

Firecore FIR411R

Firecore FIR411R Red Laser Level Instruction Manual

Model: FIR411R

1. INTRODUCTION

Thank you for choosing the Firecore FIR411R Red Laser Level. This professional-grade, self-leveling laser tool is designed for precise measurement and alignment tasks in construction and renovation. It projects 5 lines (4 vertical, 1 horizontal) and a plumb point, offering versatility for various applications. Please read this manual thoroughly before operation to ensure safe and efficient use.

Safety Information

- **Laser Radiation:** This product is a Class 2 laser product with an output power of ≤ 1 mW. Do not stare directly into the laser beam. Avoid direct eye exposure.
- Do not disassemble the device. Repairs should only be performed by authorized service personnel.
- Keep the device out of reach of children.
- Use only specified batteries and chargers.

What's in the Box

The Firecore FIR411R package includes:

- FIR411R Laser Level
- FD20 Laser Detector
- Kit Box
- Laser Glasses
- Tripod Connector
- AC Charger



Image 1.1: Contents of the Firecore FIR411R Laser Level kit, including the laser unit, detector, glasses, charger, and case.

2. PRODUCT FEATURES

- **5-Line Projection:** Projects 4 vertical lines, 1 horizontal line, and 1 plumb point for comprehensive leveling and alignment.
- **Self-Leveling Function:** Automatically levels within its range, ensuring accuracy.
- **High Accuracy:** ± 0.2 mm/m precision for reliable measurements.
- **Extended Range:** Up to 50m working range with the included Firecore FD20 laser detector.
- **Rechargeable Lithium Battery:** High-capacity battery provides up to 5 hours of continuous operation.
- **360° Rotating Fine Adjustment Base:** Two micro-rotating knobs allow precise 360° adjustment during operation.
- **Multi-functional Modes:** Vertical and horizontal lines can be operated separately or together.
- **Durable Construction:** Made from ABS plastic and rubber for robust use.



Image 2.1: Front view of the Firecore FIR411R Laser Level, highlighting its 360-degree rotation capability.

3. SETUP

3.1 Battery Installation and Charging

1. Locate the battery compartment on the device.
2. Insert the provided lithium battery, ensuring correct polarity.
3. To charge, connect the AC charger to the device and plug it into a power outlet. The power indicator will show charging status.
4. A full charge supports approximately 5 hours of continuous operation with all lasers active.

5. **Important:** Do not overcharge or over-discharge the battery to prolong its lifespan. Recharge promptly when the power indicator starts flashing.

3.2 Mounting the Device

The FIR411R can be placed on a stable surface or mounted:

- **Tripod Mounting:** Use the 5/8 inch female interface on the base to attach the laser level to a compatible tripod.
- **Rotating Base:** The integrated rotating base allows for stable placement and fine angular adjustments.

3.3 Initial Power-On

Slide the main power switch to the 'ON' position. The device will initiate its self-leveling sequence. Once leveled, the laser lines will activate.

4. OPERATING INSTRUCTIONS

4.1 Self-Leveling Mode

When powered on, the FIR411R automatically enters self-leveling mode. If the device is outside its leveling range, the laser lines may flash or an audible alarm may sound. Adjust the device's position until it self-levels and the lines become stable.

4.2 Switching Laser Lines

Use the dedicated vertical and horizontal buttons on the control panel to activate or deactivate specific laser lines. You can display cross-lines, vertical lines, horizontal lines, or combinations as needed for your task.



Image 4.1: The Firecore FIR411R Laser Level in operation, projecting clear red laser lines for alignment.

4.3 Using the 360° Rotating Base

The base of the laser level features two micro-rotating knobs. These allow for precise, incremental 360-degree rotation of the laser unit without moving the entire setup, which is ideal for fine adjustments and aligning lines to specific points.

4.4 Using the FD20 Laser Detector

For outdoor use or in bright conditions where laser lines are difficult to see, use the Firecore FD20 laser detector. Turn on the detector and move it along the desired surface. The detector will indicate the position of the laser line with visual and/or audible signals, extending the working range up to 50 meters.



Image 4.2: The Firecore FIR411R Laser Level mounted on a measuring pole, demonstrating its use in a construction setting.

5. MAINTENANCE

5.1 Cleaning

- Regularly clean the laser windows and housing with a soft, damp cloth.
- Do not use abrasive cleaners or solvents, as they may damage the plastic parts or optical components.
- Ensure the device is dry before storing.

5.2 Storage

- Store the laser level in its original kit box in a cool, dry place, away from direct sunlight and extreme temperatures.

- If storing for extended periods, remove the battery to prevent leakage.

5.3 Battery Care

- Charge the lithium battery regularly, even if not in use, to maintain its health.
- Avoid fully discharging the battery frequently.

6. TROUBLESHOOTING

- **Laser lines are flashing or alarm sounds:** The device is out of its self-leveling range. Adjust its position on a more level surface.
- **Laser not turning on:** Check if the battery is charged and correctly inserted. Ensure the power switch is fully in the 'ON' position.
- **Laser lines are dim or invisible outdoors:** Use the FD20 laser detector for improved visibility and extended range. Ensure laser glasses are worn for better visibility of the red beam.
- **Inaccurate measurements:** Ensure the device is properly self-leveled. Check for any obstructions or damage to the laser windows.

If problems persist, contact Firecore customer support for assistance.

7. SPECIFICATIONS

Feature	Specification
Brand	Firecore
Model Number	FIR411R
Material	ABS Plastic, Rubber
Color	Fir411r Red Line Laser (Yellow/Black Housing)
Operating Mode	Automatic (Self-Leveling)
Laser Class	Class 2, ≤ 1 mW
Accuracy	± 0.2 mm/m
Working Range	Up to 50m with FD20 Laser Detector
Battery Type	Rechargeable Lithium Battery (1750 mAh)
Continuous Operation	Approx. 5 hours (all lasers active)
Tripod Mount	5/8 inch Female Interface
UPC	787414950106
ASIN	B07PV9P951

8. WARRANTY AND SUPPORT

Firecore products are manufactured to high-quality standards. For warranty information, please refer to the warranty card included with your product or visit the official Firecore website. If you encounter any issues or require technical assistance, please contact Firecore customer support through their official channels.