



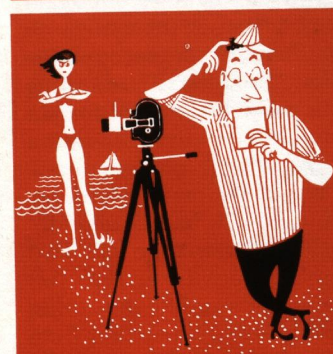
Always use a tripod to keep the camera steady; this is a "must."



Move the "zoom" (focal length) control slowly and gently, without jolting it.



Before starting a take, do not forget to correct the horizontal parallax.



Consult the Pan Cinor depth of focus chart, which shows the depth of focus available throughout the range of focal lengths covered by the lens.



How to use the

# Pan Cinor Zoom-type Lens

The Pan Cinor is a full zoom-type lens, whose focal length can be varied continuously from 20 to 60mm. The Pan Cinor is supplied complete with a coupled viewfinder. The field covered by the latter precisely matches that of the Pan Cinor throughout the range of variation of focal length.

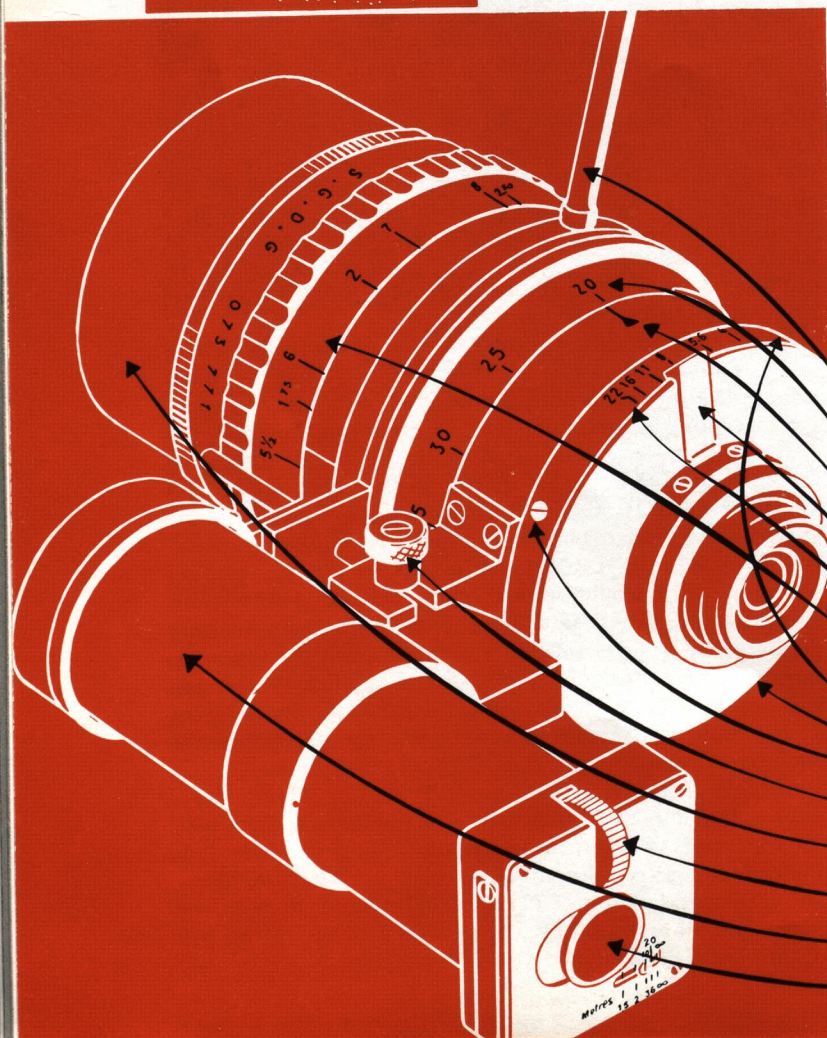
The Pan Cinor is provided with three controls: a focusing control covering distances from 1.5m (5 ft.) to infinity; a diaphragm-setting control (moving pointer) covering apertures between 1:2.8 and 1:22; and a focal length control, governed by a removable lever.

The purpose of the Pan Cinor is to produce travelling effects without moving the camera. In particular, continuous variation of the focal length enables: *optical travelling*: apparently to come closer and closer to the subject, which gets increasingly larger on the screen, or, on the other hand, seemingly to move farther away from it, so as to include other surrounding objects in the picture; *follow-on travelling*: to follow a moving subject about, while keeping it the same size on the screen.

Success in filming with the Pan Cinor depends on the scrupulous observation of certain important rules: Always use a tripod to keep the camera steady; this is a "must." Move the "zoom" (focal length) control slowly and gently, without jolting it. Before starting a take, do not forget to correct the horizontal parallax. Consult the Pan Cinor depth of focus chart, which shows the depth of focus available throughout the range of focal lengths covered by the lens.

When the follow-on technique is used to shoot a moving subject, focusing can be done on the farthest distance that the subject will reach with the lens in the telephoto position. Since the depth of focus is greatest when the lens is in the wide-angle (short focus) position, the subject will automatically lie within the field of sharp focus at shorter distances.

The Pan Cinor has been designed and adjusted to get the best possible optical results in keeping with the wide choice of focal lengths that it provides. It is in no way, however, intended as a replacement for lenses of fixed focal length, which, by reason of their fixed optical characteristics, can be regulated to a very high degree of accuracy.



- removable lever
- focal length setting ring graduated at intervals of 5 mm.
- focal length scale pointer
- moving pointer for setting diaphragm
- fixed diaphragm ring
- focusing ring
- screws for adjusting position of lens on camera to insure accurate framing through finder
- milled knob for fixing viewfinder rear part
- lens hood
- horizontal parallax corrector
- sliding portion of viewfinder (attached to lens)
- viewfinder eyepiece

## Mounting the Lens

To mount the Pan Cinor on the Bolex H-16 camera's lens turret, the following operations must be undertaken in the order shown:

1. Lock the lens turret firmly in position, using the special stud supplied with the Pan Cinor. This is done by screwing the stud into the opening at front of camera providing access to the ground glass focusing prism. Remove the H camera's viewfinder from the camera lid.
2. Unscrew the milled knob that holds the rear part of the Pan Cinor's viewfinder in place and withdraw it.
3. Screw the Pan Cinor lens onto the turret; in view of its weight, take care to engage it gently into the threaded aperture.
4. Replace the rear part on the Pan Cinor viewfinder and tighten the milled knob hard down.
5. The viewfinder aperture must be in horizontal line with the taking aperture.
6. If this is not the case, loosen the 3 screws on the diaphragm ring and adjust position of lens as required. Then tighten the screws again. *Warning:* In making this adjustment, care should be taken not to unscrew the Pan Cinor from the lens turret.
7. The removable lever can now be screwed into one or other of the tapped holes in the focal length control ring.

## Attachments

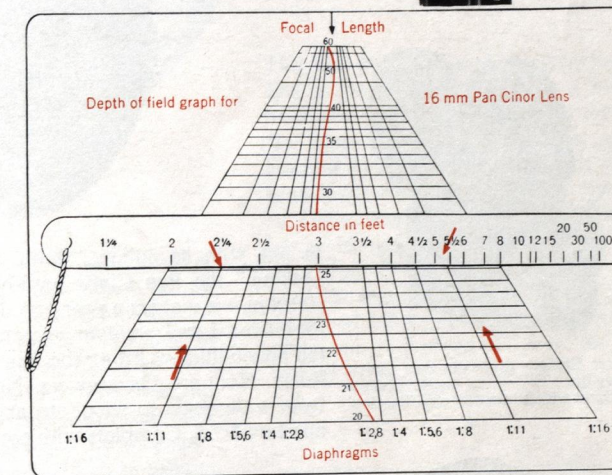
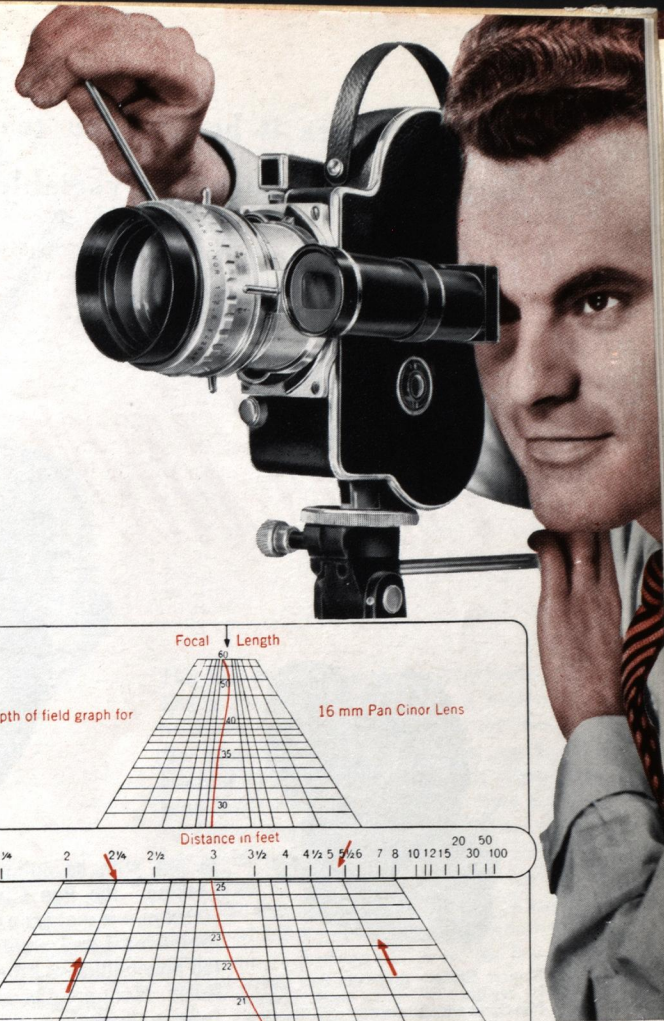
Close-up lenses: Two are available, one of focal length 1.5m (5 ft.), permitting focusing of subjects between 1.7m (5½ ft.) and 0.90m (3 ft.) away from the camera, and the other, of focal length 0.75m (2½ ft.) permitting focusing at distances between 0.90m (3 ft.) and 0.65m (25 ins.).

Filters: Filters of tinted glass for black-and-white films can be supplied in the usual shades. Wratten series VIII color film filters can also be used with the Pan Cinor by means of adapter ring B.

To attach close-up lenses and filters:

1. Unscrew lens hood A.
2. Screw on threaded ring B in its stead.
3. Slide the close-up lens or filter inside the ring.
4. Screw lens hood A back in place, thus retaining attachment in position.

Note: An additional ring B is needed for each extra close-up lens or filter attached to the lens.



## How to Use Depth of Field Calculator

1. Identify camera to object distance with corresponding mark on rule.
  2. Superpose graduated rule edge with horizontal line pertaining to focal value setting of the lens.
  3. Align distance mark on rule with colored vertical focus curve on table.
  4. Read depth of focus which ranges between the oblique lines corresponding to the aperture setting.
- According to the example illustrated above, a focal setting of 25mm, a medium camera to object distance of 3 ft. and an aperture setting of 1:11 give a depth of field ranging from 2¼ ft. to 5½ ft.

Important: Note that the depth of field decreases when passing from wide-angle to the tele-lens setting.

## Focusing Table for the Pan Cinor Lens Associated with Close-Up Lens

Feet	Feet	Feet
5 ½	3	100
5		50
4 ½	2 ½	30
4		20
3 ¾	2 ½	15
3 ½		12
3 ¼	2 ½	10
3	2 ½	8
	2 ½	7
	2 ½	6
	2 ½	5 ½
	2 ½	5