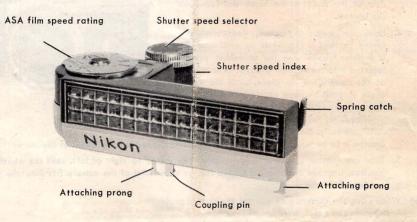
PHOTOELECTRIC EXPOSURE METER FOR NIKON F MODEL 2



The Exposure Meter for the Nikon F Model 2 is designed to attach onto the top of the Nikon F camera and to couple to both the camera's shutter speed dial and the aperture ring of the Nikkor-Auto lenses which are provided with a slotted projection on the aperture ring, such as $28 \sim 135$ mm as well as the Telephoto-Zoom $85 \sim 250$ mm in F mount.

The meter can also be used with the other Nikkor lenses in F mounts which are not provided with the slotted projection such as 21 mm F:4, 105 mm F:4, etc,. In these cases only the shutter speed dial of the camera couples to the meter, the aperture ring of the lens being to be set according to the F-number read on the F-number scale of the meter.

The meter is designed to measure reflecting light from the subject to be photographed.

Characteristics

Range of	shutter speeds used :	$1/1000 \sim 2$ sec.
Range of	F-numbers :	F: 1.4 ~ F: 22
Range of	film speed settings in ASA :	6~3,200
Range of	filter factor settings :	$1 \times \sim 4 \times$
Range of	brightness to be measured :	$4 \sim 16,000 \text{ cd/m}^2$

Mounting and Coupling

- (a) When using the camera lens Nikkor Auto provided with the slotted projection.
 - 1. The camera's shutter speed dial can be set at any speed other than T.
 - 2. To couple the meter to the camera, first set the aperture diaphragm of the lens at F: 5. 6.
 - Set the aperture slider beneath the front window of the meter at the black dot found on the bottom.
 - 4. Hold the meter by hand, depressing the spring catch (4 in Fig. 1) at an end, and slip it in from above with the attaching prongs inserted into the vertical grooves at both ends of the camera's name plate, until the meter clicks in position, and at the same time the coupling pin on the bottom fits to the slotted projection on the aperture ring of the lens. Simulteneously, the shutter speed dial of the



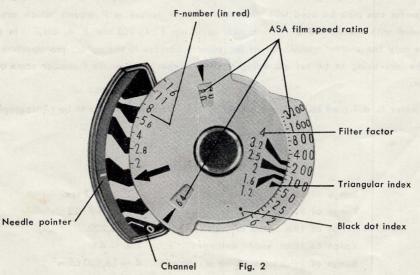
Fig. 1

camera is to be positioned just under the shutter speed setting wheel of the meter.

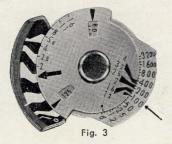
- 5. Turn the shutter speed setting wheel of the meter to right or left, until the wheel settles in position, i. e. the coupling pin on the shutter speed dial of the camera fits into the groove on the bottom of the wheel.
- (b) When using the camera lens without the slotted projection. In this case the aperture slider of the meter is to be set beforehand at the red dot found on the front of the meter.

Using the Meter

- (a) With the camera lens Nikkor Auto provided with the slotted projection.
 - First turn the meter dial (Fig. 2) with an arrow mark until the triangular index meets the ASA speed of the film being used.



ASA 100



ASA 64





Examples:

In Fig. 3 the film speed rating ASA 100 is brought to the triangular index.

The film speed is also indicated by two figures appearing in the two windows on the dial. In Fig. 4 and 5 settings of film speed rating ASA 64 and 80 are seen in one of the windows respectively.

When using a filter on the lens, rotate the dial slightly until the filter factor 1.6 (but not the index) is brought opposite the ASA film speed 100 of the film being used (Fig. 6).

> Point the meter's front window towards the subject to be photographed. The white needle pointer in the top window will move to and fro and settle at a position (Fig. 7).

Then, turn the aperture ring of the lens until the pointer meets the channel pointed to the arrow mark on the meter dial (Fig. 2), or rotate the shutter speed setting wheel of the meter until the arrow mark meets the channel pointed by the white needle pointer in the window.

Now, the correct exposure has been set ready for photographing the scene.

If, however, the scene is not bright enough to stir up the pointer needle (for instance a shutter

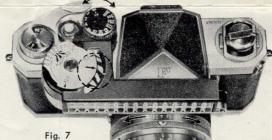




Fig. 5 ASA 100

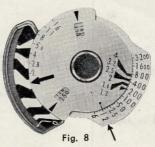


Fig. 6 With filter factor 1.6





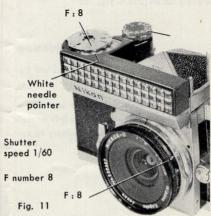




speed 1/8 sec. or slower for a film sensitivity ASA 100), the aperture slider of the meter is to be set at the red dot found on the front of the meter, and the meter couples only to the shutter speed dial, but not to the aperture diaphragem. Use of the meter in this case is the same as in the case where the camera lens is not provided with the slotted projection on its aperture ring. (See below)

- (b) With the camera lens without a slotted projection (Fig. 11).
 - Set the aperture slider of the meter at the red dot on the front of the meter. Setting of the ASA speed of the film being used and of the filter factor if a filter is used on the lens, will proceed in the same way as when the Auto Nikkor is used on the camera.

However, if the meter is used in extremely bright light conditions# where the white needle pointer in the window scales out, set the aperture slider pin at the black dot found on



the bottom of the meter. And for ASA film speed setting, use the black dot (not the triangular) index (Fig. 8). In this case the filter factor can not be set.*

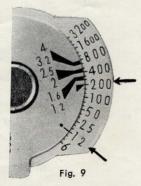
- 2. Turn the shutter speed setting wheel of the meter to a desired shutter speed.
- 3. Read the F-number scale (in red) by the channel pointed by the white needle pointer. The arrow mark indicates the position of F : 1.4.
- Set the aperture diaphragm of the lens according to the F-number indicated on the F-number scale of the meter.

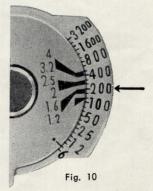
On the other hand if a particular F-number is set on the aperture diaphragm of the lens, the suitable shutter speed can be set by turning the shutter speed setting wheel of the meter when the F-number (in red) is read opposite the white needle pointer in the window.

2000 Cd/m² or brighter, for instance corresponding to the following combinations of aperture and shutter speed for a film sensitivity ASA 100 :

F: 8 1/500 sec. F: 11 1/250 sec. F: 16 1/125 sec.

* If necessary, a filter factor can be set by rectifying the ASA film speed setting. For example, when a film with an ASA speed 12 and a filter whose factor is 1.6 are used, divide 12 by 1.6 and set the meter for a film speed ASA 8 (Fig. 10).





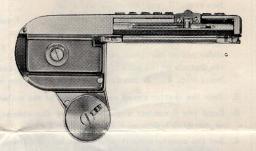
Or proceed as follows :

First bring the black dot index on the meter dial to the ASA film speed rating (12 in Fig. 9) and read the position of the triangular index on the ASA film speed scale (200 in Fig. 9). Then turn the dial until the filter factor (1.6) comes in coincidence with the channel pointing to the reading previously taken (200 in Fig. 10).

Adjusting zero position

On the bottom of the meter housing you will find a small screw head which serves to adjust the zero position of the metes as follows.

Cover the front window completely and see whether the white pointer needle rests on zero. If it does'nt, turn the screw head slightly left or right with a small screw-driver, until the resting position of the white pointer needle comes precisely to zero.





Care and keeping

Avoid any shock and serious vibration as far as possible in carrying or using. Don't leave the exposure meter in the sun, any more than you can help, to avoid excessive light and heat effect. Don't dismantle the meter, as it will impair its accuracy and efficiency. After use, clean thoroughly and store it in a dry shady place.



NIPPON KOGAKU K.K.

Shinagawa, Tokyo, Japan

Printed in Japan

FA 3101 (60. 9. A) B