

# SONY®

## HD DIGITAL VIDEOCASSETTE PLAYER

# SRW-5100

FORMAT CONVERTER BOARD  
**HKSR-5001**

DIGITAL BETACAM/HDCAM PROCESSOR BOARD  
**HKSR-5802**

ADVANCED PROCESSOR BOARD  
**HKSR-5103**


HDMI/i.LINK (HDV) OUTPUT BOARD  
**HKSR-5105**



OPERATION MANUAL  
1st Edition (Revised 3)

English

## Important Safety Instructions

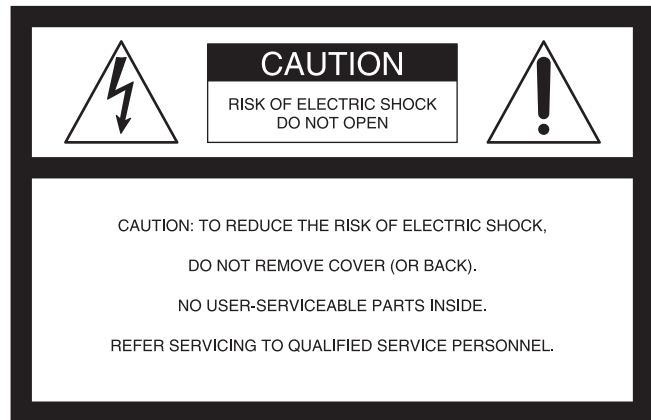
- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings.  
Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.  
  
When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel.  
Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

### WARNING

**To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.**

**To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.**

**THIS APPARATUS MUST BE EARTHED.**



This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

When installing the installation space must be secured in consideration of the ventilation and service operation.

- Do not block the ventilation slots at the left side and right side panels, and vents of the fans.
- Leave a space around the unit for ventilation.
- Leave more than 40 cm of space in the rear of the unit to secure the operation area.

When the unit is installed on the desk or the like, leave at least 4 cm of space in the left and right sides. Leaving 40 cm or more of space above the unit is recommended for service operation.

### WARNING: THIS WARNING IS APPLICABLE FOR USA ONLY.

If used in USA, use the UL LISTED power cord specified below.

**DO NOT USE ANY OTHER POWER CORD.**

Plug Cap Parallel blade with ground pin (NEMA 5-15P Configuration)

Cord Type SJT, three 16 or 18 AWG wires

Length Minimum 1.5m (4 ft .11in.), Less than 2.5 m (8 ft .3 in.)

Rating Minimum 10A, 125V

Using this unit at a voltage other than 120V may require the use of a different line cord or attachment plug, or both. To reduce the risk of fire or electric shock, refer servicing to qualified service personnel.

### WARNING: THIS WARNING IS APPLICABLE FOR OTHER COUNTRIES.

1. Use the approved Power Cord (3-core mains lead) / Appliance Connector / Plug with earthing-contacts that conforms to the safety regulations of each country if applicable.
2. Use the Power Cord (3-core mains lead) / Appliance Connector / Plug conforming to the proper ratings (Voltage, Ampere).

If you have questions on the use of the above Power Cord / Appliance Connector / Plug, please consult a qualified service personnel.

### CAUTION

The apparatus shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.

Do not install the appliance in a confined space, such as book case or built-in cabinet.

### CAUTION

The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.

### For kundene i Norge

Dette utstyret kan kobles til et IT-strømfordelingssystem.

Apparatet må tilkoples jordet stikkontakt

### Suomessa asuville asiakkaille

Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan

### För kunderna i Sverige

Apparaten skall anslutas till jordat uttag

### For the customers in the U.S.A. (for SRW-5100 and HKSR-5105)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device

must accept any interference received, including interference that may cause undesired operation.

### For the customers in Canada (for SRW-5100 and HKSR-5105)

This Class A digital apparatus complies with Canadian ICES-003.

### For the customers in Europe

This product with the CE marking complies with the EMC Directive issued by the Commission of the European Community.

Compliance with this directive implies conformity to the following European standards:

- EN55103-1: Electromagnetic Interference(Emission)
- EN55103-2 : Electromagnetic Susceptibility(Immunity)

This product is intended for use in the following Electromagnetic Environment: E4 (controlled EMC environment, ex. TV studio).

### For the customers in Europe

The manufacturer of this product is Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, Japan.

The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany.

This apparatus shall not be used in the residential area.

### For the customers in Europe, Australia and New Zealand

### WARNING

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

### WARNING

Excessive sound pressure from earphones and headphones can cause hearing loss.

In order to use this product safely, avoid prolonged listening at excessive sound pressure levels.



### For the customers in Europe

Hereby, Sony Corporation, declares that this SRW-5100 is in compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC.

For details, please access the following URL :

<http://www.compliance.sony.de/>

### Pour les clients en Europe

Par la présente Sony Corporation déclare que l'appareil SRW-5100 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Pour toute information complémentaire, veuillez consulter l'URL suivante: <http://www.compliance.sony.de/>

### **Für Kunden in Europa**

Hiermit erklärt Sony Corporation, dass sich das Gerät SRW-5100 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet. Weitere Informationen erhältlich unter:  
<http://www.compliance.sony.de/>

### **Per i clienti in Europa**

Con la presente Sony Corporation dichiara che questo SRW-5100 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE. Per ulteriori dettagli, si prega di consultare il seguente URL: <http://www.compliance.sony.de/>

### **Para los clientes de Europa**

Por medio de la presente Sony Corporation declara que el SRW-5100 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE. Para mayor información, por favor consulte el siguiente URL: <http://www.compliance.sony.de/>

### **Voor de klanten in Europa**

Hierbij verklaart Sony Corporation dat het toestel SRW-5100 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG. Nadere informatie kunt u vinden op:  
<http://www.compliance.sony.de/>

### **För kunder i Europa**

Härmed intygar Sony Corporation att denna SRW-5100 står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG. För ytterligare information gå in på följande hemsida:  
<http://www.compliance.sony.de/>

### **Para os clientes da Europa**

Sony Corporation declara que este SRW-5100 está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE. Para mais informacoes, por favor consulte a seguinte URL: <http://www.compliance.sony.de/>

### **For kunder i Europa**

Undertegnede Sony Corporation erklærer herved, at følgende udstyr SRW-5100 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF. For yderligere information gå ind på følgende hjemmeside: <http://www.compliance.sony.de/>

### **Euroopassa oleville asiakkaille**

Sony Corporation vakuuttaa täten että SRW-5100 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen. Halutessasi lisätietoja, käy osoitteessa:  
<http://www.compliance.sony.de/>

### **For kundene i Europa**

Sony Corporation erklærer herved at utstyret SRW-5100 er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF. For flere detaljer, vennligst se:  
<http://www.compliance.sony.de/>

### **Για τους πελάτες στην Ευρώπη**

Με την παρούσα η Sony Corporation δηλώνει ότι SRW-5100 συμμορφώνεται προς της ουσιώδεις απαιτήσεις και τις λοιπές σχετικές διατάξεις της οδηγίας 1999/5/EK.. Για λεπτομέρειες παρακαλούμε όπως ελένξετε την ακόλουθη σελίδα του διαδικτύου:  
<http://www.compliance.sony.de/>

### **За клиентите в Европа**

С настоящето Сони Корпорация декларира, че този SRW-5100 отговаря на основните изисквания и другите съответстващи клаузи на Директива 1999/5/ЕС. Подробности може да намерите на Интернет страницата : <http://www.compliance.sony.de/>.

### **Pro zákazníky v Evropě**

Sony Corporation tímto prohlašuje, že tento SRW-5100 je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES. Podrobnosti lze získat na následující URL: <http://www.compliance.sony.de/>

### **Euroopa klientidele**

Sony Corporation kinnitab käesolevaga seadme SRW-5100 vastavust 1999/5/EÜ direktiivi põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele. Üksikasjalikum info: <http://www.compliance.sony.de/>.

### **Európai vásárlóink fi gyelmébe**

Alulírott, Sony Corporation nyilatkozom, hogy a(z) SRW-5100 megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak. További információkat a következő weboldalon találhat: <http://www.compliance.sony.de/>

### **Klientiem Eiropā**

Ar šo Sony Corporation deklarē, ka SRW-5100 atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem. Plašāka informācija ir pieejama: <http://www.compliance.sony.de/>



## **Klientams Europoje**

Šiuo Sony Corporation deklaruoja, kad šis SRW-5100 atitinka esminius reikalavimus ir kitas 1999/5/EB

Direktyvos nuostatas.

Susipažinti su visu atitikties deklaracijos turiniu Jūs galite interneto tinklalapyje:

<http://www.compliance.sony.de/>

## **Dotyczy klientów z Europy**

Niniejszym Sony Corporation oświadcza, że SRW-5100 jest zgodne z zasadniczymi wymaganiami oraz innymi stosownymi postanowieniami Dyrektywy 1999/5/WE.

Szczegółowe informacje znaleźć można pod następującym adresem URL:

<http://www.compliance.sony.de/>

## **Pentru clienții din Europa**

Prin prezenta, Sony Corporation declară că acest SRW-5100 respectă cerințele esențiale și este în conformitate cu prevederile Directivei 1995/5/EC.

Pentru detalii, vă rugăm accesați următoarea adresă:

<http://www.compliance.sony.de/>

## **Pre zákazníkov v Európe**

Sony Corporation týmto vyhlasuje, že SRW-5100 spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

Podrobnosti získate na nasledovnej webovej adrese:

<http://www.compliance.sony.de/>

## **Za stranke v Evropi**

Sony Corporation izjavlja, da je ta SRW-5100 v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

Za podrobnosti vas naprošamo, če pogledate na URL:

<http://www.compliance.sony.de/>

## **Avrupa'daki müşteriler için**

Sony Corporation, SRW-5100 ürünü için gerekli tüm testleri 1999/5/EC Direktifine göre yapmış bulunmaktadır.

Daha detaylı bilgi için lütfen web sayfasını ziyaret ediniz:

URL: <http://www.compliance.sony.de/>

## **For the customers in Taiwan only**



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# Overview

## Chapter

# 1

## 1-1 Features

### 1-1-1 Features of the SRW-5100

The SRW-5100 is a high-definition digital videocassette player using the HDCAM-SR<sup>1)</sup> format. It is comparable to the conventional SRW-5000 in size and weight, and 4:2:2/1080/50P or 60P signal playback and playback of HQ recording of 4:4:4 (RGB) signal can be supported.

1) HDCAM-SR is a trademark of Sony Corporation.

#### HDCAM-SR format

The HDCAM-SR format exploits technological advances in signal processing and magnetic recording, to provide functionality comparable to that of the HDCAM format, while offering HD digital recording and playback with high image and sound quality.

The technology incorporated in this unit includes the following.

- Highly efficient and mild data compression using newly developed MPEG-4 Studio Profile
- Powerful error-correcting codes
- The drum with a high-performance, high-accuracy head, together with a new auto-tracking technique, yielding highly reliable narrow track playback.

These technologies allow 120 minutes of playback of an HDCAM-SR cassette (L type), the same size as the HDCAM cassette.

#### Digital signal processing

In this unit, 4:2:2/4:4:4 component video signals obtained by quantization according to ITU-R709, SMPTE 274M and BTA S-002B (SMPTE 260M) are compressed using MPEG-4 Studio Profile. Audio signals are processed without compression.

#### Bit rate reduction encoder

The component video signal undergoes frame shuffling. It is then compressed by a process in which it is subjected to DCT (discrete cosine transform) or DPCM (differential

pulse code modulation), quantization control, and variable length word encoding. This is the core of the newly developed MPEG-4 Studio Profile. Interlaced signals are compressed in fields and progressive signals are compressed in frames.

#### ECC encoder

The outer ECC (Error Correction Code) is added to the compressed video and audio data, followed by the inner ECC, ID data, and sync data. Reed-Solomon codes are employed in this error correction system.

#### Channel coding

Video and audio data with the ECC added is recorded in the form of serial data. The HDCAM-SR format adopts a scrambled i-NRZ channel coding system, giving consideration to off-track and noise characteristics.

#### Playback signal processing

The playback digital signal is equalized by an equalizer circuit. It then passes powerful inner and outer ECCs which can correct dropouts in the reproduced signal. It further goes through an error concealment circuit to have errors still remaining in the signal rectified.

#### Output interface

Component video data is converted into serial data and multiplexed with audio data and time code, then output in the HD SDI format.

With an HD-SD converter board installed, the unit can output both D1 SDI and analog composite signals. Besides audio data is output as digital data multiplexed with the HD SDI signal, it is also output via an AES/EBU digital interface. Analog data converted from digital data is also provided for monitoring.

### Advanced playback functions

#### High-quality digital recording

The HDCAM-SR format uses a component system to record video signals. The 12-channel audio signal is recorded in 48-kHz, 24-bit format. A unique and powerful error correction circuit and concealment circuit are used in digital signal processing.



Accurate and stable video signal output is made possible by setting and adjusting the internal digital video processor.

## Playback modes

### HDCAM-SR format

The following playback formats can be selected:

- For playback of a 4:2:2 signal

**1920×1080:** 23.98PsF/24PsF/25PsF/29.97PsF/30PsF, 50i/59.94i/60i, 50P/59.94P/60P

**1280×720:** 50P/59.94P

### Notes

- If the serial number of this unit is 12000 or lower, playback of 1920×1080-pixel pictures in 50P, 59.94P, or 60P mode require the HKSR-5103 (option).
- Units with serial numbers 12001 or higher are standard-equipped to support playback of 1920×1080 signals in 50P, 59.94P, and 60P mode, and therefore do not require an HKSR-5103.

- For playback of a 4:4:4 signal

**1920×1080 (SQ RGB):** 23.98PsF/24PsF/25PsF/29.97PsF/30PsF, 50i/59.94i/60i

**1920×1080 (HQ<sup>1</sup> RGB):** 23.98PsF/24PsF/25PsF/29.97PsF/30PsF, 50i/59.94i/60i

**2048×1080 (HQ<sup>1</sup> RGB):** 23.98PsF/24PsF/25PsF

**2048×1080 (HQ<sup>1</sup> XYZ):** 23.98PsF/24PsF/25PsF

**2048×1556 (HQ<sup>1</sup> RGB):** 23.98PsF/24PsF/25PsF

#### 1) HQ mode

This mode enables higher quality playback than SQ mode (440 Mbps).

### Notes

- If the serial number of this unit is 12000 or lower, an optional HKSR-5103 is required for playback in SQ mode.
- Units with serial numbers 12001 or higher are standard-equipped to support playback in SQ mode, and therefore do not require an optional HKSR-5103 for playback in SQ mode. However, an optional HKSR-5103 is required for playback in HQ mode.
- Playback of 2048×1080 and 2048×1556 signals is only available when the serial number of this unit is 12001 or higher, and an optional HKSR-5103 is installed.

- Dual-stream (3D) playback

Two independent 4:2:2 or 4:4:4 (RGB 10 bits) signal lines can be played back as a dual stream. Also, the recording of output from two independent cameras on a single VTR can be played back as a dual-stream, 3-D signal.

(Dual-stream playback for 4:4:4 (RGB 10 bits) signals is only available when the serial number of this unit is 12001 or higher.)

## Applicable system settings:

4:2:2 signal

**1920×1080:** 23.98PsF/24PsF/25PsF/29.97PsF/30PsF, 50i/59.94i/60i

**1280×720:** 50P/59.94P

4:4:4 (RGB 10 bits) signal

**1920×1080:** 23.98PsF/24PsF/25PsF/29.97PsF/30PsF, 50i/59.94i/60i

### Note

Dual-stream (3D) playback requires the HKSR-5103 (option).

## Playback compatibility

You can select the following compatibility playback functions.

- HDCAM

1920×1080: 59.94i/60i/50i/23.98PsF/24PsF/25PsF/29.97PsF/30PsF

- Digital Betacam

525/59.94i, 625/50i

### Note

Digital Betacam playback and HDCAM playback require the HKSR-5802 (option).

## Double-speed playback

Recordings made with any of the following applicable system settings can be played back at double speeds, and by adding the playback signal to a dual link output signal, 3G-SDI output signal, or dual link 3G-SDI output signal, the transmission time to a server, etc. can be shortened. (3G-SDI only when the serial number of this unit is 10101 or higher, and dual link 3G-SDI only when the serial number of this unit is 12001 or higher.)

## Applicable system settings:

4:2:2 signal

**1920×1080:** 23.98PsF/24PsF/25PsF/29.97PsF/30PsF, 50i/59.94i/60i

**1280×720:** 50P/59.94P

4:4:4 (RGB 10 bits) signal

**1920×1080:** 23.98PsF/24PsF/25PsF/29.97PsF/30PsF, 50i/59.94i/60i

### Notes

- If the serial number of this unit is 12000 or lower, an optional HKSR-5103 is required for double-speed playback.
- Units with serial numbers 12001 or higher are standard-equipped to support double-speed playback, and therefore do not require an optional HKSR-5103.
- The DIGITAL OUTPUT (AES/EBU) connectors cannot be used during double-speed playback.
- Not all devices fully support the input of signals processed for double-speed playback.

*For details, refer to the operation manual supplied with the device on the receiving end of the signals.*

### Internal format conversion function

By installing an optional HKSR-5001, when the operation mode of this unit is 23.98PsF or 24PsF, a 59.94i or 60i mode HD SDI output (audio/VITC multiplex) is made available. Additionally, conversion in either direction between 1920×1080 and 1280×720, and conversion from 4:2:2 signal to 4:4:4 signal is possible, and with the additional installation of an HKSR-5103, conversion from a 4:4:4 signal to a 4:2:2 signal is also possible.

#### Note

If the serial number of this unit is 12001 or higher, an optional HKSR-5103 is not required.

### Noiseless playback with non-tracking head (for HDCAM-SR format only)

In addition to a playback head, a non-tracking head is provided. Noiseless playback within the range of -0.5 to +1.0 times normal playback speed is thus possible.

### Noiseless playback with DT heads (for Digital Betacam or HDCAM format only)

When using the HDCAM format, the dedicated playback DT heads allow you to perform noiseless playback in the range from -1 to +2 times normal speed, including still-picture playback. When using the Digital Betacam format, the playback range is from -1 to +3.

#### Note

Digital Betacam playback and HDCAM playback require the HKSR-5802 (option).

### Internal time code reader

Time codes (LTC or user bits) can be read during playback using the time code reader.

### Computer servo system

Computer-controlled servo motors provide direct drive for the drum, capstan, and two reels, enabling quick and accurate tape access.

### Capstan override function

You can adjust the playback speed by  $\pm 15\%$  to ensure synchronization between, for example, two units playing back the same program.

#### Note

Noiseless playback cannot be performed for HDCAM-SR format when playback speed exceeds +1 times normal speed.

### Independent audio level control

It is possible to adjust the playback level either independently on each channel or simultaneously on all 12

channels for HDCAM-SR format while monitoring the peak values. For Digital Betacam or HDCAM format, adjusting the playback level is possible either independently on each channel or simultaneously on all channels (4 channels and the cue track audio).

### Tele-File<sup>2)</sup> memory label system

This unit incorporates the Tele-File memory label system to allow users to read, write and update videocassette management information, log data (IN/OUT points) and cue point data on memory labels, providing greater efficiency in cassette management and editing.

#### 2) Tele-File

A contact-free system for writing, reading, and modifying video cassette-related information on IC memory-bearing labels. Tele-File is a trademark of Sony Corporation.

## Features for ease of operation

### Remote control operation

This unit has a serial RS-422A 9-pin connector to allow control of this unit by an external control unit. This unit also comes with 9-pin REMOTE 1-IN(9P) and REMOTE 1-I/O(9P) connectors to support bridge connection of multiple SRW-5100 units or other VTRs equipped with 9-pin remote connectors for simultaneous operation using a control device. Furthermore, you can control this unit from an external control unit with a parallel (50-pin) interface.

### Digital hours meter

The meter can show the total elapsed time since this unit was turned on, total drum revolution time, total tape running time and total number of threadings and unthreadings.

### Self-diagnosis

This function allows this unit to perform self diagnostics when a malfunction occurs. An error message is displayed and a history of all errors that have occurred is recorded.

### Easy-to-maintain plug-in boards

This unit uses plug-in circuit boards to simplify servicing and inspection.

### Mountable in standard 19-inch rack

The unit can be mounted in an EIA-standard 19-inch rack.

*For rack mounting, refer to the Installation Manual.*

## 1-1-2 Features of the Control Panel

The control panel provides eight menu screens corresponding to different operation modes to allow fast and easy adjustment of necessary settings, as well as the ability to store menu settings to a "Memory Stick" for later recall.

## Menu-driven operations for a variety of purposes

Eight menus are displayed on the 130 × 95 mm (5 <sup>1</sup>/<sub>8</sub> inches × 3 <sup>3</sup>/<sub>4</sub> inches) color display and are set using the 10 function buttons.

You can register desired items to the menus other than the SET UP menu.

Pressing the **[F4]** (PF ASSIGN) button in the SET UP menu displays the menu items that can be registered.

### HOME menu

Use this menu to make the basic settings for playback operations.

### TC menu

Use this menu to make time code settings.

### VIDEO menu

Use this menu to adjust the video signals. The VIDEO menu screen shows the operation mode, current position time code, time code type, and so on.

### AUDIO menu

Use this menu to adjust the audio signals. The AUDIO menu screen shows the operation mode, current position time code, time code type, and so on.

### CUE menu

Use this menu to set up to 100 cue points. In page mode, 10 cue points per page can be set on a total of 10 pages. In the Tele-File menu, you can change the setting for the memory label system Tele-File.

### PF1/PF2 (Personal Function) menus

Use these menus to register up to 40 of the most frequently used items from the other menus (up to 10 items each can be registered to PF1, ALT/PF1, PF2 and ALT/PF2).

### SET UP menu

This menu enables the following settings.

- The VTR BANK menu allows up to eight pages of menu settings to be saved.
- Use the MEMORY CARD menu to store current settings of this unit and up to eight pages of the contents of the VTR memory bank to a “Memory Stick.”
- Use the scrollable PF ASSIGN menu to display the items that can be registered, and to select and register the most frequently used menu items.
- Use the scrollable VTR SETUP menu to display the items necessary for making initial settings, and to directly change settings without registering them with the function buttons for each menu.
- Use the PANEL SETUP menu to set control panel operations, such as the keyboard sound output.

### MAINTENANCE menu

Use this menu to access the maintenance functions.

*For details, refer to the Maintenance Manual Volume 1.*

## A full complement of storage/recall functions

These functions allow you to use titles to store and recall menu settings in either this unit’s internal memory banks or “Memory Stick.”

### VTR memory banks

These memory banks allow you to store up to eight pages of settings for this unit in addition to the current settings. Factory settings are also stored here, allowing this unit to be reset to these values at any time.

### “Memory Stick”

“Memory Stick” can hold the current settings of this unit as well as up to eight pages of settings. “Memory Stick” thus allows you to store and recall the entire contents of the VTR memory banks.

### Title function

This function allows you to add titles when storing data to the VTR memory bank or “Memory Stick,” thus facilitating data retrieval and management.

### Write protect function

Setting pages stored in VTR memory banks or “Memory Stick” can be write protected on an individual basis.

## A full range of editing functions

An SRW-5100 unit and a recorder (e.g., SRW-5800) can be connected allowing automatic or manual assemble and insert editing. This unit also features a full range of editing functions, including preview, review, preroll, and the setting or changing of edit points.

### Quick access to edit points

The following methods are provided for the setting of edit points:

- Multi-cuing for up to 100 edit points
- Search dial with shuttle and jog functions
- Direct input through numeric buttons

### DMC (Dynamic Motion Control) playback

Using the DT<sup>®</sup> (Dynamic Tracking) heads, you can play back a section of an edit at speeds between –1 and +2 times normal speed and store the speed variation in memory for later use in automatic playback.

#### Note

DMC playback cannot be selected for HDCAM-SR format.

#### Note

When edited audio is played with this unit, fade-out/fade-in processing is carried out in normal-speed playback only.

### Display of duration between edit points

The duration between IN and OUT points can be displayed by simultaneously pressing the IN and OUT buttons.

## Digital time counter

The time counter display shows CTL and time codes (LTC/VITC<sup>3</sup>), or user bits data for precise setting of edit points.

### 3) LTC (Longitudinal Time Code):

Time code recorded on a longitudinal track

### VITC (Vertical Interval Time Code):

Time code recorded on a video track during the vertical blanking interval

## 1-2 Optional Accessories

The following accessories can be used with this unit.

### HKSR-5001 Format Converter Board

This allows format conversion described below:

- 2-3 pulldown (23.98PsF to 59.94i, 24PsF to 60i)
- Conversion between 1080 and 720P
- 4:2:2 between 4:4:4

(Conversion of 4:4:4 to 4:2:2 is possible only when the HKSR-5103 is additionally installed.)

#### Note

If the serial number of the SRW-5100 is 12001 or higher, the above format conversions are possible with only the HKSR-5001 installed. An HKSR-5103 does not need to be additionally installed.

*For details on format conversion, see “Playback tape formats and conversion output” on page 171.*

### HKSR-5802 Digital Betacam/HDCAM Processor Board

This allows you to play back Digital Betacam or HDCAM tapes and output SD and HD signals.

When the system is operated in 4:4:4 mode, up conversion of the output to HD signals are possible as follows, depending on the system setting.

**1080:** Up conversion to 1080.

**720:** Up conversion to 720P.

When the system is operated in 4:4:4 mode, no up-converted HD output can be obtained.

### HKSR-5103 Advanced Processor Board

This allows double-speed playback in systems for which it is applicable. 4:2:2/1080/50P, 59P, 60P, and dual-stream (3D) playback is also supported. In addition to playback in RGB (4:4:4) SQ mode, playback in RGB (4:4:4) HQ mode is also supported.

#### Note

SRW-5100 units with serial numbers 12001 or higher are standard equipped to support playback in RGB (4:4:4) SQ mode, double-speed playback in applicable systems, and 4:2:2/1080/50P, 59P, and 60P playback. If the serial number is 12001 or higher, the HKSR-5103 is required for playback in RGB (4:4:4) HQ mode and dual-stream (3D) playback.

*For details on systems for which double-speed playback is applicable, see “Double-speed playback” on page 11.*

**HKSR-5105 HDMI/i.LINK (HDV) Output Board**

This allows the VTR to output HDMI signal (supports Deep Color) and HDV signal (1080/50i, 59.94i). However, when the system is operated in  $2048 \times 1080$ ,  $2048 \times 1556$ , 24PsF, 30PsF, 60i, 60P, or 4:4:4 RGB dual stream (3D)/double-speed playback mode, HDV video and audio signals are not output.

When the system is operated in 4:4:4 RGB dual stream (3D)/double-speed playback mode, HDMI video and audio signals are not output.

**HKDV-900 HD Digital Video Controller**

This allows you to remotely control the parameters for video signals and image enhancement.

**References**

In addition to this Operation Manual, the following manuals are available:

**Maintenance Manual Volume 1 (optional)**

Provides detailed information necessary to maintain this unit.

**Maintenance Manual Volume 2 (optional)**

Provides information on spare parts.

**Maintenance Manual Volume 3 (optional)**

Contains circuit diagrams and block diagrams.

**Installation Manual (supplied)**

Provides necessary information to install and operate this unit.

*For information about changing the video system, refer to "1-11. System Setting" in the Installation Manual.*

**9-pin Protocol Manual (optional)**

Provides information on the 9-pin protocol.

# Locations and Functions of Parts

## Chapter

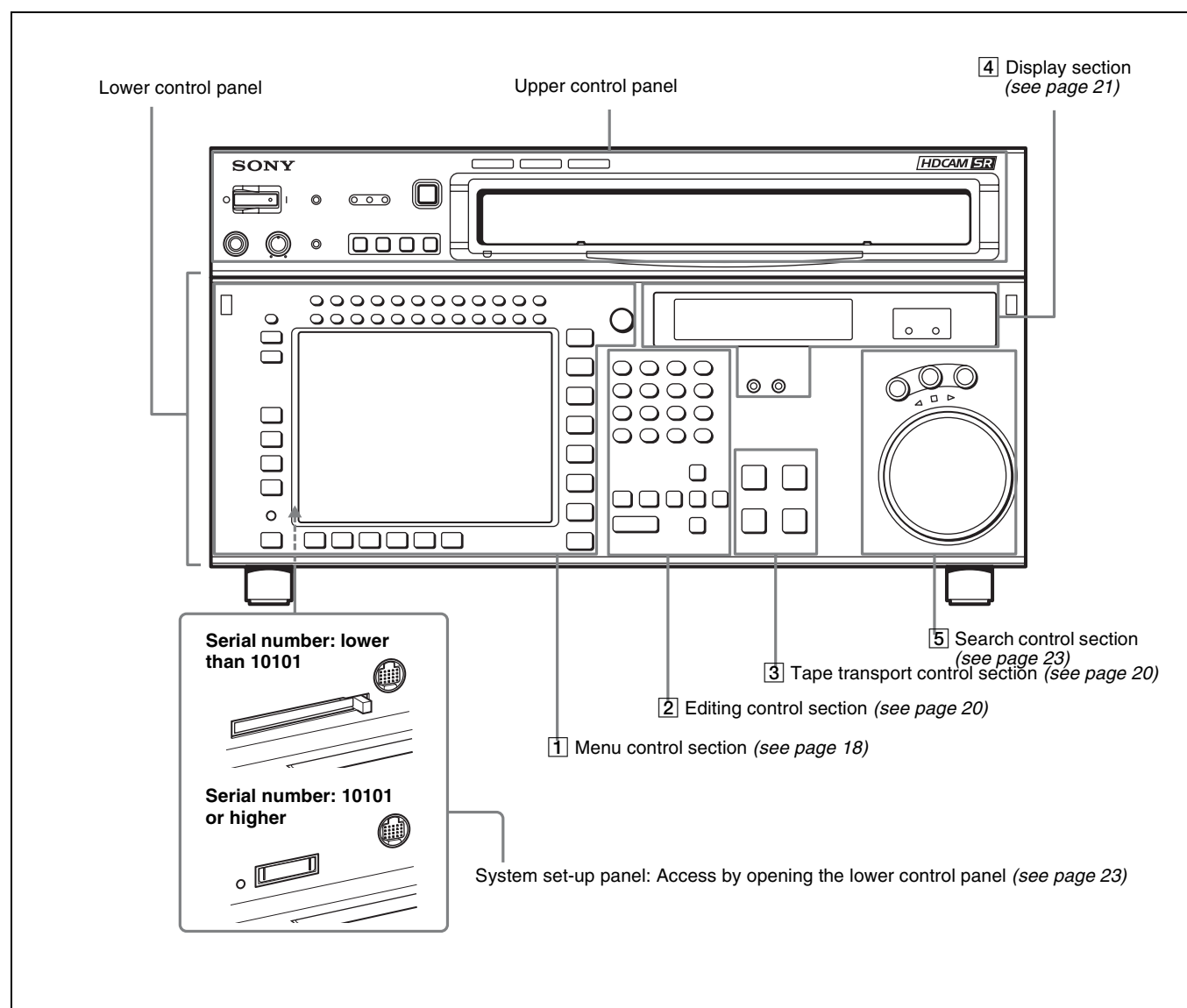
# 2

## 2-1 Control Panel

The control panel consists of the following sections:

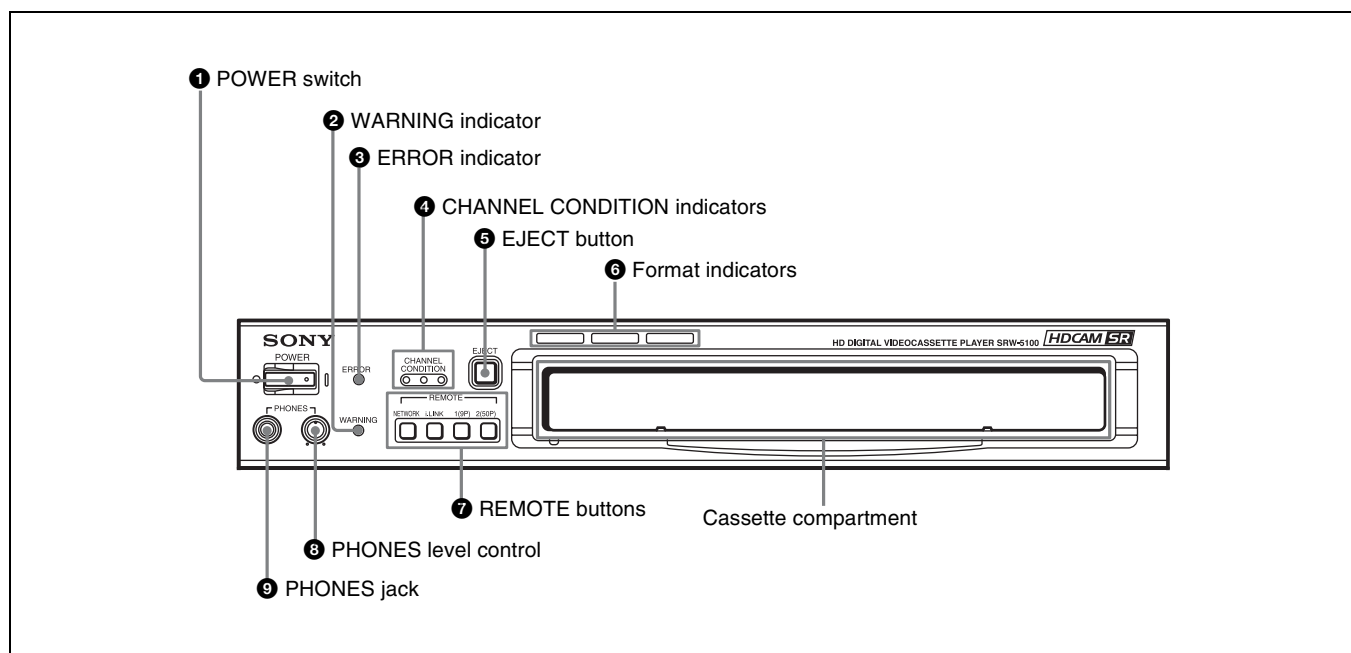
- Upper control panel

- Lower control panel
- System set-up panel





## 2-1-1 Upper Control Panel



### 1 POWER switch

Pressing on the 'I' side of this switch powers the unit and lights up the information display (see page 21) and color display (see page 18). To turn the unit off, press on the 'O' side of the switch.

### 2 WARNING indicator

This lights when there is a fault in the unit. You can check the details on the lower control panel.

*For details, see "Error Messages and Warning Messages" on page 124.*

### 3 ERROR indicator

This lights when a serious problem occurs, such as an operational malfunction or system internal error. You can check the details on the lower control panel.

*For details, see "Error Messages and Warning Messages" on page 124.*

### 4 CHANNEL CONDITION indicators

These show the status of the playback signal.

**Blue:** The playback signal status is satisfactory.

**Yellow:** The playback signal is somewhat degraded, but playback is possible.

However, if this indicator remains lit continuously, head cleaning is required.

**Red:** The playback signal has deteriorated.

If this indicator remains lit continuously, head cleaning or internal inspection is required.

### 5 EJECT button

Pressing this button automatically ejects the cassette after several seconds.

### 6 Format indicators (Digital BETACAM/HDCAM/HDCAM SR)

These show the format of the cassette loaded into the unit.

### 7 REMOTE buttons

Press one of the following buttons, to select how this unit is controlled.

**NETWORK:** This button lights when pressed, enabling access from the network connected to the NETWORK connector on this unit.

**i.LINK:** This button lights when pressed, enabling this unit to be controlled from a device connected to the HDV OUTPUT connector on the HKSR-5105.

### Note

This button operates only when the optional HKSR-5105 HDMI/i.LINK (HDV) Output Board is installed.

**1(9P):** This button lights when pressed, enabling this unit to be controlled from a device connected to the REMOTE 1-IN(9P) connector or REMOTE 1-I/O(9P) connector.

**2(50P):** This button lights when pressed, enabling this unit to be controlled from a device connected to the REMOTE 2 PARALLEL I/O(50P) connector.

**Note**

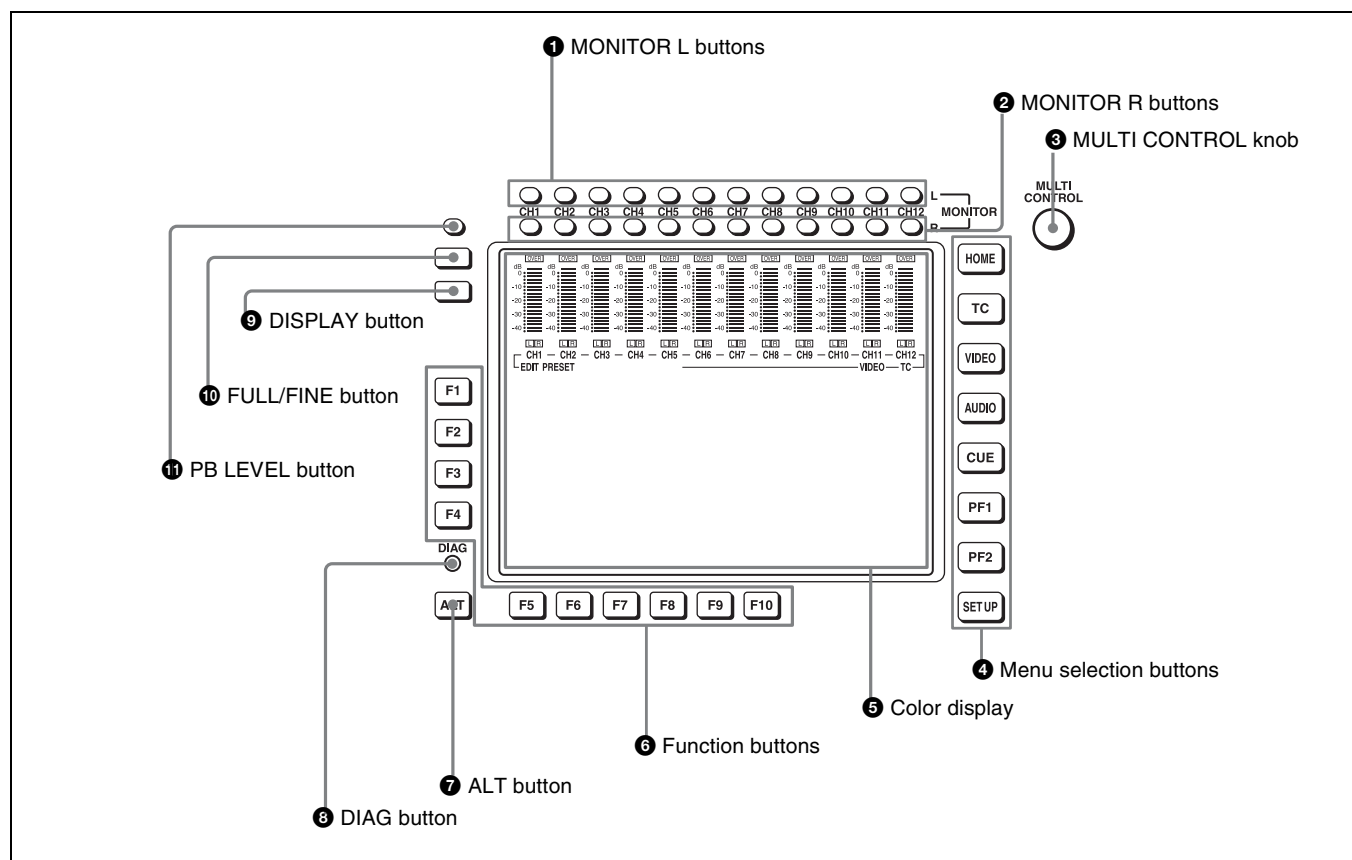
When this unit is being controlled by the external equipment connected to the REMOTE 1-IN(9P) or REMOTE 2 PARALLEL I/O(50P) connector, all tape transport buttons and edit operation buttons are disabled, except the STOP and EJECT buttons. You may also specify the disabling or enabling of all buttons by setting the VTR SETUP menu item 008 “LOCAL FUNCTION ENABLE”.

**8 PHONES level control**

Adjusts the output level to the PHONES jack.

**9 PHONES jack**

Connect stereo headphones for audio monitoring during playback. Adjust the headphone output level with the PHONES level control.

**2-1-2 Lower Control Panel****1 Menu control section****1 MONITOR L buttons**

Select the audio signal output from the MONITOR OUTPUT L connector. This assigns the desired channel to the MONITOR OUTPUT L connector. If you assign more than one channel to the same monitor output connector, a mixed audio signal is output.

You can also make this setting using the VTR SETUP menu item 807 “AUDIO MONITOR-L select”.

In the audio playback level adjustment mode, this is used to select the channel to be adjusted.

**2 MONITOR R buttons**

Select the audio signal output from the MONITOR OUTPUT R connector. This assigns the desired channel to the MONITOR OUTPUT R connector. If you assign more than one channel to the same monitor output connector, a mixed audio signal is output.

You can also make this setting using the VTR SETUP menu item 808 “AUDIO MONITOR-R select”.

In the audio playback level adjustment mode, this is used to select the channel to be adjusted.

### ③ MULTI CONTROL knob

Used to set the audio playback level and make settings in the SET UP menu (*see page 105*).

### ④ Menu selection buttons

These select the menu screen displayed on the display.

**HOME button:** Press this to go to the HOME menu screen. The home menu provides settings for the basic operations.

**TC button:** Press this to go to the TC (time code) menu screen. In the time code menu, you can switch LTC/VITC, switch DF/NDF, set the time code to be displayed on an external monitor, and so on.

**VIDEO button:** Press this to go to the VIDEO menu screen. Use it to make video related settings.

**AUDIO button:** Press this to go to the AUDIO menu screen. Use it to make audio related settings.

**CUE button:** Press this to go to the CUE menu screen. The cue menu provides 10 pages to set cue points. You can set up to 10 cue points per page. You can also make settings for the Tele-File memory label system.

**PF1 button:** Press this to go to the PF1 (personal function 1) menu screen. You can register frequently-used items in the PF1 menu. The factory default setting is blank.

**PF2 button:** Press this to go to the PF2 (personal function 2) menu screen. You can register frequently-used items in the PF2 menu. The factory default setting is blank.

**SET UP button:** Press this to go to the SET UP menu screen. The setup menu provides functions to save menu settings in VTR banks or save to a “Memory Stick,” registration operations in the PF buttons, VTR SETUP menu settings, and so on.

*For details of menus, see Chapter 4 “Menu Settings” on page 37.*

### ⑤ Color display

This comprises principally the audio level display and menu display.

#### Audio Level display:

This displays the playback levels.

The display mode can be changed with the FULL/FINE button. The factory default display is a reference level of -20 dB, and peak level 0 dB.

#### Menu display:

This displays the menu screen selected by the menu selection buttons.

Each menu screen shows the functions assigned to the function buttons (**[F1]** to **[F10]**), and shows simultaneously information required for time code display settings and so on.

### Note on faulty pixels on the LCD panel

The LCD panel fitted to this unit is manufactured with high precision technology, giving a functioning pixel ratio of at least 99.99%. Thus a very small proportion of pixels maybe “stuck”, either always off (black), always on (red, green, or blue), or flashing. In addition, over a long period of use, because of the physical characteristics of the liquid crystal display, such “stuck” pixels may appear spontaneously. These problems are not a malfunction. Note that any such problems have no effect on recorded data.

### ⑥ Function buttons

Activates the functions in each menu.

### ⑦ ALT (alternative) button

Press to change the items displayed on the current menu. Press again to return to the original items.

### ⑧ DIAG (diagnostic) button

Hold down the SFT button (*see page 20*) in the editing control section and press this switch to switch to the DIAG menu.

### ⑨ DISPLAY button

This displays the down-converted output signal in the whole color display.

### Notes

- Depending on the system settings, it may not be possible to output some signals.
- This function is for a quick check of the output signal, and cannot be used as a monitor.

### ⑩ FULL/FINE button

This selects the audio level meter display range.

**FULL:** The audio level meter display is from -60 dB to 0 dB, or -40 dB to +20 dB. Select which of these ranges (peak level: 0 dB or +20 dB) is displayed in the VTR SETUP menu item 814 “LEVEL METER SCALE”.

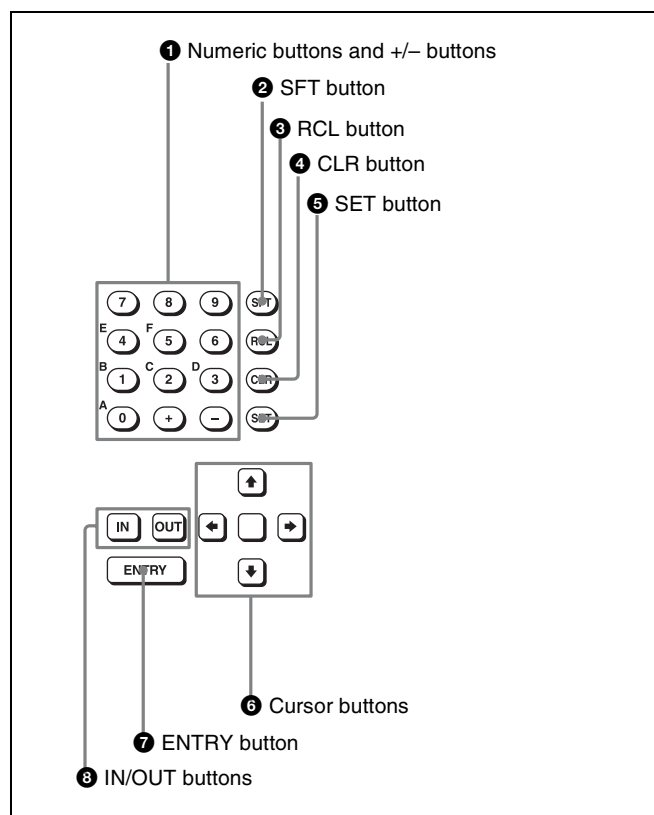
**FINE:** The audio level meter display range is expanded, and displayed with a scale in steps of 0.25 dB. The reference marker LED at the center of the level meter display range lights. When the audio level exceeds the maximum display range, the top OVER display flashes. When under the minimum display range, the bottom line flashes.

### ⑪ PB (playback) LEVEL button

Press this button to enter the playback audio level adjustment mode. In this mode, you can use the MONITOR R button to select the adjustment target channels from channels 1 to 12. While watching the audio level meter, turn the MULTI CONTROL knob for a desired audio level.

Clicking the MULTI CONTROL knob resets the playback audio level to the factory set level (a reference level of  $-20$  dB is set for a  $+4$  dBm input). Clicking the MULTI CONTROL knob again restores the adjusted level. Press this button again to exit from the playback audio level adjustment mode, and the MONITOR L and R buttons return to the normal status (this status is called the “MONITOR SELECT mode”).

## 2 Editing control section



### 1 Numeric buttons and +/- buttons

Press to input time data or edit points data at the cursor position in menu display. Press buttons 0 to 5 while holding down the SFT button to input hexadecimal A to F for user bits. Use the +/- buttons to increase or decrease settings.

### 2 SFT (shift) button

Press buttons 0 to 5 while holding down this button to input hexadecimal A to F for user bits. Use also in combination with other buttons to perform other operations.

### 3 RCL (recall) button

Press to recall the previous setting, etc.

### 4 CLR (clear) button

Press to clear input data.

### 5 SET button

Press to finalize input data.

### 6 Cursor buttons

Use to move the cursor (shown in reverse video) on the display. Also use to change menu settings.

### 7 ENTRY button

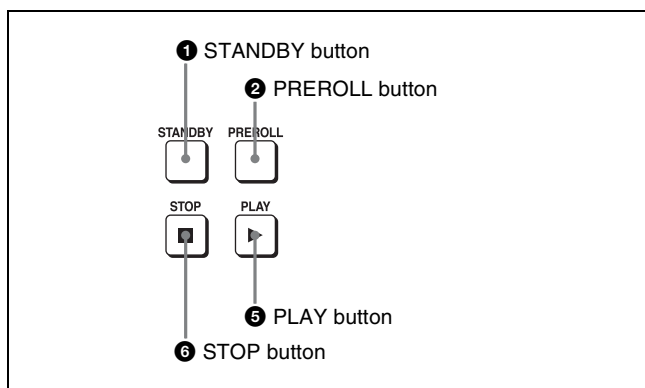
Press to enter an edit or cue point.

While holding down this button, press either the IN or OUT button.

### 8 IN/OUT buttons

To set a IN or OUT point during editing, press either of these buttons while holding down the ENTRY button. While editing by connecting this unit to a recorder, press the IN or OUT button while holding down the SFT button and the CLR button to delete the AUDIO IN or AUDIO OUT point that is set by an external device.

## 3 Tape transport control section



### 1 STANDBY button

Press this button in other than standby mode to make it light up and place this unit in standby mode. The head drum rotates in standby mode, thereby shortening the time required for the tape to start.

Press this button while in standby mode to turn the button off and exit from standby mode. The head drum stops rotating and the tape tension is released. If this unit remains in standby mode for more than eight minutes (factory setting), standby mode is automatically canceled in order to safeguard the tape.

### 2 PREROLL button

Press to run the tape to the preroll point (a position factory set to five seconds before the IN point).

Press this button while holding down the IN or OUT button to cue up the tape at the IN or OUT point.

*For details on changing the preroll time, see “4-2-3 Setting the Preroll Time (PREROLL TIME)” on page 62.*

### ③ PLAY button

Press to start playback.

### ④ STOP button

Press this button to stop playback.

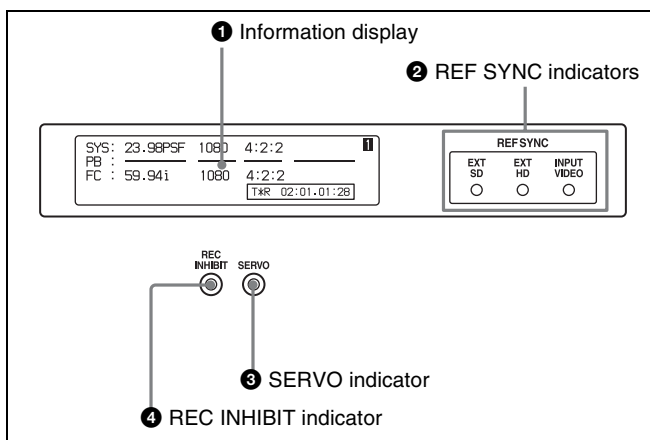
When you insert the cassette, this unit automatically enters STBY OFF mode.

The STOP button flashes in the following cases.

- There is no external reference video signal.
- This unit is out of synchronization with the external reference video signal.

You can change the setting of the VTR SETUP menu item 102 "REFERENCE SYSTEM ALARM" so that the STOP button will not flash in these cases.

## 4 Display section



### ① Information display

The information display shows a number of different pages. To change the page displayed, with no other items selected in the menu display (HOME, TC, VIDEO, AUDIO, PF1, and PF2), turn the MULTI CONTROL knob while holding it down.

The currently selected page number also appears at the upper right of the information display.

You can also hide the display of pages using the INFO SELECT menu under the OTHERS CHECK menu in the MAINTENANCE menu.

*For details, refer to the Maintenance Manual Volume 1.*

### Page 1: System status

**SY:** Shows the system information (signal standard and tape format).

**PB:** Shows the information recorded on the tape (signal standard and tape format) while being played back.

**FC:** Shows the converted signal standard when an HKSR-5001 board is installed.

**TC:** Shows the time code.

### Page 2: System status

**ACTIVE LINE:** Shows the status of 1080/1035 conversion active line.

1080→1080

1035→1080(PANEL)

1035→1080(CONV): Shows the current conversion status.

----: Cannot be converted.

OFF: No conversion done.

**DOWN CONV. OUTPUT:** Shows the output status of the down converter.

ACTIVE: Output.

MUTING: No output.

**EOS:** Appears at the location of the time code for the valid end of the previous recording.

### Page 3: Phase (OUTPUT)

**HD SDI OUTPUT ADV.:** Shows the phase of the main line HD SDI output.

OFF: In phase with reference.

–90H: 90H (HD) advanced with respect to reference.

**DOWN CONV. OUTPUT ADV.:** Shows the phase of the down converter output.

OFF: In phase with reference.

–2H: 2H (SD) advanced with respect to reference.

### Page 4: Phase (AUDIO)

**AUDIO PB OUTPUT ADV.:** Shows the phase of the audio output signal.

OFF: Output in phase with the video output signal.

–1Frame: Output one frame advanced with respect to the video output signal.

**AES/EBU & MONITOR OUTPUT:** Shows the phase of the AES/EBU and MONITOR AUDIO outputs.

REF: Output in phase with reference.

FC: In phase with the FC output.

–90H(HD): 90H (HD) advanced with respect to reference.

–2H(SD): 2H (SD) advanced with respect to reference.

### Page 5: Phase (TC)

**LTC OUTPUT:** Shows the phase of the output LTC.

LINE: Output in phase with the main line HD SDI output.

FC: Output in phase with the FC output.

### Page 6: Meta data

#### • HDCAM-SR

**META DATA LINE(OUT):** Shows the status of the three lines of main HD SDI output into which metadata is multiplexed.

**META DATA LINE(FC):** Shows the status of the three lines of output from the optional HKSR-5001 format converter board into which metadata is multiplexed.

**META DATA LINE(SD):** Shows the status of the three lines of SD SDI output into which metadata is multiplexed.

## • HDCAM

Shows the L1, L2, DID, and SDID readout from the tape. The data for L1, L2, DID, and SDID are treated as one packet and up to three packets are displayed at one time.

## Page 7: 3G-SDI

**HDSDI OUT:** Shows the 3G interface status of the main line HD SDI output.

**MON OUT:** Shows the 3G interface status of the main line HD SDI monitor output.

**FC OUT:** Shows the 3G interface status of the format converter output when the optional HKSR-5105 HDMI/i.LINK (HDV) output board is installed.

## Page 8: Select FPS

**TAPE FORMAT:** Shows the playback format of the tape.

**ACTUAL FORMAT:** Shows the recording format of the tape recorded with frames per second (Select FPS mode) specified.

**Select FPS:** Shows the transportation speed and variable playback speed of the tape recorded with Select FPS mode specified.

## Page 9: HDMI/HDV output status

### Note

HDMI/HDV signal can be output only when the optional HKSR-5105 HDMI/i.LINK (HDV) Output Board is installed.

**HDV OUTPUT:** Shows the format of the signal output from the HDV OUTPUT connector on the optional HKSR-5105 board installed. When no device is connected to the HDV OUTPUT connector, this item appears in shaded characters. When signal cannot be output from the HDV OUTPUT connector due to the current setting of this unit, a horizontal line appears for this item.

**HDMI OUTPUT:** Shows the format of the signal output from the HDMI OUTPUT connector on the optional HKSR-5105 board installed. When no device is connected to the HDMI OUTPUT connector, this item appears in shaded characters. When the signal that matches the extended display identification data (EDID) provided by the connected HDMI device cannot be output from the HDMI OUTPUT connector, a horizontal line appears for this item.

### Notes

- The ACTIVE LINE setting displayed on page 2 can be made in the SYSTEM menu under the OTHERS CHECK menu in the MAINTENANCE menu.
- The phase settings displayed on pages 3 to 5 and the settings relating to meta data displayed on page 6 can be made in the PHASE SET/META DATA menu under the ALT+OTHERS CHECK menu in the MAINTENANCE menu.

For details, refer to the Installation Manual.

- When the optional HKSR-5105 board is not installed in this unit, all areas of page 9 appears in shade.
- The format of the signal output from the HDV OUTPUT connector displayed on page 9 is determined by the system setting of this unit.
- The format of the signal output from the HDMI OUTPUT connector displayed on page 9 is determined by the system setting of this unit, the setting of VTR SETUP menu item C10 “HDMI VIDEO OUTPUT MODE”, and the extended display identification data (EDID) provided by the connected HDMI device.

For details on the output formats that the optional HKSR-5105 board supports, see “HDMI/HDV output formats that the HKSR-5105 supports” on page 175 in Appendix.

## ② REF SYNC (reference signal) indicators

These indicate the signal selected as the reference signal. If there is no reference signal input to the selected connector, the STOP button flashes.

**EXT SD:** Lights when “extern SD” is selected by the VTR SETUP menu item 006 “EXTERNAL REFERENCE select”.

**EXT HD:** Lights when “extern HD” is selected by the VTR SETUP menu item 006 “EXTERNAL REFERENCE select”.

## ③ SERVO indicator

Lights up when the drum servo and capstan servo are locked.

## ④ REC INHIBIT indicator

Only when this indicator is not lit, you can record or erase the stop code.

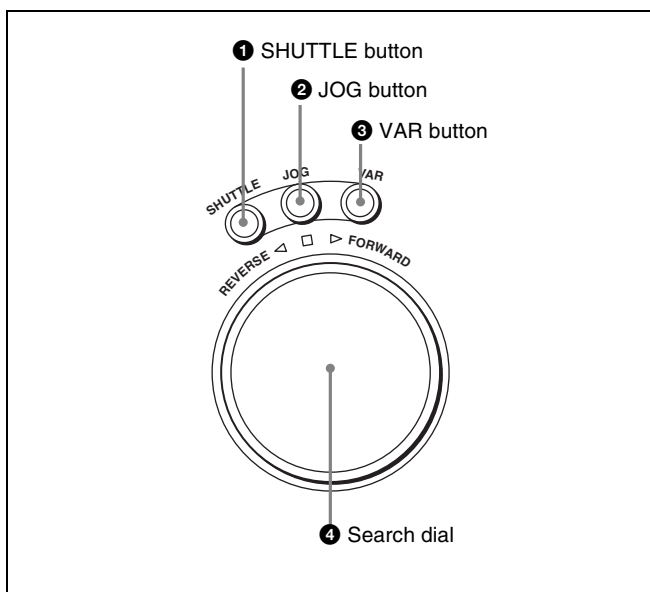
The status of this indicator depends on the setting of the VTR SETUP menu item 010 “STOP CODE INHIBIT select” and the state of the record-protect plug on the cassette.

Setting of the VTR SETUP menu item 010	State of the record-protect plug on the cassette	REC INHIBIT indicator
on	Recording disabled	Lit/flashing <sup>a)</sup>
	Recording allowed	Lit
off	Recording disabled	Lit/flashing <sup>a)</sup>
	Recording allowed	Unlit <sup>a)</sup>

a) Toggling between lit/flashing settings is possible using the VTR SETUP menu item 104 “REC INHIBIT LAMP FLASHING”.



## 5 Search control section



### 1 SHUTTLE button

Press to enter shuttle mode. In this mode, the button lights and playback at the speed corresponding to the angle of rotation of the search dial is possible. The playback speed range depends on the frame frequency of the unit. In this mode, the search dial clicks at the positions for 0 (still picture) and  $\pm 10$  times normal playback speed (HDCAM/Digital Betacam) or  $\pm 8$  times normal playback speed (HDCAM-SR).

Frame frequency	Playback speed range (for HDCAM-SR format)
23.98/24 Hz	$\pm 50$ times normal playback speed
25 Hz	$\pm 48$ times normal playback speed
29.97/30 Hz	$\pm 40$ times normal playback speed
50 Hz	$\pm 24$ times normal playback speed
59.94/60 Hz	$\pm 20$ times normal playback speed

### 2 JOG button

Press to select jog mode. In this mode, the button lights up and playback is possible at  $-1$  to  $+1$  times normal speed,  $\pm 2$  times normal speed (HDCAM/HDCAM-SR), or  $\pm 3$  times

normal speed (Digital Betacam) (determined by the setting in the VTR SETUP menu item 107 "JOG DIAL RESPONSE"). In this mode, the search dial does not click.

### 3 VAR (variable) button

Press to select variable speed playback mode for noiseless playback in the range from  $-0.5$  to  $+1$  times normal speed (HDCAM-SR), from  $-1$  to  $+2$  times normal speed (HDCAM), or from  $-1$  to  $+3$  times normal speed (Digital Betacam). Playback exceeding this speed range is not possible. The search dial clicks at the positions for still-picture and normal playback speed.

### 4 Search dial

Rotate to search for edit points. Rotate the dial clockwise for forward playback (the  $\blacktriangleright$  indicator lights up) or counterclockwise for reverse playback (the  $\blacktriangleleft$  indicator lights up). The  $\blacksquare$  indicator lights up while this unit is in stop mode.

**Shuttle mode:** The playback speed corresponds to the angle of rotation of the search dial. The playback speed range depends on the frame frequency of the unit. (See item 1 SHUTTLE button.) The dial clicks at the positions for 0 (still picture) and  $\pm 10$  times normal playback speed (HDCAM/Digital Betacam) or  $\pm 8$  times normal playback speed (HDCAM-SR).

**Jog mode:** The playback speed corresponds to the rotational speed of the dial ( $-1$  to  $+1$  times normal speed,  $\pm 2$  times normal speed (HDCAM/HDCAM-SR), or  $\pm 3$  times normal speed (Digital Betacam)) depending on the setting of the VTR SETUP menu item 107 "JOG DIAL RESPONSE". The dial does not click.

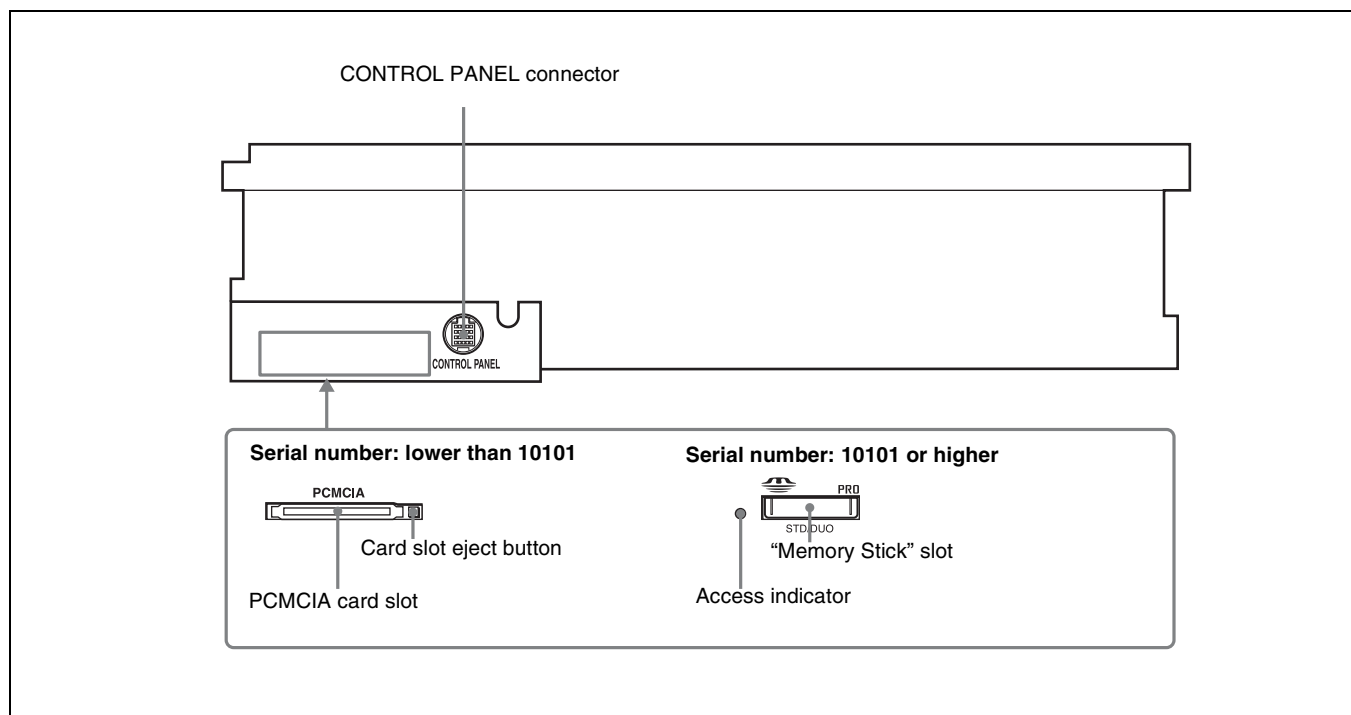
**Variable speed playback mode:** Noiseless playback is possible in the range from  $-0.5$  to  $+1$  times normal speed (HDCAM-SR), from  $-1$  to  $+2$  times normal speed (HDCAM), or from  $-1$  to  $+3$  times normal speed (Digital Betacam). The speed settings can be changed using the menu. The dial clicks at the positions for still-picture and normal playback speed.

**Capstan override mode:** Rotating the dial while holding down the PLAY button changes the playback speed by up to  $\pm 15\%$ .

## 2-1-3 System Set-Up Panel

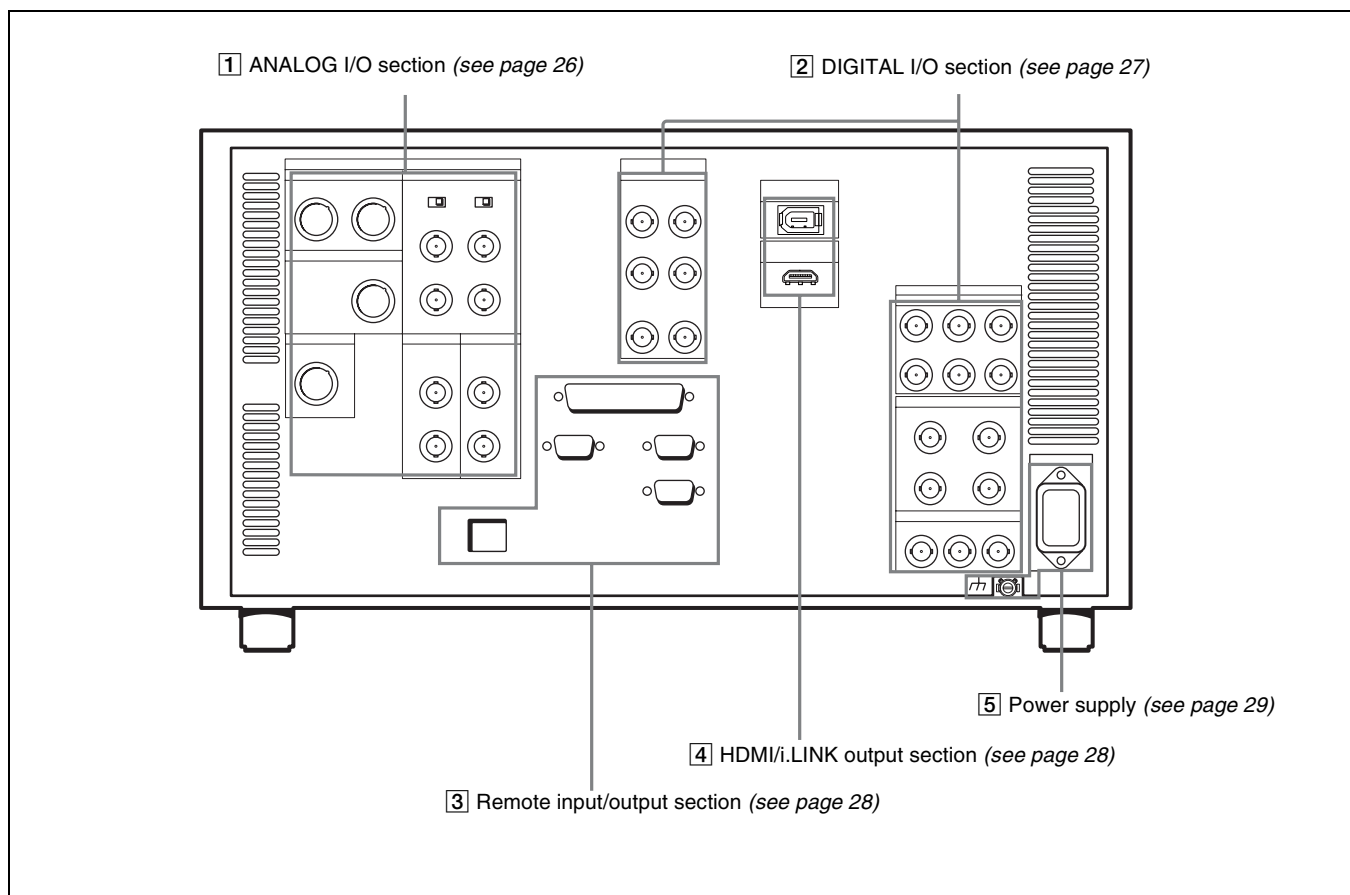
Lift the lower control panel up to its horizontal position to access the system set-up panel.

*For details of opening and closing the control panel, refer to the Maintenance Manual.*

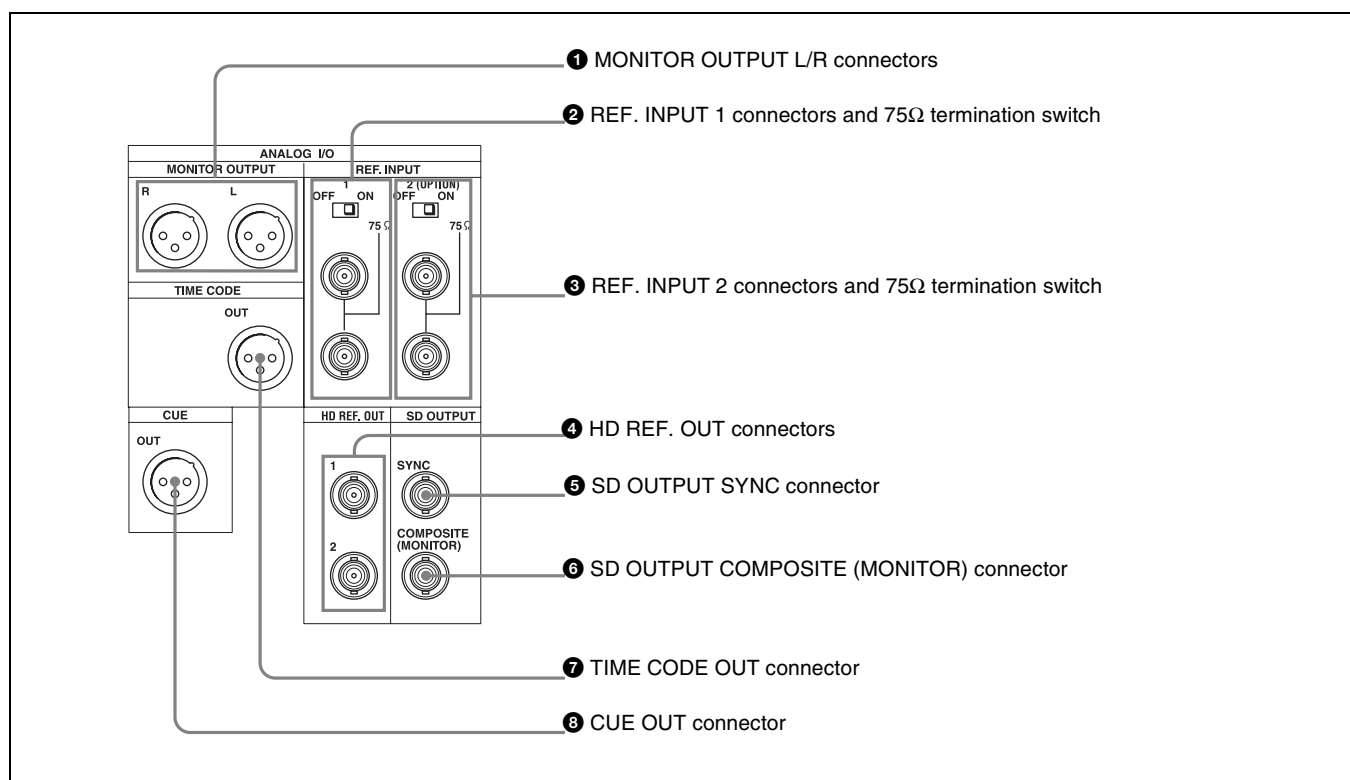


For details, see “3-4 Using a “Memory Stick”” on page 35.

## 2-2 Connector Panel



## 1 ANALOG I/O (input/output) section



### 1 MONITOR OUTPUT L/R connectors (XLR-3-31, male)

These output the audio signals for monitoring L and R channels. To select the signals to output, use the MONITOR L and MONITOR R buttons on the lower control panel.

*For details, see “5-1-2 Selecting Audio Signals To Be Monitored” on page 110.*

### 2 REF. (reference video) INPUT 1 connectors (BNC) and 75Ω termination switch

Input a reference video signal of the selected field frequency. Select HD or SD with the VTR SETUP menu item 006 “EXTERNAL REFERENCE select”. When HD is selected, input a tri-level SYNC signal. When SD is selected, input a video signal with chroma burst (VBS) or a monochrome video signal (VS).

A loop-through connection is possible. Set the 75Ω termination switch to OFF if you are using a loop-through connection and set it to ON if you are not using a loop-through connection.

### 3 REF. (reference video) INPUT 2 connectors (BNC) and 75Ω termination switch

Input a reference video signal of the field frequency selected for the format converter output. Select HD or SD with the VTR SETUP menu item A08 “FC REFERENCE select”. When HD is selected, input an HD tri-level SYNC signal for external synchronization. When SD is selected, input a video signal with chroma burst (VBS) or a monochrome video signal (VS). A loop-through connection is possible. Set the 75Ω termination switch to OFF if you are using a loop-through connection and set it to ON if you are not using a loop-through connection.

### 4 HD REF. OUT (sync signal output) connectors (BNC)

Output an HD tri-level sync signal during tape playback.

#### Notes

- When the system is operated in 4:2:2/720P mode, no signal is output from these connectors.
- When the system is operated in 4:2:2/1080/50P, 4:2:2/1080/59.94P, or 4:2:2/1080/60P mode, the reference signal that is identical to interlace signal is output from these connectors.

### 5 SD OUTPUT SYNC connector (BNC)

This outputs an NTSC or PAL signal for external synchronization.

**Note**

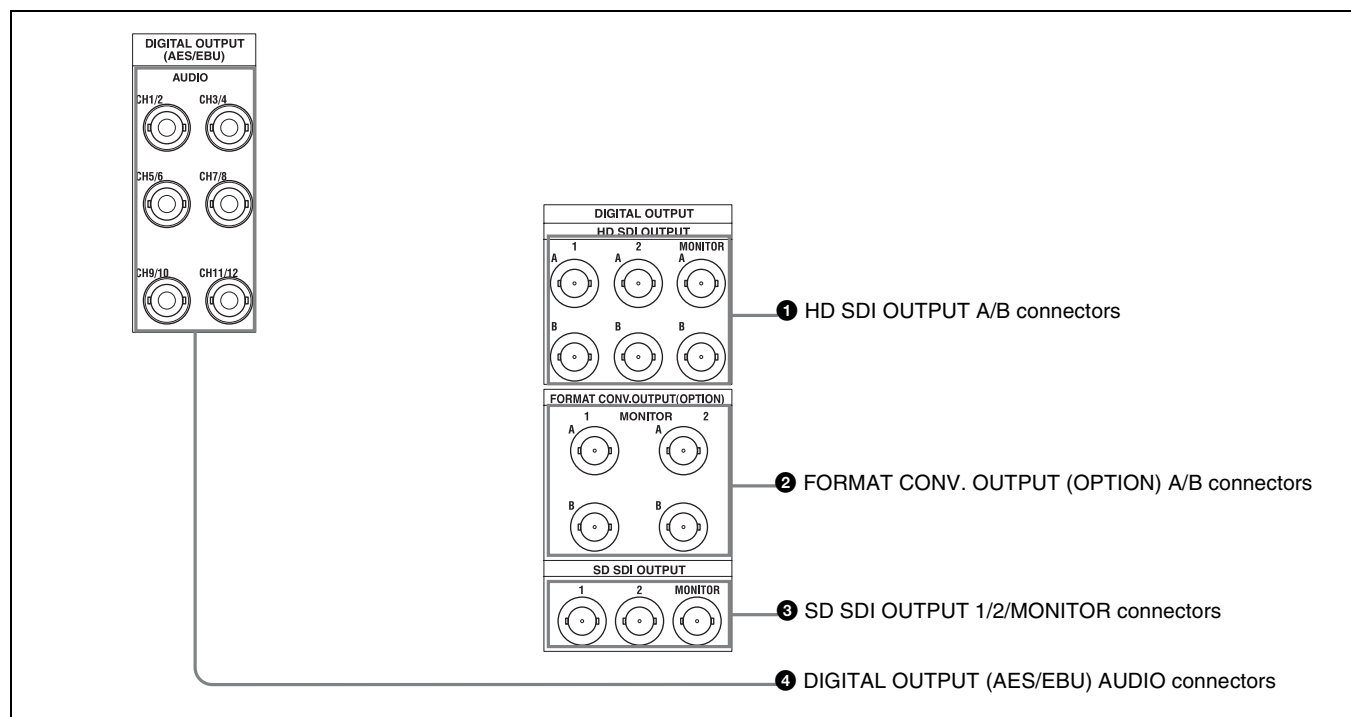
The output phase is the same as that of the composite signal output from the SD OUTPUT COMPOSITE (MONITOR) connector.

Because the output phase changes with the operation mode of this unit, use this for synchronization with the video monitor.

## 6 SD OUTPUT COMPOSITE (MONITOR) connector (BNC)

Outputs an analog composite signal for a video monitor. When the ALT/[F6] (CHARA SUPER) setting in the TC menu is on, character signals such as time codes are superimposed on the output.

## 2 DIGITAL I/O (input/output) section



### 1 HD SDI (SDI video/audio) OUTPUT A/B connectors (BNC)

These output three sets of SDI video/audio signals. When the ALT/[F6] (CHARA SUPER) buttons are set to ON in the TC menu, time data or other text data is superimposed on the signal output from the MONITOR connector.

### 2 FORMAT CONV. (format-converted video/audio) OUTPUT (OPTION) A/B connectors (BNC)

These output two sets of format-converted video/audio signals. When the ALT/[F5] (FC CHARA) buttons are set to ON in the TC menu, the output has time data or other text superimposed on the signal.

### 7 TIME CODE OUT (time code output) connector (XLR 3-31, male)

Outputs the playback time codes.

### 8 CUE OUT (cue output) connector (XLR 3-31, male)

Outputs cue track audio during HDCAM or Digital Betacam playback.

**Note**

There is no cue track on an HDCAM-SR tape, and therefore no output.

**Note**

This is only valid when the optional HKSR-5001 format converter board is installed.

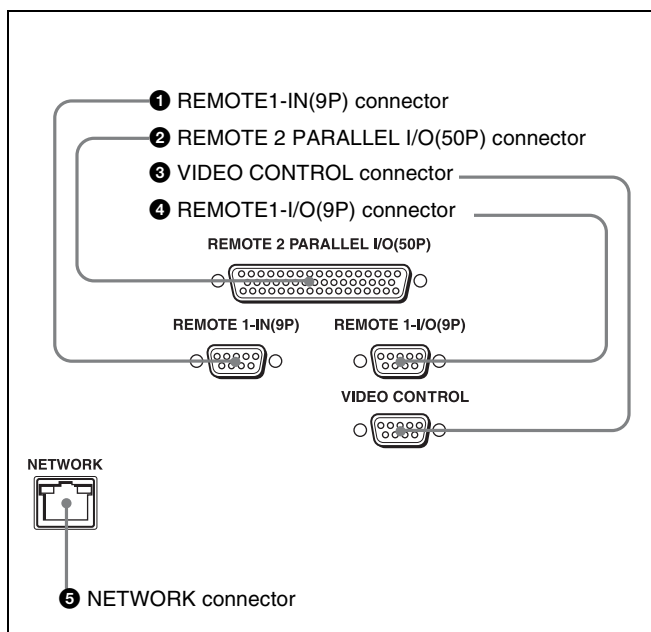
### 3 SD SDI OUTPUT 1/2/MONITOR connectors (BNC)

These output three sets of video/audio signals. When the ALT/[F6] (CHARA SUPER) buttons are set to ON in the TC menu, time data or other text data is superimposed on the output from the MONITOR connector.

### 4 DIGITAL OUTPUT (AES/EBU) AUDIO connectors (BNC)

These output digital audio signals in AES/EBU format for channels 1 to 12.

### 3 Remote input/output section



#### 1 REMOTE 1-IN(9P) connector (D-sub 9-pin, female)

Use this, with the supplied 9-pin remote control cable, to connect the unit to a recorder (e.g., SRW-5800) or an HD VTR unit to carry out editing with a BVE-series editor BVE-900/910/2000/9000/9100.

#### 2 REMOTE 2 PARALLEL I/O(50P) connector (D-sub 50-pin, female)

Inputs an external remote control signal.

For details, refer to the Maintenance Manual Volume 1.

#### 3 VIDEO CONTROL (Digital Video Processor Control) connector (D-sub 9-pin, female)

Connects to the optional HKDV-900 HD Digital Video Controller to enable remote control of the internal digital video processor. Turn off the power before connecting the remote controller.

#### 4 REMOTE 1-I/O(9P) connector (D-sub 9-pin, female)

Use this, with the supplied 9-pin remote control cable, to connect the unit to a recorder (e.g., SRW-5800) or an HD VTR unit to carry out editing with a BVE-series editor BVE-700/2000/9000/9100.

#### 5 NETWORK connector

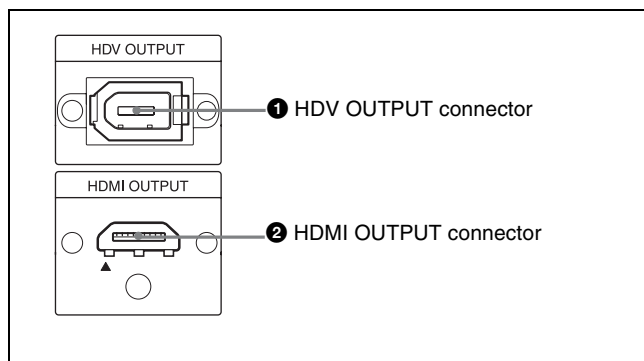
Used for monitoring this unit by SNMP, or for setting or changing settings of this unit by HTTP.

#### CAUTION

- For safety, do not connect the connector for peripheral device wiring that might have excessive voltage to this port. Follow the instructions for this port.

- When you connect the NETWORK cable of the unit to peripheral device, use a shielded-type cable to prevent malfunction due to radiation noise.

### 4 HDMI/i.LINK (HDV) output section



#### Note

The connectors in the HDMI/i.LINK (HDV) output section are added to the connector panel of this unit by installing the optional HKSR-5105 HDMI/i.LINK (HDV) Output Board.

#### 1 HDV (HDV video/audio) OUTPUT connector (HDV, 6-pin)

Output the HDV video/audio signal.

When “on” is selected by the VTR SETUP menu item 207 “REMOTE i.LINK”, this unit can be controlled from the connected device through AV/C control.

#### Notes

- When you connect this unit to a device equipped with an i.LINK jack using the i.LINK cable, power off the device and remove the power cord from the AC outlet before connecting (or disconnecting) the i.LINK cable.
- However the HDV OUTPUT connector of this unit is a 6-pin type, so no power is supplied.
- If no picture appears on the device connected to the HDV OUTPUT connector, power off the connected device, disconnect the i.LINK cable, then reconnect it.
- Normally, only one device can be connected to this unit using an i.LINK cable.
- The HDV output signal of this unit does not synchronize to the input reference video signal.
- To control this unit via the RS-422A interface (REMOTE 1-IN(9P) or REMOTE 1-I/O(9P) connector), use a video and audio interface other than HDV, such as HD SDI.

#### 2 HDMI (HDMI video/audio) OUTPUT connector (type A, 19-pin)

Output the HDMI video/audio signal.



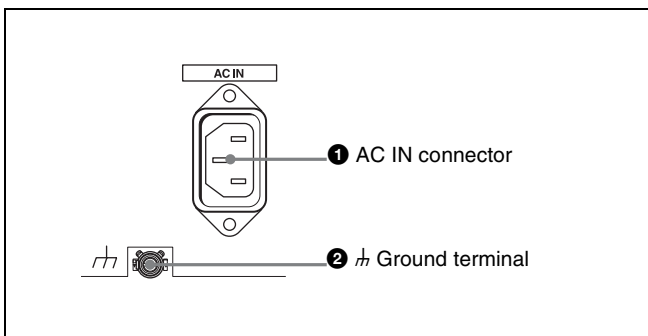
## Notes

- Use an HDMI cable conforming to Category 2 (High Speed Cable) with HDMI logo.
- When you connect this unit with another device, some of the devices may not display pictures or sounds.
- If no picture appears on the device connected to the HDMI OUT connector, disconnect the HDMI cable, then reconnect it.
- To prevent damaging this unit and the connected device, do not connect the unit in the way described below:
  - The HDMI OUT connector on this unit is connected to the HDMI output connector on another device.
  - The HDMI OUT connector on this unit is connected to the HDMI OUT connector on another unit (the same model).
- The HDMI output signal of this unit does not synchronize to the input reference video signal.

HDMI/HDV output status is displayed in information display.

*For details on HDMI/HDV output formats, see “HDMI/HDV output formats that the HKSR-5105 supports” on page 175 in Appendix.*

## 5 Power supply



### 1 AC IN connector

Connects to an AC outlet using an appropriate power cord.

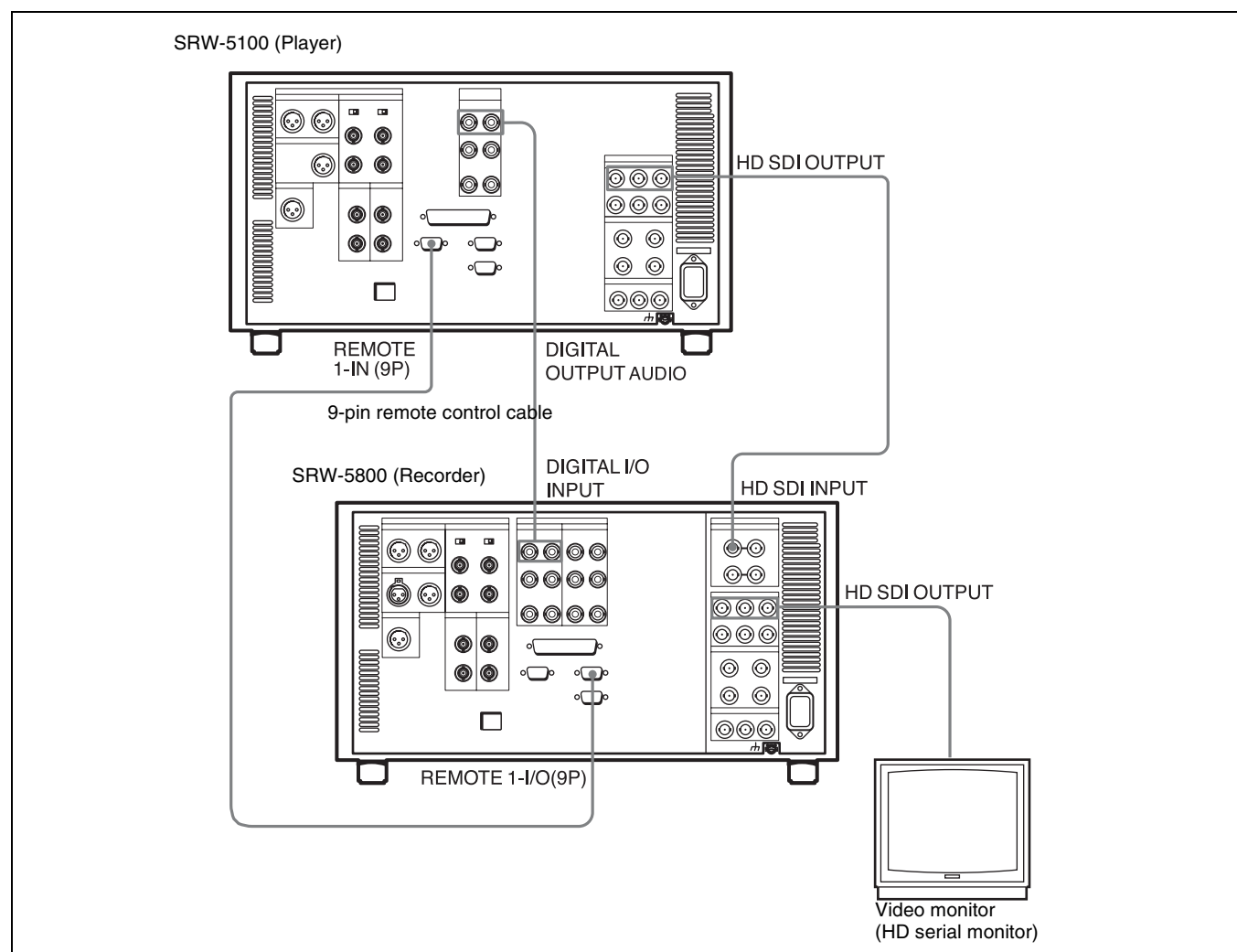
### 2 Ground terminal

## 3-1 Connecting External Equipment

### 3-1-1 Making HD Digital Connections

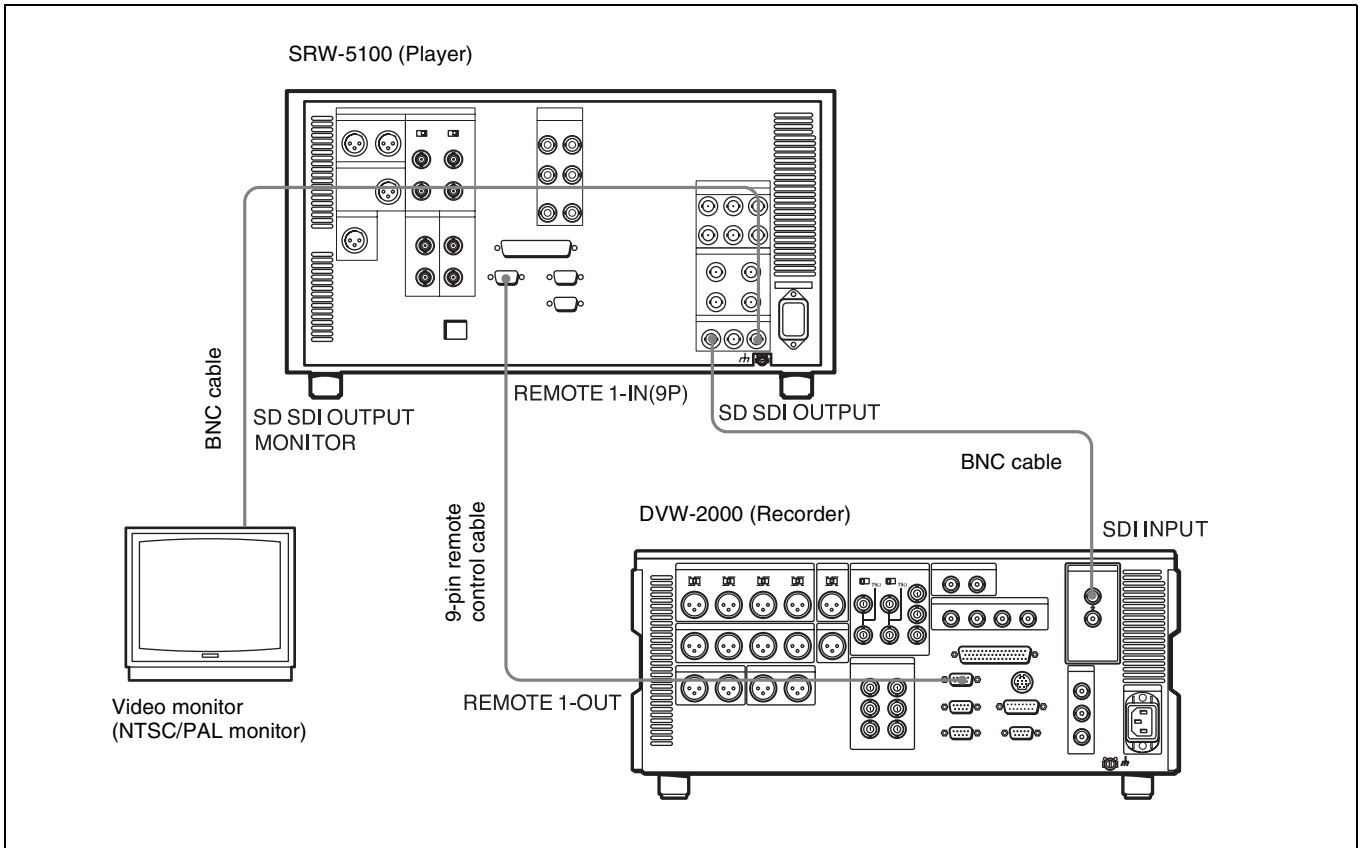
This example shows the connections when using an SRW-5100 as player and an SRW-5800 as recorder, in 59.94i or 60i mode.

*For details on operation and settings of automatic editing, refer to the Operation Manual supplied with the SRW-5800.*



### 3-1-2 Making NTSC/PAL Digital Connections

This example shows how to connect two units, an SRW-5100 as the player and a DVW-2000 D-1 Component Digital VTR as the recorder.

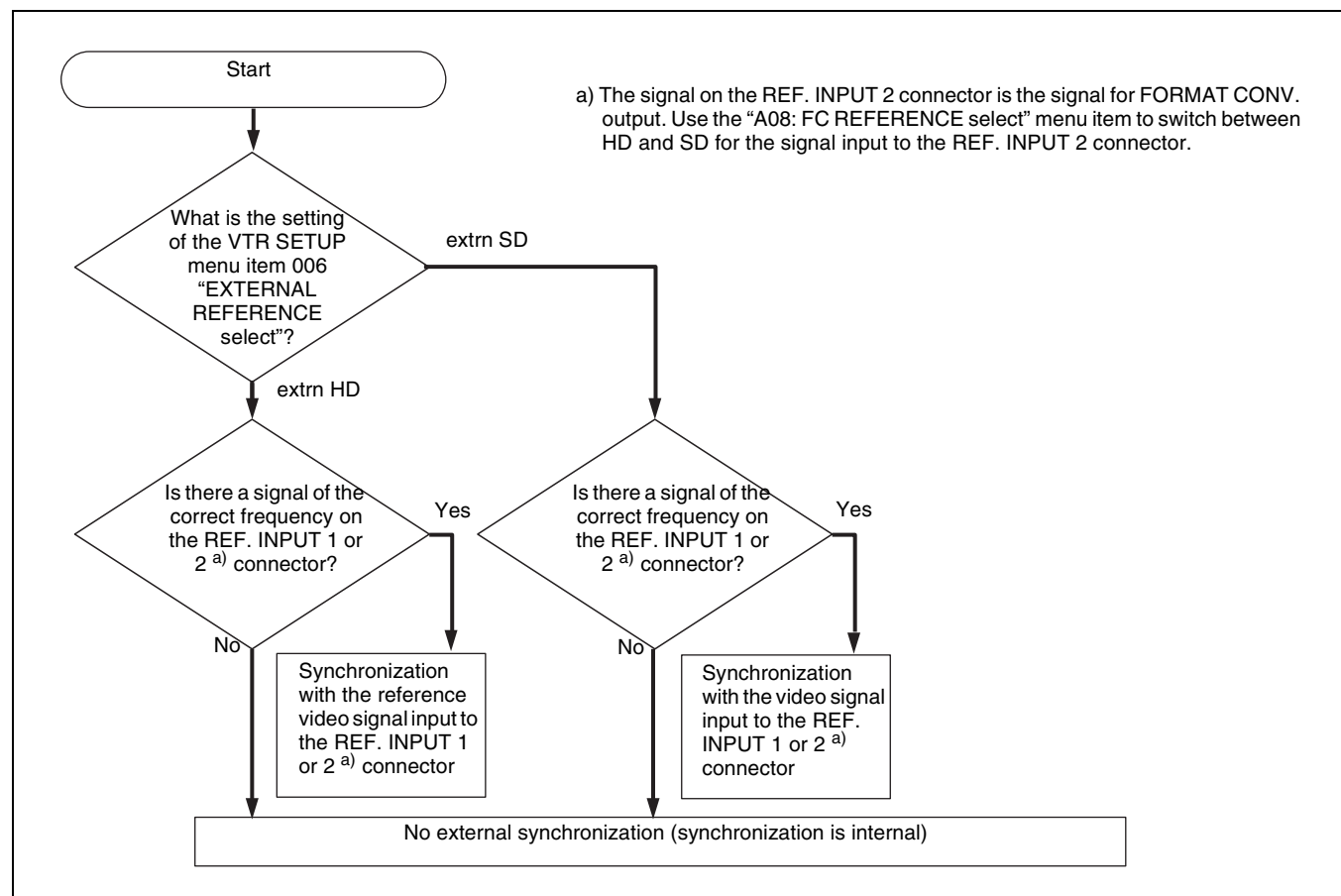


## 3-2 Reference Signals

This section describes how reference signals for the video output are selected.

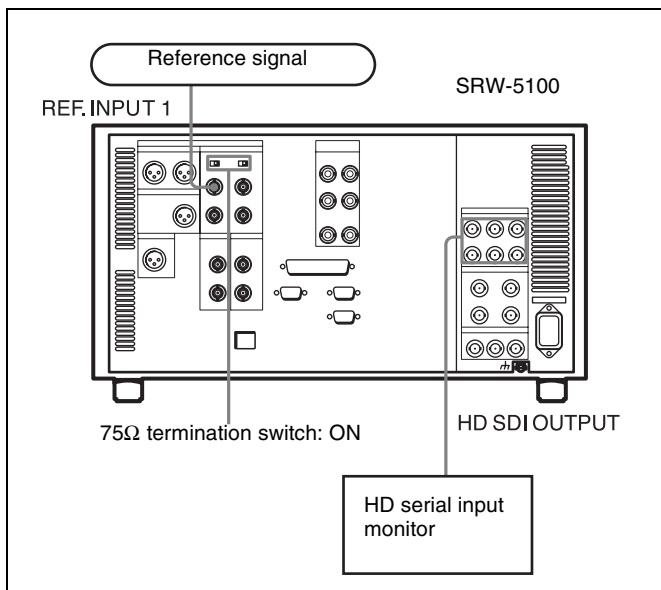
### 3-2-1 Reference Signals for Output Video

Depending on the operating condition, VTR SETUP menu settings, the input signal, and the video output signal from this unit can be synchronized as follows.



### 3-2-2 Reference Signal Connections

Make the reference signal connection as follows, according to your playback requirements.



### Note

The following signals can be used as a reference signal.

- HD trilevel SYNC signal of an appropriate field frequency for external synchronization
- Black burst signal of 525/59.94 Hz
- Black burst signal of 625/50 Hz

Input the signal of the appropriate field frequency for your system.

## Sync signals in 720P mode

Synchronize to an external sync signal when you want to play back 720P signals on this unit (including editing).

- When the 720/59.94P system is selected:  
You can select the following reference signals from menu item 006 “EXTERNAL REFERENCE select”.  
**extrn HD:** 1080/59.94i tri-level SYNC signal  
**extrn SD:** 525 black burst signal
- When the 720/50P system is selected:  
You can select the following reference signals from menu item 006 “EXTERNAL REFERENCE select”.  
**extrn HD:** 1080/50i tri-level SYNC signal  
**extrn SD:** 625 black burst signal

## Sync signals in 1080P mode

Use the following external sync signals to synchronize this unit in 1080P mode.

- When the 1080/50P system is selected:  
You can select either of the following reference signals in menu item 006 “EXTERNAL REFERENCE select”.  
**extrn HD:** 1080/50i tri-level SYNC signal  
**extrn SD:** 625 black burst signal
- When the 1080/59P system is selected:  
You can select either of the following reference signals in menu item 006 “EXTERNAL REFERENCE select”.  
**extrn HD:** 1080/59i tri-level SYNC signal  
**extrn SD:** 525 black burst signal

- When the 1080/60P system is selected:  
You can select the following reference signal regardless of the setting for menu item 006 “EXTERNAL REFERENCE select”.  
**extrn HD:** 1080/60i tri-level SYNC signal

## Sync signals in 2048 × 1556 mode

Use the following external sync signals to synchronize this unit in 2048 × 1556 mode.

- When 2048 × 1556 23.98PsF is selected:  
You can select the following reference signal regardless of the setting in menu item 006 “EXTERNAL REFERENCE select”.  
**extrn HD:** 1080/23.98PsF tri-level SYNC signal
- When 2048 × 1556 24PsF is selected:  
You can select the following reference signal regardless of the setting in menu item 006 “EXTERNAL REFERENCE select”.  
**extrn HD:** 1080/24PsF tri-level SYNC signal
- When 2048 × 1556 25PsF is selected:  
You can select either of the following reference signals in menu item 006 “EXTERNAL REFERENCE select”.  
**extrn HD:** 1080/50i tri-level SYNC signal  
**extrn SD:** 625 black burst signal

## About signals output from the optional HKSR-5105 HDMI/i.LINK (HDV) Output Board

Regardless of the setting of menu item 006 “EXTERNAL REFERENCE select”, the HDMI/HDV output signals do not synchronize with the output signal from this unit.

## 3-3 Handling Cassettes

### 3-3-1 Recommended Cassettes

Use 1/2 inch HDCAM-SR, HDCAM, or Digital Betacam cassettes.

The maximum playback time is as shown in the following tables.

System frequency HDCAM SR-cassette	59.94/ 60 Hz	50 Hz	29.97/ 30 Hz	25 Hz	23.98/ 24 Hz
S-size cassette	20 minutes	24 minutes	40 minutes	48 minutes	50 minutes
L-size cassette	62 minutes	74 minutes	124 minutes	149 minutes	155 minutes

#### Note

The playback times for 4:4:4 HQ mode, 1080p mode, or dual stream mode are one-half those indicated in the table above.

System frequency HDCAM cassette	29.97/30 Hz	25 Hz	23.98/24 Hz
S-size cassette	40 minutes	48 minutes	50 minutes
L-size cassette	124 minutes	149 minutes	155 minutes

System frequency Digital Betacam cassette	29.97 Hz	25 Hz
S-size cassette	40 minutes	40 minutes
L-size cassette	124 minutes	124 minutes

#### Note

Playing back a Digital Betacam or HDCAM cassette requires the optional HKSR-5802 Digital Betacam/HDCAM Processor Board.

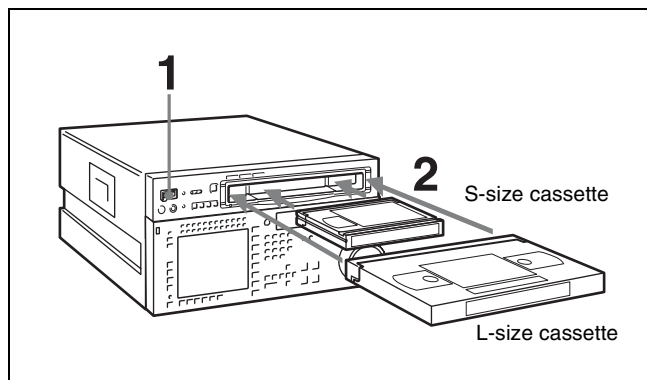
#### Storage of cassettes

Store your cassettes at room temperature and normal humidity.

### 3-3-2 Inserting and Ejecting Cassettes

Always turn on this unit before inserting or ejecting cassettes.

#### Inserting a cassette



**1** Turn the POWER switch to ON.

**2** Before inserting a cassette, check the following points:

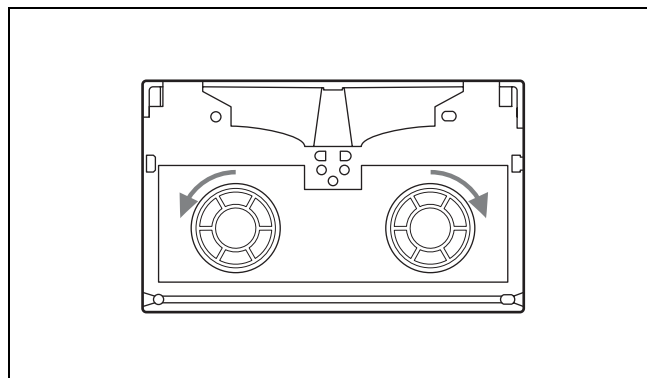
- There is no slack in the tape.
- An error message does not appear in the menu display.
- The window of the cassette is facing up.

When inserting an S-size cassette, make sure it is aligned with the marks on the cassette insertion slot.

The cassette is loaded automatically, and the tape is wound around the drum.

#### Removing slack in the tape

Press one of the reels in slightly, then carefully rotate it in the direction of the arrow until it stops.



#### Preventing double cassette inserting

When a cassette is loaded, an orange lock-out bar appears in the cassette insertion slot to prevent users from attempting to load another cassette.

## Ejecting the cassette

Press the EJECT button.

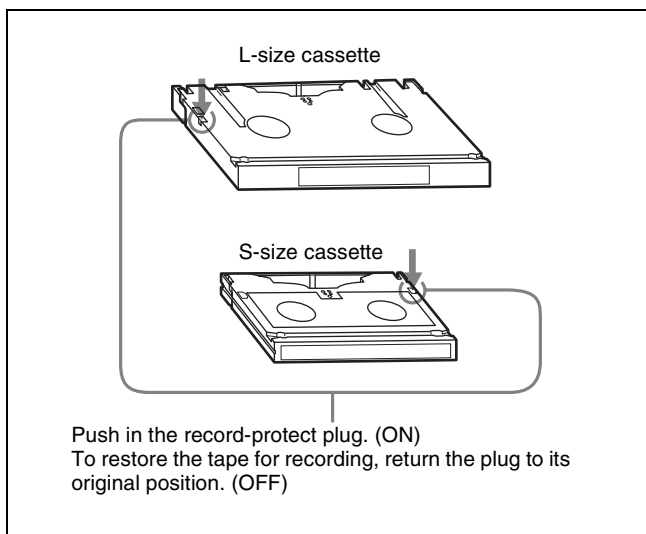
The tape is unthreaded and the cassette is automatically ejected. This operation takes a few seconds.

### To cancel ejecting a cassette

Press any operation button before the cassette is completely ejected. The cassette is loaded again and the operation corresponding to the button you pressed starts.

## 3-3-3 Preventing Accidental Erasure

To prevent accidental erasure of material recorded on a tape, push in the record-protect plug.



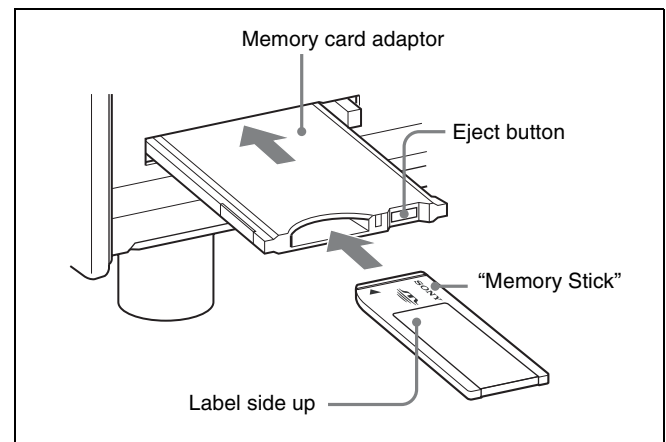
When a cassette with this plug pushed in is inserted into this unit, the REC INHIBIT indicator on the lower control panel lights up and recording or erasure of the stop code cannot be carried out,

## 3-4 Using a “Memory Stick”

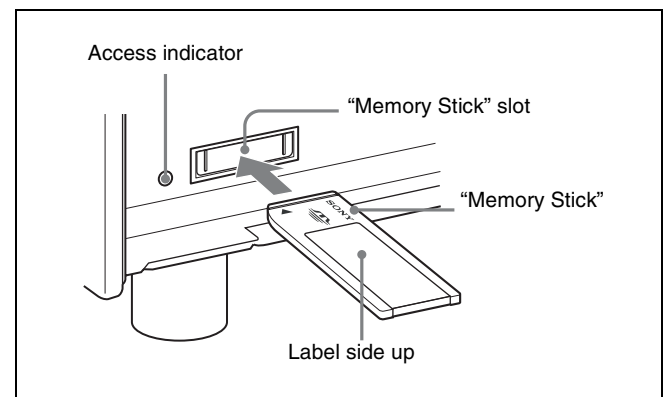
When a “Memory Stick” is inserted in this unit, the file data can be stored on the “Memory Stick,” which enables you to share data among this unit and the VTRs.

### Inserting a “Memory Stick”

- When the serial number of this unit is lower than 10101 With the label side up and the connector facing forward, insert the “Memory Stick” into an optional memory card adaptor. Then, with the “Memory Stick” still loaded, insert the memory card adaptor into the memory card slot of the unit.



- When the serial number of this unit is 10101 or higher With the label side up and the connector facing forward, insert the "Memory Stick" into the "Memory Stick" slot. The access indicator flashes when data is being accessed.



### Note

Never insert/remove a “Memory Stick” during access to data.

### To remove a “Memory Stick”

- When the serial number of this unit is lower than 10101

Push the eject button on the memory card adaptor, and pull the “Memory Stick” out.

- When the serial number of this unit is 10101 or higher Push the “Memory Stick” in, and then pull it out.

### 3-4-1 Notes on “Memory Stick”

#### Usable type of “Memory Stick”

You can use a “Memory Stick PRO” with this unit. The “Memory Stick PRO Duo” can also be used, but using the “Memory Stick PRO Duo” adaptor is required. The operations of this unit have been checked using “Memory Stick PRO” media up to 2GB.

#### Operations checked with:

MSH-128  
MSX-512S  
MSX-M2GS

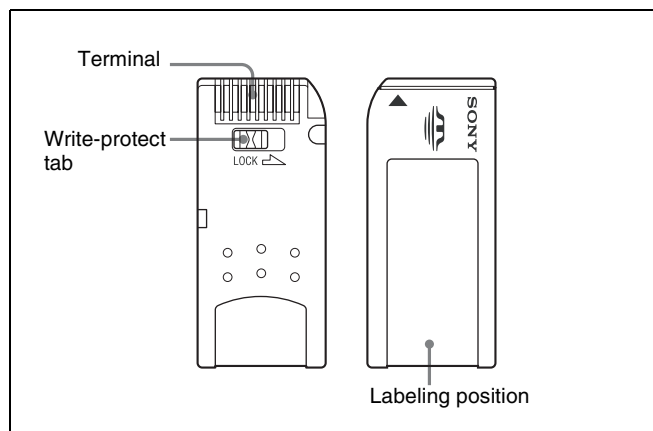
#### Note

When the serial number of this unit is 10101 or higher, “Memory Stick PRO Duo” adaptor is not required.

#### Note on data read/write speed

Data read/write speed may vary depending on the combination of the “Memory Stick” and “Memory Stick”-compliant product you use.

#### Before using a “Memory Stick”



- When you set the “Memory Stick” erasure prevention switch to “LOCK,” data cannot be recorded, edited, or erased.
- Data may be damaged if:
  - You remove the “Memory Stick” or turn off the unit while it is reading or writing data.
  - You use the “Memory Stick” in a location subject to the effects of static electricity or electric noise.
- We recommend that you make a backup copy of important data that you record on the “Memory Stick”.

#### Notes


- Do not attach anything other than the supplied label to the “Memory Stick” labeling position.
- Attach the label so that it does not stick out beyond the labeling position.
- Carry and store the “Memory Stick” in its case.
- Do not touch the connector of the “Memory Stick” with anything, including your finger or metallic objects.
- Do not strike, bend, or drop the “Memory Stick”.
- Do not disassemble or modify the “Memory Stick”.
- Do not allow the “Memory Stick” to get wet.
- Do not use or store the “Memory Stick” in a location that is:
  - Extremely hot, such as in a car parked in the sun
  - Under direct sunlight
  - Very humid or subject to corrosive substances

#### When the “Memory Stick” access indicator is lit or flashing

Data is being read from or written to the “Memory Stick” at this time. Do not shake the product or subject it to shock. Do not turn off the power to the product or remove the “Memory Stick”. Doing so may damage the data.

#### Precautions

- To prevent data loss, make backups of data frequently. In no event will Sony be liable for any loss of data.
- Unauthorized recording may be contrary to the provisions of copyright law. When you use a “Memory Stick” that has been pre-recorded, be sure that the material has been recorded in accordance with copyright and other applicable laws.
- The “Memory Stick” application software may be modified or changed by Sony without prior notice.

- “Memory Stick” and  are trademarks of Sony Corporation.
- “Memory Stick PRO” and MEMORY STICK PRO are trademarks of Sony Corporation.
- “Memory Stick PRO Duo” and MEMORY STICK PRO Duo are trademarks of Sony Corporation.



## 4-1 Registering and Storing Menu Settings

The operating conditions of this unit are set using the menu operation section on the lower control panel.

Menu items are divided among eight different menus (HOME, TC, VIDEO, AUDIO, CUE, PF1, PF2, SET UP). You can register any frequently used items to the HOME, TC, VIDEO, AUDIO, PF1, and PF2 menu screens. By registering the necessary items in advance, setting operations are made quicker. The contents of the eight VTR memory banks can, in turn, be stored on a “Memory Stick” for later recall.

### 4-1-1 Menu Configuration

This unit has two kinds of menus.

#### VTR SETUP menu list

This menu contains items that specify the initial operating conditions of this unit. You can change these settings directly without registering the items to the function buttons.

Press the **[F6]** (VTR SETUP) button in the SET UP menu to display this menu.

*For details on setting operating conditions of this unit, see “4-7-1 VTR SETUP Menu” on page 106.*

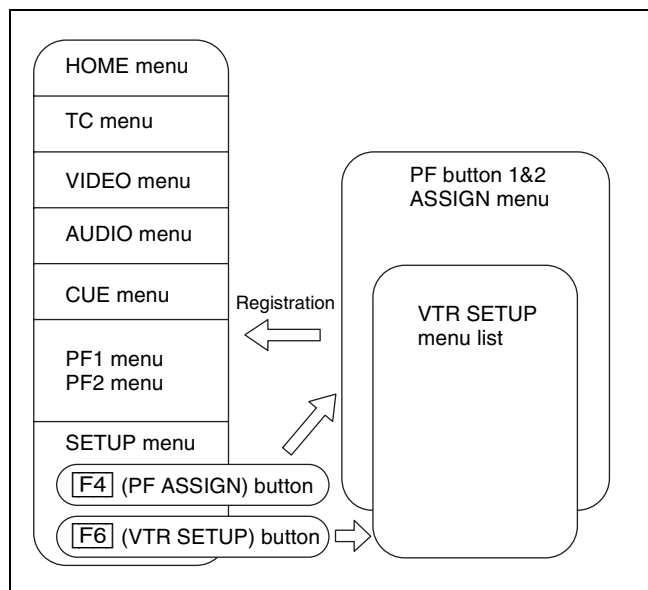
#### PF ASSIGN menu list

This is a list of menu items which can be registered to the HOME, TC, VIDEO, AUDIO, PF1 and PF2 menu screens as well as the screen that is displayed by pressing the ALT button (the ALT screen). This includes all VTR SETUP menu item.

Press the **[F4]** (PF ASSIGN) button in the SET UP menu to display this menu.

*For details on registering items, see “4-1-3 Registering VTR SETUP Menu Items to Function Keys” on page 38.*

The menu configuration of this unit is shown in the following figure.

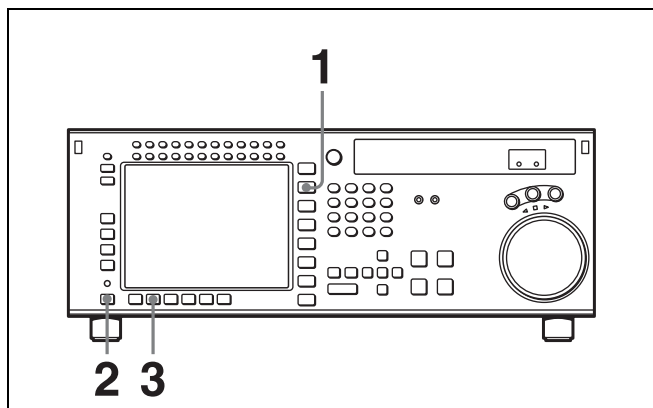


PF button assignment allows you to assign the same item also to a different menu screen or button.

### 4-1-2 Changing Menu Settings

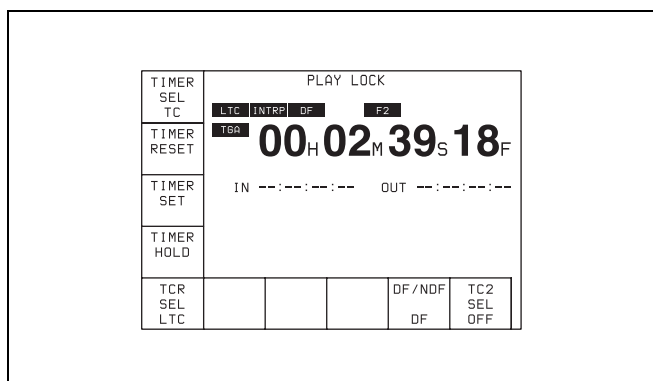
To activate the HOME, TC, VIDEO, AUDIO, CUE, PF1, PF2, or SET UP menu, press the respective menu button. Menu items are assigned to function buttons (**[F1]** to **[F10]**) in each menu. When two items are registered to the same function button, you can display the second item by pressing the ALT button.

The example below describes the procedure for changing the setting specified by the ALT/**[F6]** (CHARA SUPER) button in the TC menu.



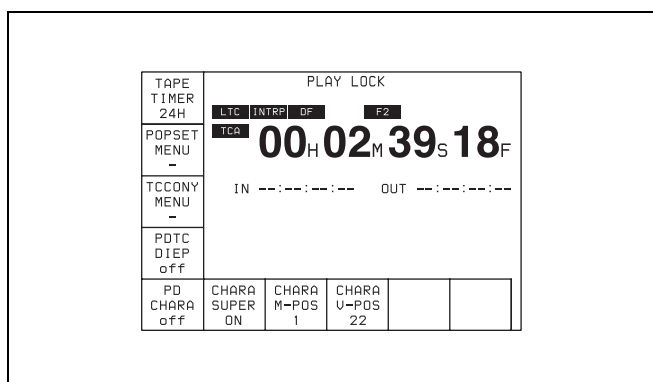
### 1 Press the TC button.

The first page of the TC menu appears in the display.



### 2 Press the ALT button.

The second page of the TC menu appears in the display.



#### To return to the first page

Press the ALT button again.

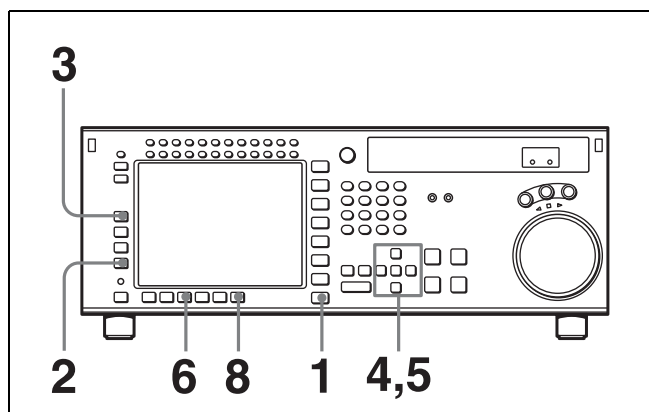
### 3 Press the [F6] (CHARA SUPER) button to change the setting.

Each time the button is pressed, the setting changes.

## 4-1-3 Registering VTR SETUP Menu Items to Function Keys

You can register 120 menu items including those displayed by pressing the ALT button in the HOME, TC, VIDEO, AUDIO, PF1, and PF2 menus. By registering frequently used menu items, the settings can be carried out together.

### Registering items



### 1 Press the SET UP button.

The SET UP menu appears in the display.

### 2 Press the [F4] (PF ASSIGN) button.

The PF ASSIGN menu appears in the display.

### 3 Press the [F1] (PAGE) button to select the menu where you wish to register an item.

The selected menu appears and the items currently registered to the menu appear in the middle of the display.

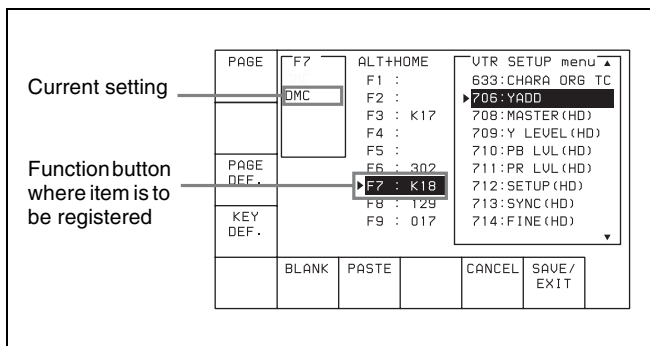
If the function button assignments are other than the default, the [F3] (PAGE DEF.) button is valid.

#### To return all function buttons to the default settings

Press the [F3] (PAGE DEF.) button.

### 4 Press the cursor ↑ or ↓ button to move the cursor (▶) to the function button where the item is to be registered.

The selected function button is highlighted and the current setting is displayed.



### To unregister the selected item

Press the **[F6]** (BLANK) button.

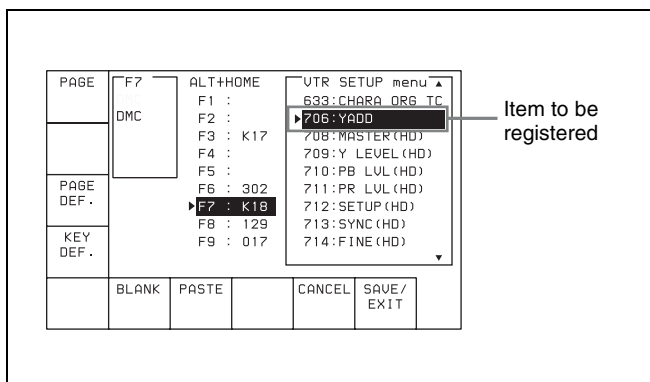
When a function button with other than the default assignment is selected, the **[F4]** (KEY DEF.) button is valid.

To return the selected function button to its default setting, press the **[F4]** (KEY DEF.) button.

- 5** Press the cursor **→** button to move the cursor (▶) to the menu list (PF ASSIGN menu), then press the cursor **↑** or **↓** button to move the cursor to the menu item to be registered.

### To scroll the menu faster

Press the cursor **↑** or **↓** button while holding down the SFT button.



- 6** Press the **[F7]** (PASTE) button to register the item.

The new item is registered to the function button.

- 7** Repeat steps **3** to **6** to register more items.

### To cancel the registration of all new items

Press the **[F9]** (CANCEL) button.

- 8** Press the **[F10]** (SAVE/EXIT) button to save the newly registered items.

The registration is completed and the SET UP menu appears in the display again.

### Note

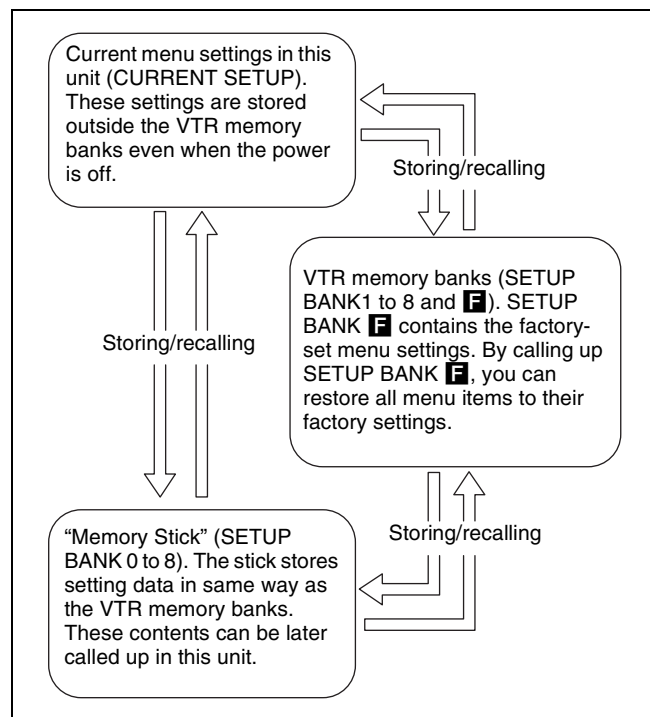
Function key registration data and the VTR SETUP menu items are stored in the VTR bank to be commonly used by the SRW-5100 and SRW-5800. Therefore, on the SRW-5100, incompatible items are registered to certain function keys at the factory and such items are shown only on the PF ASSIGN menu screen. Note that these items appear in red-shade characters on the PF ASSIGN menu.

## 4-1-4 VTR Memory Bank Function

Eight VTR memory banks are provided for storing up to eight sets of menu settings.

The contents of all eight VTR memory banks can be stored on a "Memory Stick."

In addition, you can also store and recall VTR memory bank content via the network.



For details on "Memory Stick" use, see "4-1-5 "Memory Stick" Operations" on page 41.

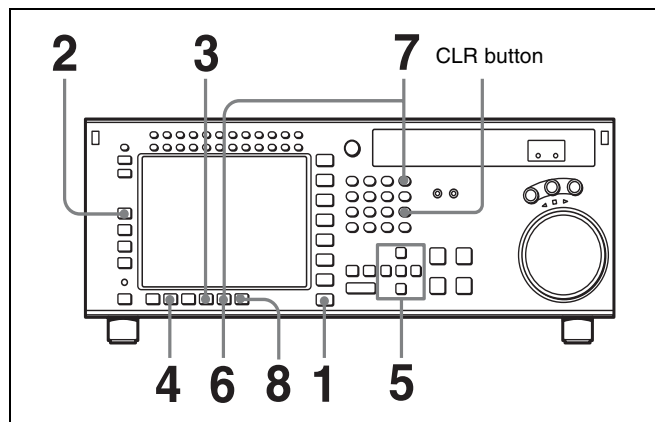
For details on storing and recalling VTR memory bank content via the network, see "4-1-6 Storing and Recalling the Contents of VTR Memory Banks Through the Network" on page 46.

For details on adding titles to the contents of the VTR memory bank, see "4-1-7 Adding Titles to the Data" on page 53.

### Note

The contents of SETUP BANK **F** cannot be changed.

## Storing the current VTR menu settings to a VTR memory bank

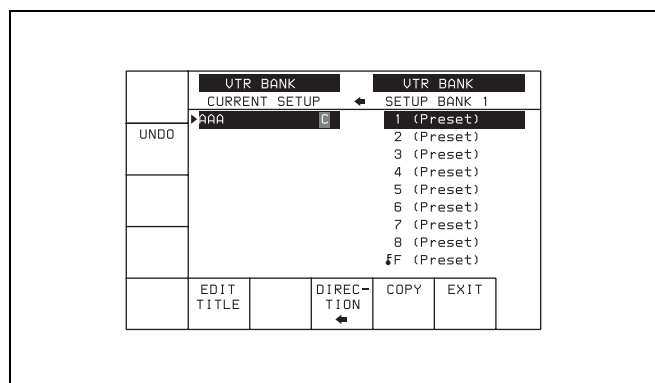


- 1** Press the SET UP button.

The SET UP menu appears in the display.

- 2** Press the [F1] (VTR BANK) button.

The VTR BANK menu appears in the display.



- 3** Press the [F8] (DIRECTION) button to select the → direction.

- 4** Press the cursor ← button to move the cursor (▶) to CURRENT SETUP[C], then press the [F6] (EDIT TITLE) button to add a title to the current menu settings of this unit.

For details, see “4-1-7 Adding Titles to the Data” on page 53.

- 5** Press the cursor → button to move the cursor (▶) to SETUP BANK, then press the cursor ↑ or ↓ button to move the flashing cursor bar to the number of the VTR memory bank to be used for saving the current menu settings.

The flashing cursor bar indicates the storage destination.

- 6** Press the [F9] (COPY) button.

A message appears in the display asking you to confirm the operation.

### To cancel the storage operation

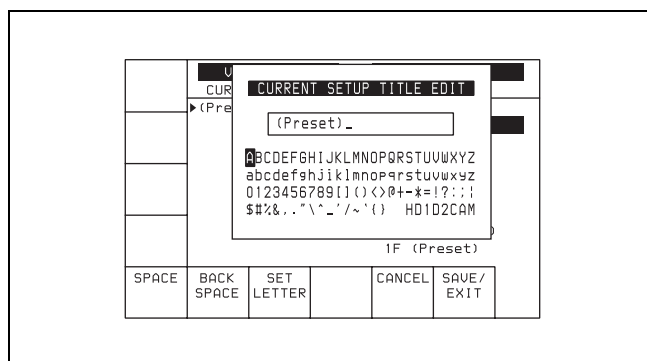
Press the CLR button.

- 7** Press the [F9] (COPY) button while holding down the SFT button.

The current menu settings are stored to the VTR memory bank.

### To add or change a title for VTR menu settings after storing them to the VTR memory bank

Move the cursor (▶) to the number of the VTR memory bank where the settings are stored, then press the [F6] (EDIT TITLE) button.



For more information, see “4-1-7 Adding Titles to the Data” on page 53.

### Recovering previous settings after new settings have been saved

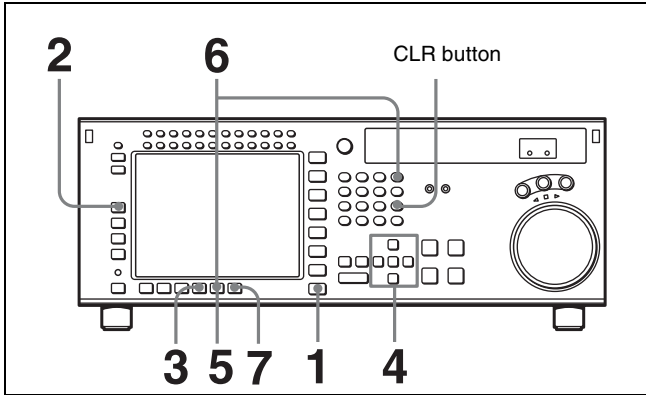
Press the [F2] (UNDO) button to recover the previous settings.

**Preventing accidental erasure after saving settings**  
Move the cursor to the memory bank to be protected and press ALT/[F2] (PROTECT) buttons. A P will appear next to the selected bank.

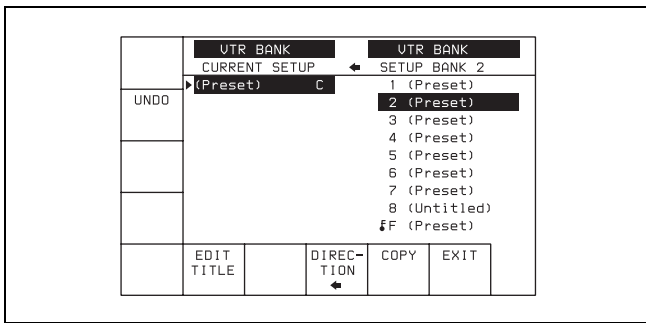
- 8** Press the [F10] (EXIT) button.

The SET UP menu appears again.

## Recalling menu settings from a VTR memory bank



- 1** Press the SET UP button.  
The SET UP menu appears in the display.
- 2** Press the **[F1]** (VTR BANK) button.  
The VTR BANK menu appears in the display.



- 3** Press the **[F8]** (DIRECTION) button to select the ← direction.  
The left cursor bar flashes.
- 4** Press the cursor ↑ or ↓ button to move the cursor (▶) to the number of the VTR memory bank to be recalled.

- 5** Press the **[F9]** (COPY) button.  
A message asking you to confirm the operation appears in the display.

### To cancel the recalling operation

Press the CLR button.

- 6** Press the **[F9]** (COPY) button while holding down the SFT button.

The menu settings are recalled from the selected VTR memory bank.

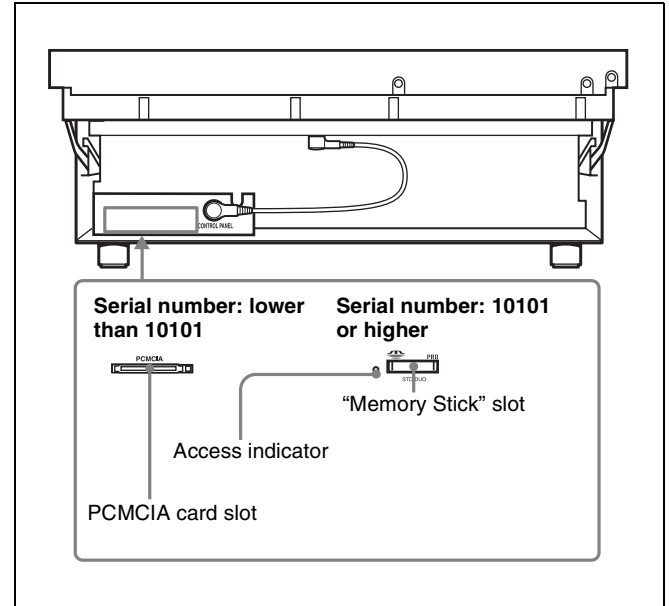
When the recalling process has been completed, the title of the VTR bank appears under CURRENT SETUP in the display.

- 7** Press the **[F10]** (EXIT) button.

The SET UP menu appears again.

## 4-1-5 “Memory Stick” Operations

You can store menu settings in the VTR memory banks and cue point data to a “Memory Stick” for recall later.



### To eject the “Memory Stick”

- When the serial number of this unit is lower than 10101  
Raise up the lower control panel, and press the eject button on the memory card adaptor inserted in the PCMCIA slot.
- When the serial number of this unit is 10101 or higher  
Lift up the lower control panel, push the “Memory Stick” in, and then pull it out.

*For details of opening and closing the control panel, refer to the Maintenance Manual.*

### Notes

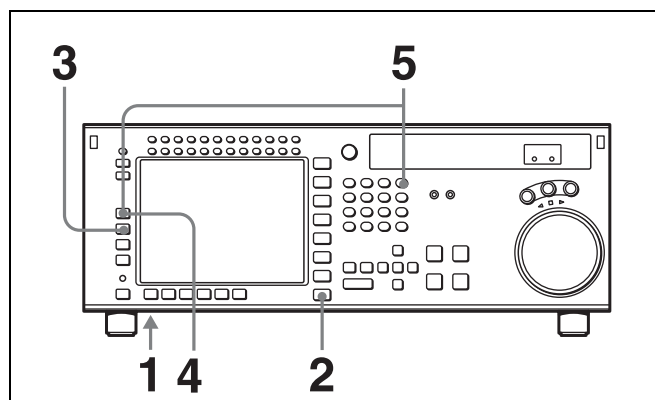
- When inserting the “Memory Stick”, firmly press the memory card adaptor that accommodates the “Memory Stick” (serial number: lower than 10101) or the “Memory Stick” itself (serial number: 10101 or higher) in as far as it will go.
- The “Memory Stick” recognition status is shown in the MEMCARD menu. If the “Memory Stick” is not inserted properly, reinsert it.
- When no directory is found on the inserted “Memory Stick” for storing the settings of the SRW-5100/5800 (“SRW5800”), the message “CONFIRMATION OF CREATING DIR:” appears in the MEMCARD menu display.  
Press the **[F1]** (FORMAT CARD) button while holding

down the SFT button to create a directory. To cancel creating a directory, press the CLR button.

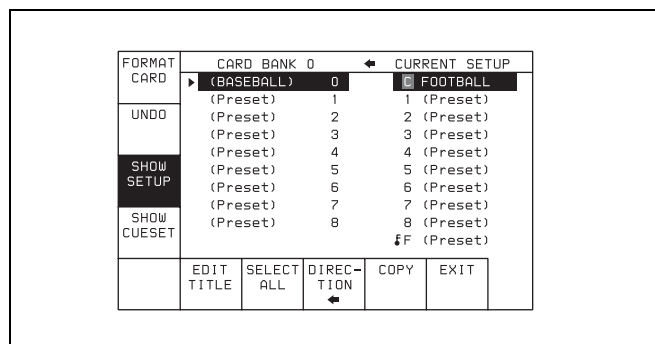
- The data to be stored to the “Memory Stick” can be commonly used with both the SRW-5100 and the SRW-5800. Therefore, the stored data contains portions that are not used with the SRW-5100.

## Formatting a “Memory Stick”

“Memory Stick” must be formatted before you can use it.



- 1 Insert the “Memory Stick.”
- 2 Press the SET UP button.  
The SET UP menu appears in the display.
- 3 Press the **[F2]** (MEMORY CARD) button.  
The MEMCARD menu appears in the display.



- 4 Press the **[F1]** (FORMAT CARD) button.

A message asking you to confirm the operation appears in the display.

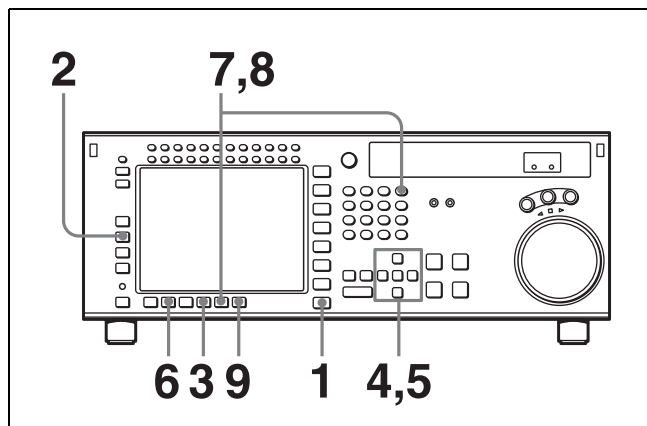
### To cancel formatting

Press the CLR button while the confirmation message appears in the display.

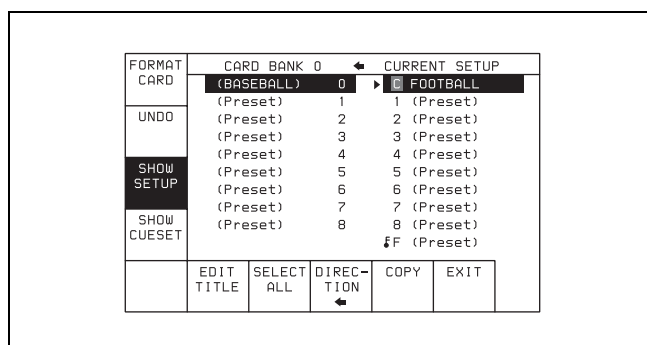
- 5 Press the **[F1]** (FORMAT CARD) button while holding down the SFT button.

This unit starts formatting the “Memory Stick.”

## Storing the contents of the VTR memory banks to a “Memory Stick”



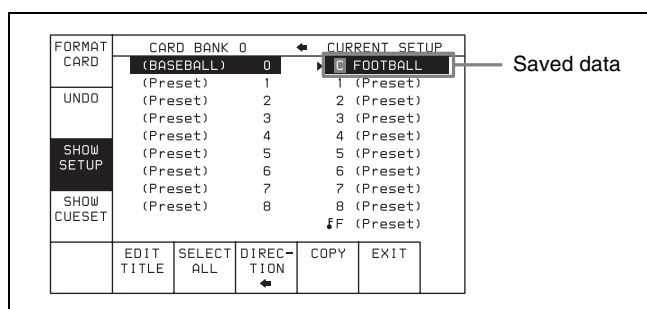
- 1 Press the SET UP button.  
The SET UP menu appears in the display.
- 2 Press the **[F2]** (MEMORY CARD) button.  
The MEMCARD menu appears in the display.



- 3 Press the **[F8]** (DIRECTION) button to select the ← direction.

The left cursor bar flashes.

- 4 Move the cursor ► to the VTR memory bank side using the cursor → button and use the cursor ↑ or ↓ button to move the cursor bar to the memory bank where the data is to be saved.



**To store the current VTR menu settings**

Move the cursor (►) to the [C] (CURRENT SETUP) position.

**To store all VTR memory banks**

Press the [F7] (SELECT ALL) button.

**Note**

If there are protected items at the destination end, it is not possible to select the [F7] (SELECT ALL) button.

- 5 Move the cursor (►) to the “Memory Stick” side using the cursor ◀ button, and use the cursor ↑ or ↓ button to move the cursor to the bank number (“Memory Stick” side) where the data is to be saved.

Destination (flashing)	FORMAT CARD	CARD BANK 0	CURRENT SETUP		
		► (BASEBALL) 0	◀ FOOTBALL		
	UNDO	(Preset) 1	1 (Preset)		
		(Preset) 2	2 (Preset)		
		(Preset) 3	3 (Preset)		
		(Preset) 4	4 (Preset)		
	SHOW SETUP	(Preset) 5	5 (Preset)		
		(Preset) 6	6 (Preset)		
		(Preset) 7	7 (Preset)		
	SHOW CUESET	(Preset) 8	8 (Preset)		
			⌘F (Preset)		
	EDIT TITLE	SELECT ALL	DIRECTION	COPY	EXIT
			◀		

The flashing cursor bar indicates the storage destination.

- 6 To change the title of the bank, press the [F6] (EDIT TITLE) button.

For details, see “4-1-7 Adding Titles to the Data” on page 53.

- 7 Press the [F9] (COPY) button.

A message asking you to confirm the operation appears in the display.

- 8 Press the [F9] (COPY) button while holding down the SFT button.

Storage begins.

After the storage is complete, the title of the VTR memory bank appears on the “Memory Stick” side.

Destination (flashing)	FORMAT CARD	CARD BANK 0	CURRENT SETUP		
		► FOOTBALL 0	◀ FOOTBALL		
	UNDO	(Preset) 1	1 (Preset)		
		(Preset) 2	2 (Preset)		
		(Preset) 3	3 (Preset)		
		(Preset) 4	4 (Preset)		
	SHOW SETUP	(Preset) 5	5 (Preset)		
		(Preset) 6	6 (Preset)		
		(Preset) 7	7 (Preset)		
	SHOW CUESET	(Preset) 8	8 (Preset)		
			⌘F (Preset)		
	EDIT TITLE	SELECT ALL	DIRECTION	COPY	EXIT
			◀		

**Preventing accidental erasure after saving settings**

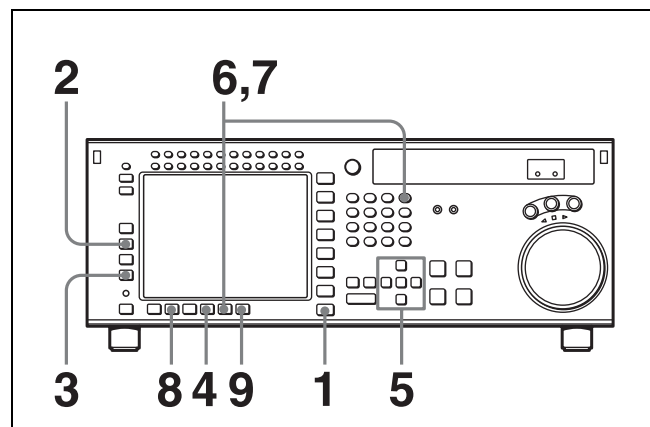
Press ALT/[F2] (PROTECT) buttons and a ⌘ symbol will appear to the right of the memory card bank number.

- 9 Press the [F10] (EXIT) button.

The SET UP menu appears again.

**Storing cue point lists to a “Memory Stick”**

You can store up to 8 pages of cue point lists to a “Memory Stick” along with titles.



- 1 Press the SET UP button.

The SET UP menu appears in the display.

- 2 Press the [F2] (MEMORY CARD) button.

The MEMCARD menu appears in the display.

Destination (flashing)	FORMAT CARD	CARD BANK 0	CURRENT SETUP		
		► (BASEBALL) 0	◀ FOOTBALL		
	UNDO	(Preset) 1	1 (Preset)		
		(Preset) 2	2 (Preset)		
		(Preset) 3	3 (Preset)		
		(Preset) 4	4 (Preset)		
	SHOW SETUP	(Preset) 5	5 (Preset)		
		(Preset) 6	6 (Preset)		
		(Preset) 7	7 (Preset)		
	SHOW CUESET	(Preset) 8	8 (Preset)		
			⌘F (Preset)		
	EDIT TITLE	SELECT ALL	DIRECTION	COPY	EXIT
			◀		

- 3 Press the [F4] (SHOW CUESET) button.

The display for storing cue point lists appears.



FORMAT CARD	CUE POINT SET 1 → CURRENT CUE SET
	MUSIC 1 → MOVIE
UNDO	(Blank) 2 → F (Blank)
	(Blank) 3
	(Blank) 4
	(Blank) 5
SHOW SETUP	(Blank) 6
	(Blank) 7
SHOW CUESET	(Blank) 8
	EDIT TITLE SELECT ALL DIREC- TION COPY EXIT

- 4 Press the **[F8]** (DIRECTION) button to select the ← direction.

The left cursor bar flashes.

- 5 Use the cursor ← button to move the cursor (▶) to CUE POINT SET side, then press the cursor ↑ or ↓ button to move the cursor bar to the number of the memory bank in the “Memory Stick” where you want to store the cue point list.

Destination (flashing)	FORMAT CARD	CUE POINT SET 1 ← CURRENT CUE SET
	▶ MUSIC 1	MOVIE
	UNDO	(Blank) 2 → F (Blank)
		(Blank) 3
		(Blank) 4
		(Blank) 5
	SHOW SETUP	(Blank) 6
		(Blank) 7
	SHOW CUESET	(Blank) 8
	EDIT TITLE SELECT ALL DIREC- TION COPY EXIT	

- 6 Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

- 7 Press the **[F9]** (COPY) button while holding down the SFT button.

This unit stores the cue point list to the “Memory Stick.”

- 8 Press the **[F6]** (EDIT TITLE) button to add a title to the cue point list.

For details, see “4-1-7 Adding Titles to the Data” on page 53.

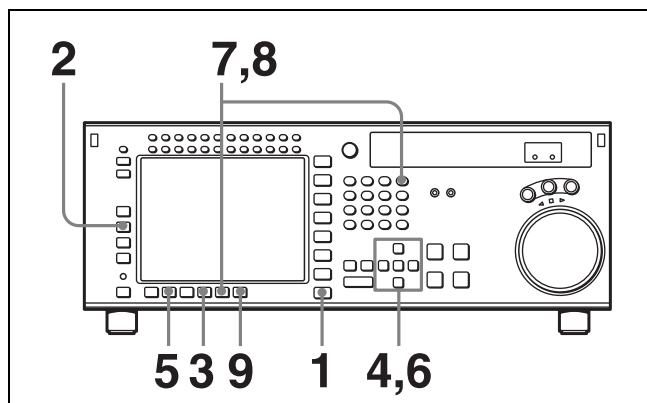
**Preventing accidental erasure after saving settings**  
Move the cursor (▶) to the cue point set number you wish to save and press ALT/[F2] (PROTECT) buttons. A **Ⓕ** symbol will appear to the right of the cue point set number.

- 9 Press the **[F10]** (EXIT) button.

The SET UP menu appears again.

## Recalling the contents of a “Memory Stick”

The contents stored in a “Memory Stick” can be recalled to the current VTR memory bank.



- 1 Press the SET UP button.

The SET UP menu appears in the display.

- 2 Press the **[F2]** (MEMORY CARD) button.

The MEMCARD menu appears in the display.

FORMAT CARD	CARD BANK 0 → CURRENT SETUP
	(BASEBALL) 0 → FOOTBALL
UNDO	(Preset) 1 1 (Preset)
	(Preset) 2 2 (Preset)
	(Preset) 3 3 (Preset)
	(Preset) 4 4 (Preset)
SHOW SETUP	(Preset) 5 5 (Preset)
	(Preset) 6 6 (Preset)
	(Preset) 7 7 (Preset)
SHOW CUESET	(Preset) 8 8 (Preset)
	EDIT TITLE SELECT ALL DIREC- TION COPY EXIT

- 3 Press the **[F8]** (DIRECTION) button to select the → direction.

The right cursor bar flashes.

- 4 Move the cursor (▶) to the “Memory Stick” side using the cursor ← button and use the cursor ↑ or ↓ buttons to place the cursor bar by the memory bank where the settings were saved.



Saved data	FORMAT CARD	CARD BANK 0	CURRENT SETUP
		(BASEBALL) 0	FOOTBALL
	UNDO	(Preset) 1	1 (Preset)
		(Preset) 2	2 (Preset)
		(Preset) 3	3 (Preset)
		(Preset) 4	4 (Preset)
	SHOW SETUP	(Preset) 5	5 (Preset)
		(Preset) 6	6 (Preset)
	SHOW CUESET	(Preset) 7	7 (Preset)
		(Preset) 8	8 (Preset)
			FF (Preset)
	EDIT TITLE	SELECT ALL	DIRECTION
			COPY EXIT

- 5** To change the title of the memory bank, press the **[F6]** (EDIT TITLE) button.

The title can also be changed after the settings are recalled.

For details, see “4-1-7 Adding Titles to the Data” on page 53.

- 6** Press the cursor  $\rightarrow$  button to move the cursor ( $\blacktriangleright$ ) to the VTR memory bank side, then press the cursor  $\uparrow$  or  $\downarrow$  button to move the cursor to the VTR memory bank number where the recalled data are to be stored.

Destination (flashing)	FORMAT CARD	CARD BANK 0	CURRENT SETUP
		(BASEBALL) 0	FOOTBALL
	UNDO	(Preset) 1	1 (Preset)
		(Preset) 2	2 (Preset)
		(Preset) 3	3 (Preset)
		(Preset) 4	4 (Preset)
	SHOW SETUP	(Preset) 5	5 (Preset)
		(Preset) 6	6 (Preset)
	SHOW CUESET	(Preset) 7	7 (Preset)
		(Preset) 8	8 (Preset)
			FF (Preset)
	EDIT TITLE	SELECT ALL	DIRECTION
			COPY EXIT

**To change the current VTR menu settings**  
Move the cursor ( $\blacktriangleright$ ) to **[C]** (CURRENT SETUP).

**To replace all VTR memory bank contents with “Memory Stick” data**

Press the **[F7]** (SELECT ALL) button.

#### Note

If there are protected items at the destination end, it is not possible to select the **[F7]** (SELECT ALL) button.

- 7** Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

- 8** Press the **[F9]** (COPY) button while holding down the SFT button.

This unit recalls the contents of the “Memory Stick.”

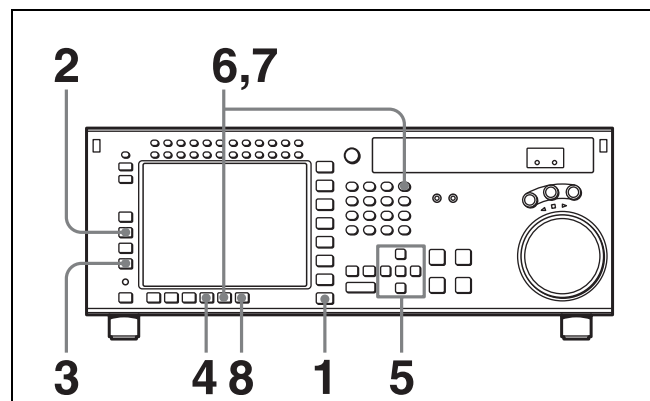
After the recalling process is complete, the title of the memory bank of the “Memory Stick” appears under the VTR memory bank indication.

- 9** Press the **[F10]** (EXIT) button.

The SET UP menu appears again.

## Recalling a cue point list from a “Memory Stick”

Recalling a cue point list from a “Memory Stick” replaces the current cue point list with the recalled data.



- 1** Press the SET UP button.

The SET UP menu appears in the display.

- 2** Press the **[F2]** (MEMORY CARD) button.

The MEMCARD menu appears in the display.

	FORMAT CARD	CARD BANK 0	CURRENT SETUP
		(BASEBALL) 0	FOOTBALL
	UNDO	(Preset) 1	1 (Preset)
		(Preset) 2	2 (Preset)
		(Preset) 3	3 (Preset)
		(Preset) 4	4 (Preset)
	SHOW SETUP	(Preset) 5	5 (Preset)
		(Preset) 6	6 (Preset)
	SHOW CUESET	(Preset) 7	7 (Preset)
		(Preset) 8	8 (Preset)
			FF (Preset)
	EDIT TITLE	SELECT ALL	DIRECTION
			COPY EXIT

- 3** Press the **[F4]** (SHOW CUESET) button.

The menu for storing cue point lists appears.

FORMAT CARD	CUE POINT SET 1	CURRENT CUE SET
	MUSIC 1	MOVIE
UNDO	(Blank) 2	F (Blank)
	(Blank) 3	
	(Blank) 4	
	(Blank) 5	
SHOW SETUP	(Blank) 6	
	(Blank) 7	
SHOW CUESET	(Blank) 8	
	EDIT TITLE	SELECT ALL
		DIRECTION
		COPY
		EXIT

- 4 Press the **[F8]** (DIRECTION) button to select the → direction.

The right cursor bar flashes.

- 5 Use the cursor ← button to move the cursor (▶) to the CUE POINT SET side, then press the cursor ↑ or ↓ button to move the cursor bar to the number of the memory bank in the “Memory Stick.”

Saved data

FORMAT CARD	CUE POINT SET 1	CURRENT CUE SET
	MUSIC 1	MOVIE
UNDO	(Blank) 2	F (Blank)
	(Blank) 3	
	(Blank) 4	
	(Blank) 5	
SHOW SETUP	(Blank) 6	
	(Blank) 7	
SHOW CUESET	(Blank) 8	
	EDIT TITLE	SELECT ALL
		DIRECTION
		COPY
		EXIT

- 6 Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

- 7 Press the **[F9]** (COPY) button while holding down the SFT button.

This unit recalls the cue point list in the “Memory Stick.”

After the recalling process is completed, the title of the cue point list appears under the CURRENT CUE SET indication.

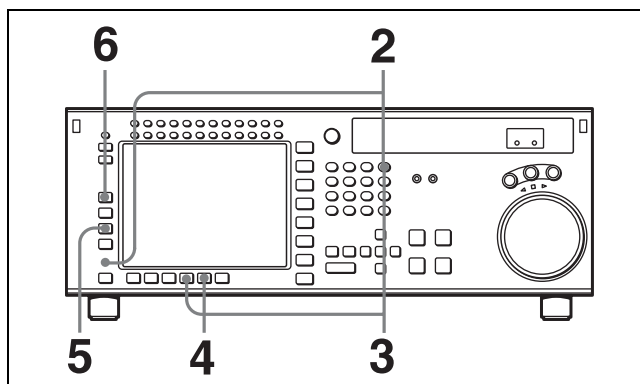
- 8 Press the **[F10]** (EXIT) button.

The SET UP menu appears again.

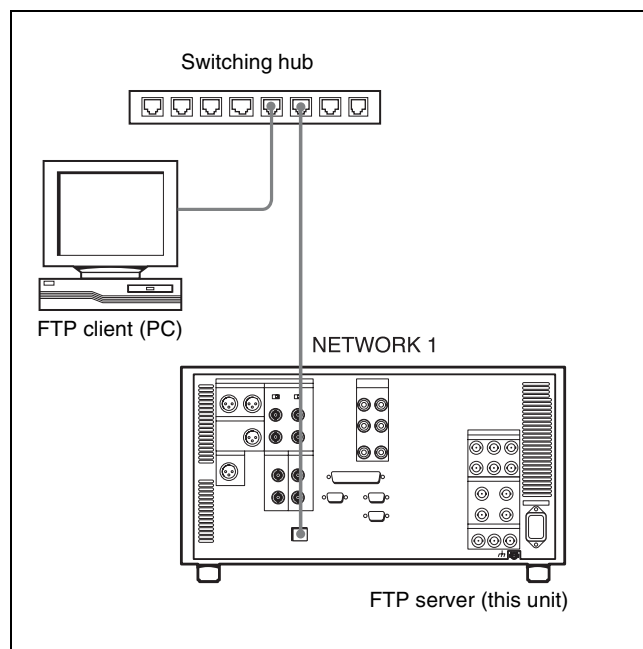
## 4-1-6 Storing and Recalling the Contents of VTR Memory Banks Through the Network

By connecting this unit as a FTP server to the network, the contents of VTR memory banks and the cue point lists can be stored and recalled through the network.

### Preparation for networking



- 1 Connect this unit to the FTP client (PC) as described below.



- 2 Press the DIAG button while holding down the SFT button.

The MAINTENANCE INFO menu appears in the display.

- 3 Press the **[F8]** (MAINTENANCE EXEC) button while holding down the SFT button.

The MAINTENANCE menu appears in the display.

- 4 Press the **[F9]** (OTHERS CHECK) button.  
The OTHERS CK menu appears in the display.
- 5 Press the **[F3]** (NETWORK SETUP) button.  
The NETWORK1 menu appears in the display.
- 6 Press the **[F1]** (NET1 IP) button.  
The NET1 IP menu appears in the display.

IP ADDRESS	NETWORK1 IP ADDRESS SETUP				
SUBNET MASK	IP Address	-	.	.	.
DEFULT GW	Subnet Mask	-	.	.	.
	Default Gateway	-	.	.	.
<div> <div></div> <div></div> <div></div> <div>CANCEL</div> <div>SAVE</div> <div>EXIT</div> </div>					

- 7 Set the following items in the menu display.  
**IP Address:** IP address of the VTR (example: 192.168.1.251)  
**Subnet Mask:** Subnet mask of the VTR (example: 255.255.255.0)  
**Default Gateway:** Default gateway of the VTR (example: 192.168.1.254)

The settings of items above can also be made in the NETWORK SETUP menu under the OTHERS CHECK menu in the MAINTENANCE menu.

*For details, refer to the Maintenance Manual Volume 1.*

IP ADDRESS	NETWORK1 IP ADDRESS SETUP			
SUBNET MASK	IP Address	-	192.168.	1.251
DEFULT GW	Subnet Mask	-	255.255.255.	0
	Default Gateway	-	192.168.	1.254
<div> <div></div> <div></div> <div></div> <div>CANCEL</div> <div>SAVE</div> <div>EXIT</div> </div>				

## Storing/recalling files to/from the FTP server (this unit)

- 1 On the FTP client (PC), access the IP address assigned to FTP server (this unit).

Log in to the FTP server (this unit) with the following user name and password.

**User name:** srw5100

**Password:** srw5100

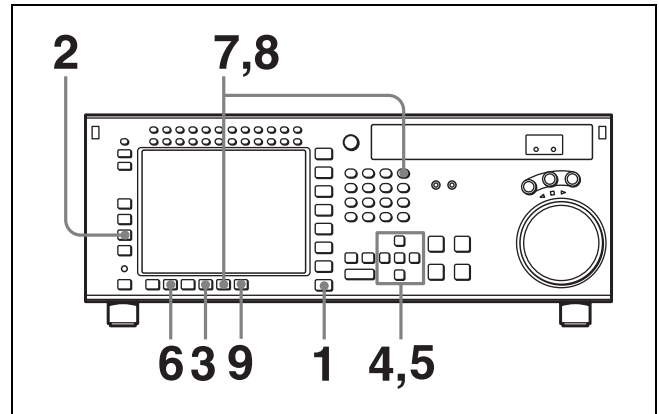
- 2 Open the VTRBANK folder of the FTP server (this unit) and save/recall the srw5800bank.dat file and srw5800cancel.dat file to/from this unit.

## Storing the contents of the VTR memory banks to the FTP server (this unit)

Up to eight sets of menu settings in the VTR memory banks can be stored along with titles.

### Note

The stored data is erased when this unit is turned on.



- 1 Press the SET UP button.  
The SET UP menu appears in the display.
- 2 Press the **[F3]** (NETWRK) button.  
The NETWRK menu appears in the display.

FORMAT CARD	NETWORK 0	CURRENT SETUP
	(BASEBALL) 0	FOOTBALL
	(Preset) 1	1 (Preset)
UNDO	(Preset) 2	2 (Preset)
	(Preset) 3	3 (Preset)
	(Preset) 4	4 (Preset)
SHOW SETUP	(Preset) 5	5 (Preset)
	(Preset) 6	6 (Preset)
	(Preset) 7	7 (Preset)
SHOW CUESET	(Preset) 8	8 (Preset)
		FF (Preset)
<div> <div>EDIT TITLE</div> <div>SELECT ALL</div> <div>DIRECTION</div> <div>COPY</div> <div>EXIT</div> </div>		

**When the srw5800bank.dat file is not found in the VTRBANK folder on the FTP server (this unit)**  
 “NO SETUP DATA” appears under the NETWORK indication.

If this happens, exit the NETWRK menu and copy the srw5800bank.dat file to the VTRBANK folder on the FTP server (this unit), or create a default srw5800bank.dat file in the VTRBANK folder.

*For details on data compatibility, see “4-1-9 “Memory Stick” Data Compatibility” on page 54.*

For details on creating default files, see “Creating VTRBANK default files” on page 52.

### Note

The contents of VTRBANK folder are erased when this unit is turned on.

- Press the **[F8]** (DIRECTION) button to select the ← direction.

The left cursor bar flashes.

- Move the cursor (▶) to the VTR side using the cursor → button and use the cursor ↑ or ↓ button to move the cursor bar to the memory bank where the data is to be saved.

FORMAT CARD	NETWORK 0	CURRENT SETUP	Saved data
(BASEBALL)	0	▶ <b>FOOTBALL</b>	
(Preset)	1	1 (Preset)	
(Preset)	2	2 (Preset)	
(Preset)	3	3 (Preset)	
(Preset)	4	4 (Preset)	
(Preset)	5	5 (Preset)	
(Preset)	6	6 (Preset)	
(Preset)	7	7 (Preset)	
(Preset)	8	8 (Preset)	
		⌘F (Preset)	
EDIT TITLE	SELECT ALL	DIRECTION	COPY EXIT

### To store the current VTR menu settings

Move the cursor (▶) to the **[C]** (CURRENT SETUP) position.

### To store all VTR memory banks

Press the **[F7]** (SELECT ALL) button.

### Note

If there are protected items at the destination end, it is not possible to select the **[F7]** (SELECT ALL) button.

- Move the cursor (▶) to the NETWORK side using the cursor ← button, and use the cursor ↑ or ↓ button to move the cursor (▶) to the bank number (NETWORK side) where the data is to be saved.

The flashing cursor bar indicates the storage destination.

Destination (flashing)	FORMAT CARD	NETWORK 0	CURRENT SETUP
	(BASEBALL)	0	▶ <b>FOOTBALL</b>
	(Preset)	1	1 (Preset)
	(Preset)	2	2 (Preset)
	(Preset)	3	3 (Preset)
	(Preset)	4	4 (Preset)
	(Preset)	5	5 (Preset)
	(Preset)	6	6 (Preset)
	(Preset)	7	7 (Preset)
	(Preset)	8	8 (Preset)
			⌘F (Preset)
	EDIT TITLE	SELECT ALL	DIRECTION COPY EXIT

- To change the title of the bank, press the **[F6]** (EDIT TITLE) button.

For details, see “4-1-7 Adding Titles to the Data” on page 53.

- Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

- Press the **[F9]** (COPY) button while holding down the SFT button.

Storage begins.

After the storage is completed, the title of the VTR memory bank appears on the NETWORK side.

FORMAT CARD	NETWORK 0	CURRENT SETUP
(BASEBALL)	0	▶ <b>FOOTBALL</b>
(Preset)	1	1 (Preset)
(Preset)	2	2 (Preset)
(Preset)	3	3 (Preset)
(Preset)	4	4 (Preset)
(Preset)	5	5 (Preset)
(Preset)	6	6 (Preset)
(Preset)	7	7 (Preset)
(Preset)	8	8 (Preset)
		⌘F (Preset)
EDIT TITLE	SELECT ALL	DIRECTION COPY EXIT

### Preventing accidental erasure after saving settings

Press ALT/**[F2]** (PROTECT) buttons and a ⌘ symbol will appear to the right of the network bank number.

- Press the **[F10]** (EXIT) button.

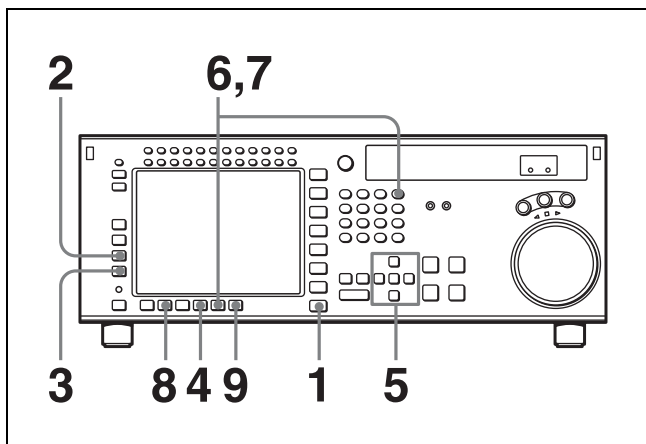
The SET UP menu appears again.

## Storing cue point lists to the FTP server (this unit)

Up to eight pages of cue point lists can be stored to the FTP server (this unit) along with titles.

### Note

The stored data is erased when this unit is turned on.



- 1** Press the SET UP button.  
The SET UP menu appears in the display.
- 2** Press the **[F3]** (NETWRK) button.  
The NETWRK menu appears in the display.

FORMAT CARD	NETWORK	0	CURRENT SETUP
	(BASEBALL)	0	▶ C FOOTBALL
UNDO	(Preset)	1	1 (Preset)
	(Preset)	2	2 (Preset)
	(Preset)	3	3 (Preset)
	(Preset)	4	4 (Preset)
SHOW SETUP	(Preset)	5	5 (Preset)
	(Preset)	6	6 (Preset)
	(Preset)	7	7 (Preset)
SHOW CUESET	(Preset)	8	8 (Preset)
			ⓈF (Preset)
	EDIT TITLE	SELECT ALL	DIRECTION
			↔
			COPY
			EXIT

- 3** Press the **[F4]** (SHOW CUESET) button.  
The display for storing cue point lists appears.

FORMAT DATA	CUE POINT SET	1	CURRENT CUE SET
	MUSIC	1	▶ MOVIE
UNDO	(Blank)	2	ⓈF (Blank)
	(Blank)	3	
	(Blank)	4	
	(Blank)	5	
SHOW SETUP	(Blank)	6	
	(Blank)	7	
SHOW CUESET	(Blank)	8	
	EDIT TITLE	SELECT ALL	DIRECTION
			↔
			COPY
			EXIT

**When the srw5800cue.dat file is not found in the VTRBANK folder on the FTP server (this unit)** “NO SETUP DATA” appears under the NETWORK indication.

If this happens, exit the NETWRK menu and copy the srw5800cue.dat file to the VTRBANK folder on the FTP server (this unit), or create a default srw5800cue.dat file in the VTRBANK folder.

For details on data compatibility, see “4-1-9 “Memory Stick” Data Compatibility” on page 54.

For details on creating a default file, see “Creating VTRBANK default files” on page 52.

#### Note

The contents of VTRBANK folder are erased when this unit is turned on.

- 4** Press the **[F8]** (DIRECTION) button to select the ← direction.

The left cursor bar flashes.

- 5** Move the cursor (▶) to the CUE POINT SET side using the cursor ← button and use the cursor ↑ or ↓ button to move the cursor bar to the bank number (NETWORK side) where the data is to be saved.

Destination (flashing)	FORMAT DATA	CUE POINT SET	1	CURRENT CUE SET
	DATA	▶ MUSIC	1	▶ MOVIE
		(Blank)	2	ⓈF (Blank)
	UNDO	(Blank)	3	
		(Blank)	4	
	SHOW SETUP	(Blank)	5	
		(Blank)	6	
	SHOW CUESET	(Blank)	7	
		(Blank)	8	
	EDIT TITLE	SELECT ALL	DIRECTION	COPY
			↔	EXIT

- 6** Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

- 7** Press the **[F9]** (COPY) button while holding down the SFT button.

Storage begins.

- 8** Press the **[F6]** (EDIT TITLE) button to add a title to the cue point list.

For details, see “4-1-7 Adding Titles to the Data” on page 53.

#### Preventing accidental erasure after saving settings

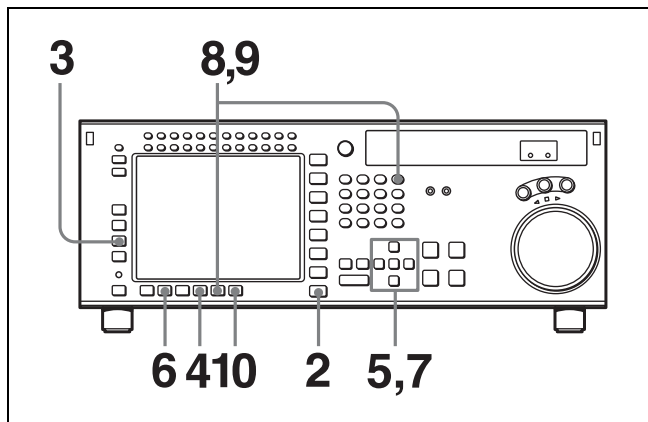
Move the cursor (▶) to the cue point set number you wish to save and press ALT/[F2] (PROTECT) buttons. A Ⓢ symbol will appear to the right of the cue point set number.

- 9** Press the **[F10]** (EXIT) button.

The SET UP menu appears again.

## Recalling the VTR bank contents from the FTP server (this unit)

The contents stored in VTR bank of the FTP server (this unit) can be recalled to the current VTR memory bank.



- 1 On the FTP client, access the IP address assigned to this unit, and copy the file where the VTR bank to be recalled is saved (srw5800bank.dat) to the VTRBANK folder.

For details on data compatibility, see “4-1-9 “Memory Stick” Data Compatibility” on page 54.

### Note

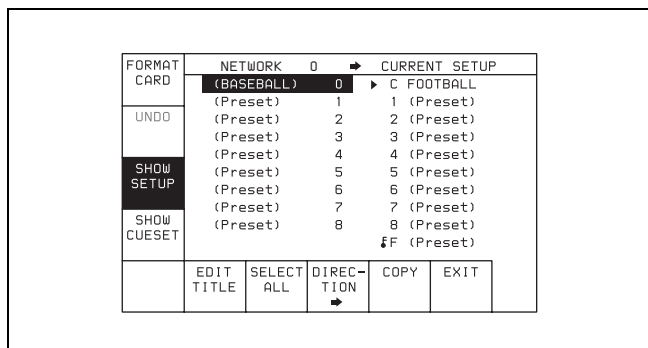
While the NETWORK menu appears in the display, copying/erasing a file to/from the FTP server (this unit) cannot be performed. To do so, exit the NETWORK menu, and then perform file copy/erasure.

- 2 Press the SET UP button.

The SET UP menu appears in the display.

- 3 Press the [F3] (NETWORK) button.

The NETWORK menu appears in the display.



When the srw5800bank.dat file containing VTR bank data is not found in the VTRBANK folder on the FTP server (this unit)

“NO SETUP DATA” appears under the NETWORK indication.

If this happens, exit the NETWORK menu and copy the srw5800bank.dat file to the VTRBANK folder on the FTP server (this unit), or create a default srw5800bank.dat file in the VTRBANK folder.

For details on data compatibility, see “4-1-9 “Memory Stick” Data Compatibility” on page 54.

For details on creating a default file, see “Creating VTRBANK default files” on page 52.

### Note

The contents of VTRBANK folder are erased when this unit is turned on.

- 4 Press the [F8] (DIRECTION) button to select the ➡ direction.

The right cursor bar flashes.

- 5 Move the cursor (▶) to the NETWORK side using the cursor ◀ button and use the cursor ↑ or ↓ button to move the cursor bar to the number of the VTR memory bank to be recalled.

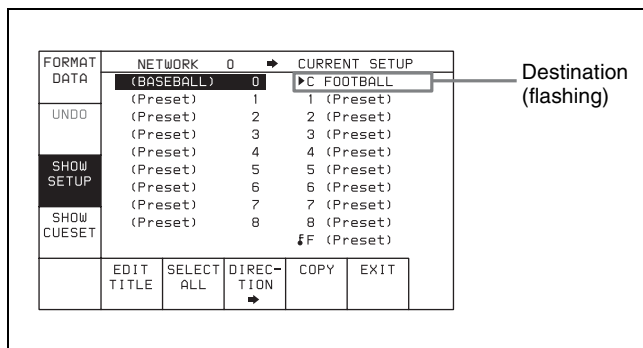
Saved data	FORMAT DATA		NETWORK 0 ➡		CURRENT SETUP	
	DATA		(BASEBALL)	0	C FOOTBALL	
		(Preset)	1	1 (Preset)		
		(Preset)	2	2 (Preset)		
		(Preset)	3	3 (Preset)		
		(Preset)	4	4 (Preset)		
		(Preset)	5	5 (Preset)		
		(Preset)	6	6 (Preset)		
		(Preset)	7	7 (Preset)		
		(Preset)	8	8 (Preset)		
				Ⓡ (Preset)		
		EDIT TITLE	SELECT ALL	DIRECTION ➡	COPY	EXIT

- 6 Press the [F6] (EDIT TITLE) button to add a title to the cue point list.

The title can be changed after recalling the data.

For details, see “4-1-7 Adding Titles to the Data” on page 53.

- 7 Move the cursor (▶) to the VTR side using the cursor ➡ button, and use the cursor ↑ or ↓ button to move the cursor bar to the bank number where the data is to be saved.



### To change the current VTR menu settings

Move the cursor (▶) to the [C] (CURRENT SETUP) position.

### To replace all the VTR bank contents with the NETWORK contents

Press the [F7] (SELECT ALL) button.

#### Note

If there are protected items at the destination end, it is not possible to select the [F7] (SELECT ALL) button.

### 8 Press the [F9] (COPY) button.

A message asking you to confirm the operation appears in the display.

### 9 Press the [F9] (COPY) button while holding down the SFT button.

The VTR starts to recall the contents of the VTRBANK folder on the FTP server (this unit). After the recalling process is completed, the title of the VTR bank folder appears under the VTR indication.

### Preventing accidental erasure after recalling settings

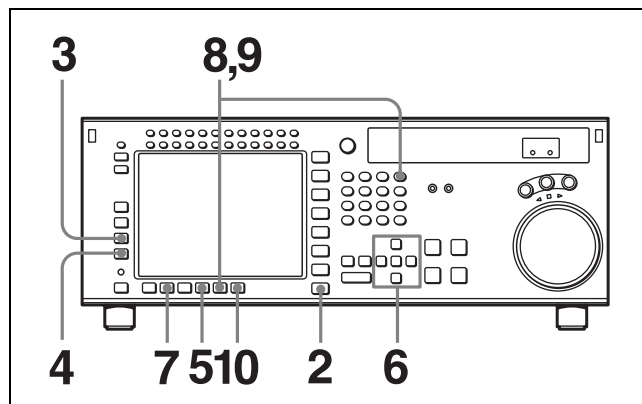
Move the cursor (▶) to the bank number you wish to save and press ALT/[F2] (PROTECT) buttons. A f symbol will appear to the right of the bank number.

### 10 Press the [F10] (EXIT) button.

The SET UP menu appears again.

## Recalling a cue point list from the FTP server (this unit)

Recalling a cue point list from the FTP server (this unit) replaces the current VTR cue point list with the recalled data.



### 1 On the FTP client, access the IP address assigned to this unit, and copy the file where the settings were saved (srw5800cue.dat) to the VTRBANK folder.

For details on data compatibility, see “4-1-9 “Memory Stick” Data Compatibility” on page 54.

#### Note

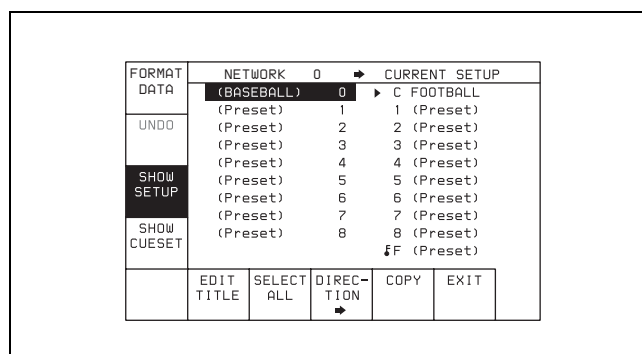
While the NETWORK menu appears in the display, copying/erasing a file to/from the FTP server (this unit) cannot be performed. To do so, exit the NETWORK menu, and then perform file copy/erasure.

### 2 Press the SET UP button.

The SET UP menu appears in the display.

### 3 Press the [F3] (NETWRK) button.

The NETWORK menu appears in the display.



### 4 Press the [F4] (SHOW CUESET) button.

The menu for storing cue point lists appears.



FORMAT DATA	CUE POINT SET 1	CURRENT CUE SET
	MUSIC 1	MOVIE
UNDO	(Blank) 2	F (Blank)
	(Blank) 3	
	(Blank) 4	
	(Blank) 5	
SHOW SETUP	(Blank) 6	
	(Blank) 7	
SHOW CUESET	(Blank) 8	
	EDIT TITLE	SELECT ALL
		DIRECTION
		COPY
		EXIT

**When the srw5800cue.dat file containing the cue point list is not found in the VTRBANK folder on the FTP server (this unit)**

“NO SETUP DATA” appears under the NETWORK indication.

If this happens, exit the NETWRK menu and copy the srw5800cue.dat file to the VTRBANK folder on the FTP server (this unit), or create a default srw5800cue.dat file in the VTRBANK folder.

For details on data compatibility, see “4-1-9 “Memory Stick” Data Compatibility” on page 54.

For details on creating a default file, see “Creating VTRBANK default files” on page 52.

#### Note

The contents of VTRBANK folder are erased when this unit is turned on.

- Press the **[F8]** (DIRECTION) button to select the ➡ direction.

The right cursor bar flashes.

- Move the cursor (▶) to the CUE POINT SET side using the cursor ◀ button and use the cursor ↑ or ↓ button to move the cursor bar to the cue point set number to be recalled.

Saved data

FORMAT DATA	CUE POINT SET 1	CURRENT CUE SET
	MUSIC 1	C MOVIE
UNDO	(Blank) 2	F (Blank)
	(Blank) 3	
	(Blank) 4	
	(Blank) 5	
SHOW SETUP	(Blank) 6	
	(Blank) 7	
SHOW CUESET	(Blank) 8	
	EDIT TITLE	SELECT ALL
		DIRECTION
		COPY
		EXIT

- Press the **[F6]** (EDIT TITLE) button to change the title of the cue point list.

The title can be changed after recalling the data.

For details, see “4-1-7 Adding Titles to the Data” on page 53.

- Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

- Press the **[F9]** (COPY) button while holding down the SFT button.

The VTR starts to recall the cue point list on the FTP server (this unit).

After the recalling process is completed, the title of the VTR bank folder appears under the CURRENT CUE SET indication.

- Press the **[F10]** (EXIT) button.

The SET UP menu appears again.

## Creating VTRBANK default files

Default files containing initial settings (srw5800bank.dat, srw5800cancel.dat, srw5800cue.dat, srw5800p50.dat, and srw5800sysbank.dat files) can be created in the VTRBANK folder of the FTP server (this unit).

- Press the SET UP button.

The SET UP menu appears in the display.

- Press the **[F3]** (NETWRK) button.

The NETWRK menu appears in the display.

FORMAT DATA	NO SETUP DATA	CURRENT SETUP
		FOOTBALL
UNDO		1 (Preset)
		2 (Preset)
		3 (Preset)
		4 (Preset)
		5 (Preset)
SHOW SETUP		6 (Preset)
		7 (Preset)
SHOW CUESET		8 (Preset)
		F (Preset)
	EDIT TITLE	SELECT ALL
		DIRECTION
		COPY
		EXIT

- Press the **[F1]** (FORMAT DATA) button.

A message asking you to confirm the operation appears in the display.

### To cancel formatting the VTRBANK folder

Press the CLR button while the confirmation message appears.

- Press the **[F1]** (FORMAT DATA) button while holding down the SFT button.



The VTR formats the VTRBANK folder.  
After the formatting process is completed, the new default files are created in the VTRBANK folder.

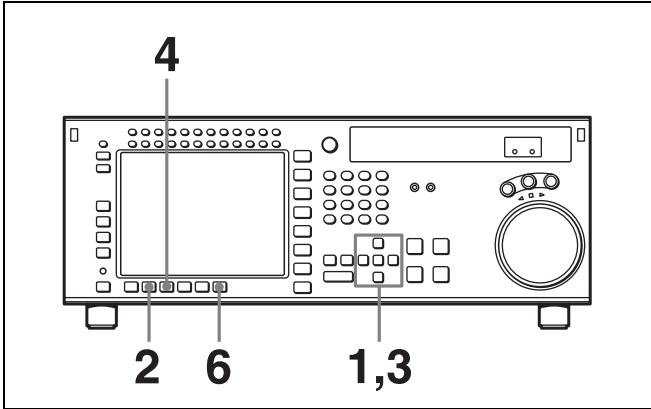
FORMAT DATA	NETWORK	0	CURRENT SETUP
	(Preset)	0	C (FOOTBALL)
	(Preset)	1	1 (Preset)
UNDO	(Preset)	2	2 (Preset)
	(Preset)	3	3 (Preset)
SHOW SETUP	(Preset)	4	4 (Preset)
	(Preset)	5	5 (Preset)
	(Preset)	6	6 (Preset)
	(Preset)	7	7 (Preset)
SHOW CUESET	(Preset)	8	8 (Preset)
			F (Preset)

EDIT TITLE	SELECT ALL	DIRECTION	COPY	EXIT

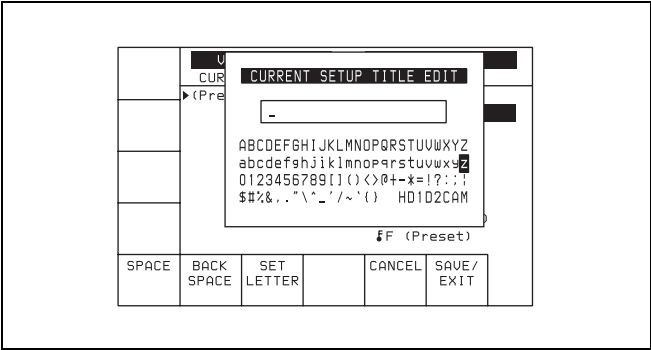
**Note**  
When the VTRBANK folder is formatted, data contained in the VTRBANK folder is erased and the newly created default files are stored to the folder.

### 4-1-7 Adding Titles to the Data

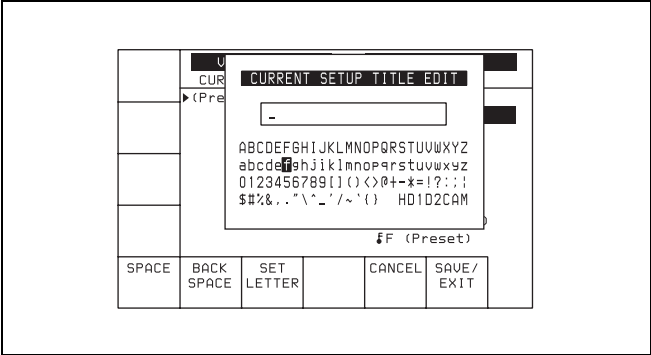
When storing data to a memory bank in a “Memory Stick” or this unit, you can add a title to the data to make data management easier.



- 1 Move the cursor (▶) to the item to be titled.
- 2 Press the [F6] (EDIT TITLE) button to display the CURRENT SETUP TITLE EDIT window.  
  
This unit enters EDIT mode is entered, and the window opens.

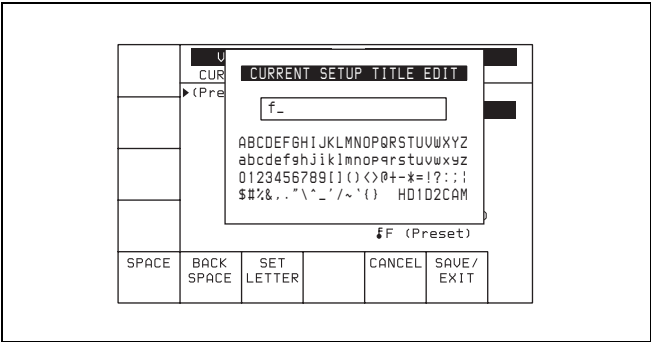


- 3 Press the cursor ← or → button to select a letter.



- 4 Press the [F7] (SET LETTER) button or the cursor center button.

The selected letter is entered.



- 5 Repeat steps 3 and 4 to enter more characters.

**To enter a space**  
Press the [F5] (SPACE) button.

**If you enter a wrong character**  
Press the [F6] (BACK SPACE) button to go back, then reenter a character.

**To cancel the procedure to start over again**  
Press [F9] (CANCEL) button to start over again.

**To change a character**  
Press the cursor ↑ button to enter the title box, then press the cursor ← or → button to go to the text insertion position.

## 6 Press the **[F10]** (SAVE/EXIT) button.

The entered title is set and the menu displayed before you pressed the **[F6]** (EDIT TITLE) button appears again.

### 4-1-8 Details on VTR Memory Bank and “Memory Stick” Functions

Most settings of most items can be stored to a VTR memory bank or a “Memory Stick.”

#### Data that can be stored to/recalled from a VTR memory bank or a “Memory Stick”

- VTR SETUP data
- PF assignment data
- BANK titles

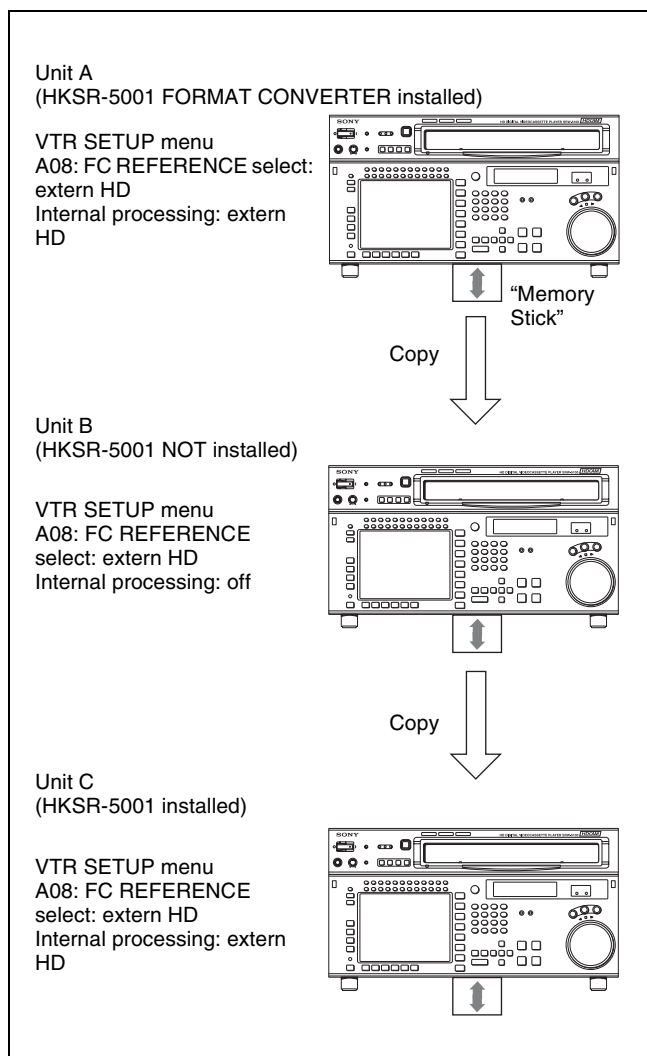
DEFAULT values for VTR SETUP can be saved and recalled. However, DEFAULT values do not include PF assignment data and BANK titles.

*For details of saving and recalling DEFAULT values, see “4-1-11 Saving and Recalling DEFAULT Settings on a Bank” on page 55.*

### 4-1-9 “Memory Stick” Data Compatibility

Data copied onto a “Memory Stick” can be used on control panels connected to other SRW-5100 and SRW-5800 units. Although data is compatible between the units with different optional equipment, take note of the following.

#### Consider data copied from unit A to unit B and then to unit C



- Even though the optional equipment is different in units A and B, the VTR SETUP menu settings are preserved.
- Even though the VTR SETUP menu settings are copied to unit C after being copied to unit B, the settings from unit A are copied to unit C.
- Even though settings are copied for optional equipment that is not present, the settings are adjusted and processed by the unit internally.
- There is data compatibility between the SRW-5100 and SRW-5800. However, the items incompatible with the SRW-5100 do not appear in the display normally.

*For details, see “4-7-1 VTR SETUP Menu” on page 106.*

- There is no data compatibility between the SRW-5100/5800 and SRW-5000/5500. However, VTR SETUP data for the SRW-5000/5500 can be imported to the SRW-5100.

*For details, see “4-1-14 Recalling VTRBANK Data for the SRW-5000/5500” on page 57.*

## 4-1-10 Automatic Reading from a VTR Bank at Power On

By having the normally used settings saved in a bank, and recalled automatically when the system is powered on, you can always start operation from powering on with the same settings.

- 1 Make the VTR SETUP menu and PF assignment settings.
- 2 In the VTR BANK menu, save the current settings in any VTR bank.  
  
It is preferable to add a title to identify the settings, and protect the settings not to be overwritten.
- 3 Press the ALT button.  
  
This switches to the ALT + BANK menu.
- 4 Press the **[F4]** (POW-ON RECALL) button.  
  
A red “P” appears to the left of the VTR BANK title. Each time you press the **[F4]** (POW-ON RECALL) button cycles the VTR bank from SETUP BANK 1 in sequence to the FACTORY PRESET item, and then to blank.
- 5 Press the ALT button, to return to the VTR BANK menu.  
  
Next time you power on, the settings will automatically be recalled from SETUP BANK in the VTR bank with “P” set.

### Note

Unless VTR SETUP menu item 116 “ALARM BEEP” is set to “off” to distinguish the automatic recall from a normal startup, a beep sound occurs twice.

## 4-1-11 Saving and Recalling DEFAULT Settings on a Bank

For each VTR SETUP menu item, you can change the factory DEFAULT value to a desired value.

*For details, see “To change the DEFAULT values in a menu item” on page 108.*

These changed DEFAULT values can be saved in a VTR BANK of this unit.

- 1 Press the SET UP button.  
  
The SETUP menu appears.

- 2 Press the ALT button.

The ALT + SETUP menu appears.

- 3 Press the **[F1]** (DEFAULT VTR BANK) button.

The DEFAULT VTR BANK screen appears.

	VTR BANK		VTR BANK	
	CURRENT DEFAULT	+	DEFAULT BANK 1	
UNDO	(Preset) C		1 (Untitled)	
			F (Preset)	
	EDIT TITLE		DIRECTION	COPY EXIT

The procedure for saving from CURRENT DEFAULT to DEFAULT BANK, saving from DEFAULT BANK or FACTORY PRESET (factory setting) to CURRENT DEFAULT, changing the title, or setting protection, is the same as operation on a VTR bank.

*For details, see “4-1-4 VTR Memory Bank Function” on page 39.*

### Notes

- The storage region for DEFAULT BANK is one set only.
- The title name shown in the current area is always that for the CURRENT SETUP data. When DEFAULT BANK data with the title changed is written to CURRENT DEFAULT, the title of the current area does not change.  
Also, when CURRENT DEFAULT settings are saved in DEFAULT BANK, the title of DEFAULT BANK is copied from the title of CURRENT SETUP.

## 4-1-12 Saving and Recalling DEFAULT Settings Through the Network

For each VTR SETUP menu item, you can change the factory DEFAULT value to a desired value.

*For details, see “To change the DEFAULT values in a menu item” on page 108.*

These changed DEFAULT values can be saved in a VTR BANK of the VTR, and recalled from the bank through the network.

- 1 Prepare the network.

For details on network preparation, see “Preparation for networking” on page 46.

- 2 Press the SET UP button.

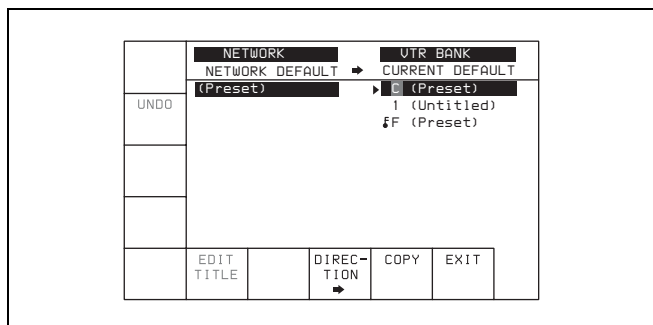
The SETUP menu appears.

- 3 Press the ALT button.

The ALT + SETUP menu appears.

- 4 Press the **[F3]** (DEFAULT NETWORK) button.

The DEFLT NET menu appears.



**When the `srw5800bank.dat` file containing DEFAULT values is not found in the VTRBANK folder on the FTP server (this unit)**  
“NO SETUP DATA” appears under the NETWORK indication.

If this happens, exit the NETWORK menu and copy the `srw5800bank.dat` file to the VTRBANK folder on the FTP server (this unit), or create a default `srw5800bank.dat` file in the VTRBANK folder.

For details on creating default files, see “Creating VTRBANK default files” on page 52.

#### Note

The contents of VTRBANK folder are erased when this unit is turned on.

Saving the NETWORK DEFAULT settings to DEFAULT BANK or CURRENT DEFAULT, or saving the DEFAULT BANK, CURRENT DEFAULT, or FACTORY PRESET settings to NETWORK DEFAULT, changing the title, and preventing accidental erasure of the settings can be performed in the same way as saving/recalling the settings through the network.

For details, see “4-1-6 Storing and Recalling the Contents of VTR Memory Banks Through the Network” on page 46.

#### Notes

- The storage region for NETWORK DEFAULT is one set only.

- The title name shown in the current area is always that for the CURRENT SETUP data. When NETWORK DEFAULT data with the title changed is written to CURRENT DEFAULT, the title of the current area does not change.  
Also, when CURRENT DEFAULT settings are saved in NETWORK DEFAULT, the title of NETWORK DEFAULT is copied from the title of CURRENT SETUP.
- There is no data compatibility between the SRW-5800/5100 and SRW-5000/5500.

On how to check the items for which DEFAULT values have been changed from FACTORY PRESET values, see “To check the items for which DEFAULT values have been changed” on page 108.

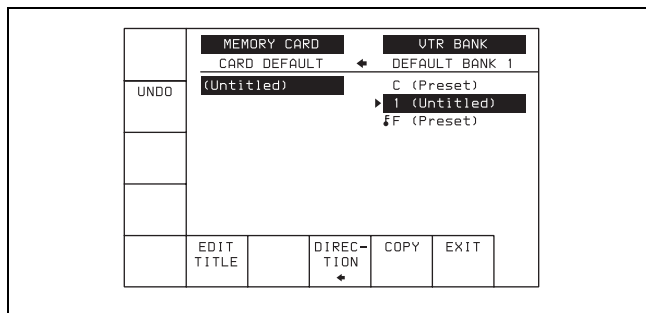
## 4-1-13 Saving and Recalling DEFAULT Settings in a “Memory Stick”

For each VTR SETUP menu item, you can change the factory DEFAULT value to a desired value.

For details, see “To change the DEFAULT values in a menu item” on page 108.

The set DEFAULT values can be saved in a “Memory Stick.”

- 1 Insert a “Memory Stick.”
- 2 Press the SET UP button.  
The SET UP menu screen appears.
- 3 Press the ALT button.  
The ALT + SETUP menu appears.
- 4 Press the **[F2]** (DEFAULT MEMORY CARD) button.  
The DEFAULT MEMORY CARD menu appears.



The procedure for saving from CARD DEFAULT to DEFAULT BANK or CURRENT DEFAULT, saving

from DEFAULT BANK, CURRENT DEFAULT or FACTORY PRESET to CARD DEFAULT, changing the title, or setting protection, is the same as operation on a VTR bank.

For details, see “4-1-5 “Memory Stick” Operations” on page 41.

Notes

- The storage region for CARD DEFAULT is one set only.
- The title shown in the current area is always that for the CURRENT SETUP data. When CARD DEFAULT data with the title changed is written to CURRENT DEFAULT, the title of the current area does not change. Also, when CURRENT DEFAULT settings are saved in CARD DEFAULT, the title of CARD DEFAULT is copied from the title of CURRENT SETUP.
- There is data compatibility between the SRW-5100 and SRW-5800.
- There is no data compatibility between the SRW-5800/5100 and SRW-5000/5500.

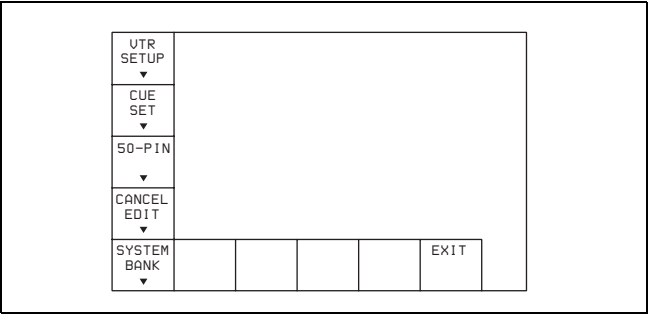
On how to check the items for which DEFAULT values have been changed from FACTORY PRESET values, see “To check the items for which DEFAULT values have been changed” on page 108.

4-1-14 Recalling VTRBANK Data for the SRW-5000/5500

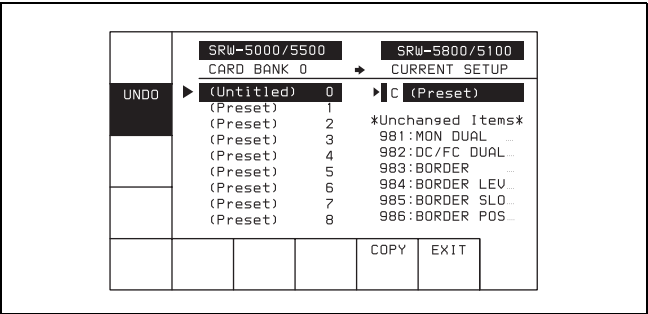
Recalling the VTR bank

VTR bank for the SRW-5000/5500 that has been stored on a “Memory Stick” can be recalled to this unit.

- 1 Press the SET UP button.  
The SET UP menu appears.
- 2 Press the ALT button.  
The ALT + SETUP menu appears.
- 3 Press the [F4] (IMPORT DATA) button.  
The IMPORT DATA menu appears.
- 4 Press the [F1] (SRW-5000/5500) button.  
The MC5000/5500 menu appears.



- 5 Press the [F1] (VTR SETUP) button.  
The VTR SETUP menu appears.



- 6 Press the cursor ← button to move the cursor (▶) to the side of SRW-5000/5500, and then press the cursor ↑ or ↓ button to move the cursor to the number of the memory bank on the “Memory Stick”.

Note

The yellow items (“Unchanged Items”) in the menu are included only in the VTR SETUP data for the SRW-5100. These items do not change even when the VTR SETUP data for the SRW-5000/5500 are recalled in step 8 below.

- 7 Press the [F9] (COPY) button.  
A message asking you to confirm the operation appears in the display.
- To cancel recalling the VTR SETUP data**  
Press the CLR button while the confirmation message appears.
- 8 Press the [F9] (COPY) button while holding down the SFT button.  
The VTR starts to recall the VTR SETUP data for the SRW-5000/5500.  
After the recalling process has completed, the title under the SRW-5000/5500 indication appears under the SRW-5800/5100 indication.
- To restore the VTR bank to its condition prior to the recall**  
Press the [F2] (UNDO) button.

- 9** Press the **[F10]** (EXIT) button.

The MC5000/5500 menu appears again.

### Recalling the cue point list

Cue point list for the SRW-5000/5500 that has been stored on a “Memory Stick” can be recalled to this unit.

- 1** Press the SET UP button.

The SET UP menu appears.

- 2** Press the ALT button.

The ALT + SETUP menu appears.

- 3** Press the **[F4]** (IMPORT DATA) button.

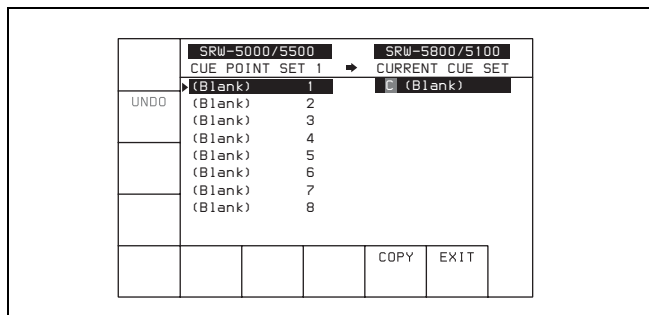
The IMPORT DATA menu appears.

- 4** Press the **[F1]** (SRW-5000/5500) button.

The MC5000/5500 menu appears.

- 5** Press the **[F2]** (CUE SET) button.

The CUE SET menu appears.



- 6** Press the cursor **↑** or **↓** button to move the cursor bar to the cue point set number on the SRW-5000/5500 side.

- 7** Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

#### To cancel recalling the cue point list

Press the CLR button while the confirmation message appears.

- 8** Press the **[F9]** (COPY) button while holding down the SFT button.

The VTR starts to recall the cue point list for the SRW-5000/5500.

After the recalling process has completed, the title under the SRW-5000/5500 indication appears under the SRW-5800/5100 indication.

- 9** Press the **[F10]** (EXIT) button.

The MC5000/5500 menu appears again.

### Recalling the 50-PIN settings

The 50-PIN settings for the SRW-5000/5500 that has been stored on a “Memory Stick” can be recalled to this unit.

- 1** Press the SET UP button.

The SET UP menu appears.

- 2** Press the ALT button.

The ALT + SETUP menu appears.

- 3** Press the **[F4]** (IMPORT DATA) button.

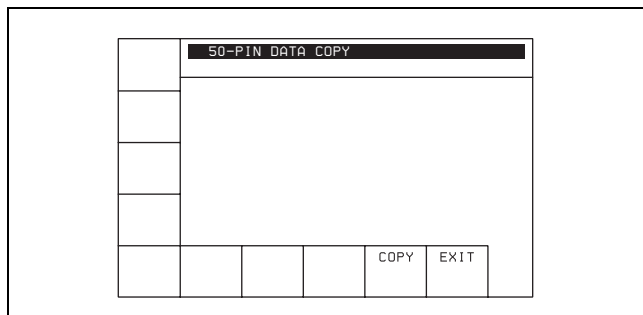
The IMPORT DATA menu appears.

- 4** Press the **[F1]** (SRW-5000/5500) button.

The MC5000/5500 menu appears.

- 5** Press the **[F3]** (50-PIN) button.

The 50-PIN menu appears.



- 6** Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

#### To cancel recalling the 50-PIN settings

Press the CLR button while the confirmation message appears.

- 7** Press the **[F9]** (COPY) button while holding down the SFT button.

The VTR starts to recall the 50-PIN settings for the SRW-5000/5500.

#### Note

Since all of the 50-PIN settings of this unit is replaced with the recalled data, the settings incompatible with this unit are also copied to this unit.

- 8** Press the **[F10]** (EXIT) button.

The MC5000/5500 menu appears again.

## Recalling the non-display settings of the warning messages

The non-display settings of the warning messages for the SRW-5000/5500 that has been stored on a “Memory Stick” can be recalled to this unit.

- 1** Press the SET UP button.

The SET UP menu appears.

- 2** Press the ALT button.

The ALT + SETUP menu appears.

- 3** Press the **[F4]** (IMPORT DATA) button.

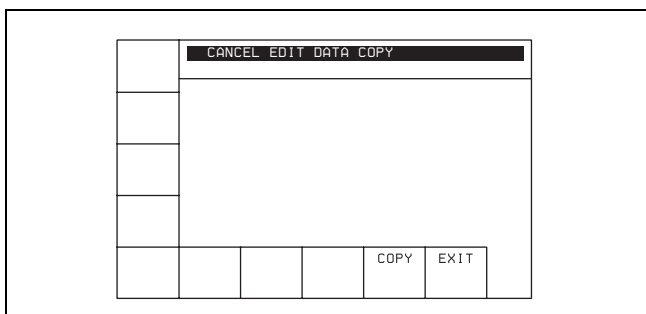
The IMPORT DATA menu appears.

- 4** Press the **[F1]** (SRW-5000/5500) button.

The MC5000/5500 menu appears.

- 5** Press the **[F4]** (CANCEL EDIT) button.

The CANCEL EDIT menu appears.



- 6** Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

### To cancel recalling the non-display settings of the warning messages

Press the CLR button while the confirmation message appears.

- 7** Press the **[F9]** (COPY) button while holding down the SFT button.

The VTR starts to recall the non-display settings of the warning messages for the SRW-5000/5500.

### Note

Since the non-display settings of the messages incompatible with the SRW-5000/5500 are overwritten with the default settings, non-display settings of such messages are cancelled.

- 8** Press the **[F10]** (EXIT) button.

The MC5000/5500 menu appears again.

## Recalling the system settings

The system settings of the SRW-5000/5500 that has been stored on a “Memory Stick” can be recalled to this unit.

- 1** Press the SET UP button.

The SET UP menu appears.

- 2** Press the ALT button.

The ALT + SETUP menu appears.

- 3** Press the **[F4]** (IMPORT DATA) button.

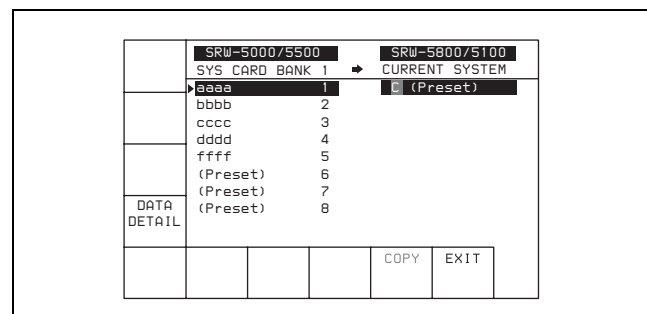
The IMPORT DATA menu appears.

- 4** Press the **[F1]** (SRW-5000/5500) button.

The MC5000/5500 menu appears.

- 5** Press the **[F5]** (SYSTEM BANK) button.

The SYSTEM BANK menu appears.



- 6** Press the cursor **↑** or **↓** button to move the cursor bar to the system bank number on the SRW-5000/5500 side.

### To check the details on items to be saved

Press the **[F4]** (DATA DETAIL) button.

The meanings of the color of items are as follows.

**Yellow:** The item does not match the current system settings of this unit.

**Red:** The item cannot be recalled to this unit due to presence of absence of the optional board, etc.

**Shaded red:** This item is not compatible with this unit.



**Note**

The system bank data that contains any red or shaded red items cannot be recalled to CURRENT SYSTEM setting.

Pressing the **[F4]** (DATA DETAIL) button repeatedly scrolls the display to the end and returns to the SYSTEM BANK menu.

## 7 Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

### **To cancel recalling the cue point list**

Press the CLR button while the confirmation message appears.

## 8 Press the **[F9]** (COPY) button.

A message asking you to confirm the operation appears in the display.

### **To cancel recalling the non-display settings of the warning messages**

Press the CLR button while the confirmation message appears.

## 9 Press the **[F9]** (COPY) button while holding down the SFT button.

The VTR starts to recall the system settings of the SRW-5000/5500.

After the recalling process has completed, the title under the SRW-5000/5500 indication appears under the SRW-5800/5100 indication.

**Note**

When this unit is in standby mode, the system settings cannot be recalled.

Be sure to cancel the standby mode of this unit before recalling the system settings.

## 10 Press the **[F10]** (EXIT) button.

The MC5000/5500 menu appears again.



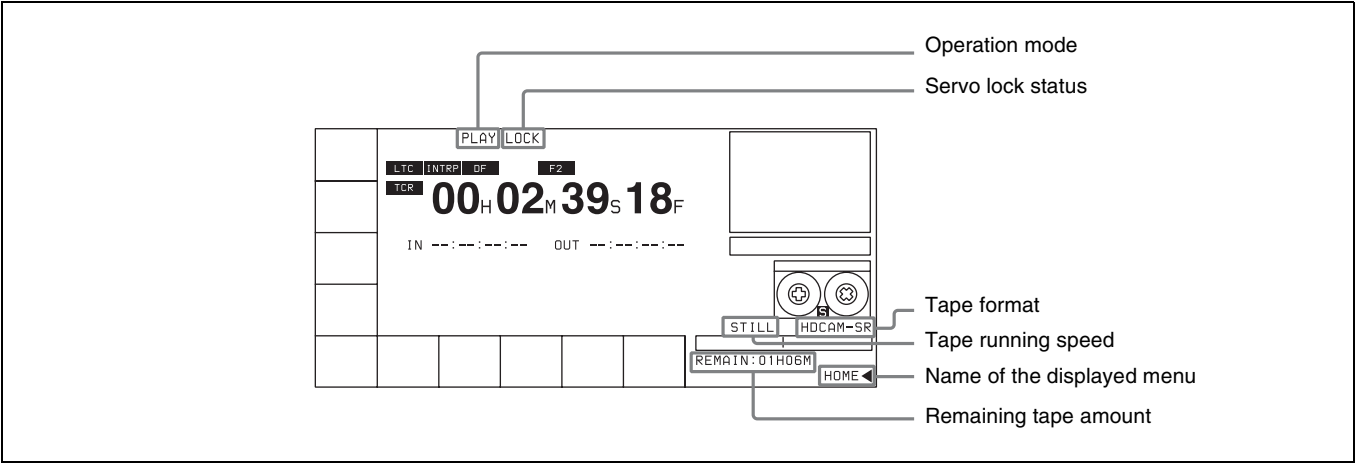
# 4-2 HOME Menu

The HOME menu sets the basic operation conditions for playback.

The HOME, VIDEO, AUDIO, TC, PF1 and PF2 menus show information that includes the operation mode, time code of the current position, and time code type, etc.

**To activate the HOME menu**  
Press the HOME button.

**To change the HOME menu page**  
Press the ALT button.



For details on time codes, see “4-3 TC Menu” on page 66.

Button	Indication	Function	Settings
ALT/[F3]	FREEZE	Selects still-picture output	
ALT/[F6]	PREROLL	Sets the preroll time	0 to 30 s
ALT/[F7]	DMC	DMC mode	on, off
ALT/[F8]	STOP CODE	Sets the stop code	
ALT/[F9]	PB MU SEL	Selects the output signal in various operation modes	

## 4-2-1 Selecting the Output Signals

Select the output signal with ALT/[F9] (PB MU SEL) or VTR SETUP menu item 017 “PB/MU SELECT MENU”. Output signal types for different operation modes of this unit are shown below.

Operation Mode \ Output Channel	Video/Audio	
Standby off	GR/MUTING	PB/MUTING
Standby on	PB/MUTING	GR/MUTING
Playback	PB/PB <sup>a)</sup>	
Shuttle	PB/MUTING	GR/MUTING PB/PB
Jog	PB/PB	PB/MUTING
Variable	PB/PB	PB/MUTING

a) Output signals during playback are PB/PB only. Output signals cannot be selected with the VTR SETUP menu item 017 “PB/MU SELECT MENU”.

## 4-2-2 Still-Picture Output (FREEZE)

For still-picture output, press the ALT/[F3] (FREEZE) buttons. The picture that was playing just before the button was pressed will be frozen on the screen. Make the field or frame selection using the VTR SETUP menu item 902 “FREEZE MODE”.

### To maintain the still-picture

Set the VTR SETUP menu item 903 “FREEZE CONTROL FROM KEY PANEL” to “latch”. The still-picture output is maintained until the button is pressed again.

### To temporarily output a still-picture

Set the VTR SETUP menu item 903 “FREEZE CONTROL FROM KEY PANEL” to “momentary”. A still-picture is output as long as you hold down the button.

## Stop-freeze function

To automatically output a still-picture when this unit is changed to stop mode, set the VTR SETUP menu item 905 “STOP FREEZE CONTROL” to “enable”.

### Note

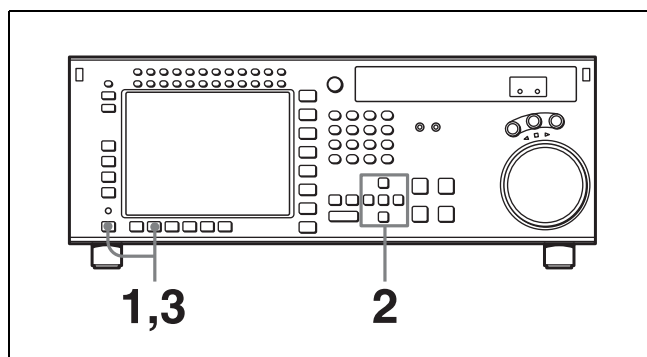
Regardless of the setting of the VTR SETUP menu item 902 “FREEZE MODE”, stop-freeze is a frame-freeze picture during playback of a PsF recorded tape, and a field-freeze picture in other modes.

## 4-2-3 Setting the Preroll Time (PREROLL TIME)

Set the preroll time by pressing the ALT/[F6] (PREROLL) buttons.

You can set a preroll time of 0 to 30 seconds in 1-second units. During editing using this unit, a preroll time of 5 seconds or more is recommended.

### Setting the preroll time



**1** Press the ALT/[F6] (PREROLL) buttons.

A data entry window appears.

**2** Change the setting with the cursor ↑ or ↓ button.

You may also use the MULTI CONTROL knob.

**3** Press the ALT/[F6] (PREROLL) buttons.

The data entry window disappears.

## 4-2-4 Selecting DMC Playback (DMC)

In DMC (Dynamic Motion Control) playback mode, this unit plays back a tape segment at a specified variable speed of -1 to +2 times normal playback speed, memorizes the speed, then plays the segment back at a later time at the memorized speed.

DMC playback is useful during on-the-spot telecasts of sporting events for immediate playback and broadcast of highlight scenes for which starting and ending points have been set during recording.

*For detail on the procedure for DMC playback, see “5-2-4 DMC Playback” on page 117.*

### Note

DMC playback can be performed only for HDCAM or Digital Betacam format.

## 4-2-5 Setting the Stop Code (STOP CODE)

You can select the stop code detection mode (recording/confirmation/deletion), and adjust the stop position when a stop code is detected.

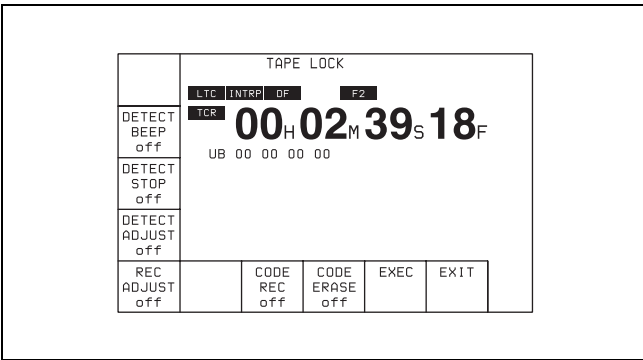
### Note

Functions related to the stop code are operational only when one of the following systems is selected.

- 1080/4:2:2, 4:4:4SQ/59i, 29PsF, 60i, 30PsF
- 720/4:2:2/59P

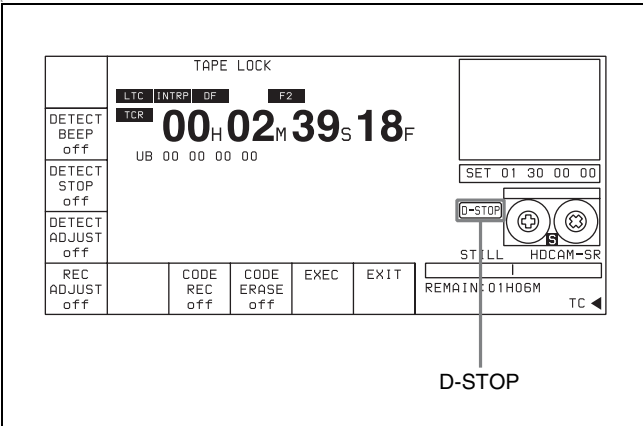
### To call up the STOP CODE menu screen

Press the ALT/[F8] (STOP CODE) buttons in the HOME menu.



### Note

If DETECT STOP is set to “ON”, “D-STOP” appears at the side of the cassette indication, as shown in the following figure.



### To detect stop codes: [F2], [F3]

When playing a tape on which stop codes are recorded, you can select four different operation modes, according to the settings of the [F2] (DETECT BEEP) button and [F3] (DETECT STOP) button, as follows.

[F2] (DETECT BEEP) button	[F3] (DETECT STOP) button	Operation when stop code is detected
OFF	OFF	No operation
OFF	ON	Stops (for NORMAL PLAY only)
ON	OFF	A beeper sounds for 1 second
ON	ON	Stops (for NORMAL PLAY only) and simultaneously a beeper sounds for 1 second

The tape transport modes and speed ranges in which stop codes can be detected are as follows.

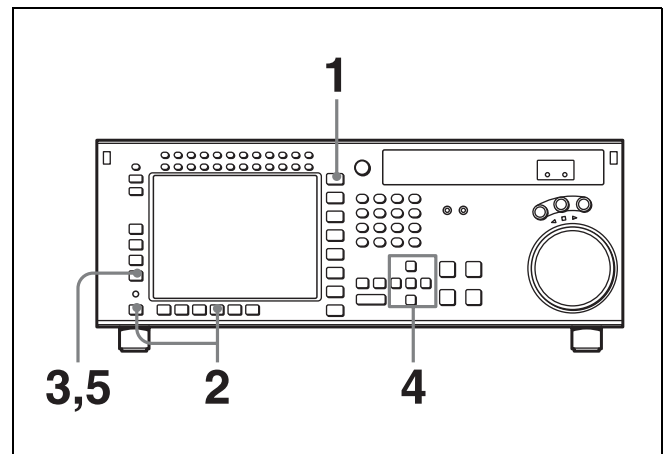
Transport mode and speed	Detected	Beeper timing	Stop timing
NORMAL PLAY	Yes	When read three times	Set by [F4] (DETECT ADJUST)
VAR, SHUTTLE (0 to less than $\pm 8$ times normal speed)	Yes	When read twice	No operation
REC, EDIT, JOG, CUE UP, PREROLL, SHUTTLE ( $\pm 8$ times normal speed or more)	No	No operation	No operation

### Note

In VAR mode, stop codes cannot be detected at  $\pm 0.03$  times normal speed.

### Adjusting the stop position when a stop code is detected: [F4]

When a stop code is detected, you can adjust the position at which the tape transport stops in the direction from the normal stop position toward the SOM point, within the range of 0 to 150 frames, in frame units.



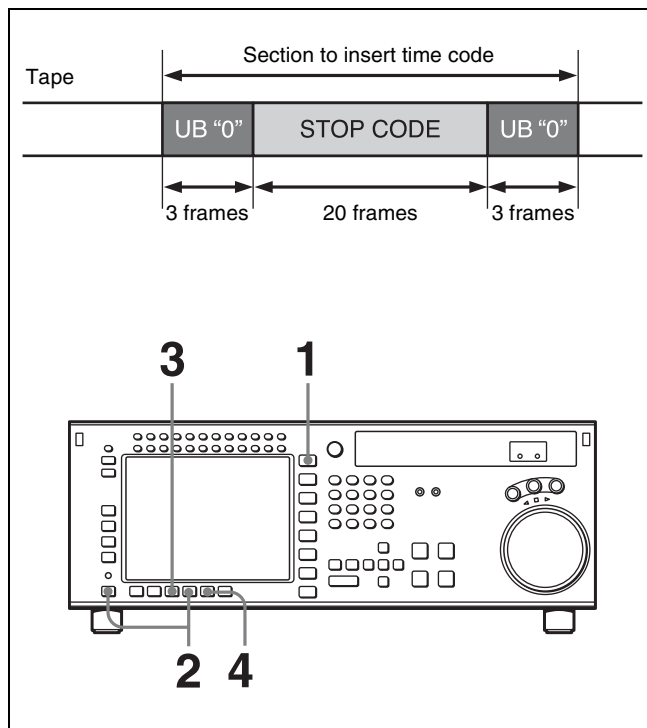
- 1 Press the HOME button.  
The HOME menu screen appears.
- 2 Press the ALT/[F8] (STOP CODE) button.  
The STOP CODE menu screen appears.
- 3 Press the [F4] (DETECT ADJUST) button.  
The setting display lights up.
- 4 Change the setting with the cursor ↑ or ↓ button.  
You may also use the MULTI CONTROL knob.
- 5 Press the [F4] (DETECT ADJUST) button.  
The data entry window disappears.

### Recording stop codes: [F7], [F9]

To record stop codes, press the [F7] (CODE REC) button. In PLAY, JOG, or similar mode, cue up to the SOM point, and press the [F9] (EXEC) button. With the point at which the [F9] (EXEC) button is pressed as the SOM point, after a preroll, the recording operation starts, and as shown in the figure below, user bits (value 0) and stop code are recorded, after which the unit automatically stops. While the stop code is being recorded, the [F9] (EXEC) button is displayed in red. After recording is completed, the setting of the [F7] (CODE REC) button is automatically changed to OFF.

#### Note

When the record-protect plug of the cassette is pushed in or when VTR SETUP menu item 010 “STOP CODE REC INHIBIT select” is set to “on,” pressing the [F9] (EXEC) button does not record a stop code.



- 1 Press the HOME button.  
The HOME menu screen appears.
- 2 Press the ALT/[F8] (STOP CODE) buttons.  
The STOP CODE menu screen appears.
- 3 Press the [F7] (CODE REC) button to select “on”.  
Pressing the button toggles between “on” and “off”.
- 4 Press the [F9] (EXEC) button.

### To abandon the operation at any point

Press the STOP button.

### To specify the recording start position

Press the [F5] (REC ADJUST) button, to specify how many seconds before the SOM point the recording of the stop code should start.

### To check the recording

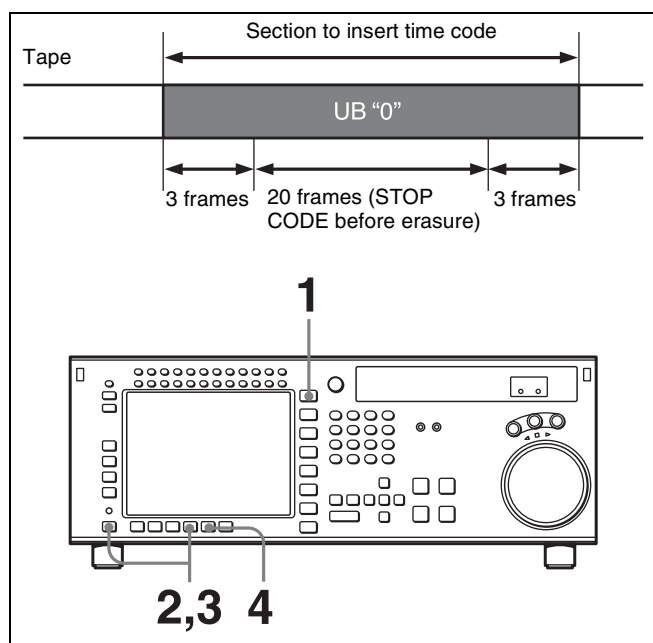
Press the PREROLL button while holding down the SFT button. The tape prerolls to the SOM point and playback starts. If the stop code is correctly recorded, regardless of the settings of the [F2] (DETECT BEEP) button and [F3] (DETECT STOP) button, a confirmation sound is emitted for 1 second, and the unit stops in accordance with the setting of the [F4] (DETECT ADJUST) button. If the unit does not stop even after passing the point at which the stop code is recorded, repeat the recording operation.

**Note**

Checking the recording by pressing the PREROLL button while holding down the SFT button is only valid in the stop code menu screen.

**Erasing stop codes:** [F8], [F9]

To erase a stop code, press the [F8] (CODE ERASE) button. In stop code detection mode, stop this unit at the stop code you want to erase, and press the [F9] (EXEC) button. After prerolling 5 seconds before the stop code recording point, this unit begins the erasure, and as shown in the figure below, user bits (value 0) are recorded, after which the unit automatically stops. After erasure is completed, the setting of the [F8] (CODE ERASE) button is automatically changed to OFF.



- 1** Press the HOME button.  
The HOME menu screen appears.
- 2** Press the ALT/[F8] (STOP CODE) buttons.  
The stop code menu screen appears.
- 3** Press the [F8] (CODE ERASE) button to select “on”.  
Pressing the button toggles between “on” and “off”.
- 4** Press the [F9] (EXEC) button.

**To abandon the operation at any point**

Press the STOP button.

**To check the erasure**

Press the PREROLL button while holding down the SFT button. This unit prerolls 5 seconds before the recording

point, and starts playback. If the unit stops at the point at which the stop code was recorded, repeat the erasure.

**Note**

Checking the erasure by pressing the PREROLL button while holding down the SFT button is only valid in the stop code menu screen.

## 4-3 TC Menu

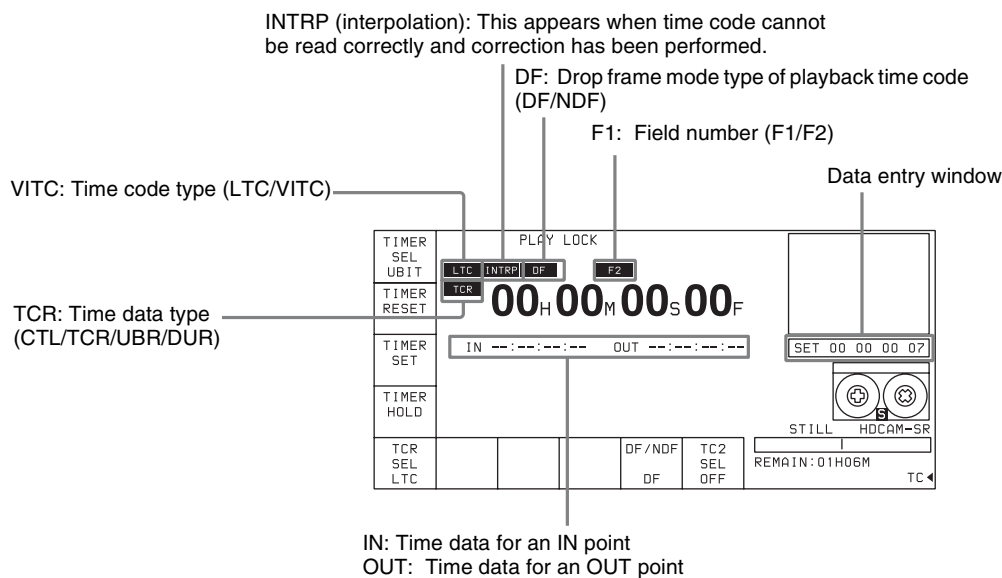
The TC menu allows you to set time code-related items through a single menu. The HOME, TC, VIDEO, AUDIO, PF1 and PF2 menus show information that includes the operation mode, time code of the current position, and the time code type, etc.

### To activate the TC menu

Press the TC button.

### To change the TC menu page

Press the ALT button.



For details on operation modes, see “4-2 HOME Menu” on page 61.

Button	Indication	Function	Settings
[F1]	TIMER SEL	Selects time data type.	CTL, TC, UBIT
[F2]	TIMER RESET	Resets the time counter.	
[F3]	TIMER SET	Sets the time data.	
[F4]	TIMER HOLD	Holds the time counter.	
[F5]	TCR SEL	Sets the time code reader.	VITC, auto, LTC
[F9]	DF/NDF	Selects drop frame mode.	DF, NDF, auto
[F10]	TC2 SEL	Selects the content of the second line of the time code display.	OFF, LTC, auto, VITC, CTL, UBR, UBV
ALT/[F1]	TAPE TIMER	Selects the CTL display mode.	+ -12H, 24H
ALT/[F2]	PDPSET MENU	Pulldown time code preset	
ALT/[F3]	TC CONV MENU	Frame conversion time code preset	
ALT/[F4]	PDTC DISP	Pulldown time code display	on, off
ALT/[F5]	FC CHARA	Superimposition of text data on FC output	on, off
ALT/[F6]	CHARA SUPER	Specifies superimposition of character information to the HD SDI output and HD-SD converter output.	on, off
ALT/[F7]	CHARA H-POS	Changes the superimposition position (horizontal).	0 to 15
ALT/[F8]	CHARA V-POS	Changes the superimposition position (vertical).	0 to 15

### 4-3-1 Setting the Time Data (TIMER SEL/RESET/SET/HOLD)

The display shows the following types of time data:

Indication	Superimposed display	Time data type
TCR LTC	TCR	The LTC <sup>1)</sup> value read by the time code reader during playback.
TCR VITC	TCR	The VITC <sup>1)</sup> value read by the time code reader during playback.
CTL	CTL	The number of CTL signals <sup>2)</sup> on the tape during playing.
UBR LTC	UBR	The user bits <sup>3)</sup> value read by the time code reader (LTC) during playback.
UBR VITC	UBR	The user bits value read by the time code reader (VITC) during playback.
DUR	DUR	Appears whenever a duration between IN and OUT points is displayed.

#### 1) LTC and VITC

LTC cannot be read when the tape speed is very slow or is changed suddenly. VITC, on the other hand, can be read more accurately than LTC when this unit is stopped or the tape speed is very low. VITC, however, cannot be read when the tape speed is very fast.

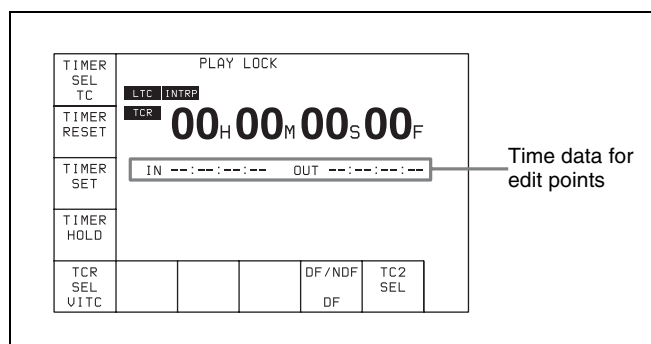
#### 2) CTL signals

CTL (control) signals are pulse signals that are recorded horizontally in each frame.

#### 3) User bits

These represent supplementary information as part of the recorded time code, and consist of eight hexadecimal digits (0-9 and A-F).

Time data for IN and OUT points are also displayed.



### Selecting the time data display

Press the [F1] (TIMER SEL) button repeatedly to select the desired time data display.

**CTL:** Counts the CTL signals on the playback tape, and displays the tape running time in hours, minutes, seconds, and frames.

**TC:** Displays the value read by the time code reader. To switch between VITC and LTC, press the [F5] (TCR SEL) button.

**UBIT:** Displays user bits data inserted in time code being played back. To switch between VITC and LTC, press the [F5] (TCR SEL) button.

### Setting the CTL timer

- 1 Press the [F1] (TIMER SEL) button to select CTL.
- 2 Enter data in the data entry window using the number buttons.
- 3 Press the SET button to set the data.
- 4 Press the [F3] (TIMER SET) button.

#### Note

When  $\pm 12H$  is selected in the VTR SETUP menu item 605 "TAPE TIMER DISPLAY" and a value of 10H or more is entered, the first digit will be dropped.

### Resetting time data

Set the [F1] (TIMER SEL) button to "CTL," and press the [F2] (TIMER RESET) button.

#### Note

Time data read by the time code reader cannot be reset.

### 4-3-2 Setting the Time Code Reader (TCR SEL)

Press the [F5] (TCR SEL) button to select the time code to be read by the time code reader during playback.

**VITC:** Reads VITC.

**auto:** Reads VITC when the playback speed is  $\pm 1/2$  times normal speed or less, and LTC when it is greater than  $\pm 1/2$  times normal speed.

**LTC:** Reads LTC.

Depending on the time code recorded on a tape, VITC or LTC appears on the display.

#### Note

Time codes that are read by the time code reader or played back are output from the TIME CODE OUT connector.

### 4-3-3 Selecting the Drop Frame Mode (DF/NDF)

Press the **[F9]** (DF/NDF) button to select the running mode for the time code after frame conversion and the CTL counter.

**DF:** Drop frame mode<sup>1)</sup> (DF is displayed.)

**NDF:** Non-drop frame mode<sup>2)</sup> (NDF is displayed.)

**auto:** The unit switches to drop frame mode when the field frequency is 29.97 Hz or 59.94 Hz, and switches to non-drop frame mode when the field frequency is 30 Hz or 60 Hz.

#### 1) Drop frame mode

In order to compensate for differences between time code values from the time code generator and the actual time that occurs when the frame frequency of this unit is 29.97 Hz, the drop frame mode causes the time code generator to omit the first two frames (frame 00 and 01) in each minute except the tenth.

#### 2) Non-drop frame mode

In this mode, drop frame mode processing is not performed. Since there is no frame cutting, a discrepancy of about 86 seconds occurs each day in the case of a frame frequency of 29.97 Hz.

#### Note

This setting is only active when the frame frequency of the unit is 29.97 Hz, 59.94 Hz, 30 Hz, or 60 Hz.

### 4-3-4 Selecting the Content of the Second Time Code Display Area (TC2 SEL)

Select the content of the second time code display area using the **[F10]** (TC2 SEL) button.

Setting	Time data displayed
OFF	No display
LTC	LTC value read from the time code reader
auto	When the playback speed is within the range $\pm 1/2$ normal speed, then VITC, and if outside this range then the LTC is displayed.
VITC	VITC value read from the time code reader
CTL	CTL signal count value
UBR	User bits read by the time code reader (LTC)
UBV	User bit value read from the time code reader (VITC)

When a warning or similar is shown, the second time code display area does not appear.

For details about the warnings, see “Warning Messages” on page 125.

### 4-3-5 Selecting CTL Display Mode (TAPE TIMER)

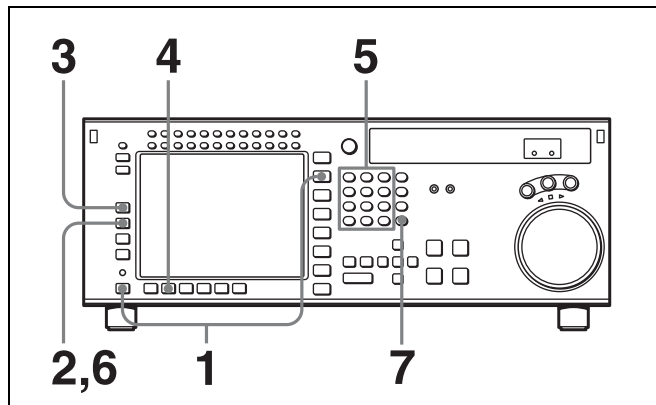
Press the ALT/**[F1]** (TAPE TIMER) buttons to select a 12-hour or 24-hour clock for the CTL display.

**+12H:** 12-hour clock

**24H:** 24-hour clock

### 4-3-6 Presetting Pulldown Time Code (PDPSET MENU) (when HKSR-5001 or HKSR-5105 is installed)

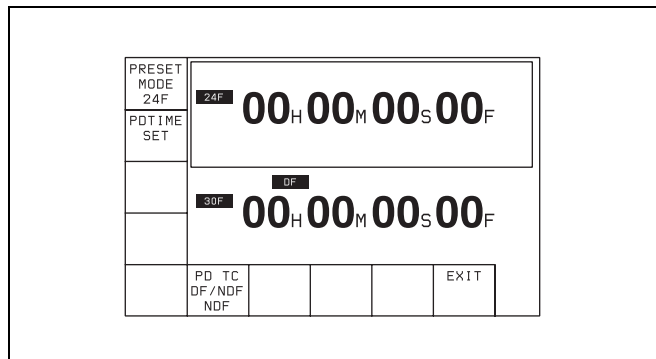
To preset the pulldown time code when this unit is operated in 23.98PsF/24PsF mode, use the following procedure.



**1** Press the TC button, then press the ALT button.

**2** Press the **[F2]** (PDPSET MENU) button.

The PDPSET menu appears.



**3** Press the **[F1]** (PRESET MODE) button to select 24F or 30F time code to be preset.

The selected time code is framed with the thick line. Each press of the button switches time code between 24F and 30F.



**24F:** Presets the 24 frames time code. The A frame of the pulldown sequence is preset.

**30F:** Presets the 30 frames time code. The A frame of the pulldown sequence is preset.

#### 4 • When 30F is selected in the step 3:

Press the **[F6]** (PDTC DF/NDF) button to select DF or NDF.

This selection is effective only for 30F time code.

**DF:** Drop frame mode

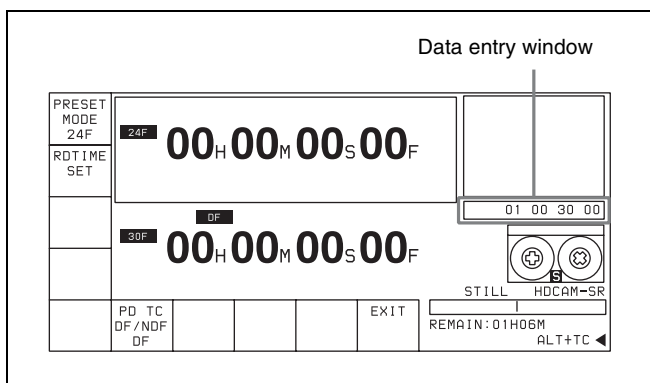
**NDF:** Non-drop frame mode

**auto:** The unit switches the running mode (DF/NDF) automatically according to the frame frequency of the unit. When the frame frequency is 23.98 Hz, the unit switches to the drop frame mode and switches to the non-drop frame mode when it is 24 Hz.

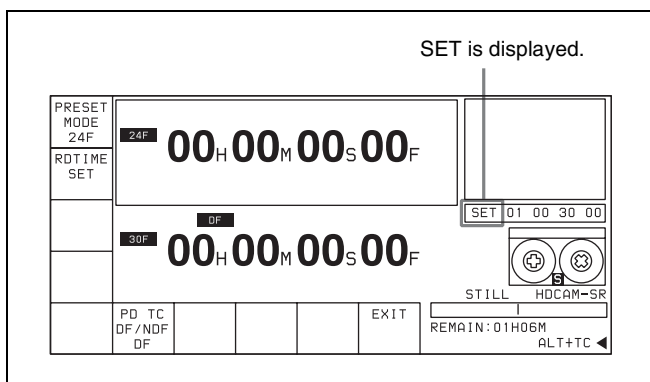
#### • When 24F is selected in the step 3:

Skip this step.

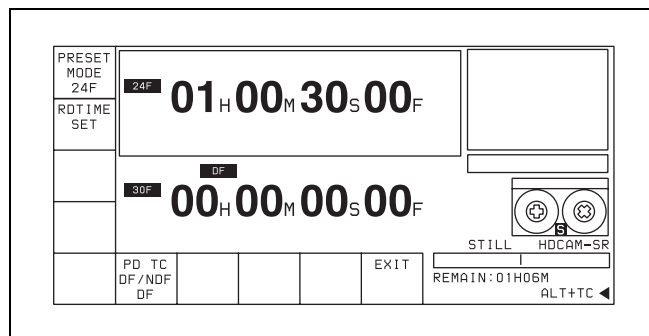
#### 5 Enter the time code data in the data entry window with numeric buttons.



#### 6 Press the SET button to set the input data.



#### 7 Press the **[F2]** (PDTIME SET) button.

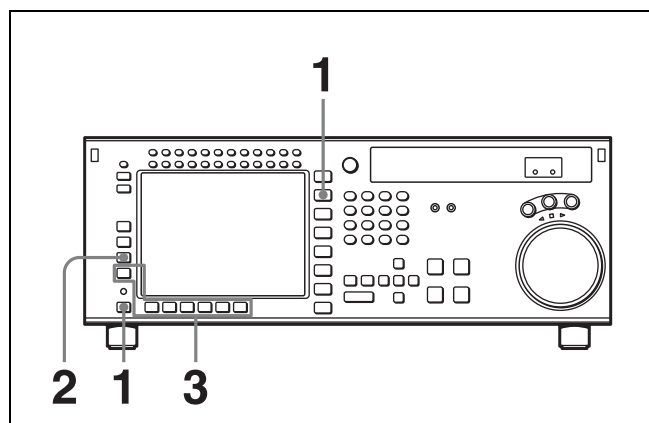


#### Notes

- Once the time code is preset, it cannot be reverted.
- Operation information display cannot be displayed while the pulldown time code appears.

### 4-3-7 Presetting for Conversion from Frame Time Code (TCCONV MENU)

Use the following procedure to set the time code conversion settings.



**1** Press the TC button, and then press the ALT button.  
The ALT+TC menu appears.

**2** Press the **[F3]** (TCCONV MENU) button.  
The TC CONVERT menu appears.

	STARTING TC	00 <sup>H</sup> 00 <sup>M</sup> 00 <sup>S</sup> 00 <sup>F</sup>
	JUMPING TC	03 <sup>H</sup> 00 <sup>M</sup> 00 <sup>S</sup> 00 <sup>F</sup>
TC CONV on	CURRENT TC	00 <sup>H</sup> 00 <sup>M</sup> 00 <sup>S</sup> 00 <sup>F</sup>
ORG TC disp on		
START TC PST	START TC ENT	JUMP TC SEL +3H
		EXIT

**STARTING TC:** Time code used as a reference when converting time code.

**JUMPING TC:** The loopback point for converting time code with STARTING TC as the reference point, and the conversion done in both forward and reverse directions.

The time code is discontinuous at this point.

The following table shows an example of how the 25 frame time code is discontinuous when the operating frequency is 25PsF, the playback tape is 24 frames, and STARTING TC is 01:00:00:00, and 24F JUMPING TC 22:00:00:00 (JUMP TC SEL=-3H).

	24 Frames TC	25 Frames TC	
JUMPING TC	22:00:00:00	20:09:36:00	
	:	:	
Forward direction	01:00:01:01	01:00:01:00	
	01:00:01:00	01:00:00:24	
↑	:	:	
STARTING TC	01:00:00:00	01:00:00:00	
↓	00:59:59:23	00:59:59:24	
Reverse direction	:	:	
	22:00:00:01	22:07:12:01	Non-consecutive part
JUMPING TC	22:00:00:00	21:09:36:00	

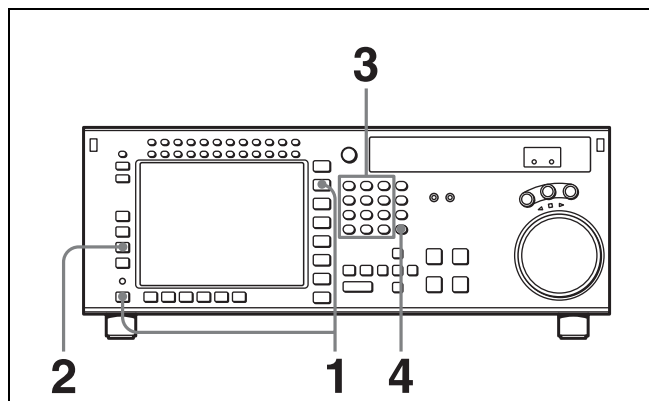
**3** If necessary, use the function buttons to change the settings.

For details on the settings made by these buttons, see the following table.

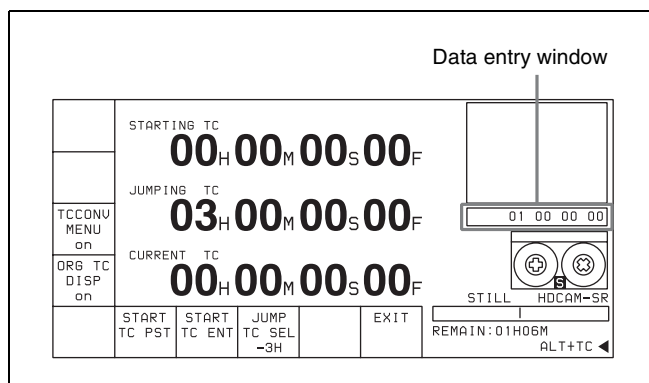
Button	Indication	Function
[F3]	TC CONV	Specifies whether the time code is converted to time code or not.
[F4]	ORG TC DISP	Specifies whether the time code is displayed or not on two lines in the HOME, TC, and PF menus along with the converted time code.
[F6]	START TC PST	Press to preset the STARTING TC using the numeric buttons.

Button	Indication	Function
[F7]	START TC ENT	Press to enter the current time code as the STARTING TC.
[F8]	JUMP TC SEL	Selects the JUMPING TC as an interval from STARTING TC. Selectable values: -3H, -2H, -1H, +1H, +2H, +3H, 0H
[F10]	EXIT	Select to exit the TC CONVERT menu.

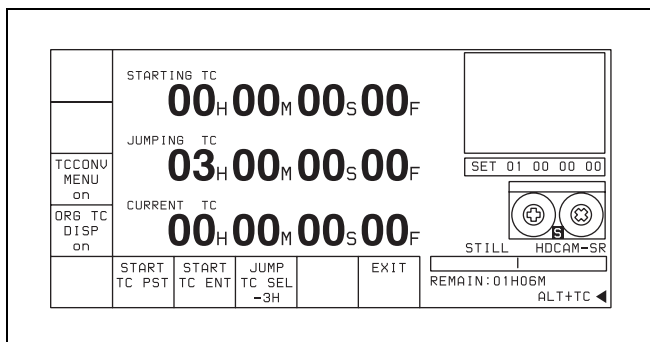
## To preset the 24F STARTING TC using the numeric buttons



- 1 Press the TC button, and then press the ALT button.  
The ALT+TC menu appears.
- 2 Press the [F3] (TCCONV MENU) button.  
The TC CONVERT menu appears.
- 3 Enter the time code in the data entry window with the numeric buttons.

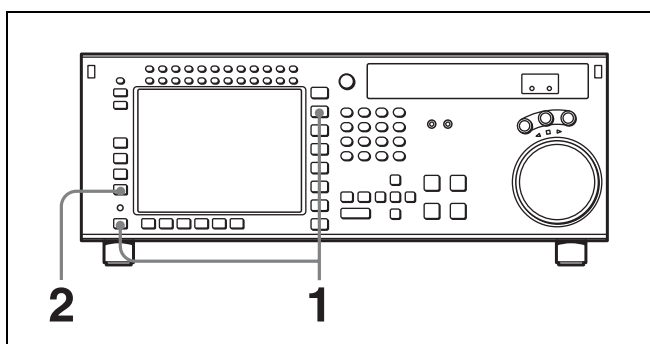


- 4 Press the SET button to set the time code.



### 4-3-8 Displaying the Pulldown Time Code (PDTC DISP) (when HKSR-5001 or HKSR-5105 is installed)

To display the pulldown time code, follow the steps below.



- 1 Press the TC button, then press the ALT button.

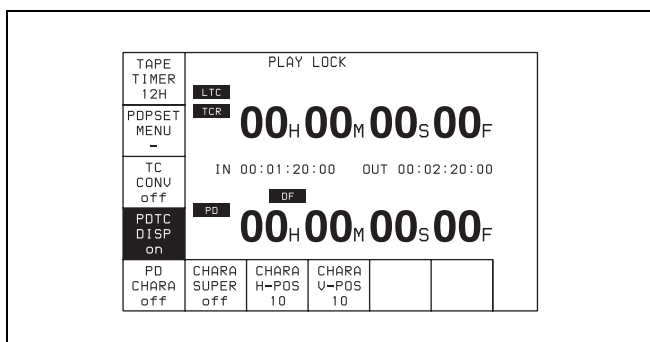
The ALT+TC menu appears.

- 2 Press the [F4] (PDTC DISP) button to select (highlight) “on”.

Each time you press the button, “on” and “off” alternate.

**on:** Displays the pulldown time code.

**off:** Does not display the pulldown time code.



### 4-3-9 Superimposition of Character Information (FC CHARA/CHARA SUPER/H-POS/V-POS)

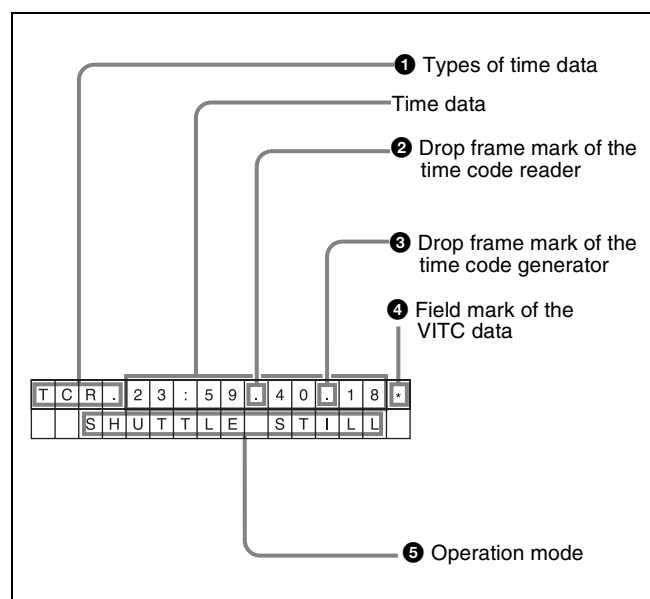
To superimpose the characters representing time code data and operation mode information on the output signals, use the ALT/[F4] (PD CHARA) and ALT/[F6] (CHARA SUPER) buttons.

Button	Setting	Connector to which the characters are superimposed
ALT/[F4]	on	FORMAT CONV. OUTPUT connector (on two connectors)
ALT/[F6]	on	<ul style="list-style-type: none"> <li>• MONITOR connector of HD SDI OUTPUT</li> <li>• SD OUTPUT COMPOSITE (MONITOR) connector</li> <li>• MONITOR connector of SD SDI OUTPUT</li> </ul>

#### Superimposition of character information on the HDMI/HDV output signal

When the optional HKSR-5105 is installed, the characters representing time code data and operation mode information can be superimposed on the HDMI/HDV output signal. Use the setting of the VTR SETUP menu item C01 “HDV/HDMI SUPERIMPOSED CHARACTER”.

#### Contents of superimposed data



#### Note

The example above shows the factory-set contents of data. By changing the setting of the VTR SETUP menu item 626 “DISPLAY INFORMATION select”, different types of information can also be displayed on the second line.

## ① Types of time data

Symbol	Meaning
CTL	CTL counter data
TCR	LTC reader time code data
UBR	LTC reader user bit data
TCR.	VITC reader time code data
UBR.	VITC reader user bit data
DUR	The duration between IN and OUT points

### Note

When time data or user bits are not read correctly, a “\*” will be displayed in this block so that the symbols become “T\*R”, “U\*R”, “T\*R.”, “U\*R.”, etc.

## ② Drop frame mark of the time code reader

“•”: drop frame mode  
“:”: non-drop frame mode

## ③ Drop frame mark of the time code generator

“•”: drop frame mode  
“:”: non-drop frame mode

## ④ Field mark of the VITC data

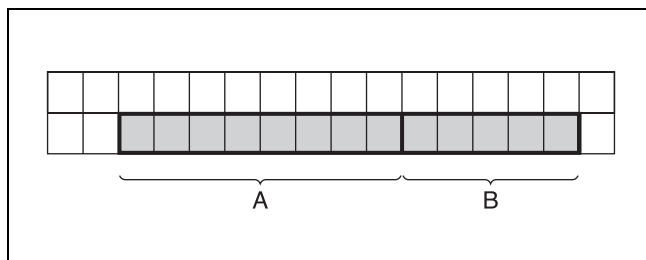
“ ”: (blank space) fields 1 and 3  
“\*”: fields 2 and 4

## ⑤ Operation mode

The contents are divided into blocks A and B as shown below.

**Block A:** Indicates the operation mode.

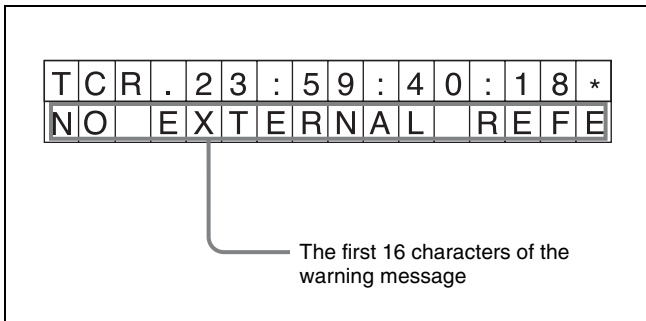
**Block B:** Indicates the tape speed or servo lock status.



Display		Operation mode
A block	B block	
TAPE UNTHREAD		Cassette not inserted
STANDBY OFF		Standby off mode
T.RELEASE		Tension release mode
STOP		Stop mode
PREROLL		Preroll mode
PLAY		Playback mode (servo unlocked)
PLAY	LOCK	Playback mode (servo locked)
PLY-SPD	Speed shift from normal speed (%)	Capstan override mode
JOG	STILL	Still-picture jog mode
JOG	FWD	Forward jog (▶ is lit)
JOG	REV	Reverse jog (◀ is lit)
SHUTTLE	(speed)	Shuttle mode
VAR	(speed)	Variable mode
DMC	(speed <sup>a)</sup> )	DMC memorize mode
D-PREV	(speed <sup>a)</sup> )	DMC edit preview mode
DMC-SPD	(speed)	DMC initial speed setting

a) Initial speed or memorized speed

## To display a warning message



Set the VTR SETUP menu item 626 “DISPLAY INFORMATION select” to any setting other than “time data only” and set the menu item 627 “CHAR WARNING DISPLAY at dual line mode” to “on”. The first 16 characters of the warning message flashes on the second line.

*For details about the warning messages, see “Warning Messages” on page 125.*

When there are multiple warning messages, each message flashes twice before it is replaced by the next message. When there is no warning message, the setting of the VTR SETUP menu item 626 “DISPLAY INFORMATION select” flashes on the second line instead.

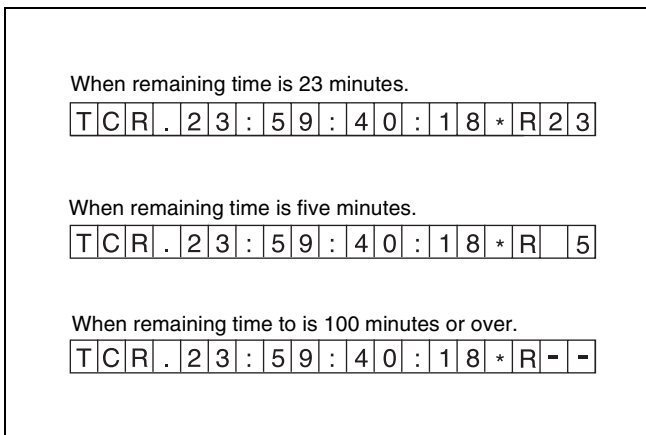
## To display remaining time on the tape

Use the VTR SETUP menu item 628 “REMAIN TIME DISPLAY” to display remaining time on the tape.

**off:** Do not display remaining time.

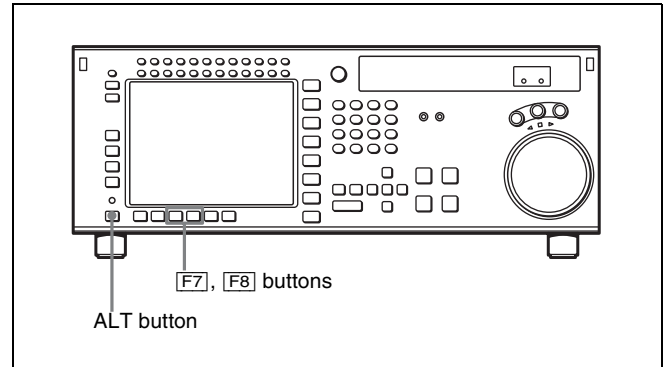
**10min:** Display remaining time when it is 10 minutes or less.

**on:** Always display remaining time.



## Changing the superimpose position

The superimpose position can be set to 16 different positions in the horizontal directions (0 to 15) and 24 different positions in the vertical directions (0 to 23).



To move in the horizontal direction, press the ALT/[F7] (CHARA H-POS) buttons, and to move in the vertical direction, press the ALT/[F8] (CHARA V-POS) buttons. Each cursor button press increments the setting by 1. From the maximum value, the next value is the minimum value.

Switching to a menu screen other than the TC menu screen also ends the setting.

## 4-4 CUE Menu

Cue points can be registered in a total of 10 pages (numbered 0 to 9), to a total of 100 cue points (numbered 0 to 99). Each page can hold a maximum of 10 cue points. Cue point settings, deletions, and page settings are done through the CUE menu.

For details on storing cue point data, see “4-1-5 “Memory Stick” Operations” on page 41.

### To activate the CUE menu

Press the CUE button.

### Note

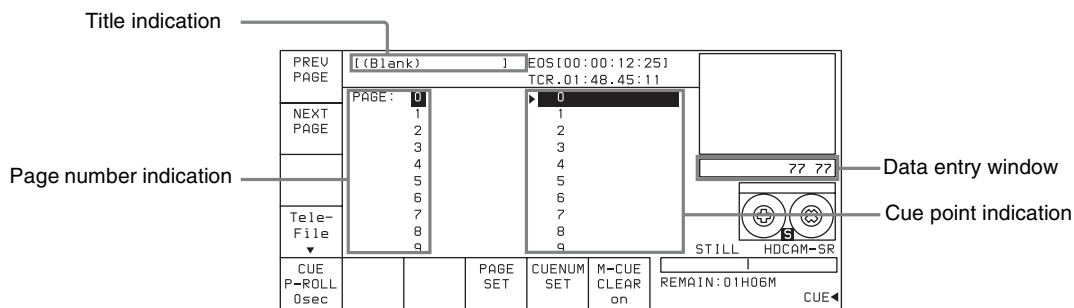
Cue point data is factory set to be erased when a cassette is inserted.

### To select whether to erase cue point data when a cassette is inserted

Press the **[F10]** (M-CUE CLEAR) button to select whether to erase cue point data when a cassette is inserted.

**on:** Erase cue point data.

**off:** Do not erase cue point data.



Button	Indication	Function	Settings
<b>[F1]</b>	PREV PAGE	Shows the previous page.	
<b>[F2]</b>	NEXT PAGE	Shows the next page.	
<b>[F4]</b>	Tele-File	Opens the Tele-File menu.	
<b>[F5]</b>	CUE P-ROLL	Specifies the preroll time to a cue point.	0 to 30 s
<b>[F8]</b>	PAGE SET	Specifies the page number.	
<b>[F9]</b>	CUENUM SET	Specifies the cue number.	
<b>[F10]</b>	M-CUE CLEAR	Erases cue point data when a cassette is inserted.	on, off
ALT/ <b>[F8]</b>	PAGE MODE	Selects PAGE mode.	
ALT/ <b>[F9]</b>	EXTEND MODE	Selects EXTEND mode.	

## 4-4-1 Selecting a Multi-Cue Mode

The SRW-5100 has the following two multi-cue modes.

### PAGE mode

Press the ALT/[F8] (PAGE MODE) buttons.

In PAGE mode, cue point data can be accessed by page number, thus speeding up cue point registration and cuing operations.

### Display

Cue points are displayed in groups of 10, number 0 to 9, 10 to 19, etc. Each display is a page.

### Selecting a page

There are the three following ways to select a page:

- Press the [F1] (PREV PAGE) button.  
The previous page is shown.
- Press the [F2] (NEXT PAGE) button.  
The next page is shown.
- Enter the desired page number with the numeric button, then press the [F8] (PAGE SET) button.  
If you enter 1, for example, page one appears, containing cue point numbers 10 to 19.

### EXTEND mode

Press the ALT/[F9] (EXTEND MODE) buttons.

In EXTEND mode, you can do operations that cannot be done in page units, such as the consecutive registration of more than 10 cue points.

### Display

The screen displays a list of 100 consecutive cue points which can be scrolled. Press the ↑ or ↓ button to scroll the list. Page columns are not displayed.

### To quickly scroll through a list

Press the ↑ or ↓ button while holding down the SFT button.

## 4-4-2 Saving and Storing the Tele-File Data

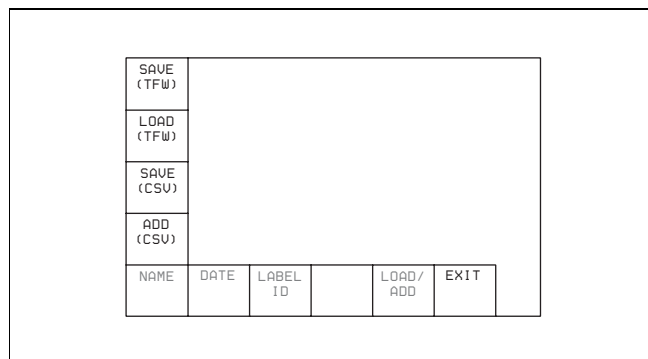
Tele-File data can be saved to a “Memory Stick” in tfw or csv file format. The tfw or csv file saved to a “Memory Stick” can also be written to the Tele-File label.

### Saving the Tele-File data to a “Memory Stick”

**1** After pressing the CUE button, press the ALT button.

**2** Press the [F1] (T-File MEMORY CARD) button.

The T-File CARD menu appears.



**3** Select the format of the file to be saved.

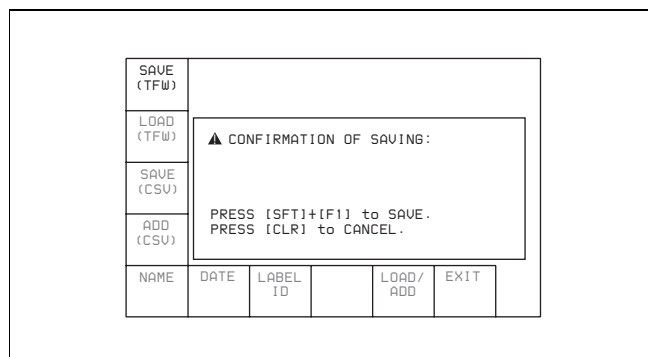
### To save the Tele-File data as a tfw file

Press the [F1] (SAVE(TFW)) button.

### To save the Tele-File data as a csv file

Press the [F3] (SAVE(CSV)) button.

A message asking you to confirm the operation appears in the display.



### To cancel saving the Tele-File data

Press the CLR button while the confirmation message appears.

**4** Press the [F1] (SAVE(TFW)) button or [F3] (SAVE(CSV)) button while holding down the SFT button.

The VTR starts to save Tele-File data to the “Memory Stick.”

After the saving of the data is completed, the file name of the saved data and the directory where the file is stored are displayed.

## When the Tele-File data is saved as a tfw data

SAVE (TFW)					
LOAD (TFW)	<div>  COMPLETED </div>				
SAVE (CSV)	<div> File Name: C214001662_100115133223.tfw Directory: MSSONY/PRO/TELEFILE/DATA </div>				
ADD (CSV)					
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

**Directory where the file is stored:** MSSONY/PRO/TELEFILE/DATA

**File name for the saved file:** “LABEL\_ID (ID of the Tele-File label)”\_“DATE (date and time when the file is saved: YYMMDDHHMMSS)”.tfw

## When the Tele-File data is saved as a csv data

SAVE (TFW)					
LOAD (TFW)	<div>  COMPLETED </div>				
SAVE (CSV)	<div> File Name: C214001662_100115133330.csv Directory: MSSONY/PRO/TELEFILE/DATA/CSV </div>				
ADD (CSV)					
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

**Directory where the file is stored:** MSSONY/PRO/TELEFILE/DATA/CSV

**File name for the saved file:** “LABEL\_ID (ID of the Tele-File label)”\_“DATE (date and time when the file is saved: YYMMDDHHMMSS)”.csv

## Replacing the contents of Tele-File label with the tfw data in the “Memory Stick”

**1** After pressing the CUE button, press the ALT button.

**2** Press the **[F1]** (T-File MEMORY CARD) button.

The T-File CARD menu appears.

SAVE (TFW)					
LOAD (TFW)					
SAVE (CSV)					
ADD (CSV)					
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

**3** Press the **[F2]** (LOAD(TFW)) button.

The tfw files stored in the “Memory Stick” are displayed in a list.

SAVE (TFW)	Load TFW File to Tele-File				
LOAD (TFW)	DIR: /MSSONY/PRO/TELEFILE/DATA				
SAVE (CSV)	File Name: 6E20001959_090812182919.tfw				
ADD (CSV)	Date: 2009/08/12 17:29:20 ID: 6E20001959				
	No	File Name	Total: 60		
	1	6E20001959_090812182919.tfw			
	2	6E20001959_090812184513.tfw			
	3	BA14000034_090818141513.tfw			
	4	C214001662_090817200332.tfw			
	5	C214001662_090817200609.tfw			
	6	C214001662_090818095459.tfw			
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

**To display the data and label IDs of the tfw files**  
Press the cursor **→** button.

**To display names of the tfw files**  
Press the cursor **←** button.

### To sort the list

Press one of the following buttons.

**[F5] (NAME) button:** The list is sorted by the file name.

**[F6] (DATE) button:** The list is sorted by the date.

**[F7] (LABEL ID) button:** The list is sorted by the label ID.

**4** Press the cursor **↑** or **↓** button (or rotate the MULTI CONTROL knob) to select the data to be written to the Tele-File label.

**5** Press the **[F9]** (LOAD(ADD)) button.

A message asking you to confirm the operation appears in the display.



SAVE (TFW)	Load TFW File to Tele-File DIR: /MSSONY/PRO/TELEFILE/DATA File Name: C214001662_090817200332.tfw				
LOAD (TFW)	▲ CONFIRMATION OF LOADING:  PRESS [SFT]+[F9] to LOAD. PRESS [CLR] to CANCEL.				
SAVE (CSV)					
ADD (CSV)					
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

### To cancel saving the Tele-File data

Press the CLR button while the confirmation message appears.

- 6** Press the **[F9]** (LOAD(ADD)) button while holding down the SFT button.

The contents of the Tele-File label is replaced with the tfw file.

When the procedure is completed, “COMPLETED” appears in the display.

SAVE (TFW)	Load TFW File to Tele-File DIR: /MSSONY/PRO/TELEFILE/DATA File Name: C214001662_090817200332.tfw				
LOAD (TFW)	● COMPLETED				
SAVE (CSV)					
ADD (CSV)					
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

### Adding the csv data in the “Memory Stick” to the Tele-File label

- After pressing the CUE button, press the ALT button.
- Press the **[F1]** (T-File MEMORY CARD) button.

The T-File CARD menu appears.

SAVE (TFW)					
LOAD (TFW)					
SAVE (CSV)					
ADD (CSV)					
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

- 3** Press the **[F4]** (ADD(CSV)) button.

The csv files stored in the “Memory Stick” are displayed in a list.

SAVE (TFW)	Add CSV File to Tele-File DIR: /MSSONY/PRO/TELEFILE/DATA/CSV File Name: C214001662_090821110537.csv				
LOAD (TFW)	Date: 2009/08/21 10:05:38 ID: C214001662				
SAVE (CSV)	No	File Name	Total		
ADD (CSV)	1	C214001662_090821110537.csv	21		
	2	C215001662_090829105533.csv			
	3	C215001662_090827105939.csv			
	4	C215001662_091001113900.csv			
	5	C215001662_091001113908.csv			
	6	C215001662_091001113912.csv			
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

### To display the data and label ID of the csv files

Press the cursor → button.

### To display names of the csv files

Press the cursor ← button.

### To sort the list

Press one of the following buttons.

**[F5] (NAME) button:** The list is sorted by the file name.

**[F6] (DATE) button:** The list is sorted by the date.

**[F7] (LABEL ID) button:** The list is sorted by the label ID.

- 4** Press the cursor ↑ or ↓ button (or rotate the MULTI CONTROL knob) to select the data to be added to the Tele-File label.

- 5** Press the **[F9]** (LOAD(ADD)) button.

A message asking you to confirm the operation appears in the display.

SAVE (TFW)	Add CSV File to Tele-File DIR: /MSSONY/PRO/TELEFILE/DATA/CSV File Name: C214001662_090821110537.csv				
LOAD (TFW)	▲ CONFIRMATION OF ADDING:				
SAVE (CSV)	PRESS [SFT]+[F9] to ADD. PRESS [CLR] to CANCEL.				
ADD (CSV)					
NAME	DATE	LABEL ID		LOAD/ADD	EXIT

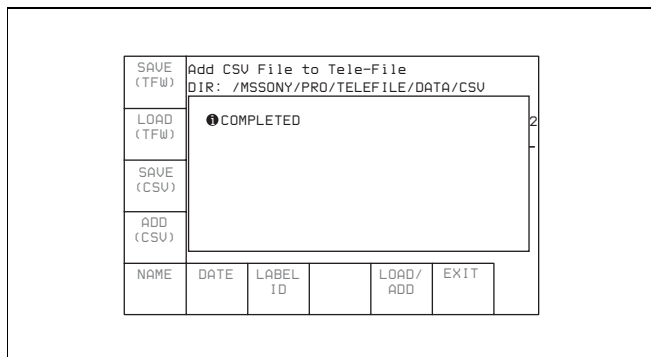
### To cancel adding the csv file to the Tele-File label

Press the CLR button while the confirmation message appears.

- 6** Press the **[F9]** (LOAD(ADD)) button while holding down the SFT button.

The VTR starts to add csv file to the Tele-File label.

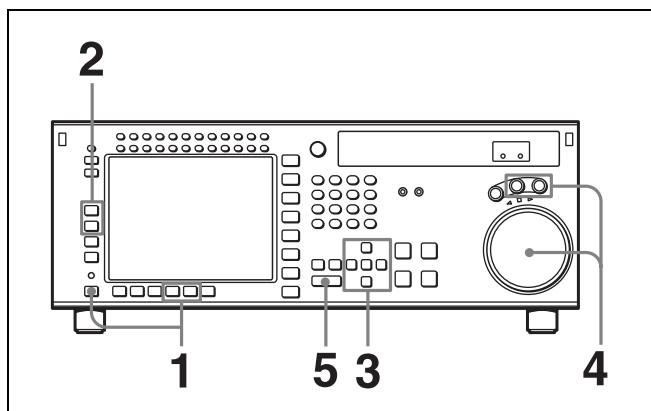
When the procedure is completed, “COMPLETED” appears in the display.



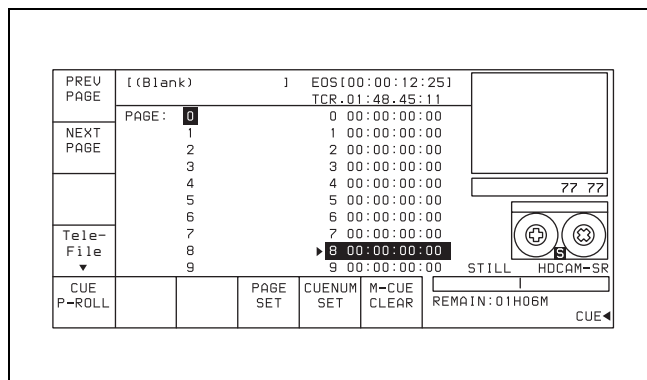
### 4-4-3 Registering Cue Points

There are two ways to register cue points: (1) by direct registration of the tape address when the ENTRY button is pressed, and (2) by the entry of cue point data with the numeric buttons.

#### Registering cue points by pressing the ENTRY button



- 1 Press the ALT/[F8] (PAGE MODE) buttons or the ALT/[F9] (EXTEND MODE) buttons.
- 2 If you selected PAGE mode, press the [F1] (PREV PAGE) button or [F2] (NEXT PAGE) button to select a desired page (or use the numeric buttons to enter the page number in the data entry window, then press the [F8] (PAGE SET) button).
- 3 Press the ↑ or ↓ button to move the cursor (▶) to the cue number to be registered.

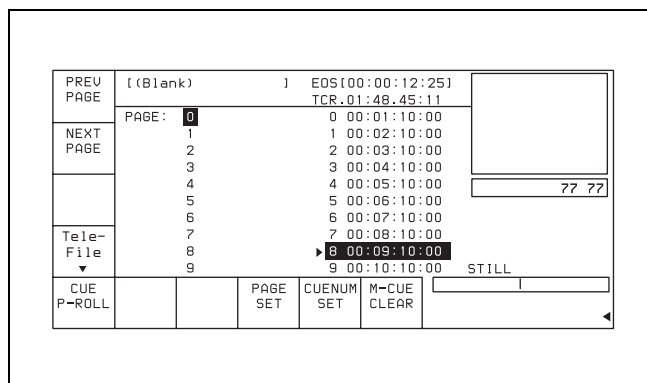


#### To select the cue number directly by numeric buttons

Enter the cue number in the data entry window with the numeric buttons, then press the [F9] (CUENUM SET) button.

- 4 Press the JOG or VAR button, then rotate the search dial to find the position where you want to register the cue point.
- 5 Press the ENTRY button at the selected position.

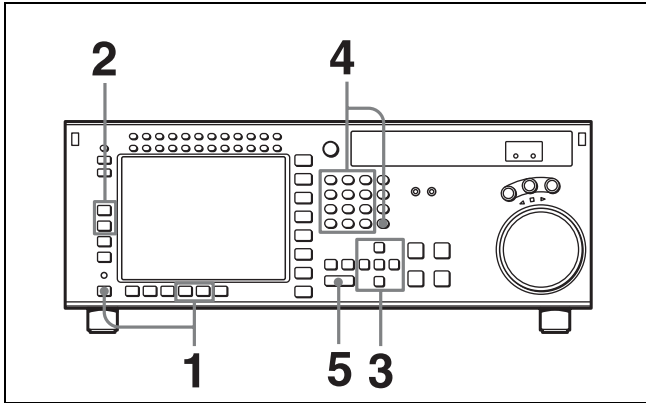
The current tape address of the position where the button is pressed is registered as a cue point. Press the ENTRY button repeatedly to register the cue point repeatedly. The cue number will automatically increment by one each time.



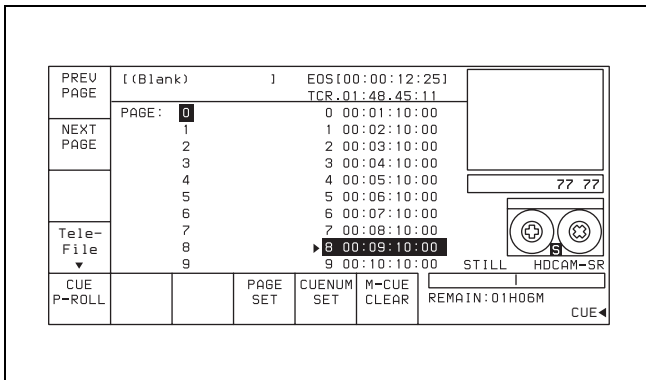
#### Note

In PAGE mode, the cue number advances only within the current page when the ENTRY button is pressed repeatedly. For example, after cue number 19 is registered and the ENTRY button is pressed, the cue point 10 comes up as the next cue point. In EXTEND mode, if you press the ENTRY button after registering, for example, cue number 99, the next cue point is registered to cue number 99 again.

## Registering cue points by the numeric buttons



- 1 Press the ALT/[F8] (PAGE MODE) buttons or the ALT/[F9] (EXTEND MODE) buttons.
- 2 If you selected PAGE mode, press the [F1] (PREV PAGE) button or [F2] (NEXT PAGE) button to select a desired page (or use the numeric buttons to enter the page number in the data entry window, then press the [F8] (PAGE SET) button).
- 3 Press the cursor  $\uparrow$  or  $\downarrow$  button to move the cursor (▶) to the cue number to be registered.

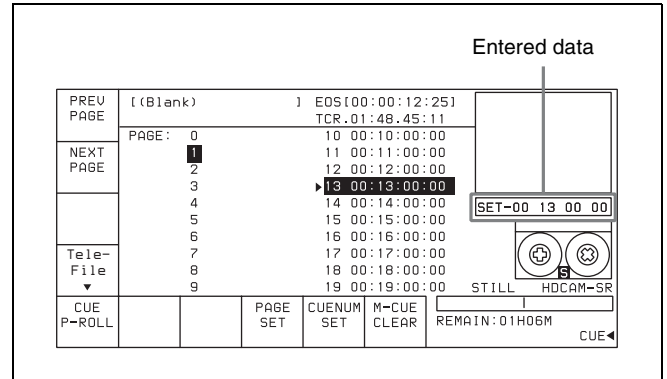


### To select the cue number directly by the numeric buttons

Enter the cue number in the data entry window with the numeric buttons, then press the [F9] (CUENUM SET) button.

- 4 Enter the cue point data in the data entry window with the numeric buttons, then press the SET button.

For example, to enter 00:01:30:00, press 0, 0, 1, 3, 0, 0. (The leading 0 is not required. When the entered value is less than eight digits, the leading digit(s) is (are) set to 0 when you press the SET button.)

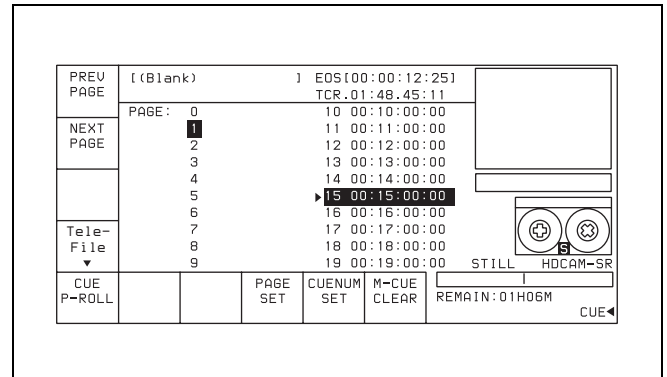


### To modify current cue point data

Press the + or – button, enter the value to be added or subtracted, then press the SET button.

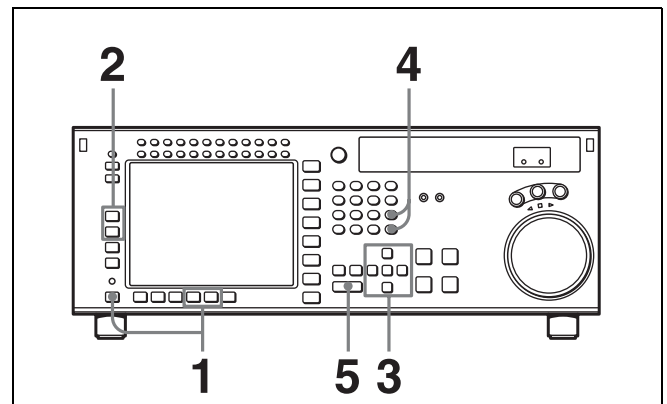
The computation is performed and the results appear in the data entry window.

- 5 Press the ENTRY button to set the entered data.  
The data are registered in the cue point data indication.



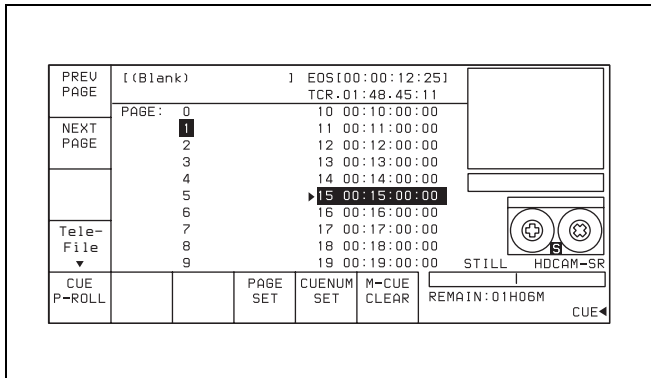
## 4-4-4 Erasing Cue Point Data

To erase any cue point data, blank out the data entry window, then do the cue point registration procedure.



- 1 Press the ALT/[F8] (PAGE MODE) buttons or the ALT/[F9] (EXTEND MODE) buttons.

- 2 If you selected PAGE mode, press the **[F1]** (PREV PAGE) button or **[F2]** (NEXT PAGE) button to select a desired page (or use the numeric buttons to enter the page number in the data entry window, then press the **[F8]** (PAGE SET) button).
- 3 Press the cursor **↑** or **↓** button to move the cursor (▶) to the cue number to be erased.

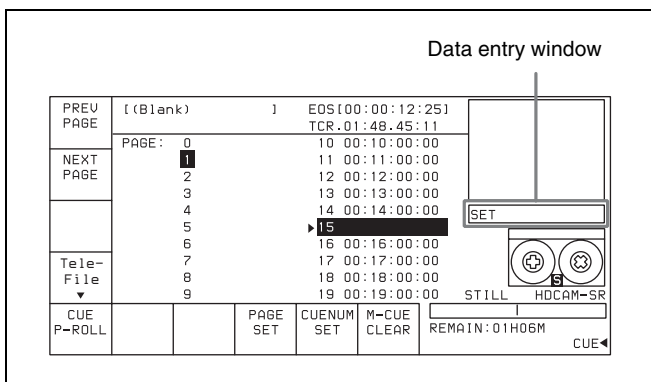


#### To select the cue number directly by the numeric buttons

Enter the cue number in the data entry window with the numeric buttons, then press the **[F9]** (CUENUM SET) button.

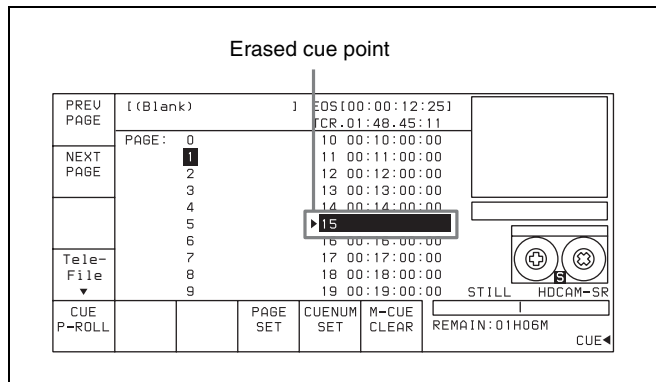
- 4 Press the CLR button then press the SET button.

The cue point display disappears from the data entry window.



- 5 Press the ENTRY button.

Data for the specified cue number are erased and the data column becomes blank.



#### To erase all cue point data

Press the CLR button while holding down the SFT button. A message asking you to confirm the operation appears in the display.

In EXTEND mode, press the CLR button while holding down the SFT button again to erase all data for cue number 0 to 99.

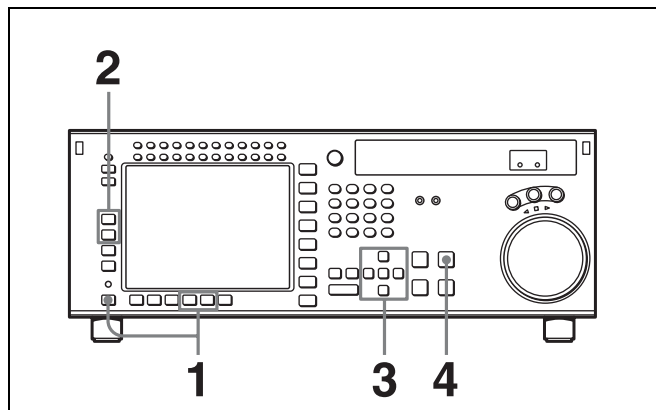
In PAGE mode, press the CLR button while holding down the SFT button again to erase data for the cue points on the current page.

### 4-4-5 Prerolling to a Cue Point

Select the preroll time to a cue point with pressing the **[F5]** (CUE P-ROLL) button.

You can set a preroll time of 0 to 30 seconds.

#### Prerolling to a cue point



- 1 Press the ALT/**[F8]** (PAGE MODE) buttons or the ALT/**[F9]** (EXTEND MODE) buttons.
- 2 If you selected PAGE mode, press the **[F1]** (PREV PAGE) button or **[F2]** (NEXT PAGE) button to select a desired page (or use the numeric buttons to enter the page number in the data entry window, then press the **[F8]** (PAGE SET) button).
- 3 Press the cursor **↑** or **↓** button to move the cursor (▶) to the cue number.

**To select the cue number directly by the numeric buttons**

Enter the cue number in the data entry window with the numeric buttons, then press the **[F9]** (CUENUM SET) button.

#### 4 Press the PREROLL button.

### 4-4-6 Changing a Cue Point Into an Edit Point

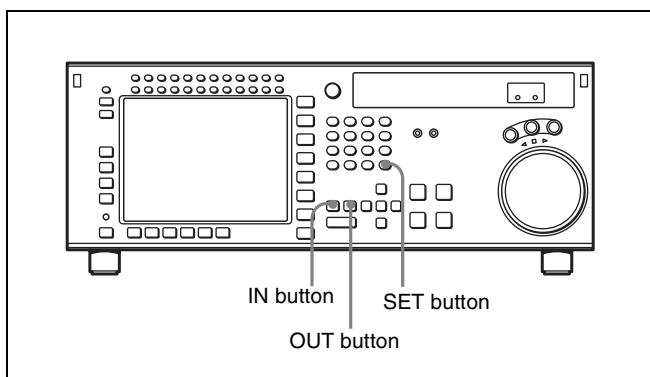
Follow the procedures below to change a selected cue point into an edit point.

#### **To change an edit point into an IN point**

Press the SET button while holding down the IN button.

#### **To change an edit point into an OUT point**

Press the SET button while holding down the OUT button.



### 4-4-7 Tele-File Menu

The Tele-File menu screen is different in HDCAM-SR and HDCAM formats.

**In HDCAM-SR format:** The cassette has a memory label attached as standard, and this screen allows operations to read out, enter, or change the cassette ID identification, recording format, recording information, management information, and so on. In the HDCAM-SR format, each recording automatically adds recording information. However, if the recording time is less than 2 seconds, or if when recording ends the measurement on the spool was not complete, then no recording information is added.

**In HDCAM format:** When an MLB-1M-100 memory label (optional) is attached to the cassette, this screen allows operations to read out, enter, or change the cue point information, log (IN/OUT point) information, management information, and so on. Using this information, cassette tape management and tape editing efficiency can be improved.

### HDCAM-SR format Tele-File menu

#### **To open the Tele-File menu**

There are two methods of accessing the Tele-File menu screen, as follows.

- Press the **[F4]** (Tele-File) button while in the CUE menu.
- Select “on” for the VTR SETUP menu item 124 “Tele-File MENU auto popup”. Then, with the HOME, TC, VIDEO, AUDIO, CUE, or SETUP menu open, insert a cassette into this unit.

#### **To change the information displayed in the Tele-File menu**

Press the cursor **←** or **→** button.

#### **Exiting the Tele-File menu**

Press the **[F10]** (WRITE/EXIT) button. The entered or modified data is saved to the memory label and this unit exits the Tele-File menu.

#### **Note**

While the data is being changed, if the write-protect setting has been made for the whole Tele-File menu, then data changed before the setting was made is rewritten.

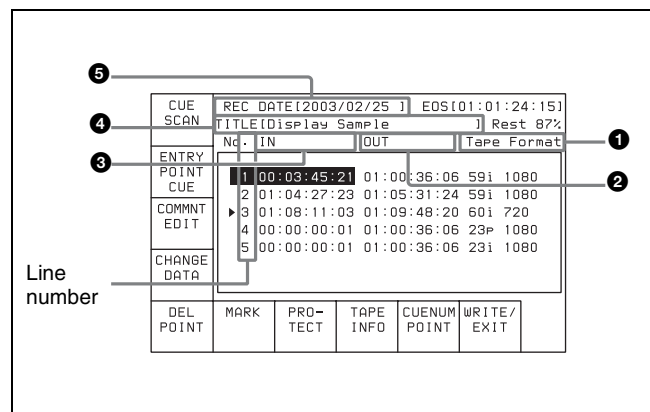
#### **To exit the Tele-File menu without saving data to a memory label**

Press the EJECT button, or press the ALT/**[F2]** (UNDO ALL) buttons. After a window that confirms cancellation is displayed, hold down the SFT button, and press the **[F2]** (UNDO ALL) button. The memory label contents when the cassette was inserted are restored.

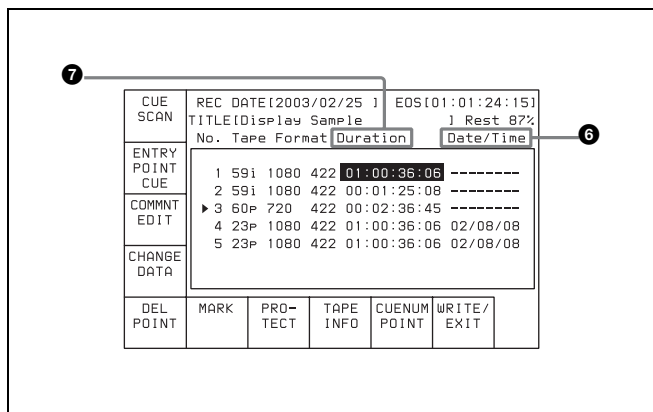
#### **If you accidentally press the EJECT button before saving data to a memory label**

Insert the cassette again within 30 seconds after the ejection and press the **[F10]** (WRITE/EXIT) button. The data that existed before the ejection of the cassette is saved to the memory label.

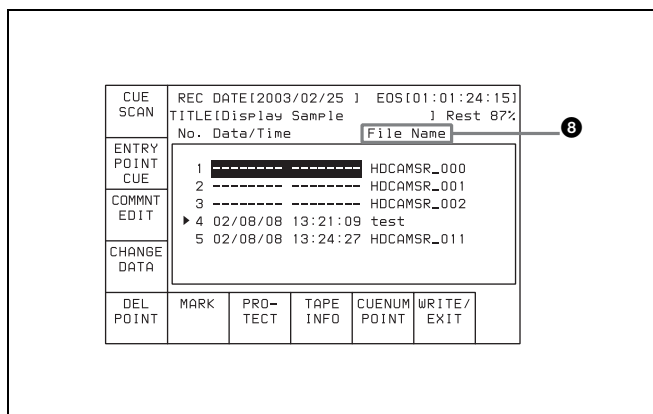
Three levels of information can be displayed in the Tele-File menu and the levels can be scrolled to the left or right by pressing the **←** or **→** button.



Tele-File menu display 1



Tele-File menu display 2



Tele-File menu display 3

**1 Tape Format**

Displays the recording format.

**2 OUT**

Displays the recording end point data.

**3 IN**

Displays the recording start point data.

**4 TITLE**

Displays the cassette title.

**5 REC DATE**

Displays the date the memory label contents were last modified.

**6 Date/Time**

Displays the recording date and time.

**7 Duration**

Displays the recording duration.

**8 File Name**

Displays the names of files.

When the Tele-File menu display 2 is displayed, you can press the SFT button to switch the TAPE FORMAT display between “59i 1080 422” and “59i 4:2:2 SQ”.

Button	Indication	Function
[F1]	CUE SCAN	Specifies the direction of the cursor movement when the PREROLL button is pressed.
[F4]	CHANGE DATA	Modifies the specified data.
[F5]	DEL POINT	Deletes the time data of the cue point.
[F7]	PROTECT	Write-protects the cue point data.
[F8]	TAPE INFO	Displays the information window.
[F9]	CUENUM POINT	Moves the cursor to the line specified by the numeric buttons.
[F10]	WRITE/EXIT	Closes the Tele-File menu after saving changes to the memory label.
ALT/[F1]	FORMAT T-File	Formats the memory label.
ALT/[F2]	UNDO ALL	Undoes all changes.
ALT/[F3]	ATTRIB EDIT	Changes the ID, ADMIN, or TITLE data in the information window.
ALT/[F4]	COPY to CUE	Copies the time data of a cue point to another cue point indicated in the CUE menu.
ALT/[F7]	WRITE PRTEC	Prohibits Tele-File menu operations.
ALT/[F10]	WRITE/EXIT	Closes the Tele-File menu after saving changes to the memory label.

**Formatting a memory label**

- 1 Press the ALT/[F1] (FORMAT T-File) buttons.
- 2 Press the [F1] (FORMAT T-File) button while holding down the SFT button.  
  
A message appears (in the control panel display) requesting confirmation of the formatting operation.  
  
**To cancel the formatting operation**  
Press the CLR button.
- 3 Press the [F1] (FORMAT T-File) button while holding down the SFT button.

“COMPLETED” appears in the control panel display.

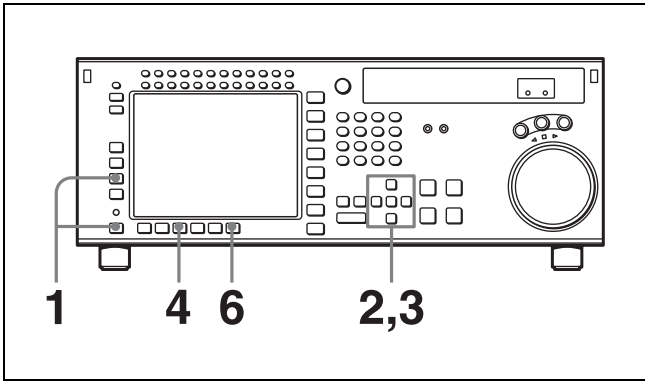
**Prohibiting Tele-File menu operations**

Press the ALT/[F7] (WRITE PRTEC) buttons.

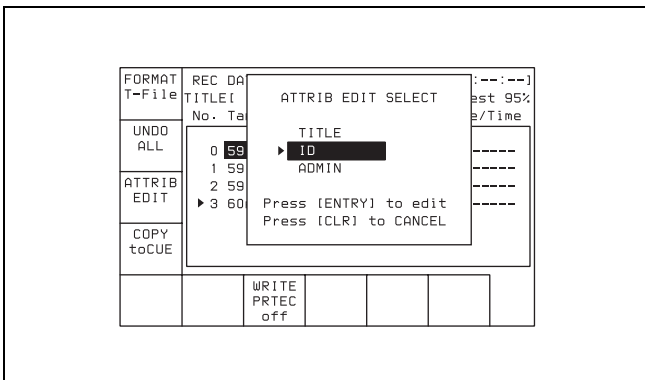
**on:** All Tele-File menu operations are prohibited.

**off:** All Tele-File menu operations are permitted.

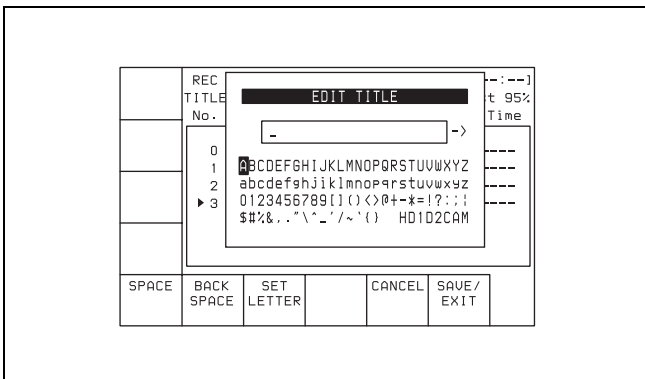
## Changing a title



- 1 Press the ALT/[F3] (ATTRIB EDIT) buttons.
- 2 Press the ↑ or ↓ button to select TITLE, and then press the ENTRY button.

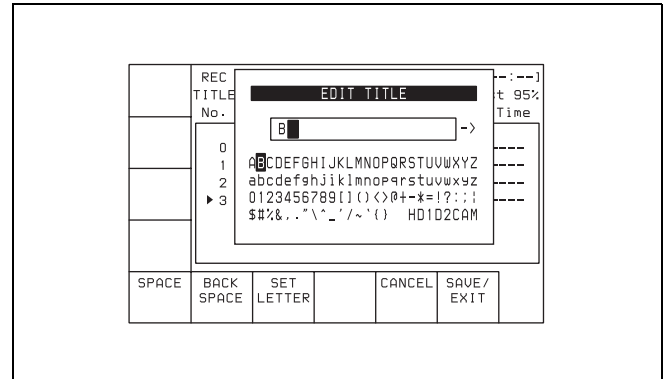


- 3 Press the cursor ← or → button to select a character.



- 4 Press the [F7] (SET LETTER) button or the cursor center button.

The selected character is entered.



- 5 Repeat steps 3 and 4 to enter more characters.

### To enter a space

Press the [F5] (SPACE) button.

### If you enter a wrong character

Press the [F6] (BACK SPACE) button to go back. Then re-enter the character.

### To start the procedure over again

Press the [F9] (CANCEL) button to start again.

### To change a character

Press the cursor ↑ button to move the cursor to the title box. Then press the cursor ← or → button to change the insertion position.

### If entered title exceeds the length of the title box

◀ or ▶ appears to the left or right of the box.

- 6 Press the [F10] (SAVE/EXIT) button.

The screen that was on before the title was entered is displayed again.

## To change IN/OUT point time data

- 1 Use the cursor buttons to move the cursor (▶) to the line where you want to change IN/OUT point time data.

### To move the cursor using the numeric buttons

With the cursor specifying IN or OUT, enter the line number using the numeric buttons. Then press the [F9] (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

### Note

If the cursor (▶) is not linked with the cursor buttons, the cursor (▶) will not move when the cursor buttons are pressed.

### To link the cursor (▶) with the cursor buttons

Press the cursor center button. Each press of the button alternately links and unlinks the cursor ▶.



## 2 Press the ENTRY button.

When the cursor buttons are aligned with the IN point, and the IN point is at the OUT point, when you press the ENTRY button at the OUT point, the time code is either entered as a new value or updated. To update the data, the winding diameter measurement must be completed, and the drum locked, and then the tape information read in.

### Note

If the cursor (▶) is not on the screen when the ENTRY button is pressed, the time data on the line currently specified by the cursor (▶) changes to the current time data, and the line is automatically displayed.

### To clear the data

With the cursor buttons, align the cursor with the data you want to clear, and in the case of the IN point hold down the IN button, and in the case of the OUT point hold down the OUT button, and press the CLR button, to clear the data. You can also clear the data by holding down the CLR button, and pressing the IN button or OUT button.

### Effect on other data of data entry or update

When you enter or update the IN point or OUT point, other data is updated as shown in the following table.

#### IN point entry/update:

State of the already-entered data	IN point	OUT point
The already-entered OUT point data and entered or updated IN point data are in the correct time sequence	Data is updated	Data is not updated
The already-entered OUT point data and entered or updated IN point are not in the correct time sequence	Data is updated	Data is deleted
OUT point data has not been entered	Data is updated	Data is not updated

#### OUT point entry/update:

State of the already-entered data	IN point	OUT point
The already-entered IN point data and entered or updated OUT point data are in the correct time sequence	Data is not updated	Data is updated
The already-entered IN point data and entered or updated OUT point are not in the correct time sequence	Data is not updated	Data is not updated
IN point data has not been entered	Data is not updated	Data is updated

## Updating File Name data

To update File Name data, press the cursor → button several times.

### To update data

- 1 With the cursor buttons, align the cursor with the File Name data you want to update.

#### To move the cursor with the numeric buttons

Enter a line number with the numeric buttons, and press the [F9] (CUENUM POINT) button. The cursor moves to the line number you entered.

- 2 Press the [F4] (CHANGE DATA) button.
- 3 With the cursor ← or → button, select the character to be entered.
- 4 Press the [F7] (SET LETTER) button or cursor center button.

The selected character is entered.

- 5 Repeat steps 3 and 4, to enter the data.

A maximum of 15 characters can be entered.

### Note

If the number of entered characters is too large, a memory overflow may occur, and it may become impossible to enter other cue point data. Press the [F8] (TAPE INFO) button to check the free memory capacity.

#### To enter a space

Press the [F5] (SPACE) button, then carry out entry.

#### If you make an error in entry

Press the [F6] (BACK SPACE) button, then carry out entry.

#### Canceling and repeating the process

Press the [F9] (CANCEL) button, then carry out entry.

#### To change a character during the operation

Press the cursor ↑ button, then move the cursor to the comment frame. With the cursor ← button or → button, change the character insertion position.

- 6 Press the [F10] (SAVE/EXIT) button.

This returns to the original menu screen.

### Cueing up to the IN point

- 1 Hold down the [F1] (CUE SCAN) button, and press the PREROLL button. This sets the cursor movement direction.

Each press cycles through the settings FWD/REW/No setting.



**FWD:** Pressing the PREROLL button moves the cursor to the next line, and cues up to the time data of that line. Invalid time data is ignored.

**REW:** Pressing the PREROLL button moves the cursor to the previous line, and cues up to the time data of that line. Invalid time data is ignored.

## 2 Press the PREROLL button.

### To write-protect the cue point data

To write-protect individual cue point data items, align the cursor with the line you want to write-protect, then press the **[F7]** (PROTECT) button. When **F** appears to the right of “No.”, then it is not possible to change the IN, OUT, and File Name settings.

### Canceling the write-protect setting

To cancel the write-protect setting, press the **[F7]** (PROTECT) button. After a confirmation message appears, hold down the SFT button and press the **[F7]** (PROTECT) button.

### To insert a new line

## 1 Use the cursor buttons to position the cursor (►) below the line where a new line will be inserted.

#### To move the cursor with the numeric buttons

To move the cursor, enter a line number with the numeric buttons, then press the **[F9]** (CUENUM POINT) button. The cursor moves to the line number you entered.

#### Note

If the cursor buttons are not linked to movement of the entry cursor ►, it is not possible to move the entry cursor ► with the cursor buttons.

#### To link the cursor buttons to movement of the entry cursor ►

Press the cursor center button. To unlink, press the cursor center button once again.

## 2 Press the ENTRY button while pressing down the SFT button.

A new line is inserted above the line specified by where the cursor (►) is placed and the current time data is entered on that line.

### To delete a line

To delete a line, with the cursor buttons align the cursor with the line to be deleted, hold down the SFT button, and press the **[F5]** (DEL POINT) button. This deletes the line, and rennumbers the lines following the deleted line.

### To display other information

To display other information, press the **[F8]** (TAPE INFO) button. This opens a window to display the information.

### To close the window

Press the **[F8]** (TAPE INFO) button.

### To change the ID/ADMIN data

## 1 Press the ALT/[F3] (ATTRIB EDIT) buttons.

## 2 With the cursor ↑ or ↓ button, select “ID” or “ADMIN”, then press the ENTRY button.

## 3 With the cursor ← or → button, select the character to be entered.

## 4 Press the [F7] (SET LETTER) button or cursor center button.

The selected character is entered.

## 5 Repeat steps 3 and 4, to enter the data.

#### To enter a space

Press the **[F5]** (SPACE) button.

#### If you make an error in entry

Press the **[F6]** (BACK SPACE) button, then carry out entry.

#### Returning to the original settings

Press the **[F9]** (CANCEL) button, then carry out entry.

#### To change a character during the operation

Press the cursor ↑ button, then move the cursor to the ID or ADMIN frame. With the cursor ← or → button, change the character insertion position.

#### When not all characters can be shown within the ID or ADMIN frame

On the left or right of the comment frame, ◀ or ▶ appears.

## 6 Press the [F10] (SAVE/EXIT) button.

This returns to the original screen.

## HDCAM format Tele-File menu

### Accessing the Tele-File menu screen

There are two methods of accessing the Tele-File menu screen, as follows.

- In the CUE menu screen, press the **[F4]** (Tele-File) button.
- Set the VTR SETUP menu item 124 “Tele-File MENU auto popup” to “on”, then in the HOME, VIDEO, AUDIO, TC, CUE, or SETUP menu screen, insert a cassette that has an MLB-1M-100 memory label (option) attached.

### To scroll the Tele-File menu screen horizontally

Press the cursor ← or → button.

There are two ways of displaying log (IN/OUT point) data in the Tele-File menu screen, as follows.

- In the Tele-File menu screen, press the **[F2]** (ENTRY POINT) button, and select “IN/OUT point”.
- Set the VTR SETUP menu item 126 “Tele-File ENTRY POINT” to “IN/OUT point”.

### Note

While the data is being changed, if the write-protect setting has been made for the whole Tele-File menu, then data changed before the setting was made is rewritten.

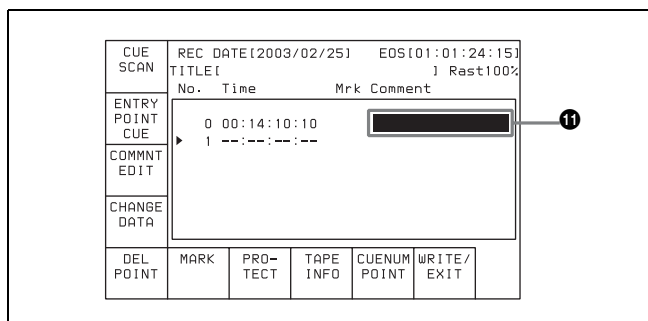
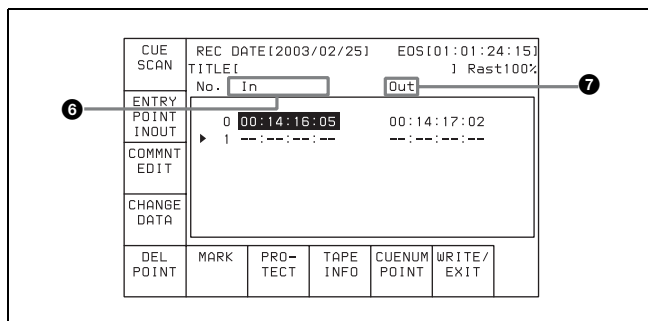
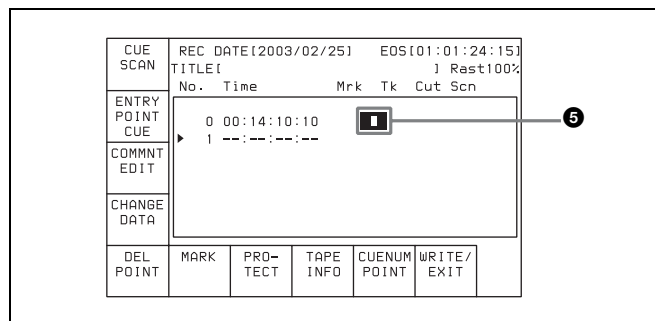
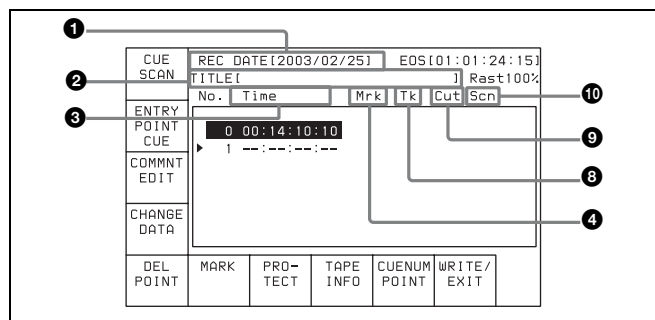
### To exit the Tele-File menu without overwriting the changed point(s)

Press the EJECT button, or press the ALT/**[F2]** (UNDO ALL) buttons. After a window that confirms cancellation is displayed, hold down the SFT button, and press the **[F2]** (UNDO ALL) button. The memory label contents when the cassette was inserted are restored.

### If you inadvertently press the EJECT button without rewriting the data

Reinsert the ejected cassette within 30 seconds, and press the **[F10]** (WRITE/EXIT) button. This writes the data from immediately before ejection.

The Tele-File menu screen scrolls in the following four stages. Scroll the screen with the cursor **←** or **→** button.



#### ① REC DATE (recording data date)

Shows the last date of recording.

#### ② TITLE

Shows the title of the cassette content.

#### ③ Time

Shows the time data of a cue point.

#### ④ Mrk (mark)

Shows an indication of a cue point attribute (OK/NG/KP/blank).

#### ⑤ Recording start point

When a cue point is the recording start point, shows @.

For how to select “on” or “off” for the recording starting point setting, see “Changing the recording starting point setting” on page 88.

#### ⑥ IN

Shows log (IN point) data.

#### ⑦ OUT

Shows log (OUT point) data.

#### ⑧ Tk (take)

Shows the take number of a cue point.

#### ⑨ Cut

Shows the cut number of a cue point.

#### ⑩ Scn (scene)

Shows the scene number of a cue point.

**11 Comment**

Shows a comment on a cue point.

Button	Indication	Function
[F1]	CUE SCAN	Sets the cursor movement direction when the PREROLL button is pressed.
[F2]	ENTRY POINT	Selects whether or not to display log (IN/OUT point) information.
[F3]	COMMNT EDIT	Edits the Comment box.
[F4]	CHANGE DATA	Changes the value of data.
[F5]	DEL POINT	Deletes time data.
[F6]	MARK	Changes the setting in the Mrk box.
[F7]	PROTECT	Prevents the cue point data from being changed.
[F8]	TAPE INFO	Shows information on the memory label.
[F9]	CUENUM POINT	Moves the cursor to the line number entered with the numeric buttons.
[F10]	WRITE/EXIT	Saves the changes and exits the Tele-File menu.
ALT/[F1]	FORMAT T-File	Formats a memory label.
ALT/[F2]	UNDO ALL	Cancels all changes.
ALT/[F3]	ATTRIB EDIT	Changes the ID, ADMIN, and TITLE within the tape information window.
ALT/[F4]	COPY to CUE	Copies time data to the CUE menu screen cue point data.
ALT/[F7]	WRITE PRTEC	Sets or unsets write protection of the whole Tele-File menu.
ALT/[F10]	WRITE/EXIT	Saves the changes and exits the Tele-File menu.

**To format a memory label**

- 1 Press the ALT/[F1] (FORMAT T-File) buttons.
- 2 Hold down the SFT button, and press the [F1] (FORMAT T-File) button.  
  
A confirmation window appears.  
  
**To cancel**  
Press the CLR button.
- 3 Hold down the SFT button, and press the [F1] (FORMAT T-File) button.

“COMPLETED” appears.

**To set write protection for the whole menu**

Press the ALT/[F7] (WRITE PRTEC) buttons.

**on:** Set write protection for the whole Tele-File menu.

**off:** Clear write protection for the whole Tele-File menu.

**To change the TITLE data**

- 1 Press the ALT/[F3] (ATTRIB EDIT) buttons.
- 2 With the cursor ↑ or ↓ button, select “TITLE”, and press the ENTRY button.
- 3 With the cursor ← or → button, select the character to be entered.
- 4 Press the [F7] (SET LETTER) button or cursor center button.  
  
The selected character is entered.
- 5 Repeat steps 3 and 4, to enter the data.

**To enter a space**

Press the [F5] (SPACE) button.

**If you make an error in entry**

Press the [F6] (BACK SPACE) button, then repeat the entry.

**To return to the initial screen**

Pressing the [F9] (CANCEL) button returns to the initial screen.

**To change a character during the operation**

Press the cursor ↑ button, then move the cursor to the title frame; with the cursor ← or → button, change the character insertion position.

**When not all characters can be shown within the title frame**

On the left or right of the title frame, ← or → appears.

- 6 Press the [F10] (SAVE/EXIT) button.

This return to the initial menu screen.

**To change time data**

To write the current time data, use the cursor buttons to align the entry cursor with the line in which you want to write.

**To move the cursor with the numeric buttons**

Enter a line number with the numeric buttons, and press the [F9] (CUENUM POINT) button. The cursor moves to the line number you entered.

**Note**

If the cursor buttons are not linked to movement of the entry cursor, it is not possible to move the entry cursor ► with the cursor buttons.

## To link the cursor buttons to movement of the entry cursor

Press the cursor center button. To unlink, press the cursor center button once again.

Press the ENTRY button to write the current time data over the time data in the line in which the entry cursor ► is present.

### Note

If you press the ENTRY button when the entry cursor is not on the screen, the time data of the line in which the entry cursor ► is currently present is written and displayed on the screen.

## To enter the current time data as a new line

- 1 With the cursor buttons, move the entry cursor to the line below the position in which you want to insert.

*For how to move the cursor, see “To change time data” above.*

- 2 Hold down the SFT button and press the ENTRY button.

The line is inserted immediately before the line on which the entry cursor is present, and the current time data is written.

## To delete a time code

- 1 Use the cursor buttons to move the cursor to the Time section to be deleted.

### To move the cursor using the numeric buttons

Enter the line number using the numeric buttons. Then press the [F9] (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

- 2 Press the [F5] (DEL POINT) button.

A deletion confirmation window appears.

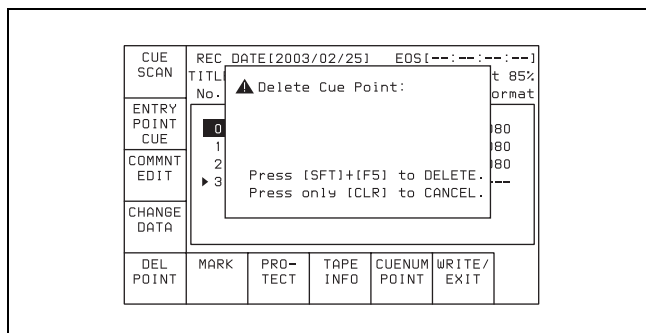
- 3 Press the [F5] (DEL POINT) button while holding down the SFT button.

The time code section becomes blank and is ready for new time data input.

### To delete the line as well as the time code

Use the cursor buttons to move the cursor to the time code to be deleted.

Then press the [F5] (DEL POINT) button while holding down the SFT button. The line is deleted and all the line numbers below are decreased by one.



## To undo the deletion of a time data or line

Press the ALT/[F2] (UNDO ALL) buttons.

A message appears (in the control panel display) requesting confirmation of the undo operation.

Press the [F2] (UNDO ALL) button while holding down the SFT button. To cancel the undo operation, press the CLR button.

## To copy time data of a cue point to another cue point specified in the CUE menu

- 1 Press the ALT/[F4] (COPY to CUE) buttons.

A copy confirmation window appears.

### To cancel the copy operation

Press the CLR button.

- 2 Press the [F4] (COPY to CUE) button while holding down the SFT button.

The time data of the cue point is copied to the cue point indicated in the CUE menu.

## Changing Mrk data

Use the cursor buttons to move the cursor to the line with the mark attribute to be changed, and then press the [F6] (MARK) button. Or, move the cursor directly to the mark attribute to be changed, and then press the [F4] (CHANGE DATA) button. In both cases, each press of the button changes the attribute as follows: OK → NG → KP (KEEP) → blank (no attribute).

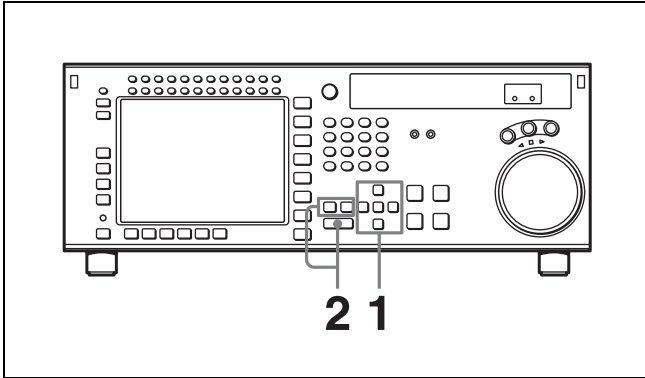
## Changing the recording starting point setting

Use the cursor buttons to move the cursor to the recording starting point section. Then press the [F4] (CHANGE DATA) button. Each press of the button turns the setting “on” (the @ indication appears) or “off” (the indication disappears).

## Entering and modifying IN/OUT point data

You can use either the ENTRY button or the numeric buttons to enter and modify IN/OUT point data.

## To enter or modify IN/OUT point data using the ENTRY button



- 1 Use the cursor buttons to move the cursor to the IN/OUT section on which the current log data is to be entered or modified.

### To move the cursor using the numeric buttons

Enter the line number using the numeric buttons. Then press the [F9] (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

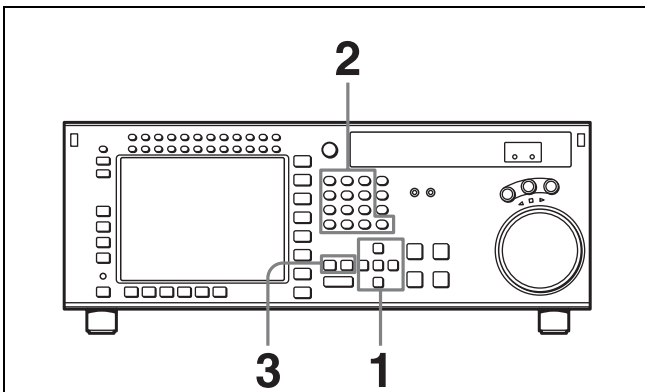
- 2 Press the IN button (to enter IN point data) or OUT button (to enter OUT point data) while holding down the ENTRY button.

The current time code is entered as the IN/OUT point data or it replaces the existing IN/OUT point data.

### Note

If the cursor is not on the IN/OUT section when pressing the IN or OUT button while holding down the ENTRY button, the current cue point is entered or it replaces the existing cue point. When pressing the ENTRY button only, the cue point is entered or replaced regardless of the cursor position.

## To enter or modify IN/OUT point data using the numeric buttons



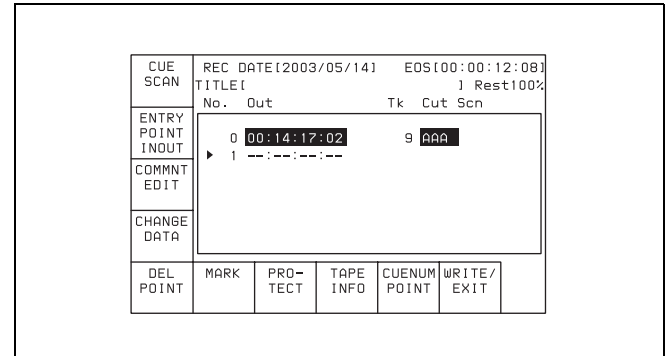
- 1 Use the cursor buttons to move the cursor to the IN/OUT section to be entered or modified.

### To move the cursor using the numeric buttons

Enter the line number using the numeric buttons. Then press the [F9] (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

- 2 Use the numeric buttons to enter the time data in the data entry window, and then press the SET button.

For example, to enter 00:01:30:00, press the numeric buttons as follows: 0, 0, 1, 3, 0, 0, 0. (There is no need to enter the first zero. When you enter a number that is less than eight digits long, the unspecified digits are automatically set to zero when the SET button is pressed.)



- 3 Press the IN button (to enter IN point data) or OUT button (to enter OUT point data).

The number is entered or it replaces the existing IN/OUT point data.

### To clear the IN/OUT point data

Use the cursor buttons to move the cursor to the IN/OUT section to be cleared, and then press the CLR button while holding down the IN button (to clear IN point data) or OUT button (to clear OUT point data), or press the IN or OUT button (to clear both IN and OUT point data) while holding down the CLR button.

### To increase or decrease IN/OUT point data one frame at a time

Use the cursor buttons to move the cursor to the IN/OUT section to be increased or decreased, and then press the + button (to increase the time data) or the – button (to decrease the time data) while holding down the IN button or the OUT button. Each time you press the + or – button, the time data is increased or decreased by one frame, respectively.

### To recall IN/OUT point data to the data entry window

Use the cursor buttons to move the cursor to the IN/OUT section to be recalled, and then press the RCL button while holding down the IN button (to recall IN point data) or the OUT button (to recall OUT point data).

## To enter the current time code continuously

- 1 Set the VTR SETUP menu item 127 “Tele-File IN OUT Input Continue” to “on”.
- 2 Use the cursor buttons to move the cursor to the IN/OUT section to be entered.

### To move the cursor using the numeric buttons

Enter the line number using the numeric buttons. Then press the **[F9]** (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

- 3 Press the IN button or OUT button while holding down the ENTRY button.

The movement of the cursor is automatic (as described in the following table) and data is entered continuously.

Input condition	When the IN button you press while holding down the ENTRY button	When the OUT button you press while holding down the ENTRY button
Only IN point data has been entered	IN point data is modified and the cursor stays on the IN point data.	OUT point data is entered and the cursor moves to the next IN point.
Only OUT point data has been entered	IN point data is entered and the cursor moves to the next IN point.	OUT point data is modified and the cursor stays on the OUT point.

## To display the duration between an IN point and an OUT point

Use the cursor buttons to move the cursor to the IN/OUT section and press the IN button and OUT button at the same time. The duration between two points appears while the buttons are pressed.

## To preroll to an IN/OUT point

Use the cursor buttons to move the cursor to the IN/OUT section and press the IN button (to preroll to an IN point) or OUT button (to preroll to an OUT point) while holding down the PREROLL button. This unit prerolls to the point and stops.

*For details on setting the preroll time, see “4-2-3 Setting the Preroll Time (PREROLL TIME)” on page 62.*

### Note

If the cursor is not on the IN/OUT section when pressing the IN/OUT button while pressing the PREROLL button, this unit prerolls to the cue point. When pressing the PREROLL button only, this unit prerolls to the cue point regardless of the cursor position.

## Automatic time data changes during IN/OUT point data entry or modification

The table below shows the automatic changes that occur in time data when either the IN point or OUT point is changed.

### When IN point data is entered or modified:

Status of input data	IN point	OUT point
The time sequence of the IN/OUT point data is correct.	The data is changed.	The data is unchanged.
The time sequence of the IN/OUT point data is not correct.	The data is changed.	The data is deleted.
The OUT point has not been input.	The data is changed.	The data is unchanged.

### When OUT point data is entered or modified:

Status of the input data	IN point	OUT point
The time sequence of the IN/OUT point data is correct.	The data is unchanged.	The data is changed.
The time sequence of the IN/OUT point data is not correct.	The data is unchanged.	The data is unchanged.
The IN point has not been input.	The data is unchanged.	The data is changed.

## Changing Tk data

Use the cursor buttons to move the cursor to the take data to be changed. Then use the numeric buttons to change the value. Note that values from 0 to 255 can be entered. Or, move the cursor to the take data, and press the **[F4]** (CHANGE DATA) button or the + button repeatedly to increase the value in increments of 1. Press the – button repeatedly to decrease the value in increments of 1. Note that the value cannot go below 0.

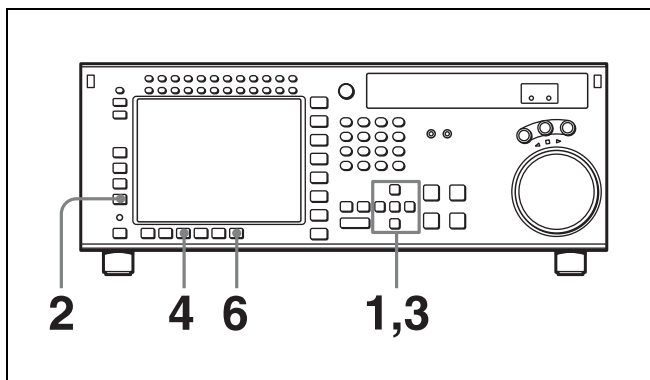
## Copying data

Use the cursor buttons to move the cursor to the destination Mrk or Tk data, and press the RCL button. The Tk data from the line above is copied to the selected line.

## Changing Cut data

Use the cursor buttons to move the cursor to the cut data to be changed, and then enter the new data using the numeric buttons and +/- buttons. Pressing the – button enters the tilde (~). Press the numeric buttons while pressing down the SFT button to enter uppercase letters (A to J). Note that a maximum of four characters can be entered.

Or, do the procedure below to change the data.

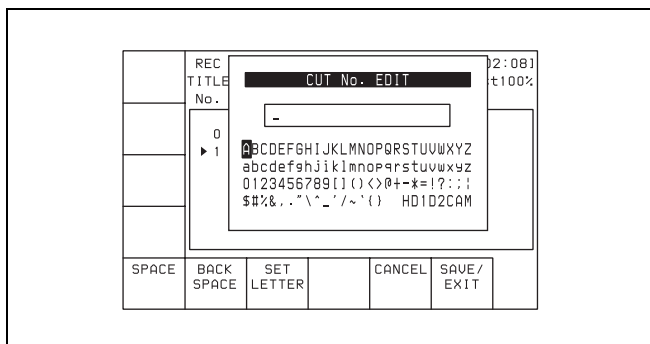


- 1** Press the cursor buttons to move the cursor to the cut data to be changed.

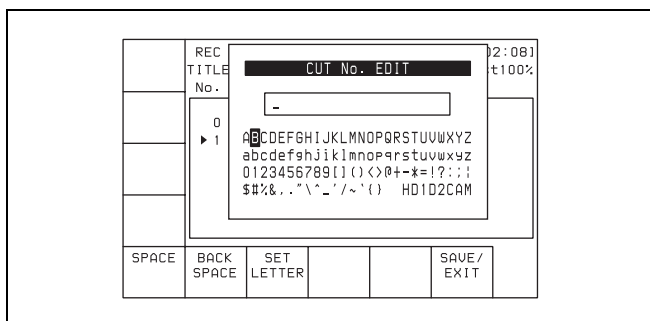
**To move the cursor using the numeric buttons**

Enter the line number using the numeric buttons. Then press the [F9] (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

- 2** Press the [F4] (CHANGE DATA) button.

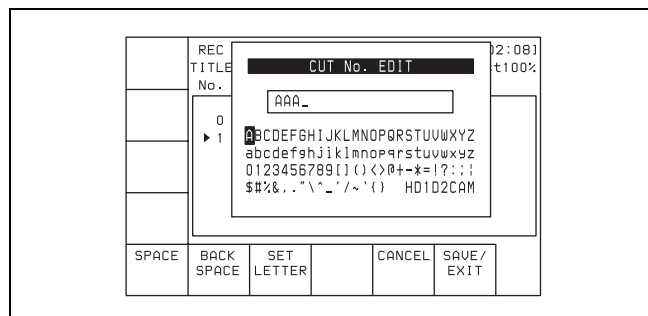


- 3** Press the ← or → button to select a character.



- 4** Press the [F7] (SET LETTER) button or the cursor center button.

The selected character is entered.



- 5** Repeat steps **3** and **4** to enter more characters.

**To enter a space**

Press the [F5] (SPACE) button.

**If you enter a wrong character**

Press the [F6] (BACK SPACE) button to go back. Then re-enter the character.

**To start the procedure over again**

Press the [F9] (CANCEL) button to start again.

**To change a character**

Press the cursor ↑ button to move the cursor to the cut data to be changed. Then press the cursor ← or → button to move the insertion position.

- 6** Press the [F10] (SAVE/EXIT) button.

The screen that was on before the cut data was changed is displayed again.

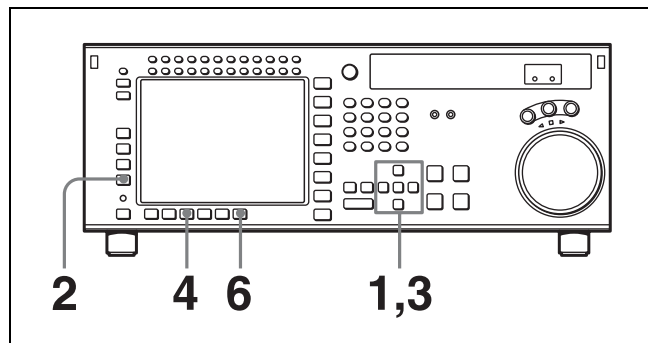
**To copy Cut data**

Move the cursor to the line to which the copied data is to be pasted. Then press the RCL button. The cut data from the line above is copied to the selected line.

**Changing scene data**

Use the cursor buttons to move the cursor to the scene data to be changed. Then enter the characters using the numeric buttons and +/- buttons. Press the numeric buttons while pressing down the SFT button to enter uppercase letters (A to J). A maximum of three characters can be entered.

Or, do the procedure below to change the data.



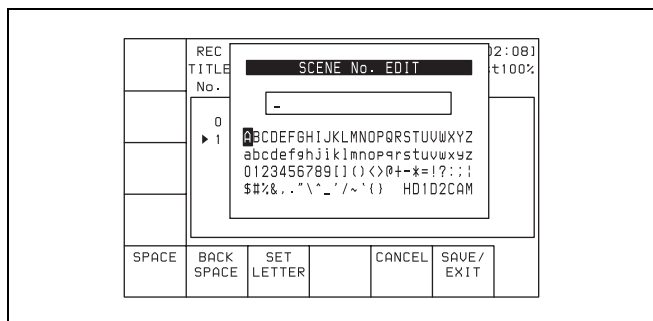
- 1** Press the cursor buttons to move the cursor to the scene data to be changed.



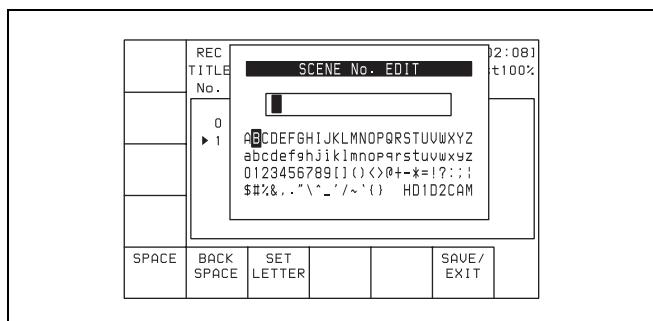
**To move the cursor using the numeric buttons**

Enter the line number using the numeric buttons. Then press the **[F9]** (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

- 2** Press the **[F4]** (CHANGE DATA) button.

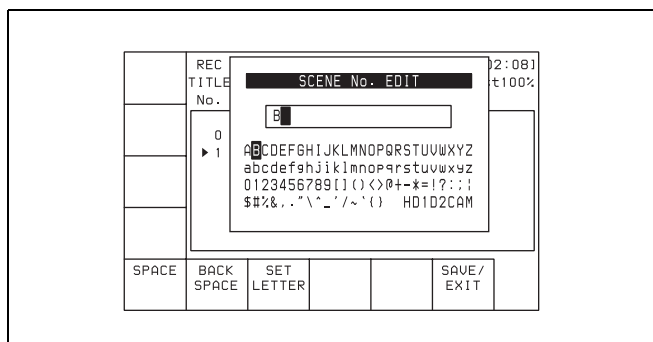


- 3** Press the cursor **←** or **→** button to select a character.



- 4** Press the **[F7]** (SET LETTER) button or the cursor center button.

The selected character is entered.



- 5** Repeat steps **3** and **4** to enter more characters.

**To enter a space**

Press the **[F5]** (SPACE) button.

**If you enter a wrong character**

Press the **[F6]** (BACK SPACE) button to go back. Then re-enter the character.

**To start the procedure over again**

Press the **[F9]** (CANCEL) button to start again.

**To change a character**

Press the cursor **↑** button to move the cursor to the scene data to be changed. Then press the cursor **←** or **→** button to move the insertion position.

- 6** Press the **[F10]** (SAVE/EXIT) button.

The screen that was on before the scene data was entered is displayed again.

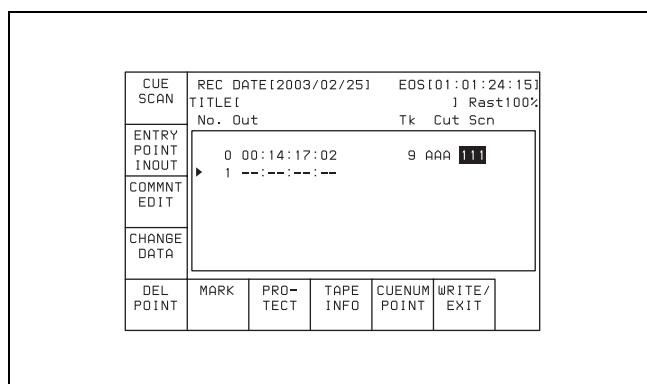
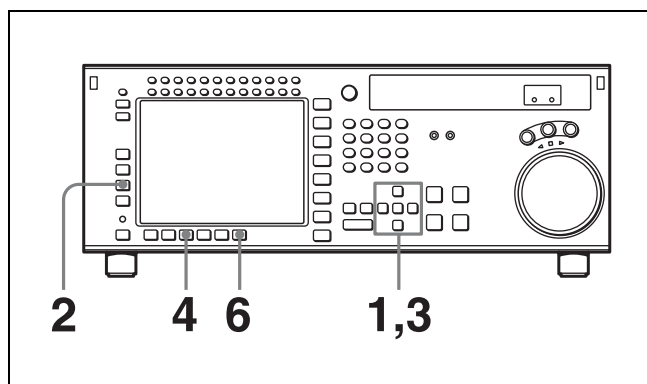
**To copy Scn data**

Move the cursor to the line to which the copied data is to be pasted. Then press the RCL button.

The scene data from the line above is copied to the selected line.

**Changing Comment data**

To display comment data, press the **→** button several times.

**To change Comment data**

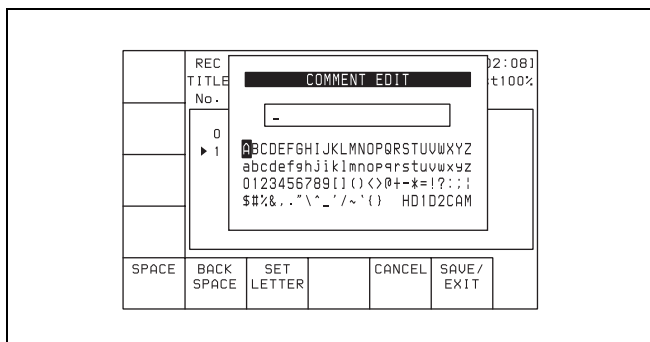
- 1** Press the cursor buttons to move the cursor to the comment to be changed.

**To move the cursor using the numeric buttons**

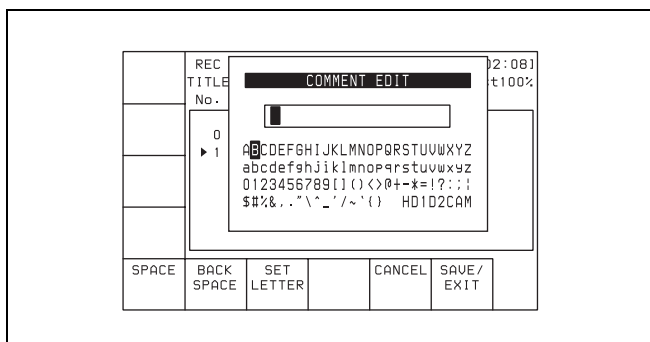
Enter the line number using the numeric buttons. Then press the **[F9]** (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

- 2** Press the **[F3]** (COMMNT EDIT) button.



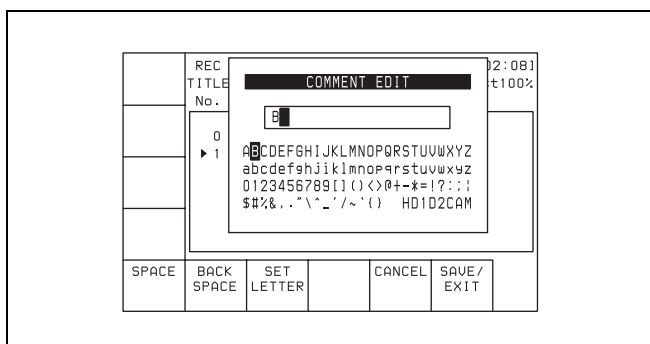


- 3** Press the cursor ← or → button to select a character.



- 4** Press the [F7] (SET LETTER) button or the cursor center button.

The selected character is entered.



- 5** Repeat steps **3** and **4** to enter more characters.

Up to 80 characters can be entered.

#### Note

If excessive comment data are entered, the input of cue point data may become disabled. To prevent this, press the [F8] (TAPE INFO) button to check the available memory.

#### To enter a space

Press the [F5] (SPACE) button.

#### If you enter a wrong character

Press the [F6] (BACK SPACE) button to go back. Then re-enter the character.

#### To start the procedure over again

Press the [F9] (CANCEL) button to start again.

#### To change a character

Press the cursor ↑ button to move the cursor to the comment to be changed. Then press the cursor ← or → button to move the insertion position.

#### If the entered text is longer than the comment box

◀ or ▶ appears to the left or right of the box.

- 6** Press the [F10] (SAVE/EXIT) button.

The screen that was on before the comment data was changed is displayed again.

#### Prerolling to a cue point

- 1** Press the [F1] (CUE SCAN) button repeatedly to specify the direction in which the cursor moves when the PREROLL button is pressed.

Each press of the button changes the direction as follows: FWD (forward) → REW (reverse) → unspecified.

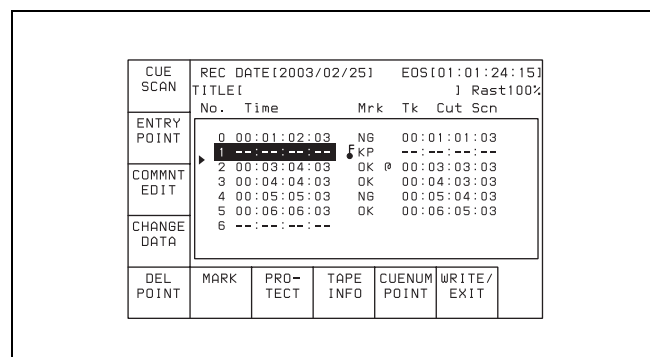
**FWD:** Pressing the PREROLL button causes the cursor to move to the next line, and this unit to preroll to the time code on that line. Invalid time codes are ignored.

**REW:** Pressing the PREROLL button causes the cursor to move to the previous line, and this unit to preroll to the time code on that line. Invalid time codes are ignored.

- 2** Press the PREROLL button.

#### Write-protecting cue point data

Press the cursor buttons to move the cursor to the line that is to be write-protected. Then press the [F7] (PROTECT) button. P appears between the Time and Mrk columns to indicate that the line (clip) is write-protected.



#### To cancel a write-protection

Press the [F7] (PROTECT) button. A message appears (in the control panel display) requesting confirmation of cancellation operation.

Press the **[F7]** (PROTECT) button while holding down the SFT button.

### Inserting a new line

- 1 Use the cursor buttons to move the cursor to the line that will be under the new line to be inserted.

#### To move the cursor using the numeric buttons

Enter the line number using the numeric buttons. Then press the **[F9]** (CUENUM POINT) button. The cursor will move to the line specified by the numeric buttons.

#### Note

If the movement of the cursor (▶) is not linked with the cursor buttons, the cursor (▶) will not move when the cursor buttons are pressed.

#### To link the cursor (▶) with the cursor buttons

Press the cursor center button. Each press of the button alternately links and unlinks the cursor (▶).

- 2 Press the ENTRY button while holding down the SFT button.

A new line is inserted above the line where the cursor (▶) is located, and the current time data is entered on the new line.

### Moving a line

Press the cursor buttons to move the cursor to the Time data of the line to be moved. Then press the + or – button. Each press of the + button moves the line up, while each press of the – button moves the line down.

#### Note

If you perform the procedure above while the cursor is on any other data other than the Time data, only the contents selected by the cursor will be moved. To move the entire line, be sure that the cursor is placed on the Time data.

### Deleting a line

Press the cursor button to move the cursor to the line to be deleted, and then press the **[F5]** (DEL POINT) button while pressing down the SFT button. The line is deleted and all the line numbers below are decreased by one.

### Displaying other information saved to the MLB-1M-100 memory label

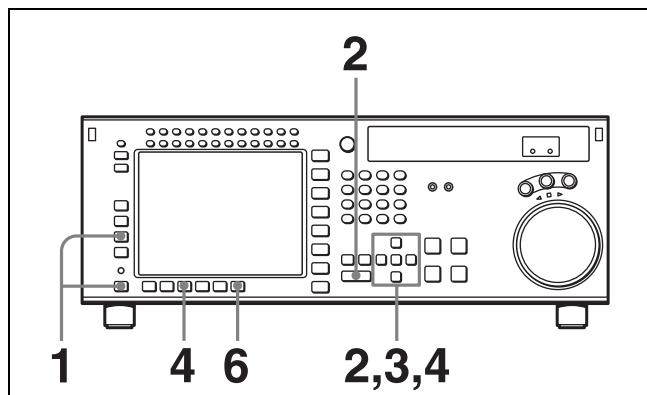
Press the **[F8]** (TAPE INFO) button. The TAPE INFORMATION window appears, showing other information.

CUE SCAN	REC DATE[2003/02/25]	EOS[01:01:24:15]
ENTRY POINT	TITLE No.	
COMMNT EDIT	ID: 001234567	
CHANGE DATA	ADMIN: Kanrisha	
	MODEL: HDW-700	
	SERIAL NUMBER:000123	
	WRITE PROTECT: ON	
	TAPE THREAD COUNT: 123	
	CUE POINT NUMBER: 5	
	CONTROL MODE: Panel	
	SIZE: 1024 USED: 234	
DEL POINT	MARK	PRO- TECT
	TAPE INFO	CUENUM POINT
		WRITE/ EXIT

### To close the window

Press the **[F8]** (TAPE INFO) button again.

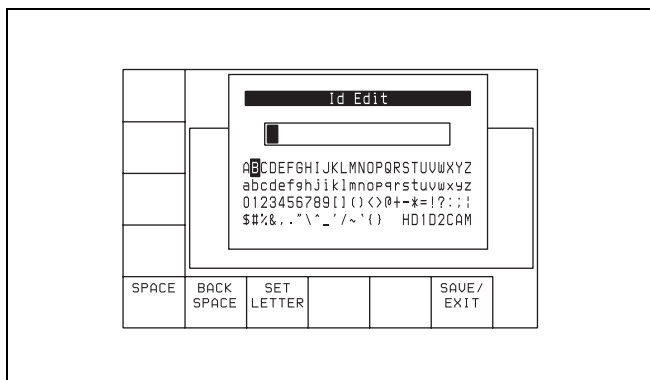
### To change ID or ADMIN data



- 1 Press the ALT/**[F3]** (ATTRIB EDIT) buttons.
- 2 Press the ↑ or ↓ button to select “ID” (tape ID) or “ADMIN” (administrator), then press the ENTRY button.

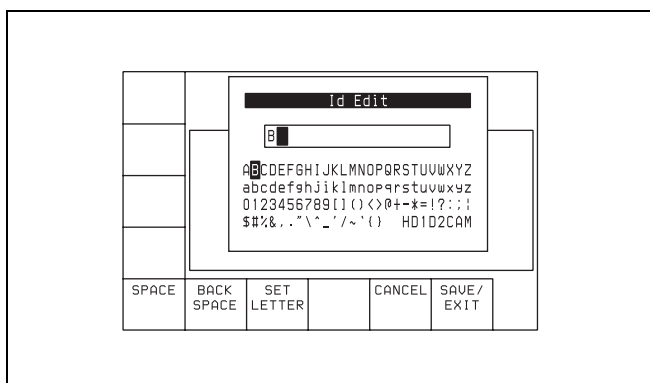
FORMAT T-File	REC DA	ATTRIB EDIT SELECT	est 50%
UNDO ALL	TITLE(N		cn
ATTAI EDIT	No. T		
COPY toCUE	0 00	▶ ID	A01
	1 00	ADMIN	A01
	2 00		A01
	3 00	Press [ENTRY] to edit	A01
	4 00	Press [CLR] to CANCEL	B20
	5 00		B20
	6 --		
		WRITE PRTEC	

- 3 Press the ← or → button to select a character.



- 4** Press the [F7] (SET LETTER) button or the cursor center button.

The selected character is entered.



- 5** Repeat steps **3** and **4** to enter more characters.

**To enter a space**

Press the [F5] (SPACE) button.

**If you enter a wrong character**

Press the [F6] (BACK SPACE) button to go back.  
Then re-enter the character.

**To start the procedure over again**

Press the [F9] (CANCEL) button to start again.

**To change a character**

Press the cursor ↑ button to move the cursor to the ID or ADMIN box. Then press the cursor ← or → button to move the insertion position.

**If entered text is longer than the ID or ADMIN box**

◀ or ▶ appears to the left or right of the box.

- 6** Press the [F10] (SAVE/EXIT) button.

The screen that was on before the ID or ADMIN data was changed is displayed again.

## 4-5 VIDEO Menu

In the VIDEO menu, adjust the video signal. The VIDEO menu screen shows the operation mode, current position time code, time code type, and so on.

### About HD image quality adjustments

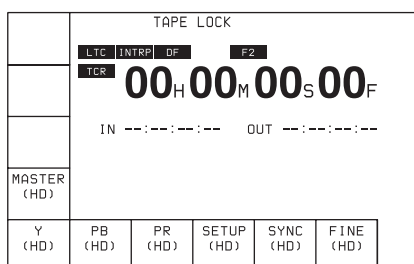
When playing back tapes recorded in Y/P<sub>B</sub>/P<sub>R</sub> (4:2:2) format, HD image quality adjustments are enabled for the HD SDI OUTPUT 1, 2, and MONITOR connectors.

### Note

HD image quality adjustments are not possible when playing back tapes recorded in RGB (4:4:4) format. Also, HD image quality adjustments are not possible when the optional HKSR-5001 Format Converter Board is installed and Y/P<sub>B</sub>/P<sub>R</sub> (4:2:2) format signals are output from the FORMAT CONV. OUTPUT (OPTION) 1 and 2 connectors.

### To access the VIDEO menu screen

Press the VIDEO button.

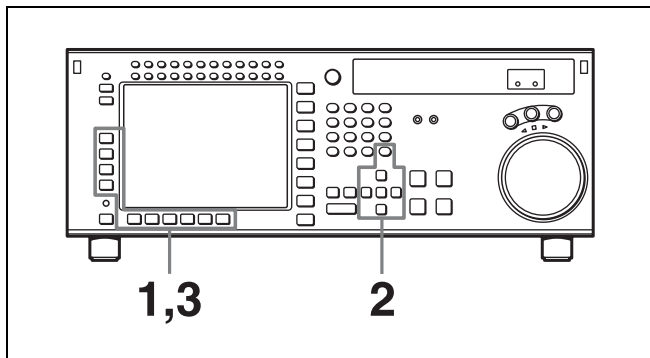


Button	Indication	Function	Settings
[F4]	MASTER (HD)	Adjusts the Y, P <sub>B</sub> , and P <sub>R</sub> output levels simultaneously.	prst, 0.0 to 141.3%
[F5]	Y (HD)	Adjusts the Y output level.	prst, 0.0 to 141.3%
[F6]	P <sub>B</sub> (HD)	Adjusts the P <sub>B</sub> output level.	prst, 0.0 to 141.3%
[F7]	P <sub>R</sub> (HD)	Adjusts the P <sub>R</sub> output level.	prst, 0.0 to 141.3%
[F8]	SETUP (HD)	Adjusts the setup level.	prst, -10.0 to +10.0
[F9]	SYNC (HD)	Adjusts the sync phase.	prst, -128 to +127
[F10]	FINE (HD)	Fine adjustment of the sync phase.	prst, 0 to 1024
ALT/[F1]	MASTER LEVEL (D1)	Adjusts the Y, B-Y, and R-Y output levels simultaneously.	prst, 0.0 to 141.3%
ALT/[F2]	Y LEVEL (D1)	Adjusts the Y output level.	prst, 0.0 to 141.3%
ALT/[F3]	B-Y LEVEL (D1)	Adjusts the B-Y output level.	prst, 0.0 to 141.3%
ALT/[F4]	R-Y LEVEL (D1)	Adjusts the R-Y output level.	prst, 0.0 to 141.3%
ALT/[F5]	VIDEO GAIN (ALL)	Adjusts the video gain.	prst, 0.0 to 141.3%
ALT/[F6]	CHROMA GAIN (ALL)	Adjusts the chroma gain.	prst, 0.0 to 141.3%
ALT/[F7]	CHROMA PHASE (ALL)	Adjusts the chroma phase.	prst, -127 to +127
ALT/[F8]	BLACK LEVEL (ALL)	Adjusts the black level.	prst, -31.0 to +31.0%
ALT/[F9]	SETUP LEVEL (CST)	Adjusts the setup level.	prst, 0 to +10.0
ALT/[F10]	FC LUT BANK	Selects the FC LUT function.	

## 4-5-1 Adjusting the Output Video Signal (MASTER to FINE)

### Adjusting the output video signal

Set the output video signal menu items as follows.



- 1 Press the function selection button ([F4], for example).

The setting display lights up.

- 2 With the ↑ and ↓ buttons (or MULTI CONTROL knob), change the numeric value.

#### Setting to the preset values

Press the cursor center button or MULTI CONTROL knob.

The prst (preset) indication appears.

- 3 At the desired setting value, press the function selection button ([F4], for example).

The numeric values change as follows.

- [F4] **button MASTER (HD)**: Pressing this button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.
- [F5] **button Y (HD)**: Pressing this button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.
- [F6] **button PB (HD)**: Pressing this button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.
- [F7] **button PR (HD)**: Pressing this button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.
- [F8] **button SETUP (HD)**: Pressing this button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.5. You can also change the setting with the MULTI CONTROL knob.

[F9] **button SYNC (HD)**: Pressing this button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 1. You can also change the setting with the MULTI CONTROL knob.

[F10] **button FINE (HD)**: Pressing this button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F1] button MASTER**: Pressing these buttons make them active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F2] button Y (D1)**: Pressing these buttons make them active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F3] button B-Y (D1)**: Pressing these buttons make them active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F4] button R-Y (D1)**: Pressing these buttons make them active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F5] button V GAIN (ALL)**: Pressing these button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F6] button CRM GA (ALL)**: Pressing these button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F7] button CRM PH (ALL)**: Pressing these button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F8] button BLK LV (ALL)**: Pressing these button makes it active, and the cursor ↑ and ↓ buttons increase or decrease the value by 1. You can also change the setting with the MULTI CONTROL knob.

**ALT/[F9] button SETUP (CST)**: Pressing these buttons make them active, and the cursor ↑ and ↓ buttons increase or decrease the value by 0.1. You can also change the setting with the MULTI CONTROL knob.

### Adjusting the master output level (HD)

Make this adjustment with the [F4] (MASTER LEVEL) button.

**prst**: 100% (4000H)

**Numerical value**: 0.0 (0H) to 141.3% (5A70H)

**Adjustable range**:  $-\infty$  to +3 dB

This setting can also be carried out in the VTR SETUP menu item 708 “MASTER LEVEL (HD)”.

### Adjusting the Y output level (HD)

Make this adjustment with the [F5] (Y (HD)) button.

**prst:** 100% (4000H)

**Numerical value:** 0.0 (0H) to 141.3% (5A70H)

**Adjustable range:**  $-\infty$  to +3 dB

This setting can also be carried out in the VTR SETUP menu item 709 “Y LEVEL (HD)”.

### Adjusting the P<sub>B</sub> output level (HD)

Make this adjustment with the [F6] (PB (HD)) button.

**prst:** 100% (4000H)

**Numerical value:** 0.0 (0H) to 141.3% (5A70H)

**Adjustable range:**  $-\infty$  to +3 dB

This setting can also be carried out in the VTR SETUP menu item 710 “PB LEVEL (HD)”.

### Adjusting the P<sub>R</sub> output level (HD)

Make this adjustment with the [F7] (PR LEVEL) button.

**prst:** 100% (4000H)

**Numerical value:** 0.0 (0H) to 141.3% (5A70H)

**Adjustable range:**  $-\infty$  to +3 dB

This setting can also be carried out in the VTR SETUP menu item 711 “PR LEVEL (HD)”.

### Adjusting the setup level (HD)

Make this adjustment with the [F8] (SETUP LEVEL) button.

**prst:** 0% (0)

**Numerical value:** -10.0 to +10.0

**Adjustable range:** -10 to +10%

This setting can also be carried out in the VTR SETUP menu item 712 “SETUP LEVEL (HD)”.

### Adjusting the sync phase (HD)

Use this setting to precisely match the output phase of this unit to the reference signal or when using a switcher or other device connected to this unit and the VTR units to create special effects such as fading, wrapping, and dissolving.

To adjust the output signal sync phase with respect to the reference input, make this adjustment with the [F9] (SYNC PHASE) button.

**prst:** 0 (0)

**Numerical value:** -128 to +127

**Adjustable range:** -1.4 to +1.4H

This setting can also be carried out in the VTR SETUP menu item 713 “SYNC PHASE (HD)”.

#### Note

This function is disabled during 4:4:4 (RGB 10 bits) dual-stream mode and 4:4:4 (RGB 10 bits) variable speed mode.

### Fine adjustment of the sync phase (HD)

Make this adjustment with the [F10] (FINE) button.

**prst:** 0 (0)

**Numerical value:** 0 to 1024

**Adjustable range:** 0 to 323 nsec

This setting can also be carried out in the VTR SETUP menu item 714 “FINE (HD)”.

#### Note

This function is disabled during 4:4:4 (RGB 10 bits) dual-stream mode and 4:4:4 (RGB 10 bits) variable speed mode.

### Adjusting the master output level (D1)

Make this adjustment with the ALT/[F1] (MASTER LEVEL) buttons.

**prst:** 100% (4000H)

**Numerical value:** 0.0 (0H) to 141.3% (5A70H)

**Adjustable range:**  $-\infty$  to +3 dB

This setting can also be carried out in the VTR SETUP menu item 755 “MASTER LEVEL (D1)”.

### Adjusting the Y output level (D1)

Make this adjustment with the ALT/[F2] (Y LEVEL) buttons.

**prst:** 100% (4000H)

**Numerical value:** 0.0 (0H) to 141.3% (5A70H)

**Adjustable range:**  $-\infty$  to +3 dB

This setting can also be carried out in the VTR SETUP menu item 756 “Y LEVEL (D1)”.

### Adjusting the R-Y output level (D1)

Make this adjustment with the ALT/[F4] (R-Y LEVEL) buttons.

**prst:** 100% (4000H)

**Numerical value:** 0.0 (0H) to 141.3% (5A70H)

**Adjustable range:**  $-\infty$  to +3 dB

This setting can also be carried out in the VTR SETUP menu item 758 “R-Y LEVEL (D1)”.

### Adjusting the video gain output level (HD/SD)

Make this adjustment with the ALT/[F5] (V GAIN (ALL)) buttons.

**prst:** 100% (4000H)

**Numerical value:** 0.0 (0H) to 141.3% (5A70H)

**Adjustable range:** 0.0% to 141.3%

This setting can also be carried out in the VTR SETUP menu item 740 “VIDEO GAIN (ALL)”.

### Adjusting the chroma gain output level (HD/SD)

Make this adjustment with the ALT/[F6] (CRM GA (ALL)) buttons.

**prst:** 100% (4000H)

**Numerical value:** 0.0 (0H) to 141.3% (5A70H)

**Adjustable range:** 0.0% to 141.3%

This setting can also be carried out in the VTR SETUP menu item 741 “CHROMA GAIN (ALL)”.

## Adjusting the chroma phase output level (HD/SD)

Make this adjustment with the ALT/[F7] (CRM PH (ALL)) buttons.

**prst:** 0

**Numerical value:** -127 to +127

**Adjustable range:** -30° to +30°

This setting can also be carried out in the VTR SETUP menu item 742 “CHROMA PHASE (ALL)”.

## Adjusting the black output level (HD/SD)

Make this adjustment with the ALT/[F8] (BLK LV (ALL)) buttons.

**prst:** 0.0% (110H)

**Numerical value:** -31.0% (0H) to +31.0% (220H)

**Adjustable range:** -31.0% to +31.0%

This setting can also be carried out in the VTR SETUP menu item 743 “BLACK LEVEL (ALL)”.

## Adjusting the setup level (COMPOSITE)

Make this adjustment with the ALT/[F9] (SETUP LEVEL) buttons.

**prst:** 7.5 IRE

**Numerical value:** 0 to +10.0

**Adjustable range:** 0 to +10.0 IRE

This setting can also be carried out in the VTR SETUP menu item 762 “SETUP LEVEL (CST)”.

## 4-5-2 Selecting the FC LUT Function (FC LUT BANK)

The FC LUT (lookup table) function converts FC output according to LUT files. This function can be used, for example, to check tapes that were recorded using S-log gamma on a standard ITU-BT709 gamma monitor.

### LUT files

To use LUT files, save LUT files stored on a “Memory Stick” (/MSSONY/PRO/VTR/SRW5800/LUT) to the banks of this unit (HKSR-5001). You can save up to eight LUT files on this unit under BANK 1 to BANK 8.

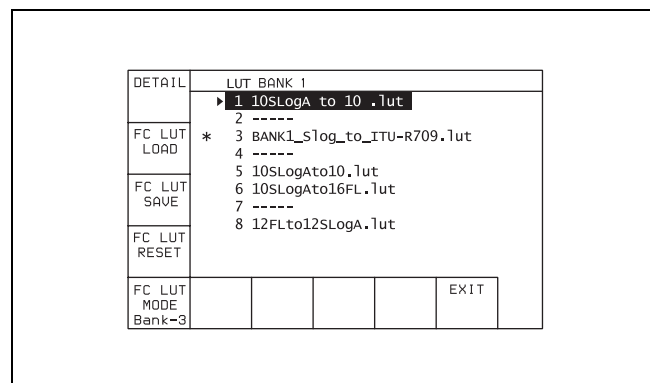
After a file is saved to a bank, it is retained even if the unit is turned off. When a bank is selected, the content of the LUT file is applied during FC 4:4/4:4/2:2 conversion. The extension for LUT files used on this unit is “.lut”. If the extension on a LUT file is not “.lut”, change the extension to “.lut”. For details on supported LUT file formats, see

“LUT File Formats Applicable to This Board” on page 177 in the Appendix.

Select the FC LUT function as follows.

- 1 Press the ALT/[F10] (FC LUT BANK) buttons.

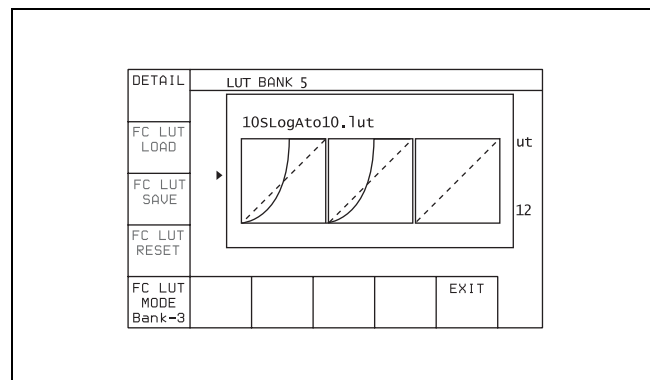
The FC LUT menu appears, together with the LUT files stored on the VTR.



### To display the LUT curve

Press the cursor ↑ or ↓ button (or rotate the MULTI CONTROL knob) to select the LUT file, and press the [F1] (DETAIL) button.

The LUT curve appears.



You can return to the previous screen by pressing the [F1] (DETAIL) button.

- 2 Perform the necessary operation.

### Saving LUT data stored on the “Memory Stick” to the VTR

- 1 Press the cursor ↑ or ↓ button (or rotate the MULTI CONTROL knob) to select the bank to which to save.

- 2 Press the [F2] (FC LUT LOAD) button.

The LUT data stored on the “Memory Stick” appears.



DETAIL	Load LUT to FC LUT Bank DIR: /MSSONY/PRO/UTR/SRW5800/LUT/ File Name: 10to10SLosA.lut Date: 2009/08/12 17:29:20				
FC LUT LOAD	No	File Name	Total: 60		
FC LUT SAVE	4	10SLosAto12FL.lut			
FC LUT RESET	5	10SLosAto16FL.lut			
	6	10SLosAto8.lut			
	7	10to10SLosA.lut			
	8	12FLto10SLosA.lut			
	9	12FLto12SLosA.lut			
NAME	DATE			LOAD	EXIT

- Directory displayed:  
/MSSONY/PRO/VTR/SRW5800/LUT
- File name displayed:  
.lut

### To display the LUT curve for LUT data stored on the “Memory Stick”

Press the **[F1]** (DETAIL) button.

You can return to the previous screen by pressing the **[F1]** (DETAIL) button again.

### To sort the list

**[F5]** (NAME) button: The list is sorted by file name.

**[F6]** (DATE) button: The list is sorted by date.

## 3 Press the **[F9]** (LOAD) button.

A message asking you to confirm the operation appears in the display.

DETAIL	Load LUT to FC LUT Bank DIR: /MSSONY/PRO/UTR/SRW5800/LUT/ File Name: 10to10SLosA.lut				
FC LUT LOAD	▲ CONFIRMATION OF LOADING:				
FC LUT SAVE	PRESS [SFT]+[F9] to LOAD. PRESS [CLR] to CANCEL.				
FC LUT RESET					
NAME	DATE			LOAD	EXIT

### To cancel the save operation

Press the CLR button.

## 4 Press the **[F9]** (COPY) button while holding down the SFT button.

The LUT data stored on the “Memory Stick” is saved.

### Saving LUT data to the “Memory Stick”

- 1 Press the cursor **↑** or **↓** button (or rotate the MULTI CONTROL knob) to select the LUT data to be saved to the “Memory Stick”.

## 2 Press the **[F3]** (FC LUT SAVE) button.

A message asking you to confirm the operation appears in the display.

DETAIL	LUT Bank 3 1 10to10SLosA.lut 2 -----				
FC LUT LOAD	▲ CONFIRMATION OF SAVING:				
FC LUT SAVE	PRESS [SFT]+[F3] to SAVE. PRESS [CLR] to CANCEL.				
FC LUT RESET					
FC LUT MODE					EXIT
Bank-3					

### To cancel the save operation

Press the CLR button.

## 3 Press the **[F3]** (FC LUT SAVE) button while holding down the SFT button.

The LUT data is saved to the “Memory Stick”.

DETAIL	LUT Bank 5 1 10to10SLosA.lut 2 -----				
FC LUT LOAD	● COMPLETED				
FC LUT SAVE	File Name: BANK5_10SLosAto10.lut Directory: MSSONY/PRO/UTR/SRW5800/LUT				
FC LUT RESET					
FC LUT MODE					EXIT
Bank-3					

- Directory displayed:  
/MSSONY/PRO/VTR/SRW5800/LUT
- File name displayed:  
“BANKx\_NAME”.lut  
BANKx: BANK number for VTR LUT  
NAME: VTR LUT name

### Restoring (resetting) all VTR LUT settings to factory default values

## 1 Press the **[F4]** (FC LUT RESET) button.

A message asking you to confirm the operation appears in the display.

## 2 Press the **[F4]** (FC LUT RESET) button while holding down the SFT button.

All VTR LUT settings return to their factory default values.



**To cancel the reset operation**

Press the CLR button.

**Selecting FC LUT files**

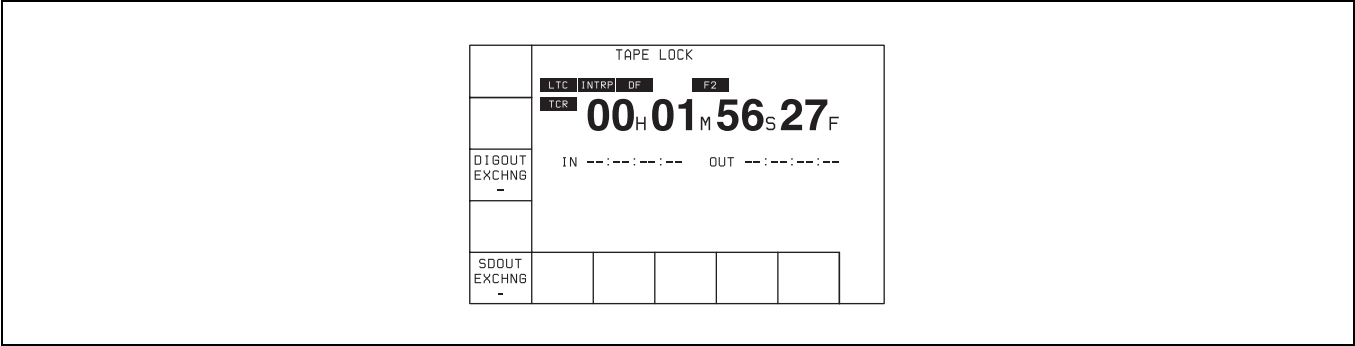
Press the **[F5]** (FC LUT MODE) button to select the FC LUT file.

A red “\*” mark appears to the left of the selected LUT file in the list.

# 4-6 AUDIO Menu

In the AUDIO menu, make audio signal adjustments. The AUDIO menu screen shows the operation mode, current position time code, time code type, and so on.

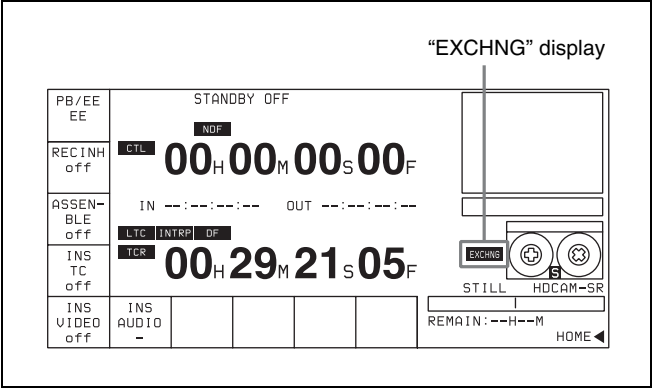
**To access the AUDIO menu screen**  
Press the AUDIO button.



Button	Indication	Function	Settings
[F3]	DIGOUT EXCHNG	Digital audio output signal source track selection (HD SDI, SD SDI, AES/EBU) However, [F5] (SDOUT EXCHNG) can be used to set SD SDI source tracks independently.	TR1 to TR12
[F5]	SDOUT EXCHNG	Digital audio output signal source track selection (SD SDI)	dis, ena, TR1 to TR12

## Display when audio output channel settings do not match track number settings

- As shown below, “EXCHNG” is displayed if even one of the HD SDI, AES/EBU, SD SDI output channels does not match the corresponding track number.



- The [F3] button in the AUDIO menu is highlighted in orange if even one of the HD SDI, AES/EBU audio output channels does not match the corresponding track number on the tape.  
In this case, if SDOUT EXCHNG is set to “dis”, the [F5] button is also highlighted in orange.
- The [F5] button in the AUDIO menu is highlighted in orange if even one of the SD SDI audio output channels

does not match the corresponding track number on the tape.

## Source track selection for the HDMI/HDV audio output signal

When the optional HKSR-5105 is installed, the audio source track to be multiplexed with HDMI/HDV output signal. Use the setting of the VTR SETUP menu item C03 “HDV AUDIO OUTPUT EXCHANGE” or item C11 “HDMI AUDIO OUTPUT EXCHANGE”.

### Note

“EXCHNG” is not displayed even when the setting of the VTR SETUP menu item C03 “HDV AUDIO OUTPUT EXCHANGE” or item C11 “HDMI AUDIO OUTPUT EXCHANGE” is changed.

## 4-6-1 Digital Audio Output Signal Source Track Selection (DIGOUT EXCHNG)

To make the source track selection for the digital audio output signal (audio multiplexed with HD SDI and SD SDI (1 to 8 channels), and AES/EBU audio output are targeted) on each of channels 1 to 12, use the following procedure.

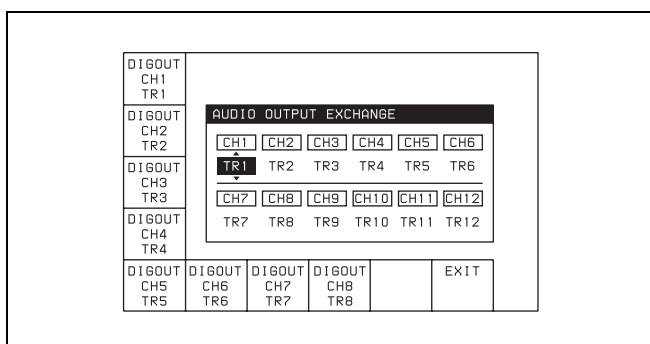
Note that when **[F9]** (SDOUT EXCHNG) in the SDOUT menu is set to “ena”, SD SDI source track selection follows the settings of the SDOUT menu.

### Note

When the system of this unit is set to double-speed playback or when the VTR SETUP menu item 842 “AUDIO OUTPUT SAMPLING FREQUENCY” is set to “96K”, the results of source track selection are not reflected and the source tracks of all channels remain their default settings.

- 1 Press the **[F3]** (DIGOUT EXCHNG) button.

The DIGOUT menu appears, together with a source track selection window for the digital audio output signals.



- 2 Carry out the source track selection for the digital audio output signal on each channel.

**TR1 to TR12:** Select the audio signals recorded on tracks 1 to 12.

- 3 Press the **[F10]** (EXIT) button.

This returns to the AUDIO menu screen.

### To make output settings for individual channels with the F buttons

By pressing any of the **[F1]** (DIGOUT CH1 TR1) to **[F8]** (DIGOUT CH8 TR8) buttons menu, and the **[F1]** (DIGOUT CH9) to **[F4]** (DIGOUT CH12) buttons in the ALT+DIG OUT screen obtained by pressing the ALT button, you can select the source track for each channel.

### To make output settings for individual channels with the numeric buttons

- 1 Press the cursor **←** or **→** button, to align the cursor with the channel for which you want to make the selection.
- 2 Press the cursor **↑** or **↓** button, to select the source track to be output.

### To return to the default settings

Press the cursor center button. The cursor item returns to the default.

### To revert the source tracks of all channels to default settings

Press the **[F9]** (DIGITAL ALL RESET) button in the ALT+DIG OUT menu.

The source tracks of all channels return to their default settings.

You can also make the source track selection using VTR SETUP menu item 834 “DIGITAL AUDIO OUTPUT EXCHANGE”.

## 4-6-2 Digital Audio Output Signal Source Track Selection (SDOUT EXCHNG)

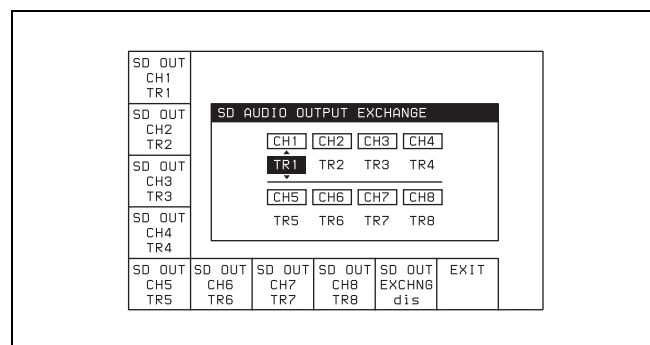
To make the source track selection for the digital audio output signal (audio multiplexed with SD SDI), use the following procedure.

### Note

When the system of this unit is set to double-speed playback or when the VTR SETUP menu item 842 “AUDIO OUTPUT SAMPLING FREQUENCY” is set to “96K”, the results of source track selection are not reflected and the source tracks of all channels remain their default settings.

- 1 Press the **[F5]** (SDOUT EXCHNG) button.

The SDOUT menu appears, together with a source track selection menu for the digital audio output signals.



- 2 Press **[F9]** (SD OUT EXCHNG) to set the display to “ena”s.

**ena:** Enable the settings of this menu.

**dis:** Disable the settings of this menu, and use the settings for CH1 to CH8 of DIGOUT EXCHNG.

- 3** Select the digital audio output signal for each channel.

**TR1 to TR12:** Output the audio signals recorded on tracks 1 to 12.

- 4** Press the **[F10]** (EXIT) button.

This returns to the AUDIO menu.

### **Making output settings for individual channels with the F buttons**

By pressing any of the **[F1]** (SDOUT CH1 TR1) to **[F8]** (SDOUT CH8 TR8) buttons, you can select the source track for each channel.

### **To make output settings for individual channels with the numeric buttons**

- 1** Press the cursor **←** or **→** button, to align the cursor with the channel for which you want to make the selection.
- 2** Press the cursor **↑** or **↓** button, to select the source channel to be output.

### **To return to the default settings**

Press the cursor center button. The cursor item returns to the default.

### **To revert the source tracks of all channels to default settings**

Press the **[F9]** (SDOUT ALL RESET) button in the ALT+SD OUT menu.

The source tracks of all channels return to their default settings.

You can also make the source track selection using the VTR SETUP menu item 836 “SD AUDIO OUTPUT EXCHANGE”.

## 4-7 SET UP Menu

In the SET UP menu, you can store and recall menu settings to and from the VTR memory banks and “Memory Stick”, store and recall menu settings and cue point lists through the network, register items to the PF menu, and set items in the VTR SETUP menu and PANEL SETUP menu.

*For details on storing and recalling data to or from the VTR memory banks or “Memory Stick,” and registering items to the PF menus, see “4-1 Registering and Storing Menu Settings” on page 37.*

### To activate the SET UP menu

Press the SET UP button.

### To change the SET UP menu page

Press the ALT button.

“▼” indicates that more than one menu page exists.

UTR BANK ▼	[F1]UTR BANK: Copy data between current setup and 8 banks. [F2]MEMORY CARD: Copy data between VTR and memory card. [F3]NETWRK: Copy data over network. [F4]PF ASSIGN: Assign HOME/TC/VIDEO AUDIO/PF1/PF2 menu function keys. [F5]PANEL SETUP: Panel setting [F6]VTR SETUP: VTR current setup				
MEMORY CARD ▼					
NETWRK ▼					
PF ASSIGN ▼					
PANEL SETUP ▼					
UTR SETUP ▼					

Button	Indication	Function	Settings
[F1]	VTR BANK	See “4-1-4 VTR Memory Bank Function” on page 39.	
[F2]	MEMORY CARD	See “4-1-5 “Memory Stick” Operations” on page 41.	
[F3]	NETWRK	See “4-1-6 Storing and Recalling the Contents of VTR Memory Banks Through the Network” on page 46.	
[F4]	PF ASSIGN	See “4-1-3 Registering VTR SETUP Menu Items to Function Keys” on page 38.	
[F5]	PANEL SETUP	See “4-7-2 PANEL SETUP Menu” on page 109.	
[F6]	VTR SETUP	See “4-7-1 VTR SETUP Menu” on page 106.	
ALT/[F1]	DEFAULT VTR BANK	See “4-1-11 Saving and Recalling DEFAULT Settings on a Bank” on page 55.	
ALT/[F2]	DEFAULT MEMORY CARD	See “4-1-13 Saving and Recalling DEFAULT Settings in a “Memory Stick”” on page 56.	
ALT/[F7]	REMOTE NET1	Selects access from the NETWORK connector.	on, off
ALT/[F9]	REMOTE 9-PIN	Selects remote operation using a device connected to the REMOTE 1-IN(9P) or REMOTE 1-I/O(9P) connector.	on, off
ALT/[F10]	REMOTE 50-PIN	Selects remote operation using a device connected to the REMOTE 2 PARALLEL I/O(50P) connector.	on, off

### Selecting remote operation mode

When operating this unit with an external device, set the ALT/[F7] (REMOTE NET1) buttons, ALT/[F9] (REMOTE 9-PIN) buttons or ALT/[F10] (REMOTE 50-PIN) buttons to “on”.

### When the ALT/[F7] (REMOTE NET1) buttons are set to “on”

You can operate this unit from a computer or similar through the network to which the NETWORK connector is connected.

### When the ALT/[F9] (REMOTE 9-PIN) buttons are set to “on”

You can operate this unit with a device connected to the REMOTE 1-IN(9P) or REMOTE 1-I/O(9P) connector.

### When the ALT/[F10] (REMOTE 50-PIN) buttons are set to “on”

You can operate this unit with a device connected to the REMOTE 2 PARALLEL I/O(50P) connector.

#### Note

When operating this unit through an external device with the ALT/[F9] or ALT/[F10] buttons set to “on”, all of the tape operation and editing buttons are disabled, with the exception of the STOP and EJECT buttons. You may also set this unit so that all buttons are enabled or disabled. Perform this setting using the VTR SETUP menu item 008 “LOCAL FUNCTION ENABLE”. You cannot, however, disable the menu and remote operation mode selection buttons.

## 4-7-1 VTR SETUP Menu

All menu items required for setting up the operating conditions are displayed in the scrollable VTR SETUP menu.

For HOME, TC, VIDEO, AUDIO, PF1, and PF2, including the screens displayed by pressing the ALT button, you can register about 120 menu items.

*For details on the VTR SETUP menu items, see the Appendix “Menu List” on page 131.*

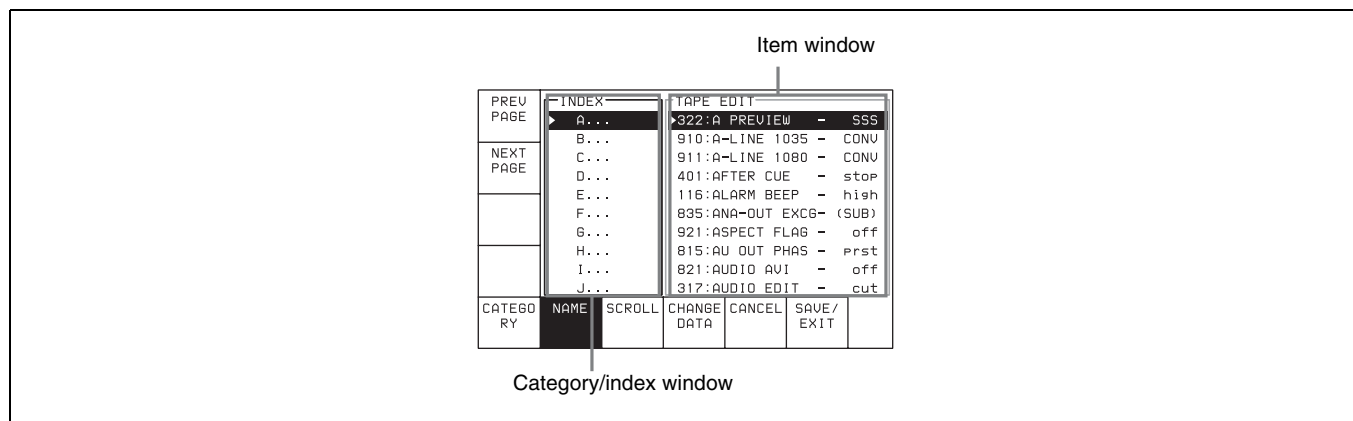
*For details of the PF assign menu, see “4-1-3 Registering VTR SETUP Menu Items to Function Keys” on page 38.*

Because the setup data that the SRW-5100 maintains can also be used with the SRW-5800, the data contains menu items that are not compatible with the SRW-5100. Such items do not appear in the display normally.

*For details on how to display and change the setting of the items incompatible with the SRW-5100, see the Appendix “To display the menu items incompatible with this unit (items dedicated to the SRW-5800)” on page 108.*

### To activate the VTR SETUP menu

Press the SET UP button, then press the [F6] (VTR SETUP) button.



Button	Indication	Function
[F1]	PREV PAGE	Moves to the beginning of the previous category.
[F2]	NEXT PAGE	Moves to the beginning of the next category.
[F5]	CATEGORY	Display by category
[F6]	NAME	Display in alphabetical order
[F7]	SCROLL	Scrolling display of all menus
[F8]	CHANGE DATA	Changes the setting.
[F9]	CANCEL	Cancels the setting operation.
[F10]	SAVE/EXIT	Sets the value and exits the VTR SETUP menu.

## Scrolling items in the VTR SETUP menu

Press the  $\uparrow$  and  $\downarrow$  buttons to scroll the items in the VTR SETUP menu.

### To search the menu by category

Items in the VTR SETUP menu are divided into categories according to type of settings they perform.

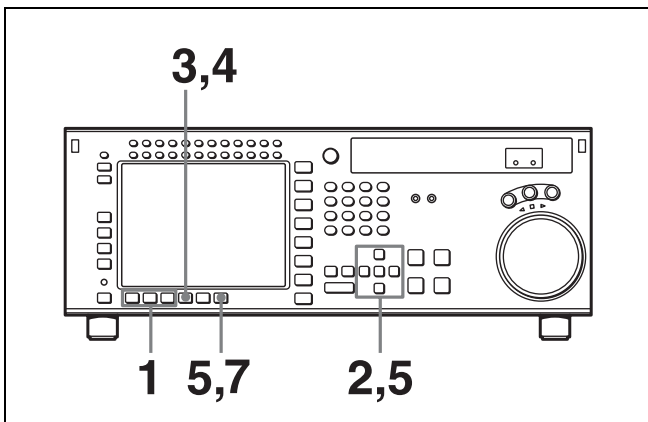
Menu number	Category
Nos. 001 to ...	Items related to operations of this unit
Nos. 101 to ...	Items related to operation panels
Nos. 201 to ...	Items related to remote interface
Nos. 301 to ...	Items related to editing
Nos. 401 to ...	Items related to prerolling
Nos. 501 to ...	Items related to recording protection
Nos. 601 to ...	Items related to the time code
Nos. 701 to ...	Items related to the video control
Nos. 801 to ...	Items related to the audio control
Nos. 901 to ...	Items related to digital process
Nos. A01 to ...	Items related to pulldown control
Nos. T01 to ...	Other

### To change the menu display

Press any of the following buttons, to change the menu display.

- [F5] (CATEGORY) button:** Display the menus by category
- [F6] (NAME) button:** Display all menus in alphabetical order
- [F7] (SCROLL) button:** Display all menus in numerical order

## Changing settings



- 1** Press one of the **[F5]** (CATEGORY), **[F6]** (NAME), and **[F7]** (SCROLL) buttons.

This changes the menu display.

### To change the category

Do one of the following:

- Press the  $\leftarrow$  button to make the categories window active, and select the category with the  $\uparrow$  and  $\downarrow$  buttons.
- Press the  $\rightarrow$  button to make the item window active, and press the **[F1]** (PREV PAGE) or **[F2]** (NEXT PAGE) button.

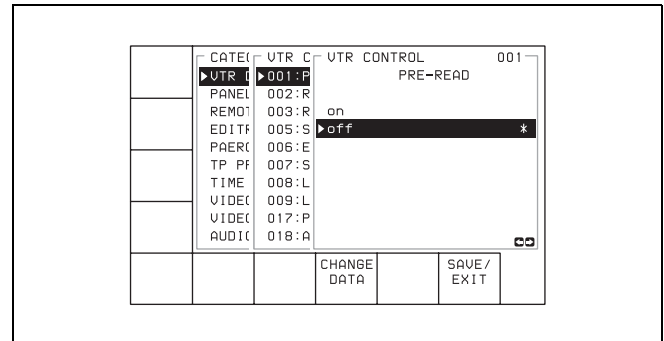
- 2** Press the  $\rightarrow$  button to make the item window active, then use the cursor  $\uparrow$  and  $\downarrow$  button, or the MULTI CONTROL knob, to align the cursor with the item to be changed.

### To speed up cursor movement

Hold down the SFT button, and press the cursor  $\uparrow$  and  $\downarrow$  button.

- 3** Press the **[F8]** (CHANGE DATA) button or the cursor  $\rightarrow$  button.

A window for changing the setting value appears.



- 4** With the **[F8]** (CHANGE DATA) button, or the cursor  $\uparrow$  and  $\downarrow$  button, or the MULTI CONTROL knob, select the setting value.

When subitems are displayed, use the cursor  $\uparrow$  and  $\downarrow$  button, or the MULTI CONTROL knob to select the subitem to be changed, then press the **[F8]** (CHANGE DATA) button repeatedly.

To return to the DEFAULT values, press the center cursor button or the MULTI CONTROL knob.

- 5** Press the **[F10]** (SAVE/EXIT) button or the cursor  $\leftarrow$  button.

This saves the change, and closes the window.

### About the unit's behavior when the MULTI CONTROL knob is pressed

You can set item 132 "KNOB MODE" in the VTR SETUP menu to "move window" to select moving between windows as the action when the knob is pressed.

- 6 To continue with changing the settings, repeat steps 1 to 5.
- 7 Press the **[F10]** (SAVE/EXIT) button.

This saves all the changes, and returns to the SET UP menu screen.

### To check the items with changed settings

In VTR SETUP menu item 131 “CHANGED MENU HIGHLIGHT”, set ITEM SETTING to “on”.

Items for which the setting values are different from the DEFAULT values appear in the VTR SETUP screen in yellow.

### To change the DEFAULT values in a menu item

- 1 Use the cursor **→** button to make the item window active, then with the cursor **↑** and **↓** buttons or the MULTI CONTROL knob, move the cursor to the item to be changed.
- 2 Press the **[F7]** (CHANGE DATA) button or the cursor **→** button.  
  
This opens a window for changing the setting.  
  
For a sub item, further press the **[F7]** (CHANGE DATA) button or the cursor **→** button, to open the window for changing the setting.
- 3 With the **[F7]** (CHANGE DATA) button, the cursor **↑** or **↓** button, or the MULTI CONTROL knob, change the setting.
- 4 Holding down the SET and ENTRY buttons at the same time, press the center cursor button.

This saves the current settings as new DEFAULT values for CURRENT DEFAULT.

The asterisks “\*” indicating the DEFAULT values move.

#### Note

If you press the center cursor button first, the setting values return to the PRESET values before CURRENT DEFAULT is overwritten, and it is not possible to change DEFAULT correctly.

### To return the DEFAULT values to the factory default PRESET values

Holding down the CLR and ENTRY buttons at the same time, press the center cursor button.

This saves the factory default PRESET values as the DEFAULT values for CURRENT DEFAULT.

- 5 Reset the current setting values if necessary, then press the **[F10]** (SAVE/EXIT) button.

You can save the changed CURRENT DEFAULT data set in DEFAULT VTR BANK or a “Memory Stick.”

*For details, see “4-1-11 Saving and Recalling DEFAULT Settings on a Bank” on page 55 and see “4-1-13 Saving and Recalling DEFAULT Settings in a “Memory Stick”” on page 56.*

### To check the items for which DEFAULT values have been changed

In VTR SETUP menu item 131 “CHANGED MENU HIGHLIGHT”, set DEFAULT SETTING to “on”.

Items for which the DEFAULT values are different from the factory setting values (FACTORY PRESET) values have the item number (or item name for a subitem) in the VTR SETUP screen shown in yellow.

### To display the menu items incompatible with this unit (items dedicated to the SRW-5800)

After pressing the SET UP button, press the **[F6]** (VTR SETUP) button while holding down the SFT button and the 0 button.

Menu items incompatible with this unit appear in red-shaded characters in the item window, to allow checking and changing their settings.

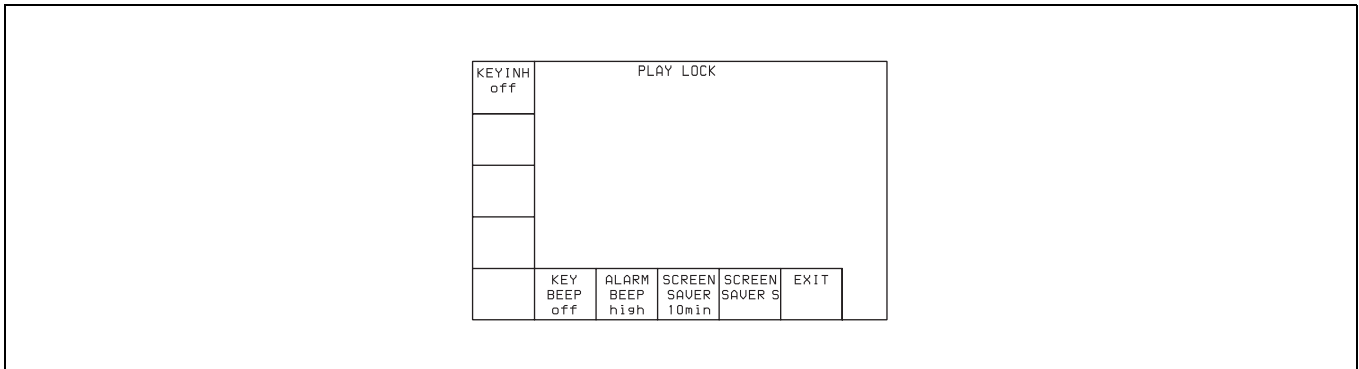


## 4-7-2 PANEL SETUP Menu

The PANEL SETUP menu is used to set the operation conditions of the upper and lower control panels.

### To activate the PANEL SETUP menu

Press the SET UP button, then press the **[F5]** (PANEL SETUP) button.



Button	Indication	Function	Settings
<b>[F1]</b>	KEYINH	Disables all button operations.	on, off
<b>[F6]</b>	KEY BEEP	Sets the keyboard sound.	high, mid, low, off
<b>[F7]</b>	ALARM BEEP	Sets the alarm.	high, mid, low, off
<b>[F8]</b>	SCREEN SAVER	Sets the color display screen-saver.	3min, 10min, 60min, off
<b>[F9]</b>	SCREEN SAVER S	Sets the information display screen-saver.	on, off
<b>[F10]</b>	EXIT	Returns to the PANEL SETUP menu.	

### Disabling button operations on the upper/lower control panel

Set the **[F1]** (KEYINH) button to “on”.

### Setting the confirmatory beep after button operations

Press the **[F6]** (KEY BEEP) button repeatedly.

**high:** loud confirmatory beep

**mid:** confirmatory beep

**low:** quiet confirmatory beep

**off:** no confirmatory beep

### Setting the alarm sound when an error occurs

Press the **[F7]** (ALARM BEEP) button repeatedly.

**high:** loud alarm sound

**mid:** alarm sound

**low:** quiet alarm sound

**off:** no alarm sound

### Setting the time until the color display screen saver is activated

Press the **[F8]** (SCREEN SAVER) button repeatedly.

**3min:** The screen saver is activated 3 minutes after the last button operation.

**10min:** The screen saver is activated 10 minutes after the last button operation.

**60min:** The screen saver is activated 60 minutes after the last button operation.

**off:** The screen saver is not activated.

### Setting the information display screen saver

Press the **[F9]** (SCREEN SAVER S) button.

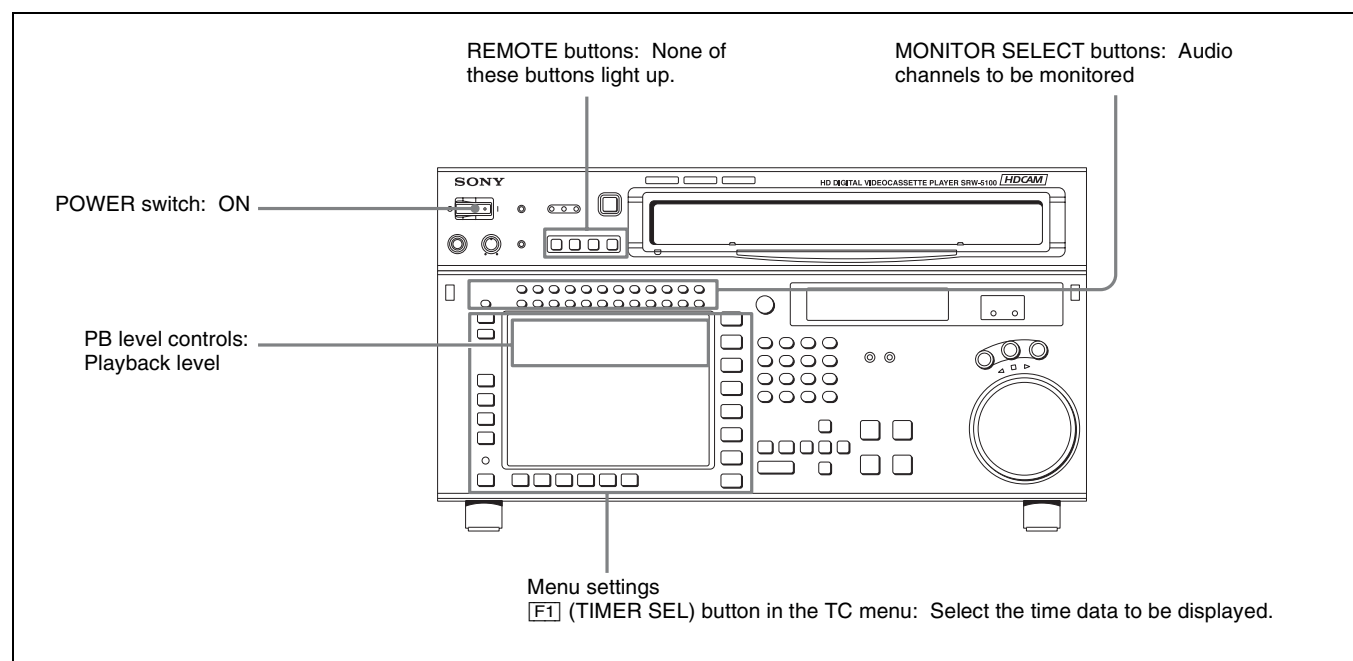
**on:** The screen display is periodically switched between normal video and reverse video.

**off:** The screen saver is not activated.

## 5-1 Preparing for Playback

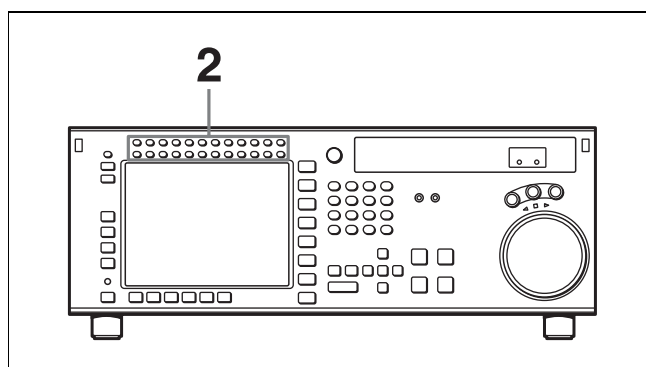
### 5-1-1 Setting Switches and Menus

Before starting playback, set the switches and menus as shown in the diagram below.



### 5-1-2 Selecting Audio Signals To Be Monitored

With the MONITOR L or R buttons at the upper left of the control panel, switch the audio signal output from the PHONES jack and MONITOR OUTPUT L/R connectors as follows.



- 1 Check the audio level display area in the color display, and make sure that the unit is not in the PB LEVEL setting state (with blue vertical lines appearing on the right of each channel level indication of the audio level meter).

The channels for which the signals are currently being monitored are shown by reverse video characters “L” and “R” below the audio level meter.

- 2 Press the buttons corresponding to each channel, to light the L/R reverse video indications below the audio level meter, and specify channels 1 to 12 with the MONITOR L or R button (both L and R can also be specified).

This setting can also be made using the VTR SETUP menu items 807 “AUDIO MONITOR-L select” and 808 “AUDIO MONITOR-R select”.

### To adjust the audio output level of the PHONES jack

Rotate the PHONES level control on the upper control panel.

## 5-1-3 Selecting the Sampling Frequency for the Digital Audio Signals

#### Note

This function is available only when the serial number of this unit is 12001 or higher.

To set the sampling frequency of the digital audio output signals to 96 kHz, set the VTR SETUP menu item 842 “AUDIO OUTPUT SAMPLING FREQUENCY” to “96K”.

When the sampling frequency of the digital audio output signals is set to 96 kHz, number of 96K audio output channels and output method according to the playback mode are as follows.

Playback mode	Maximum number of output channels	Output connectors	Specifications
• 4:4:4 HQ (XYZ/RGB) • 4:2:2 1080P • Dual-stream (3D)	12	HD SDI	1-channel 96K digital audio is output by using LINK-A/B (16+8 ch) and 2 channels on the HD SDI OUTPUT connectors. Equivalent to double-speed recording/playback.
		AES/EBU	Outputs the signal at twice the normal (48K) speed.
		FC output	Simplified 48K digital audio is output by thinning out the samples.
• 4:2:2 1080i/ PsF • 4:4:4 SQ RGB • 4:2:2 720P	8	SD SDI	
	6	HD SDI	1-channel 96K digital audio is output by using LINK-A (12 ch) and 2 channels on the HD SDI OUTPUT connectors.
		AES/EBU	Outputs the signal at twice the normal (48K) speed. TR1/2/3/4 (96K 2ch): Only channel 1/2 are used. TR5/6/7/8 (96K 2ch): Only channel 5/6 are used. TR9/10/11/12 (96K 2ch): Only channel 9/10 are used.
		FC output	1-channel 96K digital audio is output by using two 48K channels of each SDI interface.
	4	SD SDI	

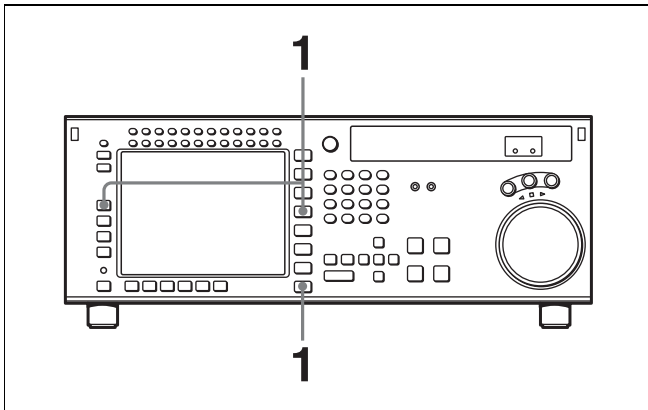
#### Note

When the VTR SETUP menu item 842 “AUDIO OUTPUT SAMPLING FREQUENCY” is set to “96K”, audio outputs from the HKSR-5105 that are multiplexed with the HDV/HDMI signal are disabled.

When the sampling frequency of the digital audio output signals is set to 48 kHz or when the serial number of this unit is lower than 12001, number of 96K audio output channels and output method according to the playback mode are as follows.

Playback mode	Maximum number of output channels	Output connectors	Specifications
<ul style="list-style-type: none"> <li>•4:4:4 HQ (XYZ/RGB)</li> <li>•4:2:2 1080P</li> <li>•Dual-stream (3D)</li> </ul>	12	HD SDI AES/EBU FC output	Simplified 48K digital audio is output by thinning out the samples.
	8	SD SDI	
<ul style="list-style-type: none"> <li>•4:2:2 1080i/PsF</li> <li>•4:4:4 SQ RGB</li> <li>•4:2:2 720P</li> </ul>	6	HD SDI	1-channel 96K digital audio is output by using only LINK-A (12 ch) and two 48K channels on the HD SDI OUTPUT connectors.
		AES/EBU	1-channel 96K digital audio is output by using two (stereo pair) 48K channels.
	4	FC output SD SDI	1-channel 96K digital audio is output by using two 48K channels of each SDI interface.

## Selecting the audio output sampling frequency for each channel



- 1 Press the AUDIO button, and in the AUDIO menu press the **[F1]** (AUDIO SELECT) button, to access the AUDIO SELECT menu.
- 2 Make audio output sampling frequency settings for each channel.

**48K:** Selects 48K as the output signal sampling frequency.

**96K:** Selects 96K as the output signal sampling frequency.

### On playback mode of this unit and audio output signal setting

Depending on the playback mode of this unit, audio output signal setting on one channel applies to two or four adjacent channels, as follows.

Playback mode	Audio output signal setting
<ul style="list-style-type: none"> <li>•4:4:4 HQ (XYZ/RGB)</li> <li>•4:2:2 1080P</li> <li>•Dual-stream (3D)</li> </ul>	Applies to two adjacent channels.
<ul style="list-style-type: none"> <li>•4:2:2 1080i/PsF</li> <li>•4:4:4 SQ RGB</li> <li>•4:2:2 720P</li> </ul>	Applies to four adjacent channels.

### To make settings for individual channels with the F buttons

By pressing any of the **[F1]** (A-SEL CH1) to **[F8]** (A-SEL CH8) buttons in the AUDIO SELECT menu, and the **[F1]** (A-SEL CH9) to **[F4]** (A-SEL CH12) buttons in the ALT+AUDIO screen obtained by pressing the ALT button, you can select the sampling frequency for each channel.

### To make output settings for individual channels with the numeric buttons

- 1 Press the cursor **←** or **→** button, to align the cursor with the channel for which you want to make the selection.

- 2 Press the cursor **↑** or **↓** button, to select the signal.

#### To return to the default settings

Press the cursor center button.

### To select the same output sampling frequency simultaneously on all twelve channels

Press the **[F9]** (A-SEL ALL) button.

This changes the output signal simultaneously on all twelve channels.

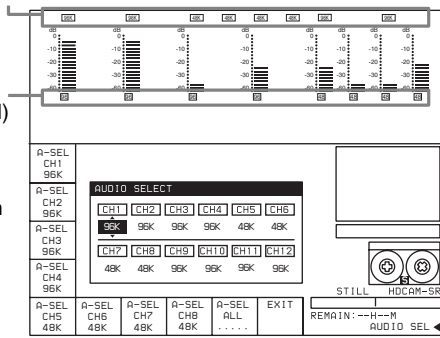
You can also make this setting using the VTR SETUP menu item 830 "AUDIO SELECT".

### About indications on the audio level meter

The output signal sampling frequency settings and the source (SG or playback signal) sampling frequency are displayed above and below the audio level meter as follows.

Output signal sampling frequency settings (appear only when the menu item 842 "AUDIO OUTPUT SAMPLING FREQUENCY" is set to "96K")

Source (SG or playback signal) sampling frequency (this flashes when it does not match the output setting)



For details on changing the factory-set reference output level, refer to the *Installation Manual*.

## To adjust the audio playback level manually

Press the PB LEVEL button to enter PB LEVEL adjustment mode. Then, make active of the channel that you want to adjust the playback level manually, and then adjust to the desired volume with the MULTI CONTROL knob or cursor  $\uparrow$  and  $\downarrow$  buttons. When you press the PB LEVEL button again to exit the PB LEVEL adjustment mode, the vertical white line on the right of the audio level meter and a horizontal white line indicating the setting are displayed, indicating that the playback level is subject to manual adjustment.

### 5-1-4 Adjusting the Audio Playback Level

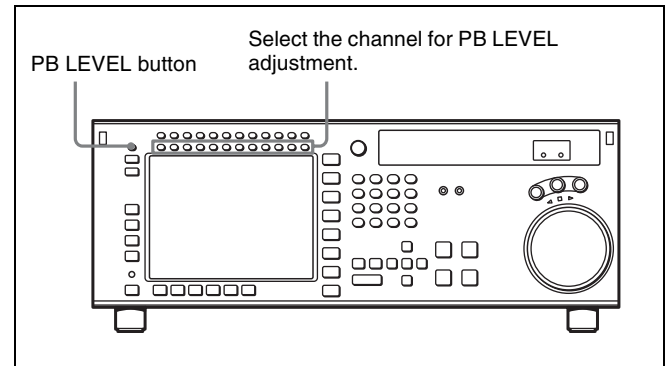
- 1 Press the PB LEVEL button at the upper left of the control panel to enter the PB LEVEL adjustment mode.  
  
A vertical blue line appears at the right of the audio level meter for each channel, indicating the PB LEVEL adjustment mode.
- 2 Press the button for the channel for which you want to carry out the adjustment (common with MONITOR R), to make the channel active.  
  
An orange border appears around the audio level meter, indicating that it is active.
- 3 Make the adjustment, using the MULTI CONTROL knob or cursor buttons.

#### To escape from the PB LEVEL adjustment mode

Press the PB LEVEL button at the upper left of the control panel once more. The vertical blue line at the right of the audio level meter for each channel disappears or turns white.

#### To output at the preset level (for a level recorded at reference $-20$ dB, outputting at $+4$ dBm)

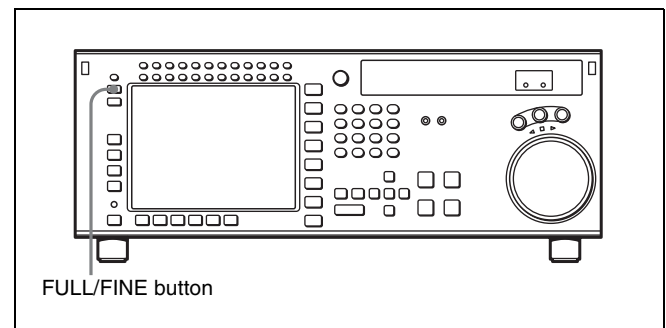
Press the PB LEVEL button to enter PB LEVEL adjustment mode. Then, make active of the channel that you want to output at the preset level, and then press the MULTI CONTROL knob. The setting becomes the preset value. Press once more to return to the immediately previous value. Pressing once more again to return to the preset value. You can also return to the preset value with the cursor center button. When you press the PB LEVEL button again to exit the PB LEVEL adjustment mode, a vertical white line on the right of the audio level meter is not displayed.



You can also carry out the playing level adjustment using the VTR SETUP menu item 833 "AUDIO PB LEVEL".

## Selecting the display range of the audio level meters

You can switch the range of audio level meter display by pressing the FULL/FINE button on the lower control panel.



**FULL mode:** The meter range is  $-60$  to  $0$  dB or  $-40$  to  $+20$  dB.

**FINE mode:** The meter scale is enlarged, and the signal level is indicated in  $0.25$  dB steps, with the reference marker indicated in the middle of each meter.

The display range of the audio level meters in FULL mode can be set using the VTR SETUP menu item 814 "LEVEL METER SCALE".

## 5-1-5 Audio Level Meter Display Modes

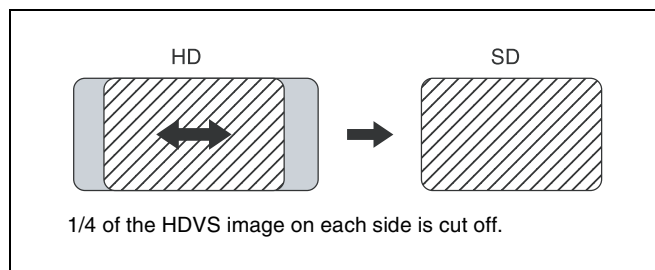
The audio level meter display changes for each mode depending on the type of cassette in use.

Cassette used	EE	PB	EJECT
HDCAM-SR	12ch	12ch	12ch
HDCAM/ Digital Betacam		4ch+CUE	

## 5-1-6 Selecting the HD-SD Conversion Mode

Select the conversion mode using the VTR SETUP menu item 930 "DOWNCONVERTER MODE".

- Edge crop mode (CROP)



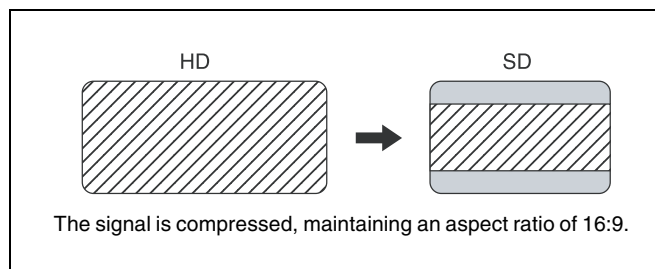
### Horizontal adjustment of the edge cropping

Use the VTR SETUP menu item 932 "H CROP POSITION (DC)".

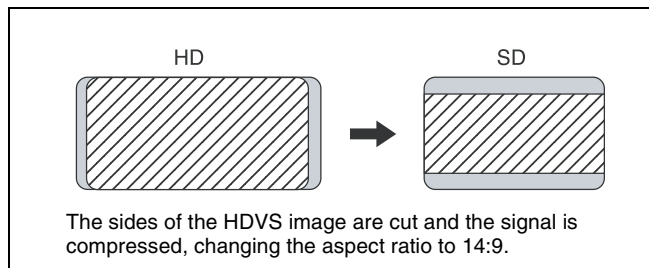
- Letter box mode (LETTER BOX)

When the letter box mode is selected, you can select one of the following three conversion methods using the VTR SETUP menu item 931 "LETTER BOX MODE (DC)".

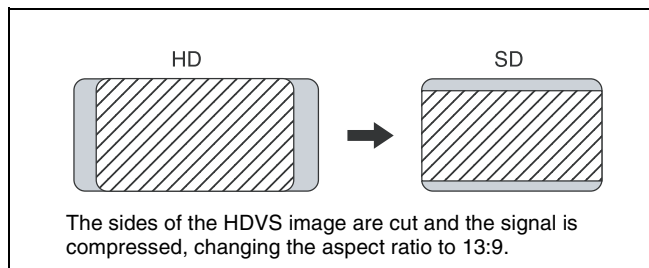
When 16:9 is selected



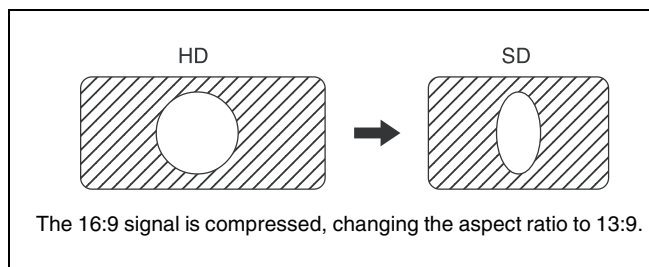
When 14:9 is selected



When 13:9 is selected



- Squeeze mode (SQUEEZE)



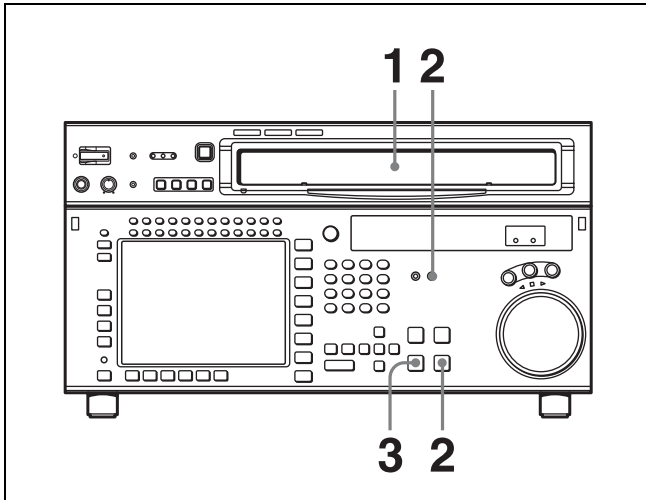
## 5-2 Playback

There are four types of playback:

- Normal-speed playback
- Jog/Shuttle/Variable mode playback
- Capstan override playback
- DMC (Dynamic Motion Control) playback

### 5-2-1 Normal-Speed Playback

Follow the procedure below to play back at normal speed.



- 1 Insert a cassette.

*For details on inserting a cassette, see “3-3-2 Inserting and Ejecting Cassettes” on page 34.*

- 2 Press the PLAY button.

Playback starts and the SERVO indicator lights up to indicate that the servo is locked.

- 3 Press the STOP button to stop playback.

#### If playback continues to the end of the tape

If the VTR SETUP menu item 407 “AUTO REWIND” is set to “on”, then the tape automatically rewinds to the beginning and stops.

### 5-2-2 Variable Speed Playback

In Jog/Shuttle/Variable modes, you can change the playback speed as follows:

**Jog mode:** The playback speed corresponds to the rotational speed of the search dial, ranging from  $-1$  to  $+1$  or  $-2$  to  $+2$  times normal playback speed (for Digital Betacam playback,  $\pm 3$  times normal speed).

(The speed setting can be changed using the VTR SETUP menu item 107 “JOG DIAL RESPONSE”.)

**Shuttle mode:** The playback speed corresponds to the angle of rotation of the search dial. The playback speed is different depending on the frame frequency of the unit. The search dial clicks at the positions for still-picture and  $\pm 8$  times normal playback speed (for HDCAM or Digital Betacam playback,  $\pm 10$  times normal speed).

Frame frequency	Playback speed (HDCAM-SR)	Playback speed (HDCAM)	Playback speed (D-BETACAM)
23.98/24 Hz	Ranging from $-50$ to $+50$	Ranging from $-60$ to $+60$	
25 Hz	Ranging from $-48$ to $+48$	Ranging from $-58$ to $+58$	Ranging from $-58$ to $+58$
29.97/30 Hz	Ranging from $-40$ to $+40$	Ranging from $-50$ to $+50$	Ranging from $-50$ to $+50$
50 Hz	Ranging from $-24$ to $+24$	—	—
59.94/60 Hz	Ranging from $-20$ to $+20$	—	—

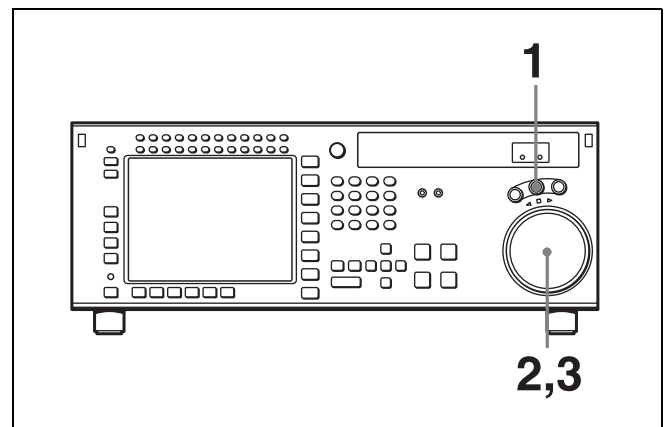
**Variable mode:** The playback speed corresponds to the angle of rotation of the search dial, ranging from  $-0.5$  to  $+1$  times normal playback speed (for HDCAM playback,  $-1$  to  $+2$  times normal speed and for Digital Betacam playback,  $-1$  to  $+3$  times normal speed).

### Jog mode playback

Follow the procedure below to play back in jog mode.

#### Note

With jog mode playback, noiseless playback cannot be performed when playback speed exceeds the range described in “Variable mode playback” on page 116.



- 1 Press the JOG button, turning it on.

This unit enters still-picture mode.

- 2 Rotate the search dial in the desired playback direction and to the desired angle.

The tape is played back slowly, at a speed corresponding to the rotational speed of the search dial. A direction indicator (◀ or ▶) lights up to indicate the direction of playback.

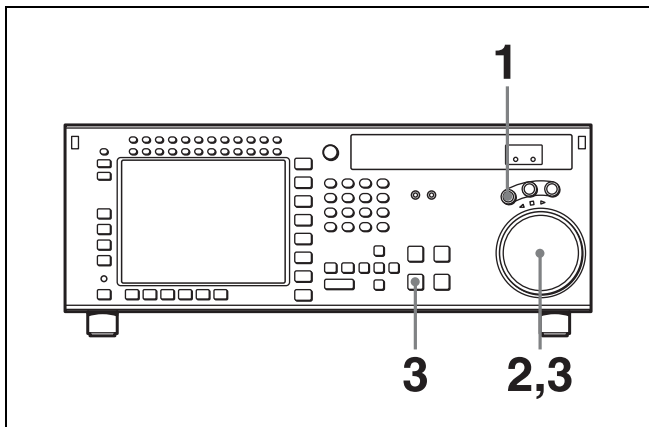
- 3 Stop rotating the search dial to stop jog mode playback.

The indicator lights up.

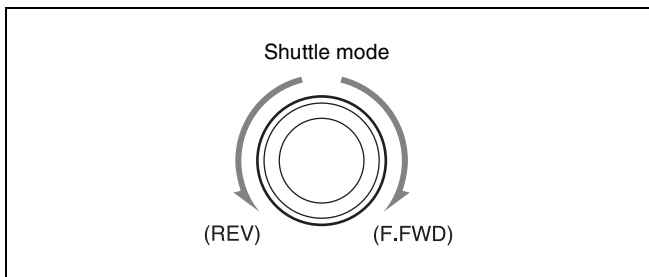
For details on switching the search dial functions, refer to the Maintenance Manual Volume 1.

## Shuttle mode playback

Follow the procedure below to play back in shuttle mode.



- 1 Press the SHUTTLE button, turning it on.  
This unit enters still-picture mode.
- 2 Rotate the search dial in the desired playback direction and set the angle of rotation as required to obtain the desired playback speed.



The tape is played back at a speed that corresponds to the angle of the search dial. A direction indicator (◀ or ▶) lights up to indicate the direction of playback. The search dial clicks at the positions for still-picture and  $\pm 8$  times normal playback speed. (For Digital Betacam or HDCAM playback, the search dial clicks at the positions for still-picture and  $\pm 10$  times normal playback speed.)

- 3 Set the search dial to center position for still-picture, or press the STOP button to stop shuttle mode playback.

## To return to normal-speed playback

Press the PLAY button.

### Note

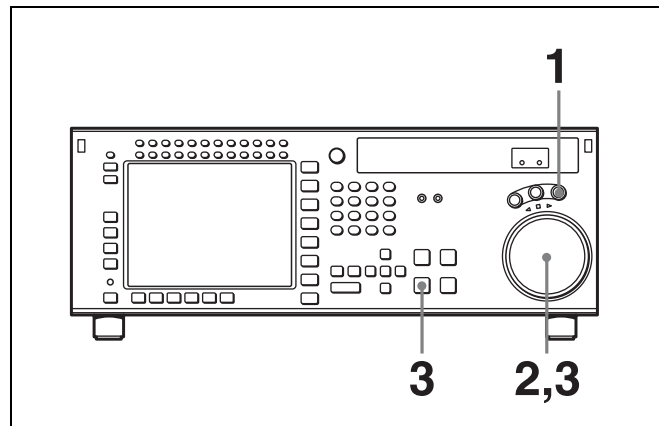
The audio signal output status is specified by the following settings of the VTR SETUP menu item 017 "PB/MU SELECT MENU".

**MU:** The audio output is always turned off.

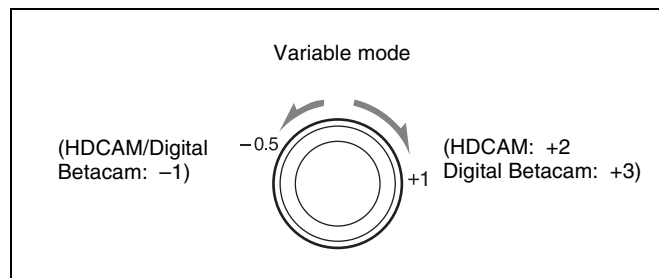
**PB:** The playback signal is always output.

## Variable mode playback

Follow the procedure below to play back in variable mode.



- 1 Press the VAR button, turning it on.  
This unit enters VAR mode.
- 2 Rotate the search dial in the desired playback direction and set the angle of rotation as required to achieve the desired playback speed.



The tape is played back at a speed that corresponds to the angle of the search dial. A direction indicator (◀ or ▶) lights up to indicate the direction of playback. The search dial clicks at the positions for still-picture,  $-0.5$  times and  $+1$  times normal playback speed. (For Digital Betacam or HDCAM playback, the search dial clicks at the positions for  $\pm 1$  times normal playback speed.)



- 3** Set the search dial to center position for still-picture, or press the STOP button to stop variable mode playback.

### To return to normal-speed playback

Press the PLAY button.

### To alternate between normal-speed playback and variable mode playback

After you have set the search dial to the angle that corresponds to the desired playback speed, pressing the PLAY button or VAR button selects normal-speed playback or variable mode playback, respectively.

To stop or start variable mode playback, press the STOP button or VAR button, respectively.

This unit is factory set so that pressing the JOG, SHUTTLE, or VAR button is required in order to enter variable-speed playback mode. To change this setting, use the VTR SETUP menu item 101 “SELECTION FOR SEARCH DIAL ENABLE”.

## 5-2-3 Capstan Override Playback

When playing back the same program on two units, you can adjust the playback phases of the two units so that they are synchronized.

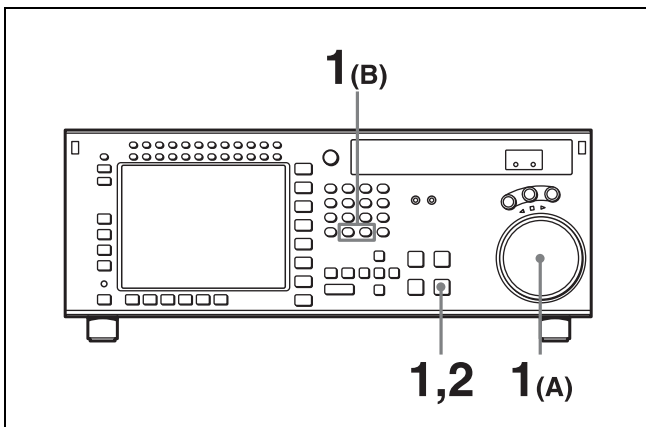
There are two ways to make this adjustment:

- (A) Using the search dial
- (B) Using the +/- buttons

### Note

When using method (A), change the system setup so that jog/shuttle mode playback is inhibited even when the search dial is rotated. Doing so prevents this unit from accidentally entering jog/shuttle mode during capstan override playback.

Set the VTR SETUP menu item 101 “SELECTION FOR SEARCH DIAL ENABLE” to “via search key”.



- 1** Use either method (A) or (B).

- (A) Rotate the search dial while holding down the PLAY button to adjust the playback speed.

The adjustment range is  $\pm 15\%$  (in steps of 1%) of the normal playback speed.

- (B) Press the + or – button while holding down the PLAY button to adjust the playback speed. Every time the + or – button is pressed, the speed changes by 1 frame.

During playback at increased or decreased speed, the SERVO indicator goes off since the servo is not locked (capstan override).

- 2** Release the PLAY button after you have finished adjusting the phase.

This unit returns to normal-speed playback and the SERVO indicator lights up.

### Note

For HDCAM-SR format, noiseless playback cannot be performed when the playback speed exceeds the normal speed.

## 5-2-4 DMC Playback

### Overview of DMC playback

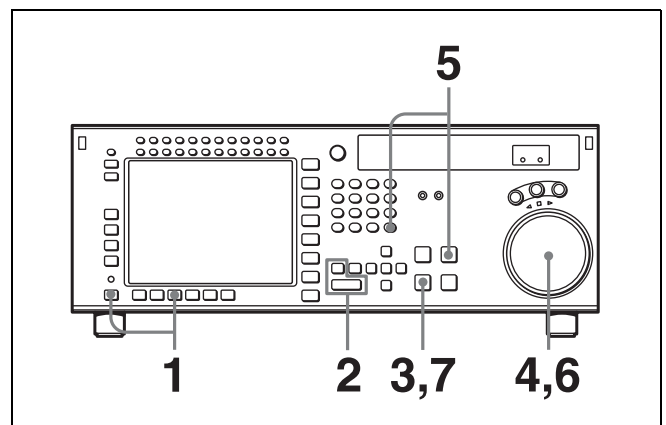
DMC (Dynamic Motion Control) playback allows you to vary the playback speed in variable mode (in the DT playback range from –1 to +2 times normal speed) for certain sections of the tape, then store the specified speed in memory for later playback.

### Note

DMC playback is possible only for Digital Betacam or HDCAM format. For HDCAM-SR format, DMC playback is not possible.

### Storing playback speeds in memory

Follow the procedure below to store DMC playback speeds in memory.



- 1 In the HOME menu, press the ALT/[F7] (DMC) buttons to light up DMC on the display.
- 2 Set a start point during recording or on a previously recorded tape by simultaneously pressing the ENTRY button and the IN button.
- 3 Press the STOP button to enter stop mode.
- 4 Rotate the search dial to select the initial playback speed.

The selected speeds are shown in the time data display window in the menu display.

#### Note

If the VTR SETUP menu item 101 “SELECTION FOR SEARCH DIAL ENABLE” is set to “dial direct”, initial speed settings cannot be made. Change the setting of this menu item to “via search key”.

- 5 Press the PREROLL button while holding down the SET button.

The tape is prerolled and played back at the initial speed from the preroll point to the speed variation start point. The moment the tape passes the speed variation start point, the MEMORY indicator in the display starts flashing.

(The ■ indicator appears in the time data display window, indicating that tape speed memorization in DMC mode is active.)

- 6 Rotate the search dial to the position for the desired playback speed.

The speed variation is stored in memory while the MEMORY indicator is flashing.

- 7 Press the STOP button to stop the tape.

#### If the MEMORY indicator flashes before the tape reaches the speed variation end point

Memory has been exceeded and this unit cannot store any more data for playback speed variations.

#### Notes on the ■ indicator and the MEMORY indicator

The ■ indicator shows that the tape speed memorization in DMC mode is taking place.

The MEMORY indicator flashes during playback speed memorization, and goes out when memorization of the playback speed has been completed.

### Performing DMC playback

There are two methods of starting DMC playback.

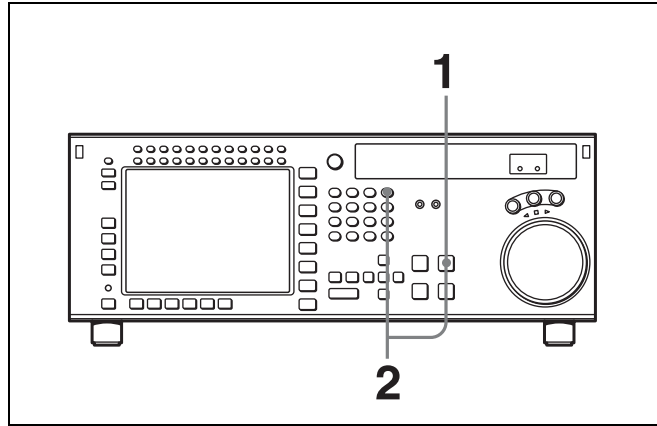
- Starting playback at the on-air cue from the on-air start point

- Starting playback immediately after prerolling

#### Note

To avoid operation errors, we recommend that you use this unit alone when performing DMC playback.

#### To start playback at the on-air cue from the on-air start point



- 1 Press the PREROLL button, turning it on.

The tape is cued up to the on-air start point.

- 2 Press the PREROLL button while holding down the SFT button at the moment the on-air cue is given.

The PREROLL button lights up. When the tape passes the speed variation start point, DMC playback starts and continues at the speed(s) stored in memory. When the tape passes the speed variation end point, normal-speed playback starts.

#### To start playback immediately after prerolling

Press the PREROLL button while holding down the SFT button.

The PREROLL button lights up. When the tape passes the speed variation start point, DMC playback starts and continues at the speed(s) stored in memory. When the tape passes the speed variation end point, normal-speed playback resumes.

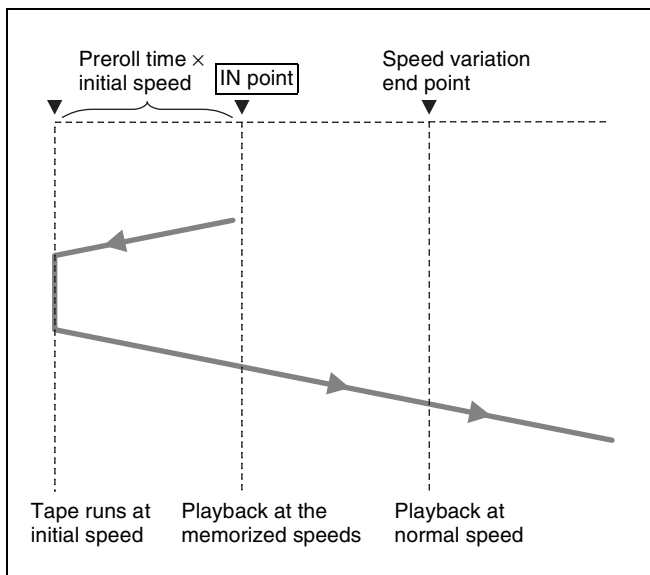
#### To stop the tape during DMC playback

Press the STOP button.

#### To exit DMC playback mode

Press the ALT/[F7] (DMC) buttons in the HOME menu to turn off the DMC indicator.

During DMC playback, the tape runs as shown in the diagram below.



### 5-2-5 Playing Back Non-audio Data

Non-audio data recorded on a tape is detected automatically and played back.

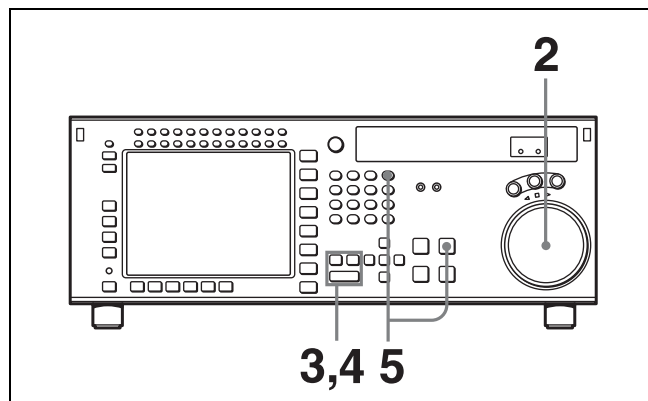
#### Note

When non-audio data is being played back:

- The DATA mark lights in white at the top of the audio level meter.
- For the audio level meters, all regions light.
- The analog audio outputs (output to the MONITOR OUTPUT connector and the PHONES jack) are turned off.
- The audio output level can be adjusted during non-audio data playback, but output non-audio data is not affected.

### 5-2-6 Playing Back Specified Section Repeatedly (Automatic Repeat Playback)

A section between specified two points can be played back repeatedly.



- 1 Set the VTR SETUP menu item T01 "AUTO REPEAT" to "on".
- 2 Rotate the search dial in jog or shuttle mode to position the start point of automatic repeat playback (IN point).

*For details on jog/shuttle mode playback, see "5-2-2 Variable Speed Playback" on page 115.*

- 3 Press the IN button while holding down the ENTRY button.

The time data for the IN point appears in the menu display.

- 4 In the same manner, position the end point of automatic repeat playback (OUT point). Then, press the OUT button while holding down the ENTRY button.

The time data for the OUT point appears in the menu display.

- 5 Press the PREROLL button while holding down the SFT button.

The tape prerolls to a point prior to the IN point, and playback starts. After passing through the OUT point, the tape is rewound to the preroll point, and this unit repeats the playback of the specified section.

Preroll time of the IN point and postroll time of the OUT point are determined by VTR SETUP menu items 302 "PREROLL TIME" and 303 "POSTROLL TIME," respectively.

#### Note

Due to the difference in the operation button assignments, automatic repeat playback operation on the SRW-5100 differs in some degree from that on the SRW-5800.

# Appendix

## Maintenance

### Head Cleaning

Use the BCT-HD12CL Cleaning Cassette to clean the video and audio heads. Read the instructions included with the cleaning cassette carefully, as improper usage can damage the heads.

If you insert the cleaning cassette, it is automatically ejected after a head cleaning operation which lasts for 10 seconds.

#### Note

Do not run the cleaning tape more than 6 times in succession to avoid damaging the heads.

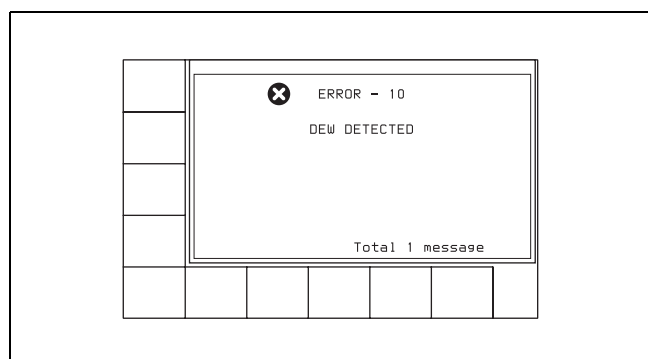
*Please refer to the Maintenance Manual Volume 1 on cleaning the video and audio heads.*

### Moisture Condensation

If you suddenly move this unit from a cold location to a warm one, or use this unit in a very humid place, moisture in the air can form on the head-drum or tape guide. This is called moisture condensation.

If you play a tape under these conditions, the tape may adhere to the drum where moisture has collected and become damaged.

If moisture condenses on the head-drum while you are operating this unit, the error message “ERROR-10” appears in the time data display section.



When this error message appears, this unit enters the protection mode and certain operations become inoperable.

Once the moisture has evaporated, the error message disappears and this unit becomes normal.

*Please refer to the Maintenance Manual Volume 1 on protection mode.*

#### If “ERROR-10” appears immediately after turning on this unit

Leave this unit turned on and wait until the error message goes off. Inserting a cassette is not possible while the message is on.

When the error message disappears, you can use this unit.

#### If you move this unit from a cold to a warm location

Leave this unit turned off for about ten minutes since some time is needed for the condensation-detection mechanism to work.

# Specifications

## General

Format	HDCAM-SR
Power requirements	100 to 240 V AC, 50/60 Hz
Power consumption	380 W (with all option boards installed)
Peak inrush current	(1) Power ON, current probe method: 16 A (100 V), 30 A (240V) (2) Hot switching inrush current, measured in accordance with European standard EN55103-1: 8 A (230 V)
Operating temperature	+5°C to +40°C (+41°F to + 104°F)
Storage temperature	–20°C to +60°C (–4°F to + 140°F)
Humidity	25% to 80% (relative humidity)
Mass	30 kg (66 lb 26 oz)
Dimensions	427 × 218 × 544 mm (w/h/d) (16 <sup>7</sup> / <sub>8</sub> × 8 <sup>5</sup> / <sub>8</sub> × 21 <sup>1</sup> / <sub>2</sub> inches)

## Tape system

Tape speed	HDCAM-SR: 94.1 mm/s (with the frame frequency of 24 Hz)/98.1 mm/s (with the frame frequency of 25 Hz)/117.6 mm/s (with the frame frequency of 29.97 Hz)/196.2 mm/s (with the frame frequency of 50 Hz)/235.2 mm/s (with the frame frequency of 59.94 Hz) HDCAM: 77.4 mm/s (with the frame frequency of 24 Hz)/80.6 mm/s (with the frame frequency of 25 Hz)/96.7 mm/s (with the frame frequency of 29.97 Hz) Digital Betacam: 96.7 mm/s
HDCAM-SR playback time (using BCT-124SRL)	155 minutes (with the frame frequency of 24 Hz)/149 minutes (with the frame frequency of 25 Hz)/124 minutes (with the frame frequency of 29.97 Hz)/74 minutes (with the frame frequency of 50 Hz)/62 minutes (with the frame frequency of 59.94 Hz)
HDCAM playback time (using BCT-124HDL)	155 minutes (with the frame frequency of 24 Hz)/149 minutes (with the frame frequency of 25 Hz)/124 minutes (with the frame frequency of 29.97 Hz)
Digital Betacam playback time (using BCT-D124L)	124 minutes
Fast forward/rewind time	Approx. 4 minutes (using BCT-124SRL)

## Search speed Shuttle mode

HDCAM-SR playback: Still to approx. ±50 times normal playback speed (with the frame frequency of 24 Hz) Still to approx. ±48 times normal playback speed (with the frame frequency of 25 Hz) Still to approx. ±40 times normal playback speed (with the frame frequency of 29.97 Hz) Still to approx. ±24 times normal playback speed (with the frame frequency of 50 Hz) Still to approx. ±20 times normal playback speed (with the frame frequency of 59.94 Hz)
HDCAM playback: Still to approx. ±50 time normal playback speed (with the frame frequency of 29.97 Hz)/ Still to approx. ±58 time normal playback speed (with the frame frequency of 25 Hz)
Digital Betacam playback: Still to approx. ±50 times normal playback speed

## Variable mode

HDCAM-SR playback: –0.5 to +1 times normal playback speed
HDCAM playback: –1 to +2 time normal playback speed
Digital Betacam playback: Still to approx. –1 to +3 time normal playback speed

Jog mode	HDCAM-SR/HDCAM playback: Still to ±2 times normal playback speed Digital Betacam playback: Still to ±3 times normal playback speed
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## Dynamic Tracking range

HDCAM
Playback: –1 to +2 times normal playback speed
Digital Betacam
Playback: –1 to +3 times normal playback speed

## Load/unload time

7 seconds or less

## Recommended tapes

HDCAM-SR cassette (S, L): BCT-6SR/33SR/40SR BCT-64SRL/94SRL/124SRL
HDCAM cassette (S and L, for playback only): BCT-6HD/12HD/22HD/32HD/40HD BCT-34HDL/64HDL/94HDL/ 124HDL

Digital Betacam cassettes (S and L, for playback only)

## Digital video system

### Digital video signal format

Sampling frequency

- 4:2:2 Y: 74.25 MHz  
Pb/Pr: 37.125 MHz
- 4:4:4 RGB/XYZ: 74.25 MHz

Quantization

- Y/Pb/Pr: 10 bits/sample
- RGB: 12 bits/sample or 10 bits/sample
- XYZ: 12 bits/sample

Compression

MPEG-4 Studio Profile

Channel coding

S-NRZ

Error correction

Reed-Solomon code

### Analog composite output

Bandwidth Y: 0 to 5.75 MHz +0.5 dB/−3.0 dB

S/N ratio 56 dB or more

Y/C delay 15 ns or less

K factor (2T Pulse)

1% or less

Output SCH phase

Conforming to RS-170A/CCIR R.624-3

## Digital audio system

### Digital audio signal format (HDCAM-SR: CH-1 to CH-12, HDCAM: CH1 to CH4)

Sampling frequency

48 kHz/96 kHz (synchronized with video) (96 kHz sampling is only available when the serial number of this unit is 12001 or higher)

Quantization 24 bits/sample

Wow and flutter

Below measurable level

Headroom

Selectable settings: 20, 18, 16, 15, and 12 dB

### Analog output

Number of bits of D/A quantization

24 bits/sample

Frequency response

20 Hz to 20 kHz +0.5 dB/−1.0 dB (reference level)

Dynamic range 96 dB or more (at 1 kHz)

Distortion 0.05% or less (at 1 kHz, reference level)

Crosstalk −80 dB or less (at 1 kHz, between channels)

## Input connectors

REF. INPUT1, REF. INPUT2 (OPTION)

BNC (2 + 2 loop-through)

HD

Trilevel SYNC

SD

0.6 Vp-p, 75 Ω, sync negative

Black burst

NTSC: 0.286 Vp-p, 75 Ω, sync negative

PAL: 0.3 Vp-p, 75 Ω, sync negative

Selecting HD or SD in a menu

## Output connectors

### HD SDI OUTPUT

A

BNC (3, MONITOR with superimposed text)

HD SDI (1.485 Gbps) (conforms to SMPTE 292M/BTA S004B)

3G-SDI (2.97 Gbps) (conforms to SMPTE 424M) (when the serial number of this unit is 10101 or higher and the optional HKSR-5103 is installed)

B

BNC (3, operational during 444SQ, 444HQ, 1080P, dual-stream, and variable speed modes.)

### SD SDI OUTPUT

BNC (3, MONITOR with superimposed text)

### SD OUTPUT

#### COMPOSITE (MONITOR)

1.0 Vp-p, 75 Ω, sync negative

#### SYNC

Black burst

0.286 Vp-p (NTSC)/0.3 Vp-p (PAL), 75 Ω, sync negative

### FORMAT CONV. OUTPUT (OPTION)

A

BNC (2, with superimposed text)

HD SDI (1.485 Gbps) (conforms to SMPTE 292M/BTA S004B) (when the optional HKSR-5001 is installed)

3G-SDI (2.97 Gbps) (conforms to SMPTE 424M) (when the optional HKSR-5001 with a serial number of 15001 or higher is installed)

B

BNC (2, with superimposed text)

### HD REF. OUT

BNC (2)

1125 SYNC

Tri-level SYNC

0.6 Vp-p, 75 Ω, sync negative

### DIGITAL OUTPUT (AES/EBU) AUDIO

BNC (6)

CH1/2 to CH11/12

AES/EBU format, unbalanced

### Note

When connecting devices for AES/EBU signal input/output, use a cable whose length is less than 300 meters.

CUE OUT (for HDCAM/Digital Betacam playback only)

XLR, 3-pin, male (1)

	+4 dBm (with a 600 $\Omega$ load), low impedance, balanced
MONITOR OUTPUT L, R	XLR, 3-pin, male (2)
	+4 dBm (with a 600 $\Omega$ load), low impedance, balanced
TIME CODE OUT	XLR, 3-pin, male (1)
	2.2 Vp-p, low impedance, balanced
PHONES	JM-60 stereo phone jack
	– $\infty$ to –12 dBu (with an 8 $\Omega$ load), unbalanced
HDMI OUTPUT (only when the optional HKSR-5105 is installed)	HDMI™ connector, supports Deep Color
	Video: 1080P, 1080i, 720P, 576P, 480P
	Audio: L-PCM 48 kHz/16 bits/up to 8 channels (differs according to the connected monitor)
HDV OUTPUT (only when the optional HKSR-5105 is installed)	Conforming to i.LINK (IEEE1394), 6-pin, S400
	Video: 1080/59.94i, 50i
	Audio: L-PCM 48 kHz/16 bits/2 or 4 channels

## Remote connectors

NETWORK	RJ-45 modular jack
REMOTE 1-IN(9P)	D-sub 9-pin, female
REMOTE 1-I/O(9P)	D-sub 9-pin, female
VIDEO CONTROL	D-sub 9-pin, female (for optional HKDV-900)
REMOTE 2 PARALLEL I/O(50P)	D-sub 50-pin, female

## Accessories supplied

Operation Guide (1)  
Installation Manual (English version (1), Japanese version (1))  
Operation Manual (CD-ROM) (1)

## Optional accessories

HKSR-5001 Format Converter Board  
HKSR-5802 Digital Betacam/HDCAM Processor Board  
HKSR-5103 Advanced Processor Board  
HKSR-5105 HDMI/i.LINK (HDV) Output Board  
RMM-110 Rack Mount Adaptor  
BCT-HD12CL Cleaning Cassette

## Recommended accessories

For details about recommended accessories, contact your Sony service representative.

### Memory card adaptor (when the serial number of this unit is lower than 10101)

MSAC-PC4 Memory Stick PC Card Adaptor or equivalent

*For optionally available AC power cords, refer to the supplied Installation Manual.*

Design and specifications are subject to change without notice.

### Note

Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.

# Error Messages and Warning Messages

## Error Messages

When the unit ceases to operate correctly due to malfunction or an internal system error, the alarm will sound and an error message will be displayed on the display.

Only one message will be displayed even when multiple errors occur, but the error log menu keeps a history of the errors.

For more information about error messages, refer to the Maintenance Manual.

After the error occurs, eliminate the cause of the error and turn the unit back on. If the error message appears again when the unit is turned on, contact your Sony representative.

For more information about eliminating errors, refer to the Maintenance Manual (Volume 1).

## Protection mode

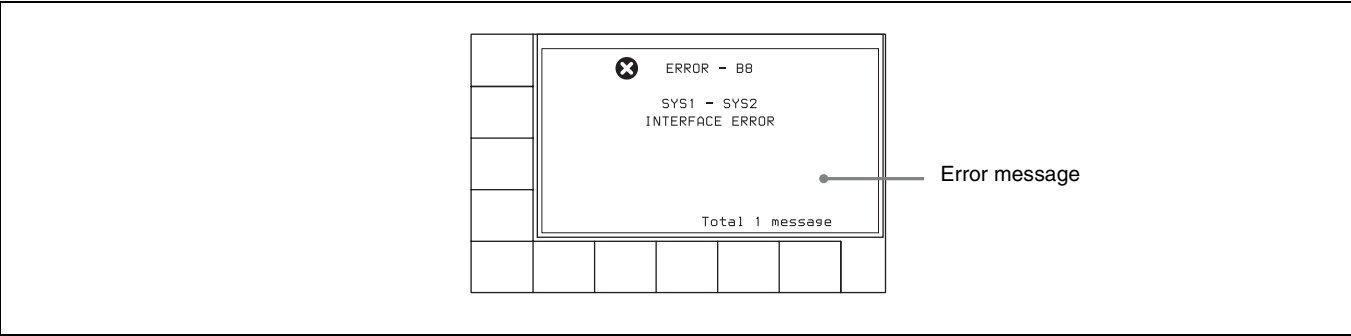
To protect the tape and the mechanical parts of this unit, the servo control system automatically stops tape transport and the drum motor and enters protection mode when an error occurs.

Cassettes may not be inserted or ejected during protection mode.

### Note

When a cassette is stuck in the unit because of protection mode, make sure to disconnect the power before removing the cassette manually.

For information about removing cassettes manually, refer to the Maintenance Manual (Volume 1).



Item number	Display	Meaning
01	REEL SLACK THREAD ERROR	Tape slack was detected during threading or unthreading.
02	REEL SLACK FF/REW/SEARCH ERROR	Tape slack or a broken tape was detected during search, fast forward, or rewind.
03	REEL SLACK PLAY/REC ERROR	Tape slack, a broken tape, or an S-side reel or T-side reel lock was detected during playback.
04	REEL SPEED ERROR	Tape transport speed error was detected during forward winding or rewinding.
05	REEL FG ERROR	When a cassette was inserted, a fault in the S-side reel or T-side reel operation was detected.
06	TAPE TENSION ERROR	During playback, excess tension was detected.
07	CAPSTAN TROUBLE	A capstan motor operation fault was detected.
08	DRUM TROUBLE	A drum motor operation fault was detected.
09	TH/UNTH MOTOR TIMEOUT	A fault was detected in a threading or unthreading operation.
0A	FULL TOP ERROR	When threading, a failure of the tape beginning processing to terminate was detected.
10	DEW DETECTED	Condensation was detected.
11	TAPE TOP/END SENSOR	The tape beginning and tape end were detected at the same time.



Item number	Display	Meaning
12	TAPE TOP SENSOR TROUBLE	A tape beginning sensor fault was detected.
13	TAPE END SENSOR TROUBLE	A tape end sensor fault was detected.
14	FAN MOTOR TROUBLE	A cooling fan motor operation fault was detected.
20	CASSETTE COMPARTMENT MOTOR LOCK	A fault was detected in a cassette compartment raising or lowering operation.
21	REEL SHIFT MOTOR LOCK	A fault was detected movement of the reel table to adjust for cassette size.
22	REEL POSITION SENSOR TROUBLE	The reel table was detected in the L cassette position and S cassette position at the same time.
23	THREADING RING POSITION ERROR	The threading end and unthreading end were detected at the same time.
24	DT HARD ERROR	A fault was detected in DT mechanism.
26	POWER SUPPLY UNIT TROUBLE	A fault was detected in the power supply unit.
93	DR INTERFACE ERROR	A communications error between the SV CPU (board SS-102) and drum CPU (board DR-508) was detected.
97	NVRAM CHECK SUM ERROR	An operation fault was detected in the servo system NV-RAM (board DR-508).
FF	SV UNDEFINED ERROR	Undefined SV error was detected.
A0	SYS UNDEFINED ERROR	Undefined SY error was detected.
A2	SYS1 - SYS2 DP-RAM ERROR	A DPRAM (board SS-102) operation fault between SYS1 and SYS2 was detected.
A5	SYS - FC DP-RAM ERROR	A DPRAM (board FC-91 or FC-111) operation fault between SYS1 and FC was detected.
A8	SYS NV-RAM CHECK SUM ERROR	A SYS NVRAM (board SS-102) operation fault was detected.
B3	XXX PLDX INITIAL ERROR	<p>An initialization error in the PLD was detected.</p> <p><b>Note</b> The description of “XXX” at the beginning of the message and of “X” immediately after the “PLD” depends on the PLD where the error was detected. Display example: SYS PLD1 INITIAL ERROR</p>
B8	SYS1 - SYS2 INTERFACE ERROR	A SYS CPU communications fault was detected.
B9	SYS - SV INTERFACE ERROR	An SV CPU communications fault was detected.
BA	SYS - EQ INTERFACE ERROR	An EQ CPU communications fault was detected.
BB	SYS - FC INTERFACE ERROR	An FC CPU communications fault was detected.
BC	SYS - 50PIN INTERFACE ERROR	A communications fault with the 50-pin CPU was detected.
BF	SYS-IF INTERFACE ERROR	A communication fault between this unit and the CPU of the HKSR-5105 (IF-1097 board) was detected.
C2	IF HARD ERROR	An operation fault was detected in the HKSR-5105 (IF-1097 board).

## Warning Messages

When one of the problems described below is detected, a warning mark is displayed in the upper left corner of the display. Operation can continue even when the mark is flashing.

If you press the SFT button (*see page 20*) and the DIAG button (*see page 18*) when the mark is flashing, an information display appears, showing a warning message.

### Note

The warning messages can be viewed in any menu except the CUE or SET UP menu.

Only one message will be displayed even if there are multiple messages. The number of errors appears at the lower right, and you can check the messages using the ↑ and ↓ buttons.

A history of errors is kept in the error log menu.

For more information about warning messages, refer to the Maintenance Manual.

Use the displayed warning information to eliminate the cause of the warning.

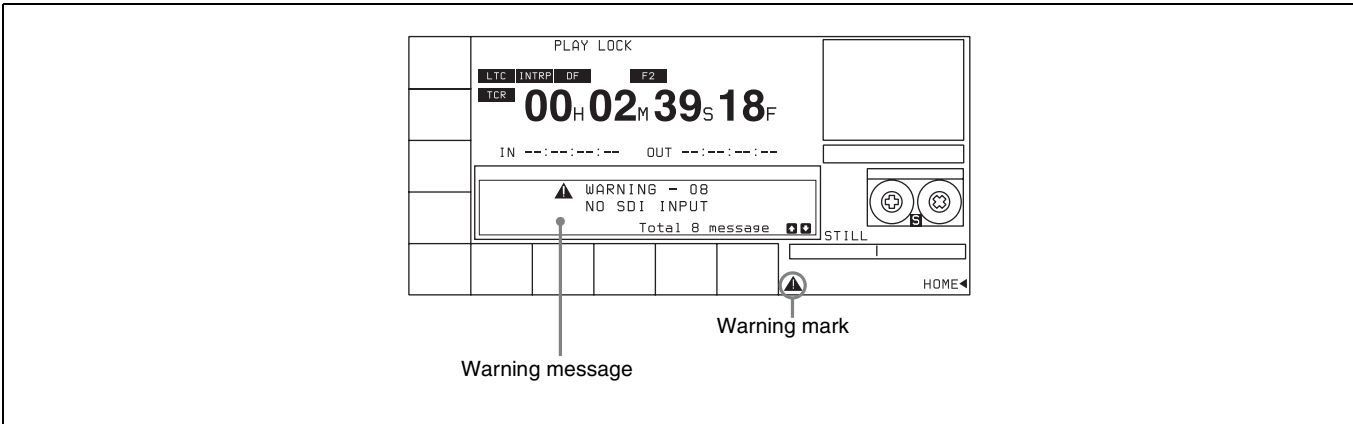
For more information about eliminating the cause of warning, refer to the Maintenance Manual.

**To automatically display a warning message**

Whenever a warning occurs, change the setting of the VTR SETUP menu item 120 “WARNING DISPLAY” to “on”.

**To clear a warning message**

To cancel the display of a warning message, see “Clearing warning messages” on page 127.



Item number	Display	Meaning
01	NO EXTERNAL REFERENCE	There is no reference signal on the selected REF. INPUT connector. This unit is using an internal reference signal.
02	LOST LOCK	Capstan servo lock was lost during playback.
03	NO EXTERNAL REFERENCE ON FC	When the VTR SETUP menu item A05 “PD EXT SD REF LOCK MODE” is set to “lock1” or “lock2”, no external SD reference signal is input.
04	HD & SD REF ASYNCHRONOUS	When the VTR SETUP menu item A05 “PD EXT SD REF LOCK MODE” in is set to “lock1” or “lock2”, HD reference signal and external SD reference signal are not synchronized.
05	PLL UNLOCK ON FC	The PLL of the HKSR-5001 is not locked on the reference signal.
0B	VIDEO DATA ERROR	The video data channel condition indicator is lit red.
0F	AUDIO DATA ERROR	The audio data channel condition indicator is lit red.
10	VITC NOT READ	VITC cannot be correctly read from the tape.
11	AUDIO PLL UNLOCKED	Audio lock generator PLL not locked to the video reference signal.
14	NO PB RF SIGNAL	Playback heads cannot correctly read digital data from the tape.
17	PB FREQUENCY IS UNSUITABLE	The cassette is ejected automatically in line with the setting of the VTR SETUP menu item 018 “AUTO EJECT LEVEL” because the system frequency of this unit and the frequency of the signal recorded on the tape do not match.
18	INCONSISTENT AUDIO FREQUENCY	There is a channel on which the sampling frequency information for tape playback and the sampling frequency information of the system do not match.
3B	NO LTC REPRODUCED	LTC signal not detected on the tape.
49	HDMI EDID DATA READING FAILURE	EDID (Extended Display Identification Data) from the connected HDMI device could not be read correctly.
52	NO SUPPORTED PB FORMAT	The recording format cannot be played back by this unit.
53	SYSTEM MISMATCH	The tape cannot be played with the current system settings.
55	VIDEO PLL UNLOCKED	Video lock generator PLL not locked to the video reference signal.

Item number	Display	Meaning
61	Tele-File MEMORY IS FULL	The remaining capacity of the Tele-File is low, and therefore the next recording will overwrite old data.
62	NO AREA FOR Tele-File DATA ADDITION	There is no space at all in the Tele-File.
63	INVALID FORMAT Tele-File	Parts of the Tele-File format are wrong.
64	Tele-File DATA WRITE FAIL	A write to Tele-File error occurred.
65	NO Tele-File LABEL	The Tele-File could not be recognized, and therefore the cassette is ejected (HDCAM-SR only).
67	Tele-File DATA READ FAIL	A Tele-File read error occurred.
71	INVALID FORMAT CONVERSION	The settings do not allow format conversion.
77	AUTO CUEUP ABORT	Auto cue-up was aborted because the target cue-up time code is 1 second or more away from the current time code.

## Error Log Menu

The time and time codes of errors and warnings occurring during operation can be displayed in a list form in the display. (Maximum listing is 99 items.)

### To open the error log menu

Press the SFT button (*see page 20*) and the DIAG button (*see page 18*), then press the **[F2]** (ERR LOG) button.

PAGE TOP	ERROR LOG '03/06/02 10:27:28				
PAGE END	TOTAL 99				
FULL MSG	95.00:00:00:00 (W) 1B NO A5/A6 INPUT				
ALL CLEAR	96.00:00:00:00 (W) 1C NO A7/A8 INPUT				
WARNI- NG on	ERROR on	CONDI- TION on		TIME TC	EXIT

Button	Display	Function	Setting
<b>[F1]</b>	PAGE TOP	Move to the top page	
<b>[F2]</b>	PAGE END	Move to the page containing the last message	
<b>[F3]</b>	FULL MSG	Display in full the message selected with the cursor	
<b>[F4]</b>	ALL CLEAR	Clear messages (LOG DATA)	
<b>[F5]</b>	WARNING	Display warning messages	on, off
<b>[F6]</b>	ERROR	Display error messages	on, off
<b>[F7]</b>	CONDITION	Display condition messages	on, off
<b>[F9]</b>	TIME	Toggle between time code and real time display	TC, REAL
<b>[F10]</b>	EXIT	Return to display of maintenance information	
ALT/ <b>[F8]</b>	CANCEL EDIT	Display the CANCEL EDIT screen	
ALT/ <b>[F9]</b>	REAL TIME	Display the REAL TIME screen	

For more information about error log menu settings, refer to the Maintenance Manual.

### Clearing warning messages

- 1 Press the ALT/**[F8]** (CANCEL EDIT) buttons.

**2** Select the message to be cleared using the ↑ and ↓ buttons.

**3** Press the **[F2]** (MARK) button.

An asterisk “\*” will appear in front of the message.  
The message will not be displayed or saved.

### To cancel clearing

Select the warning message you want to cancel clearing, and press the **[F2]** (MARK) button.

## Adjusting the clock

Press the ALT/**[F9]** (REAL TIME) buttons in the error log menu and use the setting below.

### To get current time codes

Hold down the SFT button and press the **[F5]** (GET TC) button.

### To set the data and time

Hold down the SFT button and press the **[F6]** (SET) button.  
Use the ← and → buttons to move the bar to the location to be adjusted.  
Use the numeric buttons to change the value.

### To adjust minutes and second to zero

Hold down the SFT button and press **[F8]** (ZERO) button.

### To select daylight saving time and normal time

Hold down the SFT button and press **[F9]** (SEASON) button.

**STANDARD:** normal time

**SUMMER:** daylight saving time (one hour ahead of normal time)

### Note

Changing between normal and daylight saving times changes the current time by one hour.  
Even if the change crosses midnight, the current date is not changed.

# Glossary

## AES/EBU format

A standard format for the transfer of digital audio signals. In this format, two audio signals can be input/output through one XLR-type connector.

## Assemble editing

An edit mode for adding new scenes to the end of previously recorded scenes. New video signals are recorded for each control signal, but continuity with the control signal preceding the edit point is maintained electrically. Because assemble editing in the middle of a scene will cause a break in the video image at the end of the insertion, this is not a practical method for inserting new video data. This should be done with insert editing. See also Insert editing.

## Bridging connection

A connection that allows a signal input to an input terminal to pass through the unit and exit from an output terminal for input to a third piece of equipment.

## Capstan

A drive mechanism that moves the tape at a specified speed. Its rotation is normally synchronized with a reference sync signal.

## Component video signal

A video signal that consists of a luminance signal (Y) and two chrominance (color-difference) signals (R-Y, B-Y).

## Composite video signal

A signal that consists of video (luminance and color sub carrier), sync (horizontal and vertical), and color burst signals.

## Condensation

Moisture that collects on the head drum of the tape transport mechanism, causing damage to the tape and malfunction of the VTR.

## CTL

Abbreviation for control signal. A pulse signal that can be counted, to determine the number of frames, and therefore the tape's running time. Used mainly for adjusting the tracking position of video heads, and to achieve time code continuity during continuous recording. This signal is recorded on a longitudinal tape track.

## Cue point

A point used to mark the beginning of a section of tape so that it can be located for later playback or editing.

## Drop frame mode

When the field frequency of this unit is 59.94 Hz, the actual number of frames per second is approximately 29.97, while the time code value advances one second every 30 frames. In drop frame mode, the time code is advanced such a way that this difference in the value between real time and the time codes is corrected. Specifically, two frames are skipped at the beginning of each minute, except for every tenth minute, so that the frame value for time codes matches that for real time. See also Non-drop frame mode.

## E-E mode

Abbreviation for Electric-to-Electric mode. In this mode, the signals are passed through the VTR's electronics before output but do not pass through the magnetic converter circuits such as the tape and head circuits. This mode is used for confirming input signals or adjusting the input level.

## Effect edit mode

When editing a tape using a switcher or when editing special effects, the pixels comprising the picture are often not dubbed to the same positions as those of the original. In the case of repeated dubbings, this shifting of pixels produces an accumulation of calculation errors during the compression/expansion

process; this may result in an increase in low-level noise within the signal. The effect edit mode minimizes the production of this noise. Note, however, that a slight loss in picture resolution may be observed in this mode.

## Emphasis

Emphasizing the high frequencies of a signal before processing (pre-emphasis) and de-emphasizing those high frequencies before output (de-emphasis). This reduces deterioration of the signal-to-noise ratio in the high frequency range.

## External synchronization

A method to maintain color subcarrier phase continuity by performing editing in two-frame units in order to achieve stable video without horizontal fluctuation at the edit points. For editing, a recorder VTR and a player VTR (or source VTR) are used, and external synchronization is commonly used to ensure that the operation timing control signals and time reference signals are synchronized.

## Insert editing

An edit mode for inserting new scenes into the middle of previously recorded scenes. CTL signals previously recorded on the tape are used. Consequently, this mode cannot be used for blank tapes. This mode assumes that CTL signals have somehow be recorded to the tape already.

*See also Assemble editing.*

## Longitudinal time code

*See LTC.*

## LTC

Abbreviation for Longitudinal Time Code. This is the time code recorded onto a longitudinal track of the tape. During the playback of still pictures, LTC cannot be read since the tape is not moving. During slow playback, the LTC output is so small that it may

not be read correctly, depending on the playback speed.

*See also VITC.*

### **Non-drop frame mode**

In this mode, drop frame mode processing is not performed. Since there is no frame cutting, a discrepancy of about 86 seconds occurs each day (in the case of a field frequency of 59.94 Hz) which causes problems when editing programs in units of seconds using the number of frames as a reference.

*See also Drop frame mode.*

### **Preroll**

The rewinding of a video tape in the player or recorder VTR by a certain length before an edit point, allowing the tape to attain a stable speed at the edit point and synchronization with the other video tape during editing.

### **Reference video signal**

A video signal containing a sync signal or sync and burst signal, used as a reference for synchronizing video equipment.

### **Servolocking**

The locking of the phase and speed of a VTR's head drum rotation and tape transport to a reference signal during recording and playback.

### **Standby-off mode**

A mode in which head drum rotation is stopped and tape tension is released, and thus the VTR is not ready for immediate recording and playback. This mode alleviates the tape and video heads from wear or damage.

### **An Standby-on mode**

A mode in which the head drum rotates with the tape wrapped around it, and thus the VTR is ready for immediate recording or playback. The VTR enters standby-off mode after remaining in standby-on mode for a specified length of time to prevent wear or damage to the tape and video heads.

### **Time code**

A digital signal recorded on the video tape that supplies information such as hour, minute, second and frame

number for each frame to facilitate the setting of edit points or searching for specific scenes on the tape.

There are two types of time codes: SMPTE (for the NTSC color system) and EBU (for the PAL/SECAM color system); and two time code recording formats: LTC (longitudinal time codes) which are CTL signals and audio signals simultaneously recorded longitudinally on the tape and VITC (vertical interval time codes) which are recorded on the video signal track.

### **Tracking**

The synchronizing of the head drum rotation phase and tape transport phase during playback and recording. Tracking is adjusted to eliminate picture instability when playing back material recorded on another VTR.

### **User bits**

A recordable 32-bit section in each time code on a video tape for recording such information as the recording year, month, and day, and the tape or program ID number.

### **Vertical interval time code**

*See VITC.*

### **VITC**

Abbreviation for Vertical Interval Time Code. This is a time code recorded on a video signal track during the vertical blanking interval. This VTR writes this time code in the AUX data area in the video signals. It can be read correctly even during slow or still picture playback.

*See also LTC.*

# Menu List

This section describes all of the VTR SETUP menu items. The VTR SETUP menu items are divided into the following categories by the function.

- Items relating to operations of this unit (Nos. 001 to ...)
- Items relating to operation panels (Nos. 101 to ...)
- Items relating to the remote interface (Nos. 201 to ...)
- Items relating to editing (Nos. 301 to ...)
- Items relating to prerolling (Nos. 401 to ...)
- Items relating to recording protection (Nos. 501 to ...)
- Items relating to the time code (Nos. 601 to ...)
- Items relating to the video control (Nos. 706 to ...)
- Items relating to the audio control (Nos. 807 to ...)

- Items relating to digital process (Nos. 902 to ...)
- Items relating to pulldown control (Nos. A01 to ...)
- Items relating to the HKSR-5105 (HDMI/i.LINK (HDV) output) (Nos. C01 to ...)
- Other items (Nos. T01 to ...)

For VTR SETUP menu operations, see “4-7-1 VTR SETUP Menu” on page 106.

In the “Setting” column of the table, the factory default settings are indicated by an enclosing box.

## Items Relating to Operations of This Unit (Nos. 001 to ...)

Item number	Item	Setting	Function
006	EXTERNAL REFERENCE select	<span style="border: 1px solid black;">extrn HD</span> extrn SD	This selects the signal used as reference by this unit. extrn HD: The signal input to the REF. INPUT 1 connector is used as the tri-level HD reference signal for playback. extrn SD: The signal input to the REF. INPUT 1 connector is used as the SD reference signal for playback.
007	SYNC PLAY	<span style="border: 1px solid black;">off</span> on	This is the mode for automatic correction at the start of playback. In sync play mode, for example when playing back the tape from a preroll point, the IN point is reached after exactly the preroll time has elapsed. off: Selects normal playback mode. on: Activates the sync play function for playback.  <b>Note</b> In sync play mode, the time after the tape transport starts until the video and sound appear is longer than in the normal playback mode.
008	LOCAL FUNCTION ENABLE	all disable <span style="border: 1px solid black;">stop&amp;eject</span> all enable local key map	When this unit is used in remote control mode, this selects which buttons on the control panel operate. all disable: All switches and buttons are disabled. stop & eject: Only the STOP and EJECT buttons operate. all enable: All switches and buttons are enabled. local key map: Only the buttons enabled in item 009 are operational.

Item number	Item	Setting	Function
009	LOCAL KEY MAP		Sets the LOCAL KEY MAP.
	Sub items		
	STOP	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The STOP button is disabled in remote control mode. enable: The STOP button operates in remote control mode.
	PLAY	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The PLAY button is disabled in remote control mode. enable: The PLAY button operates in remote control mode.
	STANDBY	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The STANDBY button is disabled in remote control mode. enable: The STANDBY button operates in remote control mode.
	EJECT	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The EJECT button is disabled in remote control mode. enable: The EJECT button operates in remote control mode.
	JOG	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The JOG button is disabled in remote control mode. enable: The JOG button operates in remote control mode.
	SHUTTLE	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The SHUTTLE button is disabled in remote control mode. enable: The SHUTTLE button operates in remote control mode.
	VAR	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The VAR button is disabled in remote control mode. enable: The VAR button operates in remote control mode.
	PREROLL	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The PREROLL button is disabled in remote control mode. enable: The PREROLL button operates in remote control mode.
	MENU&CURSOR	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The menu buttons and the cursor control buttons are disabled in remote control mode. enable: The menu buttons and the cursor control buttons operate in remote control mode.
	MONITOR	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: The MONITOR button is disabled in remote control mode. enable: The MONITOR button operates in remote control mode.
010	STOP CODE REC INHIBIT select	off <input type="checkbox"/> on casst	<p>Selects the record inhibit mode of stop code.</p> <p>off: Recording of stop code is enabled. (The REC INHIBIT indicator does not light.)</p> <p>on: Recording of stop code is inhibited. (The REC INHIBIT indicator lights.)</p> <p>casst: When the recording protection plug on the cassette is pushed in, this setting is displayed. This setting cannot be selected.</p> <p>The REC INHIBIT indicator lights or flashes to indicate the state of the recording inhibit mechanism on the cassette.</p> <p><i>For details, see item 104.</i></p>



Item number	Item	Setting	Function
017	PB/MU SELECT MENU		Selects output video and audio signals.
	Sub items		
	STAND BY OFF	PB/MU GR/MU	Selects the video and audio output signals in the “standby off” mode. PB/MU: The playback video signal is output. The audio output is turned off. GR/MU: Gray picture is output. The audio output is turned off.
	STAND BY ON	PB/MU GR/MU	Selects the video and audio output signals in the “standby on” mode. PB/MU: The playback video signal is output. The audio output is turned off. GR/MU: Gray picture is output. The audio output is turned off.
	SHUTTLE	PB/MU GR/MU PB/PB	Selects the video and audio output signals during shuttle playback. PB/MU: The playback video signal is output. The audio output is turned off. GR/MU: Gray picture is output. The audio output is turned off. PB/PB: The playback video and audio signals are output.
	JOG	PB/PB PB/MU	Selects the video and audio output signals during jog playback. PB/PB: The playback video and audio signals are output. PB/MU: The playback video signal is output. The audio output is turned off.
	VAR	PB/PB PB/MU	Selects the video and audio output signals during “variable” playback. PB/PB: The playback video and audio signals are output. PB/MU: The playback video signal is output. The audio output is turned off.
018	AUTO EJECT LEVEL1 (HDCAM-SR)	off LEVEL1 LEVEL2	Selects the condition under which the cassette is automatically ejected after being played back for a few seconds. When the cassette is ejected in accordance with this setting, the warning message “17 PB FREQUENCY IS UNSUITABLE” appears in the display. off: The cassette is not ejected. LEVEL1: When a tape without video playback compatibility is played back, the cassette is automatically ejected. There is no playback compatibility among 1080 4:2:2 format, 1080 4:4:4 format, 1080 4:4:4 HQ format, and 720P format. LEVEL2: The cassette is ejected when the field frequency, PsF mode, or interlace mode of the tape differs from that of this unit.

Item number	Item	Setting	Function
019	AUTO EJECT LEVEL2 (HDCAM)	<input type="checkbox"/> off LEVEL1 LEVEL2 LEVEL3	Selects the tape conditions under which a cassette is automatically ejected in playback (after approx. 3 seconds playback). When the cassette is automatically ejected, a warning message "17 PB FREQUENCY IS UNSUITABLE" appears. off: The cassette is not ejected. LEVEL1: When a tape without audio playback compatibility is played back, the cassette is automatically ejected. There is no playback compatibility between playback frame rates of 24, 25 fps and 30 fps. (There is compatibility for PsF, interlacing, or 0.1% discrepancy.) LEVEL2: Excluding a tape with compatibility for a frequency discrepancy of 0.1%, when a tape without compatibility is played back, the cassette is automatically ejected. LEVEL3: When a tape other than in the mode selected as the system is played back, the cassette is automatically ejected. (This includes PsF, and interlace mode differences.)
021	SOFT REWIND	<input type="checkbox"/> off on	off: Functions identically to previous models. on: When an HDCAM SR L cassette is inserted in the unit and the PREROLL and SHUTTLE buttons are pressed simultaneously, the tape is transported to its end in fast forward mode and then to its beginning in SOFT REWIND mode so that the tape is wound in smoother shape. The cassette is then automatically ejected.

## Items Relating to Operation Panels (Nos. 101 to ...)

Item number	Item	Setting	Function
101	SELECTION FOR SEARCH DIAL ENABLE	dial direct <input type="checkbox"/> via search key	Determines how the unit is set to search mode. dial direct: The unit enters search mode when you rotate the search dial in all modes. via search key: The unit enters search mode when you press the SHUTTLE, JOG or VAR button.
102	REFERENCE SYSTEM ALARM	off <input type="checkbox"/> on	Specifies where or not to display a warning when audio/video reference signal is not present or this unit is out of phase with the video reference signal. off: No warning is displayed. on: Warning is displayed by flashing STOP button.
104	REC INHIBIT LAMP FLASHING	<input type="checkbox"/> off on	Specifies whether the REC INHIBIT indicator lights or flashes, when record-protect plug on the back side of the inserted cassette tape is pressed down. off: The REC INHIBIT indicator lights up. on: The REC INHIBIT indicator flashes.

Item number	Item	Setting	Function
107	JOG DIAL RESPONSE	<div>type1: -1 to +1</div> <div>type2: -2 to +2</div> <div>type3: -2 to +2</div>	<p>Selects the tape speed (command of this unit) characteristics for search dial rotation.</p> <p>TYPE1: Tape speed changes linearly in a range of -1 to +1 times normal tape speed.</p> <p>TYPE2: Tape speed changes in a range of -2 to +2 times normal tape speed as shown below in TYPE2. (Tape speed does not change when the search dial is within a range of <math>\pm 1</math> times normal tape speed.)</p> <p>TYPE3: Tape speed changes linearly in a range of -2 to +2 times normal tape speed as shown below in TYPE3.</p> <div> <div> <p>TYPE2 speed</p> </div> <div> <p>TYPE3 speed</p> </div> </div>
109	KEY INHIBIT	<div>off</div> <div>on</div>	When this is set to ON, the "KEYINH" indicator in the information display appears, and the editing control block, tape transport control block, search control block, and REMOTE button are disabled.
111	VARIABLE SPEED LIMIT IN KEY PANEL CONTROL	<div>off</div> <div>on</div>	<p>Sets the tape speed range during variable-speed (VAR) playback on the control panel of this unit.</p> <p>off: The range of the tape speed is -0.5 to +1 times normal speed (HDCAM-SR), -1 to +2 times normal speed (HDCAM), or -1 to +3 times normal speed (Digital Betacam).</p> <p>on: The range of the tape speed is 0 to +1 times normal speed.</p>
112	CTL LOCK IN VAR/ SHTL	<div>off</div> <div>on</div>	<p>CTL locks the tape transport during variable-speed playback or shuttle playback.</p> <p>off: CTL does not lock.</p> <p>on: CTL locks the tape transport at speeds of -0.5, +0.5, and 1 times normal speed (HDCAM-SR), -1, -0.5, +0.5, +1, +2 times normal speed (HDCAM), or -1, -0.5, +0.5, +1, +2, +3 times normal speed (Digital Betacam).</p>
113	DT MODE	<div>field</div> <div>frame</div>	<p><b>For Digital Betacam/HDCAM format</b></p> <p>Sets the DT operation mode.</p> <p>field: Enters the field playback mode (Field DT mode) when the tape speed is -1 to +1 times normal speed.</p> <p>frame: Enters the frame playback mode (Frame DT mode) when the tape speed is +1 to +2 times normal speed.</p> <p><b>For HDCAM-SR format</b></p> <p>Sets the playback mode.</p> <p>field: Enters the field playback mode.</p> <p>frame: Enters the frame playback mode.</p>
114	POWER-ON MENU select	<div>HOME menu</div> <div>TC menu</div> <div>VIDEO menu</div> <div>AUDIO menu</div> <div>CUE menu</div> <div>PF1 menu</div> <div>PF2 menu</div> <div>ALT+PF1 menu</div> <div>ALT+PF2 menu</div>	Selects the menu displayed when the unit is powered on.

Item number	Item	Setting	Function
115	KEY BEEP	high mid low <input type="checkbox"/> off	Selects the volume of the key click sound.
116	ALARM BEEP	<input type="checkbox"/> high mid low off	Selects the volume of the alarm sound.
117	SCREEN SAVER	3 min 10 min 60 min <input type="checkbox"/> off	Selects the time after which the screen saver function operates for the color display.
118	SCREEN SAVER S	off <input type="checkbox"/> on	Set the screen-saver for the information display. off: Do not use screen-saver. on: Use screen-saver. The information display reverses at regular intervals.
120	WARNING DISPLAY	<input type="checkbox"/> off on	Selects whether warning messages should be displayed in the lower part of the time code display for the HOME menu, the TC menu, the VIDEO menu, the AUDIO menu, the PF1 menu, and the PF2 menu. off: Do not display warning messages. on: Display warning messages. <b>Notes</b> <ul style="list-style-type: none"> <li>No warning messages are displayed for the CUE menu, and SETUP menu, so check by viewing a menu other than the CUE menu, and SETUP menu.</li> <li>If LOST LOCK occurs during playback, a LOST LOCK warning message is always displayed.</li> </ul>
121	INFO DISPLAY MODE	rotation latch <input type="checkbox"/> momentary	Sets the display mode for the information display. rotation: The display automatically changes in sequence, at regular intervals. latch: Hold down the MULTI CONTROL knob and turn it to change the display, which remains unchanged when you release the knob. momentary: Hold down the MULTI CONTROL knob and turn it to change the display; after a set time interval, the display reverts to the first page.
122	MULTI CUE CLEAR by inject	<input type="checkbox"/> on off	Selects whether to erase cue point data in multi-cue mode when a cassette is inserted. on: Erase cue point data. off: Do not erase cue point data.
124	Tele-File MENU auto popup	<input type="checkbox"/> off on	Specifies whether or not the Tele-File menu appears automatically when a cassette with a memory label is inserted. off: The Tele-File menu does not appear. on: The Tele-File menu appears.
125	Tele-File THREAD COUNTER clear mode	<input type="checkbox"/> not clear when format	Specifies whether or not the thread counter is reset when a memory label is formatted. not clear: The thread counter is not reset. when format: The thread counter is reset.
126	Tele-File ENTRY POINT	IN/OUT Point <input type="checkbox"/> CUE Point	Specifies whether or not to display the log data (IN and OUT points) in the Tele-File menu. IN/OUT Point: The log data (IN and OUT points) is displayed. CUE Point: The log data (IN and OUT points) is not displayed.

Item number	Item	Setting	Function
127	Tele-File IN OUT Input Continue	on <input type="checkbox"/> off	Specifies whether or not to input the log data (IN and OUT points) continuously in the Tele-File menu. on: The log data (IN and OUT points) can be input continuously. off: The log data (IN and OUT points) cannot be input continuously.
129	STOP CODE FUNCTION		Stop code detection mode and adjustment of stop position when a stop code is detected.
	Sub items		
	DETECT BEEP	on <input type="checkbox"/> off	on: When a stop code is detected, sound a beeper. off: When a stop code is detected, do not sound a beeper.
	DETECT STOP	on <input type="checkbox"/> off	on: When a stop code is detected, stop the tape. ("D-STOP" appears in the information display.) off: When a stop code is detected, do not stop the tape.
	STOP ADJUST	150 fr <input type="checkbox"/> 0 fr	When a stop code is detected, adjust the tape stop position from the normal stop position in the direction of the SOM point (program start point), in the range 0 to 150 frames.
	REC ADJUST	5sec 4sec <input type="checkbox"/> 3sec 2sec 1sec	Specifies how many seconds before the SOM point to start recording a stop code.
130	S-LCD DIMMER	16 to <input type="checkbox"/> 11 to 0	Adjusts the information display luminance.
131	CHANGED MENU HIGHLIGHT		Changes the display color of items whose setting has been changed.
	Sub items		
	ITEM SETTING	<input type="checkbox"/> off on	off: Changed menu setting values do not change display color. on: Changed menu setting values are displayed in yellow.
	DEFAULT SETTING	<input type="checkbox"/> off on	off: Menu numbers with changed DEFAULT values do not change display color. on: Menu numbers with changed DEFAULT values are displayed in yellow.
132	KNOB MODE	<input type="checkbox"/> set default move window	Selects the behavior of the unit when the MULTI CONTROL knob is pressed during VTR SETUP menu operations. set default: When a setting value is being selected, selects the default value. move window: Move between the item window and the window for changing values.

## Items Relating to Remote Interface (Nos. 201 to ...)

Item number	Item	Setting	Function
201	REMOTE 9-PIN	<input type="checkbox"/> off on	<p>When this is set to "on", this unit is controlled from the device connected to the REMOTE 1-IN(9P) or REMOTE 1-I/O(9P) connector.</p> <p><b>Note</b></p> <p>When this unit is controlled by a device connected to the REMOTE 1-IN(9P), REMOTE 2 PARALLEL I/O(50P), or HDV OUTPUT connector, the editing control buttons and all of the tape transport buttons except STOP and EJECT are disabled. It is also possible to make a setting so that all of the buttons are disabled.</p> <p><i>For details, see item 008.</i></p>

Item number	Item	Setting	Function
202	REMOTE 50-PIN	<input type="checkbox"/> off on	When this is set to “on”, this unit is controlled from the device connected to the REMOTE 2 PARALLEL I/O(50P) connector.
203	PARALLEL RUNNING	<input type="checkbox"/> disable enable	<p>Selects whether two or more units can be operated synchronized.</p> <p>disable: Synchronized operation is not carried out.</p> <p>enable: Synchronized operation is enabled.</p> <p><b>Note</b></p> <p>For synchronized operation to be possible, this item must be set to “enable” on all of the connected units.</p>
204	VIDEO REMOTE CONTROL SELECT		Make settings for control from HKDV-900/503 via the VIDEO CONTROL (9P) connector.
	Sub item		
	1 IMAGE ENHANCER	U&D UP <input type="checkbox"/> DOWN	<p>Select whether to control the up-converter or down-converter whether controlling the image enhancer.</p> <p>U&amp;D: Control both the up-converter and down-converter.</p> <p>UP: Control the up-converter.</p> <p>DOWN: Control the down-converter.</p>
	2 D2 SETUP	BLACK <input type="checkbox"/> SETUP	<p>Select the menu item to be controlled by the SETUP dial on the HKDV-900/503 with the D2 button pressed.</p> <p>BLACK: Control menu item 743.</p> <p>SETUP: Control menu item 762.</p> <p><i>For details, see items 743 and 762.</i></p> <p><b>Note</b></p> <p>After changing the setting for this item, power off this unit or HKDV-900/503 and power it on again.</p>
205	REMOTE NETWORK	on <input type="checkbox"/> off	<p>Specifies whether or not control from a network is possible.</p> <p>on: Allows control from a network.</p> <p>off: Does not allow remote control from a network.</p>
207	REMOTE i.LINK	<input type="checkbox"/> off on	<p>Specifies whether or not to control this unit from the device connected to the HDV OUTPUT connector through AV/C command when the HKSR-5105 is installed.</p> <p>on: Allows control of this unit.</p> <p>off: Does not allow control this unit.</p> <p><i>For details on the operable switches and buttons while this unit is in remote control mode, see item 008.</i></p> <p><b>Note</b></p> <p>To allow hcontrol this unit from the external device, the optional HKSR-5105 must be installed.</p>
211	REMOTE 1 PORT	<input type="checkbox"/> I & I/O IN I/O	<p>Specifies whether to use one or both of the REMOTE 1-IN(9P) and REMOTE 1-I/O(9P) connectors on the connector panel.</p> <p>I &amp; I/O: Use both the REMOTE 1-IN(9P) connector and the REMOTE 1-I/O(9P) connector.</p> <p>IN: Use only the REMOTE 1-IN(9P) connector.</p> <p>I/O: Use only the REMOTE 1- I/O(9P) connector.</p>

## Items Relating to Editing (Nos. 301 to ...)

Item number	Item	Setting	Function
302	PREROLL TIME	0 sec : 5 sec : 30 sec	This sets the preroll time. The range is from 0 to 30 seconds, in steps of 1 second. The preroll time should generally be set to at least 3 seconds, and for phase adjustment with an editing controller it is recommended to set the preroll time to at least 5 seconds.
303	POSTROLL TIME	0 sec : 5 sec : 30 sec	This sets the tape running time after passing the OUT point (postroll time) in automatic repeat playback. The range is from 0 to 30 seconds, in steps of 1 second.
304	VAR SPEED RANGE FOR SYNCHRONIZATION	narrow wide	<p>Specifies the variable tape speed range when the variable speed playback is executed by a remote control unit connected to the REMOTE 1-IN(9P) connector.</p> <p>narrow: -0.5 to +1 times normal tape speed (HDCAM-SR), -1 to +2 times normal tape speed (HDCAM), or -1 to +3 times normal tape speed (Digital Betacam).</p> <p>wide: -1 to +2 times normal tape speed (HDCAM-SR), -1.15 to +2.45 times normal tape speed (HDCAM), or -1.15 to +3.45 times normal tape speed (Digital Betacam).</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>When this item is set to "narrow", variable speed playback is possible within the range of speed specified for the respective formats.</li> <li>When an editing control unit such as BVE-9100 is connected for DT editing, select "wide".</li> </ul>

## Items Relating to Prerolling (Nos. 401 to ...)

Item number	Item	Setting	Function
401	FUNCTION MODE AFTER CUE-UP	stop still	<p>Selects the operation mode that this unit changes to after completing a cue up operation.</p> <p>stop: Enters stop mode.</p> <p>still: Enters still-picture mode (search mode).</p> <p><b>Note</b></p> <p>When setting the standard constant on the editor and control the unit, set to "stop".</p>
403	CUEUP BY TC	capstan only reel/capstan	<p>This setting is only active when item 602 is set to "TC" or "UBIT".</p> <p>capstan only: The tape runs with the pinch ON state during cue up. (The maximum tape speed is ten times normal tape speed.)</p> <p>reel/capstan: The tape runs with the pinch OFF state during cue up. When the tape nears the cue up point and tape speed drops to slow, the pinch turns ON.</p>

Item number	Item	Setting	Function
404	CUEUP BY CTL	capstan only reel/capstan	This setting is only active when item 602 is set to "CTL". capstan only: The tape runs with the pinch ON state during cue up. (The maximum tape speed is ten times normal tape speed.) reel/capstan: The tape runs with the pinch OFF state during cue up. When the tape nears the cue up point and tape speed drops to slow, the pinch turns ON.  When this unit is controlled by an editor (BVE-2000/BVE-9100, etc), and the setting is "reel/capstan", cue up operations are done at high speed.  Select "capstan only" when editing precision has priority.
405	CUE MENU DEFAULT MODE select	page mode extend mode	Selects the default mode when the CUE menu is opened. page mode: PAGE mode extend mode: EXTEND mode
406	CUE MENU PREROLL OFFSET	0 sec : 30 sec	Sets the preroll time for a cueing up operation from the CUE menu.
407	AUTO REWIND	off on s.rew	Selects the rewind mode for the end of the tape. off: The tape transport stops at the end of the tape. on: The tape is automatically rewound from the end of the tape. s.rew: The tape is automatically rewound from the end of the tape. For HDCAM SR L cassettes, the tape is rewound smoothly to its beginning in SOFT REWIND mode. (The cassette is not automatically ejected.) For cassettes other than HDCAM SR L, SOFT REWIND mode is disabled and the tape is rewound in standard REW mode.
408	AUTO CUE UP	off on	Selects whether or not to cue up when switching from standby-off to standby-on. off: No cue-up. on: Cue up to the time code immediately before switching to standby-off.

## Items Relating to Recording Protection (Nos. 501 to ...)

Item number	Item	Setting	Function
501	STILL TIMER	0.5 sec 5 sec 10 sec 20 sec 30 sec 40 sec 50 sec 1 min 2 min 3 min 4 min 5 min 6 min 7 min 8 min 30 min	Select the amount of time after which this unit to automatically enters tape-protect mode, for the purpose of protecting the video head and tape. This is the time between stopping of the tape (stop mode or still-picture mode in search mode) and the change to tape-protection mode. The selectable range of time is from 0.5 second to 30 minutes.



Item number	Item	Setting	Function
502	TAPE PROTECTION MODE FROM SEARCH	<span>step fwd</span> standby off tension release	Specifies the tape-protect mode to which this unit changes from still-picture mode while searching (JOG/SHUTTLE/ VAR). The unit enters automatically the specified tape-protect mode after the time specified in item 501 has elapsed. step fwd: A two-second step advance is repeated in forward direction at 1/30 times normal tape speed. standby off: This unit enters standby off mode (standby is canceled). tension release: This unit enters tension release mode (tape tension is released).
503	TAPE PROTECTION MODE FROM STOP	<span>standby off</span> tension release	Specifies the tape-protect mode to which this unit changes to from the stop mode. The unit automatically enters the specified tape-protect mode after the elapse of time specified by item 501. standby off: This unit enters standby off mode (standby is canceled). tension release: This unit enters tension release mode (tape tension is released).
504	DRUM ROTATION IN STANDBY OFF	<span>off</span> on	Sets the drum rotation to “on” or “off” during standby-off mode. off: Drum rotation is stopped. on: Drum rotation continues.
505	STILL TENSION	<span>normal</span> loose	Sets the tape tension control in still-picture mode. normal: Maintains the tape tension that ensures unaffected playback even in still-picture mode. (This is the normal setting for operations of this unit.) loose: Sets the tape tension lower than that of the “normal” setting after this unit enters still-picture mode.
506	DRUM ROTATION TIMER	1 min 2 min 3 min 4 min 5 min 10 min 15 min 30 min 1H 2H 3H <span>4H</span> 8H	When menu item 502 or 503 set to “tension release”, or when menu item 504 is set to “on”, the drum motor of this unit continues to rotate after tension release mode is entered. This menu item sets the time until the unit enters standby off mode and the drum motor stops rotating after entering tension release mode. The selectable time ranges from one minute to eight hours.

## Items Relating to the Time Code (Nos. 601 to ...)

Item number	Item	Setting	Function
601	DF/NDF MODE select	<span>drop frame</span> non-drop frame auto	<p>Selects the running mode for the time code after frame conversion and the CTL counter.</p> <p>drop frame: drop frame mode (“DF” indication)</p> <p>non-drop frame: non-drop frame mode (“NDF” indication)</p> <p>auto: Drop frame / non-drop frame mode is selected automatically on the basis of the frame frequency of the unit. For 29.97 Hz/59.94 Hz drop frame mode is selected, and for 30 Hz/60 Hz non-drop frame mode is selected. The setting of the frame frequency mode is carried out with the <span>F9</span> (OTHERS CHECK)/ <span>F9</span> (SYSTEM) button in MAINTENANCE menu.</p> <p><b>Note</b> This setting is only active when the frame frequency of the unit is 29.97 Hz, 59.94 Hz, 30 Hz, or 60 Hz.</p>

Item number	Item	Setting	Function
602	TIMER MODE select	CTL [TC] UBIT	Selects the mode for displaying time data. CTL: During playback the CTL signal recorded on the tape is counted, and the tape running time is displayed in hours, minutes, seconds, and frames. TC: The time code value read by the time code reader, or the time code value generated by the time code generator is displayed. Use item 603 to toggle between VITC and LTC. UBIT: The user bits inserted in the playback time code are displayed. Use item 603 to toggle between VITC and LTC.
603	TCR MODE select	[LTC] auto VITC	Selects the time code read by the time code reader during playback. LTC: LTC is read. auto: If the playback speed is in the range $\pm 1/2$ normal speed, VITC is read, and if outside this range LTC is read. VITC: VITC is read.
604	TC2 MODE SEL	UBV UBR CTL VITC auto LTC [off]	Selects the time data appearing in the second line. UBV: Displays UBV. UBR: Displays UBR. CTL: Displays CTL. VITC: Displays VITC. auto: Displays VITC when the playback speed is in the range $\pm 1/2$ normal speed, and LTC if outside this range. LTC: Displays LTC. off: Does not display time data in the second line.
605	TAPE TIMER DISPLAY	+/- 12H [24H]	Selects whether the CTL counter operates in 12-hour display mode or 24-hour display mode. +/-12H: 12-hour display mode 24H: 24-hour display mode  <b>Note</b> In the $\pm 12$ -hour display, the tens digit of the hours value is dropped.
610	DOWNCONVERTER VICT output	[on] off	Selects whether or not to insert VITC data in the HD-SD converter output. on: VITC data is inserted. off: VITC data is not inserted.
611	VITC POSITION-1 select (NTSC)	12,281 line : [16,279 line] : 20,283 line	When 29.97PsF/59.94i mode is selected on this unit, this setting specifies the lines in which the VITC signal is inserted. It can be inserted in any lines from 12,281 to 20,283.  <b>Note</b> Items 611 and 612 allow VITC to be inserted in two lines.
612	VITC POSITION-2 select (NTSC)	12,281 line : [18,281 line] : 20,283 line	When 29.97PsF/59.94i mode is selected on this unit, this setting specifies the lines in which the VITC signal is inserted. It can be inserted in any lines from 12,281 to 20,283.  <b>Note</b> Items 611 and 612 allow VITC to be inserted in two lines.
616	VITC POSITION-1 select (PAL)	9,322 line : [19,332 line] : 22,335 line	When 25PsF/50i mode is selected on this unit, this setting specifies the lines in which the VITC signal is inserted. It can be inserted in any lines from 9,322 to 22,335.  <b>Note</b> Items 616 and 617 allow VITC to be inserted in two lines.

Item number	Item	Setting	Function
617	VITC POSITION-2 select (PAL)	9,322 line : 21,334 line : 22,335 line	When 25PsF/50i mode is selected on this unit, this setting specifies the lines in which the VITC signal is inserted. It can be inserted in any lines from 9,322 to 22,335.  <b>Note</b> Items 616 and 617 allow VITC to be inserted in two lines.
620	SUPERIMPOSED CHARACTER	off on	Specifies whether or not to superimpose time data and operating status information on the signal output from the MONITOR connector of SD SDI OUTPUT, the SD OUTPUT COMPOSITE connector and MONITOR connector of HD SDI OUTPUT. off: No information is superimposed. on: Information is superimposed.
622	CHARACTER H-POSITION	0 : 8 : 15	Sets the horizontal position of text information superimposed on the signal output from the MONITOR connector of SD SDI OUTPUT, the SD OUTPUT COMPOSITE connector and MONITOR connector of HD SDI OUTPUT. A setting of 0 displays the information at the left edge of the screen, and the position moves to the right as the setting is increased. There are 16 possible settings, from 0 to 15.
623	CHARACTER V-POSITION	0 : 22 : 23	Sets the vertical position of text information superimposed on the signal output from the MONITOR connector of SD SDI OUTPUT, the SD OUTPUT COMPOSITE connector and MONITOR connector of HD SDI OUTPUT. A setting of 0 displays the information at the bottom of the screen, and the position moves up as the setting is increased. There are 24 possible settings, from 0 to 23.  <b>Note</b> If two-line display is selected in item 626, sometimes the second line will disappear in the middle of the screen.
624	CHARACTER TYPE	without BG outlined translucent with BG	Sets the style of text information such as time codes output from the MONITOR connector of SD SDI OUTPUT the SD OUTPUT COMPOSITE connector and MONITOR connector of HD SDI OUTPUT. without BG: White characters, with no background. outlined: White characters outlined in black. translucent: White characters on a gray screen background. with BG: White characters on a black background.  <b>Note</b> For the SD OUTPUT COMPOSITE (MONITOR) connector, the “translucent” setting is automatically changed to “with BG”.
625	CHARACTER SIZE	× 1 × 2	Sets the size of text information such as time codes output from the MONITOR connector of SD SDI OUTPUT, the SD OUTPUT COMPOSITE connector and MONITOR connector of HD SDI OUTPUT. × 1: Normal size. × 2: Twice normal size.

Item number	Item	Setting	Function
626	DISPLAY INFORMATION select	time data & status time data & UB time data & CTL time data & VITC <span>time data only</span>	When item 620 is set to “on”, this setting specifies the content of text information output from the MONITOR connector of SD SDI OUTPUT, the SD OUTPUT COMPOSITE connector and FORMAT CONV. OUTPUT (OPTION) connector. time data & status: Timer counter display and status information. time data & UB: Timer counter display and user bits. time data & CTL: Timer counter display and CTL. time data & VITC: Timer counter display and VITC. time data only: Timer counter display only.
627	CHAR WARNING DISPLAY at dual line mode	<span>off</span> on	When item 626 is set to anything other than “time data only”, this item specifies whether warning messages flash on the second line or not. off: Warning messages do not flash. on: If a warning message exists, it flashes.  <b>Notes</b> <ul style="list-style-type: none"> <li>Messages that have been cleared are not displayed. <i>For more information about clearing warning messages, see “Clearing warning messages” on page 127.</i></li> <li>When there are multiple warning messages, each message flashes twice before it is replaced by the next message.</li> </ul>
628	REMAIN TIME DISPLAY	<span>off</span> 10min on	Sets whether to display remaining time on the tape in superimposed character position. off: Do not display remaining time. 10min: Display remaining time when it is 10 minutes or less. on: Always display remaining time.  <b>Note</b> The remaining time on the tape is not displayed when no cassette is inserted. The remaining time is not also displayed until this unit finishes detecting the diameter of the wound tape and estimating the remaining time immediately after the cassette is inserted.
629	CONDITION DISPLAY VIDEO MONITOR	enable <span>disable</span>	Sets whether or not to display playback signal status in superimposed character position. enable: Displays playback signal status. disable: Does not display playback signal status.
630	TC CONVERT	<span>off</span> on	Selects whether to convert the playback time code to the operating frequency time code when tapes recorded with different frame rates are used for off-speed playback. off: Does not convert the time code. on: Converts the time code.
631	ORIGINAL TC display	<span>off</span> on	When item 630 is set to “on,” this setting specifies whether the 24-frame time code is displayed or not on the control panel of this unit before conversion. off: The 24-frame time code is not displayed before conversion. on: The 24-frame time code is displayed before conversion. The type of time code displayed is specified by item 603.



## Items Relating to the Video Control (Nos. 706 to ...)

Item number	Item	Setting	Function
706	FORCED VERTICAL INTERPOLATION OFF	<input type="text" value="auto"/> forced YADD off	Specifies whether or not Y-add operation mode is automatically turned on during DT playback. auto: Y-add operation mode is automatically turned on. forced YADD off: Y-add operation mode is off all the time.  <b>Note</b> This item is automatically set to “forced YADD off” during 444SQ 3D mode and 444SQ variable speed mode.
708	MASTER LEVEL (HD) preset: 100% (4000H)	0.0% (0H) ⋮ <input type="text" value="100%(4000H)"/> ⋮ 141.3% (5A70H)	Adjusts the level of the HD video signal output from the HD SDI OUTPUT connectors. Simultaneously adjusts the Y, P <sub>B</sub> , and P <sub>R</sub> levels.
709	Y LEVEL (HD) preset: 100% (4000H)	0.0% (0H) ⋮ <input type="text" value="100%(4000H)"/> ⋮ 141.3% (5A70H)	Adjusts the level of the HD video signal output from the HD SDI OUTPUT connectors. Adjusts the Y level of the video signal.
710	P <sub>B</sub> LEVEL (HD) preset: 100% (4000H)	0.0% (0H) ⋮ <input type="text" value="100%(4000H)"/> ⋮ 141.3% (5A70H)	Adjusts the level of the HD video signal output from the HD SDI OUTPUT connectors. Adjusts the P <sub>B</sub> level of the video signal.
711	P <sub>R</sub> LEVEL (HD) preset: 100% (4000H)	0.0% (0H) ⋮ <input type="text" value="100%(4000H)"/> ⋮ 141.3% (5A70H)	Adjusts the level of the HD video signal output from the HD SDI OUTPUT connectors. Adjusts the P <sub>R</sub> level of the video signal.
712	SETUP LEVEL (HD) preset: 0	−10.0 ⋮ <input type="text" value="0.0"/> ⋮ 10.0	Adjusts the level of the HD video signal output from the HD SDI OUTPUT connectors. Adjusts the setup level of the video signal.
713	SYNC PHASE (HD) preset: 0	−128 ⋮ <input type="text" value="0"/> ⋮ 127	Controls the phase of the HD video signal output from the HD SDI OUTPUT connectors, according to the menu.  <b>Note</b> This item does not function during 444SQ 3D mode and 444SQ variable speed mode.
714	FINE (HD) preset: 0	<input type="text" value="0"/> ⋮ 1024	Controls the phase of the HD video signal output from the HD SDI OUTPUT connectors, according to the menu.  <b>Note</b> This item does not function during 444SQ 3D mode and 444SQ variable speed mode.
720	HD OUT BLANK	<input type="text" value="through"/> blank	Turns on and off vertical interval blanking processing of the HD video signals output from the HD SDI OUTPUT connectors and the FORMAT CONV. OUTPUT (OPTION) connectors. through: Do not perform blanking processing. on: Perform blanking processing.

Item number	Item	Setting	Function
740	VIDEO GAIN (ALL) (HD/UC/SD/DC) preset: 100% (4000H)	0.0% (0H) : 100% (4000H) : 141.3% (5A70H)	Adjusts the video gain of HD, UC, SD, and DC output. The video level increases with larger setting values of this item.
741	CHROMA GAIN (ALL) (HD/UC/SD/DC) preset: 100% (4000H)	0.0% (0H) : 100% (4000H) : 141.3% (5A70H)	Adjusts the chroma gain of HD, UC, SD, and DC output. The chroma level increases with larger setting values of this item.
742	CHROMA PHASE (ALL) (HD/UC/SD/DC) preset: 0	–127 : 0 : 127	Adjusts the chroma phase (HUE) of HD, UC, SD, and DC output.
743	BLACK LEVEL (ALL) (HD/UC/SD/DC) preset: 100% (4000H)	–31.0% (0H) : 0 (110H) : 31.0% (220H)	Adjusts the black level of HD, UC, SD, and DC output.  <b>Note</b> The range of control possible from the HKDV-900/503 is –8.0% to 8.0%.
755	MASTER LEVEL (D1) preset: 100% (4000H)	0.0% (0H) : 100% (4000H) : 141.3% (5A70H)	Adjusts the level of the D1 video signal output from SD SDI OUTPUT. Simultaneously adjusts the Y, B–Y, and R–Y level.
756	Y LEVEL (D1) preset: 100% (4000H)	0.0% (0H) : 100% (4000H) : 141.3% (5A70H)	Adjusts the level of the D1 video signal output from SD SDI OUTPUT. Adjusts the Y level of the video signal.
757	B–Y LEVEL (D1) preset: 100% (4000H)	0.0% (0H) : 100% (4000H) : 141.3% (5A70H)	Adjusts the level of the D1 video signal output from SD SDI OUTPUT. Adjusts the B–Y level of the video signal.
758	R–Y LEVEL (D1) preset: 100% (4000H)	0.0% (0H) : 100% (4000H) : 141.3% (5A70H)	Adjusts the level of the D1 video signal output from SD SDI OUTPUT. Adjusts the R–Y level of the video signal.
762	SETUP LEVEL (CST) preset: 7.5 IRE	0.0 : 7.5 : 10.0	Adjusts the setup level of the analog composite video signal output from SD OUTPUT COMPOSITE (MONITOR) connector.
763	SYNC PHASE (SD) preset: 0	–128 : 0 : 127	Adjusts the phase of the D1 video signal output from SD SDI OUTPUT and analog composite video signal output from SD OUTPUT COMPOSITE (MONITOR) connector.
764	FINE (SD) preset: 0	0 : 1024	Makes fine adjustments to the phase of the D1 video signal output from SD SDI OUTPUT and analog composite video signal output from SD OUTPUT COMPOSITE (MONITOR) connector.

Item number	Item	Setting	Function
775	VIDEO OUTPUT DATA	8bit 10bit	Sets the bit size of the output data from the HD-SD converter. 8bit: When connected to an 8-bit system 10bit: When connected to a 10-bit system  <b>Note</b> Make sure the bit length matches the destination device.
777	DOWNCONVERTER ACTIVE LINE	486 line 485 line	Sets the number of active lines in the down converter output (NTSC). 486 line: 486 lines (Line 20 of the second field is active.) 485 line: 485 lines (Line 20 of the second field is blank.)
778	BLANK LINE NTSC Sub items all line 12, 275 line 13, 276 line 14, 277 line 15, 278 line 16, 279 line 17, 280 line 18, 281 line 19, 282 line 20, 283 line 21, 284 line	blank through	For Digital Betacam (NTSC) playback, this selects whether or not to apply blanking to the vertical blanking interval of the SD video signal. This selection can be made for each line separately, and the Y/C signals and odd/even fields are blanked simultaneously. blank: Blank line. through: Do not blank line. all line (sub item): When this item is selected, the other items all take the same values.
779	BLANK LINE PAL Sub items all line 9, 322 line 10, 323 line 11, 324 line 12, 325 line 13, 326 line 14, 327 line 15, 328 line 16, 329 line 17, 330 line 18, 331 line 19, 332 line 20, 333 line 21, 334 line 22, 335 line	blank through	For Digital Betacam (PAL) playback, this selects whether or not to apply blanking to the vertical blanking interval of the SD video signal. This selection can be made for each line separately, and the Y/C signals and odd/even fields are blanked simultaneously. blank: Blank line. through: Do not blank line. all line (sub item): When this item is selected, the other items all take the same values.



## Items Relating to the Audio Control (Nos. 807 to ...)

Item number	Item	Setting	Function
807	AUDIO MONITOR-L select		Selects the audio channel output from the MONITOR OUTPUT L connector.
	Sub items		
	A-MON CH1	disable <input type="checkbox"/> enable	
	A-MON CH2	<input type="checkbox"/> disable enable	
	A-MON CH3	<input type="checkbox"/> disable enable	
	A-MON CH4	<input type="checkbox"/> disable enable	
	A-MON CH5	<input type="checkbox"/> disable enable	
	A-MON CH6	<input type="checkbox"/> disable enable	
	A-MON CH7	<input type="checkbox"/> disable enable	
	A-MON CH8	<input type="checkbox"/> disable enable	
	A-MON CH9	<input type="checkbox"/> disable enable	
	A-MON CH10	<input type="checkbox"/> disable enable	
	A-MON CH11	<input type="checkbox"/> disable enable	
	A-MON CH12	<input type="checkbox"/> disable enable	

Item number	Item	Setting	Function
808	AUDIO MONITOR-R select		Selects the audio channel output from the MONITOR OUTPUT R connector.
	Sub items		
	A-MON CH1	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH2	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH3	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH4	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH5	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH6	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH7	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH8	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH9	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH10	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH11	<input type="checkbox"/> disable <input type="checkbox"/> enable	
	A-MON CH12	<input type="checkbox"/> disable <input type="checkbox"/> enable	
809	DIGITAL JOG SOUND	<input type="checkbox"/> on off	Switches digital jog sound on or off. off: Digital jog sound is off. In this case, the audio from the digital channels is output, even in STILL mode, without speed correction processing on: Digital jog sound is on.
813	AUDIO MONITOR OUTPUT MIXING	add <input type="checkbox"/> rms average	Specifies the type of audio mixing to be conducted on the digital audio signal output to the MONITOR OUTPUT L/R connector. add: Simple addition rms: Multiplied average average: Simple average
814	LEVEL METER SCALE	<input type="checkbox"/> peak 0 dB reference 0 dB	Specifies the mode in which the digital audio level is displayed. peak 0 dB: Displays minus audio levels with the maximum level set at 0 dB. reference 0 dB: Displays plus and minus audio levels with the reference level set at 0 dB.  <b>Note</b> The CUE channel level is always displayed with the reference level set at 0 dB.
815	AUDIO OUTPUT PHASE preset: 128	0 : <input type="checkbox"/> 128 : 255	Sets the output timing for the digital audio playback signal (SDI and AES/EBU only). The 128 setting specifies the reference position. A setting lower than 128 advances the output timing, and a setting higher than 128 delays the output timing. (128 samples, or approx. 2.7 ms, with 1 sample = approx. 20 μs)

Item number	Item	Setting	Function
830	AUDIO SELECT	<div>48K</div>	<p>Selects the output sampling frequency for audio channels 1 to 12.</p> <p>48K: Selects 48K as the output signal sampling frequency.</p> <p>96K: Selects 96K as the output signal sampling frequency.</p> <p>When A-SEL ALL is selected, audio channels 1 to 12 are all set to the same setting.</p> <p><b>Note</b></p> <p>This menu item appears only for units with serial numbers 12001 or higher, and is enabled only when the menu item 842 is set to "96K".</p>
	Sub items	96K	
	A-SEL ALL		
	A-SEL CH1		
	A-SEL CH2		
	A-SEL CH3		
	A-SEL CH4		
	A-SEL CH5		
	A-SEL CH6		
	A-SEL CH7		
	A-SEL CH8		
	A-SEL CH9		
	A-SEL CH10		
	A-SEL CH11		
	A-SEL CH12		
833	AUDIO PB LEVEL	FFFF (HEX)	Sets the audio playback level.
	Sub items	:	
	A-PB LEVEL CH1	<div>4000 (HEX)</div>	
	A-PB LEVEL CH2	:	
	A-PB LEVEL CH3	0 (HEX)	
	A-PB LEVEL CH4		
	A-PB LEVEL CH5		
	A-PB LEVEL CH6		
	A-PB LEVEL CH7		
	A-PB LEVEL CH8		
	A-PB LEVEL CH9		
	A-PB LEVEL CH10		
	A-PB LEVEL CH11		
	A-PB LEVEL CH12		
	A-PB LEVEL CUE		



Item number	Item	Setting	Function
	DIGITAL OUT CH12	TR1 ⋮ TR12	
836	SD AUDIO OUTPUT EXCHANGE		Makes independent track selections for the audio (channels 1 to 8) to be multiplexed into SD SDI. <b>Note</b> When the system of this unit is set to double-speed playback or when the VTR SETUP menu item 842 "AUDIO OUTPUT SAMPLING FREQUENCY" is set to "96K", the results of source track selection are not reflected and the source tracks of all channels remain their default settings.
	<b>Sub items</b>		
	SDOUT EXCG	disable enable	disable: Follow the settings of DIGOUT EXCHNG menu CH1 to CH8. enable: Enable the settings of this menu.
	SD OUT CH1	TR1 ⋮ TR12	Specifies the signal tracks to assign to audio channels 1 to 8 for multiplexing with SD SDI output.
	SD OUT CH2	TR1 TR2 ⋮ TR12	
	SD OUT CH3	TR1 ⋮ TR3 ⋮ TR12	
	SD OUT CH4	TR1 ⋮ TR4 ⋮ TR12	
	SD OUT CH5	TR1 ⋮ TR5 ⋮ TR12	
	SD OUT CH6	TR1 ⋮ TR6 ⋮ TR12	
	SD OUT CH7	TR1 ⋮ TR7 ⋮ TR12	
	SD OUT CH8	TR1 ⋮ TR8 ⋮ TR12	

Item number	Item	Setting	Function
842	AUDIO OUTPUT SAMPLING FREQUENCY (Appears only when the serial number of this unit is 12001 or higher.)	<span>48K</span> 96K	<p>Selects sampling frequency of the audio output signals. 48K: Selects 48K as the sampling frequency. 96K: Selects 96K as the sampling frequency.</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>When “96K” is selected, audio outputs from the HKSR-5105 that are multiplexed with the HDV/HDMI signal are disabled.</li> <li>When “96K” is selected, you must also set channels to output in 96K sampling frequency using the VTR SETUP menu item 830 “AUDIO SELECT”.</li> </ul>
843	SELECT FPS AUDIO PB	<span>disable</span> enable	<p>Specifies whether or not to output the audio signal when playing back the tape recorded on the SRW-1 or SRW-9000 with Select FPS mode specified.</p> <p>disable: Audio signal output is turned off when playing back the tape recorded in Select FPS mode.</p> <p>enable: Audio signal is output when playing back the tape recorded in Select FPS mode. However, noise may be produced because of inconsecutive audio samples and the audio output may not satisfy the characteristics of the tape format.</p>

## Items Relating to Digital Processing (Nos. 902 to ...)

Item number	Item	Setting	Function
902	FREEZE MODE	<span>field</span> field1 field2 frame1+2 frame2+1	<p>Specifies the freeze (still-picture) mode and freeze timing during manual freezing (by REMOTE 1-IN(9P) or REMOTE 2 PARALLEL I/O(50P) connector or on the control panel) or automatic freezing.</p> <p>field: Freezes the odd or even field, depending on the timing in freeze mode.</p> <p>field1: Freezes the first (odd) field</p> <p>field2: Freezes the second (even) field</p> <p>frame1+2: Freezes the first and the subsequent second field</p> <p>frame2+1: Freezes the second field and the subsequent first field</p> <p>In the case of freezing in playback modes other than normal playback, the picture is frozen in frame mode only when dynamic tracking is performing a frame operation. The picture is frozen in field mode when dynamic tracking is not operating.</p> <p>The frozen picture does not change even if you change this setting during freeze mode. The change to this setting becomes effective the next time this unit outputs a still picture.</p> <p>When the stop freeze function is enabled, regardless of the setting of this item, the picture is frozen in frame mode only when dynamic tracking is performing a frame operation, or is frozen in field mode when dynamic tracking is performing a field operation or when it is not operating.</p>

Item number	Item	Setting	Function
903	FREEZE CONTROL FROM KEY PANEL	<input type="checkbox"/> momentary <input type="checkbox"/> latch	Determines the freeze operation control by button operations. momentary: The picture is frozen only while the button is held down. latch: The picture is frozen when the button is pressed, and remains frozen when the button is released. The frozen picture is cancelled when the button is pressed again.  Button operations Freezing in odd or even (first or second) field is specified by item 902. Distinction between the first or second field, follows the distinction in the reference signal.
905	STOP FREEZE CONTROL	<input type="checkbox"/> disable <input type="checkbox"/> enable	Enable or disables the stop freeze function.
911	ACTIVE LINE 1080 CONVERT MODE	<input type="checkbox"/> 1080⇒1035 (CONV) <input type="checkbox"/> 1035⇒1080(PANEL)	Selects the conversion mode of the effective scanning line number. 1035⇒1080(CONV): Convert the effective scanning line number from 1035 to 1080 preserving the aspect ratio of the image. 1035⇒1080(PANEL): Convert the effective scanning line number from 1035 to 1080. The 1035 lines of the image are inserted into the 1035 lines of 1080 lines, then it is horizontally compressed.  <b>Note</b> This setting is valid only for HDCAM playback when the optional HKSR-5001 is installed.
912	SLOW PROCESS MODE	<input type="checkbox"/> on <input type="checkbox"/> off	Selects whether or not to activate the function to improve the vertical resolution during slow-motion playback. on: Activate the function to improve the vertical resolution during slow-motion playback. off: Do not activate the function to improve the vertical resolution during slow-motion playback.  <b>Notes</b> <ul style="list-style-type: none"><li>• This setting is valid only for HDCAM playback when the optional HKSR-5001 is installed.</li><li>• This setting has no effect when this unit is operated in PsF mode.</li></ul>
913	SOFT BLANKING	<input type="checkbox"/> off <input type="checkbox"/> on	This process applies a graduation to the first two and last two samples of each horizontal scan line of the video signal, thus making the join in the horizontal blanking interval smoother. on: The first two samples in the video data region are increased gradually, and the last two samples are decreased gradually. off: The values of the entire video data region are displayed unaltered.
921	ASPECT FLAG OFF	<input type="checkbox"/> off <input type="checkbox"/> on	Adds 16:9/Squeeze identification signal specified by ARIB TR-B17 to down-converted SD output. on: Add 16:9/Squeeze identification signal to down-converted SD output. off: Do not add 16:9/Squeeze identification signal to down-converted SD output.

Item number	Item	Setting	Function
922	VPID Select (3D)	<div>DualStream</div> 3D	Selects the VPID that is used when the system is 3D. DualStream: Use VPID on two separate lines. (prescribed setting) 3D: Use 3D VPID.  <b>VPID</b> A packet standard defined by SMPTE-352M that identifies the format of multiplexed signals on the SDI.  <b>Note</b> This item is set to “DualStream” when 3G-SDI is selected.
930	DOWNCONVERTER MODE (DC)	<div>EDGE-CROP</div> LETTER BOX SQUEEZE	Selects the down converter mode. EDGE-CROP: Selects edge crop mode. LETTER BOX: Selects letter box mode. SQUEEZE: Selects squeeze mode.
931	LETTER BOX MODE (DC)	<div>16:9</div> 14:9 13:9	When item 930 is set to “LETTER BOX”, this setting specifies the aspect ratio of the HD-SD converter output. 16:9: The aspect ratio of the HD-SD converter output is 16:9. 14:9: The aspect ratio of the HD-SD converter output is 14:9. 13:9: The aspect ratio of the HD-SD converter output is 13:9.
932	H CROP POSITION (DC) preset: 0	-120 ∴ <div>0</div> ∴ 120	When item 930 is set to “EDGE-CROP” adjusts the down-converted output H crop (horizontal direction of portion cut out in edge crop mode).
934	CROSS COLOR (DC) preset: 8	0 ∴ <div>8</div> ∴ 15	Cross color adjustment.
935	DETAIL GAIN (DC) preset: 64	0 ∴ <div>64</div> (0 dB) ∴ 127	Adjustment of the down converter image enhancer, adjusting the sharpness of enhanced contours.
936	LIMITER (DC) preset: 32	0 ∴ <div>32</div> ∴ 63	Adjustment of the down converter image enhancer, adjusting the maximum detail level to be added to enhance the previous signal.
937	CRISP THRESHOLD (DC) preset: 0	<div>0</div> ∴ 15	Adjustment of the down converter image enhancer, and setting an amplitude so that low amplitude signals are not enhanced.
938	LEVEL DEPEND THRESHOLD (DC)		Adjustment of the down converter image enhancer, and setting the brightness range of enhanced contours.
	<b>Sub items</b>		
	DEPEND BLACK (DC)	0 ∴ <div>8</div> ∴ 15	
	DEPEND WHITE (DC)	<div>0</div> ∴ 15	



Item number	Item	Setting	Function
939	H DETAIL FREQUENCY select (DC)	2.6 MHz 3.4 MHz <u>4.3 MHz</u> 6.7 MHz	Adjustment of the down converter image enhancer, and setting the central frequency for enhanced contours.
940	H/V RATIO (DC) preset: 3	0 : <u>3</u> : 7	Adjustment of the down converter image enhancer, and setting the horizontal to vertical ratio for enhanced contours.
941	GAMMA (DC)	<u>on</u> off	Activates or deactivates the GAMMA LEVEL setting by the item 941.
942	GAMMA LEVEL (DC) preset: 0	128 : <u>0</u> : -128	Adjustment of the down converter image enhancer, and setting the slope of the correction curve. Valid only when the GAMMA LEVEL setting is activated by the menu item 941.
943	CROSS COLOR CRISP (DC) preset: 4	0 <u>4</u> 15	Sets the crisp level for down converter output cross color.
944	V-FILTER SELECT	<u>mode 0</u> mode 1 mode 2 mode 3	Sets the vertical interpolation filter coefficient for HD-SD converter output.
945	D/C LEGALIZE (DC)	<u>OFF</u> ON	For down converter output, selects whether to suppress signals with levels that are lower than the pedestal level. OFF: Do not suppress signals lower than the pedestal level. ON: Suppress signals lower than the pedestal level.
946	D/C COLOR MODE	<u>mode 1</u> mode2	Sets the hue of the down-converter output. mode1: Sets the hue of the conventional SRW-series videocassette recorder. mode2: Sets the hue of the conventional HDW-2000 series/HDW-F500 videocassette recorder.
947	Horizontal Active Pixels PAL (DC)	<u>720</u> 702	Sets the effective pixel count in the horizontal direction during HD-to-SD conversion.  <b>Note</b> This item is valid only during down-conversion in the PAL system.
950	CONVERTER MODE (UC)	<u>EDGE-CROP</u> LETTER BOX SQUEEZE	Selects the mode for up conversion. EDGE-CROP: Select edge crop mode. LETTER BOX: Select letterbox mode. SQUEEZE: Select squeeze mode.
951	H CROP POSITION (UC) preset: 0	-120 : <u>0</u> : 120	When "EDGE-CROP" is selected in menu item 950, adjusts the H crop (the frame in the horizontal direction inserted in edge crop mode) in up-conversion output.
952	LETTER BOX POSITION (UC) preset: 0	-120 : <u>0</u> : 120	When "LETTER BOX" is selected in menu item 950, adjusts the position in the vertical direction of the "letterbox" in up-conversion output.

Item number	Item	Setting	Function
953	UP CONVERTER PROCESS	FIELD FRAME ADAPTIVE ADAPTIVE-2 ADAPTIVE-3	Selects the original image used for conversion from SD to HD. FIELD: Selects field images. FRAME: Selects frame images. ADAPTIVE (standard mode): For up-conversion, the mode in which the ratio of carrying out conversion from frames or fields is set to the standard value. ADAPTIVE-2 (still image priority mode): For up-conversion, the mode in which the ratio of carrying out conversion from frames is increased. ADAPTIVE-3 (movie priority mode): For up-conversion, the mode in which the ratio of carrying out conversion from fields is increased.
954	DETAIL GAIN (UC) preset: 64	0 : 64 : 127	Adjusts the up converter image enhancer. Adjusts the sharpness of outlines.
955	LIMITER (UC) preset: 32	0 : 32 : 63	Adjusts the up converter image enhancer. Adjusts the detail maximum level added to emphasize the original signal.
956	CRISP THRESHOLD (UC) preset: 8	0 : 8 : 15	Adjusts the up converter image enhancer. Sets the amplitude value for which small amplitude signals are not emphasized.
957	LEVEL DEPEND THRESHOLD (UC) preset: 8	0 : 8 : 15	Adjusts the up converter image enhancer. Sets the luminance range for edge enhancement.
958	H DETAIL FREQUENCY (UC)	3.2MHz 4.5MHz 5.0MHz 4.0MHz	Adjusts the up converter image enhancer. Sets the central frequency and frequency characteristics for edge enhancement. 3.2MHz: 3.2 MHz $\pm$ 1.1 MHz 4.5MHz: 4.5 MHz $\pm$ 1.4 MHz 5.0MHz: 5.0 MHz $\pm$ 0.7 MHz 4.0MHz: 4.0 MHz $\pm$ 2.0 MHz
959	H/V RATIO (UC) preset: 3	0 : 3 : 7	Adjusts the up converter image enhancer. Sets the vertical to horizontal ratio for edge enhancement.
960	GAMMA LEVEL (UC) preset: 0	128 : 0 : -120	Adjusts the up converter image enhancer. Adjusts the gradient of the correction curve.
961	BACKGROUND COLOR (UC)	BACKGROUND COLOR	Sets the background color for blank areas in up conversion. BG COLOR: Selects TABLE/GRAY/BLUE/BLACK. Y TABLE, R-Y TABLE, and B-Y TABLE: Valid only when BG COLOR is set to "TABLE". Adjustable within the range from 0 to 255.
	Sub items		
	BG COLOR	BLACK/GRAY/BLUE/ TABLE	
	Y TABLE	0 to 255	
	R-Y TABLE	0 to 255	
	B-Y TABLE	0 to 255	

Item number	Item	Setting	Function
980	ALPHA CHANNEL LEVEL	white black	For 4:4:4 DUAL LINK output, sets the output level of the ALPHA CHANNEL of LINK B output. white: Output white level. black: Output black level.
981	MONITOR OUT SELECT (DUAL MODE)	LINK-A/B LINK-B/A LINK-A LINK-B SPLIT (A/B) SPLIT (B/A) Field Sequence (A/B) Field Sequence (B/A) SIDE by SIDE (A/B) SIDE by SIDE (B/A)	<p>Sets the monitor output for double-speed playback/recording or double-speed playback.</p> <p>LINK-A/B: As with the main output, the LINK-A signal and the LINK-B signal are output.</p> <p>LINK-B/A: Outputs with LINK-A and LINK-B interchanged in relation to the main output.</p> <p><b>Note</b> When this item is set to any of the following, the same signal is output for LINK A output and LINK B output.</p> <p>LINK-A: The LINK-A signal is output. LINK-B: The LINK-B signal is output. SPLIT (A/B): The monitor display is split vertically in two, with the LINK-A signal output to the left of the monitor display and the LINK-B signal output to the right. SPLIT (B/A): The monitor display is split vertically in two, with the LINK-B signal output to the left of the monitor display and the LINK-A signal output to the right. Field Sequence (A/B): The LINK-A signal is output to field 1 and the LINK-B signal is output to field 2. Field Sequence (B/A): The LINK-B signal is output to field 1 and the LINK-A signal is output to field 2. SIDE by SIDE (A/B): The screen is split into two sides with the LINK-A signal image on the left side reduced to 1/2 size in the horizontal direction, and the LINK-B signal image on the right side reduced to 1/2 size in the horizontal direction. SIDE by SIDE (B/A): The screen is split into two sides with the LINK-B signal image on the left side reduced to 1/2 size in the horizontal direction, and the LINK-A signal image on the right side reduced to 1/2 size in the horizontal direction.</p> <p><b>Note</b> The Field Sequence and SIDE by SIDE settings are enabled only during dual-stream (3D) mode. For double-speed playback, the LINK-A signal is output to fields 1 and 2.</p>

Item number	Item	Setting	Function
982	DC/FC OUT SELECT (DUAL MODE)	<input type="checkbox"/> MON LINK-A LINK-B SPLIT (A/B) SPLIT (B/A) Field Sequence (A/B) Field Sequence (B/A) SIDE by SIDE (A/B) SIDE by SIDE (B/A)	<p>Selects DC/FC output for dual-stream playback/recording or double-speed playback.</p> <p>MON: The setting of menu item 981 is applied. The LINK-A signal is output when "LINK-A/B" is selected in menu item 981, and the LINK-B signal is output when "LINK-B/A" is selected.</p> <p>LINK-A: The LINK-A signal is output.</p> <p>LINK-B: The LINK-B signal is output.</p> <p>SPLIT (A/B): The monitor display is split vertically in two, with the LINK-A signal output to the left of the monitor display and the LINK-B signal output to the right.</p> <p>SPLIT (B/A): The monitor display is split vertically in two, with the LINK-B signal output to the left of the monitor display and the LINK-A signal output to the right.</p> <p>Field Sequence (A/B): The LINK-A signal is output to field 1 and the LINK-B signal is output to field 2.</p> <p>Field Sequence (B/A): The LINK-B signal is output to field 1 and the LINK-A signal is output to field 2.</p> <p>SIDE by SIDE (A/B): The screen is split into two sides with the LINK-A signal image on the left side reduced to 1/2 size in the horizontal direction, and the LINK-B signal image on the right side reduced to 1/2 size in the horizontal direction.</p> <p>SIDE by SIDE (B/A): The screen is split into two sides with the LINK-B signal image on the left side reduced to 1/2 size in the horizontal direction, and the LINK-A signal image on the right side reduced to 1/2 size in the horizontal direction.</p> <p><b>Note</b> The Field Sequence and SIDE by SIDE settings are enabled only during dual-stream (3D) mode. For double-speed playback, the LINK-A signal is output to fields 1 and 2.</p>
983	BORDER	<input type="checkbox"/> off on	<p>When the monitor display is split during dual-stream playback/recording or double-speed playback, this item specifies whether or not a dividing line is displayed.</p> <p>off: A dividing line is not displayed.</p> <p>on: A dividing line is displayed.</p>
984	BORDER LEVEL	1 to <input type="text" value="8"/> to 127	When the monitor display is split during dual-stream playback/recording or double-speed playback, this item specifies the brightness of the dividing line.
985	BORDER SLOPE	<input type="checkbox"/> off <input type="checkbox"/> on	<p>When the monitor display is split during dual-stream playback/recording or double-speed playback, this item specifies whether or not the dividing line is sloped.</p> <p>off: The dividing line is not sloped.</p> <p>on: The dividing line is sloped.</p>
986	BORDER POSITION	–480 to <input type="text" value="0"/> to 480	When the monitor display is split during dual-stream playback/recording or double-speed playback, this item specifies the position of the dividing line.

## Items Relating to the Pulldown Control (Nos. A01 to ...)

Item number	Item	Setting	Function
A01	PD TIME CODE DISPLAY	<input type="checkbox"/> off on	Sets whether or not to display the pulldown time code on the time code display area. off: Does not display the pulldown time code. on: Displays the pulldown time code.
A02	PD PRESET FRAME MODE	<input type="checkbox"/> 24F FRAME MODE <input type="checkbox"/> 30F FRAME MODE	Selects the time code to be preset. The A frame of the pulldown sequence can be preset. 24F FRAME MODE: The 24 frames time code is preset. 30F FRAME MODE: The 30 frames time code is preset.
A03	FC SUPERIMPOSED CHARACTER	<input type="checkbox"/> off on	Specifies whether or not to superimpose time data and operating status information on the signal output from the FORMAT CONV. OUTPUT connector. off: No information is superimposed. on: Information is superimposed.
A04	PD DF/NDF SELECT	<input type="checkbox"/> drop frame non-drop frame auto	Selects the running mode for the pulldown time code to be preset. drop frame: Drop frame mode non-drop frame: Non-drop frame mode auto: The unit switches the running mode (DF/NDF) automatically according to the frame frequency of the unit. When the frame frequency is 23.98 Hz, the unit switches to the drop frame mode and switches to the non-drop frame mode when it is 24 Hz.
A05	PD EXT SD REF LOCK MODE	<input type="checkbox"/> off lock1 lock2	When the operating frequency is set to 23.98PsF, specifies whether or not the pulldown output signal and down-converted output signal are synchronized with the reference signal by the REF. INPUT 2 connector. off: The pulldown output signal and down-converted output signal are not synchronized with the reference signal by the REF. INPUT. 2 connector. lock1: The pulldown output signal and down-converted output signal are synchronized with the reference signal by the REF. INPUT 2 connector. lock2: The pulldown output signal and down-converted output signal are synchronized with the reference signal by the REF. INPUT 2 connector. When the PB/E-E mode is selected, the amount of delay on the A frame of the pulldown output signal for the A frame of the main video signal is fixed to 2 frames (59.94i).  <b>Notes</b> <ul style="list-style-type: none"><li>A warning message appears when the HD reference signal and REF. INPUT 2 reference signal are not input or not synchronized.</li><li>“lock1” and “lock2” are effective only when the operation mode of this unit is set to 23.98/24PsF.</li></ul>
A06	PD SUPERIMPOSED TIME CODE ID	<input type="checkbox"/> off on	When item 620 and A03 is set to “on”, specifies whether or not the ID (24F/30F) is displayed to the right of superimposed time code. off: No ID is displayed. on: ID (“24F” or “30F”) is displayed.  <b>Note</b> <p>The setting of this item is effective only when the operation mode of this unit is set to 23.98PsF or 24PsF.</p>

Item number	Item	Setting	Function
A07	PD CHARACTER 24F TIME CODE MODE	<input type="checkbox"/> off on	<p>When item 620 and A03 is set to “on”, specifies whether or not the 2 : 3 pulldown 24-frame time data is inserted to the first line instead of 30-frame time data.  off: 30-frame time data is displayed.  on: 24-frame time data is displayed.</p> <p><b>Note</b>  The setting of this item is effective only when the operation mode of this unit is set to 23.98PsF or 24PsF.</p>
A08	FC REFERENCE select	extrn HD <input type="checkbox"/> extrn SD	<p>Selects the signal to be the reference for the FORMAT CONV. OUTPUT input to the REF. INPUT 2 connector.  extrn HD: Use the HD tri-level reference signal input to the REF. INPUT 2 connector as the FORMAT CONV. OUTPUT reference signal.  extrn SD: Use the SD reference signal input to the REF. INPUT 2 connector as the FORMAT CONV. OUTPUT reference signal.</p>
A10	9-Pin TC sense select	<input type="checkbox"/> LINE FC	<p>Specifies whether or not the time code information of FC output signal is returned when time code sense command is input through the 9-pin connector.  LINE: Time code information of main output signal is returned. In pulldown conversion mode, 24-frame/sec time code information is returned.  FC: Time code information of FC output signal is returned. In pulldown conversion mode, 30-frame/sec time code is returned.</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>• Pulldown output signal and 30-frame/sec time code are synchronized only when this unit is set to PLAY LOCK mode. To synchronize the signals, set item A05 “PD EXT SD REF LOCK MODE” to “lock2”.</li> <li>• When editing pulldown output signals with a VTR operating in 30F mode, it may not be possible to achieve sync within 5 seconds. If this occurs, set the preroll time to 7 seconds.  Also, normal operation is not possible with devices engaged in player sync.</li> </ul>
A20	Black Clip for 444-to-422 Conversion	<input type="checkbox"/> on off	<p>When a 4:4:4 signal is converted to a 4:2:2 signal, this item specifies whether the signal that goes below the black level (040H) is suppressed or not.  on: Signals that drop below the black level are suppressed.  off: Signals that drop below the black level are not suppressed.</p>
A21	CONVERTER MODE (FC)	<input type="checkbox"/> EDGE-CROP LETTER BOX SQUEEZE	<p>Selects the mode for converting from 2K signal to HD signal for FC output.  EDGE-CROP: Selects edge crop mode.  LETTER BOX: Selects letter box mode.  SQUEEZE: Selects squeeze mode.</p>
A22	H CROP POSITION (FC) (Appears only when the serial number of this unit is 12001 or higher, and an HKSR-5001 whose serial number is 15001 or higher is installed.)	–64 : <input type="checkbox"/> 0 : 64	<p>When “EDGE-CROP” is selected in menu item A21, adjusts the H crop (horizontal direction of portion cut out in edge crop mode) for FC output.</p>

Item number	Item	Setting	Function
A23	V CROP POSITION (FC)	–238 ⋮ <span style="border: 1px solid black;">0</span> ⋮ 238	When “EDGE-CROP” is selected in menu item A21, adjusts the V crop (vertical direction of portion cut out in edge crop mode) for FC output.
A24	FC LUT MODE	<span style="border: 1px solid black;">off</span> Bank-1 Bank-2 Bank-3 Bank-4 Bank-5 Bank-6 Bank-7 Bank-8	Selects whether to use LUT, and when LUT is used, selects the bank in which the LUT file is stored. off: LUT conversion is disabled. Bank-1 to Bank-8: Select the LUT file by selecting one of Banks 1 to 8.

## Items Relating to the HKSR-5105 (HDMI/i.LINK (HDV) Output) (Nos. C01 to ...)

Item number	Item	Setting	Function
C01	HDV/HDMI SUPERIMPOSED CHARACTER	<span style="border: 1px solid black;">off</span> on HDMI HDV	Specifies whether or not to superimpose the characters representing time code data and operation mode information on the HDMI/HDV output signal. off: Does not superimpose on either the HDV output signal or the HDMI output signal. on: Superimpose on both the HDV output signal and the HDMI output signal. HDMI: Superimpose on HDMI output signal only. HDV: Superimpose on HDV output signal only.
C02	HDV AUDIO OUTPUT MODE	<span style="border: 1px solid black;">2ch</span> 4ch	Specifies the number of audio channels to be multiplexed with the HDV output signal. 2ch: Multiplexes two channels. 4ch: Multiplexes four channels.
C03	HDV AUDIO OUTPUT EXCHANGE		Makes independent track selections for the audio (channels 1 to 4) to be multiplexed into HDV output.
	Sub items		
	HDV OUT EXCG	<span style="border: 1px solid black;">disable</span> enable	disable: Follow the settings of DIGITAL OUT CH1 to CH4 in menu item 834. enable: Enable the settings of this menu.
	HDV OUT CH1	<span style="border: 1px solid black;">TR1</span> ⋮ TR12	Specifies the signal track to be assigned to audio channels 1 to 4 for multiplexing with HDV output.
	HDV OUT CH2	TR1 <span style="border: 1px solid black;">TR2</span> ⋮ TR12	<b>Note</b> When menu item C02 is set to “2ch”, the settings of sub items “HDV OUT CH3” and “HDV OUT CH4” are ineffective.
	HDV OUT CH3	TR1 ⋮ <span style="border: 1px solid black;">TR3</span> ⋮ TR12	
	HDV OUT CH4	TR1 ⋮ <span style="border: 1px solid black;">TR4</span> ⋮ TR12	

Item number	Item	Setting	Function
C04	HDV SPEED LIMIT	<span>X24</span> off	Specifies tape speed limitation for FF/REW commands when this unit is controlled by AV/C commands from the device connected to the HDV OUTPUT connector. x24: -24 to +24 times normal speed off: No limitation is made.
C10	HDMI VIDEO OUTPUT MODE	<span>mode1</span> mode2	<p>Assigns priority to the reference information (system setting of this unit and extended display identification data (EDID) of the HDMI monitor) to specify the HDMI output format.</p> <p>mode1: Outputs HDMI signal in format specified by referring to output 1 (system setting), output 2 (pulldown or P-I conversion), and then output 3 (down-conversion).</p> <p>mode2: Outputs HDMI signal in format specified by referring to output 2 (pulldown or P-I conversion), output1 (system setting), and then output 3 (down-conversion).</p> <p><i>For details on HDMI output formats, see "HDMI/HDV output formats that the HKSR-5105 supports" on page 175 in Appendix.</i></p>



Item number	Item	Setting	Function
C11	HDMI AUDIO OUTPUT EXCHANGE		Makes independent track selections for the audio (channels 1 to 8) to be multiplexed into HDMI output.
	Sub items		
	HDMI OUT EXCG	<input type="checkbox"/> disable <input type="checkbox"/> enable	disable: Follow the settings of DIGITAL OUT CH1 to CH8 in menu item 834. enable: Enable the settings of this menu.
	HDMI OUT CH1	<input type="checkbox"/> TR1 ⋮ TR12	Specifies the signal track to be assigned to audio channels 1 to 8 for multiplexing with HDMI output.
	HDMI OUT CH2	TR1 <input type="checkbox"/> TR2 ⋮ TR12	
	HDMI OUT CH3	TR1 ⋮ <input type="checkbox"/> TR3 ⋮ TR12	
	HDMI OUT CH4	TR1 ⋮ <input type="checkbox"/> TR4 ⋮ TR12	
	HDMI OUT CH5	TR1 ⋮ <input type="checkbox"/> TR5 ⋮ TR12	
	HDMI OUT CH6	TR1 ⋮ <input type="checkbox"/> TR6 ⋮ TR12	
	HDMI OUT CH7	TR1 ⋮ <input type="checkbox"/> TR7 ⋮ TR12	
	HDMI OUT CH8	TR1 ⋮ <input type="checkbox"/> TR8 ⋮ TR12	

## Other Items (Nos. T01 to ...)

Item number	Item	Setting	Function
T01	AUTO REPEAT MODE	<input type="checkbox"/> off <input type="checkbox"/> on	Sets the automatic repeat operation. off: Automatic repeat operation cannot be carried out. on: Automatic repeat operation can be carried out. <i>For details, see “5-2-6 Playing Back Specified Section Repeatedly (Automatic Repeat Playback)” on page 119.</i>

Item number	Item	Setting	Function
T02	INTERNAL VIDEO SIGNAL GENERATOR (HD)	<input type="checkbox"/> off COLOR BARS (100%) COLOR BARS (75%) SMPTE COLOR BARS ARIB COLOR BARS MULTI BURST 1 MULTI BURST 2 10 STEPS PULSE & BAR RAMP BLACK	Selects the test signal output by the signal generator built into this unit. off: The test signal is not generated, and this unit operates normally. all other settings: The test signal is output from this unit.  <b>Note</b> The test signal is output only when no cassette is inserted.
T04	INTERNAL AUDIO SIGNAL GENERATOR	<input type="checkbox"/> off silence 1 kHz sine	Selects the operation of audio test signal output. off: The audio test signal is not output. silence: The silence signal is output. 1 kHz sine: 1 kHz (In this case, a 1 kHz -20 dB sine wave is supplied to all audio outputs.)  <b>Note</b> The test signal is output only when no cassette is inserted.

#### Note

Items T01, T02, and T04 are reset to their factory default settings whenever the power is turned off.

## Playback formats

### Playback formats:

Cassette type	Playback mode	System frequency
HDCAM-SR	1920 × 1080/4:2:2 10 bits With the optional HKSR-5103 installed, dual-stream (3D) playback and double-speed playback are enabled, along with normal playback. <ul style="list-style-type: none"> <li>When the serial number of this unit is 12001 or higher, double-speed playback is a standard feature.</li> </ul>	23.98PsF
		24PsF
		25PsF
		29.97PsF
		30PsF
		50i
		59.94i
		60i
	1920 × 1080/4:2:2 10 bits <ul style="list-style-type: none"> <li>When the serial number of this unit is 12000 or lower, an optional HKSR-5103 is required.</li> </ul>	50P
		59.94P
		60P
	1920 × 1080/4:4:4 10 bits (SQ), 10 bits (HQ), 12 bits (HQ) Optional HKSR-5103 is required. <ul style="list-style-type: none"> <li>When the serial number of this unit is 12001 or higher, playback in SQ mode is a standard feature and the HKSR-5103 is not required.</li> </ul>	23.98PsF
		24PsF
		25PsF
		29.97PsF
		30PsF
		50i
		59.94i
		60i
	2048 × 1556/4:4:4 RGB 10 bits (HQ) <ul style="list-style-type: none"> <li>Available only when the serial number of this unit is 12001 or higher. An optional HKSR-5103 is also required.</li> </ul>	23.98PsF
		24PsF
		25PsF
	2048 × 1080/4:4:4 XYZ 12 bits (HQ) <ul style="list-style-type: none"> <li>Available only when the serial number of this unit is 12001 or higher. An optional HKSR-5103 is also required.</li> </ul>	23.98PsF
		24PsF
		25PsF
	2048 × 1080/4:4:4 RGB 10 bits (HQ) <ul style="list-style-type: none"> <li>Available only when the serial number of this unit is 12001 or higher. An optional HKSR-5103 is also required.</li> </ul>	23.98PsF
		24PsF
		25PsF
	1280 × 720/4:2:2 10 bits With the optional HKSR-5103 installed, double-speed playback and dual-stream (3D) playback/recording are enabled, along with normal playback. <ul style="list-style-type: none"> <li>When the serial number of this unit is 12001 or higher, double-speed playback is a standard feature.</li> </ul>	50P
		59.94P

Cassette type	Playback mode	System frequency
HDCAM (optional HKSR-5802 required)	1920 × 1080/4:2:2	23.98PsF
		24PsF
		25PsF
		29.97PsF
		30PsF
		50i
		59.94i
		60i
Digital Betacam (optional HKSR-5802 required)	625/4:2:2	50i
	525/4:2:2	59.94i

Off-speed playback compatibility for HDCAM-SR

4:2:2 mode

System frequency  Recording tape format			HD SDI OUTPUT									
			1920 × 1080								1280 × 720	
			4:2:2: 10 bits									
			23.98PsF	24PsF	25PsF 50i	29.97PsF 59.94i	30PsF 60i	50P	59.94P	60P	50P	59.94P
1080	4:2:2 10 bits	23.98PsF	●	○	▲	▲	▲	□	□	□	—	—
		24PsF	○	●	▲	▲	▲	□	□	□	—	—
		25PsF 50i	▲	▲	●	▲	▲	□	□	□	—	—
		29.97PsF 59.94i	▲	▲	▲	●	○	□	□	□	—	—
		30PsF 60i	▲	▲	▲	○	●	□	□	□	—	—
		50P	■	■	■	■	■	●	▲	▲	—	—
		59.94P	■	■	■	■	■	▲	●	○	—	—
		60P	■	■	■	■	■	▲	○	●	—	—
720		50P	—	—	—	—	—	—	—	—	●	▲
		59.94P	—	—	—	—	—	—	—	—	▲	●

## 1920 × 1080 4:4:4 (SQ) mode

Recording tape format			System frequency				
			HD-SDI OUTPUT				
			1920 × 1080				
			4:4:4 RGB 10 bits (SQ)				
			23.98PsF	24PsF	25PsF 50i	29.97PsF 59.94i	30PsF 60i
1920 × 1080	4:2:2 RGB 10 bits (SQ)	23.98PsF	●	○	▲	▲	▲
		24PsF	○	●	▲	▲	▲
		25PsF 50i	▲	▲	●	▲	▲
		29.97PsF 59.94i	▲	▲	▲	●	○
		30PsF 60i	▲	▲	▲	○	●

## 1920 × 1080 4:4:4 (HQ) mode

Recording tape format			System frequency									
			HD-SDI OUTPUT									
			1920 × 1080									
			4:4:4 RGB 12 bits (HQ)					4:4:4 RGB 10 bits (HQ)				
			23.98PsF	24PsF	25PsF 50i	29.97PsF 59.94i	30PsF 60i	23.98PsF	24PsF	25PsF 50i	29.97PsF 59.94i	30PsF 60i
1920 × 1080	4:4:4 RGB 12 bits (HQ)	23.98PsF	●	○	▲	▲	▲	●	○	▲	▲	▲
		24PsF	○	●	▲	▲	▲	○	●	▲	▲	▲
		25PsF 50i	▲	▲	●	▲	▲	▲	▲	●	▲	▲
		29.97PsF 59.94i	▲	▲	▲	●	○	▲	▲	▲	●	○
		30PsF 60i	▲	▲	▲	○	●	▲	▲	▲	○	●
	4:4:4 RGB 10 bits (HQ)	23.98PsF	●	○	▲	▲	▲	●	○	▲	▲	▲
		24PsF	○	●	▲	▲	▲	○	●	▲	▲	▲
		25PsF 50i	▲	▲	●	▲	▲	▲	▲	●	▲	▲
		29.97PsF 59.94i	▲	▲	▲	●	○	▲	▲	▲	●	○
		30PsF 60i	▲	▲	▲	○	●	▲	▲	▲	○	●

2K 4:4:4 (HQ) mode

Recording tape format			System frequency								
			HD-SDI OUTPUT								
			2048 × 1556			2048 × 1080					
			4:4:4 RGB 10 bits (HQ)			4:4:4 XYZ 12 bits (HQ)			4:4:4 RGB 10 bits (HQ)		
			23.98PsF	24PsF	25PsF	23.98PsF	24PsF	25PsF	23.98PsF	24PsF	25PsF
2048 × 1556	4:4:4 RGB 10 bits (HQ)	23.98PsF	●	○	▲						
		24PsF	○	●	▲						
		25PsF	▲	▲	●						
2048 × 1080	4:4:4 XYZ 12 bits (HQ)	23.98PsF				●	○	▲			
		24PsF				○	●	▲			
		25PsF				▲	▲	●			
	4:4:4 RGB 10 bits (HQ)	23.98PsF							●	○	▲
		24PsF							○	●	▲
		25PsF							▲	▲	●

- : Normal playback of video, audio, and time code possible.  
○: 0.1% off-speed playback of video, audio, and time code possible.  
▲: Off-speed playback of video and audio possible.  
■: Off-speed playback is possible only for video. (Audio and meta data output are turned off.)  
□: Off-speed playback of video is possible only with the tape recorded on system frequency of PsF. (Audio and meta data output are turned off.)

Notes

- In the case of 4:4:4 signals, there is no compatibility between the SQ and HQ modes.
- When playing back 1920 × 1080 4:4:4 (HQ) mode 12-bit video in a 10-bit system, the video will be output in 10-bit format. The lower two bits are discarded.
- When playing back 1920 × 1080 4:4:4 (HQ) mode 10-bit video in a 12-bit system, the video will be output in 12-bit format. The lower two bits will be 0.
- The 2048 × 1556 and 2048 × 1080 formats do not support SQ mode.
- The 2048 × 1556, 2048 × 1080, and 1920 × 1080 formats are not compatible with each other.

## Playback tape formats and conversion output

Cassette type	Playback mode		HD SDI output	SD SDI output	FORMAT CONV. output <sup>a)</sup>	
			System frequency	System frequency	System frequency	Note
HDCAM-SR	2048 × 1556 4:4:4 RGB (HQ/10 bits) <sup>d)f)</sup>	23.98PsF	23.98PsF	—	2048 × 1080/4:4:4/RGB/ 23.98PsF	
					1920 × 1080/4:4:4/RGB/ 23.98PsF	
					1920 × 1080/4:2:2/23.98PsF	
		24PsF	24PsF	—	2048 × 1080/4:4:4/RGB/ 24PsF	
					1920 × 1080/4:4:4/RGB/ 24PsF	
					1920 × 1080/4:2:2/24PsF	
		25PsF	25PsF	—	2048 × 1080/4:4:4/RGB/ 25PsF	
					1920 × 1080/4:4:4/RGB/ 25PsF	
					1920 × 1080/4:2:2/25PsF	
	2048 × 1080 4:4:4 XYZ (HQ/12 bits) <sup>d)f)</sup>	23.98PsF	23.98PsF	—	2048 × 1080/4:4:4/RGB/ 23.98PsF	
					1080/4:4:4/RGB/23.98PsF	
					1080/4:2:2/23.98PsF	
				525/59.94i <sup>c)</sup>	1080/4:2:2/59.94i	
					1080/4:2:2/59P	
		24PsF	24PsF	—	2048 × 1080/4:4:4/RGB/ 24PsF	
					1080/4:4:4/RGB/24PsF	
					1080/4:2:2/24PsF	
					1080/4:2:2/60i	
					1080/4:2:2/60P	
		25PsF	25PsF	—	2048 × 1080/4:4:4/RGB/ 25PsF	
					1080/4:4:4/RGB/25PsF	
					1080/4:2:2/25PsF	
				625/50i <sup>c)</sup>	1080/4:2:2/50P	
					1080/4:2:2/50P	
	2048 × 1080 4:4:4 RGB (HQ/10 bits) <sup>d)f)</sup>	23.98PsF	23.98PsF	—	1080/4:4:4/RGB/23.98PsF	
					1080/4:2:2/23.98PsF	
				525/59.94i <sup>c)</sup>	1080/4:2:2/59.94i	
					1080/4:2:2/59P	
		24PsF	24PsF	—	1080/4:4:4/RGB/24PsF	
					1080/4:2:2/24PsF	
					1080/4:2:2/60i	
					1080/4:2:2/60P	
		25PsF	25PsF	—	1080/4:4:4/RGB/25PsF	
					1080/4:2:2/25PsF	
					1080/4:2:2/50P	

Cassette type	Playback mode		HD SDI output	SD SDI output	FORMAT CONV. output <sup>a)</sup>	
			System frequency	System frequency	System frequency	Note
HDCAM-SR	1920 × 1080 4:4:4 RGB (SQ/10 bits) <sup>b)</sup> (HQ/10 bits) <sup>d)</sup> (HQ/12 bits) <sup>d)f)</sup>	23.98PsF	23.98PsF	—	1080/4:2:2/23.98PsF	
				525/59.94i <sup>a)</sup>	1080/4:2:2/59.94i	
					720/4:2:2/59.94P	
					1080/4:2:2/59.94P	c)
		24PsF	24PsF	—	1080/4:2:2/24PsF	
					1080/4:2:2/60i	
					1080/4:2:2/60P	c)
		25PsF	25PsF	625/50i <sup>a)</sup>	1080/4:2:2/25PsF	
					720/4:2:2/50P	
					1080/4:2:2/50P	c)
		29.97PsF	29.97PsF	525/59.94i <sup>a)</sup>	1080/4:2:2/29.97PsF	
					720/4:2:2/59.94P	
					1080/4:2:2/59.94P	c)
		30PsF	30PsF	—	1080/4:2:2/30PsF	
					1080/4:2:2/60P	c)
		50i	50i	625/50i <sup>a)</sup>	1080/4:2:2/50i	
					720/4:2:2/50P	
					1080/4:2:2/50P	c)
		59.94i	59.94i	525/59.94i <sup>a)</sup>	1080/4:2:2/59.94i	
					720/4:2:2/59.94P	
					1080/4:2:2/59.94P	c)
		60i	60i	—	1080/4:2:2/60i	
					1080/4:2:2/60P	c)
	1920 × 1080/ 4:2:2 <sup>b)</sup>	50P	50P	625/50i <sup>a)</sup>	1080/4:2:2/50i	
					720/4:2:2/50P	c)
		59.94P	59.94P	525/59.94i <sup>a)</sup>	1080/4:2:2/59.94i	
					720/4:2:2/59.94P	c)
	720/4:2:2	50P	50P	—	1080/4:2:2/60i	
					1080/4:2:2/50P	c)
		59.94P	59.94P	525/59.94i <sup>a)</sup>	1080/4:2:2/59.94i	
					1080/4:2:2/59.94P	c)



Cassette type	Playback mode		HD SDI output	SD SDI output	FORMAT CONV. output <sup>a)</sup>	
			System frequency	System frequency	System frequency	Note
HDCAM-SR	1920 × 1080 4:4:4 RGB 3D <sup>d)f)</sup>	23.98PsF	23.98PsF	—	1080/4:2:2/23.98PsF	c)
				525/59.94i <sup>a)</sup>	1080/4:2:2/59.94i	
		24PsF	24PsF	—	1080/4:2:2/24PsF	
					1080/4:2:2/60i	
		25PsF	25PsF	625/50i <sup>a)</sup>	1080/4:2:2/25PsF	
		29.97PsF	29.97PsF	525/59.94i <sup>a)</sup>	1080/4:2:2/29.97PsF	
		30PsF	30PsF	—	1080/4:2:2/30PsF	
		50i	50i	625/50i <sup>a)</sup>	1080/4:2:2/50i	
		59.94i	59.94i	525/59.94i <sup>a)</sup>	1080/4:2:2/59.94i	
		60i	60i	—	1080/4:2:2/60i	
	1080/4:2:2 3D <sup>d)</sup>	23.98PsF	23.98PsF	—	1080/4:4:4/23.98PsF	
					1080/4:2:2/23.98PsF	
				525/59.94i <sup>a)</sup>	1080/4:2:2/59.94i	
					1080/4:2:2/59.94P	c)
					720/4:2:2/59.94P	
		24PsF	24PsF	—	1080/4:4:4/24PsF	
					1080/4:2:2/60i	
					1080/4:2:2/60P	c)
		25PsF	25PsF	625/50i	1080/4:4:4/25PsF	
					1080/4:2:2/25PsF	
					1080/4:2:2/50P	c)
					720/4:2:2/50P	
		29.97PsF	29.97PsF	525/59.94i	1080/4:4:4/29.97PsF	
					1080/4:2:2/29.97PsF	
					1080/4:2:2/59.94P	c)
					720/4:2:2/59.94P	
		30PsF	30PsF	—	1080/4:4:4/30PsF	
					1080/4:2:2/30PsF	
					1080/4:2:2/60P	c)
		50i	50i	625/50i	1080/4:4:4/50i	
					1080/4:2:2/50i	
					1080/4:2:2/50P	c)
					720/4:2:2/50P	
		59.94i	59.94i	525/59.94i	1080/4:4:4/59.94i	
					1080/4:2:2/59.94i	
					1080/4:2:2/59.94P	c)
					720/4:2:2/59.94P	
		60i	60i	—	1080/4:4:4/60i	
					1080/4:2:2/60i	
					1080/4:2:2/60P	c)

Cassette type	Playback mode		HD SDI output	SD SDI output	FORMAT CONV. output <sup>a)</sup>	
			System frequency	System frequency	System frequency	Note
HDCAM-SR	720/4:2:2 3D <sup>d)</sup>	50P	50P	625/50i	1080/4:2:2/50i	
					1080/4:2:2/50P	c)
					720/4:2:2/50P	
		59.94P	59.94P	525/59.94i	1080/4:2:2/59.94i	
					1080/4:2:2/59.94P	c)
					720/4:2:2/59.94P	
HDCAM-SR or HDCAM <sup>e)</sup>	1080/4:2:2	23.98PsF	23.98PsF	—	1080/4:4:4/23.98PsF	
				525/59.94i <sup>a)</sup>	1080/4:2:2/59.94i	
					1080/4:2:2/59.94P	c)
					720/4:2:2/59.94P	
		24PsF	24PsF	—	1080/4:4:4/24PsF	
					1080/4:2:2/60i	
					1080/4:2:2/60P	c)
		25PsF	25PsF	625/50i <sup>a)</sup>	720/4:2:2/50P	
					1080/4:2:2/50P	c)
					1080/4:4:4/25PsF	
		29.97PsF	29.97PsF	525/59.94i	720/4:2:2/59.94P	
					1080/4:2:2/59.94P	c)
					1080/4:4:4/29.97PsF	
		30PsF	30PsF	—	1080/4:4:4/30PsF	
					1080/4:2:2/60P	c)
		50i	50i	625/50i	1080/4:4:4/50i	
					1080/4:2:2/50P	c)
					720/4:2:2/50P	
		59.94i	59.94i	525/59.94i	1080/4:4:4/59.94i	
					1080/4:2:2/59.94P	c)
					720/4:2:2/59.94P	
		60i	60i	—	1080/4:4:4/60i	
					1080/4:2:2/60P	c)
Digital Betacam <sup>e)</sup>	625	50i	50i	625/50i	1080/4:4:4/50i	
					1080/4:2:2/50i	c)
					720/4:2:2/50P	
	525	59.94i	59.94i	525/59.94i	1080/4:4:4/59.94i	
					1080/4:2:2/59.94P	c)
					720/4:2:2/59.94P	

a) Optional HKSR-5001 is required.

b) Optional HKSR-5103 is required when the serial number of this unit is 12000 or lower.

c) Optional HKSR-5001 (serial number: 15001 or higher) is required.

d) Optional HKSR-5103 is required.

e) Optional HKSR-5802 is required.

f) Applicable only when the serial number of this unit is 12001 or higher.

## HDMI/HDV output formats that the HKSR-5105 supports

System setting			HDV output	HDMI output 1	HDMI output 2	HDMI output 3
2048 × 1556	4:4:4HQ (RGB) <sup>a)</sup>	23.98PsF	muting	muting		
		24PsF	muting	muting		
		25PsF	muting	muting		
2048 × 1080	4:4:4HQ (RGB/ XYZ) <sup>a)</sup>	23.98PsF	No video/audio output	720×480/RGB/59.94P		
		24PsF	No video/audio output	720×480/RGB/60P		
		25PsF	No video/audio output	720×576/RGB/50P		
1080	4:4:4SQ /HQ <sup>a)</sup>	23.98PsF	1080/4:2:0/59.94i	1080/RGB4:4:4/24P	1080/4:2:2/59.94i	720 × 480/RGB/59.94P
		24PsF	No video/audio output	1080/RGB4:4:4/24P	1080/4:2:2/60i	720 × 480/RGB/60P
		25PsF	1080/4:2:0/50i	1080/RGB4:4:4/25P	1080/4:2:2/50i	720 × 576/RGB/50P
		29.97PsF	1080/4:2:0/59.94i	1080/RGB4:4:4/29.97P	1080/4:2:2/59.94i	720 × 480/RGB/59.94P
		30PsF	No video/audio output	1080/RGB4:4:4/30P	1080/4:2:2/60i	720 × 480/RGB/60P
		50i	1080/4:2:0/50i	1080/RGB4:4:4/50i	1080/4:2:2/50i	720 × 576/RGB/50P
		59.94i	1080/4:2:0/59.94i	1080/RGB4:4:4/59.94i	1080/4:2:2/59.94i	720 × 480/RGB/59.94P
		60i	No video/audio output	1080/RGB4:4:4/60i	1080/4:2:2/60i	720 × 480/RGB/60P
	4:2:2 <sup>b)</sup>	23.98PsF	1080/4:2:0/59.94i	1080/4:2:2/23.98P	1080/4:2:2/59.94i	720 × 480/RGB/59.94P
		24PsF	No video/audio output	1080/4:2:2/24P	1080/4:2:2/60i	720 × 480/RGB/60P
		25PsF	1080/4:2:0/50i	1080/4:2:2/25P	1080/4:2:2/50i	720 × 576/RGB/50P
		29.97PsF	1080/4:2:0/59.94i	1080/4:2:2/29.97P	1080/4:2:2/59.94i	720 × 480/RGB/59.94P
		30PsF	No video/audio output	1080/4:2:2/30P	1080/4:2:2/60i	720 × 480/RGB/60P
		50i	1080/4:2:0/50i	1080/4:2:2/50i		720 × 576/RGB/50P
		59.94i	1080/4:2:0/59.94i	1080/4:2:2/59.94i		720 × 480/RGB/59.94P
		60i	No video/audio output	1080/4:2:2/60i		720 × 480/RGB/60P
	4:2:2 <sup>a)</sup>	50P	1080/4:2:0/50i	1080/4:2:2/50P	1080/4:2:2/50i	720 × 576/RGB/50P
		59.94P	1080/4:2:0/59.94i	1080/4:2:2/59.94P	1080/4:2:2/59.94i	720 × 480/RGB/59.94P
		60P	No video/audio output	1080/4:2:2/60P	1080/4:2:2/60i	720 × 480/RGB/60P
720	4:2:2 <sup>b)</sup>	50P	1080/4:2:0/50i	720/4:2:2/50P	1080/4:2:2/50i	720 × 576/RGB/50P
		59.94P	1080/4:2:0/59.94i	720/4:2:2/59.94P	1080/4:2:2/59.94i	720 × 480/RGB/59.94P

a) Optional HKSR-5103 is required.

When the serial number of this unit is 12001 or higher, playback in SQ mode is a standard feature and the HKSR-5103 is not required.

b) Optional HKSR-5103 is required for double-speed playback or 3D playback.

- When the system is operated in 4:4:4 RGB dual stream (3D)/double-speed playback mode, HDMI video and audio signals are not output.

- The output priority of the HDMI output 1 and 2 can be switched by setting the VTR SETUP menu item C10 “HDMI VIDEO OUTPUT MODE”.

### About HDV output

When the system is operated in 2048 × 1080, 2048 × 1556, 24PsF, 30PsF, 60i, 60P, or 4:4:4 RGB dual stream (3D)/double-speed playback mode, HDV video and audio signals are not output.

### About HDMI output 1/2/3

- By referring to the extended display identification data (EDID) from the connected HDMI monitor, the HDMI signal that is acceptable to the monitor is output with the priority described in the table above (i.e., HDMI output 1, 2, and then 3).
- When the HDMI monitor does not support the output signal format specified by the system setting of this unit, HDMI video and audio are not output.

## Relation between HKDV-900/503 setting items and setup menu items of this unit

In the cells of the “Setup menu items of this unit” column, the brackets indicate available outputs.

HKDV-900/503 setting items	Setup menu items of this unit
HD Master	708: MASTER LEVEL (HD) [HD/UC]
HD Y	709: Y LEVEL (HD) [HD/UC]
HD P <sub>B</sub>	710: P <sub>B</sub> LEVEL (HD) [HD/UC]
HD P <sub>R</sub>	711: P <sub>R</sub> LEVEL (HD) [HD/UC]
HD Setup	712: SETUP LEVEL (HD) [HD/UC]
HD Sync Phase	713: SYNC PHASE (HD) [HD/UC]
HD Fine	714: FINE (HD) [HD/UC]
D1 Master	755: MASTER LEVEL (D1) [DC/SD] <sup>b)</sup>
D1 Y	756: Y LEVEL (D1) [DC/SD] <sup>b)</sup>
D1 B–Y	757: B–Y LEVEL (D1) [DC/SD] <sup>b)</sup>
D1 R–Y	758: R–Y LEVEL (D1) [DC/SD] <sup>b)</sup>
D2 VIDEO	740: VIDEO GAIN (ALL) [HD/UC/SD/DC]
D2 CHROMA	741: CHROMA GAIN (ALL) [HD/UC/SD/DC]
D2 HUE	742: CHROMA PHASE (ALL) [HD/UC/SD/DC]
D2 SETUP	762: SETUP LEVEL (CST) [DC/SD] <sup>c)</sup>
	743: BLACK LEVEL (ALL) [HD/UC/SD/DC]
SD Sync Phase	763: SYNC PHASE (SD) [DC/SD]
SD Fine	764: FINE (SD) [DC/SD]
CROSS COLOR	934: CROSS COLOR (DC) [DC]
H CROP POSITION	932: H CROP POSITION (DC) [DC] / 951: H CROP POSITION (UC) [UC/FC] <sup>a)</sup> / 952: LETTER BOX POSITION (UC) [UC/FC] <sup>d)</sup>
DETAIL GAIN	935: DETAIL GAIN (DC) [DC] / 954: DETAIL GAIN (UC) [UC/FC] <sup>a)</sup>
LIMITER	936: LIMITER (DC) [DC] / 955: LIMITER (UC) [UC/FC] <sup>a)</sup>
CRISP	937: CRISP THRESHOLD (DC) [DC] / 956: CRISP THRESHOLD (UC) [UC/FC] <sup>a)</sup>
DEPEND	938: LEVEL DEPEND THRESHOLD (DC) [DC] / 957: LEVEL DEPEND THRESHOLD (UC) [UC/FC] <sup>a)</sup>
FREQUENCY	939: H DETAIL FREQUENCY select (DC) [DC] / 958: H DETAIL FREQUENCY (UC) [UC/FC] <sup>a)</sup>
H/V RATIO	940: H/V RATIO (DC) [DC] / 959: H/V RATIO (UC) [UC/FC] <sup>a)</sup>
GAMMA	942: GAMMA LEVEL (DC) [DC] / 960: GAMMA LEVEL (UC) [UC/FC] <sup>a)</sup>
CROP	930: DOWNCONVERTER MODE (DC) [DC] / 950: CONVERTER MODE (UC) [UC/FC] <sup>a)</sup>
LETTER BOX	930: DOWNCONVERTER MODE (DC) [DC] / 950: CONVERTER MODE (UC) [UC/FC] <sup>a)</sup>
SQUEEZE	930: DOWNCONVERTER MODE (DC) [DC] / 950: CONVERTER MODE (UC) [UC/FC] <sup>a)</sup>

a) Select whether to set DC or UC with sub item “IMAGE ENHANCER” of menu item 204 (VIDEO REMOTE CONTROL SELECT). When both are selected (menu item 204 is U&D), both of the corresponding menu settings are made, but this unit’s answer values and unity values are the DC values.

b) With the exception of composite output.

c) Use sub item “D2 SETUP” of menu item 204 “VIDEO REMOTE CONTROL SELECT” to determine whether to control menu item 762 “SETUP LEVEL (CST)” or 743 “BLACK LEVEL (ALL)”.

d) When operating on the UC side, the setting of menu item 950 “CONVERTER MODE (UC)” automatically determines whether menu item 951 “H CROP POSITION (UC)” or menu item 952 “LETTER BOX POSITION (UC)” is used.

HD: HD SDI output during HDCAM-SR/HDCAM playback

DC: Down-converted SD (SD SDI/COMPOSITE) output during HDCAM-SR/HDCAM format playback

SD: SD (D1 (SD SDI/COMPOSITE) output during Digital Betacam format playback

UC: Upconverted HD SDI output during Digital Betacam format playback

FC: During Digital Betacam playback, up convert output from the optional HKSR-5001 format converter

# LUT File Formats

## Applicable to This Board

Examples of the five lookup table (LUT) file formats applicable to this board are shown below.

### Note

Line numbers (“Lx” in the tables below) do not appear in the actual LUT files.

#### LUT file type 1: R, G, and B have the same value (the same curve)

“LUT: 1 1024” in the header indicates one output data block (common to R, G, and B) corresponding with the 10-bit (1024) input data.

The bit depth of the output is determined by the maximum output value.

(This is an example of 10-bit input and 10-bit output.)

# Comment

LUT: 1 1024

# (Line No.)	Output value
L1	0
L2	0
L3	1
•	
•	
•	
L1023	1023
L1024	1023

#### LUT file type 2: R, G, and B have individual values (individual curves) and are aligned vertically in the order of R, G, B

“LUT: 3 1024” in the header indicates three separate output data blocks (for R, G, and B) corresponding with the 10-bit (1024) input data.

The bit depth of the output is determined by the maximum output value.

The output values on lines L1 to L1024 are R values, the values on lines L1025 to L2048 are G values, and the values on lines L2049 to L3072 are B values.

(This is an example of 10-bit input and 10-bit output.)

# Comment

LUT: 3 1024

# (Line No.)	Output value
L1	0
L2	0
L3	1
•	
•	
•	
L1023	1023
L1024	1023
L1025	0
L1026	0
L1027	1
•	
•	
•	
L2047	1023
L2048	1023
L2049	0
L2050	0
L2051	0
•	
•	
•	
L3071	1022
L3072	1023

#### LUT file type 3: R, G, and B have individual values (individual curves) and are aligned horizontally

“LUT10” in the header indicates the bit depth of the output is 10 bits.

The bit depth of the input is determined by the maximum number of lines.

(This is an example of 10-bit input and 10-bit output.)

# Comment				
LUT10				
# (Line No,)	Input value	Output R	Output G	Output B
L1	0	2	2	2
L2	1	2	2	2
L3	2	2	2	2
		•		
		•		
		•		
L1023	1022	1023	1023	1023
L1024	1023	1023	1023	1023

# Comment			
# (Line No,)	Output R	Output G	Output B
L1	2	2	2
L2	2	2	2
L3	2	2	2
		•	
		•	
		•	
L1023	1023	1023	1023
L1024	1023	1023	1023

#### LUT file type 4: R, G, and B have individual values (individual curves) and are aligned horizontally

The bit depth is not indicated in the header. It is automatically determined by the number of lines and their values.

(This is an example of 10-bit input and 10-bit output.)

# Comment				
# (Line No,)	Input value	Output R	Output G	Output B
L1	0	2	2	2
L2	1	2	2	2
L3	2	2	2	2
		•		
		•		
		•		
L1023	1022	1023	1023	1023
L1024	1023	1023	1023	1023

#### LUT file type 5: R, G, and B have individual values (individual curves) and are aligned horizontally

The bit depth is not indicated in the header. It is automatically determined by number of lines and their values.

There are no lines for input values.

(This is an example of 10-bit input and 10-bit output.)

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