

Optics and Binocular Basics

Knowing the proper terminology and use will help you choose the binoculars that are best for you.

Binoculars differ in three major areas: power, close focus and field of view.

Power is the first number listed on a binocular and is the magnification capability of the binocular. Eight power, which means you will see an object eight times closer than you could with your eyes, is considered average for a full-size binocular. (The second number is the objective lens (front lens), which indicates how much light enters the binocular - in general, the larger the number, the brighter the image.)

Close focus is the shortest distance that you'll be able to see in focus. If you are interested in birding in woods or your backyard, you'll want a binocular that has a short close focus.

Field of view is the widest area you can see when you look through the binocular. If you plan to use the binoculars to scan fields or over water, consider a binocular with a large field of view.

How to Focus Binoculars

- As you focus, be sure to keep both eyes open.
- Cover the right lens and look through the left side with the left eye.
- Rotate the center focus to sharpen the image.
- Next, cover the left lens and look through the right side with the right eye.
- Adjust the diopter eyepiece until the image appears sharp.
- Look through the binoculars with both eyes and adjust the center focus so the object is clear.



Other Things to Consider:

- Will you wear glasses when you use your binoculars? If so, you'll want a binocular with at least 14 mm of eye relief. Eye relief is the distance between the eyepiece and your eye when seeing a clear and focused image through the binocular.
- Do you want a full-size or compact binocular? Consider weight, but also think about how you will use the binocular. Most compact binoculars have a narrow field of view and work best in the yard, on hikes or at sporting events.
- How do the binoculars feel when you hold them? Test this by holding several types of binoculars. Comfort is important when you're using your binoculars for a long period of time.
- How durable are the binoculars, and what kind of warranty do they have? Some binoculars are waterproof and fog-proof. Compare warranties to be sure you're getting a warranty appropriate to your situation.
- Binoculars do not need routine maintenance except to ensure the glass surfaces are clean. When you are not using them, be sure to keep the lens caps on and store them in the case. Dirty glass surfaces will reduce the amount of light that can come through the binocular making the images less clear. In addition, dirt can destroy the lens coatings on the binoculars if they are stored dirty.

For more information, talk to one of our
Certified Bird Feeding Specialists

