

INSTRUCTIONS  
**THE MINI  
PHOTOSCOP**

*Trade Mark Reg. U. S. Pat. Off.*



*Universal Photoelectric Exposure  
Meter for Still and Cine Cameras*

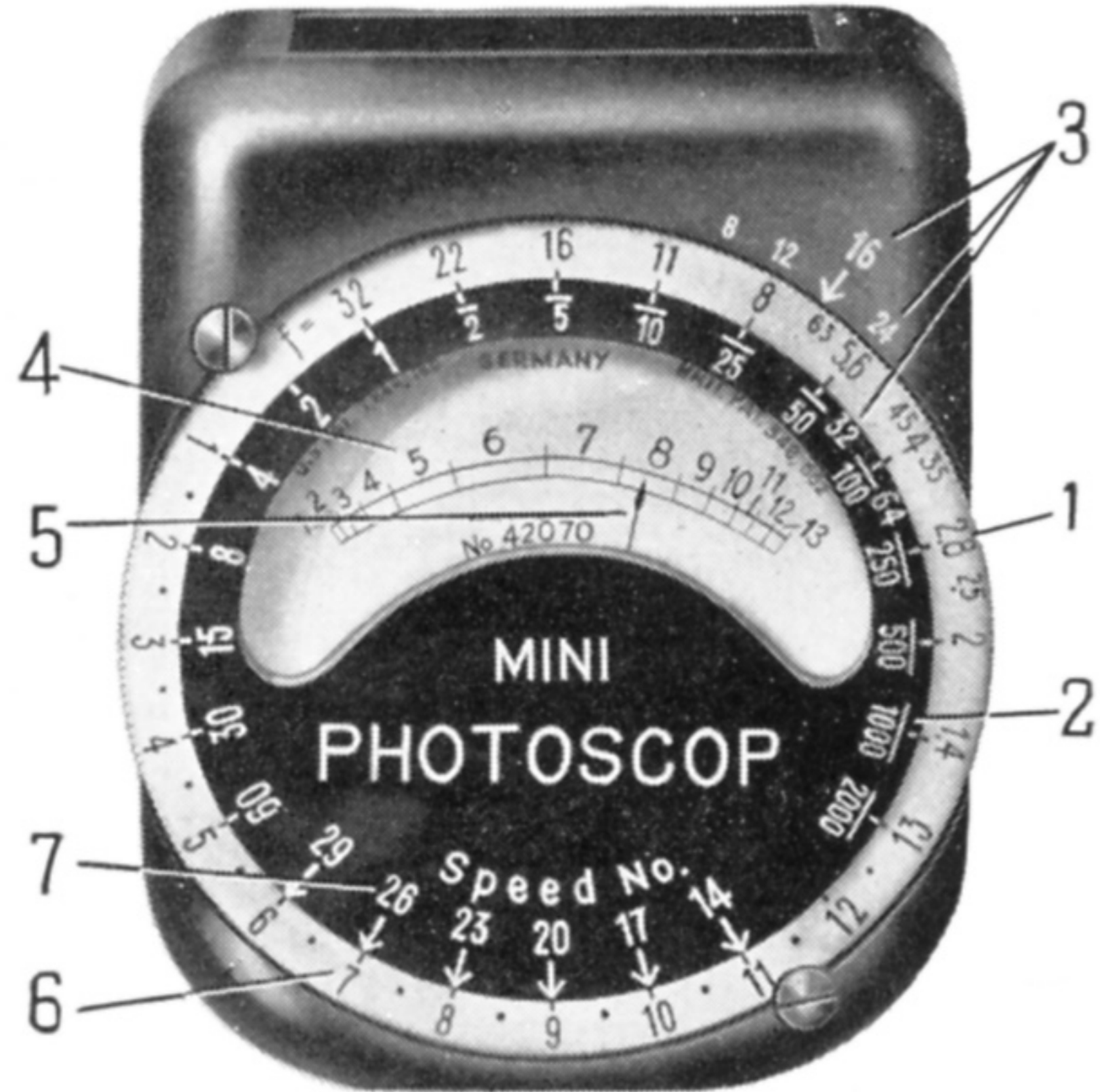


Figure 1

1. Revolving ring with lens apertures, stops F/1.4 to F/32 (red figures).
2. Time scale with exposure time from 1/2000th to 60 seconds.
3. Cinema taking speeds from 8 to 64 frames per second (yellow figures).
4. Reference scale with values 1 to 13.
5. Indicator, actuated by electrocell generator.
6. Reference values on the revolving ring (black figures).
7. Emulsion sensitivity in Photoscop Speed Numbers from 14 to 29.  
(Corresponding to Scheiner ratings used in U.S.A.).

Hold the MINI PHOTOSCOP as in illustration on the cover. Point to the object and slightly depress the cover flap, as in the illustration. The electric indicator (5 in Fig. 1) then points to a value on the reference scale (4). Find the same reference value as a black figure on the rotating ring (6). Bring it opposite the speed number (7). Further adjustment is not necessary. Read the stop (1) or the exposure time (2). You may now see at a glance for every white exposure time on the scale (2) the red stop number (1).

Movie makers will find the yellow taking speed figures in relation to the red stops, and can see what number of frames per second is required for any chosen stop, or what stop applies to number of "frames per second."

For Speed Number ratings of the various films and plates consult the Booklet of Practical Speed Values, which lists the ratings in Photoscop Speed Numbers. These ratings should be used regardless of any speed markings on film packages in U. S. A. or abroad.





Figure 2

EXAMPLE: *Using supersensitive panchromatic or any other film of Speed Number 23.* Index points to reference value "8." Shift revolving ring until black reference value "8" is opposite Speed Number "23," as in **Fig. 2**. Stop "8" is right above exposure time 1/25th; the 1/500th second exposure pairs with stop "2," and similarly is instantly available any other pair of time and stop.

NOTE: If any shutter time or stop shown on the meter is not available on the camera always use the nearest longer exposure time or larger stop.



Figure 3

EXAMPLE: **Cine camera user works with Kodachrome, having Photoscop Speed Number 17.** Index points to reference value "8." Move revolving ring until the black reference value "8" is opposite Speed Number "17." Thus, "16 frames per second" (yellow figures in upper right hand corner) requires stop 3.5, as in **Fig. 3.** Eight frames per second calls for stop 4.5; 32 frames per second — (yellow figure between 1/50th and 1/100th on the time scale) — demands stop 2.5.

NOTE: The yellow "frames per second" markings on the meter apply to cameras having the usual open shutter sector from  $150^{\circ}$  to  $210^{\circ}$ , which correspond to an exposure of  $1/38$  to  $1/27$  for each single frame.

For cine cameras with smaller shutter sector see page 8.

## CINE CAMERAS REQUIRING SPECIAL READING

Motion picture cameras with smaller angle of open sector from  $95^{\circ}$  to  $145^{\circ}$ , therefore exposing single frames from  $1/60$ th to  $1/40$ th second, may rather not employ the yellow taking speed marks of the Mini Photoscop, but should read for **"16 frames per second,"** the stop corresponding to exposure time of  $1/50$ th. For other taking speeds use the following table:

Frames				
per second	8	<b>16</b>	32	64
Read to	$1/25$	<b><math>1/50</math></b>	$1/100$	$1/200$

In this category belong the following motion picture cameras:

Filmo Golf 70	Filmo Kodacolor 75
Filmo 70 A-C (3 spd)	Keystone 16. A-7 & B
Filmo 71 A-B (3 spd)	Simplex
Filmo 70 (3 spd)	Stewart Warner 8
Filmo 75	Stewart Warner 532 A

Where Speed Numbers are listed for films which do not appear marked on the meter, take the nearest one which is marked; for instance, for film of Speed Number 22 use the Speed Number 23; for a film marked Speed Number 18, use 17.

*Exposure Under Artificial Light.* Use the Speed Number for artificial light in the Booklet of Practical Speed Values.

*Prolongation Factors:* When using filters apply the same prolongation factor as is stated on or corresponds to the filter. Proceed similarly when working with supplementary lenses.

*Contrasty Subjects:* Where possible, approach the subject and measure the shadows in which detail is desired. The angle of the meter is less than  $45^{\circ}$ . Single out the most important section of the subject for best exposure and approach with the meter as near as the object is wide. For instance, in portraiture measure the shadow side of the face from a distance of about 10 inches and guard against casting a shadow on the subject while doing so.

## **Please do not open the meter housing.**

We cannot assume any responsibility for a meter which has been opened. Mail it to our fully equipped Service Department for repair or recalibration.



The individual serial number of the MINI PHOTOSCOP is located below the center of the reference scale arc on the silvered plate. *The enclosed card is for your use in registering your MINI PHOTOSCOP with the distributors.*



## **PHOTO UTILITIES, INC.**

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