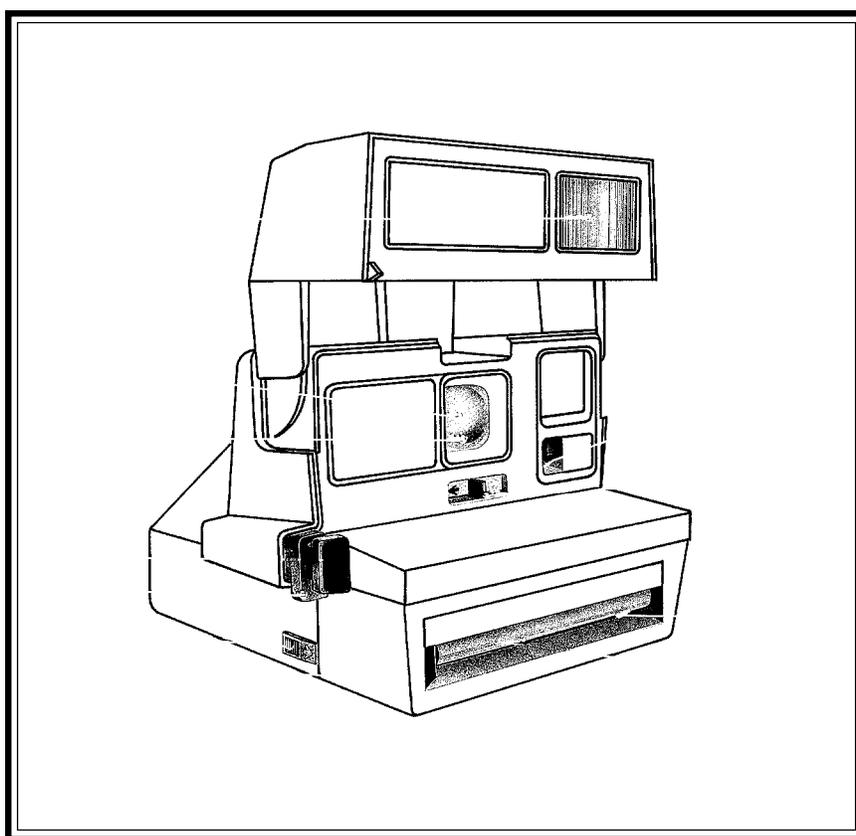




# 600 Series Camera



**User Guide**

## **IMPORTANT SAFEGUARDS**

**Note:** This product is listed by Underwriters Laboratories, Inc. (UL). As a condition of listing, UL requires that basic safety information be provided.

As with any battery-operated equipment, observe these basic safety precautions:

1. Follow all of these instructions.
2. Do not use the camera if it has been damaged, until it has been examined at an authorized Polaroid Service Center.
3. Do not disassemble the camera. To reduce the risk of an electronic shock, service or repair work must be done only by an authorized Polaroid Service Center. Incorrect reassembly can cause electrical shock when the camera is used again. Do not immerse the camera in water or other fluids.

## **PLEASE KEEP THESE INSTRUCTIONS**

### **Please read this book cover to cover**

We recommend that you take the time to read through this entire book so you are completely familiar with your camera system. It is especially important to know how to handle Polaroid film and pictures to ensure high quality results.

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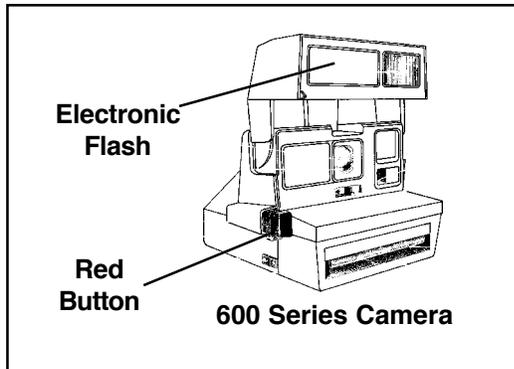
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## Important camera features

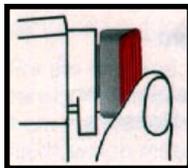
The built-in electronic flash lifts up for picture-taking, folds down for carrying ease.

The flash is designed to be used for every picture – outdoors and indoors.

The red button both charges the flash and takes the picture.



1. Press the **red** button halfway to charge the flash. A red light in the viewfinder means the flash is charging.



**Note:** It is not necessary to hold the camera to your eye while the red light is on. In about 5 seconds the flash is charged, the red light goes off and you can take a picture. Or, you can release the red button and the flash will stay charged for several minutes.

2. Press the **red** button all the way to take a picture.



## See the world in a new light

Few picture-taking situations provide just the right lighting to take the best photographs.

So Polaroid designed a unique new photographic system (Sun 600 series cameras) that makes it possible to take great pictures any time – in any light.

Under the direction of a tiny electronic computer, the system – a camera with a built-in electronic flash and Polaroid 600 film – measures light with just the right amount of flash to create an ideal photographic light for taking beautiful pictures – outdoors and indoors.

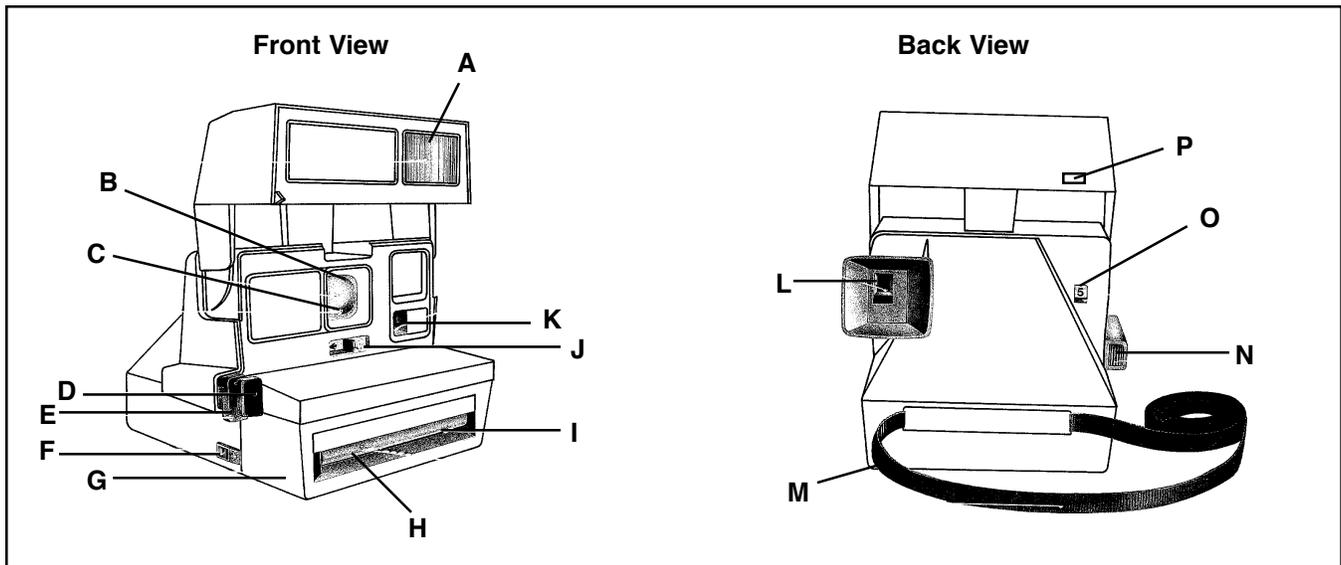
In addition, the Model 660 AutoFocus camera has an automatic focusing system which consists of a fixed front lens and an internal rotating disk with four lenses. Using sound waves to measure the distance between the camera lens and your subject, the computer selects the correct lens that will put your subject in sharp focus.

For the first time, the high-energy battery built into every film pack powers both the camera and the electronic flash, which means you need never purchase other batteries.

Polaroid 600 color film – the most light-sensitive instant color film made – was developed just for this camera system. *Other Polaroid films will not fit into or work with this camera.*

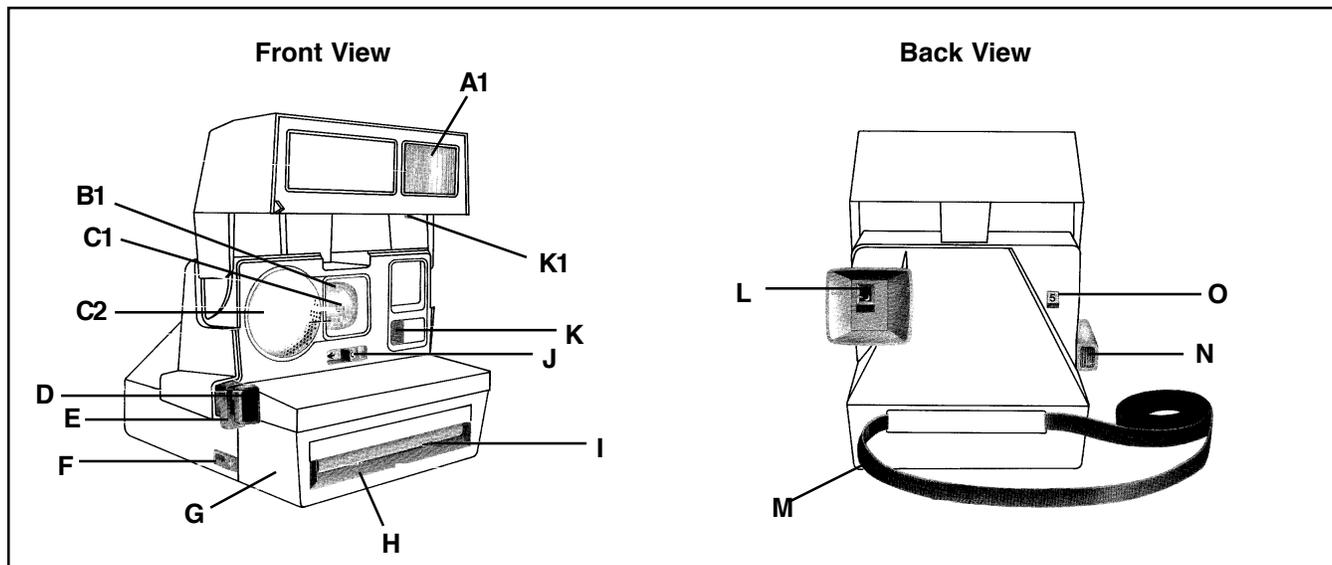
## The camera system

### Sun 600



- A** - Built-in electronic flash; 1/3000 to 1/20,000 of a second.
- B** - Fixed focus, 106mm lens.
- C** - Aperture shutter system (apertures from f/14.6 to f/45; shutter speeds from 1/3 to 1/200 of a second).
- D** - Red shutter button (pressed halfway, it charges the flash; pressed all the way, it takes the picture).
- E** - Flash override button (used to take a picture through glass – see page 12).
- F** - Film door latch.
- G** - Film door.
- H** - Film shade (shields each picture from light as it exits the camera; it rolls out with the picture, then snaps back).
- I** - Film exit slot.
- J** - Lighten/darken control (see page 8).
- K** - Photocell (silicon photo-diode – measures light from the scene and flash, outdoors and indoors).
- L** - Viewfinder.
- M** - Adjustable neckstrap.
- N** - Thumbrest.
- O** - Picture counter (indicates how many pictures remain).
- P** - Flash ready light (**red** light means the flash is charging; **green** light means the flash is ready to fire).

## Sun 660 AF



**A1** - Built-in electronic flash; (1/3000 of a second)

**B1** - Automatic focusing system (a fixed front lens and an internal rotating disk with four lenses).

**C1** - Automatic variable speed/aperture shutter system (speeds range from 1/3 to 1/200 of a second; apertures from f/14.6 to f/45).

**C2** - Transducer (sends the sound waves and receives the echo).

**D** - Red shutter button (pressed halfway, it charges the flash; pressed all the way, it takes the picture).

**E** - Flash override button (used to take a picture through glass - see page 12).

**F** - Film door latch.

**G** - Film door.

**H** - Film shade (shields each picture from light as it exits the camera; it rolls out with the picture, then snaps back).

**I** - Film exit slot.

**J** - Lighten/darken control (see page 8).

**K** - Photocell (silicon photo-diode – measures light from the scene and flash, outdoors and indoors).

**K1** - Autofocus override button (see page 11).

**L** - Viewfinder.

**M** - Adjustable neckstrap.

**N** - Thumbrest.

**O** - Picture counter (indicates how many pictures remain).

## The Film

Polaroid 600 color film was developed specifically for your camera system. Other Polaroid films will not fit into or work with this camera. Each film pack provides 10 color pictures.

This new film is the most light-sensitive instant color film made. It is one of the world's fastest developing color film. In just seconds, the image begins to appear.

## The Electronic flash

Both the electronic flash and the camera are powered by the high-energy battery built into every film pack.

The battery supplies all the power you need to fire the flash for every picture - outdoors and indoors.

The flash fully charges in about 5 seconds. It will stay charged for several minutes, allowing you to take a spontaneous picture (see page 4).

A red light in the viewfinder indicates when the flash is charging. The camera will not operate until the flash is fully charged and the red light goes off. Since you cannot take a picture while the flash is charging, you never waste film.

## Fixed focus lens

Stand at least 4 feet from your subject. In the picture, everything beyond 4 feet will be in focus.

## Electronic flash range

Be sure to use the flash for every picture – **outdoors and indoors.**

### Sun 600

For best results indoors, your subject should be from **4 to 10** feet away and near a light colored background.

### Sun 660 AF

For best results indoors, your subject should be from **2 to 14** feet away and near a light colored background.

### Split-second focusing (Sun 660 AF only)

When you take a picture, your camera sends sound waves, at frequencies beyond our range of hearing, to the central part of the scene (approximate area circled in white). At the same time, an internal disk with four lenses (behind the fixed front lens) starts to turn.

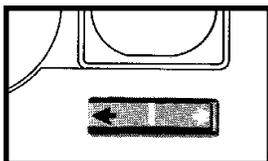
In a split second, a tiny electronic computer measures the time it takes for the sound to reach your subject and the echo to return, and calculates the distance between the camera lens and your subject. The lens then will put your subject into sharp focus at that distance and lock into place.



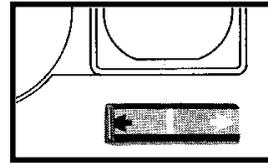
### Lighten/darken control

Use this control only when you want to reshoot a picture to make it lighter or darker.

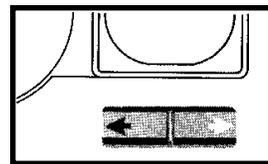
**To take a lighter picture**, slide the control past the white arrow.



**To take a darker picture**, slide the control past the black arrow.



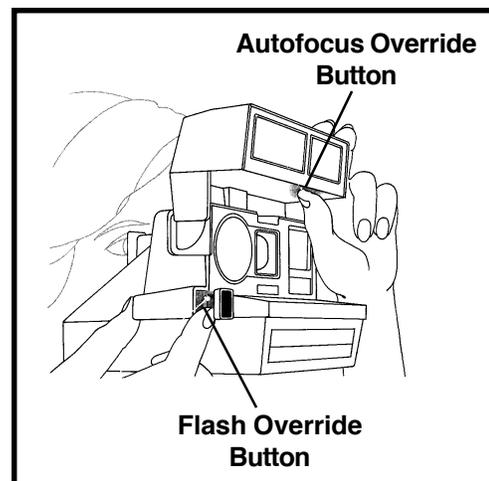
**Return the control to center position** when you have finished reshooting. A white double arrow appears in the bottom of the viewfinder as a reminder that the control is not in its center position.



### Autofocus by-pass and non-flash buttons

**Sun 640** - To avoid a flash reflection when photographing through glass in daylight press the non-flash button to take your picture.

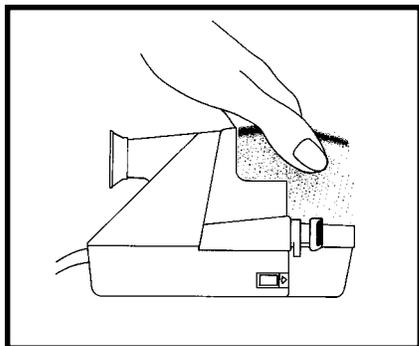
**Sun 660 AF** - To photograph a daylight scene (more than 12 ft./3m away) through glass, press and hold in the autofocus by-pass button, then press the non-flash button to take your picture.



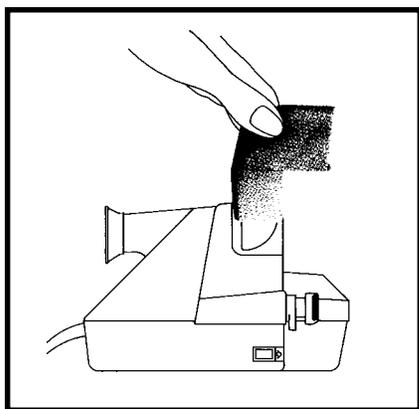
## Using the camera

### Raising and lowering the electronic flash unit

1. Grip the sides of the flash unit.



2. Swing the flash unit up to snap it in place.



3. The flash will fully charge, **automatically**, in about **3 seconds** every time you:

- Load film into the camera when the flash unit is raised.
- Raise the flash unit when there is film already in the camera.
- Take a picture.
- Touch the shutter button.

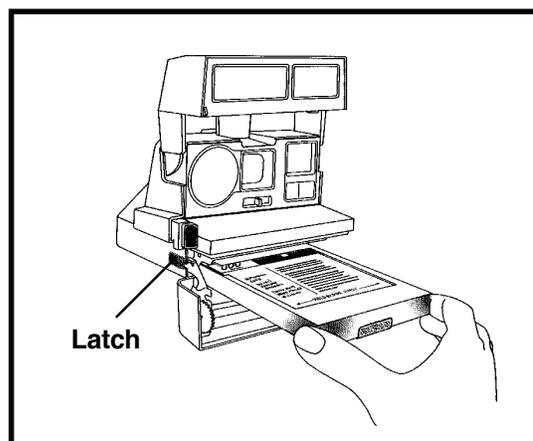
**Note:** The flash is designed to be used for **every** picture – outdoors or indoors.

When you are not using the camera, lower the flash unit. It will protect the lens and lock the red button.

### Loading the camera

Use only Polaroid 600 color film.

1. Push the latch forward. The film door will open.
2. Hold the film pack by its edges only, as shown (printed side up), and slide it all the way into the camera.



3. Close the film door.

When you close the film door:

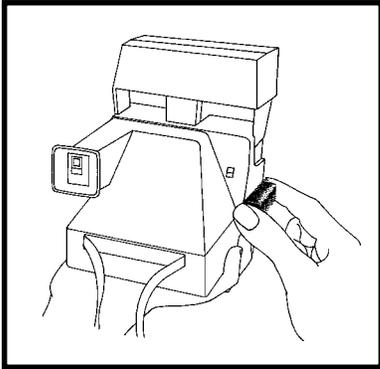
- film cover will eject.
- picture counter will set to 10.

### Removing empty film pack from camera

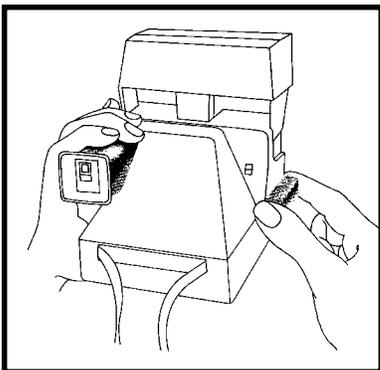
When the picture counter is blank, open the film door and pull the colored tab to remove the film pack.

## Holding the camera

1. Grip the camera so it rests firmly in the palm of your left hand.



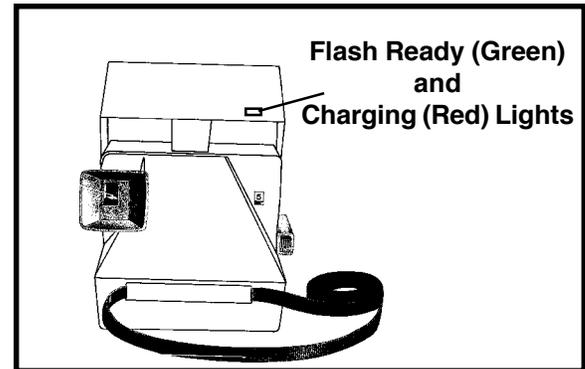
2. Place your right thumb on the thumbrest, your index finger on the red button, and curl your other fingers into your palm.
3. Or, if it is more comfortable, place the fingers of your left hand over the top of the viewfinder and your thumb under the camera – holding your right hand as described above.



## Taking the picture

### Sun 600

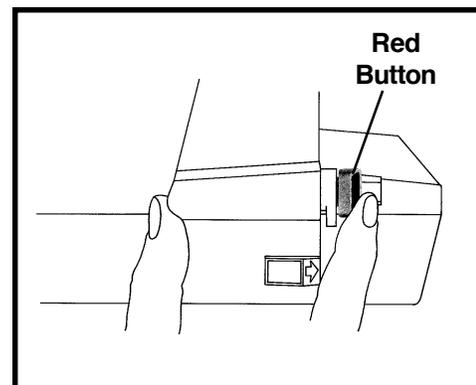
1. When you see the **green ready** light, press the shutter button all the way to take a picture.



2. After you have taken a picture, the flash will recharge and the **green ready** light will come on again in about 3 seconds.
3. When you want to take a picture and the **green ready** light has gone off, lightly touch the shutter button and release it as soon as the **red light** comes on. Then take the picture when you see the **green ready** light.

### Sun 660 AF

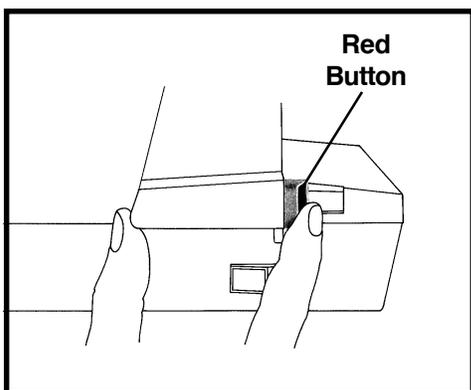
1. Stand at least 2 feet from your subject.
2. Press the **red** button until you feel resistance. Hold it there.



3. A **red light** in the viewfinder indicates that the flash is charging. In about 5 seconds, when the flash is fully charged, the **red light** goes out. The camera will not operate while the red light is on.



4. To take the picture, hold the camera steady and press the **red** button the rest of the way. The camera will then automatically eject the developing picture.



**Note:** Always use the thumbrest and gently press the **red** button; jabbing the button will jar the camera and blur the picture.

5. Hold the developing picture by its wide white border. While it is developing, keep the picture out of direct sunlight.

**Note:** When the temperature is below 55° F (13° C), keep the camera and film warm.

6. Immediately place the developing picture in a warm pocket for at least a minute.

### Composing the picture while the flash is charging

1. Press the red button part way so the flash will charge while you are composing the picture.
2. Look through the viewfinder.
3. In addition to your subject, notice the foreground and the background as they appear in the viewfinder.
4. Frame your picture, changing your position or the camera angle until you see the best composition.
5. Move in close so that the important elements of your picture fill the frame.

#### Sun 600

Indoors – subject should be 4 - 10 feet (1.2 - 3m) away and near a light colored background.

Outdoors – subject should be at least 4 feet (1.2m) away.

**Sun 640** – subject should be at least 4 feet (1.2m) away.

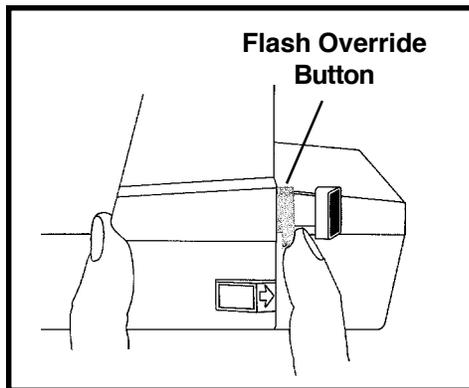
**Sun 660 AF** – subject should be at least 2 feet (60cm) away.

## Taking a picture through glass or a window

### Sun 600

Photographing a daylight scene through glass is a special situation which requires that you stop the electronic flash from firing, to avoid a flash reflection.

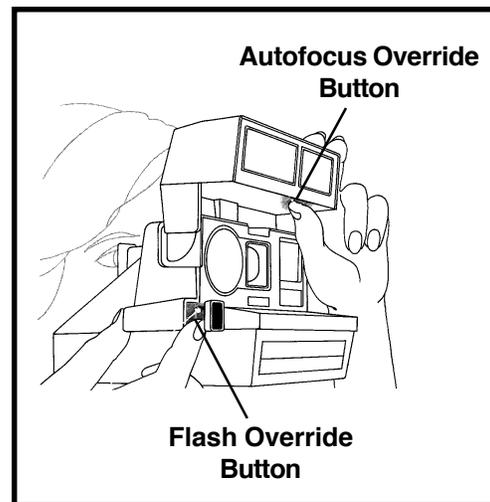
Take the picture by pressing only the flash override button.



### Sun 660 AF

Photographing a daylight scene (more than 12 feet away) through a window is a special situation which requires that you take these precautions.

To avoid focusing on the window, hold in the autofocus override button. To avoid a flash reflection, stop the flash from firing and take the picture by pressing the flash override button.



## Use the electronic flash for every picture – outdoors and indoors

The human eye adjusts to light differently than the camera's eye, which makes it difficult to judge how light from the scene will affect your picture.

Everyone who takes pictures has had the experience of looking at a subject or scene, photographing it, and being disappointed with the picture because it looks different

than what he or she saw in the viewfinder.

Polaroid's new photographic system gives you the beautiful picture you expect to see. By blending light from the scene with just enough flash, the system creates a new photographic light that more accurately reproduces, on film, what appeared in the viewfinder.

## Taking trouble-free pictures

### Hold the developing picture by its wide white border

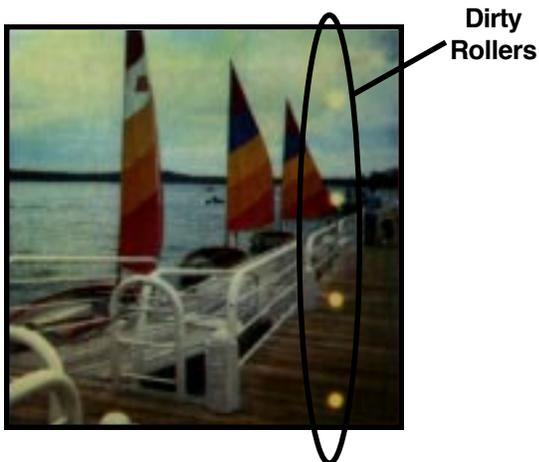
While it is developing, keep the picture out of direct sunlight.

When the temperature is below 55° F (13° C), keep the camera and film warm. Immediately place the developing picture in a warm pocket for at least a minute.

### Keep the developer rollers clean

Dirty rollers can cause a repeated spot or bar pattern to appear in the picture.

The developer rollers are located inside the film door. If there is film in the camera, open the door in dim light.



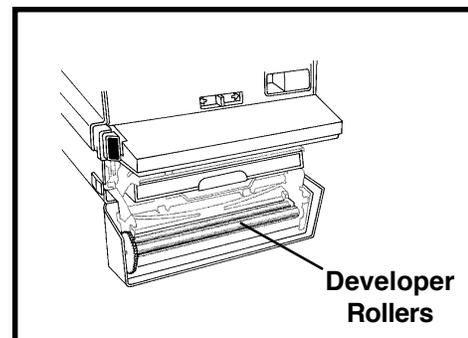
### What to look for if the camera does not operate

Check the picture counter. When the film pack is empty, you can charge the flash but you cannot take a picture.

Look through the viewfinder. When the red light is on, the flash is charging and you cannot take a picture.

### Be sure the sound waves have a clear path to your subject (Sun 660 AF only)

The sound waves travel to the central part of the scene (see page 8). If an object in the foreground prevents the sound from reaching your subject, the internal lens disk will focus on the foreground object, causing your subject to be out of focus. If this happens when you are using flash indoors, your subject will also be too dark.



## Full one-year warranty

### U.S. and Canada

If your camera proves to be defective within the warranty period, we will, without charge, either repair it or, at our option, replace it with a fully reconditioned or new camera.

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 will be determined by the manufacturing date on the camera.

The repair or replacement of your camera is guaranteed for the remaining warranty period on your original camera.

The 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** or information, call our toll-free number listed below. If your camera is not working, our representatives will verify the problem and can ship a replacement camera to you quickly (within approximately two or three Polaroid business days in the U.S.).

**U.S. only:** 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 of consequential damages, so the foregoing exclusion may not apply to you.**

**Canada only:** The warranty and provisions do not affect your statutory rights.

For more information: From within the U.S., please call us toll-free at 1-800-343-5000, Monday through Friday, 8 am to 8 pm (Eastern time).

In Canada, call toll-free: 1-800-268-6970; in Toronto, call 675-3680.

### Americas Business Center

If you have any questions about your camera or pictures, you believe your camera needs repair, or you need additional information, call us toll-free: 1-800-343-5000 from anywhere in the U.S.

Our representatives can be reached every weekday from 8 am to 8 pm, Eastern time. In Canada, call toll-free: 1 800-268-6970. In Toronto, call 675-3680.

Or, if you prefer, write to us. The address is: Americas Business Center, 201 Burlington Rd., Bedford, Massachusetts 01730. Please include a sample picture of the problem you are having with your camera.

Polaroid instant color film is sold in the U.S., Canada, and Latin America. Before traveling to countries outside the U.S. and Canada, call us toll-free to learn where film for your camera is being sold.