

GENERAL SPECIFICATIONS

The Platinum Tools, VDV MapMaster™ is a portable voice-data-video cable tester. It tests and troubleshoots RJ11, RJ12, RJ45 and F-conector terminated cables and provides built-in tone generation for cable tracing.

- **Dimensions:** 6.4" x 2.8" x 1.4" (16.3 x 7.1 x 3.6 cm)
- **Weight:** 9.0 oz. (256 grams) with battery and remote
- **Operating Temperature:** 0°C/32°F to 50°C/122°F
- **Humidity:** 10% to 90%, non-condensing
- **Maximum Voltage** between any two connector pins without damage:
RJ Jack: 66V DC or 55V AC
F-Connector: 50V DC or AC
- **Battery Life:** 9V alkaline battery typical
Standby: 4 years
Active: 425 hours
- **Cable Types:** Shielded or Unshielded; Cat7, Cat6x, Cat5e, Cat5, Cat4, Cat3, Coax
- **Maximum RJ Cable Length:** 0 to 1,000 feet (305 meters)
- **Minimum Cable Length for Split Pair Detection:** 1.5 feet (0.5 meters)
- **Maximum Coax Cable Length:**

Coax Type	Belden P/N	Center + Shield	Maximum Length
RG-58A/U	8259	14.9Ω / 1,000 ft	6,710ft (2,045m)
	9311	25.8Ω / 1,000ft	3,876ft (1,182m)
	7806A	11.8Ω / 1,000ft	8,475ft (2,583m)
RG-59/U	9310	24.1Ω / 1,000ft	4,150ft (1,265m)
	9259	23.5Ω / 1,000ft	4,255ft (1,297m)
	8241A	49.7Ω / 1,000ft	2,010ft (613m)
	9275	78.5Ω / 1,000	1,275ft (389m)
	9659	17.6Ω / 1,000ft	5,682ft (1,732m)
RG-6/U	1694A	7.2Ω / 1,000ft	13,889ft (4,234m)
	1152A	29.8Ω / 1,000ft	3,360ft (1,025m)
Mini Coax	9221	111Ω / 1,000ft	900ft (275m)
RG-11/U	1523A	15.1Ω / 1,000ft	6,623ft (2,019m)



BATTERY REPLACEMENT

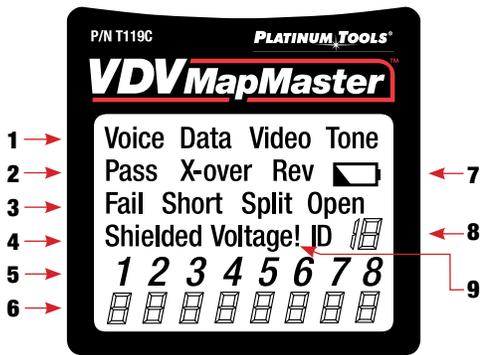
- 1) **Remove single screw** in the middle of the back of the VDV MapMaster™ with a #1 Phillips head screwdriver. Remove the battery door.
- 2) **Remove the old battery** and disconnect battery cable.
- 3) **Replace with an ANSI 1604A**, 9 volt alkaline battery (Energizer 522, Duracell Mn1604). Reattach cable and insert into battery compartment.
- 4) **Replace battery door** and screw. **DO NOT OVERTIGHTEN!**

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 VDV MapMaster™ is designed for use on unenergized cabling systems. Connecting the VDV MapMaster to live AC power may damage it and pose a safety hazard for the user.
- Poorly terminated RJ plugs have the potential to damage the jacks on the VDV MapMaster™. 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 outermost contacts of the jack unless the plug is specifically designed for that purpose.

DISPLAY

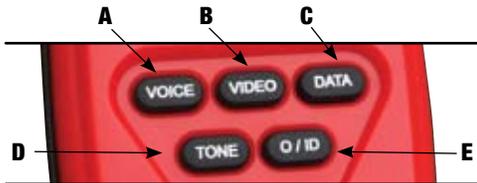


- 1) **Mode:** The top line displays the cable type test mode or tone generation mode.
- 2) **Pass/Special Cables:** “Pass” will be on if the cable is a properly wired 4-pair T568A/B data cable, a 3-pair one-to-one wired voice cable or a video cable with no faults. In addition, “X-over” illuminates if a properly wired cross-over (uplink) cable is recognized or the “Rev” illuminates if the cable is a properly wired reverse-pinned voice cable. The wire map will show actual pin connections.
- 3) **Cable Faults:** The “Fail” icon will be on only 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) illuminates. The “Split” icon illuminates if the designated pairs are not twisted together in the cable, an AC signal fault.

- 4) **Shield:** “Shielded” illuminates 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.
- 5) **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 the LCD.
- 6) **Remote-End Wire Map:** The bottom line displays the corresponding pin on the remote-end. Dash lines on the remote line indicate short pins. No pin numbers displayed on the remote line are open pairs.
- 7) **Battery Low:** The battery low symbol illuminates when the battery is nearing depletion. The symbol will begin to flash when the battery needs to be replaced. Results may be unreliable at this point.
- 8) **Location ID:** In the video or the ID modes, the “ID” icon will be on with the number of the remote ID displayed or an error message of “Open” or “Short”.
- 9) **Voltage Detected Warning:** If voltage is detected on any of the tester connectors, the “Voltage!” icon is turned on. 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.

type button. Pressing the same connector type button again, will change the pins carrying the tone. Pressing the Tone button will cycle through the available tone cadences. To turn the VDV MapMaster™ off, press the O/ID button. The VDV MapMaster™ will turn off automatically 60 minutes after the last button press. The tone is compatible with analog tone tracers.

KEYPAD



- A) **Voice:** Each press of the Voice button causes one test to be run on the 6-position RJ jack and the results displayed. The VDV MapMaster™ will turn off after 20 seconds automatically. If the button is pressed and held until “LOOP ON” is displayed, tests are run continuously and the display updated until the O/ID button is pressed or after 5 minutes of no change in results. Continuous mode is useful for trouble-shooting intermittent problems.
- B) **Video:** Pressing the Video button starts the ID test, testing only for the F-connector, because the video continuity test is the same as the ID test. The test loops continuously until the O/ID button is pressed or for 5 minutes after the last change in ID status.
- C) **Data:** Each press of the Data button causes one test to be run on the 8-position RJ jack and the results displayed. The VDV MapMaster™ will turn off after 15 seconds automatically. If the button is pressed and held until “LOOP ON” is displayed, tests are run continuously and the display updated until the O/ID button is pressed or after 5 minutes of no change in results. Continuous mode is useful for finding intermittent problems.
- D) **Tone:** When tone is pressed; the VDV MapMaster™ begins sending an audio tone for the connector last tested with the pins and cadence previously selected for that connector type. To change the connector type, press a different connector

- E) **Off/ID (O/ID):** Pressing O/ID will turn off the VDV MapMaster™ when it is in any mode. With the VDV MapMaster™ off, pressing the O/ID button starts the ID test mode. The ID test mode scans for all possible ID types – voice, video and data. The “ID” icon and a progression of “o” are displayed on the bottom line of the display to indicate scanning is active. If no ID remotes are found, “Open” is displayed. When an ID remote is found, the connector type and the ID number are displayed. If multiple ID remotes are found, the ID or fault is displayed in sequence. The test loops continuously until the I/OD button is pressed or for 5 minutes after last change in ID status.

NOTE The RJ jacks share internal connections so only RJ cable can be connected at a time for accurate cable test results. However, an RJ cable and a coax cable may be connected at the same time. In ID mode, all connectors on the VDV MapMaster™ may be connected at the same time.

ID/MAPPING

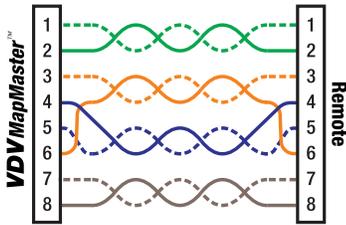
ID/Mapping: Pressing the O/ID button starts the ID test mode on the VDV MapMaster™. Review section “E” under category “KEYPAD”. ID/MAP up to 19 locations at one time with numbered custom ID remotes, whether Voice (RJ12/11), Video (coax) or Data (RJ45). Place ID remotes at one end, the VDV MapMaster™ at the other end and start scanning.



Mode Locator ID #

WIRING and DISPLAY EXAMPLES

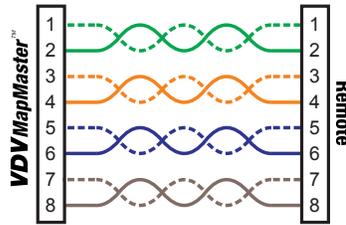
Properly Wired T568A UTP:



Properly Wired T568B UTP:

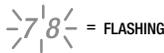
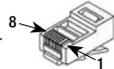
T568B is electrically identical to T568A, but swaps the green and orange pairs. Either standard will work as long as the same standard is used at both ends of a run or patch cable. Mixing "A" and "B" creates a cross-over cable.

T568A Cable with Split Pairs:

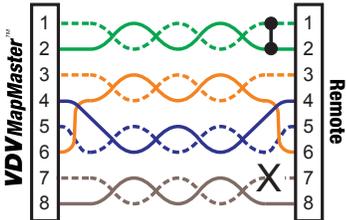


T568A Cable with Split Pairs:

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.



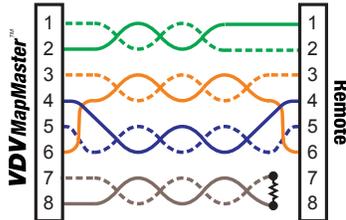
T568A Cable with a Short and an Open:



T568A Cable with a Short and an 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 a Miswire and Unrecognized Continuity:



T568A Cable with a Miswire and unrecognized Continuity:

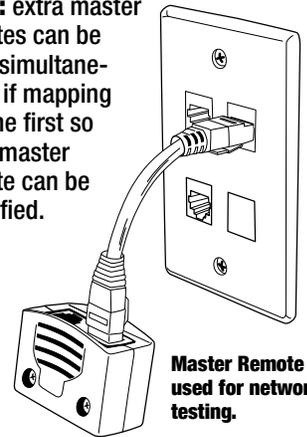
1 and 2 pins on the VDV MapMaster™ are connected to pins 2 and 1 at the remote-end. The pins with this error are flashing. The "U" for the remote pin numbers indicates an unrecognizable continuity was detected that is neither a short or open. An ID remote connected to the VDV MapMaster™ when in cable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



MASTER REMOTE

The VDV MapMaster™ Remote designed for testing both Voice (RJ12/11) and Data (RJ45) networks. Patch cables can be tested without removing the remote from storage.

NOTE: extra master remotes can be used simultaneously if mapping is done first so each master remote can be identified.



Master Remote used for network testing.

ACCESSORIES

Additional accessories to help make testing easier.



Coax Remote Set P/N T120C
ID/MAP 19 video (coax) cables at one time. Numbered custom F remotes 1 thru 19 for easy identification.



Data Remote Set P/N T121C
ID/MAP 19 data (twisted pair) cables or data ports/jacks at one time. Numbered custom RJ45 remotes 1 thru 19 for easy identification.



Master Remote P/N T124C
The replacement Master Remote(s) can be used as an extra Master Remote(s) when testing networks. Map your network first to help identify the extra Master Remote(s).



Toner Cable P/N T125C
RJ45/Alligator
Use when shooting tone via the data port. Cable conductors are terminated on contact #1 and #2, so program your VDV MapMaster to shoot tone on pair 1 and 2.



NO-Fault Cable P/N T126C
7.5" Special RJ12 to RJ12
The NO-Fault Cable uses no-fault RJ12 connectors on both ends to assure no damage to the RJ45 jacks. It is the ideal patch cable to use when mapping or shooting tone.



RJ45 PortSaver P/N T1202S
Extend the life of your tester by using the RJ45 PortSaver as your sacrificial cable. This eliminates the wear and tear from constantly plugging in and out of the tester port.