



This manual is for reference and historical purposes, all rights reserved.

This page is copyright© by M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

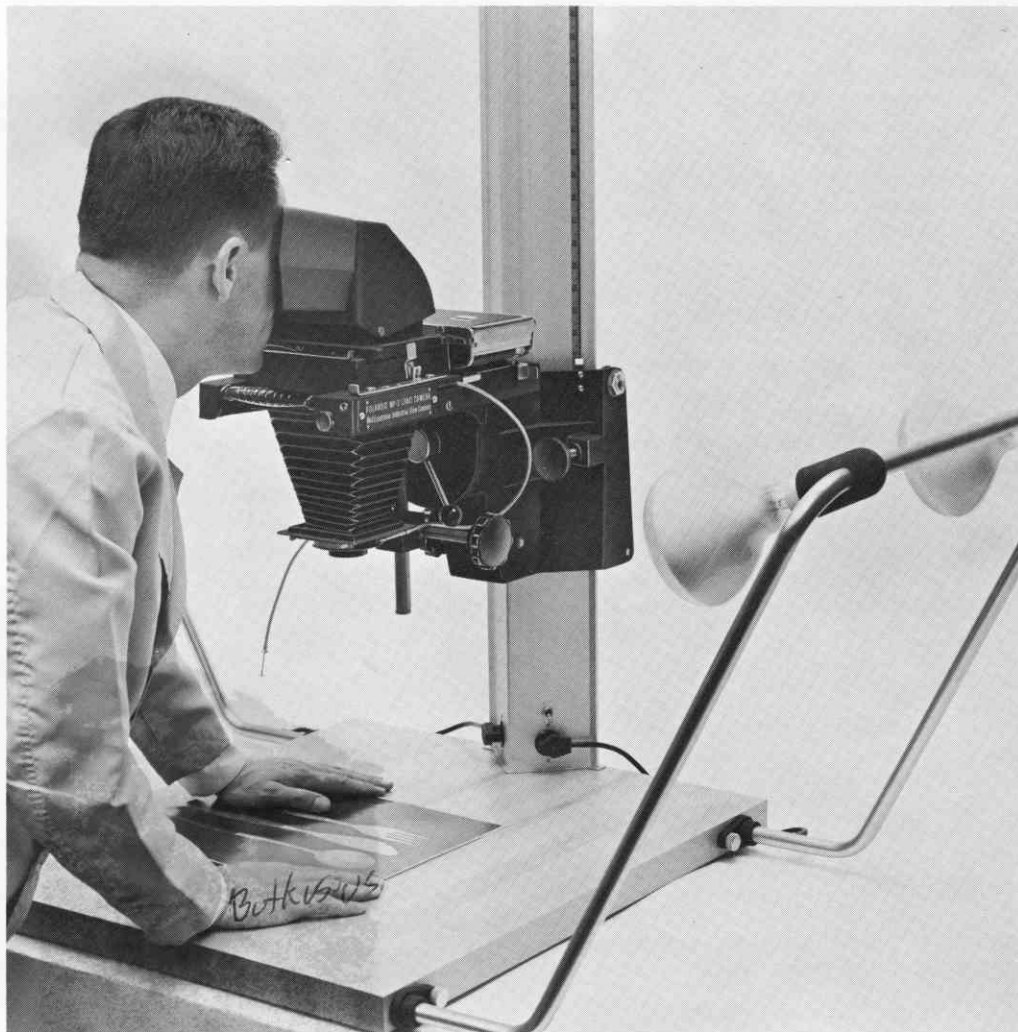
If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs.

It'll make you feel better, won't it?

**If you use Pay Pal or wish to use your credit card,
click on the secure site on my main page.**

How to assemble and use the Polaroid MP-3 Multi-purpose Industrial View Land Camera



Polaroid MP-3 System

Contents

Introduction	4
Assembly	5
The MP-3 XL Model and the MP-3 Standard Model	7
Versatility	8
Where to place the camera	9
Camera tilt	9
The sliding film carriage	10
Camera operation	12
The interchangeable film holders	15
How to use the Polaroid #226 Land Roll Film Holder	
Film loading	18
Taking the picture	21
Processing roll film prints and transparencies	22
Coating prints	24
Hardening transparencies	24
How to use the Polaroid #227 Land Pack Film Holder	
Film loading	25
Taking the picture	27
Processing pack film prints	27
Coating prints	28
If no yellow tab appears when you pull the white tab	29
How to attach filters	30
Technical Information Literature	30
For more information	30
Warranty	31
Registration	31
Servicing	31
MP-3 care and maintenance	31
Polaroid offices and repair stations	32

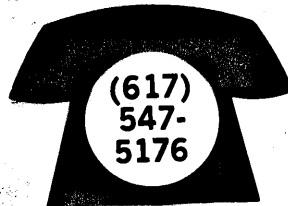
- A. 4x5 film holder position
- B. Carriage release button
- C. Shutter-open arm
- D. Camera tilt locking knob
- E. Focusing knob
- F. Locking knob
- G. Interchangeable Polaroid
Land film holders
- H. Reflex viewer
- I. Sliding film carriage
- J. Height adjustment knob
- K. Cable release
- L. Column
- M. Light frames
- N. Light switch
- O. Baseboard

This book tells you how to assemble and operate your MP-3 camera. It also gives detailed instructions on the use of the various Polaroid Land film holders.

The MP-3 is easy to use. But it also differs in many ways from any other photographic equipment you have ever operated. For this reason you are strongly advised to **read these instructions carefully** before you try to set up and use the camera.

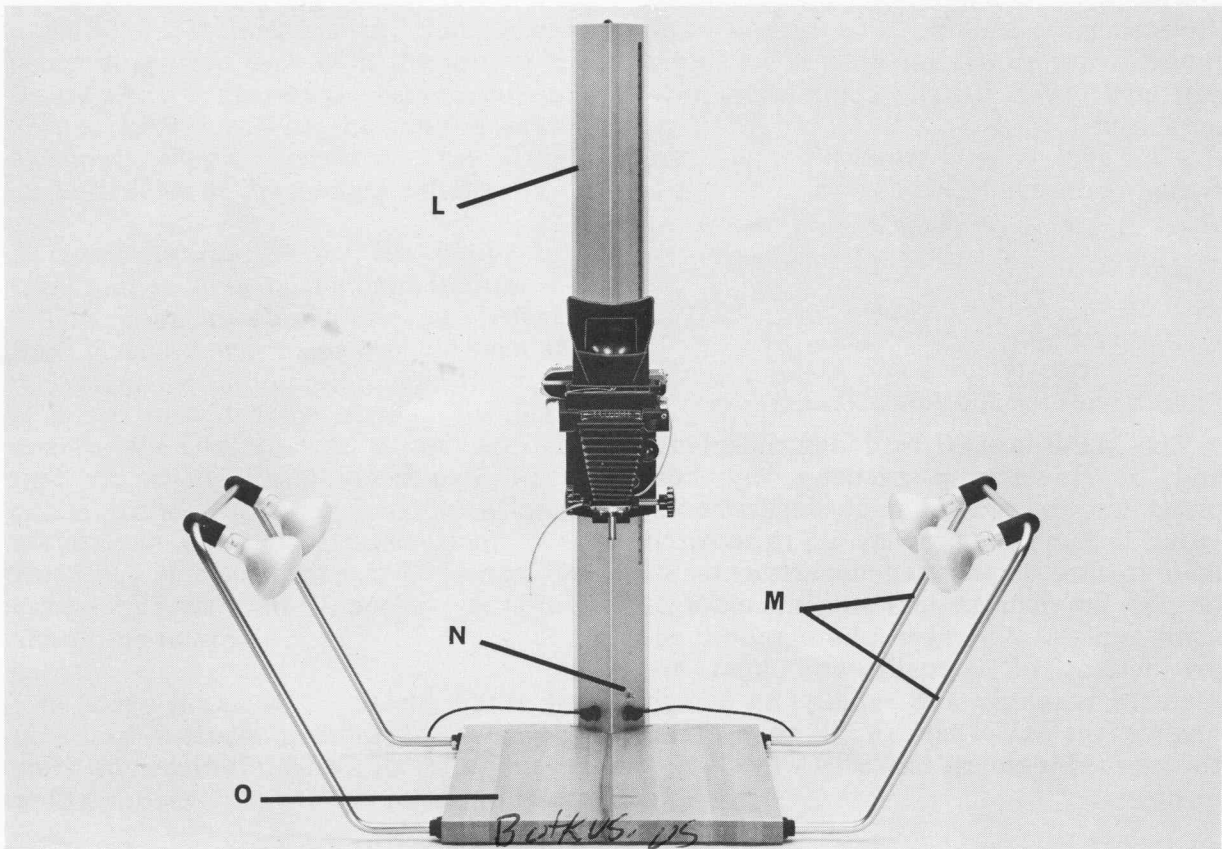
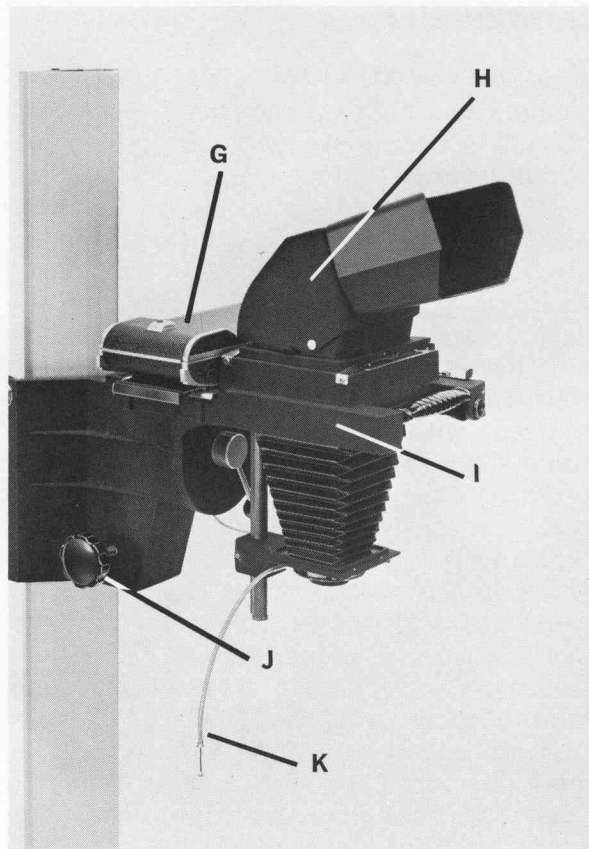
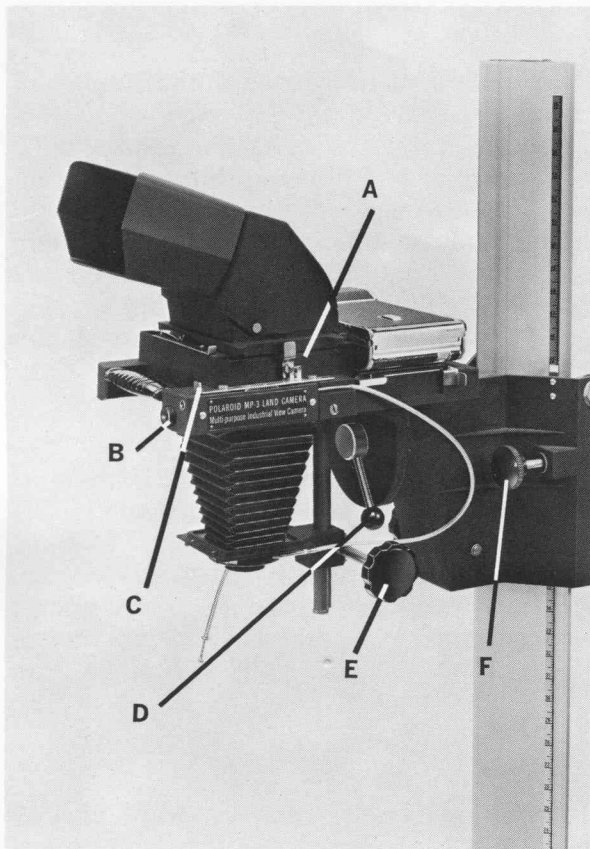
FREE ASSISTANCE FROM POLAROID.

Need help with an instant photographic problem? Have questions about any Polaroid Land films, cameras or their application? Call us collect:



Mon.-Fri., 9am - 4:30 pm, Eastern Time. A photographic specialist is available to provide technical assistance.

Polaroid®



Introduction

The Polaroid MP-3 Industrial View Land Camera is a highly versatile photographic unit. It can complete most jobs in seconds, without a darkroom.

It is possible to change instantly from one film format or type to another, without any film wastage. The sliding film carriage, which is described in detail later, is designed for this purpose. The interchangeable lenses make possible a wide range of reproduction ratios.

Used with the appropriate Polaroid Land film, the MP-3 can be used for the production of continuous tone as well as high contrast black and white prints. Slides for projection can also be made, in either tone or line. Type 55 P/N film provides a high quality fine grain negative in the 4 x 5 in. format, as well as a print. Quality color prints are ready just one minute after exposure, using Polacolor film in either the 3¼ x 4¼ in. or the 4 x 5 in. formats. Wet process films of various formats can also be used, with special adapter film backs.

The MP-3 is a precision instrument of professional standard. It is at the same time so easy to operate that it is rapidly mastered, even by the completely inexperienced.

Among the wide variety of jobs the camera is designed to handle are:

Macrophotography	Copying
Photomicrography	Slide making
Wall chart copying	X-ray copying

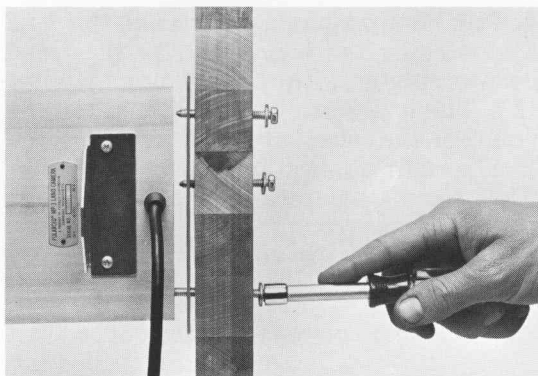
- Small object photography
- Gross specimen photography
- Halftone screening

The MP-3 is used by industrial plants and by advertising agencies, by hospitals and by government departments. It has become an everyday aid in research laboratories, engineering departments, libraries, art departments and law enforcement offices. Wherever photographic reproductions of virtually any kind are required regularly and rapidly, to a high quality, the MP-3 camera fills the need in the most economical and easy way.

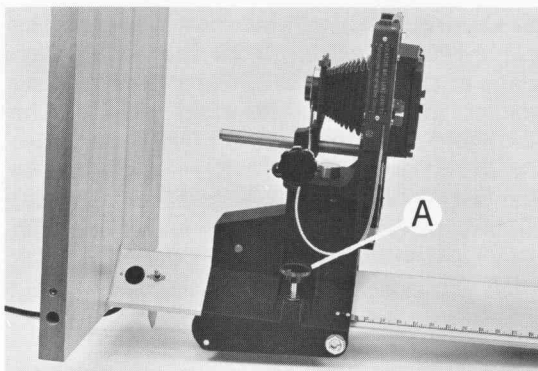
Assembly

1. Attach camera column to baseboard:

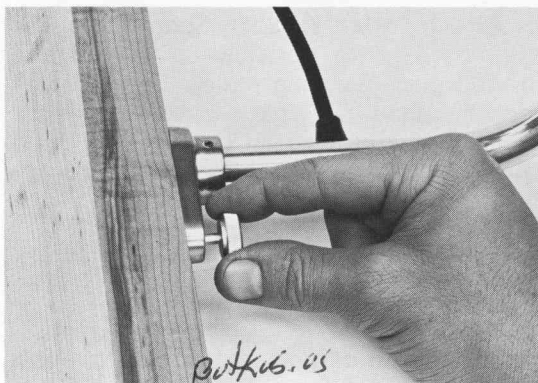
Fasten it with the three bolts provided. This is done most easily with the column in a horizontal position, as shown. The metal baseplate goes between the column and the baseboard, and the washers go on the bottom surface of the baseboard. The bolts should be tightened with a $\frac{7}{16}$ in. nut driver.



Important: Do not loosen the locking knob (A) of the camera while the camera column is not in its vertical position. The camera head is counterweighted by a strong spring. This would cause the unlocked camera head to shoot up the column while it is lying flat.



2. Add light frames: Insert the ends of the aluminum light frames into the holes in the sides of the baseboard. The frames must be placed in such a way that the cord protruding from each is in the arm of the frame which is nearest the camera column. Secure the frames with the knurled screws, as shown. Plug the cords into the sockets on both sides of the camera column.



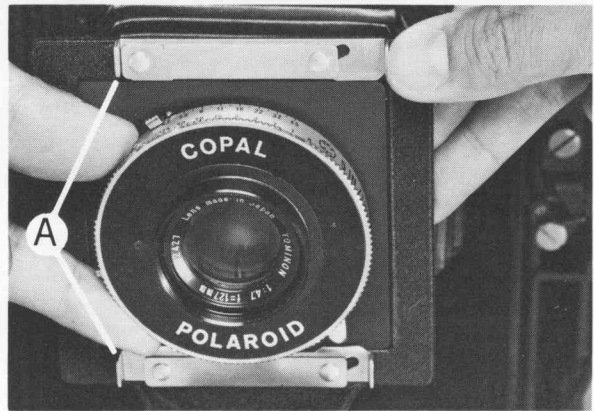
3. Insert lamps: Screw the lamps into their four sockets on the light frames.

The lamp positions are permanently fixed in such a way as to provide even and reflection-free illumination. For the types of lamps provided for each of the MP-3 models, see THE MP-3 XL MODEL AND THE MP-3 STANDARD MODEL, on page 7. Burnt out lamps should be replaced with lamps of the same type and wattage rating.

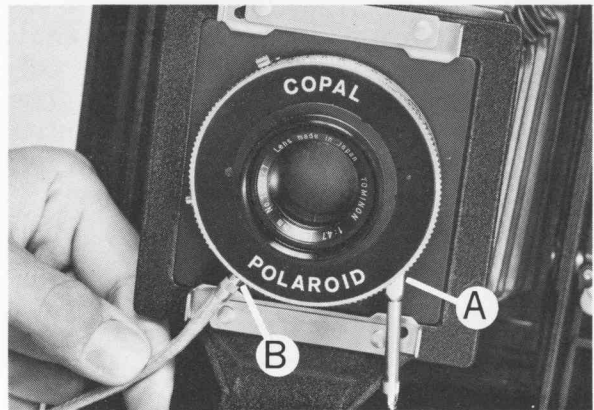
Warning: If other than U.S. lamps are used, special lamp socket adapters should be used.

In those areas of the world where the standard voltage is other than 110-120 volts (for example, 220-240 volts), lamps of the appropriate voltage rating must be used.

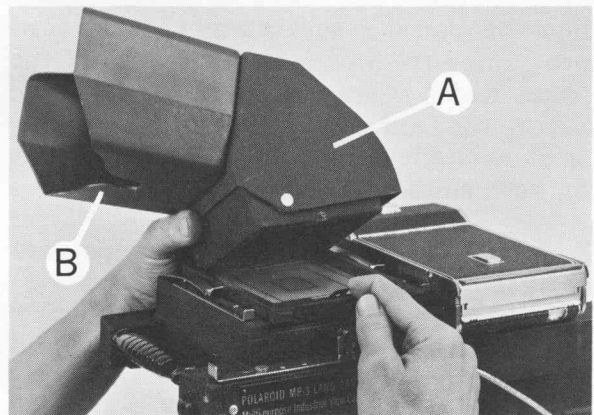
4. Put lens on camera: Attach the lens by fastening the lens board to the front bellows plate with the sliding latches (A). The lens settings should face toward you. For the selection of the right lens for each specific application and reproduction scale, see the separate instruction booklet, HOW TO USE THE LENSES AND LENS ACCESSORIES OF THE POLAROID MP-3 LAND CAMERA.



5. Connect cable releases: Connect the cable release leading from the sliding carriage of the camera to the pre-view opening socket at (A), on the right side of the shutter mount. Connect the separate cable release provided with the shutter to the socket at the left rear of the shutter mount, at (B). The shutter is self-cocking, and need not be manually tensioned after each exposure.

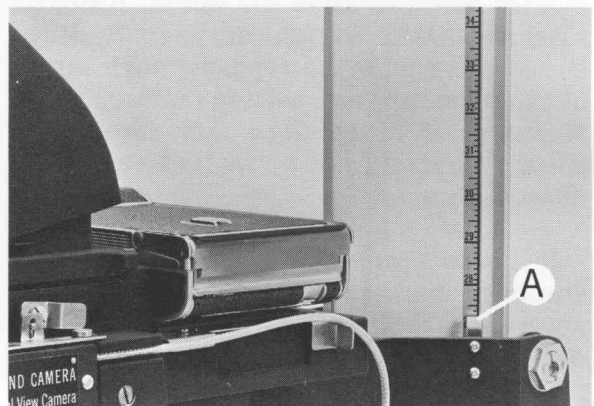


6. Attach reflex viewer: Snap the reflex viewer (A) into position on top of the ground glass focusing panel. The separate viewing hood (B) snaps onto the viewer housing in the position shown. The hood tilts vertically for convenient bright-image viewing at any camera height.



Inch scale on camera column: There is a scale, calibrated in inches, on the camera column. The height of the film plane above the baseboard is shown by the red indicator (A) on the upper right side of the elevation bracket. If it is also necessary to know the lens to film distance, this can be determined with sufficient accuracy for most purposes by measuring the lens to baseboard distance, and subtracting this from the height indicated on the column.

If the subject is raised above the baseboard, or has thickness of its own, this must be compensated for.



The MP-3 XL Model and the MP-3 Standard Model

The basic difference between the MP-3 models is one of size. The XL has a taller column, a larger baseboard with a larger field of even illumination, and more powerful lighting than the Standard. The camera head on both models is identical.

MP-3 Model 245 XL

Column height: 56 in.

Baseboard area, overall: 24 in. x 28 in.

Lighting: Four 300 watt 100 volt reflector floods (General Electric), run off the 120 volt AC supply.

The full name of the camera with the above lighting is MP-3 Model 245 XL. This camera also has a HIGH-LOW switch. This is set to HIGH for picture taking, and to LOW at other times. This increases the life of the lamps, and also keeps to a minimum the heat generated by them.

The Model 245 XL is not available outside the United States.

MP-3 Model 225 XL

The older version of the XL camera, the MP-3 Model 225 XL, uses four 150 watt 120 volt reflector floods, run off the 120 volt AC supply. This model does not have the high-low switch. The dimensions of this camera are identical with those of the 245 XL. All XL cameras having a serial number lower than P413706 (see nameplate on rear of camera column) are of the older type.

The exposure recommendations provided with the Polaroid Instant Halftone System (see separate instructions provided for that system), are designed for use with the lighting of the Model 245 XL. In the United States the Model 225 XL can easily be converted to the 245 XL. Contact your Polaroid Service Center for details.

To use the Instant Halftone System with the Model 225 XL in other countries, the following conversion should be made. The baseboard and lamp arms should be exchanged for the baseboard and lamp arms of the MP-3 Standard Model. Four 150 watt lamps should be used. You can then

use the exposure table prepared for the MP-3 Standard Model.

MP-3 Standard Model

Column height: 39 in.

Baseboard area, overall: 19 in. x 24 in.

Lighting: Four 75 watt 120 volt reflector floods, run off the 120 volt AC supply.

When a higher light output is required, the lamps can be replaced by four 150 watt 120 volt reflector floods.

The 150 watt lamps are recommended for color photography.

The exposure recommendations provided with the Polaroid Instant Halftone System are designed for use with the 150 watt reflector floods.

Note to users outside North America:

In areas of the world where the standard voltage is other than 110-120 volts (for example, 220-240 volts), lamps of the appropriate voltage rating must be used.

Versatility

Some of the features that make the MP-3 a truly versatile technical and industrial camera are shown below.

The four lenses shown (A, B, C and D), having focal lengths of 5, 4 and 3 inches and 35 mm respectively, enable the reproduction scale to be varied continuously from extreme reduction to a 10:1 magnification.

For magnifications of about 7:1 to 10:1, the bellows extension accessory (E) must be used with the 35 mm lens.

The light baffle tube (F), used with the special lensless shutter (G), is required for photomicrography.

The 5, 4 and 3 inch lenses and the lens-

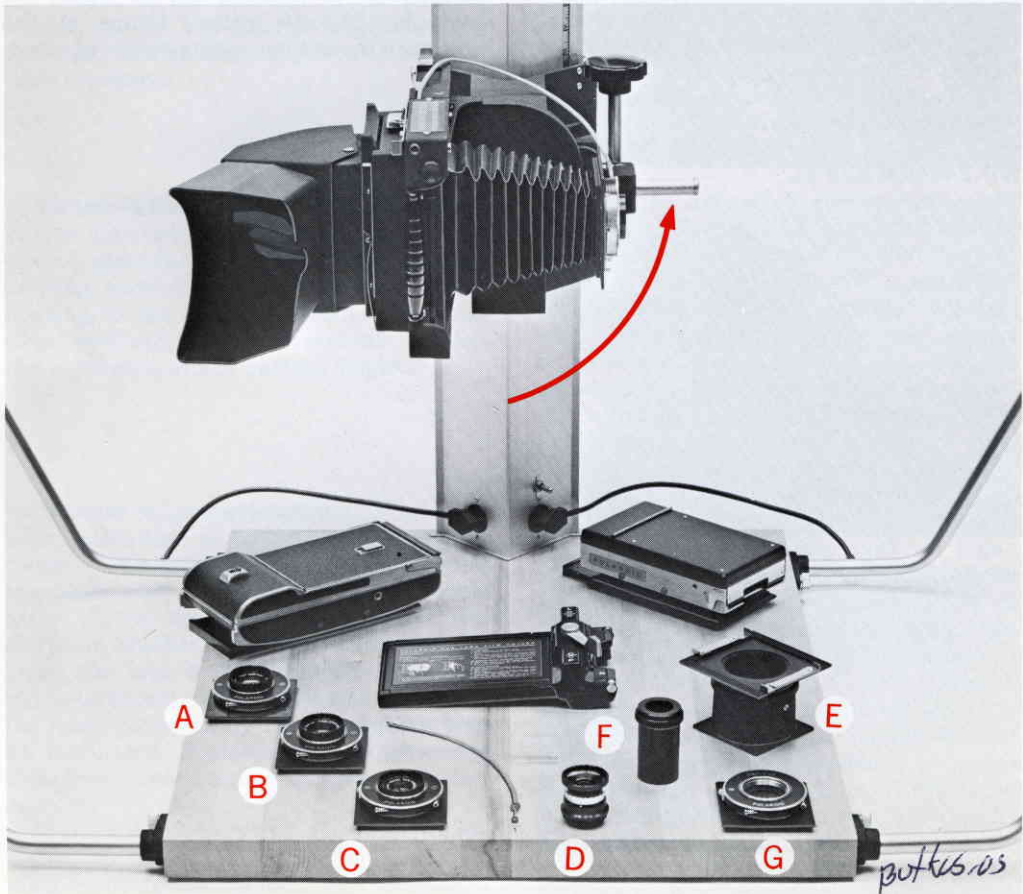
less shutter have built in "X" flash synchronization.

The picture below also shows how the camera angle can be varied to any position between vertical and horizontal.

Perhaps the one feature of the camera which adds most to its versatility is the sliding film carriage. This is discussed fully on pages 10 and 11.

In addition to the three Polaroid Land film holders shown, the camera can also take a wide selection of film holders and magazines for conventional wet-process films, thus enabling the MP-3 to be used with any film from 35 mm up to 4 x 5 in.

The methods of attaching filters to the MP-3 lenses are discussed on page 30.



Where to place the camera

For good and consistent results, select the location for your MP-3 with care:

1. Avoid variable outside light sources:

Keep the camera in a place where it will not be affected by illumination which may sometimes be brighter and sometimes weaker, such as window light. The more you can eliminate variable light sources, the easier it will be for you to standardize your exposure techniques.

2. Avoid reflections: Take particular care not to have any lights or bright reflective objects in the area immediately above the camera. These could cast reflections straight into your camera lens from a glossy original. Such reflections could have a disastrous effect on the quality of your pictures. If necessary, erect a protective shield above the camera.

Also avoid placing the camera right alongside a light colored wall. This could lead to uneven illumination of a large original on the baseboard.

Camera tilt

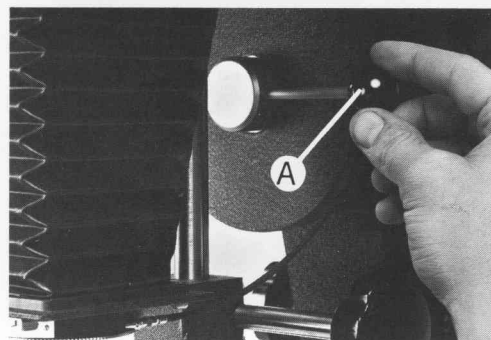
The camera head can be tilted through an angle of 90° (see p. 8). Any original that is too large for the camera baseboard can be fastened to a wall, bulletin board or blackboard, and photographed there with the camera head in a horizontal position.

Push the camera tilt locking knob (A) in a counterclockwise direction to free the camera head. Rotate the head as far as it will go. The lens will point to the right. Then turn the locking knob firmly in a clockwise direction to lock the camera head in place.

Remove the light frame on the right side of the baseboard. The original on the wall will have to be lit separately. Do not try to use the MP-3 lighting.

Be sure the whole original is lit evenly, and that no stray reflections are entering the lens. Be sure the camera is centered with the original and perpendicular to it.

The camera could be locked in place at any angle between vertical and horizontal.



The sliding film carriage

This feature enables the camera to be focused without the removal of the roll or pack film holder from the camera. It also makes possible the use of a very wide range of films in the MP-3 camera. It is possible to change from one film type to another at any time and with great rapidity, without any film wastage.

The sliding film carriage has two separate film holder sections, one behind the other. Either of these can be brought directly above the bellows and lens, for use. (See CAMERA OPERATION, page 12.)

The front section of the carriage serves two main purposes. It contains the ground glass focusing screen and the reflex viewer, and it is also the picture taking section for the Polaroid 4 x 5 Land Film Holder, which is simply inserted below the ground glass after focusing.

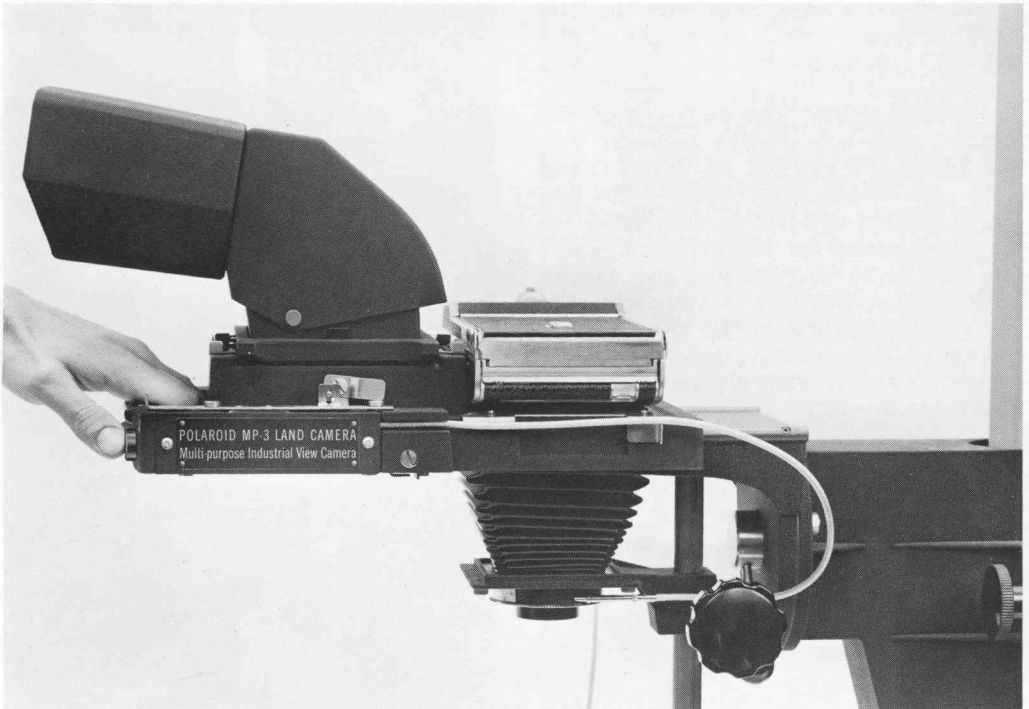
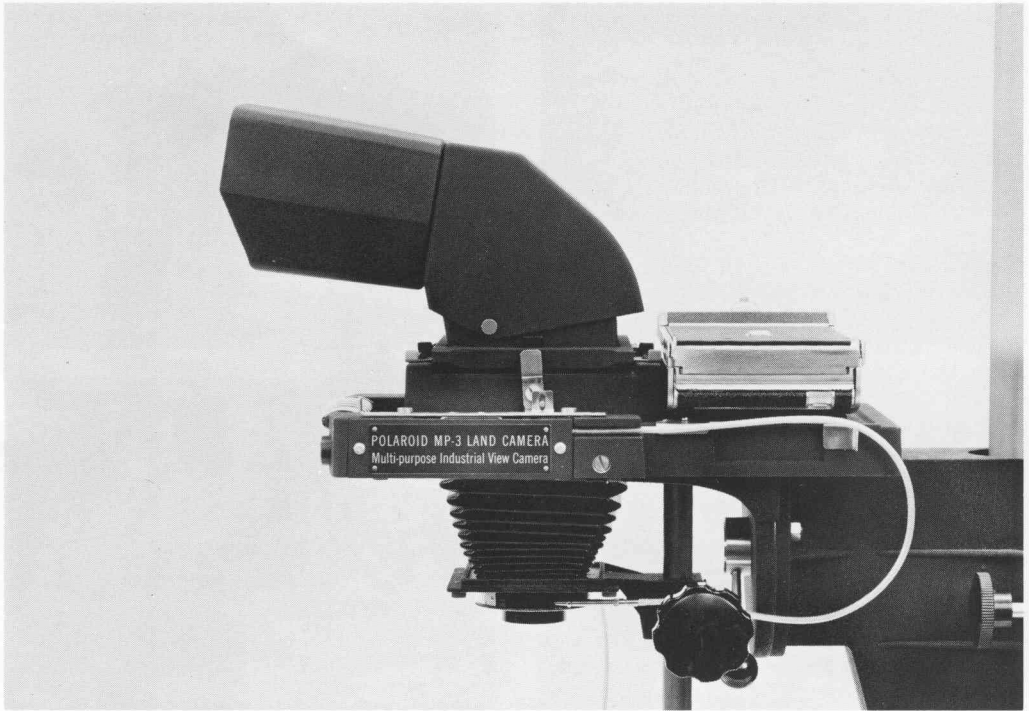
Viewing and focusing for all film types and sizes is done through the front section, which is placed over the lens by pushing the sliding film carriage back, as described under CAMERA OPERATION, page 12.

To use Polaroid pack or roll film, simply lock a Polaroid Land pack film or roll film holder on the rear section of the sliding carriage and pull the carriage all the way forward to bring the film holder over the lens.

The screen holder of the Polaroid Instant Halftone System is mounted on the rear section of the carriage.

Once the camera is focused, the film plane in either section of the carriage will always be in the true position. You can change from color to black and white, from print to transparency making, from 4 x 5 format to 3¼ x 4¼ format, and so on, and be sure that the film will always lie in the plane of greatest sharpness. Both the pack film and the roll film holder have a built in dark slide, so that there is no film wastage in the changeover.

There are a number of film cartridges and magazines for wet process films that can also be attached to one or the other of the film holder sections. See the list of MP-3 accessories, which is available separately.



Camera operation

You are advised to go carefully through this section now, to enable you to get fully familiar with your camera. But do not take any pictures until you have also read the sections telling you how to use the film holders and the films.

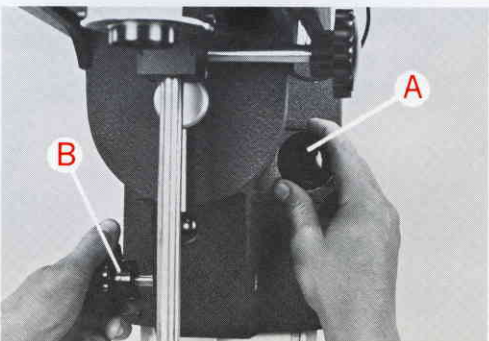
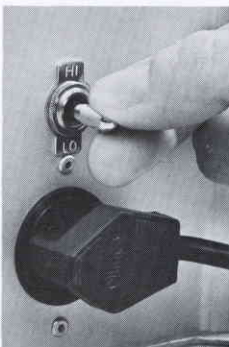
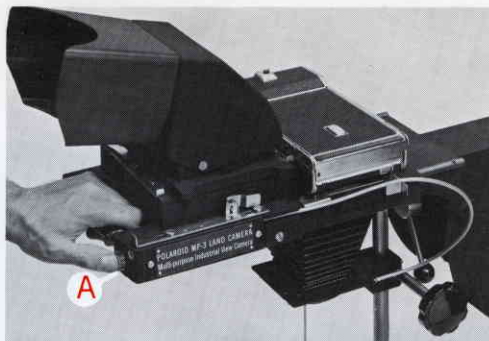
1. Position reflex viewer over lens: If the reflex viewer is not already positioned right over the lens, press the carriage release button (A) — picture 1 — and push the sliding carriage away from you, toward the column, until the viewer and ground glass are directly above bellows and lens. Release the button, once you have started moving the carriage. The carriage will then automatically lock in the correct position.

2. Open shutter: Press the SHUTTER OPEN arm (A) back until it locks. This opens the shutter and, if your lens is marked PRE-SET on the front of the mount, it also automatically opens the lens to its widest aperture.

You should always focus with the lens set wide open. If your lens is not of the PRE-SET type, open it manually.

3. Turn on lights: The switch is at the bottom right side of the column. The MP-3 Standard and 225 XL Models have an ON-OFF switch (right). The Model 245 XL has a HIGH-OFF-LOW switch (left). Use the HIGH setting for the exposure. Place the original to be photographed on the baseboard, so that it faces you right way up. The image through the reflex viewer will appear right way up, but reversed left to right. However, your picture will not be reversed in this way.

4. Frame image: Turn the locking knob (A) to the left to free the camera head for movement up and down the column. While observing the ground glass image through the reflex viewer, raise or lower the camera head, by turning the height adjustment knob (B), until the image is roughly of the required size.



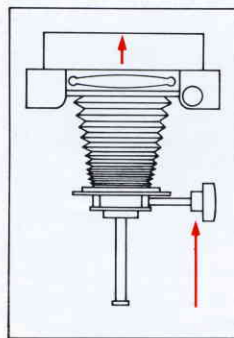
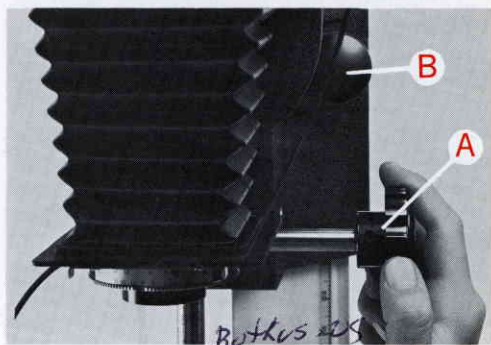
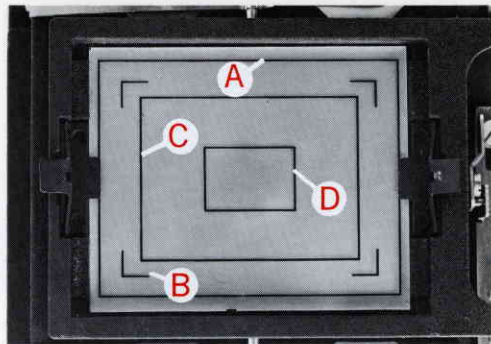
The MP-3 ground glass is marked for four different image formats. The outer rectangle (A) is for Polaroid 4 x 5 film, giving a picture area of $3\frac{1}{2} \times 4\frac{1}{2}$ in. The four corner markers (B) are for Polaroid $3\frac{1}{4} \times 4\frac{1}{4}$ pack film prints and for Polaroid roll film prints, both of these having an actual picture area of $2\frac{7}{8} \times 3\frac{3}{4}$ in. The middle rectangle (C) outlines the $2\frac{3}{8} \times 3\frac{1}{4}$ in. image area of Polaroid roll film transparencies. The smallest rectangle (D) represents the standard 24 x 36 mm format of 35 mm film.

5. Focus: Adjust the focusing knob (A) until the image is sharp. Normally at this stage the image will not be exactly the correct size. Adjust the camera height again, as described in (4) above, and refocus. You may have to repeat this two or three times, before you get the image both exactly the right size and also completely in focus. Finally, lock the camera head in position on the column by turning the locking knob (B) firmly to the right, and center the original on the baseboard in the way you wish to reproduce it. Remember to follow the ground glass marking which is correct for the film format you are using.

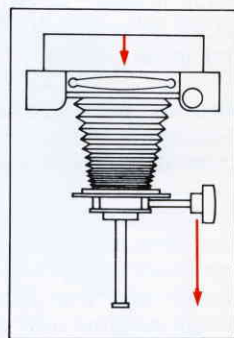
Basic focusing rule: To increase the size of the image on the ground glass screen, you must lower the camera head and increase the bellows extension. To decrease the size of the image, you must raise the camera head and decrease the bellows extension.

Normally you should adjust the camera height first to get roughly the image size you need, and then adjust the bellows extension to give you sharp focus.

However, when you are working at or near the 100% reproduction scale (that is, when original and ground glass image are nearly the same size) it becomes virtually impossible to focus by bellows adjustment. When at such a setting, you must reverse the procedure described above, and adjust the bellows first to get the approximate image size required, and then attain sharp focus by adjusting the camera head height.



To decrease image size



To increase image size

6. Close shutter: Press the carriage release button (A). The shutter will close and, if your lens is of the PRE-SET type, the lens opening will close automatically to the chosen f-number you had previously set on the lens.

When using Polaroid roll or pack films, the sliding carriage must at the same time be pulled toward you (away from the column), to bring the roll or pack film holder into position over the lens.

Release the button (A) once you have started to pull. The carriage will then automatically lock at the correct position.

If your lens is not of the PRE-SET type, you must close your lens to the chosen setting manually.

For 4 x 5 pictures, no carriage shift is necessary, the film holder being pushed under the ground glass focusing panel.

For wet-process roll film magazines, the viewer section (front) of the sliding carriage remains over the lens, and the ground glass panel is removed (see page 17).

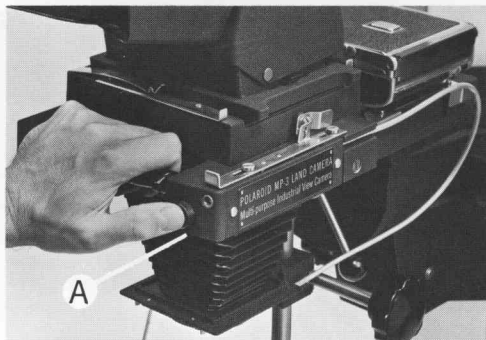
The 4 x 5 film holder cannot be inserted until the carriage release button has been pressed. Pressing this button will also make it easier to remove the ground glass panel, when a roll film magazine is to be put in its place.

Special precautions: To get the best possible results with your MP-3, observe these important precautions:

1. Always keep the camera lens clean, and keep the inside of the camera bellows free from dust. Dirt and dust lead to lens flare — and lens flare is a big enemy of image contrast and quality.

2. When copying flat material on the MP-3 baseboard, be sure that the camera head is in its true vertical position (and not slightly angled), and that it is firmly locked there.

3. Be sure that no part of the camera is loose, particularly the lens board and the bellows assembly. Long and heavy usage could cause these to lose some of their original rigidity. If necessary, contact your Polaroid Service Center for advice.



The interchangeable film holders

The MP-3 can be used with the following:

1. Polaroid 4 x 5 Land Film Holder #545 (picture 1) **or #500** (picture 2).

2. Polaroid #226 Land Roll Film Holder (picture 4, right), for series 40 film.

3. Polaroid #227 Land Pack Film Holder (picture 4, left), for series 100 film.

4. Halftone Screen Holder #229 for the Polaroid Instant Halftone System, and used with the 4 x 5 film holder. For method of attachment and use, see the instructions supplied with the Halftone System.

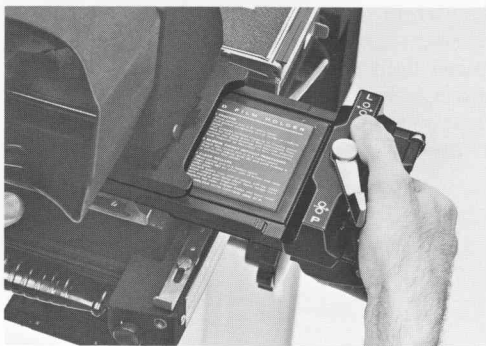
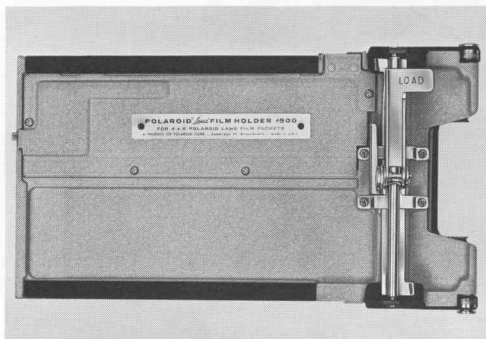
5. A number of roll film holders for wet-process films (see accessory list, available separately).

The 4 x 5 film holder: The usual operating position for the Polaroid 4 x 5 Land Film Holder is in the front section of the sliding carriage of the camera. It is pushed in below the ground glass screen, from the right, as shown in picture 3. The ground glass is mounted in a spring assembly, which holds the 4 x 5 holder firmly in position.

The 4 x 5 holder cannot be inserted until the shutter has been closed by pressing the carriage release button. Until this is done a locking lever on the right side of the camera blocks access to the 4 x 5 holder position.

With the Polaroid Instant Halftone System the 4 x 5 holder is NOT used in the front section, but in the top of a special screen holder, which is attached to the rear section of the carriage. (See the instructions with the Polaroid Instant Halftone System).

For full information on the use and care of your 4 x 5 film holder, read the instruction booklet supplied with that holder.



How to attach the roll and pack film holders:

The roll and pack film holders are used in the rear section of the MP-3 sliding carriage. In the pictures that follow, the reflex viewer has been removed from the camera, simply to show as much of the rear section as possible. The holders can be attached with the reflex viewer either in place or removed.

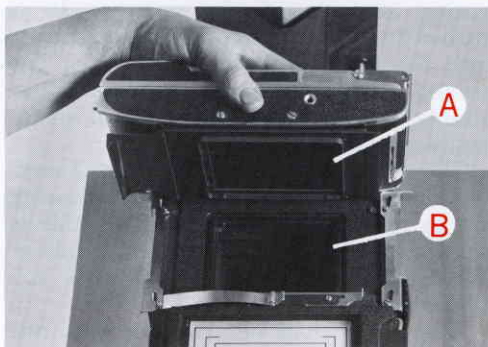
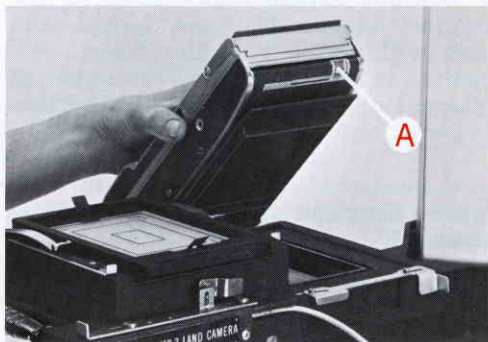
1. Hold the roll or pack film holder so that the handle of the dark slide is to your left, and the door latch (A) is on the right.

2. Be sure that the dark slide is pushed in all the way.

3. Place the film holder on the MP-3 carriage, as shown.

4. Firmly seat the film holder on the camera carriage. The film holder has a raised light seal frame (A) and the camera carriage has a light seal recess (B), both clearly shown in the picture. (A) must fit precisely into (B).

5. Lock the holder in place by pulling the latches on both sides of the camera carriage toward you. If the holder will not lock in place, it is not seated correctly.



How to attach a wet process roll film holder: A roll film holder which is designed for use with a Graflok, Graphic or similar 4 x 5 camera back must be attached in the ground glass screen position (front section of sliding carriage) of the MP-3.

After framing and focusing in the usual way, leave the sliding carriage in the focusing position. Close the shutter by pressing the carriage release button. Unclip and remove the reflex viewer. Next remove the ground glass panel by lifting up the two tab-shaped ends (A) of the two tension springs, and sliding the panel out to the right. The loaded film magazine may now be put in position, and secured by means of the two slide locks (A) — second picture.

On withdrawal of the dark slide from the magazine, the MP-3 is ready for operation. To frame and focus for subsequent pictures, replace the ground glass by reversing the above procedure.

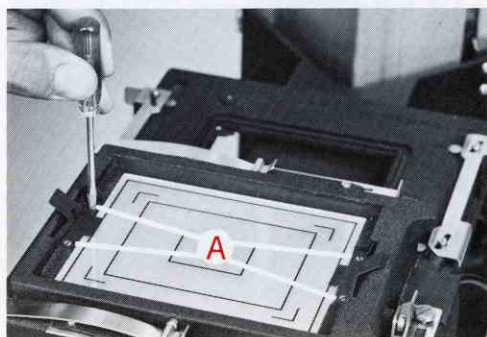
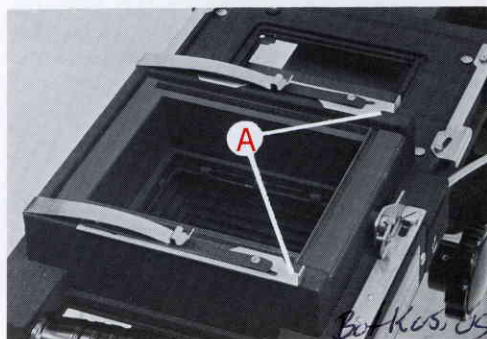
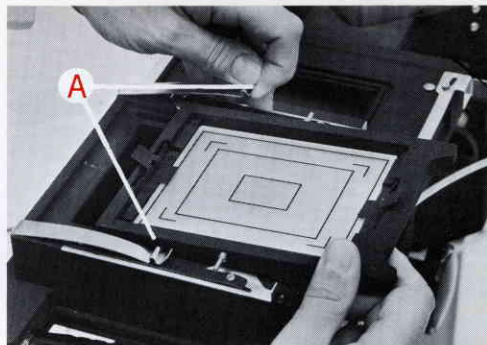
To ensure accurate framing, mark or tape the ground glass with additional image areas, to correspond with the desired film formats.

For a selection of roll film holders, see the accessory list available separately.

NOTE: The Dyonics 35 Back, taking standard 35 mm cartridges, is attached to the rear section of the sliding carriage, in the same manner as the Polaroid #226 and #227 roll and pack film holders.

How to adjust the ground glass position:

In some instances, particularly when using a 35mm film back, the image position indicated on the ground glass may not quite correspond to the actual position of the film at the time the exposure is made. To correct this, a slight adjustment in the ground glass position can easily be made. You need merely loosen the four small screws (A) that hold the ground glass in place, slide the ground glass so as to locate its 35mm rectangle at the right place, and then tighten the screws again. You need not remove the screws entirely to do this. For more detailed information on this adjustment, please contact the Industrial Marketing Department, Polaroid Corporation, at the address given on page 30.



How to use the Polaroid #226 Land Roll Film Holder

This film holder is for use with any Polaroid series 40 Land roll film.

Film loading: The holder can be loaded when it is either on or off the camera. If it is to be loaded on the camera, begin by lowering the camera head to the base of the column. This will give you the easiest access to the film holder.

Before loading, be sure the dark slide in the holder is pushed all the way in. **Never pull the dark slide out when the sliding carriage is in the rear position,** as this would cause the film to be fogged.

1. Swing the latch lever (A) down, (picture 1). The back will open slightly.

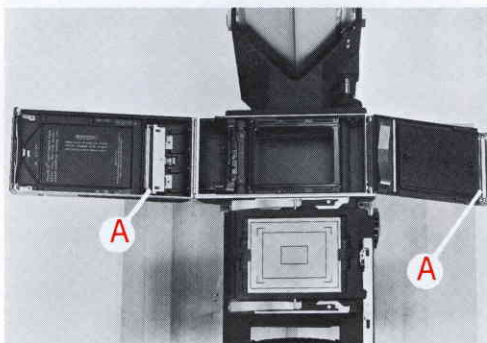
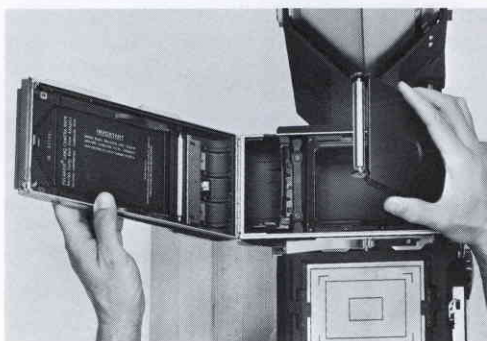
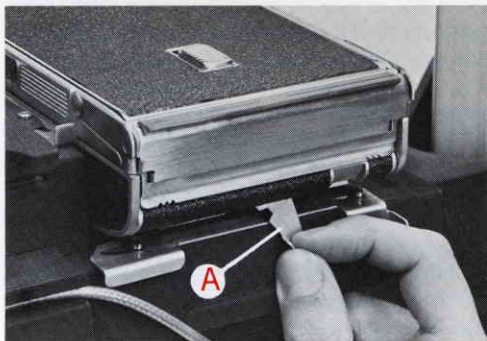
2. Lift open the back cover as far as it will go. Lower it gently; don't let it fall. Then lift open the inner panel and gently lower it as far as it will go.

3. This is the position in which the holder is loaded. Before loading, examine the two steel rollers (A). **It is important to keep these rollers clean.** Use a damp cloth to remove any specks or deposits that may appear on the rollers from time to time.

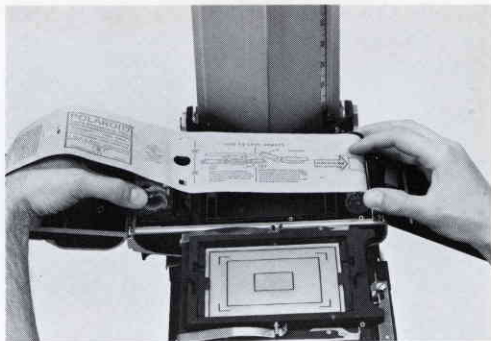
4. Carefully remove the film from its foil wrapper. Do not squeeze the package.

The film consists of two rolls: the large roll contains the material which will become the positive prints or transparencies, and the smaller, spooled roll contains the negative material. On unwrapping the film, be careful not to break the seal at the end of the positive roll (A).

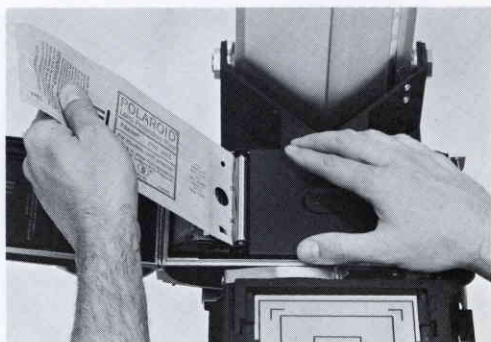
The small roll will have either a tape seal or a STOP mark near its beginning. If there is a tape seal, never break this. If there is a STOP mark, always unroll the film to exactly this mark. **Always read the loading instructions printed on the film leader,** and follow them carefully.



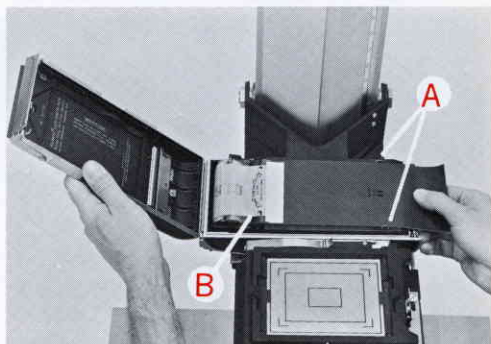
5. Drop the rolls into the wells on either side of the holder, as shown. Insert the large positive roll first, and then the small negative roll.



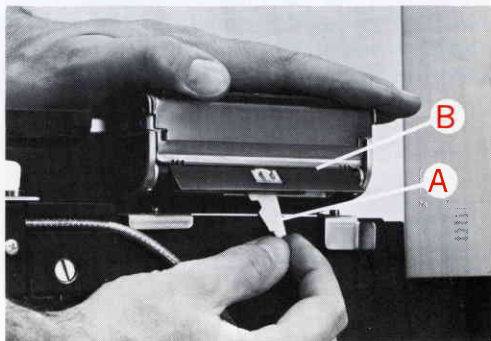
6. Now close the inner panel.



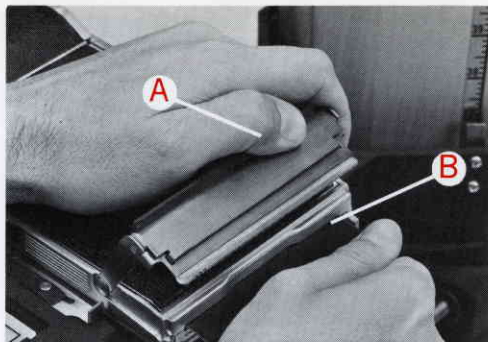
7. Fold the film leader over the steel roller on the edge of the panel, and lay it flat between the guides (A) at the hinged end of the panel. Be sure the material lies flat and smooth, and is not tucked into the well at (B).



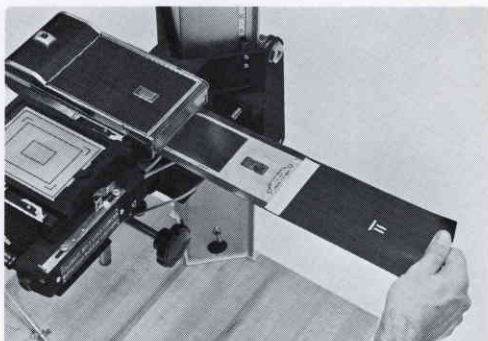
8. Close the film holder cover. While exerting a downward pressure on it, swing the latch lever (A) all the way to the left to engage the prongs, and then all the way to the right to lock. There will be a short tab of paper extending beyond the cutter bar (B).



9. Lift the cutter bar by its plastic edge (A), and grip the tab (B) firmly with your right hand.



10. Pull the tab straight out, as shown, until it comes to a firm stop. You must pull out the entire leader — about 15 inches. This may seem very long, but do not worry — **the film will stop automatically at the right point.** Press the cutter bar down firmly and tear off the leader against the cutting edge. Discard this material. The cutter bar is equipped with special teeth, to aid in the tearing of the comparatively tough base of the transparency films. If you should have difficulties in tearing this stronger material, you could use a pair of scissors instead.



11. The camera is now loaded. You can always tell which picture number on the roll you have reached, by simply lifting the cutter bar and looking at the tab beneath it. The number of the next exposure is printed on the tab.

Before reloading the film holder:

Some Polaroid films are wound on conventional spools and others are wound on two separate metal end pieces. When the whole film has been used, the spool or the two end pieces will remain in the well of the film holder. Be sure to remove them before attempting to load a new film.



Taking the picture: With the camera loaded, and the subject framed and focused, proceed as follows:

1. Press the carriage release button (A) and pull the sliding carriage toward you until it stops. Be sure to release the button once you have started moving the carriage; it will then automatically lock in the correct position.

2. Pull out the darkslide (B) until it stops. This slide protects the film against unintentional exposure and fogging. If the slide is not pulled out, you cannot make an exposure, even though you operate the shutter.

3. Determine the correct exposure. Read carefully the film instruction sheet. The EXPOSURE GUIDE FOR MP-3 CAMERA AND POLAROID LAND FILMS, published by Polaroid Corporation, enables you to compute the correct exposure easily for any film, with any model MP-3 and at any magnification.

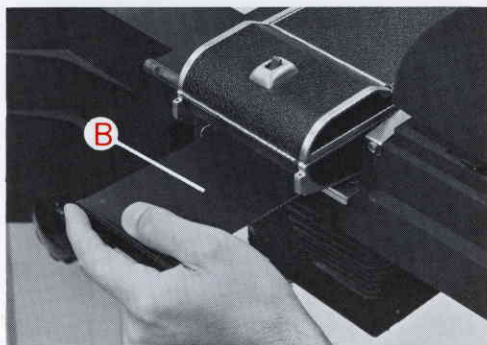
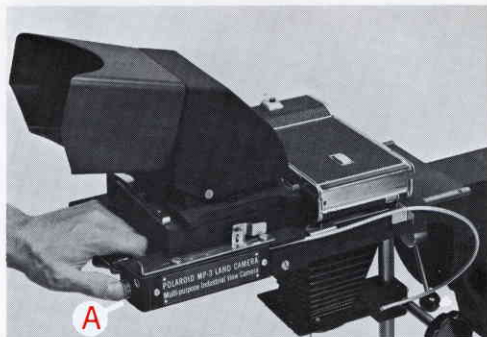
Set the shutter for the correct exposure.

4. Make the exposure, by depressing the cable release attached to the lens.

WARNING: If you are using a lens marked PRE-SET on the front of the lens mount, do not use a cable release in the socket next to the carriage release button, on the front of the camera, for picture making. If you do, all your pictures will be made at maximum lens aperture, no matter how the lens itself has been set. If your lens is not of the PRE-SET type, you can use a release in this socket, in order to make time exposures.

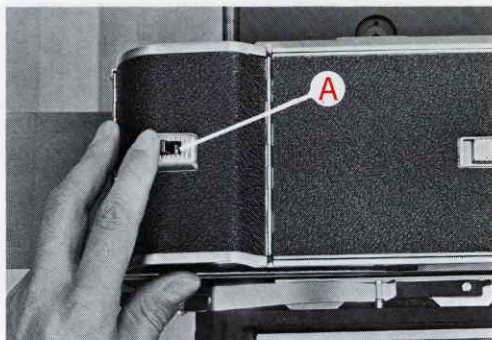
To return to the viewing/focusing position between exposures: First, reinsert the darkslide. Only after this has been done can the carriage move. Press the carriage release button, and push the carriage back to bring the ground glass screen over the lens again.

The film holder in the rear section of the sliding carriage can never be pushed beyond the bellows area while the dark slide is withdrawn. This eliminates the danger of possible film wastage.



Processing roll film prints and transparencies:

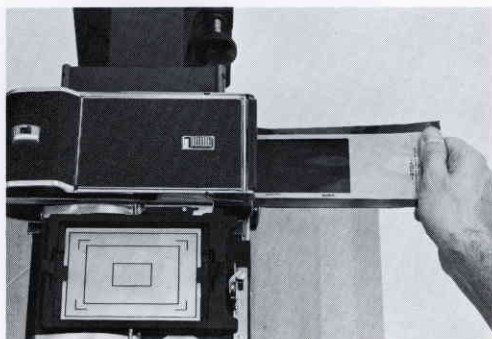
1. Snap the red switch (A) in either direction, to free the film for movement. (If you should accidentally snap this switch at any time, don't worry — it does no harm.)



2. Raise the cutter bar (A) by its plastic edge, and take a firm grip on the extending film tab. Grip it along the full extent of your thumb, as shown.

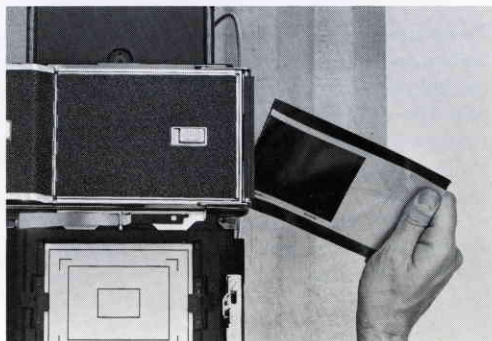


3. Pull the tab straight out, with a smooth and continuous motion. Your pull should be firm and fairly fast. The whole pull should take about as long as it takes to say comfortably the words "pull it". Do not hesitate — the film will stop automatically. **Development of the picture begins the moment you pull the tab.** Should the tab not pull easily, then snap the red switch again.

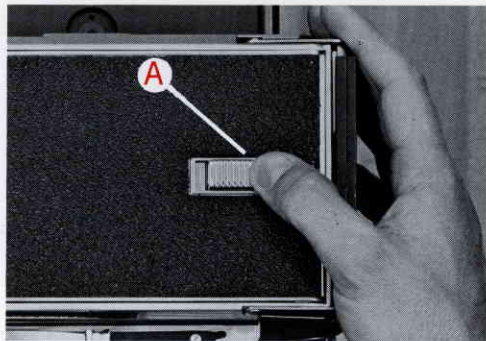


4. Having pulled the tab, snap down the cutter bar until it locks. Then tear off the protruding material and discard it. As well as starting the development process, pulling the tab also advances the film into position for the next picture.

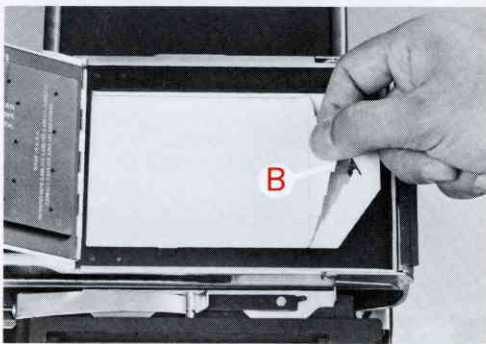
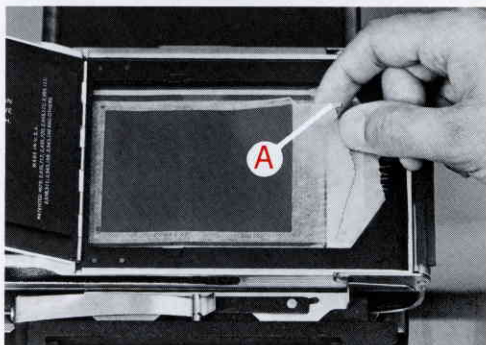
Wait the full recommended development time, according to the instructions provided with each roll of film.



5. At the end of the development time, slide the latch (A) on the picture door to the left, and open the door.



6. Lift the transparency or print out rapidly but carefully. Start at the cut-out by the tab on the right side. The cut-out is located at (A) in transparency films and at (B) in print films. Do not let the picture fall back on the damp negative. Having removed the picture, close and relatch the door.



Please read the CAUTION notice on page 32.

**Black and white prints must be coated.
Transparencies must be hardened.**

For instructions see next page.

Coating prints: All black and white prints should be coated, as soon as possible after development, with the special Polaroid print coater supplied with the film.

Roll film prints may sometimes tend to curl inwards. Remove the curl by carefully drawing the print, face up, over a straight edge, such as a smooth table edge, as shown in picture 2.

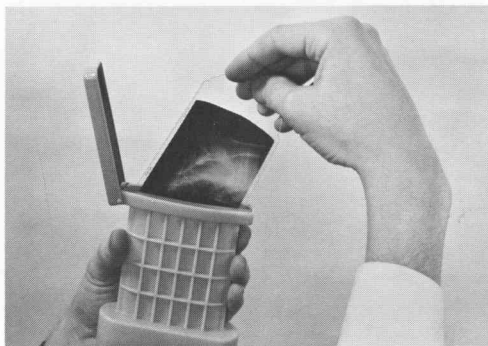
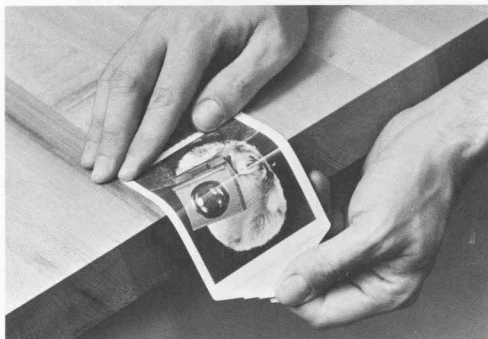
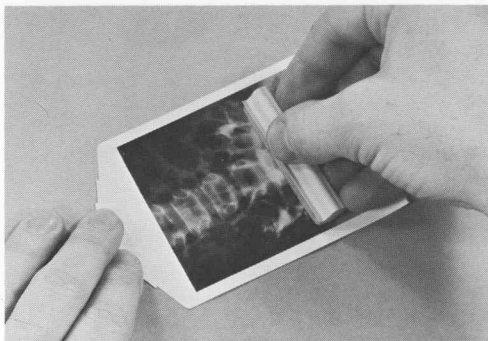
Prints from film packs will need no straightening.

Apply the print coater over the entire surface of all black and white prints (picture 1), using six to eight firm, overlapping strokes. Be sure to include all edges and corners. If the coater seems dry when you get to the last two or three prints of a roll, just press it down hard for a moment on the tab end of a print (not on the picture area), and it will release additional liquid. With pack type prints, you can press the coater down hard right at the edge of a picture, but be very careful not to scratch it. Spread the additional liquid smoothly over the print.

Once coated, the prints are durable and can be expected to withstand storage as well as conventionally processed photographic prints.

NEVER COAT POLAROID COLOR PRINTS.

Hardening transparencies: When making Polaroid transparencies for projection, the image must be hardened after removal from the camera, in a special Polaroid Dippit. Any contact with the emulsion before it has been treated in this manner will damage the picture. Follow the detailed instructions packed with the film.



How to use the Polaroid #227 Land Pack Film Holder

This film holder is for use with any Polaroid series 100 Land pack film.

Film loading: The holder can be loaded when it is either on or off the camera. If it is to be loaded on the camera, begin by lowering the camera head to the base of the column. This will give you the easiest access to the film holder.

Before loading, be sure the dark slide in the holder is pushed all the way in.

Never pull the dark slide out when the sliding carriage is in the rear position, as this would cause the film to be fogged.

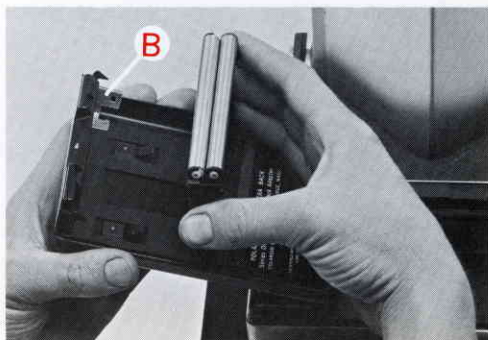
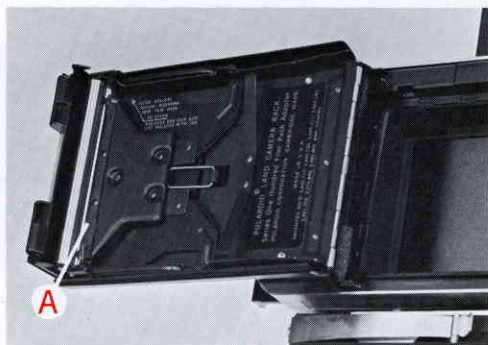
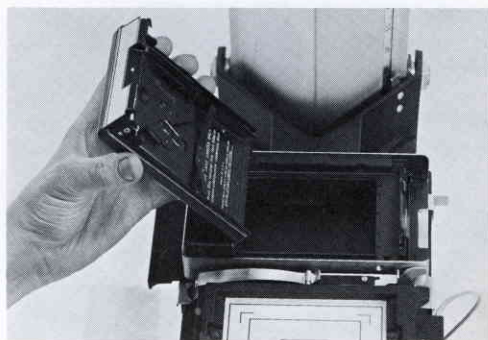
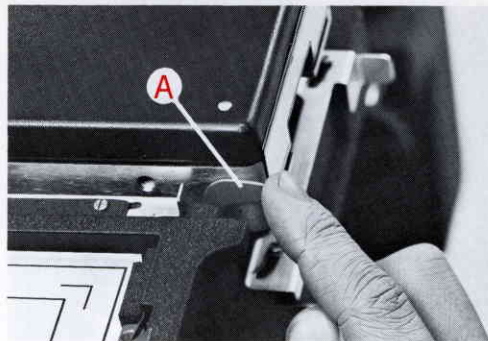
1. Push the back door latch (A) up, picture 1. The door will open slightly.
2. Swing the back door open all the way.

3. Before loading, examine the two steel rollers (A). It is important to keep these rollers clean.

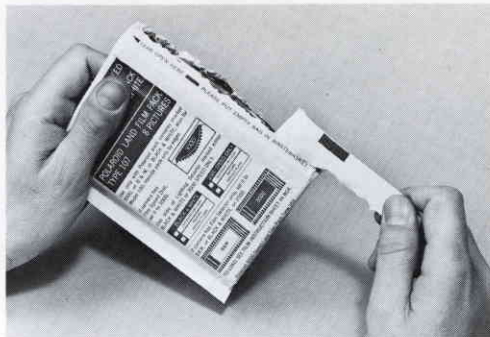
For easy access to the rollers, push out the red latch (B), and swing up the roller assembly, as shown in picture 4.

Use a damp cloth to remove any specks or deposits on the rollers. Obstinate particles of dried chemicals can be removed with a matchstick or a small piece of stiff card — but never with a metallic object, or a fingernail. Rotate the rollers as you inspect and clean them.

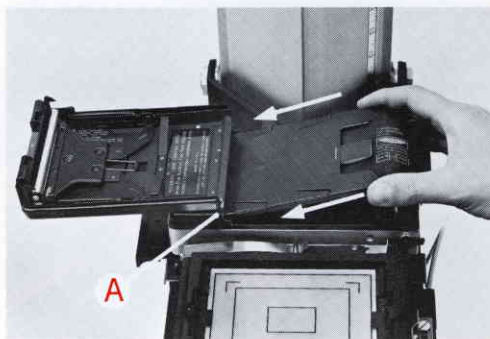
After cleaning, push the roller assembly back into position, until it locks firmly in place.



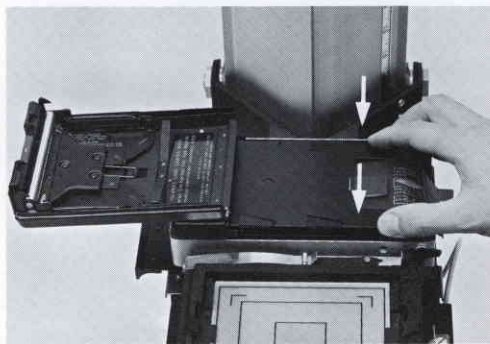
4. Remove the film pack from its box, holding it only by its edges. **Never press hard on the middle of the package.** Open the foil wrapper by tearing open the entire side of the package along the dotted line, as shown, starting at the corner. Remove the film pack and discard the moisture absorbing card packed with color film. Handle the film pack by the edges **ONLY**.



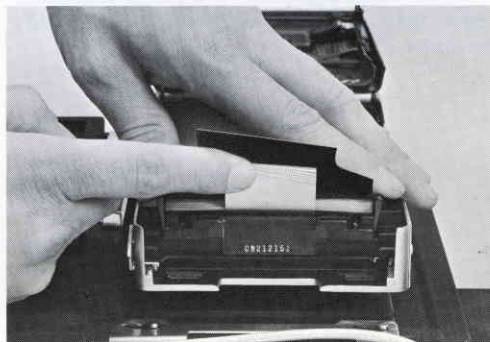
5. Hold the film pack so that the black paper safety cover faces downward into the film holder.



7. Push the pack down into the holder.

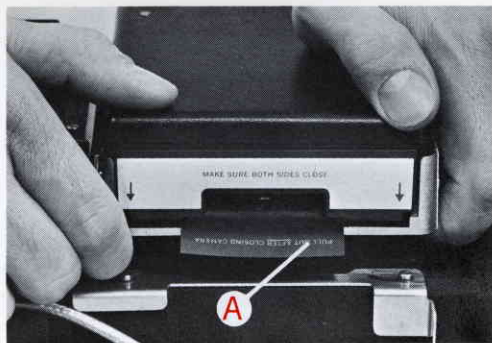


8. Make sure all the white tabs are free, as shown, and are not trapped between the pack and the film holder.



9. Close the film holder door. Squeeze both sides, to ensure that each side is securely locked.

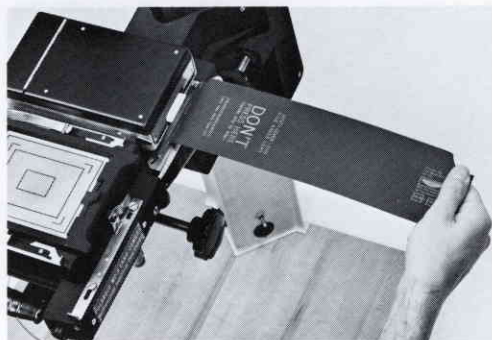
IMPORTANT: The black paper tab (A) of the safety cover must stick out of the number 4 slot. If it does not, reopen the door and straighten the tab so that it does stick out.



10. Grip the black tab firmly and pull it straight out. Pull it all the way — it must come right out of the holder. With this safety cover removed, the film is ready for the first exposure.

Taking the picture: The procedure is identical to that with the Polaroid roll film, (see instructions on page 21).

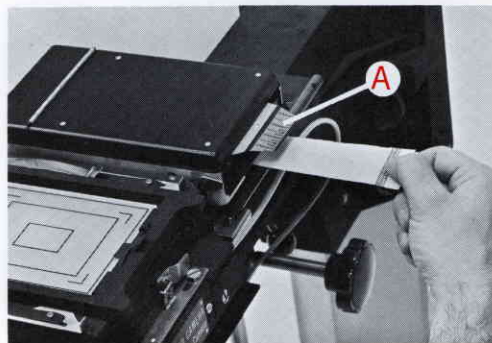
Processing pack film prints: Pack film prints, unlike roll film pictures, develop outside the camera.



1. Pull the white tab: Grasp the small white tab and pull it straight out of the film holder without hesitation. This causes a large yellow tab (A) to appear.

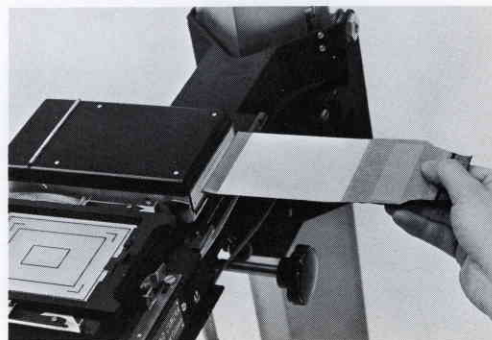
Pulling the small white tab does NOT start the development. It only prepares the film for the next step, which is the pulling of the yellow tab.

If no yellow tab appears when you pull the white tab, stop. Do NOT pull another white tab. Instead follow the instructions on page 29.

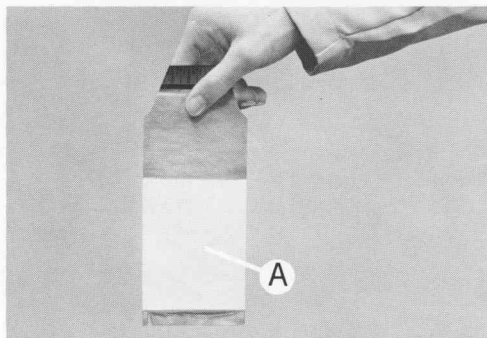


Never pull a white tab when you can see a yellow tab.

2. Pull the yellow tab: Grip the yellow tab in the center and pull it moderately fast, without hesitation, straight out of the camera. The picture is now developing OUTSIDE the camera. Start timing as soon as you have pulled the yellow tab.



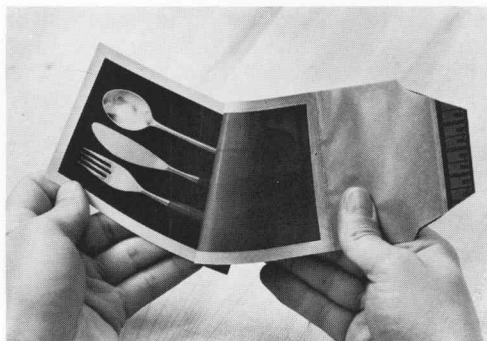
3. Wait for the full recommended development time: This is specified in the instruction sheet supplied with each film pack. During the development time, hold the picture only by the yellow tip of the tab, and hold it fairly still. Better still, lay the picture down flat. Do NOT touch, bend or lift off the print (A).



4. Lift off the print: After the full development time, rapidly strip the print from the negative, starting at the end nearest the yellow tab. Never allow the print to drop back onto the damp negative.

5. Discard the negative: Avoid all contact with chemicals left on the negative after the print is removed. Fold the negative, with the moist side in, and discard it.

Please read the CAUTION notice on page 32.



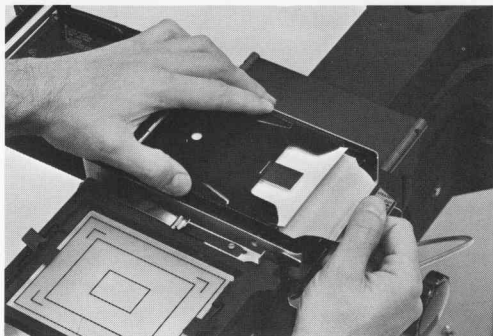
Coating prints: Black and white prints require coating. See full instructions on page 24. Never touch the surface of an uncoated print. Also, never touch a print until the coating is thoroughly dry.

NEVER COAT POLAROID COLOR PRINTS. They will dry to a tough and glossy finish. When the developed color print is dry, mount it on one of the Polaroid print mounts supplied with the film.

If no yellow tab appears when you pull the white tab, stop! Do NOT pull another white tab. Instead, gently open the film holder just enough to get one finger on top of the film pack, to hold it in place. Do this with the MP-3 lights turned off.

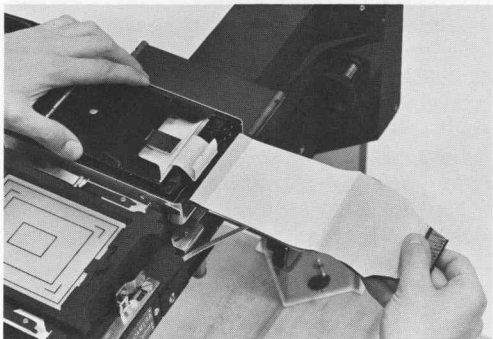


While holding the pack in place, as described, carefully open the film holder door all the way. Take hold of the top-most yellow tab.

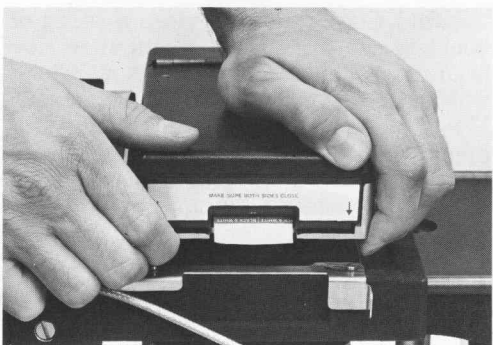


Gently pull the tab, to remove the entire picture assembly from the holder. Take care that the film pack stays firmly seated all the time.

The removed picture assembly is useless. Discard it.



Close the film holder door, making sure that the next white tab sticks out of its slot. Check that both sides of the door latch securely.



Polaroid Offices and Service Centers

CALIFORNIA

Polaroid Corp.
875 Stanton Road, Burlingame 94010
Polaroid Corp.
2040 East Maple Ave., El Segundo 90245

GEORGIA

Polaroid Corp.
3720 Browns Mill Road, S.E.
Atlanta 30315

ILLINOIS

Polaroid Corp.
2020 Swift Drive, Oak Brook 60521

MASSACHUSETTS

Polaroid Corp.
89 Second Avenue, Waltham 02154

NEW JERSEY

Polaroid Corp.
W-95 Century Road, Paramus 07652

OHIO

Polaroid Corp.
4640 Manufacturing Ave., Cleveland 44135

TEXAS

Polaroid Corp.
9029 Governors Row, Dallas 75247

AUSTRALIA

Polaroid Australia Pty. Ltd.
2 Smail Street
Ultimo, N.S.W. 2007

Mailing address:
P.O. Box 335
Broadway, N.S.W. 2007

AUSTRIA

Polaroid GmbH
Kegelgasse 27
A-1035 Wien 3

BELGIUM

Polaroid (Belgium) S.A.
12-16 rue de la Victoire
1060 Bruxelles

CANADA

Polaroid Corp. of Canada, Ltd.
350 Carlingview Drive
Rexdale, Ontario

ENGLAND

Polaroid (U.K.) Ltd.
Office:
Rosanne House
Welwyn Garden City
Hertfordshire
Repairs:
Huggins Lane
Welham Green, near Hatfield
Hertfordshire

FRANCE

Polaroid (France) S.A.
Office:
57, rue de Villiers
92-Neuilly sur Seine
Repairs:
61, rue Chaptal
92 - Levallois

GERMANY

Polaroid GMBH
Königsbacher Strasse 15-21
6 Frankfurt/Main-Niederrad 1

ITALY

Polaroid (Italia) S.p.A.
Viale Certosa 222
20156 Milano

JAPAN

Nippon Polaroid Kabushiki Kaisha
Mori Bldg. No. 6
32, Nishikubo Tomoe-cho
Shiba, Minato-ku
Tokyo

MEXICO

Repairs:
Michelmex S.A.*
Apartado Postal #6-952
Mexico 6 D.F.

THE NETHERLANDS

Polaroid (Europa) N.V.
Verkoopkantoor Nederland
Office:
Maassluisstraat 258
P.O. Box 9167
Amsterdam W. III
Repairs:
Markt 24
Enschede

NORWAY

Polaroid (Norge) A/S
Hvamkrysset
Boks 35
2007 Kjeller

PUERTO RICO

Polaroid of Puerto Rico, Inc.
Charlyn Industrial Park
Road 190, Km 1.7
Carolina 00630
Mailing address:
P.O. Box 2032, Ceramica Annex
Carolina 00630

SOUTH AFRICA

Repairs:
Frank & Hirsch (Pty.) Ltd.*
P.O. Box 1803
Bree & Nugget Streets
Johannesburg

SWEDEN

Polaroid A.B.
Box 20
S-127 21 Skärholmen

SWITZERLAND

Polaroid A.G.
Hardturmstrasse 175
Zürich 8037

*Authorized Repair Station

In addition to the Service Centers listed here, there are approved Independent Repair Stations within the United States as well as in many other countries. To locate the one closest to you, write to the nearest Polaroid Office, above.

Caution

The Polaroid Land picture process uses a caustic jelly which is safely packed inside sealed containers within each film pack, roll film and film packet. **If accidentally you should get some of this jelly on your skin, wipe it off immediately.** To avoid an alkali burn, wash the area with plenty of water as soon as possible. **It is particularly important to keep the jelly away from eyes and mouth.** Keep discarded materials out of reach of children and animals, and out of contact with clothing and furniture, as discarded materials still contain some jelly.

"Polaroid" and "Polacolor" are trademarks of Polaroid Corporation,
Cambridge, Massachusetts, U.S.A. "Polaroid" ®