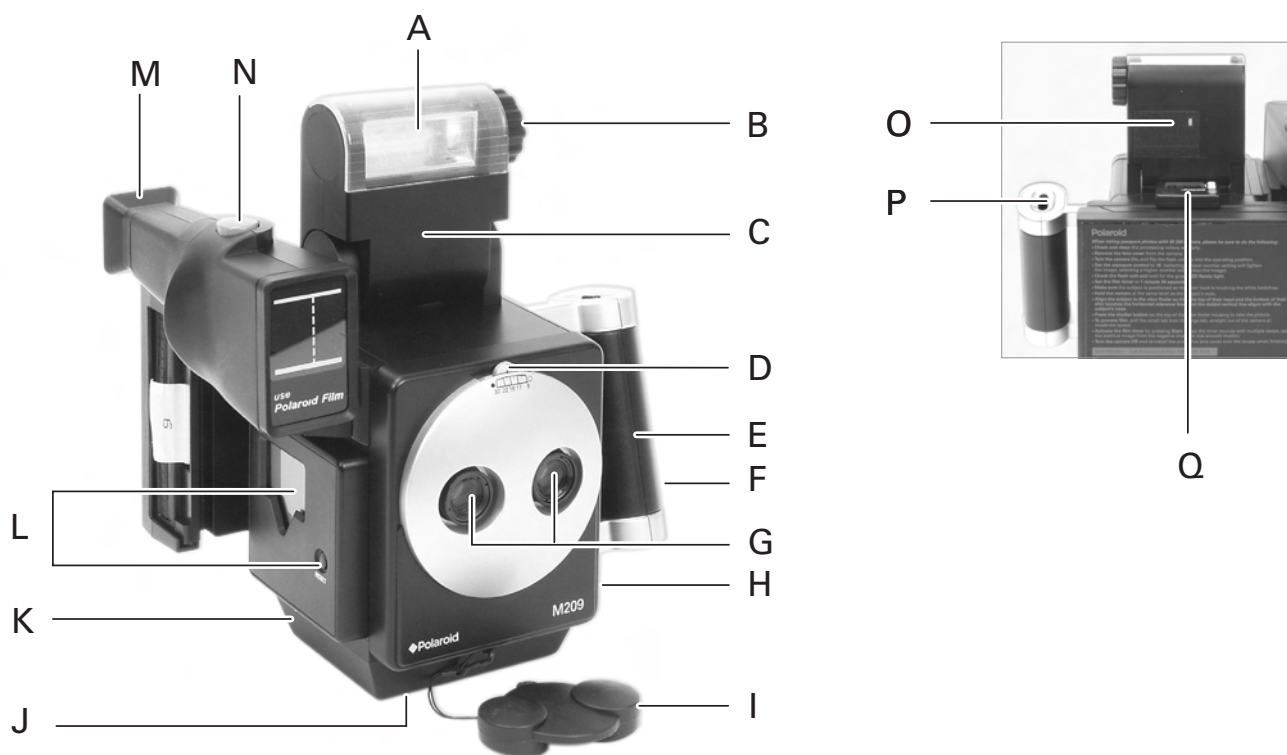




## **M209** User Guide



### Introduction

The Polaroid Model 209 Miniportrait camera produces 2 identical portraits on each sheet of Polaroid 690 color pack film.

The camera has a number of additional features such as:

- Built-in electronic flash unit. The camera can also be used with other types of lighting.
- Adjustable aperture control
- Built-in LCD display and audible alarm that tells when to pull film
- Built-in Viewfinder reference graphic, to ensure that the camera is positioned at the proper distance to produce sharp focus and correct passport size images.
- Digital film processing timer.
- Protective lens cover with tether strap.

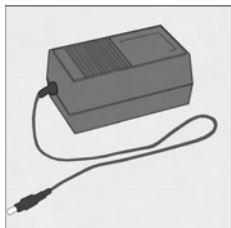
### Camera Parts

- A. Flash reflector
- B. Flash reflector knob
- C. Electronic flash unit
- D. Lens aperture selector
- E. Hand grip
- F. Battery compartment (inside the hand grip)
- G. Lenses
- H. Socket for AC adapter (on the side of the camera)
- I. Lens cap
- J. Tripod socket (on the bottom of the camera)
- K. X (sync) socket (on the side of the camera)
- L. LCD Panel with Reset button (on the side of the camera)
- M. Viewfinder / Rangefinder
- N. Shutter button
- O. Flash "Ready" indicator light (LED on the back of the flash unit)
- P. Camera on/off switch (on the hand grip)
- Q. Timer

## Accessories

### Universal Digital AC adapter:

Enables the camera to use electrical power rather than batteries in high volume applications. **IMPORTANT** the use of other non-Polaroid AC adapters may damage the camera. (PID # 649424) 100-240 volt supply.



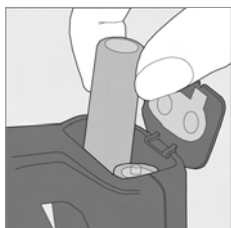
Accessories are available from your Polaroid camera dealer, or contact your nearest Polaroid Office.

### Load the batteries

The camera uses four 1.5 volt AA batteries, which provide power for the shutter and flash unit. Alkaline batteries are recommended. Do not use Nicad rechargeable batteries; they may damage the camera. A set of batteries are included with the camera.

A fresh set of alkaline batteries should last for approximately 80 flashes. The flash unit should recharge in 10-12 sec with fresh batteries; when the recharge time reaches 30 seconds, replace the batteries.

The battery compartment is inside the hand grip. Open the lid on the bottom of the hand grip and insert the batteries in the orientation shown inside the compartment. Then close the lid. If the camera will not be used for an extended period of time, remove the batteries and store them separately to prevent damage caused by leaking batteries.

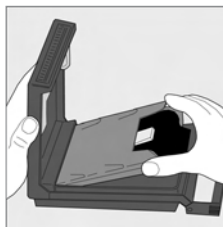


**Note:** An AC adapter may be preferred for high volume use (see Accessories).

## Loading the film

To unlock and open the camera film door, rotate the camera door latch away from the door. Before loading the film, check that the developer rollers are clean (see **Clean the developer rollers**).

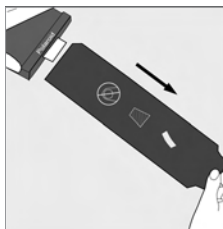
Always hold the film pack by the edges, not in the center. Slide the pack in at an angle, and then push it down into place.



Check that the white tabs are straight, all the way out of the holder. Close and latch the door, with the end of the black tab sticking out.

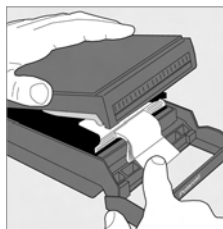


Pull the black tab straight, all the way out of the holder. A small white tab will appear. The holder is now loaded.



### No white tab?

Open the door and without moving the film pack, push the top white tab out. Then close and latch the door.



## The film processing timer

### To activate the timer:

Slide battery cover open to remove the protective battery insulator strip.



### To set the timer:

Press and hold the MIN button and then the SEC button until the correct processing time is displayed (see film instructions for recommended times). The timer will always return to this setting after a processing cycle.

### To reset the timer to a new time:

To reset it to a longer time than is displayed, simply press and hold the MIN and then SEC buttons until the new time is displayed. To reset it to a shorter time:

1. Press the MIN and SEC buttons simultaneously. The present time is cancelled and zero is displayed.
2. Press and hold the MIN button and then the SEC button until the new time is displayed.

### To load/change the timer battery:

If the display or tone fade, or if the timer stops functioning, the battery should be replaced. The timer uses a single LR44 (or equivalent) battery.

Slide the battery cover open to remove the battery. Insert the new battery "positive" (+) side facing up. Then, replace the cover and reset the timer as described above.

## Turn on the camera

Push the switch to "1" to turn on the power for the camera's shutter, and flash unit.

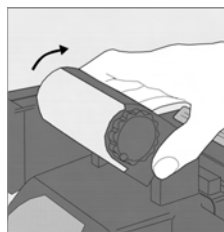
## Set the camera controls

### Lens aperture:

Set aperture selector lever to 16. (Use lower number to brighten the image, use a higher number to darken the image.)

## The electronic flash

The flash unit is designed to provide even illumination and proper exposure. To turn on the flash, simply raise the flash head all the way up. The flash automatically turns off when the head is tilted fully down.



**IMPORTANT:** When the flash unit is in the fully raised position make sure the Flash Reflector is pointing directly toward the subject. If the flash reflector is pointing in the wrong direction rotate the Flash Reflector Knob so that the flash is pointing in the direction of the subject.

**Note:** The camera's shutter will not work while the flash is recharging. The shutter will work only if the flash "Ready" indicator LED is illuminated.

Auxiliary flash units can be synchronized with the camera. Contact your local service center for further information.

## Using the Viewfinder/Rangefinder

Look through the Viewfinder and align the top of the subject's head and the bottom of the subject's chin with the upper and lower horizontal reference lines, then align the subject's nose with the dotted vertical line.



Be sure to use the Viewfinder/Rangefinder reference lines to "set up" each portrait. This will ensure that all subjects are at the proper distance to produce the desired image size.

## Photographing children

Photographing young children requires the following adjustments.

### Aperture selection:

For children set the aperture selector to between f22-f32. For infants, select f32.

### Viewfinder/Rangefinder alignment:



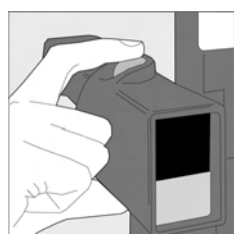
For young children, align the child's eye with the vertical reference line in the Viewfinder/Rangefinder as shown in the illustration.



For infants, the vertical reference line needs to be aligned with the side of the infant's face as shown.

## Taking the picture

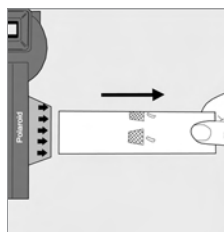
1. Check that the flash "Ready" light is on. (The camera's shutter will not operate while the flash is charging.)
2. Position the subject close to the background so that their shoulders touch the photographic backdrop.
3. Hold the camera so that the lenses are level with the eyes of the subject.



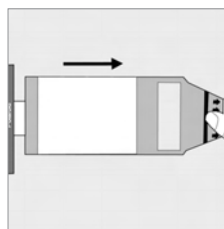
4. Frame the subject using the Viewfinder. (See Using the Viewfinder / Rangefinder.)
5. Press shutter button on top of the Viewfinder to take the picture.

## Processing the film

**Note:** Always hold the camera firmly by the handgrip, while pulling the film tabs.

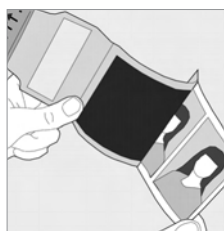


1. Pull the white tab straight, all the way out of the camera. A large tab will appear. If not, see section "no large tab":



2. Pull the large tab: Grip the tab firmly and pull it straight, at moderate speed, without hesitation, all the way out of the camera.

3. Start the timer. The correct processing time should already be set. Press the START button once; the timer will count down to zero. At the end of the processing time, a series of short tones will sound. The timer will automatically reset for the next picture.

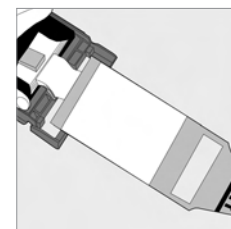


4. Process the picture for the full time recommended in the film instructions. Then separate the print from the negative, starting at the end nearest the large tab. Information

handling the negatives is in the film instructions. (See caution notice at the end.)

## Processing tips: No large tab?

Do not pull another white tab. Instead carefully open the film holder door far enough to get a finger on top of the film pack to hold it down. Grasp the topmost large tab, and gently pull it out and discard it. Inspect the rollers and clean them if necessary. (see Clean the development rollers). Close the film holder door and latch it, with the next white tab sticking out. (You will have to reshoot the portraits that were on that piece of film.)

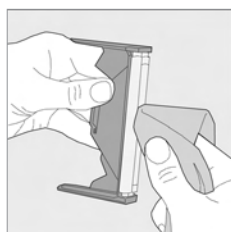
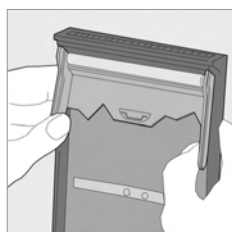




## Cleaning the Developer rollers

Dirt on the Developer rollers can cause a variety of problems such as repeated spots on the pictures and jammed film. Inspect the rollers when loading the film, and clean them as follows.

With both hands, lift the steel hoops, and remove the roller assembly. Clean both rollers with a soft, lint free cloth, dampened with water. Or hold the roller assembly under clean running water. Rotate both rollers as you clean and inspect them. Note that one roller turns more easily than the other. Never scrape the rollers with anything metallic, nor with your fingernail, and never attempt to disassemble the rollers. Also clean the film tab slot. Then reinstall the roller assembly.



## Picture faults and probable causes

- **Repeated evenly spaced spots or lines:** Due to dirt on the steel rollers in the film holder.
- **Missing corners or orange-red marks along edges:** Caused by pulling the large tab out at an angle.
- **Oblong print:** The white tab was not pulled all the way out. When the large tab was pulled, that white tab was pulled back into the camera.
- **Many small white specks:** Caused by pulling the large tab too fast. This can also cause pink lines, streaks or blotches on color prints.

- **Muddy looking print:** The print was not processed long enough. Under-processed film may be brownish pink.
- **Image slightly overexposed:** Subject may have leaned forward when picture was taken or higher aperture number should be selected.
- **Very light image or none at all:** The film was fogged or extremely over-exposed. Do not pull the black tab before inserting the film pack into the holder.
- **Nearly black or solid black image:** Caused by insufficient or no exposure. Be sure you have removed the dark slide.
- **Extremely dark image:** Check to make sure the flash reflector is aimed at the subject. (Rotate the flash reflector control knob if necessary.)
- **Broad streak or curtain shaped mark:** Due to hesitation or stopping while pulling out the large tab.
- **Double exposure:** Film not processed before shooting next photograph.

## Service

Cameras damaged by accident, mishandling or tampering will be promptly repaired at a reasonable charge. Please pack the camera carefully in its original shipping carton or other solid container, with plenty of padding and ship it prepaid and insured to the nearest Polaroid Service Center.

## Caution

This process uses a caustic paste. Avoid contact with skin, eyes and mouth and keep away from children and animals. **If you get some paste on your skin, wipe it off immediately and wash with water to avoid an alkali burn. If eye or mouth contact occurs, quickly wash the area with plenty of water and see a doctor.** Keep discarded materials away from children, animals, clothing and furniture.

## IMPORTANT SAFEGUARDS

Underwriters Laboratories Inc. (U.L.) requires that the following safety information be provided

As with any electrically operated equipment, basic safety precautions should be observed, remember:

1. Follow all instructions.
2. Do not leave unit unattended.
3. If unit will not be used for extended period of time, remove batteries: if using AC adapter, unplug unit from electrical outlet. Grasp plug, not cord and pull to disconnect from outlet.
4. Do not operate unit which has been dropped or damaged until it has been examined by authorized service center.
5. Before storing, allow unit to cool completely.
6. To avoid electrical shock hazards, do not immerse unit in water or other fluids. Do not operate unit near water or with wet hands. If service or repair work is required, contact authorized service center. Incorrect reassembly can cause electric shock when unit is used subsequently.
7. Close supervision is necessary when unit is used by or near children.
8. The use of accessories other than those recommended may cause risk of fire, electric shock or injury.

**PLEASE KEEP THESE INSTRUCTIONS.**

## For more information

For additional assistance in the use of your camera, or advice on any photographic problem, call toll-free from within the U.S.A. at **1-800-225-1618**. Mon. – Fri., 8 AM to 8PM (Eastern Time).

## Limited Warranty (U.S.A. only)

Your Polaroid Instant Camera has been thoroughly tested and inspected before shipment. All parts are guaranteed against defects in materials and workmanship for one full year from the date of original purchase. During this period any such defects will be remedied by Polaroid Corporation without charge except for transportation costs. To take advantage of this Limited Warranty, the camera must be repaired by an authorized service center. The warranty does not include batteries, or damage caused by leaking batteries.

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