

Spectra Precision HV302

Spectra Precision HV302-1 Rotary Laser Level User Manual

INTRODUCTION

This manual provides detailed instructions for the safe and effective operation, setup, and maintenance of your Spectra Precision HV302-1 Rotary Laser Level. Please read this manual thoroughly before using the product to ensure optimal performance and safety.

SAFETY INFORMATION

WARNING: LASER RADIATION

The Spectra Precision HV302-1 emits visible laser radiation. Avoid direct eye exposure to the laser beam. Do not stare into the beam. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

- Always operate the laser in a safe manner.
- Do not attempt to disassemble or modify the laser unit.
- Ensure the work area is clear of obstructions and personnel are aware of laser operation.
- Store the laser in its case when not in use to prevent damage.



Image: A close-up of the side of the Spectra Precision HV302-1 rotary laser level, showing a yellow warning label with a laser symbol and text indicating "LASER LIGHT DO NOT STARE INTO BEAM" and "CLASS 2 LASER PRODUCT". This label provides critical safety information regarding laser radiation.

PACKAGE CONTENTS

The Spectra Precision HV302-1 Interior Package includes the following items:

- Spectra Precision HV302 Rotary Laser Level
- RC402N Remote Control
- Wall Mount
- Magnetic Target Plate
- Small Carrying Case
- NiMH Batteries

PRODUCT OVERVIEW

Spectra Precision HV302 Rotary Laser Level



Image: A closer view of the control panel on the Spectra Precision HV302-1 rotary laser level. It shows buttons for rotation speed, scan mode, manual mode, and power on/off, along with directional arrows for beam positioning. This highlights the user interface of the laser level.

- **Power Button:** Turns the unit on and off.
- **Rotation Speed Control:** Adjusts the rotation speed of the laser beam.
- **Scan Mode:** Creates a visible line segment instead of a full rotation.
- **Manual Mode:** Disables self-leveling for setting slopes.
- **Directional Arrows:** Used to position the laser beam in scan mode or manual mode.
- **Hi/Man Button:** Toggles between high-speed rotation and manual mode.

RC402N Remote Control



Image: The Spectra Precision RC402N remote control. It is yellow with a gray control panel, featuring an LCD screen at the top and various buttons for controlling the laser level functions remotely. This image shows the remote control included in the package.

The RC402N remote control provides access to all laser functions from up to 330 feet away. It features a backlit LCD with leveling indicators.

Remote Control Features:

- **M (Mode) Button:** Cycles through various operating modes.
- **E (Enter) Button:** Confirms selections.
- **Directional Arrows:** Control beam position and menu navigation.
- **On/Off Button:** Powers the laser on or off remotely.
- **LCD Display:** Shows current settings and leveling status.

Wall Mount



Image: A silver-colored wall mount accessory for the laser level. It features an adjustable vertical slide with a measurement scale and a platform for securing the laser. This mount allows for precise positioning of the laser on vertical surfaces.

The included wall mount allows for secure and adjustable positioning of the HV302 laser level on vertical surfaces, facilitating accurate vertical alignment and plumb applications.

SETUP

1. Battery Installation

1. Locate the battery compartment on the HV302 laser unit.
2. Open the compartment cover.
3. Insert the NiMH batteries, ensuring correct polarity (+/-).

4. Close the battery compartment cover securely.
5. For the RC402N remote control, open its battery compartment and insert the required batteries (typically AA or AAA, refer to remote markings if present).

2. Mounting the Laser

The HV302 can be used on a tripod, flat surface, or with the included wall mount.

- **Tripod Mounting:** Attach the laser to a standard surveying tripod using the threaded mount on the base of the unit.
- **Wall Mount:** Secure the wall mount to a vertical surface using appropriate fasteners. Attach the HV302 to the wall mount platform. Adjust the height as needed.
- **Flat Surface:** Place the laser on a stable, level surface.

OPERATION

1. Powering On and Self-Leveling

1. Place the HV302 on a stable surface or mount it securely.
2. Press the **ON/OFF** button on the laser unit or the RC402N remote control.
3. The laser will begin its automatic self-leveling process. The laser beam will start rotating once leveled.
4. If the laser is outside its self-leveling range (± 5 degrees), an indicator light will flash, and the laser may stop rotating. Adjust the laser's position until it levels.

2. Horizontal Applications

For horizontal leveling, ensure the laser is placed horizontally. The rotating beam will provide a continuous 360-degree horizontal reference plane.

- Use the magnetic target plate to easily detect the laser beam at various distances.
- Adjust the rotation speed using the control panel or remote for optimal visibility.

3. Vertical Applications

To use the HV302 for vertical alignment, place the unit on its side or use the wall mount to orient it vertically. The laser will project a vertical plane.

- The split beam feature allows for plumb point transfer.
- Use the directional arrows on the control panel or remote to precisely position the vertical beam.

4. Plumb Applications

The HV302 can project a plumb-up and plumb-down beam simultaneously, useful for transferring points between floors or for vertical alignment.

5. Using the RC402N Remote Control

The remote control allows for convenient adjustment of laser functions from a distance.

- **Power On/Off:** Use the dedicated button.
- **Rotation Speed:** Adjust as needed.
- **Scan Mode:** Activate to create a visible line segment. Use directional arrows to adjust the segment's position and length.
- **Manual Mode:** Press the 'M' button to enter manual mode for setting slopes. The laser will no longer self-level.

MAINTENANCE

- **Cleaning:** Keep the laser unit and remote control clean. Use a soft, damp cloth to wipe surfaces. Do not use harsh chemicals or abrasive cleaners.
- **Lens Care:** Gently clean the laser lens with a soft, lint-free cloth. Avoid scratching the lens.
- **Storage:** When not in use, store the HV302-1 and its accessories in the provided carrying case in a dry, temperature-controlled environment. Remove batteries if storing for extended periods to prevent leakage.
- **Calibration:** Regular calibration by an authorized service center is recommended to maintain accuracy, especially after significant impacts or prolonged use.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Laser does not power on.	Dead or incorrectly installed batteries.	Check battery polarity. Replace batteries with fresh ones.
Laser beam is not rotating or flashing.	Unit is outside self-leveling range.	Adjust the laser's position until it is within its self-leveling range (± 5 degrees).
Remote control not working.	Remote batteries are dead or range is exceeded.	Replace remote batteries. Ensure you are within 330 feet of the laser.
Inaccurate measurements.	Laser is not level or requires calibration.	Ensure the laser is self-leveled. If issues persist, contact an authorized service center for calibration.

SPECIFICATIONS

- **Model:** HV302
- **Operation Mode:** Automatic
- **Self-Leveling Range:** ± 5 degrees
- **Accuracy:** 1/16 inch per 100 feet (1.5 mm per 30 m)
- **Working Range:** Up to 2,600 feet (800 meters) with detector
- **Laser Type:** Visible, Class 2
- **Wavelength:** 630-680nm
- **Power Source:** NiMH Batteries (for HV302), specific batteries for RC402N remote
- **Material:** Alloy Steel, Metal
- **Color:** Yellow
- **Item Weight:** 15 Pounds (6.8 kg)
- **Manufacturer:** Spectra Precision

WARRANTY AND SUPPORT

Spectra Precision products are designed for durability and reliability. For information regarding warranty coverage, technical support, or service, please refer to the official Spectra Precision website or contact your authorized dealer. Keep your purchase receipt as proof of purchase.

For further assistance, visit the [Spectra Precision Store on Amazon](#).

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question