

OASIS LANMARK™-2000 EXTENDED DISTANCE CHANNEL WARRANTY

Berk-Tek recommends installing a well-designed structured cabling channel per the TIA standards. This includes up to 90 meters of twisted pair horizontal cabling terminated on both ends with a modular jack and 10 meters of corresponding Category patch cords. This now can be extended up to a length of 116 meters total when installing a two connector channel that contains 106 meters of LANmark-2000 and a total of 10 meters of corresponding Category patch cords.

In some real world installations, there is a need for channel lengths over the 100 meter maximum length requirement. This new extended distance channel configuration is to accommodate these installations.

Berk-Tek's OASIS 15-year warranty will cover an extended distance channel configuration for IEEE 802.3 Switched Gigabit Ethernet when using LANmark-2000 horizontal cable up to 106 meters in length, two terminations and a total of 10 meters of corresponding Category 6 patch cords from an approved connectivity partner. The installation must meet the most recent TIA standards, and be installed to best practices by a Certified OASIS Installer. *(See testing procedures and warranty information detailed in this document.)*

GUIDELINES FOR BEST INSTALLATION PRACTICES

This guide is intended to provide basic guidelines for the installation of Berk-Tek copper cabling products. The use of this guide is not a substitute for installation training through the OASIS program. Installation practices outlined in ANSI/TIA - 568-C and the BICSI TDMM Manual must be followed.

Maximum Cable Lengths

Per the channel and permanent link requirements of ANSI/TIA -568-C

- 106 meters maximum of LANmark-2000 horizontal cabling
- 10 meters total patch cords

Cable Slack

Providing additional cable slack at both ends to is recommended to accommodate future cabling system changes

- Telecommunications closet: 10 feet
- Telecommunications outlet: 12 inches for twisted pair cables



Maximum Cable Pull Force

- UTP Cables: 25 lbs-f

Handling of Cable

- Reel/Reel Boxes must be stored and handled in an upright position to reduce the chance of twisting and kinking the cable, especially if the reel box is partially used.

Cable Bend Radius

- 4 times the cable diameter

Cable Management and Pulling Practices

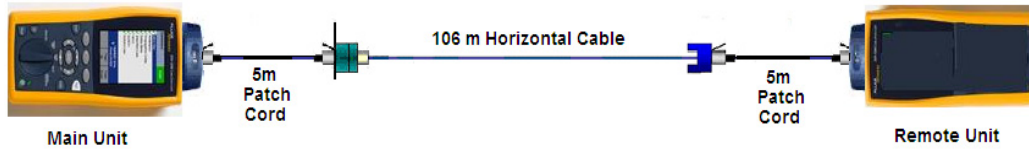
Eliminate cable stress:

- Control tension in suspended cable runs by limiting spans between supports to 5 ft. or less.
- Avoid tightly cinched cable bundles.
- Avoid kinking during installation.
- Avoid changing the geometry of the cable.
- Follow manufacturers' recommendations for loading of cable trays and j-hooks.
- The use of tie wraps should be avoided.
- Staples are prohibited.
- When pulling cable, apply pulling force evenly to all conductors in the cable.
- Avoiding kinking the cable when dressing the cable.
- Avoid exceeding the maximum bend radius for the cable.

Connector Termination

- Follow the manufacturer's guidelines for termination of connectors and patch panels.

TESTING PROCEDURES FOR A EXTENDED DISTANCE CHANNEL CONFIGURATION



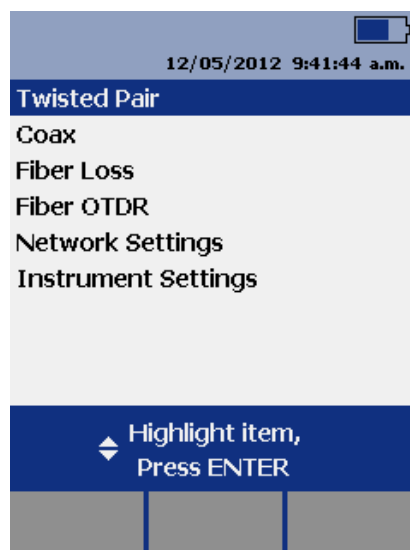
Configuration 1 – Extended Distance Channel Configuration

A maximum of 106-meter length of horizontal cable terminated to a near end connector and jack at the work area/device far end. Two Category 6 patch cords, one for the near end and the other for the far end. The hand-held tester shall be fitted with the channel adapters on both ends. The hand-held tester must be set to the following settings to complete this testing.

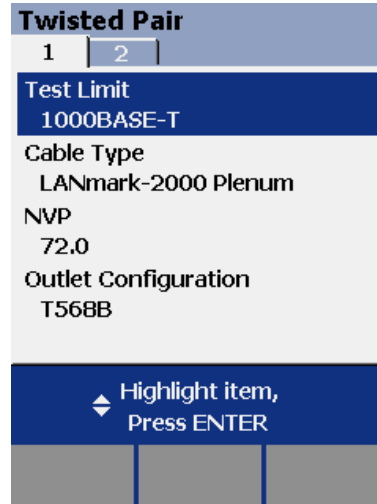
(Note: Nexans Data Communications Competence Center Testing exhibited results that complied for active testing to IEEE 802.3 Switched Gigabit Ethernet. Passive and active testing included configuration 1 utilizing the Spirent Smartbits Traffic Generators and Fluke DTX-1800. Results for passive and active testing can be located in test report NHCC13060401.)

Fluke DTX 1800 Set-up

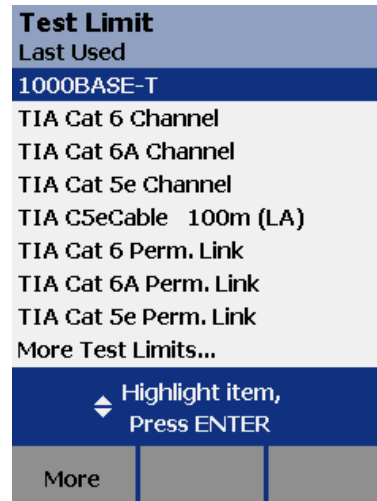
- Set Dial on Main Unit to Setup
- Highlight Twisted Pair and press enter



- Highlight Test Limit and press enter



- Highlight 1000Base-T and press enter
- If 1000Base-T does not appear on the screen highlight more test limits and press enter



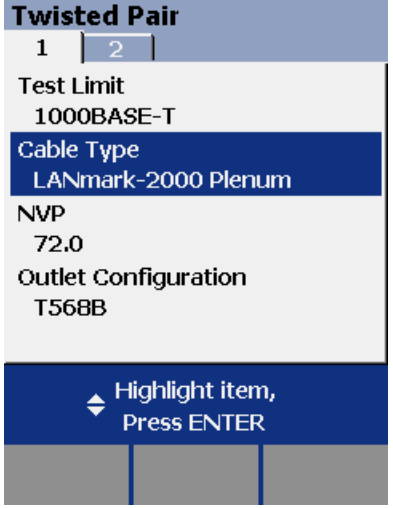
- Scroll to application and press enter



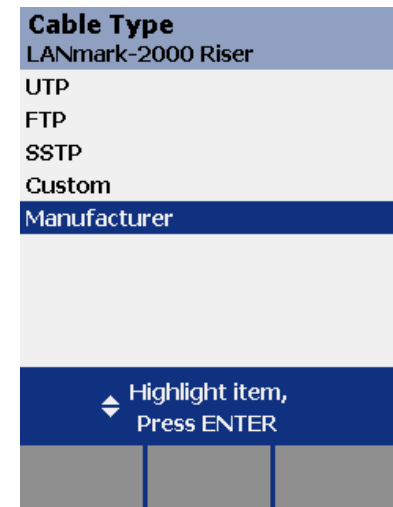
- Scroll to 1000BASE-T and press enter



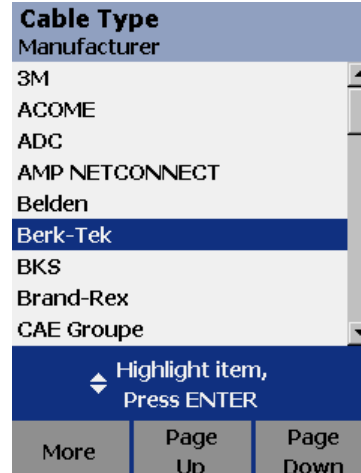
- Scroll to Cable Type and press enter



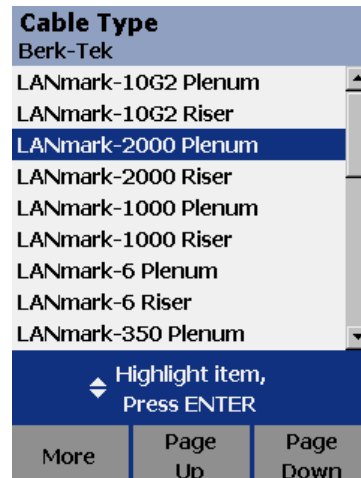
- Scroll to Manufacturer and press enter



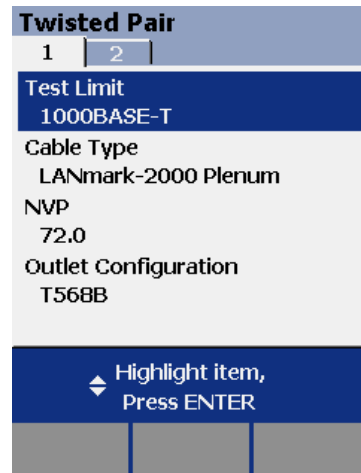
- Scroll to Berk-Tek and press enter



- Scroll to LANmark-2000 and press enter (choose the correct type Plenum or Riser)



- You are finished with setup and the tester screen should appear like the image below



- Turn dial to autotest, hook up channel and press test
- Record and save results



Note:

Length will indicate a failure; this is due to the tester being hard coded for a maximum length of 100 meters. All other parameters shall pass the 1000 Base-T specification.

OBTAINING AN OASIS WARRANTY ON AN EXTENDED DISTANCE CHANNEL CONFIGURATION

- Installer must be registered in the OASIS program as a Certified OASIS Installer
- Certified OASIS Installer logs in to www.oasis-on-line.com and completes the warranty application
- Certified OASIS Installer uploads a Bill of Materials and proper test data. Reference Exhibit V of the OASIS Certified Integrator System Link-Channel Installation Agreement for testing requirements.
- Upon completion of the warranty application the project is reviewed and processed.
- OASIS Warranty Certificate is issued via email to the Certified OASIS Installer

To obtain the OASIS warranty, installers must understand and abide by the recommended industry standards for proper installation of cable and connectivity as well as testing procedures. For more information on the warranty or warranty application procedures, contact Kelly Urbanik at the information below:

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