

## **INSTRUCTION MANUAL**

4 IN 1 Cable Tester



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#### 1: INTRODUCTION

The 4 in 1 Cable Tester tests 4 common LAN and Computer cables. It tests installed cables or patch cords with RJ-45, RJ-11,USB and BNC connectors. It is intended to test cables with straight through connections not cables with reversed or transposed connections like some LAN crossover cables or reverse wired telephone cables.

## 2: SAFETY RULES & WARNINGS



This tester is not intended for live circuits.

Attaching this tester to a powered circuit will result in damage to the tester or injury to the user.

- 2.1 Read all instructions in this manual before using this tester.
  Failure may result in damage to the tester or injury to the user.
- 2.2 Repairs and maintenance must only be carried out by qualified service personnel or qualified electricians/technicians who know the dangers of, and the safety rules applicable to this type of equipment.
- 2.3 Do not touch the ends of the cables when operate it. An unexpected dangerous potential may be present.
- 2.4 Do not apply voltage or current to any of the tester's connectors

- 2.5 Do not use this tester to make measurements in adverse environments such as rain, snow, fog, or locations with steam, explosive gases or dusts.
- 2.6 Avoid usage near strong electrostatic fields (high voltage power lines, televsions, computer monitors, etc.).
- 2.7 Avoid usage near strong RF fields (radio or television transmitters, walkie talkies, cellular phones etc.).
- 2.8 Remove the battery when the tester isn't used for more than 1 month. Chemical leakage from the battery could damage the tester.

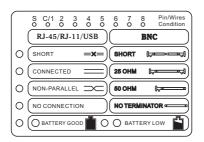
## 3:PRODUCT FEATURES

- 3.1 Test 4 types of cables
- 3.2 Simple one button test
- 3.3 Ergonomic portable handheld design
- 3.4 Tests installed wiring or patch cables
- 3.5 Remote unit stores in Main unit
- 3.6 600 ft test distance (RJ-45/RJ-11/BNC)
- 3.7 Built in battery access
- 3.8 LEDs indicate connections and faults
- 3.9 Beeper provides audible annunciation of test results
- 3.10 Tests shielded (STP) or unshielded(UTP) LAN cables
- 3.11 Test shields USB cables

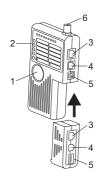
#### 4: SPECIFICATIONS

- 4.1 Cable Types Tested:
- UTP and STP LAN cables,terminated in RJ-45 male connectors.(EIA/TIA 568)
- RJ-11 cables with male connectors, 2 to 6 conductors installed.
- USB cables with Type A flat plug on one end and type B square Plug on other end.
- BNC cables with male connectors.
- 4.2 Faults Indicated: No Connection, Shorts, Opens, crosses.
- 4.3 Low battery Indicator: LED lights to indicate low battery.
- 4.4 Case Dimensions: 7.25×4.0×1.0 inches (L×W×H).
- 4.5 Weight: 202 grams, 0445lbs. (Without battery).
- 4.6Battery: 1 standard 9-volt alkaline battery.

#### 5: FRONT PANEL & 4 in 1 DLAGRAM



#### 6: interfaces



- 6.1 Test Button
- 6.2 Main Display
- 6.3 RJ-45 Jack
- 6.4 RJ-11 Jack
- 6.5.1 USB Jack (NF-3468)
- 6.5.2 USB(mini) Jack (NF-3368)
- 6.6 BNC Jack

## 7:OPERATION

#### 7.1 General Information:

The 4 in 1 Cable Tester NF-3468, it functions by pressing onesingle button on the panel. User can get clear test results from the 8 light and knowing the cable is connected. No connection, shor or Non-parallel.

Note: Only one cable can be tested at a time. (eg) A BNC cable and RJ-45 cable cannot be tested simultaneously.

#### 7.2 The MAIN and REMOTE unit:

The 4 in 1 Cable Tester, is consists of a Master unit and Remote unit. The Remote is detachable when testing cablesBe careful when remove it from the master because the plastic edge is a little sharp.

#### 7.3 Testing Patch cables:

"Patch" cables have both ends accessible at the same location. Usually, these cables are less than 25ft in length, and are not installed in a wall orceiling. Since both ends are accessible, one end one be plugged into the 4 in 1 Main unit, and the other into the remote unit. It is unecessary to remove the remote unit from its docked position on the Main unit.

## 7.4 Testing Installed cables:

If the two ends of testing cable are not in the same location, the Remote can be detached from the Main unit. Once detached, the Remote can be attached to one end a cable, and the Main unit attached to the other end of the cable.

## 7.5 Performing the Test:

Once the Remote and Main unit are attached to the ends of the subject cable, as described in 6.3 and 6.4, testing may begin, simply press and release the Test Button on the Main unit, observe the LED indicators, and note the "beep" sound that comes from the Main unit.

## 7.6 Interpreting the Results:

#### 7.6.1 Power LED:

The Power LED should light whenever the "Test" Button is pressed and released. It will be on for a minimum of 5seconds. If the power LED does not light, replace the battery.

## 7.6.2 Low Battery LED:

The low Battery LED should not light . If it does, replace the battery.

#### 7.6.3 No connection LED/Single Beep

If the Remote is not connected to the Main unit with a cable, or the cable has no intact conductors, the No Connection LED will light and the Beeper will sound Once.

#### Note:

When testing an RJ-45 UTP cable. The S/G LED must not light. When testing an RJ-45 UTP cable. The S/G must light.

The 4 in 1 is intended to test complete cables. It may not find faults in cables that are intentionally incomplete. For example, the standard EIA/TIA 568 RJ-45 terminated Ethernet cable is expected to contain 8 conductors. If only 4 conductors are used between the RJ-45 connectors, the 4 in 1 may not properly identify the faults.

RJ-11 cables may have 2 connections, 4 connections, or as many as 6 connections. For 2 connection cables, LED 3 and 4 must light. For 4 connection cables, LED 2, 3,4 and 5 must light. For 6 connection cables, LED 1.2.3,4,5 and 6 must light.

The Numbered LEDs don't indicate that a GOOD connection exists, only that a connection exists. If the Short or Cross LEDs are Lit, there is a fault in the cable.

#### 7.6.4 Connected LED/3Beepers/Short LED/Numbered LEDs

If the Connected LED lights, the Beeper emits 3 beeps, and the Short LED lights, the cable has a fault. The Numbered LEDs indicate the location of a short.

#### Note:

In the Short mode, the Numbered LEDs only indicated the location of the shorts. The other connections in the cable are not indicated. If more than 3 numbered LEDs light, there may be multiple shorts in the cable.

### 7.6.5 Connected LED/2Beepers/Cross LED/Numbered LEDs

If the Connected LED lights, the Beeper emits 2 beeps, and the Cross LED lights, the cable has a fault.

#### Notes:

In the Cross-mode, the Number LEDs indicate connections but do not indicate the location of the cross.

RJ-11 cables used for telephone connections are often crossed. Even new cables are often crossed . This seldom affects the performance of standard analog telephone lines(POTS). Digital telephone lines and old touch-tone phones may be polarity sensitive, so a crossed cable may prevent them from working properly.

#### 8:MAINTENANCE

4 in 1 Cable Tester is a precision test instrument and, when used as described in this manual, should not require maintenance. There are no internal adjustments.

Calibration is not required.

To clean outside of the tester, use a cloth dampened with a mild detergent solution. Do not use any abrasive cleansers, or chemical solvents that may damage the tester.

## 9:ACCESSORIES

# 9.1 The 4 in 1 Cable Tester includes the following items:

Main Unit Remote Female BNC Terminator Instruction Manual Carrying Case Color box



Your excellent helper in cable test!

