User Manual

V860IIC

Foreword

Thank you for purchasing this product.

This V860IIC camera flash applies to Canon EOS series cameras and is compatible with E-TTL II autoflash. With this E-TTL II compatible flash, your shooting will become simpler. You can easily achieve a correct flash exposure even in complex light-changing environments. This camera flash features:

- GN60 (m ISO 100, @200mm). 22 steps from 1/1 to 1/128.
- Pro 2000mAh Li-ion Battery-max.1.5s recycle-650 full power pops.
- Fully support Canon E-TTL II camera flash. Workable as Master or Slave unit in a wireless flash group.
- Use dot-matrix LCD panel to make clear and convenient operations.
- With built-in 2.4GHz wireless remote system to support transmitting and receiving.
- Provided multiple functions, include HSS (up to 1/8000s), FEC, FEB, etc.
- Use optional FT-16S to adjust flash parameters & trigger the flash.
- Stable consistency and color temperature with good even lighting.
- Support with firmware upgrade.

For Your Safety

- Always keep this product dry. Do not use in rain or in damp conditions.
- 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 extrusion, falling or strong hit. Otherwise, electric shock may occur if you touch the electronic parts inside it.
- Do not fire the flash directly into the eyes (especially those of babies) 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.
- 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 or electromagnetic interference may result.
- Do not leave or store the flash unit in places where the ambient temperature reads over 50°C (e.g. in automobile). Otherwise the electronic parts may be damaged.

VING
Pioneering Li-ion Camera Flash

Conventions used in this Manual

● This manual is based on the assumption that both the camera and camera flash's power switches are powered on.

● Reference page numbers are indicated by "p.**".

● The following alert symbols are used in this manual:

⚠ The Caution symbol gives supplemental information.

The Note symbol indicates a warning to prevent shooting problem.

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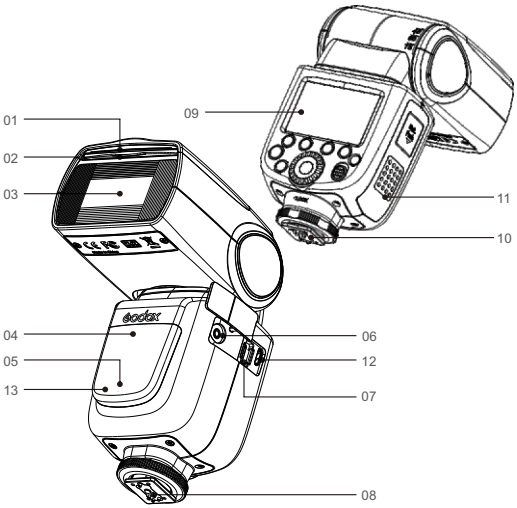
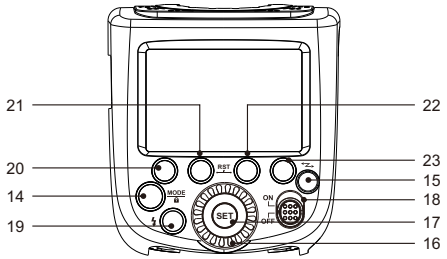
Name of Parts



● Body

01. Catchlight Panel
02. Built-in Wide Panel
03. Flash Head
04. Optic Control Sensor
05. Focus Assist Beam
06. Sync Cord Jack
07. Wireless Control Port
08. Hotshoe
09. Dot-marix LCD Panel
10. Lock Ring
11. Battery Compartment
12. USB Port
13. Slave Flash Ready Indicator

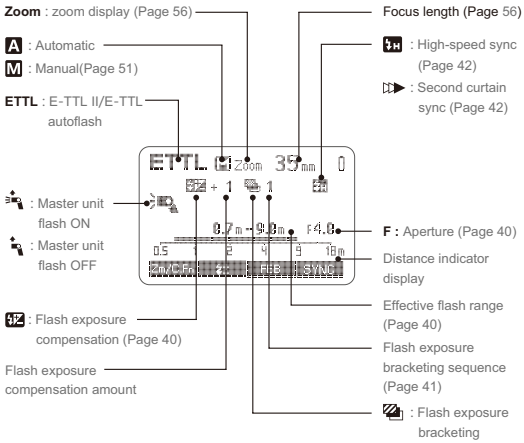


● Control Panel

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

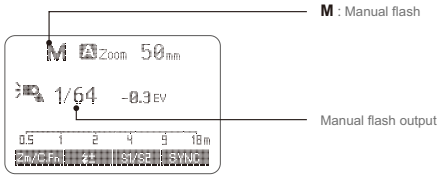
● LCD Panel

(1)E-TTL Autoflash

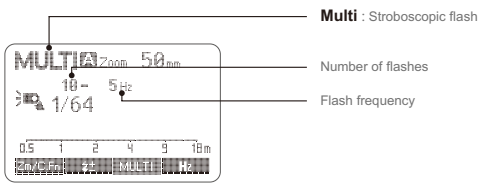


- The display will only show the settings currently applied.
- The functions displayed above function buttons 1 to 4, such as SYNC and , change according to settings' status.
- When a button or dial is operated, the LCD panel illuminated.

(2)M Manual Flash

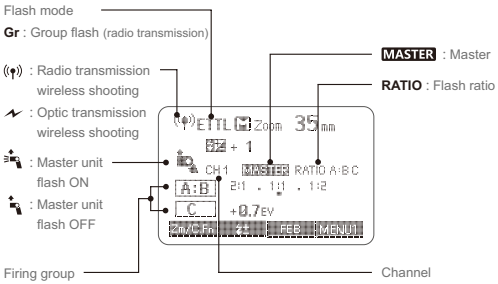


(3)Multi Flash

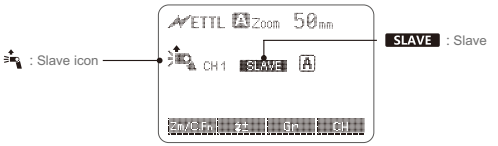


(4) Radio Transmission Shooting/Optic Transmission Shooting

● Master Unit



● Slave Unit



● What's in the Box of V860IIC Kit?

1. Flash Unit **2.** Li-ion Battery Pack **3.** Battery Charger
4. Battery Charger Cable **5.** Mini Stand
6. Protection Case **7.** Instruction Manual

● What's in the Box of V860IIC (only flash unit)?

1. Flash Unit **5.** Mini Stand **6.** Protection Case **7.** Instruction Manual

● Separately Sold Accessories

The product can be used in combination with the following accessories sold separately, so as to achieve best photography effects:

X1C TTL wireless flash trigger, FT-16S power & trigger control, Mini softbox, White & Silver reflector, Honeycomb, Color gels, Snoot, etc.

Battery

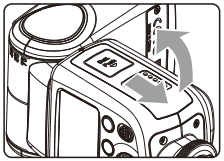
● Features

1. This flash unit uses Li-ion polymer battery which has long runtime. The available charge-and-discharge times are 500.
2. It is reliably safe. The inner circuit is against overcharge, overdischarge, overcurrent, and short circuit.
3. Take only 2.5 hours to fully charge the battery by using the standard battery charger.

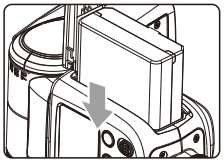
● Cautions

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. No over 24 hours' continuous charging.
5. Store in dry, cool, ventilated places.
6. Do not put aside or into fire.
7. Dead batteries should be disposed according to local regulations.
8. If the battery had ceased using for over 3 months, please make a full recharge.

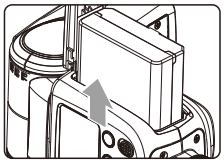
● Loading and Unloading the Battery



1 To load the battery, push the battery compartment cover downward and open it.



2 According to the triangle sign on the battery pack, insert it into the compartment until a white knob locks the battery with a click sound.



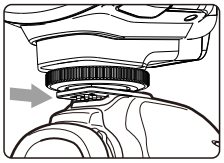
3 To unload the battery, tap the white knob and the battery pack will pop out. Then close the compartment.

● Battery Level Indication

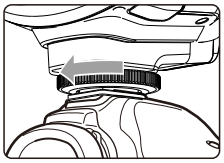
Make sure the battery pack is securely loaded in the flash. Check the battery level indication on the LCD panel to see the remaining battery level.

Battery Level Indication	Meaning
3 grids	Full
2 grids	Middle
1 grid	Low
Blank grid	Lower battery, please recharge it.
Blinking	The battery level is going to be used out immediately. And the flash will auto power off in 1 minute. Note: Please recharge the battery as soon as possible (within 10 days). Then, the battery can be used or be placed for long period.

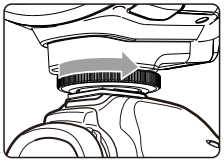
Attaching to a Camera



1 Attach the Camera Flash.
- Slip the camera flash's mounting foot into the camera's hotshoe all the way.



2 Secure the Camera Flash.
- Rotate the lock ring on the mounting foot until it locks up.



3 Detach the Camera Flash.
- Rotate the lock ring on the mounting foot until it is loosened.

Power Management

Use ON/OFF Power Switch to power the flash unit on or off. Turn off if it will not be used for an extended period of time. Setting as a master flash, it will turn the power off automatically after a certain period (approx. 90 seconds) of idle use. Pressing the camera shutter halfway or pressing any flash button will wake up the flash unit. Setting 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. (C.Fn-APO, Page 57)

C.Fn Slave Auto Power Off Timer is set to 60 minutes by default. Another option "30 minutes" is available. (C.Fn-Sv APOT, Page 57)

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, 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 pressing.

ETTL Mode

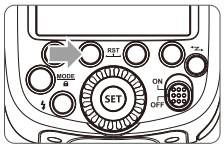
Press < **MODE** > Mode Selection Button to enter E-TTL mode. The LCD panel will display.

- 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.

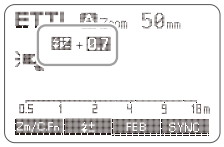
FEC: Flash Exposure Compensation

With FEC function, this flash can adjust 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.

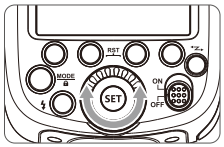
Setting FEC:



1 Press Function Button 2 < ± >. The icon < ± > and flash exposure compensation amount will be highlighted on the LCD panel.



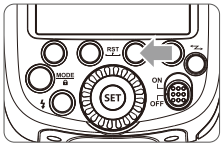
2 Set the flash exposure compensation amount.
- Turn the Select Dial to set the amount.
- "0.3"means 1/3 step, "0.7"means 2/3 step.
- To cancel the flash exposure compensation, set the amount to "+0".



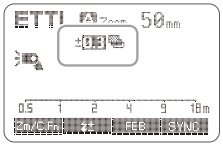
3 Press < **SET** > button again to confirm the setting.

FEB: Flash Exposure Bracketing

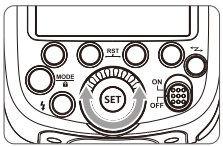
You can take three flash shots while automatically changing the flash output for each shot from -3 to +3 in 1/3rd stops. The camera will record three images with different exposures: one exposed according to camera calculations, one over-exposed and another under-exposed. Over and under exposure amount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



1 Press function button 3 < FEB >. The icon < > and the exposure bracketing 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 step, “0.7”means 2/3 step.



3 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 ready before shooting.
- FEB can be used with FEC and FEL.

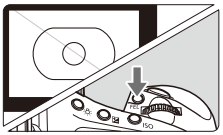
C.Fn You can prevent the FEB from being cancelled automatically after three photos are taken. (C.Fn-FEB ACL , Page 57)

C.Fn The FEB shooting sequence can be changed. (C.Fn-FEB, Page 57)

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.



1 Focus the subject.

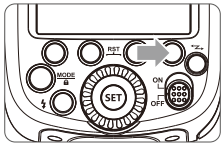
2 Press the <**FEL**> button.

- Aim 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.

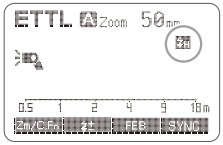
- If the subject is too far away and underexposure, the < > icon will blink in the viewfinder. Move closer to the subject and try the FE lock again.
- If <**ETTL**> is not displayed on the LCD panel, FE lock cannot be set.
- If the subject is too small, FE lock might not be very effective.

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.



1 Press Function Button 2 < SYNC > so that < > is displayed.

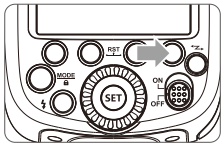


2 Check that < > is displayed in the viewfinder.

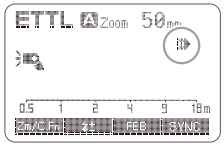
- If you set a shutter speed that is the same as or slower than the camera’s maximum flash sync speed, < > will not be displayed in the viewfinder.
- With high-speed sync, the faster the shutter speed, the shorter the effective flash range.
- To return to normal flash, press < SYNC > button again. Then < > will disappear.
- Multi flash mode cannot be set in high-speed sync mode.
- Over-temperature protection may be activated after 15 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.

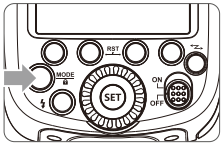


Press function button 4 < SYNC > button so that < > is displayed on the LCD panel.

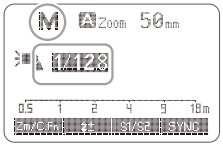


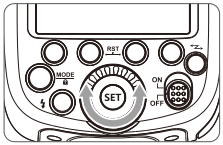
M: Manual Flash

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.



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





2 Turn the Select Dial to choose a desired flash output amount.

3 Press < **SET** > button again to confirm the setting.

Flash Output Range

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. 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 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	·····
	1/2+0.7	1/2+0.3		1/4+0.7	1/4+0.3		·····

←Figures displayed when increasing flash output level

Optic S1 Secondary Unit Setting

In M manual flash mode, press <**S1/S2**> button so that this flash can function as an optic S1 secondary flash with optic sensor. With this function, the flash will fire synchronously when the main flash fires, the same effect as that by the use of radio triggers. This helps create multiple lighting effects.

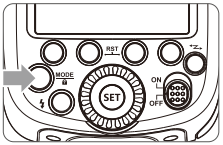
Optic S2 Secondary Unit Setting

Press <**S1/S2**> button so that this flash can also function as an optic S2 secondary flash with optic sensor in M manual flash mode. This is useful when cameras have pre-flash function. With this function, 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.

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

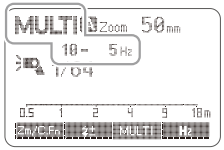
Multi: Stroboscopic Flash

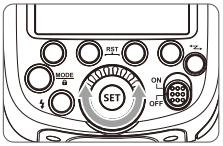
With stroboscopic flash, a rapid series of flashes is fired. It can be used to capture a multiple images of a moving subject in a single photograph.
You can set the firing frequency (number of flashes per sec. expressed as Hz), the number of flashes, and the flash output.



1 Press <**MODE**> button so that < MULTI > is displayed.

2 Turn the Select Dial to choose a desired flash output.





3 Set the flash frequency and flash times.

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

Calculating the Shutter Speed

During stroboscopic flash, the shutter remains 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 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 output \ Hz	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 output \ Hz	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.

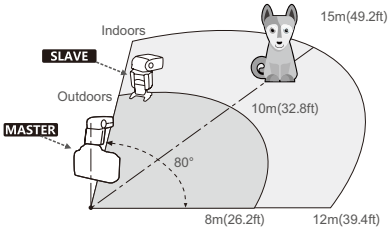
Flash Output	1/4	1/8	1/16	1/32	1/64	1/128
Number of Flashes	2	4	8	12	20	40

Wireless Flash Shooting: Optic 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 wireless. As a slave unit, it can receive wireless 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 master unit to ETTL mode without any operation for 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 unit.

Positioning and Operation Range

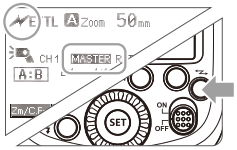


- Even with multiple slave units, the master unit can control all of them via wireless.
- In this user manual, "master unit" refers to the camera flash on a camera and "slave unit" will be controlled by the master unit.

1. Wireless Settings

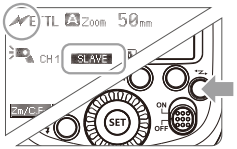
You can switch between normal flash and wireless flash. For normal flash shooting, be sure to set the wireless setting to OFF.

Master Unit Setting



Press < ⇄ > button so that < ⚡ > or < MASTER > are displayed on the LCD panel.

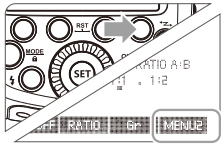
Slave Unit Setting



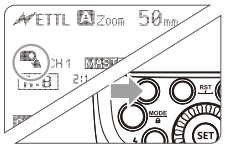
Press < ⇄ > button so that < ⚡ > or < SLAVE > are displayed on the LCD panel.

2. Master Unit's Flash OFF

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



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



2 Press Function Button 1 < ON/OFF > 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.