TTL AUTO FLASH OPERATION

The Promaster 7200EDF 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).

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 autofocusing system with information from a pre-flash exposure.

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

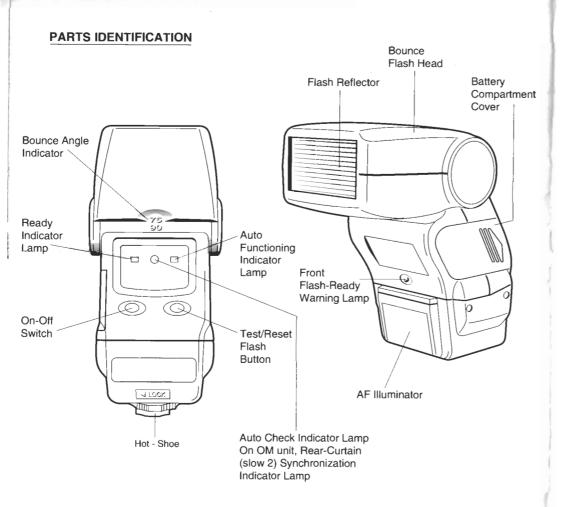
OLYMPUS (OM) unit:

• 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.

PROMASTER® 7200EDF Digital

OPERATING INSTRUCTIONS

ELECTRONIC FLASH



FLASH DEDICATION

The Promaster 7200EDF Digital Flash unit is dedicated to work with compatible cameras only.

- 7200EDF-CN fits CANON digital cameras with E-TTL / E-TTL II autoflash metering system.
 (e.g. Compatible with Rebel XT, XTi, 5D, 30D)
- 7200EDF-NK fits NIKON digital cameras with i-TTL autoflash metering system.
 (e.g. Compatible with D200, D80, D70, D70s, D50, D40, D40X)
- 7200EDF-PX fits PENTAX digital cameras with P-TTL / TTL autoflash metering system.
 (e.g. Compatible with ist DS, DL K100D, K10D)
- 7200EDF-OM fits OLYMPUS digital cameras with TTL autoflash metering system.
 (e.g. Compatible with E1, E300, E500, E410)
- 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.
- 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.



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 CHECK LAMP

If exposure was sufficient, the auto check lamp "OK" on the flash unit will briefly glow after the camera's shutter button is depressed.

AUTO POWER-OFF

This flash unit incorporates a battery saving automatic power-off circuitry. The flash unit automatically turns itself off approximately 5 minutes after the last operation and the ready indicator LED lamp extinguishes itself. The flash can be re-activated for firing by touching the shutter release button on the camera or 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, 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.

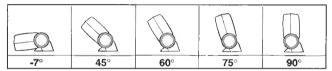
<u>WIDE-ANGLE DIFFUSER</u> – A wide-angle **Diffuser** accessory that can be positioned in front of the zoom flash head is included in this flash unit's package. With this Diffuser, the flash can cover 20mm wide-angle lens on a 35mm SLR camera or 13mm wide-angle lens on a digital format SLR camera.

	Flash Coverage	Guide Number (at ISO 100) 64 feet	
With Diffuser	68° Vertical		

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, 2 x for Olympus E410.

BOUNCE FLASH PHOTOGRAPHY

This involves "bouncing" the flash off a ceiling or other reflective surfaces to obtain a soft illumination. 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).



TTL AUTO FLASH RANGE: (Approx. in feet)

ISO in use				With Wide-Angle	Without Wide-Angle
100	200	400	800	Diffuser	Diffuser
1.4	2	2.8	4	8 - 46	10 - 71
2	2.8	4	5.6	6 - 32	8 - 50
2.8	4	5.6	8	5 - 23	7 - 36
4	5.6	8	11	4 - 16	5 - 25
5.6	8	11	16	3 -11.5	3 - 18
8	11	16	22	3 - 8	3 – 12
11	16	22		3 - 5.8	3 - 9
16	22			3 - 4	3 - 6
22				3 - 2.9	3 - 4.5

SPECIFICATIONS

Power Source : 4 (1.5V) AA Alkaline Batteries or Promaster Rechargeable NiMH Batteries

Guide Number : 100 feet (without Diffuser, at ISO 100) 64 feet (with Diffuser, at ISO 100)

Angle of Coverage : (based on a 35mm format SLR camera)

	With Diffuser 20mm	Without Diffuser 28mm
Verticle	68°	53°
Horizontal	88°	70°

(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.

TTL Auto Range : Approx. 3 - 71 feet

Recycling Time : 0.3 - 10 sec

Flash Duration : 1/30,000 to 1/1,000 sec

Bounce Angle : -7° to 90°

(Click stops : -7°, 0°, 45°, 60°, 75°, 90°)

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