Nissin
D I G I T A L

NISSIN.JAPAN

MG10

INSTRUCTION MANUAL

Nissin

NISSIN.JAPAN
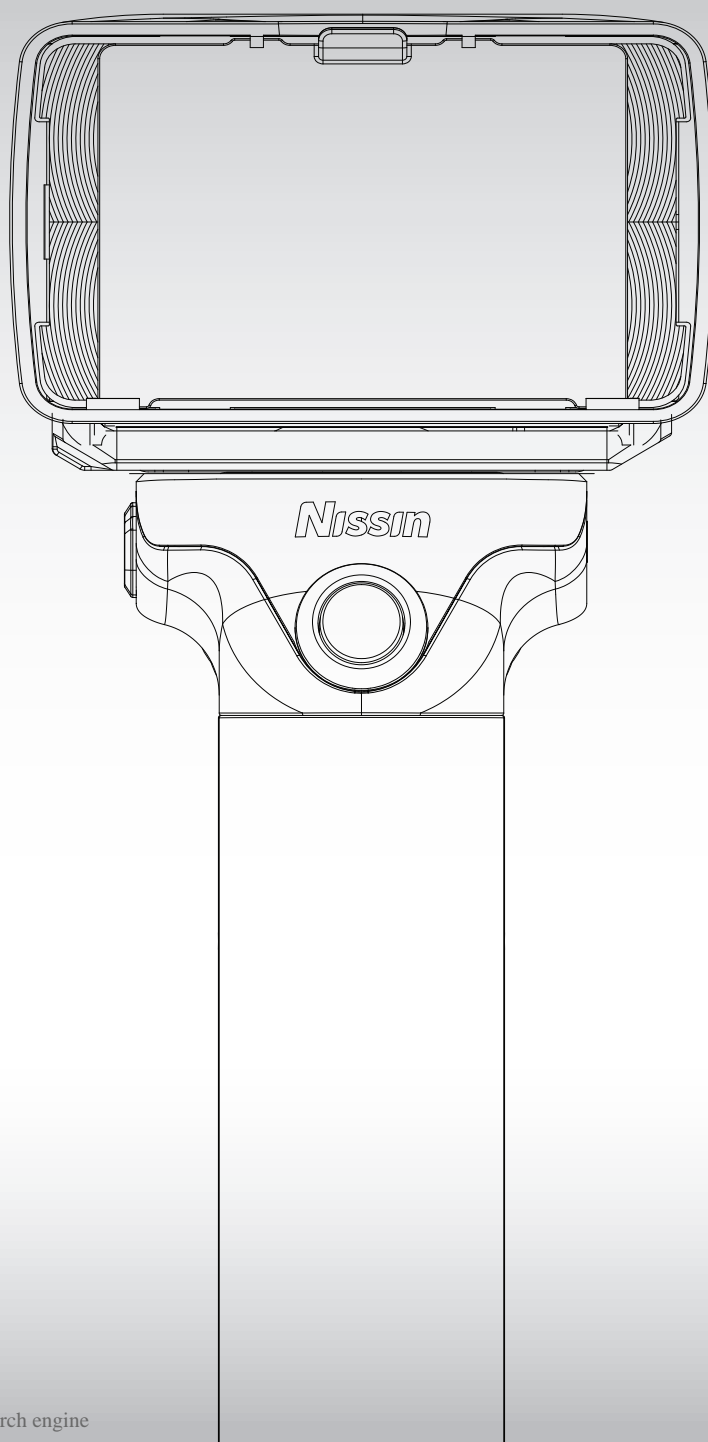
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Thank you for purchasing a Nissin product

Before using this flash unit, please read this instruction manual and refer to the manual of camera owner carefully to get a better understanding of the proper operation to enjoy flash photography.

1

NAS

Ready!

Nissin Air System (NAS) is a Nissin wirelessly remote control flash light system, designed by Nissin. It consists of a Nissin radio commander (NAS commander) and the Nissin wireless flash (NAS flash) and Nissin radio receiver (NAS receiver) as remote slave units.

● Insert Air 10s on the camera hot shoe as a NAS commander.

● The signal of Air 10s is transmitted by using 2.4 GHz transmission.

● Transmission distance is approx. 100m (330 ft.)
   (Metal/ Wire/ Wall/ another 2.4 GHz radio frequency may cause a
   reduction in the NAS transmission distance)

2

SAFETY INSTRUCTIONS

These safety instructions refer to important information on how to use this product safely and properly. Please read the following instructions before using the product.

⚡ WARNING

This symbol refers to the possibility of personal injury, death or property damage if not followed as described.

● The flash unit contains high voltage electric parts. Do not try to open or repair the flash unit. Return it back to the repair service station or the store where you bought it from.

● Do not touch the inside parts from the opening when the unit was dropped or broken.

● Do not shoot the flash directly to the eyes at short distance. It may damage the eyes.

● When taking a flash picture, especially toward a baby, it is recommended to keep the flash unit at least 1 meter (3.3feet) away from the subject. Or use diffuser or bounce the light to the ceiling or wall to soften its intensity.

● Do not place the flash unit near any flammable gas, chemicals or such liquids. It may cause fire or electric shock.

● Do not touch the flash unit with wet hands or use in the water. The flash unit carries high voltage inside and it may cause an electric shock.

● Do not shoot the flash unit directly at the driver of automobiles or such vehicles.

● Do not set the flash window close to the human body and shoot, which may get scalded.

● Place the batteries correctly in position. Placing the batteries in wrong polarity may cause leakage, exothermic heat or explosion.

⚠ CAUTIONS

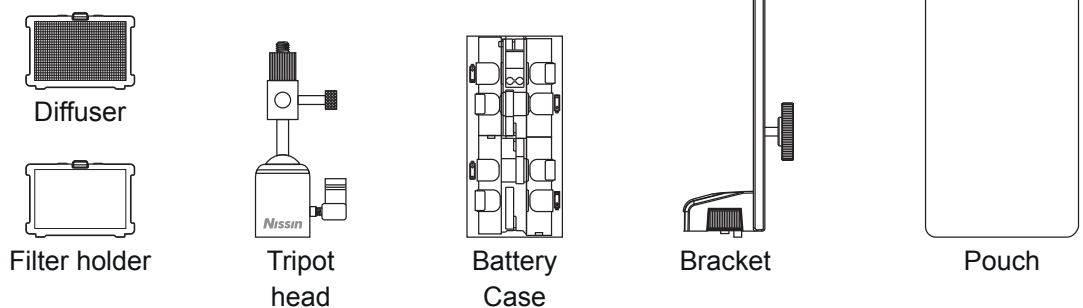This sign refers to conditions which may cause damage or defect.

● Do not touch the inside parts from the opening when the unit was dropped or broken.
● Place the batteries correctly in position. Placing the batteries in wrong polarity may cause leakage, exothermic heat or explosion.
● Do not leave or store the commander unit in the temperature over 40ºC/ 104ºF, such as in the automobile.
● The flash unit is not water resistance. Keep the unit away from rain, snow and humidity.
● Do not use benzene, thinner or other alcoholic agents to clean the unit.
● Do not use this flash unit with cameras which are not recommended in the compatibility list at official website, otherwise it may damage the camera's circuitry.
● Remove the batteries when not in use for a longer period of time.
● Do not have a heavy impact to the flash unit, nor throw it onto a hard surface floor.

3

Names of the Components
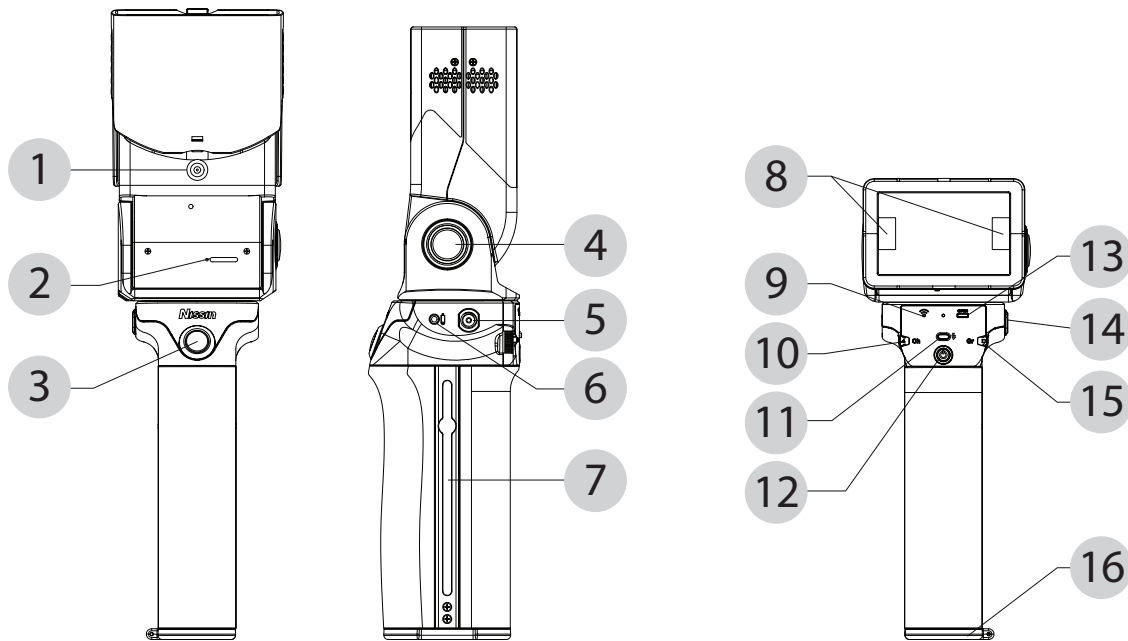
1 X-terminal

2 Micro SD card slot
   (for firmware update)

3 Wireless remote shutter

4 Bounce lock

5 Tripod Screw

6 Shutter cable socket (2.5mm)

7 Rail

8 Modelling Light

9 NAS connection light

10 Channel Dial

11 Pilot button (Test flash button)

12 Power On/Off button

13 Open Mode button

14 Power Pack socket

15 Group Dial

16 Battery compartment door

Accessories:

Diffuser

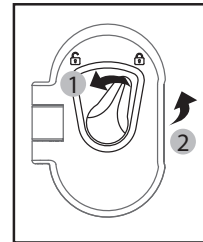Filter holder

Tripot
head

Battery
Case

Bracket

Pouch

4

Preparation before use.
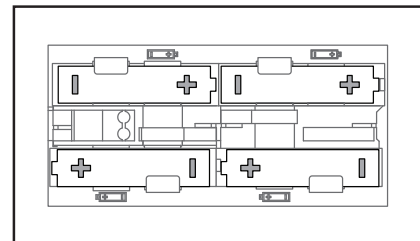
Before starting wireless flash shooting.

Inserting batteries

Applicable Battery Type - Alkaline batteries, Lithium batteries or NiMH batteries.
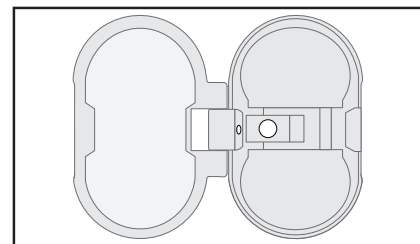
1. Open the battery compartment door.

2. Insert 8 x size AA batteries in battery case as shown in the picture.

3. Insert the battery case and lock the battery door. Make sure white dot at same side as shown in the picture.
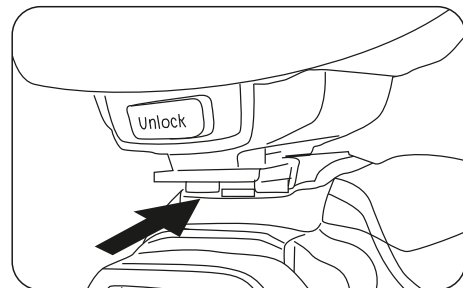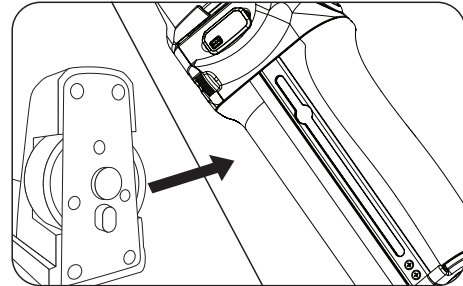
CAUTIONS

1. It is recommended to use batteries of the same brand and replace all at the same time.
2. It is recommended to use a qualified rechargeable battery due to environmental protection and power supply reaction while using. Re-charge the battery before use
3. Wrong insertion of the battery direction or wrong versions of batteries may lead to malfunction on electrical contacts or damage on MG10.
4. Remove all batteries from MG10 is highly recommended while not in use for long time.

5

Basic Operation

Mounting MG10 on the camera

1. Turn off MG10.

2. Insert the short side of bracket into the side rail of the MG10 and tighten the wheel.

3. Put the camera on the bracket and tighten the mounting screw.

4. Slide the mounting foot of Air 10s into the hotshoe on the camera

Removing MG10 from the camera

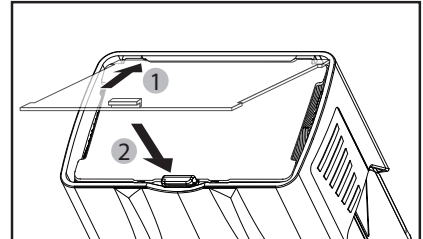1. Turn off MG10.

2. Loosen the mounting screw at bottom side.

CAUTIONS

Do not use the Air 10s as a holder to pick up the whole camera system.
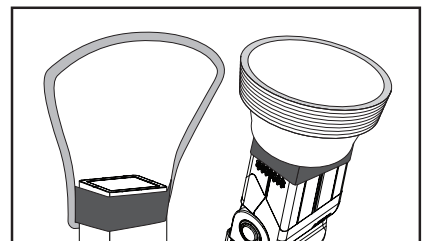
6

Zoom head and light diffusing panel

Using light diffuser / filter holder with zoom head

1. Turn off MG10.

2. Insert the flash gel between zoom head & filter holder.

3. Insert the diffuser / filter holder in ① & put the diffuser / Filter holder lid on ② .

Zoom head

1. Turn off MG10.

2. Pull out the zoom head base ① & slide out the zoom head ② .

3. The (49 x 72 mm) head fit most of the standard flash mount acessories in the market. (Example showing on picture 3)

7

Pairing Setting

To perform wireless shooting, set the Nissin Air 10s commander and
NAS slave unit with the following procedure. After pairing is completed, both of them
will memorize the data and there will be no need to pair again after the units are
switched on and off.

Step 1: Set all NAS flashes and NAS receivers to pairing mode.

Nissin flash MG10

1. Make sure the Nissin MG10 is off.
2. Rotate the "Ch" channel dial to "Auto" auto channel mode.
3. Hold the "Open" button and the power button for 3 seconds.

Step 2: Binding on Flash Commander

Nissin Air 10s

1. Make sure the Nissin Air 10s is off.
2. Hold both Panel Lock button and Power on/off buton for 3 seconds
   until the pilot light is blinking in orange colour.
3. "Beep" sound persists until the Pairing signal is received.
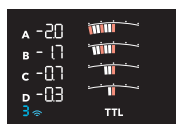   When the "beep" sound stops, the pairing is complete.
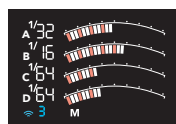
Basic Groups and Advanced groups

There are basic groups and advance groups for controlling the Nissin Air10s. They allow the user to pair an unlimited amount of slave units. They mainly divided into two kinds of groups:

Basic Group

A B C D

TTL mode

M mode

Advance Group

Ȧ Ḃ Ċ Ḋ

M/TTL mode

Basic groups and advance groups can be use at the same time for different strobes. Example:
Use the i60A in basic group A on manual, use two MG10 in advance group Ȧ & Ḋ in TTL and manual mode.

Camera with Air 10s
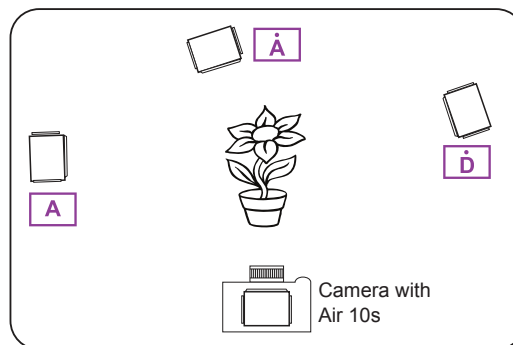
Group Setting

MG10, provides individual control of 4 groups (strobes), you can set these 4 groups in different settings. Before shooting, you have to set each strobes to be one of these 4 groups.

Nissin MG10 Flash

User can turn the (Gr D) Mode Dial to A / B / C / D / Ȧ / Ḃ / Ċ / Ḋ in changing the group setting.

Nissin Air 10s

Press ⌷ 1 second to switch basic group and advanced group

9

Open Mode (only works with Air 10s)

The NAS system is using an independent identity (ID) function to access strobes, the NAS strobes will not be affected by other commanders whenever they are using the same channel in the same location. A slave unit of Nissin flash or Nissin receiver can only be controlled by one and only one NAS commander with pairing in default setting.

MG10 offers "Open Mode" ,a new function (only works with Air 10s), on the pairing setting. Open Mode can let two or more camera using same set MG10 in one place.

Open Mode Setting

1. Press the OPEN button on MG10 to switch on Open mode. Pilot light on which means Open mode is on.

2. Hold the $\boxed{M/TTL}$ button of Nissin Air 10s for 1 seconds, the word "**OPEN**" lights up on the top of 🛜 in the LCD display which means Open Mode is on. Now hold the $\boxed{M/TTL}$ for 1 seconds again to turn off.

Wireless remote shutter

MG10 with Air 10s provide wireless remote shutter. User allow to use remote shutter to control camera on MG10.

Using with Air 10s

1. Slide the mounting foot of Air 10s into the hotshoe of the camera.

2. Connect the shutter cable between Air 10s & the camera.
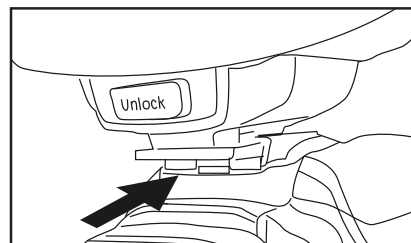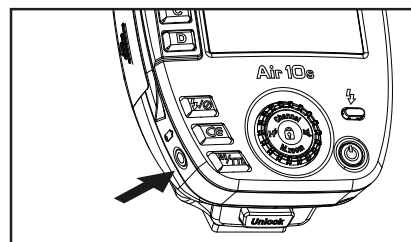

3. Turn MG10 Group Dial to **Gr** ⊙ for using wireless remote shutter.

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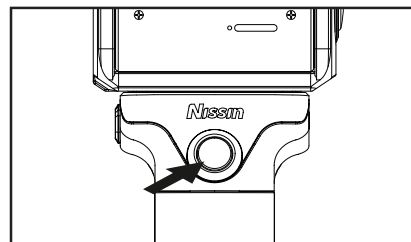
⚡ Flash power control

The Nissin MG10 can only be used in wireless mode with a NAS commander like the Nissin Air 10s. All exposure setting functions will be controlled by this NAS commander. (X-sync please refer to P.16)

TTL and M exposure mode switch

In Basic groups mode: Press the M/TTL button.

>

In Advanced groups mode:

To set different exposure mode in each group:
1. Press the Group Selection button. When the letter "A" blinks,
   press M / TTL mode button to change the exposure mode
   (the same procedure works with groups B, C, and D).

2. After completing the exposure setting,
   press the Group Selection button again to stop the blinking.

CAUTIONS

TTL auto flash exposure mode of Nissin Air 10s supports cameras which walked through the compatibility test.

+/- EV | # Flash Exposure Control

All the following setting have to be carried out on the control of the commander order on the commander Air 10s.

TTL flash exposure compensation

1. Press the Group Selection button, the group letters blink.

2. Rotate the Operation Dial to increase or decrease the TTL flash exposure compensation.
   The settings of TTL auto exposure compensation on Nissin Air 10s starts
   from -2EV to + 2EV and controlled by 1 / 3EV step interval.

   TTL mode

In addition to the bar chart, there are a number of exposure values shown:
- Setting of 0EV shows in 0.0,
- Setting of -2EV to -0.3EV will be displayed in -2.0 to -0.3;
- Setting of +0.3EV to + 2EV will be displayed in 0.3 to 2.0.

3. When the exposure compensation setting is completed,
   press the group selection button again.

TTL memory (exposure value memory)

Switching Air 10s from TTL mode to M mode, the last flash power setting
will be saved in TTL control. Flash power value will also remain unchanged in M mode.

CAUTIONS

If you do not press any group selection button which means all group letters in the display do not blink, rotate the Operation Dial to increase/ decrease the power of all groups. For example, A: 0EV, B: + 0.6EV, C: + 1EV, D: -1EV, do not select any group then turn the Operation Dial clockwise in 2 click intervals, will cause to A: + 0.6EV, B: + 1.3EV, C: 1.6EV, D: -0.3EV.

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All the following setting have to be carried out on the control of the commander order on the commander Air 10s.

M manual flash mode power control

1. Press the Group Selection button, the group letter blinks.

2. Rotate the Operation Dial to increase or decrease the flash power of the group selected. The setting of M mode on Air 10s starts from 1/256 (minimum) to 1/1 (Full), and controlled by 1/3 step intervals. The value digi displayed next to the group only shows the integer step value [*].

M mode

3. When the M mode setting is completed, press the group selection button again.

[*] The integer step values of Nissin Air 10s are
1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/128 and 1/256

CAUTIONS

If you do not press any group selection button which means all group letters in the display do not blink, rotate the Operation Dial to increase/ decrease the power of all groups. For example, A: 1/256, B: 1/8 + 0.6EV, C: 1/4, D: 1/2, do not select any group then rotate the Operation Dial clockwise with 2 intervals, it becomes
A: 1/256 + 0.6EV , B: 1/4 + 0.3EV, C: 1/4 + 0.6EV, D: 1/2 + 0.6EV.

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 Flash power control (X-Sync)

Connecting with X-Sync cable

1. Turn off MG10 and camera.

2. Plug the cable into X-terminal on camera & MG10.
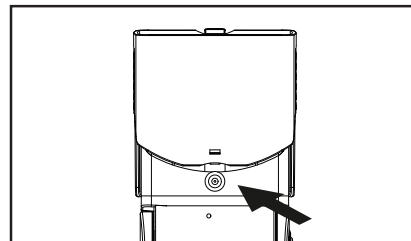
Power control

1. Turn Group Dial to for using x-sync.

2. Use Channel Dial to control the flash power:

Full	1/2	1/4	1/8	1/16	1/32	1/64	1/128	1/256
Ch 8	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch A

15
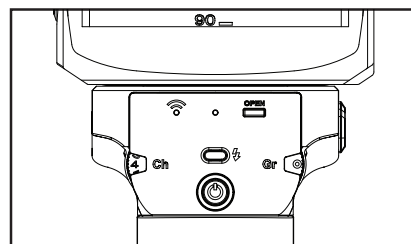
⚡ Zoom head setting

Nissin MG10 offers "A" auto zoom mode and manual zoom mode.

1. Hold the $M.zoom$ on Air 10s for 2 seconds.

2. Press the group selection button until the the desired letter(s) blink.
   Rotate the Operation Dial to change the Zoom head position setting.
   The focal length is representing the flash angle. Rotate the Operation Dial
   in anti-clockwise direction to decrease the value of the focal length of zoom head.
   Keep rotating anti-clockwise to change the "A" automatic zoom mode at the end.
   Rotate the Operation Dial in a clockwise direction to leave.
   The "A" auto zoom mode will increase the value of the focal length value of zoom head.
   Coverage range supports 24mm, 28mm, 35mm, 50mm, 70mm, 85mm,
   105mm, 135mm and 200mm focal length lenses.

```
A  200
B   85
C   24
D    A
    mm
         M. Zoom
```
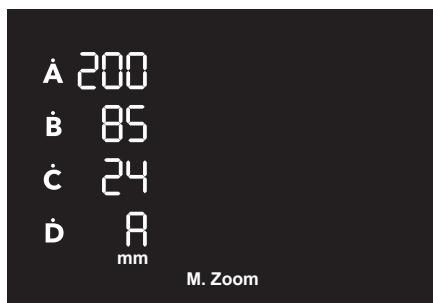
3. Press the group selection button again after completion of the zoom setting.
   Hold $M.zoom$ for 2 seconds again when all groups zoom settings are completed.


CAUTIONS

If you do not press any group selection button, which means all group letters in the display do not blink, rotating the Operation Dial to increase or decrease the flash zoom head focal length will affect all groups; A, B, C and D.

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Since the different focal length of the lens are suitable for different angles
of the shooting range, the focal length is getting shorter at the same sensors size.
Which means that the smaller focal length lens with larger angle in the view,
the flash area coverage will be larger.

Nissin MG10 Guide No. at manual exposure mode (ISO 100 in meters)

Zooming Position	Flash Power Level (Guide No.)								
	Full	1/2	1/4	1/8	1/16	1/32	1/64	1/128	1/256
24mm	38	27	19	13	10	7	5	3	2
28mm	41	29	20	14	10	7	5	4	3
35mm	47	33	23	17	12	8	6	4	3
50mm	56	39	28	20	14	10	7	5	3
70mm	60	42	30	21	15	11	7	5	4
85mm	64	45	32	23	16	11	8	6	4
105mm	69	49	34	24	17	12	9	6	4
135mm	74	52	37	26	18	13	9	6	5
200mm	80	57	40	28	20	14	10	7	5
Without zoom head	28	20	14	10	7	5	3	2	2

For the camera system we support, there are 4 main image sensor sizes:
35mm Full Frame format, APS-C format, 4/3 system format and 1" sensor format.

◖Ξ Modeling light

Normal flashguns have a very short flash duration. In order to estimate and control the flash more efficiently, the modeling light on slave unit can be used. It is a constant light for the user to estimate and preview the light before shooting(flash emitting).

Turn on/off the modeling light

1. Press the Group Selection button(s), the group letter(s) blink.

2. Press \◖Ξ\ to switch the group's modeling on/off.

3. Press the Group Selection button again when setup completed.

Adjusting modeling light

1. Press \◖Ξ\ on Air 10s for 1 second to switch to the advanced groups.

2. Press \M/TTL\ to change to M mode.

2. Press \◖Ξ\ to turn on modeling light.

3. Use the to adjust the modeling light power.

CAUTIONS

If you do not press any group selection button, which means all group letter in the display do not blink, pressing the modeling light button will invert the modeling on/off setting of all groups. For example, A & C: On and B & D: off, press the modeling light button without selecting any group, will cause to A & C: Off, and B & D: On.

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H⚡ High Speed Synchronize (HSS / FP)

Flashgun supports shutter speed limitation on X-Sync (maximum speed synchronize to flash) on SLR / DSLR /Mirrorless Cameras in general. If it does not support HSS function of the camera, faster shutter speed settings than the maximum synchronize speed will block the flash gun. With faster shutter speeds than the maximum sync speed some part(s) of the image area would be shaded by the moving shutter leaves within the flash duration. As a result the image is only partially exposed by the flash light.". HSS allows flashgun works under high speed shutter (max 1/8000s).

Air 10s HSS On & Off switch

● Method A (for Canon & Sony)
  Hold **H⚡** button for 2 seconds to turn on or off.

● Method B
  1. Insert Air 10s to camera shoe.
  2. Switch on both Air 10s and Camera,
     For Canon: Menu setting > External Flash setting > HSS mode in the sync setting
     For Nikon: Custom setting menu > Flash > Flash sync speed > Auto FP

Exposure setting under HSS mode

The flash emitting operation in HSS mode is different from the normal flash mode. With the HSS function, users can get a faster shutter speed which will result in a lower guide number. This is equivalent to a lower flash output. The flash of HSS cannot be measured by an external light meter. When HSS is on, the exposure compensation setting of TTL mode offers the same -2EV to +2EV of basic mode. Using the power control of "M" Manual mode under HSS, the Air 10s offers 1/32 to 1/1 power range only. If power is set from 1/256 to 1/64+0.3EV, "M" manual power setting will automatically change to 1/32 in HSS mode.

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🔇 Buzz (Beep sound) on strobes

All settings of strobes are controlled by the commander wirelessly after the pairing is completed. If the strobes buzzer is on, a "Beep" sound will be heard when the Strobe is charging and not ready to flash. The "Beep" sound will be heard everytime when there is any change made through the commander.

Air 10s Beep or Buzzer on & off switch

Hold 🔇 button to switch the buzzer (on strobes) on or off.
When "no buzzer" logo is displayed in LCD, it means that the beep sound is off.
When the "no buzzer" logo disappears, then the buzzer function is turned on.

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External Power Pack Socket (sell separately)

⚠️ **Make sure to switch off both the Power Pack and the flash unit before use.**

Connecting the Power Pack

1. Use the compatible flash power supply cable for MG10. Hold the connector of the flash power supply cable in front of the socket with both guide marks on the connector and on the socket coinciding and insert it into the socket straightly. You can plug the connector into either socket 1 or socket 2.

2. Connect the plug at the other end of the power supply cable to the MG10.
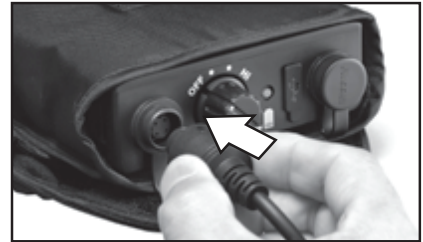
Disconnecting Power Supply Cable

1. Make sure the Power Pack has been switched OFF.

2. Hold the connector of the flash powter supply cable as shown and pull it off.

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Firmware update procedure

To start the firmware update procedure, you need to have:

● The computer (Windows or Mac) connected to the Internet
● A Micro SD/SDHC card (recommend 4GB-32GB) and Micro SD card reader.
● MG10 with 8pcs of full re-charged AA batteries or 2pcs of full recharged 26650 Lithium ion battery.

1. Download the Firmware file(s). Click here to download firmware files:
   http: //www.nissindigital.com/firmware.html

2. Insert Micro SD/SDHC card to the card reader and connect to the computer.

3. Format Micro SD/SDHC card under FAT32 format (Please backup before format).

4. Copy all Firmware file(s) to Micro SD/SDHC card.

5. Eject the Micro SD/SDHC and remove from the card reader.

6. Insert batteries into MG10 and switch on it.

7. Then switch off the MG10.

8. Remove the Micro SD/SDHC cover of MG10, insert the Micro SD/SDHC which contains the latest firmware update files into the MG10.

9. Switch on the MG10. A LED light inside the Micro SD card slot of MG10 will blink, it will blink and the light will change orange to red and stop blinking once the update is finished.

10. The green light will emit when the firmware update procedure is completed. Remove the batteries and remove the Micro SD/SDHC.

11. Insert the batteries again and switch on the MG10.

Specifications

Guide no. (at ISO 100)	GN80@200mm/GN47@35mm/ 165Ws / Dual Quartz flash tubes
Continuous flashes	200 flashes@ 3sec interval
Zoom coverage	24mm~200mm motorize zoom, 18mm with diffuser
Power source	2x 26650 Li-ion Batteries (4000mAh or higher) or 8xAA rechargeable Batteries
Recycling time	2.8sec with 2x Li-ion Batteries/ 3.0sec with 8xAA Rechargeable Batteries/ 1.5sec with PS8+2x Li-ion batteries
Number of flashes (Approx.)	500times with 2x Li-ion 5000mAh batteries / 250 times with 8x AA 2200mAh rechargeable batteries
Flash Duration	1/10000~1/167sec
Color temperature	5600K
Exposure control	Precision Light sensor with IGBT flash control
Control	By Nissin Air10s
Setting	Channel setting, Group setting, Open mode on/off, Power switch
Wireless mode	2.4GHz with Nissin NAS system
EV compensation on flash	None (1/256 - 1/1 with 1/3 steps set by Nissin commander)
Bounce position	-7 ~ 90 degree Vertical, +/- 180 degree Horizontal.
Manual mode power ratio	1/256 ~1/1 with 1/3 steps
Mode	TTL, M, HSS, OPEN MODE
LED Modeling	8W LED, Control by Air10s,25steps, appox 4 hours operation with 5000mAh batteries, Overheat protected
External power pack socket	Yes
Shutter Release	shutter cable to camera or by NAS
Tripod mounting hole	¼" , 20UNC
Bracket Mount	Left or right hand mountable
Flash Tube life	100,000 full flashes
Dimensions	210x145x80mm HxDxW
Weight	975g w/o batteries

(1) This is a testing result record , it may be affected by equipment and environmental factors.
(2) This is a new feature which supports a coming new NAS flash.
(3) Excludes Sony version.

Warranty

In case of the following reason of the defect, it may void the warranty.

1. The product is not used in accordance with the instruction of the owner's manual.

2. The product is repaired or modified by the one who is not an authorized repair service.

3. When the product is used with the cameras not applicable, lens, adaptors or such accessories produced by the third party.

4. Fault or defect caused by fire, earthquake, flood, public pollution and such natural accident.

5. In case that the product is stored in dust, moisture, extremely high temperature or such poor condition.

6. Scratch, blemish, crush or worn out by a violent use or treatment.

7. Guarantee card without name of place purchased or date of purchase stamped, or no guarantee card.

Please refer the respective warranty condition for details which depends on the country of purchase and contact our official distributors who distributed this product for the warranty arrangement details.

NISSIN

Nissin Japan Ltd., Tokyo
http://www.nissin-japan.com

Nissin Marketing Ltd., Hong Kong
http://www.nissindigital.com