

**FLASH UNIT
ELEKTRONENBLITZGERÄT
UNITE DE FLASH
UNIDAD DE FLASH**

PE-387S

Operating Instructions
Bedienungsanleitung
Mode d'emploi
Manual de Instrucciones



Please read these instructions carefully before using the Flash Unit.
Bitte lesen Sie diese Bedienungsanleitung sorgfältig durch, bevor Sie dieses
Blitzgerät benutzen.
Veuillez lire les instructions attentivement avant d'employer le unite de Flash.
Por favor lea estas instrucciones cuidadosamente antes de usar la unidad de Flash.



National

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Dear Owner

Thank you for selecting this flash unit. We welcome you to the growing family of satisfied National product owners around the world. We feel certain you will be completely satisfied with this new aid to your photographic ability. Please read this operating instructions booklet and keep it handy for your reference.

Parts identification

- | | |
|--------------------------------|--------------------------------|
| ① Flash | ⑧ Pilot lamp |
| ② Battery compartment cover | ⑨ Flash button |
| ③ Sensor | ⑩ LCD panel |
| ④ Remote sensor socket | ⑪ Light key |
| ⑤ Synchro cord socket | ⑫ F-stop key |
| ⑥ Film speed key | ⑬ Power/sound monitor switch |
| ⑦ Auto/manual selection switch | ⑭ Shoe lock lever/power switch |



Turn on the power and the display is "ASA100 F8".

Range/distance indicator
In accordance with the film speed, F-stop and/or lens coverage settings, the automatic operating range/flash-to-subject distance in manual is displayed.

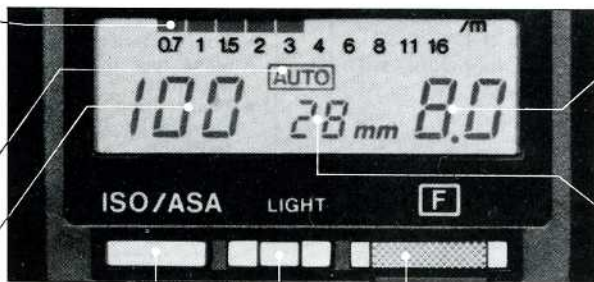
Auto/manual mode indicator
Linking to the auto/manual selection switch, [AUTO] / [M] is displayed.

Film speed indicator
The film speed display is ASA25-800 in 16 steps. Press the key and the film speed changes by a 1/3 step. When the indicator reaches the film speed you wish, just take off your finger.

● Automatic energy saving system

If you do not fire the flash and power remains on without any operation for approx. five minutes, the charging cycle will automatically stop and the LCD panel will indicate "OFF" to conserve battery life.

* If you let the unit untouched while the LCD panel is indicating "OFF", new Alkaline batteries will last approx. 170 hours. Turn off the unit when you are not using the unit.



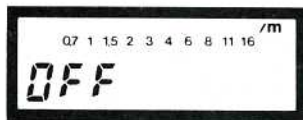
F-stop indicator
The F-stop display is F1.4 - 16 in 8 steps. Press the key and the F-stop changes by one step. When the indicator reaches the F-stop you wish, just take off your finger.

Lens coverage indicator
In conjunction with the angle zoom setting, the camera focal length which can be covered is displayed. When attaching the optional 20mm wide-angle diffuser "20mm" is displayed.

Film speed key

Light key
Press the key and the LCD panel is illuminated. The light will be turned out automatically after approx. 20 seconds.

F-stop key

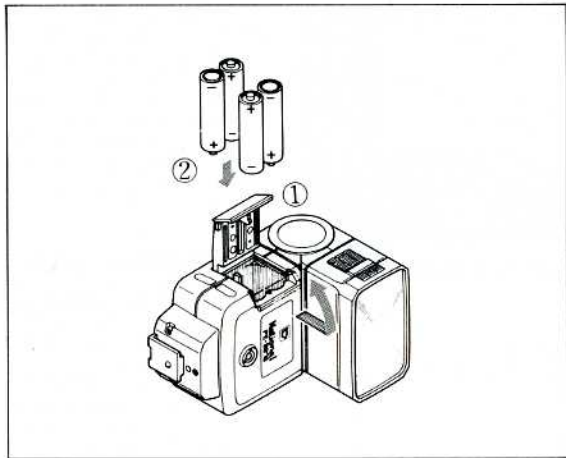


Press any of three keys and the memory circuit restores the previous informations on the LCD panel, starting the normal recycling cycle, when the shoe lock lever remains locked.

* The LCD panel and pilot lamp will start to blink approx. ten seconds before, and when the power switch is at the beeper mark (Ⓜ) position, the warning beeper will also inform you of this beforehand.

Preparation

1. Loading the batteries

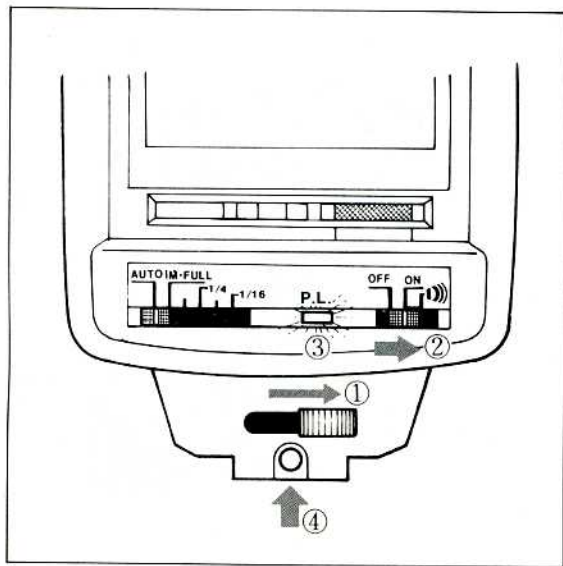


- (1) Open the battery compartment cover by sliding it as illustrated.
- (2) Insert four 1.5 V size AA batteries (optional) or Ni-Cd batteries (optional), matching the polarities with the diagram in the battery compartment.
Always be sure to change batteries after unlocking the shoe lock lever.
- (3) Close the cover.

Note:

- Four batteries must be of the same type.
- Make sure that the batteries are inserted with correct polarities (+, -).
- When using Ni-Cd batteries, recharge with National charging set PW-1103 (optional) before loading into the flash unit.

2. Testing the flash



- (1) Lock the shoe lock lever.
- (2) Turn on the power switch.
- (3) Confirm whether pilot lamp lights up.
- (4) Push the flash button, and the unit flashes.

* After checking the flash, turn off the power switch.

● Double check ON-OFF battery switch

The power is automatically turned off by unlocking the shoe lock lever when detaching the flash unit from the camera. The battery waste is prevented even if the power switch is neglected to turn off.

* If you leave the shoe lock lever locked without firing the flash, new Alkaline batteries will last approx. 720 hours. Be sure to unlock the lever after use.

● Flash stop device

Daylight shooting without flash unit is possible without dismounting the flash unit. Simply turn off the power switch.

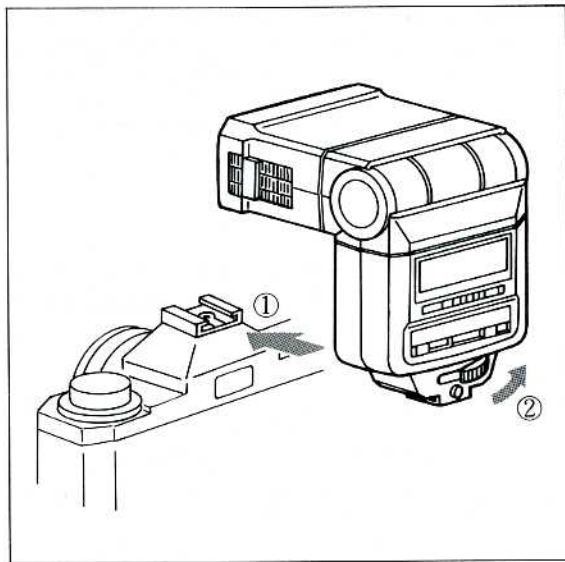
● Memory circuitry

Even if the power switch is turned off, the memory circuitry holds the LCD panel's informations, when the shoe lock lever remains LOCKED.

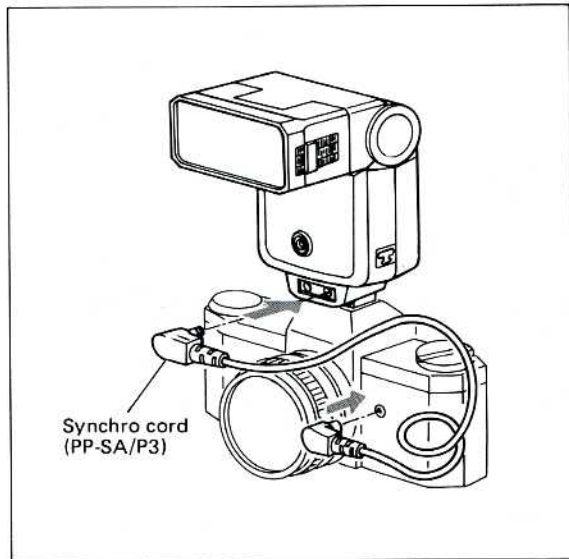
* When locking and unlocking the shoe lock lever several times, the LCD panel may display wrong numerals and marks.

To avoid this, unlock and re-lock the lever slowly.

3. Attaching to the camera



Insert the mounting shoe into the camera's accessory shoe and lock the shoe lock lever.
If your camera is not equipped with the hot shoe, connect the unit to the camera's X-terminal with National synchro cord (PP-SA/P3).



● Hand lighting

For the hand lighting effect, 3m synchro cord is optionally available. The flash unit allows you automatic hand lighting in combination with optional remote sensor type 2 (PW-12S).



4. Setting the shutter speed

Focal plane shutter										
Hand-held Blur Zone						Safety Zone		Shutter Curtain Cut-Off		
B	1	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{15}$	$\frac{1}{30}$	X $(\frac{1}{60})$	$\frac{1}{125}$	$\frac{1}{250}$	$\frac{1}{500}$

Set X mark (1/60 sec.) or slower speeds.

* Some cameras permit use of flash units with the shutter set at 1/90 sec. or 1/125 sec.

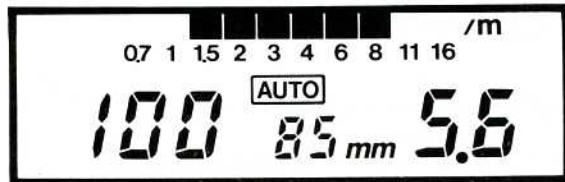
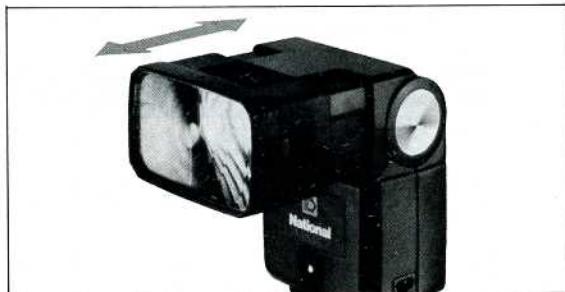
Between-the-lens shutter										
Hand-held Blur Zone						Safety Zone				
B	1	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{15}$	$\frac{1}{30}$	$\frac{1}{60}$	$\frac{1}{125}$	$\frac{1}{250}$	$\frac{1}{500}$

The flash unit can synchronize with the shutter speed (1/500 sec. or slower).

● **If Your Camera is AE SLR Camera;**
use manual mode.

Refer to your camera's operating instructions.

Angle zoom system



The angle zoom flash head is compatible with the fields covered by the camera focal lengths of 28mm, 35mm, 50mm and 85mm or more. Extend or retract the angle zoom flash head to the position which is closest to the focal length of your camera lens. The LCD displays the lens coverage, automatic operating range or flash-to-subject distance in manual photography.

* If the angle zoom flash head is not properly positioned at a click stop, the LCD displays the error indication (— —) and the range/distance indication disappears.



Mount the optional 20mm wide-angle diffuser (PP-WP20G) onto the flash head, with the angle zoom head set to the 28mm position. The lens coverage is changed to the 20mm focal length, and the LCD displays the automatic operating range or flash-to-subject distance in manual photography.

* If the angle zoom flash head is not properly set to the 28mm position, the LCD displays the error indication (— —) and the range/distance indication disappears.



● Angle of coverage and GN

Lens coverage indicator	Angle of coverage (with 35 mm camera)	Guide number	
		ISO/ASA 100	ISO/ASA 400
28 mm	28 mm lens cover (Vertical: 53° Horizontal: 70°)	27	54
35 mm	35 mm lens cover (Vertical: 45° Horizontal: 60°)	32	64
50 mm	50 mm lens cover (Vertical: 34° Horizontal: 46°)	38	76
85 mm	85 mm lens cover (Vertical: 23° Horizontal: 31°)	42	84

● Film size and angle of coverage

Lens coverage indicator	Film size					
	35mm	6 x 4.5	6 x 6	6 x 7	6 x 9	4"x5"
28mm	28mm lens cover	55mm lens cover	65mm lens cover	65mm lens cover	65mm lens cover	105mm lens cover
35mm	35mm lens cover	70mm lens cover	80mm lens cover	90mm lens cover	90mm lens cover	135mm lens cover
50mm	50mm lens cover	105mm lens cover	120mm lens cover	120mm lens cover	127mm lens cover	210mm lens cover
85mm	85mm lens cover	150mm lens cover	210mm lens cover	200mm lens cover	200mm lens cover	360mm lens cover



With the power control system, you can reduce the light output levels from full power to 1/2, 1/4, 1/8 or 1/16 power in manual photography, and you can handle the needs for flash fill-in outdoors or multiple flash lighting with the motor drive.

● Synchronization with motor drivers

(Number of continuous firing flashes at power control:
GN8/ASA100; lens coverage: 35 mm)

Power source	Recycling time		
	5 fps.	2 fps.	1 fps.
Four 1.5V size AA Alkaline batteries	5	8	15
Four size AA Ni-Cd batteries	5	8	15

Set the auto/manual selector switch to the position which delivers the light output you want to use, and in the LCD panel, the auto/manual indication is changed from **AUTO** to **M**, and the flash-to-subject distance is displayed for each of the light output.

