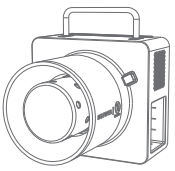
Product Overview

The Q6 600W is a powerful outdoor flash, with a large battery capacity, capable of high-speed performance. Its exposed lamp tube and reflector ensure excellent light quality, effectively suppressing sunlight intensity for outdoor shots. Featuring wireless TTL functionality, it has a built-in lithium battery for portability. With a 2.4G wireless Q system, the flash can be remotely controlled, allowing activation of TTL, M, and Multi flash modes using Qpro and Q-series triggers.

Package Contents



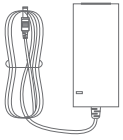
Q6 Outdoor Flash



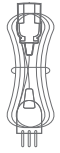
Support Mount



Storage case



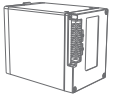
Power Adapter



Power Cord



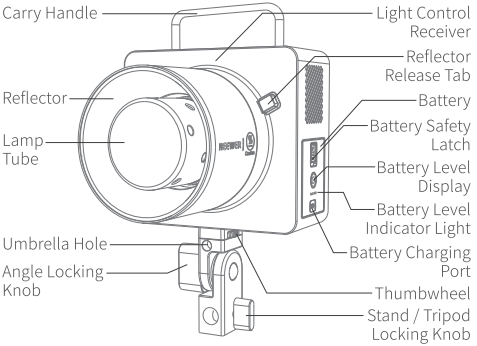
Reflector Cap

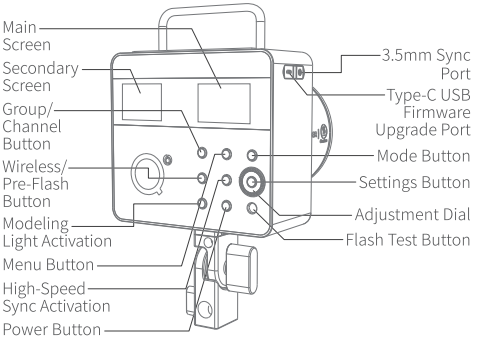


Battery

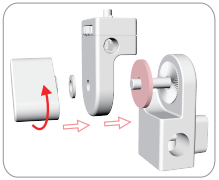
Optional Accessories: Compatible with various photography accessories from the NEEWER range, including QPro triggers, Bowens mount softbox umbrellas, reflector umbrellas, beauty dishes, and light stands, to achieve optimal shooting results.

Product Illustration





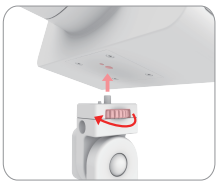
Installation Instructions



Installing the washer:

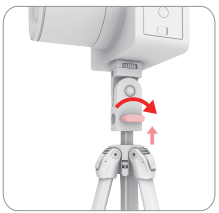
Loosen and remove the angle knob first, then disassemble the whole support mount. Place the washer onto the screw, reassemble the support mount, then tighten the knob.

※ The washer can eliminate friction noise but may decrease the load capacity of the support mount.



Installing the Mount:

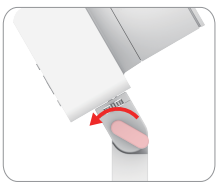
Insert the screw and locating pin at the top of the Mount into the screw hole and locating slot at the bottom of the flash.
Tighten the thumbscrew until the handle is securely attached.



Mounting on a tripod / light stand:

Insert the top of the tripod / light stand into the mounting hole at the bottom of the support mount, then tighten the indicated locking knob to complete the setup.

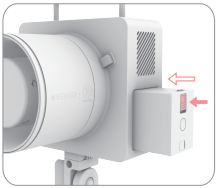
※ This product does not include a light stand / tripod and must be purchased separately.



Adjusting the Angle of the Outdoor Flash:

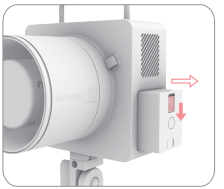
Loosen the angle locking knob on the Mount, adjust the angle of the outdoor flash according to the usage scenario, and then tighten the knob to secure it.

Battery Usage Instructions



Installing the Lithium Battery:

Insert the battery, with the button facing outwards, into the battery compartment until it locks securely in place. (View image for guidance)



Removal of Lithium Battery:

Press down on the battery release tab to release the whole battery which will automatically pop out, allowing you to remove it completely.

Battery Management:

Press and hold the power button for 1 second to turn the product on or off. Please turn off the flash if the product will not be used for an extended period.
This product is designed with an automatic power-off function. If there is no operation during the set time in C.Fn-STANDBY mode (30-120 minutes), the flash will automatically turn off.

Battery Characteristics:

1. This product uses a lithium battery that supports up to 500 charge /discharge cycles and complies with GB31241 safety standards.
2. Safe and reliable, the battery features built-in protection against overheating, overcharging, deep discharge, and short circuits.

Battery Level Indicator

Install the lithium battery correctly in the flash to power the device. The battery status can be checked during use at any time by checking the battery icon on the flash screen.

LCD Screen Battery Level Indicators	LED Display on the Battery	Indication / Battery Percentage
For the battery status of the entire flash system	Represents battery status when no power is being drawn	
Full Charge	1 Red + 3 Green Lights On	100%
Sufficient Charge	1 Red + 2 Green Lights On	50% ~ 75%
More than Half Charge	1 Red + 1 Green Lights On	50%
Low Charge	1 Red Light On	3% ~ 20%
Charging Reminder	2% Red Light Flashing, 1% Indicator Light Off	A battery level below 2% indicates that it is almost depleted. When this occurs, the flash cannot continue normal operation. A warning notification will display after one minute, with the device automatically turning off after three minutes.
Note: The display is generally consistent with the table above, but there are still slight differences when switching between battery levels.		**Note: When the battery is almost completely discharged, please charge the flash as soon as possible (within 10 days) before further use or storage.**

LED Display on the Battery:

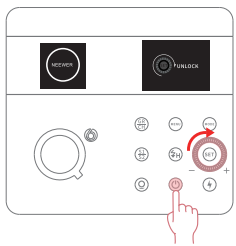


1 Red + 3 Green Lights On | 1 Red + 2 Green Lights On | 1 Red + 2 Green Lights On | 1 Red Lights On

Battery Use Precautions

01. Avoid short-circuiting the positive and negative terminals.
02. The battery is not waterproof. Do not expose to water or use in humid environments.
03. Keep out of reach of children.
04. Do not charge the battery for more than 24 hours. Only the included charger should be used with the flash.
05. If the battery has not been used for more than 3 months, please recharge it to keep battery cells in optimum condition.
06. Do not expose the battery to fire or place it near flames.
07. Please dispose of any waste batteries according to local regulations.
08. If not used for an extended period, please charge the battery to about 60% before storing.
09. Wrap the battery in a non-conductive material to avoid any metal foreign objects from having direct contact with the battery. Store the battery in a cool, dry place.
10. The battery must not be charged during use.
11. The battery is designed with over-temperature protection; if the internal temperature of the battery reaches 55°C, the over-temperature protection will be activated, requiring the battery to cool down before further use.

How to Use



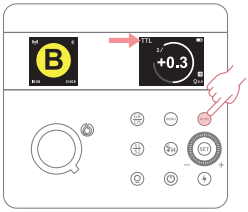
Power On/Off / Screen Unlock:

① Press the power button "⏻" to turn on the display. Then, rotate the adjustment dial clockwise until a downwards pointing arrow appears on the display to unlock the screen.

② Press the power button "⏻" to shut down the device.

TTL Auto Flash Mode

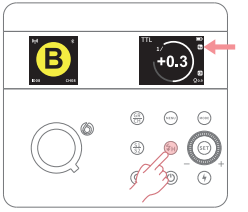
This product features three flash modes: "TTL," "M," and "Multi." Briefly press the "MODE" button to cycle through these and select one of the three flash modes.



Setting the TTL Mode:

Press the "MODE" button until the "TTL" icon appears on the screen, indicating that the flash mode is set to the TTL auto flash mode.

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



High-Speed Sync:

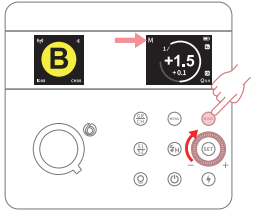
Press the "H" button and the "H" icon will appear on the screen. Then use an additional wireless transmitter like the QPro C/N/S/QS for the high-speed sync functionality.

When using high-speed sync (FP flash), you can use the flash to shoot at all shutter speeds.
In high-speed sync mode, using aperture priority is particularly useful for fill light in portrait photography.

Notes:
1. If the shutter speed is set equal to or slower than the camera's maximum flash sync speed, the "H" icon will not be displayed in the viewfinder.
2. When using high-speed sync, the higher the shutter speed, the smaller the effective flash range.
3. In wireless mode, Q6 follows the same synchronization method as the transmitter QPro C/N/S.
4. High-speed sync flash cannot be used in Multi-Strobe mode.
5. Using high-speed sync flashes for more than 50 consecutive shots may activate the flash's overheating protection function.

M Manual Flash Mode

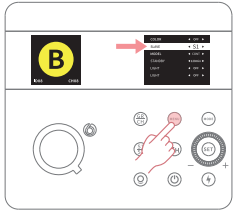
In M (Manual) mode, the flash output can be set from 1/512 power to 1/1 full power in 0.1 increments. To achieve the correct flash exposure, please use a handheld flash exposure meter to determine the required flash output.



Setting the Flash Output Power:

Press the "MODE" button until the "M" icon appears on the screen, indicating that the flash mode is set to manual mode. Rotate the adjustment dial to select the desired flash output power. Confirm the level by pressing the "SET" button.

※ The S1/S2 optical triggering is only available when the wireless mode is turned off in manual mode.

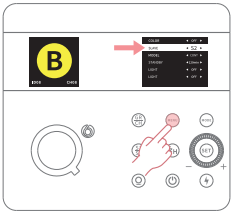


Setting the S1 Flash Unit:

In manual mode, press the "MENU" button to enter the menu. Select the S1 pre-flash function under the "SLAVE" option, allowing the flash to function as a slave flash in a manual flash environment. The S1 flash will be triggered by the first flash of the master flash, achieving the same triggering effect as using a wireless trigger.

When the wireless mode is off, press the "S1/S2" button to switch between S1/S2/OFF modes.

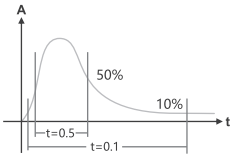
M Manual Flash Mode



Setting the S2 Flash Unit:

Press the "MENU" button to open the menu. Select the "SLAVE" option and choose the S2 pre-flash function to set up the flash as a slave in TTL auto-flash conditions.

The S2 flash has an anti-pre-flash feature. When paired with a camera using a single pre-flash, it activates via optical triggering. Additionally, it can synchronize with the second burst of the master flash, enabling a secondary optical trigger.



※The duration is displayed only in M manual mode.

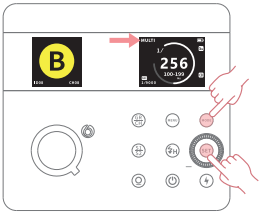
Display of Flash Duration:

Flash duration refers to the time from when the flash begins until it reaches half-peak value. The half-peak value is represented as t=0.5. To provide photographers with more detailed shooting values, this product uses the standard of t=0.1

The graphic to the left shows the difference between t=0.5 and t=0.1.

Multi Strobe Flash Mode

With stroboscopic flash, you can use a series of rapid flashes to capture multiple images of a moving object in a single photograph. You can also set the flash frequency (the number of flashes per second, expressed in Hz), the total number of flashes per exposure, and the flash output.



Setting the Multi Strobe Flash:

① Press the "MODE" button until the "MULTI" icon appears on the screen, indicating the flash mode is set to strobe flash mode.

Rotate the adjustment dial to set the flash output power.

② Press the "SET" button to select the number of flashes, and rotate the adjustment dial to set it to the desired value.

Press the "SET" button again to select the flash frequency, and rotate the adjustment dial to set it to the desired value.

Calculating the Shutter Speed:

During the strobe flash process, the shutter should remain open until the flashes stop. Use the following formula to calculate the shutter speed, and then set it on your camera.

Shutter Speed = Number of Flashes / Flash Frequency

Example: If the number of flashes is 10 and the flash frequency is 5 Hz, then the shutter speed should be at least 2 seconds.

⚠ To prevent the flash head from overheating and being damaged, do not perform continuous strobe flash bursts exceeding 10 flashes. After 10 flashes, allow the flash unit to cool for at least 15 minutes. If you attempt to perform continuous strobe flash bursts beyond 10 flashes, the flash may automatically stop to prevent the flash head from overheating. If this occurs, please allow the flash unit to cool for at least 15 minutes.

Multi Strobe Flash Mode

Notes:
1. Using stroboscopic flash is more effective for subjects with strong reflections against a dark background.
2. It is recommended to use with a tripod and a remote switch.
3. Strobe flash cannot be activated when the flash output is at 1/1 or 1/2.
4. "Bulb" mode can also be used when using strobe flash.

Maximum Number of Strobe Flashes:

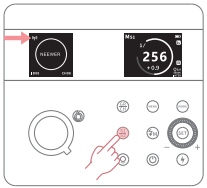
Hz / Flash Output Power	1	2	3	4	5	6 ~ 7	8 ~ 9	10	11	12 ~ 14	15 ~ 19	20 ~ 50	60 ~ 100
1/4	7	6	5	4	3	3	3	2	2	2	2	2	2
1/8	14	14	12	10	8	6	5	4	4	4	4	4	4
1/16	30	30	30	20	20	20	10	8	8	8	8	8	8
1/32	60	60	60	50	50	40	30	20	20	20	18	16	12
1/64	90	90	90	80	80	70	60	50	40	40	35	30	20
1/128	100	100	100	100	100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

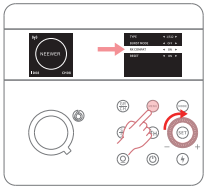
2.4G Wireless Transmission

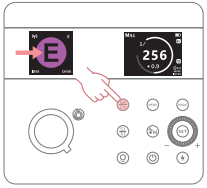
The Q6 uses a 2.4G wireless Q system and can seamlessly work with other accessories from NEEWER. As a slave flash, the Q6 is compatible with Canon E-TTL II, Nikon i-TTL, and Sony cameras, and will automatically switch settings according to the master flash, eliminating the need for manual settings.

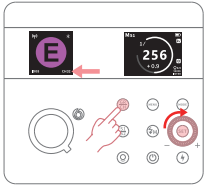
※ As a slave unit, the Q6 can be controlled by the master units with wireless transmission capabilities, such as QPro series wireless flash triggers, Z2, Z1, Z760, and Z880 series flashes, and more.

2.4G Wireless Transmission









Setting the 2.4G Wireless Connection:

Press and hold the "S1 S2" button until the "((•))" icon appears on the secondary screen.

Wireless Compatibility Settings:

Enter the menu, rotate "SET" button and choose "RX COMPAT".
"OFF to disable wireless compatibility", now use the Q-system trigger.
"ON to enable wireless compatibility", now use the X-system trigger.

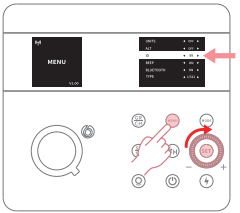
Setting the Communication Group:

Press the "GR CH" button to select and confirm the group letter (A-E) .

Setting the Communication Channel

Press and hold the "GR CH" button for 2 seconds to select the channel, then rotate the adjustment dial to set the channel number (1-32). Press the "SET" button to confirm.

2.4G Wireless Transmission



Setting the ID Number:

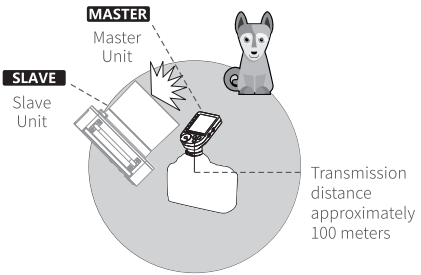
Press the "MENU" button to enter menu mode, rotate the adjustment dial to select the ID number (01~99). Press the "SET" button to confirm.

※ The master unit (Q-pro) and the flash unit (Q6) must be set to the same channel or ID number for wireless communication.

Wireless Flash Photography:

Positioning and Operating Range (Example of Wireless Flash Photography).

① Using as a slave unit for automatic flash photography.

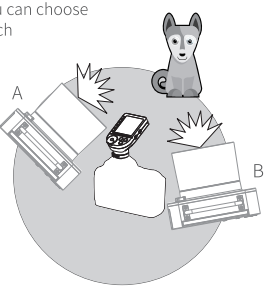


- Use a master unit with wireless transmission capabilities as the transmitter.
- Please perform a test flash and trial shot before commencing your photography session.
- The transmission distance may be shorter due to factors such as position, surrounding environment, and weather conditions.

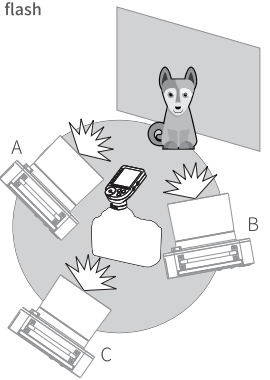
2.4G Wireless Transmission

Wireless Multiple Flash Photography:
You can divide the slave units into two or three groups, and perform TTL auto flash while varying the flash ratio at the same time. Additionally, you can choose different flash modes for each flash group.

② Using two slave groups for automatic flash photography.



③ Using three slave groups for automatic flash photography.

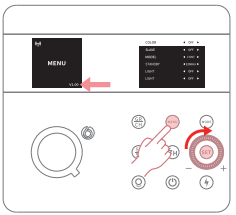


2.4G Wireless Transmission

Causes & Troublshooting Misfires in 2.4G Wireless Mode:

1. 2.4G Signal Interference (e.g., wireless bases, 2.4G Wi-Fi routers, Bluetooth devices, etc.).
→ Adjust the channel settings on the triggering device (recommended to +10) to find a channel without interference, or turn off other 2.4G devices during operation.
2. Ensure the flash has recycled or that its recycling speed matches the continuous shooting speed (the flash indicator should be illuminated), and that it is not in overheating protection or any other abnormal state.
→ Lower the flash output power if necessary. If using TTL mode, try switching to manual mode (TTL mode requires a pre-flash).
3. Check if the distance between the trigger and flash is too short (distance < 0.5m).
→ Enable the "Close Distance Wireless Mode" on the trigger. For Qpro series: Set C.Fn-DIST to 0-30m.
4. Check the battery level of both the trigger and the receiver.
→ Replace the batteries if low (it is recommended to use 1.5V disposable alkaline batteries for the flash trigger).

C.Fn: Set Custom Functions



Menu Mode (C.Fn: Set Custom Functions)

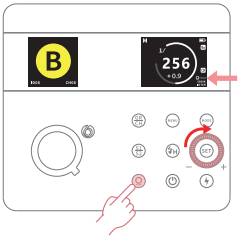
① Press the "MENU" button to enter the C.Fn menu. The "V x.xx" icon will be displayed on the lower right corner of the secondary screen, indicating the software version number.

② Rotate the adjustment dial to select the custom function, and press the "SET" button to confirm it.
③ Rotate the adjustment dial to select the parameter, and press the "SET" button to confirm it.
④ Press any button to exit the menu.

Custom Settings

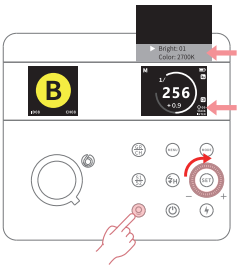
COLOR	Constant Color Temperature Mode, Switch		
SLAVE	OFF/S1/S2		
Modeling Light Mode	CONT: Constant On		
	INTER: Light off after the flash is recycled		
Modeling Light Color Temperature	2700-6500K		
Screen Sleep Time	OFF/30s/1min/1.5min/2min/2.5min		
AUTO OFF Time	OFF: No Automatic Shutdown		
	30MIN: Auto Shutdown After 30 Min of No Operation		
	60MIN: Auto Shutdown After 60 Min of No Operation		
	90MIN: Auto Shutdown After 90 Min of No Operation		
DELAY (Delay Shooting)	Delay Flash OFF, 0.01~30s, Delay Flash After Triggering		
	Supported Modes: Manual/Multi-Strobe Mode		
UNITS (Mask Cutting Shooting)	UNITS: Number of Flash Units	2-4	The UNITS and ALT functions must be used together: UNITS sets the total number of flash units; ALT sets the number of triggers before the flash is activated.
	ALT: Trigger Count	1-4	
	Supported Mode: Manual Mode	Manual Mode	
ID	1-99		
BEEP	ON/OFF		
BLT	ON/OFF		
TYPE (Flash Ratio Display Mode Switch)	Fraction Mode (1/1~1/512)		
	Decimal Mode (9.0~1.0)		
BURST MODE	YES/NO		
RESET	Restores Factory Settings		

Modeling Light

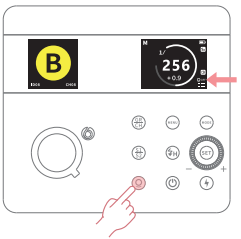


Modeling Light Mode:

① Press the "" modeling light button and the "PROP" icon will appear in the lower right corner of the main screen. Rotate the adjustment dial to change the output power and adjust the brightness of the modeling light. The higher the output power; the brighter the modeling light.

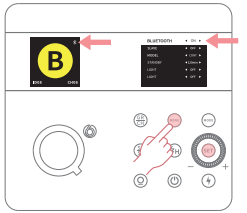


② Press the "" modeling light button, and the modeling light icon, with the corresponding value, will appear in the lower right corner of the main screen. Press and hold the modeling light button for 2 seconds to enter the parameter adjustment interface. Rotate the adjustment dial to select the brightness level (01-10) and color temperature value (2700K-6500K).



③ Press the "" modeling light button until the modeling light and "OFF" icon appear in the lower right corner of the main screen, indicating that the modeling light is turned off.

APP Control



Short press the "MENU" button to enter the menu and select "BLUETOOTH". Set the status to ON to enable the Bluetooth function.

Connect your smartphone via Bluetooth and use the NEEWER App to control the LED light. When the "" symbol on the display screen stops blinking, it indicates a successful Bluetooth connection.

※ For detailed instructions, please scan the QR code on the APP Guide card to access the APP Guide Page.

Protection Features

Software Protection:

The continuous flash count for activating overheating protection (the following values are for reference; specifics depend on hardware design) at 30°C is as follows.
After the overheating protection mechanism is triggered, the recycling time will be extended as below.

Power	Flash Count	Extended Recycling Time
1/1	120	7S
1/2(+0.7)	180	5S
1/2(+0.3)	240	5S
1/2	300	4S
1/4	400	4S
1/8	600	4S
1/16	800	3S
1/32	1000	2S
1/64	1000	1S
1/128	2000	1S
1/256	2000	1S
1/512	3000	1S

Protection Features

Overheating Protection:

To avoid overheating and potential damage to the flash, do not exceed 90 rapid consecutive shots at full power (1/1). After 90 shots, allow the flash to cool down for at least 10 minutes.

Continuing to shoot immediately after 90 consecutive flashes may trigger the overheat protection mechanism, extending the recycling time by over 6 seconds. If this happens, let the flash cool for about 10 minutes to resume normal operation.

When the overheating protection is active, a "🌡" icon will appear on the display.

Protection Features

Other Protection Mechanisms:

Fault Code	Cause
E1	Detected IGBT damage
E2	Detected excessive temperature in the energy storage capacitor; no further flashes possible to allow device to cool down.
E3	Overvoltage of the high-voltage capacitor
E4	Energy storage capacitor not fully charged for over 20 seconds
E6	NTC - Energy storage capacitor signal lost
E7	NTC - LED lamp head signal lost
E8	Fan signal lost
E9	Firmware error-please upgrade to the correct firmware

Troubleshooting

Insufficient or excessive flash exposure.

- Using high-speed synchronization.

→ When using high-speed synchronization, the effective flash range will be smaller. Make sure that the subject is within the effective flash range.

- The flash is set to manual exposure mode.

→ Switch to TTL mode or adjust the flash output power settings.

Maintenance & Care

- If the device behaves abnormally during use, turn off the flash immediately, and try to determine the cause.
- The lamp body should be protected from vibrations. Ensure the surface is kept clean and free of dust.
- It is normal for the lamp body to generate some heat. Unless necessary, do not continuously trigger the flash.
- If the product malfunctions or gets wet, it may only be used again after being serviced by a professional.
- The company reserves the right to apply changes to the technical specification of the product without prior notice.

Triggering via Sync Port

The specifications for the synchronization port are Φ3.5mm. A sync cable or trigger plug can be used to synchronize the flash triggering.

※ When using the sync interface for triggering, it is necessary to turn off the 2.4G wireless mode and S1/S2 modes.
※ When using the sync interface for triggering, the sync speed will be less than 1/200.

Firmware Upgrade

This device can be upgraded via the USB port. The latest software announcements and instructions will be posted in the firmware section of our official website.

- This product does not come with a USB update cable and should be purchased separately. The interface type and cable required is USB-C.
- Upgrading the firmware requires the support of the "Neewer_Firmware_Update" program. Please download and install "Neewer_Firmware_Update" application first, and then select the firmware file for the upgrade.
- Please refer to the latest electronic manual, as the product undergoes firmware updates.

Specifications

Product Model	Q6
Wireless Slave Unit Mode	Radio Mode (Compatible with Canon E-TTL II, Nikon i-TTL, Sony)
Flash Output Power	600Ws
Multi-Flash Mode	TTL / M / MULTI
Stroboscopic Flash	Flash Frequency 1-100Hz, Flash Count 1-100 times
Sync Method	Front Curtain Sync, Rear Curtain Sync, High-Speed Sync
Delay Triggering	0.01~30 S
BURST MODE	ON/OFF
Constant color temperature mode	5700K±100K
Mask	✓
Fan	✓
BEEP	✓
Flash Duration	Ordinary flash: 1/209~1/10989s Color temperature is constant: 1/181~1/5263s
Model Lamp (LED)	
CCT	2700K-6500K
CRI	95+
TLCI	98+
Trigger Method	Optical Trigger / 3.5mm Sync Trigger / 2.4G Wireless Trigger
Control method	Panel control / APP control / 2.4G control
Power Supply	Lithium Battery, AC Dummy Battery(Additional purchases)
Battery	Capacity: 83.52Wh Rated voltage: 28.8V / 2900mAh
Recycle Time	0.01～0.9 S

Specifications

2.4G Wireless System	
Wireless Function	Slave Unit, Off
Subordinate Groups	A\B\C\D\E
Wireless Triggering Distance	100 meters
Channel	CH1-CH32
Wireless ID	OFF, 1-99

Notes

1. Do not expose the product to temperatures exceeding 50°C.
2. The operating temperature of this product should not exceed 40°C.
3. Avoid dropping the product, subjecting it to impacts, or strong shocks.
4. Do not point the flash directly in someone's eyes, especially infants, as it may cause temporary vision impairment.
5. The product is not waterproof and should, therefore, be protected from wet or humid environments.
6. Do not disassemble the product. Repairs or inspections should only be made by a qualified professional should a malfunction occur.
7. It is prohibited to dismantle, impact, crush, or throw the product into a fire. If the product shows severe swelling, discontinue use immediately.
8. In the event of any malfunction, turn off the flash immediately.
9. Avoid using the flash near chemicals, flammable gases, or other hazardous substances, as these materials may be sensitive to the flash's intense light under certain conditions, potentially leading to fires or electromagnetic interference. Always heed relevant warning signs in such environments.