

Pro'sKit®

MT-7055

**Enhanced LAN
Cable Tester**



MT-7056

LAN Cable Tester



User's Manual

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Thank you purchasing the Multi-Function Cable Tester Series Before using the Cable tester series for first time, Please read the following instructions.

謝謝您購買寶工電纜測試器系列,在您第一次使用本產品時,請您閱讀本產品操作說明。

MT-7055 **Enhanced Lan Cable Tester**

Instant cable tester with tone generator for home and commercial networks user's guide

The Plug'N'Check Plus offers an affordable solution for the general or professional user to verify cable integrity of Datacom, Telecom and Coaxial cables without mastering a complex readout. While the loop back test using only, simply plug in both ends of a cable, the main test unit will immediately display explains the cable type and checks whether cable is faulty or good, a remote test using both units has to be read the pin-to-pin configuration by the user at the remote unit. A shield LED shows results of the shielding check and battery-low indicator prevents misreading results. Provides a tone generator for tracing cable with a Net Probe simple and fast, also equipped with a line tester to verify phone line polarity and detects voltage before it threatens the safety of the tester. It will make work shorter and easier for the layman and the professional alike. Especially suited for verification, installation and maintenance of residential and commercial networks.

Features:

1. Instantly indicates cable type (LAN/TELECOM/COAX) and tests for faults.
2. Remote unit display actual pin configuration, detects shorts miswires, breaks, reversed, enables testing of installed cables.
3. Checks datacom/network, voice/telecom, crossover, shielded and coax cables.
4. Tone generator makes tracing cable with a net probe simple and fast.
5. A built-in line tester verifies phone line polarity and detects voltage before it threatens the safety of the tester.
6. Battery low indicator prevents misreading results.
7. Suitable for residential or commercial application.

A. Loop-back Testing

Simply plug in cable and verify!

Switch tester on. The Green/Red LEDs will light one by one to show that the tester is operational.

1. Plug both ends of cable into the tester twin RJ45 jacks, and the test results will show immediately on the LED display.

Reading LED display

VOICE

- Cross pinning: Cable is good, and is a telecom/voice cable. USOC 8, 6, 4, 2.

DATA

- Straight-through : Cable is good, and is a datacom/network cable for PC-to-HUB connection, or coaxial video cable.

DATA

- Crossover: Cable is good, and is a crossover cable, for PC-to-PC and HUB-to-HUB connections.

FAULTY

- Cable has a break, short, miswire, or reversed pair.

SHIELD

- Cable shielding is good (for shielded cables only).

B/L

- Tester's battery is low.

B. Remote Testing

Testing installed cable using the remote test unit.

(A) Automatic testing

1. Plug one end of the cable into the main test unit; plug the other end into the remote test unit
2. Press the Remote Autoscan button on the main unit to switch to remote testing mode. The tester will automatically begin testing each wire in the following pattern: (first sending a signal out on all eight pins, then sending an individual signal on each pin from 1 to 8 in sequence, you can follow the wiring of the cable by starting from the signal on all eight pins and counting which RX pins light up as the TX socket transmits from pin 1 to pin 8 in sequence. (Results must be read on the remote unit.) The shield light on the remote unit will light continually if the cable is shielded and its shielding is good.

(B) Manual Testing

1. Follow all the instructions for automatic testing. Then press the " manual test/tone generator" button on the main test unit. The tester will send a signal on pin 1. With each press of the " manual test/tone generator" button, the signal will advance to the next pin. Results are shown on the remote unit.

C. Tone Generation

To send a tone over the wire which can be detected by a tone tracer , simply plug one end of the cable into the "TX" jack on the main test unit; set it to remote test mode by pressing the "Remote/Autoscan"button; and switch to manual mode by pressing the manual test/tone generation button. The tester will automatically generate a tone along the length of the cable while in manual remote test mode, whether or not the remote test unit is connected to the other end of the cable. Press the manual/tone button to select an individual pin to carry a tone. Trace the tone using a tone tracer such as the PR-06P Net Probe.generation button. The tester will automatically generate a tone along the length of the cable while in manual remote test mode, whether or not the remote test unit is connected to the other end of the cable. Press the "manual/tone" button to select an individual pin to carry a tone. Trace the tone using a tone tracer such as the PR-06P Net Probe.

D. Line Test

To verify whether an installed telecom/voice cable has normal or reversed polarity, plug it into the "Line Test" jack on the remote unit. A green light indicates normal polarity; a red light, reversed polarity. A yellow light indicates A/C power is present on the line, and an unlit LED indicates that there is no power on the line. The "Line Test" jack can also show the presence of voltage on a datacom cable.

WARNING :

Before performing any test on an installed cable, plug the cable into the "Line Test" jack to see if voltage is present on the cable. If the Line Test LED lights, disconnect the cable's power source before proceeding with tests. Using the cable tester on live circuits may damage the tester.

NOTE :

While the loop back test using only the main test unit will immediately indicate whether a cable is faulty or good, a remote test using both units has to be read by the user at the remote unit, and the pin-to-pin configuration that the remote indicates must be checked against the known pin-to-pin wiring

E. Battery Replacement

When the battery low indicator goes on, the battery should be replaced immediately, in order to prevent misreading results.

Remarks:

- The main tester runs on one 9 V Alkaline battery.
- Please take out the battery if you do not need to use the tester for any extended period.

SPECIFICATIONS

Power	Main unit - 9V Alkaline battery Remote unit - None required
Size	Main unit - 4.57"x2.67"x1.13"/116mmx68mmx28mm Remote unit-4.65"x1.28"x1.11"/118mmx 32.5mmx28mm140g with battery
Weight	180g with battery Shipping weight-280g without battery
Operating Temp.	0°C - 45°C (32°F - 113°F)
Material	ABS
Built-in interface	RJ45 Jack - accepts both RJ45 & RJ11 plugs
Display	3Ø LED & 5Ø LED
Tone Freq.	800 HZ
Test	Indicates-crossover, straight thru., cross pinning, and coax cables. Detects fault-opens, shorts, reversals, crossed and miswires.
Cable types supported	UTP, STP, T568 A / B, 10Base-2, BNC / COAX and USOC 8,6,4,2 cables.
Distance maximum length	2,000ft. / 610m

MT-7055 提供一個經濟快速的解決方式，使一般或專業的網路安裝人士來完成整個系統的佈線、查線和導通測試，特別使一般人士不需精通細節亦能順利快速完成安裝。

Loop back test 迴路測試，只需將線的兩端插入測試器的兩個 RJ45 插頭即時由 LED 顯示線的種類/DATA/VOICE/COM 及用途，如是壞的線 Fault LED 會亮。Shield LED 一顯示 Shielding 測試結果,B/L(低電量)LED 燈亮，指示須更換電池，避免誤判讀。利用 Remote unit 可測已安裝之電纜線，同時由 LED 顯示實際的 Pin configuration，可方便

查開短路或錯線的情況。同時見有音頻發射器搭配 Net Probe 音頻接收器，可用於查線或找斷線的位置，Remote Unit 附有 line/voltage(電話線/電壓)測試器，可用於測電話線的極性有無電壓以保護測試器。



此測試器不能用於檢測帶有電流電壓的纜線

一、迴路測試(Loop test)

1. 打開電源開關 LED 開始自動掃描。
2. 將線的兩端插入測試器的 RJ45 JACK 測試器即刻判讀由 LED 顯示結果
Voice LED 綠-Cross Pinning 屬 telcom / Voice Cable USOC.2.4.6 or 8
Data/Coax LED 綠-Straight-through 使用於 PC 對 HUB 測 cable 需使用 Optional 的 RT45+0 BNC or F adapter 轉接頭
Data LED 綠-Crossover 使用於 PC 對 PC or HUB 對 HUB 的聯接
Fault LED 紅-表示線壞的開短路或錯線
Shield LED 綠-亮表示 STP Cable-Shielding 是好的
低電量 B/L LED 紅-亮表示低電量需更換電池避免誤判讀。

二、遠端測試(Remote test)

1. 自動掃描：
 - A. 線的一端插入 Main unit 的 TX tack 插座另一端插入 Remote unit RX Tack
 - B. 按下 AUTO 自動掃描按鍵，在 Remote unit 端看 pin out 結果
 - C. 從第 1 Pin 掃到第 8 Pin 會全亮，接下表示一個循環的開始，在 Remote 端容易判讀每一 Pin 相對應的情形。
2. 手動測試
按下 Manual test/Tone generator 按鍵，然後每按一次 test 鍵 LED 的訊號燈會往後退 1Pin
3. 音頻發射
 - A. 將纜線插入 TX 插座
 - B. 選 Remote test mode 再選 Manual mode

- C. 此時測試器會送出音頻沿著線送出
 - D. 同時可按 **Manual/tone** 按鍵選擇欲送音頻信號的 pin
 - E. 可使用 **Net probe** 音頻追蹤器，沿著線可找出線的另一端位置，或斷線的位置。
4. 線路測試
- 每次測試線路之前請先將纜線的另一端插入 **Remote unit** 的 **Line test** 插座，查看線上是否有電壓電流，如 **LED** 亮，表示線上帶有電，須先移除，方可開始測試，如 **LED** 不亮，表示線的另一端是 **open** 可開始測試。
- 電話線的測試：
- LED** 亮綠燈—表示正常極性
 - LED** 亮紅燈—表示極性相反
 - LED** 亮黃燈—表示線上帶有 **A/C Power**
 - LED** 不亮—表示另一端 **open** /或 **No Power**

MT-7056 **LAN CABLE TESTER**

WITH TONE GENERATOR

The Lan Cable Tester is a perfect companion to any network professionals. It combine the function of a simple to use cable tester with a built in tone generator. The tester can enhance one's ability to quickly locate and verify the status of a commonly used voice and data cable. The Lan Cable Tester's function include: loop-back, continuity, open, short, miss-wire and pin to pin configuration. It can verify a cable up to 2,000 feet in length, furthermore, it comes with shielded connectors which enables the testing of STP cables. It also features the convenient auto scanning and precision manual scanning modes.

The Lan Cable Tester comes in two modular units enables for local loop-back test of a patch cable or remote testing of pre-installed premise wiring. When coupled with Net Probe (PR-06P) or other compatible tone probe, the tone can help a technician to quickly

isolate and locate the cable being tested. Comes complete with BNC to RJ45 adapters for testing of coax BNC network and a RJ45 to RJ45 patch cord for testing patch panel and RJ45 network wall plates. Battery low indicator saves you from misreading the tester in case of low power. Requires a 9V battery to operate and not for live lines and circuits.

FEATURES:

1. All-in-one tester/tone generator.
2. Pin-to-pin LED indication.
3. For loop-back and remote testing.
4. Auto-scan or manual step testing.
5. Tests Lan, Telcom, STP and coax BNC cables.
6. Tone feature locates remote cable ends and cables in a bundle.
7. Battery low indicator.

PRODUCTION SPECIFICATION

1. Dimensions main: 4.57 X 2.67 X 1.13" (116 X 68 X 28)mm
2. remote: 4.65 X 1.28 X 1.11"(118 X 32.5 X 28)mm
3. Operating temp.: 0°C ~45°C
4. Weight: 180g/0.4lb with battery
5. Power Req.: One DC 9V battery
6. Tone freq.: 800 HZ

PART NUMBER

1. MT-7056 Lan Cable Tester with Tone Generator

MT-7056 是一款經濟實用能檢測目前市場上一般 DATE/VOICE/COAX 纜線，藉由 LED 顯示各種不同纜線其實際的 pin configuration 方便錯線的判讀、修復與廣泛的應用。測試器包括 Main unit 和 Remote unit 提供方便的迴路測試和移動測試，具有自動掃瞄和手動測試的選擇，方便一個人操作測試已佈好的纜線。同時建有音頻發射器，開機即可沿線送出音頻，亦可利用 Manual test 選擇欲送音頻的 pin。搭配 Net

Probe 音頻接收器可用於查線用。同時可測 Shielding(STP cable)是否導通和 B/L LED 低電量警示燈，避免誤判讀。是每一位網路線安裝維修人員和學生必備的工具。

一、Loop-back test 迴路測試

1. 將線的兩端插入 Main unit 的兩個 RJ45 插座。
2. 可選擇自動掃瞄(auto scan)或手動測試
3. LED 判讀
 - A. 同一排 TX or RX LEDS, 有 2 個 LED 同時亮表示短路
 - B. 假如掃瞄測試中有 LED 不亮或直接跳躍表示開路或 LED 燒掉
 - C. 特殊纜線像跳線(Crossover)和電話線則需參改其實際的 pin configuration.
4. 如欲測 BNC or USB、1394cable 則需使用 optional 轉接頭。

二、Remote Test 遠端測試

1. 連接測試線的一端至 Main unit 的 TX/Remote 插座
2. 開機同時設定於自動掃瞄，此時自動沿線送出音頻信號
3. 在遠端將線插入 Remote unit “RX” 插座
4. 或用 Probe 找出欲測的線，再插入 “RX” 插座
5. 再觀查相對應的 LED 是否都亮，是否就是你所要的 pin-out

三、送音頻尋找特定的線或 pin 同時找出可能 break 的位置

1. 在 Main unit 選定 Manual test
2. 由 tset 按鍵選欲送音頻的 pin 或選 Auto 自動掃瞄送音頻
3. 利用 probe 沿線可找出 break 的位置，當音頻突然變小或消失即可能就是 break 的位置
4. 如末端一捆線中，其聲音最大 signal 信號 LED 燈亮，即是送音頻的 cable or pin

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