Vector Optics SCRF-S20

Vector Optics SCRF-S20 Paragon 6x21 GenIII BDC Rangefinder User Manual

Model: SCRF-S20

1. Introduction

This manual provides detailed instructions for the safe and effective use of your Vector Optics SCRF-S20 Paragon 6x21 GenIII BDC Rangefinder. Please read this manual thoroughly before operation and retain it for future reference.

The SCRF-S20 is a very compact rangefinder featuring Bluetooth connectivity, an OLED display, and the capability to provide necessary click adjustments for your scope via a dedicated application. It is designed for precision and ease of use in various outdoor activities.

2. Safety Information

- **Laser Safety:** This device uses a Class 1 laser (905 Nm). Do not look directly into the laser emitter or point it at others. Avoid aiming at highly reflective surfaces that could redirect the laser into your eyes.
- **Battery Safety:** Use only CR2 batteries. Ensure correct polarity when inserting. Do not mix old and new batteries or different types. Dispose of batteries properly.
- **Environmental Protection:** The device is IPX4 waterproof, meaning it is resistant to splashing water. Do not submerge the device in water. Avoid extreme temperatures and direct sunlight for prolonged periods.
- **Handling:** Handle the device with care. Avoid dropping or subjecting it to severe impacts.

3. Package Contents

Verify that all items are present in your package:

- Vector Optics SCRF-S20 Paragon 6x21 GenIII BDC Rangefinder
- Cleaning Cloth
- Lanyard
- Nylon Bag
- Instruction Manual (this document)



Image 3.1: The Vector Optics SCRF-S20 Rangefinder shown with its included accessories: a user manual, a protective nylon case, and a wrist lanyard.

4. Product Overview

Familiarize yourself with the components of your rangefinder:



Image 4.1: Side view of the Vector Optics SCRF-S20 Rangefinder, highlighting its compact design and rubberized grip. The Vector Optics logo is visible on the side.



Image 4.2: Another side view of the rangefinder, showing the 'M' (Mode) button, which is used for cycling through different measurement modes and settings.



Image 4.3: Front view of the rangefinder, clearly displaying the objective lens (top) and the laser emitter/receiver (bottom).



Image 4.4: Angled view of the rangefinder, providing a perspective of both the adjustable eyepiece and the objective lens.



Image 4.5: Bottom view of the rangefinder, showing regulatory labels and manufacturing information.

5. Setup

5.1 Battery Installation

1. Locate the battery compartment cover, usually on the side or bottom of the device.
2. Twist or slide the cover to open it.
3. Insert one CR2 battery (not included) into the compartment, ensuring the correct polarity (+/-) as indicated inside.
4. Close the battery compartment cover securely.

5.2 Initial Power-On

Press the power button (often integrated with the measurement button) to turn on the device. The OLED display should illuminate.

5.3 App Connection (Bluetooth)

The SCRF-S20 supports ballistic calculations via a smartphone application:

1. Download the **AB Synapse - SORD** application from your device's app store.
2. Ensure Bluetooth is enabled on your smartphone.
3. Turn on the rangefinder.
4. Open the AB Synapse - SORD app and follow the in-app instructions to pair your rangefinder. The app utilizes the Ultralite Ammo Database for ballistic data.

6. Operating Instructions

6.1 Basic Distance Measurement

1. Look through the eyepiece and aim the reticle at your desired target.
2. Press the measurement button (usually the main power button) once. The distance to the target will be displayed on the OLED screen within approximately 0.25 seconds.

6.2 Scan Mode

For continuous measurement of multiple targets or moving objects:

1. Press and hold the measurement button.
2. Pan the rangefinder across different targets. The display will continuously update with new distance readings.
3. Release the button to exit scan mode.

6.3 Angle Measurement

The device automatically measures and displays the angle to the target, ranging from -70° to 70°.

6.4 Ballistic Data Integration

Once connected to the AB Synapse - SORD app, the rangefinder can transmit distance and angle data to the app. The app will then calculate and provide precise ballistic solutions, including necessary scope click adjustments, based on your firearm and ammunition profile stored in the Ultralite Ammo Database.

6.5 Automatic Shut-off

To conserve battery life, the rangefinder will automatically shut off after 20 seconds of inactivity.

7. Maintenance

7.1 Cleaning

- **Lenses:** Use the provided cleaning cloth or a soft, lint-free cloth specifically designed for optical lenses. Gently wipe the lenses to remove dust or smudges. Do not use abrasive materials, harsh chemicals, or solvents, as these can damage the lens coatings.
- **Body:** Wipe the body of the rangefinder with a soft, damp cloth. Avoid getting water into any openings.

7.2 Storage

- Store the rangefinder in its protective nylon bag when not in use.
- Keep the device in a cool, dry place, away from direct sunlight and extreme temperatures.
- If storing for an extended period, remove the battery to prevent leakage and potential damage to the device.

8. Troubleshooting

- **No Display/Power:**
  - Check battery installation. Ensure the CR2 battery is inserted with correct polarity.
  - Replace with a fresh CR2 battery.

- **Inaccurate Readings or No Measurement:**
  - Ensure a clear line of sight to the target. Obstructions like branches or heavy fog can interfere.
  - Avoid measuring through glass, which can cause inaccurate readings.
  - Ensure the objective lens and laser emitter/receiver are clean and free from smudges or debris.
- **Bluetooth Connectivity Issues:**
  - Ensure Bluetooth is enabled on your smartphone and the rangefinder is powered on.
  - Make sure the AB Synapse - SORD app is updated to the latest version.
  - Try restarting both the rangefinder and your smartphone.
  - Ensure the rangefinder is within the Bluetooth range of your smartphone.
- **Display is Dim or Flickering:**
  - This may indicate a low battery. Replace the CR2 battery.

9. Specifications

Feature	Specification
Model Number	SCRF-S20
Magnification	6x
Objective Diameter	25 mm
Exit Pupil	14 mm
Measurement Range	5-1850 meters
Angle Range	-70° to 70°
Field of View	7°
Reticle Size	12 MOA
Scan Mode	Yes
Measurement Time	0.25 seconds
Laser Type	905 Nm (Class 1)
Distance Precision	± 1 m at 1000 m
Angle Precision	1°
Dimensions (L x W x H)	105 x 76 x 42 mm (4.13 x 2.99 x 1.65 inches)
Weight (without battery)	140 g (4.94 oz)
Housing Material	Plastic with rubber coating
Battery Required	CR2 (not included)
App Support	AB Synapse - SORD (Ultralite Ammo Database Version)
Max Distance (Reflective Target)	1850 m

Feature	Specification
Max Distance (Buildings)	1650 m
Max Distance (Large Trees)	1200 m
Max Distance (Animals / Deer)	825 m
Max Distance (Golf Flag)	460 m
Waterproof Rating	IPX4
Automatic Shut-off	After 20 seconds of inactivity
Color	Black
Compatible Devices	Firearms
Sport Application	Hunting, Climbing, Golf, Shooting, Sailing

10. Warranty and Support

Vector Optics products are engineered for reliability and performance. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Vector Optics website.

For technical support, service inquiries, or any questions regarding your SCRF-S20 rangefinder, please contact Vector Optics customer service. Customers in Germany benefit from dedicated German support and customer service.

Please retain your proof of purchase for warranty claims.