Swift Binocular Collection

SWIFT Sport Optics

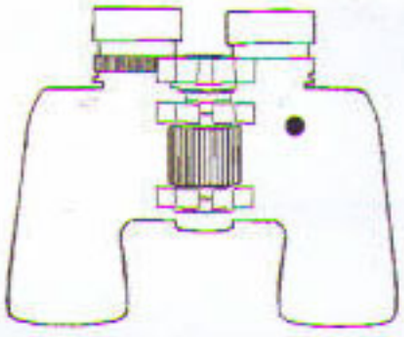
Congratulations on becoming the owner of a Swift binocular!

Binoculars from Swift Sport Optics (Swift) are the result of years in research and development, the sole purpose of which has been to design the finest, most practical optics giving our customers the greatest value for their purchase. Swift is committed to developing products that excels in quality and performance. Only actual use, (and comparison with far costlier optics) can truly demonstrate the extraordinary quality of workmanship and materials which make these binoculars the most sound investment of their kind.

Please note that all Swift Sport Optics binocular models undergo rigorous quality control to check for alignment. With years of use, all binoculars will eventually drift out of alignment and require collimation by an optical technician. Sudden drops, bumps and bands to the binocular may cause the optics to fall out of alignment. Re-alignment is not covered under the Swift Warranty.

Swift Binocular Terms

PORRO PRISM



This style is especially suited for binoculars with objective lenses of 44mm (millimeter) and larger. The traditional "M-shaped" in which the objective lenses are spaced wider than the eyepieces offers two prisms in each barrel.

ROOF PRISM

The roof prism is a slimmer design, shaped somewhat like the letter "H" and has a third prism to direct the light over a longer optical path, yet keep the binocular smaller and lighter in weight.

MAGNIFICATION

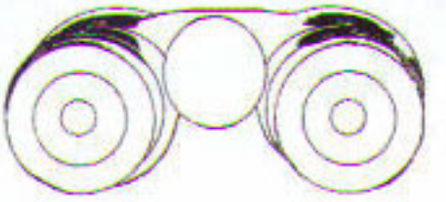
Binoculars are labeled with numbers like 7x 50 or 8x 40 or 10x 50. The first number refers to the magnification, or the number of times the binocular magnifies an object. The x means "times" or "multiplication" just as in arithmetic. For example, an object such as a bird, ship, or race horse that is 500 feet away will appear 1/7 of that distance (71 feet) in a 7x glass, 1/8 that distance (62 feet) in an 8x glass, and 1/10 the distance (50 feet) in a 10x binocular.

OBJECTIVE

The second number refers to the diameter of the objective lenses in millimeters. The objective lenses are the large lenses on the front of the binocular, the end closest to the subject. A glass with 50mm or larger objective lenses will be fairly large and heavy, whereas a binocular with 21mm lenses will be small and compact.

EXIT PUPIL

The exit pupil is the small circle of light seen in the eyepiece when holding the binocular at arms' length toward a light source such as the sky or a light-colored wall. The larger the exit pupil, the more light that is admitted too your eyes, the greater the detail, clarity, and resolution, especially in dim light. Divide the objective size (second number) by the magnification (first number) and you arrive at the exit pupil. These two numbers together give light gathering power of the binocular.



LENS COATINGS

Modern lenses are coated during manufacturing with a variety of lens coating materials to eliminate lens aberrations, reduce internal reflections, and screen out ultraviolet light. As a result, these lenses have a higher Relative Light Efficiency (RLE). RLE is a measure of brightness used to compare different binoculars. Note, coatings may not be added after manufacturing.

Coated Lens

Uncoated Lens

FIELD OF VIEW

The Field of View (FOV), expressed either in degrees or in feet at 1000 yards, measures the area that the binocular can view at one time. Consider a ship that is 500 feet long bow to stern, 1000 yards away. A wide-field binocular with a FOV of 500 ft @ 1000 yards, would allow you to view the entire ship at once. A binocular with a FOV of 375 ft @ 1000 yards, would not take in the entire length of the ship. Similarly, at a sporting event, a wide FOV will take in a greater span of the playing field than a narrow FOV.

Binocular Settings

To get the sharpest image at the most comfortable view, it is necessary to properly set the binocular to accommodate your eyes. This is done by first adjusting for your interpupillary distance or the distance between your eyes.

INTERPUPILLARY ADJUSTMENT

1. Hold the binocular comfortably to your eyes in a normal viewing position.
2. With a firm grip on the barrels, move the barrels in an arc like motion closer together or further apart until you see a single circular field.

It is important to set the binocular to this position before use to reduce eyestrain and fatigue.

DIOPTER ADJUSTMENT

When focusing, it is necessary to correct the differences in sight between each eye. This individual eye correction is known as the Diopter Adjustment and is accomplished in different ways on different binocular models. Please see the Product Information Card for the type of diopter adjustment found on your binocular model.

CENTER FOCUSING WITH RIGHT DIOPTER ADJUSTMENT

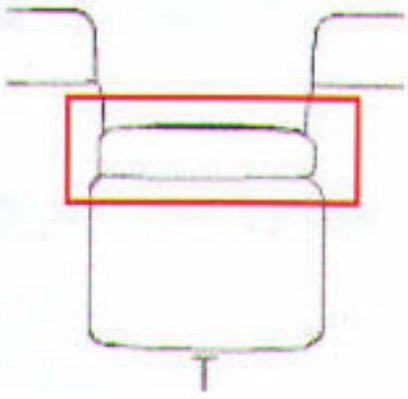
1. Set the adjustable right eye diopter ring to zero or center index mark.
2. Leaving both eyes open, cover the right objective lens with a plastic dust cover and focus the left eye with the center focus knob.

3. Then cover the left objective with the dust cover and focus the right eye by only turing the diopter ring.

Note the index mark on the right eyepiece so that in the future, you do not have to repeat the entire procedure; you simply set the right eyepiece at this mark and use the center knob for focusing.

COMBINATION CENTER FOCUS/DIOPTER ADJUSTMENT

Some of the latest Swift Sport Optics binocular models have a left eye diopter adjustment which is controlled from the center focus knob.



1. First, grasp the top of the center focus knob and pull up, this is the diopter ring. The diopter ring will then turn independently to adjust to the left eyepiece.
2. Leaving both eyes open, cover the left objective lens of the binocular with a dust cover, and use the bottom portion of the center focus knob to focus the right eye.
3. Then, cover the right objective lens with the dust cover, and turn the diopter ring to focus the left eye.
4. Press down the diopter ring to lock the diopter setting in place. When locked the center focus knob will continue to work as a complete unit.

EYECUPS

To take advantage of the full field of view that the binocular offers, your eyes must be the proper distance from the eyepieces. This distance is known as the Eye Relief or Eye Point. Your Swift binoculars have rubber, pop or twist eyecups that fit comfortably against your eyes and place your eyes at the proper distance. For eyeglass wearers, make sure that eyecups are folded or twisted down so that your eyes will be close enough to the eyepiece. See the Product Information Card for the type of eyecups found on your binocular.

DUST COVERS and RAINGARDS

Swift binocular models come with either plastic dust covers that fit over the individual eyepieces and objective lenses or rainguards which fit over both eyepieces and usually attach to the binocular strap to protect them when not in use.

TRI-POD SOCKETS

Most Swift binocular models are available with a tri-pod mount. Tri-pod screw sockets are on the center post of the binocular. This is protected by a cap to keep the threads free of dust and dirt. The socket will accept a special mounting bracket that connects to any standard camera tri-pod.

WATERPROOF/FOGPROOF MODELS

Swift waterproof/fogproof binocular models are filled with a nitrogen gas mixture and sealed with neoprene gaskets and O-rings. The gas is non-corrosive and completely free from moisture, ensuring that there will be no moisture inside the binocular to create fog, even when sudden drops in temperature create fog in ordinary models, rendering them useless. These special seals and gaskets also insure the binocular can resist rain and occasional shallow submersion. It is important to note that most Swift binocular models are designed to be waterproof to a depth of one meter for five minutes. To determine if your binocular is waterproof see the enclosed Product Information Card.

MAINTENANCE

Please clean the lenses of your binocular as you would a camera. First, use air or a soft brush to remove dust particles and dirt from the lens. Then, use only soft tissue or an approved lens cloth with an approved lens cleaning solution (non-ammonia). Start from the center of the lens and gently wipe in a circular motion from the center to the outer edge of the lens. Gently dry binocular lenses after use in damp weather as raindrops, or other moisture, may leave a permanent stain if it remains on the lens.

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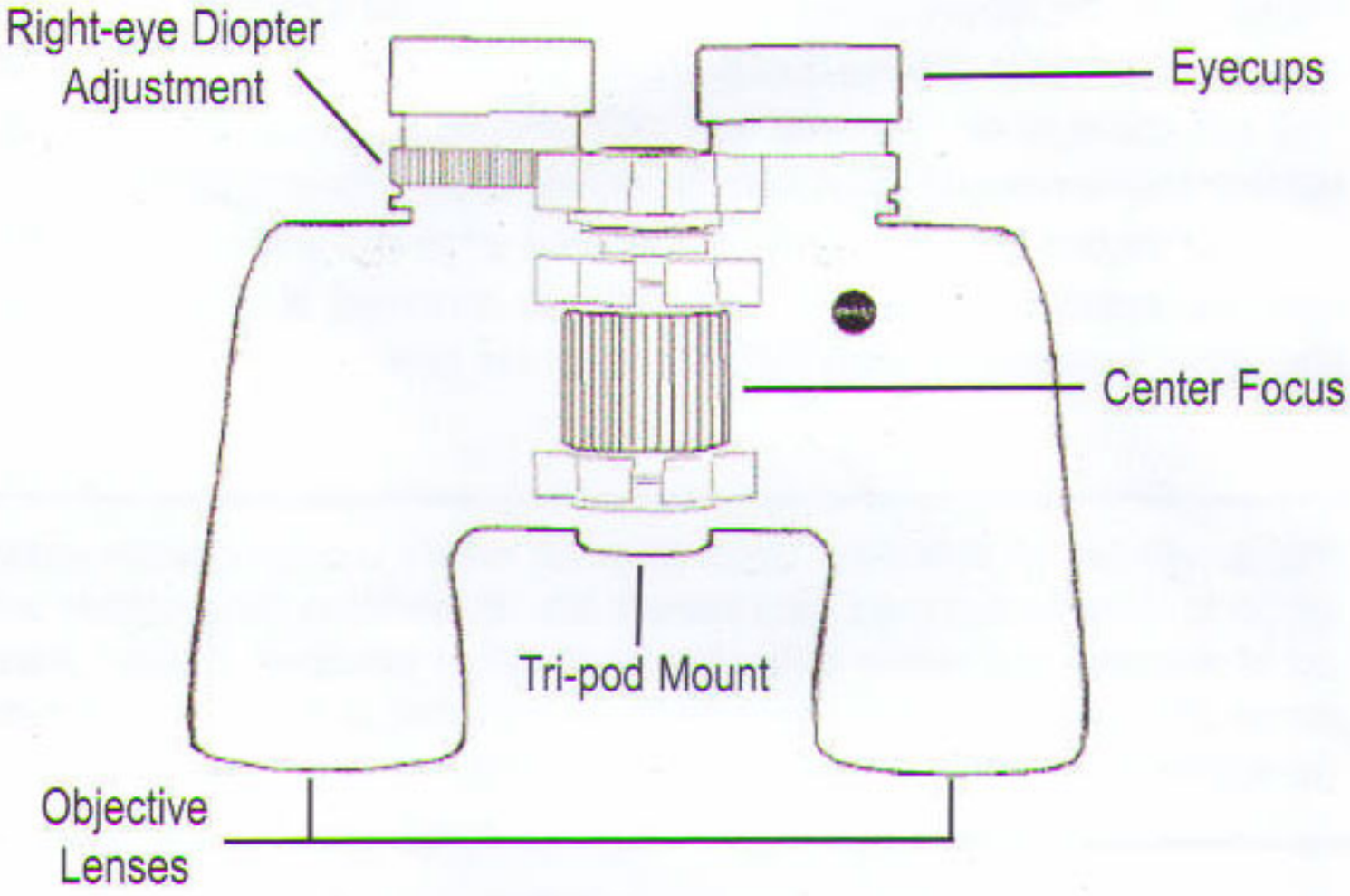
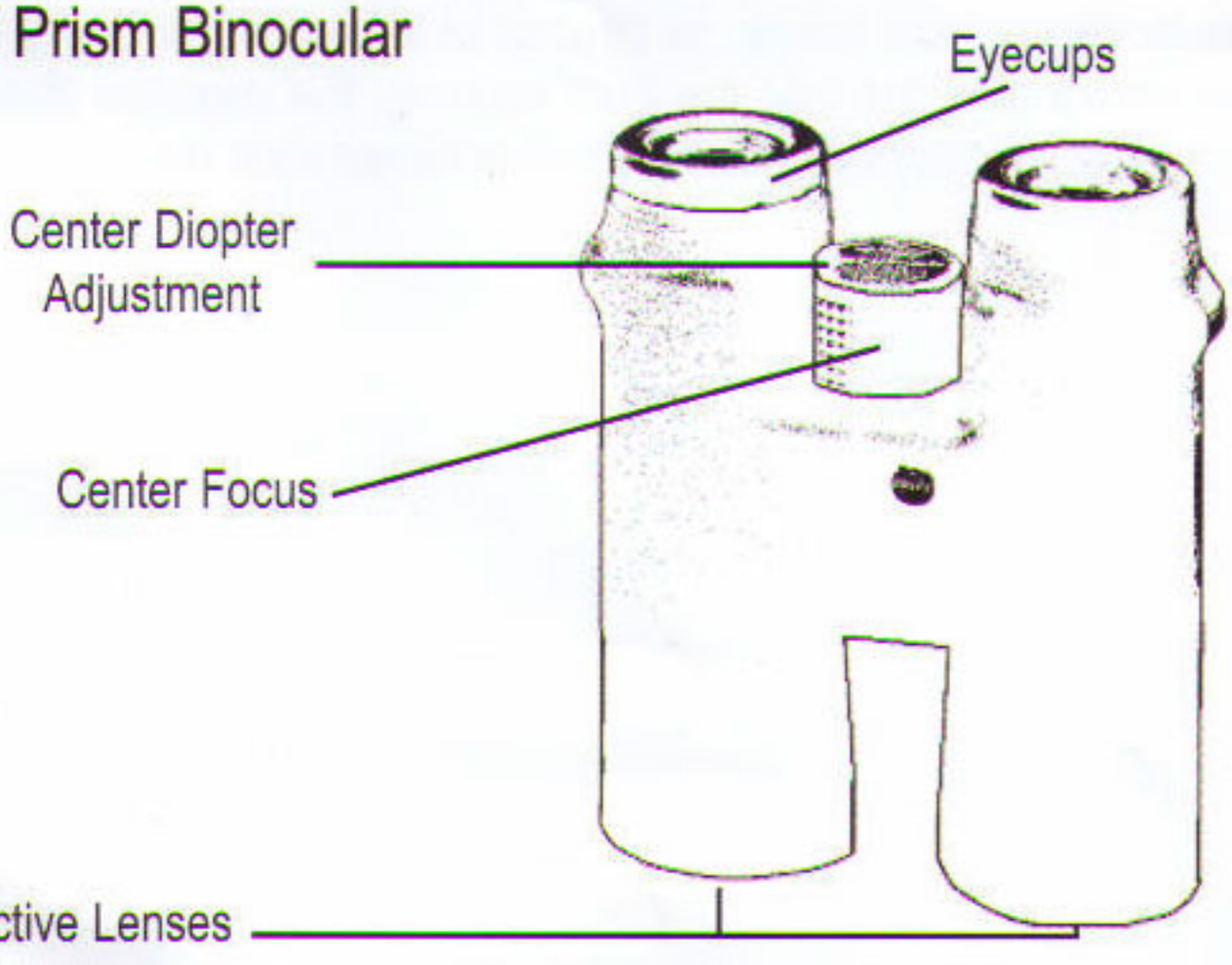
WARNING

Never disassemble lenses, as removal of a lens from its cell destroys the waterproof seal and void the Swift warranty. For complete details on the Swift warranty see the enclosed Product Registration card.

Porro Prism Binocular



Roof Prism Binocular



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