

# Pro'sKit®

## MINI LAN CABLE TESTER

MT-7058

User's manual



### INTRODUCTION

The mini LAN cable tester complies with CE safety standard, compact size and lightweight design for easy detection of good connections, opens, crossed wires & split pairs by only one touch testing. Traces wires with tone. Remote lights allow one person operation. Additional non-contact voltage detection provides user safety. Ideal for testing installed cables or patch cords with RJ-45, RJ-11, RJ12 and BNC connectors.

### SAFETY RULES & WARNINGS



#### WARNING

This tester is not intended for use on powered circuits. Attaching this tester to a powered circuit can result in damage to the tester or injury to the user.

1. Read all instruction in this manual before using this tester. Failure to do so may result in damage to the tester or injury to the user.
2. Do not use this tester with its case open, or with parts removed. Doing so may damage the tester and/or injure the user.
3. When using this tester in schools and workshops, responsible teachers or skilled personnel must control the usage of this tester. Failure to observe this precaution may result in damage to the tester or injury to the user.
4. Follow the recommendations of any Trade Organizations or Regulatory Agencies whose scope encompasses the use of this

tester failure to do so may result in damage to the tester or injury to the user.

5. Repairs and maintenance must only be carried out by qualified service personnel or qualified electricians/technicians who know the dangers of.
6. Do not apply voltage or current to any of the tester's connectors. Doing so may damage the tester and /or injury the user.
7. Remove the battery when the tester not in use for longer than a month. Chemical leakage from the battery could damage the tester.

### PRODUCT FEATURES

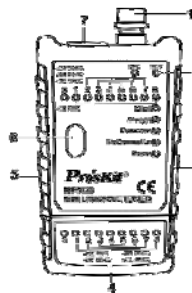
1. Complies with CE safety standard
2. Automatically detect good connections, opens, crossed wires & split pairs
3. Simple one button test
4. LEDs indicate connections and faults
5. Tests shielded (STP) or unshielded (UTP) LAN cables
6. BNC cable indicator
7. Non-contact voltage detection for user safety.
8. Long cable test more than 300 meters
9. Low power consumption with auto power off function to preserve battery.

### SPECIFICATIONS

1. Cables Tested: UTP and STP LAN cables Terminated in RJ-45 male connectors. (EIA/TIA 568) RJ-11, RJ-12 cables with male connectors, 2 to 6 connectors installed. BNC cables with male connectors.
2. Faults Indicated: No Connection, Short, Straight, and Crossover.
3. Low Battery Indicator: LED lights different colors to indicate low battery
4. NCV detection for AC60V~240V 60Hz
5. Case Dimensions: 100\*60\*24.5mm (LxWxH)
6. Weight: 120g (without battery)
7. Battery: 12V battery. AE23

### PRODUCT DESCRIPTION

1. BNC connector
2. Non-contact voltage indicator
3. Power/sound on/off switch
4. RJ-45/RJ-11/12 connector
5. Auto / manual NCV switch
6. One touch push button
7. RJ-45/RJ-11/12 connector



### ACCESSORIES

- Female BNC Terminator
- Instruction Manual
- Pouch Bag

### OPERATION

#### 1. The MAIN and REMOTE unit:

The Mini LAN Cable Tester consists of a main unit and a remote unit. The remote unit stores conveniently on the bottom of the main unit. It can be removed or replaced by sliding it from left to right or right to left respectively.

#### 2. Performing the test:

Once the remote and main units are attached to the ends of the subject cable, as described in 3.2 and 3.3, testing may begin, simply press and release the test button on the main unit, observe the LED indicators, and note the beeping sound that comes from the main unit.

#### 3. Interpreting the results:

##### 3.1 Power LED:

The power LED should light up whenever the test button is pressed and released. If the power LED turns red, replace the battery.

##### 3.2 No connection LED

If the remote is not connected to the main unit with a cable, or the cable has no intake conductors, the no connection LED will light up and the beeper will sound for 4 times.

##### 3.3 Straight/Crossover LED

When all of the appropriate numbered LEDs light up, the straight or crossover LED also lights up, and the beeper sounds for 4 times with crossover. The beeper sounds for 3 times with straight it means the cable is all correct connection. If some of the LEDs do not light up, but others light up, and the straight LED also lights up, it means the cable is open. If some of the LEDs light up inconsistently, and the straight LED also lights up, it means the cable may be misconnected. Please check in turn of lighted LED of remote unit to identify which wires are misconnected or change left side switch to "Step" become manual function to check the misconnection status step by step.



If RJ45 or RJ11/12 all wires are wrong order that Straight LED will light 1 to 8, 2 to 7 and so on.



#### Note:

RJ-11/12 cables may have 2 conductors, 4 conductors, or 6 conductors. When testing 2 conductor cables, LED 4 ~ 5 must light up, for 4 conductor cables, LED 3~ 6 must light up and for 6 conductor cables, LED 2~7 must light up, and "STRAIGHT" LED also lights up. The numbered LEDs do not indicate a good connection exists; only shows connection exists. If "Short" LED lights up during test, it means the shorted was found in the cable.

#### 3.4 Short LED

If 3 & 4 LEDs lights up, and all other LEDs do not light up, the cable is shorted; the "short" LED will light up.

#### 3.5 Crossover LED

Numbered 1~8 LEDs will light up, and "Crossover" LED also lights up. Means wires are crossover or wire crossed.

#### 4. BNC testing:

Numbered LEDs will light up during scanning, after scanning; both LEDs of BNC on the main unit and the BNC receiver will light up. If the BNC cable is short, only the LED of BNC on the main unit lights up; if the BNC cable is open, both LEDs of BNC on the main unit and the receiver won't light and "no connection" LED will light up..

#### 5. Non-contact Voltage Detection:

Set the left side switch to the NCV position and push the test button, As the detachable antenna is located at the right top of the tester, close to right top of the tester to the live wires, the LEDs of NCV will light with sound.



Please put the tester as close as possible to surface of tested source for optima testing result.

When the wire multiple faults, test results show is in accordance with the host panel "test results show" the lights from the top down order, namely: Shot → Straight → Crossover → No Connection!

# Pro'sKit®

## 迷你網路測試器

### MT-7058



#### 一、產品介紹：

MT-7058 是一款集多種線路測試功能及非接觸電壓測量於一體的多功能纜線測試器，可測試的線材種類 RJ-45、RJ-11、RJ-12、BNC。只需一按開關，所測試線材狀況一目了然。線材的斷路、短路、交錯都一一顯示在主機面板上。

#### 二、安全注意事項：

注意：此測試器不能用於測試帶有電壓之活線，若將活線接於此測試器，可能會造成測試器損壞。

\*\* 使用前請細詳閱讀使用說明書，錯誤使用可能造成測試器損壞。

\*\* 使用時請勿將機殼打開使用或自行更換內部零件，以免成測試器損壞。

#### 三、產品特色：

- 雙功能指示：快速結果測試(斷路、交叉、直通、短路) 與 Pin to Pin 掃描測試 (1-8 LEDs)
- 網路、電話、BNC 3 合 1：可測試 RJ45 (8P8C) 網路線、RJ11/12 (4P/2C、6P/4C、6P/6C) 電話線、BNC 線與屏蔽指示
- 聲光雙顯示：具有 LED 燈號與音頻嗶聲的聲光雙指示功能、電池低電壓指示、防誤測迴路保護電路
- 免接觸驗電：具有免接觸驗電功能，確保網路架設作業的安全，並通過 CE 安規認證
- 測試距離更遠：採用 12V(AE23) 電池，測試距離超過 300 米

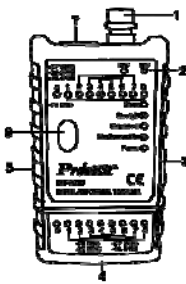
- 攜帶方便：輕巧迷你的近遠端結合設計，附 BNC 終端電阻。攜存袋，外出作業更方便

#### 四、產品規格：

1. 測試線材/接頭：UTP / STP / RJ-11/ RJ-12 / RJ45 / BNC
2. 自動 (AUTO) 及手動 (STEP) 切換掃描檢測跳接正確性、短路、斷路及芯線排列順序等功能
3. 非接觸電壓 AC60V~240V 60Hz 感應測試(NCV)
4. BNC 接頭同軸電纜連接、斷路、短路測試
5. 自動待機功能
6. 低電壓 LED 燈色指示
7. 尺寸：100\*60\*24.5mm (L x W x H)
8. 重量：120 克 (不含電池)
9. 適用電源：12V 電池 AE23

#### 五、本體介紹：

1. BNC 接頭
2. 免接觸驗電顯示
3. 電源/聲音開關
4. RJ-45/11/12 接頭
5. 自動/手動/免接觸驗電開關
6. 測試按鈕
7. RJ-45/11/12 接頭



#### 六、配件：

1. BNC 母端接頭
2. 使用說明書
3. 收納袋
4. 12V (AE23) 電池

#### 七、顯示面板及 LED 燈功能介紹：

- (1) "S" 燈號：表示遮罩線
- (2) "1-8" 燈號：表示對應的線路。
- (3) "SHORT" 燈號：表示線材有短路。
- (4) "STRAIGHT" 燈號：表示受測試的線材連接是正確的或是代表一條扁平的直通線。

⚠ RJ45 (8P8C) 網路線和 RJ11/12

(4P/2C、6P/4C、6P/6C) 電話線兩端的順序全反向時 (即一線材端是 1~8，另一端是 8~1) 測試結果為 "STRAIGHT" 燈亮起，蜂鳴器響 3 聲。此類，請結合主測試器和遠端測試器判斷線材的情況。

(5) "CROSSOVER" 燈號：表示受測試的線材連接有交錯的問題或是代表一條交叉的對絞線。

(6) "NO CONNECTION" 燈號：表示沒有相通的線，或是接頭沒有插好，有可能是接觸不良。

(7) "POWER" 燈號：按下測試鍵後亮綠燈：表示本測試器的電源正常可正常使用。亮紅燈：表示本測試器的電源不足，應及時更換電池，以免對測試結果產生影響。

(8) "NCV" 燈號：表示接觸電線存在電壓

(9) "BNC" 燈號：同軸電纜導通判斷

#### 八、3 種線材及 NCV 的測試方法

##### 1. 測試 RJ45：

⚠ 主測試器的測試結果皆需搭配遠端接收器亮燈順序來判斷線路正確性

● 把所需測試線插入主測試器和遠端測試器，按一下開關主機 "STRAIGHT" 燈亮，而上方對應的 8 顆 LED 燈亮起順序一致時 (如果是 STP 線則 "S" 燈也會同時亮)，表示這條線是連接正確的線路。

● 如果 "STRAIGHT" 或 "CROSSOVER" 燈亮，而主測試器和遠端測試器燈號亮起的順序不一致就表示有交錯或順序相反。此時只要查看遠端接收器燈號亮起的順序即可得知是哪幾條線錯接。

● 將側面的滑動開關切換至 "STEP" 手動測試功能，逐一查看主測試器及接收器 1-8 燈號顯示狀態。

● 如果 "SHORT" 燈亮，表示有短路，

同時短路的路線與所對應的 LED 燈也同時亮。

● 如果 "STRAIGHT" 燈亮，而 LED 燈有幾顆不亮，表示對應的路線有斷路。

● 如果 "CROSSOVER" 燈亮，就表示這條線是交叉線或錯接。

##### 2. 測試 RJ-11/12：

如果 6 芯電話線則 LED 亮 "2-7"，4 芯電話線亮 "3-6"，2 芯電話線 "4-5"，同時 "STRAIGHT" 燈也亮。

##### 3. 測試 BNC 同軸電纜：

插入 BNC 測試座，配合 BNC 母端接頭，按下測試鍵，掃描後若電纜線導通狀態，則 "BNC" 指示及母端接頭燈亮。若電纜線開路，則 "NO CONNECTION" 指示燈亮。"BNC" 指示燈及母端接頭燈不亮，若電纜線短路，則 "BNC" 指示燈亮，母端接頭燈不亮

##### 4. NCV 測試：

將左側撥動開關推到 NCV 檔位，按下 TEST 鍵，並將本體右測頂端靠近被測體，當交流電壓高於 60V 低於 240V 時，"NCV" 指示 LED 長亮並有響聲警示。



為提高測試靈敏度，請貼近待測電源表面。

當線材多重故障時，「測試結果顯示」的優先排序，是依照主機面板上「測試結果顯示」的燈號由上而下的順序，即：Shot→Straight→Crossover→No Connection！

# Pro'sKit®

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