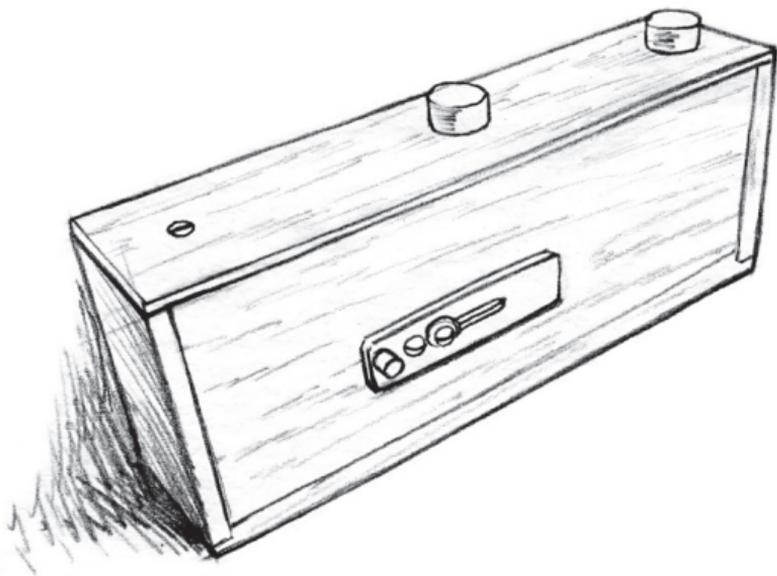


Zero Image

Zero 6 x 12B
Multi Format Pinhole Camera
Basic Version



Instruction Manual

Zero 6 x 12B Multi Format

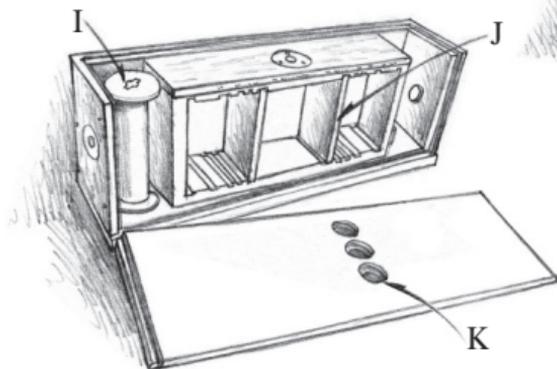
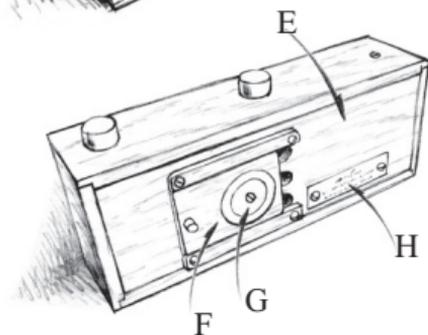
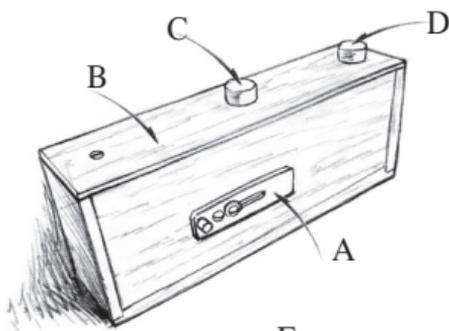


Thanks for purchasing the Zero Image wooden pinhole/zone plate camera. With Zero Image cameras, the creativity of photography will be unlimited. The Zero Image cameras are easy to use, read this manual before your first shot for best results.

NOMENCLATURE



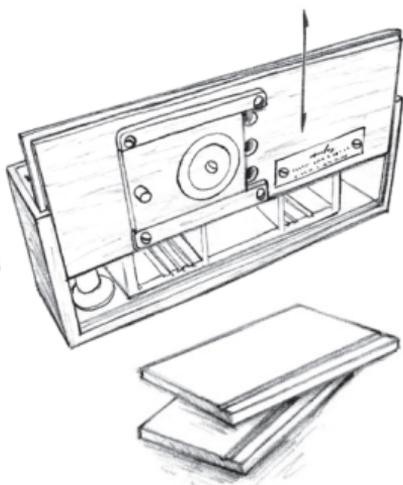
- A. Shutter
- B. Top Cover
- C. Top Cover Lock
- D. Film Advance Knob
- E. Back Cover
- F. Film Counter Window Cover
- G. Exposure Scale
- H. Name Plate w/Serial Number
- I. Take Up Spool
- J. Divider
- K. Film counter window



SETTING THE FILM FORMAT

The Zero 6 x 12 camera is designed to be a multi-format camera. The film format can be set to 6 x 4.5, 6 x 6, 6 x 7, 6 x 9 and 6 x 12 before the film is loaded.

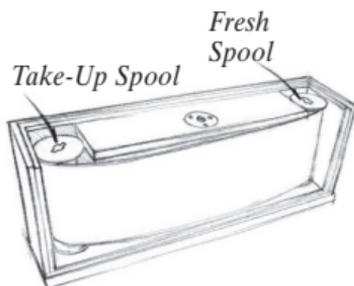
1. Turn the top cover lock (C) counter-clockwise to open the top cover.
2. Slide out the back cover (E).
3. You will find two dividers (J) at both sides of the middle chamber of the camera. There you will also find 5 pairs of symmetric slots on the top and the bottom of the inner chamber. The pair close to the center is for 6 x 4.5 format, the one next to it is for the 6 x 6, then for 6 x 7, 6 x 9 and the outermost pair is for 6 x 12.



LOADING THE FILM

This camera accepts 120 roll film.

1. Insert the tongue of the backing paper of a fresh roll of film into the slot of the take-up spool (I).
2. Insert the fresh film and take-up spool into the camera with the fresh film at the right-hand side of the camera. Make sure the position of the fresh film and the take-up spool is correct otherwise you will not be able to advance the film.
3. Replace the back cover of the camera.
4. Replace the top cover, adjust the film advance knob (D), aligning it with the slot (on top of the take-up spool), press together the camera back and the top cover so that they are firmly in place, and then turn the top cover lock (C) clockwise to lock the top cover. There is no need to over-tighten it or you may damage the camera.

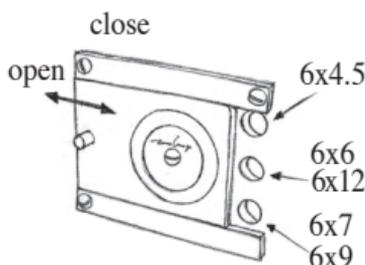


- Turn the film advance knob (D) clockwise to advance the film until the number "1" appears under the film counter window (K)

Note: The mechanism of the film advance knob (D) will only turn in a clockwise direction, so as to prevent the film from curling back. If you attempt to turn the knob in a counter-clockwise direction, you may damage the camera.

USING THE FILM COUNTER WINDOW

- Slide the film counter window cover (F) to open it. You will see three round red film counter windows (K).
- Use the upper window if your camera is set to a 6 x 4.5 format. the middle one is for 6 x 6 or 6 x 12 format. The lower one is for 6 x 7 and 6 x 9 format.



| Film Format you are using | Film counter window to use |
|---------------------------|----------------------------|
| 6 x 4.5 | the Upper one |
| 6 x 6, 6 x 12 | the Middle one |
| 6 x 7, 6 x 9 | the Lower one |

- Advance the film with the film advance knob (D) in clockwise direction until you see the number "1" appear in the appropriate film counter window (K).
- When the exposure is finished, advance the film until next number appears in the same film counter window (K).

Note: 1. For the 6 x 12 format, use the middle film counter window and advance the film until an "even" number appears, (i.e. for the first frame, the film number is "2" and the for the next frame, the film number should be "4", "6" "8" and "10" is the last frame).

2. Remember to advance the film after every exposure or you will get a double/multi exposure image.

MOUNTING THE CAMERA

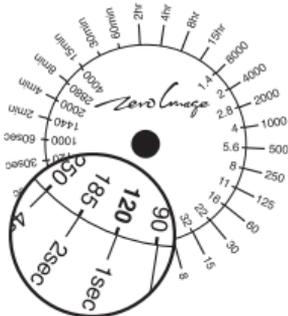
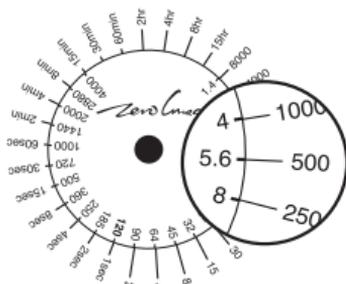
The camera comes with a tripod mount located at the bottom. You can mount the camera to a tripod or just put it on the ground or on a table. We highly recommend that you use a tripod if you want to frame your scene precisely or if you need to keep your camera stable for a long time or for a fast exposure. Remember to loosen all of the control knobs of your tripod before tilting or swinging the camera otherwise you may damage the tripod socket.

EXPOSURE

Calculating the exposure time:

Our camera comes with an exposure scale (G). If you have a light meter, you can make use of the exposure scale (G) to calculate the exposure time easily. The numbers on the outer ring of the exposure scale (G) are the exposure time ranging from 1/8000 of a second to 15 hours and numbers on the inner (movable) dial indicate f/stop number setting. These range from f/1.4 to f/500.

1. Use a light meter to get a reading of the scene you wish to photograph. Choose the f/stop that is aligned most closely with a given exposure time. (For example, the reading is f/5.6, 1/500 seconds).
2. Look at the inside ring and find the f/stop selected from the light meter (f/5.6 in this example). Turn the dial until that f/stop matches with the correct exposure time (1/500 seconds in this example).
3. Now find the f/stop of your camera on the inside dial (f/stop of the 6 x 12B camera is f/158). It will be aligned with the estimated exposure time of the photograph you wish to take, i.e. 1.5 seconds in this example.



If you don't want to use a light meter, use 2-4 seconds under bright sunlight, 4-20 seconds for shade; 4-10 minutes for cloudy, for indoor or a lighted scene, use 15-45 minutes or more. These estimated exposure times are based on ASA100 film.

Reciprocity Corrections

If the exposure time is shorter than 1/10,000 seconds or longer than 1 second, it is necessary to calculate and adjust for reciprocity failure.

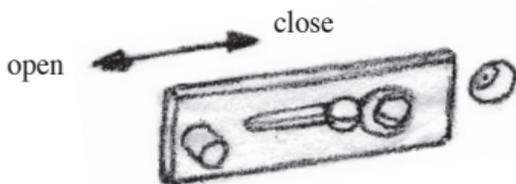
Exposure time indicated by

| Exposure scale | Compensation | Exposure |
|----------------------|--------------|--------------------|
| 1 second (or over) | x2 | 2 seconds |
| 5 seconds (or over) | x5 | 25 seconds |
| 50 seconds (or over) | x12 | 600 sec or 10 min. |

Note: 1. All informations mentioned above is based on ASA100 film speed. 2. Some practice will be required to relate the times given in this chart to your particular camera and film. Keep a record of the light condition and the exposure time for every photograph you take, so that you can make later adjustments accordingly.

TRIGGERING THE SHUTTER

1. To expose, simply slide the shutter (A) to open the shutter. When the exposure time is up, close it by slide it back to cover the pinhole.
2. If you use high speed film or a zone plate version camera, the exposure time may less than 1 sec. This time you need to open the shutter (A) and hide the pinhole/zoneplate with your finger, then remove your finger and put it back to cover the pinhole as fast as you can.



UNLOADING THE FILM

When loaded with 120 roll film, the camera takes 16 frames when it is set to 6 x 4.5 format, 12 frames when set to 6 x 6 format, 8 frames when set to 6 x 7 or 6 x 9 format, and 5 frames when set to 6 x 12 format.

1. When all of the frames have been exposed, simply continue to turn the film advance knob (D) clockwise until all the film is transferred to the take-up spool.
2. Open the top cover (B) and remove the back cover (E), in order to withdraw the exposed roll of film.
3. Tighten and seal it with tape or a rubber band to prevent damage from light leaks.

Note: Although the camera is designed to enable you to load and unload the film anywhere, we highly recommend that you do not load or unload the film under bright sunlight as loosely wrapped film may suffer damage from light leaks.

MAINTENANCE

1. Prevent the camera from getting wet.
2. Do not allow the camera to be exposed to strong sunlight for a long time.
3. Do not press or punch the pinhole or zone plate or the film counter window with any object.
4. Never clean the camera with an alcohol-based cleaning agent.
5. Clean the camera with a cotton cloth, with polishing oil like lemon oil, orange oil for woodworking, Beeswax is preferable. Always try a little at the bottom corner before you apply the agents to the whole camera.
6. If the shutter or the exposure scale is too tight or too loose, adjust the screw that holds it with a screw driver.
7. Clean the pinhole/zone plate with an air blower tenderly. Keep the blower at least one inch away from the pinhole or the zone plate and blow away the dust tenderly. Too much air pressure may damage the pinhole and the zone plate.
8. Never over-tighten the knobs or any screw of the camera. It will cause damage to the camera.
9. Do not store the camera near a heat source or in a cabinet with humidity control, as the camera may dry up or crack.

SPECIFICATIONS

| | |
|-----------------------------------|--------------------------------------|
| Material: | Teak wood |
| Pinhole size: | 0.25mm |
| Zone Plate (Optional): | 40mm with 11 zones |
| Dimension : | 8 1/4" (L) x 2 3/4"(W) x 3 1/2" (H) |
| Weight: | 380 gm |
| Focal Length: | 40mm |
| F/stop: | f/158 (pinhole) f/55 (zone plate) |
| Film use: | 120 roll film |
| Film Format: | 6 x 4.5, 6 x 6, 6 x 7, 6 x 9, 6 x 12 |
| Tripod Socket: | 1/4" Thread |

Specifications and design are subjected to change without notice.



Zero Image Co.

Unit 902, Workingview Commercial Bldg.,
21 Yiu Wa Street, Causeway Bay, Hong Kong

Tel: (852) 29499332

Fax: (852) 24654492

Email: info@zeroimage.com

Web Site: <http://www.zeroimage.com>

Technical support: support@zeroimage.com