SUUNTO M-3, M-3G BASEPLATE COMPASSES

USER GUIDE

2025-06-02

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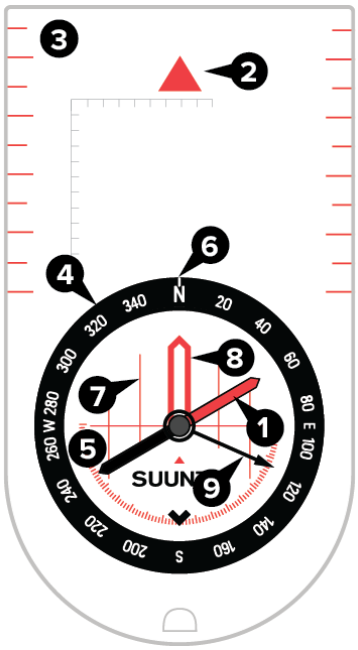
1. Compass anatomy



1. Needle with red end that points to magnetic north
2. Direction-of-travel arrow for pointing to target on map and when moving
3. Baseplate with straight edges and scales for working on map
4. Bezel with directional scale for using as a protractor
5. Rotating capsule for setting direction to target
6. Bearing index for reading numerical bearing from bezel
7. Orienting lines used to align capsule with meridian lines on map
8. Orienting arrow for aligning with needle to find direction to target
9. Clinometer (select models only) for measuring vertical angle

2. Orient the map

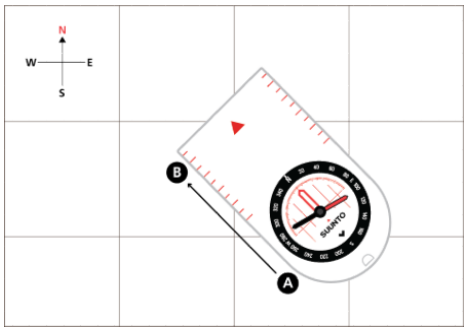
To better understand your surroundings, you should use your compass to first turn your map in the right direction. This ensures the geographic features around you are in the same general direction as you see them on the map.

1. Hold your compass level and look at the red end of the needle to see where north is.
2. Turn the map so that the northern upper edge is pointing north.

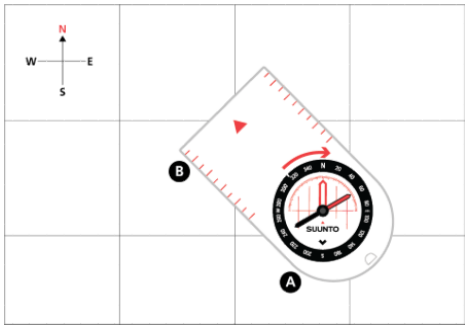
3. Navigate with map and compass

When navigating with a map and compass, you are first determining a direction of travel on the map and then transferring that direction to the real world.

1. Place the compass on the map between your starting point (A) and your target (B).

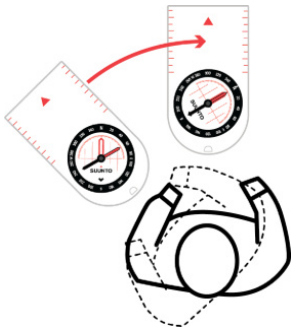


2. Turn the capsule until the orienting lines are parallel to the meridian lines on the map with N pointing north.

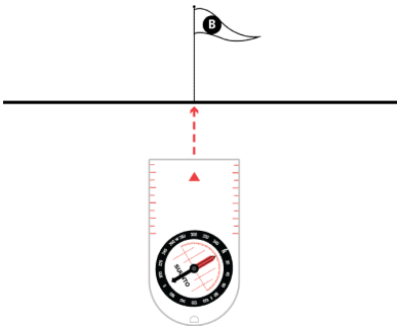


3. Hold compass level at waist height and turn yourself until the needle and orienting arrow are aligned.

   NOTE: *Compensate for declination. See 4. Declination correction.*



4. Select a visible target in front of you to help you maintain your direction while traveling.



5. Follow your progress by comparing landmarks to the map.

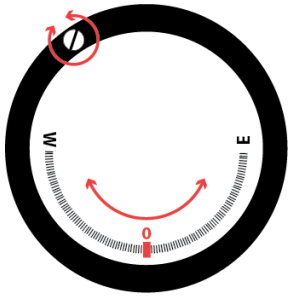
4. Declination correction

The meridian lines on a map indicate the direction toward true north while your compass needle indicates the direction toward magnetic north. The angle between these two directions is called magnetic declination.

Before navigating you should check your local magnetic declination from a trusted source, such as a recent map or the NOAA website. If the magnetic declination is more than a few degrees, you must compensate for it when navigating.

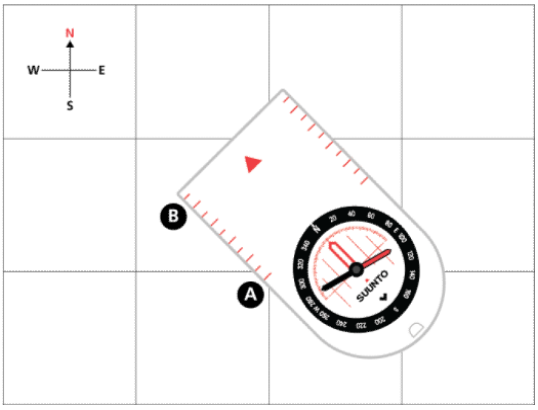
If your Suunto compass has adjustable declination, do the following at the start of your navigation.

1. Turn the compass over.
2. Insert the metal key into the adjustment screw.
3. Turn the key until the declination indicator is the correct number of degrees east or west of 0°.



5. Measure distance on map

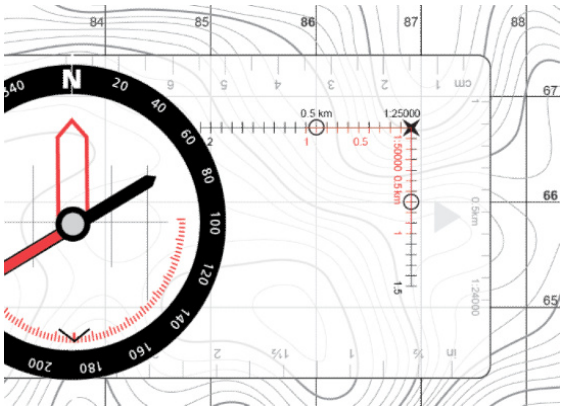
Your Suunto compass has multiple scales on the baseplate to help you measure distance on a map. Be sure to use the same scale indicated on your map. If the map scale is not on your compass, use a general scale (cm or inch) to calculate distance.



6. Find UTM coordinates

Select models only.

With the Romer scale on the baseplate, you can determine locations within the grid of your UTM map accurately. The UTM coordinate of a location can be presented in full or abbreviated as a six-figure grid reference. The position of the star mark in the sample illustration is 35V 686900 6966700, or 869667 in short. In this reference, 86 is the easting grid line number and 66 is the northing grid line number on the map, while 9 and 7 (circled) are the values where the Romer scale crosses the grid lines. This means that the location is 9x100 m east of the vertical grid line marked 86 and 7x100 m north of the horizontal grid line marked 66.



7. Care

Use only fresh water and mild soap for cleaning. Clean your compass regularly.

Operating/storage temperature: -30° C - +60° C / -22° F - +140° F

⚠ ***CAUTION:*** *DO NOT APPLY SOLVENT OF ANY KIND.*

⚠ ***CAUTION:*** *DO NOT APPLY INSECT REPELLENT.*

⚠ ***CAUTION:*** *DO NOT KNOCK OR DROP.*



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