

**NIKON ELECTRIC MOTOR DRIVE**

**INSTRUCTIONS**



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## NIKON ELECTRIC MOTOR DRIVE

### Preparation for Use

The Nikon camera equipped with the motor unit accepts a standard film load\* of either 20 or 36 exposures, as in the normal Nikon camera. The film perforation, however, should be more carefully engaged by the notch on the winding spool and sprocket, as the initial surge of the motor in starting may pull the sprocket free of the film.

Attach the Nikon motor unit to the camera body in place of the standard back (Fig. 1).

Turn the A-R ring around the camera shutter button to A, and advance film and trip shutter until the camera exposure counter is at zero, just as you do with manual operation.



Fig. 1

\*Using the cassette (magazine) is preferred to the film cartridge (patrone), as the latter causes more friction and results in a larger reduction of driving speed, consuming the battery more rapidly.



Fig. 2

### Battery Case

Power for the motor drive is supplied from six standard 1.5 volt penlite batteries ("Eveready" type No. 815, Mallory Zinc Pen Cell type pf.932 etc.). These are to be deposited in the vest pocket battery case (Fig. 2) following the terminal indications. If the markings are not correctly followed it may be a cause of disorder to the motor unit.

Batteries should be kept always fresh. When batteries become consumed, the driving speed of the motor unit may be reduced and the shutter button become heavier. The batteries should be replaced by new ones when the voltage drops below 8.5V.

In case any other power source is used than the vest-pocket battery furnished with the unit, the following data will be helpful.

Electromotive force : D. C. 9 volts

Electric current : 0.4 amperes approximately

Note in this case that all the terminal sockets and plugs found on the unit and cord are so made as to receive positive (+) at the center and negative (-) at the circumference.

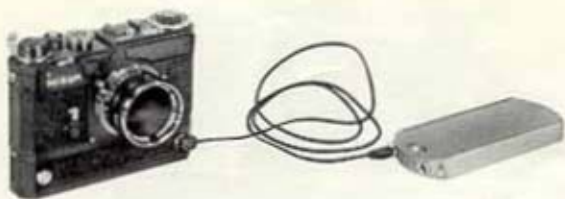


Fig. 3

### Individual Exposure

First set the K-L ring around the press button on the back of the unit, at the center dot position "•" only (See Fig. 5, p. 5). Attach the connecting cord to the socket on the front of the motor unit and to the socket without marking on the battery case (Fig. 3). (Outlet on battery case marked "R" is for remote operation only.)

The moment the connection is made, the winding of film and shutter will automatically be accomplished, and the camera shutter button can then be depressed for the first exposure.

When the finger is released from the shutter button, the automatic winding of film and shutter starts for the next exposure. Consequently there is no need for manual lever winding as long as the unit is connected to the battery case.

When the camera is not being used, set the K-L ring at L to avoid accidental firing.

#### **Important !**

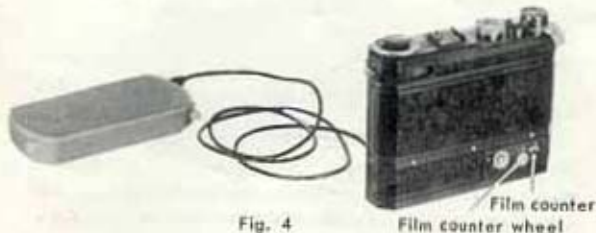
Do not release your finger from the shutter button as long as the shutter timing mechanism is operating.

When releasing your finger, lift it up promptly, so as not to hinder the shutter button to pop up freely.

Care should be taken not to try to depress the shutter button before the winding action for the next exposure is completed. Do not use T (Time Exposure).

Should smooth functioning of mechanism become hindered due to any incorrect manipulation as described previously it may be set to right thus :

1. For Nikon S2, turn the A-R ring (against some pressure), found around the shutter button of the camera, to R and then back to A.
2. For Nikon SP, depress for a short time the button found on the back of the unit for sequence photography (see next page).



## Film Counter

The film counter on the back side of the motor unit (Fig. 4 and 5) indicates the unexposed picture frames still remaining, while the camera film counter indicates the number of exposed frames.

If a predetermined number of exposures is desired, set the counter on the motor unit at the number of frames to be exposed by rotating the wheel (Fig. 4) with your thumb in direction of arrow. The motor drive will stop automatically the moment the motor counter indicates "0". For example, if entire roll of film is to be fired in one burst, set counter at 36. If 6 frames are to be fired in one burst set counter at 6.

Release button for sequence photography

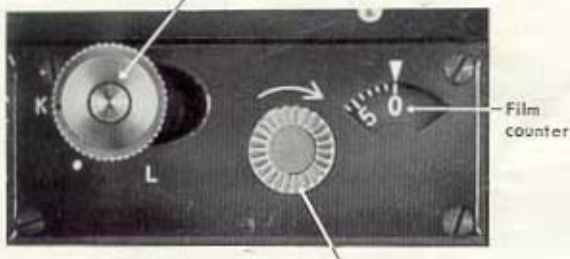


Fig. 5

Film counter wheel

## Sequence Photography

The Nikon Motor Unit also enables any desired number of sequence photographs to be taken at the rate of approximately three exposures per second. For sequence photography, use the release button found on the back of the unit (Fig. 5). When the ring around the button is set at "L", the button is locked, thus preventing accidental release. With the ring set on the white dot at the center position, the motor drive will continue to run as long as the button is held depressed by your finger. When the ring is turned to "K" the button will remain depressed, keeping the motor unit running until the ring is reset to the center marking, or the counter on the motor unit has reached the "0" position.

For sequence photography do not use shutter speeds slower than  $1/60$  of a second.

Individual exposures may also be made by utilizing the press button for sequence photography, by detaching the depressing finger from the button each time the shutter is released for one picture frame. However, this manipulation is applicable only to shutter speeds of  $1/60 \sim 1/1000$  th second.

Needless to say, the counter on the motor unit should be set at the maximum exposure number the film can take. If the counter happens to be set at 36 exposures when the film actually loaded makes 20 exposures, take care not to depress the button after the 20 exposures have been made. Otherwise the film end or its perforations will be cut and rewinding will become impossible.

## Remote Control

The Nikon motor unit allows for remote control operation. Connect the cord to the socket marked R on the battery case. Set the K.L ring on the back of the unit at K. Depressing the button located on the battery case will operate the camera automatically and continuously at a distance.

However, when remote control is desired over a long distance, a more powerful electric source is required in order to compensate for the voltage drop along the connecting cord.



Fig. 6

## Cautions

- If desired, the camera with the motor unit attached may be operated manually using the single stroke lever. However, be sure to detach the battery connection when an automatic winding has been completed. If the cord is detached while the shutter button being depressed, the lever will become locked. Attach the cord again and finish the automatic winding.
- With Animation Speedlight Units, the taking of stroboscopic sequence photos is possible, at the rate of 3 per second approximately.
- The motor drive unit is factory-adjusted to a particular Nikon S2 or SP camera and may not function when used with other cameras.

Consult your dealer or the manufacturer, if you desire to use it in combination with another Nikon camera.



