Your excellent helper in cable test!

NOYAFA®

NF-8518

Optical Wire Meter tracer

User Manual

ORIGINAL AUTHENTIC

Patented products, Counterfeiting not allowed

VER:V1

Read the precautions before your operation

The transmitter and receiver of this device are powered by lithium polymer batteries.

Please do not place the device in a location that is dusty, humid, or hot (above 40°C).

Please do not disassemble the device. Repair and maintenance should be done by a professional staff.

When not using the device for a long time, please remove the battery to prevent the battery liquid from leaking out.

Please do not perform related operations on the communication line during thunderstorms to prevent lightning strikes and personal safety.

CONTENTS

Product interface and components

NF-8518 is an Optical Wire Meter Tracer for home and public facility network cable repair. Its main functions on the transmitter includes cable continuity testing, cable scanning, cable length measurement, POE testing, port flash, crimping, Optical Power Meter & Visual Fault Locator function. The receiver can support checking cable continuity immediately after scanning. Also with bulit-in Non-Contact Voltage tester and LED light.

UI Icon Description

Auto power off icon

When this icon is displayed it means that the auto-off function is on and when this icon is not displayed, it means that the auto-off function is off.

Power display icon

Displays the current power and charging status, green means it is in the charging status, but white means non-charging status.

CONT

TEST

Flash

Length

PoE

QC Test

OPM

VFL

Set

Instructions of the Products

Continuity

Select Normal Cont Mode (Figure 1) to test cable continuity between the SCAN/CONT port of the transmitter and the RJ45 port of the receiver.
When you didn't connect the transmitter and the receiver well, the following interface will be displayed (Figure 2):

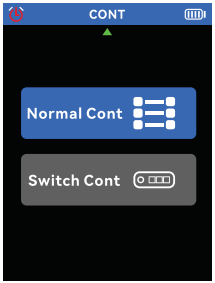


Figure 1

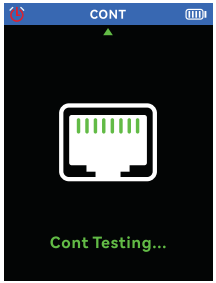
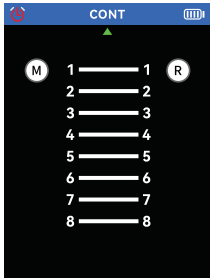
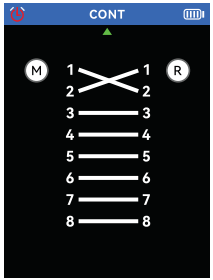


Figure 2

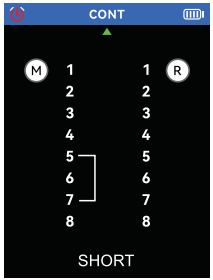
When you well connected the transmitter and the receiver, the following interface will be displayed as below:



Normal



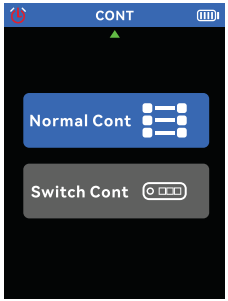
Cross

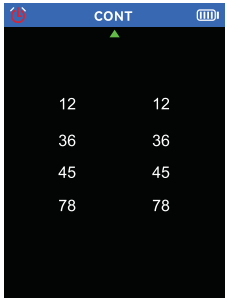


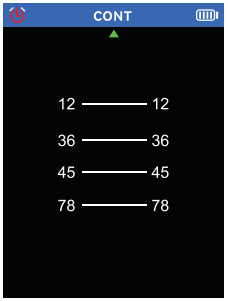
Short

Switch Cont

Select Switch Cont Mode to test cable continuity between the SCAN/CONT port of the transmitter and the Switch.



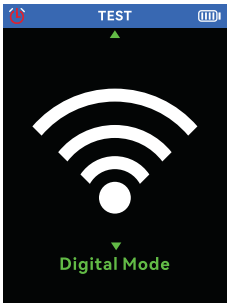




Test

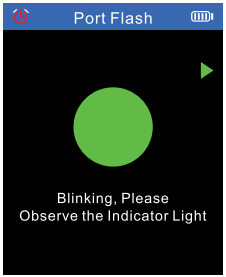
1. Upon entering this page, the default setting is the Digital mode on scanning.

2. When you find the target cable, and then connect the transmitter and the RJ45 port of the receiver, it will begin to check the continuity of the target cable automatically. Also, the results will be displayed (as shown in the previous cable continuity function results). Disconnecting from the receiver, it will automatically revert the device to cable scanning.



Port Flash

Once the test is successful, the green dots on the screen will flash at the same frequency with the port indicator lights.



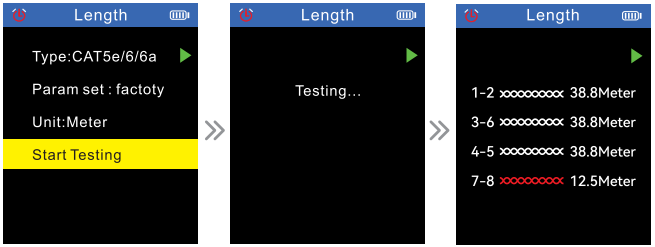
Port Flashing

Length

1. Network Cable Length Test

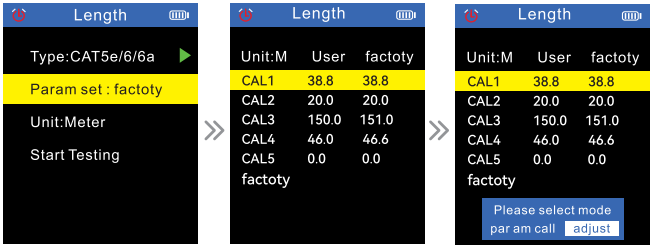
Insert the network cable into the"Length/Flash" port on the right side of the transmitter, select the length test option on the main page, and the screen will automatically show the"Start Testing"screen. Press" OK "to begin the test.

The device can test the cable length and breakpoints, with an optimal range of 5-350meters.



Parameter Settings

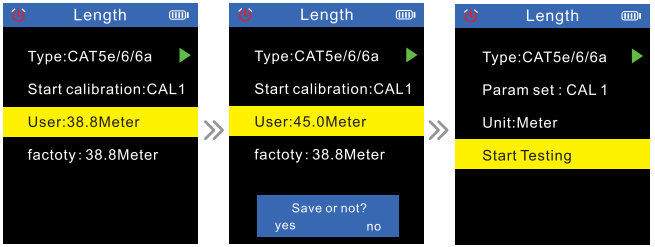
By default, the network cable length test uses factory settings.
If the test results are inaccurate or have significant errors, you can calibrate the device, and use the new calibration values for subsequent tests. For example, using Calibration Value 1:



① Press the "Up/Down" buttons to select "Parameter Settings", then press "OK" to enter the calibration value selection screen.

② Select Calibration 1 and press "OK" to enter the mode.

③ Press the "Up/Down" buttons to choose between "Parameter Retrieval" or "Parameter Calibration". If you select "Parameter Retrieval", it will jump to step⑥; if you select "Parameter Calibration", proceed to step④.



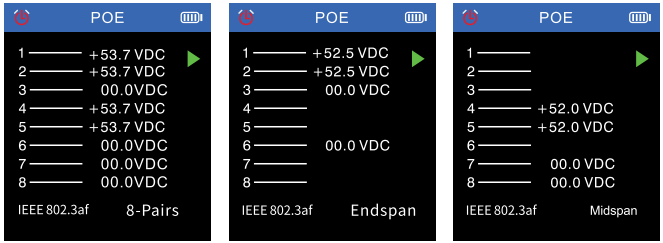
④ After calibration, the user value and factory value will appear. For example, if the actual cable length is 45 meters, press the "Up/Down" buttons to modify the user value to 45 meters.

⑤ After editing, press "OK" to choose whether to save the changes. Press "Back" to recalibrate, or press "OK" to proceed to step⑥.

⑥ On the "Start Test" screen, press "OK" to begin testing.

PoE Test

After the detection is successful, the screen will indicate the detection data.

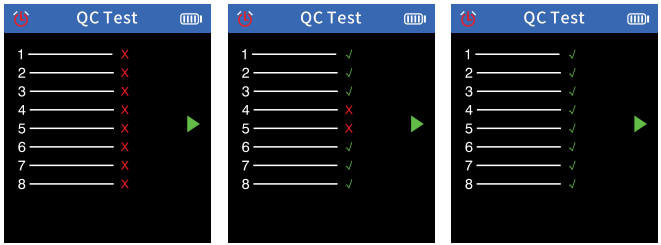


Power Supply of 8 Cores, 53.7V | Bridge Joint at the End, 52.5V | Bridge Joint in the Middle,52.0V

Both of PoE: 5~60V non-standard/standard PoE can be tested, automatic identification of AF/AT standard.

Crimping/QC Test

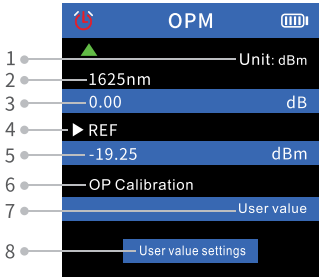
This function can be used to inspect whether the crystal joint is well connected. The tick means the cable core has been well connected, the error mark means that the core hasn't been well connected.



All the cores (1-8) are disconnected | Cores 4 and 5 are disconnected | The pressing connection is normal

Optical Power Meter

This function can be used to test the optical power and light attenuation value. The unit, wave length, REF, optical output power calibration can be set, the white triangle cursor indicates current option.



1. **Unit setting:** dBm or mW/uW/nW, the mW/uW/nW units can be automatically switched according to the current laser light intensity.
   Press up/down button to move the cursor to this option, and then, press the button " OK " to switch units.

2. **Wavelength setting:** 850/980/1270 /1300/1310/1490/1550/1577/1625/1650nm, press up/down button to move the cursor to this option, and then, press the button " OK " to switch wavelength.

3. **Optical output power:** After setting the wavelength, insert the optical fiber to optical power joint at top of the instrument, the third line will indicate the value of optical output power.

4. **REF:** Reference value it is used when the attenuation value of optical signal passing the optical fiber link is tested.

   ① After testing the optical output power, move the cursor to REF option, long press the button " OK " for 3 seconds, the optical power value will jump to line 5 from line 3 and become a reference value.

   ② Switch to the optical fiber link to be tested, at this time, line 3 will indicate the attenuation value of this optical fiber link (The test value after switching to the optical fiber link-the reference value before switching to the optical fiber link=Attenuation value of this optical fiber link).

   ③ Short press button " OK " to open/close REF mode, long press button " OK " for 3 seconds to re-set the reference value.

5. **Reference value:** In case of non-REF mode, Line 3 indicates optical output power value, line 5 not indicates value.

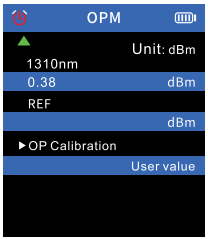
Notes:

1. In case of REF mode, Line 5 indicates the reference value, Line 3 indicates the attenuation value.
2. dBm is the unit indicating absolute power value.
3. dB is a relative number, which indicates increase or reduction of the signal strength.
4. In the optical fiber network, the optical power is often measured with dBm as the unit, while, the attenuation, consumption and insertion loss of optical fiber are expressed with dB.

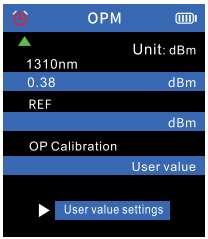
6. **Optical power calibration:** Factory value/user value can be selected.

Normally, you only need to select factor value, if the test error is large, you can select user value-user value setting for calibration.

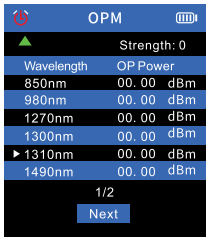
The following uses the 1310 wavelength as an example:



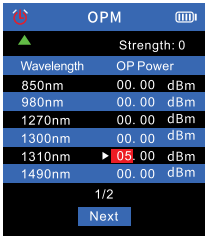
Select Optical Power Calibration Press the" OK " key to switch between the factory-set value/ user-defined value.



Select User-Defined Value SetupPress the " OK "key to enter the Setup interface.

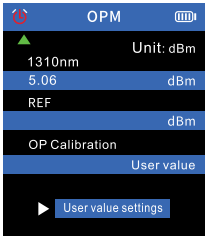


Press the" ↑ ↓ "keys and select the wavelength 1310. Then press the" OK "key to enter Parameter Setup.



Press the " OK " button to switch between integer and percentage. Press the" ↑ ↓ "keys to set the parameters. After the parameters are set, press the" ↩ "key.

The cursor is in front of 1310 again.Long press the " OK "key for 2 seconds. When √ appears, it indicates confirmation.



Press the" ↩ "key to return to the Test interface. Here, you can test the optical power again.

Notes:

- In Step Five above, be sure to long press the " OK " key for 2 seconds. When √ appears, it indicates that the data are confirmed; otherwise, the calibration will to take effect.
- In the aforementioned step six, calibration is done for the 1310 wavelength. When testing the 1310 wavelength under "User Value Setting" mode, the calibration data takes effect. For calibration in other wavelengths, follow steps three hundred and forty-five as described above.
- If the calibrated value is not used, switch back to the factory-set value according to Step One above.
- To remove the calibrated value, return to Menu — Setup — Factory Settings.

Visual Fault Locator

Transmitter

Select " " function to open the red light, press button " OK " to switch: Rapid flash, slow flash, always on.

Setting

The transmitter allows you to set the language, backlight brightness, backlight duration, auto power-off time, wiremap calibration, restore factory settings, and check the instrument's version number, among other options.

Receiver

CONT/SCAN function on the receiver

Upon initial power-up or when you select the test function, the device enters digital mode, with the scan light keeping on.

1. When is in SCAN function:

When the receiver emits a beeping sound, it indicates that a tracing signal has been received. The more rapid the beeping, the closer the receiver is to the target cable, and the signal strength indicator below will correspondingly display a higher signal level.

Connect one end of the network cable to the transmitter's SCAN/CONT port and the other end to the receiver's RJ45 port. When the target cable is connected the transmitter and the RJ45 port of the receiver, it will begin to check the continuity of the target cable automatically. Also, the results will be displayed. Disconnecting from the receiver, it will automatically revert the device to cable scanning.

2. When is in CONT function:

The continuity results are indicated by the 9 LEDs below:

a steady green light indicates a straight-through connection;

a steady red light indicates a crossed connection for the corresponding wire core;

a flashing red light indicates a short circuit for the corresponding wire core.

Non-Contact Voltage

Press the NCV button, and it will enter NCV function, with the NCV light keeps on.

Other

1. Power On/Off:

Long press the power button to manually switch the device on or off.
The unit will automatically power off after 30 minutes of inactivity.

2. Sensitivity Indication:

When you adjust the sensitivity of the receiver, by rotating the sensitivity knob, the corresponding 9 red LED lights on the underside will turned on. It indicates the current sensitivity level. When the knob ceases rotation, the red sensitivity indicator will automatically extinguish after 3 seconds, remaining off until sensitivity is readjusted.

3. Low-Battery Shutdown:

The power light flashes before triggering low-battery shutdown.

4. Illumination:

Press the LED light button to make the light on or off.

Parameters

Model	NF-8518			
Fiber Tester	OPM	Wavelength	850nm/980nm/1270nm/1300nm/1310nm/ 1490nm/1550nm/1577nm/1625nm/1650nm	
		Range	-70 ~ +6dBm	
		Accuracy	±0.5dB	
	VFL	Power	10mW	
		Emit visible red laser to detect faults such as breaks, cracks, or bends in the fiber optic cable		
Cable Tester	Length		5-350m	
	POE		Power Supply Agreement	IEEE802.3 at/af; Non-Standard
			Power Supply Method	End Span/Mid Span/ 8-pin power connector
			Port Flash	√
	SCAN		Test at the same time	
	CONT			
	Crimping		√	
Battery	Power Supply		3.7V 1500mAh Polymer lithium battery	
	Charging Port		Type-C	
	SCAN/CONT/Flash		RJ45 (Anti-burnt 60V)	
Transmitter	164*71*34mm			
Receiver	198*45*28mm			

Packing list

Transmitter	1pc	Tool Bag	1pc
Receiver	1pc	Color Box	1pc
User Manuel	1pc	Certificates	1pc
Lithium Battery Precautions Card	1pc	Type-C cable	1pc

Note: Please refer to the actual product received.

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深圳市诺方舟电子有限公司

编号	201	202	301	302	303	304	305	比例：	1:1	品号：	304-B1701-0017
类目	塑胶件	五金类	镜片	PVC贴纸	不干胶贴	说明书	包装盒	单位：	mm		
选择						√		设计	HZL	品名：	NF-8518说明书-V1 20250915
306	307	308	309	310	311	312	313	核准			
彩卡	吸塑	工具包	PE袋	纸箱	宣传单	合格证	打印标签	标准：	√	文件类型：	做货文件
								定制：			

制作日期	2025.09.15	样式	骑马钉	印刷材质	128g双铜纸 封面过哑膜
印刷要求	彩色	页码	20P	变更记录	
尺寸大小	140*105mm	版本	V1		