

**NOYFA**®

*Your excellent helper in cable test!*

**MODEL: NF-838**

# INSTRUCTION MANUAL

## LCD Multifunction Wire Tester



**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 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 at the other end with receiver

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



**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 sb .

Never expose the equipment directly in the sun.

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

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.

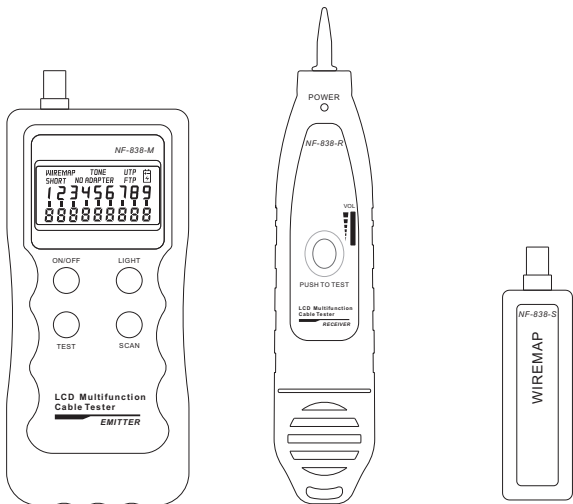
Never use the equipment to detect power cord with electricity (such as power supply circuit of 220V), other wise, it may result in damage to equipment and personal injury.

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



Emitter(NF-838-M)

Receiver(NF-838-R)

Remote identifier(NF-838-S)

## Overview

Model NF-838 is composed of emitter (NF-838-M), receiver (NF-838-R) and remote identifier (NF-838-S). The instrument is provided with fluent appearance, excellent hand feel and considerate human-centered design. It owns three great functions of hunting, wire sorting and circuit status testing. Also NF-838 highlights its function to test all kinds of cable, such as RJ11, RJ45, COAX, USB, 1394 cable, it has 9 different tones.

## Product features:

LCD display is more direct, more visual and clearer.

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

Test 5E, 6E, telephone wire, coaxial cable, USB cable, 1394 line and other cables for troubleshooting.

RJ45/RJ11/BNC/USB/1394 and other ports are included and other adaptors are no need.

Backlight display function.

- Different tones for different circuit status.

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

## Technical indexes

### (1) Overall dimension

Emitter: 185x80x32mm; receiver: 218x46x29mm;

Remote identifier: 107x30x24mm

### (2) Power

Two laminated batteries of 9V

### (3) Display

Large screen LCD segmented display (effective visual area 54x26mm)

### (4) Type of cable tested

RJ 45/RJ11/BNC/USB/1394 cable and other different types

### (5) Type of cable detected

RJ 45/RJ11/BNC/USB/1394 cable and other metal wires

### (6) Ambient temperature in work

-10 ~+60

### (7) Signal transmission distance

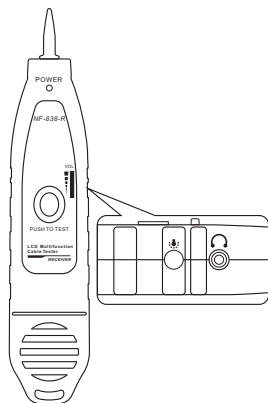
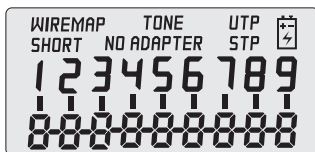
More than 2 km

### (8) Location of wire order and cable failure

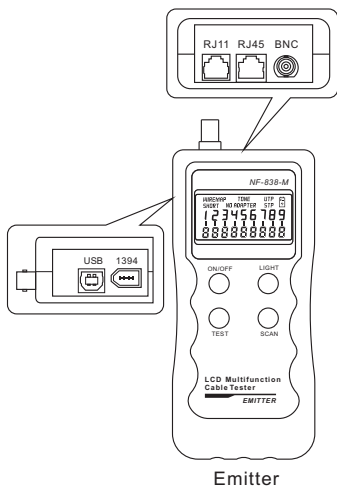
Failure test, open circuit, short circuit, reversed position, crossing and series winding

# Product Interface and Keypad Introduction

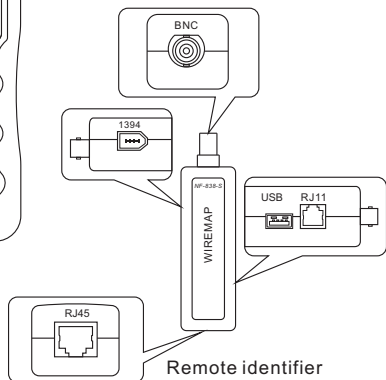
## Instructions for LCD Display



Receiver



Emitter



Remote identifier

## Instructions for product

Turn on the tester. Meanwhile, the default of system is wire map testing, LCD display is as follows if the cable is not connected.



WIREMAP  
NO ADAPTER

## Wire map testing (Take RJ45 as an example)

Turn on the tester, connect one end of the cable to emitter, and the other end is connected to RJ45 port of remote identifier. Press “test” to start, if the cable is shielded (or earthing wire), LCD will display “STP”; if the cable is unshielded (or earthing wire), LCD will display “UTP”; press “light” key in dim environment.

## Test Result1: Short circuit (SHORT)

If there is short circuit of cable or terminal, three “tick, tick and tick” will come out from emitter. Meanwhile, LCD display the picture below: (take 3,4-short circuit as example)



WIREMAP  
SHORT

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At this moment, press “TEST” key to restart again. If the short circuit still occurs, please solve “short” circuit problem before measuring.



## Test Result 2:

If the cable is not connect to the emitter or remote identifier, the launcher will produce “tick” one time and LCD displays the picture below in the meanwhile:



WIREMAP  
NO ADAPTER

## Test Result 3: Normal wiring map (WIREMAP)

If the cable is normal, the launcher will produce a long “tick” and LCD displays the picture below in the meanwhile.



WIREMAP                  UTP

1	2	3	4	5	6	7	8
1	2	3	4	5	6	7	8

RJ45 cable without shielding wire



WIREMAP                  STP

1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9

RJ45 cable with shielding wire

#### Test Result 4: When there is open circuit of cable

The emitter produces a long “tick” sound and LCD displays the picture below in the meanwhile:

WIREMAP				UTP	
1	2	4	5	7	8
1	2	4	5	7	8
1	2	4	5	7	8

The result indicates that “3” “6” line of RJ45 cable is open.

#### Test Result 5: When the cable is crossed /disorder

The emitter produces two short “tick, tick” and LCD displays the picture below in the meanwhile:

WIREMAP				UTP			
1	2	3	4	5	6	7	8
1	2	6	4	5	3	7	8

The result indicates that “3” “6” line of RJ45 cable is cross.

#### Test Result 6:

**When the cable is cross/disorder, as well as open circuit.**

The emitter produces two short “tick, tick” sound and LCD screen displays picture below in the meanwhile:

WIREMAP				UTP	
1	3	4	5	6	8
1	3	4	5	6	8
1	3	4	5	6	8

The picture indicates that “3” “6” line of RJ 45 cable is cross and “2” “7” lines are in open circuit.

## Test of different cable orders

The result of normal RJ45 cable is shown as below:

WIREFMAP	UTP
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	

The result of normal RJ11 cable is shown as below:

WIREFMAP	UTP
1	2
2	3
3	4
4	5
5	6
6	

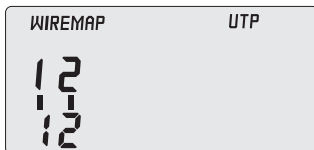
The result of normal 1394 cable is shown as below:

WIREFMAP	UTP
1	2
2	3
3	4
4	5
5	6
6	

The result of normal USB cable is shown as below:

WIREFMAP	UTP
1	2
2	3
3	4
4	

The result of normal BNC line is shown as below:



## Hunting test

Press "ON/OFF", the equipment is started up with a long sound. Slightly touch "SCAN" key and enter hunting mode, LCD screen displays the following in flashing:




Press "ON/OFF", then the emitter will start working. Connect testing cable to corresponding port of the emitter (RJ45, RJ11, USB, BNC, 1394 and others), slightly touch "SCAN" key, and select the preferred tone (there are 9 kinds of frequency to be selected, press "SCAN" for your desired one, then take the receiver to hunt target wire (the usage of receiver is shown in the following) . Press "backlight" key when in dim environment.

## Usage of the receiver

Dismount the battery cover, install battery of 9V, press "PUSH" key, then approach the cable with probe and find target wire required among lots of cables. When the probe is near target wire, the "beep, beep and beep" sound may occur and the signal indicator light "POWER" will be on. Compare volume of "beep, beep and beep" and luminance of signal indicator, the wire which makes sound is the loudest and the signal indicator is the brightest is target one.

## Other functions

### (1) Low-voltage hint function

When the battery voltage is low, the low-voltage hint sign " "on LCD will flash and the user shall have the battery replaced at this moment.

### (2) Earphone function

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

### (3) Volume adjustment function

Turn "volume" switch on the receiver when tracing cable to adjust.

### (4) Floodlight function

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

### (5) Keypad sound start and stop function

If the user needs to stop keypad sound in test, the user can slightly touch "wire sorting" and hunting key, the keypad sound is stopped; if the keypad sound is about to started again, the operations above shall be repeated so that the keypad sound is started.

## Packing list

1. Emitter	1PCS	7. Rj45 Adaptor cable	1PCS
2. Receiver	1PCS	8. Alligator clip adaptor	1PCS
3. Remote adapter	1PCS	9. User manual	1PCS
4. Laminated battery of 9V	2PCS	10. Kit	1PCS
5. Earphone	1PCS	11. Color box	1PCS
6. RJ11 Adaptor cable	1PCS		

## Diagram of series products



**NF-306**



**NF-868**



**NF-8208**



**NF-268**



**NF-806R**



**NF-816**



**NF-468L**



**NF-3468**



**NF8108-M**



**NF-388**



**NF-903**



**NF-906A**



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**SHENZHEN NOYafa ELECTRONIC CO.,LTD**