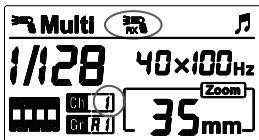


## 5.RX Slave Flash Mode

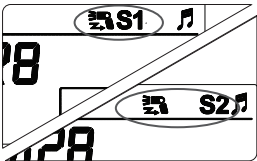
Press [TRIG MODE] button to select RX slave flash mode. When YN660 is set as RX slave unit, it supports receiving 2.4GHz wireless trigger signal of YN660, YN560IV, YN560TX, RF602, RF603(II), and RF605 respectively. YN660 supports two trigger signal (RF602 and RF603) and it's equipped with 16 channels (CH1~CH16). When used, set the channel of YN660 which is used as a slave unit same as the master unit, and set the trigger signal of the slave unit same as



the master unit to realize wireless flash.

## 6.S1/S2 Slave flash mode

Through the [Trigger mode] button can choose S1、S2 slave flash mode. The two modes are also suitable for off-camera slave unit, for create a variety of lighting effects, which is suitable for manual flash and TTL flash environment. This two modes are same as M mode, you just need to rotate the [Select dial] to adjust the flash output. When using the S1、S2 mode, you can rotate the flash head to make the sensors face to the master unit.



**S1 mode:** In this mode it will work with the first flash synchronously of the master flash, with the result consistent with the use of radio slave. To use this mode properly, the master flash should

be set at manual flash and the TTL flash system with preflight function and the red-reduction function with multiple flashes should not be used.

S2 mode: It is also called “pre-flash cancel mode”. This mode is similar with S1 mode, but it can neglect the pre-flash given by TTL flash. Therefore, it can support the master flash working in TTL mode. In particular, if S1 mode cannot flash properly and synchronous with your internal flash, you can try to use S2 mode.

Note: The following situation shall be avoid when the S1 and S2 modes are used: the red eye reduction function of the main light is used; the order mode (Nikon) or wireless mode (Canon) of the main light is used; the ST-E2 is used as the flash controller ;the base connect to the flash trigger.

## **7.Power Saving Mode**

In different flash mode, the YN660 will perform different power saving mode,such as < SE of 3 30> indicates flash on-top use,idle 3 minutes will enter into dormancy states,idle 30 minutes will shutdown automatically.

The YN660 is equipped with 3 different power saving modes,including on-top power saving mode,S1/S2 flash saving mode and RX wireless flash saving mode,which can setup through the Advanced Options (the details please refer to the “Advanced Options” section).

## 8.Overheat Protection

If the speedlite is used too frequently,the temperature of flash head maybe relevantly rise.when the internal temperature of the flash rise to a certain temperature, the flash will appear the overheat warning,the recycle time of the speedlite will be extended and the recycle indicator light will blink with red or blue light.When the speedlite continue to flash in the overheat warning temperature,it

A rectangular box containing the text 'OH' in a bold, black, sans-serif font, representing the LCD display when overheat protection is activated.

may active the overheating protection flash restriction. When the overheating protection mechanism is activated, the LCD will display the < O.H > with <recycle indicator> red and blue flashing alternately. When the overheating protection mechanism is activated,the speedlite will not flash,please idle for at least 15 minutes and wait for its cool down before continuing use.

Note:in order to avoid impact,please try to use 1/4 or below flash output when rapid shooting is needed;when the speedlite appears overheat warning,please appropriate reduce the flash frequency or flash output;when take out the batteries after continuous flash,please be careful since the battery can be very hot.

## 9.Manually Set the Zoom

Short press the[ZOOM]button to choose the zoom,then rotate the [select dial]to manually set the zoom,the zoom can be switched among (20/24 / 28 / 35 / 50 / 70 / 80 / 105/135/199mm),the zoom setting result will display on the LCD screen.

Note: the 199mm focal length of YN660 is equivalent to 200 mm focal length.

## **10.Sound Prompt**

When the sound prompt is enabled,the speedlite will make different sounds prompt its working status.

## **11.PC Sync port (input)**

Through connecting to the PC sync port, you can make the flash synchronously.

## **12. Automatic Setting Saving**

The speedlite will automatically save the current settings,which will convenient to your next use.

# **VII.Advanced Applications**

## **1.Wireless Radio Transmission Flash Shooting**

You can use a YN660 as master unit, then through the master unit to control multiple slave units respectively,including the flash mode,flash output,local length,flash frequency,times of flash.Use the radio transmission can effectively reduce the influence of obstacles to the signal, and at the same time it can get further trigger distance which up to 100 meters.

The method of control the slave unit through the main unit is as below:

(1)Through short press the [trigger mode] button of the YN660 set to TX master flash mode,set other YN660 to RX slave flash mode.

(2) In the advanced options set the triggering signal mode master unit consist to the slave unit,for detail setting method please refer to the subsequent "advanced options" section;

(3)Set the master unit and slave unit in the same communication channel: long press the **【GR/CH】** button to choose the channel,through rotate the [select dial]to adjust the channel,then press the [OK] button to save the settings.

(4)Change the group of slave units:short press the **【GR/CH】** button on the slave unit to choose the big grouping,the short press the **【OK】** button to choose the small grouping,then rotate the [select dial] to adjust,then press the [OK] button to save the settings.

(5)Short press the **【GR/CH】** button on the master unit to choose the select group,then rotate the [Select dial] to the grouping you need to control,at the moment you can change the flash mode,flash output,focal length,time of flash and flash frequency on the master unit,the settings will be synchronized to the corresponding slave unit. When the grouping of the master unit display <GR-->,means the current interface displays the flash parameters of the master unit.

## **2.S1/S2 Optical Transmission Triggering**

S1/S2 slave flash mode can satisfy your basic lighting needs.When use the S1/S2,please avoid the obstacles between the master speedlite and the slave speedlites,otherwise the obstacles will make interference to the wireless signal transmission. Under the optical triggering,the farthest distance of indoors use can be up to 25 meters, the farthest distance of outdoor use distance is up to 15 meters.

### **3.Use the External Charging Pack**

You can purchase the external charging pack SF-18C or SF-17C,connect it via the speedlite charging port, after the flashing,the charging pack will charging for the speedlite to increase the recycle speed of the speedlite.

### **4.High-speed Continues Shooting**

The speedlite supports high-speedlite continues shooting function, please set the camera to continues shooting mode.

Please note: The quantity of photos that can be continuous shot is related with the flash output setting,thus please use fully charged batteries.

### **5.After Curtain Sync**

You can use slow-speed shutter to produce trailing smear for the object and the flash light will flash at the moment when the shutter is going to be shut,which means the rear-curtain sync function (this function need the support of the camera, for the rear-curtain sync setting, refer to your camera manual for setting).

Prompt:the Canon system require the speedlite to communicate with the camera before realize the after curtain sync function.

### **6.Advanced Options Function**

The YN660 supports the advanced options function,allows you custom the flash function according

to your requirement.

Setting method: long press the **【ZOOM/Fn】** button to enter into the advanced options interface, rotate the [Select dial] to choose the custom function item you need, short press the [OK] button to enter into setting status (blinking), rotate the [select dial] to adjust the parameter, then press the [OK] button to save the settings. After the custom function setting is completed, press the **【Return】** button back to the shooting interface. Such as: <SE oF 3 30>, means used on camera, the speedlite idle 3 minutes will automatically enter into dormancy, idle 30 minutes will shutdown automatically.

The custom function supported by YN685 is as following :

SL EP on: Enable the power saving mode

SL EP - -: Turn off the power saving mode

SE oF 3 30/15 60/30 120: the speedlite idle 3/15/30 minutes will enter into dormancy, idle for another 30/60/120 minutes will shutdown

SE oF - - 120: no dormancy, idle 120 minutes will turn off

Sd 30/60/120: S1/S2 mode, idle 30/60/120 minutes will shutdown

Sd 5 30/15 60/30 120: RX mode, idle 5/15/30 minutes will enter into dormancy, idle for another 30/60/120 minutes will shutdown

Sd - - 120: no dormancy, idle 120 minutes will turn off



SL EP on



SE 3 30  
oF



Sd 60

Lcd 7/15/30: The LCD backlight duration is 7/15/30 seconds

lcd 7

Sound on: Enable sound prompt

Sound --: Turn off sound prompt

Sound on

Inc 0.3: Manual flash output at 0.3EV for fine-tuning stride length

Inc 0.5: Manual flash output at 0.5EV for fine-tuning stride length

Inc 0.3 5: Manual flash output at 0.3/0.5EV mixed fine-tuning step stride length

inc 0.3 5

rF 603: Compatible with the RF-603 wireless flash trigger

rF 602: Compatible with the RF-602 wireless flash trigger

rF 60 2



Gr A:TX master unit supports remote control the parameter of group A salve unit

A rectangular LCD display showing the text "Gr A LL" in a black, pixelated font.

Gr Ab: TX master unit supports remote control the parameter of group A,B salve units

Gr Ab c: TX master unit supports remote control the parameter of group A,B,C salve units

Gr All:TX master unit supports remote control the parameter of group A、 B、 C、 D、 E、 F six salve units

A rectangular LCD display showing the text "CL EA" in a black, pixelated font.

Note:the item only can change the parameter when the speedlite set to TX master mode status.

CL EA - -: Recover the advanced options default setting (at the moment long press the OK button will recover to default setting )

A rectangular LCD display showing the text "U 10 00" in a black, pixelated font.

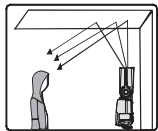
V10 00 (the content may different due to the manufacture time difference)

## 7.Reflection Flash

Bounce flash means to take photos by making flash light head aimed at wall or ceiling and using the light reflected back from the ceiling or wall to light the desired object, so that the shade behind

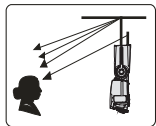
the object can be decreased to get more natural shooting effect.

If the wall or ceiling is too far, the bounce flash may be too weak to get enough exposure. The wall or ceiling should be even and white in order to get efficient reflection; if the reflection surface is not white, color cast may appear in photo.



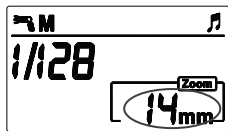
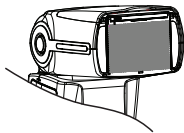
### 8. Use Reflection Board for Shooting

With the Reflection board in flash, pull out the Reflection board and the Wide panel out from the light head at the same time and then push the Wide panel back. In such case, if this product is being used to take photos, it will produce a highlighted point on the eyes of the subject and thus make the eyes charming (catching light). This function can reach optimal effect when the flasher head is up 90°.



### 9. Use Wide Panel

Pull out the Wide panel, push back the Reflection board and arrange them as per the figure; in such case, the flash scopes will extent to 14 mm ,the flash range will be enlarged and the effect will be softer and more natural.



Note: When the [Wide panel] being pulled out, the flash range will be locked to 14mm and unadjustable at the moment.

## VIII.Specifications

Circuit design	Insulated Gate Bipolar Transistor (IGBT)
Guide No.	66 (ISO 100, 199mm)
Flash mode	M、Multi
Trigger mode	Camera set-top,TX,RX,S1, S2
Zoom range	20, 24, 28, 35, 50, 70, 80, 105, 135, 199mm
Vertical rotation angle	-7~90 degrees
Horizontal rotation angle	0~270 degrees
Power supply	4×AAsize batteries (Alkaline or Ni-MH are usable)
Lighting times	100~1500 times (AA alkaline cell used)
Recycle time	Approx 3s (AA alkaline cell used)
Color temperature	5600k
Flash time	1/200s~1/20000s
Flash control	8 levels of output control (1/128~1/1), 29 levels of fine tuning
External interface	hot shoe, PC port,external charging port
Additional features	the electronic flash head zooming, sound prompt, automatically,saving setting,power saving mode, overheatprotection,advanced options setting
Dimensions	approximate 67×77×210mm (Extended state)
Net weight	427g
Contains items	Speedlite(1), protecting bag (1), mini stand (1) ,manual (1)

## Guide Number of different focal length range (ISO 100, in meters / feet)

Flash Output	Flash Coverage(mm)										
	14	20	24	28	35	50	70	80	105	135	199
1/1	54.12	93.83	101.09	108.24	129.91	151.58	180.4	191.29	209.33	212.96	216.59
1/2	38.28	66.44	71.5	76.56	92.07	107.14	127.71	135.3	147.95	150.48	153.01
1/4	27.06	46.97	50.49	54.12	65.01	75.79	90.2	95.59	104.61	106.48	108.24
1/8	19.14	33.22	35.75	38.28	45.87	53.46	63.91	67.54	74.03	75.46	76.56
1/16	13.75	23.43	25.3	27.06	32.45	37.84	45.1	47.96	52.36	53.46	54.12
1/32	9.79	16.61	17.71	19.14	23.1	26.73	31.79	33.88	37.18	37.51	38.28
1/64	6.82	11.88	12.65	13.75	16.28	19.14	22.77	23.87	26.4	26.73	27.06
1/128	4.73	8.25	9.02	9.79	11.55	13.31	15.84	16.94	18.37	18.81	19.14

## IV.Possible problems during use and solutions

1. Please note when use the flash outdoors: For outdoor application, please avoid direct sunlight to the wireless triggering sensor and ensure normal use of the flash.
2. Precaution for outdoor use of lambency umbrella: The lambency umbrella mounted on the flash light outdoors may be blown down easily, and the hot shoe of the flash light may be broken. Please fix the mounting rack.

**3. Photos are under exposure or over exposure?** Check if the set shutter, aperture and ISO are too near the flash limit or if some settings including exposure compensation in relation to flash are proper.

**4. Vignetting appears in photos or only part of the subject is illuminated?** Please check the current coverage of focal length and make sure if the lens focal length exceeds the coverage range of the flash. The product' s zooming range is 20~200 mm of the medium format system. You can try to pull out the wide-angle diffuser to expand the flash range.

**5.Unable to trigger the RX mode?** Please check if the triggering signal mode (rF-602、 rF-603) and channel of the master unit and slave unit are consist;whether the group flash set to flash prohibited.

**6. The flash light is abnormal?** Switch off the power of flash light and camera, mount the flash light on the hot shoe of camera, and switch on the power of flash light and camera again. If the abnormality continues, replace the batteries.

Updated version of this manual can be got from <http://www.hkyongnuo.com/e-aboutus.php> .

The functions of this manual are based on the test conditions of our company. Further notice will not be given if the design and specifications change;

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**YONGNUO**  
DIGITAL

## 产品保修卡

用户名称\_\_\_\_\_ 联系电话\_\_\_\_\_ 邮编\_\_\_\_\_

地址\_\_\_\_\_

产品名称\_\_\_\_\_ 购买日期\_\_\_\_\_

故障说明\_\_\_\_\_

## WARRANTY CARD

Owners Name\_\_\_\_\_ Phone\_\_\_\_\_ Zip Code\_\_\_\_\_

Address\_\_\_\_\_

Product model\_\_\_\_\_ Purchase Date\_\_\_\_\_

Failure Description\_\_\_\_\_

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The distance between user and products should be no less than 20cm