#### Precaution

To avoid fire or electrical shock, please do not expose this product to rain or moisture.

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

Please keep the batteries and the parts which can be swallowed mistakenly away from children. Contact a doctor immediately when it occurs.

To avoid any possible injury to eyes, do not use the flash in a short distance from the eyes.

To avoid any possible safety accident, do not use the flash on people who need a high degree of attention.

If any of the following situations occurs, please take the batteries out and stop using this product.

- $\bullet$  This product is dropped or shocked seriously and the inner part of this product is bared.
- Wear gloves and take the batteries out if the corrosive liquid inside the battery leaks.
- This product gives off strange smell, heat or smokes.

Do not dissemble or maintain this product because the internal high voltage circuit may cause the electric shock.

Please take out all the batteries if this product is not used for a long time.

#### **Features**

# • Wireless transmitter-receiver, supports 2.4GHz radio triggering and optical triggering.

This product YN320EX is compatible with YONGNUO 602/603 radio triggering signal and S (refers to SONY) optical transmission wireless triggering signal. A YN320EX can be used as master unit or slave unit. The flexibility of YN320EX makes photography more freewheeling.

## High-speed Sync TTL Speedlite

YN320EX supports TTL flash and High-speed Sync (HSS). The maximum sync speed is up to 1/8000s.

## • Realize 6-group flash control easily

As a radio master unit, YN320EX supports controlling 6 separate groups. It can remotely control the flash mode, flash output, focal length, number of stroboscopic and stroboscopic frequency of YN560Li/YN720/YN685/YN560III/YN560IV/YN660/YN860I i

## Ultra-fast Charging Recycle System

The recycling time for full output just takes 2s. You can get high-speed charging recycling experience even without using brand new batteries. The recycling time just takes 3s~5s.

## Firmware Upgrade

YN320EX is equipped with USB port. The latest firmware can be downloaded from the official website of YONGNUO. Upgrade the firmware of YN320EX to keep it in best performance.

# Sound Prompt System

When the sound prompt system is enabled, the flash emits different sounds to indicate different working status.

#### Flash Head Electric Zoom

With ZOOM button, the flash head can circularly move in the coverage range of 24mm~105mm.

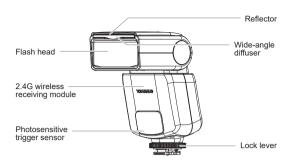
# • GN31 @ ISO100, 105mm

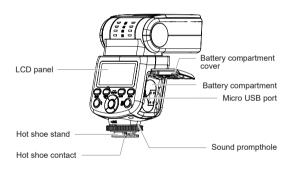
## **Quick Start**

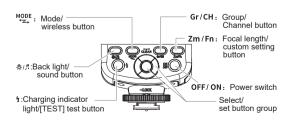
If you don't have time to read this user manual thoroughly, please read this part.

- **1.**To effectively extend the service life of this product, please avoid overusing maximum output power.
- 2.Press each button and observe the contents on the display screen to learn the function.
- **3.**Short press [MODE], the flash mode can be switched among TTL/M/Multi/OFF.
- 4.Long press [42], get into trigger mode selection interface, and select: ordinary on-camera, radio master control, radio slave, wireless optical control, wireless optical slave (Ss/S1/S2).
- **5.**Press [UP][DOWN][LEFT][RIGHT] button to quickly adjust flash parameters in current mode. Some parameters should be selected before setting.
- **6.**In TX/RX triggering mode, short press [Gr/CH] to switch groups (A/B/C/D/E/F), and long press [Gr/CH] to set channel (CH1~CH16).
- **7.**Short press [Zm/Fn] and enter status of focal length adjustment; long press [Zm/Fn] and enter status of custom adjustment.
- **8.**Through custom settings, wireless triggering signal can be switched between RF603 and RF602.
- **9.**Press and hold [MODE] and [Gr/CH] at the same time, the flash parameters can be restored to factory default settings.

# **Components Description**







# LCD panel





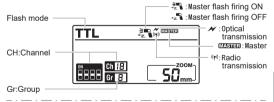
#### Manual flash



## Stroboscopic flash



#### Master unit



#### Slave unit



**Charging Indicator** 

Status of Charging Indicator	Meaning	Method
Red light	The speed-lite is fully charged and ready to fire	Normal
Blue light	The speed-lite has not been fully charged.	Waiting for completion of charging.
Blue light blinking	Low battery; the speed-lite is about to shut down.	Please replace batteries.
	Overheat prompt	Reduce flash frequency or stop using the speed -lite until it cools down.
Red light blinking	Overheat prompt	Reduce flash frequency or stop using the speed- lite until it cools down.
Red light and blue light blinking	Overheat protection mechanism is activated.	Stop using the speed-lite /shut down the speed-lite until it cools down.

# **Sound Prompt**

The Sound Form	Meaning	Method
Tick twice	The sound indicator is enabled; the speed-lite is started and ready to fire.	Normal
Tick Tick Tick, Tick Tick Tick	The exposure is possibly excessive.	Adjust exposure compensation or change the shooting condition.
Tick Tick Tic	The exposure is possibly insufficient.	Adjust exposure compensation setting or change the shooting condition.
Ticktick tick tick tic	The charging has not been completed.	Wait for completion of charging.
Tick-a long sound	The speed-lite is fully charged and ready to fire.	Normal
Tick continuously and quickly	Low battery; the speed-lite is about to shut down.	Please replace the batteries.
Tick-tick-tick	Auto power off after sleep.	Please turn off the speed-lite and restart it.

# **Grouping Display Status and Meaning**

Group Display Status	Meaning			
	TX Master Flash Mode	Rx Slave Flash Mode		
Gr A	Set flash mode, flash output and focal length of master flash and slave flash in off-camera group A.	This speedlite is used as slave flash in group A.		
Gr B/C/D/E/F	Set flash mode, flash output and focal length of the slave flash in B/C/D/E/F group from master unit.	This speedlite is used as slave flash in B/C/D/E/Fgroup.		

### Installation

#### 1. Install Batteries

Slide the batteries compartment cover in the direction of the arrow as shown

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

Close the [battery compartment cover] in the direction of the arrow as shown.





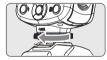


Please use 2pcs of standard AA batteries. To avoid circuit, please do not use damaged batteries.

## 2. Attaching to the Camera

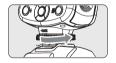
Rotate [Lock lever] to the highest point as the arrow shown. Slip the speedlite [Hot shoe stand] into the camera hot shoe. Rotate [Lock lever] until it' s tightened as the arrow shown.





### 3. Dismantlement

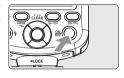
Rotate [Lock lever] to the highest point and take the speedlite off.



### **Basic Function**

#### 1 Power on and Power off

Long press [ON/OFF]button for around 2 seconds, the speed-lite will be switched on and start charging: after switched on, the <Charging indicator> will be displayed with red light which indicates it is ready to fire.



If the battery level is low, the <Charging indicator> will blink with blue light, and, the low power icon displays on the LCD screen and speedlite shuts downautomatically, which indicates the batteries need to be replaced.

After use, long press [ON/OFF] to turn off the power source. It's recommended to turn off the power source before you take out the batteries

#### 2.Test Flash

After the flash < Charging indicator> turns into red, you can test whether the flash is normal or not through [ 4 lbutton.



Short press [MODE] button to adjust the flash mode to TTL mode. In TTL mode, the metering system of the camera will detect flash illumination reflected back from the subject so as to automatically adjust the flash



output to make the exposure of the subject and background in balance. In TTL mode, the exposure compensation, exposure bracketing, high-speed sync, second-curtain sync and exposure lock are supported.

## Flash Exposure Compensation (FEC)

In order to make the shooting effect more suitable to your needs, you can set the flash exposure compensation trough the camera or on the flash.In TTL mode, short press [LEFT][RIGHT] button, the exposure compensation can be



adjusted within the range of -3EV~+3EV by 1/3 grade.

0.3 means 1/3 grade; 0.7 means 2/3 grade. When the flash, camera and trigger are all set FEC, the FEC value will be superimposed.

## Flash Exposure Bracketing (FEB)

After the FEB is set, when every 3 or 5 photos are taken, exposure compensation will be made automatically in the sequence of, for example, "Normal→Under→Over". This function helps you to improve the success rate of photo



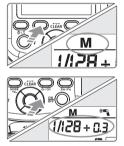
taking. This function should be operated on the camera. For more setting details, please refer to the user manual of your camera

## FEL Exposure Lock

To use this function, cover the subject for which flash exposure will be locked at the center of the viewfinder of camera, press the button [FEL] of the flash exposure lock, and the speedlite will pre-flash and the camera will calculate the appropriate flash output data. Now you have some time for recomposing, after that you can press shutter to take photos. This function can only be used when it's supported by your camera. For the setting method please refer to your camera manual.

#### 4. M Mode

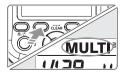
In M mode, you can set the flash output according to your requirement. By operating [LEFT][RIGHT][UP][DOWN] button, the flash output can be adjusted. Adjustment range of flash output is 1/128~1/1, and the output can be divided into 8 grades. Each grade has maximum 3 levels for fine adjustment. [UP] and [DOWN] button can be used to adjust flash output; the increment is 0.3EV.



When taking photos, you should just set the flash output, adjust the camera and press camera shutter, the speed-lite fires when it receives the sync signal from the camera.

## 5. Multi Mode

Multi mode is stroboscopic mode. In Multi mode, the speedlite fires according to the output power, flash frequency and number of flashes you set. Through [LEFT] and [RIGHT] button, the output power can be



adjusted. The flash output range is 1/128-1/64-1/32-1/16-1/8-1/4. Setting method of number of flash and flash frequency: short press [OK] button and select number of flash, short press [OK] again and select flash frequency, after



parameters selected, short press [LEFT] and [RIGHT] button to adjust number of flash and flash frequency.

When in low battery, the charging speed of the speed-lite will be slow, which may cause the leakage of the stroboscopic flash. In this situation, please reduce the flash frequency or change new battery.

## 6. ZOOM: Setting Flash Range

Lamp head Auto zoom: Short press [ZOOM] button until the focal length value displays with blinking on LCD panel, then short press [LEFT] and [RIGHT] button to adjust flash coverage range. When <M> is not displaying on



the LCD panel, it means auto zoom is enabled. At this time, the speedlite will adjust flash coverage range according to the change of the focal length (50mm by default).

Lamp head manual zoom: short press button [ZOOM] until the focal length value displays with blinking on LCD panel, then press [LEFT] and [RIGHT] button to adjust flash coverage range. When <code><ZOOM></code> icon is displayed to the left side of <code><ZOOM></code> icon, flash coverage range ( $24 \rightarrow 50 \rightarrow 70 \rightarrow 105 \text{mm}$ ) can be manually adjusted.

When the speedlite is used as slave unit and the focal length doesn't show as <M>, it just mean that the focal length of the speedlite can be remote controlled by the master unit. In radio flash shooting mode, auto zoom is not supported. Using wide-angle diffuser, the flash coverage will be extended to 14mm, and the focal length will be locked.

# 7.Power Saving Mode

In different flash mode, YN320EX runs different power saving mode. When it's in on-camera mode, the speedlite will enter sleep mode after being idle for 90s. When It's set as wireless slave unit mode, the

5E

speedlite will enter sleep mode after being idle for 5 min. When the speedlite is in sleep mode, it will shut down automatically after being idle for a while. This function can be enabled and disabled. For detailed operation please refer to "Custom Function Setting" chapter(P.44).

#### 8. Overheat Protection

When this speedlite is used continuously and frequently in a short time, the overheat protection mechanism will be triggered to protect this speedlite from damage and aging. The overheat protection mechanism can be divided into "overheat warning" and "overheat locking". When it's in overheat warning status, the charging recycling time will be extended, and < Charging indicator> will be warned by single color light blinking. At this time, please reduce service intensity. If



Overheat locking

the speedlite keeps firing frequently after overheat warning, it will enter overheat locking status. An overheat protection icon is displaying on the LCD panel, the function button will be locked, the parameters cannot be adjusted and the speedlite cannot fire. At this moment, please keep the speedlite idle for 15 min until it cools down. To avoid affecting the normal shooting, when fast shot is needed, please try to keep the flash output under 1/4.



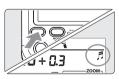
When the <Overheat Protection> icon displays on the LCD panel, the charging recycling speed possibly slows down.

When the <Overheat Protection> icon displays on the LCD panel, please decrease the flash frequency or flash output accordingly.

Please mind the hot batteries when take them out after continuous flashes.

# 9.Sound Prompt

By long pressing [\*/\beta] button or operating <So nd> from custom function setting, sound prompt can be enabled or disabled. With this function enabled, the speedlite emits different sounds to indicate different working status.



#### 10. Auto Save

Press [ON/OFF] to turn this speedlite off, it will save current settings automatically, which is convenient for you to use this flash next time.

## 12. Clear Settings

By pressing both button 2 and button 3 for 2 seconds, the flash settings, such as trigger mode, flash mode, flash intensity and focal length will be restored to default settings except for the custom function settings.



## 13.Firmware Upgrade

This speedlite supports firmware upgrade. Please visit the official YONGNUO website <www.hkyongnuo.com> and download the latest firmware to upgrade the speedlite as below:

- Open battery compartment cover (The USB-MINIB cord is optional).
- Connect the speedlite to computer with Micro USB cable, and the speedlite will enter upgrade status automatically.
- Open the upgrade software, upgrade the speedlite according to the tips.

# **Advanced Applications**

## 1. High-speed Sync Flash

With high-speed sync (FP flash), the flash can be synchronized with all shutter speeds, the maximum shutter sync is up to 1/8000.High-speed synchronization is particularly convenient for using aperture priority to fill flash for portrait.When the shutter speed is faster than camera flash sync speed, the speedlite will enable HSS function automatically and an HSS icon < > is displaying on the LCD creen. For details of HSS please refer to user manual of camera.

In Multi mode, HSS is not supported.

In radio flash shooting mode, HSS is not supported.
In S1/S2 wireless flash mode, HSS is not supported.

## 2.Second-curtain Sync

When the second-curtain sync function is enabled, the speedlite fires at the moment when the shutter is about to close. You can use slow-speed shutter and second-curtain sync to produce trailing smear for the subject. To use second-curtain sync function properly, please make sure that your camera supports this function. When the rear-curtain sync function is enabled, a rear-curtain sync icon < >>> will be displayed on the LCD screen.

## 3. Red-eye Reduction

Red-eye reduction function can be enabled from the camera. The flash will fire several times before the shutter opens to make the pupil constriction of subject contract. Using red-eye reduction helps reduce red-eye effect caused by the flasheffectively.

In wireless flash shooting mode and Multi mode, red-eye reduction is not supported.

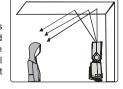
# 4. High-speed Continuous Shooting

This speedlite supports high-speed continuous shooting function. Please set the camera in continuously shooting mode before taking photos.

In high-speed continuous shooting mode, the photo quantity is related with the flash brightness. Please use the batteries with enough electric quantity.

## 5. Bounce Flash

Bounce flash means taking photos by making flash light head aimed at wall or ceiling and using the light reflected back from the wall or ceiling to illuminate the subject



so that the shade behind the object can be decreased to get more natural shooting effect.

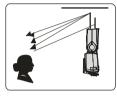


If the wall or ceiling is too far, the bounce flash may be too weak to get enough exposure.

The wall or ceiling should be even and white in order to get efficient reflection; if the reflection surface is not white, the color cast may appear in photo.

## 6. Use Reflection Board for Shooting

Use the reflection board for shooting, pull out the reflection board and the wide-angle panel out from the lamp head at the same time, and then push the wide-angle 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 flash head is upward 90 degrees.

## 7.Use Wide-angle Diffuser Panel

Pull out the wide-angle diffuser panel ,push back the reflection board, and place them according to the picture, the flash range will be increased and the flash effect will be softer and more natural.



# Wireless Flash Shooting

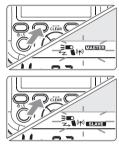
#### 1 Radio Transmission

The YN320EX is fully compatible with radio transmission triggering signal of RF602/RF603 with YN560Li.YN720.YN660.YN560 IV .YN560 III.YN860Li flash and RF602.RF603.RF605.YN560-TX series flash trigger these models turns to radio triggering system and achieve the function of wireless flash shooting. One YN320EX can be used as both master unit and slave unit. In the shooting of radio flash shooting this model supports M/Multi two flash modes when the flash is set to OF.it means 'Flash off' .

## Master unit, Slave UnitSetting

Master unit: Long press the[◄حد] button to enter the trigger mode selection interface short press [Left]or[Right] until the screen displays < (\*) > and < CLASSIES >.press[OK]to save the setting. Slave: Long press the [ + ] button to enter the trigger mode selection interface, short press [Left]or[Right] until the screen displays < (\*)> and

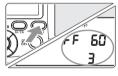
< SLAVE > .press[OK]to save the



# Select Radio Signal

settina.

Enters custom options C.Fn04,set the radio signal to RF602 or RF603. During the triggering process the radio signals of master control unit and slave unit should be the same otherwise the slave unit cannot be triggered.



Please refer to chapter 'Custom Function Setting' (P.44).

#### Channel Setting

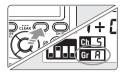
Long press [Gr/CH]button until the <CH> blinks .short press [Left][Right]to select the channel,press[OK]to save the setting. There are 16 channels available, during the radio triggering process, please make sure the channels of the master unit and the slave unit to be



consistent, otherwise the slave unit cannot be triggered.

#### Slave Unit Grouping Setting

Short press[Gr/CH]button on the slave unit and set the flash to the group you need the slave unit has A/B/C/D/E/F 6 groups for choice.Please refer to chapter 'Grouping display status and meaning ' (P.30).



#### Master flash on or off(ON/OFF)

When the YN320EX is used as radio master control unit vou can choose by yourself whether the master unit get involved in flashing or not setting method:in the state of mater control unit.short press[OK]button [≥ ] or



[ ] blinks.through [Left][Right].vou can choose whether the master unit get involved in flashing or not.[27] means master unit flash ON.[....] means master unit flash OFF.

When the high-speed sync flash function is enabled, the master unit will be forcibly set to off.

#### Slave Unit Settings

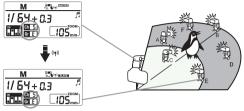
When the YN320EX is used as slave unit, you can not only set the parameters on this flash directly, but also remotely change the parameters from the master control unit. The method of setting the flash mode, flash output, flash coverage directly on this flash is the same as that of the other ordinary on-camera flashes. For remotely controlling the parameters of slave unit, you only need to set the flash mode, flash output, flash coverage of the corresponding groups on the master control unit, these parameters will be synchronized to the slave unit flash of the group.



If you need to control the focal length of the slave unit through the master control unit, you need to set the focal length of the slave unit flash to auto state.

## Master Control Unit Remotely Controls Parameters of Different Slave Unit Groups

Through master control unit, you can remotely change the flash parameters of the slave unit from the 6 groups, A/B/C/D/E/F respectively. On the master control unit, short press[GR/CH], switch to the grouping control interface you need to control,the <Gr A... F> on the master control unit display means the current interface is the flash parameters control interface of the slave unit from the group you set.for example, when the master control unit group displays <Gr E>,it means at this time, you can change the slave unit's flash mode of group E, flash output and focal length, the setting method of setting the flash mode from the master control unit, the setting method of the flash meters is the same as that of the ordinary on-camera flashes. For more grouping meanings, please refer to chapter 'Grouping display status and meaning' (P.30).



In shooting of radio flash,the flash mode, flash output,focal length is controlled by group A.

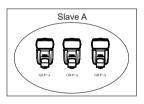
## Use 1-6 Slave Units for WirelessFlash Shooting

On the slave unit flash, short press[Gr/CH]button, set the slave unit to any group of A.B.C.D.E.F.

On the master control unit, short press [Gr/CH]button to switch the flash control group, then change the flash parameters of the corresponding slave unit, realizing the function of controlling the off-camera parameters remotely.

If you need higher flash output or better lighting, you can increase the number of slave unit flashes of one group.

For example, if the groups of three slave units are all set to <A>, they will be used as one flash of the slave unit group.

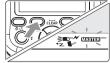


# 2.Optical Transmission

In optical transmission wireless flash shooting, this model supports Sony's optical wireless flash system and S1/S2 optical triggering, it can realize wireless TTL, manual flash function. In optical transmission wireless flash shooting, this model is compatible with Sony's optical transmission wireless signals such as HVL-F60M.HVL-F43M.HVL-F32M, one YN320EX can be used as master control unit and slave unit.

• Master Control Unit Setting
Long press the [←∞] button to enter the trigger mode selection

interface, short press [Left]or[Right]until the screen shows < ∧ > and < comsision > to enter WL optical wireless flash master unit state



In WL optical wireless flash system, the channel of this model is defaulted to CH1

In WL optical wireless flash system, this model only supports TTL flash.

As optical transmission master control unit, the flash mode of the camera needs to be set to wireless remote mode(WL).

### The Master Flash On or Off (ON/OFF) Setting

When YN320EX is used as optical transmission wireless master control unit.vou can choose by vourself whether the master unit participates in flashing or not, short press[OK]button ,[3] or[3]blinks on the screen.through



[Left][Right], you can choose whether the master unit participates in flashing or not. [3] means master unit flash ON, [ ] means master unit flash OFF.

When YN320EX is used as optical transmission wireless master control unit,if the high-speed sync is on,the master control unit is forced to be flash off.

In optical transmission wireless flash shooting, it only supports TTI mode

## Slave Unit Settings

Long press[⁴云▶]button to enter the trigger mode selection interface, short press [Left]or[Right]until the screen shows < ✓>and < SEVE > to enter optical transmission wireless flash slave unit state. When the YN320EX is used as optical transmission wireless slave unit. there are 3 triagering modes.Ss/S1/S2 for choice.



Ss mode: The mode only receives Sony's optical transmission wireless triggering signal supports

TTL wireless flash,the flash output is fully controlled by master unit

In WL optical wireless flash system, the channel of this model is defaulted to CH1.

S1/S2 trigger model are suitable for manual flash environment and TTL flash environment respectively. When YN320EX is in S1/S2 trigger model, the flash mode is defaulted to M mode, short press [Up][Down][Left][Right], you can adjust the flash output.

S1 mode: In this mode it will work with the first flash of the master flash synchronously, with the the same effect of using wireless trigger. To use this mode properly, the master flash should be set to manual flash, do not use the TTL flash system with pre-flash function or the red-eye reduction function with multiple flash.

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 sync with your internal flash properly, you can try using S2 mode.



The following situation shall be avoided when the S1 and S2 modes are used,otherwise,it may lead to out-of-sync flash: the main flash using red-eye reduction function; using flash with multiple flash or using flash trigger as master control unit.

# **Custom Function Setting**

You can customize the flash function according to your requirement. The custom function setting is:long press the function button [Zm/Fn] to enter the custom function setting option, short press[Up][Down]button to select custom items, short press [Left][Right]button to set the parameters of the items

Custom functions supported by YN320EX is as follows:

#### C.Fn 01

SL EP on: Power saving mode is

SL EP - -: Power saving mode is off

O I SL EP

#### C.Fn 02

SE oF 15/30 /1H/2H:In ordinary on-camera mode,the countdown of master control unit auto power-off is 15 minutes/30minutes/1hour/2 hours

02 SE oF 15

#### C.Fn 03

Sd 5 30/15 60/30 120:Idle time before sleep for slave unit is 5/15/30 minutes, countdown to auto power-off is 30/60/120 minutes.

20 03 Sd S 30

#### C.Fn 04

rF 603/2 radio trigger signal is switched to 603 or 602

04 rf 60 3

#### C.Fn 05

Gr ALL:master control unit can remotely control parameters of the slave units from the 6 groups, A/B/C/E/D/F. ©5 Gr AL L

Gr ABC:master control unit can remotely control parameters of

remotely control parameters of the slave units from the 3 groups, A/B/C.

Gr AB:master control unit can remotely control parameters of the slave units from the 2 groups, A/B.

Gr A:master control unit can only remotely control parameters of the slave units from group A.

C.Fn 06

Lcd 7/15/:the back-light time of the LCD screen is 7/15/30 seconds 05 Lc d

C Fn 07

So nd on:Sound prompt function is on.

So nd - -: Sound prompt function is off

07 So nd <sup>5</sup>

C Fn 08

Qu ic - -: Quick Power ON-OFF function is off.

Qu ic on Quick Power ON-OFF function is on

08 9u 1c of

C.Fn 09

CL EA - -: restore advanced options default setting(at this time long press OK button to restore default setting)

09 CL EA

C.Fn 10

VE. XX:Version information of the flash firmware

10 UE r 100

# **Trouble Shooting Guide**

## 1.Unable to power on or flash

Please check if the batteries are installed properly, or the battery power is enough; Please make sure the hot shoe of the flash inserted completely to the hot shoe socket of the camera and lock the locking ring of the flash tightly.

# 2.Unable to flash in optical transmission wireless shooting

For outdoor shooting, please protect the wireless senor of the flash from direct sunlight; Please make sure the slave unit is within effective triggering range.

# 3.Unable to flash in radio transmission wireless shooting

Please make sure the radio trigger signals(602 or 603)of master control unit and slave unit are in the same channel, and the slave unit is placed within the effective triggering range from the master control unit.

## 4. Underexposure and overexposure of photos

Please check if the settings of the camera, the shutter, aperture and ISO are too close to the limit of the flash, or if the settings concerned with the camera are correct.

# 5.Dark corner of photo appears or only part of the object is illuminated.

Please check the current flash coverage of the flash; please check if the lens focal length is out of the flash coverage, if it is, you can try pulling the wide-angle diffuser to extend the flash coverage.

## 6.Flash in error state

Please try turning off the flash and camera, take off the flash from the camera and remount, then restart the power of the flash and camera. If the problems still exist, please contact YONGNUO After-Sale Service Hot line 400-0013-888 or email to service@hkyongnuo.com for help.

# **Specifications**

Zoom range

Insulated Gate Bipolar Translator (IGBT) Circuit design

Guide No 31 (ISO 100, 105mm)

Flash mode TTL, M, Multi

Trigger mode On-camera, 2,4GHz radio trigger, wireless

optical trigger 24. 50.70.105mm Vertical rotation angle -7~90 degrees

Horizontal rotation angle 0~270 degrees

Power supply 2xAA alkaline battery or AA NI-MH battery

Flash times Approx.220 times

Recycle time Approx.2s (with AA NI-MH battery)

Color temperature about 5600k 1/350s~1/20000s Flash time

Flash control 8 levels of output control(1/128~1/1).

22 levels of fine tuning in total

External interface Hot shoe. Micro USB port

Transmission distance 20~25 indoors,10~15 outdoors for photo

sensitive triggering;

Up to 100m for radio triggering Additional functions

Lamp head electric zoom, sound prompt,

power saving mode.overheating protection, auto-save setting

Dimensions 40×65×154mm (extended state)

225g Net weight

Accessories with flash flash\*1,protecting bag\*1,tiny base\*1

## **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 functions on this manual are obtained based on the test conditions of our company. Further notice will not be given if there are any changes for the design and specification. The YONGNUO logo on this manual is registered trademark or trademark owned by SHENZHEN YONGNUO PHOTOGRAPHIC EQUIPMENT Co., Ltd. in China or other countries (regions). All other trademarks are the property of their respective owners.