

## COMPASS MANUAL THUMB COMPASSES

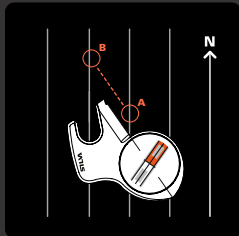
### HOW TO NAVIGATE

#### ORIENTING THE MAP TO NORTH

The easiest way to use a map and compass together is to orient the map towards North. Simply align the map meridians with the compass needle so that "up" on the map is pointing North. Now everything on the map is in the same direction as on the ground. When travelling along your route, remember to keep the map oriented at all times. By doing this it will be very easy to follow your route since turning right on the map also means turning right on the ground! Properly orienting the map is quick, easy and the best way to avoid unnecessary mistakes.

### EASY AS 1-2-3

#### THE SILVA 1-2-3 SYSTEM

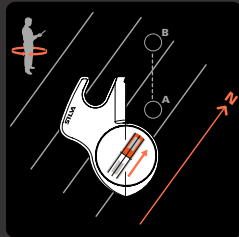


#### FIXED HOUSING

##### 1-2-3

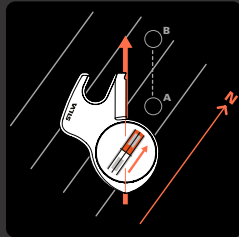
Place your compass on the map and use the **baseline** to make a straight line between your current position and your destination.

Make sure the **sighting line** points towards your destination.



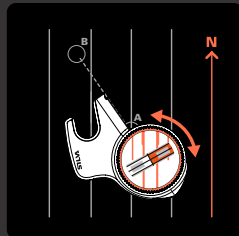
##### 1-2-3

Turn yourself and the compass until the **compass needle** is parallel with the **map meridians** and the orange/red part points north on the map.



##### 1-2-3

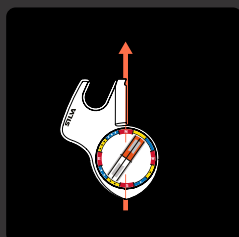
Now the **sighting line** will point towards your destination. Take a landmark and start moving. Enjoy!



#### TURNABLE HOUSING

In **step 2** - turn the **compass housing** until the **orienting lines** are parallel with the **map meridians**.

In **step 3** - Lift your compass from the map and turn yourself until the **needle** is aligned with the **orienting lines**. Now the **sighting line** will point towards your destination.



#### SPECTRA HOUSING

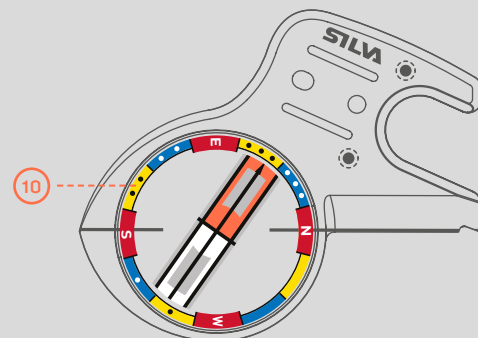
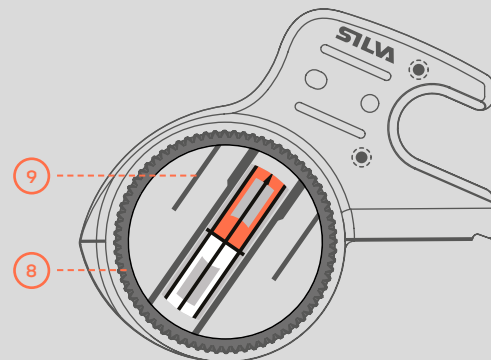
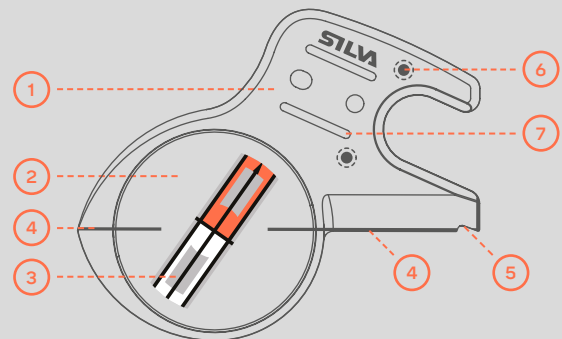
After **step 2** - note the coloured reference point that the **needle** is pointing at. In **step 3** - the **sighting line** will point towards your destination as long as the **needle** points at the colour marking from step 2.

### BASIC COMPASS FEATURES

#### THUMB COMPASSES

SILVA's thumb compasses are perfect for the orienteer, adventure race athlete and anyone who needs a clear view of the map and a fast, stable needle.

The SILVA thumb compasses come as either **Left** or **Right** version. The left version is placed on your left hand, which is the most commonly used. Choose compass based on your personal preferences.



- |   |   |    |                                      |
|---|---|----|--------------------------------------|
| 1 | BASEPLATE                                 | 6  | RUBBER FRICTION FEET                 |
| 2 | LIQUID FILLED CAPSULE                     | 7  | THUMB BAND ATTACHMENT                |
| 3 | COMPASS NEEDLE                            | 8  | TURNABLE COMPASS HOUSING             |
| 4 | SIGHTING LINE / DIRECTION OF TRAVEL ARROW | 9  | ORIENTING LINES                      |
| 5 | PINPOINT TIP                              | 10 | SPECTRA SYSTEM™ COLOURED REF. POINTS |

## COMPASS MANUAL THUMB COMPASSES

### BASIC COMPASS FEATURES

#### THUMB COMPASSES

#### 1 BASEPLATE

Highly durable baseplate in acrylic plastic with lots of transparency to increase the map visibility. Use the edge of the baseplate to get your bearing. Our thumb baseplates features a design which contributes to perfect contact between thumb and map.

#### 2 LIQUID FILLED CAPSULE

The capsule is filled with anti-static liquid (customized formula) that ensures clear reading, fast settling time, perfect dampening, stability and accuracy of the needle.

#### 3 COMPASS NEEDLE

The magnetic needle features a combination of a sapphire jewel bearing and a hardened steel pivot that minimises friction, which in turn gives rapid and accurate movements. Magnetic North direction accuracy: 1 degree. The orange/red end points to magnetic north!

Our thumb compass needles come in two different versions:

**JET needle:** The world's fastest needle, highly transparent for extra map visibility.



**NOR needle:** Standard needle, stable and distinct.



#### 4 SIGHTING LINE / DIRECTION OF TRAVEL ARROW

The sighting line shows the direction that you want to travel along or the bearing you are taking. It runs along the edge of the **baseplate** and continues at the centre back of the baseplate to let you visualize a line through the compass housing.

#### 5 PINPOINT TIP

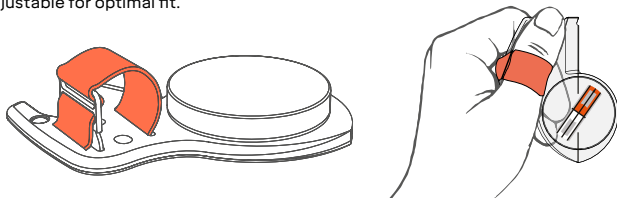
With the carved out tip at the end of the **sighting line** you get a very sharp edge to pinpoint your destination on the map without blocking the view of the map details.

#### 6 RUBBER FRICTION FEET

Silicon rubber friction feet for precision map work. Placed at the bottom side of the **baseplate** near the thumb grip for extra stability.

#### 7 THUMB BAND ATTACHMENT

Thumb compass is attached to one's thumb using a small elastic band. The band is adjustable for optimal fit.



#### 8 TURNABLE COMPASS HOUSING (BEZEL)

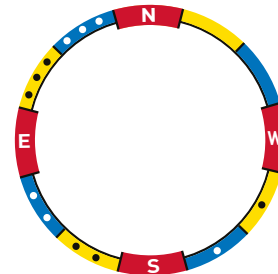
Use the turnable compass housing by rotating the grip ring when navigating with the SILVA 1-2-3 system. The unique feature of a turnable compass housing on a race thumb compass gives you the opportunity to use a thumb compass even if you are used to navigating with a traditional baseplate compass.

#### 9 ORIENTING LINES

Our thumb compasses with **turnable housing** have lines/markings in the **capsule** bottom to ensure easy settling. The lines are fixed within the **compass housing**, rotates along with the grip ring and are designed to be aligned with the map meridians. The lines are used to align the **compass housing** with the map in step 2, when navigating with the **SILVA 1-2-3 system**.

#### 10 SPECTRA SYSTEM™

The SILVA Spectra System™ is developed to simplify your orienteering, enabling you to be faster and more accurate through the forest. No matter if you are an elite or leisure orienteer - the Spectra System™ will help you by letting you stay on the right course at high speed while reducing mistakes.



The Spectra System™ consists of coloured reference points and dots on the **capsule** that are easy and quick to read and memorize.

You will become faster by navigating more accurately, if you think more clearly. During periods of high stress and extreme physical work we know that the brain does not get as much energy as at rest. Sometimes you think less rationally. The tougher the work, the harder it is to make the right decision and do the right thing - quickly. To think clearly, you have to keep things simple.

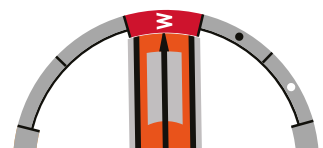
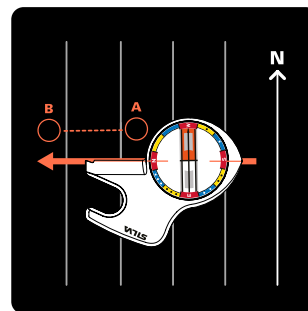
With our Spectra compasses you have an easier system and clearer reference points, which help you keep the right directions at competition speed.

#### ● USING SPECTRA WITH THE 1-2-3 SYSTEM:

1. Place your compass on the map and use the baseline to make a straight line between your current position and your destination. Make sure the Sighting line points towards your destination.
2. Turn yourself and the compass until the compass needle is parallel with the map meridians and the orange/red part points north on the map. Note the coloured reference point that the needle is pointing at and memorize it (for example blue, one dot).
3. The Sighting line will point towards your destination as long as the needle points at the colour reference point from step 2 (blue, one dot). Take a landmark and start moving.

#### ● WHY ARE THE EAST AND WEST CARDINAL POINTS REVERSED?

You may have noted that "E" is placed on the left side of the capsule and "W" is placed on the right side. This seems wrong, but it makes sense. See the example image below. We want to go from A to B. This is straight West. Since the compass needle is aligned with north on the map, it points to the reference point **Red, W** on the Spectra system™. When you are going west, the needle points to the West reference point.



#### ● ADVANTAGES WITH THE SPECTRA SYSTEM™:

- You don't need to hold the compass orientated on the map, in order to travel on the desired bearing.
- You can run on a compass bearing at high speed.
- Taking the step from using the traditional base plate compass to using a thumb compass is made easier.
- You have more freedom to choose whether to run with the map and compass in the same hand or with the compass in one hand and the map in the other.
- The use of colours and dots as reference points reduces the risk of making mistakes at extreme levels of physical and mental fatigue.
- The use of colours and dots makes the teaching and learning of how to use the compass easier. It simplifies the explanation of how to use to map and compass youths and beginners.
- The colour segments are easier to find and focus on, especially at high speed and you can correct your direction without stopping.
- Now it is possible to make an accurate compass run with a thumb compass.



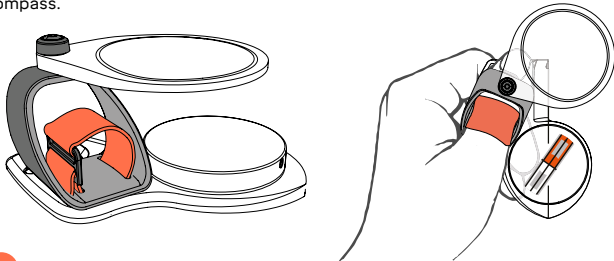
# COMPASS MANUAL THUMB COMPASSES

## COMPASS ACCESSORIES FEATURES

### THUMB COMPASSES

#### ZOOM MAGNIFIER

For more detailed map reading, you can get the SILVA Zoom magnifier as an optional accessory. The Zoom is easily attached/detached to the baseplate of your thumb compass.



#### SCALE CARD

The SILVA scale card is a great complement when you need to do detailed map work, measurements and preparations, but you don't have a baseplate compass with the scales that correspond to your map.

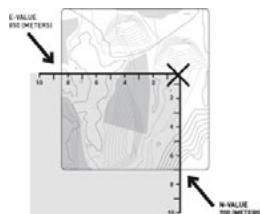


#### MAP MEASURING SCALES

A map is a reduced picture of the terrain. The determined proportion between the distances on the map and the corresponding distance on the ground is called a map scale. To obtain the corresponding distance in the field, the distance on the map must be multiplied by the divider of the scale. The most common scales are 1:10 000, 1:15 000, 1:25 000 and 1:50 000. For example, the scale 1:10 000 means that 1 cm on the map corresponds to 10 000 cm = 100m in the terrain.

#### ROMER SCALES\*\*

Use the Romer coordinate scales on the scale card to measure distance or accurately work out a six-figure grid reference that lets you determine the coordinates of a known position on the map (or to determine the position of known coordinates on the map).



#### STENCIL HOLES

The scale card also has stencil holes for adding map symbols/markings positions on map with pen/pencil – increasing precision.

## MORE INFORMATION

### CAN I USE MY COMPASS IN ANY PART OF THE WORLD?

Most SILVA compasses are balanced for one of three magnetic zones. Using your compass in the "wrong" zone will cause the needle to tilt and may result in it getting stuck against the roof/floor of the capsule and showing an incorrect north.

SILVA's compasses are balanced in three different zones: MN (Magnetic North), ME (Magnetic Equator), MS (Magnetic South). Make sure to buy a compass for the magnetic zone you will navigate in.



### TAKE CARE OF YOUR COMPASS

A SILVA compass will, if treated carefully, be a navigation partner for many, many years. Always check that your compass is functioning properly before heading out.

- Never expose your compass to extreme temperatures (above 60°C or below -20°C) – this can deform the plastics with a leaking compass capsule as a result.
- Avoid dropping the compasses on hard surfaces and handle it with care.
- Don't store or place the compass close to strong magnetic fields such as knives, mobile phones, radio speakers, magnets etc. This can cause reversed polarity of the compass needle which will result in it pointing south instead of north.

### WARRANTY

SILVA warrants that, for a period of five (5) years, your SILVA product will be substantially free of defects in materials and workmanship under normal use. SILVA's liability under this warranty is limited to repairing or replacing the product. This limited warranty extends only to the original purchaser. If the product proves defective during the warranty period please contact the original place of purchase. Make sure to have your proof of purchase on hand when returning the product. Returns cannot be processed without the original proof of purchase. This warranty does not apply if the product has been altered, not been installed, operated, repaired, or maintained in accordance with instructions supplied by SILVA, or has been subjected to abnormal physical or electrical stress, misuse, negligence or accident. Neither does the warranty cover normal wear and tear. SILVA is not responsible for any consequences, direct or indirect, or damage resultant from use of this product. In no event will SILVA's liability exceed the amount paid by you for the product. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty is valid and may be processed only in the country of purchase.