



CHEETAH LIGHT
CL - 600



CONTENTS

Foreword

Thank you for purchasing this product.

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.

Wireless power-control flash CL600 is designed to provide a lightweight, portable, easy-to-use, multi-functional, and reliable flash lighting solution for outdoor shooting. It fits wedding, art, portrait, and commercial photography. This portable flash offers:

1. Built-in wireless power adjusting and flash triggering
2. Large-capacity 8000mAh lithium battery (LiFePO₄)
3. Full battery provides 450 full power flashes for CL600
4. Recycle to full power in 2.5 second for CL600
5. User-replaceable battery module
6. Power adjusts from 1/1 to 1/32 with auto power discharge
7. Stable color temperature at 5600±200k
8. LCD display on a concise and modern panel
9. Built-in fan to prevent overheating.

| | |
|-----|---|
| P01 | For Your Safety |
| P01 | Caution |
| P02 | Names of Parts |
| | Battery Module |
| | Control Module |
| | Flash Head |
| | AC Charger |
| P03 | What's in the Box |
| P03 | Operation |
| | Battery |
| | Mounting and Detaching the Reflector |
| | Installing and Detaching the Flash Tube |
| P06 | Using the Flash |
| | Power Management |
| | Power Level Adjusting |
| | M Mode: Manual Flash |
| | S1 Mode: S1 Slave Triggering Mode |
| | S2 Mode: S2 Slave Triggering Mode |
| | Modeling Lamp On / Off |
| | Sound Prompt Beep |
| | Wireless Control Function |
| | Sync Triggering |
| P08 | Protection Function |
| | Over-Temperature Protection |
| | Other Protection |
| P09 | Technical Data |
| | Maintenance |

For your safety

⚠ DO NOT disassemble or modify

This product contains high-voltage components. Failure to observe this precaution could result in electric shock or product malfunction. Should the product break open as the result of a fall or other accident, send the defective back to an authorized maintenance center.

⚠ Keep dry

Do not handle with wet hands, immerse into water, or expose to rain. Failure to observe this precaution could damage this product.

⚠ Keep out of the reach of children

This product contains small parts that may pose a choking hazard. Should any part of this device be swallowed accidentally, consult a physician immediately.

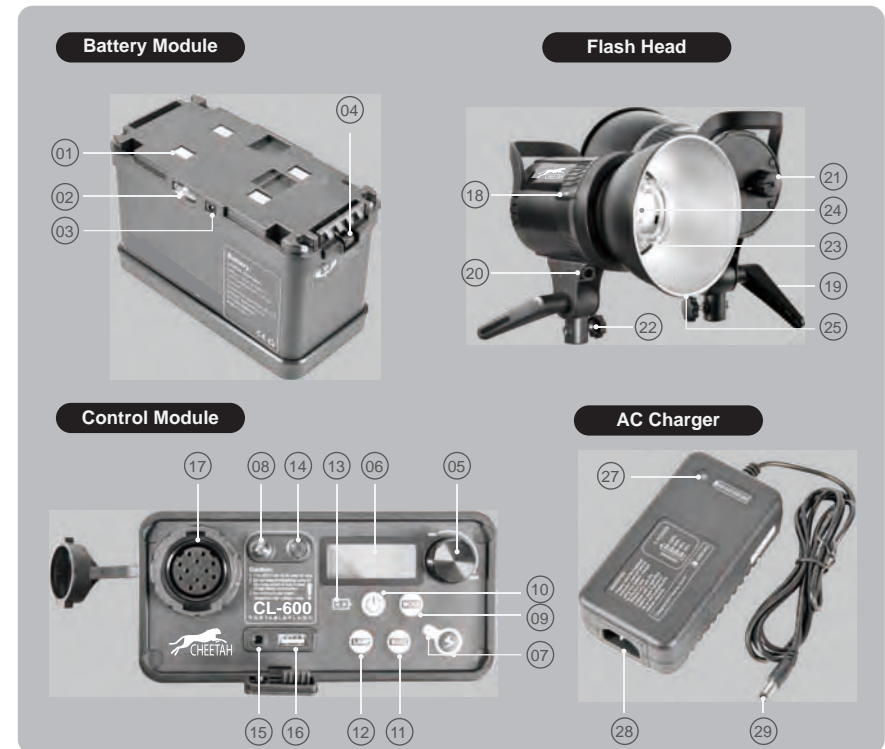
⚠ Do not expose to high temperature

Do not leave or store this product in high temperature conditions. Failure to observe this precaution could cause fire or damage the housing or internal parts.

Caution

- ⚠ NEVER touch the flash tube or the modeling lamp with bare hands. Please wear insulated gloves before replacing any of them.
- ⚠ Do not look directly at the flash tube when in use or it may cause eye pain or blurring vision.
- ⚠ Turn the battery pack off and disconnect the flash head from the battery pack when they will not be used. If not, the battery pack will remain in charging state and consume electricity.
- ⚠ Avoid sudden impact. This could damage the flash tube and the battery pack.
- ⚠ Do not use this product in serve cold, damp, or high temperature conditions.

Name of Parts



Battery Module

- 01. Electrodes
- 02. Fuses
- 03. Charging Socket
- 04. Lock

Control Module

- 05. Flash Output Dimmer
- 06. LCD Panel
- 07. Test Button (TEST) / Flash Ready Indicator
- 08. Light Sensor
- 09. Mode Selection Button (MODE)
- 10. Power Switch
- 11. Buzz Button (BUZZ)
- 12. Modeling Lamp Switch (LAMP)
- 13. Battery Level Indicator
- 14. Sound Beep Outlet
- 15. Sync Cord Jack
- 16. Wireless Control Port
- 17. Power Output Socket

Flash Head

- 18. Bayonet Mount Lock
- 19. Angle Adjusting Handle
- 20. Umbrella Input
- 21. Power Input Socket
- 22. Mount Bracket
- 23. Flash Tube
- 24. LED Modeling Lamp
- 25. Reflector
- 26. Power Connection Line

AC Charger

- 27. Charging Indicator
- 28. AC Power Plug
- 29. Charging Plug



What's in the Box

| No. | Name | Unit | Quantity |
|-----|--------------------------------------|------|----------|
| 1 | Flash head | PCS | 1 |
| 2 | Battery Module | PCS | 1 |
| 3 | Control Module | PCS | 1 |
| 4 | AC Charger | PCS | 1 |
| 5 | Wireless Power-control Flash Trigger | Pair | 1 |
| 6 | Aluminum Case | PCS | 1 |
| 7 | Soft Cap | PCS | 1 |
| 8 | Lamp Cover | PCS | 1 |
| 9 | Shoulder Bag | PCS | 1 |
| 10 | Power Connection Line | PCS | 1 |
| 11 | Standard Reflector | PCS | 1 |



Operation

Battery

- This battery pack adopts LiFePO4 battery. It has a long battery life and 2000 charge-and-discharge times.
- It is safe and reliable. The inner circuit is built in with protection against over-charging, over-discharge, over-current, and short circuit.
- This battery pack needs four hours' charging time.

Caution

- ⚠️ Avoid excessive impacts and shocks.
- ⚠️ This product is not water-proof. DO NOT expose it to fog or immerse into water.
- ⚠️ Keep this product out of reach of children.
- ⚠️ DO NOT keep this battery pack in charging state for over 24 hours.
- ⚠️ Keep this product in cool, dry, and draughty places.
- ⚠️ DO NOT put this product beside or into fire.
- ⚠️ Batteries out of service must be handled according to local regulations.
- ⚠️ DO NOT fire the flash head when in charging.
- ⚠️ If the battery pack had ceased using for more than 6 months, please give it a full charge before using it.

Operation

Installation and Detachment of Battery Module

● Installation

Place the battery pack on a horizontal table. Put the control module over the battery module and push it down. Fasten the locks on both sides with hands. Check and ensure the locks are in position.



● Detachment

With Part A pressed down, open the locks on the both sides.

Charging

Insert the Charging Plug (29) of the AC charger into the Charging Socket (03) of the battery pack. Connect one end of the Charger Power Cable to the AC Power Plug (28) and the other end to the AC power supply. Make sure sound connections and the battery pack starts to be charging. For the charging status, see the instructions on the AC charger. The battery module can be separated from the control module during charging. Therefore, purchasing another battery module means unlimited interchanges and numerous flashes with one on charging and one on working.



NOTE: To ensure the battery service life, you are not advised to use the battery pack when it is being charged.

Mounting and Detaching the Reflector

The flash head adopts a Bowens-style bayonet mount to install the Reflector (25). You can detach the reflector to add other lighting accessories found in studios, e.g. beauty dish and softbox.

To detach the reflector, press the Bayonet Mount Lock (18) and hold for seconds till you rotate the reflector and detach it.



Operation

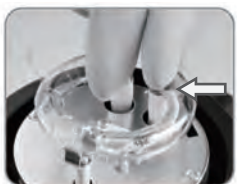
Installing and Detaching the Flash Tube



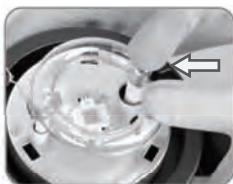
1. Turn the power off and remove all power cables.
2. Detach the reflector.



3. Wear a pair of insulated gloves and loosen the iron wire on the tube.



4. Keep a balanced hold on the two feet of the tube and pull it out gently.



5. Target a new tube directly towards the two copper outlets and slightly push it in.



6. Twine the iron wire to fix the new tube.



7. Target the reflector towards the bayonet of flash head.
8. Rotate the reflector until it is securely fixed.

Using the Flash

1. Power Management

- Press the Power Switch (10) and hold for a second to turn the battery pack on or off. Please power it off if it will not be used for an extended period of time.
- If the battery pack is powered on but the Power Connection Line (26) is not well connected, the battery pack will auto power off after 10 seconds.
- If the battery pack is powered on and the Power Connection Line (26) is well connected, the battery pack will auto power off after 3 hours' idle operation.

⚠ Note: Before unplugging the Power Connection Line (26), please turn the battery pack off.

2. Power Level Adjusting

You can adjust the power level from 1/32 power to 1/1 full power in 1/3 stop increments. Use a hand-held flash meter to determine the required flash output to obtain a correct flash exposure.

Rotate the Flash Output Dimmer (05) to adjust the power level. 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:

Figures displayed when reducing flash output level→

| | | | | | | | | |
|-----|---------|---------|-----|---------|---------|-----|--|----|
| 1/1 | 1/1-0.3 | 1/1-0.7 | 1/2 | 1/2-0.3 | 1/2-0.7 | 1/4 | | OF |
| | 1/2+0.7 | 1/2+0.3 | | 1/4+0.7 | 1/4+0.3 | | | |

←Figures displayed when increasing flash output level

⚠ Note: When "OF" is shown on the LCD display, it means no flash output and flash firing is turned off.

3. M Mode: Manual Flash

Press Mode Selection Button (09) to enter M mode. In this mode, you can use a radio trigger to fire the flash. Before shooting, adjust the power level of the flash and the settings of your camera. When you press the camera shutter-release button, the flash will fire. Slave triggering mode is not available in M mode.

4. S1 Mode: S1 Slave Triggering Mode

- Press Mode Selection Button (09) to enter S1 mode. In this mode, the flash can function as a slave flash for creating multiple lighting effects. It is applicable to work under ambient light situations, but direct sunlight or other direct strong lights may reduce the sensitivity of the light sensor.
- In S1 mode, the flash will fire when the master flash fires, the same result as that by the use of a radio trigger.

5. S2 Mode: S2 Slave Triggering Mode


- Press Mode Selection Button (09) to enter S2 mode. In this mode, the flash can function as a slave flash for creating multiple lighting effects. It is applicable when using a TTL master flash. It can work under ambient light situations, but direct sunlight or other direct strong lights may reduce the sensitivity of the light sensor.

Using the Flash

- In S2 mode, the flash will ignore a single “preflash” from the master flash and will only fire in response to the second, actual flash from the master.

6. Modeling Lamp On / Off

This flash head is equipped with LED modeling lamp.

To turn the modeling lamp on or off, press the Modeling Lamp Switch (12). When it lights up,  will be shown on the LCD display.


The modeling lamp will be off automatically after 15 minutes so as to prevent overheating. Allow a rest time of 5 minutes before you turn it on.

7. Sound Prompt Beep

The battery pack is built in with a buzzer to prompt you that the flash kit is ready for firing. You can press the Buzz Button (11) to enable or disable the sound prompt beep.

When the buzzer is enabled,  will be shown on the LCD display.

8. Wireless Control Function


- The battery pack is built in with a Wireless Control Port (16) so that you can wirelessly control the flash kit in terms of power level, modeling lamp & buzzer on/off and achieve flash triggering.
- To control the flash kit wirelessly, the included CL-Tx/Rx flash trigger is required. Insert its receive end into the Wireless Control Port (16) on the battery pack and mount the transmit end onto the camera hotshoe. Settings made on the hotshoe-mounted transmit and receive ends will be wirelessly communicated to the flash and battery pack. Then you can press the camera shutter button to trigger the flash. Also, you can hold the transmit end in your hand to achieve wireless control.
- When the battery pack receives wireless signals,  will be shown on the LCD display.
- For full instructions on the use of CL-Tx/Rx flash trigger, see its user manual.

9. Sync Triggering

The Sync Cord Jack (15) is a $\phi 3.5$ mm 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 about 10 to 15 seconds. If this occurs, allow a rest time of about 10 minutes, and the flash kit will then return to normal.
- When the over-temperature protection is started,  will be shown on the LCD display.

Number of flashes that will active over-temperature protection:

| Power Output Level | Number of Flashes (Approx.) |
|--------------------|-----------------------------|
| 1/1 | 100 |
| 1/2 | 150 |
| 1/4 | 200 |
| 1/8 | 300 |
| 1/16, 1/32 | 400 |

2. Other Protection

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

| Prompts on LCD Panel | Meaning |
|----------------------|---|
| E0 | A failure occurs on the temperature sensor inside the battery pack. Please send this kit to a maintenance center. |
| E1 | A failure occurs on the recycling system so that the flash cannot fire. Please restart the battery pack. If the problem still exists, please send this kit 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. |

Technical Data

| | |
|----------------------------------|---------------------------|
| Model | CL600 |
| Max. Power | 600W/S |
| Guide No. (m ISO 100) | 68 |
| Battery | LiFePO4 (12.8V / 8000mAh) |
| Recycling Time at 1/1 Full Power | 2.5 second |
| Full Power Flashes | Approx. 450 |
| Flash Duration | 1/800 to 1/2000 second |
| Power Adjusting | 16 steps from 1/32 to 1/1 |
| LED Modeling Lamp | 12W |
| Color Temperature | 5600K±200K |
| Voltage of Charger | AC100-240V / 50-60Hz |
| Battery Pack Size | 17cm×8cm×26cm |
| Battery Pack Weight | Approx. 2.98kg |
| Flash Head Weight | Approx.0.96kg |
| Weight with the Case | Approx. 7.8kg |
| Battery Unit Size &Weight | 17cm×8cm×10.7cm /1.71kg |

Maintenance

- Shut down the system immediately should abnormal operation be detected.
- Avoid sudden impacts and the flash kit 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 head must be performed by our authorized maintenance center which can provide original parts. The flash tube is user replaceable. Replacement tubes can be obtained from the manufacturer.
- This flash kit, except the consumables e.g. flash tube and modeling lamp, is supported with a one-year warranty.
- Unauthorized service will void the warranty.
- If the product had failure 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.