



PROMASTER®

7500EDF Digital

OPERATING INSTRUCTIONS

ELECTRONIC FLASH

• TWIN FLASH • BOUNCE • SWIVEL • MOTORIZED ZOOM

Guide Number (at ISO100 in feet) for Dual Flashes (based on 35 mm SLR):

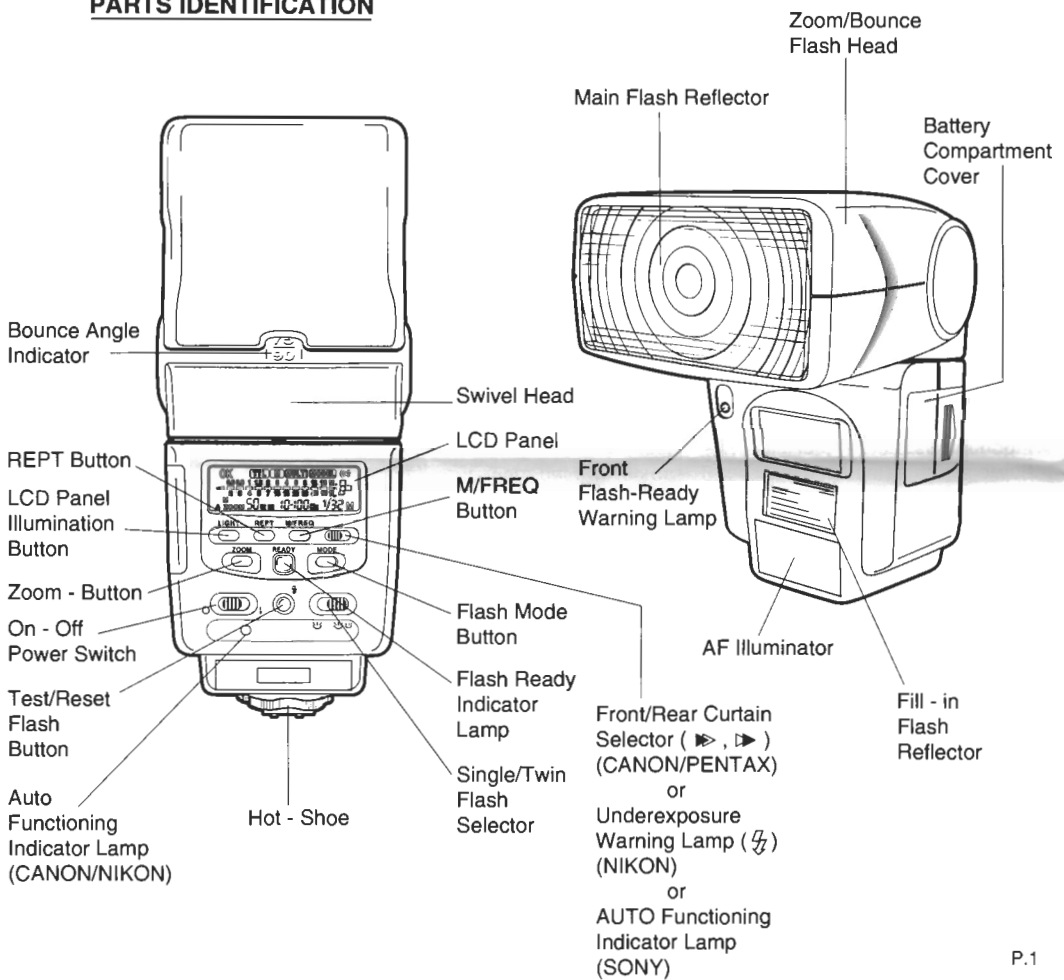
Power Level	FLASH COVERAGE SETTING							
	17mm (24mm+Diffuser)	24mm	28mm	35mm	50mm	70mm	80/85mm	105mm
1/1	42	69	75	90	102	112	115	122
1/2	30	49	53	64	72	79	81	86
1/4	21	35	38	45	51	56	58	61
1/8	15	25	27	32	36	40	41	43
1/16	11	18	19	23	26	28	29	31
1/32	7	13	14	16	18	20	21	22
1/64	5	9	10	12	13	14	15	16

TTL Autoflash Range (in feet) for Single Main Flash Only (based on 35 mm SLR):

ISO FILM SPEED							FLASH COVERAGE SETTING								
25	50	100	200	400	800	1600	17mm (24mm+Diffuser)	24mm	28mm	35mm	50mm	70mm	80/85mm	105mm	
		1.4	2	2.8	4	5.6	5 - 33	7 - 54	7 - 61	10 - 70	12 - 80	12 - 89	12 - 93	12 - 99	
		1.4	2	2.8	4	5.6	8	4 - 23	6 - 38	6 - 43	6 - 49	8 - 56	10 - 63	10 - 65	10 - 69
1.4	2	2.8	4	5.6	8	11	3 - 16	5 - 27	5 - 30	5 - 35	7 - 40	9 - 45	9 - 46	9 - 49	
2	2.8	4	5.6	8	11	16	2 - 11.5	4 - 19	4 - 21	4 - 25	5 - 28	6 - 31	6 - 33	6 - 35	
2.8	4	5.6	8	11	16	22	2 - 8.2	3 - 13	3 - 15	3 - 18	3 - 20	5 - 22	5 - 23	5 - 25	
4	5.6	8	11	16	22	32	2 - 5.8	2 - 9.4	2 - 11	3 - 12	3 - 14	5 - 16	5 - 16	5 - 17	
5.6	8	11	16	22	32		2 - 4.2	2 - 6.8	2 - 7.7	3 - 8.9	3 - 10	4 - 11	4 - 12	4 - 13	
8	11	16	22	32			2 - 2.9	2 - 4.7	2 - 5.3	3 - 6.1	3 - 7	4 - 7.8	4 - 8.1	4 - 8.6	
11	16	22	32				2 - 2.1	2 - 3.4	2 - 3.9	3 - 4.5	3 - 5	4 - 5.7	4 - 5.9	4 - 6.3	

The specifications are based on the latest information available at the time of printing and are subject to change without notice.

PARTS IDENTIFICATION



P.1

FLASH MODE

This unit has five firing flash modes : TTL, M, MULTI, MODEL and ((1/2) (Slave).

You can select the desired mode by pressing the 'MODE' button. Each press of the Mode button changes the flash mode in the following cycle :



- As different models of camera operate differently for flash photography, you should read the Instructions Manual of your camera for details of flash operation.

A. TTL AUTO FLASH OPERATION

TTL

The Promaster 7500EDF digital flash unit is provided with an automatic metering system. The camera's auto exposure function will automatically operate with this external flash to **make the results of your flash photography even clearer and more natural, increasing the illumination area and allowing sophisticated flash techniques such as bounce-flash photography.** Available light is metered through the camera's lens (TTL) and illumination is set automatically.

- All flash exposure settings are in the camera's control menu.

CANON (CN) unit :

- **E-TTL Auto** - The flash is controlled entirely by the camera, based on the information sent from it. The flash fires a pre-flash before the main flash fires so that the camera can obtain the necessary evaluative information on the subject. The data obtained is incorporated to set the more accurate output of the main flash automatically.

NIKON (NK) unit :

- **i-TTL Auto** - The flash is controlled entirely by the camera, based on the information sent from it. The flash fires a series of imperceptible Monitor Pre-flashes just before the flash fires so that the camera can obtain necessary information on the subject. The subject is then correctly exposed by the light from the flash and the exposure is hence less affected by the ambient light than in the conventional TTL mode. This is the feature of the new NIKON Creative Lighting System (CLS).

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FLASH DEDICATION

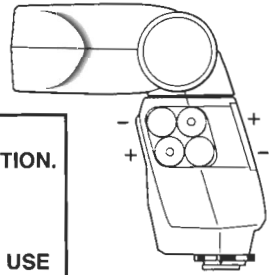
The Promaster 7500EDF Digital Flash unit is dedicated to work with compatible cameras only.

- **7500EDF-CN fits CANON digital cameras with E-TTL / E-TTL II autoflash metering system.**
(e.g. Compatible with Rebel XT, XTi, 5D, 30D)
- **7500EDF-NK fits NIKON digital cameras with i-TTL autoflash metering system.**
(e.g. Compatible with D200, D80, D70, D70s, D50, D40, D40X)
- **7500EDF-PX fits PENTAX digital cameras with P-TTL / TTL autoflash metering system.**
(e.g. Compatible with ist DS, DL K100D, K10D)
- **7500EDF-SN fits SONY digital cameras with ADI / P-TTL autoflash metering system.**
(e.g. Compatible with α 100)

- Use with incompatible cameras may cause damage to the camera, the flash unit or both.
- When mounting the flash unit to the camera, always ensure that the flash unit is switched off.
- As different models of cameras operate differently for flash photography, you should read the Instruction Manual of your camera for details of flash operation.

INSERTING BATTERIES

- Open the battery compartment cover.
- 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.

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PENTAX (PX) unit :

- **P-TTL Auto** - The flash is controlled entirely by the camera, based on the information sent from it. The flash fires a pre-flash before the main flash fires so that the camera can obtain the necessary information on the subject to set the output of the main flash automatically.

SONY (SN) unit :

- **ADI / P-TTL Auto** - The flash is controlled by the camera, based on the information sent from it. The flash fires a pre-flash before the main flash fires so that the camera can obtain the necessary information on the subject to set the output of the main flash automatically.

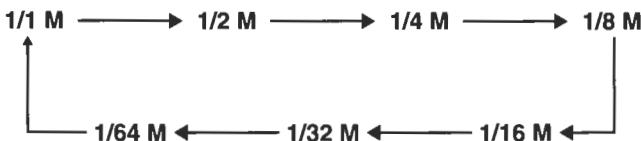
ADI * (Advanced Distance Integration flash metering) - Combines distance information from the autofocus system with information from a pre-flash exposure.

* High Accuracy ADI in combination with D Lens (Lens with built-in distance encoder)

B. MANUAL FLASH OPERATION

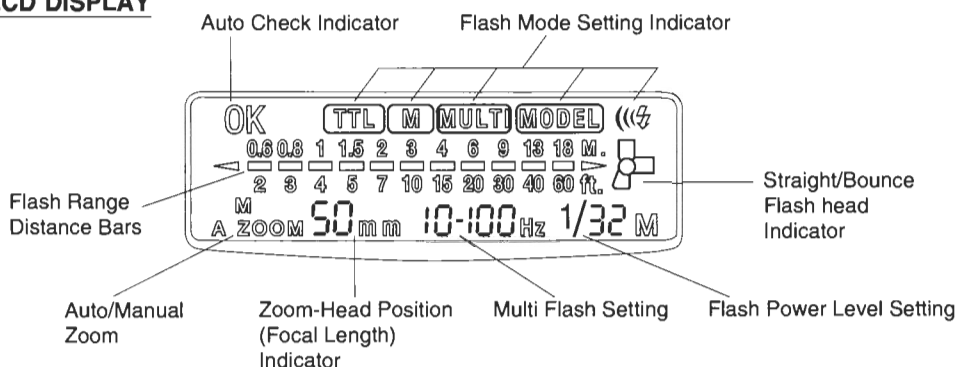
M

- Set the camera's shooting mode to manual mode and set the flash unit's mode to 'M'.
- Press the 'M/FREQ' button to select a desired output level.
Each press of the 'M/FREQ' button changes the flash output level in the following cycle:



- Manually set the camera's shutter speed to X-sync speed or slower and set the desired aperture and then take the picture after confirming that the subject is within the flash range displayed in the LCD panel with a distance indicator bar.

LCD DISPLAY



- In TTL Autoflash or MANUAL mode, Flash Range Distance bars appear when the flash unit is mounted on the mating camera.

AF ILLUMINATOR FOR AUTOFOCUSING

When subject contrast is low or in low light, the AF illuminator is automatically activated when the camera's shutter release button is pressed halfway. This illumination enables the camera's autofocus system to focus correctly. The AF illuminator enables autofocusing with subjects up to about 16 feet away. This working range of the AF illuminator is based on standard testing method with a 50 mm lens.

- The AF illuminator may not be effective if your subject has very low reflectance.
- On certain camera models, this AF assist light is overridden by the AF assist light on the camera.

AUTO POWER-OFF

A battery-saving automatic power-off circuitry is incorporated in this flash unit. If you do not operate any of the flash or camera controls for about five minutes, the flash-ready lamp will be automatically extinguished and the LCD data panel will be switched off. The flash unit will be in stand-by mode. To re-activate the flash, simply press lightly the camera's shutter button or the flash's test button or switch the flash unit to OFF and then ON again. In slave flash mode, the off-camera flash will be switched off automatically if you do not use it for about one hour.

- When used on certain digital cameras, 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.

AUTO CHECK

When using the flash unit in TTL Autoflash mode, if exposure was sufficient, the auto check indicator "OK" will appear in the LCD panel at the same moment when the camera's shutter button is pressed.

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C. MULTIPLE FLASH OPERATION

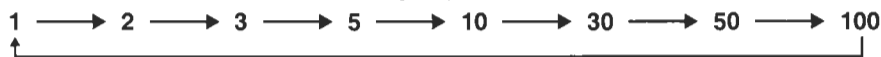
MULTI

With multiple flash mode, the flash unit can be fired several times in succession during a single exposure to record the flowing motion of a subject. It is recommended to operate the main flash only (by sliding the sub-reflector switch to ☞ position).

1. Set the flash's mode to 'MULTI'.
2. Press the 'REPT' button to select the number of times the flash will fire.



3. Press the 'M/FREQ' button to select the firing frequency in HZ (flashes per sec.)



4. Set the camera to Manual mode and set the desired aperture and the shutter speed calculated from the following formula:

No. of bursts ÷ Firing Frequency

For example: 10 ÷ 5 HZ The shutter speed should be 2 (10 ÷ 5) sec or longer

- When using the Multi flash mode, the flash power level is automatically set to 1/16M and can not be changed.
- A distance indicator bar appears in the flash range display. This is the distance at which one burst from the entire sequence will provide a correct exposure.

D. MODELING FLASH OPERATION

MODEL

This feature helps you to view the effects of the flash's position in relation to your main subject before you take the picture. It is recommended to operate the main flash only (by sliding the sub-reflector switch to ☞ position).

1. Set the flash's mode to 'MODEL'.
2. Press the 'M/FREQ' button to select H-F or L-F.

High Frequency (H-F) : A high-frequency series of low-power pulses that is most useful when you take close-up pictures.

Low Frequency (L-F) : A low-frequency series of strong flash bursts for use when taking portraits or whenever your subject is large.

3. Press the flash's Test button to activate the modeling flash.

- In this Modeling flash mode, the flash range display in the LCD panel will disappear.

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E. SLAVE FLASH OPERATION



- It is recommended to operate the main flash only (by sliding the sub-reflector switch to ☞ position).

The flash unit can be used as a slave flash unit (a flash-stand is provided), which will fire when its wireless Slave Flash sensor catches light from the master flash unit. You can select the flash power level by pressing the 'M/FREQ' button when the flash unit's mode is set to ☞.

1/1 M → 1/2 M → 1/4 M → 1/8 M → 1/16 M → 1/32 M → 1/64 M

- In this slave flash mode, the flash range display in the LCD panel will not appear.
- When used for the slave flash operation, the flash unit is operated in manual mode.

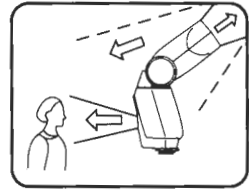
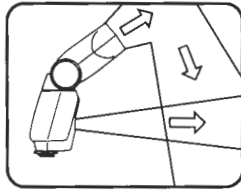
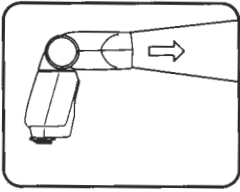
BOUNCE PHOTOGRAPHY

Bounce lighting involves 'bouncing' the light off a ceiling or other reflective surfaces to obtain soft illumination. The flash head can be rotated both vertically and horizontally to achieve the optimum bounce position. (The flash has click stops at the most commonly used position). It is recommended to operate your flash unit in TTL mode.

- when the flash head is at a bounce or swivel position, the flash range display will disappear and an indicator ☞ will appear in the LCD panel.
The flash range display and ☞ will reappear when the flash head is at straight flash (0° bounce and 0° swivel) position.

DUAL FLASH LIGHTS

You can enjoy dual flash lights with the sub-reflector. Slide the sub-reflector switch to "☞☞" position. Dual flash light - from the main and sub-reflectors will give you a variety of flash techniques as illustrated. If you do not want to use the sub-reflector, slide the sub-reflector switch to ☞ position. It is recommended to operate double flashes for bounce flash operation. Single flash is desirable for direct straight flash.



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REAR-CURTAIN SYNCHRONIZATION (CANON / PENTAX unit)

When using with some models of cameras which are capable of rear-curtain sync, you can select (by sliding the switch to ☞ or ☞) whether to have the flash fire as soon as the shutter opens (☞ - front curtain sync.) or immediately before the shutter closes (☞ - rear curtain sync.)

- Use shutter-priority auto or manual exposure mode.
- In MULTI flash mode, the rear-curtain sync. can not function.

(Please refer to your camera's Instructions Manual for more information.)

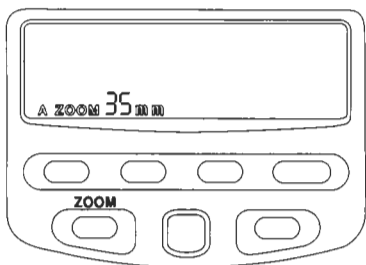
FLASH COVERAGE ANGLE

Coverage angles are available for focal length ranging from 24 mm to 105 mm (based on a 35mm SLR camera).

● AUTO ZOOM OPERATION (A ZOOM)

If this facility is not supported by your camera, use the Manual Zoom operation.

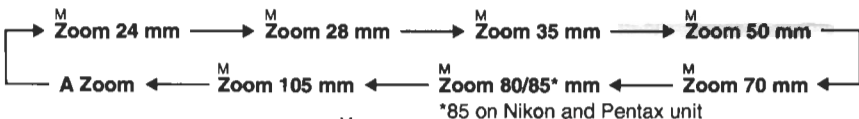
The flash unit automatically adjusts the zoom-head position to provide angle of coverage that matches the focal length of the lens in use and the setting is displayed in the LCD panel. The coverage angle automatically changes when the lens is zoomed.



● The guide number changes when the flash coverage angle is changed.

● If the focal length of the lens in use is less than 24 mm, only "A Zoom 24 mm" will be displayed. If the focal length of the lens in use is larger than 105 mm, only "A Zoom 105 mm" will be displayed.

● If Zoom is displayed in the LCD panel, press the ^MZoom button until "A ZOOM" is displayed.



● MANUAL ZOOM OPERATION (^MZoom)

Press the Zoom button once to change from auto zoom to manual zoom mode. Each press of the Zoom button changes the coverage angle in the above cycle. Press zoom button until your desired zoom-head position appears in the LCD panel.

WIDE-ANGLE DIFFUSER – A wide-angle Diffuser accessory that can be positioned in front of the zoom flash head is included in this flash unit's package. With this Diffuser and zoom position set at 24mm, the flash can cover 17mm wide-angle lens on a 35mm format SLR camera or 11mm wide-angle lens on a digital format SLR camera.

	Flash Coverage	Guide Number (at ISO100)
(24mm + Diffuser)	75° Vertical	46 feet (Single main flash)
	92° Horizontal	42 feet (Dual flash)

Note: The digital camera lenses require shorter focal lengths to obtain the same angle of coverage as their 35mm counterparts. Please check the field of view (FOV) crop factor i.e. focal length multiplier of your digital camera for 35mm equivalent FOV. e.g. 1.6 x for Canon XTi, 1.5 x for Nikon D70s.

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SPECIFICATIONS:

Power Source	: 4 (1.5V) 'AA' Alkaline Batteries or Promaster NiMH AA Rechargeable Batteries
Recycling Time	: 0.3 - 10 sec
Flash Duration	: 1/30,000 to 1/1,000 sec.
Bounce Angle	: -7° - 90° (Clip stops: -7°, 0°, 45°, 60°, 75°, and 90°)
Swivel Angle	: 0° - 180° (Clip stops: Right 0°, 30°, 60°, 90°, 120°, 150° Left 0°, 30°, 60°, 90°, 120°, 150°, 180°)
Power Zoom	: Motorized Zoom 24-28-35-50-70-80/85-105 focal length (mm)
Flash Coverage	: (based on a 35mm SLR camera)

	17mm (24mm+Diffuser)	24mm	28mm	35mm	50mm	70mm	80/85mm	105mm
Verticle	75°	60°	53°	45°	34°	26°	23°	20°
Horizontal	92°	78°	70°	60°	46°	36°	31°	27°

(A wide-angle Diffuser accessory is provided)

Note: The digital camera lenses require shorter focal lengths to obtain the same angle of coverage as their 35mm counterparts. Please check the field of view (FOV) crop factor i.e. focal length multiplier of your digital camera for 35mm equivalent FOV.

Guide Number (at ISO100 in feet) for Single Main Flash (based on 35 mm SLR):

Power Level	FLASH COVERAGE SETTING							
	17mm (24mm+Diffuser)	24mm	28mm	35mm	50mm	70mm	80/85mm	105mm
1/1	46	75	85	98	112	125	130	138
1/2	32	53	60	70	79	88	92	98
1/4	23	38	43	49	56	62	65	69
1/8	16	27	30	35	39	44	46	49
1/16	12	19	21	25	28	31	33	34
1/32	8	13	15	17	20	22	23	25
1/64	6	10	11	12	14	16	16	17

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