

## Shadow Detail Flash

**Shadow Detail Flash** is an **electronic flash** that illumines the **shadow area** of a picture. If the **shadow areas** are too dark the film/print for image impression, leaving the dark areas with little or no detail. The ratio between **sunlight** and the **flash** determines how much **shadow detail light** was used. There are two preferred **sunlight** to **flash** ratios used. **Flash** one stop less than available **sunlight**. At ratio 2 to 1 [**flash** contribution at one stop less], the actual light for the film makes a 3:1 lighting difference. Therefore  $\frac{1}{2}$  an f-stop to compensate for the extra light the **flash** adds the picture. The other one is **flash** two stops less than available **sunlight**. At ratio 3 to 1 [**flash** contribution at two stops less], for film the illumination difference is 5:1, this +  $\frac{1}{4}$  an f-stop. The latitude for the film should compensate for the extra illumination the **flash** adds the picture.

Depending on shutter speed, f-stop, and film speed will determine the **flash power** needed on subject, for ratio of light for **shadow detail** wanted. Most focal plane shutters have the full film frame available for **electronic flash** at 1/60 of a second or longer shutter time. Therefore film speed can be of assistance in the f-stop selection. By using slow speed ASA 50-100 for **bright sunlight** or close-up pictures for 1/60 shutter speed allows for some control depth of field control.

### Setting up for shadow detail flash,

1. Take a light meter reading for 1/60 second at film's ASA. Record f-stop.
2. Decide the ratio of main to flash you want 2:1 [-1 f-stop], 3:1 [-2 f-stops]
3. To the recorded f-stop step 1 add +1 or +2 for the detail flash. Record the new f-stop value.
4. Find flash to subject distance. Record number of feet.
5. With the last f-stop value, go to f-stop for eight 283/285 flash units chart. Find film ASA value column, find f-stop in that column, and go over to the feet column. The chart has matched the ASA to f-stop to subject distance for Lighting Bar light's inverse square [  $1 / (\text{distance}) * (\text{distance})$  ] of the units roll off for the output power setting. If more distance flash to subject is required, flash power must be reduced. See flash charts for  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ,  $\frac{1}{16}$  power at same ASA and distance, for wanted f-stop for ASA and distance flash to subject.
6. Neutral density filters are also useful for all over light reduction. If used all the f-stops need to be corrected by the by the filter's loss .3 = -1 stop, .6 = -2 stops, .9 = -3 stops. Redo step 5 with the new values.