

# 78-525 Fieldmaster® Lensatic Compass

## Warranty and Parts:

We replace all defective or missing parts free of charge. Additional replacement parts may be ordered toll-free. We accept MasterCard, Visa, checks and School P.O.s. All products warranted to be free from defect for 90 days. Does not apply to accident, misuse or normal wear and tear. Intended for children 13 years of age and up. This item is not a toy. It may contain small parts that can be choking hazards. Adult supervision is required.

## Description:

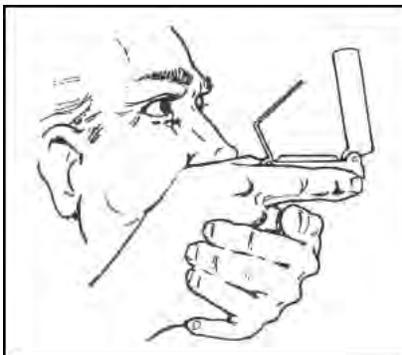
The Lensatic compass differs from the traditional "orienteeing compass." It is preferred by the military for its precision, durability and accuracy since it is designed to take extremely accurate bearings for directing artillery fire.

The Lensatic Compass consists of: a rotating bezel; the sighting-wire unit/ top cover; the thumb hook; and the lens.

It can be used to locate terrain features or to follow a course over the ground. The dial is graduated in 0 - 360° in 5° increments and 6400 mils in 20 mil increments. The metal case is shock resistant but the compass is not waterproof.

## To take a bearing:

1. Open the top cover halfway so that it is at a right angle to the compass base.
2. Lift the lens arm up about 45° and make sure the thumb hook is situated all the way to the bottom.
3. Place your thumb into the hook



to hold it steady. Looking at the target object, place the sighting wire in the middle of the object.

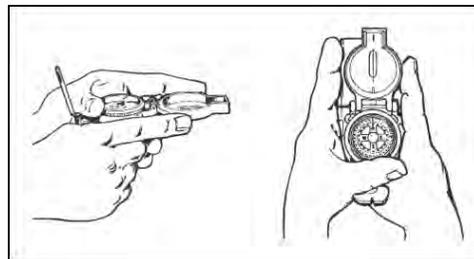
4. Move the lens up and down so you can read the degree markings without looking away from the object.
5. Read the bearing in degrees or in MILS.

## To set a bearing:

1. Sight on the target object as described above. Take the bearing in degrees.
2. Rotate the marking on the moving bezel to align it with Magnetic North as indicated by the compass card.
3. Rotate yourself until the Magnetic North on the compass aligns with the bezel's marking.
4. Use the bearing indicated through the sighting wire as your direction of travel.

## To follow a bearing:

1. Orient yourself as above.
2. Choose a landmark in the distance to use as a reference.
3. Follow the bearing on the Lensatic Compass when the landmark is obscured by trees, clouds, fog, hills etc.
4. Confirm your direction occasionally by taking new



bearings to the landmark.

## Orienteering with the Lensatic Compass:

Using this compass for orienteeing is not as straightforward as with the Orienteering Compasses such as the Fieldmaster® 78-530, available from Science First®, but it is possible.

The square case has one side ruled so you can use it to triangulate known landmarks to your position. This built-in ruler is designed for military grid maps but will also work with USGS topographical maps. We recommend that you use a protractor (the military provides one for use with lensatic compasses).

**For detailed instructions, see the U.S. Army Field Manual at the following address:**

<http://www.globalsecurity.org/military/library/policy/army/fm/3-25-26/ch9.htm>

## P/N 24-8525

© Science First®/ Morris & Lee Inc. Science First® and Fieldmaster® are registered trademarks of Morris & Lee Inc. All rights reserved.