![OptoTest — Test Solutions for Fiber Optics]

OP280MT
Ribbon Visual Fault Locator
Instruction Manual

Contacting OptoTest Corporation

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MnOP280-RevC

OP280

online resources

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Overview

The **OP280MT** is designed to check for breaks in a ribbon fiber and to verify correct polarity of ribbon fiber connectors, hybrid cables and distribution boxes quickly and conveniently. Each of the twelve fibers is illuminated with bright 635nm red LASERs.

The **Ribbon Fiber Visual Fault Locator** can be used for single mode or multimode applications and is pre-programmed with various sequences for automatic or individual scanning of each fiber. User defined patterns can be programmed via the USB data port.

Features

- 12 Individual super bright red lasers, one per fiber
- Use for fault location up to a few hundred meters
- Internal rechargeable battery
- USB chargeable
- Programmable patterns for the various connection types

Initial Preparation

Unpacking and Inspection

The unit was carefully inspected, mechanically, electrically and optically before shipment. When received, the shipping carton should contain the items listed in Standard Contents. Account for and inspect each item. In the event of a damaged instrument, write or call OptoTest Corp, California.

Note: Be aware that accessories such as detector adapters, remote head detectors, and high performance reference cables will be located inside a small box labeled "Accessories Inside". If this box is not included with the original shipment, contact OptoTest of their nearest distributor.

Please retain the shipping container in case re-shipment is required for any reason.

Damaged In Shipment

All instruments are shipped F.O.B. Camarillo when ordered from OptoTest.
If you receive a damaged instrument you should:

1. Report the damage to your shipper immediately.
2. Inform OptoTest Corporation.
3. Save all shipping cartons.

Failure to follow this procedure may affect your claim for compensation.

Standard Contents

1. Model OP280MT Ribbon Visual Fault Finder
2. USB A-B and Power Cables
3. Interface Sacrificial Cable and Performance Bulkhead Mating Adapter
4. Certificate of Conformance
5. Instruction Manual(s)
6. CD with applicable software and documentation (if ordered)

Front Panel Operation

On | Off Button
Turns the unit on or off. When turned on the unit starts up with sequence #1. This is indicated with LED #1 blinking. The unit will stay on until turned off again.

Pressing the On/Off button for a few seconds will cause the unit to display the level of the battery charge. The number of LEDs illuminated is proportional to the battery life (12 LEDs=full charge).

Select | Advance
When the LED is blinking, pressing this button turns on the first combination of lasers for the selected sequence. The LED will go from blinking to solid.

When the unit is operating the lasers (LED solid) pressing this button will advance to the next sequence step. The next combination of lasers will turn on.

If the Advance button is pressed and held for a few seconds the unit will automatically cycle through the sequence steps. This automatic play of the sequence is stopped by pressing the Advance button again.

Select Sequence
When the LED is blinking, pressing this button switches to the next programmed sequence. The unit stores up to twelve sequences, 4 pre-programmed and 8 user programmable. The sequences are programmed using the OPL-280MT application software.
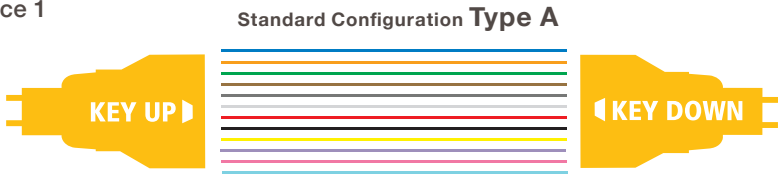
Supported OP280MTs are configured to work in conjunction with the OP480MT to quickly analyze the cable type (A, B, C, etc). To put the OP280MT in the proper mode to function with the OP480MT, press and hold the "Select Sequence" button for 5 seconds and release. When ready, the unit will flash LED #1 until the button is released. In this mode the LASERs will quickly cycle through all available LASER sources and be easily recognized by an OP480MT.
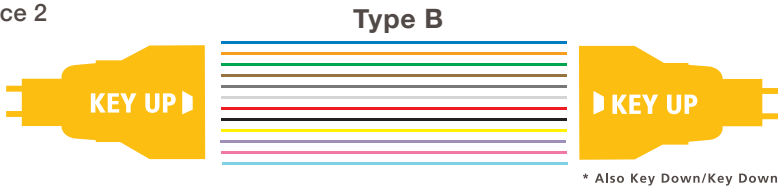
Sequences

The first four sequences are pre-programmed and represent the common configuration types A thru D. The individual lasers are turned on such that at the far end of the ribbon cable the individual fibers are lit up sequentially starting with fiber #1, then #2, ending with fiber #12.
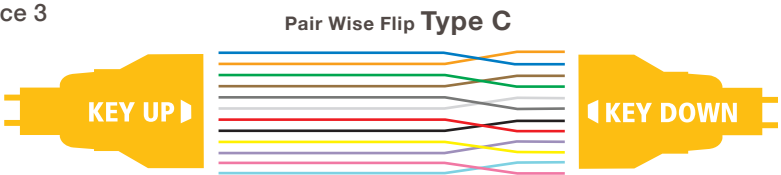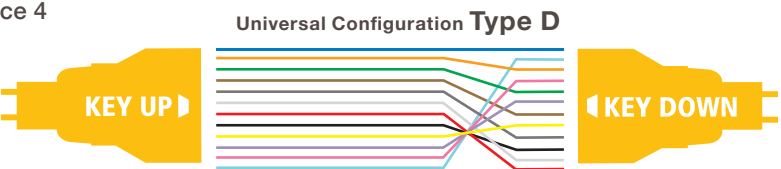
Sequence 1

Standard Configuration **Type A**

KEY UP ▶   ◀ KEY DOWN

Sequence 2

Type B

KEY UP ▶   ▶ KEY UP

* Also Key Down/Key Down

Sequence 3

Pair Wise Flip **Type C**

KEY UP ▶   ◀ KEY DOWN

Sequence 4

Universal Configuration **Type D**

KEY UP ▶   ◀ KEY DOWN

The sequences 5 thru 12 are user programmable. The OP280MT can be programmed with any standard Windows based computer connected to the OP280MT via USB cable. The app OPL-280MT allows one to retrieve and program each individual sequence, as well as set the brightness of the lasers.

Charging the OP280MT

The OP280MT can be charged with the supplied USB cable. The unit will be fully charged in approximately 12 hours.

NOTE: If the unit is being operated while charging, it will take longer to full charge the battery.

Discharged Unit
A completely discharged unit will take approximate 10 minutes to power back on.

Care and Maintenance

As with any fiber optic test equipment it is essential that the optical interface of BOTH the cable being inserted into the OP280MT as well as the MT bulkhead of the OP280MT is kept clean.

For cleaning MT ferrules, the MT Clean product or similar is recommended.

To protect the OP280MT, optical interface we recommend to connect an Interface Sacrificial Cable, such as those included in the OP-POLARITYKIT12.

USB Control of the OP280MT

The OP280MT is controlled via the USB bus. Commands are available via the OP280.DLL to communicate with the instrument through a program. Contact OptoTest for the latest release of the OP280.DLL.

Warranty Information

OptoTest Corp. warrants this product to be free from defects in material and workmanship for a period of one year from date of shipment. During the warranty period we will, at our option, either repair or replace any product that proves to be defective. To exercise this warranty contact OptoTest Corp. headquarters. You will be given prompt assistance and return instructions. Repairs will be made and the instrument returned, transportation prepaid. Repaired products are warranted for the balance of the original warranty period, or at least 90 days.

NOTE: Do not send instruments for any reason without contacting OptoTest headquarters first.