

## **ASPECT RATIO - 16 mm**

Unlike 35mm, an understanding of 16mm aspect ratios is very basic.

16mm film stock has a frame aspect ratio of 1.33:1 That is, the width of the frame is 1.33 x's the size of the height. So if you project a 16mm image that is 1' in height, then it will be 1.33' wide.

Wide screen or "scope" titles can be printed on 16mm. in one of three ways. It can be done "flat", that is, the entire 1.33:1 frame is printed with a picture that is approx. 1/2 (actually 57%) of the original 2.35:1 scope picture. A flat print is usually made with an attempt to keep the important story visual information within the 16mm frame... doing a "pan & scan".

Second, a widescreen picture (2.35:1) can be "letterboxed" into the 1.33:1 16 mm frame.... this is called "adapted scope". The widescreen picture appears in the frame with an upper and lower black margin.

Third, as is done on 35mm film, the width of the widescreen image is optically squeezed down into the frame and when projected the operator places a "scope" lens in front of the projector which unsqueezes the image to it's proper width. A 16mm scope lens will expand the width 2 x's, which makes the image a 2.66:1 picture.

Dr Film