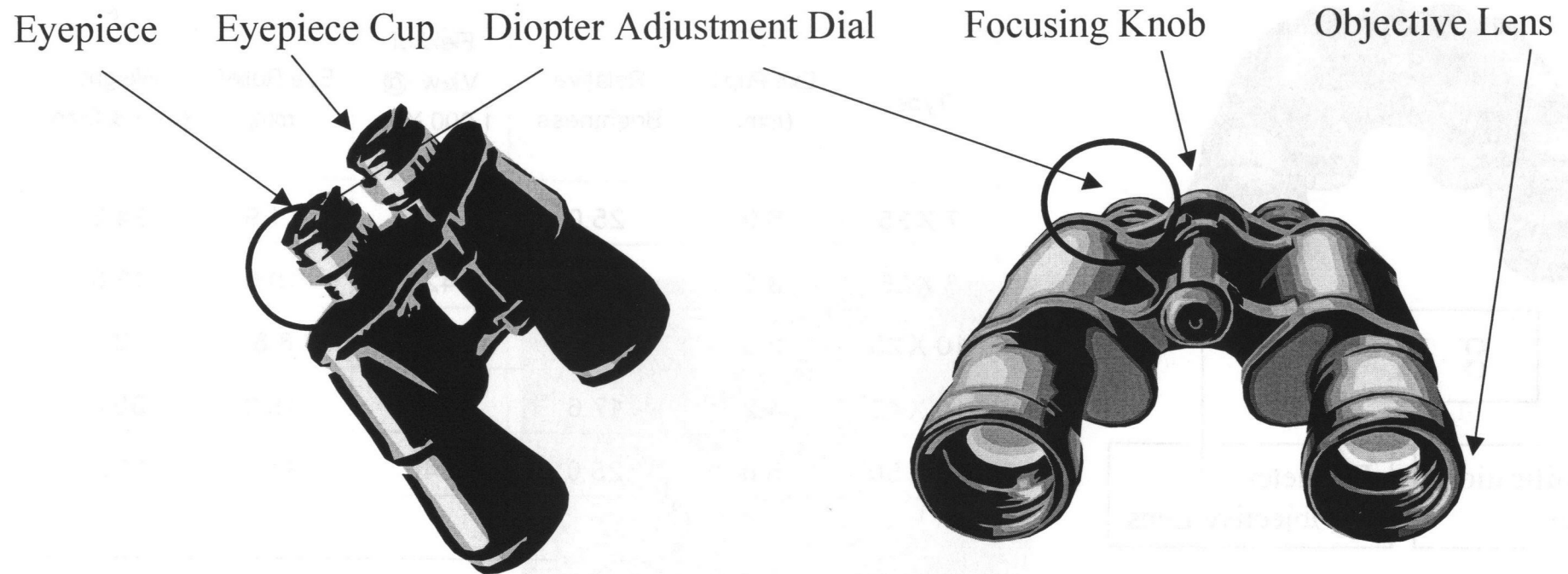


## Binocular Basics

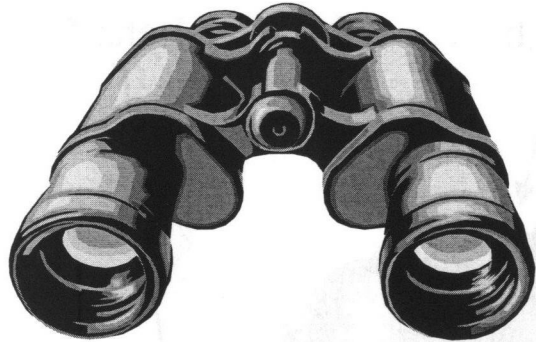


Adjust the binoculars between your eyes by looking through them at a distant object and fold or unfold them until you see a single circular image.

Diopter Adjustment - Used to correct any difference of vision between your eyes.

1. Look through binoculars at a distant object
2. Cover the right side of the binoculars and turn the focusing knob until the subject appears in sharp focus.
3. Cover the left side and view the same subject through the right side.
4. Turn the Diopter adjustment dial until the subject appears in sharp focus.
5. The (+ -) indicators on the diopter adjustment dial will help you reset the adjustment at a later time.

# Binocular Basics



1

8 X 25

Magnification Power

Diameter of Objective Lens

2

$$\text{Exit Pupil} = \frac{\text{Diameter}}{\text{Magnification}} = (25 / 8) = 3.1$$

Exit Pupil = Diameter of shaft of light that reaches your eyes' pupils. Large exit pupils provide a bright image and make it easier to maintain a full image when you move your hands. (For dusk & dawn viewing use EP 4+mm)

3

Relative Brightness = Square of the exit pupil. The larger the number the better. (Example:  $3.1 * 3.1 = 9.8$ )

# Examples

1	2	3	4	5	6
Type	Exit Pupil (mm)	Relative Brightness	Field of View @ 1,000 Yds. (ft.)	Eye Relief (mm)	Weight (oz.) & Size
7 X 35	5.0	25.0	487	11.9	24.3
8 X 25	3.1	9.8	429	10.0	12.0
10 X 25	2.5	6.3	325	8.8	12.0
10 X 42	4.2	17.6	338	18.0	30.0
10 X 50	5.0	25.0	340	11.8	33.9

4

Field of View (FOV) = The width of the area you can view in a single glance 1,000 yards from where you stand.

5

Eye Relief = Distance you can be from eyepiece and still see a full image. (Glass wearers 11+mm)

6

Weight & Size = Tradeoff with other features ! Select based on intended use.