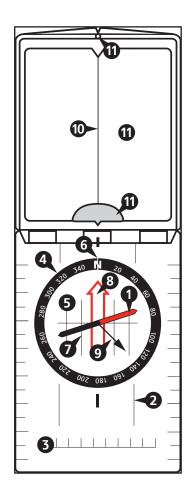
# SUUNTO MIRROR COMPASSES USER GUIDE

## 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
- 10. Center line for aligning target and compass
- 11.Notch, mirror and hole (select models only) for precise sighting of an object



## 2. Orienting the map

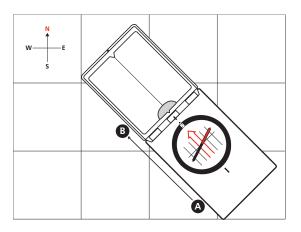
To better understand your surroundings, you should use your compass to first turn your map in the right direction. This ensures the geographic features around you are in the same general direction as you see them on the map.

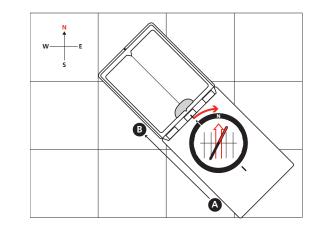
- 1. Hold your compass level and look at the red end of the needle to see where north is.
- 2. Turn the map so that the northern upper edge is pointing north.

# 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.

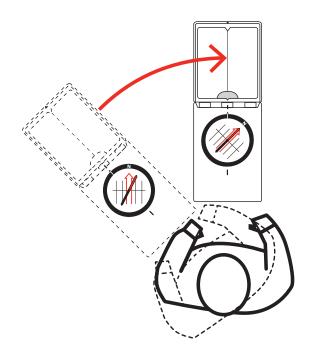
1. Place the compass on the map between your starting point (A) and your target (B).



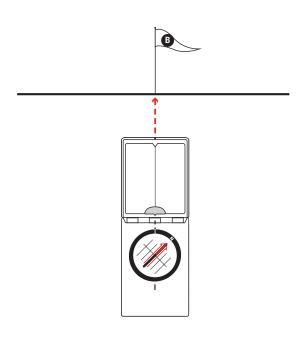


2. Turn the capsule until the orienting lines are parallel to the meridian lines on the map with N pointing north.

 Hold compass level at waist height and turn yourself until the needle and orienting arrow are aligned. NOTE: Compensate for declination. See section 5.

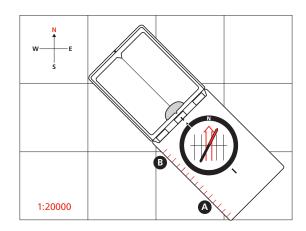


- 4. Select a visible target in front of you to help you maintain your direction while travelling.
- 5. Follow your progress by comparing landmarks to the map.



#### 4. 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.



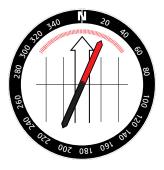
## 5. Declination correction

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 a fixed declination scale, do the following each time you navigate to a new target.

- 1. Follow 'Navigate with map and compass' procedure to the end of step 3.
- Turn left or right until the needle points to the degree of declination on the fixed scale according to your current location.

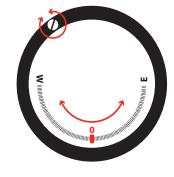


- 3. Hold the compass steady and turn the capsule to align the orienting arrow with the new needle position.
- 4. Continue with step 4 of 'Navigate with map and compass' procedure.



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

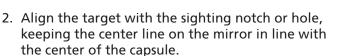
- 1. Turn the compass over.
- 2. Insert the metal key into the adjustment screw.
- 3. Turn the key until the declination indicator is the correct number of degrees east or west of 0°.



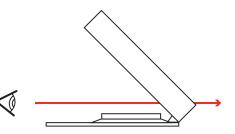
## 6. Sight a bearing

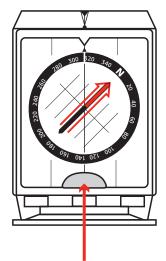
A bearing is the angle between direction to north and the direction to a target. This can be used for example in communicating directions with others or when finding your location.

1. Open the mirror and hold the compass at eye level so that you can read the capsule from the reflection.



- 3. Hold the compass steady and turn the capsule until the orienting arrow and needle are aligned. NOTE: Compensate for declination. See section 5.
- 4. If the numerical bearing is needed, read it from the bearing index.

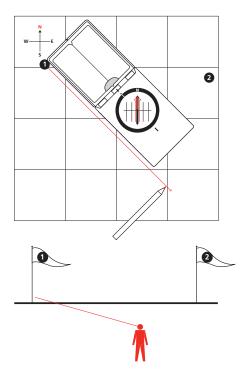




# 7. Finding your location

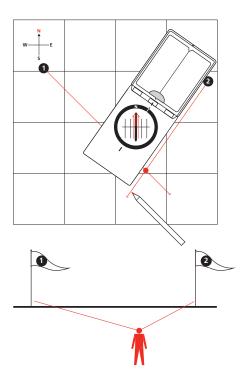
You can sight two or more objects and use triangulation to accurately determine where you are.

- 1. Find a visible object that is identifiable on your map and follow steps 1-3 of the 'Sight a bearing' procedure.
- 2. On the map, place the long edge of the compass on the object (1).
- 3. Turn the compass until the orienting lines and meridian lines are parallel and draw a line from the object.



4. Choose a second object and repeat steps 1-3.

The intersection of the two lines indicates your position, and the closer the angle between the intersecting lines is to 90°, the greater the accuracy.



## 8. Signal with a mirror

A mirror enables signaling over long distances by flashing sunlight reflected in the mirror.

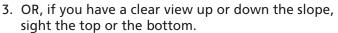
- 1. Hold two fingers in a V-shape at arm's length so that you see the target between your fingers.
- 2. Keep the open compass mirror upright close to your eyes and turn the mirror until the reflected sunlight hits your fingers.
- 3. Rotate the mirror left-to-right to create a flashing signal in the desired direction.

## 9. Measure slope incline

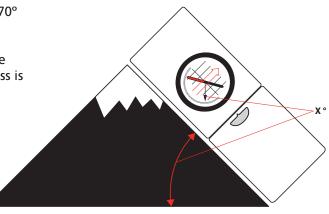
Applies to MC-2 and MC-2 Global only.

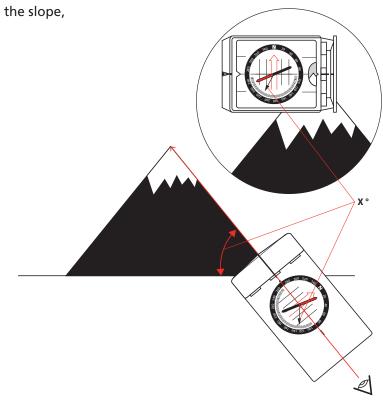
The scale for declination correction on the back of the capsule also functions as a scale for the clinometer.

- 1. Turn the capsule so that the bearing index is at 270° (due West) and tilt compass on its side with the declination scale downwards.
- 2. If you have a clear view across the slope, align the compass to the slope with the back of the compass is facing you.



4. Read from the clinometer needle to get approximate inclination reading.





## 10. 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.

## **11. SUUNTO LIMITED WARRANTY**

Suunto warrants that during the Warranty period Suunto will, at its sole discretion, remedy defects in materials or workmanship free of charge either by a) repairing, or b) replacing with similar product, or c) refunding, subject to the terms and conditions of this Limited Warranty. This Limited Warranty does not cover a) wear and tear, b) rough handling, c) modifications, d) exposure to chemicals, or e) misuse. Unless local mandatory law provides otherwise, a) this limited warranty is only valid in the country of purchase and b) proof of purchase shall be provided when accessing warranty services.

#### Warranty Period

Limited Lifetime Warranty:

Applicable to Suunto A, M, MC, MB and Clipper compasses.

The warranty period is limited until such reasonable time as the product is no longer reasonably usable due to wear and tear.

Limited 2-year Warranty:

Applicable to Suunto Arrow, Orca-Pioneer and KB compasses.

The Limited Warranty period is two (2) years from the date of original retail purchase.

#### **Limitation of Liability**

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