PFLASHPOINT



Zoom Li-on TTL Flash 🖻 for Canon FPLFSMZL2CA

Thank you for choosing Flashpoint!

The new Flashpoint ZoomLi-on TTL Speedlight for Canon with Integrated R2 Radio Transceiver is a hotshoe speedlight which is fully compatible with the Canon TTL system. It delivers the benefits of an external battery pack without the irritation of cables, thanks to the Zoom Li-on's generous internal interchangeable 11.1 volt Lithium Ion battery. The incredible amount of power contained in these compact and lightweight units as well as their integrated functions and features make them the first choice of professional photographers. If you have any questions or concerns, please feel free to contact us at Brands@Adorama.com

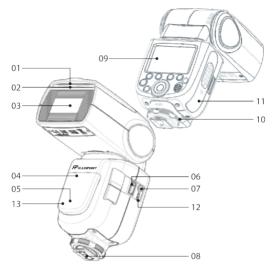
Features

- Extremely Powerful Flash with a GN of 127
- Uses an Advanced Li-Ion Polymer Battery Which Has Amazing Power, Recycle Time, and Life Expectancy
- Approximately 650 Full Power Flashes Per Charge
- · Complete Compatibility with The Canon ETTL System
- Fully Compatible with All On Camera ETTL Controls Including Automatic TTL Exposure Control, Exposure Bias, Bracketing, Second Curtain Sync, HSS, EXIF Recording, Modeling Flash, and Flash Exposure Lock
- Optical ETTL Communication with Canon Flashes as a Master or Slave
- Manual Control of Three Different Wireless Groups by Using the Canon Optical System
- Remote ETTL and Manual Power Control with the Integrated R2 Radio System's Built In Transmitter and Receiver
- Industry benchmark range and interference avoidance with the new INTEGRATED 2.4 gHz R2 Radio System
- Zooming Head for Even Coverage with automatic zoom or manual control
- HSS for Shutter Speeds Up To 1/8000 Second
- Regular and Intelligent Optical Slave Modes
- Backwards Compatible with The Flashpoint R1 Radio Control System for Manual Output Control and Triggering
- · 360 degree rotation and 90+ degree tilt
- Stable color temperature at 5600±200K over the entire power range
- Backlit Matrix LCD
- Multipurpose Buttons with Digital Marking for Faster Navigation
- Perfect for On and Off Camera Use
- Laser AF Assist Lamp with Crisscross Pattern for Instant Autofocus Even In Complete Dark On Low Contrast Surfaces
- 1 Year Warranty

For Your Safety

- · Always keep this product dry. Do not use in rain or in damp conditions.
- Do not use any power supply other than the included one to charge the battery.
- · Do not charge the battery for more than 12 hours
- This product contains high-voltage electronic parts. Touching the high-voltage circuit inside it may result in electric shock.
 Do not disassemble. Should repairs become necessary, this product must be sent to an authorized maintenance center.
- Stop using this product if it breaks open due to internal shifting, falling or strong impact. STRONG electric shock may occur if you touch the components inside it. You might DIE. Don't risk it. Reincarnation is not covered by the warranty
- Do not fire the flash directly into the eyes (especially those of babies and pets) within short distances. Otherwise visual impairment may occur. When taking pictures for babies, keep the flash unit at least 1 meter (3.3 feet) away from them. Using bounce flash to reduce light intensity is also recommended. Plus it will make them look cuter. Because it creates softer light, and larger catchlights in the eyes. And makes them look more angelic. Which is good. Cause they are babies. They are SUPPOSED to look angelic! Also you won't get hard shadows from that ridiculous gigantic bow they decided to stick on the baby's head if you bounce your light.
- Do not use the flash unit in the presence of flammable gases, chemicals and other similar materials. In certain circumstances, these materials may be sensitive to the strong light emitting from this flash unit and fire may result. A whole new meaning to "Flashpoint".
- Do not leave or store the flash unit if the ambient temperature reads over 50°C (e.g. in automobile in the sun). Otherwise the electronic parts may be damaged.
- Do not insert metal parts into any lighting equipment
- Do not touch the electrical contacts on the flash or battery or contact them with any conductive materials
- This flash has an over-heat protection circuit, rapid continuous firing will cause the flash to slow operation and trigger a "cool down" period. After this period, the flash will resume normal operation. You may also reboot the flash by cycling the power off and then on.
- Do not use selective colorina
- Do not use the flash to support other equipment. For example, do not lift your camera by the flash
- The flash has a locking pin to ensure secure operation. To avoid damage, completely unscrew the locking ring before removing the flash
- The battery should slide smoothly into the flash. If it does not, remove it, check alignment, and check for obstructions. Do not force the battery
- Do not store illegal substances in the flash's battery compartment
- In case of abnormal function, sparks, excessive heat, flames or smoke, immediately power off the unit and disconnect the battery if safely possible. Have it checked by an authorized technician

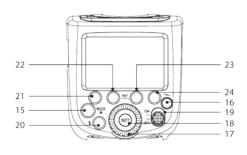
Name of Parts



Body

- 01. Retractable Bounce Card
- 02. Retractable Wide Angle Diffuser 09. Dot-marix LCD Panel
- 03. Flash Head
- 04. Optical Control Sensor
- 05. Focus Assist Beam
- 06. R1 Wireless Control Port
- 07. Sync Cord Jack

- 08. Hotshoe
- 10. Lock Ring
- 11. Battery Compartment
- 12. USB Port for Firmware Upgrades
- 13. Slave Flash Ready Indicator

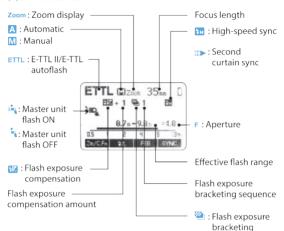


Control Panel

- 15. < MODE > Mode Selection Button / Lock Button
- 16. < ◀**▼** > Wireless Selection Button
- 17. Select Dial
- 18. < SET > Set Button
- 19. ON / OFF Power Switch
- 20. < \$ > Test Button / Flash Ready Indicator
- 21. Function Button 1
- 22. Function Button 2
- 23. Function Button 3
- 24. Function Button 4

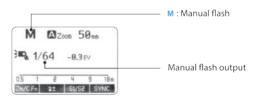
LCD Panel

(1)E-TTL Autoflash

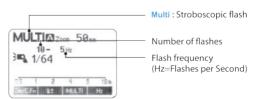


- The display will only show the settings currently applied.
 - The functions displayed above buttons 1 to 4, such as SYNC and 12 , change according to settings' status.
 - When a button or dial is operated, the LCD panel is illuminated.

(2)M Manual Flash

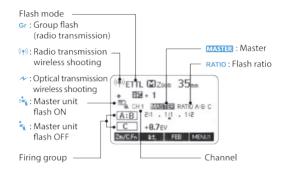


(3)Multi Flash

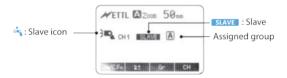


(4) Radio Transmission Shooting/Optical Transmission Shooting

Master Unit



Slave Unit



Included Accessories

1. Flash Unit 2. Mini Stand 3. Protective Case 4. Instruction Manual 5. Li-ion Battery Pack 6.Battery Charger with Cable

Accessories



Battery Features

- 1. This flash unit uses an advanced Li-ion polymer battery which has amazing power and life expectancy.
- 2. It has several safety features, such as circuitry to protect against overcharge, over discharge, outputting too much power, and short circuit.
- 3. It takes only 2.5 hours to fully charge the battery by using the standard battery charger (included).

Battery Warnings

- 1. Do not short circuit.
- 2. Do not expose to rain or immerse into water. This battery is not water proof.
- 3. Keep out of reach of children.
- 4. Do not leave the battery in the charger for more than 12 hours.
- 5. Store in dry, cool, ventilated places.
- 6. Do not put near or into fire.
- 7. Batteries should be disposed according to local regulations.
- 8. If the battery was not used for over 3 months, please charge fully before use.

Loading and unloading the battery





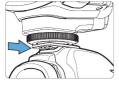


To load the battery, line up the shape of the battery with the battery compartment (it can only fit one way) and slide it into the flash until the white retaining snap clicks into place To remove the battery, slide aside the white retaining snap. The battery should pop out of the unit on its own

Battery Level Indication	Meaning
(***	Full
•••	Middle
	Low
□ Blinking	Battery power will be empty and need to be charged immediately

Note: There is a battery level indicator on the LCD screen to inform you of the current battery level. Please keep an eye on it.

Attaching to a Camera



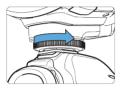
Attach the Camera Flash.

Slip the camera flash's mounting foot into the camera's hotshoe all the way.



Secure the Camera Flash.

Rotate the lock ring on the mounting foot until it is secure.



Detach the Camera Flash.

Rotate the lock ring on the mounting foot until it is fully loosened.

Power Management

Use ON/OFF Power Switch to power the flash unit on or off. Turn off the unit if it will not be used for an extended period of time. Set as a master flash, it will turn the power off automatically after approx. 90 seconds of idle use. Pressing the camera shutter halfway or pressing any flash button will wake up the flash unit. Set as a slave flash, it will enter sleep mode after a certain period (adjustable, 60 minutes by default) of idle use. Pressing any flash button will wake it up.



C.Fn Disabling Auto Power Off function is recommended when the flash is used off camera.

See the Custom Function Menu section.

C.Fn Slave Auto Power Off Timer is set to 60 minutes by default. Another option "30 minutes" is available. See the Custom Function Menu section.

Flash Mode - E-TTL Autoflash

This flash has three flash modes: **E-TTL**, Manual **(M)**, and **Multi** (Stroboscopic). In **E-TTL** mode, the camera and the flash will work together to calculate the correct exposure for the subject and the background. In this mode, multiple TTL functions are available: FEC, FEB, FEL, HSS, second curtain sync, modeling flash, and control with the camera's menu screen.

* Press < MODE > Mode Selection Button and three flash modes will display on the LCD panel one by one with each press.

ETTL Mode

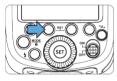
Press < MODE > Mode Selection Button to enter E-TTL(Automatic) mode.

- Press the camera release button halfway to focus. The aperture and effective flash range will be displayed in the viewfinder.
- When the shutter button is fully pressed, the flash will fire a pre-flash that the camera will use to calculate exposure and flash output the instant before the photo is taken.

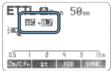
FEC: Flash Exposure Compensation

With FEC function, this flash can bias the flash output from -3 to +3 in 1/3rd stops. It is useful in situations where minor adjusting of the TTL system is needed based on the environment.

Setting FEC:



Press Function <u>Button 2</u>
< 12 > The icon < 22 > and flash exposure compensation amount will be highlighted on the LCD panel.



- 2 Set the flash exposure compensation amount.
 - Turn the Select Dial to set the amount.
 - "0.3"means 1/3 stop. "0.7"means 2/3 stop.
 - To cancel the flash exposure. compensation, set the amount to "+0".



Press < SET > button again to confirm the setting.

FEB: Flash Exposure Bracketing

You can take three flash shots while automatically changing the flash output for each shot from -3 to +3 in 1/3rd stops. The camera will record three images with different exposures: one exposed according to camera calculations, one over-exposed and another under-exposed. Over and under exposure amount is user adjustable. This function helps get correct exposure especially in shooting moving objects or when environmental lights are complex.



Press function button 3 < FEB >. The icon < 🎱 > and the exposure bracketing amount will be highlighted on the LCD panel.





- Turn the Select Dial to set the amount.
- "0.3"means 1/3 stop. "0.7" means 2/3 stop.



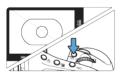
Press <SET> button again to confirm the setting. Then your FEC and FEB settings are displayed on the LCD panel.



- FEB will be cancelled after three photos are taken.
 - For best results, set the camera drive mode to "single" and ensure the flash is recycled before shooting.
 - FEB can be used with FEC and FEL.
 - C.Fn You can prevent the FEB from being cancelled automatically after three photos are taken. See the Custom Function Menu section.
 - **C.Fn** The FEB shooting sequence can be changed. See the Custom Function Menu section.

FEL: Flash Exposure Lock

FEL can lock the correct flash exposure setting for any part of the scene. With < ETTL > displayed on the LCD panel, press the camera's < FEL > button. If the camera does not have the < FEL > button, press the < * > button.



Focus on the subject.

Press the < FEL > button.

- Position the subject at the center of the viewfinder and press < FEL > button.
 - The camera flash will fire a preflash and the required flash output for the subject is retained in memory.
 - Each time the < FEL > button is pressed, a preflash will be fired and a new flash exposure setting will be locked.



- If the subject is too far away and underexposed, the < \$ > icon will blink in the viewfinder. Move closer to the subject and try the FE lock again.
 - If < ETTL > is not displayed on the LCD panel, FE lock cannot be set.
 - If the subject is too small, FE lock might not be effective.

High-Speed Sync

High Speed Sync (FP flash) enables the flash to synchronize with all camera shutter speeds. This is convenient when you want to use aperture priority for fill-flash portraits.



Press Function Button 2 < SYNC > so that $< \frac{1}{2}$ > is displayed.



Check that < 3 > is displayed in the viewfinder.



- If you set a shutter speed that is the same as or slower than the camera's maximum flash sync speed, < 5 > will not be displayed in the viewfinder.
 - With high-speed sync, the faster the shutter speed, the shorter the effective flash range.
 - To return to normal flash, press < SYNC > button again. Then < 1 > will disappear.
 - Stroboscopic mode cannot be set in high-speed sync mode.
 - Over-heat protection may be activated after 10 consecutive high-speed sync flashes.

Second-Curtain Sync

With a slow shutter speed, you can create a light train following the subject. The flash fires right before the shutter closes.



Press function button 4 < SYNC > button so that < >> is displayed on the LCD panel.



M. Manual Flash

The flash output is adjustable from 1/1 full power to 1/128th power in 1/3rd stop increments. To obtain a correct flash exposure, use a hand-held flash meter to determine the required flash output.



Press < MODE > button so that < M > is displayed.







Press < SET > button again to confirm the setting.

Flash Output Levels

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

Figures displaye		

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

←Figures displayed when increasing flash output level

Optical Slave S1

In M manual flash mode, press < \$1/\$2 > button so that this flash can be triggered as an optical slave. With this function, the flash will fire simultaneously when the main flash fires. Use this mode when firing another manual powered flash, and in areas where no one else is doing flash photography.

Intelligent Optical Slave S2

Press < \$1/\$2 > button so that this flash can be triggered as an intelligent optical slave. This is useful when triggering with a TTL flash. In this mode, the flash will ignore a single "preflash" from the main flash and will only fire in response to the second, actual flash from the main unit. Use this mode when firing a TTL speedlight, and in areas where no one else is doing flash photography.



 S1 and S2 optic triggering is only available in M manual flash mode.

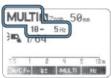
Multi: Stroboscopic Flash

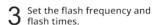
With stroboscopic flash, a rapid series of flashes is fired. It can be used to capture multiple images of a moving subject in a single photograph. You can set the firing frequency (number of flashes per sec. expressed as Hz), the number of flashes, and the flash output.











- Press < MULTI > button to select the setting to change.
- Turn the Select Dial to set the number and press < Hz > button again to confirm. The next item to be set will blink. (Hz=FPS)
- After you finish the setting, press < SET > button and all the settings will be displayed.



Calculating the Shutter Speed

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

Number of Flashes / Flash Frequency = Shutter Speed

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



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



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

Maximum Stroboscopic Flashes:

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

Flash Hz Output	10	11	12-14	15-19	20-50	60-199
1/4	2	2	2	2	2	2
1/8	4	4	4	4	4	4
1/16	8	8	8	8	8	8
1/32	20	20	20	18	16	12
1/64	50	40	40	35	30	20
1/128	70	70	60	50	40	40

If the number of flashes is displayed as "--", the maximum number of flashes will be as shown in the following table regardless of the flash frequency.

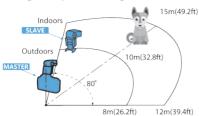
Flash Output	1/4	1/8	1/16	1/32	1/64	1/128
Number of Flashes	2	4	8	12	20	40

Wireless Flash Shooting: Optical Transmission

This product supports wireless flash application and functions as either a master or a slave unit. As a master unit, it can control Canon speedlites e.g. 580EXII, 600EX-RT via Optical wireless. As a slave unit, it can receive wireless Optical signals of Canon speedlites e.g. 580EXII, 600EX-RT and commanders of Canon cameras e.g. 7D/60D/600D.

- You can set up two to three slave groups for E-TTL II autoflash shooting. With E-TTL II autoflash, you can easily create various lighting effects.
- Any flash settings (of flash exposure compensation, high-speed sync, FE lock, FEB, manual flash, Multi flash) on the master unit will be automatically sent to the slave units. So the only thing you need to do is to set the slave unit to ETTL mode without any operation of the slave units at all during the shooting.
- This flash can work in ETTL autoflash, M manual flash, and Multi stroboscopic flash modes when set as a master or slave unit.

Positioning and Operation Range

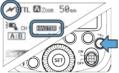


- Even with multiple slave units, the master unit can control all of them via optical wireless.
 - In this user manual, "master unit" refers to the speedlight on a camera and "slave unit" will be controlled by the master unit.

1.Wireless Settings

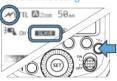
You can switch between normal flash and wireless flash. For normal flash shooting, be sure to set the wireless setting to OFF.

Master Unit Setting



Press < \sim > button so that < \sim > and < MASTER > are displayed on the LCD panel.

Slave Unit Setting



Press < >> button again so that < >> and < SLAVE > are displayed on the LCD panel.

2. Master Unit's Flash OFF

When the master unit is set to OFF, only the slave units will fire a flash which effects the exposure.



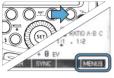
Press Function <u>Button 4</u> so that < <u>MENU2</u> > is displayed on the LCD panel.



- Press Function <u>Button 1</u>
 < <u>ON/OFF</u> > to control the
 ON/OFF of the master unit.
 - >: The master unit flash firing is ON.
 - < > : The master unit flash firing is OFF.
- Even if the master unit flash firing is disabled, it still fires a preflash to transmit wireless signals.

3. Setting the Communication Channel

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



Press Function <u>Button 4</u> so that < <u>MENUS</u> > is displayed on the LCD panel.



Press Function <u>Button 1</u> so that < CH > is displayed on the LCD panel. Turn the Select Dial to choose a channel ID from 1 to 4.

Press the < SET > button to confirm.

4. ETTL: Fully Automatic Wireless Flash Shooting Using Automatic Wireless Flash with a Single Slave Unit



Master Unit setting

- Attach a Flashpoint Zoom TTL flash on the camera and set it as the master unit.
- As a master unit, the Zoom TTL can control Canon speedlites e.g. 580EXII, 600EX-RT via optical wireless.



Slave Unit setting

- Set the other camera flash as the wireless slave unit.
- As a slave unit, the Zoom TTL can receive wireless signals of Canon speedlites e.g. 580EXII, 600EX-RT and commanders of Canon cameras e.g. 7D/60D/600D.

3 Check the communication channel

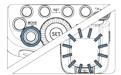
 If the master unit and slave unit(s) are set to a different channel, set them to the same channel.

4 Position the camera and flashes

 Position the camera and flashes as the picture shows.

5 Set the master unit's flash mode to < ETTL >.

- Set the master unit's flash mode to < ETTL >.
- For shooting, < ETTL > will automatically be set for the slave unit.
- Set the master unit flash firing as ON to fire a flash.



6 Check that the flash is ready.

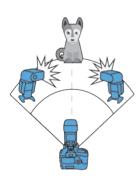
- Check that the master flash ready indicator is lit.
- When the slave flash is ready, the AF-assist beam lighting area will blinks at 1 second intervals.



7 Check the flash operation.

- Press the master unit's Test Button
 ½ >.
 - The slave unit will fire. If not, adjust the slave unit's sensor angle toward the master unit and distance from the master unit.

Using Automatic Wireless Flash with Multiple Slave Units



When stronger flash output or more convenient lighting operation is needed, increase the number of slave units and set them as a single slave unit. To add slave units, use the same steps as setting "automatic wireless flash with a single slave unit". Any flash group can be set (A/B/C).

When the number of slave units is increased and the master unit flash firing is ON, automatic control is implemented to make all groups of flashes fire the same flash output and ensure the total flash output combines to a proper exposure.



Nearby oscillating light sources like fluorescent tubes and computer screen can affect the sensor's ability to receive flash signals.



- Press the depth-of-field preview button on the camera to fire a modeling flash.
- If the slave unit's auto power off function is activated, press
 the master unit's test button to power it on. Please note
 that test firing is unavailable during the camera's regular
 metering time.
- The time of slave auto power off is adjustable.



The firing frequency of stroboscopic flash during the optical transmission shooting can be set from 1Hz to 199Hz.

Using Multiple Master Units

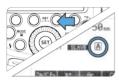
By preparing several cameras with master unit flashes attached, cameras can be changed during shooting while keeping the same lighting source.

5. ETTL: Wireless Shooting with Flash Ratio

Auto Flash Shooting with Two Slave Units

Divide the slave units into A and B groups and balance their exposure contribution (flash ratio).

Auto control exposure to make the total output of A and B flash combine to a proper exposure.



Setting the flash groups of slave units.

- Set the flash as slave unit.
- Press Function <u>Button 3</u>Gr > and choose
 - < A > or < B >.
- Set one slave unit as < A >, the other as < B >.



- Step 2 to Step 4 are set on the master unit.
 - Press the Function <u>Button 4</u> on the master unit so that
 - < MENU 2 > is displayed.

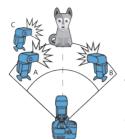


- Setting < RATIO A:B >.
 - Press Function <u>Button 2</u>
 RATIO > so that
 - < RATIO A:B > is displayed.



- ✓ Setting flash ratio.
 - Press Function <u>Button 3</u>
 Gr >.
 - Turn the Select Dial to set the amount of flash ratio and press
 SET > button to confirm.
- Taking the picture.
 - The slave units will flash according to the flash ratio.

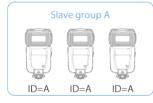
Auto Flash Shooting with Three Slave Units



Setting the slave group < C >.

- Set the slave unit to flash aroup < C >.
- Setting < RATIO A:B C >.
- Set the master unit as < RATIO A:B C >.
- Setting flash exposure compensation.
 - Set the slave unit of flash aroup < C >.
 - Press Function Button 2 < 12 >. Turn the Select Dial to set the amount of flash exposure compensation and press < SET > button to confirm.

About Slave Group Control



If three slave units are all set to < A > in terms of slave ID, these slave units will be controlled as if they were one camera flash in slave group A. This allows for faster recycle and more power from a single direction.



- When setting < RATIO A:B C >, group A, B and C will fire a flash simultaneously, when setting < RATIO A:B >, group C will not fire.
 - If shooting with group C is toward the main shooting subject, over exposure might occurred.
 - In some EOS film cameras that support E-TTL autoflash, you cannot perform multiple flash wireless shooting with a flash ratio setting.

6. M: Wireless Flash Shooting with Manual Flash

You can shoot with a different flash output setting for each slave unit (firing group). Set all parameters on the master unit.



Set the flash mode to <M>.



- When < MENU1 > is displayed, press the Function Button 2 < RATIO > to set the groups to fire.
 - The setting changes as follows each time you press the button: ALL (RATIO OFF) → A/B (RATIO A : B) \rightarrow A/B/C (RATIO A:B:C)



Setting flash output.

Press Function Button 3 < Gr >. Turn the Select Dial to set the flash output of the groups. Press <SET> button to confirm.

Taking the picture.

 Each group fires at the set flash ratio



- When ALL < RATIO OFF > is set, set A, B or C as the firing group for the slave units.
 - To fire multiple slave units with the same flash output, select ALL < RATIO OFF > in step 2.

Setting < M > Flash Mode

You can directly operate the slave unit to manually set the manual flash or stroboscopic flash.





Setting the slave unit.

Setting flash mode to < M >.

- Press < MODE > button so that < M > is displayed.
 - Set the manual flash output.

7. Multi: Manual Wireless Flash Shooting



Set < MULTI > stroboscopic flash.

- Press < MODE > button so that < MULTI > is displayed.
- Set the stroboscopic flash.



↑ The firing frequency of stroboscopic flash during optical transmission wireless shooting can be set from 1Hz to 199Hz (settings from 250 Hz to 500 Hz are not available).

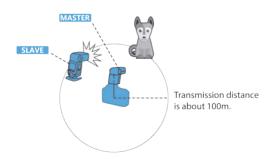
Wireless Flash Shooting: Radio (2.4G) **Transmission**

Using a flash with a radio transmission wireless shooting makes it easy to shoot with advanced wireless multiple flash setups, as well as E-TTL II autoflash shooting.

The basic relative position and operating range are as shown in the picture. You can then perform wireless E-TTL II / ETTL autoflash shooting just by setting the master unit to < ETTL >.

Positioning and Operation Range

Autoflash Shooting with One Slave Unit



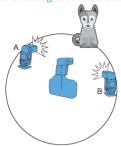


- Use the supplied mini stand to position the slave unit.
 - Before shooting, perform a test flash and test exposures.
 - The transmission distance might be shorter depending on factors such as positioning of slave units, interference from other signals, barriers, bodies of water, and weather conditions.

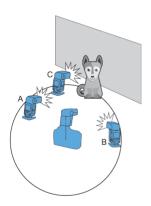
Wireless Multiple Flash Shooting

You can divide the slave units into two or three groups and perform E-TTL II/E-TTL autoflash while changing the flash ratio. In addition, you can set and shoot with a different flash mode for each firing group, for up to 3 groups.

Auto Shooting with Two Slave Groups



• Auto Shooting with Three Slave Groups



Wireless shooting using radio transmission has advantages over wireless shooting using optical transmission, such as being less affected by obstacles, and not having to point the slave unit's wireless sensor toward the master unit. The main functional differences are as follows:

Function	Radio Transmission	Optical Transmission
Distance	100m	15m
Channel	1~32	1~4
A/B/C Power	OFF, 1/128~1/1	1/128~1/1

Other Features

R1 Wireless Control Function

The flash unit is designed with a R1 Wireless Control Port so that you can wirelessly adjust the power level of the flash and the flash triggering.

To control the flash wirelessly, you need a R1 remote control set (Transmitter and Receiver). Insert the receiver

into the Wireless Control Port on the flash and insert the transmitter into the camera hot shoe.

Settings made on the

hotshoe-mounted transmitter will be wirelessly communicated to the flash. Then you can press the camera shutter release button to trigger the flash. You can also hold the transmitter in your hand to control your off-camera flash.







For full instructions on the use of R1 series remote control, see its user manual.

Other Triggering Methods

Sync Triggering

The Sync Cord Jack is a Φ 3.5mm plug. Insert a trigger plug here and the flash will be fired simultaneously with the camera shutter.

Modeling Flash

If the camera has a depth-of-field preview button, pressing it will fire the flash continuously for 1 second. This is called modeling flash. It enables you to see the shadow effects on the subject and the lighting balance. You can fire the modeling flash during wireless or normal flash shooting. This feature is also useful for annoying those around you.



- To avoid overheating and deteriorating the flash head, do not fire the modeling flash for more than 10 consecutive times. If you fire the modeling flash 10 consecutive times, allow at least 10 minutes' break for the camera flash.
- The modeling flash cannot be fired with the EOS 300 and Type-B cameras.

Auto Focus Assist Beam

In poorly-lit or low-contrast shooting environments, the built-in auto focus assist beam will automatically activate to make it easier for autofocus. The beam will activate only when autofocus is difficult and turn off as soon as the autofocus is achieved.

If you want to turn off the auto focus assist beam, set the "AF" to "OFF" in the C.Fn settings.



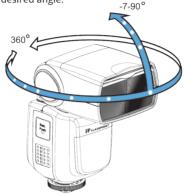
If you find the auto focus assist beam does not light up, this is because the camera has achieved autofocus.

Position	Effective Range	
Center	0.6~10m / 2.0~32.8 feet	
Periphery	0.6~5m / 2.0~16.4 feet	

Rounce Flash

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 a more natural-looking shot. This is called bounce flash.

To set the bounce direction, hold the flash head and turn it to the desired angle.

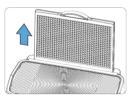




- If the wall or ceiling is too far away, the bounced flash might be too weak and result in underexposure.
- The wall or ceiling should be a plain, white color for high reflectance. If the bounce surface is not white, a color cast may appear in the picture.

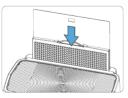
Creating a Catchlight

With the catchlight panel, you can create a catchlight in the subject's eves to add life to the facial expression.



Point the flash head upward to 90°.





- Push the wide angle diffusion panel back in.
 - Push in only the wide angle diffusion panel.
 - Follow the same procedures as for bounce flash.



- Point the flash head straight ahead and then upward to 90°. The catchlight will not appear if you swing the flash head left or right.
 - For best catchlight effect, stay 1.5m/4.9ft away from the subject.

ZOOM: Setting the Flash Coverage and Using the Wide Angle Diffusion Panel

The flash coverage can be set automatically or manually. It can be set to match the lens focal length from 20mm to 200mm. Also, with the built-in wide angle diffusion panel, the flash coverage can be expanded for 14mm wide-angle lenses.

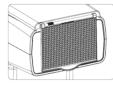


In Manual Zoom mode, press the < ZOOM/C.FN > button.

- Turn the Select Dial to change the flash coverage.
- If $\langle A \rangle$ is displayed, the flash coverage will be set automatically.



 If you set the flash coverage manually, make sure it covers the lens focal length so that the picture will not have a dark periphery.



Using the Wide Angle Diffusion Panel

Pull out the wide angle diffusion panel and place it over the flash head as shown. The flash coverage will then be expanded to 14 mm.

- The catchlight panel will come out at the same time. Push the catchlight panel back in.
- The < ZOOM/C.FN > button will not work.



Low Battery Warning

If the battery power is low, $\langle | \rangle >$ will appear and blink on the LCD panel. Please replace the batteries immediately.

C.Fn: Setting Custom Functions

The following table lists the available and unavailable custom functions of this flash

	C.Fn Custom Functions					
Custom Function Signs	Function	Setting No.	Settings & Descriptions	Custom Functions No.		
m/ft	Distance indicator	m ft	meters feet	C.Fn-00		
APO	Auto power off	ON OFF	ON OFF	C.Fn-01		
FEB ACL	FEB auto cancel	ON OFF	ON OFF	C.Fn-03		
FEB	FEB order	$0 \rightarrow - \rightarrow +$ $- \rightarrow 0 \rightarrow +$		C.Fn-04		
AF	AF-assist beam	ON OFF	ON OFF	C.Fn-08		
Sv APOT	Slave auto power off timer	60min 30min	60min 30min	C.Fn-10		
BEEP	Audible ready alert	ON OFF	ON OFF	C.Fn-20		
LIGHT	Backlighting time	12sec OFF ON	Off in 12 sec. Always off Always lit	C.Fn-22		
LCD	LCD contrast ratio	0~9	10 levels			

- Press < Zm/C.Fn > Backlight/Custom Setting Button for 2 seconds or longer until C.Fn menu is displayed. The "Ver x.x" in the top-right corner refers to the software version.
- 2. Select the Custom Function No.
 - Turn the Select Dial to select the Custom Function No.
- 3. Change the Setting.
 - Press <SET> button and the Setting No. blinks.
 - Turn the Select Dial to set the desired number. Pressing < SET > button will confirm the settings.
 - After you set the Custom Function and press < MODE > button, the camera will be ready to shoot.
- In the C.Fn mode, long press the "Clear" button for 2 seconds until "OK" is displayed on the panel, which means the values in C.Fn can be reset.

Control with the Camera's Menu Screen

If the camera flash is attached to an EOS camera which has a speedlite control function, the flash can be controlled using the camera's menu screen. For the menu operation procedure, refer to your camera's instruction manual.

Setting Camera Flash Functions

The following flash functions are adjustable according to different flash modes.

- 1. Flash mode
- Shutter sync (1st/2nd curtain, high speed sync)
- 4. Flash exposure compensation
- 5. Flash firing
- 6. Clear camera flash's settings

Custom Functions of Camera Flash

C.Fn-00, C.Fn-01, C.Fn-03, C.Fn-04, C.Fn-08, C.Fn-10, C.Fn-20, and C.Fn-22.

Clear All Flash Custom Functions

Flash function settings screen



Flash C.Fn settings screen



* Screens from the EOS-1D Mark III.



- If flash exposure compensation has already been set with the camera flash, flash exposure compensation cannot be set with the camera. To set it with the camera, the camera flash's flash exposure compensation must be set to zero.
 - If any Flash Custom Functions and flash settings other than flash exposure compensation have been set by both the camera and the flash, the latest settings will take effect.

Protection Function

1. Over-Temperature Protection

- To avoid overheating and deteriorating the flash head, do not fire more than 20 continuous flashes in fast succession at 1/1 full power. After 20 continuous flashes, allow a rest time of at least 10 minutes.
- If you fire more than 20 continuous flashes and then fire more flashes in short intervals, the inner over-heat protection function may be activated and make the recycling time over 10 seconds. If this occurs, allow a rest time of about 10 minutes, and the flash unit will then return to normal.
- When the over-heat protection is started, * is shown on the LCD display.

Number of flashes that will activate over-temperature protection:

Power Output Level	Number of Flashes
1/1	30
1/2 +0.7	40
1/2 +0.3	50
1/2	60
1/4 (+0.3,+0.7)	100
1/8 (+0.3,+0.7)	200
1/16 (+0.3,+0.7)	300
1/32 (+0.3,+0.7)	500
1/64 (+0.3,+0.7)	1000
1/128 (+0.3,+0.7)	

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

Power Output	Times
1/1	15
1/2 (+0.3,+0.7);	20
1/4 (+0.3,+0.7)	30
1/8 (+0.3,+0.7);	
1/16 (+0.3,+0.7)	40
1/32 (+0.3,+0.7);	
1/64 (+0.3,+0.7);	50
1/128 (+0.3,+0.7);	

2. Other Protections

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

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

Technical Data

Model		FPLFSMZLCAV2
• Type		
Compatible cameras		Canon EOS cameras (E-TTL II autoflash)
Guide no. (1/1 output @ 200mm)		127 Ft, 34 Meters @ ISO 100 200mm zoom
Flash coverage		20 to 200mm (14mm with wide Angle Diffusion panel)
		Auto zoom (Flash coverage set automatically to match the lens focal length and sensor size)
		- Manual zoom
		• Rotating/tilting flash head (bounce flash): 0 to 360° horizontally and -7° to 90° vertically
Flash duration		1/300 to 1/20000 second
• Exposure C	ontrol	
Exposure control system		E-TTL II autoflash and manual flash
Flash exposure compensation (FEC)		Manual. FEB: ±3 stops in 1/3 stop increments (Manual FEC and FEB can be combined.)
FE lock		With < FEL > button or < * > button
Sync mode		High-speed sync (up to 1/8000 seconds), first-curtain sync, and second-curtain sync
Stroboscopic mode		Provided (up to 100 times, 199Hz)
• Wireless Fl	ash	
Wireless flash function		Master, Slave, Off
Controllable slave groups		3 (A, B, and C)
Transmission	Optical	Indoors: 12 to 15 m / 39.4 to 49.2 ft.
range		Outdoors: 8 to 10 m / 26.2 to 32.8 ft.
(approx.)		Master unit reception angle: ±40° horizontally, ±30° vertically
	2.4G	100m
Channels	Optical	4 (1, 2, 3, and 4)
	2.4G	32 (1~32)
Slave-ready indicator		Two red blinking indicators
Modeling flash		Fired with camera's depth-of-field preview button
Auto Focus Assist Beam		
Effective range (approx.)		Center: 0.6~10m / 2.0~32.8 feet
		Periphery: 0.6~5m / 2.0~16.4 feet
• Power Sup	ply	
Power source		11.1V/2000mAh Li-ion polymer battrey
Recycle time		< 1.5 seconds. Red LED indicator will light up when the flash is ready
Full power flashes		Approx. 650
Power saving		Power off automatically after approx. 90 seconds of idle operation. (60 minutes if set as slave)
Sync Triggering Mode		Hotshoe, 3.5mm sync line, R1 Wireless control port
Color Temperature		5600±200k
• Dimension	s	
WxHxD		64 x 76 x 190 mm
Weight without battery		410g
Weight with battery		530g

Troubleshooting

If there is a problem, refer to this Troubleshooting Guide.

The Camera Flash cannot be charged.

- The batteries are installed in the wrong direction.
 - → Install the battery is in the correct direction.
- The camera flash's internal battery is exhausted.

 → If < □ > appears and blinks on the LCD panel, replace the batteries immediately.

The Camera Flash does not fire.

- The camera flash is not attached securely to the camera.
 - → Attach the flash's mounting foot securely to the camera.
- The electrical contacts of the Camera Flash and camera are dirty.
- → Clean the contacts with an eraser.
- < 1 > or < 1 H > is not displayed in the view finder of camera.
 - → Wait until the flash is fully recycled and the flash ready indicator lights up.
 - → If the flash ready indicator lights up, but < \$\frac{1}{2} > \text{or} < \$\frac{1}{2} \text{H} > \text{is} not displayed in the view finder, check whether this flash unit is securely attached to the camera hotshoe.
 - → If the flash ready indicator does not light up after a long wait, check whether the battery power is enough. If the battery power is low, < [↑] > will appear and blink on the LCD panel. Please replace the battery immediately.

The power turns off by itself.

- After 90 seconds of idle operation, auto power off takes effect if the flash is set as master.
 - → Press the shutter button halfway or press any flash button to wake up.
- After 60 minutes (or 30 minutes) of idle operation, the flash unit will enter sleep mode if it is set as slave.
 - → Press any flash button to wake up.

Auto zoom does not work.

- The camera flash is not attached securely to the camera.
 - → Attach the camera flash's mounting foot to the camera.

The flash exposure is underexposed or overexposed.

- There was a highly reflective object (e.g. glass window) in the picture.
 → Use FE lock (FEL).
- You used high-speed sync.
 - With high-speed sync, the effective flash range will be shorter. Make sure the subject is within the effective flash range displayed.
- You used Manual Flash mode.
 - → Set the flash mode to ETTL or modify the flash output.

Photos have dark corners or only parts of the target subject are illuminated.

- The focal length of lens is wider than the flash zoom setting.
 - Check the flash coverage you set. This flash unit has the flash coverage between 20 and 200mm, which fits medium-format cameras. Pull the wide Angle Diffusion panel out to extend the flash coverage.

Firmware Upgrade

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



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

Maintenance

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