

Silva Expedition S

Silva Expedition S Compass

USER MANUAL

Introduction

The Silva Expedition S Compass is a high-performance navigation tool designed for serious outdoor enthusiasts, including hikers, mountaineers, backpackers, and hunters. This robust and lightweight compass features a global needle, allowing for accurate use worldwide. Its design incorporates practical elements for precision map work and reliable orientation in various conditions.

Key features include easy-handling Dryflex housing, silicon rubber feet for enhanced grip on maps, night-enabling luminous markings for low-light conditions, and a magnifying lens. It also integrates map-measuring scales, a slope card for assessing terrain, and a built-in permanent adjuster for magnetic declination. The durable acrylic construction ensures high transparency and longevity.



Image: The Silva Expedition S Compass, showcasing its transparent baseplate, orange bezel, and mirror lid. The attached lanyard with measurement scales is also visible.

Setup

Before using your Silva Expedition S Compass, familiarize yourself with its components and ensure it is ready for use.

1. **Initial Inspection:** Unpack the compass and inspect it for any visible damage. Ensure the needle moves freely within the capsule.
2. **Lanyard Attachment:** The compass comes with a scale lanyard. Attach it securely to the designated hole on the compass baseplate. This lanyard is useful for carrying the compass and for measuring distances on maps.
3. **Understanding Components:**
 - **Baseplate:** The transparent acrylic plate with measuring scales.
 - **Compass Housing (Bezel):** The rotatable ring with degree markings (0-360).
 - **Magnetic Needle:** The red (North) and black (South) needle that points to magnetic north.
 - **Mirror:** Used for accurate sighting and as an angle assistant.
 - **Sighting Hole:** Allows simultaneous viewing of the compass dial and background.
 - **Declination Adjustment:** A built-in mechanism for setting magnetic declination.
 - **Slope Card:** A separate card for measuring inclination.



Image: Detailed view highlighting the rubber bezel for grip, the capsule filled with anti-static liquid for fast needle settling, and the included slope card for inclination measurement.

Operating Instructions

The Silva Expedition S Compass offers various functions for precise navigation.

1. Orienting Your Map

To orient your map, place the compass flat on the map. Align the edge of the compass with a north-south grid line on the map. Rotate the map and compass together until the red (North) end of the magnetic needle aligns with the orienting arrow inside the compass housing. Your map is now oriented to magnetic north.

2. Taking a Bearing (Direction of Travel)

1. **Point the Compass:** Hold the compass flat in front of you and point the direction of travel arrow towards your destination or the object you want to take a bearing to.

2. **Rotate the Housing:** Rotate the compass housing (bezel) until the red (North) end of the magnetic needle is inside the orienting arrow.
3. **Read the Bearing:** The bearing is indicated by the degree marking at the direction of travel arrow.

3. Using the Mirror for Sighting

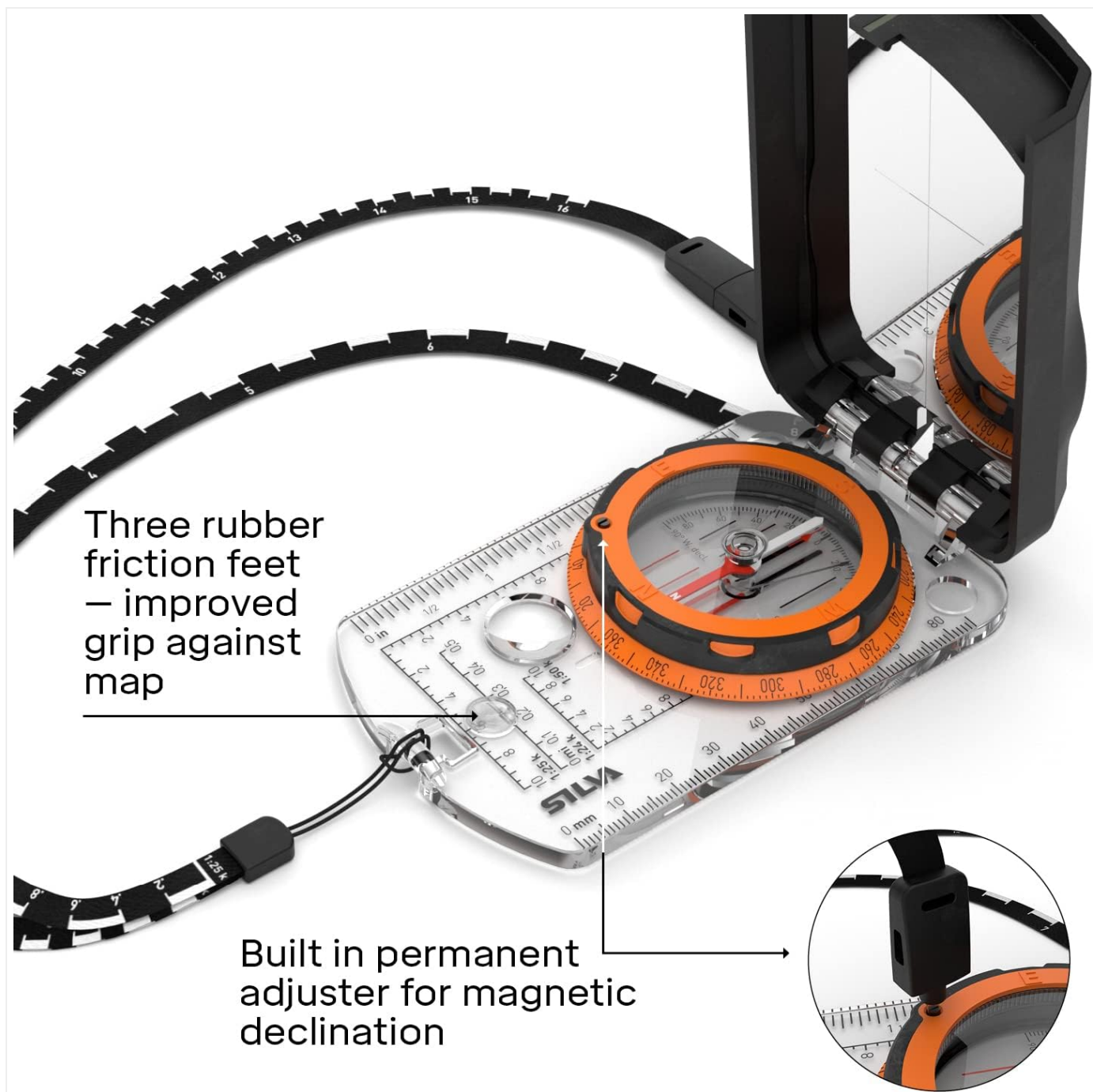
The mirror allows for more precise bearings by enabling you to simultaneously view the compass dial and the distant object. Open the mirror lid to an angle that allows you to see the compass capsule and the object in the reflection. Use the sighting hole and the cross in the mirror for alignment.



Image: The mirror of the compass, illustrating how the cross serves as an angle assistant for 45-degree angles, and the sighting hole for simultaneous viewing of the dial and background.

4. Magnetic Declination Adjustment

Magnetic declination is the angle between magnetic north (where your compass points) and true north (geographic north). This compass features a built-in permanent adjuster. Consult a local map or reliable source for the declination value of your area. Use a small tool (like the edge of the lanyard) to rotate the declination scale inside the capsule to match the local declination.



Three rubber friction feet – improved grip against map

Built in permanent adjuster for magnetic declination

Image: Close-up of the compass baseplate, showing the three rubber friction feet for improved map grip and the location of the built-in permanent adjuster for magnetic declination.

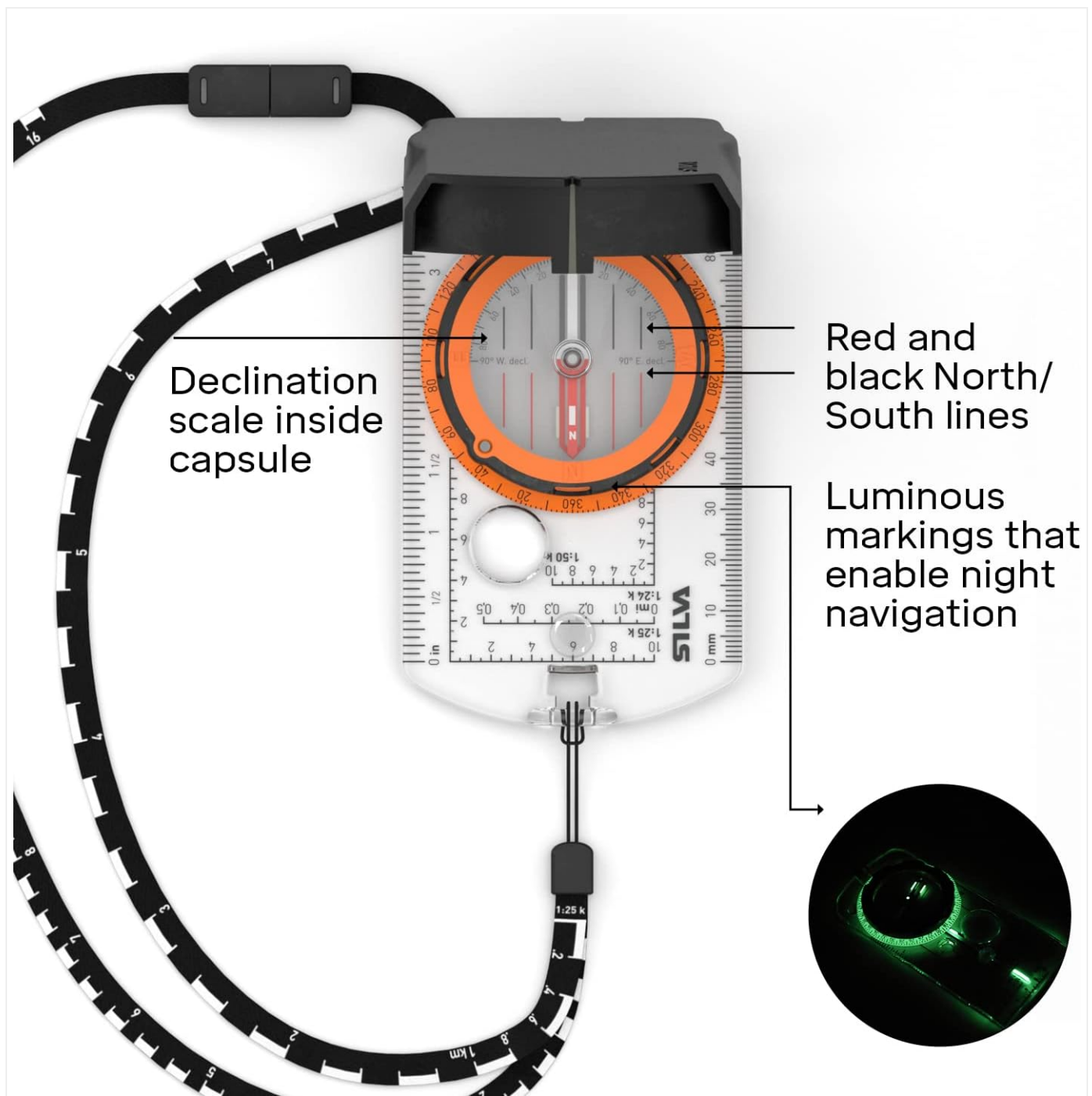


Image: Top-down view of the compass, indicating the declination scale inside the capsule, the red and black North/South lines, and the luminous markings that enable night navigation.

5. Using Map Measuring Scales

The compass baseplate includes various map measuring scales (e.g., 1:24k, 1:25k, 1:50k) to determine distances on different map types. Align the appropriate scale with your map's scale to measure distances accurately. The lanyard also features scales for quick measurements.

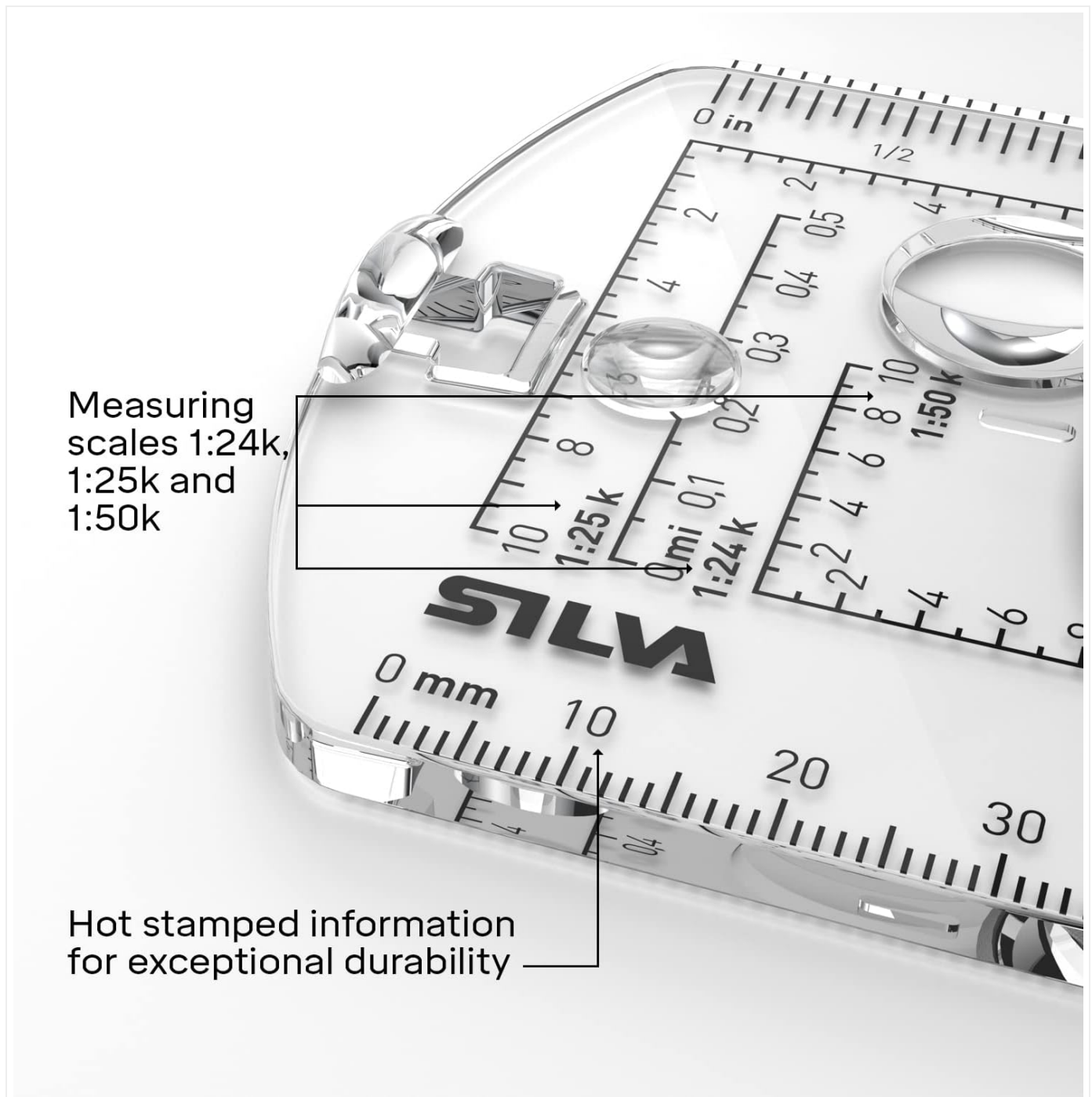


Image: Detailed view of the compass baseplate, highlighting the measuring scales for 1:24k, 1:25k, and 1:50k maps, along with hot-stamped information for durability.

6. Using the Slope Card

The included slope card helps you calculate avalanche risk and determine the steepness of terrain. Follow the instructions on the card to measure the angle of inclination.

7. Night Navigation

The compass features night-enabling luminous markings on the bezel and needle. Expose the compass to light before use in dark conditions to charge the luminous material. This allows for visibility and navigation in low-light environments.



Image: A person's hands are shown using a compass on a paper map, illustrating practical application of the navigation tool.

Maintenance

Proper care will extend the life and accuracy of your Silva Expedition S Compass.

- **Cleaning:** Clean the compass with a soft, damp cloth. Avoid abrasive cleaners or solvents, as they can damage the acrylic and markings.
- **Storage:** Store the compass in a cool, dry place away from strong magnetic fields (e.g., speakers, magnets, electronic devices) which can demagnetize the needle or affect its accuracy.
- **Handling:** While robust, avoid dropping the compass or subjecting it to extreme impacts, which could damage the capsule or needle.
- **Temperature:** Avoid exposing the compass to extreme temperatures for prolonged periods, as this can affect the liquid inside the capsule.

Safety cord with scales for
measure distance on map



Durable acrylic
– high transparency

Image: Side view of the compass, highlighting the durable acrylic material for high transparency and the safety cord with integrated scales for measuring distances on a map.

Troubleshooting

If you encounter issues with your compass, consider the following:

- **Needle Not Settling:** Ensure you are holding the compass flat and steady. Strong magnetic interference from nearby objects (e.g., metal objects, electronics, power lines) can affect the needle. Move to an open area away from such interference.
- **Inaccurate Readings:**
 - Verify that you have correctly adjusted for magnetic declination for your current location.
 - Ensure no magnetic objects are near the compass.
 - Check if the compass is held level.
- **Bubble in Capsule:** A small bubble may appear in the liquid-filled capsule due to temperature changes. This is normal and generally does not affect accuracy. If the bubble is very large or persistent, contact customer support.

Specifications

Feature	Detail
Brand	Silva
Model Name	Expedition S
Part Number	451066
Color	Transparent
Material	Acrylic
Item Weight	0.09 Kilograms (86 grams)
Product Dimensions (LxW)	4.25" x 2.5" (10.8 cm x 6.35 cm)
Map Scales	1:50k, 1:25k, 1:24k
Special Feature	Lightweight, Luminous Markings, Global Needle, Slope Card, Declination Adjuster
Included Components	Compass, Scale Lanyard, Slope Card

Warranty and Support

Silva products are manufactured to high quality standards. For information regarding warranty coverage, please refer to the warranty documentation included with your purchase or visit the official Silva website. For technical support or inquiries, please contact Silva customer service through their official channels.

For more information, visit the [Silva Store on Amazon](#).

