Quick Reference Guide

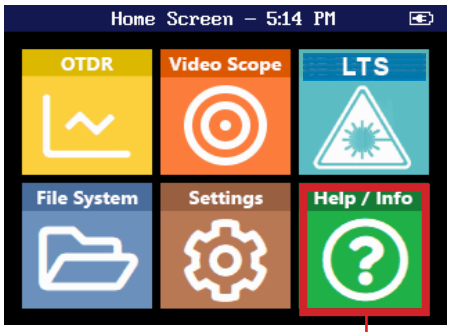
OV350-OTDR / Mini OTDR

Rev A 9/13/2026

Power Up

Press the button to power on the OV350-OTDR, the home screen will be displayed.

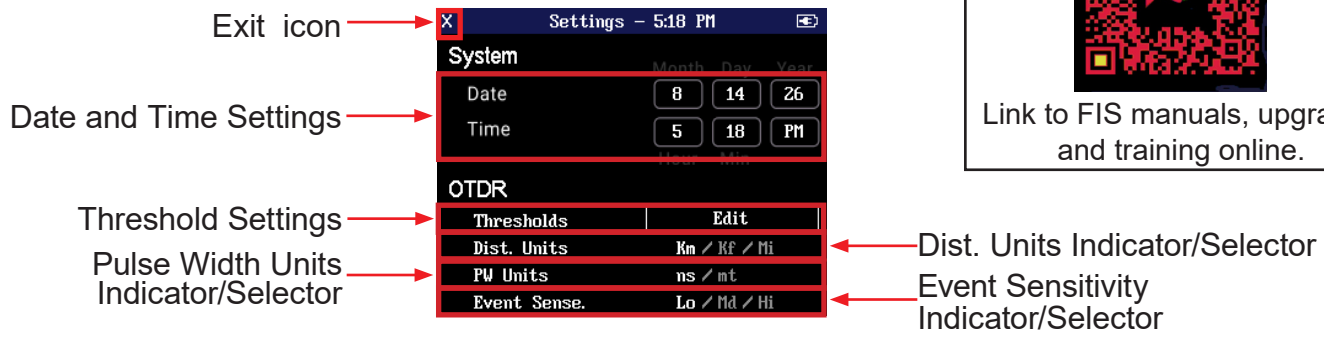
The home screen offers direct access to the OTDR, LTS (TLS for DWDM) and video scope modules. File management icon opens project/file management screen to manipulate and transfer projects and files saved in the OTDR and video scope and LTS modules. The settings icon opens the settings page. The Help icon offers the user a link to Fiber Instrument Sales manuals, upgrades and training online.



Link to FIS manuals, upgrades and training online.

Select the Settings icon to open the settings screen.

Setting Screen



Setup

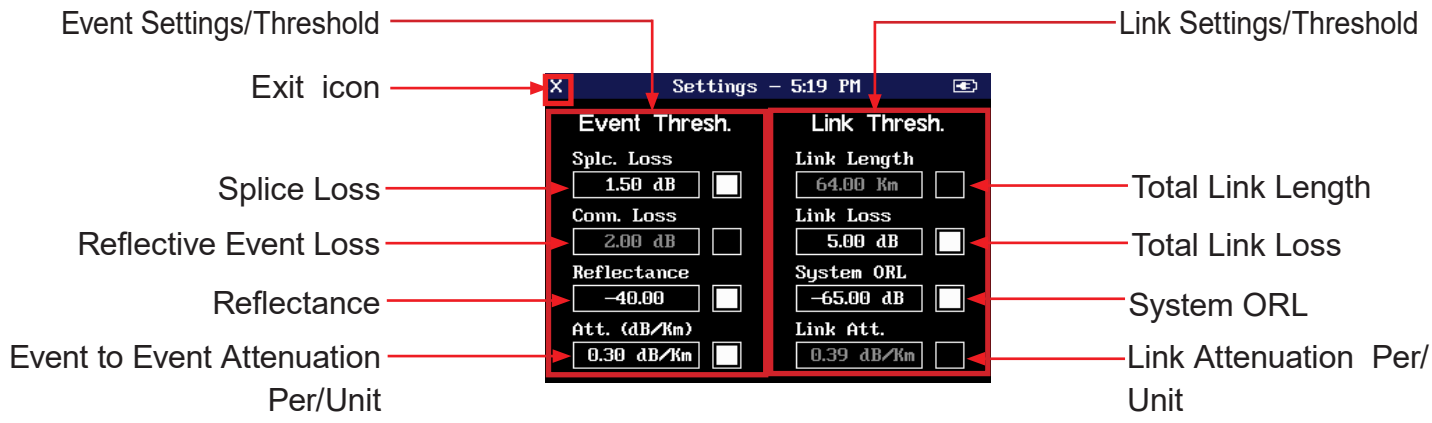
Follow the steps below for initial setup and periodic adjustments

Time and Date Settings

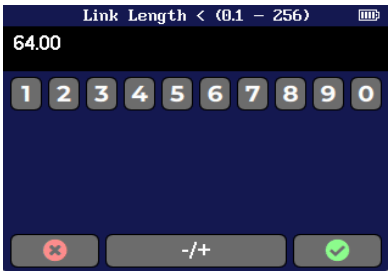
- From the Home screen, select the Settings icon to enter the settings screen.
- For accurate time stamps on saved files set the date and time by touching each value. Long hold for faster operation.

OTDR Threshold Settings

Touch the Edit button to the right of “Threshold” to open the thresholds settings screen. The following screen will be displayed.



To set the thresholds, ensure the threshold is active by selecting the box to the right. If the box is filled in white, it is active. Touch the value below a setting title and the following screen will be displayed:



Simply enter the full number desired for the threshold and the old entry will be overwritten. Use the +/- to set negative or positive values, then touch the green check to save or red X to cancel.

Note: These are pass thresholds, therefore the value entered and anything lower than that value passes.

Event Thresholds:

- Splice Loss threshold is the maximum value allowed for a non-reflective event
- Connector Loss is the maximum value allowed for reflective events such as a pair of connectors.
- Reflectance is the reflective value at the event indicated.
- Attenuation db/unit, is the dB loss per unit of measure selected in OTDR Settings.

Link Thresholds:

- Link Length is the maximum length a link may be before failure. This may be used to indicate the labeling is wrong or the wrong fiber is being tested.
- Link Loss is the total loss the fiber under test may have before failure.
- System ORL is the maximum ORL allowed before failure. Remembering the ORL is represented as a negative number.
- Link Attenuation is the maximum dB loss per/unit the Link/fiber under test may have before failure.

All the thresholds may be turned off or on by touching the box immediately to the right of the value. The box of a selected threshold will be filled white and un-selected items will be black.

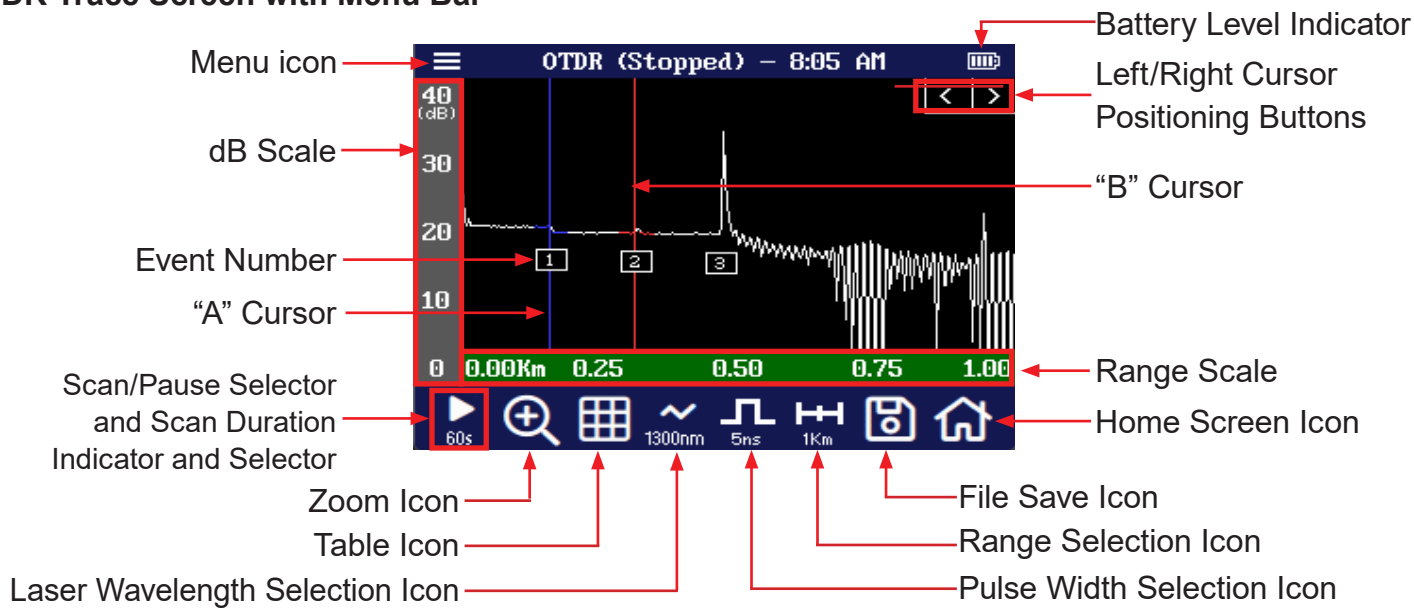
General OTDR Settings:

For these settings, simply touch the desired unit or value.

- Distance Units of kilometer (Km), kilo feet (Kf) and miles (Mi) may be selected for all distance measurements.
- The Pulse width my be represented in nanoseconds (ns) or meters (mt).
- Event Sensitivity may be set to low (Lo), medium (Md) or high (Hi). It may be necessary in noisy environments to lower the sensitivity while in very clean flat traces, a higher sensitivity setting may be used.

OTDR Operation

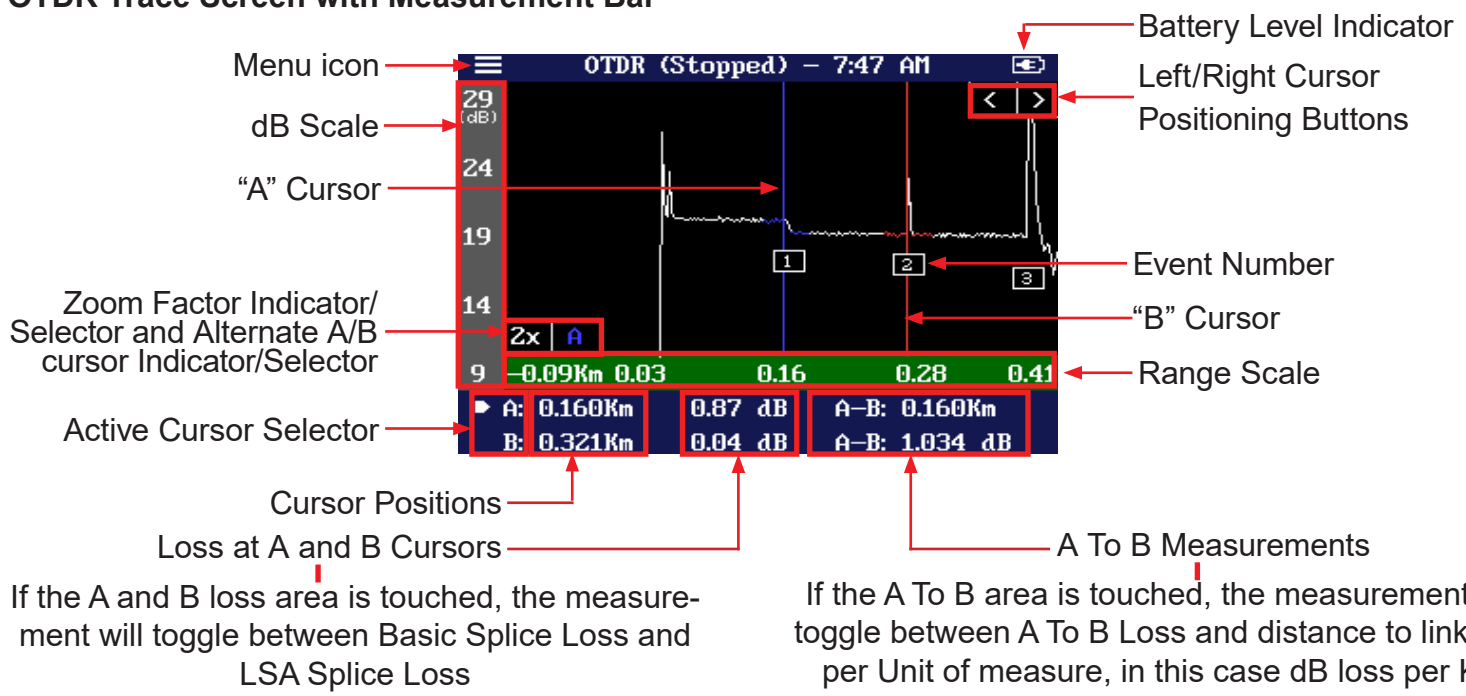
OTDR Trace Screen with Menu Bar



OTDR Trace Screen Operation With Menu Bar Description

Menu	The menu icon cycles between the OTDR trace screen with menu bar and the OTDR trace screen measurement bar at the bottom of the trace screen.
dB Scale	The dB scale range is 0-40 dB. The range adjusts accordingly with increased zoom levels.
Event No.	Event numbers will display on event after the event table has been opened or after a trace with the auto save enabled.
Cursors	The cursors are the blue and red vertical lines on the trace. They may be moved by touching anywhere on the screen to snap the active cursor to that location. They may also be moved by touching the cursor and dragging it to a desired position. For micro adjustments, use the left/right cursor positioning buttons in the top right corner of the trace.
Play/Pause	The Play Pause button starts and stops a trace. The value below it is the time duration of the trace acquisition. Long touch the play button (While the trace is stopped) and a selection menu with available times will be displayed. Touch the desired length of time and a trace will start.
Zoom	Touch the Zoom button to cycle through the available zoom levels. The available levels are 1X, 2X, 4X, 8X, 16X, and 32X. An alternative method to zoom, is simply touch the very bottom left of the trace window, just above the range bar. This will activate the zoom indicator/selector.
Table	Touch the Table icon to open the event table.
Wavelength	Touch the Wavelength icon to display a list of the available wavelength installed.
Pulse Width	Touch the Pulse Width icon to display a list of the available pulse widths for the selected range. Therefore, the desired range should be set first.
Range	Touch the range icon and a list of available test ranges will be displayed. The ranges (in meters) are; 500m, 1km, 2km, 4km, 8km, 16km, 32km, 64km and 128km(SM only)
File Save	Touch the File Save icon to save test to non volatile internal memory.
Home	Touch the Home icon to return to the home screen.
Range Scale	The range scale represent the selected range and will adjust as necessary based on zoom level and active cursor position in increased zoom levels.
L/R Cursor	Use the Left/Right buttons to mover the cursors left or right in one step increments.

OTDR Trace Screen with Measurement Bar



If the A and B loss area is touched, the measurement will toggle between Basic Splice Loss and LSA Splice Loss

If the A To B area is touched, the measurement will toggle between A To B Loss and distance to link loss per Unit of measure, in this case dB loss per Km

OTDR Trace Screen Operation With Measurement Bar

Note: Items that are consistent with the trace screen displaying the menu bar will not be listed below.

Zoom Factor When the zoom factor is greater than 1X, the current zoom level and an "A" or "B" will be displayed in the bottom left of the trace. Touch the displayed zoom level to cycle through the available levels and touch the "A" or "B" to toggle the active cursors.

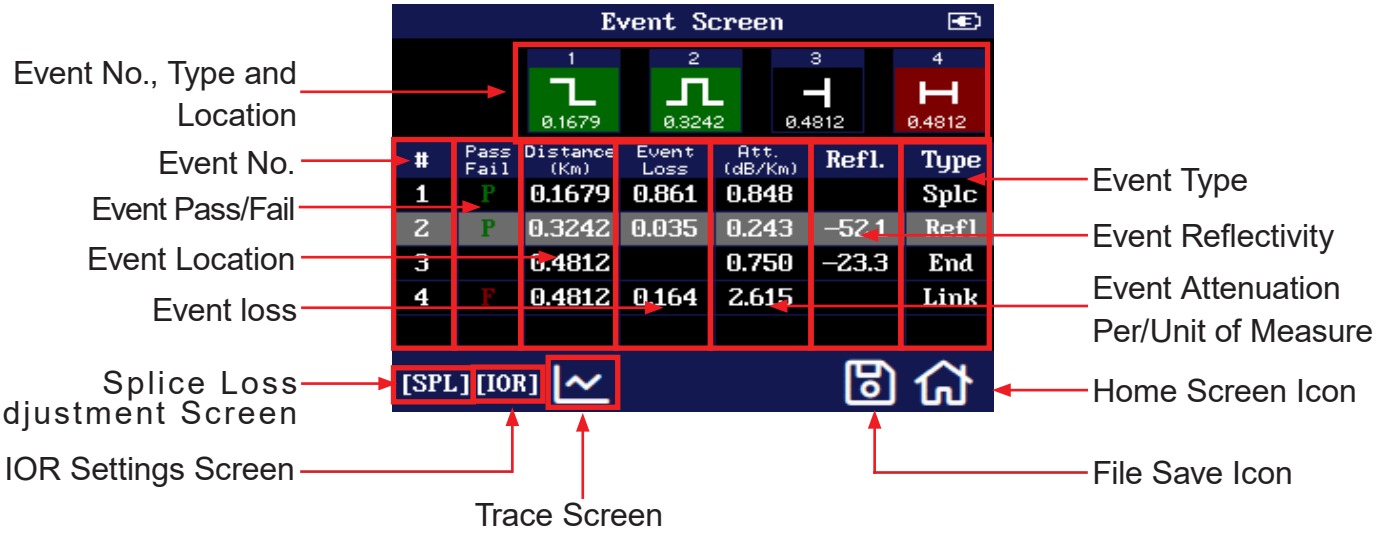
Active Cursor In The measurement bar there is an "A" and "B" line. One will have a pointer preceding the line. The one with the pointer in front of it indicates the active cursor. Touching in this area of the "A" and "B" will also toggle the active cursor.

Cursor Position These measurements are the location, using the unit of measure as a reference

"A" & "B" Info These measurements are the splice/event loss at "A" and "B" cursors. When this area is touched, it will toggle measurements between basic splice loss and LSA loss. LSA loss is indicated by the yellow splice zone marker on the trace.

"A" To "B" Info These measurements are the distance and loss between the "A" and "B" cursors. If this area is touched, the measurements will toggle to the link loss per unit. In this case loss per km.

OTDR Event Table Screen



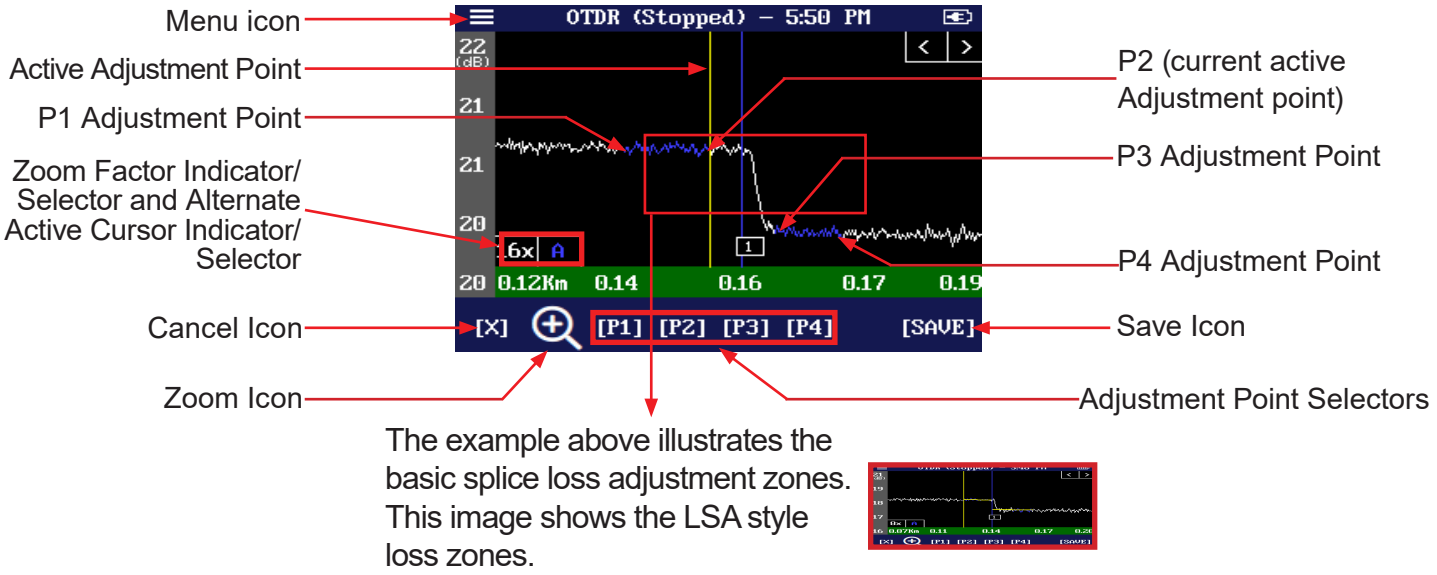
Event Table Description

- Event number, type and location is indicated near the top of the screen in the header of the table. Splice Loss threshold is the maximum value allowed for a non-reflective event
- The first column indicates the event number.
- The next column is a pass or fail grade, indicated by a green “P” or Red “F”. There will be no pass/fail if that data segment was not selected in the thresholds screen.
- Next is the Distance column this indicated the location of the event on the trace. Using the selected unit of measure.
- Next is event loss, this measurement is derived from the splice avg. method at that event.
- Next is loss per unit of measure. In this case loss per kilometer. This is the loss per/km of the fiber between the current event and the prior event or launch location. The row indicated by an “L” (Link), will be the 2 point loss of the entire trace.
- Next column is reflectance. This offers the reflectance of an event the has a reflective value. Splice events should not have a reflection and link will not display reflectance.
- The last column is event type.

Event Table Screen Operation

[SPL]	Touch this Icon to open the splice zone adjustment screen.
[IOR]	This icon will open an IOR settings screen simply type in the new IOR for the selected wavelength.
Trace Screen	Touch this icon to return to the trace screen
File Save	Touch this icon to open the file save screen
Home	Touch this icon to return to the home screen.

Splice Zone Adjustment Screens with Basic Splice Zones



The example above illustrates the basic splice loss adjustment zones. This image shows the LSA style loss zones.

Splice Zone Adjustment Screen Description

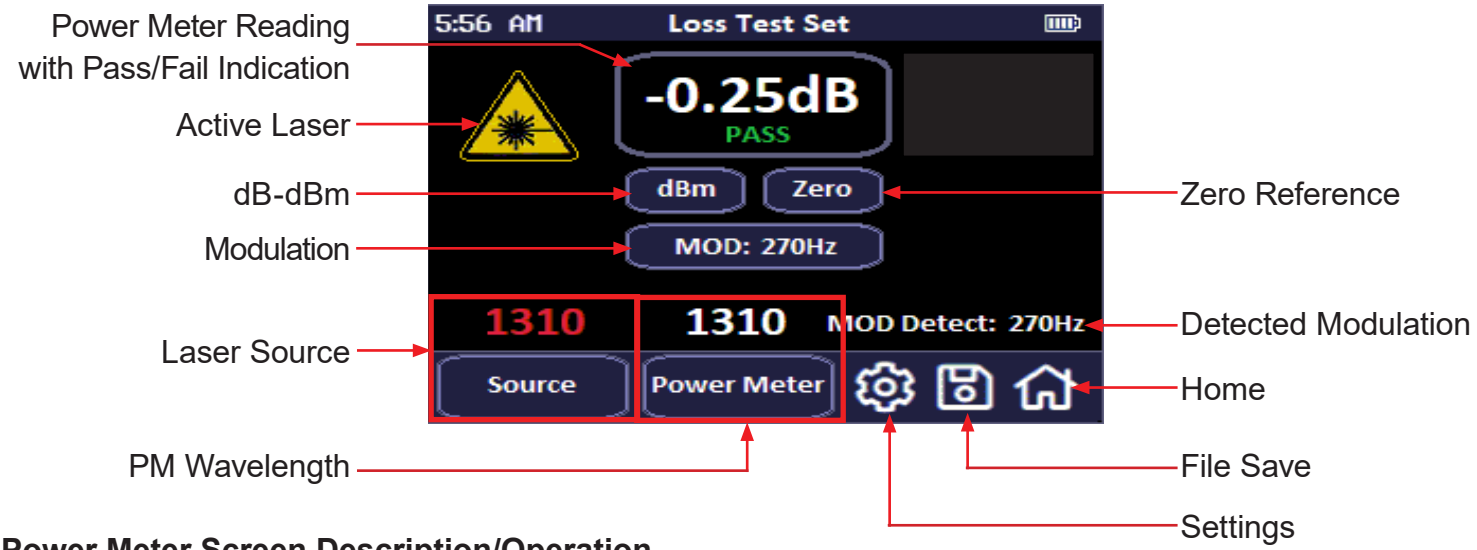
Open the splice loss adjustment screen by touching the [SPL] icon in the bottom left of the table screen.

- The active adjustment point is shown with a vertical yellow line running from the top to bottom of the trace. In this example, the active adjustment point is P2.
- P1 is the first adjustment point. It is the start of the zone to the left of the cursor.
- P2 adjustment point sets end position of the zone before the cursor.
- P3 adjustment point sets the beginning of the zone that is after the cursor. This point sets the of the zone to accommodate the dead zone after the splice or reflective event.
- P4 adjustment point is end of the second segment and sets the length of the zone after the cursor.
- In the large image above, the basic splice loss is used. The small image shows the LSA example. In the LSA example, the splice zones are overlaid by yellow reference lines.

Splice Zone Adjustment Screen Icon Operation

Menu	The menu icon toggles between the splice loss adjustment screen and the trace screen with measurement bar. On the trace screen, touch the “A” and “B” splice loss area to toggle between basic splice loss for noisy traces and LSA splice loss for clean traces.
[X]	The cancel icon returns the use to the trace screen with measurement bar.
Zoom	The Zoom Icon will cycle through the available zoom factors and bring up the on screen zoom level indicator/selector and active cursor indicator/selector.
[P1]-[P4]	The [P1] through [P4] icons will place the focus of operation on the desired adjustment position.
[SAVE]	The save icon will save the settings, recalculate and return the user to the trace screen with measurement bar.

Loss Test Set



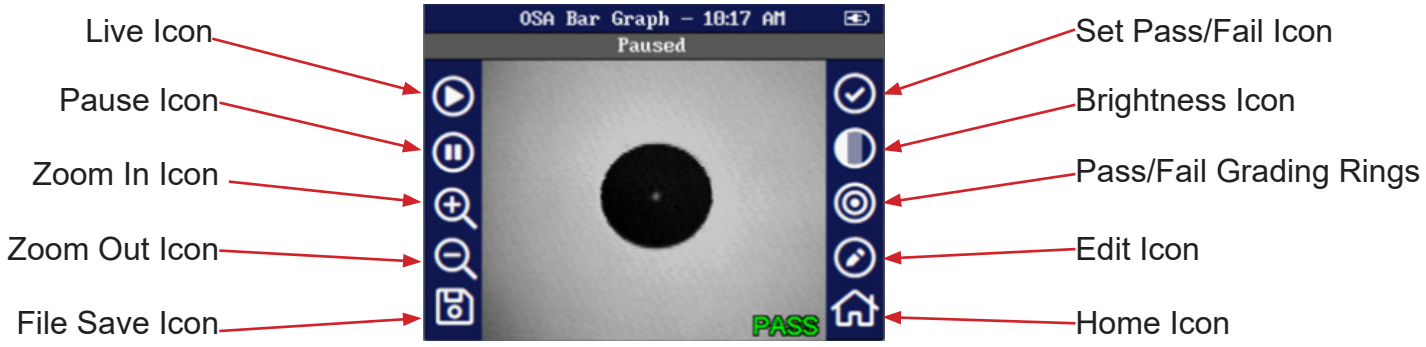
Power Meter Screen Description/Operation

Power Reading	Power meter reading with pass/fail.
Laser Symbol	The laser symbol is displayed when there is an active laser being transmitted.
dB-dBm	This toggles between db and dBm readings.
Modulation	Use this button to Cycle through the modulation settings of CW, 270Hz, 1000Hz or 2000Hz for LTS light source and CW and 2Hz for the VFL source.
Laser Source	This button will toggle through the available OTDR test ports and VFL light source. The indicator above will show the active source or display OFF.
Power Meter	The button will cycle through the calibrated wavelengths. The indicator above will show the selected wavelength for testing

Settings	Opens the settings screen to set pass/fail power meter thresholds.
File Save	Saves the current measurements.
Home	Returns to the home screen.
Detected Modulation	Indicates the current modulation being detected.
Zero Reference	Use this button to set the zero reference.

Video Microscope

Video Microscope Icons



Video Scope Icon Function

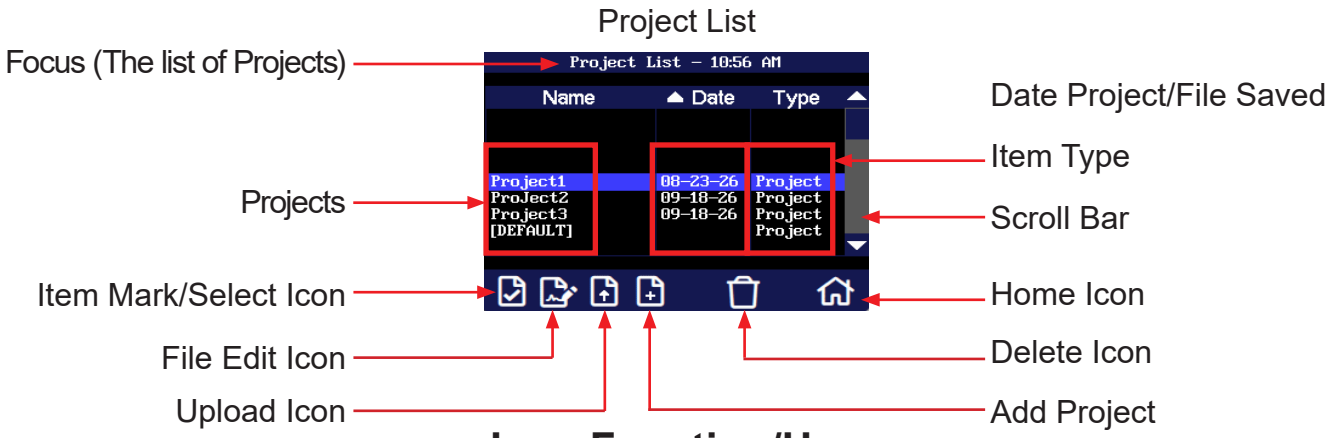
Live Icon	Selecting the live icon turns on live or running mode. This is a real time reading of the connector face.
Pause	To freeze an image for inspection, select the Pause icon. While in auto of the auto/pass/fail mode, pressing pause will grade the connector end face and display calculated pass/fail.
Zoom In	Selecting Zoom In increases the image to 250x
Zoom Out	Selecting Zoom Out returns the image to 125X
Save Icon	Selecting the Save Icon opens the file save/naming screen with QWERTY keyboard
Pass/Fail	Selecting the set pass/fail icon while in the live mode will toggle through fail, pass and auto grading markers (Auto will be accomplished by the unit when entering the pause mode.)
Brightness	Selecting the brightness icon will cycle through the brightness levels available.
Grading Rings	Selecting this icon will toggle the grading rings off and on. These pass/fail grading rings are used to assist with manually grading a connector. The rings represent 25um, 120um, 130um and 250um.
Edit Icon	This is used to mark the points of contamination and is accomplished in the paused mode. Available markers will be displayed at the top of the screen. Pick up the marker by using the stylus and touching the contamination sample size that is required. Touch the image where the marker is to be placed. The marker may be fine-tuned with the stylus to cover the contamination point. Once positioned properly, touch the statement “Place marker on image then touch here” to lock marker in place. Repeat this as necessary to mark all the points that need to be indicated for the pass/fail status. At this point the image should be saved as the marks are removed upon returning to live mode.
Home Icon	Select the home icon to return to the home screen.

Project/File Management

Project/File Management Screen/Icons

When the project/file management screen is opened, it will default to project management with a list of projects displayed. All files are saved within a project. Once a project is added or opened, the “file icon with a + sign) will change to a “file folder icon”. This indicates a project is opened and the items being view are now files within the project and the project name will be displayed at the top of the screen.

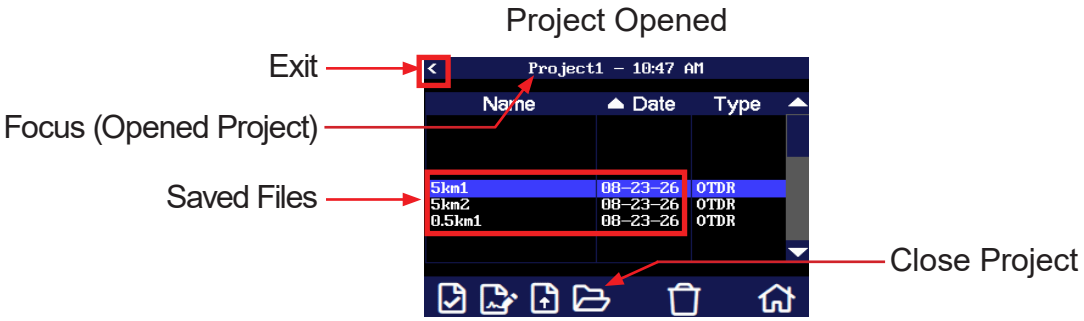
File Management Display



Icon Function/Use

Focus	Indicates the focus of the list, whether it is the project list or which project is open.
Projects	Shows a list of the saved projects.
Mark/Select	Selecting this will mark the highlighted project for uploading or deleting.
File Edit	When selected the highlighted item will open in with the QWERTY keyboard for name editing.
Upload Icon	Selecting this will upload marked Items to the computer through FIS Connect Software.
Add Project	Add Project will open a new project and bring up the file naming screen with QWERTY keyboard.
Delete Icon	This is a non-recoverable delete key, once selected the highlighted project is deleted immediately.
Home Icon	Select the home icon to return to the home screen
Scroll Bar	Use to move quickly through project list.
Item Type	Displays the item is a project, while in project screen.
Date	Displays the date the project was created.

File Management Screen



Exit	This will return the user to the project management screen
Focus	Shows the name of the project that is opened
Saved Files	List of the files that are saved in the project
Close Project	Closed the currently opened project and returns to project list.