Polaroid
SX-70
Land
Camera
Alpha
This booklet tells how to take the best pictures with your Polaroid SX-70 Land camera. Your camera may look slightly different from the one in this booklet, but it works exactly the same way. All the information here applies to your camera.

If you ever need more information about taking pictures, call us, free. Our Customer Service representatives are glad to help. We can be reached on weekdays from 8 a.m. to 5 p.m., your time. From anywhere in the continental U.S.A. except Massachusetts, call this number, toll-free:

**800-225-1384**

From Massachusetts and anywhere in Canada, call collect:

**(617) 864-4568**

For your convenience, these phone numbers are on your camera, under the lens. You can see them when the film door is open.
Opening

Hold the camera in the palm of your left hand.

Lift the small end of the viewfinder cap, and pull it straight up...

...until the cover support (A) locks.

& Closing

Push the cover support toward the rear of the camera.

Press down on the viewfinder cap slowly but firmly...

...until both sides of the camera latch.
Each SX-70 film pack provides ten 3½ x 3½ inch pictures. Each pack contains a flat battery to supply power for pictures made with that pack. Only Polaroid SX-70 Land film can be used in your camera. For flash pictures, use a FlashBar like the one pictured here. It has ten bulbs, five on each side.

The threaded socket in the bottom of your camera is a tripod mount that fits any regular tripod.

The picture counter on the rear of the camera is blank when the camera is empty, and sets to 10 when a pack is inserted and the film door is closed. After you take a picture, the counter shows how many are left in the pack. After 10 pictures, the counter stops at 0 and the camera won’t let you waste a flashbulb. If you should reinsert a partly used or empty pack, the counter will automatically reset to 10.
Focusing

The key to good SX-70 pictures is careful focusing. It makes the difference between consistently beautiful pictures and disappointing ones. Spend a few minutes now learning what it means and how to do it.

Focusing means adjusting the lens of the camera to get the sharpest, clearest image in the viewfinder. You do it by rolling the focus wheel—just as you might focus with binoculars.

There are two ways to focus:

- Use the whole image.
- Use the split circle in the lower center of the viewfinder.

Both methods are explained on the following pages.

Accurate Focusing—Important for Flash

Besides setting the lens for sharpness, focusing also influences exposure (the amount of light that strikes the film) for flash pictures.

The camera automatically sets the right flash exposure when you accurately focus on subjects 10\(\frac{1}{2}\) inches to about 20 feet from the camera. Though the camera can tolerate minor errors in focusing and still produce a properly exposed flash picture, it's best to be sure you've focused accurately.

To focus with the whole image, look at the most important part of your subject through the viewfinder, ignoring the split circle. Roll the focus wheel all the way in one direction, then all the way in the other. Notice that the image changes from fuzzy to sharp and back to fuzzy.

Return the wheel to the point where the main subject began to look sharp and clear. Now roll it a bit in each direction until you're sure that the most important part of your subject is just as sharp and clear as possible.

Focusing is like tuning a radio for the best reception. Turn slightly past the perfect setting once or twice to be sure you've found it.
The split circle is most helpful in dim light and for flash pictures. Look through the viewfinder and place the split circle over a vertical line on your subject: a necktie, scarf or lapel, a front seam, or the line between light and dark areas, as shown. Choose a line at the point you want sharpest in your picture, not behind or in front of it.

When the line is broken, your subject will be out of focus.

Roll the focus wheel until the line becomes continuous. Now your subject will be in focus.

The split circle helps you focus, not frame or view. It’s placed low in the viewfinder so it won’t interfere with viewing. This means you may have to reframe your picture after you focus. When you reframe, don’t change your distance from the subject. Simply point the camera slightly up, down or to one side, until you see in the viewfinder exactly what you want in the picture.

The Distance Scale

The distance scale around the lens can be used two ways. After focusing, you can compare the distance scale setting next to the line (A) with the actual camera-to-subject distance to be sure you’ve focused accurately.

Or, it can be used when the lighting is too dim to accurately focus through the viewfinder. Simply estimate the camera-to-subject distance and then roll the focus wheel to set the distance scale accordingly.

In the picture, the lens is set to a subject 5 feet away. Notice that you set line opposite line, instead of number opposite line.

Sharpness — from Near to Far — in Sunlight

On bright, sunny days, if you focus the camera on an object about 15 feet away (or set the distance scale to 15 feet), everything from about 8 feet to the most distant scene will be sharp in the finished picture.

With the camera set this way, the image you see in the viewfinder will not show the wide range of sharpness that the finished picture will have.

Don’t try this technique on overcast days, in dim light or with flash.
Loading & Unloading

Push down on the yellow bar to open the film door, which should open by itself. Never force the door open.

Insert a film pack, holding it by the sides, as shown.

Push the pack all the way in, until a narrow strip (A) along the end of the pack snaps open.

Close the film door, keeping your fingers away from the exit slot. The camera will make a sound and the film cover will come out of the exit slot. Remove and save it to order copies of your favorite SX-70 pictures, using the form on the back.

If the film cover doesn’t come out, see page 31.

To remove a film pack: Open the film door and pull the yellow tab.

Check regularly to make sure the rollers inside the film door are clean. It’s best to do this when an empty film pack is in the camera, so dust doesn’t enter. Remove any specks of dirt or dried developer jelly with a clean, lint-free cloth, moistened with water if necessary.
Shooting

When you've focused, frame your subject carefully in the viewfinder.

Hold the camera steady and gently squeeze the shutter button. *Hold the button in...*

...until the picture comes out of the exit slot, and all camera sounds stop. These shooting steps are printed under the viewfinder eyepiece as a handy reminder.

Remove and handle the picture by its wide border. Now enjoy the most rewarding part of your SX-70 picture-taking process: watching the image gradually emerge from the blank film. In minutes, your picture will be fully developed. Don't bend or squeeze the picture. (See “Care of Your Pictures” on page 32.)

*If ever the picture does not come out of the exit slot, see page 31.*

In dim light or when using flash, you might get a blurred picture if either the camera or the subject moves when the picture is taken. Neither you nor your subject should move after hearing the first “click,” which comes before the camera actually takes the picture.

To assure sharp, clear pictures under all conditions, avoid these:

**Camera Movement (top)**

Hold the camera steady from the moment you squeeze the shutter button until the picture comes out of the camera.

**Subject Movement (center)**

Generally, ask your subject to hold still until the picture comes out of the camera. The subject shouldn’t move after hearing the “click.”

**Blinking (bottom)**

The flashbulb fires a split second after the camera “clicks.” Some people anticipate the flash and blink when they hear the “click.” Then their eyes may be closed when the picture is taken. Ask them to try not to blink until after the flash has fired.
The Lighten/Darken Control
The Lighten/Darken control will rarely need to be changed from the normal position. However, if your main subject is too light or too dark in a daylight picture, you can use the L/D control to adjust exposure for another picture in the same place, with the same lighting. For a small change, turn it one mark, as shown. For a greater change, move it two marks or more.

The control automatically returns to the normal position when the camera is closed.

The L/D control generally should not be used to correct flash exposure. If a flash picture is too light or too dark, you probably haven't focused accurately.

Taking Pictures in Hot and Cold Weather
When it's hot, keep your camera, film and developing pictures away from hot "baking" conditions like direct sunlight, hot surfaces and a car's glove and luggage compartments.

When it's cold, keep your camera and film warm. Put each developing picture immediately into a warm inside pocket for at least three minutes.

For the most up-to-date information, see the back of your SX-70 film box.

Flash Pictures
As a general rule, you should use flash for indoor pictures, since most indoor lighting won't be bright enough or of the right color balance to produce good pictures. When using flash, always remember to (1) focus accurately and (2) observe the flash range of 10½ inches to 20 feet. However, flash shouldn't be used for ultra-close pictures of faces.

First firmly insert the FlashBar into the socket. Then take your pictures the usual way. Focus carefully.

When all five bulbs on one side have been fired, the camera won't let you take another picture until you turn the FlashBar around for five more flashes. This keeps you from wasting film. When all the bulbs have been fired, the camera will again stop working until you remove the used FlashBar.

When taking pictures of people within 3 feet of the camera, ask them to turn slightly away from the flash. This avoids possible discomfort from the bright light and minimizes the chance of "red eye" (see page 30).

Flash pictures shouldn't be taken where the atmosphere contains gases or dust that may be ignited by a spark.

Electronic Flash
Some electronic flash units may work well with your SX-70 camera, others will not. Some could even damage the camera. Before you buy, check with your dealer or with the manufacturer of the electronic flash unit to make sure it's suitable for your camera. Or ask Polaroid Customer Service (see page 33).
Four Flash Hints

1. Watch the background. Place your subject close to a colorful background if you can. Color adds interest to the picture; having the background near the subject assures that it will be well lit. An exception: fair-haired people and objects with bright outlines can look good against a dark (or distant) background.

2. Arrange groups. All the people in a group should be about the same distance from the camera, so they'll all be evenly lit by the flash. When they're at different distances, only the person the camera was focused on will be correctly lit. The other people will be either too dark or too light.

3. Avoid flash reflections. If you aim directly at a reflective surface—a mirror, window, shiny wall, photo or painting—your picture will show a reflection of the flash, a “hot spot.” Avoid this by standing to one side of your subject and shooting from an angle rather than head-on. The same principle applies to people wearing glasses. Ask them to turn slightly away from the camera.

4. Above all, focus carefully. Remember that focusing influences exposure for flash pictures. When a flash picture is too dark or too light, it's usually because the camera was focused elsewhere than on the main subject. And, stay within the flash range of 10½ inches to about 20 feet. A flashbulb cannot provide enough light for an entire auditorium or sports stadium, for example.
**Flash in Daylight**

With this camera you can use a combination of flash and daylight. The electronic control circuitry in the camera was designed to read both the daylight and the light from the FlashBar, and combine them to produce a properly exposed picture. When using flash outdoors, you soon will come to know for yourself the wide range of opportunities for taking luminous, colorful pictures which you might not otherwise have taken.

For best results, remember these requirements. Focus properly. For the most natural combination of daylight and flash, the subject should be between 4 and 12 feet from the camera, 5 or 6 feet giving particularly impressive results. Here are typical ways flash can be of help in daylight.

If the subject is in the shade and the background is bright, the exposure is in danger of being either too much for the background or too little for the subject. By adding flash, as shown at left, you can create an attractive, sunny, bright picture.

When the subject is lit by strong sunlight, using flash can soften or eliminate unpleasant, harsh shadows, as shown below left.

A face that is lit only by a blue sky, and is not lighted directly by the sun, would have a bluish, cold appearance. The addition of flash provides the sense of sunshine.

In dim light, without flash, the shutter will remain open for a relatively long exposure time, resulting in blurred pictures unless a tripod is used. Using flash reduces the exposure time and results in sharp, attractive pictures.

**Close-Ups**

Your SX-70 camera is especially designed to open a new world of beautiful, exciting close-up pictures. With no accessories you can come as close as 10½ inches. The closest pictures will show your subject at half its actual size. You'll get the best close-ups, with the greatest range of sharpness, by using flash. You can also take close-ups in bright sunlight or open shade. Be sure you have enough light, and hold your camera steady. In dim light, without flash, you'll need to use a tripod.

The professional way to get a sharp image when close to the subject is to set the focus wheel at its nearest setting, then carefully move the camera back and forth slightly until the subject is as clear and sharp as possible.

If you want to get even closer, you can. The Polaroid Close-up Lens #121 (with Diffuser for flash pictures) lets you take life-size pictures of subjects as close as 5 inches.
Time Exposures

In dim light, the SX-70 can make automatic time exposures as long as 14 seconds. The camera should be on a firm support—a tripod is best. The tripod mount on the bottom of your camera secures it to any standard tripod. Or, you can prop your camera securely on a table or other flat surface. The Remote Shutter Button #112 (A) helps prevent camera shake.

Press the shutter button gently, holding it in at least a second. Then release the button and the camera will do the rest. When the electric eye has finished timing the exposure, the shutter will close and the picture will come out and start to develop. For best results, the light on the scene should be fairly even. Indoors, a bright light or window in the scene could "fool" the electric eye, and the rest of the picture would be too dark.

SX-70 film gives the most natural colors when it's exposed in sunny daylight or with the light from a FlashBar, which closely matches daylight. You can also get beautiful pictures indoors with other kinds of lighting. Although pictures taken indoors without flash may not faithfully reproduce the colors of the subject, they often have a charm and beauty all their own. Under most fluorescent lights, pictures taken without flash will have a greenish tint. Under tungsten lights used in homes, the pictures will have a reddish tint.

Troubleshooting

Repeated Spots or Bars

The bar pattern at right may be caused by dirt near the ends of the rollers inside the film door. The repeated spot pattern may be caused by specks of dirt on the rollers. (Use the location of the spots on the picture to find the specks on the rollers.) Check the rollers each time you load, and clean them, if necessary. It's best to do this with an empty film pack in the camera, so dust can't enter.

Support the back end of the camera. Open the film door (A) and depress the light shield (B) to expose the rollers (C). Rotate the rollers with your finger. They should move freely. Remove any specks of dirt with a clean, lint-free cloth, moistened with water if necessary. Check the raised ends (D) on the top roller, near which dirt may collect.

Should it ever be necessary to clean the picture exit slot (E) under the front edge of the film door, insert a stiff piece of paper (like the cover that has been ejected from a film pack) in front of the rollers and under the light shield. Push it until it comes out of the picture exit slot. Move it in the slot until it removes any developer jelly that may be trapped there. Be careful not to force the slot open as it could be permanently bent.
Incomplete Image
If part of the picture is missing, the film pack may have been damaged before picture-taking, perhaps by being squeezed while being loaded into the camera (see page 14). Sometimes this problem is accompanied by a leak of developer jelly onto the rollers, the picture exit slot and the back of the picture. Clean the rollers as described on page 27 before taking more pictures. Avoid contact with the developer jelly. Please read the CAUTION notice on the film box.

Fogged Pictures
White areas in the picture mean the film was fogged before it was exposed, probably by the film pack’s removal from the camera and reinsertion in the light. If the film pack is removed, the top picture will always be fogged; others may be fogged in one corner. If it’s ever necessary to remove and reinsert a film pack, do so in dim light.

“Red Eye”
In some flash pictures the pupils of your subject’s eyes may appear red. This is a reflection from blood vessels in the eye and happens most often in dim light, generally with children and blue-eyed adults. To minimize this effect, tell your subject to avoid looking directly at the flash.

If the Camera Doesn’t Eject the Film Cover or Film
If your camera doesn’t eject a film cover or piece of film when it should, the battery in your film pack may be dead. Try a fresh film pack.

If the film cover doesn’t come out of the second pack, the camera may need repair. Call Customer Service at the number below and explain the problem.

If the viewfinder goes black for as long as you depress the shutter button, and no picture is ejected, the camera’s internal battery check is indicating that your battery is too weak to take a picture. Insert a new film pack.

If you press the shutter button for a flash picture and nothing happens, a FlashBar with five used bulbs facing front may be on your camera. This signals you to change the FlashBar. If the camera doesn’t work when an unused side faces front, turn it around or insert a new one. If it works then, it means one side of the FlashBar wasn’t operating. If you have any questions, please call Customer Service.

If the Camera Stops During a Cycle
In rare cases, the camera may stop in the middle of an operating cycle. When this happens, you may not be able to close the camera fully. Never try to force it shut.

There are two reasons why the camera may stop. One is jabbing at the shutter button instead of holding it until the picture comes out. The remedy is simple—squeeze the button again and hold it. If the camera still doesn’t complete its cycle, open the film door in dim light, pull the pack out about an inch, push it in again and close the door. The counter will reset to 10. The camera should complete its cycle, ejecting the top piece of film, which will have been exposed.

The other reason is that the battery in the film pack is weak. Test this by reinserting an empty pack if possible, or a new one.

If you insert a fresh pack, the film cover may stick out and prevent the door from closing. Remove it and close the door. If you can close the door but the cover is ejected part way, open the door and remove the cover by turning the rollers forward. Never try to force the cover through the rollers without first opening the door.

A Problem With Your Camera or Film?
Call us at no charge. We can be reached on weekdays from 8 a.m. to 5 p.m., your time. From anywhere in the continental U.S.A. except Massachusetts, call 800-225-1384, toll-free. From Massachusetts and Canada, call collect, (617) 864-4568.

Film Replacement
Return any film pack that has a dead or weak battery to Polaroid or to your dealer, and we will replace it—provided the film has not passed the expiration date on its box.
Care of Your SX-70 System

The Camera
Treat your camera with care. Rough handling or dropping may damage delicate parts. Keep the camera closed when not in use. The lens and viewfinder will seldom need cleaning. If they do, blow off any dust, then wipe them gently with a clean, lint-free cloth. Regularly clean the rollers inside the film door with a similar cloth, moistened with water if necessary (see page 27).

The Film
Polaroid SX-70 Land film, like all film, should be kept cool. If possible, store below 75°F (24°C). For longer storage, keep below 65°F (18°C). In its sealed box, the film can be refrigerated (not frozen). Let it reach room temperature before using it. This will take at least an hour.

To preserve its freshness, keep the film sealed in its protective box until ready for use. Then, take the same care of a loaded camera as you do your film. Keep the camera in a cool place (but not in a refrigerator).

The Pictures
When your SX-70 picture comes out of the camera, handle it by its wide white border. Don't bend or crush the picture as it develops, and never fold it. There's nothing to discard, nothing to trim. Cutting the picture's borders may open its structure and cause it to deteriorate.

The brilliant pictures made with your SX-70 system are among the most stable and resistant to fading ever known in photography.

Fingerprints on your pictures can be easily removed. Simply "mist" the surface with your breath, then polish with a tissue or a soft clean cloth, just as you might clean eyeglasses.

Our Service Policies

The policies that shape our warranty and customer service have evolved during decades of experience with millions of camera owners. These policies are based on a simple principle: customers should be treated fairly.

Polaroid's warranty, on the inside back cover, is short and simple. Our after-warranty service is good too, and includes the same toll-free phone calls. And there's a warranty on repairs, also.

Our skilled Customer Service representatives are ready to help you get good pictures. If you have a problem with your camera or film, we urge you to get in touch with us promptly, in one of three ways.

Call Us, Free
You can reach us weekdays from 8 a.m. to 5 p.m., your time. From anywhere in the continental U.S.A. except Massachusetts, dial 800-225-1384, toll-free. From Massachusetts and Canada, call collect—(617) 864-4568.

Or, Write a Letter
Write to Customer Service, Polaroid Corporation, Cambridge, Mass. 02139. If you write about a picture-taking problem, please enclose sample pictures and clearly explain the conditions under which the problem occurred. Clearly print your address.

Or, Visit a Service Center
Bring your pictures. The people there will be glad to discuss your pictures with you, give information and offer help for any picture-taking problem. Our Service Centers are listed on the back cover.
If Your Camera Needs Repair

If you ever believe your camera may need repair, before you send it to us, please call Customer Service at the toll-free number listed on the previous page, and explain the problem. We just may be able to save you the time and trouble of returning it.

Your Polaroid Land camera dealer will be happy to return your camera for repair, however, should that ever be necessary. Or if you prefer, you may bring the camera to a Polaroid Service Center, which offers walk-in service. Many repairs can be made while you wait. You can also talk to our representatives about any picture problems you may have.

Or, you may mail the camera to Polaroid for repairs. Pack it carefully so it will travel safely. Address it to the nearest Polaroid Service Center (see back cover). Send it by insured parcel post. To make it easier we will, at your request, send a sturdy pre-addressed shipping carton to you anywhere in the U.S.A.

When returning your camera, be sure to include a note clearly describing the camera problem and, if you can, sample pictures which illustrate it.

Polaroid Service Centers try to give the fastest possible service and highest quality workmanship. The goal is to repair and ship all cameras within five working days, rarely longer. Depending on distance and mail service, you can expect to have your camera back in 10 to 14 days.

If You're Taking Your Camera Outside the U.S.A.

Try to anticipate your needs and take along an adequate supply of SX-70 film and FlashBars. Or, before leaving, check with the nearest Polaroid Customer Service office for places of supply in other countries.

Full One-Year Warranty

If your camera proves to be defective within the warranty period we will repair it or at our option replace it with a similar camera without charge. The warranty applies whether you do or do not return the registration card to us.

The warranty period is one year from the original date of purchase. To verify the warranty period, you should keep the sales slip or other proof of the purchase date. Without this information, the warranty period is two years from the manufacturing date on the camera.

If, within the warranty period, your camera is mailed to us for service from inside the U.S.A., it will be returned with a postal refund approximately equal to the cost of insured parcel post. We will also give you a free pack of film.

This warranty does not cover damage caused by accident, misuse, or tampering with the camera, and a charge will be made for such repairs.

For warranty service, the camera must be returned to and repaired by a Polaroid Service Center or Authorized Service Center. You can return the camera through your Polaroid camera dealer. If that is not convenient, see page 34 for information on how to return the camera, or call Customer Service toll-free at 800-225-1384 (in Massachusetts and Canada call 617-864-4568 collect).

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty excludes all consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the foregoing limitation or exclusion may not apply to you.