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I have no connection with any camera company

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If you use Pay Pal, use the link below. Use the above address for a check, M.O. or cash. Use the E-mail of butkusmi@ptd.net for PayPal.

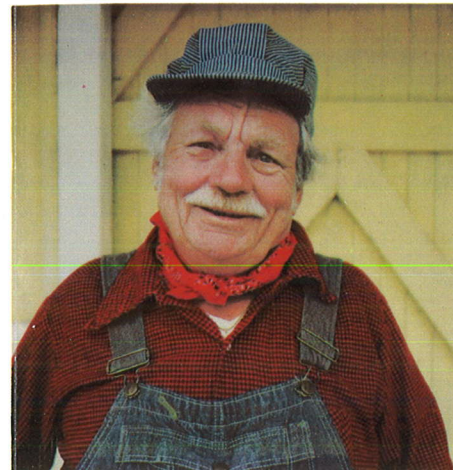


[back to my "Orphancameras" manuals /flash and light meter site](#)

Only one "donation" needed per manual, not per multiple section of a manual !

The large manuals are split only for easy download size.

- You don't always need direct sunlight to get great results. This portrait was taken on a bright overcast day. Since the light is diffused, shadows are soft, making it a flattering light for close-ups.
- Include color. Use props. Ask your subjects to wear bold, solid colors or pose them near a colorful background.
- When shooting scenics, include something in the foreground to serve as a natural frame or to show depth or scale.
- Watch the background. It should complement your subjects, not distract from them. Keep it simple.



Close-ups

Your camera is designed to open a new world of beautiful, exciting close-up pictures. You can take them in daylight or with flash and no other camera does it so easily.

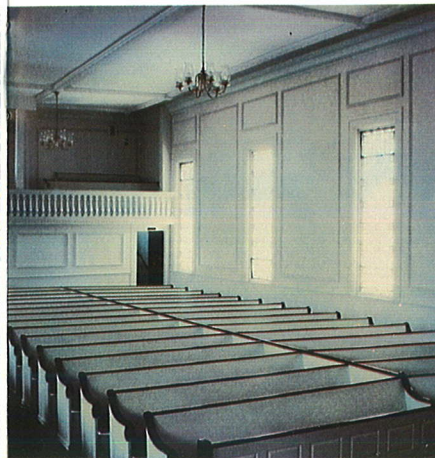
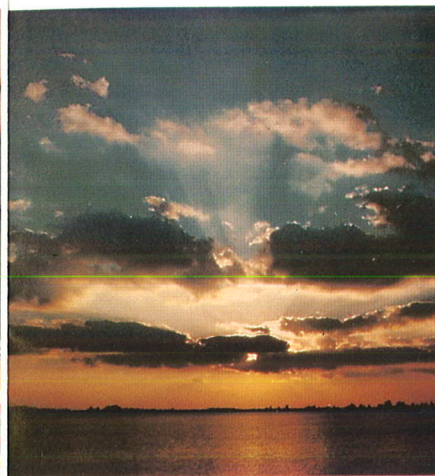
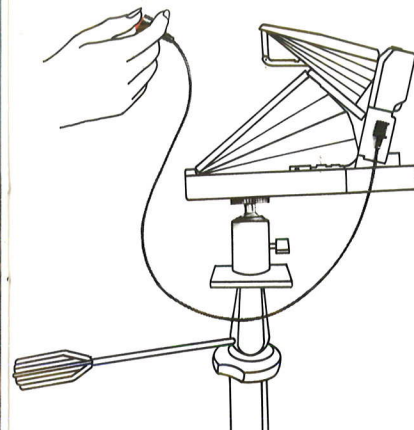
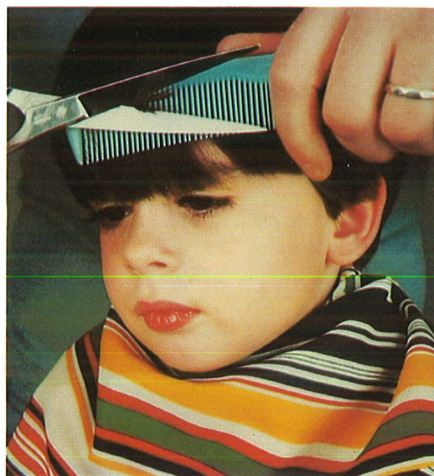
With no accessories, you can come as close as 10.4 inches. Pictures taken at that distance will show your subject at half its actual size.

For medium close-ups (pets, children, etc.), look through the viewfinder and as you move in close, *lightly* press the shutter button partway several times to "preview" the picture at various distances. When you see the picture you want, just press the button all the way.

To shoot at the closest possible distance, look through the viewfinder and come closer to your subject than 10.4 inches. *Lightly* press the shutter button partway and hold it there. You'll hear the camera set the lens for 10.4 inches.

Move the camera back and forth until your subject is as sharp and clear as possible. When it is, press the button all the way to take the picture.

To avoid possible discomfort from the flash, extreme close-ups of people should be made in natural light rather than with flash.



Time exposures

Your camera can make automatic time exposures up to 14 seconds.

Keep the camera steady by placing it on a firm support—a tripod is best—and use the Polaroid Remote Shutter Button #112. The tripod socket is on the bottom of the camera.

To take the picture, press the shutter button for at least a second; then release it. The camera will do the rest.

For best results indoors, stand so bright lights are behind you or to the side.

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.

Tips on outdoor lighting

Outdoors, your camera's electric eye controls the lens opening and shutter speed to let just the right amount of light reach the film.

The electric eye works best when the scene is evenly lit. It can be "fooled" by uneven lighting as described below.

Bright backgrounds: White wall, swimming pool, beach or snow scenes, etc.

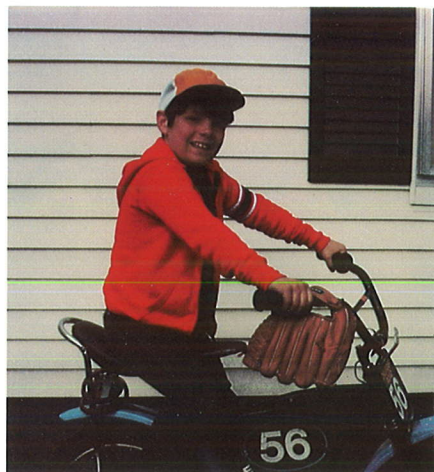
When a bright background is a large part of the scene and reflects more light than your subject, the electric eye sets the camera for the background causing your subject to appear too dark in the picture (top right).

You can do one of three things before taking the picture:

- move closer to your subject to reduce the effect of the background (bottom right).
- use "fill-flash" to balance the light.
- turn the Lighten/Darken control toward Lighten (shown below) to lighten your subject.



(Setting: 1 mark toward Lighten)



Dark backgrounds: Green foliage, dark wall, etc.

When a dark background is a large part of the scene and reflects less light than your subject, the electric eye will again set the camera for the background. Now, your subject may appear too light (top right).

In this situation, flash may not help balance the light. This time, either move closer to your subject (bottom right) or set the Lighten/Darken control toward Darken (shown below) to darken your subject.



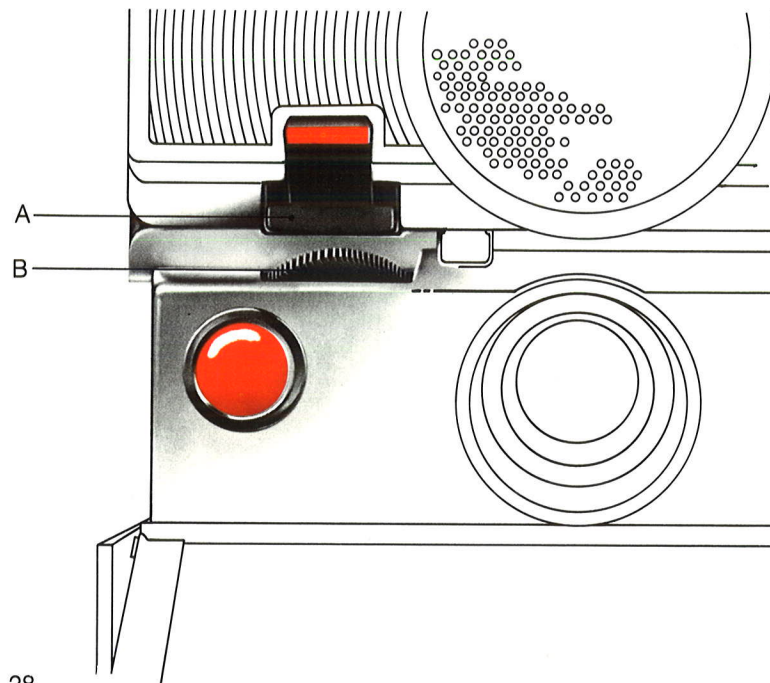
(Setting: 1 mark toward Darken)



To set the lens manually

A few special situations call for setting the lens manually:

- When shooting straight-on through glass, it will block the sound waves from reaching your subject. The lens will focus on the glass and your subject will appear fuzzy. Screens or bars could cause the same result.
- When shooting at an angle toward a flat, smooth surface (glass enclosed art, wall hanging, etc.), the sound waves may reflect away from the camera causing the lens to be set incorrectly. You can see when this happens by lightly squeezing the shutter button partway. If your subject appears unsharp in the viewfinder, set the lens manually.

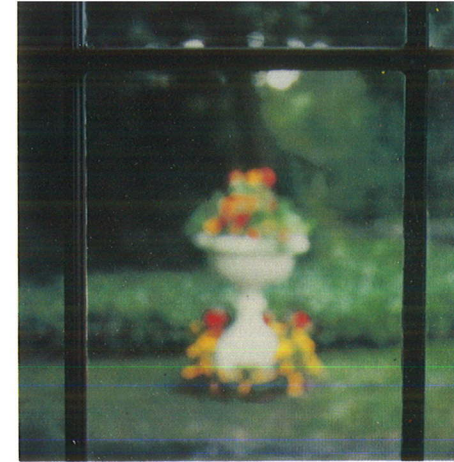


To set the lens manually: Press the bottom of the manual focus switch (A). Then use the manual focus wheel (B) as described on the opposite page.

The red bar on top of the switch signals that you've disconnected the sonar focusing system. To reactivate it, press the top of the switch or close the camera. The lens will reset itself for sonar focusing.

To use the focus wheel: Look at the most important part of the scene. 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 your subject began to look sharp and clear. Now roll it a bit in each direction until you're sure your subject is as sharp and clear as possible. You can check your ability to focus accurately by comparing the setting on the distance scale around the lens with the actual camera-to-subject distance.





Need help? Call Customer Service

If you ever have a question about your camera or your pictures, call us toll free . . .

800-225-1384

from anywhere in the continental U.S.A. except Massachusetts and Alaska. From those states, call collect—(617) 864-4568. In Canada, call toll free—800-261-6970. Our Customer Service representatives can be reached every weekday from 8 a.m. to 5 p.m., your local time.

You can write to Polaroid Corporation, Customer Service, Cambridge, Mass. 02139, or to Customer Service at any of the locations listed on the back cover. Include your address, phone number and camera model.

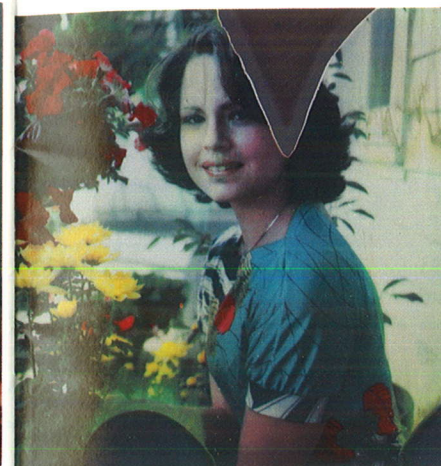
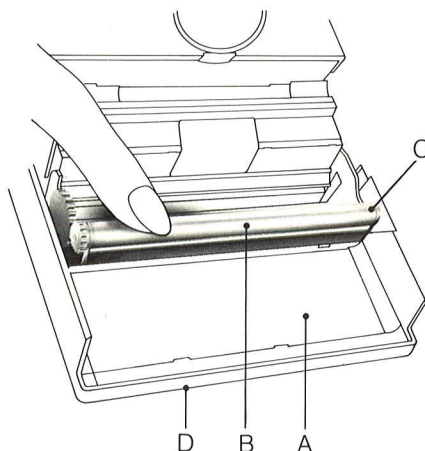
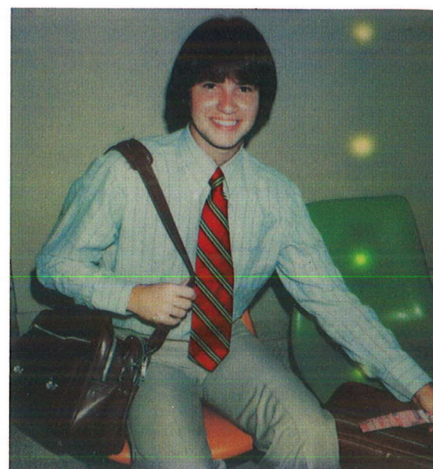
All our Service Centers offer walk-in service, too, including while-you-wait repairs in most cases. If you can get to us easily, bring your camera and pictures in.

Repeated spots: If a repeated spot or bar pattern appears on the picture, the rollers inside the camera need cleaning.

It's best to check the rollers each time you load film.

To clean the rollers: In dim light, open the film door and depress the light shield (A). Rotate the rollers (B). Remove any specks of dirt with a clean, lint-free cloth, moistened with water if necessary. Check the raised ends (C) on the top roller; dirt can collect there too.

Should you need to clean the picture exit slot (D), insert a stiff piece of paper (like the film cover) in front of the rollers and under the light shield. Push, until it comes out the picture exit slot.



Part of the picture is missing: This happens when you damage the film by squeezing the pack above and below the yellow tab. As you load the camera, remember to hold the film pack by its sides.

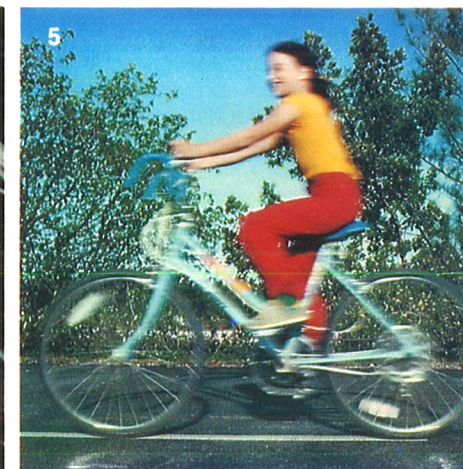
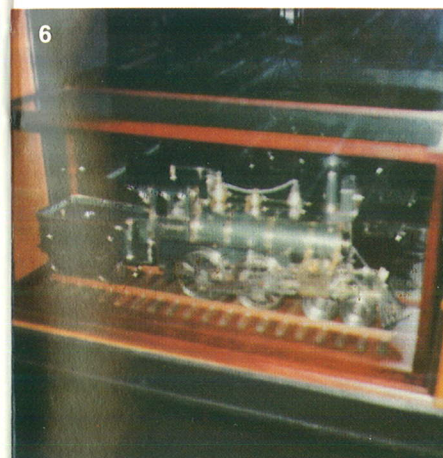
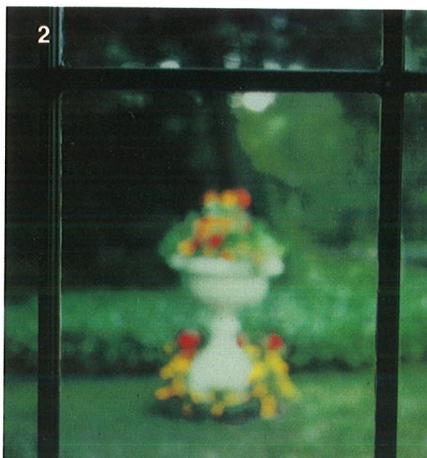


Part of the picture is fogged: If you press against the bellows while taking a picture, you may block the movement of parts inside the camera. The next picture you take could be partially or totally white or could have streaky light patterns.

Hold the camera as shown on page 11.

Fuzzy pictures can be caused by . . .

- 1 Moving the camera during picture taking. It is important to hold the camera steady until the film is ejected from the camera.
- 2 Shooting through glass. The glass will block the sound waves from reaching your subject and the lens will focus on the glass. Set the lens manually (see page 28).
- 3 The sound waves striking a foreground object and not reaching your subject. As you press the shutter button, the sound waves travel to the central part of the scene. Be sure they have a clear path to your subject.
- 4 Taking a picture in dim light. When the red light appears in the right side of the viewfinder, remember to use flash or take a time exposure (see page 15).
- 5 Your subject moving during picture taking. You'll get the best action pictures when your subject is moving toward you, rather than across the picture.
- 6 Shooting at an angle toward a smooth, flat surface. The sound waves have reflected away from the camera. Set the lens manually (see page 28).



If the camera doesn't eject the film cover or film

- The battery in your film pack may be dead. Try a fresh pack. If the film cover doesn't come out of the second pack, the camera may need repair. See the next page.
- 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 the FlashBar 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 (see page 31).
- If the camera sets the lens but the picture does not come out; or if the lens does not reset past infinity (∞) when you release the shutter button, close the camera then reopen it. The jam should clear.

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 inserting an empty pack if possible, or a new one.

If you insert a fresh pack, the film cover may be partly ejected preventing 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.

If your camera needs repair

If you believe your camera needs repair, *before you send it to us* please call Customer Service (see page 31) 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. 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. 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. Depending on distance and mail service, you can expect to have your camera back in 10 to 14 days.

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.

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.

Care of your system

The camera

Treat your camera with care. Rough handling 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 32).

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, crush or fold the picture. Don't cut the picture's borders, this can ruin the picture.

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 lightly with a tissue or a soft clean cloth.

Electronic flash

Your camera was designed to use FlashBars and with a FlashBar it will produce well exposed pictures over the full flash range from about 10 in. to 20 ft.

Because of the special electronic circuitry in SONAR OneStep cameras, an electronic flash unit must have matching electronic characteristics in order to give good picture results with this camera.

As of August, 1978, such electronic flash units were not available. However, it is expected that units designed to give excellent results with SONAR OneStep cameras (over a shorter flash range) will be marketed in the near future.

Polaroid Customer Service will have a list of electronic flash units designed to work with SONAR OneStep cameras and you can get this information by calling toll free (see page 31).

Electronic flash units other than those listed by Customer Service will not give consistently good results and may cause SONAR OneStep cameras to malfunction.

There is a general rule that applies to any electronic flash unit. If you get poor picture results with it, try a FlashBar. If you get good pictures with a FlashBar, but not with electronic flash, the cause of the problem is the electronic flash, not the camera or the film.

Accessories

Picture taking can be even more fun with the accessories listed below, available from your camera dealer.

- Polaroid Remote Shutter Button #112
- Polaroid #119A Tele 1.5 Lens
- Polaroid #132 Self-Timer
- Polaroid #2323 Carrying Case

Copies and enlargements

High-quality copies and enlargements may be ordered through your camera dealer or directly from Polaroid Copy Service (the order form is on the back of the film cover).



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 a 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 37 for information on how to return the camera, or call Customer Service toll-free at 800-225-1384 (from Massachusetts and Alaska, call 617-864-4568 collect. From Canada, call toll free—800-261-6970).

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.

Polaroid service centers and offices

California

Polaroid Corporation
2040 E. Maple Avenue
El Segundo 90245
Telephone: (213) 322-6206

Georgia

Polaroid Corporation
5601 Fulton Industrial Blvd., S.W.
Atlanta 30336
Telephone: (404) 346-1717

Hawaii

Polaroid Corporation
Suite 153
841 Bishop Street
Honolulu 96813
Telephone: (808) 524-3911

Illinois

Polaroid Corporation
2020 Swift Drive
Oak Brook 60521
Telephone: (312) 654-5252

Massachusetts

Polaroid Corporation
784 Memorial Drive
Cambridge, Mass. 02139
Telephone:
Within Massachusetts,
call collect 864-4568.
Out of state, toll free
800-225-1384

New Jersey

Polaroid Corporation
P.O. Box 607
W-95 Century Road
Paramus 07652
Telephone: (201) 265-6900

Ohio

Polaroid Corporation
4640 Manufacturing Road
Cleveland 44135
Telephone: (216) 267-7600

Texas

Polaroid Corporation
9029 Governors Row
Dallas 75247
Telephone: (214) 631-9500

Puerto Rico

Polaroid Caribbean Corp.
Charlyn Industrial Park
Road 190. Km 1.7
Carolina 00630
Telephone: (809) 768-1119

Mailing address:
P.O. Box 2032
Carolina 00630

Additional Service Centers:
Besides Polaroid's own Service Centers listed here, there are many other authorized Service Centers in the U.S.A. To locate the one closest to you, call Customer Service (see page 31).

Australia

Polaroid Australia Pty. Ltd.
Eden Park Estate
31 Waterloo Road
North Ryde, N.S.W. 2113
Mailing address:
P.O. Box 163
North Ryde, N.S.W. 2113

Austria

Polaroid Ges.m.b.H.
Kegelgasse 27
1031 Wien, Postfach 349

Belgium

Polaroid (Belgium) S.A.-N.V.
113 Rue Colonel Bourg
Kolonel Bourgstraat 113
1140 Bruxelles-Brussel

Brazil

Polaroid do Brasil Ltda.
Rua Almirante Marques Leão 408
São Paulo 01330, S.P.
Mailing address:
Caixa Postal 2908
São Paulo 01000

Canada

Polaroid Corporation
of Canada, Limited
350 Carlingview Drive
Rexdale, Ontario M9W 5G6
Telephone: (416) 675-3680

Polaroid Service Centre
8449 Main Street
Vancouver, B.C. V5X 3M8
Telephone: (604) 324-5150

Denmark

Polaroid A.S.
Blokken 75
3460 Birkerød

France

Polaroid (France) S.A.
Office:
57, rue de Villiers
92202 Neuilly

Repairs:
1, rue Ambroise Croizat
95100-Z.I. Argenteuil

Germany

Polaroid GmbH
Sprenglinger Landstrasse 109
6050 Offenbach

Great Britain

Polaroid (U.K.) Ltd.
Ashley Road
St. Albans
Hertfordshire AL 1 5PR

Hong Kong

Polaroid (Far East) Limited
10th Fl. Block "B"
Watson's Estate
8 Watson Road, North Point
Hong Kong

Italy

Polaroid (Italia) S.p.A.
Via Piave 11
21051-Arcisate (Varese)

Japan

Nippon Polaroid
Kabushiki Kaisha
Mori Bldg. No. 30
3-2-2, Toranomon
Minato-ku
Tokyo (105)

Mexico

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

The Netherlands

Polaroid (Europa) B.V.
DeBoelelaan 32
1083 HJ Amsterdam
Postbus 7949
1008 AC Amsterdam

Repairs:

Parallelweg 37b
7511 EE Enschede

New Zealand

Polaroid New Zealand Ltd.
Augustus House
15 Augustus Terrace
Parnell, Auckland 1
Mailing address:
P.O. Box 37-046
Parnell, Auckland 1

Norway

Polaroid (Norge) A/S
Industriveien 8B
Postboks 80
1473 Skårer

Panama

Polaroid Interamerican, S.A.
P.O. Box 2167
Colon Free Zone

Singapore

Polaroid Singapore (Pte) Ltd.
M-4 The Orchard
290 Orchard Road
Singapore 9

Mailing address:

Box 22
Pasir Panjang Post Office
Singapore 5

Sweden

Polaroid AB
Ekholmsvägen 34
127 24 Skärholmen

Switzerland

Polaroid A.G.
Hardturmstrasse, 175
8037 Zürich

Venezuela

Micron C.A.*
Apartado 70250
Ed. America, 4A
Transversal, Urb.
Horizonte
Caracas 107

*Authorized Service Centers