Cleerline™ SSF-TKITP-500 | Test Kit Quick Start Guide

WARNING: LIGHT SOURCE LASER DOES NOT OPERATE AT VISIBLE WAVELENGTH. LIGHT IS NOT VISIBLE WHEN LASER IS ACTIVE. TO AVOID THE RISK OF EYE DAMAGE, DO NOT LOOK AT LASER WHEN LIGHT SOURCE IS OPERATIONAL.

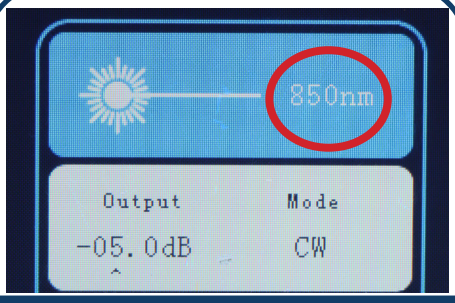
Your power meter and light source units will be used to measure loss in dB of the power coupled into the cable by the light source versus power measured on the receiver end by the power meter. Loss testing is done at wavelengths for the fiber in use, typically 850 nm for Multimode and optionally at 1300 nm, while Single Mode is tested at 1310 nm and optionally 1550 nm. The measured loss can be compared to the estimated loss for the link or "loss budget."

This testing kit with included OLS, OPM, reference cables, adapters, power supplies, and available software allows for loss testing and data recording of fiber optic cables

For set-up, allowable loss, link budget calculations, etc., the Fiber Optic Association (FOA) is a great resource for testing guidelines. FOA power testing instructions are included with your kit and should be reviewed prior to using this equipment. Information on the two noted tests above can be found via the FOA at www.thefoa.org, including fiber optic testing methods and standards.

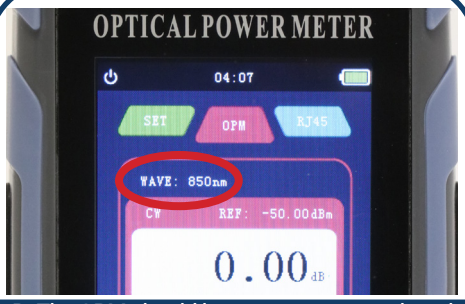
1. Turn on both light source (OLS) and power meter (OPM).

Set both the OPM & OLS to the desired wavelength by pressing the wavelength button on each unit.



A. Wavelength on the OLS is displayed in the upper right corner of the screen. Set to desired value (press wavelength key.)

Pressing wavelength button activates laser.

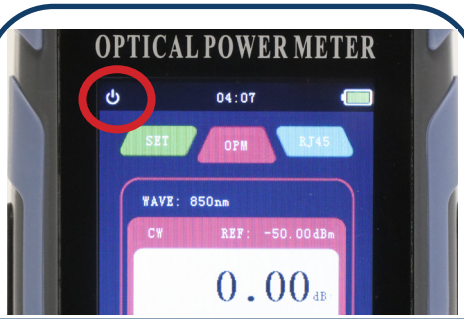


B. The OPM should be set to same wavelength as the OLS unit. Press the wavelength button until desired value appears.
Note: Typically 850nm for Multimode testing and 1310nm for Single Mode. *Use appropriate cables for fiber type being tested.*

Aqua = Multimode. Yellow = Single Mode.

2. On the OLS press FREQ button until CW displays on the center of the screen below the wavelength (see step 1A image).

*Typical testing configuration for most cables



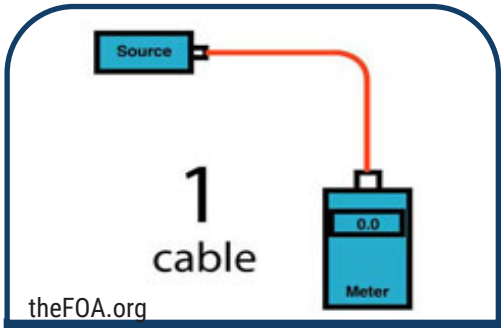
3. On both units ensure that the auto-power off funtion is not ON before setting any reference. If set to ON quick press the power button 1x to turn off the auto feature.

Note: a power symbol will be at the top of the screen if the auto-off function is on.

4. Plug REFERENCE cable into the appropriately labeled port on the OLS.
LC Single-ended testing - 1 cable between OLS & OPM *install LC adapter onto OPM.
LC Double-ended testing - 2 cable between OLS & OPM *install SC adapter onto OPM.
SC Single-ended testing - 1 cable between OLS & OPM *install LC adapter onto OPM.

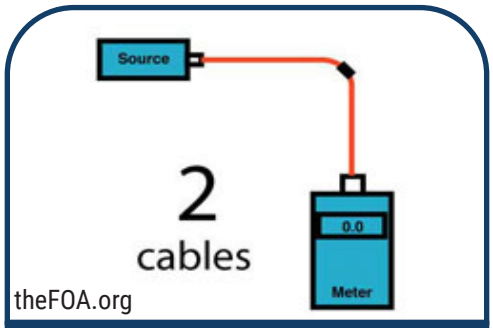
Cleerline™ SSF-TKITP-500

Test Kit Quick Start Guide



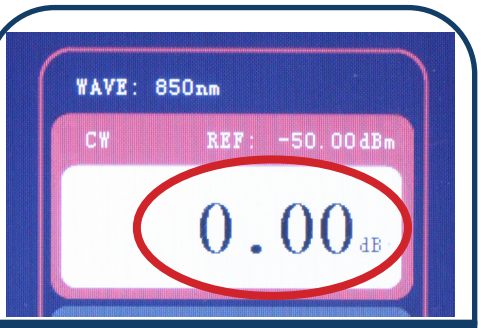
5. Cable Testing, place appropriate adapter onto OPM receiver, select and plug in cable (Single Mode or Multimode according to cable the cable being tested), between OLS and OPM.

Aqua = Multimode. Yellow= Single Mode



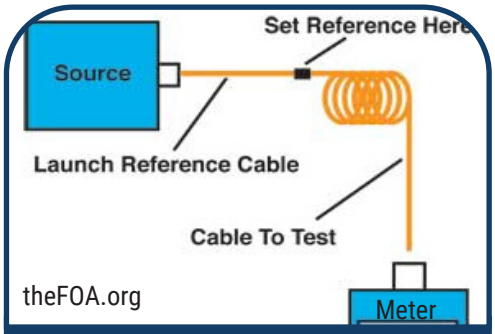
6. Cable Testing, place appropriate adapter onto OPM receiver, select and plug in two cables, one into OLS and other into OPM (Single Mode or Multimode according to the cable being tested). Link cables together with appropriate type adapter.

*Additional cables are required for double ended testing of SC, ST, and FC types.



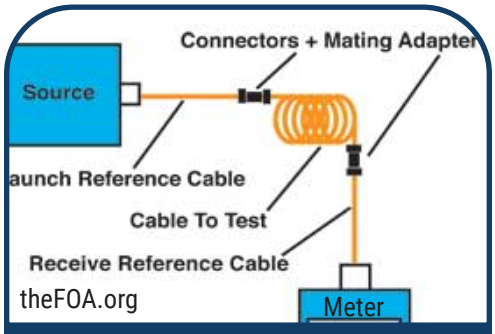
7.Reference OPM.
Once Reference cable/s only are connected between OLS and OPM units, Quick Press the "REF" button on the OPM unit. OPM should then read 0.00 dB on its display"

*Do not press REF again unless ONLY Reference cables are installed between OLS & OPM as show in Box 5 or 6



8A. **Single-ended Testing:**
Unplug Reference Cable connector from OPM power meter side ONLY. Place appropriate type feed through (LC or SC) adapter onto connector on end of cable.

Plug installed cable to be tested into adapter at end of cable from OLS and other end into top of OPM. OPM will now display loss of the installed cable



8B. **Double-ended Testing:**
Unplug one Reference Cable from the feed thru adapter and install additional adapter on that open connector.

Plug installed cable to be tested into adapters, one at OLS side and other at OPM side. OPM will now display loss of the installed cable.

*Performing Step 7 removes the power loss of the "reference" cables so that the dB loss reading of the installed cables will not include the loss of the reference cable(s) utilized.

Scan for Software

or go to
https://cleerline.com/document/software/

Refer to the included FOA instructions "Guide to Fiber Optics & Premises Cabling" to perform A>B and B<A testing to properly diagnose high loss connector terminations.

For accurate testing, frequent cleaning of all connector faces being placed under test, maintaining minimal bends and movement of reference cables, and resetting of power meter reference throughout the course of testing are recommended.