## PLATINUM TOOLS®



# *MapMaster*<sup>™</sup> mini

Instructions: P/N T109

### MapMaster mini Cable tester

- EASY TO USE
- EASY TO READ LCD SCREEN
- DETECTS SHORTS, OPENS, REVERSALS, MISWIRES, AND SPLIT PAIRS
- TONE GENERATOR
- REMOTE ID DETECTION
- AUTO POWER-OFF

#### **GENERAL SPECIFICATIONS**

The Platinum Tools MapMaster mini is a pocket-size data cable tester. It tests and troubleshoots RJ45 terminated cables, provides built-in tone generation for cable tracing and detects either two test and mapping remotes and up to five network ID remotes for mapping end locations.

- Dimensions: 4.6" x 2.3" x 1.1" (11.7 x 5.8 x 2.8 cm)
- Weight: 4.0 oz. (115 grams) with battery and remote
- Operating Temperature: 0°C to 50°C / 32°F to 122°F
- Storage Temperature: -20°C to 60°C / -4°F to 140°F
- Humidity: 10% to 90%, non-condensing
- Maximum Voltage between any two connectors pins without damage: RJ Jack: 66V DC or 55V AC
- Battery Life typical: 6V alkaline batteries 4 x LR44. Standby: 3.5 years, Active: 80 hours
- Cable Types: Shielded or Unshielded; CAT7, CAT6a, CAT5e, CAT5, CAT4, CAT3 (4-pair only)
- Maximum RJ Cable Length: 0 to 1000 feet (305 meters)

- Minimum Cable Length for Split Pair Detection: 1.5 feet (0.5 meters)
- Low Battery: Icon flashes when battery voltage falls below 6V
- Complies with Conformité Européenne directives.

#### WARNINGS

To ensure safe operation and service of the tester, follow these instructions. Failure to observe these warnings can result in severe injury or death.

- The MapMaster mini is designed for use on unenergized cabling systems. Connecting the MapMaster mini to live AC power may damage it and pose a safety hazard for
- Poorly terminated RJ plugs have the potential to damage the jacks on the MapMaster mini, Visually inspect an RJ plug before inserting it into the tester. The contacts should always be recessed into the plastic housing of the plug. Plugging 6-position plugs into the 8-position jack on the tester has the potential to damage the outer-most contacts of the jack unless the plug is specifically designed for that purpose.

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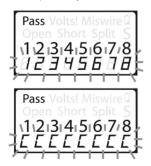
Phone: 800.749.5783 Fax: 800.749.5784 California, USA www.platinumtools.com

### We Make Connections EZ!™

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## Display Pass Volts! Miswire Open Short Split S 12345678 12345678

1. Pass: "Pass" flashes if the cable is a properly wired 4-pair T568A/B data cable or cross-over (uplink) cable. A cross-over cable will have the lower row of pin numbers of the crossed pairs flashing and will alternate with "C".



- 2. Cable Faults: The "Miswire" icon is displayed if the cable is not wired to one of the cabling standards. An open or short error takes precedence over miswires and the appropriate icon(s) is displayed.
- 3. The "Split" icon is displayed if the designated pairs are not twisted together in the cable, an AC signal fault.

- 4. Tester-End Wire Map: The top line displays the pins on the tester end in order. These pins are mapped to the pins on the remote-end shown directly below them on
- 5. Remote-End Wire Map: The lower row displays the corresponding pin on the remote-end. Dash lines on the remote line indicate shorted pins. No pin numbers displayed on the remote line are open pairs.
- 6. Voltage Detected Warning: If voltage is detected on any of the tester connectors, the "Volts!" icon is displayed. A check for voltage is performed before each test and if found, no test is run. The tester should be disconnected immediately from the source of the voltage.
- 7. Battery Low: The battery low symbol is displayed when the battery is nearing depletion. The symbol will begin to flash when the batteries need to be replaced. Results may be unreliable at this point.
- 8. Shield: The "S" icon is displayed when a shielded data cable is properly connected at both ends. It will be flashing if there is a short to a wire in the cable along with that pin number and the "Short" indicator.
- 9. ID number: When used with the #2 test-and-map remote in the CABLE mode alternately displays the lower row wire map and "ID 2" or when using the network maponly remotes (#1-#5) in the LOCATE mode, displays the ID number of the remote



#### Operating the MapMaster™ mini Cable Tester

The MapMaster mini has a single button to both start a test and select other functions and options. Presses of less than about 1 second (short press) and more than 1 second (long press) are recognized differently.

#### 1.Cable testing (short press)

With the MapMaster mini off, each short press of the button causes a cable test to be executed and the results displayed for 20 seconds before powering off, "TEST" is displayed while testing is being performed. If another short press occurs before the 20 second time out another test and 20 second time out begin.

If the button is pressed and held until "LOOP" is displayed and then released, tests are run continuously, and the display updated. The MapMaster mini will turn off automatically if there is no test result change for 5 minutes. A long press of the button will cause the MapMaster mini to exit cable test loop mode and enter mode selection as discussed below

Mode Selection (long press): Starting with the MapMaster mini off, a long press of the button will cause the Map-Master mini to enter mode selection. In mode selection the MapMaster mini cycles through cable test and tone generator modes. The mode displayed when the button is released will begin execution. From powered off, the modes in order are:

#### LOOP -> LOCATE -> HiLo1 -> HiLo2 -> Hi -> Lo -> OFF -> CABLE

. Loop: Cable test that loops continuously until it times out or exiting the mode by a long press that reenters mode selection. Used to troubleshoot intermittent problems.

- Hi Lo 1, Hi Lo 2, Hi, Lo (four tone cadences): The four modes are all tone generator modes with different sounds. The "Hi Lo" tones are made up of two frequencies with different timings. "Hi" and "Lo" are single frequency. Once in a tone mode, short presses change the pins carrying tone. The pins with tone are displayed. In a tone mode, the tester will turn off automatically 30 minutes after the last button press or by exiting to mode select with a long press. Note that you must use an analog tone probe to hear the tones generated by the tester.
- Off: When the button is released with "OFF" displayed, the Tester will power off. Once in one of the above modes, OFF is the first mode offered upon exiting to mode select. To select a different mode other than OFF, continue to hold the button down and the next mode in rotation will be displayed next.
- Cable: The cable test mode is the single cable test mode with 20 second timeout that a short press from powered off executes.

#### Warranty

Platinum Tools warrants this product to be free from defects in material and workmanship for 12 months for test equipment and 3 months for cables and accessories from the date of purchase. Liability is limited to the repair and or replacement of the product. Warranty excludes batteries and wearable components such as the integrated RJ45 jack included with the product. NO IMPLIED WARRANTIES OF MERCHANT-ABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Platinum Tools is not liable for consequential damages.

Should any parts or workmanship prove defective, Platinum Tools will repair or replace at Platinum Tools' option, at no cost to the Buyer except for shipping costs from the Buyer's location to Platinum Tools. This is Buyer's SOLE AND EXCLUSIVE REMEDY under this Agreement. This warranty does not apply to products which have been subject to neglect, accident or improper use, or to units which have been altered or repaired by other than an authorized repair facility.

#### Cleaning

Turn off the MapMaster mini and disconnect all cables. Use a damp, clean cloth to clean the MapMaster mini. CAUTION: do not use abrasive or harsh cleaners or solvents.

#### Storage

When the MapMaster mini is not in use, store in a dry, protective case. Batteries should be removed if stored for a long period of time. Do not expose to high temperatures or humidity. When stored in temperatures exceeding the limits listed in the Specifications section, allow the MapMaster mini to return to normal recommended operating conditions before using it.

#### Disposal

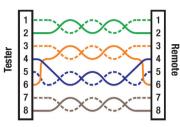
Caution: This symbol indicates that equipment and its accessories should be treated to a separate collection and proper disposal.

#### Warning

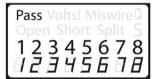
Always wear approved eye protection. Do NOT use on live circuits

#### **WIRING AND DISPLAY EXAMPLES**

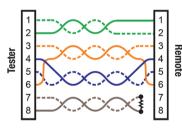
#### Properly Wired T568A UTP:



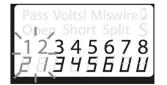
T568B is electrically identical to T568A but swaps the green and orange pairs. Either standard will work as long as the same standard is used at both ends of a run or patch cable. Mixing "A" and "B" creates a cross-over cable.



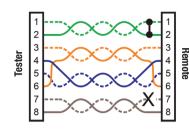
#### T568A Cable with a Misfire and Unrecognized Continuity:



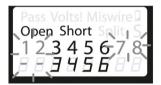
1 and 2 pins on the MapMaster mini are connected to pins 2 and 1 at the remote-end. The pins with this error are flashing. The "U" for the remote pin numbers indicates an unrecognizable continuity was detected that is neither a short or open. An ID remote connected to the MapMaster mini when in cable test mode would also show this error.



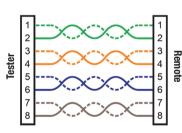
#### T568A Cable with a Short and Open:



The 1–2 pair pins are shorted together, and the 7–8 pair is open. The pins with the errors are flashing. Dash lines (-) on the bottom (remote) display line indicate the short, while no numbers on the bottom line indicate the open pair.



#### T568A Cable with Split Pairs:



A common error in building a cable is to put all the pairs in pin sequence 1–2, 3–4, 5–6 and 7–8. This will produce the correct continuity, but the pairs are designated to be on pins 3–6 and 4–5 in the middle of the connector for compatibility with phone wiring. This wiring error is only detected by the split pair test since the designated pairs are not twisted together.

