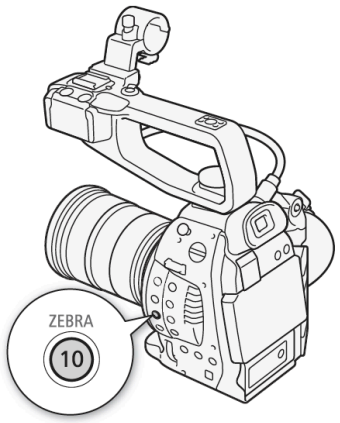
# Exposure 3 – Measuring Exposure

The C100 has some tools for aiding good exposure: the **zebra pattern** and the **waveform monitor.**

The **zebra pattern** feature displays black and white diagonal stripes over areas that are exposed at a particular level. It can be used in two ways:

1. It can be used to show areas that are **overexposed** – i.e. the zebra pattern will display on pixels that are measured at 100 IRE or above (IRE is a measure of the video signal).

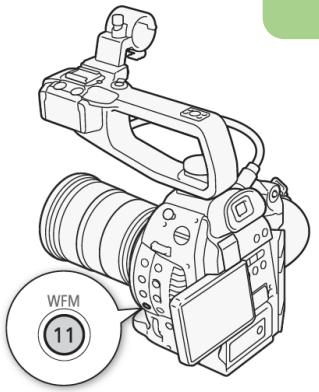
2. It can also be used to measure a particular range of exposure such as 70-80 IRE which allows **accurate exposure of facial skin tones**. The zebra appears on highlights at 70-80 IRE, and vanishes above that. Since properly exposed skin highlights should fall at about 70 IRE, the camera operator adjusts the iris to display zebra pattern on the highlighted areas of the subject's face. On a well lit face, zebra will appear on forehead, nose, and cheekbones.




Zebra at 70-80 appears on facial highlights.


The **waveform monitor** is a graph that displays the levels of brightness in the image. Each vertical column of pixels in the video image corresponds to the same vertical column, from left to right, in the waveform. The 'trace' of the waveform represents the number of pixels at each brightness level from -10 to +120 IRE.

The waveform shows the exposure across the entire image. Areas above 100 are overexposed and below 0 are underexposed. Often a wide spread of tones from dark to light suggests a well exposed, high contrast image. As the iris is opened and closed the waveform will rise and fall and because of the layout of the waveform, the exposure of faces and other objects can also be judged.




Here the subjects face can be read from the waveform and the exposure judged.