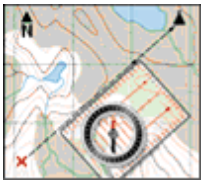
HOW TO USE A COMPASS

Obtaining a Travel Direction from a Map

Use the following procedure to obtain an exact travel direction towards your desired destination. The procedure will work if the magnetic North-South lines are drawn on the map.

Click here to see the entire procedure

1.



1 a) Place the compass on the map so that the long edge connects the starting point with the desired destination.

b) Make sure that the direction arrows are pointing from the starting point to the place of destination (and not the opposite way).

2.

2 a) Hold the compass firm on the map in order to keep the base plate steady.

b) Turn the rotating capsule until the North-South lines on the bottom of the capsule are parallel with the North-South lines on the map.

c) Be sure that the North-South arrow on the bottom of the capsule points to the same direction as North on the map.

3.

3 a) Hold the compass in your hand in front of you. Make sure that the base plate is in horizontal position, and that the direction arrows are pointing straight ahead.

b) Rotate your body until the North-South arrow on the bottom of the capsule lines up with the magnetic needle, and the red end of the needle points in the same direction as the arrow.

c) The directional arrows on the baseplate now show your desired travel direction.

Find a suitable target in the terrain (e.g., a tree, boulder or a bush) towards which the direction arrows point. Walk towards the chosen object without looking at your compass. When you reach your target, find a new object that is aligned with your bearing.

Note 1: Sometimes the compass capsule may get turned accidentally while you are walking. Remember to check from time to time that the capsule has not deviated from the direction that had been set on the compass.

Note 2: Remember the difference between the magnetic needle that

always points to the magnetic North Pole and the direction arrows that show the travel direction.

Suunto is known all over the world for its advanced product innovations and reliable quality. Field compasses, hand bearing compasses, marine compasses, clinometers and tree height meters as well as diving instruments including dive computers. All are valued by amateurs and competitive athletes as in work situations requiring extreme accuracy. Suunto USA is also the distributor of Primus Stoves and Lanterns and other outdoor products.

We all have new worlds to find, go exploring.

What is a Global Needle? | What is Declination?

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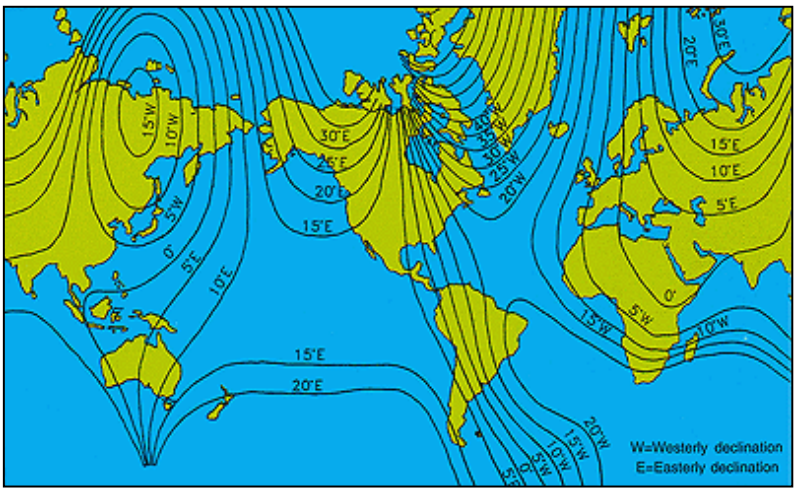
What is Declination?

To understand declination you must first realize that there are two North Poles. There is a True Geographic North Pole at the top of the world, and a Magnetic North Pole which is over 1,250 miles from the True North Pole. A magnetic compass always points toward the Magnetic North Pole. Maps are oriented to the True North Pole. The angular difference between True North Pole and Magnetic North is called declination. Declination varies from 0 to 30 degrees in most populated regions of the world. These declination values usually change slightly over time, as the earths plates shift. The actual value of declination and its annual rate of change for your area will usually be shown on your map. This will be expressed as either a Easterly or Westerly declination, depending on your location. Below is an actual declination chart from 1990, showing the worldwide declination situation in 1990. The current declination values for today will be very close, if not identical, to the values below.



The correction for declination is easily made. Once you have aligned your compass on the map in your direction of travel, and rotated the capsule to match the map's North-South directions, you are ready to make adjustments for declination. (If you are not sure how to align your compass with your map, please see How to Use a Compass for more details). At this point, you simply subtract Eastern declination from or add Western declination to this direction and turn the capsule so that the new direction aligns with the index mark at the top of the baseplate.

> For example, using your map you have turned your capsule to show 60 degrees at the index mark. Your local declination is 15 degrees Western. Your corrected declination is then 75 degrees (= 60 degrees + 15 degrees). Reset your capsule to 75 degrees.

Many compasses have a fixed declination correction scale to simplify the calculations required. Some compasses even have an adjustable declination correction scale that will allow for the declination compensation. With this type of compass, the true direction can be used directly from the compass. Before buying a compass, you may want to consider whether it has a fixed declination corrrection scale, and adjustable declination correction scale, or neither.

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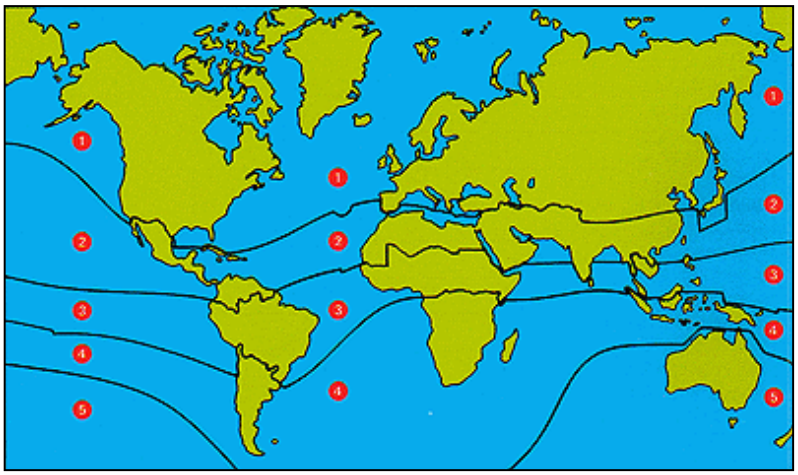
What is a Global Needle?

Before you can fully understand a "Global Needle", you must understand a few basic principles of a compass. In order to get an accurate reading from a compass, the compass needle needs to be "balanced" in the capsule, so it does not drag on the top or bottom of the capsule. But, because the horizontal and vertical components of the earth's magnetic field vary considerably in different locations, a compass needle that "balances" perfect in North America will drag or stick in South America. As a result of these magnetic variances, the compass industry has divided the earth into 5 "zones", as identified in the map below. All of the standard compasses sold at The Compass Store are balanced for zone 1 (since most of our sales are in North America).

However, Suunto has developed a patented Global Needle that will perform perfectly with needle tilts of up to 20 degrees. This allows a single compass to be used effectively in all 5 of the earth's zones (see below). So when we say that a compass is outfitted with a Global Needle for true world-wide performance, now you know what we mean.



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