

 BELL & HOWELL

2146 XL

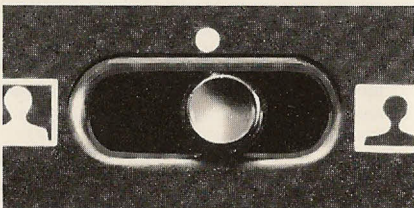


ENGLISH/ESPAÑOL/FRANÇAIS

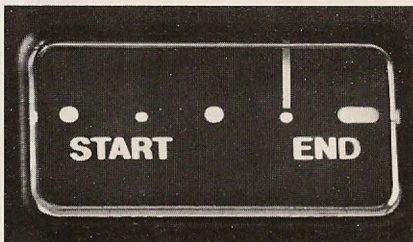
adjusting the lens until they disappear. If the subject has any depth, of course, there will always be fringes around those details which are closer and further away than the distance to which the camera is focused. Just eliminate them from whatever you want the audience to concentrate on and do not worry about their appearance elsewhere in the scene. For example, in the shot of a bee gathering honey it will be the bee that matters, not the petals. Find some vertical detail in the bee and eliminate the fringes from that. (Now and again, you may come across a subject which appears to have no vertical details sufficiently sharp-edged to give a clear image of the coloured fringes. There is an easy remedy. Pick a horizontal detail, or any other reasonably straight line, and twist the camera while focusing so that it believes it is looking at a vertical line.)

iii. If you want perfect exposures from some part of the scene, and not just good average exposure for the scene as a whole, the manual exposure control can be used to over-ride the automatic control as explained in paragraph 24. But unless you are totally confident about what corrections to apply, rely on the automatic control, supplementing it – if the distribution of light and shade in the scene is abnormal – by using the contrast switch explained in paragraph 22.

- 22 Contrast switch.** For nearly all the scenes you will ever want to film, the automatic exposure control system of the camera will give you an ideal exposure. There are, however, two main exceptions. When you are filming a subject against an unusually bright background, an automatic system may tend to under-expose. When the background is unusually dark, it may tend to over-expose. So that you can compensate for this tendency, your camera is provided with the useful Bell & Howell "contrast" switch. For all scenes with normal backgrounds, it should be in the central "off" position. For very bright backgrounds, slide it to the rear and for very dark backgrounds slide it to the front. You will not need to remember which position is which: the symbols, showing a head against a dark and a light background, make the correct position clear at a glance. At all positions of the "contrast" switch, you still have the full benefit of the automatic exposure control.



- 23 Film length indicator.** As soon as you start filming, the red pointer of the film length indicator begins to move across the scale from left to right, measuring the amount of the cartridge you have used and so, of course, showing how much unused film remains. In the illustration, the pointer is showing that $\frac{2}{3}$ of the cartridge – or 150 seconds of screen time – has been used and that $\frac{1}{3}$ of the cartridge (50 seconds) remains. The indicator resets itself automatically to zero whenever a cartridge is removed from the camera. If therefore you take out a cartridge before it has all been used, perhaps to change to film of another type, note the scale reading before opening the film compartment and mentally add this reading to the readings you obtain when you start filming again with the original cartridge. The red signal warning you that there are only 20 seconds of film left in the cartridge is operated by the film length indicator and will not be seen after a partly used cartridge has been put back in the camera. The up and down movement of the indicator in the viewfinder, however, will stop in the usual way when all the film in this cartridge has been used.



- 24 Manual exposure control.** Experienced photographers and film makers will know that for some scenes and certain special effects it is desirable to set the lens aperture manually, rather than depend upon the automatic exposure control system of a camera. On Model 2146 XL, this is easily done. With the ON/OFF switch at ON, partially depress the trigger. Looking through the viewfinder, rotate the AUTO/MAN ring in a downward direction until the desired lens aperture number (f/number) appears to the left of the horizontal line.

If you are using a separate exposure meter, regard the shutter speed as 1/30 second. It is, however, often preferable to use the camera itself as an exposure meter. With the AUTO/MAN ring at AUTO and the zoom lens at its extreme telephoto setting, aim the camera at that detail in the scene for which exposure is especially critical. Note the f/number which appears in the viewfinder when the trigger is partially depressed and then, after resetting the zoom lens to compose the scene, move the AUTO/MAN ring downwards until (again with the trigger partially depressed) the same f/number reappears. One application