FiberMASTER OTDRs, Power Meters and Light Sources

Firmware Installation Directions

1. Launch CertSoft2 software.
2. Connect FibermASTER to the PC and wait for the green connection symbol to appear in the top-right corner of the CertSoft screen.
3. Import any stored tests from the tester to the PC by selecting Features, then File Transfer.
4. Update the firmware by selecting Help, then Firmware Upgrade.
5. Select the firmware zip file to be installed.
   Note: The file zip downloaded from the TREND website contains this release note file and the firmware zip file. *Select the firmware zip file, not the file originally downloaded from the website that contains the firmware and release note.*
6. Follow the on-screen prompts to update the instrument firmware.

Version 1.0.3.0
1 August 2023

- Added new project creation screen that allows entering header information.
- Added new OTDR file save screen that allows verifying and editing header information.
- Added new automatic naming system.
- Added option to automatically detect launch and/or tail cables by entering "0" for the length.
- Added new customizable automatic naming feature. Added per-wavelength persistent IOR (Index of Refraction) values.
- Added vertical axis labels to graph when zoomed in.
- In some cases the splice zones weren't being defaulted correctly leading to inaccurate event loss measurements.
- In some cases the "AVG" label on event screen could display "???".
- Updated TIA standard label to "568.3-E: 2022".
- Better detection of end of fiber (EOF), some end-reflections were not meeting the 36dB detection threshold previously used (specifically at 850nm), now set to >-28dB reflectance.
- Measuring link loss a couple points before EOF to prevent underreported or negative link loss measurements
- Now using a 3-point average at each end of link loss measurement to increase measurement repeatability and diminish effect of "riding up" on the end reflection.
- In the wavelength label for dual wavelength tests the primary trace wavelength is now listed first.
- Made event scale bar relative to detected EOF instead of the scan range.
- When zoomed in the cursor "flags" (distance measurements boxes) are now aligned with the top 2 rows of the graph grid.

- Improved location of inactive cursor when zoomed in.
- Translation updates.
- The last saturated reflection is now considered the EOF event rather than the first.
- Longer filename support for trace files (32 characters).
- Fixed bug that prevented deleting or renaming sub-folders.
- Fixed bug that caused negative loss measurements to be clipped to 0 dB.
- Fixed bug that could lead to incorrect test standard name printed on CertSoft report.

Version 1.0.2.0
1 March 2022

- Updated OTDR settings screen so that all settings are on one screen to eliminate page scrolling to access all settings.
- Changed splice zones to green for better visibility
- When changing splice measurement mode the splice zones don't always update
- Clock and Calendar icons merged into one button on device setup screen
- Added battery charging indicator
- Added progress bar under OTDR graph while scanning
- Added event numbers at bottom of trace graph
- Test parameters shown on schematic screen while scanning
- Persistent light source option (not auto-disabled when changing screens)
- Added ability to create sub-folders (nested as deeply as you like)
- Removed transition between screens in most cases, reinstated fade effect
- Add 30s averaging time
- Add French "AZERTY" keyboard
- Added Feet/kilofeet measurement mode in addition to meters/kilometers
- When both MM or SM wavelengths are selected allow selecting a wavelength from the opposite set and automatically deselect the original two
- Automatically update the virtual instrument when switching selected wavelengths in wavelength selection screen

Version 1.0.1.0
13 December 2021

- Added Launch Control Warning to notify user when launch errors are detected.

Launch control warning is a feature that monitors the reflection of the front connector during the initial portion of the test for conditions that may cause problems with the accurate acquisition of a trace.

1. Saturated initial reflection. The front connector is too reflective for the OTDR to "see" down the fiber. The result is a very high dead zone and the ability to detect only large reflective events with limited distance accuracy. Probable causes are misaligned launch connector, damaged launch cord connector, UPC-to-APC launch cord.

2. Low backscatter level detected - the level of reflected energy after the initial pulse is lower than expected. Most likely cause is the connector plugged into the OTDR is not fully inserted/secured, or the fiber is broken immediately in front of

the OTDR connector.

3. No launch detected - there is no reflected energy coming into the OTDR detector. This is likely caused by damage to the OTDR's internal optics which requires factory service. Launch Control Warning can be enabled in the OTDR Setup menu. It is turned off by default.