Godox 神牛

AD600BM

WITSTRO⁺威客

一体式外拍闪光灯
All-in-One Outdoor Flash

深圳市神牛摄影器材有限公司

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705-AD6BM0-00　　　　　Made In China

FC CE RoHS

中英文双语 / Chinese English Bilingual

说明手册 / INSTRUCTION MANUAL

Foreword

Before using this product

Please read this user manual carefully in order to ensure your safety and the proper operation of this product. Keep for future reference.

Thank you for purchasing a GODOX product.

WITSTRO All-in-One Outdoor Flash AD600BM has strong power, all-in-one lithium battery pack and great portability. When using Godox 2.4G wireless X system off camera, AD600BM can be triggered by X1 series flash trigger in M/Multi mode, etc. With master & slave functions, AD600BM can also use in combination with Godox camera flashes, outdoor flashes, studio flashes, etc. With this AD600BM flash, your shooting will become simpler. WITSTRO AD600BM flash system is an AD600BM flash with a bare tube, wireless flash trigger, and a range of dedicated light shaping accessories. AD600BM offers studio quality light for outdoor and live shooting. The AD600BM offers:

- **Compatible wireless system:** When using Godox 2.4G wireless X system, fully support M/Multi flash system of Canon, Nikon, etc. Workable as Slave unit in a wireless flash group.
- **Dot-matrix LCD panel:** with clear and convenient operation.
- **Built-in 2.4G wireless transmission:** with all-in-one functions and 80 meters further transmission
- **Studio quality light:** up to 600Ws, GN 87 (m ISO 100, with standard reflector).
- **External battery pack:** professional lithium battery pack (lithium, 11.1V/8700mAh), 0.01-2.5s recycling and 500 full power flashes.
- **Lightweight and portable** even with power and accessories
- **Wireless control:** With built-in Godox 2.4G wireless X system to achieve wireless control. Godox FT-16 flash trigger can also be used to wirelessly adjust flash power level and trigger the flash. AD600BM has 3.5mm sync cord jack and PC sync socket to achieve various sync triggering mode.
- **Wide-range accessories:** AD600BM adopts Bowens mount whose accessories includes softbox, beauty dish, snoots, clolor gels, etc.
- Power adjusts from full power to 1/256 in 1/3 stop increments
- Stable color temperature at 5600±200K over the entire power range
- 1/8000s high-speed sync flash, Focus-assist beam on/off & high-speed sync triggering

The powerful and portable AD600BM meets the demands of freelance commercial photographers, photojournalists, wedding and beach portraiture shooters, event and backpack photographers, photograph enthusiasts, etc.

⚠ Warning

⚠ Always keep this product dry. Do not use in rain or in damp conditions.

⚠ Do not disassemble. Should repairs become necessary, this product must be sent to an authorized maintenance center.

⚠ Stop using this product if it breaks open due to extrusion, falling or strong hit. Otherwise, electric shock may occur if you touch the electronic parts inside it.

⚠ Do not fire the flash directly into the eyes (especially those of babies) within short distances. Otherwise visual impairment may occur.

⚠ Do not use the flash unit in the presence of flammable gases, chemicals and other similar materials. In certain circumstances, these materials may be sensitive to the strong light emitting from this flash unit and fire or electromagnetic interference may result.

⚠ Do not leave or store the flash unit if the ambient temperature reads over 50°C (e.g. in automobile). Otherwise the electronic parts may be damaged.
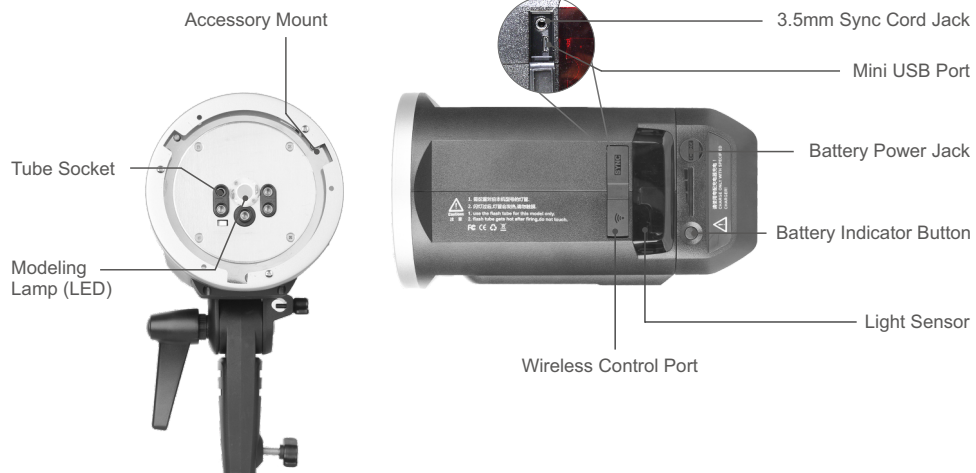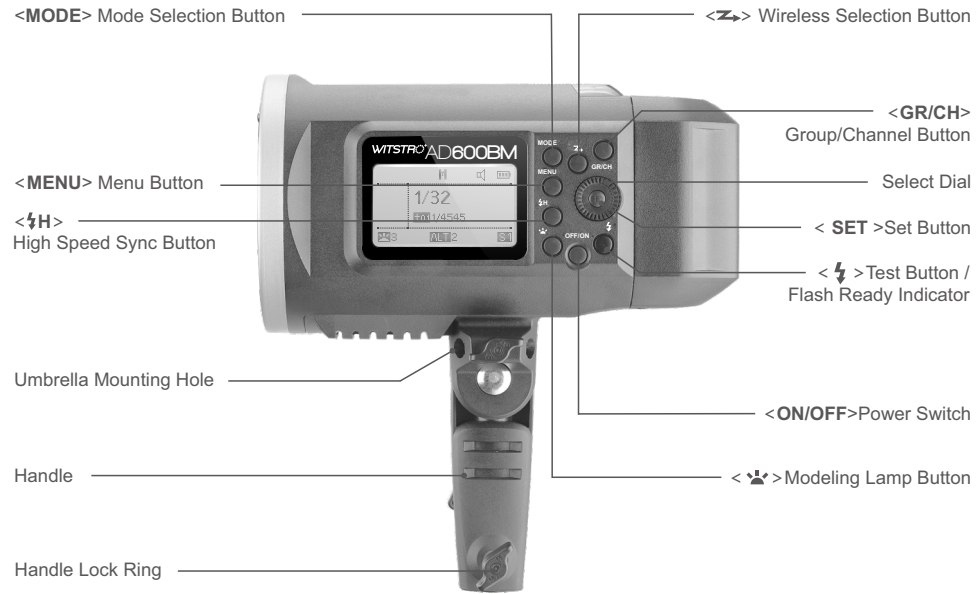
Contents

Conventions used in this Manual

- This manual is based on the assumption that both the camera and camera flash's power switches are powered on.
- Reference page numbers are indicated by "p.**".
- The following alert symbols are used in this manual:

    ⚠ The Caution symbol indicates a warning to prevent shooting problem.

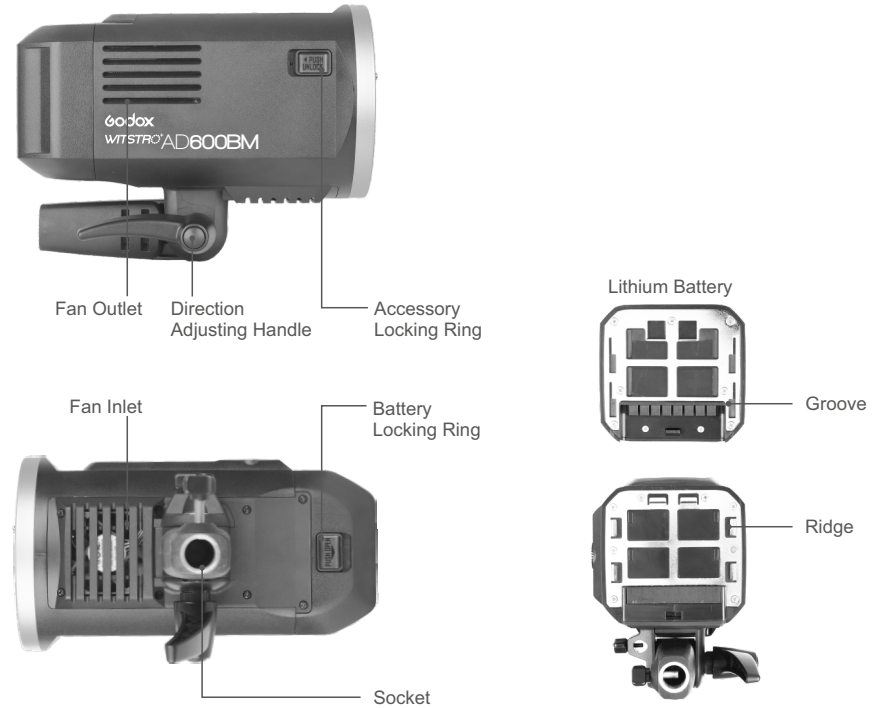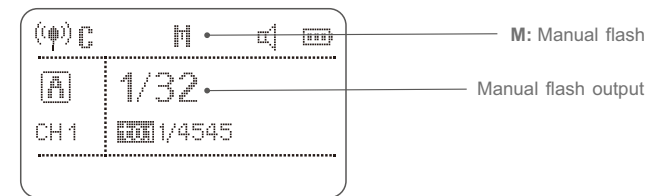   📵 The Note symbol gives supplemental information.
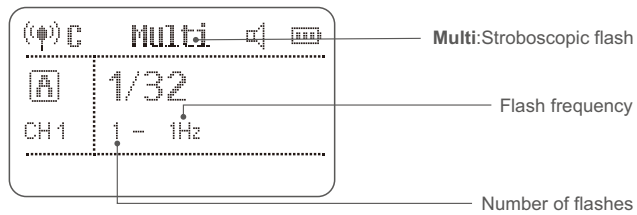
Name of Parts

Body:

<MODE> Mode Selection Button

<Z→> Wireless Selection Button

<GR/CH> Group/Channel Button

Select Dial

<MENU> Menu Button

<⚡H> High Speed Sync Button

< SET >Set Button

< ⚡ >Test Button / Flash Ready Indicator

Umbrella Mounting Hole

<ON/OFF>Power Switch

Handle

< 👥 >Modeling Lamp Button

Handle Lock Ring

WITSTRO AD600BM

1/32

1/4545

Accessory Mount

3.5mm Sync Cord Jack

Mini USB Port

Tube Socket

Battery Power Jack

Modeling Lamp (LED)

Battery Indicator Button

Light Sensor

Wireless Control Port

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Name of Parts

Body:

Godox
WITSTRO AD600BM

Fan Outlet   Direction Adjusting Handle   Accessory Locking Ring

Lithium Battery

Fan Inlet   Battery Locking Ring

Groove

Ridge

Socket

LCD Panel:

(1) M Manual Flash

M: Manual flash

Manual flash output

(((•))) C   M   ◁| ▯▯▯

Ⓐ 1/32

CH 1   ▮▮▮1/4545

LCD Panel:

(2) Multi Flash

Multi:Stroboscopic flash

Flash frequency

Number of flashes

(3) Radio Transmission Shooting

$(\cdot)$: Radio transmission wireless shooting

Firing group

Channel

(4) Slave Unit

Flash duration

S1/S2
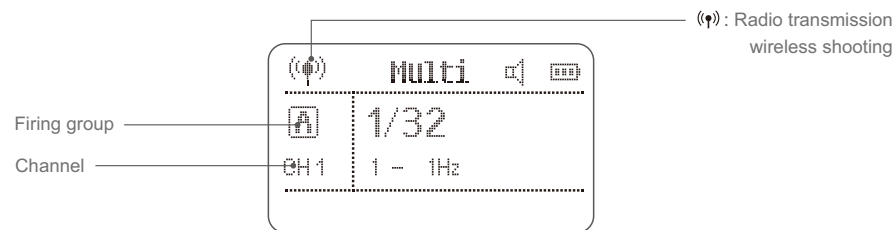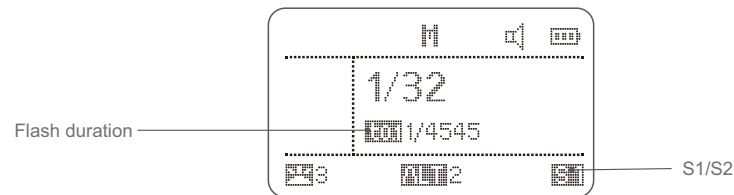
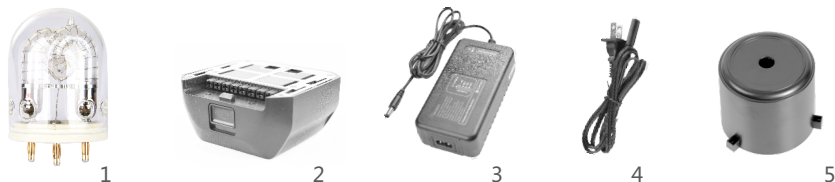## Included Accessories

1. Flash tube   2. Lithium battery pack   3.Battery charger   4. Power cord   5. Lamp cover   6. Instruction manual

1   2   3   4   5

Separately Sold Accessories

AD600BM can be used in combination with the following accessories sold separately, so as to achieve best photography effects: X1 Wireless Flash Trigger, FT-16 Remote Control, Softbox, Beauty Dish, Fold Up Umbrella, Snoots, Light Stand, etc.

Installing Reflector (Other Accessories)

1. Press down the Accessory Locking Ring.

2. Insert the reflector into the Accessory Mount and clock wise to lock it up.

Attaching Flash Tube

1. Remove the reflector or other accessories from the flash head.

2. Match the flash tube in the Tube Socket. Push the flash tube in until it is securely seated into the socket.

Adjusting Handle

1. When the Direction Adjusting Handle is not pulled out, screw clockwise while unscrew anti clockwise.

2. The Direction Adjusting Handle's rotation angle should be restrained from 0 to 180 degrees below the flash body. Please pull out the Direction Adjusting Handle, adjust the appropriate angle, and manipulate the step 1 before colliding with the flash body.
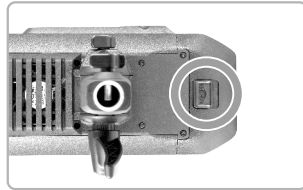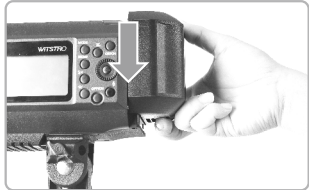
Battery

Features

1. This flash unit uses Li-ion polymer battery which has long runtime. The available charge-and-discharge times are 500.

2. It is reliably safe. The inner circuit is against overcharge, overdischarge, overcurrent, and short circuit.

3. Take only 4 hours to fully charge the battery by using the standard battery charger.

Cautions

⚠ Do not short circuit.

⚠ Do not expose to rain or immerse into water. This battery is not water proof.

⚠ Keep out of reach of children.

⚠ No over 24 hours' continuous charging.

⚠ Store in dry, cool, ventilated places.

⚠ Do not put aside or into fire.

⚠ Dead batteries should be disposed according to local regulations.

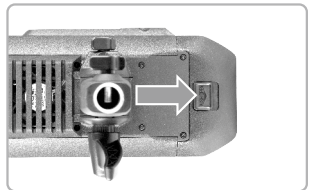⚠ If the battery had ceased using for over 3 months, please make a full recharge.

Loading and Unloading the Battery Pack

Loading:

1 Match the battery's groove with the main battery compartment's ridge.

2 Push down the battery pack until it is locked.

Unloading:

1 Push the Battery Locking Ring to the right.

2 Push the battery pack upward to unload it.

Battery

Battery Level Indication

Attach the battery pack to the flash correctly. Be aware of the battery level by check the battery level indication on the LCD panel when using.

Battery Level Indication on the LCD Panel (Indicating battery level and management of the whole flash system)	LED Battery Level Indication on the Battery (Indicating battery level and management of non-loaded battery)	Meaning
3 grids	1 red grid +3 green grids	Full battery
2 grids	1 red grid +2 green grids	Medium battery
1 grid	1 red grid +1 green grid	Low battery
Blank grid	1 red grid	Lower battery, please recharge it.
Blinking		The battery level is going to be used out immediately. And the flash will auto power off in 1 minute. Note: Please recharge the battery as soon as possible (within 10 days). Then, the battery can be used or be placed for long period.

Note: The two indications are almost the same except of grids shift.

Power Management

Long press the **<ON/OFF>** Power Switch for 2 seconds to control the on/off of the flash unit. Turn off the power pack if the flash unit will not be used for an extended period (approx. 1 hour).

> **C.Fn** Disabling Auto Power Off function is recommended when the flash is used off camera. (C.Fn-APO, Page 40)

Wireless Flash Mode

AD600BM can only be set as slave unit (receiver end). Press Wireless Selection Button to set radio transmission. When using radio transmission, AD600BM will automatically switch between Canon (C) and Nikon (N) system according to X1 series transmitter.
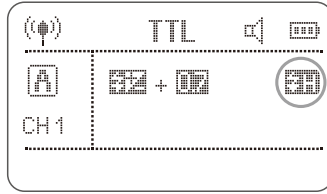
Flash Mode — High Speed Sync

⚡H High-Speed Sync

High Speed Sync (FP flash) enables the flash to synchronize with all camera shutter speeds. This is convenient when you want to use aperture priority for fill-flash portraits.
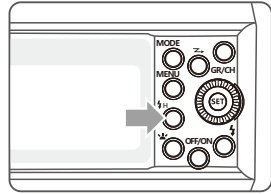
**1** Press High Speed Sync Button so that < ⚡H > is displayed.

2 Please use X1 series transmitter.

ⓘ
- If you set a shutter speed that is the same as or slower than the camera's maximum flash sync speed, < ⚡H > will not be displayed in the viewfinder.
- With high-speed sync, the faster the shutter speed, the shorter the effective flash range.
- To return to normal flash, press < ⚡H > button again. Then < ⚡H > will disappear.
- Multi flash mode cannot be set in high-speed sync mode.
- Over-temperature protection may be activated after 50 consecutive high-speed sync flashes.

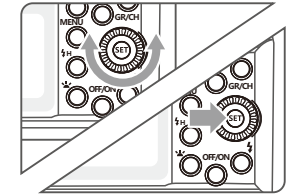
Flash Mode — M: Manual Flash

The flash output is adjustable from 1/1 full power to 1/256th power in 1/3rd stop increments. To obtain a correct flash exposure, use a hand-held flash meter to determine the required flash output.
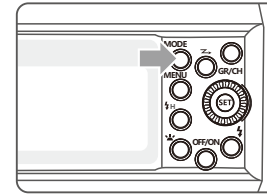
1 Press < **MODE** > button so that < **M** > is displayed.
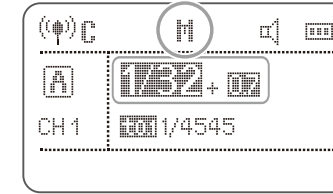
2 Turn the Select Dial to choose a desired flash output amount.

3 Press < **SET** > button again to confirm the setting.

Flash Output Range

The following table makes it easier to see how the stop changes in terms of f/stop when you increase or decrease the flash output. For example, when you decrease the flash output to 1/2, 1/2-0.3, or 1/2-0.7, and then increase the flash output to more than 1/2, 1/2+0.3, 1/2+0.7, and 1/1 will be displayed.

<div align="center">Figures displayed when reducing flash output level ⟹</div>

1/1	1/1–0.3	1/1-0.7	1/2	1/2-0.3	1/2-0.7	1/4	......
	1/2+0.7	1/2+0.3		1/4+0.7	1/4+0.3		......

<div align="center">⟸ Figures displayed when increasing flash output level</div>

Optical S1 Secondary Unit Setting

In M manual flash mode, press <MENU> button to enter C.FN-SLAVE to choose S1 function, so that this flash can function as an optical S1 secondary flash with optic sensor. With this function, the flash will fire synchronously when the main flash fires, the same effect as that by the use of radio triggers. This helps create multiple lighting effects.

Optical S2 Secondary Unit Setting

Press < MENU > button to enter C.FN-SLAVE to choose S2 function, so that this flash can also function as an optical S2 secondary flash with optical sensor in M manual flash mode. This is useful when cameras have pre-flash function. With this function, the flash will ignore a single "preflash" from the main flash and will only fire in response to the second, actual flash from the main unit.

ⓘ
- S1 and S2 optical triggering is only available in M manual flash mode.

Flash Mode — M: Manual Flash

Display Flash Duration

Flash duration refers to the length of time that from flash's firing to reach the half peak at maximum. The half peak at maximum is usually expressed as t=0.5. In order to provide the photographer with more concrete data, this product adopts t=0.1. The difference between t=0.5 and t=0.1 is shown in the following picture.
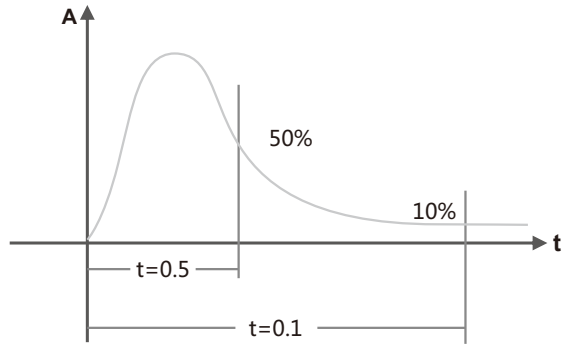
The flash duration will only be displayed on the LCD panel in M mode.

Flash Mode — Multi: Stroboscopic Flash

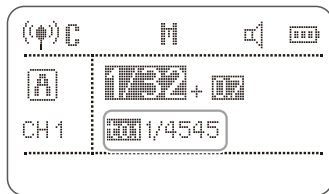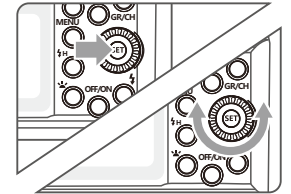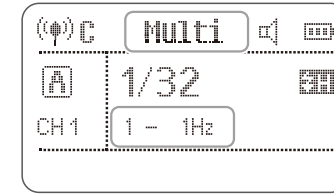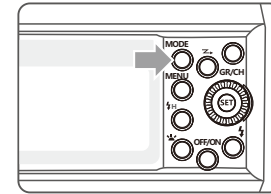With stroboscopic flash, a rapid series of flashes is fired. It can be used to capture a multiple images of a moving subject in a single photograph. You can set the firing frequency (number of flashes per sec. expressed as Hz), the number of flashes, and the flash output.

1 Press <**MODE**> button so that <**MULTI**> is displayed.

2 Turn the Select Dial to choose a desired flash output.

3 Set the flash frequency and flash times.
- Press <**SET**> Button to select the flash times. Turn the Select Dial to set the number.
- Press <**SET**> Button to select the flash frequency. Turn the Select Dial to set the number.
- After you finish the setting, press <**SET**> button and all the settings will be displayed.

Calculating the Shutter Speed

During stroboscopic flash, the shutter remains open until the firing stops. Use the formula below to calculate the shutter speed and set it with the camera.

Number of Flashes / Flash Frequency = Shutter Speed

For example, if the number of flashes is 10 and the firing frequency is 5 Hz, the shutter speed should be at least 2 seconds.

⚠️ To avoid overheating and deteriorating the flash head, do not use stroboscopic flash more than 10 times in succession. After 10 times, allow the camera flash to rest for at least 15 minutes. If you try to use the stroboscopic flash more than 10 times in succession, the firing might stop automatically to protect the flash head. If this happens, allow at least 15 minutes' rest for the camera flash.

- Stroboscopic flash is most effective with a highly reflective subject against a dark background.
- Using a tripod and a remote control is recommended.
- A flash output of 1/1 and 1/2 cannot be set for stroboscopic flash.
- Stroboscopic flash can be used with"**buLb**".
- If the number of flashes is displayed as "--", the firing will continue until the shutter closes or the battery is exhausted. The number of flashes will be limited as shown by the following table.

Maximum Stroboscopic Flashes:

Flash Output / Hz	1	2	3	4	5	6-7	8-9	10	11	12-14	15-19	20-50	60-100
1/4	7	6	5	4	4	3	3	2	2	2	2	2	2
1/8	14	14	12	10	8	6	5	4	4	4	4	4	4
1/16	30	30	30	20	20	20	10	8	8	8	8	8	8
1/32	60	60	60	50	50	40	30	20	20	20	18	16	12
1/64	90	90	90	80	80	70	60	50	40	40	35	30	20
1/128	100	100	100	100	100	90	80	70	70	60	50	40	40
1/256	100	100	100	100	100	90	80	70	70	60	50	40	40

AD600BM adopts Godox 2.4G wireless X system, which has good compatibility with other products of our company. AD600BM can automatically switch to slave unit according to the master unit instead of setting manually. When receiving the master unit's signal, "C" or "N" will be displayed on the LCD panel.
Nikon cameras (use X1T-N, TT685N, etc.) and Canon cameras (use X1T-C, TT685C, etc.) can use one or more AD600BM flashes simultaneously.

*As a slave unit, AD600BM can be controlled by the following master units: AD360II-C, AD360II-N, TT685C, TT685N, X1T-C, X1T-N, TT600,etc.
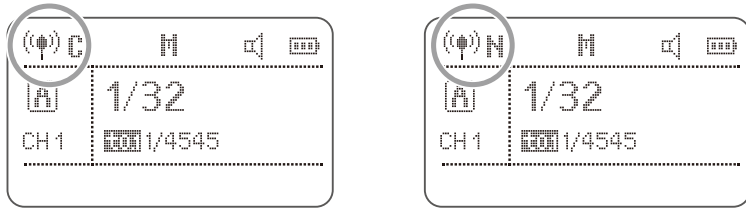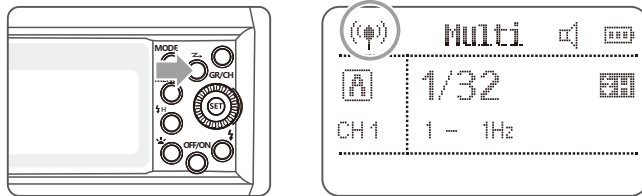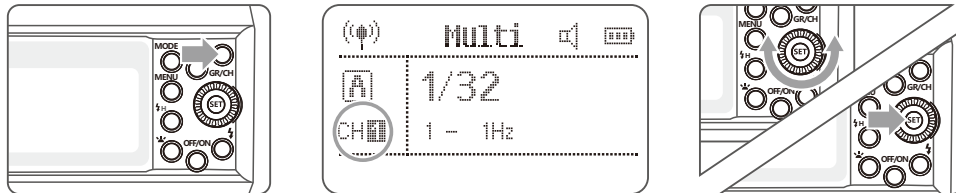

1. Wireless Settings

Press < ⊿ > Wireless Setting Button again until < ((•)) > is displayed on the panel.

2. Setting the Communication Channel

If there are other wireless flash systems nearby, you can change the channel IDs to prevent signal interference. The channel IDs of the master unit and the slave unit(s) must be set to the same.

1 Long press the **<GR/CH>** Button for 2 seconds so that channels ID is displayed on the LCD panel.

2 Turn the Select Dial to choose a channel ID from 1 to 32.

3 Press the **<SET>** button to confirm.

3. Setting the Communication Group

Short press the < **GR/CH** > Button to choose group ID from A to E.
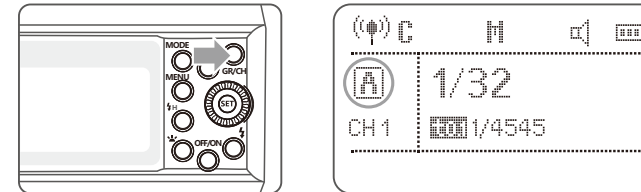
4. Wireless Flash Shooting

Positioning and Operation Range (Example of wireless flash shooting)

● Autoflash Shooting with One Slave Unit

Transmission distance is about 80m
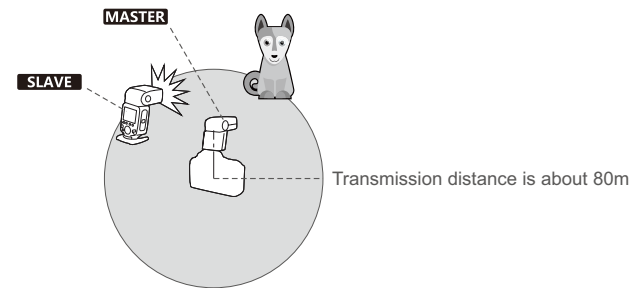
● Use the supplied mini stand to position the slave unit.
● Before shooting, perform a test flash and test shooting.
● The transmission distance might be shorter depending on the conditions such as positioning of slave units, the surrounding environment and whether conditions.

Wireless Flash Shooting: Radio (2.4G) Transmission

Wireless Multiple Flash Shooting

You can set and shoot with a different flash mode for each firing group.

● Auto Shooting with Two Slave Groups

● Auto Shooting with Three Slave Groups

C.Fn: Setting Custom Functions

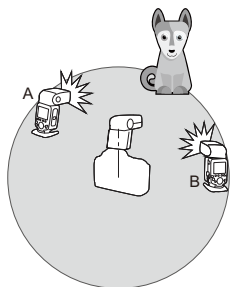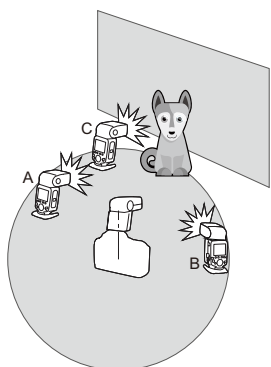| Custom Function Signs	Functions	Setting Signs	Settings & Descriptions	Restrictions
BEEP	Beeper	ON	ON	NO
		OFF	OFF	
SLAVE	S1/S2 mode selection	OFF	OFF	M mode
		S1	S1 mode	
		S2	S2 mode	
FAN	Fan working mode	OFF	OFF	NO
		AUTO	Temperature <45°: OFF	
			Temperature >45°: LOW FAN	
			Temperature >60°: HIGH FAN	
SLEEP	Auto power off	OFF	OFF	NO
		1HR	Auto power off without any operation	
		2HR		
		3HR		
LIGHT	Backlighting time	12sec	Off in 12 sec.	NO
		OFF	Always off	
		ON	Always lighting	
DELAY	Delay flash	OFF, 0.01~30S	Can be triggered as second curtain	M/Multi mode
UNITS	Total number of flashes	2~4	Use UNITS in combination with ALT: UNITS sets the total number of flashes; ALT sets the triggering times before flash's firing	M mode
ALT	Triggering times			M mode
LCD	LCD contrast	0~9	10 levels	
RESET	Parameter resetting	NO		NO
		YES	Reseting	

1. Press < **MENU** > Button to enter **C.Fn** menu. The "**Ver x.x**" in the top-right corner refers to the software version.
2. Select the Custom Function Signs.
   * Turn the Select Dial to select the Custom Function Signs.
3. Change the Setting.
   * Press<**SET**> button and the Setting Signs are highlighted.
   * Turn the Select Dial to set the desired number. Press <**SET**> button will confirm the settings.
4. Exit C.Fn Menu.
   * Press <**MENU**> Button to exit.

Modeling Lamp

Modeling Lamp

AD600BM is equipped with a 10W LED modeling lamp which has 3 steps of light adjustment and two always lighting modes.

- **Short press the Modeling Lamp Button to set the steps:**
  One step: 30% of power output; off in 30 minutes (prevent overheating)
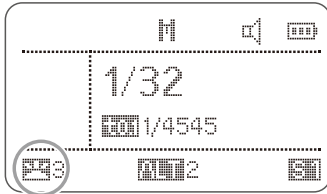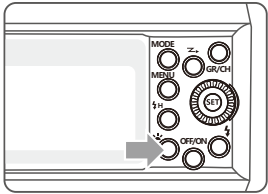 Two step: 60% of power output; off in 20 minutes (prevent overheating)
  Three step: 100% of power output; off in 10 minutes (prevent overheating)
- **Long press the modeling lamp for 2 seconds to set modeling modes:**
 1.Always lighting
  2.Modeling lamp auto off when firing.

Other Applications

Wireless Control Function

The flash unit is built in with a Wireless Control Port so that you can wirelessly adjust the power level of the flash and the flash triggering.
To control the flash wirelessly, you need a FT-16 remote control set (on-camera and on-flash). Insert its receive end into the Wireless Control Port on the flash and insert the transmit end into the camera hot shoe. Settings made on the hotshoe-mounted transmit and receive ends will be wirelessly communicated to the flash. Then you can press the camera shutter release button to trigger the flash. You can also hold the transmit end at hand to control your off-camera flash.

> For full instructions on the use of FT series remote control, see its user manual.
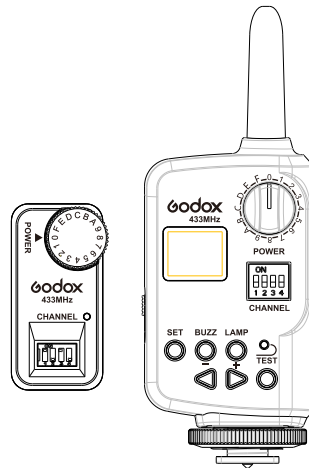
Sync Triggering

The Sync Cord Jack is a Φ3.5mm plug. Insert a trigger plug here and the flash will be fired synchronously with the camera shutter.

Protection Function

1. Over-Temperature Protection

- To avoid overheating and deteriorating the flash head, do not fire more than 100 continuous flashes in fast succession at 1/1 full power. After 100 continuous flashes, allow a rest time of at least 10 minutes.
- If you fire more than 100 continuous flashes and then fire more flashes in short intervals, the inner over-temperature protection function may be activated and make the recycling time over 10 seconds. If this occurs, allow a rest time of about 10 minutes, and the flash unit will then return to normal.
- When the over-temperature protection is started, 〰 is shown on the LCD display.

Number of flashes that will activate over-temperature protection:

Power Output Level	Number of Flashes
1/1	100
1/2（+0.3,+0.7）	150
1/4（+0.3,+0.7）	200
1/8（+0.3,+0.7）	300
1/16（+0.3,+0.7）	400
1/32（+0.3,+0.7）	500
1/64（+0.3,+0.7）	1000
1/128（+0.3,+0.7）	
1/256（+0.3,+0.7）	

Number of flashes that will activate over-temperature protection in high-speed sync triggering mode:

Power Output	Times
1/1	50
1/2（+0.3,+0.7）	60
1/4（+0.3,+0.7）	75
1/8（+0.3,+0.7）	100
1/16（+0.3,+0.7）	150
1/32（+0.3,+0.7）	200
1/64（+0.3,+0.7）	
1/128（+0.3,+0.7）	300
1/256（+0.3,+0.7）	

2. Other Protections

- The system provides real-time protection to secure the device and your safety. The following lists prompts for your reference:

LCD Panel	Meaning
E1	A failure occurs on the recycling system so that the flash cannot fire.Please restart the flash unit. If the problem still exists, please send this product to a maintenance center.
E2	The system gets excessive heat. Please allow a rest time of 10 minutes.
E3	The voltage on two outlets of the flash tube is too high. Please send this product to a maintenance center.
E9	There are some errors occurred during the upgrading process. Please using the correct firmware upgrade method.

Technical Data

Model	AD600BM
Flash Mode	M/Multi
Guide No. (m ISO 100)	87 (m ISO 100, with standard reflector)
Flash Duration	1/220 to 1/10000 seconds (T0.1)
POWER	600W
Power Output	9 steps: 1/256~1/1
Stroboscopic Flash	Provided (up to 100 times, 100Hz)
Sync mode	High-speed sync (up to 1/8000 seconds), first-curtain sync, and second-curtain sync
Delay Flash	0.01~30 Seconds
Mask	√
Fan	√
Beeper	√
Modeling Lamp (LED)	10W
Optical Slave Flash	S1/S2
Flash Duration Indication	√
Display	Dot-matrix panel
• Wireless Flash (2.4G transmission)	
Wireless Flash Function	Slave, Off
Controllable Slave Groups	5 (A, B, C, D, E)
Transmission Range (approx.)	80m
Channels	32 (1~32)
• Power Supply	
Power Supply	Lithium battery pack (11.1V/8700mAh)
Full Power Flashes	500
Recycle Time	Approx. 0.01-2.5s
Battery Indicator	√
Power Indication	Power off automatically after approx. 60 minutes of idle operation.
• Sync Triggering Mode	3.5mm sync line, wireless control port
• Color Temperature	5600±200k
• Dimensions	
Dimension (with battery)	220x245x125 mm (flash tube & reflector not included)
Net Weight (with battery)	2.69 Kg (flash tube & reflector not included)

Firmware Upgrade

This flash supports firmware upgrade through the USB port. Update information will be released on our official website.

> USB connection line is not included in this product. The USB port is a standard Micro USB socket. Common USB connection line is applicable.

Maintenance

● Shut down the device immediately should abnormal operation be detected.
● Avoid sudden impacts and the product should be dedusted regularly.
● It is normal for the flash tube to be warm when in use. Avoid continuous flashes if unnecessary.
● Maintenance of the flash must be performed by our authorized maintenance department which can provide original accessories.
● This product, except consumables e.g. flash tube, is supported with a one-year warranty.
● Unauthorized service will void the warranty.
● If the product had failures or was wetted, do not use it until it is repaired by professionals.
● Changes made to the specifications or designs may not be reflected in this manual.