

APPLICATION NOTE

JUNE 2016

QUICK START GUIDE FOR THE Pro400 TDR

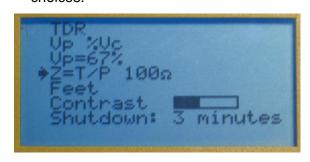
Getting to the Menu list.



Turn the unit on by pressing the Power button.

Select the List Menu by pressing Range and Scan together.

In the list use the down arrow ▼key to move down the menu and ◀ and ▶ keys to select from the choices.



- Select TDR (rather than tone trace)
- Select %Vc (Vp as a percent of light speed)
- Pick a likely Vp from the chart (e.g., 67)
- Select Main 25 Ω (solid power wire) or T/P 100 Ω
- Select Feet (rather than meters)
- Choose a battery-saver shutdown time.
- Exit the Menu by hitting the Range button.

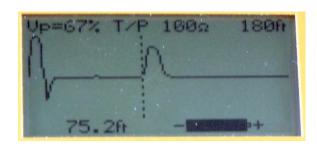
Launching a scan.



Connect the TDR to a test cable at least 6 feet long, open at one end.

Launch a TDR pulse scan by pressing the Scan/Lock key.

To cause continuous scanning briefly press and hold the Scan key.



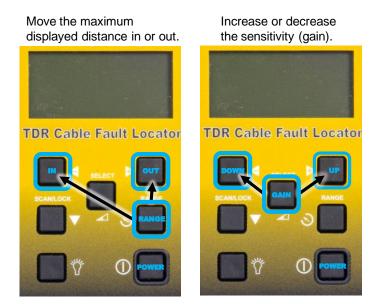
Adjust the range scale to something close to the cable length. This shows a 75-foot cable and a 180-foot range.

Observe the upward blip of an open circuit representing the end of the cable.

QUICK START GUIDE FOR THE Pro400 TDR (continued)

If the distance cursor is not reading correctly adjust the Vp in the list menu until the distance matches the known cable length. The final Vp is the one you should use for this cable type in the future.

To adjust the range scale and change the sensitivity use the ◀ and ▶ keys together with the Range or Select buttons as shown below.



Refer to the Pro400 TDR Cable Fault Locator Operating Instruction Manual for more detail.





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Cable Correction Factor Table (VoP or VP) for TDRs For reference only Armada Technologies LLC

<u>Impedance</u> <u>Straight</u> Coiled <u>Buried</u> **Conduit** Range **Nominal** CABLE TYPE Setting Coax Cable - Trunk 85 75 75 83 Coax Cable - RG6/U Triple or Quad Shield 78 - 82 82 Coax Cable - RG6/U Dual Shield 75 63 72 66 Coax Cable - RG59/U 75 Cat 5 UTP 67 100 72 58 70 16 gauge Speaker Wire 25 66 63 - 75 66 12/2 with Gnd Romex 25 55 - 60 59 14/2 NM 25 58 24 AWG Loose Pair 100 62 58 4 Conductor Telephone Wire 100 70 -84 77 8 to 16 AWG THHN in Conduit 25 70 Decoder Cable - ID1 25 73 57 60 Decoder Cable - MAXI 25