

NOYAFA NF-859GK

NOYAFA NF-859GK Network Cable Tester User Manual

Model: NF-859GK

1. PRODUCT OVERVIEW

The NOYAFA NF-859GK is a multifunctional network cable tester designed for diagnosing and maintaining local area networks. It integrates various testing capabilities including TDR network cable testing, IP testing, POE testing, port flashing, and Visual Fault Locator (VFL) functions. This device is suitable for professional use in engineering cabling, network maintenance, and equipment management.



Figure 1: NOYAF A NF-859GK Network Cable Tester (Transmitter and Receiver)

This image displays the main unit (transmitter) and the receiver of the NOYAF A NF-859GK network cable tester, along with its carrying case. The main unit features a color screen and various control buttons, while the receiver has indicator lights and a probing rod.

2. PACKAGE CONTENTS

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

- NF-859GK Main Unit (Transmitter)
- NF-859G Receiver
- Type-C Charging Cable
- User Manual (this document)
- Carrying Case

3. SETUP

3.1 Initial Charging

The NF-859GK is equipped with a built-in 1500mAh 3.7V lithium battery. For optimal performance and to ensure sufficient power for initial use, it is recommended to fully charge the device before its first operation. Connect the provided Type-C charging cable to the charging port on the main unit and a suitable USB power adapter (not included).



Figure 2: Battery Life and Charging Information

This image highlights the long battery life of the NF-859GK, featuring a 1500mAh 3.7V lithium battery that provides approximately 10 hours of working time and supports 2-hour quick charging via a Type-C port.

3.2 Device Layout and Controls

Familiarize yourself with the main unit (transmitter) and receiver controls:



PRODUCT SPECIFICATION

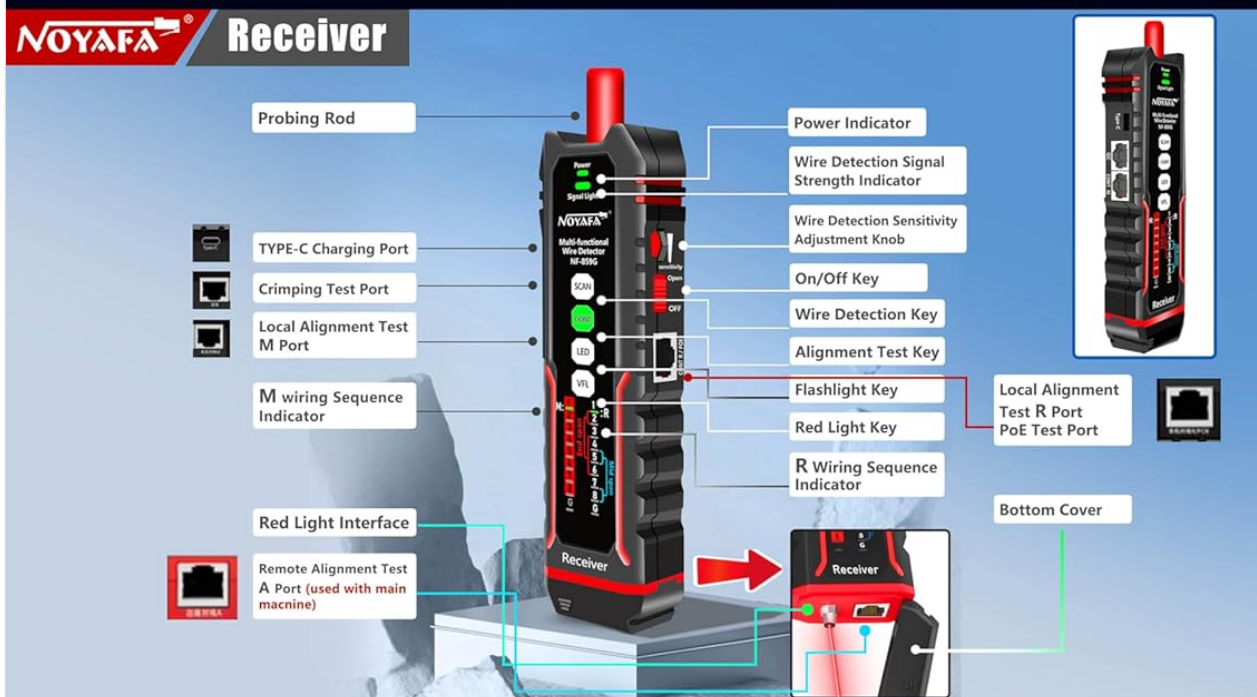


Figure 3: Transmitter and Receiver Control Diagram

This diagram illustrates the various buttons and ports on both the NF-859GK transmitter and receiver. Key controls on the transmitter include the On/off Key, OK (Confirm) Key, Up/Down/Return Keys, and a Type-C Charging Port. The receiver features a Probing Rod, Power Indicator, Wire Detection Signal Strength Indicator, and a VFL (Visual Fault Locator) port.

- **On/off Key:** Powers the device on or off.
- **OK/Confirm Key:** Confirms selections or enters menus.
- **Up/Down Keys:** Navigate through menu options.
- **Return Key:** Goes back to the previous screen or menu.

- **Type-C Charging Port:** For charging the internal battery.
- **RJ11/RJ45 Ports:** For connecting network and telephone cables.
- **VFL Port:** For connecting fiber optic cables for visual fault location.

4. OPERATING INSTRUCTIONS

4.1 Network Cable Testing (TDR Technology)

The NF-859GK utilizes Time Domain Reflectometer (TDR) technology for accurate network cable testing. It supports RJ11, RJ45, CAT5, CAT5e, CAT6, and CAT6a cables (UTP/STP).



Figure 4: TDR Network Cable Testing Capabilities

This image illustrates the core functionalities of the NF-859GK, including TDR (Time Domain Reflectometer) technology for network cable testing, IP address testing, and VFL (Visual Fault Locator) with a double-ended red light pen. It confirms compatibility with CAT5/5e, CAT6/6a, CAT3, RJ45, and RJ11 cables.

4.1.1 Continuity Test (QC Function)

This function checks the wiring sequence and continuity of RJ11 and RJ45 network cables. It identifies open circuits, short circuits, and cross-connections.

1. Connect one end of the cable to the RJ45/RJ11 port on the main unit and the other end to the corresponding port on the receiver.
2. Select the 'Cont' (Continuity) option from the main menu.
3. The screen will display the wiring status (Good, Cross, Short Circuit, Open) for each wire pair.



Figure 5: QC Function & Continuity Testing

This image demonstrates the QC (Quality Control) function and continuity testing for RJ11 and RJ45 network cables (Cat5/5e/6/6a UTP/STP). It shows how the device indicates correct crimping via a digital light display and provides a clear pass/fail status for each wire, including telephone line-to-line testing and single-head crimp RJ45 plug tests.

4.1.2 Cable Length Measurement

The NF-859GK can accurately measure cable length within a range of 2.5m to 200m (8.2ft to 656ft).

1. Connect the cable to be measured to the main unit's RJ45/RJ11 port. The receiver is not required for this test.
2. Select the 'Length' option from the main menu.
3. The device will display the measured length in meters or feet.

4.2 IP Tester / PING Function

This tool diagnoses and maintains local area networks running TCP/IP protocol. It authenticates connections, checks data integrity, measures round-trip time, and provides IP addresses.

1. Connect the device to the network via an RJ45 cable.
2. Select 'IP Scan' or 'PING' from the menu.
3. Follow the on-screen prompts to initiate an IP scan or PING test. The device will display network information such as IP addresses, gateway, and ping statistics.



Figure 6: PING / IP Address Tester Interface

This image shows the user interface for the PING and IP address testing functions on the NF-859GK. It displays options for IP scanning, setting IP addresses, and conducting PING tests, along with example network configurations involving NVRs, PoE switches, and routers.

4.3 POE Tester

The POE (Power over Ethernet) tester efficiently identifies PoE devices, detects crossover modes (unknown/end-span/mid-span/8-core power supply), and polarity. It supports IEEE 802.3AF/IEEE 802.3AT standards and automatically switches between 10M/100M/1000M modes.

1. Connect the network cable from the PoE source to the RJ45 port on the main unit.
2. Select the 'POE' option from the main menu.

3. The device will display PoE voltage, pinout, and standard compliance (802.3af/at).



Figure 7: POE Tester & POE Port Flashing

This image demonstrates the POE testing capabilities, showing voltage readings for each pin. It also illustrates the port flashing function, which helps identify connected ports on a switch by making their indicator lights blink, and includes cable length measurement results.



Figure 8: POE Tester Standard Support

This image emphasizes the NF-859GK's support for both 802.3af and 802.3at PoE standards, indicating its ability to test various power types and power supplies for network cables.

4.4 Port Flashing

The port flashing function helps accurately locate the target cable by causing the indicator light on the connected port of a switch or router to flash. It also displays port information such as operating speed and duplex mode.

1. Connect the main unit to a network port using an RJ45 cable.
2. Select 'Port Flash' from the menu.
3. Observe the blinking indicator light on the network device to identify the connected port.

4.5 Visual Fault Locator (VFL)

The NF-859GK features a dual-head VFL function, acting as a 10mw visual fault locator for fast fiber finding. It supports universal joint FC/SC/ST interfaces and has a power detecting range of -70dBm to +10dBm.

1. Connect the fiber optic cable to the VFL port on the receiver.
2. Activate the VFL function.

3. Observe the red light emitted from the fiber to identify breaks or faults.



Figure 9: VFL Function

This image highlights the VFL (Visual Fault Locator) function of the NF-859GK, which enables fast fiber finding. It shows the device connected to various fiber optic connectors (ST, SC, FC, LC heads) and specifies the test range of -70dBm to +10dBm for power detection.

4.6 NVC / LED Light

The device includes an NVC (Non-Contact Voltage) function for detecting live wires without direct contact. An integrated LED light assists in working in dark environments.

5. MAINTENANCE

To ensure the longevity and accurate performance of your NOYAF A NF-859GK, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the device. Avoid using abrasive cleaners, solvents, or harsh chemicals that could damage the casing or screen.
- **Storage:** Store the device in a cool, dry place, away from direct sunlight, extreme temperatures, and high humidity. When not in use for extended periods, store it in its protective carrying case.

- **Battery Care:** Recharge the battery regularly, even if the device is not in frequent use, to prevent deep discharge and prolong battery life. If storing for a long time, charge the battery to about 50% capacity.
- **Port Protection:** Keep the RJ45, RJ11, and VFL ports free from dust and debris. Use protective caps if provided.

6. TROUBLESHOOTING

If you encounter issues with your NF-859GK, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Device does not power on.	Low battery or battery depleted.	Connect the device to a power source using the Type-C cable and charge it fully.
Inaccurate cable length measurement.	Cable type not supported or damaged cable.	Ensure the cable is within the supported range (2.5m-200m) and is not damaged. Recalibrate if necessary (refer to advanced settings in the device menu).
No signal detected during cable scan.	Incorrect connection or receiver not powered on.	Verify that both the transmitter and receiver are properly connected and powered on. Check for cable damage.
POE test shows incorrect voltage/pinout.	Non-standard PoE or faulty PoE source.	Ensure the PoE source adheres to IEEE 802.3AF/AT standards. Test with a known good PoE source.
VFL red light is dim or not visible.	Dirty VFL port or damaged fiber.	Clean the VFL port and fiber connector. Check the fiber for severe bends or breaks.

If the problem persists after attempting these solutions, please contact NOYafa customer support for further assistance.

7. SPECIFICATIONS

Feature	Specification
Model	NF-859GK
Brand	NOYafa
Measurement Type	TDR (Time Domain Reflectometer)
Supported Cable Types	RJ11, RJ45, CAT5, CAT5e, CAT6, CAT6a (UTP/STP), CAT3
Cable Length Measurement Range	2.5m - 200m (8.2ft - 656ft)
POE Standards Supported	IEEE 802.3AF, IEEE 802.3AT
Link Speed Detection	10M/100M/1000M (Auto-detection)
VFL Output Power	10mw

Feature	Specification
VFL Test Range	-70dBm to +10dBm
VFL Interface Type	Universal Joint FC/SC/ST (requires converter head for testing)
Battery Type	Built-in 1500mAh 3.7V Lithium Battery
Charging Port	Type-C
Working Time	Approx. 10 hours
Quick Charge Time	Approx. 2 hours
Package Dimensions	11.69 x 6.34 x 2.4 inches
Item Weight	2.29 Pounds

8. WARRANTY AND SUPPORT

8.1 Warranty Information



Specific warranty terms and conditions for the NOYAFA NF-859GK Network Cable Tester are provided by the manufacturer or the authorized seller at the time of purchase. Please refer to your purchase documentation or contact the seller directly for detailed warranty coverage, duration, and claim procedures.


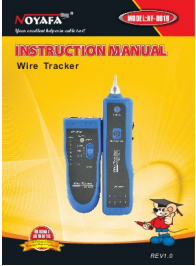


8.2 Customer Support

For technical assistance, troubleshooting beyond this manual, or inquiries regarding your device, please contact NOYAFA customer support through their official website or the contact information provided by your retailer. When contacting support, please have your product model (NF-859GK) and purchase details ready.

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Related Documents - NF-859GK

	<p>NOYAFA NF-308 & NF-388 Network Cable Tester User Manual</p> <p>Comprehensive user manual for the NOYAFA NF-308 and NF-388 network cable testers, providing detailed instructions for testing Ethernet, telephone, coaxial, and USB cables, along with wire tracing capabilities.</p>
	<p>Noyafa NF-8508: Instrukcja Obsługi Testera Okablowania LCD, Miernika Mocy Optycznej i VFL</p> <p>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.</p>

	<p>NOYAFA NF-300 Network Cable Tester User Manual</p> <p>Comprehensive user manual for the NOYAFA NF-300 network cable tester, detailing its features, specifications, and operation for testing LAN cables. Includes troubleshooting and safety information.</p>
	<p>NOYAFA NF-801B Wire Tracker Instruction Manual</p> <p>Comprehensive instruction manual for the NOYAFA NF-801B Wire Tracker, detailing its interfaces, functions, specifications, and usage for tracing and testing telephone, network, and electric wires.</p>
	<p>NOYAFA NF-308S Wire Fault Locator Instruction Manual</p> <p>Comprehensive user manual for the NOYAFA NF-308S Wire Fault Locator, detailing its functions, operation, technical specifications, and accessories for network cable testing and troubleshooting.</p>
	<p>NOYAFA NF-8508 Optical Wire Meter Tracer User Manual</p> <p>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.</p>