

OLTS5

Optical Loss Test Set

User's Guide

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A Division of **AFL Telecommunications**

Limited Warranty

One Year Limited Warranty

All Noyes products are warranted against defective material and workmanship for a period of one year from the date of shipment to the original customer.

Any product found to be defective within the warranty period will be repaired or replaced by Noyes.

In no case will Noyes liabilities exceed the original purchase price of the product.

Exclusions

The warranty on your equipment shall not apply to defects resulting from the following:

- Unauthorized repair or modification
- Misuse, negligence, or accident



CE Information

These instruments have been designed and tested to comply with the relevant sections of any applicable specifications including full compliance with all essential requirements of all applicable EU Directives.

Returning Equipment

To return equipment, please contact Noyes to obtain additional information and a Service Request (S.R.) number. To allow us to serve you more efficiently, please include a brief description specifying the reasons for the return of the equipment.

AFL Telecommunications

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Safety Information

Important Safety Information



WARNING! Use of controls or adjustments other than those specified herein may result in hazardous radiation exposure.



CAUTION! To avoid serious eye injury, never look directly into the optical outputs of fiber optic network equipment, test equipment, patch cords, or test jumpers. Always assume that optical outputs are on.



NOTICE! The OLTS5 contains no user serviceable parts. Except for replacing batteries and cleaning optical ports, this instrument must be returned to Noyes or authorized agents for repair and calibration.

CAUTION! Proper care in handling should be taken when using any precision optical test equipment such as the OLTS5. Scratched or contaminated optical connectors can impact the performance of the instrument. It is important to keep the dust caps in place when the unit is not being used.

Section 1: General Information

Thank you for purchasing a Noyes OLTS5 Optical Loss Test Set. The purpose of this User's Guide is to explain how to use and maintain this instrument.

Please check our web site at www.AFLtele.com/go/Noyes for updates to this manual, software updates, and additional application information. If you have any questions about the OLTS5 and recommended accessories, or if you need technical or sales support, please contact Noyes Customer Service.

Contacting Noyes Customer Service

You may call AFL-Noyes Customer Service between 8 a.m. and 5 p.m., United States Eastern Time, as follows:

Tel: 800-321-5298 (North America)
603-528-7780
Fax: 603-528-2025
E-mail: NoyesTechSupport@AFLtele.com

Unpacking and Inspection

This instrument has been carefully packed in accordance with standard shipping procedures. Examine the equipment for damage that may have occurred during shipment. If you find any damage, or if any of the following items are not included, please contact Noyes.

The OLTS5 test kit includes:

- (1) OLTS5 test set
- (2) AA alkaline batteries
- (1) Adapter cap
- Serial cable
- WinTest software and manual
- User's guide
- Warranty registration card
- Carry case

Feature Overview

The OLTS5 Optical Loss Test Set series offers end-to-end single-mode testing at either 1310/1550 nm or 1550/1625 nm.

The OLTS5 may be operated in automatic or manual test modes. In its “two-unit” automatic test mode, a pair of OLTS5 test sets may be used to measure the end-to-end, bi-directional insertion loss of a pair of single-mode fibers at 1310/ 1550 nm or 1550/ 1625 nm. Tests are started and controlled by the user from the OLTS5 configured as the Main unit. Test progress messages and results are displayed on the Remote unit. Full test results can be reviewed and saved in the Main unit. Thresholds may be set to provide pass/fail results.

In its “single-unit” automatic test mode the OLTS5 can measure bi-directional, dual-wavelength insertion loss of patch cords, or fiber optic cables while they are still on the reel.

In the manual operating mode individual OLTS5 test sets can operate either as an optical power meter (OPM) or dual-wavelength laser source.

The OLTS5 can store dual-wavelength, bi-directional insertion loss results for up to 1,000 fibers. Test results can be organized in up to 20 user-named files. Results are transferred to a PC via a serial link. Windows® software is provided to view, edit, and print test results.

The OLTS5 may be operated from (2) AA alkaline batteries, an optional NiMH rechargeable battery pack, or an AC power adapter.

Recommended Accessories

You will need fiber optic test jumpers to connect the OLTS5 to the fiber under test. Test jumpers must have the same core and cladding size as the fiber under test. The connector at one end of the test jumper must mate with the appropriate optical port on the OLTS5. The connector on the other end must mate with the fiber optic link under test. Test jumpers with a variety of lengths and connector styles are available from AFL-Noyes. Connector adapters are required to mate fiber optic test jumpers.

A supply of optical cleaning pads and isopropyl alcohol or a connector-cleaning cartridge is recommended to clean the optical connectors on the OLTS5 and test jumpers. A supply of fiber optic cleaning swabs or a can of filtered compressed air is recommended for cleaning connector adapters.

Section 2: Functional Description

OLTS5 Ports and Keys

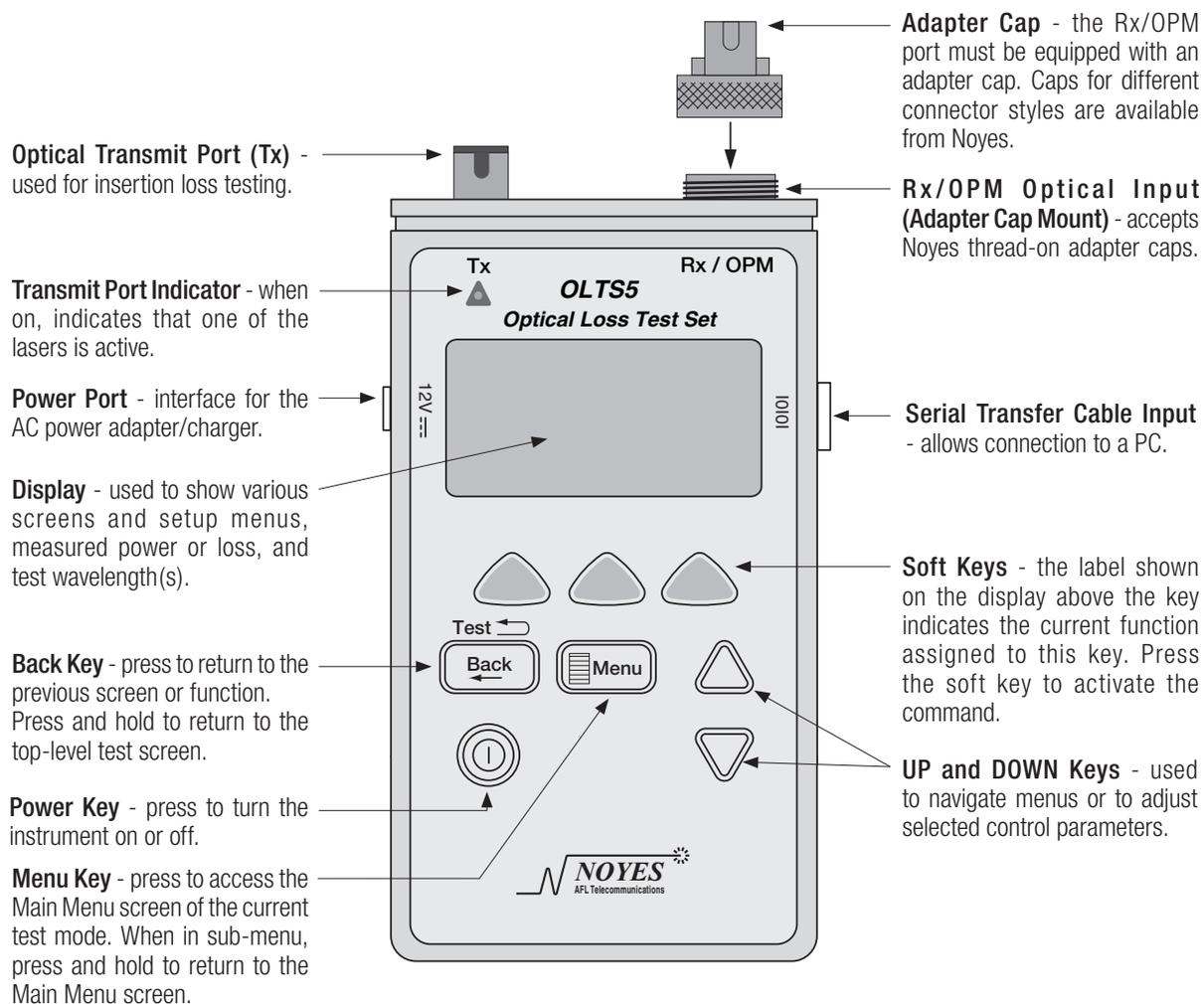


Figure 2-1. OLTS5 Ports and Keys.

Section 3: Setup and Operation

To Display the Main Menu

From any screen, press the MENU key (refer to Figure 3-1).

To Select a Sub-menu or Parameter from a Menu

- Use the Up and Down arrow keys to highlight an item.
- Press SELECT to display a sub-menu screen.

Using the Back key

- Press to display a previous screen.
- Press and hold to return to the top-level test screen.

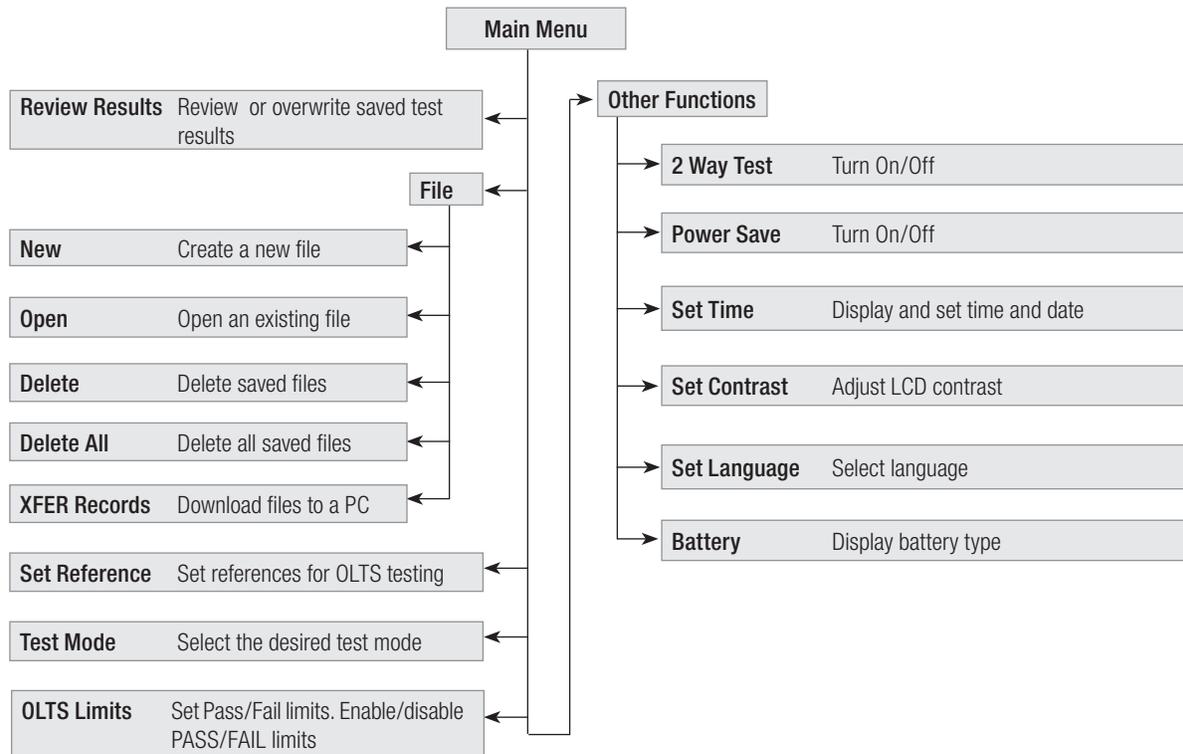


Figure 3-1. Main Menu.

General Setup

General settings are done in the OTHER FUNCTIONS sub-screen that allows you to set language, set time/date, adjust LCD contrast, and enable / disable 2 way test and power save feature.

From the MAIN MENU screen, highlight and select the OTHER FUNCTIONS option to access the OTHER FUNCTIONS screen.

To Turn 2 Way Test or Power Save On/ Off

- 1 Use the UP and DOWN arrow keys to highlight the desired option.
- 2 Pressing ▲ or ▼ toggles this function On and Off as indicated on the display.

Note: 2 Way Test option enables or disables bi-directional testing of the selected fiber (s).

Note: When the power save function is On, an OLTS5 turns off automatically 10 minutes after the last key press.

To Set Time/ Date

- 1 Using the UP and DOWN arrow keys highlight the SET TIME option.
- 2 Press SELECT to access the SET TIME screen.

Note: The displayed time is the time at which the SET TIME function was selected from the OTHER FUNCTIONS menu.

- 3 Use the UP and DOWN arrow keys to highlight the parameter to be changed.
- 4 Choose the ▲ or ▼ soft keys to increment or decrement the selected parameter.
- 5 Press OK to save settings and return to the OTHER FUNCTIONS screen.

To Set Contrast

- 1 Use the UP and DOWN arrow keys to highlight the SET CONTRAST option.
- 2 Press SELECT to access the SET CONTRAST screen.
- 3 Press the UP and DOWN arrow keys to increase / decrease the LCD contrast.
- 4 Press OK to save settings and return to the OTHER FUNCTIONS screen.

To Set Language

- 1 Press the UP or DOWN arrow keys to highlight the Language option.
- 2 Press SELECT to access the SET LANGUAGE function>
- 3 Press the UP or DOWN arrow keys to scroll through available languages.
- 4 Press the Select soft key will configure the user interface to the selected language.

Selecting a Test Mode

The OLTS5 offers five operating modes as follows:

Test Mode	Description and Application
OLTS MAIN ("two-unit" automatic test mode)	Configures the OLTS5 as a controller to be paired with a second OLTS5 unit configured as an OLTS REMOTE. May be used to measure bi-directional insertion loss of single-mode fiber pairs.
OLTS REMOTE ("two-unit" automatic test mode)	Configures the OLTS5 as a smart remote to be paired with a second OLTS5 unit configured as an OLTS MAIN. May be used to measure bi-directional insertion loss of single-mode fiber pairs.
OLTS SINGLE ("single-unit" automatic test mode)	Configures the OLTS5 as a single stand alone unit. May be used to measure bi-directional, dual-wavelength insertion loss of patch cords.
OPM (manual test mode)	Causes the unit to enter the OPM (optical power meter) measurement mode.
OLS (manual test mode)	Causes the unit to enter the OLS (optical laser source) measurement mode.

To select a test mode:

- 1 From the MAIN MENU screen, use the UP and DOWN arrow keys to highlight the TEST MODE option.
- 2 Press SELECT to display a list of available test modes.
- 3 Using the UP and DOWN arrow keys highlight the desired test mode, then press SELECT.
- 4 A test screen of the selected mode will be displayed.

Setting Pass/Fail OLTS Limits

- 1 From the MAIN MENU screen, highlight and select the OLTS LIMITS option to access the OLTS LIMITS screen.
- 2 Press the λ soft key to select the desired wavelength.
- 3 Press C/F (Coarse /Fine) to toggle between COARSE and FINE adjustment.
- 4 Use the UP or DOWN arrow keys to increase or decrease the limit value displayed on the screen. You may set limits within the allowable range as follows:

Mode	Range	Coarse	Fine
OLTS limits	0 to 45 dB	± 1.00 dB	± 0.01 dB

- 5 Choose ON/OFF to toggle LIMITS on or off as indicated on the display.

Note: If limits have been changed, you will be prompted to save them on exit.

Managing Files

All the commands and sub-screens for creating, opening, deleting, and transferring files to a PC can be accessed from the MAIN MENU > FILE > FILE MENU screen.

To Create a New File

- 1 From the MAIN MENU screen, highlight and select FILE > NEW option to access the NEW FILE screen.
- 2 Use the UP and DOWN arrow keys to highlight the desired character.
- 3 Press SEL to enter the highlighted character in the file name field.
- 4 Repeat steps 2 & 3 to enter up to 7 characters.
- 5 You may press DEL to remove the last entered character.
- 6 When you finish entering characters, choose CREATE.

To Open an Existing File

- 1 From the MAIN MENU screen, highlight and select FILE > OPEN option to access the OPEN FILE screen. A list of saved files is displayed.
- 2 If displayed, you may press P-UP (page up) or P-DN (page down) to scroll through the list of saved files. Use the UP and DOWN arrow keys to highlight the desired file, then press SELECT.

Note: Selected file is now the current file. You need to make the desired file current to perform the following operations:

- Save test results to the desired file
- Transfer saved test results to a PC

To Delete Files

- 1 From the MAIN MENU screen, highlight and select FILE > DELETE FILE or DELETE ALL.
- 2 Selecting DELETE FILE allows you to delete individual files:
 - Use the UP and DOWN arrow keys to highlight the file to be deleted. If displayed, you may press P-UP (page up) or P-DN (page down) to scroll through the list of saved files..
 - Press DELETE. When prompted to confirm removal, choose YES or NO.
- 3 Selecting DELETE ALL allows you to delete all saved files at once. When prompted to confirm removal, choose YES or NO.

To Transfer Files to a PC

- 1 Using the supplied serial cable or RS232 / USB adapter, connect the OLTS5 instrument to the available COM Port on a PC.
- 2 From the Windows Start Menu select Programs > Noyes > WinTest software.
 - From the WinTest Settings menu, select the appropriate COM Port.
 - In the header fields, enter the information that you want to appear on the files transferred from the OLTS5 instrument.
 - From the WinTest Instrument menu, select OLTS5.
 - From the WinTest File menu, select Receive Stored Report.
- 3 From the OLTS5 MAIN MENU > FILE MENU > OPEN screen, highlight the file to be transferred, then press SELECT.
- 4 From the FILE screen, use the UP and DOWN arrow keys to highlight the XFER RECORDS option.
- 5 Choose SELECT to start transferring.

Note: For a complete description of the PC executable software, refer to the User's Guide supplied with the software.

Section 4: OLTS Automatic Mode - Measuring Bi-directional Insertion Loss

OLTS Mode Screens and Features

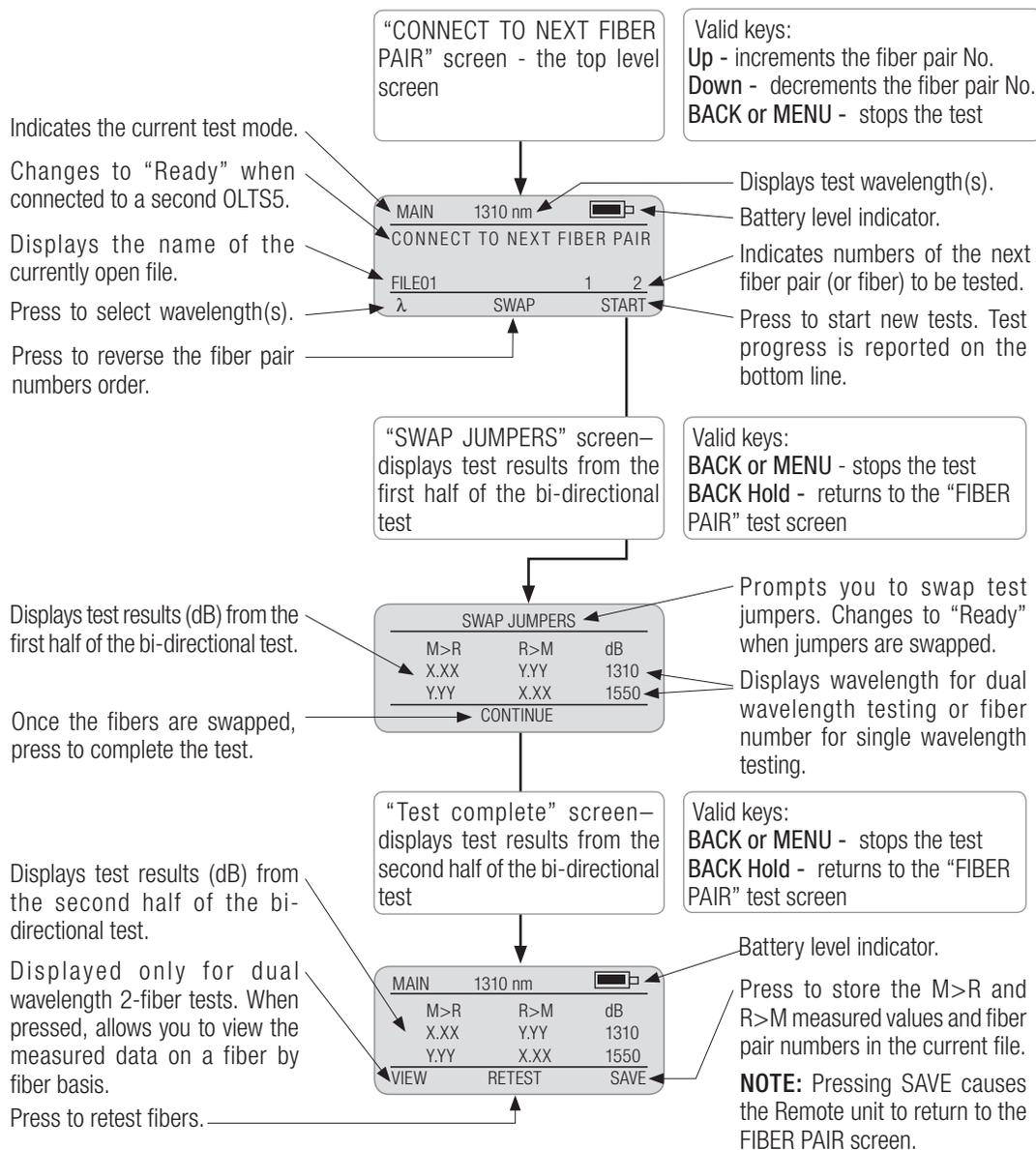


Figure 4-1. OLTS Mode Screens and Features.

Setting References

Setting references is recommended on a daily basis before testing and when changing test jumper(s).

On entry to the OLTS (MAIN, REMOTE, or SINGLE) test mode the unit will determine if the reference hasn't been set for over 24 hours and prompt you to re-reference.

The display will read

REFERENCE IS OVER 1 DAY OLD SET REFERENCE IS RECOMMENDED	
LATER	NOW

- Pressing LATER allows you to omit setting references and use the old reference values.
- Pressing NOW allows you to access the REFERENCE screen.

Note: You may also access the REFERENCE screen from the OLTS MAIN MENU screen:

- Press the MENU key
- Highlight the SET REFERENCE option
- Press SELECT

Reference values can be set using either mutual (common site) or self (remote site) referencing method as follows:

Reference method	Application	Description	Setup procedure
Mutual (common site) referencing	Used in the "two-unit" automatic test mode: OLTS MAIN and OLTS REMOTE	This method requires both OLTS5 units at a common site	Connect test jumpers to the Main and Remote units as illustrated in Figure 4-2
Self (remote site) referencing	Used in "two-unit" or "single-unit" automatic test modes: OLTS MAIN and OLTS REMOTE, or OLTS SINGLE	This method may be used if the Remote unit is not available at a common site	Connect a test jumper to the Transmit (Tx) and OPM ports as illustrated in Figure 4-3

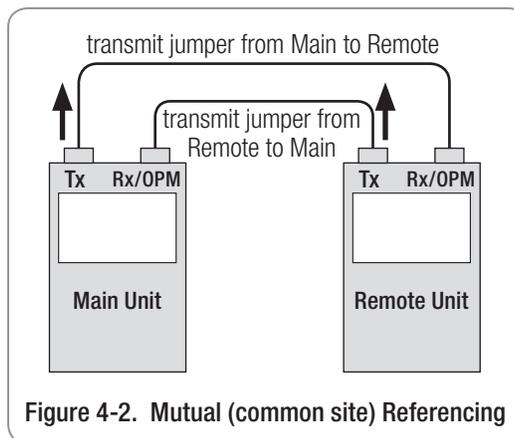
Note: If the mutual references are not set, the OLTS5 will use the remote references.



IMPORTANT! Keep all optical connections and surfaces free from dirt, oils, or other contamination to ensure proper operation. Scratched or contaminated connectors can reduce performance. Clean all fiber optic connectors before performing test procedures described below.

Mutual Referencing

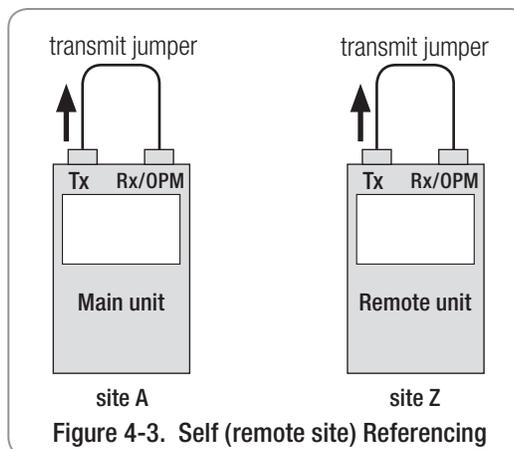
- Using transmit jumpers, connect the Main and Remote units as illustrated in Figure 4-2.
- Press START on both units to begin referencing.
- When new reference values are displayed:
 - Press SAVE if the new reference values are acceptable ($-5 \pm 2\text{dB}$).
 - OR
 - If the new reference values are not acceptable, try cleaning the connectors again, then press RETEST.



Self (remote) Referencing

Note: When a pair of OLTS5 test sets is used to perform test measurements, both units should be referenced.

- Using transmit jumpers, connect the transmit and receive port as illustrated in Figure 4-3.
- Press START to begin referencing.
- When new reference values are displayed:
 - Press SAVE if the new reference values are acceptable ($-5 \pm 2\text{dB}$).
 - OR
 - If the new reference values are not acceptable, try cleaning the connectors again, then press RETEST.



Testing Fiber Links - OLTS Main and Remote Modes

Perform the following steps after Main and Remote units have been referenced.

NOTE: Once the references have been set, do not disconnect transmit jumpers from the Main and Remote unit transmit ports (Tx).

- 1 Disconnect transmit jumpers from the Main and Remote unit receive (Rx) ports.
- 2 Attach receive jumpers to the Main and Remote unit receive (Rx) ports.
- 3 Transport Main and Remote unit to opposite ends of the link to be tested.
- 4 Connect each unit to the link under test (refer to Figure 4-4, step I).
- 5 Wait for units to indicate "READY".
- 6 Press START (Main unit) to begin testing.

- The Main unit will connect with the Remote unit, perform the first step of the bi-directional test, display the results (dB), and prompt you to swap jumpers if 2 Way testing is enabled.
- If prompted, swap jumpers as illustrated in Figure 4-4, step II. Wait for units to indicate "READY". Press CONTINUE (Main unit) to perform the second step of the 2 Way test.
- When test results are displayed, press SAVE (Main unit) to store test results.
- or
- Press RETEST (Main unit) to retest fibers.
- For the 2 Way Dual Wave test, you may press View to view the test results on a fiber by fiber basis.

- 7 To test additional fibers reconnect the Main and Remote units to the next fiber pair then repeat step 5.

Note: When operating in the "two-unit" automatic test mode, test results can be saved and reviewed in the Main unit (refer to section "Reviewing Saved Test Results", page 13).

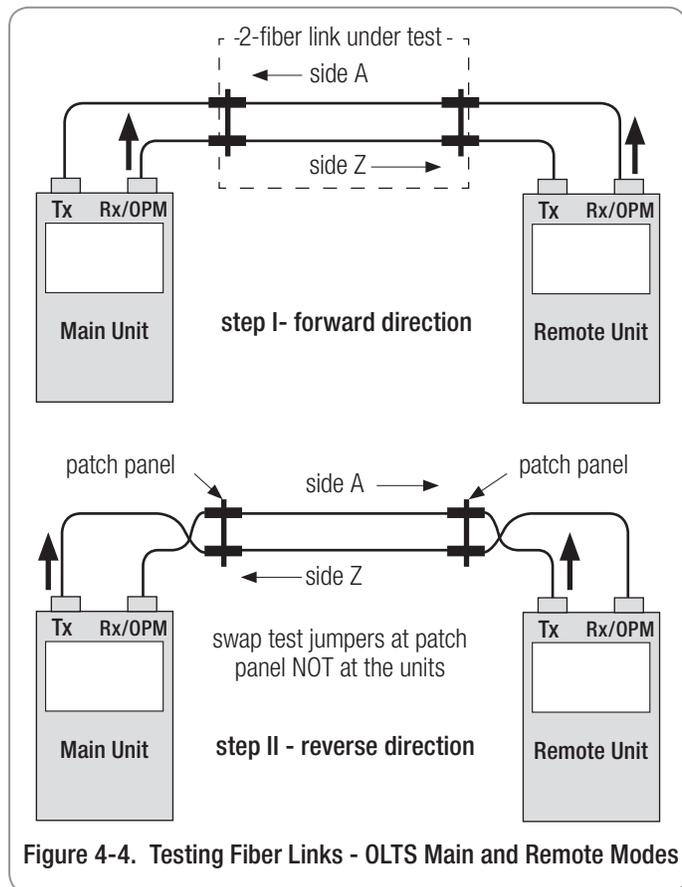


Figure 4-4. Testing Fiber Links - OLTS Main and Remote Modes

Reviewing Saved Test Results

Prior to reviewing saved tests, OPEN the file to be viewed (refer to section “To Open a File”).

- From the MAIN MENU screen, select the REVIEW RESULTS option to access the OPEN RECORD screen (Figure 4-5).
 - You may press the UP and DOWN arrow keys to scroll through saved fiber pairs numbers.
 - You may press the ▲ or ▼ soft keys to increment or decrement through the records in blocks of 100.
- Once the desired fiber pair is displayed, press OPEN to view saved records.
 - If the test results for a Dual Wavelength, bi-directional test, press the ▲ or ▼ soft keys to toggle display between saved records in the selected pair.
 or
 - You may press RETEST to perform a new test and overwrite the record data.

to retest a fiber pair:

- Press RETEST to start, the OLTS5 display will switch from the OLTS RESULTS screen to the top-level test screen.
- Press START (Main unit) to begin testing.
 - The Main unit will connect with the Remote unit, perform the first step of the bi-directional test, display the results (dB), and prompt you to swap jumpers if 2 Way testing is enabled.
 - If prompted, swap jumpers as illustrated in Figure 4-4, step II.
Press CONTINUE (Main unit) to perform the second step of the 2 Way test.
When test results are displayed, press SAVE (Main unit) to replace test results.

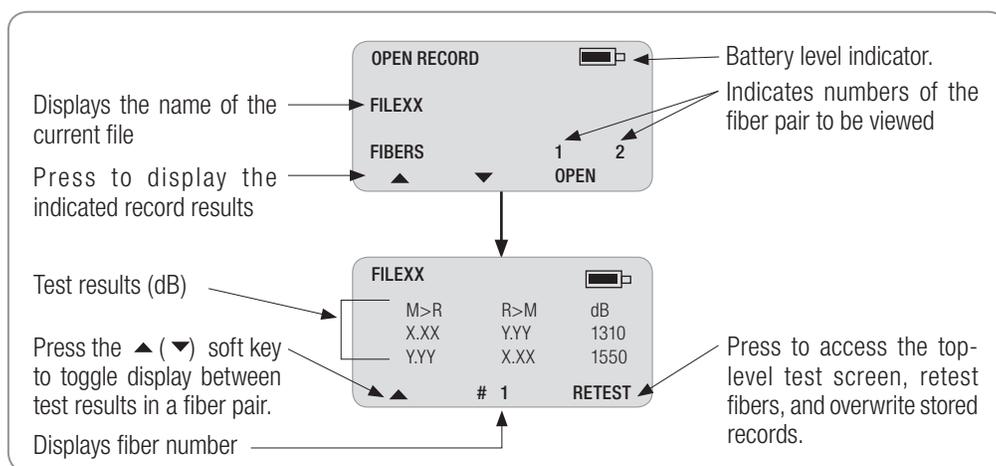


Figure 4-5. Reviewing Saved Test Results.

Testing Patch Cords - OLTS Single Test Mode

Perform the following steps after the OLTS5 unit has been referenced (refer to section “Mutual Referencing”).

NOTE: Once the references have been set, do not disconnect the transmit jumper from the transmit port (Tx).

- 1 Disconnect the transmit jumper from the receive port Rx/OPM.
- 2 Attach the receive jumpers to the receive Rx/ OPM port (refer to Figure 4-6, step I).
- 3 Connect the OLTS5 to the patch cord to be tested using the appropriate adapters.
- 5 From the OLTS SNGL test screen, Press START to begin testing.
 - The OLTS5 will perform the first step of the test, display the results (dB), and prompt you to swap jumpers if 2 Way testing is enabled.
 - If prompted, swap jumpers as illustrated in Figure 4-7, step II.
Press CONTINUE to perform the second step of the bi-directional test.
 - When test results are displayed, you may press SAVE to store test results in the current file.

Note: Once saved, test results can later be retrieved (refer to section “Reviewing Saved Test Results”, page 13).

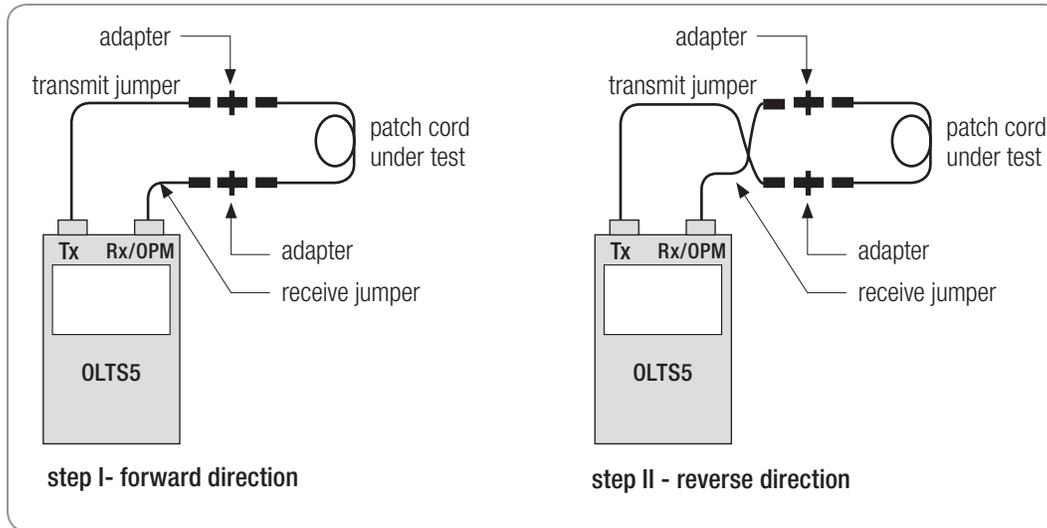


Figure 4-6. Testing Patch Cords - OLTS Single Test Mode

Section 5: Manual Test Modes

OPM (Optical Power Meter) Test Mode and Applications

In the OPM manual test mode, an OLTS5 instrument can operate as an optical power meter to perform diagnostic and evaluation tests associated with fiber optic transmission systems. An OLTS5 measures both absolute power (dBm or μ W) and insertion loss (dB). As an optical power meter, an OLTS5 may be used with any LED or laser source to measure insertion loss on multimode or single-mode links respectively.

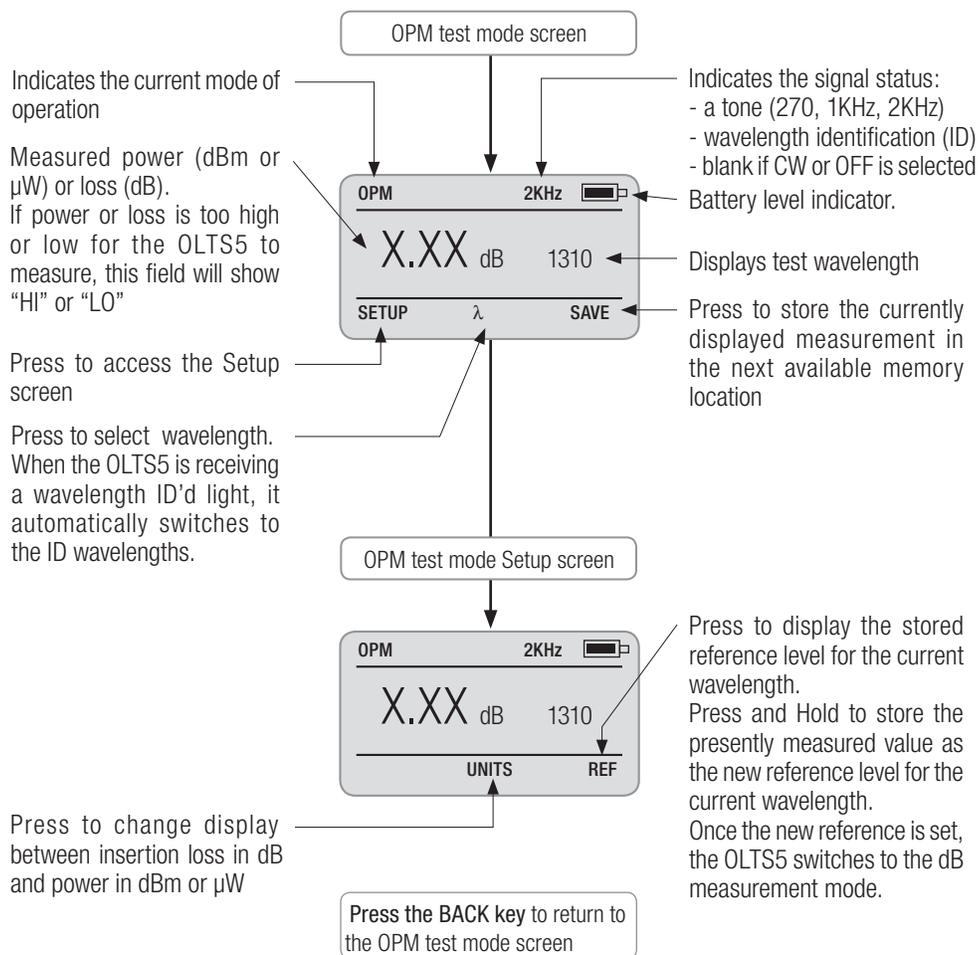


Figure 5-1. OPM Test Mode Screens and Features.

OPM Screens and Features

Setting References

- 1 Press WAVE to select the desired wavelength.
- 2 From the OPM test screen, press SETUP to access the Setup screen (Figure 5-1).
- 3 You may press REF to displays the stored reference level for the current wavelength.
- 4 Press and hold REF to store the presently measured value as the new reference level for the current wavelength. Once the new reference is set, the OLTS5 switches to the dB measurement mode.
- 5 Press the BACK key to return to the OPM test screen.

Measuring Optical Power

Use the following procedures to verify the optical power of a transmitter. The operational wavelength and the measurement mode (dBm, dB, or μ W) must correspond with the specifications of the transmitter under test. The test results should be within manufacturer specifications. Clean all fiber optic connectors before performing test procedures described below.

- 1 Attach the test jumper leading from the transmitter to the OPM Port.
- 2 Press WAVE to select the desired wavelength from the OPM setup screen. Choose UNITS to select the display units: "dB", "dBm", or " μ W".
- 3 Press the BACK key to return to the OPM test screen.
- 4 Press SAVE to save the displayed measurement in the next available memory location.

Saved test results can later be retrieved (refer to section "Reviewing Saved Test Results").

Reviewing Saved Test Results

Prior to reviewing saved tests, open the file to be viewed (refer to section "To Open a File").

- 1 From the MAIN MENU screen, select the REVIEW RESULTS option to access the OPEN RECORD screen.
 - You may press the UP and DOWN arrow keys to scroll through saved records (fiber numbers).
- 2 Once the desired fiber number is displayed, press OPEN to view the selected record.
 - You may press the UP and DOWN arrow keys to scroll through saved records.
 - If required, choose RETEST to perform a new test and overwrite the stored measurement.
- 3 Press RETEST to start, the OLTS5 will switch from the OPM RESULTS screen to the top level OPM test screen.
- 4 When the new measurement is displayed, press SAVE to overwrite previously stored record.

OLS (Optical Laser Source) Test Mode and Applications

In the OLS manual test mode, an OLTS5 can operate as a dual-wavelength (1310/1550nm) laser source. As a laser source, an OLTS5 may be used with any optical power meter to measure insertion loss on single-mode fiber links.

The OLS mode allows the user to turn lasers on and off, adjust lasers output level, modulate lasers output with a tone signal (270Hz, 1kHz or 2kHz), or encode the wavelength ID onto the laser output.

OLS Screens and Features

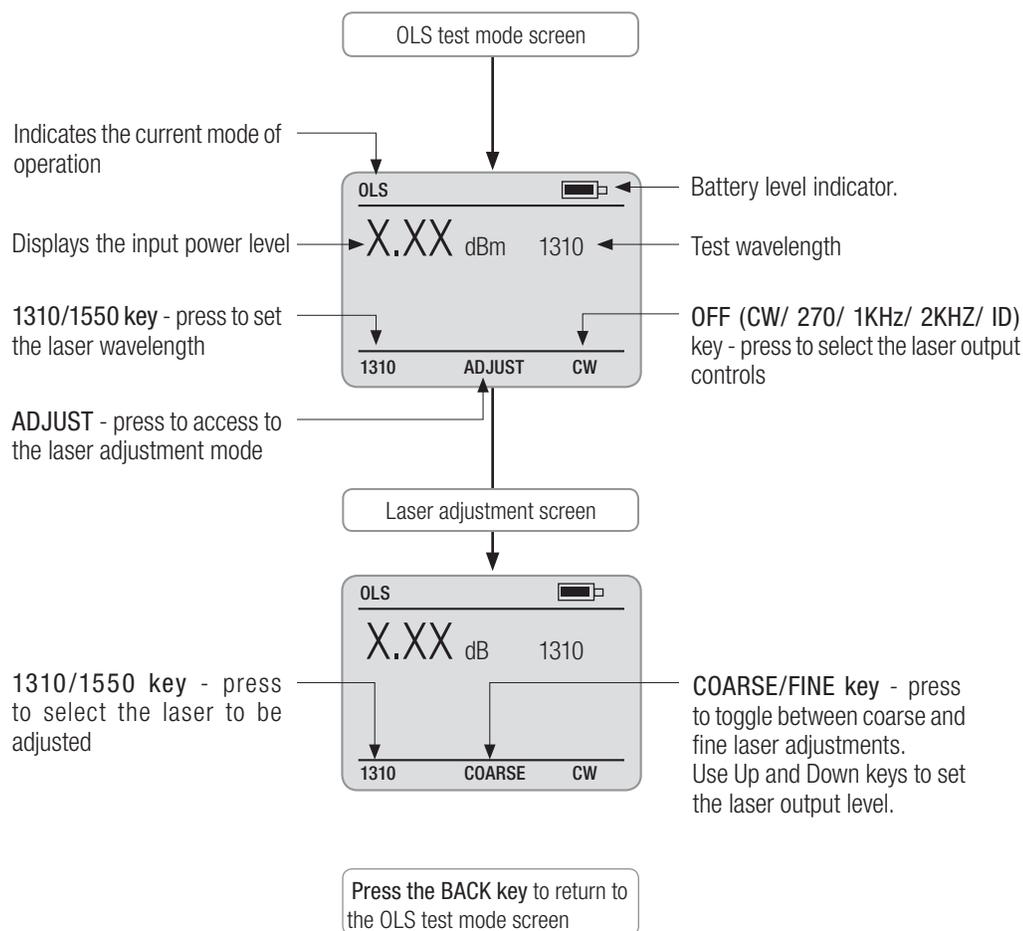


Figure 5-2. OLS Test Mode Screen and Features.

Adjusting Laser Output Level

- 1 Using a test jumper, connect the transmit (Tx) and receive (Rx/OPM) ports.
- 2 From the OLS test mode screen, press the ADJUST soft key to access the laser adjustment mode (refer to Figure 5-2).
- 3 Press the 1310/1550 soft key to select the desired laser for adjustment.
- 4 Press the C/ F soft key to toggle between COARSE and FINE adjustment.
- 5 Use arrow keys to increase or decrease the output level value displayed on the screen.
- 6 When the output level is set as desired, press the Back key to confirm your settings and exit the adjustment mode.

ID and Tone Signal Features

The OTLS5 is designed to generate Tone or ID in fiber cables as identification signals. When using one OTLS5 as a light source and another OTLS5 as a power meter, we recommend using the ID mode for fiber identification. The tone feature is primarily useful when using the OLTS5 as a light source with a power meter other than the OLTS5.

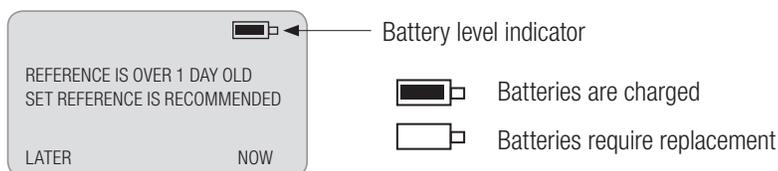
To generate an ID or Tone signal:

- 1 Select and attach the appropriate test jumper to the transmit port Tx.
- 2 Attach the other end of the test jumper to the fiber to be traced.
- 3 From the OLS test screen, press the 1310/1550 soft key to select the desired laser.
- 4 Use the OFF/ CW/ 270/ 1KHz/ 2KHz/ID soft key to select the desired control signal. Once selected, the OLTS5 will generate the selected signal into the attached fiber.
- 5 At the far end, use an OLTS5 set to OPM mode or other optical power meter for fiber identification. When the OLTS5 detects a signal, an appropriate signal indicator will appear in the upper right hand corner of the display.

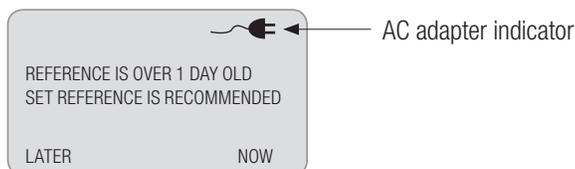
Section 6: Maintenance

Battery Maintenance

When the black bar in the Battery level indicator has disappeared, AA batteries require replacement; if a battery pack is used, it requires recharging. The instrument will operate for approximately 1 hour (minimum) after a “BAT” indicator is displayed.



Note: The Battery level indicator is replaced by an AC adapter indicator when the unit is powered from an AC Adapter.



To Replace AA Batteries

- 1 Starting from the top, remove the protective rubber boot from the instrument.
- 2 Remove the battery compartment cover located on the back of the instrument.
- 3 Replace the discharged batteries.
- 4 Replace the cover and rubber boot.

To Recharge a Battery Pack

- 1 Connect the AC power adapter/charger to the Power Port (refer to Figure 2-1).
- 2 A battery pack can be recharged to full capacity in about 12 hours.

Repair and Calibration

Repair of these units in the field is NOT recommended. If repair is necessary, please contact Noyes. Calibration is recommended every 36 months. Please contact Noyes for proper calibration.

Cleaning Optical Ports



CAUTION: Before conducting the following procedures be sure to have the unit(s) turned OFF.

Optical ports must be kept free from dirt or other contaminants to ensure accurate measurements and operation. A supply of optical cleaning pads and isopropyl alcohol or a connector-cleaning cartridge is recommended to clean the optical ports.

To Clean the Transmit (Tx) Port

- 1 Unscrew UCI adapter from base.
- 2 Pull the adapter directly out away from the mount.
- 3 The ferrule can now be cleaned. Perform one of the following:

If using Noyes Cleaning Supplies

- Leaning the FCC2 can back (30°), press the button on the FCC2 to fill the well.
- Dip the CCTP tip into the well of the FCC2 to dampen the tip with optical cleaning fluid.
- Place the damp tip over the ferrule to be cleaned.
- Rotate the tip clockwise 10 revolutions while applying varying pressure to create a gentle pumping action where the tip contacts the ferrule.
- Discard the CCTP stick after using both tips.

If using lint-free optical cleaning pads and isopropyl alcohol

- Be sure to use 99% IPA that has not been contaminated.
- Dampen the wipe with the alcohol and gently wipe the exposed ferrule. Then dry the ferrule using

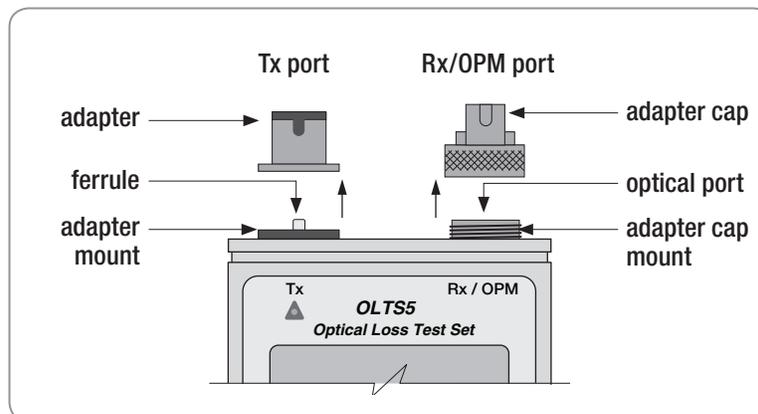


Figure 6-1. Cleaning Optical Ports.

a new optical wipe

- 4 Using a can of filtered compressed air (held vertically), blow out any contaminants from the adapter.
- 5 After cleaning, carefully align the key way and replace the UCI adapter insuring that it slides into place.
- 6 Once completed, screw the adapter down until tight.

To Clean the Receive (Rx/OPM) Port

- 1 Unscrew the adapter cap from the adapter cap mount.
- 2 Clean the optical port using optical wipes and IPA.
- 3 Using a can of filtered compressed air (held vertically), blow out any contaminants from the adapter cap.
- 4 Replace the adapter cap once the cleaning is complete.

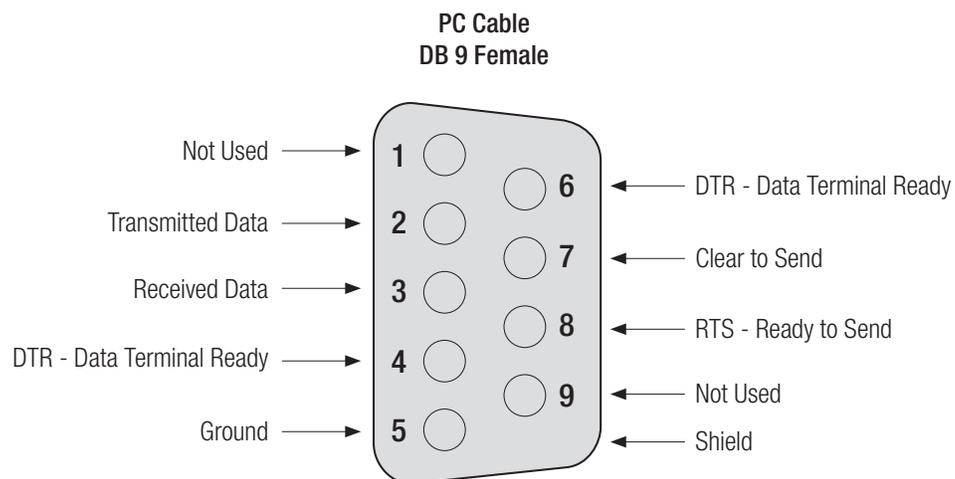
Section 7: Specifications

OLTS5 Specifications

Model	OLTS 5-3	OLTS 5-5	OLTS 5-6
Transmit port (laser source) specifications			
Center wavelengths	1310/1550 ± 20 nm	1550/1625 ± 20 nm	1310/1550 ± 20 nm
Emitter type	Laser, Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03		
Output power into 9/125 SM fiber	-5 dBm (nominal)	-5 dBm (nominal)	-5 dBm (nominal)
Stability	± 0.1 dB, up to 8 hours	± 0.1 dB, up to 8 hours	± 0.1 dB, up to 8 hours
Insertion loss and power measurement resolution	0.01 dB	0.01 dB	0.01 dB
Available connector types	SC, FC, ST	SC, FC, ST	SC, FC, ST
Receive port (optical power measurement) specifications			
Detector type	InGaAs	InGaAs	Filtered InGaAs
Calibrated wavelengths	850, 980, 1300, 1310, 1480, 1550, 1625 nm		
OPM (manual) mode optical power display range	+ 10 to – 70 dBm	+ 10 to – 70 dBm	+ 16 to – 60 dBm
OLTS (automatic) mode insertion loss measurement range	45 dB	45 dB	39 dB
Accuracy at –10 dBm, 25°C	± 0.25 dB	± 0.25 dB	± 0.25 dB
General specifications			
Display	128 X 64 dot matrix liquid crystal display		
Dimensions (H x W x D)	18.5 X 11.1 X 4.6 cm (7.3 X 4.4 X 1.8 in)		
Weight	0.55 kg (1.2 lb)		
Operating temperature and humidity	0 to +50°C, 90% RH (non-condensing)		
Storage temperature and humidity	-20 to +60°C, 95% RH		
Power	2 AA Alkaline (2-cell NiMH-or AC adapter optional)		
Battery life (typical)	(2) AA - 17 hours; NiMH battery pack - 11 hours		
Connector types	Thread-on adapter cap mount		

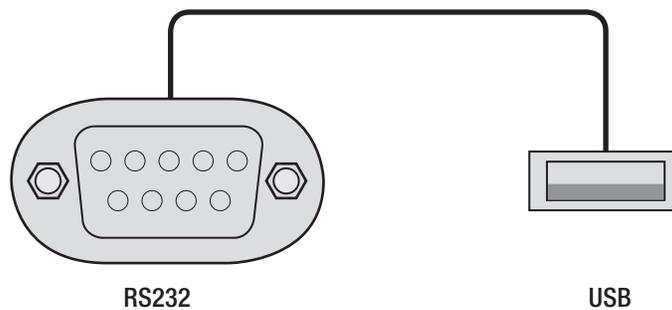
All specifications valid at 25°C unless otherwise specified.

Serial Cable



USB to RS232 Adapter

NOTE: To use the USB to RS232 adapter, included software for the virtual COM Port must be installed.



Thank you for choosing Noyes Test & Inspection

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