

**NOYafa**®

Your excellent helper in cable test!

**MODEL:NF-168**

# INSTRUCTION MANUAL

## RJ45/RJ11/BNC WIRE TRACKER



**ORIGINAL  
AUTHENTIC**

*Patented products,  
Counterfeiting not allowed.*



REV1.0

## Find target wire required from numerous telephone wires and LAN cables

### Example I

Hunt cable in telephone exchanger



Connect launcher and telephone wire port to be hunted in right way



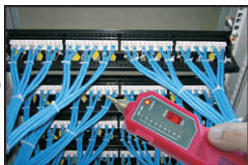
Hunt cable at the other end with receiver

### Example II

Hunt cable in distribution frame



Connect launcher and LAN cable port to be hunted in right way



Hunt cable at the other end with receiver



**Please read and learn safety instructions before use or maintain the equipment**

Please store the test in right place and operate in correct way in case of the sharp probe hurts.

Never expose the equipment directly in the sun.

Never put the equipment in the place with much dust, humidity and high temperature (over 40 °C)

Please use battery according to the specification; otherwise, it may result in damage to equipment.

Please never dismount the equipment arbitrarily. The maintenance and care shall be conducted by professional personnel.

Please take out the battery in launcher and receiver if the equipment is not used for a long time so as to prevent that the battery liquid is leaked in future.

Never use the equipment to detect power cord with electricity (such as power supply circuit of 220V), other wise, it may result in damage to equipment and personal injury.

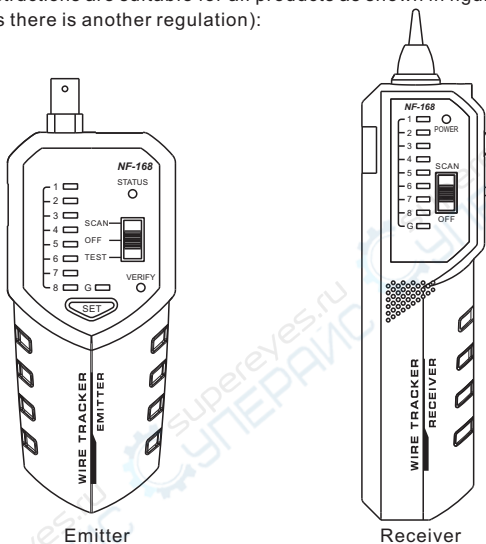
Never conduct related operation of communication line in thunderstorm weather so as to prevent lightning stroke and impact on personal safety.

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## Brief Introduction

The service manual for user here covers all products of NF-168 (all instructions are suitable for all products as shown in figure below unless there is another regulation):



## Overview

NF-168 is an updated item after NF-801. It is a breakthrough in the communication field, which highlights for its anti-interference ability. This item is composed of emitter and receiver. It owns three great functions of hunting, wire sorting and circuit status testing quickly and accurately. Thus, it becomes an available tool for technicians in installation and maintenance of weak current system. It is widely applicable to telephone system, computer network, other metal wire circuit and other fields.

## Product features:

Tracing network line (4 cores) directly when connected with switch or router. (NF-801 don't).

The wire can be hunted directly in connection with Ethernet switch/ router /PC terminal of different models in startup.

the wire can also be hunted directly such as 5E, 6E, telephone line, coaxial cable and other cables.

Test 5E, 6E directly, troubleshooting open, short, cross errors.

RJ45/RJ11/BNC and other ports are included and the complex switch is not required.

Endurable high pressure and self-protection ability.

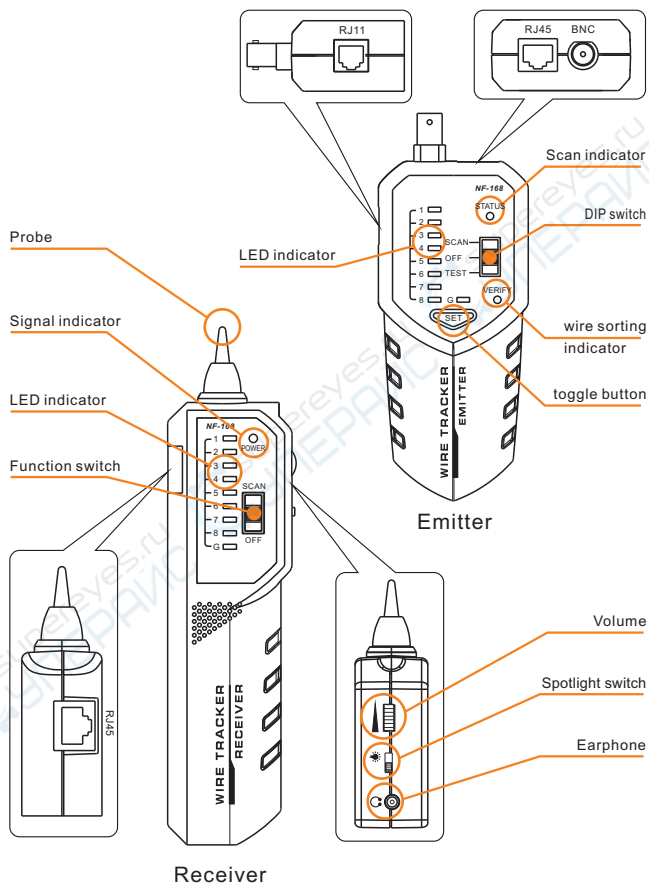
Earphone and backlight help you operate in dark.

9V battery for power supply and low-voltage hint function.

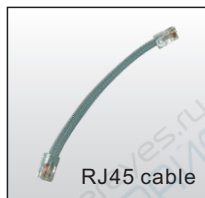
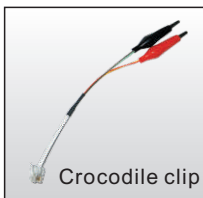
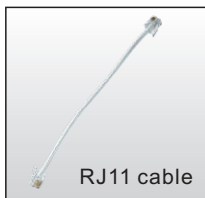
## Specification:

Item	Specification	
Product name	Wire tracker	
Power supply	DC, 9V battery	
The max working current	Emitter	$\leq 20\text{mA}$
	Receiver	$\leq 30\text{mA}$
Signal transmission format	Multi-frequency impulse	
Signal output electric status	8Vp-p	
Distance of signal transmission	$\geq 3\text{km}$	
Appearance dimension	Emitter	146×57×30 mm
	Receiver	187×46×27 mm
	Whole set	285×150×46 mm
Weight	Emitter	0.083kg
	Receiver	0.096kg
	Whole set	0.458kg

## Product Interface and Keypad Introduction



## Accessories



The accessories are included in the whole set, their usage are as below.

### **RJ45 cable**

Connect 8-core network cable with transmitter or receiver.

### **Crocodile clip**

clip the wire cores to test if necessary.

### **RJ11 cable**

Connect telephone line (2/4/6 cores) with transmitter of receiver.

### **Earphone**

It help users to operate in noisy environments.



## Operation methods

### Usage of transmitter

Open battery cover, install DC 9V battery in launcher, push the key to “scan”, the indicator flashes, which means the transmitter is normal. Connect two ends of network line to the RJ45 port of launcher and remote identifier separately. then hold the receiver to find the target line. (If you want to alter its frequency,press the button of “Set”). Push the key to “test”, the “VERIFY” indicators will flash. Connect two ends of network line to the RJ45 port of launcher and receiver separately, then go ahead with the test result. (If you want to adjust its speed, press the button of “Set”) .

### Usage of receiver

Open battery cover, install DC 9V battery in launcher, push the key to “scan”, the indicator flashes, which means the transmitter is normal. Connect two ends of network line to the RJ45 port of launcher and remote identifier separately. then hold the receiver to find the target line. when the probe is close to the target cable among plenty of cables, you will hear “beep, beep”, and the voice is the loudest, the signal light would be brightest. (Sometimes there may be some noise, it is difficult to distinguish which one is the goal, here you can turn down the voice to the best status.)

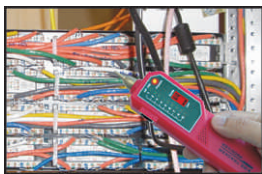
## Hunting test

### Network line (as below)



1. Open battery cover, install DC 9V battery in launcher, push the key to "scan", its indicator flashes, which means the transmitter work well.
2. Connect one end of network line to the RJ45 port of launcher.
3. push the key to "scan" of receiver, then its indicator flashes, which means the receiver is normal. then hold the receiver to find the target line.
4. In the process, press the button of "Set" to choose your ideal volumn.

### Telephone line(as below)



1. Open battery cover, install DC 9V battery in launcher, push the key to "scan", its indicator flashes, which means the transmitter work well.
2. Connect one end of telephone line to the RJ11 port of launcher.
3. push the key to "scan" of receiver, then its indicator flashes, which means the receiver is normal. then hold the receiver to find the target line.
4. In the process, press the button of "Set" to choose your ideal volumn.

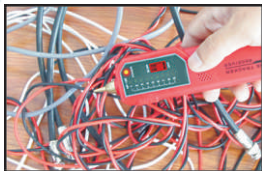
**Note: Never put a telephone cable into RJ45 Port, especially a charged one, for fear of burnout to the tester**

## Monitoring line(as below)



1. Open battery cover, install DC 9V battery in launcher, push the key to "scan", its indicator flashes, which means the transmitter work well.
2. Connect one end of BNC line to the BNC port of launcher.
3. push the key to "scan" of receiver, then its indicator flashes, which means the receiver is normal. then hold the receiver to find the target line.
4. In the process, press the button of "Set" to choose your ideal volume.

## Metal line(as below)



1. Open battery cover, install DC 9V battery in launcher, push the key to "scan", its indicator flashes, which means the transmitter work well.
2. Insert the crocodile clip into RJ11 port of transmitter, clamp the wire core with crocodile clip.
3. push the key to "scan" of receiver, then its indicator flashes, which means the receiver is normal. then hold the receiver to find the target line.
4. In the process, press the button of "Set" to choose your ideal volume.

## Wire sorting ( RJ45 as an example)

1. Connect two ends of network line to the RJ45 port of launcher and receiver separately.
  2. And push the key to “test”, the wire sort indicators will flash, which means the transmitter works well. (adjust its speed by press the button of “Set”)
  3. If the wire is normal, and the GND is not connected, then the 8 indicators will flash one by one. And if GND is connected, then the 1 to 8 and G indicators will flash one by one.
  4. If there is miswires as below. If line “2” is open, then the 2<sup>nd</sup> indicator of emitter and receiver will not flash. If there is several lines are open, the corresponding indicators will not flash. And if less than 2 lines are connected, none of the lights is on.
- When the line are cross, for example, line “2” and line “3” disorder, the indicators flash as follows,
- Transmitter : 1-2-3-4-5-6-7-8-G  
Receiver: 1-3-2-4-5-6-7-8-G
- When there is short circuit of line “2” and “3”, the 2<sup>nd</sup> and 3<sup>rd</sup> indicators of receiver will not flash while the other lights still do.



## Other functions

### (1) Low-voltage hint function

When the battery voltage is low, push the function button to “scan” or “test”, at this time, both the scan indicator and wire sorting indicator will flash, which means the battery should be replaced.

### (2) Earphone function

The earphone can be worn in noisy environment for operation so as to avoid external interference.

### (3) Volume adjustment function

Turn volume adjustment switch on the receiver when tracing cable to adjust the volume to the appropriate degree.

### (4) Floodlight function

The side floodlight can be started at night or in dark. The floodlight turns on so as to facilitate your normal operation.

### (5) Wire sorting directly with switch

Connect the line to be tested with transmitter and switch, then get the result from flashlights.

## Packing list

1. Emitter	1PCS	6. RJ45 adapter line	1PCS
2. Receiver	1PCS	7. Cable Clip	1PCS
3. Laminated battery of 9V	2PCS	8. User manual	1PCS
4. Earphone	1PCS	9. Kit	1PCS
5. RJ11 Adapter line	1PCS	10. Color box	1PCS

## Diagram of series products



**NF-306**



**NF-868**



**NF-8208**



**NF-801B**



**NF-806R**



**NF-816**



**NF-468L**



**NF-3468**



**NF8108-M**



**NF-388**



**NF-903**



**NF-906A**



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