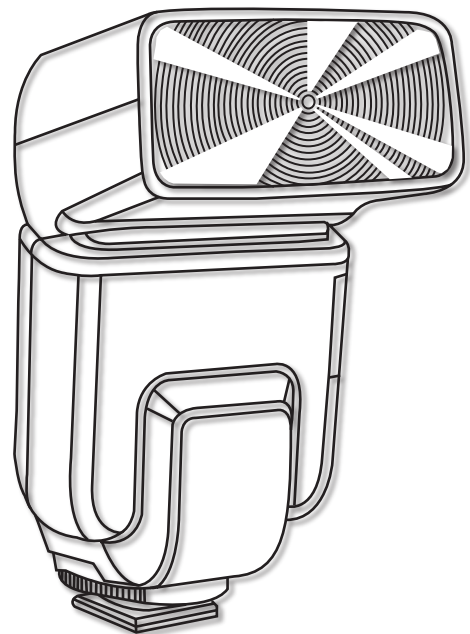


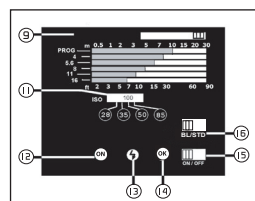
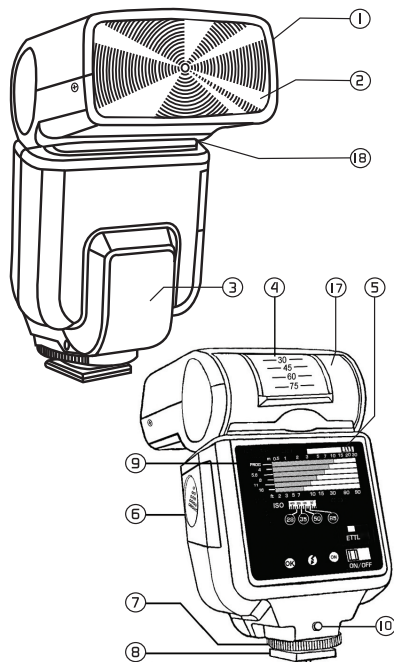
SFD35

Dual Autofocus Flashgun

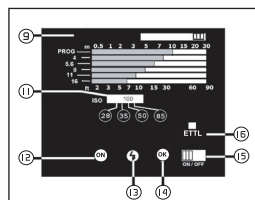
Dedicated System



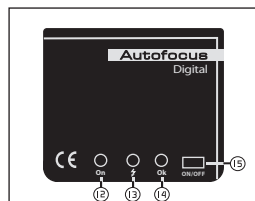
OPERATING INSTRUCTION MANUAL



for Nikon



for Canon



for Sony

NOMENCLATURE

1. 4 position Zoom Head
2. Fresnel lens
3. AF illuminator beam
4. Bounce Head Scale
5. ISO Setting knob
6. Battery Compartment Lid
7. Locking Ring / Release Button (For Sony)
8. Hot Shoe Foot
9. Exposure/Distance Table
10. Flash Test Button
11. ISO/Zoom Head Setting Window
12. Power On Indicator
13. Ready Lamp
14. Green Auto Check Lamp
15. ON/OFF Switch
16. E-TTL Indicator (For Canon) Flash Mode Switch (for Nikon)
17. Vertical Bounce Flash Head
18. Horizontal Swivel Pivot

PRECAUTIONS

Before you start to operate the flash unit, please read the following caution to prevent possible damages.

1. This flash unit can only be used on the camera brand according to the dedicated mounting which is designed for.
2. Any attempt to dismantle the flash will result in possible electric shocks or burns. If the outer casing is cracked or flash unit is faulty, please return to the authorized dealer for repairs by authorized personnel.
3. Do not attempt to trigger the flash close to eyes. Keep at least 1m/3.3ft when taking flash photography.
4. When the flash unit is not used for extended period of time (more than 2 weeks), remove all batteries to prevent battery leakage.
5. Try to charge fully and fire the flash several times in a month to ensure that the electronic circuitry as well as the capacitor is kept in a tip-top condition.
6. During battery replacement, replace all 4 batteries of the same type at the same time.
7. Flash unit should be kept dry at all times as it is not either waterproof or weatherproof. Often it impractical to repair/replace components damaged by water.
8. Care must be taken as this flash unit is a precise equipment. Any accident knocks or drop may result in permanent damage to the circuitry and components which may not be feasible to undergo repairs.
9. Always store the flash unit in a cool dry place, away from heat or direct sunlight. Never store the flash in a drawer or cupboard containing naphthalene or camphor (moth balls) as these will have a negative effects on the circuitry of the flash unit.
10. Do not use a thinner, benzene or other cleaning agents to remove dirt or fingerprint from the unit. Use a soft, moistened cloth instead.

INSTALLING THE BATTERIES

Ensure that the ON/OFF switch (15) is in the OFF position. Slide the battery compartment Lid (6) toward the front of the flash and flip up until the battery chamber is fully exposed. Insert 4 AA sized batteries according to the battery polarity indication as shown inside the battery chamber. Close the battery compartment lid (6) by pushing it down while sliding towards the back of the flash.

MOUNTING THE FLASH ON THE CAMERA

Ensure that ON/OFF (15) switch is at the OFF position. Slide the Hotshoe Foot (8) onto the camera's hotshoe and fasten the locking ring (7) in an anti-clockwise motion. To detach the flash unit, turn the locking ring (7) in a clockwise motion until it stops.

For Sony Alpha DSLR, ensure that the camera's hotshoe is fully push in until the Release button (7) pop up. To detach the flash unit, depress the release button (7) and at the same time pull the flash unit from the camera's hotshoe.

Note: Ensure camera inbuilt flash is at the 'close' position. Grasp the bottom of the flash to prevent damage to the hotshoe foot (8) and camera hotshoe.

OPERATING THE FLASH

Slide the ON/OFF switch to the left and wait for a humming sound to be heard (occur when the flash is switch on). When the ready lamp (13) located the back of the flash light up, the flash is ready to fire. Pressing the flash test button (10) will fire the flash to insure its operation.

AUTO STANDBY SYSTEM

To conserve battery power, the flash unit will automatically turn to standby mode when the flash is not used for approximate 3 minutes. To on the flash again, either press the flash test button (10) or switch off and on again using the ON/OFF switch. When the flash is not in use for extended period of time, slide the ON/OFF switch to the off position.

EXPOSURE/DISTANCE TABLE*

This is a guide table showing the maximum effective range based on different combination of ISO, zoom lens and aperture setting.

Base on the ISO window (11), setting the ISO setting knob (5) according to the ISO and zoom head position will show the maximum effective TTL range of the flash unit.

For example, at ISO 100 set at zoom position 50mm, the effective TTL range, according to 5 different F/stop setting is listed out as follows:

F/stop	Maximum Effective TTL Range (ISO 100)
F2.0	17m / 56ft
F2.8	12m / 40ft
F4.0	8.5m / 28ft
F5.6	6.0m / 20ft
F8.0	4.3m / 14ft

*For Canon and Nikon only

USING THE AUTO CHECK LAMP

The green auto check lamp (14) located at the back of the flash is used to ensure that your subject is within the effective TTL range of the flash unit. When the ready lamp (13) is on, press the camera shutter release button to fire the flash. If your subject is within the effective TTL range, the green auto check lamp will illuminate for approximate 2 seconds indicating correct flash exposure has been obtained. If the green auto check lamp does not illuminate, it meant that the subject is not within the effective range. In this situation, move closer to the subject and try again.

FLASH MODE SWITCH SELECTION (For Nikon only)

The flash mode switch (16) is used to select between automatic balanced i-TTL flash mode (BL) and standard i-TTL mode (STD). Regardless of the flash mode selected, preflashes are fired by the flash and reflected to the camera auto flash sensor, after which the camera will automatically control the flash output for correct exposure.

AUTOMATIC BALANCED (BL) i-TTL mode

When this mode is selected, preflash will first be fired to determine the subject and background lighting. The flash output will then be automatic adjusted for a perfect balanced exposure lighting between the subject and the background.

STANDARD (STD) i-TTL mode

When this mode is selected, preflash will first be fired to determine the subject lighting. The flash output will then be automatically adjusted to ensure that the main subject is sufficiently exposed irregardless of the background lighting. This mode is mainly used for long distance photography and often produce well illuminated subject. This mode is particularly useful when there is strong background lighting which may render underexposed subject when BL mode is being used.

PROGAM TTL MODE


Program TTL mode is one of the most popular and easy way of using Digital SLR cameras.

This flash unit provide full automatic TTL(Through the lens) control of flash exposure when used on dedicated model with inbuilt hotshoe dedication which provides the ETTL/TTL (for Canon) or i-TTL (for Nikon) auto flash metering features (Please refer to your camera owner's manua).

When using the flash unit outdoor under sunlight, the flash will automatically reduce its output to properly illuminate the subject. To use this flash unit in program mode, set your camera to 'P' (Program) mode or 'Auto' mode.

Once the camera is set to any of the above 2 modes, the flash unit will automatically fire the correct exposure to properly illuminate the main subject and background. This TTL dedicated mode can be used on practically any situation ranging from total darkness to daylight/ambient light.

Below are the steps that you need to follow to use the flash unit in program TTL mode:

1. Set the camera to P or Auto mode.
2. Slide the ON/OFF switch to the ON position.
3. For Canon: If the camera body supports E-TTL, the E-TTL indicator (16) will light up; For Nikon: Select the flash mode (16) (Automatic Balance iTTL or Standard iTTL)*.
4. Check that distance to the subject is within the effective TTL range as indicated on the exposure/distance table.
5. Focus on the subject
6. Press the shutter button fully to take the picture after ensuring that the ready lamp is on. When the flash is fully charged, the flash indicator  will also be lit in the camera viewfinder.
7. To confirm that the flash unit fires the correct exposure, the Green autocheck lamp will light up for approximate 2 seconds. In the event that the green lamp does not lit, retake the picture at a closer distance.

* -Depends on your camera body. Check your owner manual for availability of Automatic Balanced or Standard i-TTL features.

Auto TTL Mode

This flash unit can also be used with the camera set at any of the preset program mode (AV-Aperture priority, TV-Shutter Speed priority, Manual Exposure).

AV Aperture Priority Mode

This mode permits you to set the aperture value manually while the shutter speed will be automatically set by the camera. When using this mode, the flash exposure will be automatic controlled by the camera base on the combination of shutter speed, aperture value and the flash mode (16) selected on the flash unit.

TV Speed Priority Mode

This mode permits you to select your desired shutter speed* and the aperture value will be automatically selected by the camera. When using this mode, the flash exposure will be automatically controlled by the camera based on the combination of shutter speed, aperture value and the flash mode (16) selected on the flash unit.

*Check with your camera manual for the maximum flash synchronization speed.

Manual Mode

This mode permits you to manually select your desired shutter speed and the aperture value. When using this mode, them flash exposure will be automatically controlled by the camera based on the combination of shutter speed, aperture value and the flash mode (16) selected on the flash unit.

USING THE ZOOM HEAD

For wide angle picture taken at 28mm, set the zoom head position of the flash unit to 28mm or 35mm (35mm equivalent) depending on the zoom position of the lens*. This will help to ensure that the angle of lens coverage is adequately illuminated by the flash unit.

For telephoto pictures taken at 85mm and above (35mm equivalent), set the zoom head position to 85mm on the flash unit.

*Note: For Canon Digital SLR cameras, the lens conversion factor to 35mm equivalent is usually 1.6x of the range indicated on the camera lens. For example, a zoom range of 18-55mm, when converted into 35mm equivalent is approximate 29 – 90mm.

*Note: For Nikon Digital SLR cameras, the lens conversion factor to 35mm equivalent is usually 1.5x of the range indicated on the camera lens. For example, AF-S Nikkor 18-55mm ED lens, when converted into 35mm equivalent is approximate 27 – 82.5mm.

USING THE BOUNCE AND SWIVEL HEAD

When using a direct flash on the subject, pictures taken will either result in excessive shadow being formed behind the subject or that the subject will be slightly over illuminated even though flash control is automatic.

To resolve the above two issues, you can use different combination of bounce head position ranging from 0-90 degree as well as the swivel feature from 0-330 degree. In this way, you can eliminate the shadow issues as well as produce more natural pictures.

For best results, it is recommended to bounce/swivel off white walls or ceiling* with the zoom head set at the 50mm position. To ensure correct flash exposure, check that the green auto check lamp lit after taking the picture.

*Note that the maximum flash distance is reduce considerably because light travel indirectly to the subject over an increased distance and will usually lose 2-3 aperture of light (f/stops) even though the reflection surface is white. The bounce and swivel head must be adjusted properly to achieve the best possible lighting effect.

TROUBLESHOOT GUIDE

If for some reasons, the flash unit does not work properly, refer to the below troubleshooting guide.

Problem Issue	Possible cause(s)	Solution
Flash unit charges but does not fire	Batteries are exhausted	Replace all 4 batteries (recommended NiMH batteries)
	Metal contacts on either the flash unit or camera are dirty	Use microfibre cloth to wipe the metal contacts and remount the flash
Flash unit does not charge at all	Orientation of the batteries is wrong	Install again the battery polarity according to the indication in the battery compartment
	Battery compartment lid is not being close fully	Reopen the battery compartment lid and close it so that the end of the lid align perfectly with the main body of the flash unit
	Metal contacts inside battery compartment is dirty	Use microfibre cloth to wipe the metal contacts and reload the batteries
	Batteries acompletely exhausted	Replace all 4 batteries (recommended NiMH batteries)
AF illumination beam does not light up in low light / complete darkness situation	Camera body does not provide AF illumination by flash unit or lens is set at manual focus mode	Check your owner operating manual switch lens focusing to AF mode
Dark corners observed at the four extreme corners of pictures	Position of the zoom head is incorrectly set	Recheck the correct angle of the lens, taking into consideration of the 1.5x magnification factor and adjust the zoom head to the correct position
Auto check lamp does not lit up	Distance to the subject is too far and pictures may be underexposed	Retake at a closer distance
	Flash unit does not fire at all	Check that the ready lamp on the flash unit as well as the 'flash' indicator in the viewfinder appear before taking pictures
Power On indicator does not lit up	Flash unit has not been used for more than 3 minutes	Press the test button to fire and the flash will resume back to normal operation
Ready Lamp does not lit up even though Power On indicator is lit	Batteries are completely exhausted	Replace all 4 batteries (recommended NiMH batteries)
ETTL indicator does not light up (for Canon only)	Camera body does not provide ETTL metering	Check your owner operating manual

Technical Specifications

Flash TTL working range for ISO 100

<div>Zoom Position</div> <div>F/stop</div>	28mm	35mm	50mm	85mm
F4.0	0.7 - 6.8m	0.7 - 7.8m	0.8 - 8.5m	0.8 - 9.0m
F5.6	0.7 - 4.8m	0.7 - 5.5m	0.8 - 6.1m	0.8 - 6.4m
F8.0	0.7 - 3.4m	0.7 - 3.8m	0.8 - 4.3m	0.8 - 4.5m
F11	0.9 - 2.5m	0.9 - 2.8m	0.9 - 3.1m	0.9 - 3.3m
F16	0.9 - 1.7m	0.9 - 2.0m	0.9 - 2.1m	0.9 - 2.2m

Camera Type

For Canon	: Direct hotshoe contact mount flash with standard TTL/E- TTL for Canon cameras.
For Nikon	: Direct hotshoe contact mount flash with iTTL for Nikon cameras.
For Sony	: Direct hotshoe contact mount flash with Dynax ADI / PTTL for Sony Alpha DSLR camera
Guide No	: 34 in meters / 112 in feet at 50mm (ISO 100)
Circuitry	: IGBT (Insulated Gate Bipolar Transistor)
Automatic TTL range	: 0.9 – 17.0m / 3.0 – 56ft (F2.0)
AF illumination range	: 0.9 – 8.0m / 3.0 – 26ft
Angle of illumination	: 28mm-35mm-50mm-85mm (35mm equivalent)
Bounce Angle	: Up 30-45-60-75-90
Swivel Angle	: Left 60-75-90-120-150-180 / Right 60-75-90-120-150
Dedication	: Canon TTL / E-TTL / E-TTL II Nikon i-TTL system Sony ADI / PTTL system
Exposure check confirmation	: Green Auto Check Lamp
Flash Duration	: 1/700 sec (full power)
Auto Standby	: 3 minutes
Color temperature	: 5600k
Number of flashes	: Approximate 150 – 300 (Alkaline batteries) Approximate 100 – 200 (Ni-Cd, Ni-MH batteries)
Recycling Time	: Approximate 6 sec (Alkaline batteries) Approximate 4 sec (Ni-Cd, Ni-MH batteries)
Power Source	: 4x AA Alkaline, NiCad or NiMH batteries
Dimension (mm)	: 76 (W) x 60 (H) x 185(L)
Weight	: 280g (without batteries)

Specifications are subjected to changes without prior notice. The program in this flash unit is being upgraded constantly to meet new demands in the market. As such, new changes to the specifications may not be reflected in this manual.