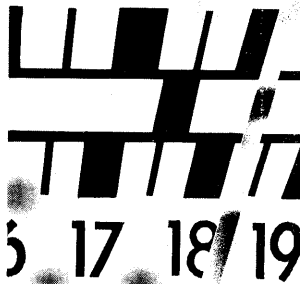
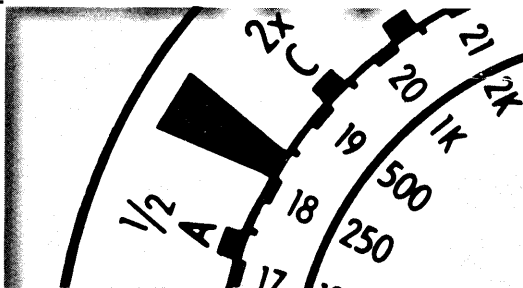


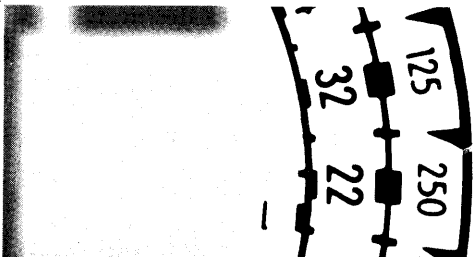
1. aim the meter



2. rotate the arrow



3. transfer the settings
to your camera



a

When you look through the viewfinder, you will see the subject as shown here. The meter "sees" exactly what you see inside that circular area. Now, firmly press the ON-OFF POINTER BUTTON. This permits the pointer to swing to the correct light reading. Release the button and the pointer will remain locked at that position.

r

Rotate the arrow until it is aligned with the same number indicated by the pointer—in this case, slightly over 18.

t

Use any combination of speed and f-stop values required by prevailing circumstances. For example, if you must stop action at a sporting event, you may decide to shoot at 1/1000 second; the corresponding f-stop in this instance, is f-11. Or, if the scene requires a maximum depth of focus, you may use f-22 at 1/250 second. It's that easy! For the fine points, see page 22.

technique

You'll get more satisfying pictures if you adapt your exposure technique to prevailing circumstances. The three basic techniques shown here and on the following pages use reflected light. Should you choose to use incident light refer to "Special Effects" section.

camera position technique

For most outdoor scenes, you will take your measurement at the camera and measure the light which arrives at the lens. Avoid sky light which inflates the reading, sometimes causes underexposure. Use the ART procedure described previously.

close-up technique

Use this for portraits or any scene in which there is a single subject and the background is of secondary importance. In general, the reading should be taken within arm's length of the subject (in this photo for example, you would take a reading of the girl's cheek). Here again, use the ART procedure unless the subject is a person's face. In this case, refer to the meter dial (see inside back cover) and you will note a C position next to the arrow. In this situation, you will rotate the C to the correct setting, NOT the arrow. Otherwise, the procedure is the same as before. Incidentally, be careful with the meter's shadow: if it falls on the portion of the face being measured, it will give you a false reading.

substitute readings

Quite often you will want to make a portrait or candid shot without disturbing the subject. Use the palm of your hand as a substitute for the subject's face. This method is also useful if, for any reason, the subject is not accessible. Similarly, you can use nearby trees as a substitute for distant trees, etc. To get the correct reading, use the ART procedure except when working with flesh tones. In that case, use the C position on the dial instead of the arrow.

INTERCHANGEABLE CALCULATORS—permit easy replacement with Ansel Adams Zone Dial.

ADVANCED SENSITIVITY—a combination of cadmium sulphide cell—and proven Weston meter movement—gives precise results, even under extreme lighting conditions.

MILLION-TO-ONE BRIGHTNESS RANGE—0.002 to 2000 candles per square foot range gives unexcelled versatility.

EYE-LEVEL VIEWFINDER—lets you see exactly what the meter sees.

TWO LIGHT SCALES—for high and low light levels.

EXPOSURE DIAL—gives easily readable values for speed and f-stop, indicates limits of both black and white (U and O) and color (A and C) films, permits negative density control, aids in compensating for filters. Provides EV Exposure Settings for Polaroid and other cameras using this system.

Ranger 9 features



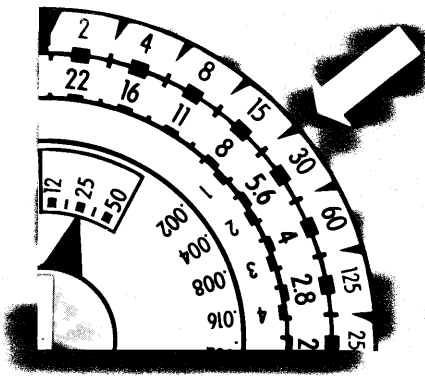
density control—U and O black and white film

Black and white film has a range within which it reproduces the brightness of objects in tones of grey from white to black. If you know these limits you can expose so that the negative has the desired over-all density. The U and O positions on the Ranger 9 control dial show the limits for correct exposure of black and white film. When a meter reading is taken from the camera position, the reading obtained is the average brightness of the whole scene. In this illustration, the reading is 13, but close-up readings will produce 10 and 16. When we set the arrow at 13, it becomes evident that the 10 and 16 values are well within the U and O positions. Objects having a brightness value outside of U and O positions will be under or over exposed.



working in extremely low light levels

The O position is ideal for black and white pictures taken in extremely low light. By taking a close-up reading of the brightest object in the scene, and setting the O position at the corresponding value on the light scale of the exposure control dial, correct exposure will be given to all areas in the scene which have brightness values corresponding to the range covered by the U and O positions. Occasionally, a backlighted or contrasty scene exceeds even the wide acceptance range of black and white film. In this event, the exposure can be keyed to that portion of the scene—either the shadows or highlights, whichever are most important—by placing the U or O opposite the darkest or brightest reading respectively.



FPS SHUTTER SPEEDS IN SECONDS

	(1)	(2)	(3)
8	1/15	1/20	1/25
12	1/20	1/30	1/40
16	1/30	1/40	1/50
24	1/40	1/60	1/80
32	1/60	1/80	1/100
48	1/100	1/125	1/150
64	1/125	1/150	1/200

movies

Any of the techniques described for determining exposures on still subjects can also be used for movies. First, determine the exposure index of the film to be used from the manufacturer's data sheet and set this number in the EXPOSURE INDEX WINDOW. From your camera booklet determine your camera's shutter speed which, for the purpose of illustration, we will assume to be 1/30 second. Having made your exposure reading in the customary manner, you will find the correct f-stop opposite the 1/30 second value (in this case, f 5.6). If your camera shoots at 16 frames per second, no further adjustments are required. For cameras which operate at other frame speeds, consult table.

For example, find the shutter speed at 16 FPS for your camera from your camera instruction book—say, for example, 1/30 at 16 FPS as underlined. The required shutter speed for different FPS speeds will be found in the same column.

exposure for special effects

SNOW, BEACH AND WATER SCENES—Take readings of the brightest and darkest objects and use the f/stop midway between or take a reading from the palm of your hand and use the "C" position. Most appealing snow textures occur when the scene is back-lighted or cross-lighted.

COPY WORK—When copying pages of a book or photographs in black and white or color, take a reading from a white card placed over the subject. Divide the exposure index by five and set this value in the Exposure Index window. Point the arrow at the light reading obtained and select the camera settings as usual.

TELEVISION—Adjust the television screen for contrasty black and whites. Place the camera on a tripod, set the shutter at 1/25 second and focus on the lines across the screen. Dim the room lights. Take a close-up average reading holding the meter about six inches from the screen. Set the meter arrow at this reading and select the camera settings in the usual manner.

AERIAL PICTURES—To prevent the sky from inflating the reading, aim the meter down toward the ground. In general, below 1,000 feet use the meter reading indicated; from 1,000 to 2,000 feet stop down 1/3 f/stop; from 2,000 to 4,000 feet close down 1/2 f/stop; above 4,000 feet close the camera aperture one full stop from the reading. Use a Skylight Filter with daylight color film (no exposure correction).