

Operating Manual

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Notice for Use

Warning

To avoid electricity leakage and personal injury, please comply following instruction:

- Do not use the damaged product.
- Do not use the product near the explosive gas, stream or atomy.
- No assembly needs to repair by customers. (if the product have any damage, please contact local distributor or our maintenance center which printed on the instruction)

Careful

To avoid the product and tested equipment damage, please comply following instruction:

- all connection have to use correct cable and connector
- watch direction of battery installation

Cleaning

Please use slight wet cotton to clean the product, **Do** not use acid, alkali solution.

POWER

The product uses two AA alkaline or NiCd/NiMH rechargeable batteries. Please take out battery if you will not use the product in long time that to avoid battery mal-function and leakage.

→ Ps: The product's battery energy capability display function is designed for 1.5v alkaline batteries, and the NiCd/NiMH batteries usually are 1.25v will display 2/4 or 3/4 capability when they are full.

→ The product system will shut down if long time not using, and PWR indicator light will turn on.

Operation Chart



1. Power/Esc

keep press: turn on/off

quick press: cancel/backspace

2. Navi-Key

→ select menu in main interface

→ select cursor, the selected button will display orange

→ input numbers and character

→ **OK**: confirmation and start-up function

3.tab:

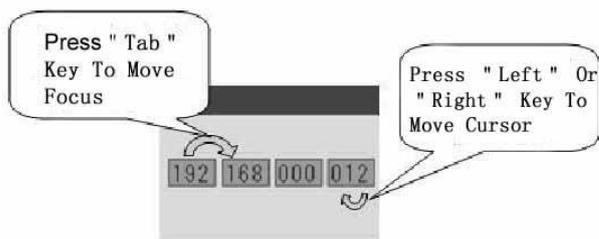
→ select button or cursor

4. input operation

→press "tab" key to select cursor

→press "left" or "right" key to select location of input

→press "up" or "down" key to select numbers and figures



tips: every number in box can be edit individually,when input large number, like input subnet mask "255", just need to press three times on the first "0" of "000" in box.

Peripheral interface and properties

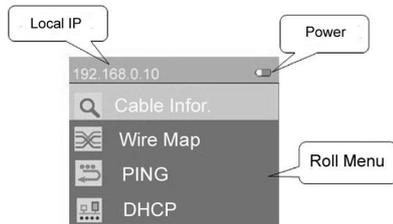
→As shown in picture above, RJ-45 Ethernet connector in the left is the main test interface, all the product function need to use it.

→RJ-45 Ethernet connector in the right is the minor connector which will be used in the "Wiremap" program.

→ Mini- USB connector is used for the software update.

Screen Display Guidance

main menu



Operation Chart

	Cable Info	Test cable properties and parameters
	Wire Map	Draw cable wire map by work with remote adapter
	Ping	ICMP test,
	DHCP	Acquire Info from DHCP server
	Multi-IP monitor	Multi-IP address ICMP test
	POE test	POE device test

	Flash Port	Identify tested cable ID by flash linked switch port
	Audio tracker	Located tested cable with audio tracker
	System setting	Setting system parameters

System Setting:

	Storage manager	Active web server to check and saving test results
	LOCAL IP	Setting local IP address
	Date&time	System date and time
	Audio	Open/close sound of using keys
	backlight	Adjust backlight level
	Standby	set waiting time of system standby
	System info	Display system information

NT-100 adapter

Operation Chart



Operation Guide

LED Flash switch: Open/close LED light

Power Switch :

up: Open audio test

mid: MUTE/ LED light indicate

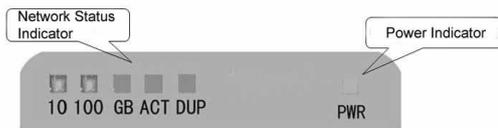
down: shut down

Volume adjuster: adjust level of volume

Program introduction

★ Link status indication

main test connector plug in Ethernet Cable, and the other side of cable plug in working status network equipment, the LED light area which on the above of screen display the connecting speed and "Dup" status.



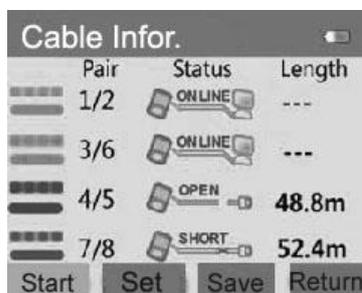
LED display	status
10	10Mbps speed
100	100Mbps speed
GB	1000Mbps speed
ACT	active indicator, twinkle when network has data sending or receiving
DUP	turn on when network connection version is full-DUP

★ Power Indication

“PWR” is a multifunction indicator

PWR Display	Status
off	Normal
on	Standby(energy-saving)
twinkling	Battery low-energy warning

1. Cable Info



(please use left port of the tester)

The program designed for Cat5E or Cat6 UTP/STP, please set type of tested cable before using.

Press OK to start test, indicate cable status and pair length (measure by unit-meter)
 pair ranking: 1/2, 3/6,4/5,7/8, every pair display one test result.

Cable status:



Open: cable un- connected or open circuit, display the distance to malfunction node



Short: mal-function node of the pair short



On line: normal, correct connection to network equipment



Fail: un-identified cable or is malfunction, can not get test data

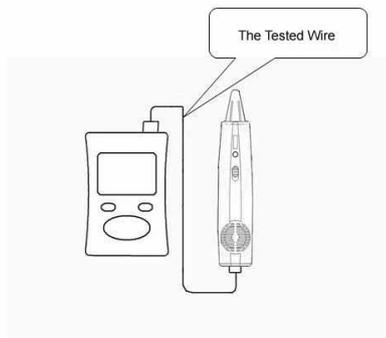
Ps 1: In some 10/100M network adaptor that only end the pair

which use for data transformation ,so it probably display

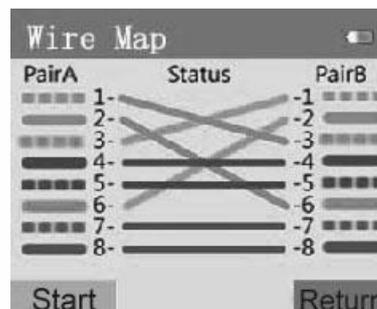
only 1/2, 3/6 online, and others are short.

Ps 2: It will not display length when cable is in correct connection --online.

2. Wire Map

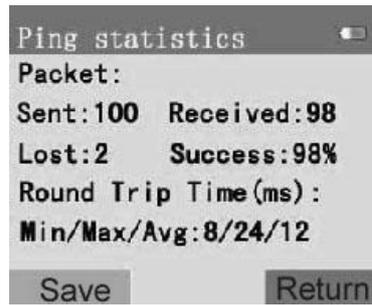
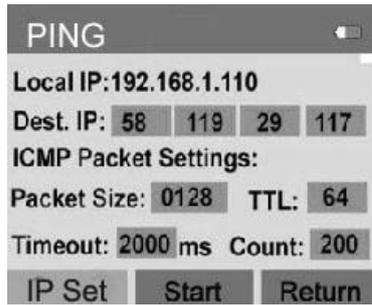


(please use right test port)



Please plug cable into right RJ-45 port, the other side of cable pulg into RJ-45 port of NT-100.

3. PING



which is the elementary test of network connection status. You also can test IP node stability through set ICMP data packet.

Before start the test, you should set the local IP Address, you also can set local IP Address by using of DHCP function if you have set DHCP serve open .

User can set:

Packet Size: sending ICMP data packet size , configure 12-1492 bytes, default 32

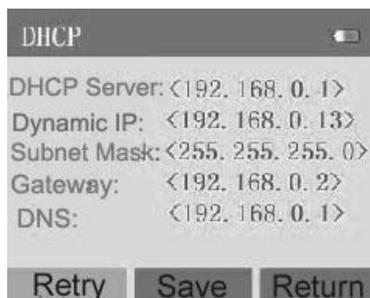
TTL: Time to Live, configure 1-128

Timeout: configure 10-2000 ms, default 2000ms

Count: , configure 1-999 times, default 4 times

Ps: In this program, main test connector will set to 10/100M adaptive speed automatically.

4.DHCP



(please use left test port)

This program is a DHCP client, user can check local network DHCP server Info, also can acquire an IP address save to nLink-820 IP address.

5. Link Monitor

Link Monitor		
No.	IP Address	State
01	192.168.3.54	✓
02	202.99.160.68	✗
03	58.119.56.240	✓
04	192.168.3.54	✓

Start Add Delete Return

(please use left test port)

Test could use for monitoring up to 32 IP node connection status simultaneity.

Add IP Address: press ADD button, input objective IP Address, then press OK key to confirm.

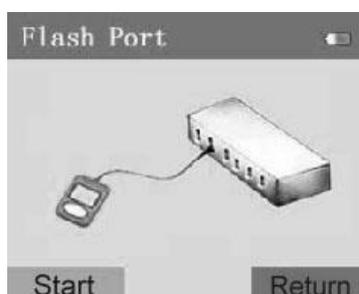
Delete IP Address: press DEL button, input the serial number which generate when you add the IP Address, and then press OK.

Test result and status

?	Waiting for response
X	Failed (warning by tone)
✓	Link connection correct

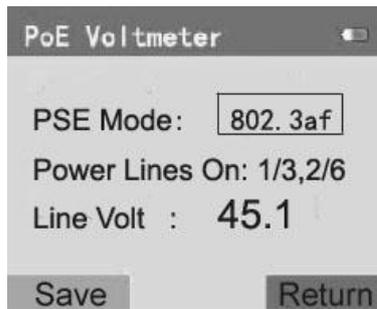
Ps: In this program, main test connector will set to 10/100M adaptive speed automatically.

6. Flash Port



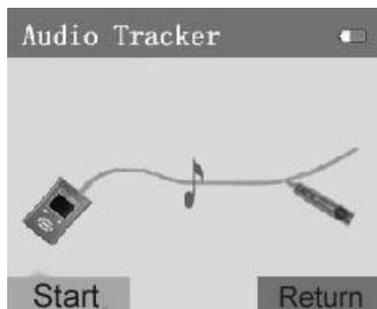
Plug cable connector into left test port, the other port of this cable plug in a switch or router, press Start button to start test. The switch or router's port will flash in a fixed frequency.

2. PoE Test



Plug cable into left test connector, then press OK key or Start button. Link-820 could simulate the different power level PD device, and acquire voltage waveform of the PSE device. This will continue several seconds depend on different situation.

8. Audio tracker



(please use right test port)

This program need to work with NT-100. After start program, the tester will send the specific digital audio signal through cable. And NT-100 will receive the audio signals to identify the tested cable.

System Settings

1. Date & time:

Set system time that can be inserted when you save the test data.

2. IP Setting

Set the IP Address

3. Tone

Open/close sound

4. Backlight

Adjust backlight brightness

5. Energy Save

Set the time to standby when you temporarily stop use the product.

6. Storage Manager

You must into this program interface when you browse the test result which has been saved on Web.

You can choose the test result that need to be deleted in this program.

7. System Info

nLink-820 version.

Test result Saving & Browse

1. Saving

nLink-820 could save three kinds test result :Cable Info, PING, PoE Test.

After complete test, press Save button, system will remind you to input the ID number which to mark the particular test result. ID number is composed by three numbers and one figure. There is no ranking restrict.

Every single program test result can save up to 300 pieces. You have to clear out in Storage Manager manually after it full.

Test result can not be recovery after clear out, please make a backup or print it out before clear out.

2. Browse

Users can browse the test result by web server.

First you enter **System Settings—>Storage manager** interface.

Then set correct IP address for the device, and make sure the device has access into the network (make sure the computer and the device is under the same subnet).

For example: <http://192.168.1.100>

Electrical Specifications

nLink-820	
Access Media	10/100/1000BASE-T (IEEE 802.3) adaptive port
Cable Type	UTP Cat5/Cat5e; EIA/TIA568A/B
Protocol	IPv4, ICMP, DHCP, HTTP etc.
Cable Info Test	Cable length, open, short, on-line; Minimum test length: 0.8m; Accuracy: $\leq 0.8m$.
PoE Test	VC: 0~-60V DC; Standard IEEE802.3af, IEEE802.3at and nonstandard PD device; PSE : endconnection(1/2,3/6 pairs)and crossconnection(4/5,7/8 pairs)
Ports	RJ45 ports x2 Mini-USB x1
User Interface	1.8" LCD TFT, 160×128 pixels; Link indicator LED x5; power indicator LEDx1; Keys x7
Power	2 x AA alkaline or 2 x AA NiCd/NiMH batteries
Size	103.5x66x29mm
Weights	100g
Work Enviroment	Work environment -10~+40 °C Storage environment -20~+60 °C Work humidity 95% RH (no condensation)