Your excellent helper in cable test!

Your excellent helper in cable test!

NF-8209 Pro

Network Cable Tester

User Manual

ORIGINAL AUTHENTIC

Patented products, Counterfeiting not allowed

VER:V6

Please read the manual carefully before operating this unit.

- This device is powered by a polymer lithium battery. Please charge the device every 6 months if the device is not used for a long time.
- Please don't place the device in dusty, humid or high temperature (above 40°C) places.
- Please don't disassemble the instrument by yourself. Repair and maintenance must be performed by professionals.
- The transmitter of this equipment has automatic shut down function,and the automatic shutdown time can be set according to the user's needs.
- Don't connect to alive line that exceeds the protection voltage (Burn-resistant 60V)
- Do not operate communication lines during a thunderstorm to prevent personal safety from being affected by lightning.

CONTENTS

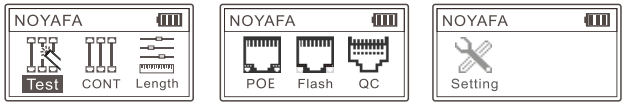
Overview

NF-8209PRO is a new generation to offer digital and analog signaling all in one net work toner and probe.

Also, it includes Anti-interference cable locating, cable length measurement , cable faults testing, PoE testing, Port Flash, Crimp test for RJ45 Plug and NCV function, all these makes it a must-tool for cabling engineers.

Product Buttons And Interface Description

Emitter main page



Product Features Overview

- **SACN/CONT:** Anti-interference cable locate, can directly connect to the network cable after locating.
- **CONT:** Test open, short, cross, ect for STP, UTP cable.
- **Length:** Measure length of lan cable,range is 2.5m~200m.
- **POE:** Detect the power supply cores and voltage of POE power supply equipment, both standard and non-standard POE can be detected.
- **Port Flash:** locate network port by the flashing port light on switch/ router.
- **QC Test:** Test whether the RJ45 Plug has been well crimped.

Product Operation

1. Power ON/OFF

Transmitter: long press the power button to turn on/off.

Receiver: Rotate the sensitivity button to turn on/off, there will be a click sound prompt.

2. SCAN Testing

Can quickly and efficiently find the target cable from many messy cables, complex lines, and switches.

Insert one end of the target network cable into the RJ45 SCAN/CONT port on the top of the transmitter (the telephone line is connected to the RJ11 SCAN port on the right), and select the "SCAN" mode.

Turn the receiver knob to turn on the power, adjust the sensitivity (the signal strength indicator light is red, the higher the sensitivity, the more LEDS are on and the larger the detection range), and use the probe to close to the target wire. When the receiver detect the signal , it will make a "beeping" sound and the red signal light will turn green ,more closer to the target wire, the stronger the signal, the more LEDS are on.

SACN tips:

You can first adjust the sensitivity to the maximum to find the approximate range, and then adjust the sensitivity to a lower level to accurately locate the target cable.

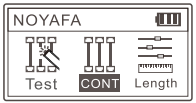
Note: In the SCAN mode, plug the other end of the network cable into the RJ45 port at the bottom of the receiver to directly perform the line alignment (Note: the receiver needs to be turned on). For detailed CONT results, see Part 3 below.

3. CONT Testing

3.1 Wire Mapping:

Can test short circuit, open circuit and crossover of network cables.

Insert one end of the target network cable into the RJ45 "SCAN/CONT" port on the top of the transmitter, and the other end into the RJ45 port at the bottom of the receiver (power on required). Turn on the wire mapping function and select "CONT".



Receiver test results:

Normal: The green light is always on;

Cross: The red light is always on;

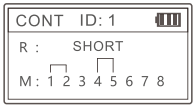
Short Circuit: red light flashing;

Open circuit: No light.

Emitter test results:

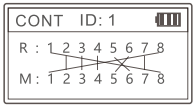
8 cores are normal

9 cores are normal,
G indicates the shielding layer



12 45 Short circuit respectively

5 8 Two-wire disconnection



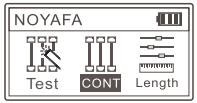
56 Cross 18 Cross

Note: "ID:1" is the receiver number.

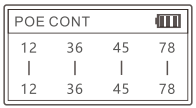
3.2 POE Mapping:

Used to test whether the wire pair connected to the switch is conductive.

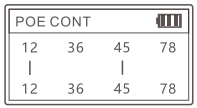
Insert one end of the target network cable into the RJ45 "SCAN/CONT" port on the top of the transmitter, and the other end into the RJ45 port on the switch. Turn on the wire mapping function and select "POE CONT".



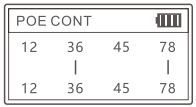
Used to test whether the wire pair connected to the switch is conductive.



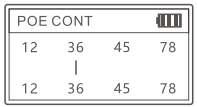
Normal



Short circuits detected on pairs 36 and 78



Short circuits detected on pairs 12 and 45



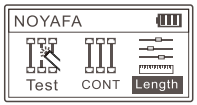
Short circuits detected on pairs 12, 45, and 78

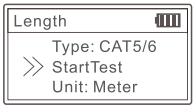
4. Length Testing

The length of 12, 36, 45, 78 cores of network cables can be tested respectively.

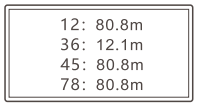
When measuring the length, the network cable cannot be powered on or connected to any equipment or instruments. The length must be between 5 meters and 350 meters, otherwise the measurement data will be inaccurate.

Connect one end of cable to "Flash/PoE/Length" port, disconnect the cable at far end, choose "Length" on the main menu, and select the preferred unit(Meter/Yard/Foot)before testing.

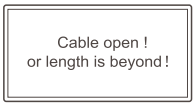




Insert one end of the network cable into the length port on the top of the emitter. The test results are displayed in four groups corresponding to the 12, 36, 45, and 78 cores of the twisted pair cable.



Display result 1



Display result 2

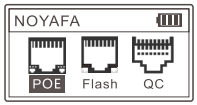
Display result 1: The network cable length is 80 meters, and the 36 cores are disconnected at 12 meters (see the parameter table for instrument error).

Display result 2: Operation error or out of range (5-350 meters)

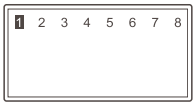
5. PoE Testing

Detect the power supply cores and voltage of POE equipment.

Connect the device to be tested to the POE port on the top of the Emitter and select the POE test function.



Press the enter button

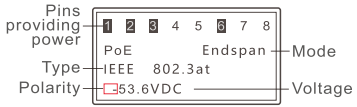


Testing.....

If the test is a standard POE switch, the POE power supply mode, standard PoE voltage of the POE device and voltage polarity will be displayed.

The POE power supply methods are divided into end jumper, middle jumper and 8-core power supply. The power supply core corresponding to each power supply method will be indicated by a color block in the number above the screen.

The POE equipment standards are divided into IEEE802.3af and IEEE802.3at. The POE voltage and polarity are displayed at the bottom of the screen (8-core power supply don't display polarity)

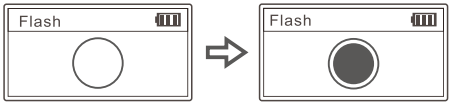


Note: Polarity "+" means that the 12 cores is positive and the 36 cores is negative; polarity "-" means that the 12 cores is negative and the 36 cores is positive; polarity is not displayed when the 8 cores are powered.

6. Port Flash Testing

Insert the network cable into the flash interface at the top, connect the other end to the switch/router, select the "flash" test, wait for the test to read, a circle will be displayed on the screen ◯ ;

If the network cable is connected normally, the circle on the screen will flash into a dot ● , and the corresponding port indicator on the switch/ router will flash together (flashes once every 3 seconds) to determine the target cable.

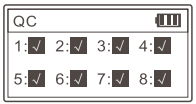


Special use: When the switch is powered on, you can test whether the network cable is connected properly.

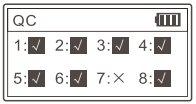
7. QC Testing

Used to test whether the network cable core and the copper sheet of the crystal head are well crimped.

Insert the crimped crystal plug into the QC port on the right side of the emitter, and the instrument will automatically test it. "√ " means the crimping is normal, and "x" means the core is blocked.



Normal



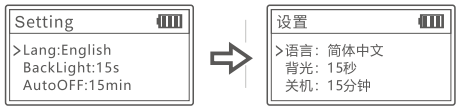
Core No. 7 is blocked

8. Setting

The settings page allows you to view/change language, backlight time, auto power off time, contrast, length measurement calibration, and version information.

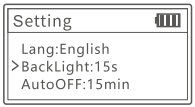
8.1 language setting

The language options are Simplified Chinese and English.



8.2 Backlight setting

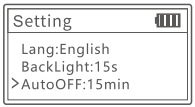
The backlight has 15 seconds, 30 seconds, 60 seconds, always on, and off options.



Backlight refers to the time the screen is illuminated when there is no operation

8.3 Shutdown setting

Automatic shutdown time is 15 minutes, 30 minutes, 1 hour, shutdown options.

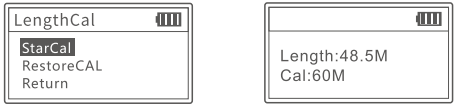


8.4 Contrast setting

Contrast refers to the color contrast between the screen text and the background color.

8.5 Length measurement calibration settings

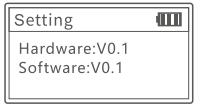
Select Start Calibration and press the enter button. Press the Left or Right button to set the calibration length (±50 meters and not less than 3 meters)



Select Restore Calibration Settings and press the enter button. The interface displays OK and the calibration length is restored.

8.6 Version Information

Can check the software/ hardware version numbers (software/hardware version numbers may be inconsistent, this is normal)



9. NCV Function (Receiver)

The NCV function is used to detect the presence of live electrical wires in the working environment to ensure construction safety.Press the NCV button on the receiver briefly to enter NCV mode. The receiver emits a"beep" sound when it detects alternating current voltage greater than 70V.

10. Lighting function (Receiver)

The lighting button can be used on any interface to control the switching of the lighting lamp.Press once to turn on the lamp, and press again to turn it off.

11. Low Battery Reminder

Emitter: The battery symbol in the upper right corner of the screen shows the battery level. When the battery level is too low, the instrument will automatically shut down.

Receiver: The power indicator flashes green when the battery is low, turns red when the charging cable is plugged in, and turns off when fully charged.

Notes:

When the battery is too low, it will affect the performance of the instrument. Please keep the battery fully charged.

Please charge the device every 6 months if the device is not used for a long time.

Packing List

Emitter	1pc	User manual	1pc
Receiver	1pc	Certificate of Conformity	1pc
Toolkit	1pc	Type-C charging cable	1pc
Lithium battery instruction card	1pc	Alligator clip cable/ 6P cable/8P cable	1pc

Note: The manual is for reference only. If there is any change, no further notice will be given. The actual product shall prevail.

Technical parameters

EMITTER	SCAN	Cable type	CAT5、CAT6
		Max. Signal voltage	5V±1.0Vp-p(Audio level)
		Frequency	455KHZ
		SCAN	Anti-interference mode
		Max range	RJ45 1000m
	CONT	Cable type	CAT5、CAT6
		Cable sequence and fault testing	Normal,open circuit, short circuit, cross
		STP/UTP	Distinguishable by test
		CONT	RJ45 SCAN/CONT port + Receiver RJ45 port
	Length	Test line	CAT5、CAT6
		Test range	5~350m
		Accuracy	±1.5m or ±3%
		Unit	m/ft/yd
	QC	Test type	8-core
		Response speed	⩽1S
	POE	Voltage test range	DC5~60V
		Power supply core/ jumper mode	end jumper/middle jumper / 8-core power supply/unknown
		PSE type	non-standard
	Flash	Switch type	Compatible 10M/100M/1000M

EMITTER	LCD display	128*64 Dot-matrix with backlight
	Language display	Chinese/English
	Keys	4 functions +1 power button
	Ports	Three RJ45+one RJ11
	Power supply	3.7V1400mAh polymer lithium battery
	Battery low indication	Yes
	Backlight function	15 seconds/30 seconds/ 60 seconds/always on/off
	Auto-off time	15min/30min/60min/0FF
	Voltage protection	DC60V
	Maximum operating current	≤200mA
	Size	125x70x32mm
RECEIVER	Anti-interference cable locate reception	Yes
	Sensitivity adjustable function	Yes
	NVC function	AC80V~1000V 50/60Hz
	Sound prompts	Yes
	LED lighting	Yes
	Power supply	3.7V1400mAh polymer lithium battery
	Power indication	Yes
	Auto shut down	15min
	Low voltage prompt	3.5V±0.1V
	Maximum operating current	≤200mA
	Input voltage protection	It is not recommended to operate the device during the 60V withstand voltage
	CONT	RJ45
	Size	198x50x30mm
OTHER	Operating temperature/ humidity	32~122°F(0~50°C)/⩽90% No condensation
	Storage temperature	14~122°F(-10~50°C)

FAQ

Phenomenon	Causes and solutions
The cable locate receiver don't ring	Check whether the port is plugged in incorrectly
	Check whether the receiver sensitivity is adjusted to the maximum
Different testing results for one same cable	Check whether there is any foreign matter on the Emitter/receiver CONT port
	Check whether both ends of the tested network cable are plugged in tightly
The length test result is that the cable is open or out of the measurement range	Check whether the port is plugged in incorrectly
	Measuring range: 5-350 meters
No results display when test PoE	Connecls to wrong port, "PoE" is the correct one
	Test the cable's continuity to make sure it is a good cable
	Check the PoE device is power on
No flashing port when use port flash	Connects to wrong port,"Length/Flash" is the correct one
	Check if the network cable is connected properly using the pairing function
	Check if the switch is powered on
Unable to see what's displayed on the screen clearly	Set the contrast to above 30
The result of correct network cable alignment is out of order	Machine failure, please contact technical support

NOYAFA® 精明鼠®

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-D2301-0007
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	LJQ	品名:	NF-8209Pro说明书英文-V6 20250730
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	2025.07.30	样式	骑马订	印刷材质	128g双铜纸
印刷要求	彩色	页码	20P	变更记录	V5较V4版本，增加POE对线功能
尺寸大小	140*105mm	版本	V6		V6较V5版本，去掉耳机描写