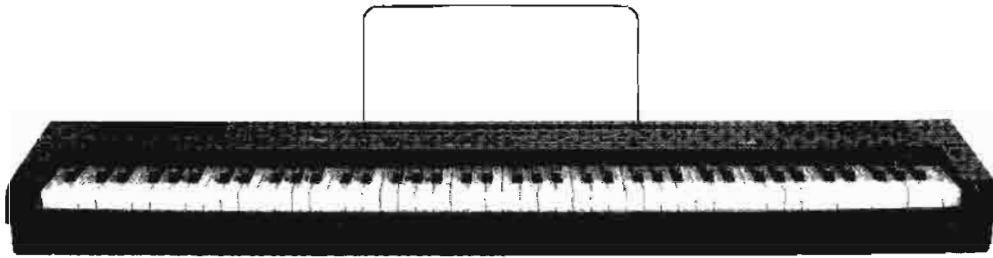# Artesia

PA-88H
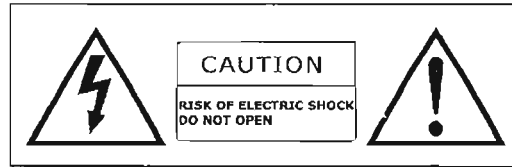
Owner's Manual

Virgin Musical Instruments

Precaution

Thank you for purchasing this digital instrument. For correct operation and safety, please read the manual carefully and keep it for future reference.

Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

The lightning flash with arrowhead symbol within an equilateral triangle 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.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.

(Figure 1)

7) Do not block any ventilation openings; install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) 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 is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) 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 (Figure 1).
13) Unplug this apparatus during lightning storms or when unused for a long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the 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.
CAUTION: Apparatus shall not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the apparatus.
Always make sure all batteries are inserted the correct way around to match the +/- polarity markings.
Always replace all of the batteries at the same time. Do not combine old and new batteries, also do not mix battery types, as this can cause overheating, or fire, or battery fluid leakage.
Remove the batteries from the instrument if it is not to be used for a long time.

WARNING: This product contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.
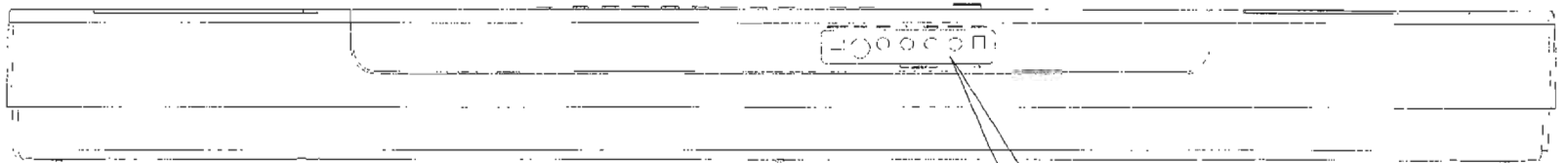
Thank you for choosing the Artesia PA-88H

Your piano is a high quality, portable, digital piano. Featuring an 88 note standard size key, hammer action keyboard and an advanced PCM tone generation technology that combined will provide you with a rich performing and playing experience. The piano is more than great technology, it has many features and connection possibilities. To get the most out of your instrument, please read this manual thoroughly and try out the various functions that can compliment your playing style.Whether it is on stage, studio or home, your new portable piano is designed to give you a lifetime of musical enjoyment.
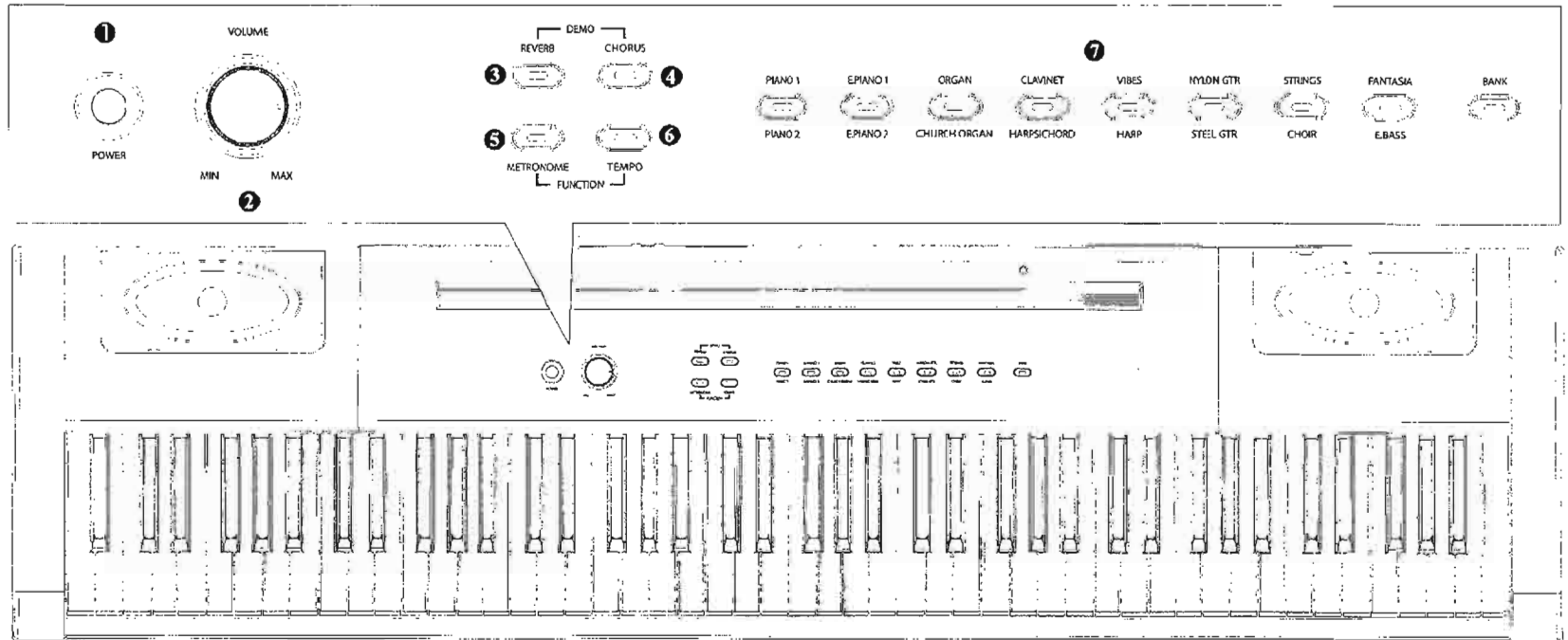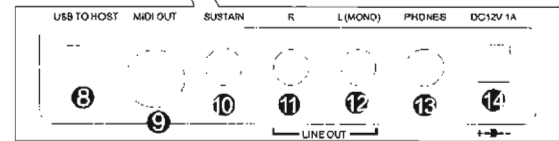
Contents

Rear Panel

| USB TO HOST | MIDI OUT | SUSTAIN | R | L (MONO) | PHONES | DC12V 1A |

⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭

LINE OUT

Top Panel

VOLUME

❶

POWER

MIN   MAX

❷

┌─ DEMO ─┐
REVERB   CHORUS
❸   ❹

❺   ❻
METRONOME   TEMPO
└─ FUNCTION ─┘

❼

| PIANO 1 | EPIANO 1 | ORGAN | CLAVINET | VIBES | NYLON GTR | STRINGS | FANTASIA | BANK |
| PIANO 2 | EPIANO 2 | CHURCH ORGAN | HARPSICHORD | HARP | STEEL GTR | CHOIR | E.BASS | |

2
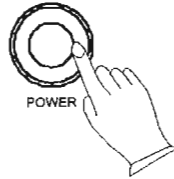
Panel Control

1. POWER

2. VOLUME

3. REVERB Button

4. CHORUS Button

5. METRONOME Button

6. TEMPO Button

7. VOICES Select

8. USB TO HOST Jack

9. MIDI OUT Jack

10. SUSTAIN Jack

11. LINE OUT(R) Jack

12. LINE OUT(L)(MONO) Jack

13. PHONES Jack

14. DC Power Jack

Turn on the power

Before playing turn the power on by pressing the POWER switch, the panel LED will turn on.
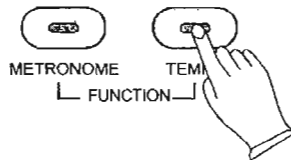
POWER

┌─ **NOTE**───

This piano has an auto off function. If you don't engage in any operations, the piano will turn off after 30 minutes.

Auto Power On/Off

Press the [METRONOME] and the [TEMPO] buttons together to enter the Function Mode.

METRONOME   TEMP
└ FUNCTION ─┘

Pressing the C#2 piano key allows the user to switch auto Power On or Off. While holding down the C#2 piano key, play the C3 Key once for Auto Power On and twice for Auto Power Off.

C#2
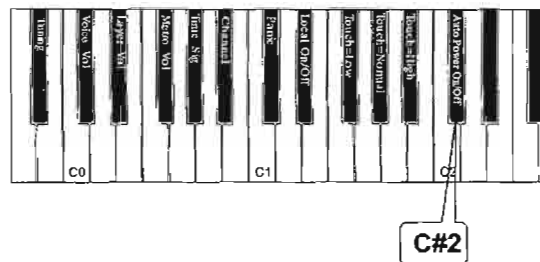
Press the [METRONOME] and the [TEMPO] buttons together again to exit the Function Mode.

Set the Volume

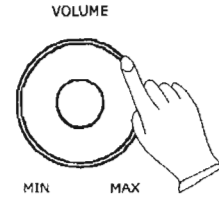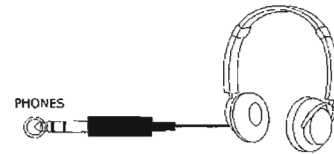Initially set the [VOLUME] about half way between the "MIN" and "MAX" settings. You can adjust the volume to accommodate you play.

Using Headphone

One standard stereo headphones can be plugged in here for private practice or late-night playing. The internal speaker system is automatically shut off when a pair of headphones is plugged into PHONES jacks.

Using External Sound System

The Line Out jack(R) and Line Out jack(L)(MONO) can be used to deliver the output of the piano to a keyboard amplifier, stereo sound system, mixing console or tape recorder.
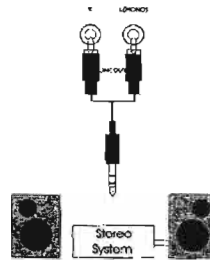
MIDI OUT Jack

MIDI (Musical Instrument Digital Interface) is a world-standard communication interface which allows electronic musical instruments to communicate with each other, by sending and receiving compatible note, program change and other types of MIDI data.

This terminal transmits data from this instrument to other MIDI devices. The transmitted data includes the note and touch velocity produced while playing on the keyboard, as well as voice changes. Demo songs are not transmitted.

Using USB-MIDI

This piano allows the transfer of MIDI over USB. There is a specific way in which the MIDI signals are routed for maximum flexibility. In a standard Digital Piano, the built-in keyboard sends MIDI signals to the internal sound bank as well as the 5-pin MIDI output. In this digital piano, the keyboard not only sends MIDI signals to the internal sound bank (just like normal) but also sends MIDI signals simultaneously to the internal MIDI connection which hooks up inside the device to the Audio Interface. It is the Audio Interface that is used to control the USB-MIDI.

USB TO HOST

Sustain Pedal

The sustain pedal included with the PA-88H will cause piano key sounds to slowly decay as if they were being held down. A more traditional piano style pedal may be used also. The Sustain jack will auto-detect the polarity of any sustain pedal that you use.
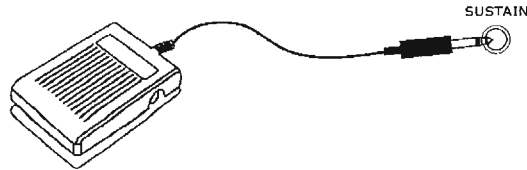
SUSTAIN

NOTE

Please make sure that the piano is turned off before connecting the pedal. Otherwise, it may not be read by the piano correctly.
If you use different sustain pedal and you need to change the polarity for proper operation, you will need to turn off the piano and then hold down the foot pedal during power up.

Using the DC Power Jack

Connect the included DC power adapter to the Power Supply Jack.
Please use only the provided power adapter.

Using Battery Power

Always make sure all batteries are inserted the correct way around to match the +/- polarity markings.

Always replace all of the batteries at the same time. Do not combine old and new batteries, also do not mix battery types, as this can cause overheating, or fire, or battery fluid leakage.

Remove the batteries from the instrument if it is not to be used for a long time.

The piano has 16 built-in voices, which include several pianos as well as other instruments. These digitally-sampled musical instrument sounds may be selected one at a time, layered to produce two voices at once.

To select an instrument voice (Main voice), press the appropriate Voice Select button on the front panel.

PIANO 1	E.PIANO 1	ORGAN	CLAVINET	VIBES	NYLON GTR	STRINGS	FANTASIA	BANK
PIANO	E.PIANO 2	CHURCH ORGAN	HARPSICHORD	HARP	STEEL GTR	CHOIR	E.BASS	
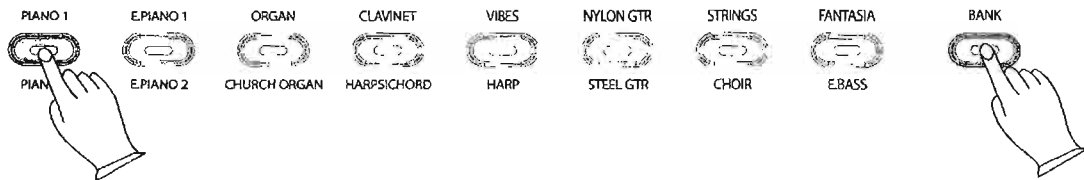
NOTE

Press the [BANK] button and it's indicator will turn on, then when you press an instrument select button the instrument that you hear is the instrument listed on the bottom of the voice button.

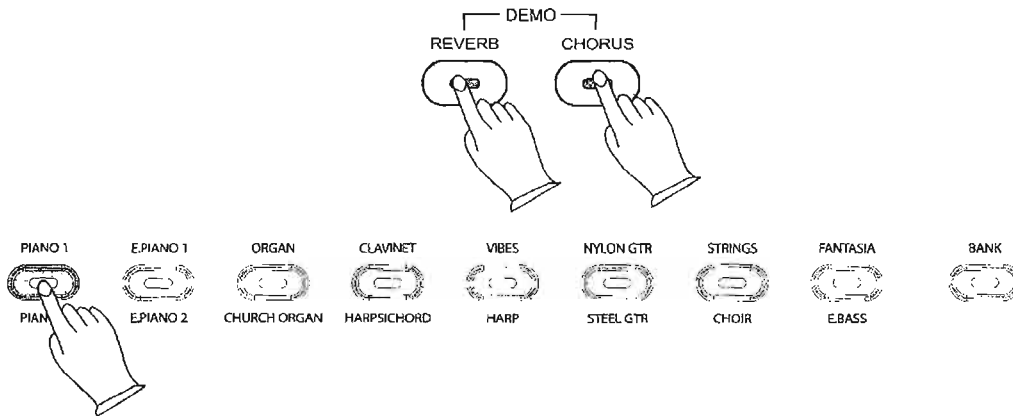There are 16 demo songs in the piano. Each demo song will demonstrate a different voice. Here's how you can select and play the demo songs.

Select the Demo Song

The demo songs may be selected by pressing the [REVERB] and [CHORUS] buttons together simultaneously. The [REVERB] button, the [CHORUS] button and voice buttons will flash . The first demo song is the Piano.

During playback, another song may be chosen by pressing a different voice select button. You can also press the [BANK] button then press a voice button to select a demo song in the bottom line.

Stop the Demo Song

To stop the demo song. Press the [REVERB] button and the [CHORUS] button together again.
To replay the current song from the beginning, press the flashing voice select button.
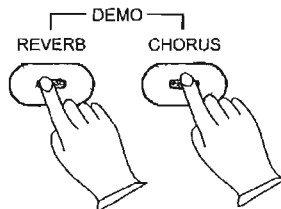
Reverb and Chorus Buttons

The Reverb and Chorus effects may be applied to each voice individually and will be retained even when the power is turned off.
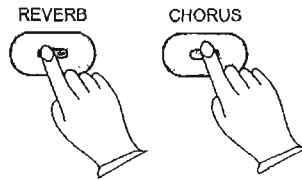
To apply either effect, press either button. The button will light and the effect will be heard when the piano is played.

To turn off the effect, press the button of the desired effect again and the LED light will turn off.

Select the Depth of the Effects

1. Press and hold the effect button that you want change the depth of.
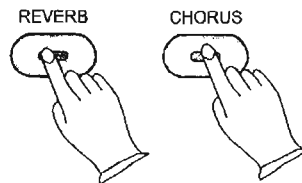
2. The LED will blink. You can then release the button and press a key on the keyboard corresponding to the setting you want for the reverb depth. It's possible to change the setting by pressing multiple keys after each other until the right setting is found.
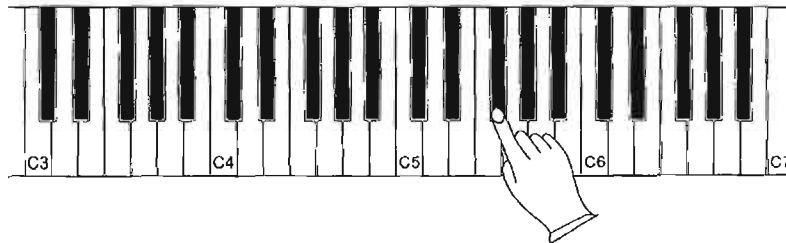
3. Set the reverb depth by pressing a key on the keyboard to select the value. See the Appendix for the Reverb Depth on pages 24 to 31.

4. Play the keyboard to hear the new setting with the sound selected.

5. To exit the [REVERB]([CHORUS]) function, press the [REVERB] ([CHORUS])
   button again.

In Layer mode two voices may be played simultaneously, each at individual selected volume levels.

To enter the Layer mode, press and hold the voice select button to select the MAIN sound, then press the another voice select button that you would like to add for the LAYER sound, and release. Both the buttons LED will remain on while layered.

To turn Layer Mode off, select a single voice button and the other Voice LED light will turn off.
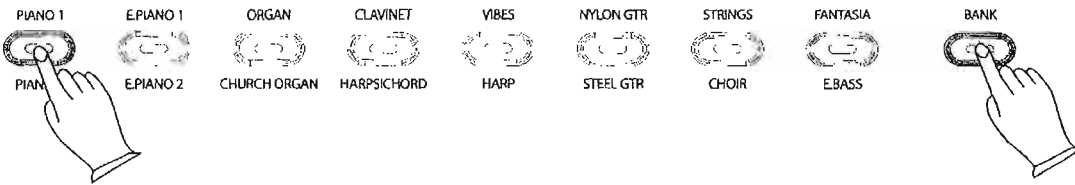
To layer two sounds in different banks, press and hold simultaneously the voice button required in the first bank and the bank button. The bank button LED will flash and 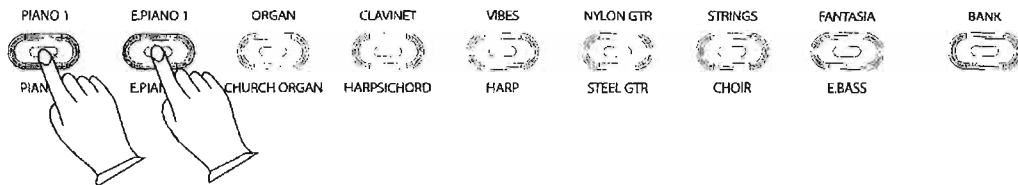the first voice button will be lit. Once the bank button is flashing you can remove your hands from the buttons. Next, select the layered button from the second bank by pressing the corresponding button. Once selected this button will blink to indicate it is from the second bank while the instrument from the first bank stays lit. If two voices in the first and second bank, but on the same button are selected, the buttons should merely blink. These can also be layered by double-pressing the button in which case again the button will blink.

To Adjust the Volume of Main Voice in Layer Mode

Press the [METRONOME] and the [TEMPO] buttons together to enter Edit Mode, The LEDs for both buttons will become lit.
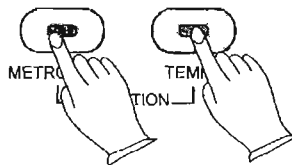
Pressing C#0 activates the voice volume menu.
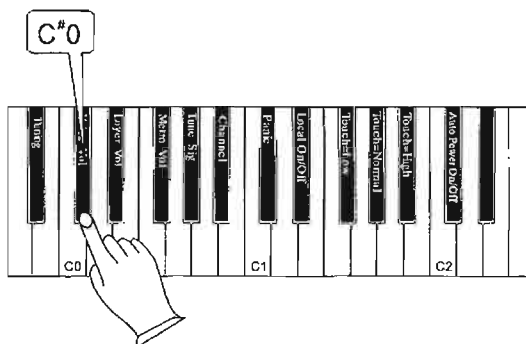
The volume can be changed in 88 note steps from 0-127 where C7=127
and A-1=0. Pressing a key will play C3 of the currently selected voice
sound at the volume corresponding to the key value.
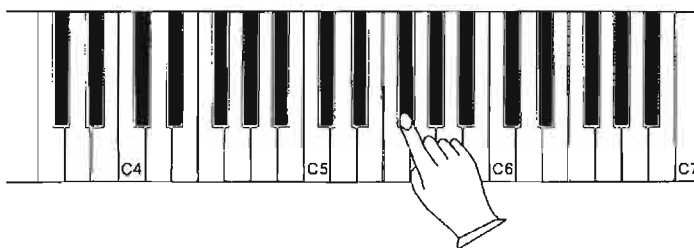
To exit the Voice Volume function, press the [METRONOME] and [TEMPO]
buttons at the same time again.

To Adjust the Volume of the Layer Voice

Press the [METRONOME] button and the [TEMPO] button to enter Edit Mode.
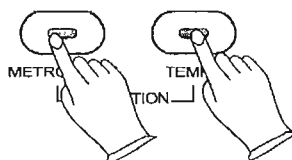
Press the (D#0) key activates the voice volume menu. The volume can be
changed in 88 note steps from 0-127 where C7=127 and A-1=0.
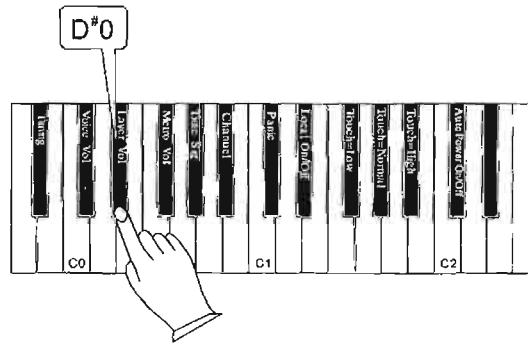
Press a key will play C3 of the currently selected layered sound at the volume corresponding to the key value.
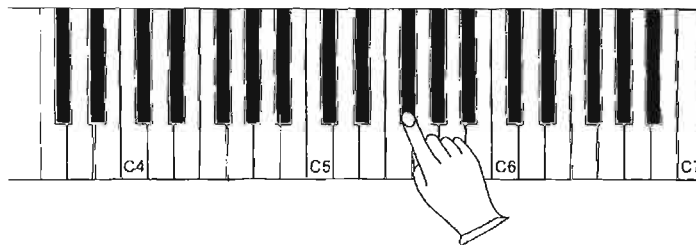
Press the [METRONOME] and the [TEMPO] again to exit Edit mode.

Press the metronome button to turn the metronome on.
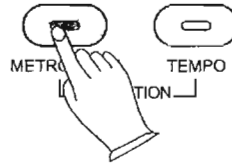
When the Metronome button is activated its LED will light and you will hear the click in the headphones or through the speakers.

Metronome Volume

Press the [METRONOME] and [TEMPO] buttons together to enter edit mode.

Pressing F#0 activates the metronome volume menu. the volume can be changed in 88 note steps from 0-127 where C7=127 and A-1=0. Pressing a key will play the metronome sound at the volume corresponding to the key value.
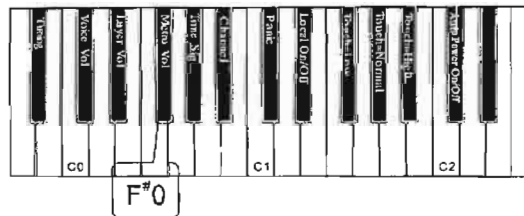
Changing the Metronome Time Signature

Pressing the [METRONOME] and the [TEMPO] buttons allows you to change the time signature for the metronome. When this menu is selected the metronome starts playing at the current tempo setting. Pressing G#0 toggles through the time signature options starting with the current setting. Default is 4/4 and the following options are available to toggle through: 2/4, 3/4, 4/4, 5/4, 6/8, 9/8, 12/8.
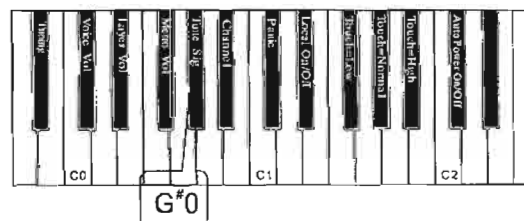
Press the [METRONOME] and the [TEMPO] buttons again to exit Edit Mode.

Tempo

The tempo of the metronome may range from 20 to 280 beats per minute (BPM).
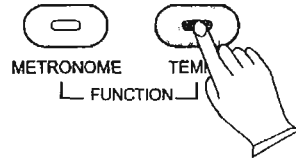
To change the tempo, press and hold the button for 3 seconds to change the setting. The LED will blink to current tempo speed. If the Metronome is off, no sound will be heard.

Press a key on the keyboard to select a tempo. The LED will blink to the new value. It is possible to make multiple changes and see the LED tempo change as the keys are pressed.

To exit, press the tempo button. The LED will stop blinking and not light. See Appendix for the value ranges.

Tempo defaults to 120 but settings are retained when the power is turned off. For example 120BPM = C3 piano key.

Edit Functions

In the Edit Mode the keys on the keyboard are used for selecting the Function to be edited. To enter the Edit Mode, press the Metronome and Tempo buttons at the same time.

Function Key Assignments

Please refer to pages 11 and 14 for information about editing the Metronome and Layer functions.

Master Tuning

The piano is tuned to A440 when the power is turned on and does not require tuning. However, if desired, the tuning may be adjusted in small increments from -50 to +50 cents (one semitone).

To change the Master Tuning:

Press the [METRONOME] and [TEMPO] button together to enter Edit Mode.
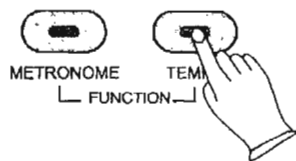
Press the Tunning key $A^\#$-1 to select the Master Tuning Function. The keyboard will now play middle C piano 1 voice (C3) on every note across the keyboard. Playing C3=C3. Pressing any key downwards to $A^\#$-1 will play C3 but change the tuning setting proportionately to tune down by a whole semi tone.
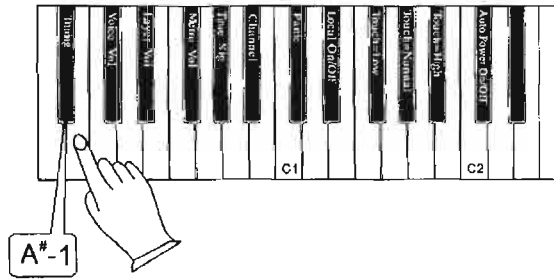
Pressing any key from C3 and up will play the C3 note but at tuning settings proportionately so that its possible tune up by a whole semi tone. Please listen as you proceed to determine the correct tuning setting.
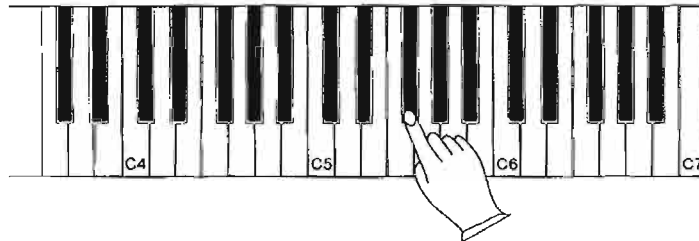
Press the [METRONOME] and the [TEMPO] buttons again to exit Edit Mode.

Touch

The Touch Select function allows the choice of 3 keyboard sensitivity settings for different playing styles: Low Sensitivity, Normal Sensitivity and High Sensitivity. This affects the volume of the piano as you play the keys.

To Set the Keyboard Sensitivity

Press the Metronome and Tempo Buttons together to enter the Edit mode.
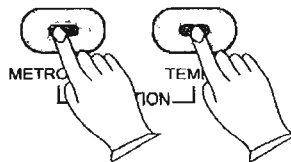
Press the desired Touch Select key (F#1, G#1, A#1) to select between Low, Normal and High Keyboard Sensitivity. When selecting F#1 low, Piano 1 C3 will play at velocity value 30. When G#1 Normal is selected, Piano 1 C3 will play at velocity value 70. When A#1 High is selected, Piano 1 C3 will play at velocity value 127 and the piano will exit Function Mode automatically.
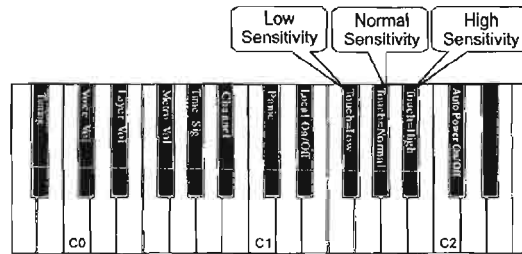
MIDI Channels

MIDI Out channel values range from 1 to 16.

To change the MIDI Out Channel Value: While in the Edit Mode press the A#0 key the amount of times that correspond to the MIDI Out Channel that you desire.

The MIDI Out Channel Value is identified by the amount of times that the C3 Piano Note is sounded.

The default MIDI Out channel is 1.

For example: When you press A#0 piano key one time in edit mode, you will hear one note C3 sound to indicate that current MIDI Out channel is 1.

If you press The A#0 piano key 9 times in a row while still in the Edit Mode you will hear the C3 Note being played back 10 times to denote that the new MIDI Out channel is 10.
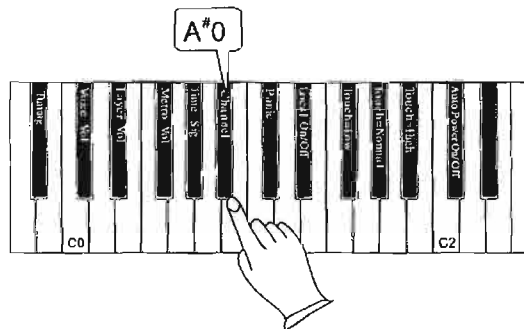
MIDI Local On/Off

Turning the Local On/Off function to Off will disconnect the keyboard from the internal sound engine of this piano. This means you can use the piano as a MIDI controller to control other MIDI devices (or virtual instrument software running on

your computer) without playing the internal sounds of this piano. You may also find other occasions (such as when you are using MIDI sequencing software on your computer) where it is useful to turn Local off.

Press the [METRONOME] and the [TEMPO] Buttons together to enter the edit mode.
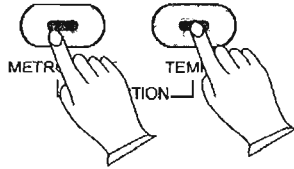
Press the Local On/Off key (D#1) to switch local on or off. When the D#1 key is first pressed the current setting is confirmed by playing the C3 piano key once for on and twice for off. If you press the D#1 key again you will need to re-enter your desired settings.
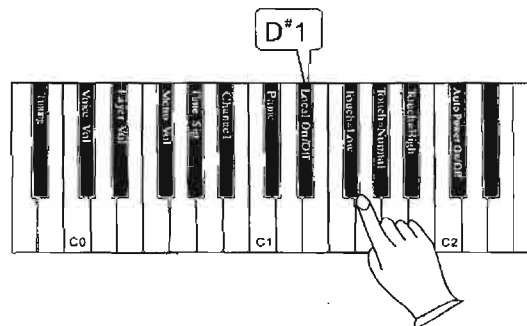
Press the [METRONOME] and the [TEMPO] Buttons again to exit the edit mode.

MIDI Panic Key

Pressing the Panic key will send out a "Reset All Controllers" and "All Notes Off" MIDI Message on ALL MIDI Channels 1 - 16. This can be especially useful for clearing "stuck notes" when controlling external MIDI devices or software.

To use the Panic key to send out a "Reset All Controllers" and "All Notes Off" MIDI Message on ALL MIDI Channels 1 - 16:

Press the [METRONOME] and [TEMPO] button together to enter Edit Mode.
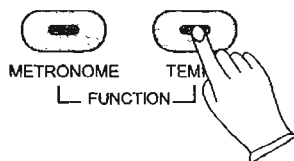
Press the Panic Key (C#1) allows the user to activate Panic, which send out general MIDI reset messages such as all note off, etc. Once Panic reset has been completed, Piano will automatically exit Edit mode.
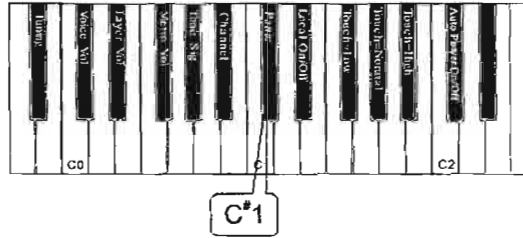
Factory Reset

Performing a Factory Reset will clear all battery backed memory and restore all functions to their factory default settings, just like they were when you used this piano for the first time.

1. Turn the Power Off.
2. Hold down the [REVERB] and the [CHORUS] buttons while powering on the piano.
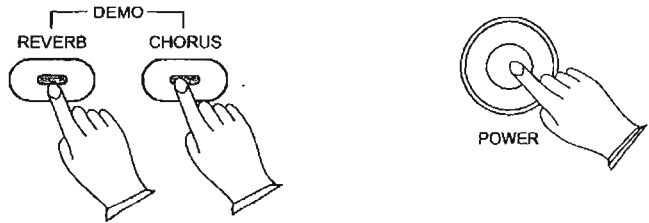
All LEDs on the device will light while these buttons are held down. Once this has happened, you can release the [REVERB] and [CHORUS] buttons.

When the [REVERB] and the [CHORUS] buttons are released, this piano will return to normal operation Mode (ready-to-play). All button LEDs will return to their default states.

This piano will now function normally and as if powered on for the first time.

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic **Channel**	Default Changed	1-16 1-16	1-16 1-16	*Up to 3 channels simultaneously
Mode	Default Messages Altered	Mode 3 Yes ********	Mode 3 No No	
Note **Number**	True voice	0~127 ********	0~127	
Velocity **Note**	Note ON Note OFF	Yes Yes	Yes Yes	
After **Touch**	Key's Channels	No No	No No	
Pitch Bend		No	No	
Control Change		0-127	0,1,5,6,7,10,11, 32,64,65,66,67, 80,81,91,93,100, 101,121	
Program **Change**	True #	0-127 ********	0-15	16
System Exclusive		Yes*	Yes*	*The controller will recognize and respond to GM Device inquiries. Master Tune supported. Master Volume supported.
System **Common**	Song Position Pointer Song Select Tune Request	No No No	No No No	
System **Real Time**	Clock Commands	No No	No No	
Aux Messages	All Sounds Off* Reset All Controllers Local ON/OFF* ALL Notes OFF Active Sensing System Reset	Yes Yes Yes Yes No No	Yes Yes Yes Yes Yes Yes	* The controller will respond to GM, but not piano voices.
Notes				

MIDI Channel Modes		
	POLY OFF	MONO ON
OMNI ON	Mode1	Mode3
OMNI OFF	Mode2	Mode4

Parameter adjusting instructions

According to chart shown below, choose corresponding key to set the desired values.

	Voice Vol	Layer Vol	Metro. Vol	Reverb Vol	Chorus Vol	Tempo
A-1	0	0	0	0	0	20
A#-1	2	2	2	2	2	24
B-1	4	4	4	4	4	28
C0	6	6	6	6	6	32
C#0	8	8	8	8	8	36
D0	10	10	10	10	10	40
D#0	12	12	12	12	12	44
E0	14	14	14	14	14	48
F0	16	16	16	16	16	52
F#0	18	18	18	18	18	56
G0	20	20	20	20	20	60
G#0	22	22	22	22	22	62
A0	24	24	24	24	24	64
A#0	26	26	26	26	26	66
B0	28	28	28	28	28	68
C1	30	30	30	30	30	70
C#1	32	32	32	32	32	72
D1	34	34	34	34	34	74
D#1	36	36	36	36	36	76
E1	38	38	38	38	38	80
F1	40	40	40	40	40	82
F#1	42	42	42	42	42	84
G1	44	44	44	44	44	86
G#1	46	46	46	46	46	88

	Voice Vol	Layer Vol	Metro. Vol	Reverb Vol	Chorus Vol	Tempo
A1	48	48	48	48	48	90
A#1	50	50	50	50	50	92
B1	52	52	52	52	52	94
C2	54	54	54	54	54	96
C#2	56	56	56	56	56	98
D2	58	58	58	58	58	100
D#2	60	60	60	60	60	102
E2	62	62	62	62	62	104
F2	64	64	64	64	64	106
F#2	66	66	66	66	66	108
G2	68	68	68	68	68	110
G#2	70	70	70	70	70	112
A2	72	72	72	72	72	114
A#2	74	74	74	74	74	116
B2	76	76	76	76	76	118
C3	78	78	78	78	78	120
C#3	80	80	80	80	80	122
D3	81	81	81	81	81	124
D#3	82	82	82	82	82	126
E3	83	83	83	83	83	128
F3	84	84	84	84	84	130
F#3	85	85	85	85	85	132
G3	86	86	86	86	86	134
G#3	87	87	87	87	87	136
A3	88	88	88	88	88	138
A#3	89	89	89	89	89	140
B3	90	90	90	90	90	142
C4	91	91	91	91	91	144

	Voice Vol	Layer Vol	Metro. Vol	Reverb Vol	Chorus Vol	Tempo
C#4	92	92	92	92	92	146
D4	93	93	93	93	93	148
D#4	94	94	94	94	94	150
E4	95	95	95	95	95	152
F4	96	96	96	96	96	154
F#4	97	97	97	97	97	156
G4	98	98	98	98	98	158
G#4	99	99	99	99	99	160
A4	100	100	100	100	100	162
A#4	101	101	101	101	101	164
B4	102	102	102	102	102	166
C5	103	103	103	103	103	168
C#5	104	104	104	104	104	170
D5	105	105	105	105	105	172
D#5	106	106	106	106	106	174
E5	107	107	107	107	107	176
F5	108	108	108	108	108	178
F#5	109	109	109	109	109	180
G5	110	110	110	110	110	185
G#5	111	111	111	111	111	190
A5	112	112	112	112	112	195
A#5	113	113	113	113	113	200
B5	114	114	114	114	114	205
C6	115	115	115	115	115	210
C#6	116	116	116	116	116	215
D6	117	117	117	117	117	220
D#6	118	118	118	118	118	225
E6	119	119	119	119	119	230

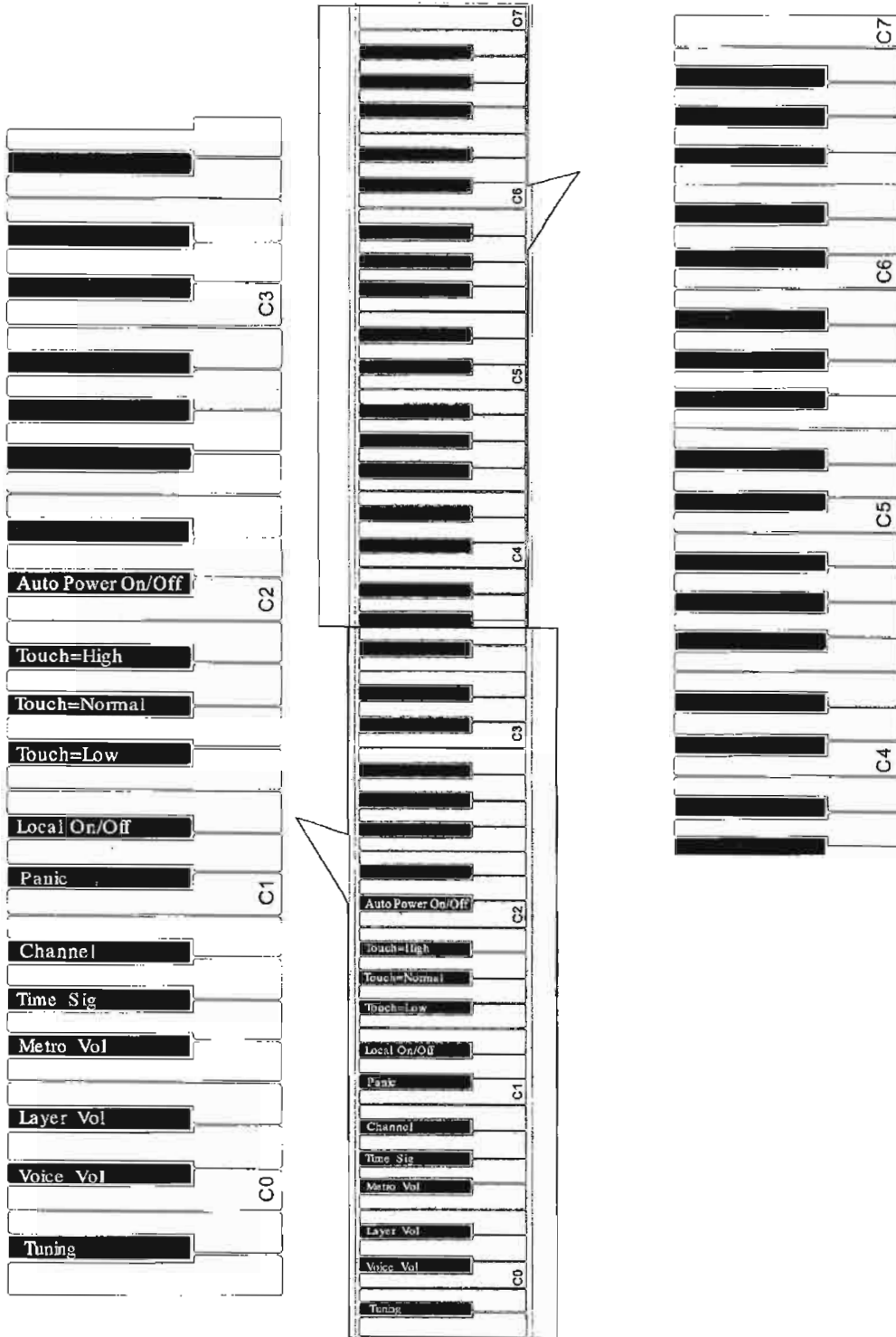|	Voice Vol	Layer Vol	Metro. Vol	Reverb Vol	Chorus Vol	Tempo
F6	120	120	120	120	120	235
F#6	121	121	121	121	121	240
G6	122	122	122	122	122	245
G#6	123	123	123	123	123	250
A6	124	124	124	124	124	255
A#6	125	125	125	125	125	260
B6	126	126	126	126	126	270
C7	127	127	127	127	127	280

Note:

X: No value available for this particular Edit Function on this key.

Resetting Value:

	Tune	Voice Vol	Layer Vol	Metro. Vol	Local	Channel	Tempo	Voice Select	Auto Power Off
Factory Default	0	127	100	100	ON	1	120	1(Grand Piano)	OFF

Advanced Functions Keyboard Chart

Auto Power On/Off

Touch=High
Touch=Normal
Touch=Low

Local On/Off
Panic

Channel
Time Sig
Metro Vol

Layer Vol

Voice Vol

Tuning

Auto Power On/Off
Touch=High
Touch=Normal
Touch=Low
Local On/Off
Panic
Channel
Time Sig
Metro Vol
Layer Vol
Voice Vol
Tuning

28

Specifications

Keyboard:	88 standard-size hammer keys with touch response
Voice:	16
Polyphony:	64
Voice Control:	Layer, Layer level, Keyboard sensitivity, Tuning
Metronome:	On/off, Level, Time signature
Pedal Response:	Sustain
Effect:	Reverb, Chorus
Demo Songs:	16
MIDI:	Channels 1-16, Local On/Off
Connectors:	USB TO HOST, MIDI OUT, SUSTAIN, LINE OUT(R), LINE OUT(L)(MONO), PHONES, DC Power
Speakers:	YD816 15W/4ohm x 2
Dimensions(W x D x H)	51.8x 13.3 x 5.1(inches),1315 x 337 x 130(mm)
Weight:	13.5Kg
Supplied Accessories:	Owner's Manual, Music Rest

10506035V1.0

Artesia