

How to use the **POLAROID EXPOSURE METER #628** with the Model 180 and other non-electric eye Polaroid Land cameras

This is an ultra-sensitive cadmium sulfide cell meter that measures the brightness of the light reflected from the subject. It will give correct exposure information for color or black and white films for the brightest beach or snow scenes, or for subjects in dimly lit interiors.

Although it is designed specifically for the Model 180 camera, it can be used with all non-electric eye Polaroid Land cameras and other makes of cameras. It can handle film speeds from ASA 25 to ASA 12000.

The meter gives exposure information in the form of easy-to-use EV numbers and also in f-number/shutter speed combinations.

To use the meter with old model Polaroid cameras having exposure numbers from 1 to 8 or 2 to 9, simply subtract 9 from the EV number indicated by the meter.

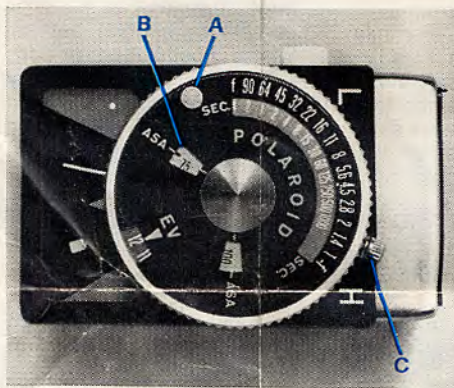
It is preferable to use the meter handheld. However, it has a foot that fits the accessory shoe on the Model 180 camera and the meter may be used while on the camera.

SET THE METER

Set the film speed dial for the speed of the film you are using. The speed of each type of film is given in the instruction sheet packed with the film. Example: 3000 for black and white Type 107. Check this and turn the film speed knob (A) to place the right number in the window (B).

When you set 75 (for color film) line up the black and white index marks at the edge of the window, as shown. Center all other film speed numbers in the window.

For subjects in bright light, set the High/Low switch (C) to H; for subjects in dim light set it to L.



TAKE THE READING

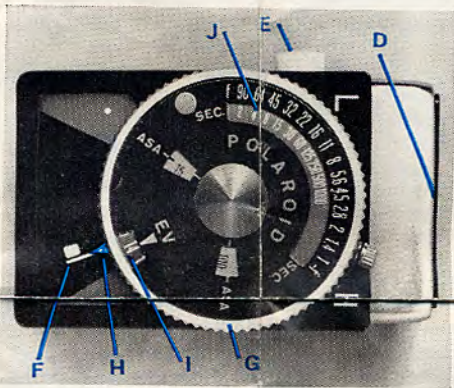
Hold the meter in your hand and aim the cell window (D) at the subject.

Depress the needle button (E) with your forefinger and hold it down until the needle (F) stops swinging; this may take several seconds. Then release the button; the needle will be locked in position.

Turn the pointer control ring (G) with your thumb to place the pointer (H) directly over the needle.

Read the correct exposure in the EV window (I). Here, it's EV 14. Or, pick a suitable combination from the f-number/shutter speed scale (J). For example, 1/125 at f/11. Set the camera for the exposure.

There are important differences in the way the meter is used for pictures of people, scenes, etc. See other side for details.



IF THE NEEDLE DOESN'T MOVE

If the meter is set to H, switch to L. If it's set to L and the needle doesn't move, or moves only slightly, there isn't enough light to make a picture.

IF THE NEEDLE IS IN A RED ZONE

Exposure readings will be most accurate when the needle stays in the black zone. If it stops in a red zone, try moving the High/Low switch to the opposite side. If it still remains in a red zone, use extra care in taking the reading.

HOW TO GET BEST RESULTS WITH YOUR METER

PEOPLE AND NEARBY SUBJECTS

For pictures of people it's best to take the reading from the brighter side of your subject's face. Bring the meter close, as shown, so the cell "sees" only the face and not the background, but be careful not to cast a shadow on your subject.

If one side of the face is brightly lit and the other is in deep shadow you may find that an "average" reading will give a more pleasing result than a single reading.

First use the meter on the bright side of the face and note the exposure; then take a reading on the shaded side. Set the camera for an exposure between the two.

The "average" reading also is good for groups. Take readings from the most brightly lit and dimly lit faces.

For nearby subjects other than people, take a reading off the most important part.

A close-up reading (as shown) is most important when there's bright light behind your subject. Example: a man on a shaded porch with a beach behind. Or, in bright sun, with his face turned so it's shaded.



INDOOR PICTURES WITHOUT FLASH

Provided that the light on the subject is fairly even, it's easy to make well exposed pictures indoors. Bring the meter close to your subject, as shown above.

If you're taking an over-all reading of a room, don't aim the meter directly at a strong light source, such as a window or lamp; your picture will be too dark.

LANDSCAPES, BUILDINGS, OUTDOOR GROUPS, ETC.

Aim the meter at the most important part of the subject and come as close as possible to take your reading.

Caution: For distant scenes, point the meter slightly down so the cell does not

"see" too much sky light. Don't point it down too much — just below the horizon.

Never aim the meter directly at the bright sun while the needle button is depressed; the meter will be damaged.

MAINTENANCE AND ADJUSTMENT

The battery: This meter is powered by a tiny 1.3 volt mercury battery, Type PX 13. For best results it should be replaced every two years. To remove it, unscrew the battery cover (A). Insert the new battery with the side marked PX 13 facing up.

To check the condition of the battery, depress and hold simultaneously the battery check button (B) and the needle button (C). The needle should swing to the green square (D). If it doesn't go that far, replace the battery.

Checking for zero: Due to rough handling the meter may get out of adjustment and consistently give readings that are too high or too low. To check the meter, press the cell window end (E) on a table top so no light can enter and depress the needle button (C). The needle should move to the dot (F).

If the needle doesn't reach the dot, or passes it, use a fine bladed screwdriver to adjust the zero set screw (G) until the needle does meet the dot. If you are unable to adjust the meter so the needle meets the dot, the meter must be repaired.

