NOYAFA nf-826

NOYAFA NF-826 Underground Cable Tester Locator Instruction Manual

Circuit Tracer Metal Pipe Detector Wire Tracker Tool

1. Introduction

The NOYAFA NF-826 is a professional-grade underground cable and pipe locator designed to accurately detect and trace various types of buried or concealed lines. This instrument consists of a transmitter and a receiver, utilizing advanced technology to provide stable and reliable performance. It is an essential tool for electricians, plumbers, construction workers, and DIY enthusiasts to safely locate and maintain utility lines.

Figure 1: NOYAFA NF-826 Transmitter (right) and Receiver (left) Units.

2. Safety Information

- Always ensure power is OFF to lines before connecting the transmitter, especially when dealing with electrical cables.
- Do not use the device in explosive gas, vapor, or dust environments.
- Wear appropriate personal protective equipment (PPE) such as gloves and safety glasses.
- Keep the device dry and clean. Avoid exposure to extreme temperatures.
- Refer to local regulations and safety standards for underground utility locating.

3. Package Contents

Upon opening the package, verify that all items are present and in good condition:

- 1x NF-826 Transmitter
- 1x NF-826 Receiver

- 1x USB Charging Cable
- 1x Test Lead Set (Red and Black)
- 1x Grounding Rod
- 1x Crocodile Clamps Set
- 1x User Manual (this document)
- 1x Carry Bag

Figure 2: Contents included in the NF-826 package.

4. Product Overview

The NF-826 system comprises two main units: the Transmitter (Emitter) and the Receiver. Both units feature an LCD screen for displaying information, control buttons for various functions, and a robust design for field use.

Figure 3: Detailed view of the Transmitter and Receiver components and controls.

5. Setup and Operation

5.1. Charging the Device

Both the Transmitter and Receiver are powered by built-in Lithium-Ion batteries. Use the provided USB charging cable to charge the units. A full charge ensures optimal performance.

5.2. Connecting the Transmitter

To begin tracing, connect the transmitter to the target wire or pipe. For underground or in-wall tracing, connect one test lead to the target line and the other to the grounding rod inserted into the earth. For open circuits or specific wire identification, connect both leads to the ends of the wire.

Figure 4: Transmitter connected to a wire and a grounding rod for outdoor tracing.

5.3. Operating Modes (Receiver)

The receiver offers both Automatic and Manual modes for sensitivity adjustment:

- **Automatic Mode:** The receiver automatically adjusts sensitivity to the maximum level, suitable for quick scans and locating targets in deep environments.

- **Manual Mode:** Allows manual adjustment of sensitivity (8 levels) for precise tracking. Use this mode to narrow down the exact location after an initial scan.

Switch between modes using the 'MENU' button on the receiver. Adjust sensitivity using the up/down arrow keys.

Figure 5: Explanation of Automatic and Manual sensitivity modes on the receiver.

5.4. Tracing and Locating

Once the transmitter is connected and active, use the receiver to follow the signal. The signal strength displayed on the LCD and the audible beeping will guide you to the location of the wire or pipe.

Video 1: Demonstration of the NOYAFA NF-826 in action, showing how to trace cables and pipes.

5.4.1. Underground Wire/Pipe Tracing

Walk along the suspected path of the buried line, holding the receiver close to the ground. The signal strength will increase as you get closer to the line.

Figure 6: Using the NF-826 to detect underground pipes.

5.4.2. In-Wall Wire Tracing

For wires inside walls, hold the receiver flat against the wall and move it slowly. The signal will indicate the wire's path.

Figure 7: Tracking cables behind a wall using the receiver.

5.4.3. Breakage and Short Circuit Detection

The NF-826 can help pinpoint breaks or short circuits in a line. When a break is encountered, the signal will significantly drop or disappear. For short circuits, the signal might change characteristically.

Figure 8: Illustrates how the device indicates a broken wire by the absence of signal.

Video 2: Short demonstration of detecting a short point and a breakage point in a wire.

5.4.4. Energized and Non-Energized Wires

The device can trace both energized and non-energized wires. For energized wires, the built-in AC/DC voltmeter function can measure voltage from 12V to 400V.

Figure 9: The NF-826 is capable of tracing both live and dead wires.

Video 3: Demonstrates the AC/DC voltage testing feature of the NF-826.

6. Applications

The NF-826 is widely applicable in various scenarios:

- Locating pet fence wires.
- Tracing communication and power cables.
- Identifying water and gas pipeline paths.
- Finding fuses and safeguarding circuits.
- Locating sockets and junction boxes.
- Detecting open or short conduits under floors.

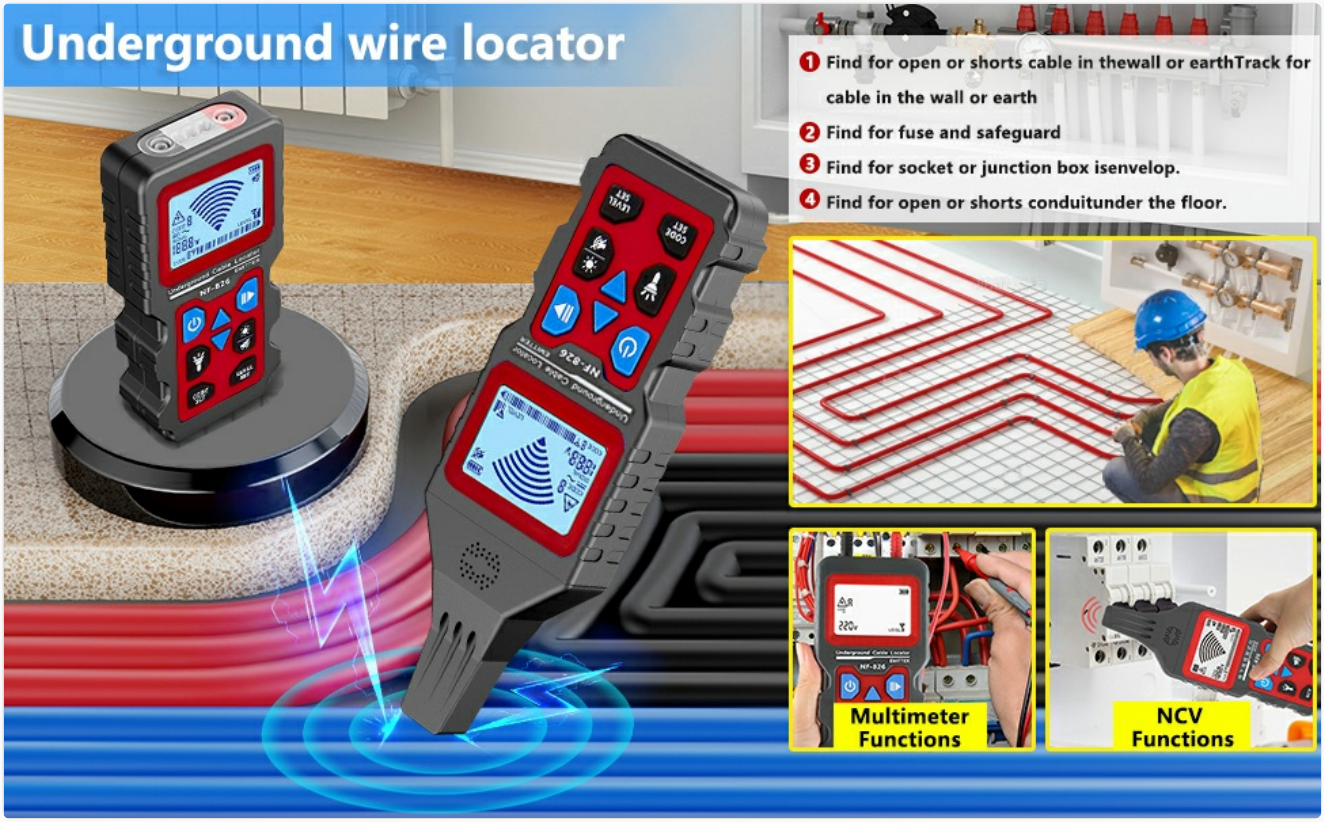

Figure 10: Various applications of the NF-826, including finding open/short cables, fuses, and junction boxes.

Figure 11: Examples of where the NF-826 can be used, such as for pet fences, metal wires, and pipes.

7. Troubleshooting

- **No Signal/Weak Signal:**
  - Ensure both transmitter and receiver are powered on and fully charged.
  - Verify proper connection of test leads to the target wire/pipe and grounding rod.
  - Adjust receiver sensitivity to a higher level.
  - Ensure the transmitter is set to the correct signal code.
  - For multi-strand wires, the product may not work effectively. It is primarily designed for single or double strand wires.
  - Signal strength can be affected by soil moisture and material density (e.g., reinforced concrete slabs may block signals).
- **Inaccurate Location:**
  - Move the receiver slowly and methodically. There might be a slight time lag in signal detection.

- Switch to Manual mode and fine-tune sensitivity for more precise localization.
- Ensure no other strong electromagnetic interference is present nearby.

- **Device Not Turning On:**
  - Check battery charge level.
  - Ensure power button is pressed and held for a few seconds.

8. Specifications

Feature	Specification
Model Number	NF-826
Brand	NOYAFA
Power Source	Battery Powered (1 Lithium Ion battery included)
Item Weight	2.1 Pounds
Color	Red, Black
AC/DC Voltmeter Function	12V to 400V
Receiver Sensitivity	Adjustable (8 levels)
Automatic Shutdown	Yes (within 10 minutes)
Flashlight Function	Yes
Backlight Function	Yes
Mute Function	Yes

9. Maintenance

- Clean the device regularly with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Store the device in its carry bag in a cool, dry place when not in use.
- Ensure the battery is charged periodically, even if the device is not in active use, to maintain battery health.
- Inspect test leads and connectors for any damage before each use.

10. Warranty and Support

For warranty information, technical support, or service inquiries, please contact NOYAFA customer service through their official website or the retailer from whom you purchased the product. Keep your purchase receipt as proof of purchase.