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VILTROX
Your Smart Choice

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JY610C
ETTL SPEEDLITE

User manual

Catalogue

For more information, please visit www.viltrox.com

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⚠ Caution

1. If corrosive liquids seep from the batteries and get in your eyes,immediately wash your eyes with running water and consult with a doctor.Your eyes could be seriously damaged if they are not treated quickly.
2. If corrosive liquids seep from the batteries and come in contact with your skin or clothes, wash immediately with running water.Prolonged contact could injure your skin.
3. Never attempt to disassemble or repair the flash by yourself,as this could result in you receiving an electric shock and could also cause the flash to malfunction; such malfunction could lead to personal injury.
4. If the flash is dropped and damaged,do not touch any exposed interior metal parts.Such parts,especially the speedlight's capacitor and associated parts,could be in a high-charge state and if touched could cause an electric shock.Disconnect the power or remove the batteries and be sure that you do not touch any of the product's electrical components.
5. If you detect heat,smoke or notice a burning smell,immediately stop operation and remove the batteries to prevent the flash from catching on fire or melting. Allow the flash to cool down so that you can safely touch it and remove the batteries.

6. The flash should never be submerged in liquid or exposed to rain,saltwater or moisture unless it is properly protected from the liquids and moisture.
   Underwater use requires a certified underwater housing.If water or moisture gets inside the flash, this could cause the flash to catch on fire or cause an electric shock. In such instances you should immediately remove the batteries from the flash.
   Note: electronic devices that are penetrated by water or moisture are often not economically repairable.
7. Do not use the flash in the presence of flammable or explosive gas.If the flash is operated in areas where there is a flammable gas,including propane, gasoline and dust, it could cause an explosion or fire.
8. Do not fire the flash directly at the driver of a moving car.
9. Do not fire the flash directly into the eyes of someone that is at close range, as it could damage their eyes'retinas. Never fire the flash closer than 1 meter from infants.
10. Do not fire the flash while the flash is touching a person or object.Such use can result in the person being burned, and/or their clothes igniting from the heat of the flash's firing.
11. Keep small accessories out of the reach of children to avoid the possibility of the accessory being swallowed. If an accessory is accidentally swallowed, immediately consult with a doctor.

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12. Use only the batteries specified in this instruction manual.Batteries other than those specified could leak corrosive liquids, explode or catch on fire or otherwise not perform satisfactorily.
13. Do not mix battery types,brands or old and new batteries,as the batteries could leak corrosive liquids, explode or catch on fire. When using more than one battery in a product, always use identical batteries that were purchased at the same time.
14. Non-rechargeable batteries such as manganese,alkaline-manganese and lithium batteries should never be charged in a battery charger because they could leak corrosive liquids, explode or catch on fire.
15. When using standard size (AA,AAA,C,D) or other common rechargeable batteries such as NiCd and Ni-MH battery types,or when recharging them,be sure to use only the battery charger specified by the battery maker and read the instructions thoroughly.
    Do not recharge these batteries with their terminals reversed in the charger or before the batteries have cooled off sufficiently because they could leak corrosive liquids, explode or catch on fire. The same caution applies to using the rechargeable batteries that may be supplied by the photo product' s manufacturer.

⚠ Attention

1. Do not touch the flash with wet hands,as this could cause an electric shock.
2. Keep the flash away from children to prevent them from putting the flash in or near their mouth,or otherwise touching a dangerous part of the product,as such contact could cause an electric shock.
3. Do not apply strong physical shocks to the flash,as this could cause a malfunction that could cause the flash to explode or catch on fire.
4. Never use active agents that contain flammable substances such as paint thinner, benzene or paint remover to clean the flash,and never store the flash in locations containing chemicals such as camphor and naphthalene,as this could damage the plastic case, causes fire or cause an electric shock.
5. Remove any batteries from the flash before storing the flash for a long time to prevent the flash from catching on fire or leaking corrosive liquids.

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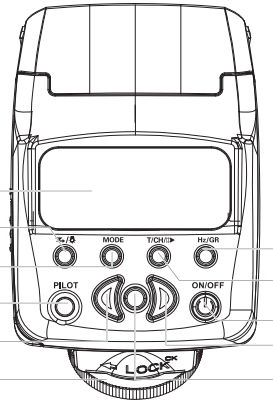
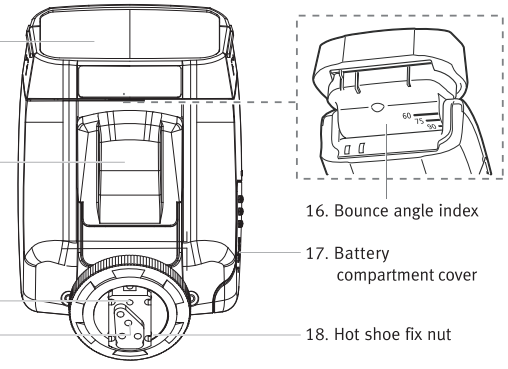


1. LCD panel
2. Slave/Backlight button
3. Flash mode
4. Indicator / Test firing
5. Minus button
6. Fixed knob
7. Stroboscopic frequency / Group
8. Stroboscopic number / Channel/ Rear Sync
9. Power button
10. Plus button
11. Set/Confirm button

12. Flash head
13. Wireless sensor
14. Locking pin
15. Hot-shoe contacts
16. Bounce angle index
17. Battery compartment cover
18. Hot shoe fix nut



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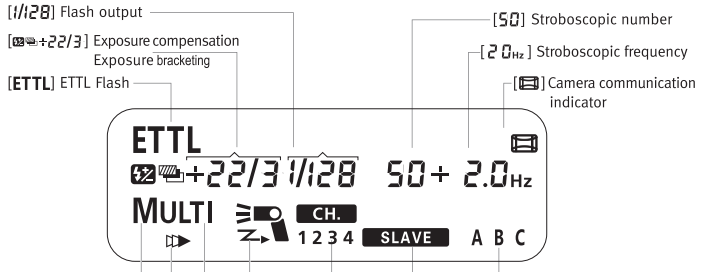
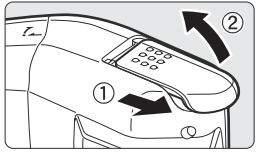
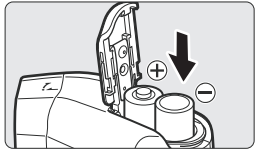


LCD Panel

Installing the batteries



① Slide the battery compartment cover and open it as shown by the arrows.



② Install two batteries.

- Make sure the <⊕> and <⊖> battery contacts are correctly oriented.
- Return the cover to its original position.

Install two AA-type penlight batteries (1 .5V or lower) of any of these types.

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Recycling Time and Flash Count

Recycling Time: 0.1 - 4 sec. Flash Count: 100 - 680 flashes
Based on new size-AA alkaline batteries testing standards.

Be sure to use a new set of two batteries of the same brand. When replacing the batteries, replace both batteries at once.

Do not fire more than 20 continuous flashes in a short time.

If you fire more than 20 continuous flashes in a short time, the overheating prevention function may be activated and make the recycling time about 8 to 20 sec. If this occurs, allow a rest time of about 15 min. and the functioning of the flash will then return to normal.

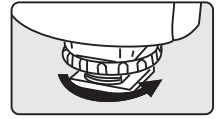
If you change the batteries after firing flashes continuously, be aware that the batteries might be hot.

Using size-AA batteries other than the alkaline type may cause improper battery contact due to the irregular shape of the battery contacts.

* Size-AA Ni-MH or lithium batteries can also be used.

Attach the Speedlite

Be sure to turn off the camera and flash before installing or removing the flash.



1. Ready to attach the speedlite
Loosen the locking ring by turning it in the direction of the arrow.

2. Attach the speedlite
Mount the speedlite into the camera's hot shoe all the way.

3. Detach the speedlite
Loosen the locking ring to the top,then remove the flash light from camera's hot shoe.

4. Secure the speedlite
Turn the locking ring in the direction.

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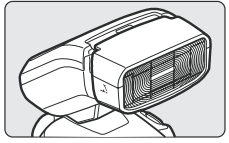
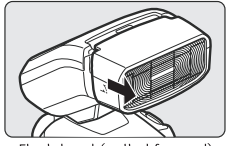
Switching Flash Coverage



Flash head (normal position)

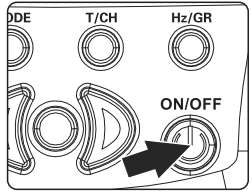
- The Guide No. is 22 (ISO 100 in meters / feet).



Flash head (pulled forward)

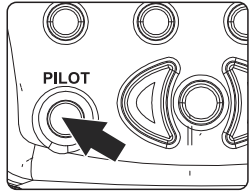
- The Guide No. is 27 (ISO 100 in meters / feet).

Turning on the power switch



Long press ‹ **ON/OFF** › power switch for 3 sec to fire flash

- The flash recycling starts.



Check that the flash is ready

- The ‹ **PILOT** › lamp will first turn green (ready for quick flash), and then turn red (flash ready).
- Pressing the ‹ **PILOT** › lamp will fire a test flash.

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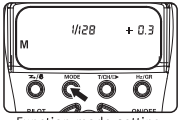
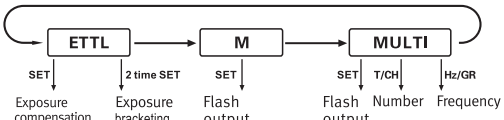
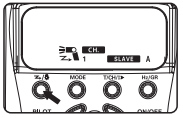
Choose the mode

Press < **MODE** > button, choose < **ETTL** >、< **M** >、< **MULTI** > mode.

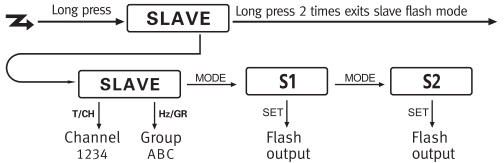


Function mode setting

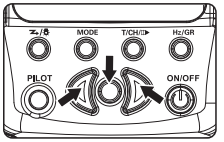


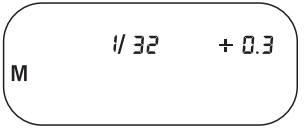


Slave flash mode setting



Setting flash ratio output





● Press<**SET**>button,Again press<▷>or<◁>button,flash output will change as follow:

When press<▷>button

1/128→1/128+0.3→1/128+0.7→1/64+0.3.....1/1

1/1.....1/64+0.7←1/128+0.7←1/128+0.3←1/128

When press<◁>button

1/1→1/1-0.3→1/1-0.7→1/2→1/2-0.3.....1/128

1/128.....1/2-0.3←1/2←1/1-0.7←1/1-0.3←1/1

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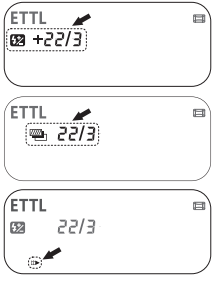
ETTL Flash

Camera can integrate pre-flash and exposure information,adjusting flash output. Suggested shoot by TTL mode in the standard usage.



- Press ‹**MODE**› button to show ‹**ETTL**›.Press<**SET**> set exposure compensation,Press<◀▶> to plus or minus value,then press<**SET**>set exposure Bracketing Press <**SET**> again to confirm setting.

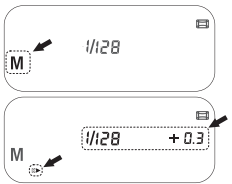
+0...+1/3...+2/3...+1...+11/3...+12/3...+2...+21/3...+42/3...+5

+0...-1/3...-2/3...-1...-11/3...-12/3...-2...-21/3...-42/3...-5

- Press ‹**T/CH/**▶▶› button to show ‹▶▶› ,access Rear-curtain sync (The default for Second-curtain sync),Again press cancel Rear-curtain sync.

Manual flash

You can set the flash output from 1/128 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.



Press ‹ **MODE** › button to display ‹**M**›.

- Set the flash output.
  Press the ‹ **SET** › button, the flash output blinks.
  Press the ‹◀▶› button to set the flash output, then press the ‹ **SET** › button to confirm.
- Press ‹ **T/CH/**▶▶› button to show ‹▶▶› ,access Rear-curtain sync (The default for Second-curtain sync),Again press cancel Rear-curtain sync.

Flash output display: the manual flash output value will change as shown below when the flash output is decreased or increase.

(Example) Figures for decrease flash output→

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	. . .

←Figures for increased flash output

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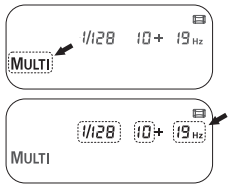
Stroboscopic flash

With stroboscopic flash, a rapid series of flashes is fired. It can be used to capture 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.



Press the ‹ **MODE** › button so that ‹ **MULTI** › is displayed.
Select the item to be set: press the ‹ **Hz/GR** › button , stroboscopic flash indicator blinks, press ‹ ◀◀ ▶▶ › button, setting stroboscopic frequency (-- off,1-20Hz)
Press the ‹ **T/CH/⚡▶** › again to set stroboscopic numbers (1-50T).
Press ‹ **SET** ›, setting flash output.

- Press ‹ **T/CH/⚡▶** › button to show ‹ ⚡▶ › ,access Rear-curtain sync (The default for Second-curtain sync),Again press cancel Rear-curtain sync.

Calculating the shutter speed

During stroboscopic flash, the shutter release remains open until the firing stops. Use the formula below to calculate the shutter speed and set it with the camera.
Number of flashes / Firing 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 sec.

Stroboscopic flash

⚠ To avoid overheating and deteriorating the flash head, do not use stroboscopic flash more than 10 times in succession. After 10 times, allow the flash to rest for at least 15 min. If you try to use the stroboscopic flash more than 10 times in succession, the flash maybe stop automatically to protect the flash head, when the LCD screen display "Hi". If this happens, allow the flash to reset for at least 15 min.

Stroboscopic flash is most effective with a highly reflective subject against a dark background.Using a tripod, a remote switch and external power source is recommended. A flash output of 1/1 or 1/2 cannot be set for stroboscopic flash.

Maximum Stroboscopic Flashes:

Frequency (Hz) / Flash output	1Hz	2Hz	3Hz	4Hz	5Hz	7Hz	9Hz	10Hz	11Hz	14Hz	19Hz	20Hz
1/4	6	4	4	4	4	3	3	2	2	2	2	2
1/8	6	6	6	4	4	3	3	2	2	2	2	4
1/16	8	8	8	8	8	6	6	4	4	3	3	8
1/32	10	10	10	8	8	8	8	8	4	4	4	16
1/64	25	25	25	20	20	20	16	16	10	10	10	30
1/128	50	50	50	50	50	40	30	20	20	20	15	40

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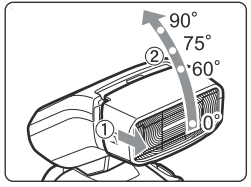
Bounce Flash Shooting

By pointing the flash head toward a wall or ceiling, the flash will bounce off the surface before illuminating the subject. This can soften shadows behind the subject for more natural-looking shots.



Pull the flash head forward and then tilt it upward to determine the flash head angle.

When the resulting picture is dark, set smaller F number (open the aperture) or increase the ISO speed and try shooting again. The resulting picture may also be dark if the wall or ceiling is too far away.

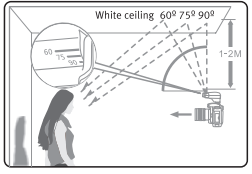
The wall or ceiling should be a plain, white or nearly white color for high reflectance. If the bounce surface is colored, this may produce a color cast in the resulting picture.

After shooting with bounce flash, be sure to return the flash head to the forward-facing position and push the flash head back into its original position.

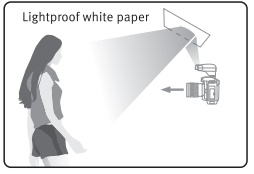
* Determine the best angle for bounce flash by taking test shots and checking the resulting pictures on the camera LCD monitor.

Bounce Flash Shooting

For a simple bounce flash technique, tilt the flash head upward and bounce the flash light off the ceiling. Note that the flash should not directly illuminate the subject.



- The recommended distance between the flash head and reflective surface (ex. ceiling) is 1 to 2m (3.3-6.6 ft.).
- Note to prevent the flash light directly illuminating the subject.
- In color photography, select white or highly reflective surfaces to bounce the light off. Otherwise, your pictures will come out with an unnatural color cast similar to that of the reflecting surface.



- When the distance between the flash head and reflective surfaces is long, use some A4-size white paper to bounce the light off. Check that the bounced light rightly illuminates the subject.

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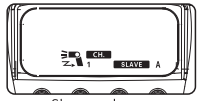
Wireless Slave flash

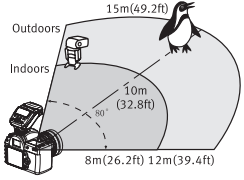
Keep press ‹ **MODE** › button into wireless slave flash mode,Press ‹ **MODE** › button,choose slave flash mode: Remote: You can switch the channel and group under this mode;
S1: under this mode ,the flash can trigger by be any single flash and come true sync flash;
S2: will avoid pre-flash with MASTER.



Slave mode

S1 mode

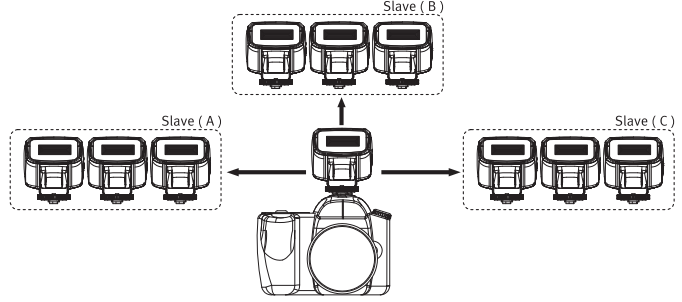
S2 mode



- Using flash stand (supports tripod) to support SLAVE flash unit.
- Using the reflect function to rotate SLAVE, make its WIRELESS SENSOR towards to MASTER.
- Using in door, wireless transfer maybe reflect by wall, so the flash unit place no need to be very exactly.
- After setting flash unit, make sure test the wireless flash before shooting.
- Make sure there is no obstacle between MASTER ans SLAVE unit, which will effect wireless transfer.

Wireless Slave flash

When JY610C used with Canon eTTL compatible camera, you can use wireless grouping flash. In this mode, the remote control flash can be divided in three group, then you can set the flash mode of each group and the flash output compensation value of the main flash.



Master flash from the camera's built-in flash or with the function of main external flash trigger flash

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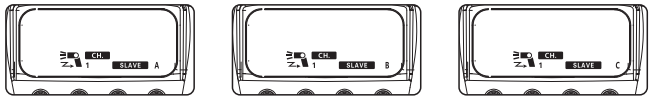
Wireless Slave flash

Set the JY610C to slave flash.Long press the ‹ /☼› enter the wireless mode, and then press the ‹ **MODE** › select SLAVE mode.Press the ‹ **Hz/GR** › set up group A, B, C. Press the ‹T/CH/⚿▶› set the channel 1, 2, 3, 4. Can be composed into 12 creative collocations.



A group 1 channel　B group 1 channel　C group 1 channel

A group 4 channel　B group 4 channel　C group 4 channel

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Effective usage of Speedlite

1. With the JY610C mounted on your camera's hot shoe, you can tilt the flash head in four steps (horizontal, 60º, 75º and 90º) to bounce the light off the ceiling.

Tilt the flash head 90º upper

Horizontal

This technique offers following advantages:

○ Eliminates Red Eye　● Creates soft shadows　○ Prevents hair or clothes appearing to shine.

Effective usage of Speedlight

2. When the subject has a mottled appearance with the flash light, raise the tilting degree of the flash head.

● Illuminated subject in a mottled tone

● Shooting with the flash head tilted up 90º

● Depending on the lens' focal length and tilting degree of the flash head, the bounced light may illuminate the subject in a mottled tone.

• Tilt the flash head 90º and take the shot.

Effective usage of Speedlight

3. In case the light is not enough.

● When the flash light is insufficient

● Shooting with higher ISO sensitivity

When the reflective surface is too far away, the light from Speedlite may be not enough to illuminate the subject.

● When taking photograph with digital cameras, set the ISO sensitivity higher than in normal shooting.

○ For bounce flash shooting, set the lens'ape rture larger (f/3.5, f/4.5 or f/5.6) than for normal shooting.

● Reduce the distance between the re elective surface and the Speedlite.

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Custom Function

Long press ‹ **SET** › to user-defined, press ‹◀▶› setting Function No.;press ‹ **SET** › again setting ‹ Setting No. ›, press ‹◀▶› setting parameter,then press ‹ **SET** › for confirmation.

Function No.	Name	No.	Settings & Description
Fn 01	Auto power off	0	ON
		1	OFF
Fn 02	Modeling flash	0	ON(Depth-of-field preview)
		1	ON (Test firing)
		2	ON (with both)
		3	OFF
Fn 03	FEB auto cancel	0	ON
		1	OFF
Fn 04	FEB sequence	0	0→−→+
		1	−→0→+

Function No.	Name	No.	Settings & Description
Fn 07	Test firing with auto flash	0	1/32
		1	Full output
Fn 08	AF-assist beam firing	0	ON
		1	OFF
Fn 09	Auto zoom for sensor size	0	ON
		1	OFF
Fn 10	Slave auto power off timer	0	60 minutes
		1	10 minutes
Fn 11	Slave auto power off cancel	0	Within 8 hour
		1	Within 1 hour

Select power saving mode,press the camera shutter button active flash,or press flash testing button ‹**PILOT**›.
Attention:access custom function setup,press ‹ ☼/✲ › key ON/OFF LCD back light.

Flash shooting distance range

Flash range guid.

ISO sensitivity	Aperture (F)										
1600	4	5.6	8	11	16	22	32	–	–	–	–
800	2.8	4	5.6	8	11	16	22	32	–	–	–
400	2	2.8	4	5.6	8	11	16	22	32	–	–
200	1.4	2	2.8	4	5.6	8	11	16	22	32	–
100	–	1.4	2	2.8	4	5.6	8	11	16	22	32
Usable flash shooting distance range (m/ft.)	1.9-20	19	13.5	9.6	6.7	4.8	3.4	2.4	1.6	1.2	0.6

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Troubleshooting Guide

If a problem occurs, refer to this Troubleshooting Guide.

The Speedlite does not fire

Make sure the batteries are installed in the correct orientation.
If the lamp does flash orange light after 30 seconds, replace the batteries with new ones.Clean the electrical contacts of the Speedlite and the camera.

The bottom of the picture looks dark

You were too close to the subject. Keep at least 0.6 m/2 ft. away from the subject. If a lens hood is attached, remove the lens hood.

The periphery of the picture looks extremely dark

After shooting with the flash head pulled forward, be sure to return the flash head to its original position before shooting again.

Specifications

Type	Airborne auto flash
Compatible cameras	Compatible Canon eTTL system camera
Guide No	27 (ISO 100 in meters/feet)
Effective flash range	0.6 - 20 m (With EF 50mm f/1.4 lens at ISO 100)
Flash mode	ETTL flash、M flash、MULTI flash
Slave mode	SLAVE、S1、S2
Light emission	The flash can be moved 90 upward, it has 0, 60, 75, 90 degree of vertical angle
Effective flash range	0.7-19.3m (quick flash: 0.7-11.1m)
Battery	Two size-AA alkaline batteries
Recycling Time	Approx. 0.1 - 4 sec
Battery life (flash count)	Approx. 100-680 flashes
Dimensions (W×H×D)	48 × 64 × 101 mm / 1.89 × 2.5 × 4.0 in.
Weight	Approx. 140 g / 4.9 oz. (excluding batteries)

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Included Items

Flash pouch	× 1
User manual	× 1
Warranty card	× 1
Pack the box	× 1