Safety Information

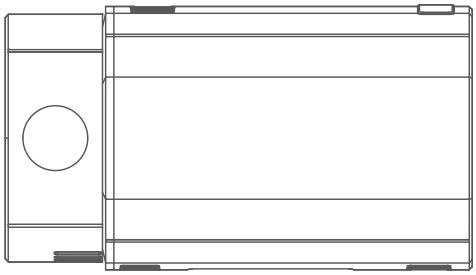
For your safety and that of others' , please read the safety information before using this product for the first time and pay attention to all highlighted precautions in this manual. The device should be checked periodically and damaged components should never be used.

※ Keep away from flammable materials.
※ Do not use in rainy, humid, or other unsuitable weather conditions.
※ Use a blower brush or clean tissue paper to remove dust and moisture.
※ Keep this product out of the reach of children and pets.
※ Avoid extended exposure and storage under direct sunlight.
※ Before carrying out any maintenance, turn off and unplug the power source. Turn off the power before installing or removing accessories.
※ Keep the ventilation holes free of blockages at all times.
※ Do not clean with chemical agents or liquids. Do not immerse any part of the flash in liquid.
※ Do not attempt to disassemble or repair by yourself.
※ Certain parts of the flash will become hot during use and should never be touched with bare hands.

Product Overview

The compact and portable Q120 Outdoor Flash features TTL, M, and Multi modes, along with HSS. The built-in wireless 2.4G Q-system is compatible with Canon, Sony, Nikon, and other cameras. It also supports Bluetooth app control for intuitive operation.

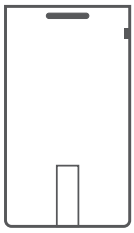
Package Contents



Flash ×1



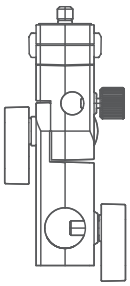
Carry Bag ×1



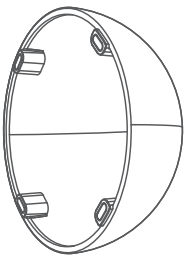
Battery
×1



Charging Cable
×1

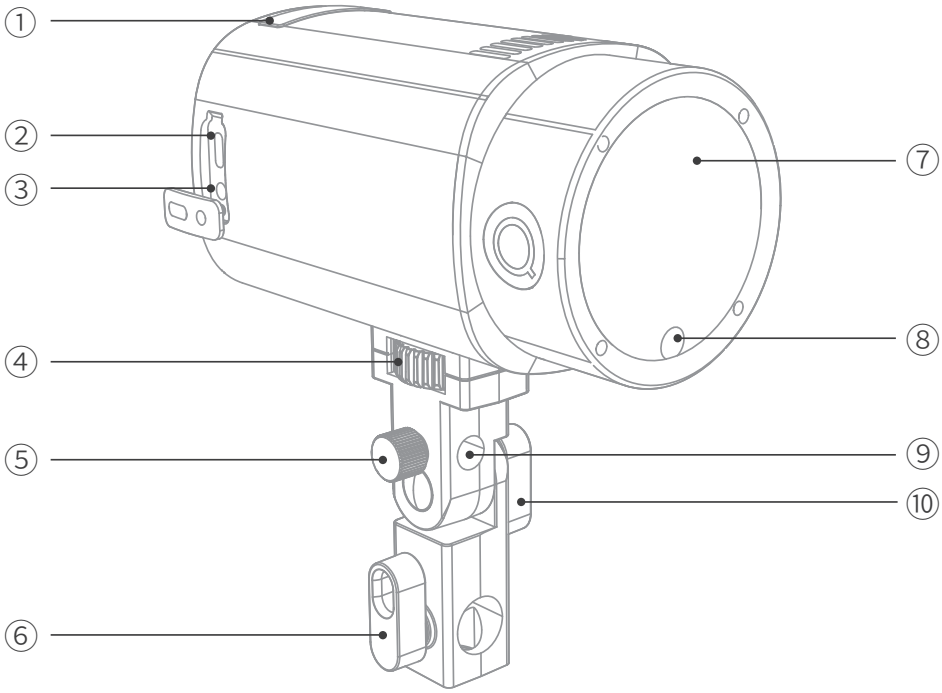


Handle
×1



Diffuser
×1

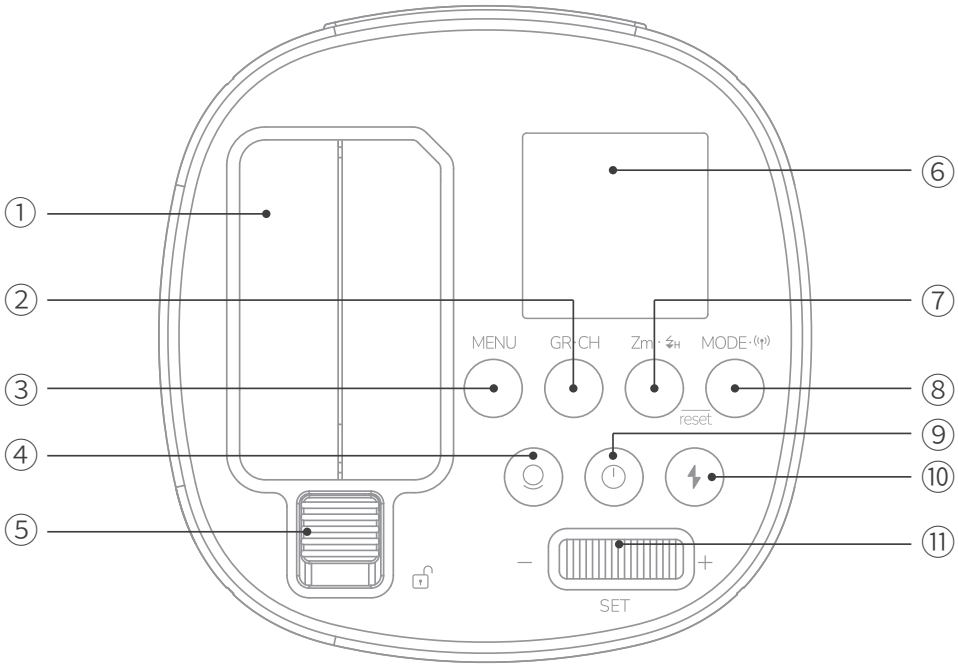
Product Illustration



Product Illustration

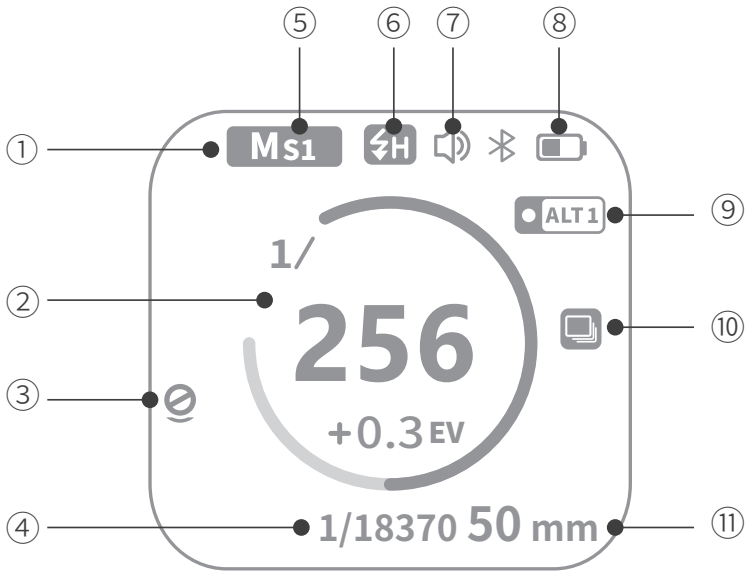
EN

① Optical Receiver
② USB-C Port for Firmware Upgrade
③ 2.5mm Sync Jack
④ Handle Locking Knob
⑤ Umbrella Locking Knob
⑥ Stand Locking Knob
⑦ Optical Lens
⑧ Modeling Lamp
⑨ Umbrella Hole
⑩ Angle Adjustment Knob

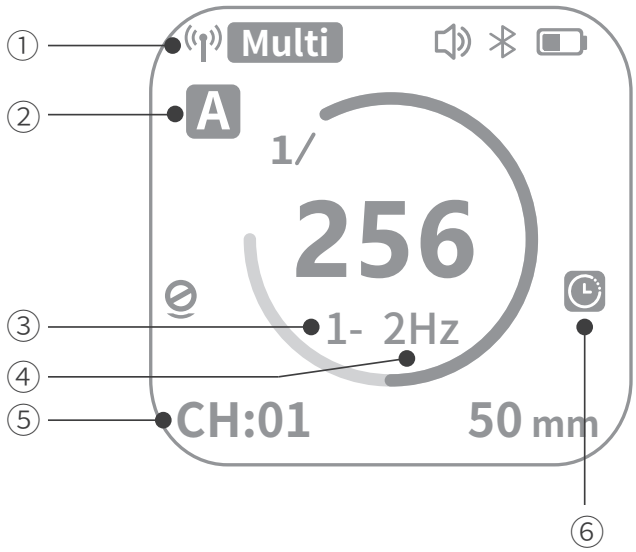


① Li-ion Battery
② Short Press: Switches Groups; Long press: Adjusts Channels
③ Menu
④ Modeling Lamp
⑤ Battery Release Button
⑥ Screen
⑦ Short Press: Focal Length; Long Press: HSS
⑧ Short Press: Switches Modes; Long Press: Wireless On/Off
⑨ Long Press: Powers device On/Off
⑩ Test Flash
⑪ Short Press: Selects Items; Scroll: Adjusts Values

Screen

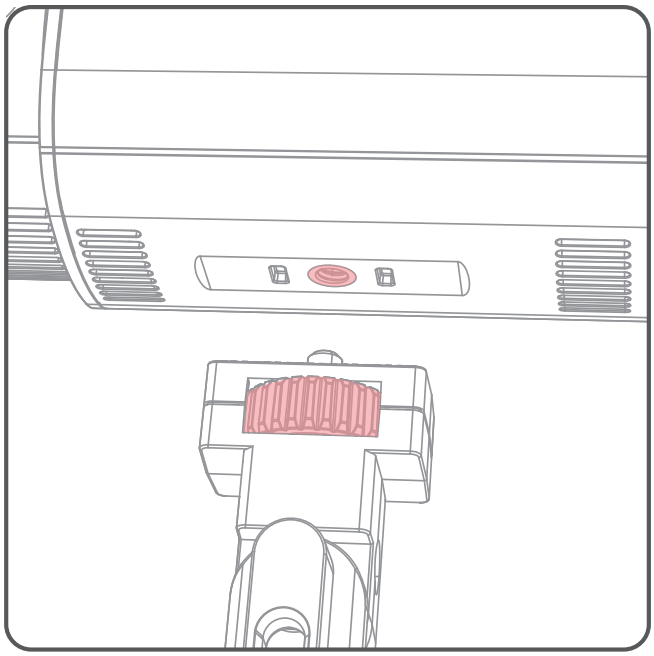


① Flash Mode: M/TTL/MULTI
② Flash Output Power
③ Modeling Lamp Status
④ Flash Duration
⑤ S1/S2 Mode
⑥ HSS
⑦ Audible Prompt
⑧ Battery Level Indicator
⑨ Mask Function
⑩ Continuous Shooting Mode
⑪ Focal Length

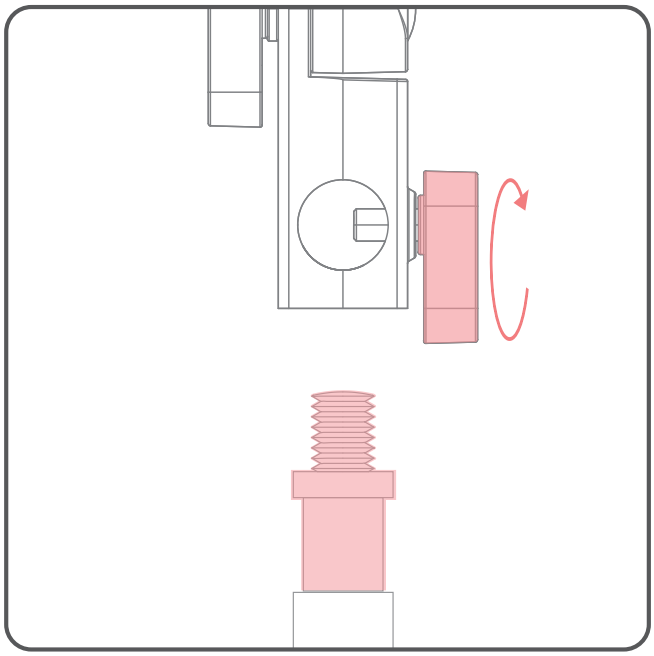


① Wireless Transmission
② Group
③ Number of Flashes
④ Flash Frequency
⑤ Channel
⑥ Delay Time

Mounting the Flash

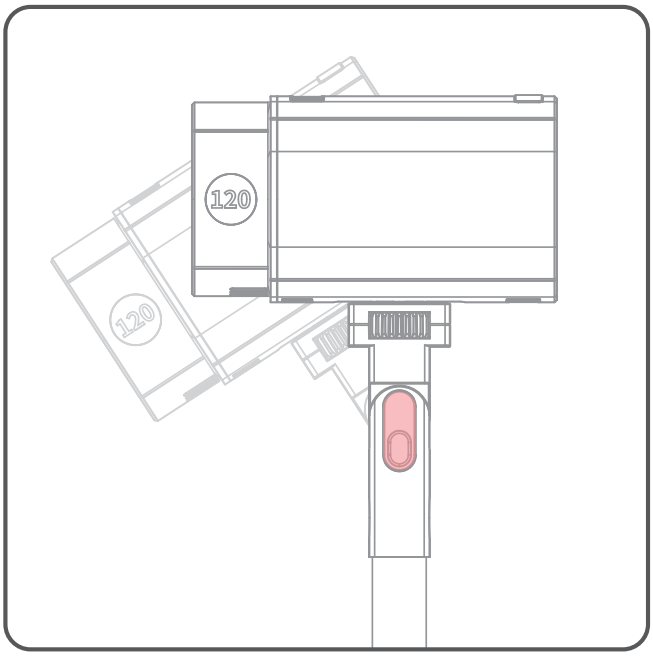


① Attach the support mount to the underside of the flash and secure it by tightening the locking knob.



② The support mount will drop down over the top of the light stand and is secured using the locking knob.

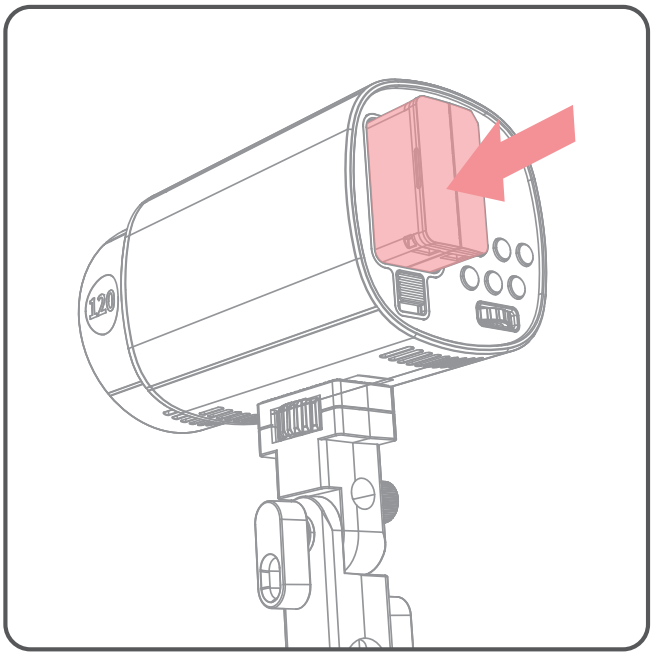
Mounting the Flash



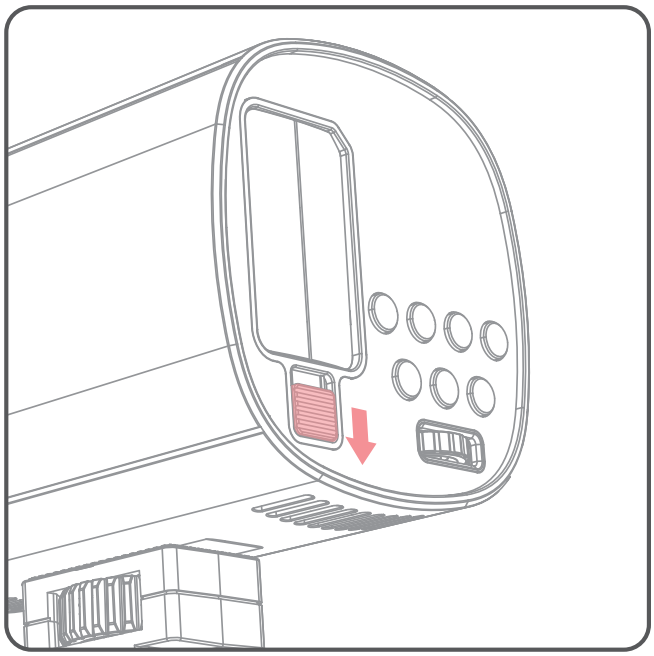
③ Rotate the angle adjustment knob to adjust the angle of the flash.

Power Management

1. How to install and remove the battery



① Installation:
Insert the battery into the battery compartment in the direction shown until it clicks into place.



② Removal:
Slide the latch in the direction shown to release and remove the battery.

2. Features

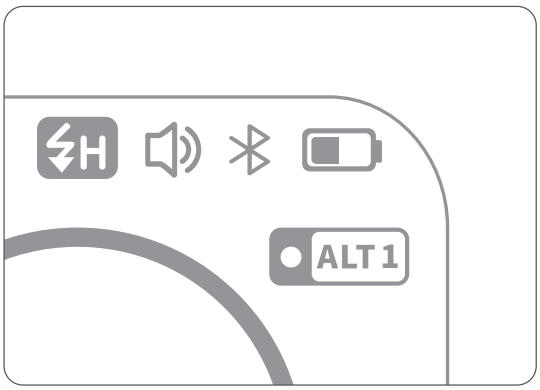
① The Li-ion battery supports up to 500 charge–discharge cycles for a long lifespan.
② With built-in protection against overcharging, overdischarging, overcurrent, and short circuits.

3. Precautions

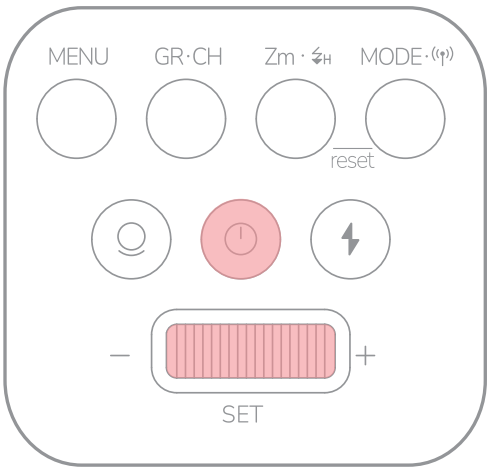
① Avoid short-circuiting the positive and negative terminals.
② Do not immerse the battery in water.
③ Keep the battery out of reach of children.
④ Do not charge the battery for more than 24 hours.
⑤ Store the battery in a cool, dry, and well-ventilated place.
⑥ Keep the battery away from heat sources and open flames.
⑦ Dispose of the battery in accordance with local regulations after it reaches the end of its service life.
⑧ If the battery is not used for more than three months, fully charge it before storage.

4. Battery Level Indicator

Ensure that battery has been correctly installed to power the flash. During use, check the battery level indicator on the screen to monitor remaining battery at any time.



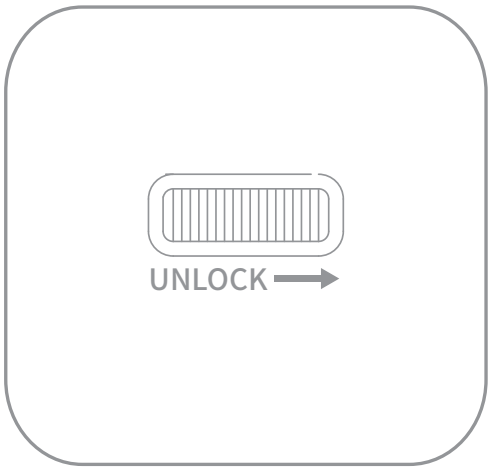
Battery Icon Status	Battery Percentage
(Applies to the entire flash system)	
	76%~100%
	51%~75%
	26%~50%
	3%~25%
Low Battery/Charging Reminder	The battery icon will continuously flash, prompting the user to charge or replace the battery.

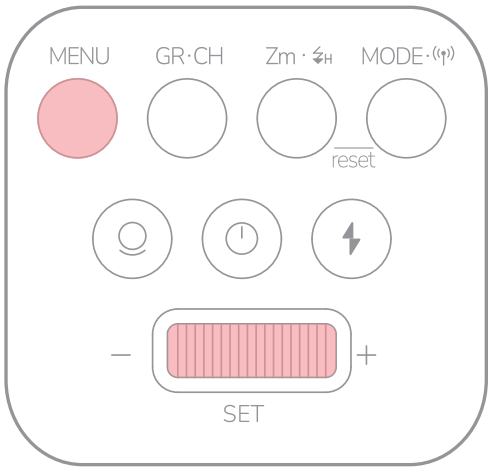


- **Power On/Off**

Short press < ⏻ > button: screen displays <UNLOCK>, then scroll <SET> to the right to power on.

Long press < ⏻ >button to power off.

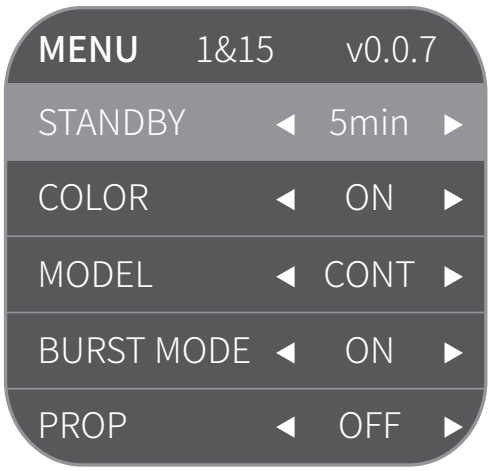




If not in use for an extended period, turn off the device. The flash features an automatic sleep function.

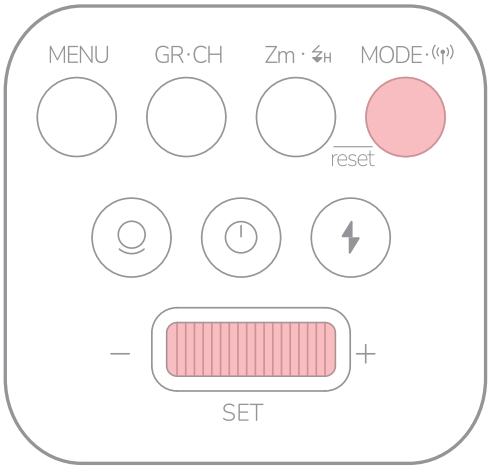
Short press <MENU> to access the menu, scroll and short press <SET> to select <Standby>, then scroll <SET> to choose sleep duration.

When the flash is in sleep mode, short press < ⏻ > button to wake the device.



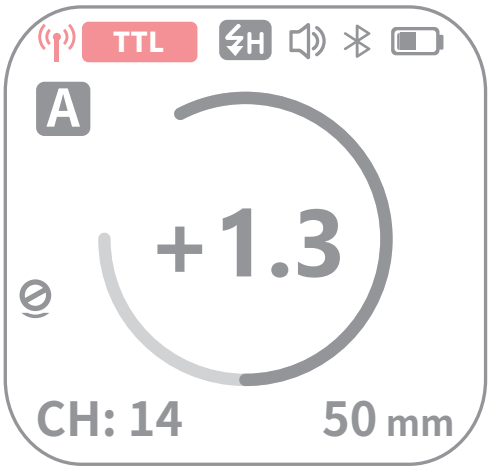
TTL Mode

In TTL mode, the camera metering system detects flash light reflected from the subject and automatically adjusts flash output to achieve balanced exposure for both subject and background.



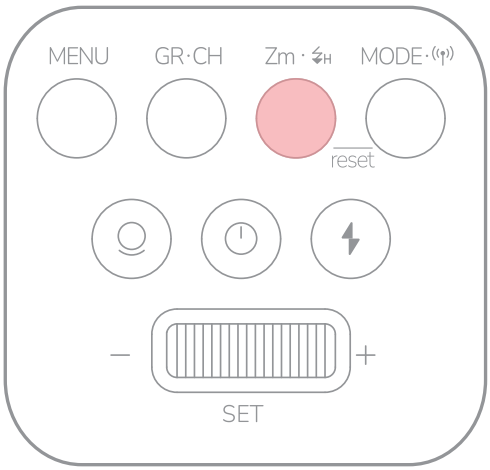
Long press <MODE> to enable wireless mode. Short press <MODE> until <TTL> appears on the screen—this sets the flash to TTL mode.

※ TTL mode is only available when wireless mode is activated.



1. Flash Exposure Compensation

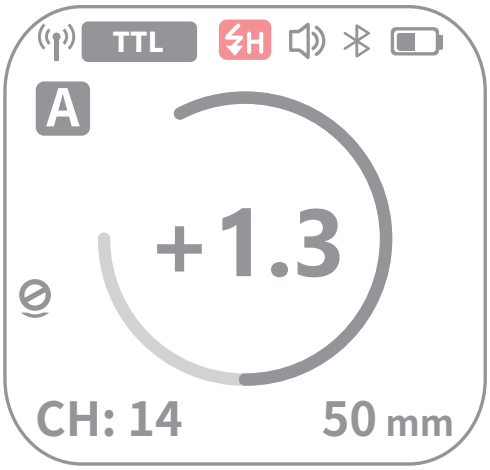
Scroll <SET> to adjust flash exposure compensation. 0.3 represents 1/3 stop, 0.7 represents 2/3 stop.



2. HSS Mode

HSS (high-speed sync) allows flash use at any shutter speed—especially useful for fill flash in aperture-priority portrait shooting.

TTL Mode



Long press < Zm · ⚡H > until < ⚡H > appears on screen. HSS requires a compatible wireless transmitter (e.g., Q/QPRO/QZ).

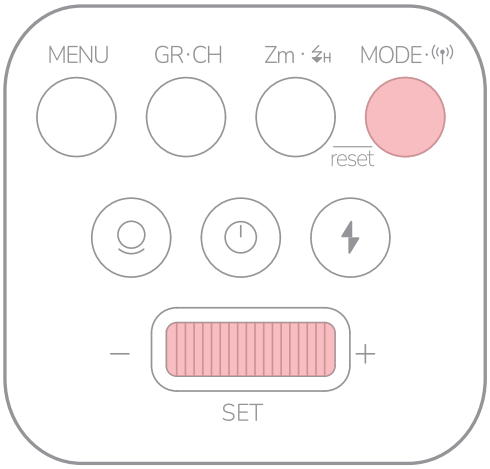
The master trigger must also have HSS enabled.

※ In HSS mode, higher shutter speeds reduce the effective flash range.

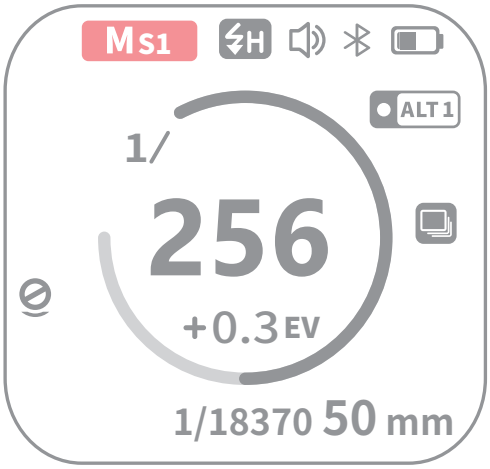
※ MULTI flashes mode will remain unavailable if HSS is activated.

M (Manual) Mode

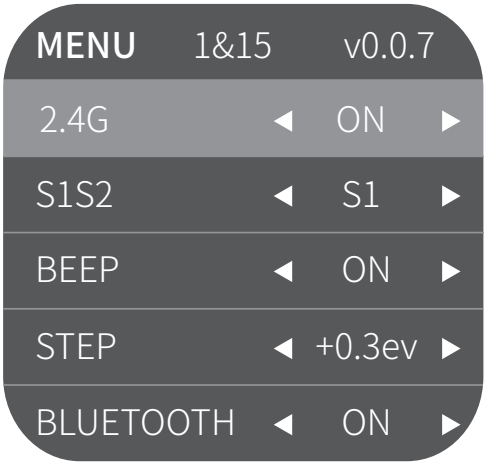
The flash output power is adjustable from 1/256 to 1/1. To achieve the correct exposure, please use a handheld flash meter to measure the flash output.



Short press <MODE> until <M> appears on screen. The flash mode is now set as M (manual).



Scroll <SET> to adjust flash output power.



1. S1/S2 Mode

Short press <MENU> to enter menu, scroll and short press <SET> to select <Slave S1/S2>, then scroll <SET> to choose S1 or S2 mode.

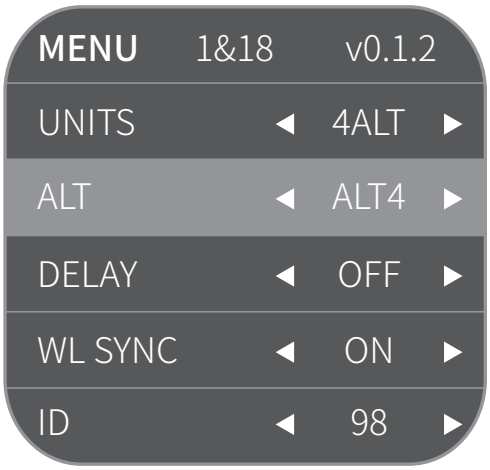
Note: S1/S2 optical triggering is only supported in M (manual) mode.

※ Setting the S1 Unit

In M (manual) mode, use the S1 function to set the flash as a slave unit for multiple lighting effects. The flash will trigger in sync with the first burst from the master unit and delivers the same result as a wireless flash trigger.

※ Setting the S2 Unit

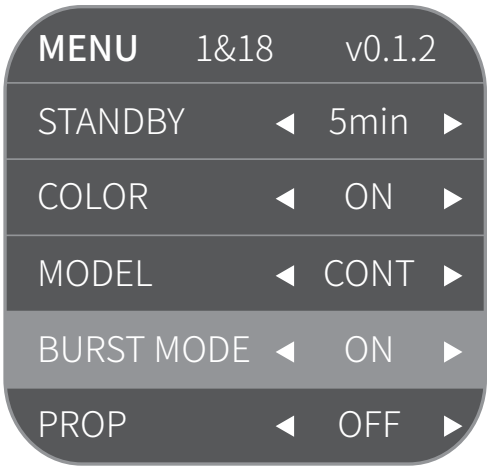
In M (manual) mode, use the S2 function to set the flash as a slave unit in TTL flash settings. With pre-flash prevention, the flash will trigger in sync with the second burst from the master unit.



2. Mask Function

Short press <MENU> to enter the menu, then scroll and short press <SET> to select <Sequence>, and scroll <SET> to choose the desired item.

Sequence 1, Sequence 2, Sequence 3, and Sequence 4 (sequence can be null) indicate when the flash will trigger.



3. Continuous Shooting Mode

Short press <MENU> to enter the menu, then scroll and short press <SET> to select <Continuous Shooting Mode>, and scroll <SET> to enable it.

※ Continuous Shooting Mode is supported only in M mode without HSS.
※ Flash output power must be set to 1/16 or lower.



4. Consistent Color Temperature

Short press <MENU> to enter the menu. Rotate and short press <SET> to select <Consistent Color Temperature>, then rotate <SET> to enable.

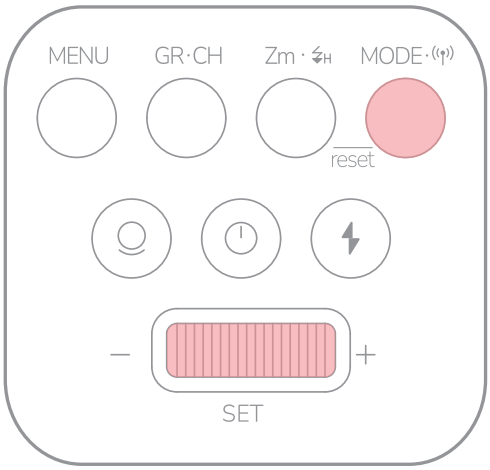
※ Consistent Color Temperature is available only in M mode.

M (Manual) Mode

※ If a sound prompt is heard after enabling this function, it means the function is temporarily unavailable due to high flash capacitor energy that may cause overexposure. Fire the flash to discharge, then shoot again.

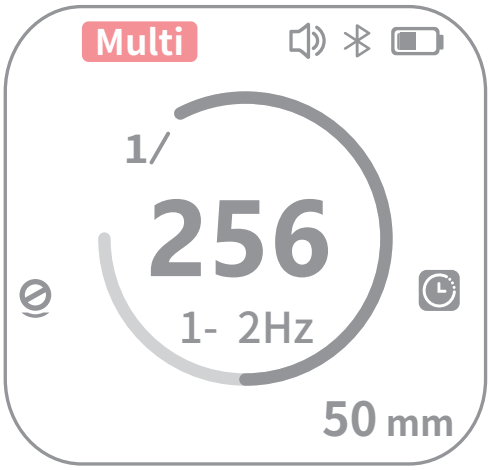
MULTI (Stroboscopic) Mode

MULTI mode emits a series of rapid flashes that allow you to capture multiple images of a moving subject in a single photo.



Short press <MODE>. When <MULTI> appears on the screen, the flash is set to <MULTI> mode.

① Scroll <SET> to adjust flash output power.



MULTI (Stroboscopic) Mode



② Short press <SET> to select <Flash Count>, then scroll <SET> to set number of flashes.

③ Short press <SET> to select <Frequency>, then scroll <SET> to set flash frequency.

Shutter Speed Calculation

During stroboscopic flashes, the shutter must remain open until flashing stops. Use the formula below to calculate shutter speed and set it on the camera.

Flash Count / Flash Frequency = Shutter Speed

For example, if the flash count is 10 and the frequency is 5 Hz, shutter speed must be at least 2 seconds.

※ To prevent overheating and damage to the flash, do not emit more than 10 consecutive stroboscopic flash sequences. After 10 sequences, allow the flash to cool for at least 15 minutes. If more than 10 consecutive sequences are emitted, the flash may stop automatically to prevent overheating. If this occurs, let it cool for at least 15 minutes.

※ "Bulb" is also available in MULTI mode.

※ Stroboscopic flashes cannot be set when flash output is 1/1 or 1/2.

※ Use of a tripod and remote is recommended.

※ Stroboscopic flashes are most effective when shooting highly reflective subjects against a dark background.

MULTI (Stroboscopic) Mode

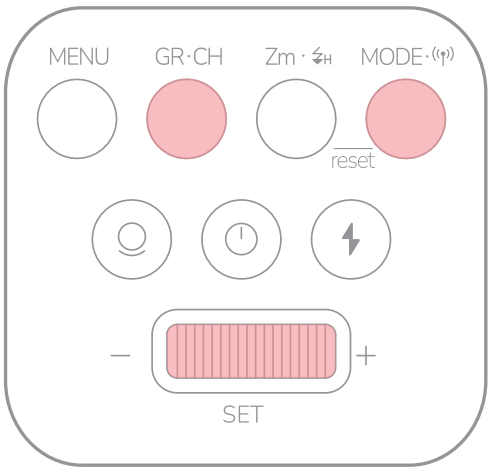
Maximum Stroboscopic Flash Count

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	6	5	5	4	4	4	4
1/16	30	30	30	20	20	20	20	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	90	90	90	90	90	90	80	70	70	60	50	40	40
1/256	100	100	100	90	90	90	80	70	70	60	50	40	40

2.4G Wireless Transmission

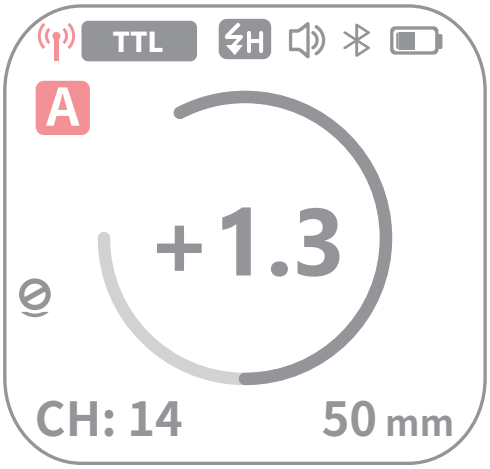
The Q120 features a 2.4G wireless Q system to work seamlessly with compatible NEEWER models. When used as a slave unit, it supports Canon E-TTL II, Nikon i-TTL, and Sony TTL. The flash automatically switches according to the master unit, with no manual setting required.

※ As a slave unit, the Q120 can be wirelessly controlled by a master unit, including: QPro, QZ, Z1, Z2, Z3, Z760, Z880 series, etc.



1. 2.4G Wireless Setup

Long press <MODE> until < > appears on the screen.



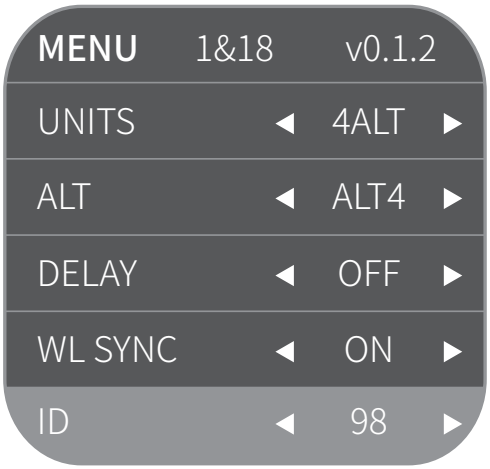
2. Setting Groups

Short press <GR•CH> to select a group from A / B / C / D / E.



3. Setting Channels

Long press <GR · CH> to enter channel adjustment, then scroll <SET> to select a channel from 01–32.



4. Setting Wireless IDs

Short press the <MENU> to enter the menu. scroll and short press <SET> to select <Wireless ID>, then scroll<SET> to set an ID from 00–99.

※ The master unit and the Q120 must be set to the same channel and ID.



5. Wireless Sync

When wireless triggering is required, the wireless sync function can quickly match the channel and ID between the master and slave unit.

Short press <MENU> to enter the menu, scroll and short press <SET> to select <Wireless Sync>, then scroll <SET> and select <Start>.



※ Wireless sync must be enabled on both the master and slave unit. The channel and ID of the master unit will automatically sync to the slave unit for quick wireless pairing.

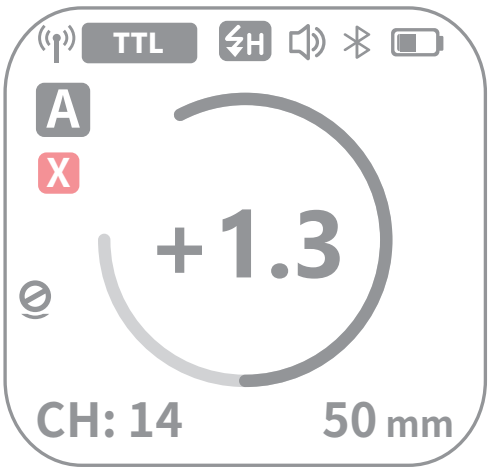


6. Slave Mode Compatibility

Short press <MENU> to enter the menu, scroll and short press <SET> to select <Slave Compatibility>.

Scroll <SET> and select <Off> to use Q system triggers.

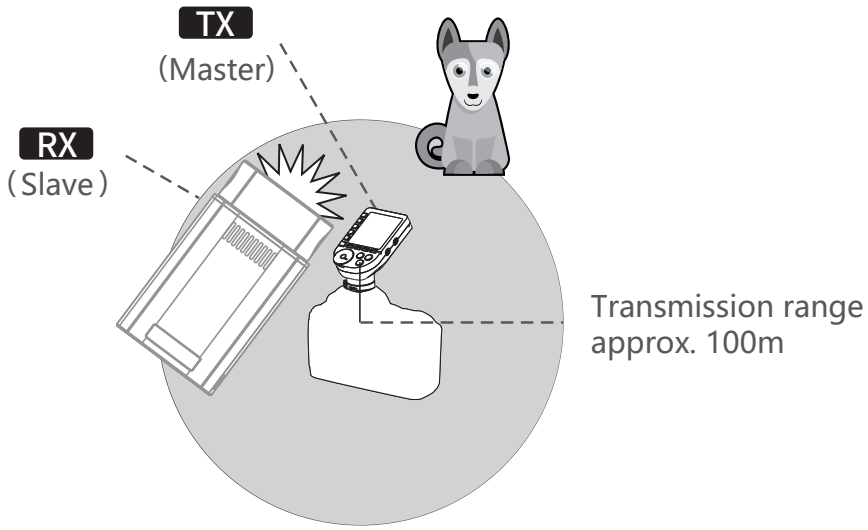
Scroll <SET> and select <On> to use X system triggers.



5. Wireless Flash Shooting

Positioning and operating range (example for wireless flash shooting)

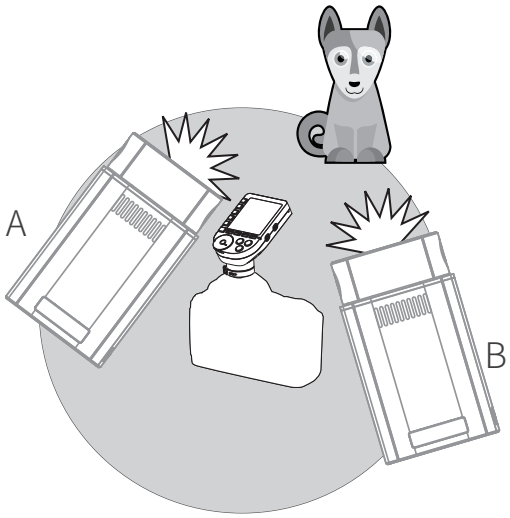
① Using a single slave unit for automatic flash shooting.



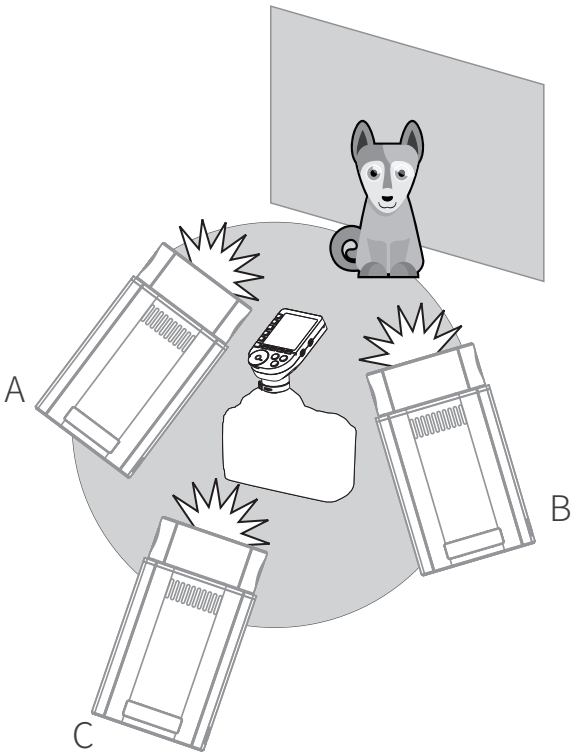
- Transmission range may be shorter depending on location, environment, and weather conditions.
- Perform test flashes and test shots before shooting.
- Use a master unit with wireless transmission function as the trigger.

Wireless Multi-Flash Shooting: Slave units can be divided into two or three groups to perform TTL automatic flash while adjusting flash ratios. Different flash modes can also be set for each flash group.

② Using two slave units for automatic flash shooting.



③ Using three slave units for automatic flash shooting.



6. Common Causes and Solutions for 2.4G Wireless Misfires

① External 2.4G signal interference (e.g., wireless base stations, 2.4G Wi-Fi routers, Bluetooth devices, etc.)
→ Adjust the channel on master unit (recommended: +10) to find an interference-free channel, or turn off other 2.4G devices during operation.

② Ensure flash is fully recycled and ready to keep up with the speed of continuous shooting (ready indicator on). Check that the flash is not in overheat protection or other abnormal states.
→ Reduce flash power. If using TTL, try switching to M mode.

③ Transmitter and flash too close (<0.5m)
→ Enable ""Short Distance Wireless Mode"" on the master unit. For QPro series: set C.Fn-DIST to 0–30m.

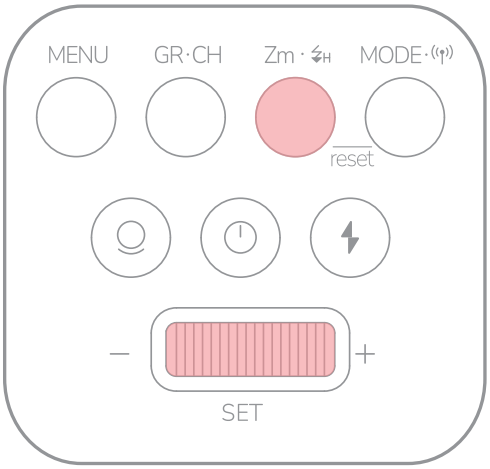
④ Low battery on both master and slave units
→ Replace batteries. Recommended: 1.5V disposable alkaline batteries for the transmitter.

Other Functions

1. Sync Jack Trigger

Insert a sync cable or trigger plug into the 2.5mm sync jack to sync the flash.

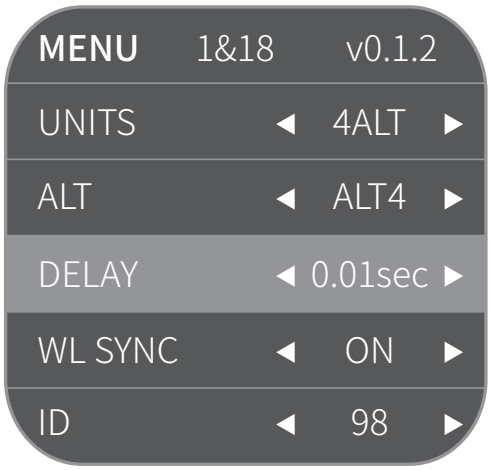
※ When using the sync jack, disable 2.4G wireless mode and S1/S2 modes.
※ Sync speed using the sync jack: ⩽1/200s.



2. Focal Length Setting

Short press <Zm> to enter focal length adjustment. Scroll <SET> to adjust between 28–105mm.

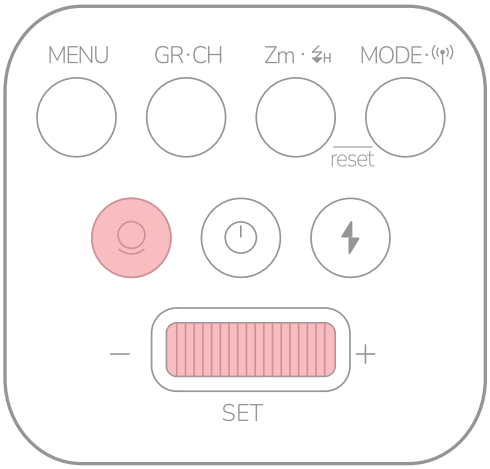




3. Delayed Flash

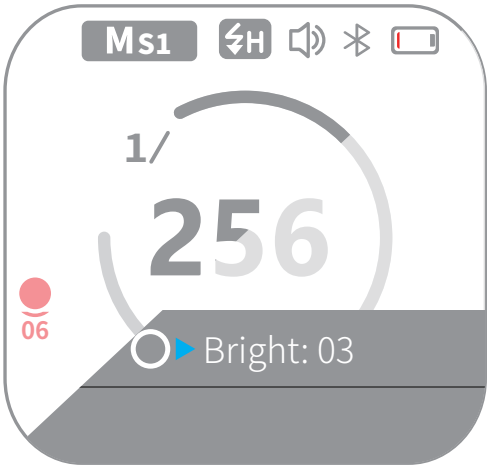
Short press <MENU> to enter the menu. Scroll and short press <SET> to select <Delayed Flash>, then scroll <SET> to enable.

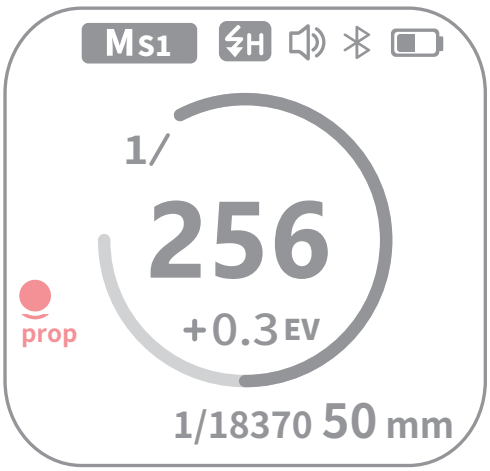
※ Can be used as a rear-curtain flash.



4. Modeling Lamp

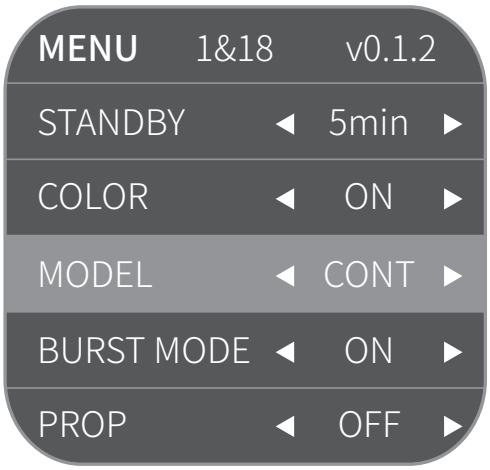
① Short press <◯> when the value symbol appears. Long press <◯> to enter brightness adjustment, then scroll <SET> to set brightness setting between 01–10.



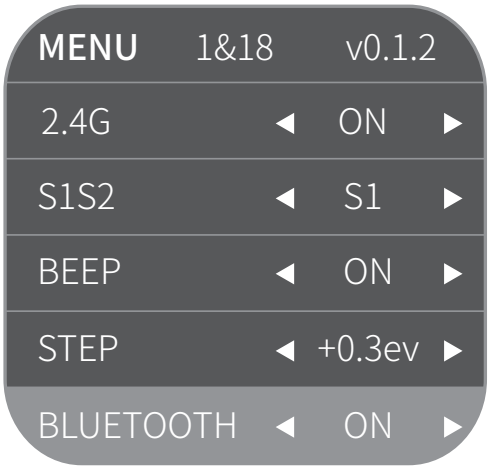


② Short press <◯> when the symbol shows <prop>. When adjusting flash output power, modeling lamp brightness changes accordingly—higher power, higher brightness.

※ Enable <Brightness Follow> in the menu.



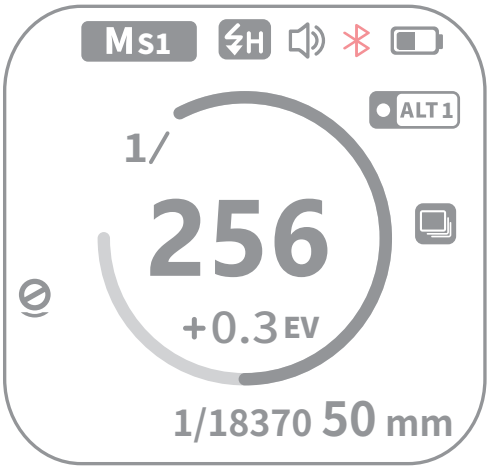
③ Short press ＜MENU＞ to enter the menu. Scroll and short press ＜SET＞ to select ＜Modeling Lamp Mode＞, then scroll ＜SET＞ to choose ＜Continuous＞ or ＜Intermittent＞.



5. APP Control

① Short press <MENU> to enter the menu. Scroll and short press ＜SET＞ to select ＜Bluetooth＞, then scroll ＜SET＞ to enable.

② Connect to your phone via Bluetooth. When the ＜✱＞ icon stops flashing, the connection is successful. Use the NEEWER APP to control the flash.



③ For detailed instructions, scan the QR code on the "APP Prompt Card".

Symbol	Function	Setting	Description	Range
STANDBY	Auto Sleep	OFF	Disable	-
		5min	Automatically sleeps after inactivity	
		30min		
		60min		
		90min		
COLOR	Consistent Color Temperature	ON	ON	M (non-HSS) mode
		OFF	OFF	
MODEL	Modeling Lamp Mode	On	Modeling lamp stays on	-
		Pause	Modeling lamp stays paused	
BURST MODE	Continuous Shooting	ON	ON	M≤1/16
		OFF	OFF	
Brightness Follow	Modeling lamp brightness follows flash power	ON	ON	M/MULTI
		OFF	OFF	
Mask	Number of Units	2 Masks	2 devices	Use simulta-neously in M mode
		3 Masks	3 devices	
		4 Masks	4 devices	
Sequence	Mask Shooting	OFF	OFF	
		Sequence 1	Trigger response during 1st flash	
		Sequence 2	Trigger response during 2nd flash	
		Sequence 3	Trigger response during 3rd flash	
		Sequence 4	Trigger response during 4th flash	
Delayed Flash	Delayed Shooting	OFF	OFF	M/MULTI
		0.01~30.0s	As Rear-Curtain Flash	

Symbol	Function	Setting	Description	Range
WL SYNC	Wireless Sync	START	ON	2.4G
		OFF	OFF	
ID	ID Number	OFF	OFF	2.4G
		01~99	Set ID	
2.4G	Wireless Transmission	ON	ON	-
		OFF	OFF	
S1S2	Optical Trigger Mode	OFF	Enable	M
		S1	S1	
		S2	S2	
Sound Prompt	Beep	ON	ON	-
		OFF	OFF	
Power Adjustment	Increment	+0.1ev	±0.1ev	M
		+0.3ev	±0.3ev	
BLUETOOTH	Bluetooth Mode	ON	ON	-
		OFF	OFF	
RESET	Restore Factory Settings	OK	Restore Factory Settings	-
		--		
RX COMPAT	Slave Compatibility	ON	ON	2.4G
		OFF	OFF	
Language	Display Language Chinese	Chinese	Chinese	-
		English	English	

Protection Features

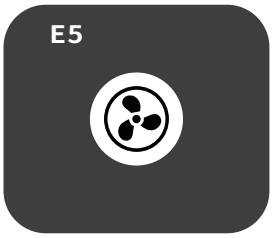
1. To prevent flash head overheating and damage, do not perform more than 70 rapid consecutive flashes at 1/1 power. After 70 flashes, allow the flash to cool for at least 5 minutes.
2. When the overheat protection activates, " " will appear on the screen.

Focal Length / Number Of Times / Power	28mm	35mm	50mm	70mm	80mm	105mm
1/1	70	75	80	90	100	105
1/2	120	120	120	120	120	120
1/4	200	200	200	200	200	200
1/8	300	300	300	300	300	300
1/16	400	400	400	400	400	400
1/32	500	500	500	500	500	500
1/64	1000	1000	1000	1000	1000	1000
1/128	2000	2000	2000	2000	2000	2000
1/256	6000	6000	6000	6000	6000	6000

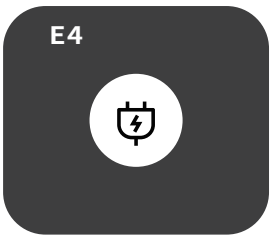
Error Prompts



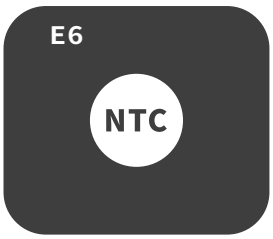
High-Voltage Capacitor Overvoltage



Fan Malfunction



Recycle Error (Over 8s)



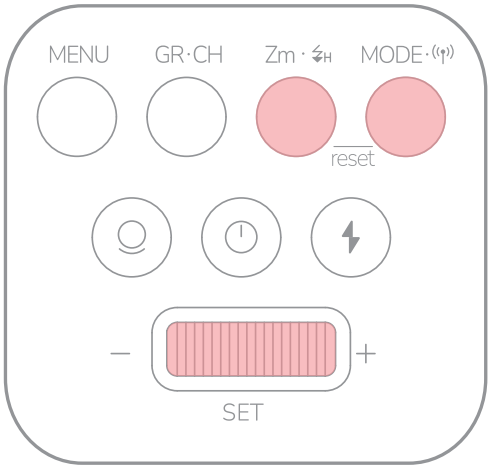
Temperature Sensor Error (Disconnected/ Open Circuit)

Firmware Upgrade

The device supports firmware upgrades via the USB port. The latest firmware will be available on the official website.

- The product does not include a USB cable; please purchase separately. It supports USB-C cables only.
- Firmware upgrades require the ""Neewer_Firmware_Update"" software. Before upgrading, download and install the software, then select the corresponding firmware file.
- As the product receives firmware updates, please refer to the digital user manual for up-to-date information.

Factory Reset



Press and hold both ＜Zm＞ and ＜MODE＞ to restore factory settings.



Or, select ＜Reset＞ in the menu and short-press ＜SET＞; when <OK> appears, the device will reset to factory settings.

Safety Precautions

1. Do not place the product in environments above 50°C.
2. The recommended operating temperature is below 40°C.
3. Avoid dropping the product or subjecting it to collisions or strong impacts.
4. Do not flash the light directly into eyes (especially infants), as it may cause temporary vision impairment.
5. This product is not waterproof; avoid rain or damp environments.
6. Do not disassemble the product yourself. Any repairs must be performed by the manufacturer or authorized service personnel.
7. Do not dismantle, strike, crush, or expose the product to fire. If the battery or unit shows severe swelling, stop using it immediately.
8. In case of any malfunction, turn off the power immediately.
9. Do not use the flash near chemicals, flammable gases, or other sensitive substances, as sudden intense light may trigger fire or electromagnetic interference. Adhere to any warning signs in these types of environments.

Specifications

Model	Q120	
Flash Modes	Wireless Off	M/MULTI
	Wireless Slave Mode	TTL/M/MULTI
Compatible Cameras (Wireless Slave)	Nikon	
	Canon	
	Sony	
	FUJIFILM	

Specifications

Flash Output Power	120Ws
Flash Duration (t0.1 approx.)	1/400S-1/20000S
Flash Power Range	1/256~1/1
Delay Flash	0.01~30S
Groups (GR)	A，B，C，D，E
Transmission Distance	100M
Modeling Lamp Brightness Levels	1-10
Modeling Lamp Power	3W
Stroboscopic Flash	Yes (Max Count: 100; Frequency: 100 Hz)
Sync Modes	HSS, First-Curtain, Rear-Curtain
Flash Duration Display	✓
Recycle Time	0.01 – 1.5s
Triggering Methods	2.4 GHz / S1 Optical / S2 Optical / 2.5 mm Sync Jack
ID	01~99
CH	01~32
Power Supply	Lithium Battery
Battery Capacity	7.2V/3000mAh
Max Full-Power Flashes	410-420
Flash Dimensions	81×81×143mm
Weight (with battery)	671g
Frequency Range	2412.75MHz-2437.75MHz
Max Transmit Power	8.62dBm