

Canon  
**F-1**

# BOOSTER T FINDER



**INSTRUCTIONS**

English Edition

The Canon Booster T Finder, interchangeable with the F-1 pentagonal prism section, reads precise exposures with its electronic timer under extremely dim lighting conditions. It is effective for photomicrography, macro-photography, and when shooting indoors or night scenes where timed exposures are necessary.



## Technical Data

**Meter:** Highly sensitive pivot meter.

**Metering Element:** 2 CdS photocells.

**Circuit Construction:** 9 transistors, 2 diodes, 3 condensers, 2 variable resistors, 3 semifixed resistors, 21 fixed resistors, 2 lamps, 1 thermistor.

**Metering System:** Low illumination side (orange colored scale): Zero method stopped-down metering. Centrally-weighted averaging system.

High illumination side (white colored scale): Full aperture metering by camera.

**Metering Range:** ASA 100, EV10 (f/22 at 1/2 sec.)-EV-3.5 (f/1.2 at 15 sec.) with booster element. ASA 100, EV15 (f/22 at 1/60 sec.)-EV3 (f/1.4 at 1/4 sec.) with camera element.

**Switching of Metering Range:** By turning shutter dial and eyepiece shutter knob.

**Film Speed Scales:** ASA 25-12800.

25 . . 50 . . 100 . . 200 . . 400 . .  
 (32)(40) (64)(80) (125)(160) (250)(320) (500)(640)  
 800 . . 1600 . . 3200 . . 6400 . .  
 (1000)(1250) (2000)(2500) (4000)(5000) (8000)  
 . 12800  
 (10000)

**Shutter Speed Scales:** Low speed (orange): 60, 30, 15, 8, 4, 3 sec. High speed (white): 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60 sec. Coupled to Booster Timer on low speed side and to shutter speed of camera on high speed side.

**Timer:** Low speed: 60–3 seconds continuous use possible. Exposure control by electronic timing device.

**Timer Lamp:** Proceeding element by blinking lamp.

**Meter Reading:** Zero method, with illumination lamp and battery check index mark.

**Viewfinder:** Eye-level using pentagonal prism. Dioptic adjustment lens interchangeable. Magnifier R, S usable.

**Viewfinder Information:** Rangefinder, metering range.

**Meter Information:** When between 1/4 and 1/60 sec. at ASA 100, the camera side information appears illuminated on right side.

**Power:** One 6v #544 silver oxide battery. Use exterior power at low temperatures. Connect battery chamber and Battery Case with Cord 6V 2B. Battery Magazine 12V is used.

**Battery Checker:** Built in.

**Shutter Release Socket:** Built in.

**Eyepiece Shutter:** For retroincident light cutoff. Coupled to meter switch. Booster lamp lights up when eyepiece shutter is closed.

**Attaching onto Camera:** Set the shutter dial of the camera at between 1/30 and 1 second and then attach onto camera. Connection is made by turning shutter speed dial on Booster side.

**Switching of Shutter Dial:** Push the timer knob upwards at "3" second scale and turn the shutter speed dial to low speed scales. The shutter speed on the camera side is automatically set at "B", and the

timer functions.

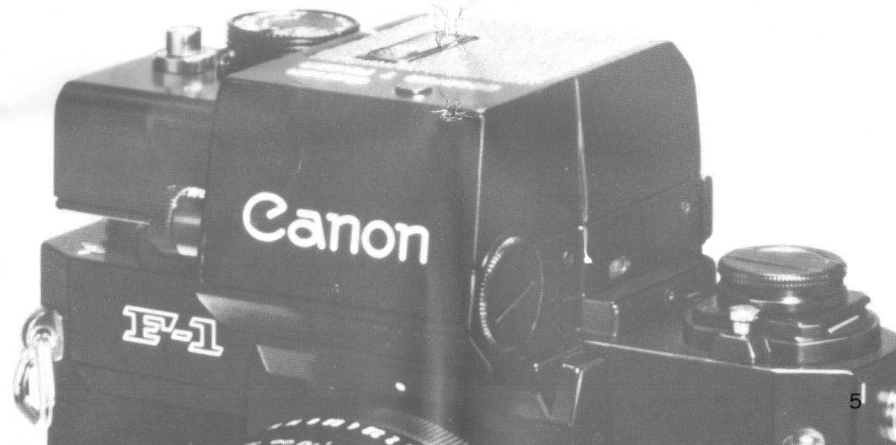
**Safety Devices:** Eyepiece shutter, timer knob, etc.

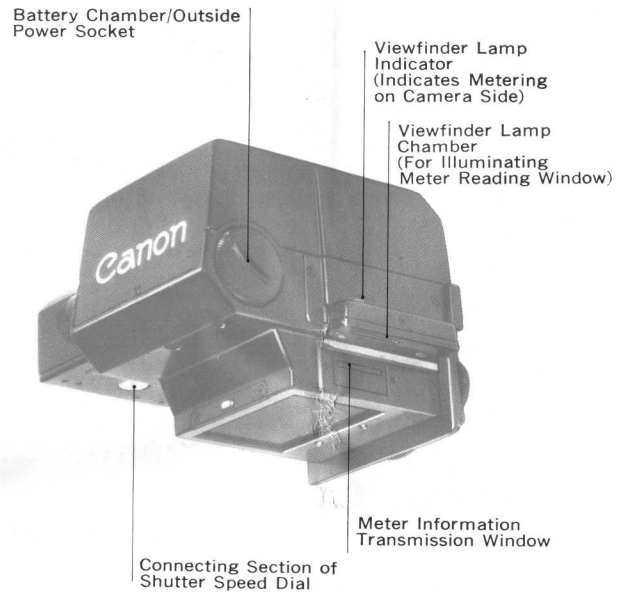
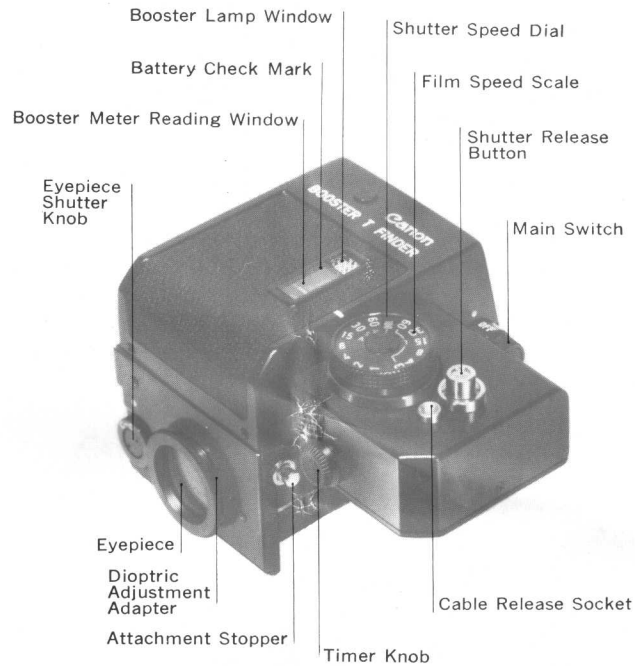
**Size:** 87 x 52 x 69mm (3-5/16" x 2-1/16" x 2-11/16").

**Weight:** 350 grams (12-3/8 oz.).

**Accessories:** Case, silver oxide battery #544, Battery Magazine 12V, Cord 6V 2B, Battery Case, Finder Dust Cover.

Subject to alterations.



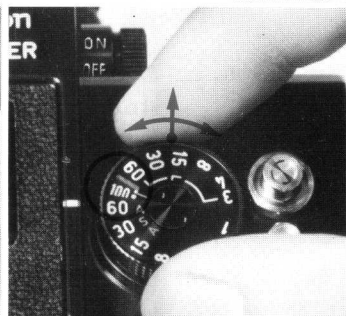
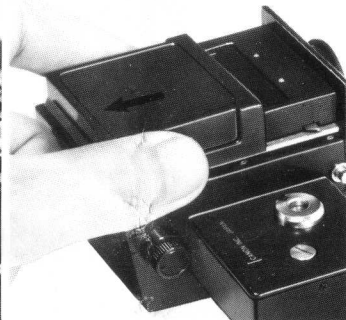
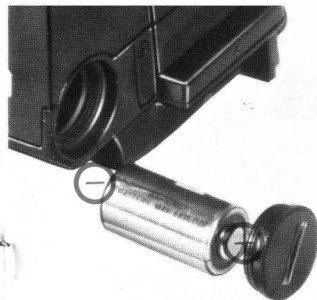


## Battery Loading and Checking

- 1 Remove the cover of the battery chamber by unscrewing and load a 6v silver oxide battery (#544) with the plus (+) side facing outwards.
- 2 Turn the main switch to "B.C.", and if the needle in the meter reading window swings over to the battery check mark (in blue) it means the battery has sufficient power level. If the needle does not swing over to the battery check mark, replace the battery with a new one.

## Attaching Procedure

- 1 Remove the pentagonal prism section of the camera. Slide this section towards the rear while pressing the attachment stoppers on both sides of them.
- 2 Pull off the finder dust cover of the Booster T Finder.
- 3 Set the ASA film speed scales on the camera and the Booster T Finder at the film to be used. Lift and turn the ring around the shutter speed dial. When setting the film speed scale of the Booster T Finder, it can be performed easier by pressing on the center or the connecting section of the shutter speed dial.



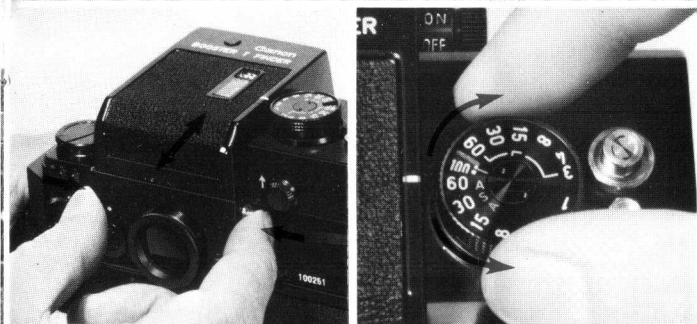
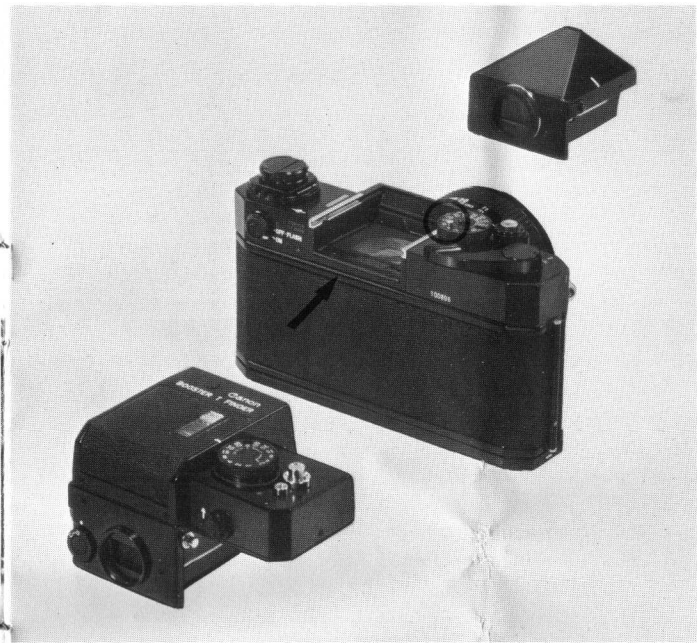
Since the film speed scale coupling range of the Booster T Finder differs according to the shutter speed, the film speed scale cannot be fully turned at certain settings of the shutter speed. In this case, turn the shutter speed dial and reset it at a different speed. When the shutter speed dial is set at the white "60" position, the entire film speed scale can be used.

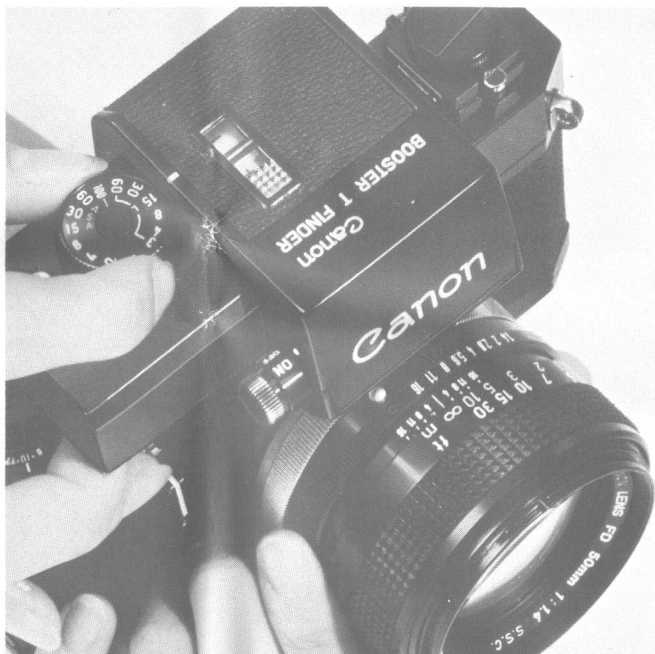
**4** Set the shutter speed dial of the camera anywhere between "1" and "30". The shutter speed dial of the Booster T Finder can be set anywhere.

**5** Align the attachment rails of the Booster T Finder, keep pressing its attachment stoppers, and slide in fully from the rear.

**6** Turn the shutter speed dial slightly to left or right so that it will couple with the shutter speed dial of the camera.

■ When detaching, slide the Booster T Finder towards the rear while depressing the attachment stoppers.





## Metering

Meterings on the Booster T Finder side and the camera side can be performed continuously with the Finder left attached on the camera, and is, therefore, very convenient.

■ The Booster T Finder incorporates the averaging system in metering using two CdS photocells so as to read night scenes with scattered spotlight sources accurately.

**1** The metering on the Booster T Finder side is used when timed exposures of three seconds or more are necessary, and when using faster shutter speeds with faster f/stops in dim light situations.

The timed exposure range between 3 and 60 seconds is indicated by the orange colored scale. The shutter speed dial of the camera is automatically set at "B". When the shutter release button is pressed, the timer functions and exposure is automatically timed.

Perform metering on the Booster T Finder side by stopped-down metering. When shooting within this range, the lamp inside the booster lamp window lights up.

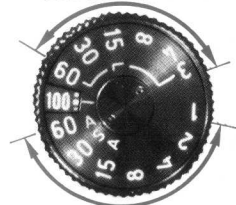
**2** When the subject has sufficient brightness and is over the metering range of the Booster T Finder, the metering can be switched over to the camera side.

Perform full aperture metering with FD lenses, and stopped-down metering with FL lenses. The white colored scale indicates exposures between 1 and 1/60 second, and couples with the shutter speed dial on the camera side. When shooting within this range, the lamp in the viewfinder indicator window lights up.

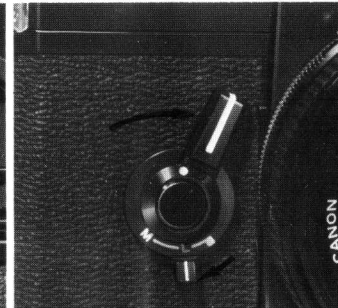
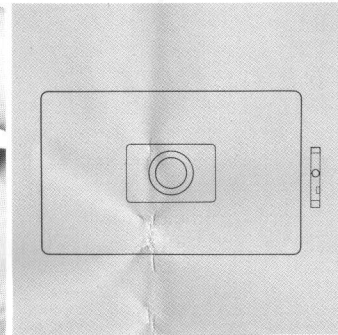
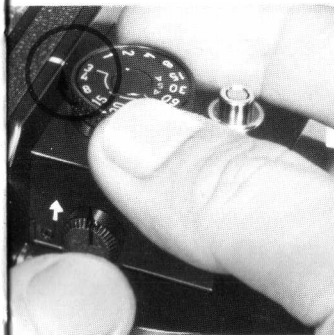
## Metering on Booster T Finder Side

- 1 Set the main switch at "ON".
- 2 Turn the shutter speed dial clockwise to the orange scale side. When the dial stops at "3" on the orange colored scale, push the timer knob upwards, and turn the dial further. The shutter speed dial can be set at any index of the orange colored scale.
- 3 Decide the composition of the picture and focus while looking through the viewfinder with the aperture left at full opening.
- 4 Close the eyepiece shutter by turning the eyepiece shutter knob to "C". At this time, the lamp in the booster lamp window lights up.
  - The eyepiece shutter knob functions also as the meter circuit switch so as to prevent metering error by the retroincident light from the viewfinder eyepiece.
- 5 Lock the stopped-down functioning lever of the camera so as to set it for stopped-down metering.

Orange Colored Scale  
(Low Speed)



White Colored Scale  
(High Speed)



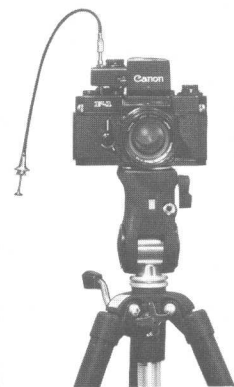
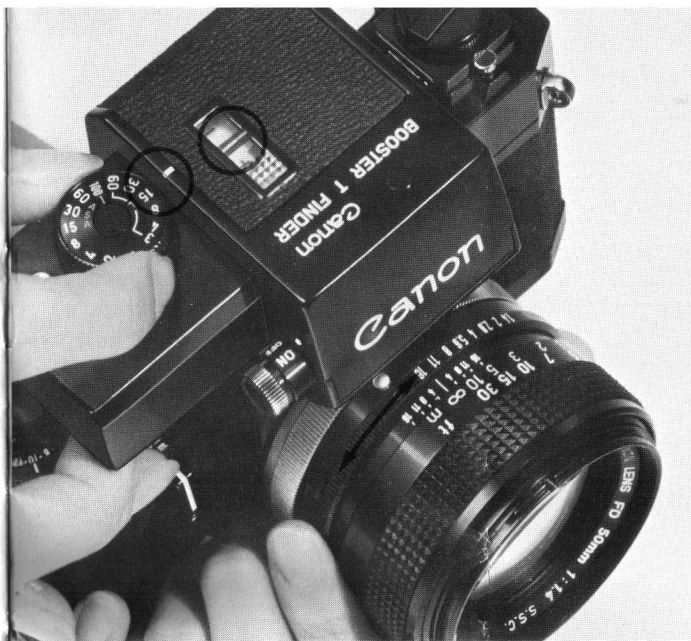


**6** Turn the shutter speed dial or the preset aperture ring so that the meter needle points to the black zone. If the meter needle is pointing to the plus (+) side, it indicates over-exposure, and if the needle is in the minus (-) side, it indicates under-exposure.

**7** As the meter needle will move with the passage of time, because of a slow response speed for small light volumes, a fine adjustment is necessary. Wait and make an adjustment 2-3 minutes later when situations are darker than EV 0, and 10-30 seconds later when situations are brighter than EV 0.

**8** Depress the shutter release button fully. The timer functions according to the shutter speed giving proper exposure, and you may release your finger from the shutter release button.

The lamp in the booster lamp window lights up once every second to indicate the progress of the exposure.



## Metering on Camera Side

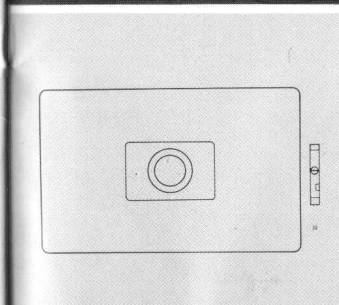
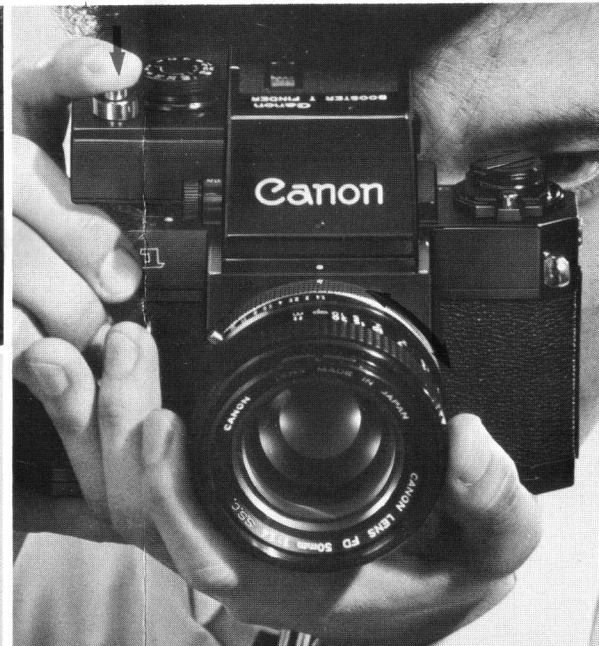
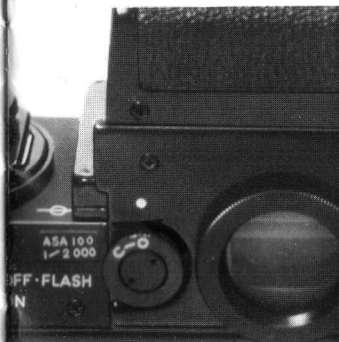
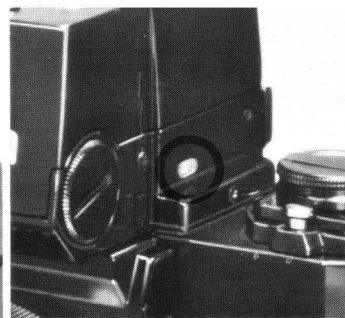
Metering function on the camera side is used when the subject is brighter than the metering range of the Booster T Finder.

**1** Turn the shutter speed dial towards the white colored scale. When the scale goes over orange colored "3", the shutter speed dials of the camera and the Booster T Finder become geared again.

**2** When the metering functions the metering range on the camera side, the lamp in the booster lamp window goes out and the viewfinder lamp indicator lights up to indicate that metering on the camera side is now functioning. At the same time, the meter reading window inside the viewfinder is illuminated.

**3** Open the eyepiece shutter by turning the eyepiece shutter knob to "O" and return the stopped-down functioning lever to its former position for full aperture metering.

**4** Perform ordinary full aperture metering and decide the proper exposure. Metering is possible up to 1/60 second.



## Metering with Increased Film Speed Number

In the case of metering with the Booster T Finder, where the film speed is increased over ASA 2000, there is no need and it cannot be aligned with the ASA speed on the camera side.

When performing photography at increased film speed, shoot the entire roll of film under the same conditions. If the metering is switched over to the camera side as is, the exposure value will change.

## Using Outside Power Source

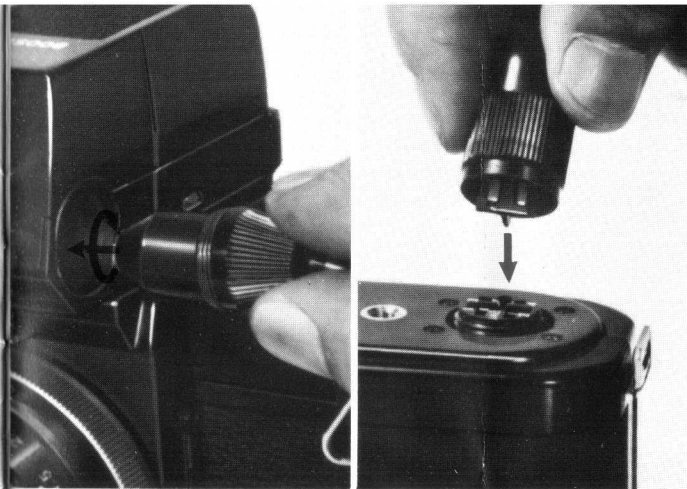
In low temperatures, the performance of the silver oxide battery deteriorates. The use of the Canon Battery Case is recommended as an external power source in low temperatures for an extended period of time.

Use Battery Magazine 12V with eight penlight (size AA) batteries.

Canon Cord 6V 2B is used for connecting the Battery Case to the Booster T Finder.

Remove the silver oxide battery of the Booster T Finder, insert the connector of the Cord to the battery chamber and tighten it with the tightening ring.

The connector with the T-shaped plug is plugged into the Battery Case and tightened with its tightening ring.



## Note

- 1 Always turn off the main switch, when not metering, to prevent battery consumption.
- 2 Even when film winding is not made, the shutter release button can be pressed and the timer begins counting when the shutter speed dial is set between "3" and "60" on the orange colored scale. Be careful not to mistake it for an exposure.
- 3 If the shutter release button is pressed while the shutter speed dial is set at the orange colored scale side and the main switch is set at "OFF", it becomes locked. When the shutter speed dial is turned to the white colored scale side, the shutter release button becomes unlocked.
- 4 Interchange Finders quickly in the shade.
- 5 When using FL lenses, decide the proper exposure on either low or high illumination sides by stopped-down metering.

### Magnifier R and S

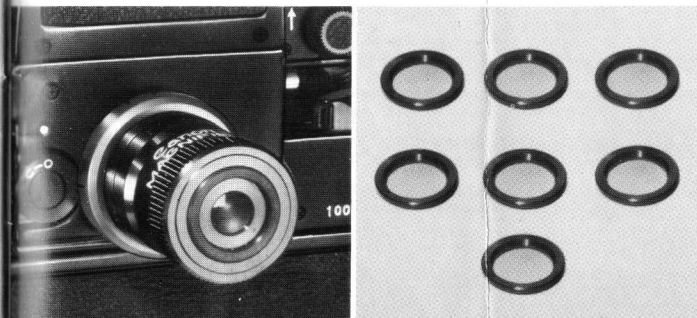
The Canon Magnifier R and S can be attached to the eyepiece which magnifies the rangefinder section for accurate focusing. Because it can be sprung up and clamped, the entire field of view can be viewed after focusing.

### Dioptic Adjustment Lenses (7 kinds)

The screw-in type dioptic adjustment lenses, which can be attached to the viewfinder eyepiece, are available as optional attachments.

### Coupling Range of Booster T Finder

Film Speed ASA	Usable Shutter Speeds		Coupling Range of Aperture
	Metering on Booster Side	Metering on Camera Side	
25	60-3	1-1/60	f/1.2-22
50	30-1	1/2-1/60	f/1.2-22
100	15-1/2	1/4-1/60	f/1.2-22
200	8-1/4	1/8-1/60	f/1.2-22
400	4-1/8	1/15-1/60	f/1.2-22
800	3-1/15	1/30-1/60	f/1.2-22
1600	1-1/30	1/60	f/1.2-22
3200	1/2-1/60	—	f/1.2-22
6400	1/4-1/60	—	f/1.2-22
12800	1/8-1/60	—	f/1.2-22



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