

HOLGA-120WPC

HOLGA 120 PANORAMIC PIN HOLE CAMERA

OPERATION INSTRUCTIONS

1. Introduction

As the name implies, this camera possesses the following two special features -

1.1. Pinhole Exposure

Being a pinhole camera, it lets light pass through a very tiny hole, the pin hole, to hit the film directly, causing exposure, without passing through any lens. Due to the linear propagation of light, the image on the film will be in a reversed form i.e. left will become right, top will become bottom, etc., etc.

As light does not have to pass through any lens, images taken by pin hole cameras will have the following characteristics -

- (a) There is not any optical distortion whatsoever to the image.
- (b) There is not any need to focus.
- (c) The angle of the view will be much wider.

1.2. Panoramic View

Having a greatly extended body, the camera enjoys a super wide panoramic view with the horizontal exposure angle reaching as wide as 120° . Depending on which of the two Film Size Frames is used (see Section 4 below), the width of the film for the picture taken can either be 90mm or 120mm.

2. Parts of the Camera

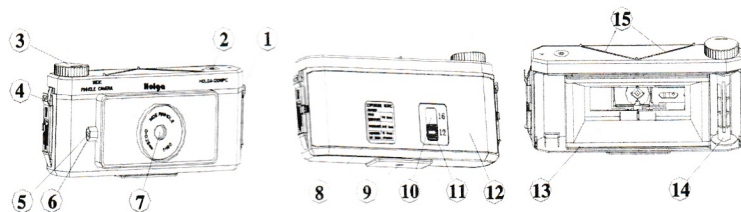


Fig. 1

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|-----|----------------------------------|------|--------------------------------|
| (1) | Back Cover Latch, Left | (9) | Tripod Mounting Hole |
| (2) | Leveler | (10) | Frame Counter Window |
| (3) | Film Advance Knob | (11) | Frame Number Pointer |
| (4) | Back Cover Latch, Right | (12) | Back Cover |
| (5) | Socket for Shutter Release Cable | (13) | Frame Size Mask |
| (6) | Shutter Release Button | (14) | Take-Up Spool |
| (7) | Pin Hole Plate | (15) | Picture Limit Indication Lines |
| (8) | Exposure Table | | |

3. Film to Use

The camera can accommodate all 120 format films. The use of exposure speed ASA 100 films on sunny days and ASA 400 on cloudy days or indoor occasions is recommended.

4. Setting Frame Size/Number of Frames per Roll of Film

The camera is provided with two different Frame Size Masks -

- One, with the number "8" in the top left hand corner, for 8 frames of 6 x 9 cm each per roll; and
- Another, with the number "6" in the top left hand corner, for 6 frames of 6 x 12 cm each per roll.

Follow the steps below to set the frame size and frame number -

- (a) Push downward the Back Cover Latches on the two sides to unlatch and remove the Back Cover.
- (b) Check to see whether the Frame Size Mask originally the
noe desired. Swap in the one for the desired number of fram
needed.
- (c) Slide the Frame Number Pointer on the Back Cover to point as follows -
 - Point at the number 16 when the quantity of frames is 8 ; and
 - Point at the number 12 when the quantity of frames is 6.
- (d) Re-install the Back Cover and latch it on the two sides.

5. Film Loading

- (a) Push downward the Back Cover Latches on the two sides to unlatch and remove the Back Cover.

- (b) Break the seal of the film roll and hold it on the outside where the backing paper is.
- (c) The Film Compartment is on the left of the camera. Engage the hole on the top end of the film spool into the pin in the Film Compartment while sliding the film roll into the compartment. The tapered end of the film must be pointing towards the Take-Up Spool on the other side of the camera.
- (d) Pull on the tapered "tongue" of the film while keeping the film roll inside the compartment with the thumb.
- (e) There is a long slot on the Take-Up Spool on the right side of the camera. Insert the tapered "tongue" of the film into this long slot and give the Film Advance Knob two or three turns in the direction of the arrow sign, carefully aligning the top and bottom edges of the film against the top and bottom edges of the inside of the camera. Check to ensure that the film is firmly wound on to the Take-Up Spool.
- (f) Replace the Back Cover and latch it in place on the two sides.
- (g) Turn the Film Advance Knob in the direction of the arrow sign until the number "1" appears in the red Film Counter Window.
- (h) The camera is now ready for use.

6. Picture Taking

- (a) As longer exposure time is required for pin hole cameras, it is always necessary to mount the camera on a tripod (available separately as an option) before picture.

Remove the Lens Cap.
- (c) Utilizing the two Picture Limit Guide Lines, delineate the view and compose the picture.
- (d) Decide the exposure time needed (from experience or by reference to the Exposure Table in Section 12 below) and press down the Shutter Release Button until the decided time comes to an end.
- (e) Advance the film by turning the Film Advance Knob until the next **ODD** number appears in the Film Counter Window.

7. Multiple-Exposures Effect

As the film is advanced manually, this camera can help achieve special effects through

multiple exposures by NOT advancing the film after a frame has been exposed. Each depression of the Shutter Release Button will bring about another exposure. This feature will provide more latitude for the photographer to try out his/her imagination.

To achieve multiple exposures is very easy - simply do NOT advance the film after a picture has been taken. This can be done repeatedly for as many times as one wants. However, it must be noted that if the lighting of the environment is bright, multiple exposure may cause the film to be overly exposed.

8. Removal of Film

Important: This procedure must strictly be performed in a totally dark environment without any leak of light, preferably inside a Darkroom Bag.

Take following steps -

- (a) Turn the Film Advance Knob until no more number appears in the Frame Counter Window, which indicates that the whole film roll has already been transferred and wound on to the originally empty Take-Up Spool.
- (b) Push downward the Back Cover Latches on the two sides of the camera to unlatch and remove the Back Cover.
- (c) Remove the film roll, which is now wound onto the originally empty Take-Up Spool, from the camera. Turn the spool of the roll to tighten up the roll and then use a piece of cellophane tape to tape the open end of the roll firmly in position. The film roll can now be sent for processing.
- (d) Transfer the now empty spool on the left to the Take-Up spool Compartment on the right for use next time as the Take-Up Spool.

9. Use of Shutter Release Cable

As extended exposure time is needed, it is strongly recommended to always use a Shutter Release Cable (available separately as an option). To install the optional Shutter Release Cable, simply screw the screw-threaded end of the cable into the Socket for Shutter Release Cable.

10. Use of Continuous Lighting

When taking pictures at night or in dark environments, it is necessary to provide lighting. As pin hole cameras require extended exposure time, it is necessary to use continuous lighting, not flashes.

11. Some Suggestions

- (a) Always put on the Lens Cap when the camera is not in use.
- (b) Always check to see that the lens cap has been removed before taking a picture.
- (c) Always take pictures with the sun behind the camera.
- (d) Always use a tripod.
- (e) Always press the Shutter Release Button gently to avoid jerking the camera and press it all the way down until the clicking sound is heard.
- (f) Always remember to advance the film after taking a picture, except for multiple exposures, until the next ODD number appears in the Frame Counter Window.
- (g) Always load or remove films in a totally dark environment.
- (h) Always clean the Pin Hole Plate only with a piece of soft and smooth cloth.

12. Exposure Table

There is an exposure table on the back of the camera to provide some reference for deciding the length of exposure time needed according to the condition of the weather or time of day as follows -

Exposure Table	
Fine Weather	7 ~ 9 sec.
Overcast	10 ~ 12 sec.
Morning or dusk	13 sec. upwards

There is not any standard exposure time. All has to be mastered through one's thinking, imagination and experience.

13. Specifications

	120 Pin Hole Type
Pin Hole	0.30 mm Diameter
Distance from Pin Hole to Film Surface	40 mm
View Angle	120°
Aperture	F133
Film to be Used	120 format color or black/white films of speed from ASA 100/ISO 21 to ASA 400/ISO 27
Frame Size	6 x 12 cm and 6 x 9 cm respectively
Dimensions	210 x 56 x 96 mm
Weight	Approx. 220g
Accessories Included	1 Carrying Strap and 1 each of 8 and 6 Frame Size Masks

14. Optional Accessories

14.1 SC-30

Shutter Release Cable (30cm in length).

14.2 HT-115 Tripod

Status	Height	Weight	Radius of circular base
Tightly collapsed	405mm	469g	31mm
Fully extended	1180mm	469g	346mm