



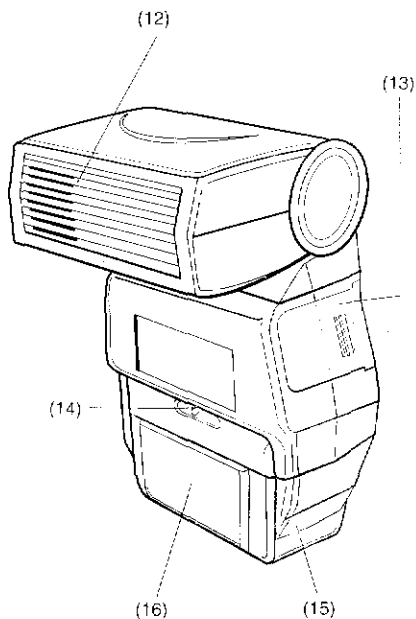
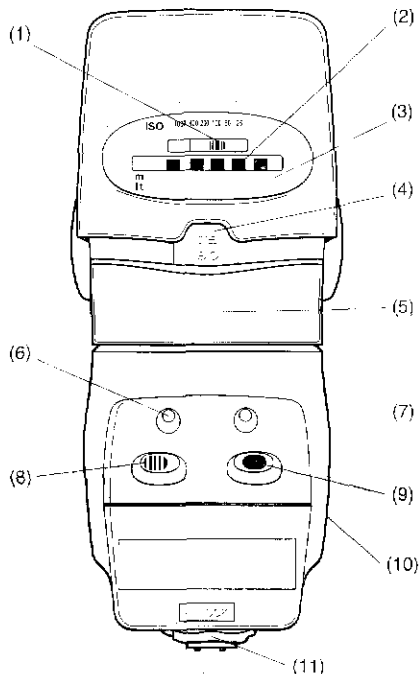
PROMASTER®

5550DX DIGITAL

OPERATING INSTRUCTIONS

ELECTRONIC FLASH

PARTS IDENTIFICATION



- (1) ISO/DIN Selector
- (2) F-stop Indicator
- (3) Exposure Calculator
- (4) Bounce Angle Indicator
- (5) Swivel Head
- (6) Ready Indicator Lamp
- (7) Auto Check Indicator Lamp
(with FTM5000/FTA5000 Modules)
or Functioning Indicator Lamp
(with 5000DX Modules only)
- (8) ON/OFF Switch

- (9) Test/Reset Flash Button
- (10) Release Button for Detaching Module
- (11) Locking Ring
- (12) Bounce/Swivel Flash Head
- (13) Battery Compartment Cover
- (14) Front Ready-Flash Warning Lamp
- (15) Interchangeable Dedicated Shoe Module
- (16) AF Illuminator for Autofocusing
(on DX Module OM/CN and FTA5000 AF Module)
or Light Sensor
(on DX Module SN/NK and FTM5000 Module)

FLASH DEDICATION

This flash unit requires an Interchangeable Dedicated Module to fit dedicated cameras for dedicated flash operation.

● PLEASE REFER TO THE MODULE INSTRUCTIONS FOR ADDITIONAL DETAILS.

DX Modules for popular digital cameras :

- DX Module OM is for OLYMPUS digital cameras. (#1045 with Hot-Shoe/#9901 with Cord)
- DX Module SN is for SONY digital cameras. (#9908 with Cord)
- DX Module NK is for NIKON 900 series digital cameras. (#1017 with Sync Cord)
- DX Module CN is for CANON digital cameras and 35mm SLR autofocus cameras with E-TTL autofocus metering system. (#1010 with hot-Shoe)

This flash unit can also work with other 5000 series Modules :

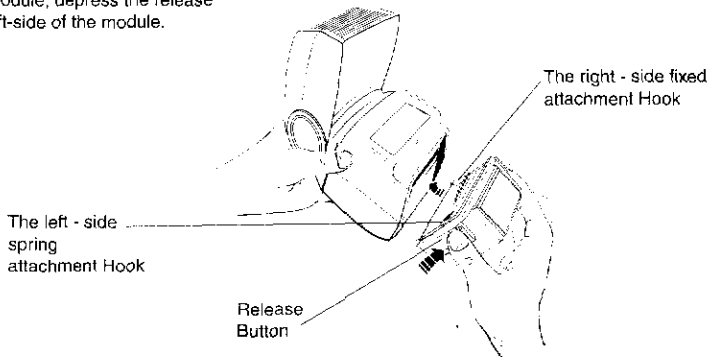
- FTA modules for 35mm film SLR autofocus cameras
- FTM modules for 35mm film SLR classic cameras
- Compatible with Promaster Slave Module

● As different camera models operate differently for flash photography, please also refer to your camera instruction manual for additional information.

● Before attaching the Module to the Flash unit, always make sure that the Module and the Flash unit contact points are clean. A stain or dirt on the surface of the contact points on the Module side or on the Flash unit side may cause malfunction. You may use a soft cloth to clean the contact points on both sides.

ATTACHING AND DETACHING A MODULE

1. To attach a module, position the right-side fixed attachment hook onto the flash unit and then push the left-side of the module upward until the left-side spring attachment hook clicks into position.
2. To detach the module, depress the release button on the left-side of the module.



- IMPORTANT NOTES:
- WHEN ATTACHING OR DETACHING THE MODULE, ALWAYS ENSURE THAT THE FLASH UNIT IS SWITCHED OFF.
 - DO NOT ATTACH OR DETACH THE FLASH UNIT TO AND FROM THE MODULE WHILE THE MODULE IS STILL MOUNTED ON THE CAMERA.
 - WHEN MOUNTING THE FLASH UNIT TO THE CAMERA, ALWAYS ENSURE THAT THE POWER OF THE FLASH UNIT IS SWITCHED OFF.
 - EACH DEDICATED MODULE IS DESIGNATED FOR A PARTICULAR RANGE OF CAMERAS. USE OF A DEDICATED MODULE NOT DESIGNED FOR YOUR CAMERA MAY CAUSE DAMAGE TO THE EQUIPMENT.

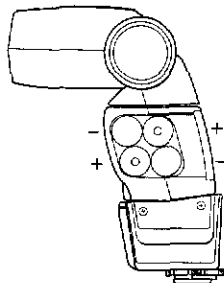
IT IS IMPORTANT TO FOLLOW THE ABOVE INSTRUCTIONS. OTHERWISE THE FLASH UNIT, MODULE AND/OR THE CAMERA MAY BE DAMAGED.

INSERTING BATTERIES

- i. Open the battery compartment cover.
- ii. Insert four 1.5V AA batteries following the (+) (-) sign as indicated inside and replace the cover.

IMPORTANT:

- ENSURE THAT THE BATTERIES ARE INSERTED IN CORRECT POSITION.
- FOR BEST RESULTS USE FRESH ALKALINE BATTERIES OR PROMASTER RECHARGEABLE NIMH BATTERIES.
- DO NOT MIX FRESH AND WEAK BATTERIES.
- TO PREVENT BATTERY LEAKAGE, REMOVE BATTERIES IF NOT IN USE FOR LONG PERIODS OF TIME.



AF ILLUMINATOR FOR AUTOFOCUSING (on DX Module OM/CN and FTA5000 AF Module only)

When the camera's operating button is pressed halfway, the AF illuminator is automatically activated when required, with low-contrast subjects in low light. This illumination enables the camera's autofocus system to determine focus status and adjust the lens.

The AF illuminator enables autofocusing with subjects up to about 16 feet away. This distance is for autofocusing only. When focusing manually, flash photography is possible up to about 71 feet, when using ISO 100 and a f1.4 aperture (please refer TTL Auto Flash range table).

NOTE: • The working range for the AF illuminator is based on a standard test method with a 50mm lens.

If longer focal lengths are used, the camera may not focus the lens accurately. In this case, or whenever focus signals blink, set focus mode of the camera switch to M and focus lens manually.

- On certain camera models, this AF assist light is overridden by the AF assist light on the camera.

AUTO CHECK LAMP (When used with FTM5000/FTA5000 Module)

On TTL auto flash mode or normal auto flash mode, if exposure was sufficient, the auto check lamp on the flash unit will briefly glow after the camera's shutter button is depressed. On normal auto flash mode, before actually taking the photos, you can check whether the shooting distance is within the automatic range by depressing the test flash button on the flash unit.

AUTO POWER-OFF

This flash unit incorporates a battery saving automatic power off circuit. The flash unit automatically turns itself off approximately 5 minutes after the last operation and the ready indicator LED lamp extinguishes itself. With the AF or DX Modules on some dedicated cameras, the flash can be re-activated for firing by touching the shutter release button on the camera. With other modules, the flash can be re-activated for firing by pressing the Reset Flash Button once on the flash unit or by switching the flash unit OFF and then ON again.

- When used on certain digital cameras (Olympus / Sony), the auto power-off function is controlled by the camera. The flash unit can be automatically turned off only if the digital camera in use is switched off.

TTL AUTO FLASH OPERATION

This flash unit provides automatic Through-The-Lens (TTL) flash exposure when used with dedicated cameras which have TTL Auto Flash Metering Circuitry.

This mode permits you to use any lens aperture within the flash unit's operating range to enable you to have greater control over the depth of field. *The larger the aperture (the smaller the f-number) you select, the greater the maximum shooting distance (less depth of field but shorter recycling time between shots). On the other hand, the smaller the aperture (the greater the f-number) you select, the lesser the maximum shooting distance (greater depth of field but longer recycling time).* Therefore, in selecting an aperture, all three factors - maximum shooting distance, depth of field and flash recycling time should be taken into consideration. (When simply demonstrating the TTL Auto function there must be film inside the 35mm SLR camera).

TTL AUTO FLASH RANGE : (Approx. in feet)

ISO FILM IN USE				NORMAL COVERAGE
100	200	400	1000	
1.4	2	2.8	4	10 - 71
2	2.8	4	5.6	8 - 50
2.8	4	5.6	8	7 - 36
4	5.6	8	11	5 - 25
5.6	8	11	16	3 - 18
8	11	16	22	3 - 12
11	16	22		3 - 9
16	22			3 - 6
22				3 - 4

Whenever possible, the TTL Automatic Mode balances the exposure between the main subject illuminated by the flash and the background in ambient light. Therefore, the TTL mode can be used under conditions ranging from total darkness to fill-in flash.

NORMAL AUTO FLASH OPERATION (When used with FTM5000 Module)

When attached to a FTM5000 module, there are auto flash operation settings designated by the colors BLUE - f2, YELLOW - f4 and *GREEN - f5.6 on the module for shooting up to approx. 50 feet, 25 feet and 18 feet respectively with ISO 100 film. (* Non-AF Module CN does not have this setting)

USING THE EXPOSURE CALCULATOR

(a) Normal Auto Operation for Standard SLR Cameras,

- (1) Set INDEX line of the ISO/DIN film selector switch to the ISO/DIN film speed in use.
- (2) Read along the auto line (blue, yellow or green according to your auto range setting selected) and find the corresponding f-number for auto operation. Set this aperture on your camera.

(b) TTL Auto Operation for Dedicated TTL Cameras

- (1) Set INDEX line of the ISO/DIN film selector switch to the ISO/DIN film speed in use.
- (2) Focus on your subject and note the flash to subject distance.
- (3) Locate the lens aperture you wish to use for TTL Auto Operation and read the distance opposite this selected aperture to check whether the flash to subject distance is within auto range. If it is, set the aperture on your camera.

(c) Manual Flash Operation

- (1) Set INDEX line of the ISO/DIN film selector switch to the ISO/DIN film speed in use
- (2) Focus on your subject and note the flash to subject distance. Locate this distance on the distance scale.
- (3) Read the aperture opposite this distance and set the f-number on your camera.

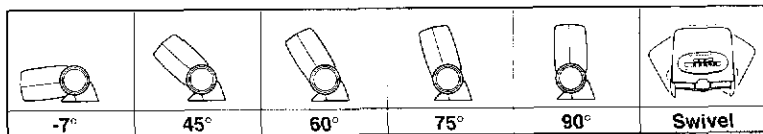
LOW POWER MANUAL FLASH (When used with DX Module NK or FTM5000/FTA5000/Slave Module)

In the Manual Flash Operation, you can set the flash unit's Mode Selector switch to '1/16' or 'ML' power position, which gives you faster recycling time and a higher number of flashes. It is useful for close-up work and shooting with a motor-drive winder (up to 2 frames per second). The guide number at this setting is 1/4 of the full power guide number (please see Guide Number Table).

BOUNCE FLASH PHOTOGRAPHY

This involves "bouncing" the flash off a ceiling or other reflective surfaces to obtain a soft illumination. The auto mode should be used for bounce lighting.

After determining the position of your subject, adjust the bounce angle. (The flash head is variable from -7° , 0° , 45° , 60° , 70° and 90° as desired). If necessary you can swivel the flash head in a horizontal direction by 180° to the right, and 150° to the left. Do not attempt to swivel the flash head further than it was meant to.



SPECIFICATIONS

- Power Source : Four 1.5V AA size Alkaline Batteries or PROMASTER Rechargeable NIMH batteries
- Recycling Time : Automatic : 0.3 - 10 sec.
Manual : 6 - 10 sec.
- Battery Life : Approx 100 - 700 flashes
(Depending on the type of batteries)
- Flash Duration : Automatic : 1/30,000 to 1/1,000 sec
Manual : 1/1,000 sec
- Angles of Illumination : Horizontal 70°
Vertical 53°
- Guide Number Table : (Approx. in Feet)

ISO FILM SPEED	25	50	100	200	400	1000
		64				
GUIDE NUMBER	50	70	100	140	200	315

*The Guide Number at 1/16 or M_L Power is 1/4 of the above.
(on DX Module NK or FTM5000/FTA5000/Slave Module)

- Bounce Angle : -7° to 90°
(Click Stop : -7°, 0°, 45°, 60°, 75° and 90°)
- Swivel Angle : 0° to 180°
(Click Stop : Left 0°, 30°, 60°, 90°, 120°, 150°
Right 0°, 30°, 60°, 120°, 150°, 180°)
- Weight (without batteries or Module) : approx. 212 gm
- Dimensions (without Module) : approx. 128 (H) x 74 (W) x 48 (D) mm

* Design and specifications are subject to change without prior notice.