

## Precautions

To prevent fire or electrical shock, please do not expose the product to rain or moisture.

To avoid short circuit, please make sure the batteries contacts are securely packed and in accordance with local provisions when handling the battery.

Keep the batteries and other accessories out of the reach of children. If a child or infant swallows a battery or accessory, please contact a doctor immediately.

To avoid possible injury to eyes, do not use the flash near the eyes.

To avoid possible safety accident, do not use the flash light on the people who need to keep highly focused.

If the following situations happen, please remove the batteries immediately and stop using the flash:

- The product falls or is struck seriously and internal parts are exposed.
- If the corrosive liquid inside the battery leaks, please take out the battery with gloves.
- The product gives off strange smell, heat, or smokes.




Do not disassemble or repair this product by yourself. High-voltage internal parts may cause electrical shock. Please remove all the batteries when the product is not in use for a prolonged period.

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### Conventions used in this user manual:

- In order to learn and master the operation of this speed-lite, at the meanwhile you read this manual, please take user manual of your camera as reference.
- In every operating step, we assume that both camera and speed-lite are power on.

### Icons used in this user manual

-  : Supplementary information
-  : Long press the button
-  : Short press the button

## Features

### ● **Integrated Transceiver and Receiver, Compatible with YONGNUO RF Radio Trigger System (RF602/603)**

During radio transmission wireless shooting, this product can be used as a master unit or slave unit. It is fully compatible with RF radio triggering signals from YN650EX-RF / YN685EX-RF / YN320EX / YN685(II) / YN720 / YN560 IV / YN660 / YN560 III / YN560-TX (pro) / RF603 / RF602 / YN32-TX. And it also contains 16 transmission channels and 10000 wireless radio ID, making it easy for multi-flash lighting.

**Note:** Please set the ID of YN685EX-RF as 0000 when using it with products that do not support ID setting.

### ● **Supports Multi-group Flashes Independent Control**

When used as a radio master unit, the product is able to control 5 independent groups, performing remote control of flash mode, flash output and focal length for YN650EX-RF / YN685EX-RF / YN320EX / YN685(II) / YN720 / YN560 IV / YN660 / YN560 III.

### ● **Supports Optical Transmission Wireless Slave Flash**

In optical transmission wireless flashing shooting, YN685EX-RF can be set as slave unit to receive optical transmission wireless signals from YN320EX and from Sony flashes such as HVL-F32M, HVL-F60RM, HVL-F60M, performing off-camera TTL mode flashing.

### ● **High GN; Supports TTL, M and Multi Mode, High-speed Synchronization Flash**

GN60@ISO100, 200mm, supports TTL, M, Multi flash, with high-speed synchronization function, all shutters are available for shooting, the maximum shutter synchronization speed is up to 1/8000s.

### ● **Firmware Update**

The product is equipped with a USB port, you can download the latest firmware from YONGNUO official website to upgrade the product.

### ● **Super-speed Recycle System; Supports external battery pack**

The flash recycle with full output only needs 2s to perform. Even if without any new battery, it only takes 3-4s to perform the fast flash recycle. With the use of compact battery pack, higher recycle needs can be met.

### ● **Real-time Display of Power Consumption**

With real-time display of battery power, it's easy to know the power consumption.

### ● **Electric Zoom**

Equipped with auto zoom and manual zoom, the flash coverage can be set in the range of 20 to 200mm, so that the fill light is more uniform and effective.

### ● **Sound prompt, Custom Function and Autosave Function**

### ● **LCD Display Screen and Standard PC Synchronous Interface Equipped**

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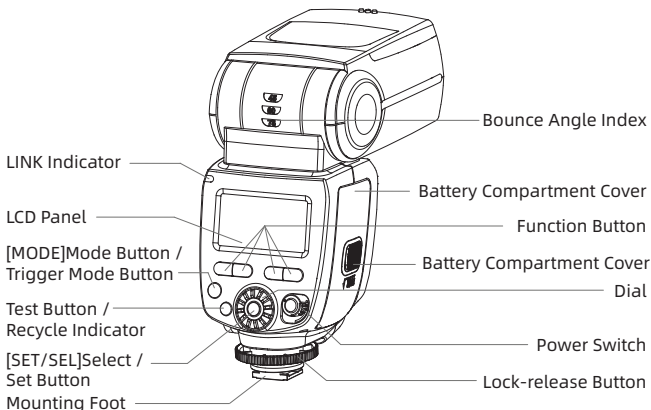
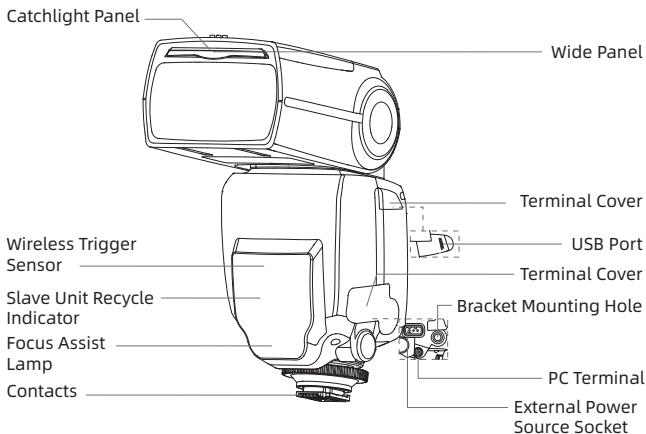
## Quick Start

**If you don't have much time to read the whole user manual, we advise you to read this section.**

1. Please avoid the excessive use of maximum power output, which can effectively extend the service life of the product. (It is recommended that the flash should be idle for more than 10 minutes when overheat protection is activated.)
2. Press the [MODE] button for seconds to enter trigger mode selection. Turn the [DIAL] to select a trigger mode.
3. Press the [MODE] button to switch flash modes between TTL/M/Multi/Gr. (Gr mode only works when the flash is set as radio wireless master unit.)
4. Turn the [DIAL] to adjust the selected value and press the [SET] button to save the settings.
5. Press the [Zm/C.Fn] button to enter focal length setting. Press the [Zm/C.Fn] button for seconds to enter custom function setting.
6. The function buttons 1 to 4 vary according to the current flash status. Function buttons can be used to operate the functions displayed on the screen above the corresponding button. For more details, please read the subsequent section.
7. Press the function button 2 and 3 at the same time for seconds, and the settings of the flash can be reverted to their defaults.
8. Turn the flash OFF, press the [MODE] button for seconds to turn the flash on and enter the upgrade interface.

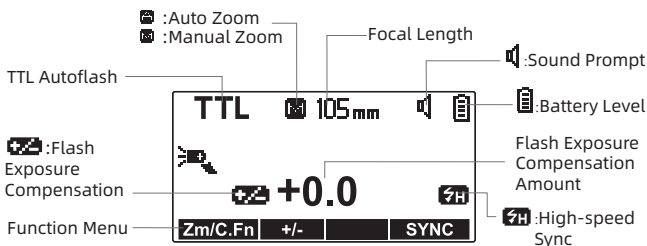
# Nomenclature

## 1.The Part Name

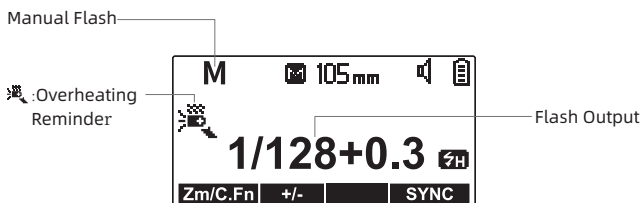


## 2.LCD Panel

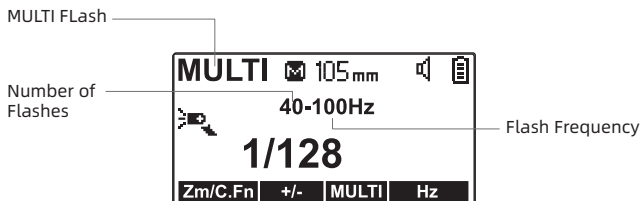
### TTL Autoflash



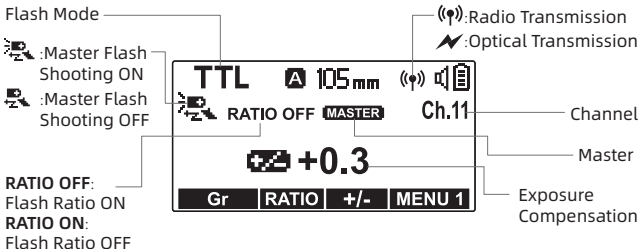
### Manual Flash



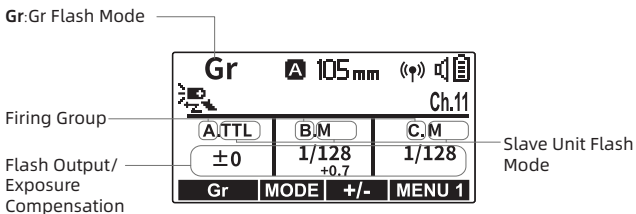
### MULTI FLash



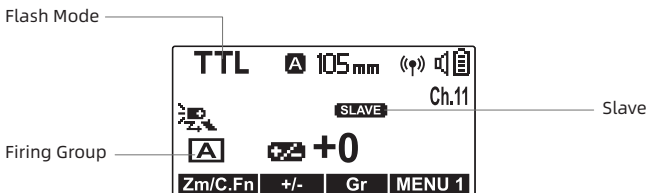
## Master Unit



## Master Unit: Gr Flash Mode



## Slave Unit



### 3. Recycle Indicator Status

Status	Description	Action
Red Light Lit	The flash is charged and ready to flash	Normal
Blue Light Lit	Flash charging is not completed	Wait until flash is fully charged
Blue Light Blinking	a. The battery power is low, and the flash is going to power off automatically. b. Overheating warning	a. Please change the battery. b. Reduce the flash frequency or stop shooting until the flash is cooled down.
Red Light Blinking	Overheating warning	Reduce the flash frequency or stop shooting until the flash is cooled down.
Red and Blue Light Blinking Alternately	Overheat protection flash limit is activated	Stop shooting or turn off the flash until it is cooled down.

### 4. LINK Indicator Status Description

Status	Description
Blue	Transmission OK
Red	Sending or receiving triggering instruction

### 5. Slave Unit Recycle Indicator Description

Status	Description
Blinking	Flash recycle of the slave unit completed.
Off	Flash recycle of the slave unit is not completed.

### 6. Sound Prompt Description

Sound	Description	Action
DiDi	Power on; sound prompt on; flash OK	Normal
DiDiDi-DiDiDi	The flash exposure may be excessive.	Adjust exposure settings or change shooting conditions.
Di Di Di	The flash exposure may be insufficient.	Adjust exposure settings or change shooting conditions.
Di--DiDi DiDi	The flash isn't fully charged.	Wait until flash is fully charged.
Di—Di lasts for seconds	The flash has been fully charged and is ready for shooting.	Normal
Di-continuously and quickly	The battery power is low, and the flash is going to power off automatically.	Please change the battery.
Di-Di-Di-	Sleep mode is activated, and the flash is going to power off automatically.	Please turn off the flash and turn it on again.



# Installation and Detachment

## 1.Installing the Batteries

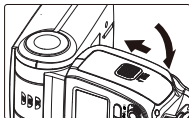
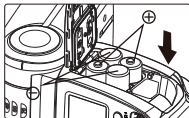
Slide and open the battery compartment cover in the direction of the arrow as shown.

Insert the batteries according to the label inside and make sure the direction of the battery contact (+/-) is correct.

Slide and close the battery compartment cover in the direction of the arrow as shown.

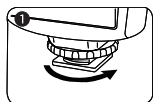


Please use four standard specification AA batteries.To avoid circuit please do not use damaged batteries.



## 2.Attaching the Flash to the Camera

Turn off the flash, turn the [Lock-release Button] to the end (picture ①), and slip the flash's [Mounting Foot] completely into camera's hot shoe (picture ②). Turn the [Lock-release Button] until it is locked (picture ③).



## 3.Detaching the Flash

Turn off the flash, turn the [Lock-release Button] to the end, and detach the flash from the camera.



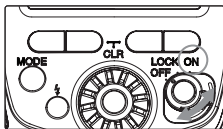
## Basic Functions

### 1. Power-on and Power-off

Set the [Power Switch] to <ON>, and the flash will be turned on and start being charged. After turned on, the <Recycle Indicator> will be turned on with red light, which indicates it is ready to fire.

If the battery power is low, the flash will show the <Low Battery Icon> with the <Recycle Indicator> blinking in blue, and then automatically turned off. Please replace the battery currently.

After use, set the [Power Switch] to <OFF> to turn off the flash. It's recommended to turn off the flash before you take out the batteries.

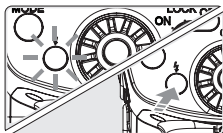


### 2. Button Lock Function

Set the [Power Switch] to <LOCK>, to lock the [DIAL] and function buttons of the flash. This function helps to prevent the flash settings from being accidentally changed. When this function is on, if you operate this function, <LOCK> will be displayed on the LCD panel.

### 3. Test Flash

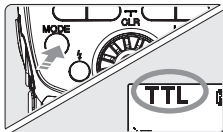
After the <Recycle Indicator> turns red, you can press the [TEST] button to test whether the flash fires normally.



### 4. TTL Mode

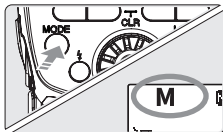
Press the [MODE] button to switch the flash mode to TTL mode. In TTL mode, the camera's metering system will detect the flash lighting reflected from the subject, thereby adjust the flash output automatically, so that the subject and the background obtain balanced exposure. The product supports functions such as exposure compensation, high-speed sync, rear curtain sync, exposure lock and camera menu access.

In TTL mode, you can also compensate the flash brightness. The compensation range is -3EV to +3EV with the accuracy of 1/3EV.



### 5. M Mode

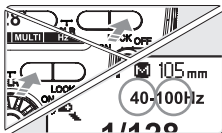
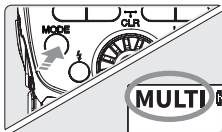
Press the [MODE] button to switch the flash mode to M mode. In M mode, you can set the flash brightness according to your needs.




Press the function button [+/-], and when the <Flash Output> is highlighted, turn the [DIAL] to adjust the flash output brightness. The adjustment range of flash output brightness in M mode is from 1/128 to 1/1,8 levels of brightness totally, and each level can be adjusted up to 3 sub-levels I, in 1/3EV increments, so that there are 22 sub-levels adjustment in total. When shooting, you only need to set the flash output, adjust the camera, and press the camera shutter, then the flash will fire according to the camera's sync signal.

## 6.MULTI Mode

Press the [MODE] button to switch the flash mode to MULTI mode. MULTI mode is also known as stroboscopic mode. In this mode, the flash will fire according to the output power, number of flashes and flash frequency you set. The setting method of flash output is the same as in M mode: the flash output range is 1/128-1/64-1/32-1/16-1/8-1/4. Press the function button [MULTI] to select the number of flashes, press the function button [Hz] to select frequency, and turn the [DIAL] to adjust the number of flashes and flash frequency. The adjustable range of number of flashes is from 2 to 100 and of flash frequency, is 1 to 100. When the number of flashes is set to <-->, the flash will continue to fire until the shutter is closed, or the battery is exhausted.



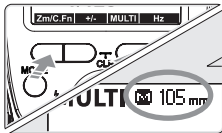
 In the case of low battery power, the flash charging speed is slow, which may cause flash leakage during high-frequency flash. In this case, please reduce the flash frequency or replace with new batteries.

The maximum number of strobes of the flash will be limited by the flash output power and flash frequency.

## 7.ZOOM: Setting the Flash Coverage

**Auto Zoom:** Press the function button [Zm/C.Fn]. When the focal length value flashes on the LCD panel, turn the [DIAL] until <A> is displayed to the left of the <ZOOM> icon. When the flash is attached to the camera, the flash lamp cup will move back and forth as the focal length of the lens changes, to adapt to different flash coverage (the default is 35mm).

**Manual Zoom:** Press the function button [Zm/C.Fn]. When the focal



length value flashes on the LCD panel, turn the [DIAL] until <M> is displayed to the left of the <ZOOM> icon, you can manually adjust the flash coverage (20, 24, 28, 35, 50, 70, 105, 135, 200mm).



When the wide panel is used, the flash coverage will be expanded and locked to 14mm.

## 8.Camera Menu Access (Only Supports Cameras Released Recently)

On the cameras released recently with the [External Flash Setting] menu, you can set the flash parameters through the camera menu, such as adjusting the flash modes (TTL/M/Multi/Gr/OFF), wireless flash setting, high-speed sync, exposure compensation, focal length etc.

## 9.Auto-assist Focusing Lamp

In low-light or low-contrast shooting environments, when the camera cannot focus automatically or correctly, the built-in assist focusing lamp will be activated to help the camera to focus. This lamp can be set to be on or off by setting flash custom function C.Fn 04.



When the camera's focus mode is set to AF-C, the mentioned focusing lamp cannot be lit.

## 10.Power Saving Mode

The product is designed with a power saving mode, which can be activated by custom function settings. For specific settings, please refer to the subsequent "Custom Function Settings" section. With the power saving mode is activated, the flash will be in sleep status after being idle for a period, and if the flash remains idle for a period of time after sleep mode, it will be automatically turned off. To turn on the flash again, press the camera shutter halfway or press the [TEST] button.



## 11.Overheat Protection

Continuous and rapid flash firing in short time may result the rise of internal temperature of the flash. To avoid damaging the flash due to overheating, the flash is designed with overheating protection function. When the firing is too frequent, the LCD panel will show the <H> icon and the <Recycle Indicator> will blink in a single color. At this time, please reduce the flash frequency or flash output appropriately. Otherwise, the firing at a high frequency will activate the overheat

protection mechanism: the <🔥> icon will be displayed on the LCD panel and the <Recycle Indicator> will blink in red and blue alternately. After the overheat protection mechanism is activated, the flash will be locked, the parameters cannot be adjusted and the flash cannot fire. At this time, please leave the flash idle for 10 minutes and wait until it is cooled down. To avoid affecting the normal shooting, when fast shot is needed, please try to keep the flash output under 1/4.



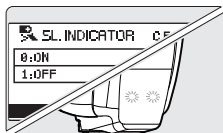
When an overheating warning appears, please reduce the flash frequency or flash output appropriately. When removing the battery after multiple firings in succession, please be careful that the battery may be very hot.

## 12.Sound Prompt

The sound prompt can be turned on or off through the custom function setting option C.Fn 06. After the sound prompt is on, the flash will emit different sounds to indicate its working status. For more details, please refer to the "Nomenclature" section.

## 13.Off-camera Status Indicator

The off-camera status indicator can be turned on or off through the custom function setting option C.Fn 08. With this function activated, the indicator will blink after slave unit completes the flash charging recycle, which is convenient for you to learn the recycle status of the off-camera flash in real time from a distance.



## 14.Autosave

When the flash is turned off by pressing [Power Switch], the flash will automatically save the current settings, which is convenient for you to use this flash next time.

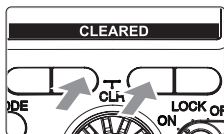
## 15.PC Sync Port (input)

YN685 is equipped with standard PC sync port. Through connecting to the PC sync port, this speed-lite can be triggered synchronously.

## 16.Clearing Flash Settings

Press the function button 2 and 3 for about 2 seconds, the flash settings,

such as trigger mode, flash mode, flash output and focal length will be restored to default settings.

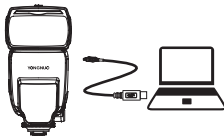
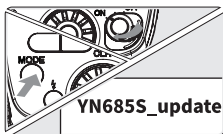


For the operation method of reverting custom function settings, please refer to the section on custom function settings.

## 17.Firmware Upgrade

The product supports firmware upgrade. Users can log on YONGNUO official website <https://www.hkyongnuo.com/xzyzc> to download the latest upgrade software and firmware to upgrade the flash. The upgrade method is:

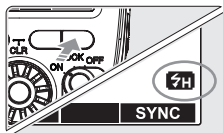
1. Connect to the computer via a Micro USB cable (Micro USB cable needs to be purchased separately).
2. When the flash is off, press and hold the [MODE] button until the flash turns on and enters the upgrade interface.
3. Open the upgrade software and follow the software instructions to upgrade.



# Advanced Applications

## 1. High-speed Sync Flash

With high-speed sync flash (FP flash), you can use the flash simultaneously under all shutters, and the maximum sync speed can reach to 1/8000 second. High-speed sync flash is particularly convenient when using aperture priority to fill flash for portraits. Short press the function button [SYNC] to turn on or off the high-speed synchronization function. After the high-speed synchronization is turned on, the LCD screen will display the high-speed synchronization icon.



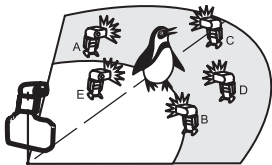
When this product is used as a slave unit, the flash synchronization mode needs to be set by the master control unit.

## 2. Rear-curtain Sync

When the rear-curtain sync is turned on, the flash will fire at the moment when the shutter is about to close. Using a slow shutter speed and rear-curtain sync can create smear for the subject. The rear-curtain sync function needs to be set from the camera, please refer to the camera manual for the method.

## 3. Remote Wireless Flash

YN685EX-RF supports remote wireless flash: 2.4GHz radio wireless flash shooting (602/603 wireless flash system) has an effective flashing distance of up to 100m; For optical transmission wireless flash shooting (Ss/S1/S2), the longest distance for indoor use can reach to 25m, and the longest distance for outdoor use can reach to 15m. Please refer to the "Wireless Flash Shooting" chapter for detailed setting methods.



## 4. Flash Exposure Compensation

To make the shooting effect better meet your needs, you can set flash exposure compensation through the camera menu or flash setting. The exposure compensation value setting range on the flash is -3EV ~ +3EV, and the exposure level increment is 1/3EV. Short press the function button [+/-] of the flash to enter the exposure compensation setting state, rotate the [dial] to adjust the exposure compensation value, and press the [SET] button to save the setting.

## 5. FEL/AEL lock

To use this function, you should lock the center of camera's viewfinder at the subject which needs flash exposure, press the flash exposure lock [FEL/AEL] button of the camera, the flash will emit a pre-flash, and the camera will calculate the appropriate flash output data. You have a period of time to recompose the picture, you can press the shutter to shoot after composing the picture (this function needs to be supported by your camera itself, please refer to your camera manual for setting).

## 6. High-speed Continuous Shooting

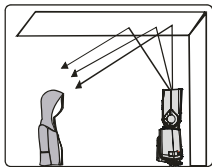
This product supports high-speed continuous shooting function, please set the camera to continuous shooting mode, and then shoot.



The quantity of photos of burst shooting depends on the flash output setting. Please use battery with sufficient power.

## 7. Bounce Flash

Bounce flash refers to shooting by pointing the 'Flash head' at the wall or ceiling, and illuminating the object with the light reflected from the wall or ceiling (commonly known as "jumping flash"), which can reduce the shadow behind the subject and obtain a more natural light effect.

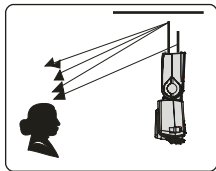


If the wall or ceiling is too far away, the bounce flash may be too weak and cause underexposure. The wall or ceiling should be flat and white, which helps to get efficient reflection, if the reflecting surface is not white, color cast may appear on the photo.

## 8. Use [Catchlight Panel] for shooting

Use the 'Catchlight Panel' to flash, pull the 'Catchlight Panel' and 'Wide Panel' out of the flash head together, and push the 'Wide Panel' back.

If you shoot at this time, you can create highlight points in the model's eyes, making the eyes more charming and beautiful (catchlight). This function can achieve the best effect when you position the flash head toward the front and 90° up.



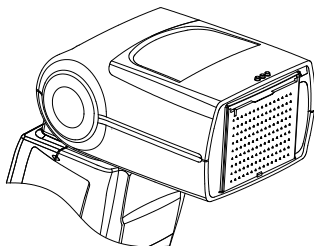


## 9. Use Wide Panel

Pull out the 'Wide Panel' and push back to the 'Catchlight Panel', and place it as shown in the figure. The flash range will be expanded and the flash effect will be softer and more natural.



When using the 'Wide Panel', the flash coverage will be expanded and locked to 14mm.



# Wireless flash shooting

## 1. 2.4GHz Radio Transmission

YN685EX-RF is compatible with YONGNUO RF radio trigger system, and it can be used as a master unit or a slave unit during radio flash shooting.

When used as a master unit, it can remotely control the flash mode, flash output and focal length of the slave units YN685EX-RF, YN650EX-RF, YN320EX, YN720, YN560 III, YN560 IV, YN660, YN685(II), YN862.

When used as a slave unit, it can receive the radio triggering signal from a flash trigger (such as RF602, RF603, YN560-TX Pro, etc.) or flash (such as YN685EX-RF, YN650EX-RF, YN320EX, YN560 IV, YN660, YN862, etc.) with 602/603 master control function. If supported by the master control unit, the flash mode, flash output and focal length can be changed remotely through the master control unit.

### •Master Unit, Slave Unit Settings

**Master :** Flash mounted on top of the camera, turn on the power, set the 「Wireless Flash」 menu on the camera to “On” . For more information, please refer to the camera instructions.

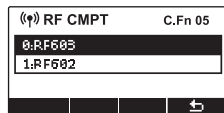


**Slave:** Long press the [MODE] button to enter the trigger mode selection interface, rotate the [Dial] and select <Ⓜ SLAVE>, press [SET] to save the settings.



### •Select Radio Signal

Enter the custom option C.Fn 05 and set the radio signal to RF602 or RF603. During the triggering process, please ensure that the radio signals of the master control unit and the slave unit are set to be consistent, otherwise the flash cannot be triggered.



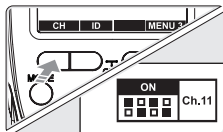
### •Transmission Channel/Radio ID Settings

If there are other photographers using radio wireless multiple flash shooting or other radio equipment in public, you can change the transmission channel and ID to avoid interference. YN685EX-RF has 16 physical channels and 10,000 IDs to choose.

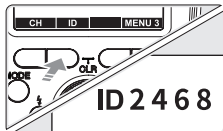
If there are other photographers using radio wireless multiple flash

shooting or other radio equipment in public, you can change the transmission channel and ID to avoid interference. YN685EX-RF has 16 physical channels and 10,000 IDs to choose.

**Set the channel:** Short press the function button [CH] to enter the channel setting interface, turn the [dial] to select the appropriate channel from 1 to 16, short press [SET] to save the setting.





**Set ID:** Short press the function button [ID] to enter the ID setting interface, short press the function button [←] or [→] to select the number of ID digits, turn the [dial] to select the desired number from 0 to 9, and short press the [SET] button to save the settings.

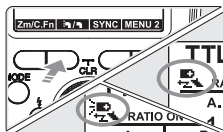


During the radio transmission wireless shooting process, please ensure that the transmission channel and ID of the master unit and the slave unit are set to the same, otherwise the flash will not be triggered normally. If the master unit or slave unit used does not support ID setting, please set the ID of YN685EX-RF to 0000.

### •The Master Flash ON or Forbid Flash

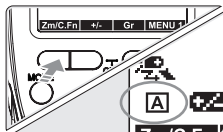
When YN685EX-RF is used as the master control unit for radio wireless flash photography, you can choose whether the master unit participates in the flash. When the flash setting of the master flash is ON, the master unit will participate in the flash as a group A flash.

**Setting method:** Short press the function button [Fn/Menu] to select whether the main control unit participates in the flash. When the master controller participates in the flash, it displays , and when the master controller does not participate in the flash, it displays .



### •Slave Unit Grouping Setting

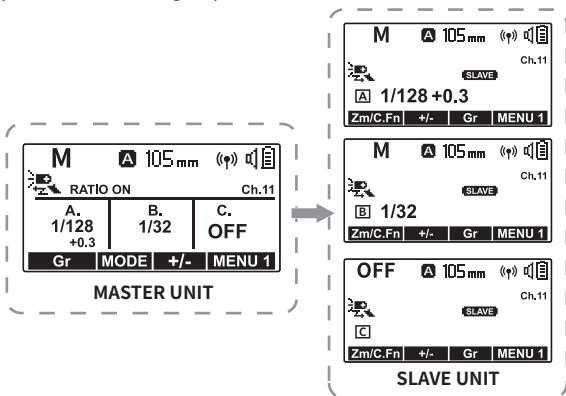
On the slave unit, short press the [Gr] button to switch the flash to the group you want to set. There are 5 groups A/B/C/D/E for the slave unit to choose from.



### •Slave Unit Flash Parameter Setting


When used as a slave unit, the parameters can be set directly on this flash, or the parameters can be changed remotely through the master

control unit. The method of directly setting the flash mode, flash output, and flash coverage on this flash is the same as that of a normal on-camera flash. To remotely set the parameters of the slave unit, you only need to set the flash mode, flash output, and flash coverage of the corresponding group on the master control unit and all the settings will be synchronized to the group of slave unit flashes.



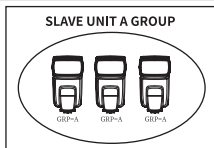
### •Wireless Flash Shooting Using 1 to 3 Slave Units

On the slave unit flash, short press [Gr] to enter the group setting interface, turn the [dial] to set the slave unit to any group of A, B, and C. On the master control unit, short press the function button [RATIO] to turn on the flash ratio <RATIO ON>, and short press the [RATIO] again to turn off the flash ratio <RATIO OFF>. Short press the [Gr] button to select the control group, and turn the [Dial] to adjust the flash ratio and flash output of the group flashes.

 To make all the slave units in groups of A, B, and C flash with the same output, please set to <RATIO OFF>.

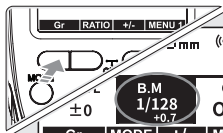
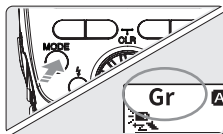
If you need a higher flash output or better lighting, you can increase the number of flash units in one group of slave units.

For example: if the groups of 3 slave units are set to <A>, they will be fired as a flash unit of the slave unit group and controlled by the master unit.



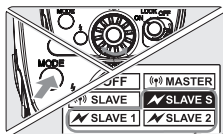
### •Gr: Set different flash modes, brightness, and focal lengths for each group of flashes for wireless flash shooting.

On the master control unit, short press the [MODE] button to switch the flash mode to <Gr>. In this mode, up to 5 groups (A/B/C/D/E) flashes can be triggered simultaneously, and different flash modes, flash brightness and focal lengths can be set for each group of slave units through the master control unit. Short press the function button [GR] to select the control group, then turn the [dial] to directly change the exposure compensation or flash output of the group of slave units, short press the function button [MODE] to change the flash mode of the group of slave units (TTL,M ,OFF). Short press the function button [+/-] and turn the [Dial] to adjust the exposure compensation for all groups.

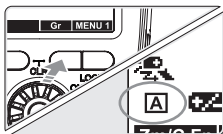


## 2. Optical Transmission

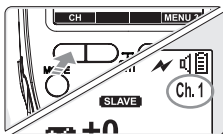
YN685EX-RF can be used as a slave unit in optical transmission wireless flash photography. There are three trigger modes: Ss, S1, and S2. Setting method: Long press the [MODE] button to enter the trigger mode selection interface, turn the [dial] to select the desired trigger mode, and press [SET] to save the setting.



**Ss trigger mode:** The same YN685EX-RF can respectively receive the optical transmission wireless trigger signal of YONGNUO YN320EX and Sony HVL-F32M, HVL-F60RM, HVL-F60M and other flashes. On the slave unit, short press the [Gr] button to switch the flash to the group you want to set. There are two groups (A/B) for the slave unit to choose.



In the Ss trigger mode, the flash output of the slave unit will be fully controlled by the master unit, and there are four channels



(CH1/2/3/4) to choose.

**Channel setting method:** Short press the function button [CH] to highlight the channel, turn the [dial] to adjust, and press [SET] to save the setting.

The S1/S2 trigger mode is suitable for manual flash mode and TTL flash mode respectively. When YN685EX-RF works in S1/S2 trigger mode, the flash mode defaults to M mode. Short press the function button [+/-] to highlight the flash output, and turn the [dial] to adjust.

**S1 mode:** When the flash is in S1 mode, it will trigger the flash synchronously with the first flash of the master flash, the effect is the same as using a wireless flash trigger. To use this mode normally, your master flash must be set to manual flash. The TTL flash system with pre-flash should not be used, and the red-eye reduction function with multiple flashes also should not be used.

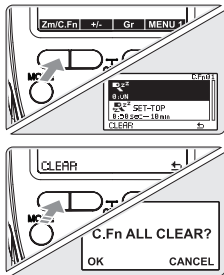
**S2 mode:** Also known as "pre-flash cancel mode", this mode is similar to S1 mode, but it can ignore the pre-flash from TTL flash, so it can support the master flash working in TTL mode. In particular, if the S1 mode cannot synchronize with your built-in flash, you can try the S2 mode.



When using the S1 and S2 modes, the master control unit needs to turn off the red-eye reduction function and the optical transmission wireless flash mode, otherwise, the flash may be out of sync.

## Custom Function Settings

You can customize the flash function according to your personal preference. Long press the function button [Zm/C.Fn] to enter the custom function item menu, rotate the [Dial] to choose the custom function item (No., such as C.Fn 01), short press the [SET] button to enter the item sub-menu, rotate the [Dial] to modify the function settings of the sub-item, short press the [SET] button to save the settings and exit the sub-menu, press [BACK] button to return to the normal shooting interface after finishing the custom function settings. After entering the custom function item menu. Short press the [CLEAR] button and then press the [OK] button to restore the custom options to the factory default selections



The custom functions supported by YN685EX-RF are as follows:

### Fn 01 Power saving function

0:ON	Turn on
1:OFF	Turn off

### Fn 02 Master control unit sleeps automatically, shutdown timing

0:30SEC→10min	Being idle for 30 seconds to enter sleep mode, continue to be idle for 10 minutes to be shut down automatically
1: min→30min	Being idle for 3 minutes to enter sleep mode, continue to be idle for 30 minutes to be shut down automatically
2:30min→60min	Being idle for 30 minutes to enter sleep mode, continue to be idle for 60 minutes to be shut down automatically

### Fn 03 Slave unit sleeps automatically, shutdown timing

0:30min→60min	Being idle for 30 minutes to enter sleep mode, continue to be idle for 60 minutes to be shut down automatically
1:60min→120min	Being idle for 60 minutes to enter sleep mode, continue to be idle for 120 minutes to be shut down automatically

#### **Fn 04 Auto focus assist lamp**

0:ON	Turn on
2: OFF	Turn off

#### **Fn 05 RF radio trigger signal selection**

0:RF603	RF603 radio trigger signal
1:RF602	RF602 radio trigger signal

#### **Fn 06 Sound prompt**

0:ON	Turn on
1:OFF	Turn off

#### **Fn 07 LCD backlight**

0:12SEC	The display time of LCD backlight is 12 seconds
1:ON	Turn on continuous lighting
2:OFF	Turn off lighting

#### **Fn 08 Off-camera indicator light**

0:ON	Turn on
1:OFF	Turn off

#### **Fn 09 LCD display contrast control**

The contrast of the LCD screen can be adjusted, totally 8 levels adjustable.

#### **Fn 10 Screen backlight brightness**

The screen backlight brightness can be adjusted, totally 8 levels adjustable.

#### **Fn 11 Firmware version**

VER. Xx: You can view the flash firmware version information



## Troubleshooting Guide

### **1. The power cannot be turned on or the flash does not fire.**

Please check whether the battery is installed correctly and whether the battery power is sufficient or not; please make sure that the flash hot shoe is installed in place, and the flash fixing knob is locked.

### **2. Cannot flash in radio transmission wireless shooting.**

Please make sure that the RF radio trigger signal, the channels and the ID of the slave unit and the master unit are set to the same, and the slave unit is placed within the effective wireless transmission range of the master unit.

### **3. Cannot flash in optical transmission wireless shooting**

When using it outdoors, please avoid direct sunlight to the wireless sensor of the flash; make sure that the channels of the master unit and slave unit are set to the same, and the slave unit is within the effective wireless transmission range of the master unit.

### **4. The photo is underexposed or overexposed.**

Check whether the camera's shutter, aperture, and sensitivity (ISO) are too close to the flash limit, or whether the flash-related settings such as exposure compensation on the camera and flash are correct.

### **5. The photos appear dark corners or subject can be only partially lit up.**

Please check the current flash coverage; Please check whether the lens focal length is beyond the range of the flash, if so, you can try pulling out the wide panel to enlarge the coverage of the flash.

### **6. The flash control panel display blurred.**

There is a layer of film on the screen when it is out of the factory, you can tear it to enjoy more clear visual effect.

### **7. Other abnormal situations**

Please try to turn off the power of the flash and camera, remove the flash from the camera and install again, and then restart the power of the flash and camera. If there are still abnormalities, you can contact YONGNUO after-sales service hotline 400-0013-888 or send an email to [service@hkyongnuo.com](mailto:service@hkyongnuo.com) for help.

## Specification

Circuit design	Insulated Gate Bipolar Translator (IGBT)
Guide number	60 (ISO 100, 200mm)
Flash mode	TTL, M, MULTI,Gr
Trigger mode	set-top, radio master, radio slave, wireless optical slave (Ss, S1, S2)
Lamp head zoom range	20, 24, 28, 35, 50, 70, 105, 135, 200mm
Vertical rotation angle	-7~90 degrees
Horizontal rotation angle	180 degrees each side
Power supply	4 *AA alkaline batteries or AA nickel-metal hydride (Ni-MH) batteries
Light-emitting times	100~1500 times (using AA alkaline batteries)
Recycle time	about 2 seconds
Color temperature	about 5600k
Flash time	1/200 second ~ 1/20000 second
Flash control	8 levels of brightness control (1/128~1/1), a total of 22 levels of fine adjustment
External interface	Hot shoe, PC interface, external charging interface, USB interface
Radio transmission triggering distance	up to 100 meters
Optical transmission triggering distance	20-25 meters indoors, 10-15 meters outdoors
Additional functions	Master flash, off-camera flash, high-speed sync, rear curtain sync, exposure compensation, exposure lock, lamp head electric zoom, sound prompts, automatic save settings, power saving mode, overheat protection, custom functions, firmware upgrades
Volume	about 65×78×210mm (stretched state)
Net weight	about 427g
Included items	Flash (1), protective bag (1), mini base (1), Manual (1), product certificate (1)

Guide number (ISO100, in meters/feet)

Flash Output	Flash coverage (mm)					
	14	20	24	28	35	50
1/1	15/49.2	26/85.3	28/91.9	30/98.4	36/118.1	42/137.8
1/2	10.6/34.8	18.4/60.4	19.8/65	21.2/69.6	25.5/83.7	29.7/97.4
1/4	7.5/24.6	13/42.7	14/45.9	15/49.2	18/59.1	21/68.9
1/8	5.3/17.4	9.2/30.2	9.9/32.5	10.6/34.8	12.7/41.7	14.8/48.6
1/16	3.8/12.5	6.5/21.3	7/23	7.5/24.6	9/29.5	10.5/34.4
1/32	2.7/8.9	4.6/15.1	4.9/16.1	5.3/17.4	6.4/21	7.4/24.3
1/64	1.9/6.2	3.3/10.8	3.5/11.5	3.8/12.5	4.5/14.8	5.3/17.4
1/128	1.3/4.3	2.3/7.5	2.5/8.2	2.7/8.9	3.2/10.5	3.7/12.1

Flash Output	Flash coverage (mm)			
	70	105	135	200
1/1	50/164	58/190.3	59/193.6	60/196.9
1/2	35.4/116.1	41/134.5	41.7/136.8	42.4/139.1
1/4	25/82	29/95.1	29.5/96.8	30/98.4
1/8	17.7/58.1	20.5/67.3	20.9/68.6	21.2/69.6
1/16	12.5/41	14.5/47.6	14.8/48.6	15/49.2
1/32	8.8/28.9	10.3/33.8	10.4/34.1	10.6/34.8
1/64	6.3/20.7	7.3/24	7.4/24.3	7.5/24.6
1/128	4.4/14.4	5.1/16.7	5.2/17.1	5.3/17.4

## FCC Statement

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.

**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 and can radiate radio frequency energy and, if not installed and used in accordance with the 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.

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

The electronic version of this manual is available at <https://www.hkyongnuo.com/xzyzc>.

The functions in this manual are obtained based on our company's test conditions. Design and specifications are subject to change without notice.

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