**OPERATING INSTRUCTIONS**

**ELECTRONIC FLASH**

- TWIN FLASH
- BOUNCE
- SWIVEL
- MOTORIZED ZOOM

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

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<tr>
<th>Power Level</th>
<th>FLASH COVERAGE SETTING</th>
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**TTL Autoflash Range (in feet) for Single Main Flash Only (based on 35 mm SLR):**

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The specifications are based on the latest information available in the time of printing and are subject to change without notice.
FLASH MODE
This unit has five firing flash modes: TTL, M, MULTI, MODEL and (Q) (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:

\[ \text{TTL} \rightarrow \text{M} \rightarrow \text{MULTI} \rightarrow \text{MODEL} \rightarrow (\text{Q}) \]

* 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
The Promaster 7500E/DF digital flash unit is provided with an automatic metering system. The camera's auto exposure function will automatically operate with the external flash to make the results of your flash photography even clearer and more natural. Increasing the illumination area and allowing instantaneous 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 (Ch) unit:
* E-TTL Auto - The flash is controlled entirely by the camera, based on the information sent from the camera. The flash fires a pre-flash before the main flash fires so that the camera can obtain the necessary exposure 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 the camera. The flash fires a series of impossible 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).
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 autofocus metering system.
  (e.g. Compatible with Rebel XT, XTi, SD, 30D)

- **7500EDF-NK** fits NIKON digital cameras with i-TTL autofocus metering system.
  (e.g. Compatible with D200, D60, D70, D70s, D50, D40, D40X)

- **7500EDF-PX** fits PENTAX digital cameras with P- TTL / TTL autofocus metering system.
  (e.g. Compatible with *p*DS, *p*SL, K100D, *p*K20D)

- **7500EDF-SH** fits SONY digital cameras with ADI / P-TTL autofocus metering system.
  (e.g. Compatible with *a*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

1. Open the battery compartment cover.
2. 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.**

P 2

PENTAX (PK) 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)

**MANUAL FLASH OPERATION**

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

   ![Flash Output Levels](image)

3. 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.
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 MULTI) position.

1. Set the flash's mode to MULTI.
2. Press the "REPT" button to select the number of times the flash will fire.
   
   | Times | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 10 |

3. Press the "M/REP" button to select the firing frequency in Hz (flashes per sec.).
   
   | Frequency | 20 | 30 | 50 | 100 |

4. Set the camera to Manual mode and set the desired aperture and the shutter speed calculated from the following formula:
   
   Number of bursts = Firing Frequency
   
   For example: 105 Hz. The shutter speed should be 2 (ISO 25) sec or longer.

   When using the Multi flash mode, the flash power level is automatically set to TRIM and cannot 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.

MODELING FLASH OPERATION  MODEL

This feature helps you to view the effects of the flash 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 MULTI) position.

1. Set the flash's mode to MODEL.
2. Press the M/REP button to select HI-F or LF.

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

   Low Frequency (LF) - 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.
SLAVE FLASH OPERATION

- It is recommended to operate the main flash only (by sliding the sub-reflector switch to (I) 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 [II].

[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 tilted both vertically and horizontally to achieve the optimal bounce position. (The flash has click stops at the most commonly used positions.) It is recommended to orient your flash unit in the [I]T 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-flat or swivel position.

DUAL FLASH LIGHTS

You can enjoy dual flash lights with the sub-reflector. Slide the sub-reflector switch to I position. Dual flash lights from the main and sub-reflector 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 (I) position. It is recommended to operate double flashes for bounce flash operation. Single flash is desirable for direct straight flash.

REAR-CURTAIN SYNCHRONIZATION (CANON / PENTAX unit)

When shooting with some models of cameras which are capable of rear-curtain-sync, you can select (by sliding the switch to (I) or (I)) whether to have the flash fire as soon as the shutter opens (I, front curtain sync) or immediately before the shutter closes (I, 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 24mm to 105mm (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 24mm, only “A Zoom 24mm” will be displayed.**
- **If the focal length of the lens in use is larger than 105mm, only “A Zoom 105mm” will be displayed.**
- **If Zoom is displayed in the LCD panel, press the Zoom button until “A Zoom” is displayed.**

**A Zoom**
- 24mm (105mm)
- 28mm (85mm)
- 35mm (60mm)
- 50mm (50mm)
- 70mm (70mm)

**MANUAL ZOOM OPERATION**

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/depth position appears in the LCD panel.

**WIDE-ANGLE DIFFUSER**

- **Wide-angle Diffuser accessory that can be positioned in front of the flash head is included in this flash unit 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**
- (24mm + Diffuser)
- 75° Vertical
- 92° Horizontal

**Guide Number (at ISO100)**
- 46 feet (Single main flash)
- 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. 1.5 x for Canon XT, 1.5 x for Nikon D70s.

**SPECIFICATIONS:**

- **Power Source:** 4 (1.5V) “AA” Alkaline Batteries or Promaster NiMH AA Rechargeable Batteries
- **Recycling Time:** 0.3 - 10 sec
- **Flash Duration:** 1/00,000 to 1/100,000 sec.
- **Bounce Angle:** 7° - 90°
  - (Clip stops: 7°, 10°, 15°, 20°, 25°, 30°, 45°, 60°, 75°, 90°)
- **Swivel Angle:** 0° - 180°
  - (Clip stops: Right 0°, 30°, 60°, 90°, 120°, 150°, 180°)
  - Left 0°, 30°, 60°, 90°, 120°, 150°, 180°)
- **Power Zoom:** Motorized Zoom 24-28-35-50-70-80/65-105 focal length (mm)
- **Flash Coverage:** (based on a 35mm SLR camera)

**Verticle**
- 75°
- 60°
- 53°
- 45°
- 34°
- 26°
- 20°

**Horizontal**
- 92°
- 78°
- 70°
- 56°
- 45°
- 31°
- 20°

- (A wide-angle Diffuser accessory is provided)

**Guide Number (at ISO100 in feet)**

- **For Single Main Flash (based on 35mm SLR):**

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