

Pro814



Pro814 Super 8mm Film Camera

**Brought to you by:
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PRO814 SUPER 8mm CAMERA

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1. Loading Batteries

Make sure the batteries you use are in good working order. A low functioning battery could lead to bad light meter readings causing exposure to be off, as well as causing the cameras frame rate speed to vary.

- a. AA Batteries in Handle (4) : Load 4 AA batteries into the cameras handle or hand grip. The bottom of the handle's plate can be unscrewed. Place the batteries in the handle, minding the positive(+) and negative(-) settings indicated on the camera.
- b. 1.3V Batteries for Light Meter (2) : Open the Light Meter battery chamber, located on the left side of the camera, by turning the circular plate <pictured 1.a> counter clock wise. Place 2 1.3V batteries negative(-) in, positive(+) facing out and replace the circular plate.



1.a

- c. Testing : Once you have loaded the batteries in the camera, you can test the batteries and their power levels. To do this, find the battery test buttons on the bottom of the camera <pictured 1.b>. The white button will allow you to check the levels of the AA batteries, while the red will allow you to check the levels of the 1.3V batteries. The indicator is located on the left side of the camera <pictured 1.c> next to the Frame Rate Indicator. To check, turn camera on to the "R" position. If the indicator goes into the blue, then the batteries have sufficient power, in the red, they don't. If the indicator for the AA batteries is in the white, it will be good enough to shoot at 18 & 12 fps, not 24fps.



1.b



1.c

2. Hand Grip / Handle Usage

When the hand grip is placed in its open / stood up position, it is automatically locked. When folding the handle back up, hold the grip locking lever <pictured 2.a> upwards and swing the handle back. The Hand Grip is the AA battery chamber for the film drive.



2.a

3. Eye Piece

The eye piece is located on the back of the camera <pictured 3.a> and comes with an eye cup. (Remember when shooting to cover the eye piece with your eye, as to not allow a reverse light to leak.)



3.a

- a. To adjust the eye piece, loosen the adjustment ring by turning it to the left. Aim the camera in the direction of a bright subject and look into the eye piece to see the view finder. Turn the eye piece and adjust it so you can see the aperture scale and the lines of the prism screen clearly. Once you have completed this, tighten the adjustment ring .
- b. The Pro814 comes equipped with an open-close <pictured 3.b> feature on the eye piece. When you are unable to place your eye over the eye piece when shooting, you can close the eye piece as to not allow light to leak into the camera from a reverse angle, which could lead to overexposure issues on the film.



3.b

4. Loading Film

To load film into your Pro814, lift the side lever latch <pictured 4.a>, turn to the left and open film door. Slide the Super 8 film cartridge in towards the front of the camera, label facing upwards, and set into position by lightly pressing down. Once film is in place, shut film door, turn latch back to the locked location and return to its original position.



4.a

a. ***Pro8mm Advanced Cartridge Notching***

There are 3 improvements that Pro8mm has made to the Pro814 camera and it's film cartridges to make the average camera produce above average results. Most super 8 cameras were designed and calibrated to make their best pictures using Kodachrome film. With K40 discontinued, it is time to establish new standards and calibrate to modern film stocks. Super 8 film makers now use ASA range from 50 to 500ASA. The new Pro8mm notch system has 6 ASA designations, calibrated in 2/3 F stop increments that can tell a properly calibrated camera the best way to expose all Pro8mm film stocks.

.8) Notch (40ASA) Used for Pro8/01 50D (old K40 Notch)

.7) Notch (64ASA) Used for Pro8/22 64D & Pro8/80 64T

.6) Notch (100ASA) Used for Pro8/12 100T & Pro8/85 100D

.5) Notch (160ASA) Used for Pro8/43 160T & Pro8/17 200T

.4) Notch (250ASA) Used for Pro8/05 & Pro8/63 250D, Pro8/53 250T

.3) Notch (400ASA) Used for Pro8/18 & Pro8/73 500T, Pro8/92 500D

The advanced super 8 cartridge notching is designed to provide accurate film exposures with modern super 8 film that ranges from 50 to 500 ASA. The Pro814 has been modified and calibrated to register this range of film, and will allow for the production of a superior image.

b. ***Filtering your Pro814***

The internal 85 filter has been removed from the Pro814 camera. The reason for this is we have found that over time, the original filters tended to be made of plastic, causing them to become easily dirty and warped from deterioration, causing the image on the film to look out of focus and dirty.

Pro8mm recommends that if you are going to shoot film that is opposite of the lighting conditions it is set up for, to use an external filter that can be easily screwed onto the front lens. If shooting Tungsten based film under daylight, you'll want to filter with an 85 filter. If you are shooting Daylight based film under lights, you'll want to filter with an 80A filter. You'll want to filter when using the opposite film stock to lighting condition do to the fact that Tungsten based film tends to look bluer when not filtered, and Daylight film looks more yellow or orange when not filtered.

(You can purchase the filters along with Neutral Density, Polarizing, or any other filter you may need from Pro8mm)

5. Film Speed Setting

The film setting can be found on the left side of the camera <*pictured 5.a*>, next to the battery level indicator. The camera can be set for 12, 18, and 24 frames per second (fps). The standard in super 8 was 18fps, but with the modern world shooting 16mm and 35mm at 24fps for sync sound purposes, it's really up to the camera operator as to what frame rate will be shot.



5.a

6. Turning the Camera On

The Pro814 comes equipped with a 3 way switch <pictured 6.a> that allows you to turn the camera off and on. The three positions are “Off”, “R”, and “RC-RL”



6.a

1. “Off” is the position where the power circuit is cut off and the exposure meter, power zoom and shutter release do not function.

2. “R” is where the power circuit is switched on, allowing your camera to run.

3. “RC-RL” is where the running lock function is on. With the switch in this position, press the trigger and the camera will be locked for continued running until the switch is returned to “R”, allowing the trigger to pop out, stopping the camera.

7. Focusing

Adjust the focus by turning the focusing ring on the lens to that the subject can be seen most clearly through the prism screen rangefinder. The aligned image can be seen more accurately and easily the longer the focal length of the lens. The best way to get the most accurate focus whether shooting at low magnification (wide-angle) or max magnification (telephoto), its recommended to focus the camera at maximum magnification and the return to which ever focal length you wish to shoot at. The focal point does not change during zooming.

8. Composition

The viewfinder of the Pro814 is of the single-lens reflex type, so there is no parallax. What this means is that what you see in the viewfinder will be what is exposed on the film. The image seen through the viewfinder will change magnification and the picture area will also change by turning the zooming ring. The size of the image can be decided by zooming.

9. Exposure

You want to make sure you are getting proper exposure when shooting your film. Look into the eye piece while aiming the camera at your subject with the camera in the ON position. If the needle is within the aperture scale range then you are fine to shoot. If the needle is in the red on either side of the aperture scale, there is too much or not enough light and you do not want to shoot at this time. If it is to the right, it means you will be under-exposing the film. If it is to the left, it means you are over-exposing the film. *(Note: you will not be able to see any exposure level on the aperture scale if you do not have any film in the camera)*

- a. To set for **Auto Exposure**, you'll want to set your exposure setting *<pictured 9.a>* to **AUTO** and the aperture control ring *<pictured 9.b>* to **O**.
- b. To set for **Manual Exposure**, you'll want to set your exposure setting *<pictured 9.a>* to **MANUAL** and then use the aperture control ring *<pictured 9.b>* to control how open and or closed you want aperture to be by moving the ring up and down between the black and orange lines on the ring and the **O** and **C** indicator.



9.a



9.b

10. Shooting

Once you have the film loaded into your Pro814 and have checked your exposure levels and have accomplished the composition you desire, the next step is to start shooting. This is accomplished by simply pressing the **Trigger** *<pictured 10.a>* located on the front of the camera.



10.a

11. Zooming

The Pro814 comes equipped with power zoom control *<pictured 11.a>* as well as manual zoom capabilities.

- a. **Power Zoom** : The power zoom control *<pictured 11.a>* is located on the right side of the camera . Pressing the zoom button will allow you to have smooth and regulated zooming effects. The **T** is for zooming towards telephoto and the **W** is towards wide-angle shots. The entire zoom will take 6 to 9 seconds.



11.a

- b. **Manual Zoom** : If you wish to zoom faster or slower than the speed of the power zoom, or to decide the size of the subject in your frame, you'll want to use the manual zoom on the lens of your camera. Just simply turn the zoom portion of the lens (located closest to the camera body) to the left or right to capture the zoom. The zoom portion of the lens also comes with a small handle that you can hold with your fingers for more comfort while filming.

12. Film Counter

Most super 8mm film cartridges have 50 foot loads, or close to that. Located on the back of the Pro814 is the film counter *<pictured 12.a>*. The film counter will allow you to see how many feet of film you have shot. When the counter reaches 50 feet, your roll has been completed and it's time to change to another roll.



12.a

(Note: when you remove a cartridge the feet counter is automatically returned to 0. If you place a cartridge in the camera that has been partially shot, the counter will still start at 0, not the footage mark that has already been shot)

13. Helpful Tips

The Pro814's film exposure becomes unstable when shooting at the more closed F Stops, i.e. F16 and beyond. This is true for both manual and automatic exposure settings. When shooting at these high F Stops will often lead to an image with flicker. There is not a service at this time to fix the problem. Pro8mm advises that a neutral density filter be added to the lens in order to bring down the brightness and place the exposure range in a more stable level.