NOYAFA NF-8508

NOYAFA NF-8508 Network Cable Tester User Manual

Brand: NOYAFA | Model: NF-8508

Introduction

The NOYAFA NF-8508 is a professional multi-functional network cable tester designed for comprehensive network diagnostics and maintenance. It combines nine essential functions into one compact device, making it an indispensable tool for network engineers, IT professionals, and equipment maintenance personnel. This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your NF-8508 tester.

Key Features

- **Multi-Functionality:** Integrates cable continuity test, cable scanning, port flicker, length measurement, PoE power test, optical power meter, VFL fault location, and NCV function.
- **QC Test & Automatic Scanning:** Accurately identifies connection status for RJ11/RJ45 network cables (Cat5, Cat5e, Cat6, Cat6a, UTP/STP).
- **PoE Test & Port Flashing:** Detects power polarity, voltage, and supply status of PoE switches (supports 10M/100M/1000M modes, max 60VDC). Quickly identifies port operating speed and status.
- **Optical Power Meter (OPM):** Supports 7 wavelengths (850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm) with a power detection range of -70 dBm to +10 dBm. Supports FC/SC/ST interfaces.
- **Visual Fault Locator (VFL):** 10mW output power at 650nm wavelength for efficient identification of fiber breaks, poor contacts, bends, or cracks.
- **Cable Length Measurement:** Measures cable length from 2.5m to 200m with an accuracy of ±1.6m.
- **User-Friendly Design:** Features a full HD color large screen for convenient monitoring, non-slip design for comfortable grip, and an LED flashlight for low-light environments.
- **Rechargeable Battery:** Equipped with a 3.7V 1500mAh polymer lithium battery, rechargeable via USB-C.

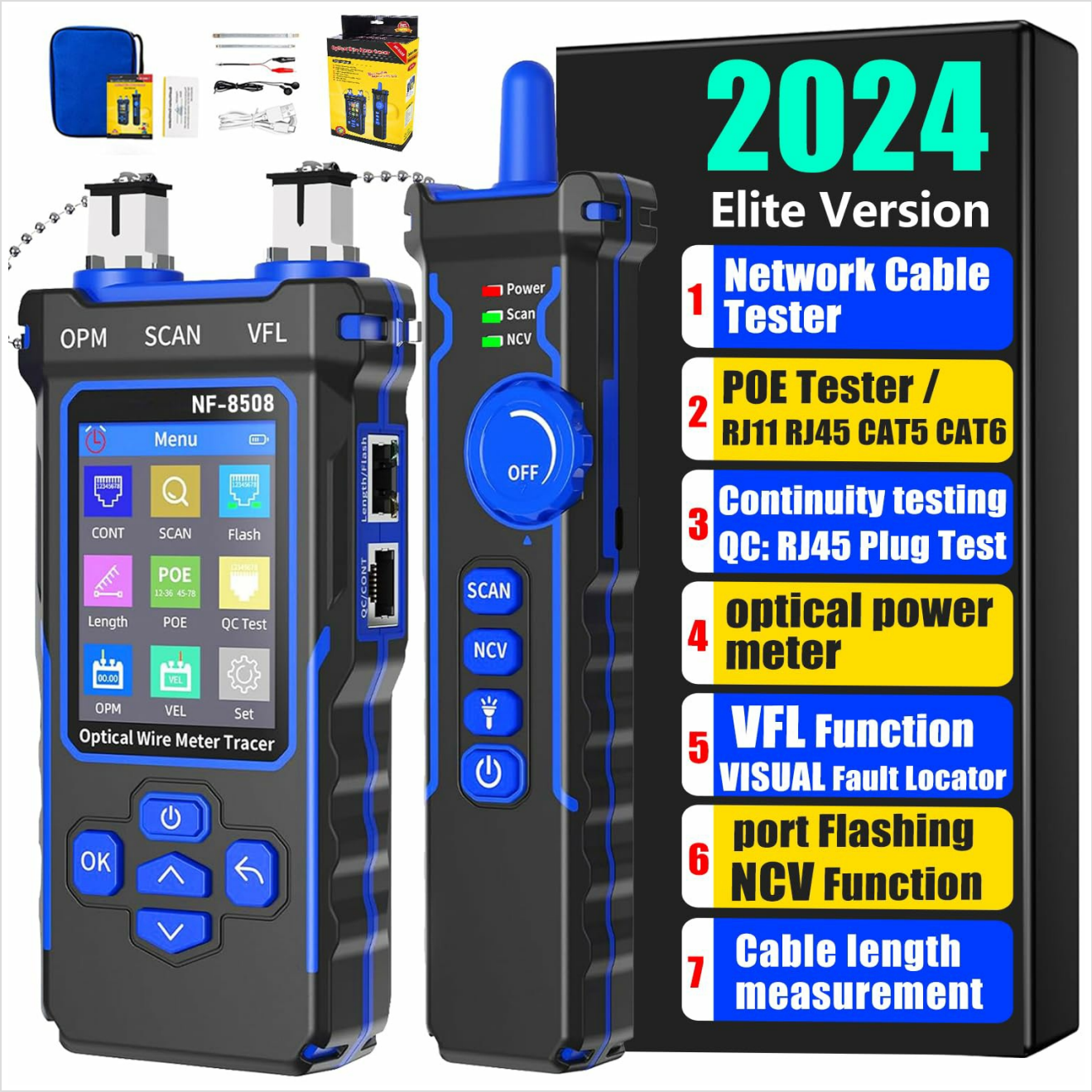

Figure 1: Main product view of the NOYAFA NF-8508 Network Cable Tester and its remote unit, highlighting its multi-functionality including network cable testing, PoE testing, continuity testing, optical power meter, VFL, port flashing, NCV, and cable length measurement.

Your browser does not support the video tag.

Video 1: This video provides an overview of the NOYAFA NF-8508 Network Cable Tester, demonstrating its key features such as optical power meter, VFL, wire mapping, QC test, length test, and port flash. It highlights the full HD color screen and non-slip design.

Setup

Package Contents

Before use, ensure all components are present:

- NF-8508 Transmitter Unit
- NF-8508 Receiver Unit
- RJ11 Adapter Line
- RJ45 Adapter Line

- Cable Clip Adapters
- USB-C Charging Cable
- Earphone
- User Manual (this document)

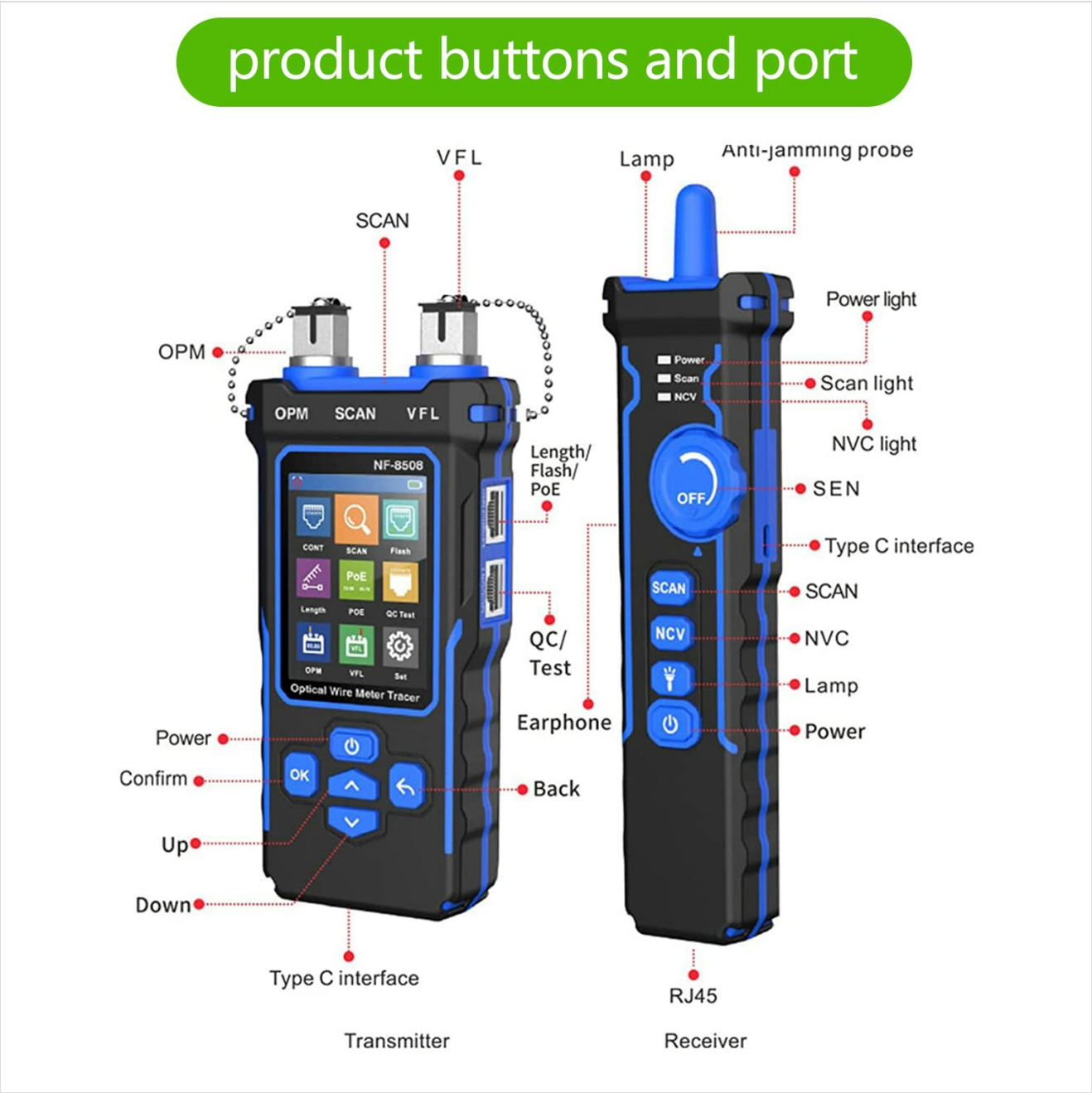

Figure 2: Diagram labeling all buttons and ports on both the main transmitter unit and the receiver unit of the NF-8508.

Charging the Device

The NF-8508 comes with a built-in rechargeable lithium battery. Before first use, fully charge both the transmitter and receiver units using the provided USB-C charging cable and a compatible USB power adapter (not included). The battery indicator on the screen will show charging status.

Powering On/Off

Press and hold the power button (**U** icon) on both the transmitter and receiver units to power them on or off. The screen will illuminate upon power-on.

Operating Instructions

The NF-8508 features a user-friendly interface with a main menu for selecting different functions. Use the directional buttons (Up, Down, Left, Right) and the OK button to navigate and confirm selections.

1. Cable Continuity Test (CONT / QC Test)

This function verifies the correct wiring sequence and continuity of RJ11 and RJ45 cables.

1. Connect one end of the RJ45 or RJ11 cable to the 'RJ45' or 'RJ11' port on the transmitter unit.
2. Connect the other end of the cable to the corresponding port on the receiver unit.
3. Select 'CONT' or 'QC Test' from the main menu on the transmitter.
4. Press 'OK' to start the test. The screen will display the wiring status for each pin. A green checkmark indicates correct continuity, while a red 'X' or missing line indicates a fault.

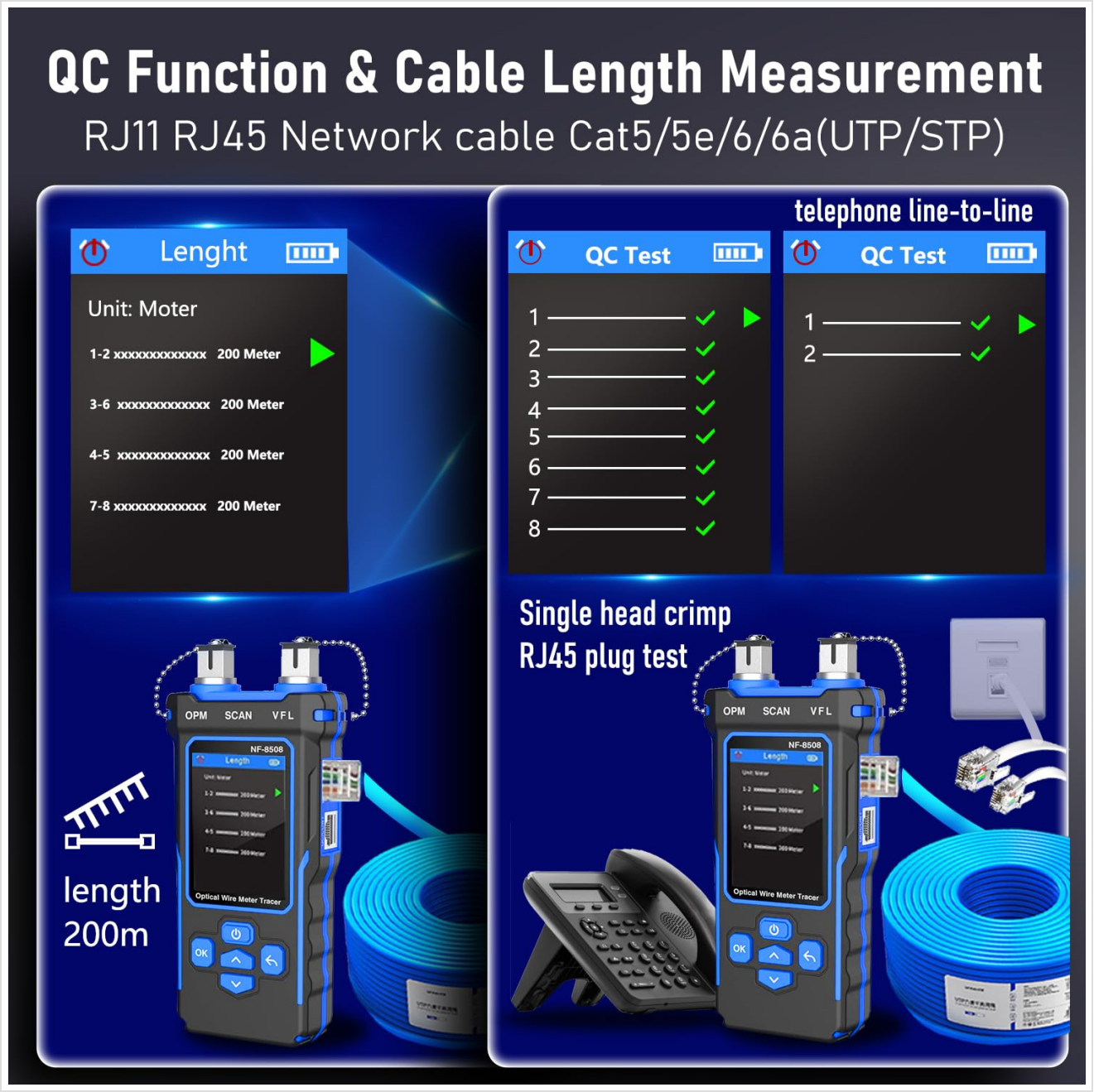

Figure 3: Display of the QC Function and Cable Length Measurement, showing the tester's screen with cable length readings (up to 200m) and continuity test results for RJ11/RJ45 cables.

2. Cable Scanning (SCAN)

Used to trace and locate specific cables within a bundle or wall.

1. Connect the cable to be traced to the 'SCAN' port of the transmitter unit.
2. Select 'SCAN' from the main menu. You can choose between 'Digital Mode' or 'Analog Mode' based on your preference and environment.
3. Use the receiver unit to scan the cables. The receiver will emit an audible tone, which becomes louder as it approaches the target cable.

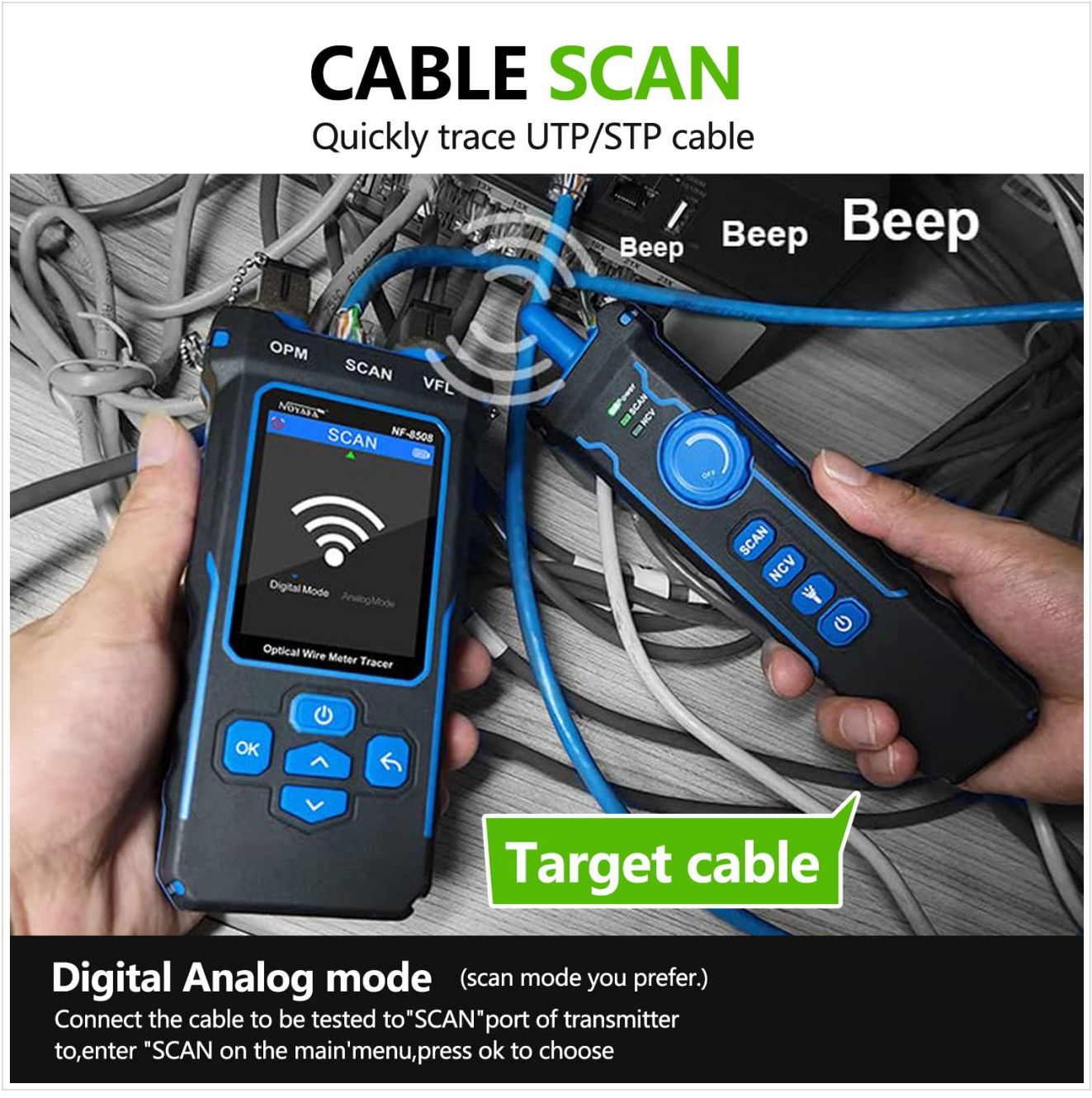

Figure 4: Illustration of the cable scan function, showing the main tester unit and the remote unit being used to trace a UTP/STP cable, with "Beep" sounds indicating detection.

3. Port Flicker (FLASH)

Helps identify the port on a network switch or router to which a cable is connected by making the port's indicator light flash.

1. Connect the RJ45 cable to the 'RJ45' port on the transmitter unit.
2. Connect the other end of the cable to a port on the network switch.
3. Select 'Flash' from the main menu. The transmitter will send a signal that causes the connected switch port's LED to blink, allowing for easy identification.

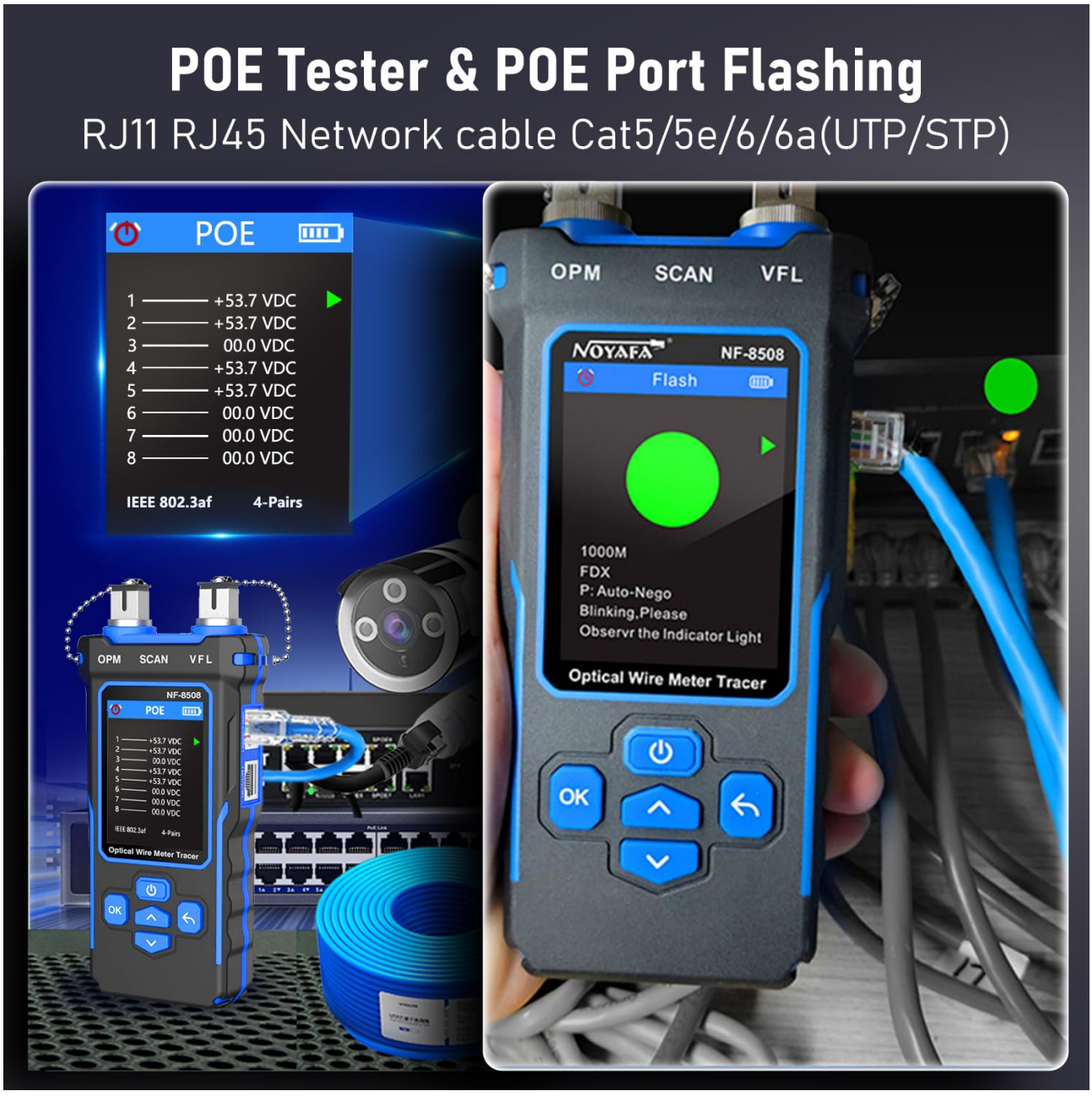

Figure 5: Image illustrating the PoE Tester and Port Flashing functions, showing the tester connected to a network switch, displaying PoE voltage and pinout, and indicating port activity.

4. Length Measurement (LENGTH)

Measures the length of an Ethernet cable.

1. Connect one end of the RJ45 cable to the 'RJ45' port on the transmitter unit. The receiver unit is not needed for this function.
2. Select 'Length' from the main menu.
3. Press 'OK' to initiate the measurement. The screen will display the cable length in meters.

5. PoE Power Test (POE)

Tests Power over Ethernet (PoE) voltage and polarity.

1. Connect the RJ45 cable from the PoE source (e.g., PoE switch) to the 'RJ45' port on the transmitter unit.
2. Select 'POE' from the main menu.
3. The screen will display the PoE voltage, polarity, and standard (e.g., IEEE 802.3af/at).

Your browser does not support the video tag.

Video 2: This video demonstrates the on-line function, PoE test, and cable length measurement capabilities of the NOYAFA NF-8508 Network Cable Tester, showing practical application in a network environment.

6. Optical Power Meter (OPM)

Measures the power of optical fiber signals.

1. Connect the optical fiber to the 'OPM' port on the transmitter unit. Ensure the correct adapter (FC/SC/ST) is used.
2. Select 'OPM' from the main menu.
3. The screen will display the optical power in dBm for the selected wavelength. You can cycle through different wavelengths (850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm) and perform calibration if needed.

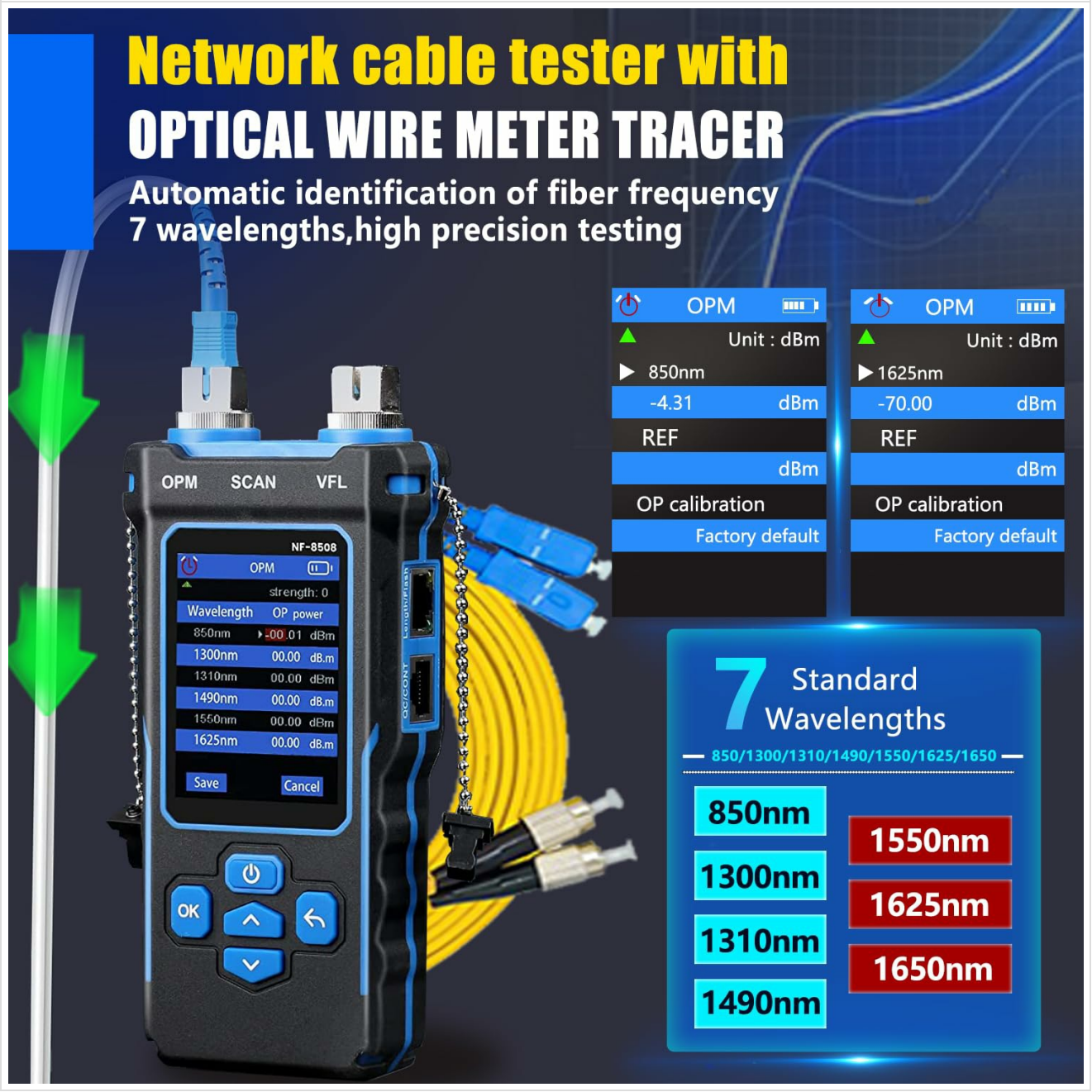

Figure 6: Detailed view of the Optical Power Meter (OPM) function, displaying measurements for various wavelengths (850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm) and calibration options.

7. Visual Fault Locator (VFL)

Locates breaks or faults in optical fibers using a visible red laser.

1. Connect the optical fiber to the 'VFL' port on the transmitter unit. Note: An LC converter head may need to be purchased separately for LC connectors.
2. Select 'VFL' from the main menu.
3. A red laser light will be emitted. Observe the fiber for any light leakage, which indicates a fault.

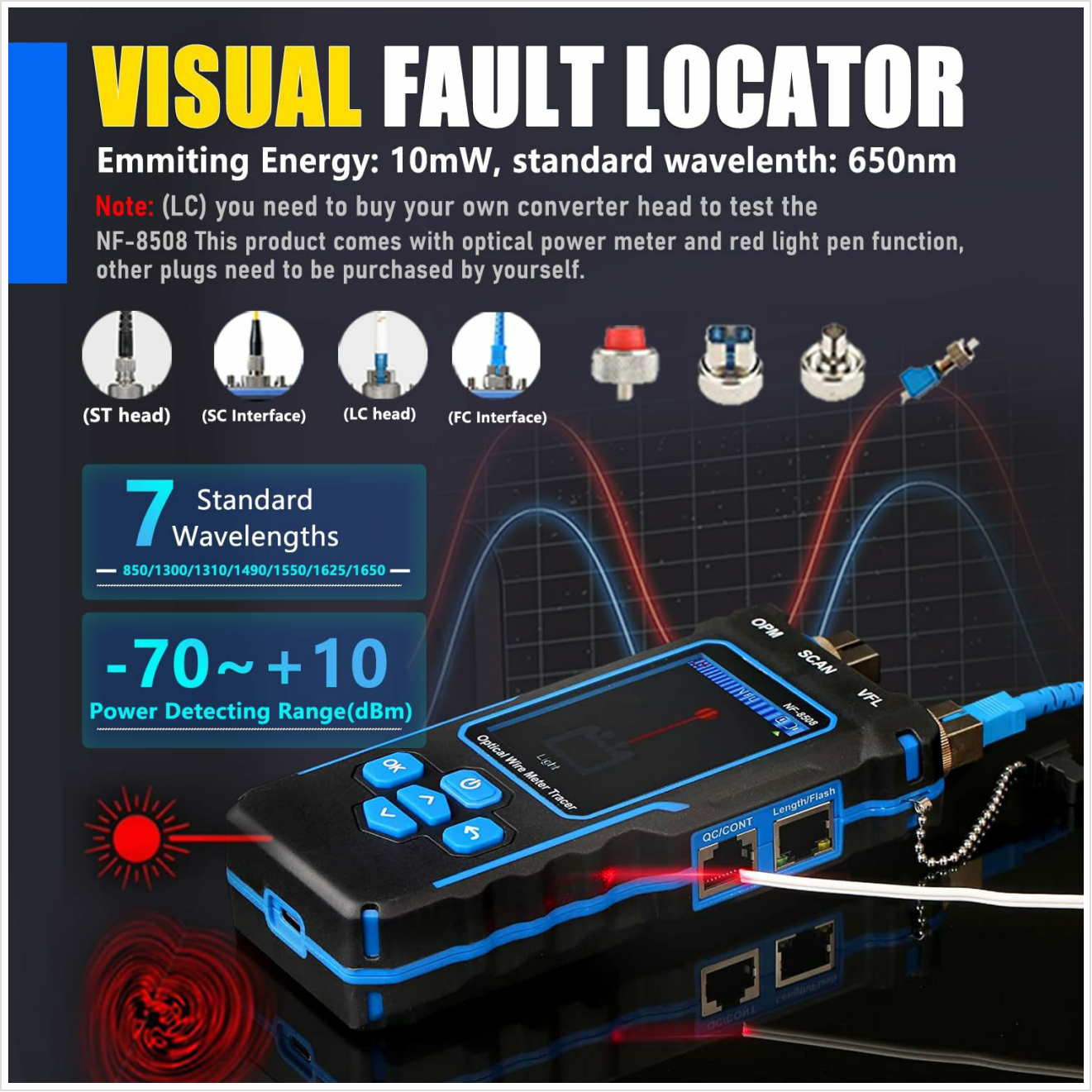

Figure 7: Demonstration of the Visual Fault Locator (VFL) function, showing the red laser light emitted from the VFL port and various fiber optic connector types (ST, SC, LC, FC).

8. Non-Contact Voltage (NCV) Function

Detects the presence of AC voltage without direct contact.

1. On the receiver unit, rotate the dial to the 'NCV' position.
2. Bring the NCV sensor (top part of the receiver) close to the wire or electrical outlet.
3. The NCV light will illuminate and an audible alarm will sound if AC voltage is detected.

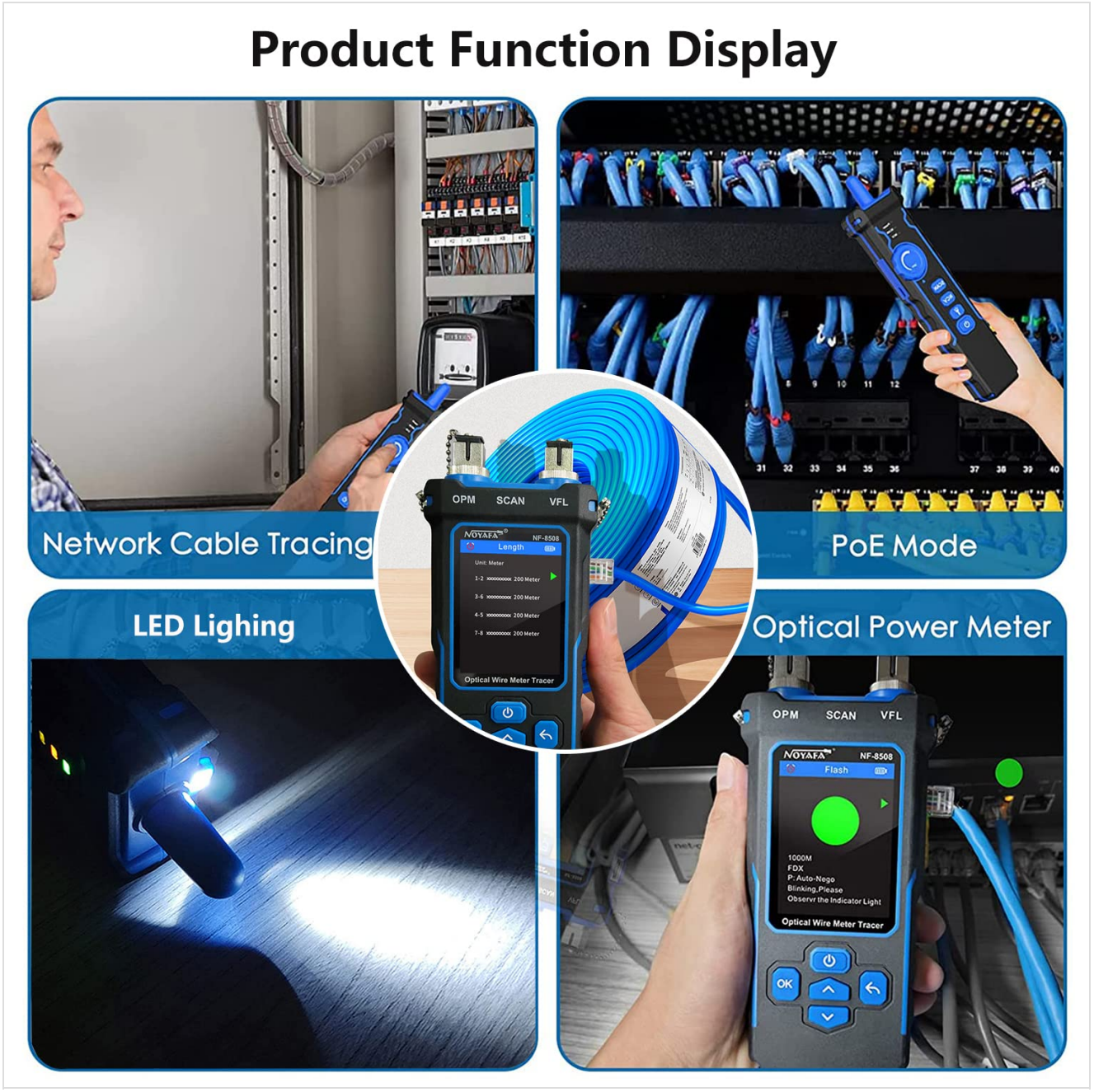

Figure 8: Composite image showcasing various product functions: network cable tracing, LED lighting, optical power meter usage, and PoE mode.

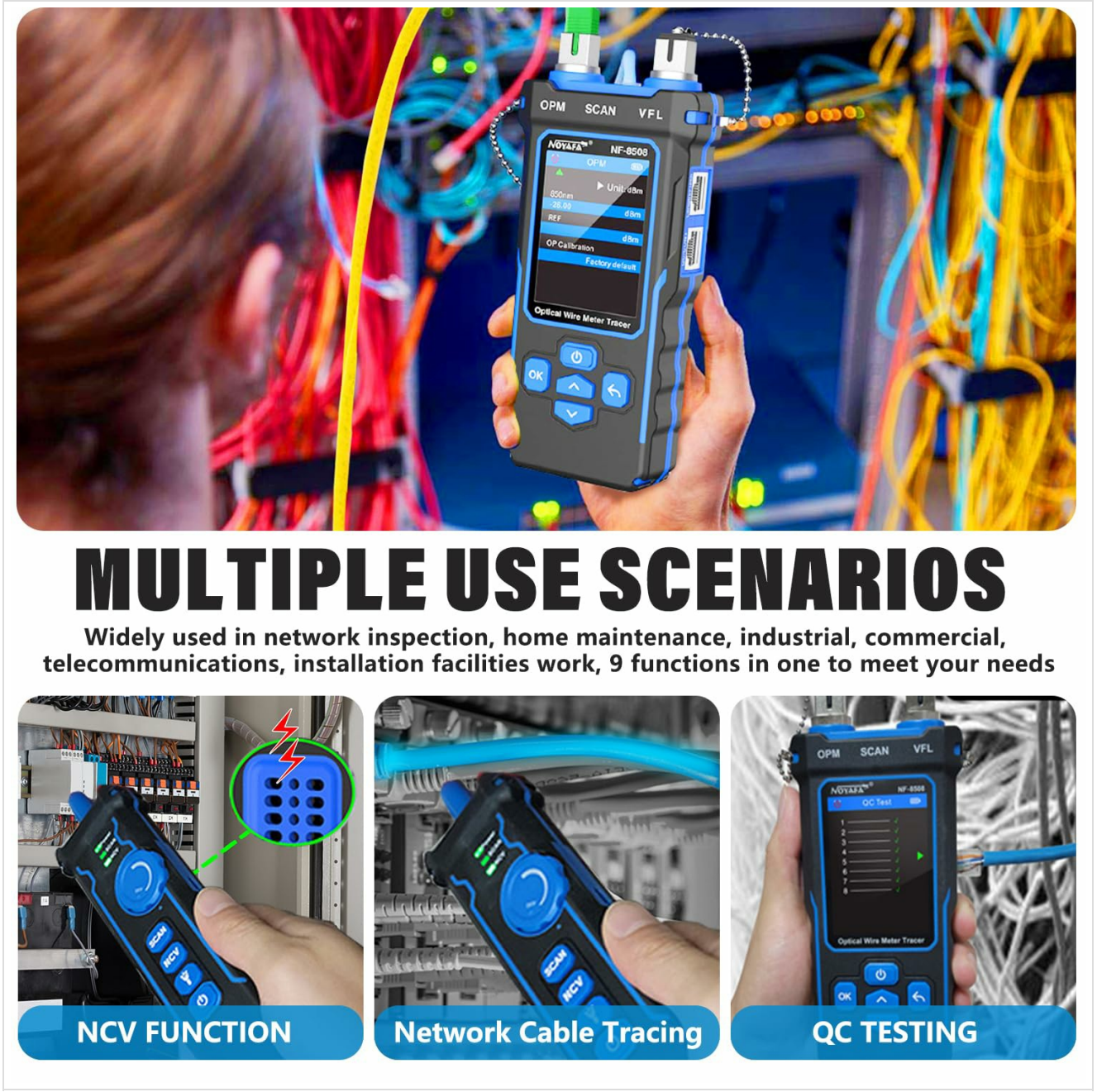

Figure 9: Image depicting multiple use scenarios for the tester, including NCV function, network cable tracing, and QC testing in different environments.

Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the device. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** Recharge the battery regularly, even if the device is not in use, to maintain battery health. Avoid fully discharging the battery for extended periods.
- **Optical Ports:** Keep the optical ports clean and free of dust. Use appropriate fiber optic cleaning tools if necessary.

Troubleshooting

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Device does not power on.	Low battery; Power button not pressed long enough.	Charge the device fully. Press and hold the power button for 3-5 seconds.
Inaccurate cable length measurement.	Cable type mismatch; Cable damage; Environmental interference.	Ensure correct cable type is selected (if applicable). Inspect cable for damage. Test in a different environment.
No tone during cable scan.	Receiver not in SCAN mode; Cable not properly connected; Cable is not the target.	Ensure receiver dial is set to SCAN. Reconnect cable securely. Scan other cables in the bundle.
VFL red light is dim or absent.	Low battery; VFL port dirty; Fiber optic cable damaged.	Charge the device. Clean the VFL port. Inspect fiber optic cable for breaks.
PoE test shows incorrect voltage.	Non-standard PoE; Faulty PoE source.	Verify PoE standard. Test with a known good PoE source.

Specifications

Feature	Detail
Product Dimensions	10.45 x 6.57 x 3.2 inches
Item Weight	1 Pound (16 ounces)
Model Number	NF-8508
Power Source	Battery Powered (3.7V 1500mAh Lithium)
Color	Blue
Cable Length Measurement Range	2.5m - 200m
Cable Length Measurement Accuracy	±1.6m
Optical Power Meter Wavelengths	850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm
Optical Power Meter Range	-70 dBm to +10 dBm
VFL Output Power	10mW
VFL Wavelength	650nm
Country of Origin	China

Warranty and Support

For warranty information and technical support, please refer to the documentation included with your purchase or visit the official NOYAFA website. You can also visit the NOYAFA Store on Amazon for additional product information and support resources.

Related Documents - NF-8508

	Noyafa NF-8508: Instrukcja Obsługi Testera Okablowania LCD, Miernika Mocy Optycznej i VFL Kompleksowa instrukcja obsługi testera okablowania Noyafa NF-8508, zawierająca szczegółowe informacje o funkcjach takich jak pomiar mocy optycznej, VFL, test PoE, lokalizacja kabli, ciągłość, długość i wiele więcej.
	Noyafa NF-8508: Instrukcja Obsługi Testera Okablowania LCD i Miernika Mocy Optycznej Kompleksowa instrukcja obsługi dla testera okablowania Noyafa NF-8508, zawierająca informacje o funkcjach, specyfikacjach, obsłudze i konserwacji miernika mocy optycznej, lokalizatora uszkodzeń VFL i testera PoE.
	NOYAFA NF-8508 Optical Wire Meter Tracer User Manual User manual for the NOYAFA NF-8508 Optical Wire Meter Tracer, detailing its features for network cable testing, including continuity, length, PoE, VFL, and optical power meter functions.
	Noyafa NF-8508: Tester Okablowania LCD, Miernik Mocy Optycznej i Lokalizator VFL - Instrukcja Obsługi Kompleksowa instrukcja obsługi testera okablowania Noyafa NF-8508. Dowiedz się o funkcjach takich jak miernik mocy optycznej (OPM), lokalizator uszkodzeń wizualnych (VFL), testowanie PoE, pomiar długości kabla, test ciągłości, skanowanie portów i NCV. Idealny do naprawy kabli sieciowych w domach i obiektach użyteczności publicznej.
	NOYAFA NF-8508 Optical Wire Meter Tracer User Manual User manual for the NOYAFA NF-8508 Optical Wire Meter Tracer, detailing its functions, specifications, and operation for network cable testing, PoE testing, and optical power measurement. Includes instructions for continuity testing, scanning, port flashing, length measurement, PoE testing, QC testing, optical power meter, and VFL.
	NOYAFA NF-8508 Optical Wire Meter Tracer User Manual Comprehensive user manual for the NOYAFA NF-8508 Optical Wire Meter Tracer. This guide details its extensive features for cable testing, including continuity, scanning, port flashing, length measurement, PoE testing, crimp testing, optical power measurement, and visual fault location. It covers both transmitter and receiver functions, specifications, application fields, and precautions for professional and home use.