NOYAFA NF-824

NOYAFA NF-824 Rechargeable Circuit Breaker Finder and GFCI Outlet Tester User Manual

Model: NF-824

1. Introduction

The NOYAFA NF-824 is a versatile and essential tool designed for electrical professionals, home maintenance workers, and DIY enthusiasts. It accurately identifies circuit breakers on energized 90-230V AC electrical systems, performs GFCI outlet tests, and detects non-contact voltage (NCV). Featuring an HD LCD screen with signal strength display and adjustable sensitivity, this device simplifies electrical troubleshooting and enhances safety.

This manual provides detailed instructions for the safe and effective use of your NF-824 Circuit Breaker Finder and GFCI Outlet Tester.

2. Safety Information

Always prioritize safety when working with electrical systems. Failure to follow these safety guidelines may result in electric shock, fire, or personal injury.

- Read and understand all instructions before using the device.
- Do not use the device if it appears damaged or is not functioning correctly.
- Ensure the electrical system is within the specified voltage range (90-230V AC) before testing.
- Always wear appropriate personal protective equipment (PPE), such as safety glasses and insulated gloves, when working with electricity.
- Do not attempt to open or modify the device. Refer all servicing to qualified personnel.
- Keep the device away from water and moisture.
- Use caution when testing live circuits. Avoid touching exposed wires or terminals.
- The NCV function is for indication only; always verify voltage with a contact voltage tester before touching wires.
- Do not rely solely on this device for critical safety decisions. Always follow local electrical codes and safety practices.

3. Package Contents

Verify that all items are present in your package:

- 1x NF-824 Circuit Breaker Finder (Transmitter and Receiver)
- 1x 3-prong to 2-prong adapter
- 1x Light socket adapter
- 1x Alligator clip adapter
- 1x Type-C charging cable
- 1x User Manual
- 1x Carrying Case

Figure 1: Complete accessory kit and carrying case for the NF-824.

4. Product Overview

4.1. Transmitter (Outlet Tester)

- **Test Plug:** Connects to standard electrical outlets.
- **Master Control Screen:** LCD display showing voltage, wiring status, and GFCI trip time.
- **Power Button:** Turns the transmitter on/off.
- **HOLD Button:** Freezes the current display reading.
- **GFCI Button:** Initiates a GFCI test.
- **Status Indicator LED:** Red/Green light indicating wiring faults.
- **Type-C Charging Port:** For recharging the internal battery.

Figure 2: Transmitter (Outlet Tester) in use, showing correct wiring and voltage.

4.2. Receiver (Breaker Finder)

- **NCV Indicator Light:** Flashes when non-contact voltage is detected.
- **Master Control Screen:** LCD display showing signal strength and NCV status.
- **Sensitivity Switch:** Adjusts the detection level (7 levels).
- **Power Button:** Turns the receiver on/off.
- **LED Light:** Built-in flashlight for dark environments.
- **Type-C Charging Port:** For recharging the internal battery.

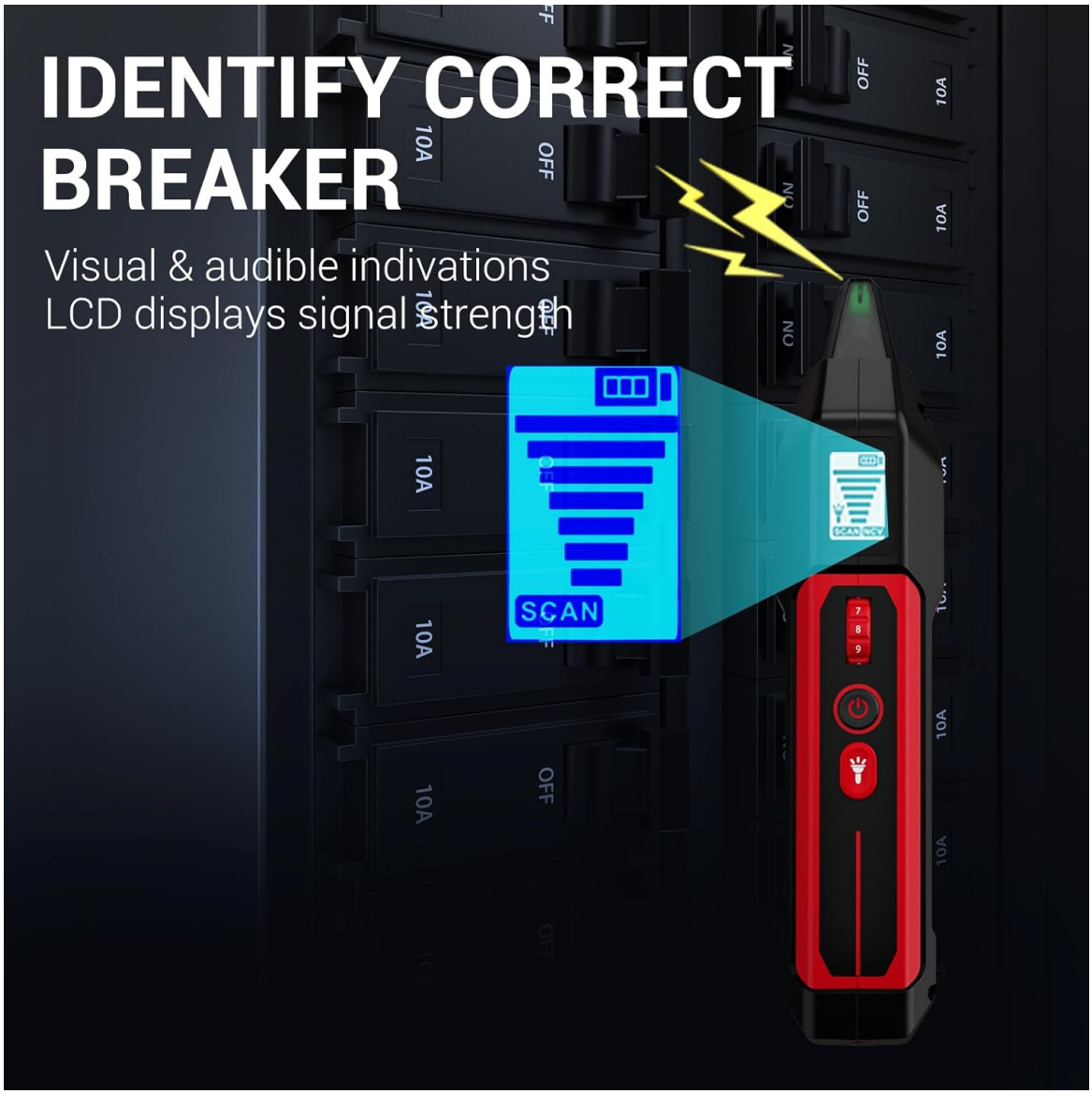

Figure 3: Receiver scanning a circuit breaker panel.

5. Setup

5.1. Initial Charging

Both the transmitter and receiver are equipped with built-in 3.7V lithium batteries. Before first use, fully charge both units using the provided Type-C charging cable. A full charge typically takes a few hours. The battery indicator on the LCD screen will show charging status.

Figure 4: Charging the NF-824 units via Type-C.

5.2. Attaching Adapters (If Needed)

Depending on your testing requirements, attach the appropriate adapter to the transmitter:

- **3-prong to 2-prong adapter:** For testing older 2-prong outlets.
- **Light socket adapter:** For testing light bulb sockets.
- **Alligator clip adapter:** For direct connection to wires or terminals (use with extreme caution).

6. Operating Instructions

6.1. Circuit Breaker Finding

1. **Plug in the Transmitter:** Insert the NF-824 transmitter into the electrical outlet or fixture you wish to trace. Ensure it is securely connected. The transmitter's LCD will display the voltage and wiring status.
2. **Activate the Receiver:** Press and hold the power button on the receiver for a few seconds to turn it on. The receiver will enter "SCAN" mode.
3. **Adjust Sensitivity:** Use the sensitivity switch on the side of the receiver to set the desired

detection level. Start with a lower sensitivity and increase if needed.

4. **Scan the Breaker Panel:** Slowly move the tip of the receiver along the circuit breakers in the electrical panel. Maintain a consistent speed and distance from each breaker.
5. **Identify the Breaker:** The receiver will provide visual (flashing light on the tip, signal strength on LCD) and audible (beeping) indications when it detects the correct circuit breaker. The strongest and most consistent signal indicates the target breaker.
6. **Verify:** Once identified, turn off the suspected breaker and check if the power to the original outlet/fixture is cut.

Figure 5: Receiver displaying signal strength while scanning.

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Video 1: Demonstration of the NOYAFA NF-824 Circuit Breaker Finder in action, showing how to identify the correct breaker in a panel.

6.2. GFCI Outlet Testing

1. **Plug in the Transmitter:** Insert the transmitter into a GFCI-protected outlet.
2. **Check Wiring Status:** Observe the LCD display for the initial wiring status (e.g., "CORRECT").
3. **Perform GFCI Test:** Press the "GFCI" button on the transmitter. The GFCI outlet should trip, cutting power to the outlet. The transmitter's display will show the trip time.
4. **Reset GFCI:** Reset the GFCI outlet by pressing its reset button.

Note: If the GFCI does not trip, it may be faulty and should be inspected by a qualified electrician.

6.3. Non-Contact Voltage (NCV) Testing

1. **Activate NCV:** The receiver automatically enters NCV mode when powered on.
2. **Scan for Voltage:** Move the tip of the receiver near electrical wires, outlets, or devices.
3. **Detect Voltage:** If AC voltage is present, the NCV indicator light on the receiver's tip will flash, and the LCD will show a signal strength bar. The intensity of the light and the number of bars indicate the strength of the detected voltage.

Figure 6: Receiver performing an NCV test on a cable.

6.4. Wiring Condition Detection

When the transmitter is plugged into an outlet, its LCD screen provides clear visual feedback on the wiring condition. The red/green indicator lights, combined with details on the large screen, can accurately diagnose 6 common wiring faults:

- Correct Wiring
- Open Ground
- Open Neutral
- Open Hot
- Hot/Neutral Reversed
- Hot/Ground Reversed

Figure 7: Transmitter displaying different wiring fault conditions.

7. Maintenance

- **Cleaning:** Wipe the device with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in its carrying case in a cool, dry place when not in use.
- **Battery Care:** Recharge the batteries regularly, even if the device is not used frequently, to maintain battery health.
- **Inspection:** Periodically inspect the device and accessories for any signs of damage.

8. Troubleshooting

- **No Power on Device:** Ensure the device is fully charged. Press and hold the power button for a few seconds.
- **Inaccurate Breaker Identification:**
  - Adjust the receiver's sensitivity.
  - Ensure the transmitter is securely plugged into the circuit being traced.
  - Scan the breakers slowly and consistently.
  - Minimize interference from other electrical devices.
- **GFCI Test Fails:**
  - Ensure the outlet is indeed GFCI protected.
  - If the GFCI does not trip, the outlet or its wiring may be faulty. Consult a qualified electrician.
- **NCV Not Detecting Voltage:**
  - Ensure the receiver is powered on and in NCV mode.
  - Verify that the circuit is live.
  - Adjust sensitivity if necessary.

9. Specifications

Feature	Specification
Model No.	NF-824
Charging Port	Type-C USB (5V)
Auto Off	30min
Low Power Alert	Yes
Outlet Tester Screen	Segment Code LCD
Outlet Tester Plug Type	CN, US, EU
Outlet Tester Battery	3.7V 390mAh Lithium
Outlet Tester Max Operating Current	<50mA
Outlet Tester Charging Current	500mA
Outlet Tester Standby Current	≤10uA
Receiver Product Size	60x38.5x132.5 mm
Receiver Screen	Segment Code LCD
Receiver Sensitivity Adjustment	7 Levels
Receiver NCV Range	≥ AC 90 V
Receiver Signal Strength Indicator	7 Gears
Receiver LED Light	Yes
Receiver Battery	3.7V 700mAh Lithium
Receiver Max Operating Current	<100mA
Receiver Charging Current	700mA
Receiver Standby Current	≤10uA

10. Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the product packaging or contact NOYAFA customer service directly. Keep your purchase receipt as proof of purchase.