

Binoculars Buyers Guide (1073)

Binoculars are basically two telescopes mounted together to make images appear closer. When you are trying to see an object or area in the distance, a good pair of binoculars eliminates the space between you and the object or area you want to view.

Sizes

Binoculars come in two primary sizes:

1. compact
2. standard
3. Note: Some companies also offer monoculars as well.

Monoculars

Monoculars have a single eyepiece and are good for stationary viewing. They can be mounted on a tripod and used with a camera. Hands-free spotting monoculars work particularly well for bird watching, hunting, and nature photography. Some models also sport powerful magnification and produce high-quality images. Smaller, compact monoculars are good for occasional use.

Compact binoculars

Compact binoculars can fit into a pocket or purse easily. They are small and compact and allow you to get a closer look conveniently. These lightweight binoculars offer flexibility and mobility while providing good viewing capabilities. Some models weigh mere ounces. The Nikon Travelite V, for example, weighs a mere 9 ounces.

Standard-size binoculars

Standard binoculars provide a crisp, clear image for bird watching, hunting, or viewing animals at a distance. These types of binoculars can range from mid to large size and can weigh between 20 and 35 ounces. Some popular models include Nikon Action Hunting Binoculars, Steiner Safari Binoculars, and Bushnell Powerview Binoculars.

You may want to mount larger, heavier models geared toward astronomy and nature viewing on a tripod to keep the viewed image as steady as possible.

Digital Camera Binoculars

Binoculars can do a lot more than magnify an image that is in the distance. Some models include a built-in digital camera, which store images on internal memory and then allow you the ability to download them to your computer just like any other digital camera. In addition, some binoculars also allow you to record video. Several popular models include Meade CaptureView II or Celestron VistaPix models. Digital camera binoculars offers the ability to easily locate an image and photograph it instantly. You will never miss a great nature shot again.

Night Vision Binoculars

Great for night viewing, night-vision binoculars existing light and produce a green-colored image so that you can see in the dark. They are great for activities that you would do at night. There are three classes of night-vision binoculars indicating which type of light intensifier tube the binoculars use, they are:

- 1st generation binoculars
- 2nd generation binoculars
- 3rd generation binoculars

Inexpensive 1st generation binoculars provide adequate night-vision image quality while Mid-range 2nd generation binoculars provide night-vision image quality between 1st- and 3rd-generation models. Lastly, high-end 3rd generation binoculars produce high-quality night-vision images.

It is important to look for this generation information included with binoculars to make sure that you get true night-vision support.

Night-vision Alternatives

Many binoculars offer clear and bright viewing in the dark, but don't supply true night vision. Item listings for these products will not list generations. However, they are a good option for people who just want to see a little better at night.

Features and Product Specifications

Magnification

Magnification controls how close an object can be viewed. For example, binoculars with 8X magnification make objects appear eight times closer to your position. Magnification of 7X to 12X is sufficient for general binocular use and wide-area viewing. Keep in mind that the higher the magnification, the steadier you need to keep your hands. In addition, it is best to set binoculars with more than 12X magnification on a tripod for stability.

Zoom

Zoom controls the range of magnification for example, from 7X to 12X. Use the zoom feature to zero in on your target or zoom away from it.

Aperture

Aperture determines the amount of light captured in an image. It is measured in millimeters and represents the diameter of the front or objective lens. Binoculars are designed in a two number designation indicating magnification and aperture. For instance a pair of 5 x 30 binoculars will magnify an image five times and have a 30-millimeter opening to let light in. An aperture of 20 to 60-millimeters is great for recreational use while an aperture of 70 to 80-millimeters would be best for looking at the stars.

Field-of-view

The size of the area that you can see through a pair of binoculars is called the “field-of-view.” It is measured in degrees of field or in linear feet viewed from 1,000 yards. Wider fields-of-view allow you to view more of the scenery while “wide-field” binoculars make it easier to track fast-moving objects, scan the sky for birds, and generally observe more of nature.

Prisms

Just as a mirror reverses images and turns them right side up, so do prisms. They work in exactly the same way. They are located between the objective lens and the eyepiece. Binoculars offer two prism designs.

- Roof prisms: Small prisms, which allow binoculars to come in smaller sizes.
- Porro prisms: Larger prisms, which allow a greater field of view in larger binoculars.

Focus

A center focus to simultaneously focus each eyepiece usually comes with binoculars. However, there are optional focus options such as diopter control or individual focus that is available as well. It’s a matter of choice to fit your needs.

- Diopter control: Gives you the ability to balance your view for each eye.
- Individual focus: Gives you the ability to focus on objects more precisely. This feature is usually found in binoculars designed for marine or astronomical use.

Waterproof Binoculars

You can’t always count on the weather so you may want to consider buying a pair of waterproof binoculars. If you will be boating, hunting, hiking, camping, or doing other outdoor activities, they may be just right for your needs. You can also purchase fog proof binoculars that offer protection in a light drizzle or heavy fog.

Lens Care

Protect the objective lenses with lens caps if supplied with the binoculars, and/or by keeping them in their case when not in use. Clean the lenses as you would a good camera lens, with lens cleaning fluid and lens tissue; don't clean them with your necktie or a napkin, or you'll scratch the lens coating. With a little care, a quality pair of binoculars will last a lifetime.

Pricing

You can expect to pay around £11.43 for a low-end pair of binoculars good for swap-meets to £85.73 and more for a feature rich pair.