

## G. Instructions for Care

1. To protect the binoculars, store them in their case and keep them in a dry area.
2. Clean the lenses with a soft, lintless cloth when needed.
3. Any remaining dirt or smudges can be removed by adding a drop or two of isopropyl alcohol to the cloth.

## Very Important

It is not necessary to clean binoculars internally. Attempting to take binoculars apart or clean them internally will result in damage.

## Caution

Do not use this product to view the sun. Looking directly into the sun, with or without binoculars, can cause permanent eye damage.

# West Marine® Tahiti 7X50 Binoculars

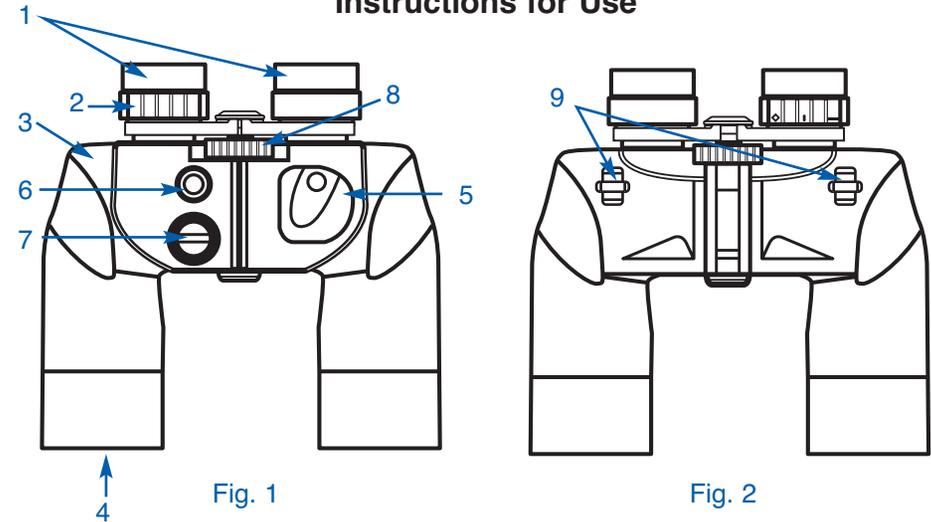
Waterproof

Fog-proof

For use in any weather

Internal rangefinder scale & bearing compass

## Instructions for Use



## Main Features:

- Waterproof, dust-proof, all-weather binoculars are suitable for use in all conditions. Ideal for rugged activities such as watersports and mountaineering.
- Nitrogen gas inside the binoculars eliminates fogging and mold on the internal lens surfaces, even during severe weather conditions.
- Internal rangefinder scale and bearing compass with illumination switch indicates the distance or size of objects being viewed, along with their direction.
- Hi-index Bak-4 prism creates a bright, sharp image with vivid contrast, providing a clear view of objects.
- Rubber-coated body provides great shock resistance and a comfortable grip.

## Binocular Parts (Fig. 1 & 2)

- |                                 |                         |
|---------------------------------|-------------------------|
| 1. Rubber eyecups               | 6. Compass light switch |
| 2. Adjustable eye-piece diopter | 7. Battery compartment  |
| 3. Main body                    | 8. Center focus knob    |
| 4. Objective lens               | 9. Strap holders        |
| 5. Compass housing              |                         |

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## A. Eyepiece Distance Adjustment

For best viewing, the binoculars should be adjusted for the individual user so that eyepieces line up with the user's eyes:

1. Hold the binoculars in a normal viewing position.
2. Grasp each barrel firmly. While looking through the binoculars, adjust the barrels until you see a single, circular field of view. Reset the binoculars to this position each time you use them. The eye distance setting is indicated on the scale located on the binocular hinge.

## B. Diopter Setting and Center Focus

1. Set the right eyepiece (2) to zero and look at a distant object.
2. Keeping both eyes open, cover the right objective (front) lens with your hand, then adjust the center focus wheel until an image in the left eyepiece appears sharp.
3. Cover the left objective (front) lens with your hand, then rotate the right eyepiece until the image appears sharp again.
4. Diopter setting is now correct for your eyes, and you need only adjust the center focus to view objects at different distances. Note the diopter setting for future use.

## C. Roll-down Eyecups

To use binoculars while wearing eyeglasses or sunglasses, roll down the eyecups (1). This will allow you to bring your eyes closer to the binoculars, improving your field of view.

## D. Floating Strap

Prior to water activities, make sure the floating strap is securely attached to the binoculars. This strap is designed to keep binoculars afloat if they are dropped into the water.

## E. Reading the Rangefinder Scale

The rangefinder scale is a useful navigation tool if you know the size or distance of an object. If you know an object's size, you can use the rangefinder to calculate its distance. Conversely, if you know the object's distance, the rangefinder can tell you its size.

1. To measure distance, simply apply the following formula:

$$\text{Distance} = \frac{100 \times \text{Object Height}}{\text{Rangefinder Scale Reading}}$$

Example: if the object is 20 meters high and the rangefinder scale reading is 1.6 (Fig. 3), then:

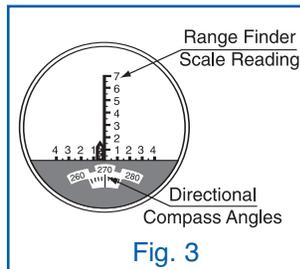
$$\frac{20 \text{ M (height)} \times 100}{1.6 \text{ (rangefinder scale reading)}} = 1,250 \text{ M (distance)}$$

2. To measure size, the formula becomes:

$$\text{Object Size} = \frac{\text{Distance} \times \text{Rangefinder Scale Reading}}{100}$$

Example: if the object is 1,250 meters away and the rangefinder scale reading is 1.6, then:

$$\frac{1,250 \text{ M (distance)} \times 1.6}{100} = 20 \text{ M (object size)}$$



## F. Using the Bearing Compass

1. To read the bearing compass:

When you look through the left eyepiece, you will see a bearing compass window with figures and graduations below the field of view. The bearing compass shows directions as angles: north is 0°, east is 90°, south is 180° and west is 270°. Each graduation mark in the compass represents 1°.

To determine an object's direction, first align the object with the rangefinder scale in the center of the field. Then read the compass, reading the graduation mark that lines up with the reference line in the center of the bearing compass.

**Note:** the compass is oriented to "magnetic north," which differs from "true north." True north is the same throughout the world, while magnetic north varies depending on location.

2. To locate your position:

These binoculars, together with a map and protractor, can be used to locate your position. For example, the binoculars plus the map in Fig. 4 could be used to determine the location of a boat sailing within the map's area.

a. First, from the boat, use the binoculars to locate the buoy shown on the map. In this example, the bearing compass would show that the buoy is located 190° from the boat.

b. Use this information to determine the direction from the buoy to the boat. (To do this, subtract 180° if the object's reading is 180° or greater; add 180° if the reading is less than 180°.) So, 190° (direction from boat to buoy) - 180° = 10° (direction from buoy to boat).

c. On the map, draw a line from the buoy extending in a 10° direction (10° from magnetic north). You now know your boat is somewhere along this line (Fig. 5).

d. To determine your boat's exact position, use the binoculars to locate a second object, the lighthouse. The bearing compass will show that the direction from your boat to the lighthouse is 300°.

e. Then calculate the direction from the lighthouse to your boat: 300° - 180° = 120°.

f. Finally, draw a line extending 120° from the lighthouse (Fig. 6). Your boat is located at the point where the two lines intersect.

3. Compass light:

To read your compass in the dark, press the compass light switch (6), which will illuminate it in red light. If the light becomes faint, change the light battery (LR43 X 2, alkaline batteries). Unscrew the cover of the battery compartment (7) and change the battery.

