XProTec

20-Way Cable Mapper

Operation Manual

XFTP TRILITHIC

About XProTec Pro-Installer Tools

The XProTec line from XFTP is a comprehensive lineup of professional-grade technical tools. These full-featured, field-proven, and easy-to-use tools meet the highest quality standards in the industry, and feature the dependability you expect for complete installation solutions.

Safety Instructions & Warnings

WARNING: The cable mapper will not test cable runs with AC or DC voltage present. Additionally, the cable mapper will not test through power amplifiers, DC blocking devices, attenuators, directional line taps, power dividers, matching transformers, splitters, or isolation splitters.

WARNING: If the cable mapper detects a positive DC voltage present on the center pin with respect to the barrel or an AC voltage, a “lightning bolt” will appear on the display. Remove the cable mapper from the line and remove the source voltage from the cable before doing any further testing.

Device Overview

The 20-Way Cable Mapper is a hand-held device designed to find and identify up to 20 coaxial, speaker, or security/alarm cables at a time. The device is designed for installers who test multi-run coaxial cable systems terminated with “F” connectors, or those who wish to map runs to a central bundle. The cable mapper’s features include;

- Push Button Operation
- High Intensity LED Display, Readable in any Lighting Environment
- Low Battery Indicator
- Short Circuit & DC or AC-RMS Voltage Detection/Warning
- F-Type and Alligator Clip inputs, including an F-Type Female to Alligator Clip Adaptor
- 20 Numbered Remote Terminators Included

Device Operation

The device consists of the master unit and 20 remote terminators, which are numbered #1 - #20. Perform the following steps to test a cable run;

1. For cables terminated with F-Type connectors, simply connect the remote terminator(s) to the far end of the cable(s) to be tested.

OR

1. For un-terminated cables, use the **F-Type Female to Alligator Clip Adapter** that is included to perform cable mapping as follows;
    - Speaker or Security/Alarm Cables (Twisted Pair) - Clip one alligator clip of the adapter to each wire and then connect the remote terminator to the F-Type female connector.
    - Coaxial Cable (Center Conductor & Shield) - Clip one alligator clip of the adapter to the cable shield, clip the other alligator clip to the center conductor, and then connect the remote terminator to the F-Type female connector.

2. Connect the master unit to the other end of the cable(s). Push and hold the power button located beneath the display on the front of the master unit to begin a test. The LED display indicates the number of the remote terminator that is found, as shown to the right.

4. When voltage is detected on the cable being tested, a “lightning bolt” is shown on the LED display, as shown to the right. The LED will alternate between to left and right “lightning bolt” until the condition is cleared.

5. When a short circuit is detected, “SH” is shown on the LED display, as shown to the right.

6. Release the power button to conclude the testing session.

Battery Maintenance

When the battery power is not sufficient to operate the unit, the **Low Battery** LED *(located in the lower right corner of the LED display above the battery icon)* will illuminate and replacement of the battery is required. To ensure proper operation of the device, replace the battery as soon as possible. The device is powered by three (3) 3 Volt CR2032 batteries.

To replace the battery, perform the following steps;

1. Remove screws from the back of the device.
2. Remove the back of the device, remove the old batteries and dispose of properly.
3. Install the new batteries, observing proper polarity and replace the back of the device and screws.

Specifications

Environmental

- **Operating Temperature:** 32 to 122 ºF (0 to 50 ºC)
- **Storage Temperature:** -40 to 158 ºF (-40 to 70 ºC)
- **Humidity:** 10% to 90%, non-condensing

Battery Life

- **Standby Mode:** 2.5 years, if used continuously
- **Testing Mode:** 20 hours, if used continuously

Testing

- **Cable Resistance:** 100 Ohms MAX DC resistance, sum of both conductors
- **Maximum Input Protection:** 100 Volts DC or AC-RMS, continuous
- **Peak Input Protection:** 200 Volts DC or AC-RMS, five (5) seconds maximum

Warranty Information

Trilithic, Inc. warrants that each part of this product will be free from defects in materials and workmanship, under normal use, operating conditions and service for a period of one (1) year from date of delivery. Trilithic, Inc.'s obligation under this Warranty shall be limited, at Trilithic, Inc.'s sole option, to replacing the product, or to replacing or repairing any defective part, F.O.B. Indianapolis, Indiana; provided that the Buyer shall give Trilithic, Inc. written notice.

Batteries are not included or covered by this Warranty.

The remedy set forth herein shall be the only remedy available to the Buyer under this Warranty and in no event shall Trilithic, Inc. be liable for incidental or consequential damages for any alleged breach of this Warranty. This Warranty shall not apply to any part of the product which, without fault of Trilithic, Inc., has been subject to alteration, failure caused by a part not supplied by Trilithic, Inc., accident, fire or other casualty, negligence or misuse, or to any cause whatsoever other than as a result of a defect.

Except for the warranty and exclusions set forth above, and the warranties, if any, available to the Buyer from those who supply Trilithic, Inc., there are no warranties, expressed or implied (including without limitation, any implied warranties of merchantability of fitness), with respect to the condition of the product or its suitability for any use intended for it by the Buyer or by the purchaser from the Buyer.

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