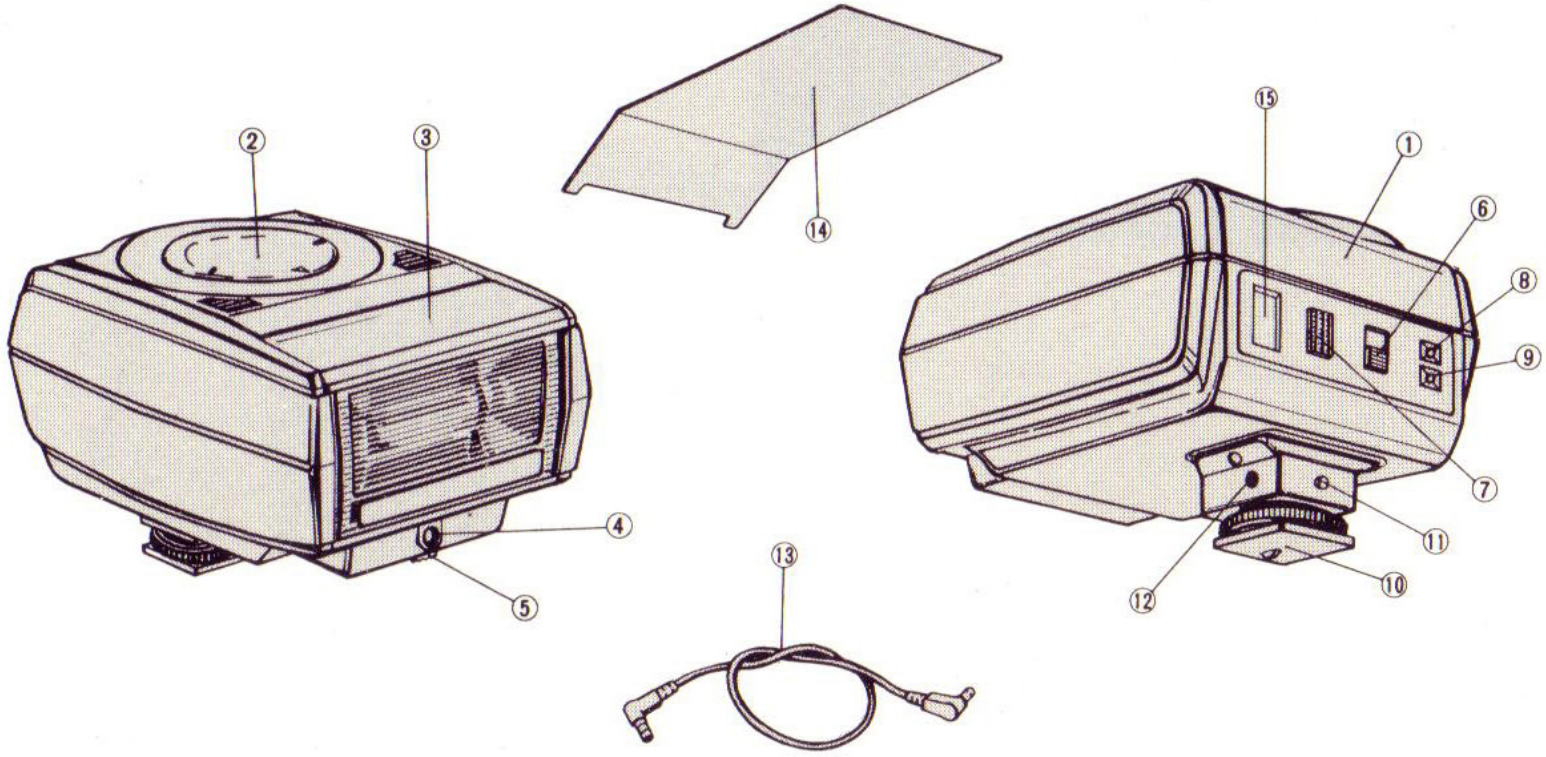
WILSONWERKS ARCHIVES

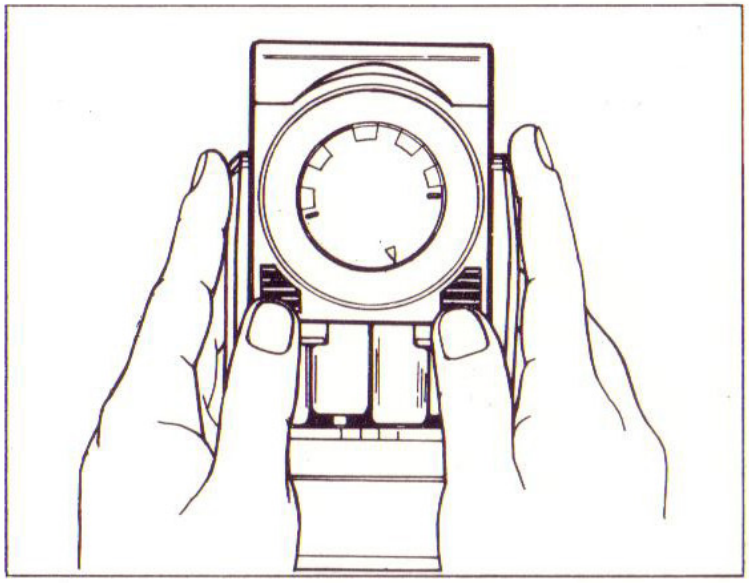
Thyristor Automatic Flash with Bounce Device

Operating Instructions

Description of parts

1. Battery cover
2. Flash guide dial
3. Bounce head
4. Auto sensor
5. Auto-Manual switch
6. ON-OFF switch
7. Ready light window
8. Auto check lamp
9. Switch-on-indicator lamp
10. Accessory hotshoe
11. Test button
12. PC cord input
13. PC cord
14. Soft lighting reflector





Inserting batteries

Slide back the battery cover and insert four fresh AA size batteries according to the symbols indicated inside. Alkaline type batteries are recommended for maximum number of flashes.

Mounting the flash to your camera

Slide the accessory shoe of the flash into the accessory clip on your camera and tighten the lock screw. If your camera is equipped with a hotshoe this will automatically couple with the flash and trigger the flash when the shutter is released. If your camera does not have a hotshoe use the PC cord. Simply plug one end of the cord into the PC cord input on the flash shoe (this disconnects the hotshoe contact) and the other end into your camera's PC socket. If your camera has multiple sockets, be sure to use the one marked X. Refer to your camera manual for exact instructions regarding proper use of flash connections.

Camera shutter speed

For cameras with focal plane shutter (most reflex cameras), the flash will synchronize at 1/60 sec. in most cameras or 1/125 sec. in some cameras. See camera's operating manual for the correct shutter speed to be set. Shutter speed faster than the recommended ones will cause shadows on the picture. For cameras with a leaf shutter, the flash will synchronize at 1/500 sec. and all slower speed. For general use, a shutter speed of 1/125 sec. is recommended.

Operating the flash

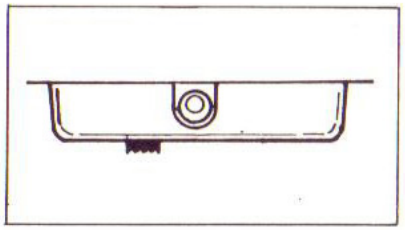
Turn the ON-OFF switch to the ON position. The red Switch-on-indicator lamp will simultaneously light up to indicate that the flash unit is switched on. If the batteries are fresh and correctly inserted the ready light will begin to glow after a few seconds indicating the flash is ready to be fired. Depression of the test button allows to fire a trial flash. When the flash unit is fired the ready light will go off and when the unit is ready for another flash, it will light up again. When using the flash on automatic, this recycling time will be very rapid because of the thyristor circuit built into this unit. When using flash on manual, the thyristor circuit is inoperative causing recycling to be much longer. When this recycling time becomes excessively long even on automatic, then the batteries are weak and should be replaced.

NOTE: Even when the ready light is on, the flash may not be fired if the ON-OFF switch is turned off.

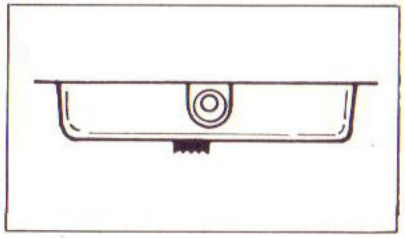
Automatic exposure

Your flash unit allows a choice of three automatic ranges to get control over depth of field.

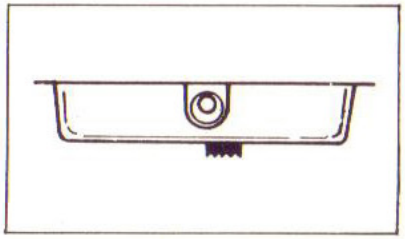
Set the Auto-Manual switch to either the green, orange or yellow position. This will turn on the auto sensor which will measure the light reflected from the subject and regulate the light output to give correct exposure when the flash is fired with the camera shutter button.



The green position will give you the maximum automatic range of the flash up to 36 feet or 11 meters and should always be used for distance shots. Set the f-stop on your camera to f1.4 when using ASA 25 film or f2.8 when using ASA 100 film.



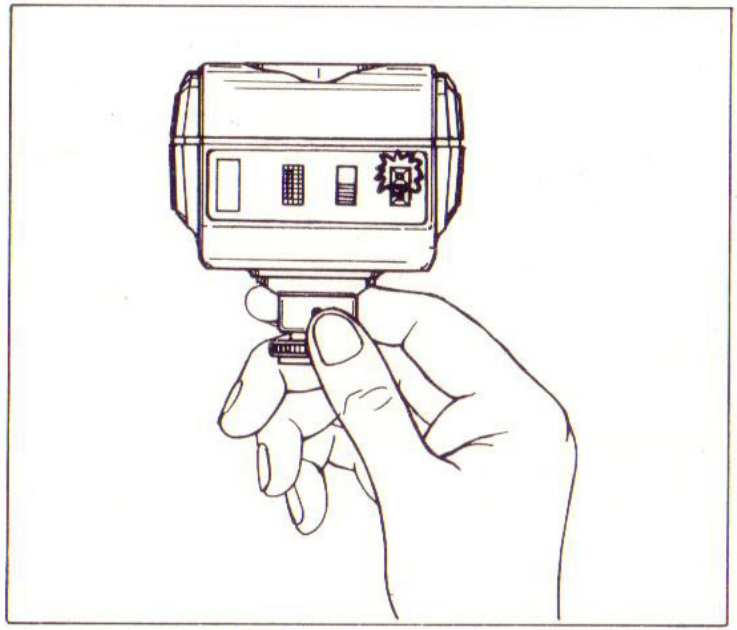
The orange position will give you medium range up to 18 feet or 5.5 meters and medium depth of field. Set the f-stop on your camera to f2.8 when using ASA 25 film or f5.6 when using ASA 100 film.



The yellow position will give you the range only up to 9 feet or 2.7 meters, but will give you the greatest depth of field. Use this position on close-up shots. Set the f-stop on your camera to f5.6 when using ASA 25 film or to f11 when using ASA 100 film.

Whenever you use a film of an ASA rating other than 25 or 100, different f-stop must be used. We have indicated the correct f-stop for three positions using the two most common films, but you can determine your own f-stop for any speed of film by using the flash guide dial on the flash unit. Set the arrow on the inner disk opposite the film speed you are using (the dial is marked for both ASA and DIN) Then read the proper f-stop figure opposite one of the three colored arrows and set it on your camera. Be sure to set the Auto-Manual switch to the same color as the arrow you select.

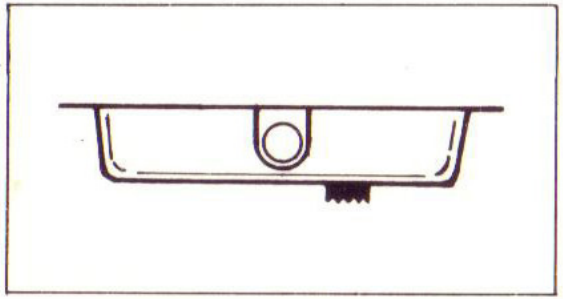
For example, if you are using ASA 400 film, set the arrow pointing to 400 on the outer dial. The three colored arrows will then fall, respectively, opposite f5.6, f11 and f22. If you are using the flash on the green auto setting, set the lens to f5.6. The three colored lines around the distance scale on the outer dial show the approximate range covered by the flash with the auto setting on that particular color.



Auto check lamp

The auto check lamp device is one of the exclusive features of this flash unit. Before shooting, check whether the subject is in the auto range. From the predetermined shooting position, aim the flash at the subject and push the test button to fire. If the green auto check lamp glows after firing, the subject is within the auto flash operating range. If it fails to glow, the subject is beyond the auto range and you must reduce the shooting distance or set the Auto-Manual switch to a larger f-stop setting (smaller f-stop figure).

Or after shooting, check to see if correct exposure has been made. If the shutter has been tripped and the correct exposure has been made, the auto check lamp glows.

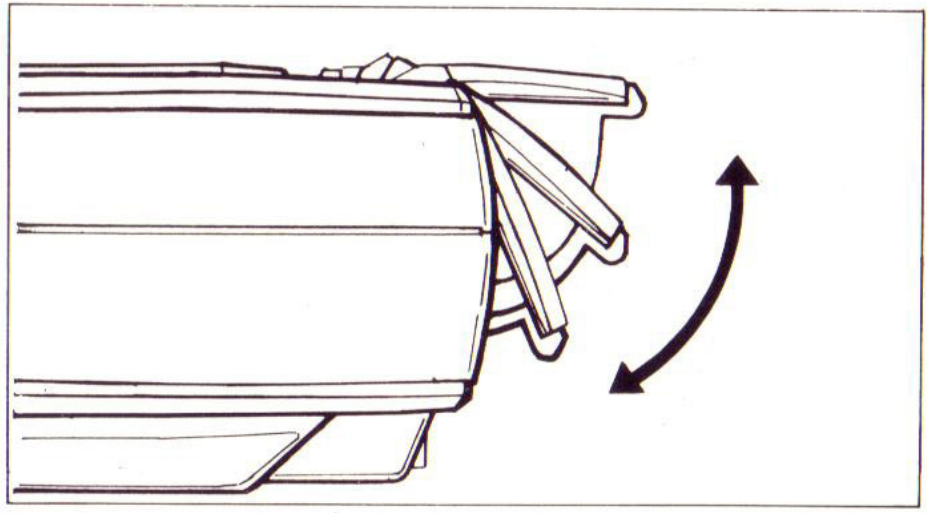


Manual exposure

Turn the Auto-Manual switch to the Manual (white) position which turns off the automatic sensor. Turn the flash guide dial until the arrow points to the ASA or DIN speed of the film in use. Find the approximate subject distance on the distance scale and set your lens to the f-stop opposite that distance. For example, if you are using an ASA 100 film and your subject is 12 feet away, the lens aperture to be set is f8.

Automatic bounce flash

Your flash allows you to bounce light off the ceiling or the wall for soft illumination while maintaining the convenience of automatic exposure control. Set the bounce head tilt to the desired bounce angle. The adjustable head tilts from 0° (straight ahead) up to 90°, with click stops at 0°, 30°, 60° and 90°. Set the Auto-Manual switch to the color which provides the automatic operating range you desire. However, it is important to make sure that the position you select has an operating range sufficient to cover the total flash-to-reflector-to-subject distance. To ensure the proper exposure when bouncing light off the light-absorbing surfaces like dark walls or relatively high ceilings, always use the largest aperture (smallest f-stop figure). Test fire the flash with test button. Auto check lamp will show you if sufficient light power is available. If it fails to glow, reduce the distance to the reflecting surface. For true color expousre, the reflecting surface should always be white.

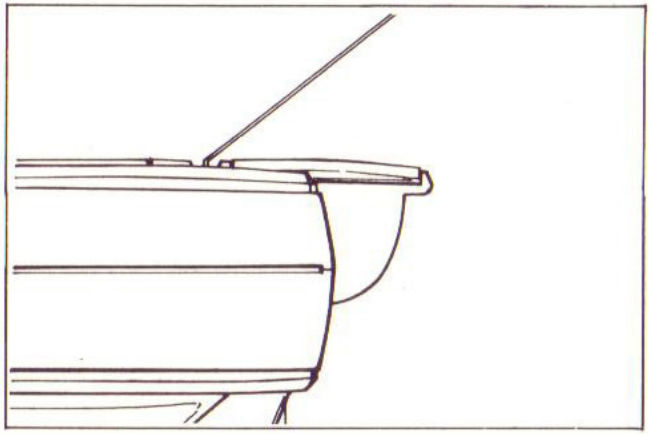


Manual bounce flash

Your unit can be used in the manual mode for bouncing light off ceilings or walls. First set the Auto-Manual switch to the white (Manual) position. Measure the distance from the flash unit to the reflecting surface and to the subject. Read f-stop figure corresponding to the total distance on the flash guide dial. Set aperture on your lens at least one f-stop lower (smaller figure) than this f-stop figure.

Example: Film speed: ASA 100

Flash — reflecting surface — subject distance	: 7m
f-stop obtained from flash guide dial	: f4
f-stop to be set on the lens	: f2.8



Soft lighting reflector

To this unit supplied is a lizzard-treated reflector which is its exclusive feature. By inserting this panel to the slit behind the bounce head, a soft-toned picture at a short distance can be obtained; it is particularly effective for portrait. It is advisable to set the bounce angle at 90°. Use the flash in the automatic mode as usual. The auto sensor will ensure correct exposure.

Exterior power pack (Optional accessory)

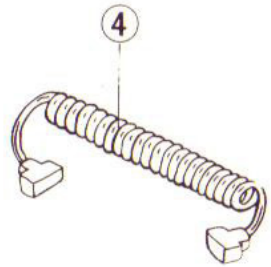
The compact transistorized battery power pack available as optional accessory permits the flash unit to recycle faster and to produce larger number of flashes than the

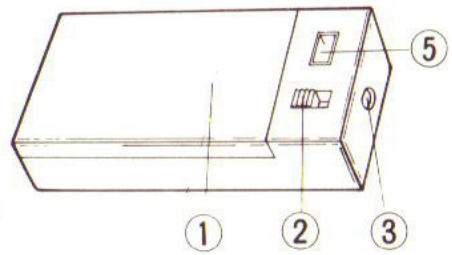
usual battery operation.
The power pack operates either on 8 or 4 pieces penlite batteries. To use, slide open the battery compartment cover and install 8 or 4 pieces penlite batteries following to the diagrams imprinted inside. In case of the operation on 4 piece batteries, all four batteries should be inserted on the left half portion of the compartment. Be sure to close the battery compartment cover. Plug one end of the power pack cord into the socket on the power pack and the other end to the power pack socket on the back of the flash. Slide the power pack switch upward. This will turn on the red switch-on-indicator lamp of the power pack. When the ready light on the flash unit glows, you are ready to shoot.
While the flash unit may be powered by only the accessory power pack (without loading 4 penlite batteries into the built-in battery compartment), such use will result in non-functioning of the Auto check lamp. To avail yourself of the benefits of this feature, you MUST use four batteries in the built-in compartment. Recycle time and number of flashes obtainable using both power pack and flash unit's batteries simultaneously are:

Recycle time	approx. 3 sec.
Number of flashes	approx. 360

(The above data are for manual exposure using alkaline batteries.)
NOTE: When operating the flash on power pack, avoid firing the flash continuously more than 5 flashes in manual mode (full output) with an interval of 3 seconds or shorter since it may cause damage with the flash unit.

1. Battery compartment cover
2. Power pack switch
3. Switch-on-indicator lamp
4. Power pack cord
5. Socket





Maintenance and care

When not in use, switch the flash off. Take the batteries out when the flash unit is being stored or when it will be carried during a long time. Do not try to open or

repair your flash unit since the electric circuit inside carries a high voltage. If your flash needs repair or does not work correctly, take it to where you bought it from. Opening the flash unit voids the warranty.

Specifications

Type:	Thyristor automatic flash with bounce device which tilts up to 90°
Mounting:	Fixed hotshoe with lock screw and PC cord
Guide number:	50 for ASA 25 in feet or 30 for DIN 21 in meters
Power source:	Four penlite (AA) batteries
Flash duration:	1/1,000th sec. in Manual 1/1,000th – 1/30,000th sec. in Auto
Approximate recycle time:	10 sec. in Manual w/alkaline batteries 0.5 – 10 sec. in Auto w/alkaline batteries
Approximate number of flashes:	120 in Manual w/alkaline batteries 120 – 2,000 in Auto w/alkaline batteries
Illumination angle:	60° horizontal, 50° vertical
Color temperature:	About noon daylight
Auto range:	Green: 3 – 36 ft or 1 – 11 m Orange: 1.5 – 18 ft or 0.5 – 5.5 m Yellow: 1.5 – 9 ft or 0.5 – 2.7 m
Auto f-stop:	Green: f1.4 w/ASA 25 or f2.8 w/DIN 21 Orange: f2.8 w/ASA 25 or f5.6 w/DIN 21 Yellow: f5.6 w/ASA 25 or f11 w/DIN 21

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