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Check Before Use

Foreword

Thank you for purchasing the OLOONG product.

The **OLOONG** Speedlight SP-690 II is a high-perdormance CLS-coppatible flash unit with a large guide number of 50(ISO 100,m)(at the 180mm zoom position), the available zoom positions to be automatically adjusted at standard illumination pattern intensity are between 24mm and 180mm.It can serve as an on-camera flash as well as a master unit or a slave unit in a wireless,multiple-Speedlight system to achieve TTL and Manual flash.

It has the following characteristics:

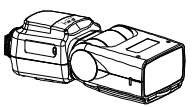
- ❑ High Guide number: 50
- ❑ Low Recycle time:5s (AA alkaline cell used)
- ❑ 22 Level light quantity output control
- ❑ Compatible with Nikon wireless flash(can be used for master or slave)
- ❑ LCD display
- ❑ Compatible with I-TTL autoflash/Stroboscopic flash
- ❑ Power zoom function/Memory function
- ❑ Support front-curtain/rear-curtain sync

To get the most out of your speedlight, please read this manual thoroughly before use.

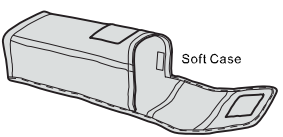
Include items

The SP-690 II comes with the following accessories.Check that all items are included before use.

- ❑ Soft Case
- ❑ Warranty card
- ❑ Speedlight Mini Stand
- ❑ User's manual



SP-690 II



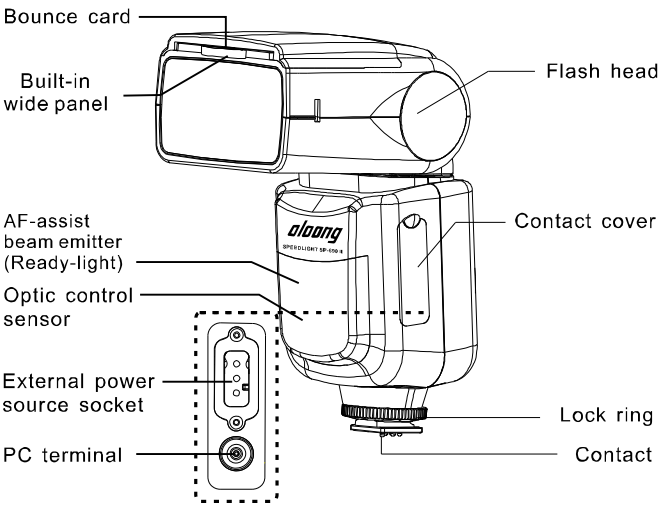
Soft Case

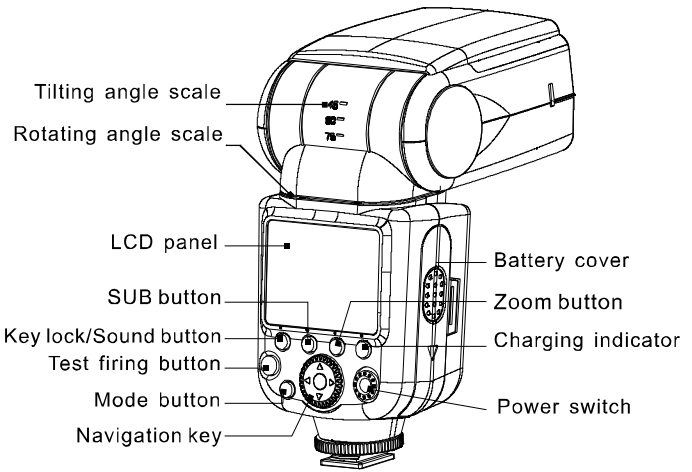
Mini Stand

Warning ⚠

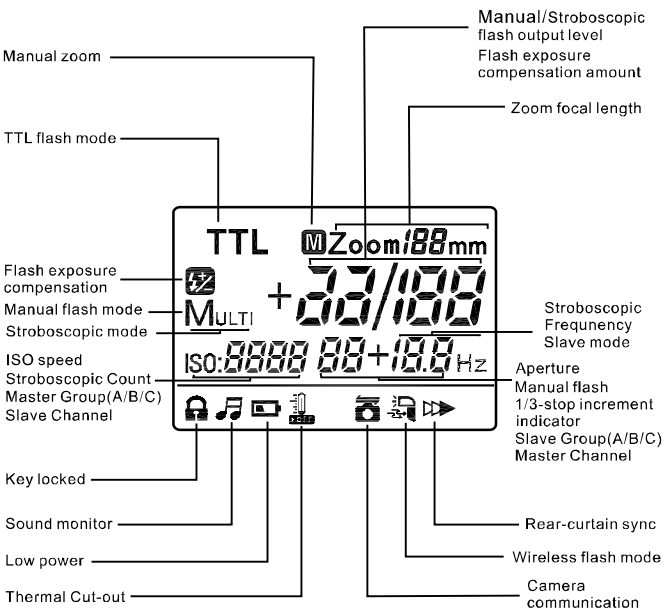
1. Do not use the unit in the presence of flammable or explosive gas.
2. If the flash unit is dropped and damaged, do not touch any exposed interior metal parts.
3. If you detect heat, smoke or notice a burning smell, immediately stop operation and remove the batteries to prevent the unit from catch on fire or melting.
4. If corrosive liquids seep from the batteries and get in your eyes, immediately wash your eyes with running water and consult with a doctor.
5. The flash unit should never be submerged in liquid or exposed to rain, sweat or moisture. If water or moisture gets inside the unit, this could cause the unit to catch on fire or cause an electric shock.
6. Do not use the unit on the people who need a high degree of attention, this could cause a accident.
7. Do not fire the flash unit directly into the eyes of someone that is at close range , as it could damage the retinas of their eyes. Never fire the flash unit closer than 1 meter from infants.
8. Keep small accessories out of the reach of children to avoid the possibility of the accessory being swallowed. If an accessory is accidentally swallowed, immediately consult with a doctor.
9. Never attempt to disassemble or repair the flash unit by yourself, this could lead to personal injury.
10. Use standard size (AA) , or other common rechargeable batteries such as Ni-Cd and Ni-MH battery types. Do not recharge these batteries with their terminals before they work.
11. Please use standard size(AA) or other common rechargeable batteries.Do not use these batteries with their terminals reversed.
12. To prevent overheating and damage the flash head ,do not fire in quick succession beyond 25 times when you use 1/1 level .If you fire beyond 25 times in 1/1 level, the overheating protection mode will be activated, you can hear short beeps for 15 seconds. And you must turn off the power , wait until the flashlight cools down after 15 minutes.

Nomenclature



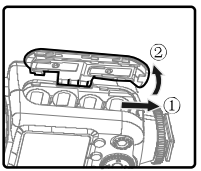

Tilting angle scale
Rotating angle scale
LCD panel
SUB button
Key lock/Sound button
Test firing button
Mode button
Navigation key
Battery cover
Zoom button
Charging indicator
Power switch

LCD Panel


Manual/Stroboscopic flash output level
Flash exposure compensation amount
Manual zoom
Zoom focal length
TTL flash mode
TTL
Zoom
mm
Flash exposure compensation
Manual flash mode
Stroboscopic mode
MULTI
Stroboscopic Frequency Slave mode
ISO speed
Stroboscopic Count
Master Group(A/B/C)
Slave Channel
ISO:
Hz
Aperture
Manual flash 1/3-stop increment indicator
Slave Group(A/B/C)
Master Channel
Key locked
Sound monitor
Low power
Thermal Cut-out
Rear-curtain sync
Wireless flash mode
Camera communication

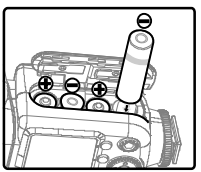
Basic Operation

STEP 1 Inserting the batteries



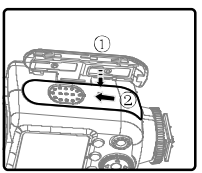
1 Open the cover.

Slide it as shown by the arrow to open the cover.



2 Install the batteries.

Make sure the + and - battery contacts are properly oriented as shown in the compartment.

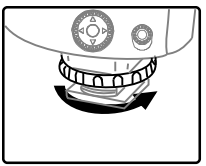


3 Close the cover.

Close the battery compartment cover and slide it as shown by the arrow.

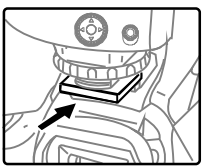
- Using size-AA alkaline,Ni-MH or lithium batteries other.
- When battery power is low,<▭>is displayed.Replace or recharge batteries.
- Use a new set of four batteries of the same brand.
- Using size-AA batteries other than the alkaline type may cause improper battery contact due to the irregular shape of the battery contacts.
- If you change the batteries after firing many flashes continuously be aware that the batteries might be hot.

STEP 2 Attaching to the camera



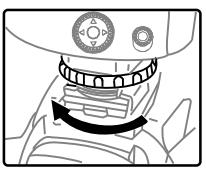
1 Ready to attach the Speedlight.

Loosen the locking ring by turning it in the direction of the arrow.



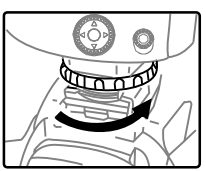
2 Attach the Speedlight.

Mount the Speedlight into the camera's hot shoe all the way.



3 Secure the Speedlight.

Turn the locking ring in the direction of the arrow tighten.

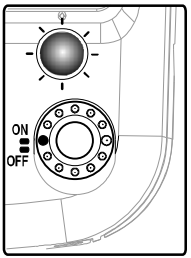


4 Detach the Speedlight.

loosen the locking ring to the top, then remove the flashlight from camera's hot shoe.

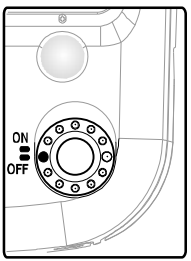
- Attach or detach the speedlight ,you must loosen the locking ring to the top,then slide the speedlight slowly in or out.

STEP 3 Turn on the power



1 Turn on the power.

Turn the Power switch to<ON>. The charging Indicator is red, then change green after a few seconds, and you can hear two beeps, the flashlight is ready now.



2 Turn off the power.

Turn the Power switch to<OFF>.

- If the charging indicator is always red, and<🔋> is displayed, please replace the batteries with new ones.
- In order to save power,the flashlight will enter sleep state in 3 minutes(specially,it will not sleep in slave mode), the LCD is not displayed,and you can press the shutter button halfway or <PILOT> button to wake it up.
- To test the flashlight,please press the <PILOT> button.

Basic Operation

About the pilot lamp & supporting function

Status of Charging indicator	Speedlight condition	Operation
The red light is lit	Charging	Normal
The green light is lit	The flashlight is fully charged, can be used	Normal
The red light is lit for a long time	Battery power is low	Replace the batteries

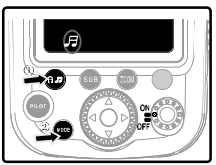
Supporting function

LED Backlit

- Turn the [Power ON-OFF] switch to <ON>, the backlit is on. When the flashlight has no action in 15 seconds, the backlit will turn off, and press any buttons can turn on.

Basic Operation

❑ Sound monitor



1 Enable Sound monitor.

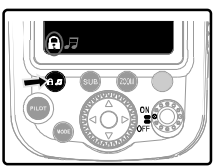
Press <A.B> button , the<♫> will blink,then press<MODE>button to confirm.

2 Disable Sound monitor.

When the Sound monitor was enable,press <A.B> button,the <♫> will blink,then press <MODE> button to confirm.

Sound monitor	Speedlight condition
One beep	Press button/Normal flash
Two beeps	The flashlight is fully charged
Short beeps for 15 seconds	Enter Overheating protection mode

❑ Key lock



1 Enable Key Lock.

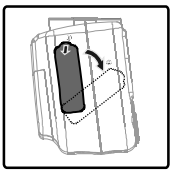
Press <A.B> button , the<🔒> will blink,then press<MODE>button to confirm.

2 Disable Key Lock.

When the key was locked,press <A.B> button for 2 seconds,when the <🔒> disappeared, all buttons can be used.

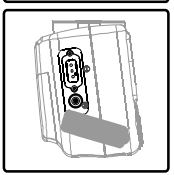
❑ Extended interface

Use of extended interface can be connect to an external power source or PC sync.



1 Ready to connect to an external power source and PC sync.

Slide it as shown by the arrow to open the cover.



2 Connecting.

① External power source:Provides a stable power supply.

② PC Sync: Speedlight sync with camera.

- External power source:Use of an optional external power source provides a stable power supply , increases the number of flash firings and shortens recycling time. Canon CP-E4 external power source can be used with SP-690 II.
- PC Sync:By connecting to the PC terminal, you can make the flash synchronously. This PC terminal only receives synchronous signal input without supporting synchronous signal output.

❑ Temperature monitor

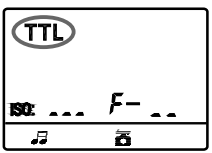
The SP-690 II features thermal cut-out,which offers protection against raised operating temperature.

- If the temperature of the unit raises as a result of the Xenon tube, <🌡> will be displayed on the LCD, you can hear short beeps for 15 seconds, and the flashlight is locked. Please turn off the speedlight for 10 minutes until it cools down.
- Specially,the SP-690 II enters overheating protection mode,when the number of continuous firing beyond 25 times at 1/1 level.

Flash Modes

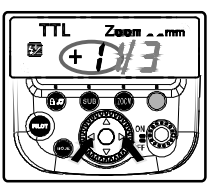
I-TTL mode

Information obtained by monitor pre-flashes and exposure control information is integrated by the camera to automatically adjust flash output levels.



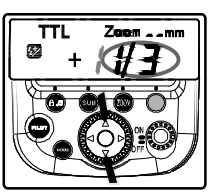
1 Set the speedlight to <I-TTL> mode.

SP-690 II can support I-TTL autoflash mode. When use this mode,<TTL>appears on the LCD.The default flash exposure compensation is 0.



2 Coarse tuning the flash exposure compensation.

Press left/right navigation to decrease/ increase the flash exposure compensation (with 1 steps).



3 Fine tuning the flash exposure compensation.

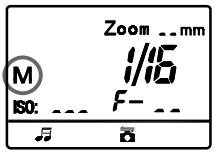
Press up/down navigation to decrease/ increase the flash exposure compensation (with 1/3 steps).

- When using with a CLS-compatiable camera and a CPU lens, SP-690II's ISO sensitivity,aperture and focal length are automatically set according to camera setting.

Flash Modes

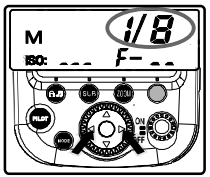
Manual mode

You can set the flash setting to manual mode when you need. And you can choose the exposure flash power level between 1/1 to 1/128.Specially, the Flash output level changes in ±1/3 steps by using navigation key.



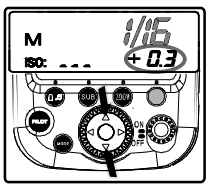
1 Set the speedlight to <M>.

The default output power is 1/16.



2 Coarse tuning the flash power.

Press left/right navigation to decrease/ increase the flash output level(with 1 steps).



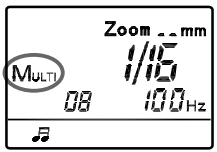
3 Fine tuning the flash power.

Press up/down navigation to decrease/ increase the flash output level(with 1/3 steps).

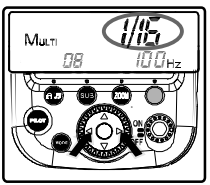
Flash Modes

MULTI (Stroboscopic) mode

In Multi mode,the SP-690 II fires repeatedly during a single exposure, creating stroboscopic multiple-exposure effects.This operation is useful when shooting fast-moving subjects.
You can set the firing frequency(number of flashes per sec.expressed as Hz),the number of flashes,and the flash output.

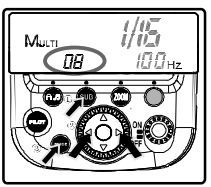


1 Set the speedlight to <MULTI>.



2 Turn the flash power.

Press left/right navigation to decrease/ increase the flash output level (with 1 steps).

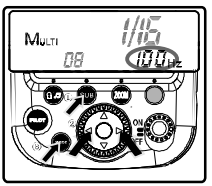


3 Set the number of flashes (times).

① Press the <SUB>button ,the number blinks.
② Press left/right navigation to decrease/ increase the number.And up/down navigation can change the number to max/min.
③ Press the <MODE>button to confirm.

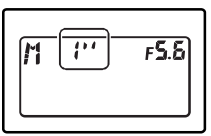
Flash Modes

MULTI (Stroboscopic) mode



4 Set the firing frequency.

① Press the <SUB>button ,the number blinks.
② Press left/right navigation to decrease/ increase the number.And up/down navigation can change the number to max/min.
③ Press the <MODE>button to confirm.



5 Set the shutter speed.

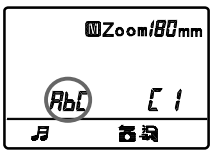
- Use the following equation to determine the shutter speed and use a shutter speed one or more steps slower than the calculated shutter speed.
  Shutter speed=Number of flasher per frame÷Frequency of flash(Hz).
- For example,if the number of flashes per frame is 10 and the frequency is 5Hz, divide 10 by 5 to get a shutter speed of 2 seconds or slower.(Set shutter speeds of slower than 2 seconds.)
- B(bulb) can be used for the shutter speed.

- Using a tripod,a remote switch,and external power source is recommended.
- To avoid overheating and deteriorating the flash head,don't use stroboscopic flash more than 10 times in succession.After 10 times,allow the speedlight to rest for at least 15 min.
- The maximum flash firing number deals with flash output level, frequency.You can check the appendix.

Wireless Modes

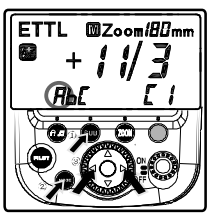
Master mode

SP-690 II can be used for master unit of CLS system.In this mode,you can divide the slave units into three groups and set the flash mode and flash output level compensation values separately for each group as well as the master flash unit.



1 Press the <MODE> button to choose master mode.

〈AbC〉icons correspond to A,B,C groups.

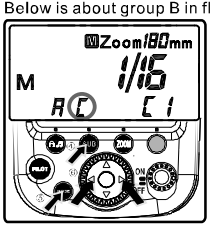


2 Set flash mode for each group.

① Press the <SUB> button, that group A blinks.
② Press the <MODE> button to choose flash mode.
③ Press navigation to choose compensation value.

- The following three flash modes are available: i-TTL mode, Manual mode,Flash canceled.
- In flash canceled mode, the group will be directly closed to avoid unnecessary interference.

Below is about group B in flash canceled mode.

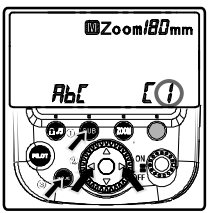


④ Press the <SUB> button,select other group.
⑤ Press the <MODE> button to choose flash mode.
⑥ Press navigation to choose compensation value.

- For more information of setting compensation value,check P14.

Wireless Modes

Master mode



3 Set channel.

① Press the <SUB> button , that channel number blinks.
② Press left/right navigation to decrease/increase the channel number.
③ Press the <MODE> button to confirm.

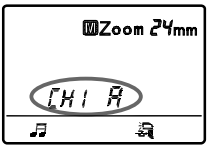
- Select channel number between 1 and 4.

- If another photographer uses the same type of wireless slave flash setup close by,your slave flash units may accidentally fire in sync with that photographer's master flash unit.To avoid this,use a different channel number.
- For master unit,SP-690 II can control Nikon SB-600/700/800/900 and OLOONG SP-660 II/680 II/690 II.
- SP-690 II can't support high-speed wireless flash,don't set the shutter to 1/200 or more.
- SP-690 II can't support Repeating flash mode(RPT).
- For master unit,SP-690 II is similar with Nikon SU-800 without exposure itself.When using the wide panel,the effective shooting distance is wider, even slave units which in camera rear side also be fired in sync.

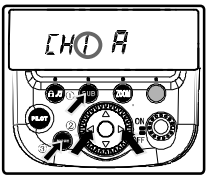
Wireless Modes

Slave mode

For slave unit,SP-690 II can receive signals from OLOONG SP-690 II(master),Nikon SB-600/700/800/900 and Nikon camera commander function.In this mode,you can divide the slave units into three groups and set the flash mode and flash output level compensation values separately for each group as well as the master flash unit.



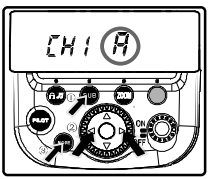
1 Press the <MODE> button for 2 sec. to choose slave mode.



2 Set channel.

① Press the <SUB>button ,that channel number blinks.
② Press left/right navigation to decrease/ increase the channel number.
③ Press the <MODE>button to confirm.

- Select channel number between 1 and 4.



3 Set group.

① Press the <SUB>button ,that group number blinks.
② Press left/right navigation to decrease/ increase the group number.
③ Press the <MODE>button to confirm.

- Select group number from A/B/C.

- SP-690 II is compatible with Nikon TTL and M wireless flash, without supports Auto aperture flash andRepeating flash mode.
- SP-690 II can't support high-speed wireless flash,don't set the shutter to 1/200 or more.
- Using a camera's built-in flash as a master flash unit to trigger the slave unit,you must raise the built-in flash.

Ready-light and parameter display

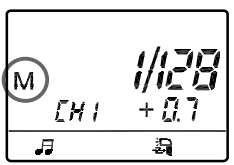
Ready-light

- In slave mode,the ready-light is set to blink.

Parameter display

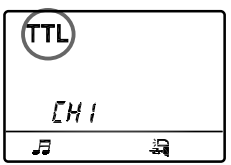
- The master's Parameters will appear on the LCD when SP-690 II received a valid Nikon or Canon wireless flash.

For example



If received M wireless flash ,the icon <M> and master's parameters will appear on the LCD.

- Fine tuning information appear in the group area,display time approximately 3 seconds.



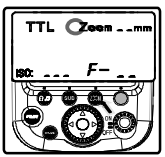
If received TTL wireless flash ,the icon <TTL> will appear on the LCD.

Advanced Application

Power zoom function

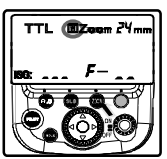
The power zoom function automatically adjusts the zoom position to match the lens focal length.When you want to change the zoom position to one that does not match the focal length,you should adjust the zoom position manually. Specially,the available zoom positions to be adjusted are between 24mm and 180mm.

Auto zoom



Press the <ZOOM> button,then press the navigation key to indicate< M > disappears.

Manual zoom



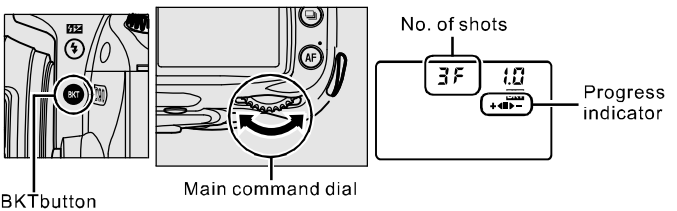
Press the <ZOOM> button,then press the navigation key to indicate< M > on the LED,and use left/right navigation to decrease/increase the value.Specially,press up navigation can change the zoom position to 180mm;press down navigation can change to auto zoom mode.

- If you set the flash zoom manually,make sure it covers the lens focal length so that the picture will not have a dark periphery.
- If you use a commercially-available sync cord to connect the camera to speedlight's PC terminal,set the flash zoom manually.

Flash exposure bracketing

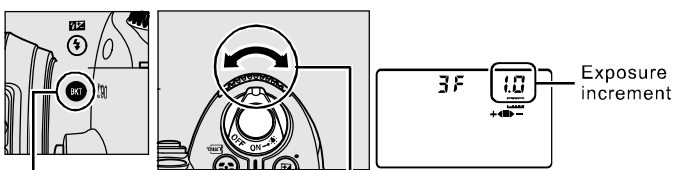
1 Choose the number of shots.

Press the BKT button and rotate the main command dial to choose the number of shots in the bracketing sequence.



2 Select an exposure increment.

Press the BKT button and rotate the sub-command dial to choose the exposure increment from values between 0.3EV and 2.0EV.



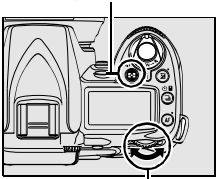
✱Screens from the Nikon-D90

- To cancel bracketing , press the BKT button and rotate the main command dial until the number of shots in the bracketing sequence is 0.

Flash value lock(FV Lock)

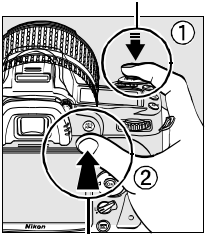
Using FV Lock,you can lock in the appropriate flash exposure,while keeping the subject illumination constant even if you change the composition.

Metering method button



Main command dial

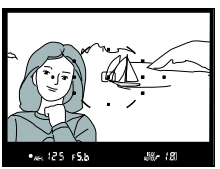
Shutter-release button



AE-L/AF-L button

1 **Select mode P,S,or A and choose center-weighted or spot metering.**

2 **Focus the subject,and press the AE-L/AF-L button.**

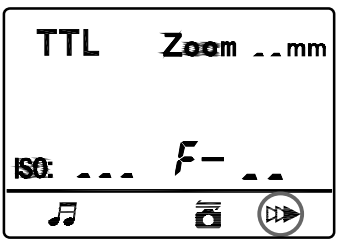


3 **Keeping the AE-L/AF-L button pressed,recompose the photograph and shoot.**

✱Screens from the Nikon-D90

Front-curtain/Rear-curtain sync

In front-curtain sync,the flash fires immediately after the front curtain opens completely;
In rear-curtain sync,the flash fires just before the rear curtain starts to close.
In normal flash photography,when shooting fast-moving subject at slow shutter speeds,please use rear-curtain sync,a moving subject will appear with such moving marks behind.



When you select rear-curtain from the camera,<⚡▶> appears on the LCD of SP-690 II.

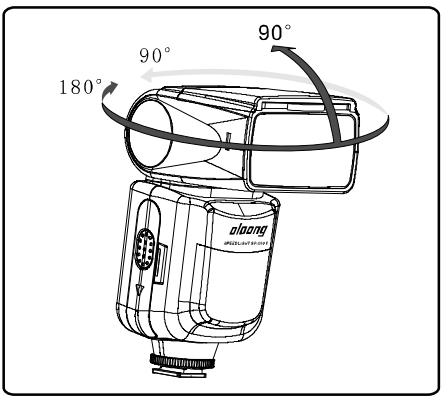
- Since slow shutter speeds are usually used,use a tripod to prevent camera shake.
- With I-TTL , two flashes will be fired even at slow shutter speeds. The first flash is only the preflash,and not a malfunction.

Advanced Application

AF assist beam emitter

Under the low light condition, in the dark place, AF assist light will automatically emitt the red colored beam and illuminate the subject, so that the camera can easily focus the subject in darkness.

Bounce flash operation



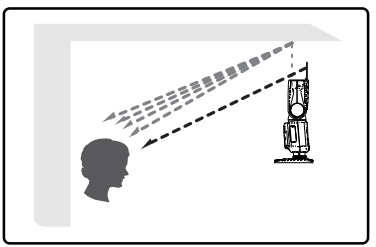
Tilt or rotate the SP-690 II's flash head to bounce the light off the ceiling or walls,providing more natural-looking pictures of people with softer shadows.

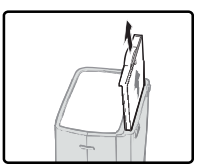
- If the wall or celling is too far away, the bounced flash might be too weak and result in underexposure.
- If color photography, select white or highly reflective surfaces to bounce the light off of. Otherwise, your pictures will come out with an unnatural color cast similar to that of the reflecting surface.

Advanced Application

Use bounce card

In bounce flash photography,use the SP-690 II's built-in bounce card to create a highlight in the subject's eyes,making the eyes look more vibrant and avoiding illuminating the front of the subject.

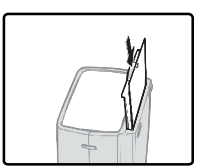




1 **Point the flash head upward by 90°.**

2 **Pull out the wide panel.**

The catchlight panel will come out at the same time.



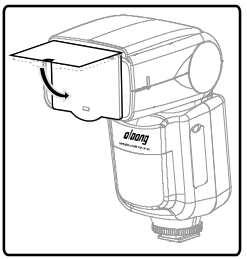
3 **Push the wide panel back in.**

Push in only the wide panel.

- Point the flash head straight ahead and then upward by 90°.The catchlight will not work if you swing the flash head left or right.
- For maximum catchlight effect,stay with 1.5m(4.9ft) of the subject.

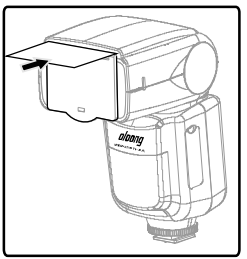
Use the wide panel

When the distance between the camera an subject is less than approx. 2m, you can take more natural-looking close-up pictures using the wide panel.



1 Pull out the wide panel.

Slowly pull out the wide panel all the way, and position it over the flash head.



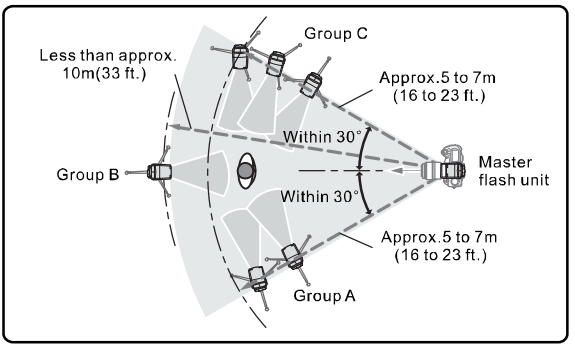
2 Push the bounce card back in.

- Slowly pull out the wide panel all the way, and position it over the flash head.

Advanced Application

Advanced wireless flash

SP-690 II supports multiple wireless flash mode,you can use as a slave unit of optical slave to create flash group.



- SP-690 II supprots Nikon CLS system.
- SP-690 II can be used for master flash.
- Be sure to test the wireless flash operation before shooting.
- Used as a slave unit,can set the SP-690 II at any place(must confirm the slave units can receive the optical signal).
- As a basic guide,the effective shooting distance between the master and slave units is approx.10m (33 ft.) or less in the front position,and approx.7m (23 ft.) at both sides.These ranges vary slightly depending on the ambient light.
- Indoors,the wireless signal can also bounce off the wall,so there is more leeway in positioning the slave units.
- Be sure to place all slave units that are set in the same group close together.
- Don't place any obstacles between the master unit and slave units.Obstacles can block the transmission of wireless signals.

Troubleshooting Guide

The Speedlight does not fire

Cause: The batteries are installed in the wrong orientation.
Solution: Install the batteries in the correct orientation.

Cause: The batteries are exhausted.
Solution: Replace the batteries.

Cause: The Speedlight is not attached securely to the camera.
Solution: Attach the Speedlight's mounting foot securely to the camera.

Cause: The electrical contacts of the Speedlight and camera are dirty.
Solution: Clean the contacts.

Flash button does not respond

Cause: Control buttons are locked.
Solution: Look at the LCD display,if< >icon appears,please press< > button to close it.

Cause: Button or circuit damage.
Solution: Take your Speedlight to a retailer or **OLOONG** representative for repair.

The slave unit does not fire

Cause: The slave's mode is wrong.
Solution: Please set it to wireless flash mode as the master units.

Cause: The slave unit(s) is not positioned properly.
Solution: Place the slave unit within the master unit's transmission range.

Exposure FAQ

Cause: Photos are under exposure or over exposure.
Solution: Check if the set shutter, aperture and ISO are too near the flash limit.Or adjust flash output intensity.

Cause: The periphery or bottom of the picture looks dark.
Solution: If the subject is closer than 2 m , tilt the flash head downward by 7° .

Specifications

Type:	On-camera,I-TTL autoflash speedlight
Guide No.:	GN 50(at 180mm focal length,ISO 100)
Flash coverage:	24-180mm ● Auto zoom(Flash coverage set automatically to match the lens focal length) ● Manual zoom
wireless mode:	● Nikon wireless flash mode (master&slave modes)
Voice:	Beep
Display type:	LCD display & LED backlit
Protection type:	Thermal Cut-out
Power supply:	4×AA size batteries(Alkaline & Ni-Mh & Lion)
Flash time:	1/800~1/20000S
Recycle time:	approx 5s(AA alkaline cell use) approx 2s(AA Ni-Mh cell use)
Color temperature:	5600K
Flash control:	22 Levels light quantity output control(1/1 ~1/128,14 levels of fine tuning); I-TTL autoflash
Power saving:	Auto power off after 15 minutes in stand-by mode
Vertical rotation angle:	-7° ~90°
Horizontal rotation angle:	0° ~270°
Dimensions:	196. 5mm(L) × 77. 5mm(W) × 58. 5mm(H)
Net weight:	430g

- This manual content is followed the test from **OLOONG** company.
- Design an specification subject to change without notice.

Appendix

Guide No. (at ISO 100, in meters/feet)

Flash output level	Zoom position(mm)									
	24	28	35	50	70	85	105	120	135	180
1/1	25.4	27.9	31.4	35.8	39.3	41.5	44.4	46.9	48.4	50
1/2	18.0	19.7	22.2	25.3	27.8	29.3	31.4	33.2	34.2	35.4
1/4	12.7	14.0	15.7	17.9	19.7	20.8	22.2	23.5	24.2	25
1/8	9.0	9.9	11.1	12.7	13.9	14.7	15.7	16.6	17.1	17.7
1/16	6.4	7.0	7.9	9.0	9.9	10.4	11.1	11.8	12.1	12.5
1/32	4.5	5.0	5.6	6.4	7.0	7.4	7.9	8.3	8.6	8.9
1/64	3.2	3.5	4.0	4.5	5.0	5.2	5.6	5.9	6.1	6.3
1/128	2.3	2.5	2.8	3.2	3.5	3.7	4.0	4.2	4.3	4.5

Appendix

Referring to the table below,set the flash output level,the frequency, and the number of repeating flashes separately for each picture.

Maximum number of repeating flash per frame

Frequency	Flash output level				
	M1/8	M1/16	M1/32	M1/64	M1/128
1Hz	14	30	60	90	90
2Hz					
3Hz	14	30	60	90	90
4Hz	12	20	50	80	80
5Hz	10	20	40	70	70
6Hz	8	20	32	56	56
7Hz	6	20	28	44	44
8Hz	6	20	24	36	36
9Hz	5	10	22	32	32
10Hz	5	10	20	28	28
20Hz	4	8	12	24	24
30Hz					
40Hz					
50Hz					
60Hz					
70Hz					
80Hz					
90Hz					
100Hz					

oloong

SHENZHEN TRONGASONIC ELECTRONICS CO.,LTD.
Xinwei Industrial park,Pingdi,Longgang,ShenZhen,China

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