USER MANUAL

FIBERIZER DESKTOP APPLICATION

Table of Contents

GENERAL INFORMATION

Fiberizer is a Windows™ based application for working with OTDR traces, compatible with Windows™ XP/Vista/7 (x86/x64) operating systems. The software is capable of displaying, storing, printing and analyzing several traces simultaneously. **Fiberizer** can control the operation of the OPX series OTDRs via a USB cable and Windows Mobile Device Interface **AcitveSync** (or **Windows Mobile Device Center**) if desired by the OTDR operators.

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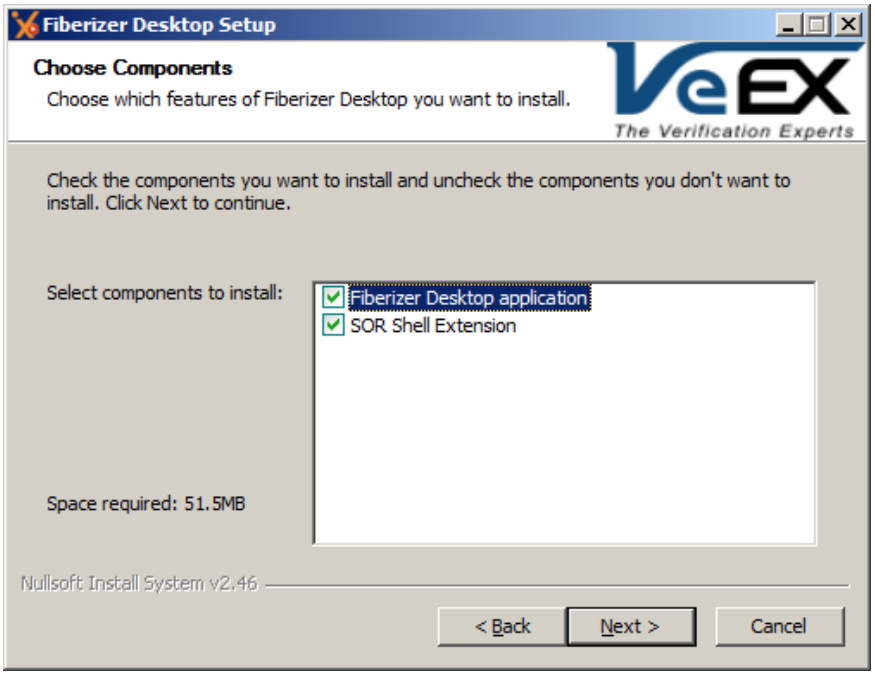
1. GETTING STARTED WITH FIBERIZER DESKTOP

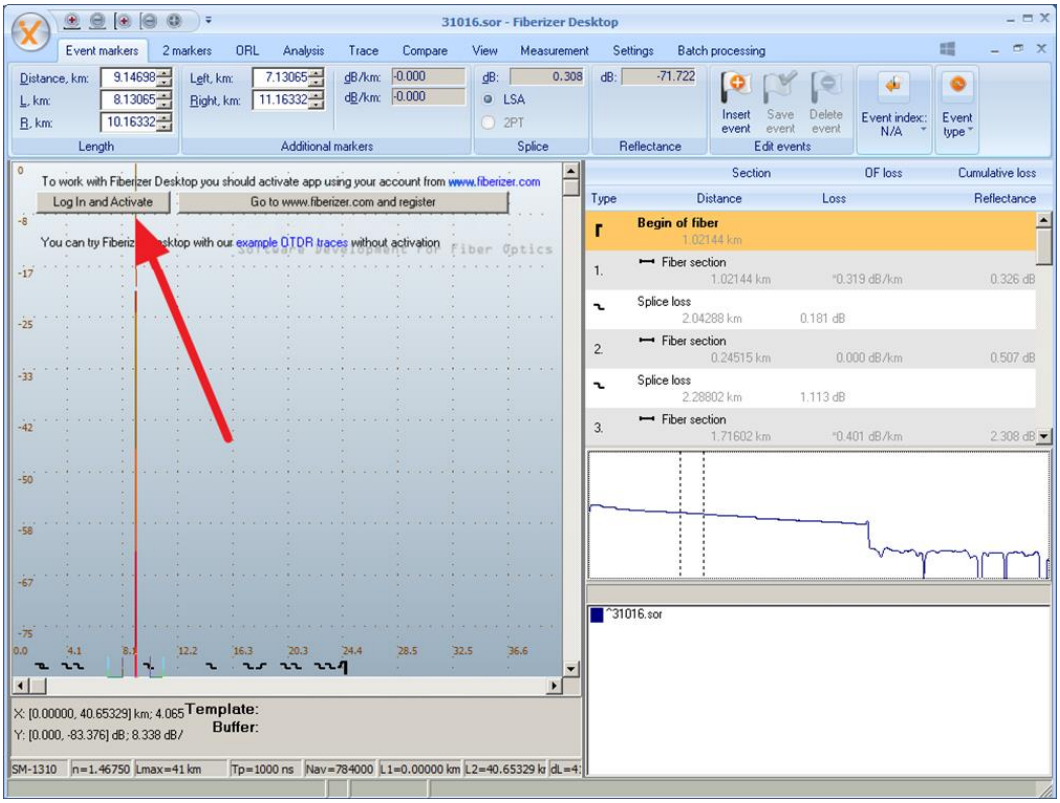
1.1 Software Installation

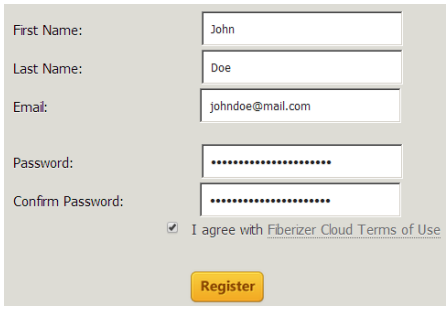
1) Insert the CD to the PC or unzip the archive to the hard drive.
2) Execute Fiberizer setup.
3) Follow the instruction of the installation wizard.



1.2 Software Activation

In order to use **Fiberiz**er Windows software, you need to register at fiberizer.com.





Enter your account parameters and wait for the server to verify your licensing information. During license verifying you may get the following notification from server:

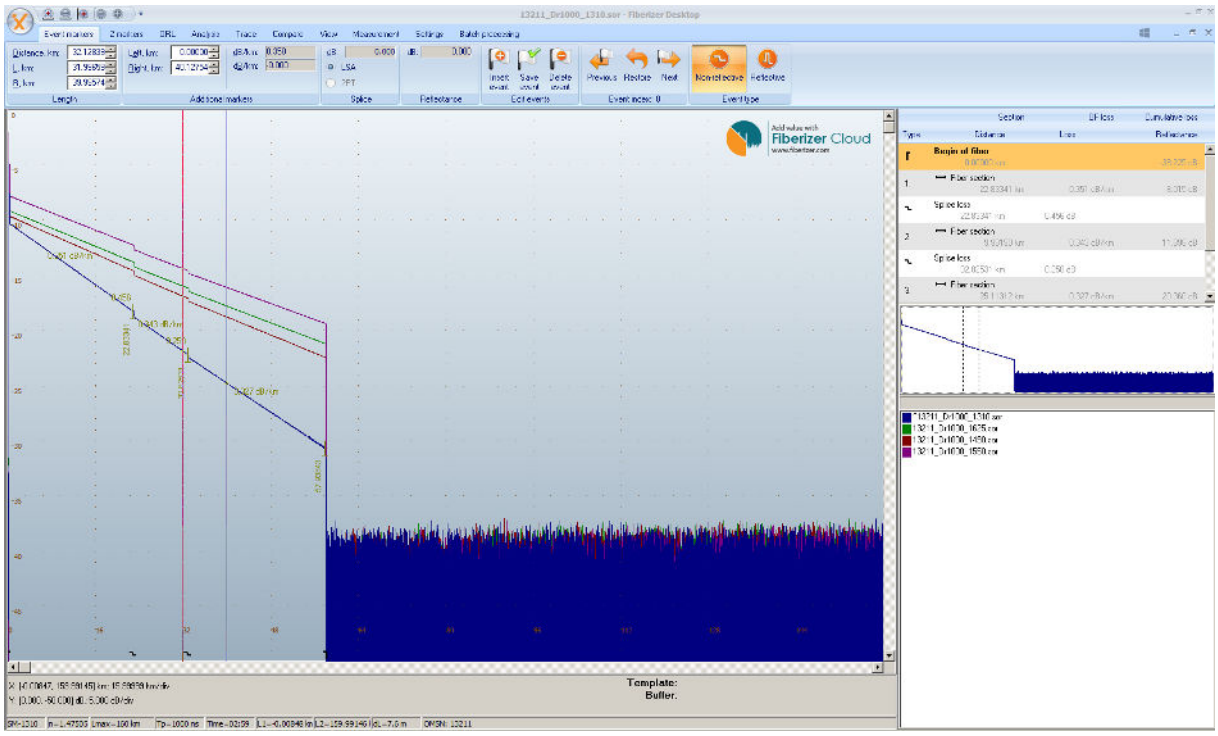
Some problems with your Fiberizer Cloud account or subscription plan.

In most cases this means that you've used your www.fiberizer.com account for **Fiberizer** Desktop on more than 5 computers, which is the limitation of single account on multiple devices.

2 SCREENS AND MENUS

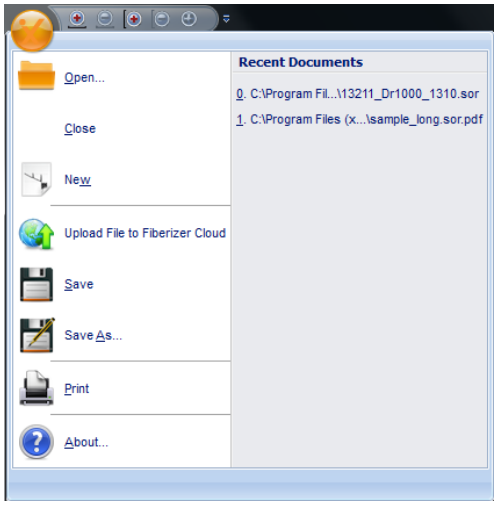
2.1 Main Screen

The main screen of **Fiberizer** Desktop is divided into several sections. The window shown in the picture below gives a summary of the **Main screen** features.



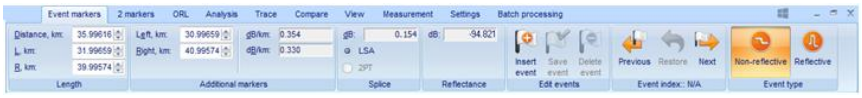
2.1.1 Title Menu Bar

Title Menu Bar displays the available system level pull-down **File** menu and zoom shortcuts.



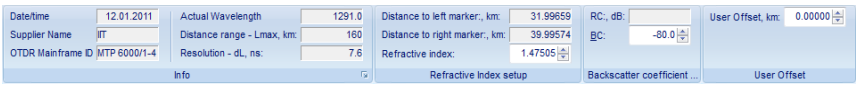
2.1.2 Tab Menu Bar

Tab Menu Bar displays all application commands grouped by functions.



Click the button at the upper right corner of the Tab Menu Bar to see the list of currently opened files and traces.

2.1.3 Trace Information Tab



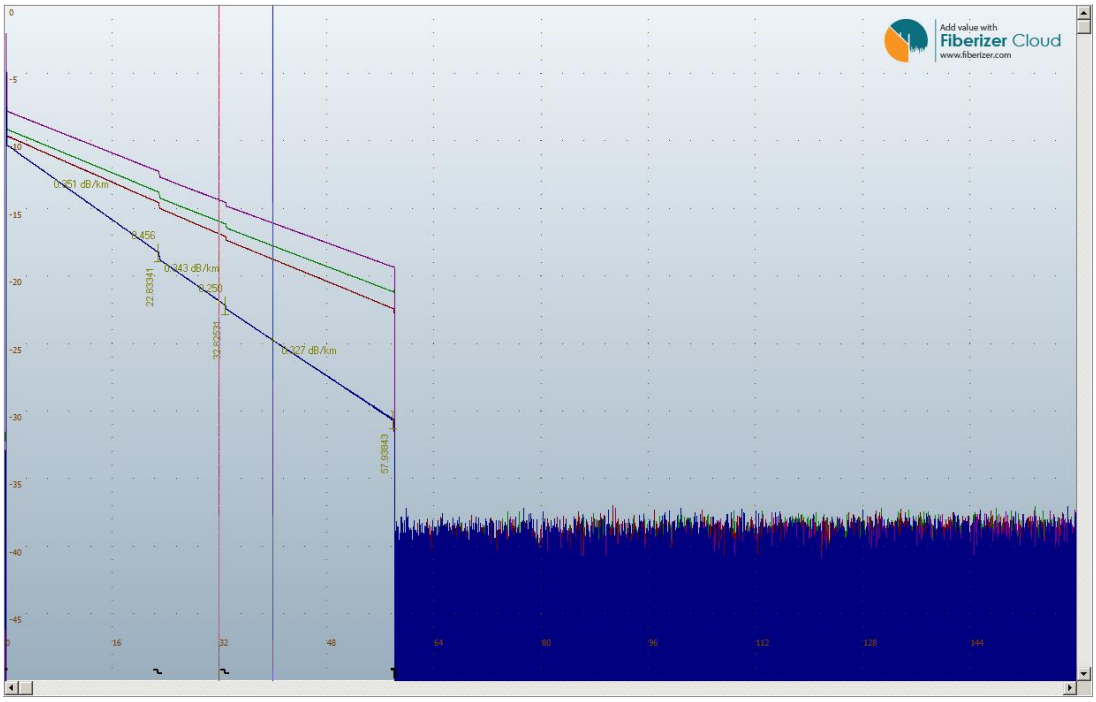
To open the Trace Information dialog box, press the arrow button located at the lower right corner of the **Info** tab under the **Trace** tab. *See **Trace Information** section for details of the dialog box.*

2.1.4 Trace Panel

The Trace Panel displays the visual representation of attenuation and reflection of an optical fiber. The beginning of the fiber is located at the left side of the trace. The slope or attenuation of the fiber can be seen as the trace moves to the right. There are two active markers, the information containing the location of the markers is located at the left side of the screen as shown below.

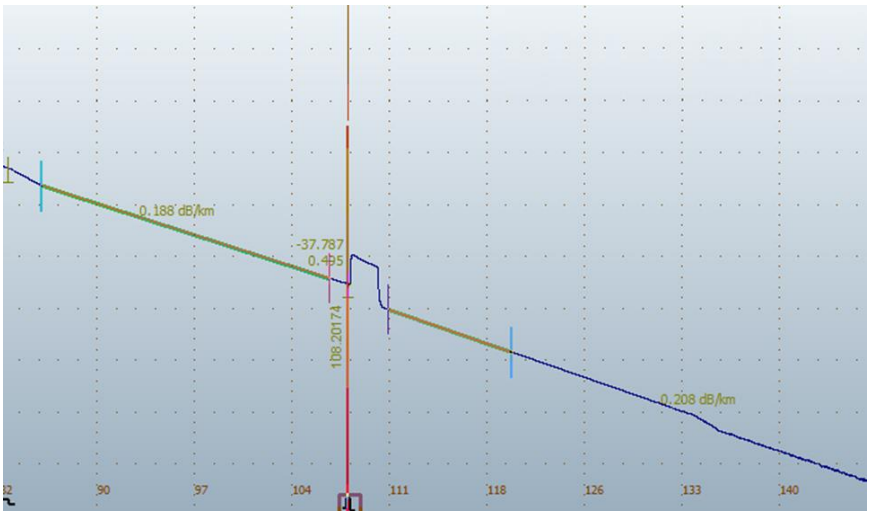
The Trace Panel also displays several measurement values that correspond to attenuation, attenuation loss at an event, distance to an event and Optical Return Loss (ORL). These values are the measurements from the Automatic Trace Analysis that the OTDR performed in Automatic mode (see Section 3.4 Trace Analysis for more information).

The testing parameters for the active trace are located at the Information Panel below the Trace Panel. All parameters are preset by the operator prior to running a test (see Section 3.8 Measurement for more information).



2.1.5 Shortcuts (mouse gestures for Trace Panel)

To work on Event markers and trace:

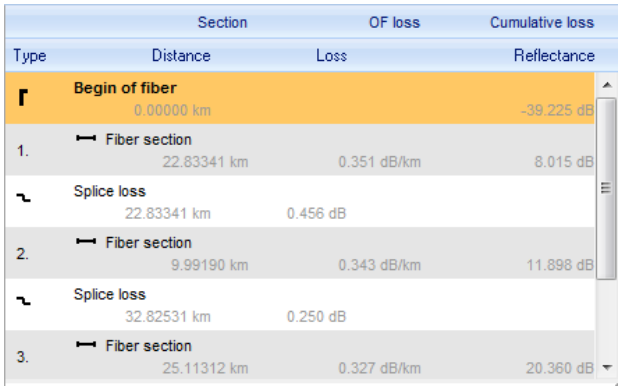


1) Drag the thick part of the central marker to move all markers simultaneously (lock markers).
2) Drag the thin (top) part of the central marker to move it independently.
3) The left mouse click moves the central marker to the mouse pointer position and all others are moved respectively (locked).

4) The right mouse click moves the central marker to the mouse pointer position and all others distributed within the zoomed area.
5) Hold and drag the right mouse button to scroll/move the trace.
6) Hold and drag the left mouse with the Alt key pressed, to magnify a desired section.

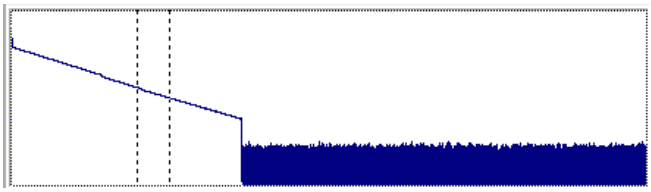
2.1.6 Event Table Panel

The Event Table Panel displays saved events in a tabular format:



2.1.7 Preview Panel

The Preview Panel displays the current trace section relative to the entire trace.

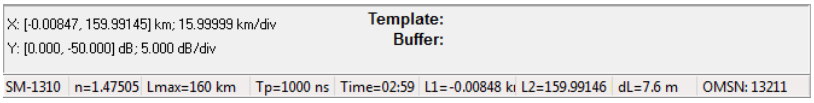


2.1.8 Trace List Panel

The Trace List Panel displays the list of traces for the current window and their colors.

2.1.9 Parameters Panel

The Parameters Panel displays the following trace parameters:



X – Shows the distance range of the displayed section and the scale of the distance on the horizontal axis

Y – Shows the range of loss in dB for the entire trace window and the scale of the loss per division on the vertical axis

Fiber Type – Identifies the fiber type (multimode or single mode) and the wavelength

N – Displays the Refractive Index of the fiber

Lmax – Displays the total distance range

Tp – Displays the duration of the pulse width used

Nav – Indicates the number of averages

L1 – Indicates the distance from the beginning of the fiber to the beginning of the measured section

L2 – Indicates the distance from the beginning of the fiber to the end of the measured section

For more accurate measurements it may be necessary for the technician to adjust certain testing parameters for the specific fiber under test.

The operating parameters should be set according to the characteristics of the fiber link under test. For short fiber run, shorter pulse widths and fewer averages are optimum. For longer fiber run, longer pulse widths and more averages are the best. The parameters chosen by users are dependent on the testing requirements. Tradeoffs may be necessary sometimes.

3 OPERATIONS

3.1 Event Markers

3.1.1 Event Marker Tab

After the OTDR finishes the measurement, it can also perform Automatic Trace Analysis if the option is enabled. Once the trace analysis is completed, the OTDR determines the **distance** of the fiber line, **distance to events**, the **attenuation** of the fiber link and sections, the Optical Return Loss (**ORL)**, the **splice losses** and the **connector losses**. The events are also displayed in the **Events Table.**

The OTDR creates marks with inserted event symbols. From these marks, the OTDR determines the appropriate values. The event distance is indicated with the vertically oriented text on the trace. Fiber attenuation values are displayed in dB/*distance*.

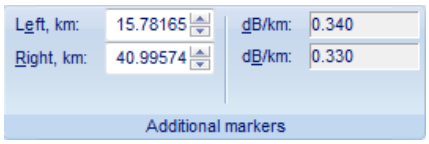
3.1.2 Length tab

Distance, km – Enables users to change distance of event marker

L, km – Adjusts main Left marker

R, km – Adjusts main Right marker

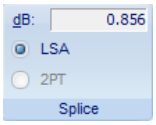
3.1.3 Additional Markers tab



Left, km - Adjusts the left-most marker of **LSA**

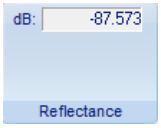
Right, km – Adjusts the right-most marker of **LSA**

3.1.4 Splice tab



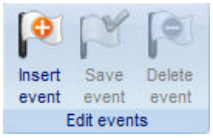
LSA mode is only availalble when users are working on events**. dB** field displays the splice loss value calclulated with **5-Markers LSA** method**.**

3.1.5 Reflectance tab



dB field displays the reflectance value at current marker (center marker) location.

3.1.6 Edit Events tab

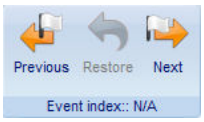


Insert Event – Inserts an event to the Event Table with respect to the current marker (center marker) location

Save event – Saves the modified event

Delete Event – Deletes the selected event

3.1.7 Event Index tab



Moves to the **Next** or **Previous** event in the Event Table.

3.1.8 Event Type tab

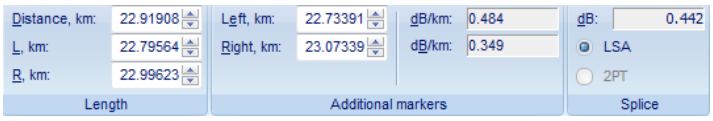
The Event type detected is either **Non-reflective** or **Reflective**.

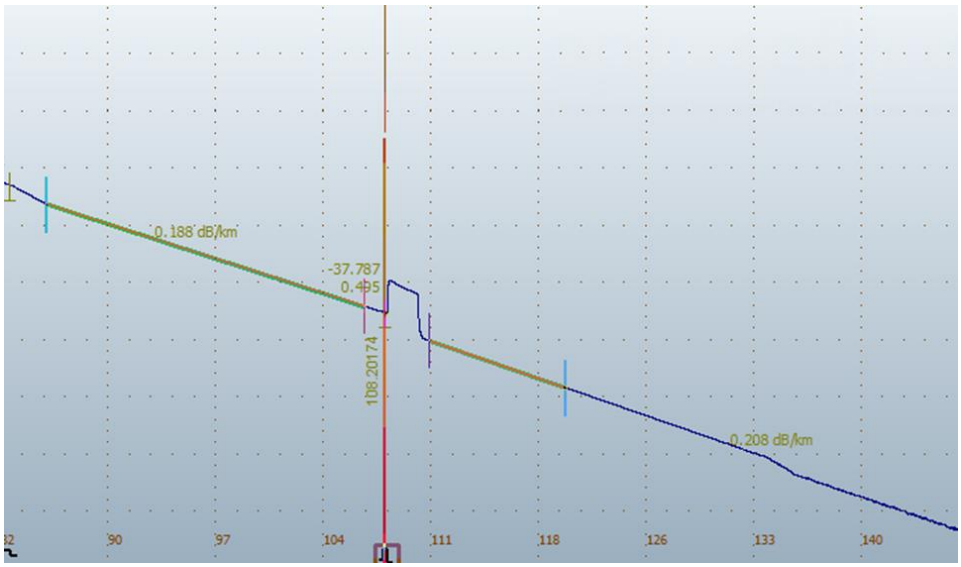
3.1.9 Attenuation Measurement of an "Event" (Splice Loss)

By using the **Five Markers** method, the OTDR can measure the attenuation of a specific event. The **Five Markers** method works as described below.

The left marker (**L**) and the right marker (**R**) are placed at either side of the event, as close as possible to the edges of the event, without touching the event itself. The two outermost markers (**Left** and **Right**) are used to calculate the straight line approximation

of the fiber on both sides of the event and the fifth marker (**C**) is used to locate the begining of the event. The measurement results are displayed in the **Information** panel. The **(L,km)** field indicates the distance of the left marker while the **(R,km)** field indicates the distance of the right marker on the trace. The **dB** field located at the **Splice** box of the **information** panel displays the attenuation of the event.





Splice Mode Information Panel and Trace Panel

3.2 2 Markers – 2PT and LSA Measurement Modes

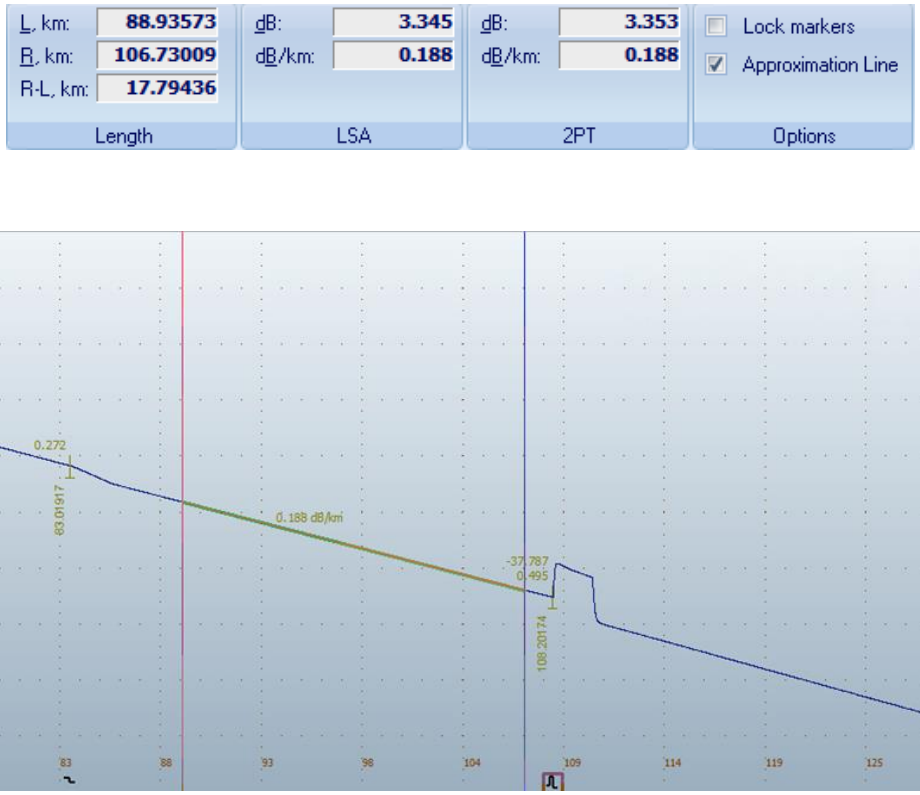
3.2.1 Measuring attenuation between two marker points – (2PT)

The measurement values are based upon where the left marker (**L**) and the right marker (**R**) are positioned on the trace. The **(L,km)** field indicates the distance of the left marker (**L**) while the **(R,km)** field indicates the distance of the right marker (**R**) on the trace. **(R-L,km)** indicates the distance between the left and the right markers. The **dB** field in the **Information** panel displays the attenuation between the left and the right markers, while the **dB/km** field displays the attenuation co-efficient.

3.2.2 Measuring attenuation by approximation – (LSA)

The attenuation measurement by approximation mode is used to measure non-event sections of the fiber link. This mode increases the accuracy of the attenuation measurement between the two markers by using a straight line to approximate the

measurement. The approximation straight-line measurement values are shown at the left side of the screen in the **Information** panel. The measurement values are based upon where the left marker (**L**) and the right marker (**R**) are positioned on the trace. The **(L,km)** field indicates the distance of the left marker (**L**) while the **(R,km)** field indicates the distance of the right marker (**R**) on the trace. **(R-L,km)** indicates the distance between the left and the right markers. The **dB** field in the **Information** panel displays the attenuation between the left and the right markers, while the **dB/km** field displays the attenuation coefficient.



2PT and LSA Information Panel and Trace Panel

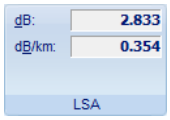
3.2.3 Length Tab

L – Distance to left marker

R – Distance to right marker

R-L – Distance between markers

3.2.4 LSA Tab



dB – Attenuation between markers calculated with LSA approximation

dB/km – Slope (attenuation divided by R-L distance)

3.2.5 2PT Tab

dB – Attenuation between markers calculated *without* LSA approximation

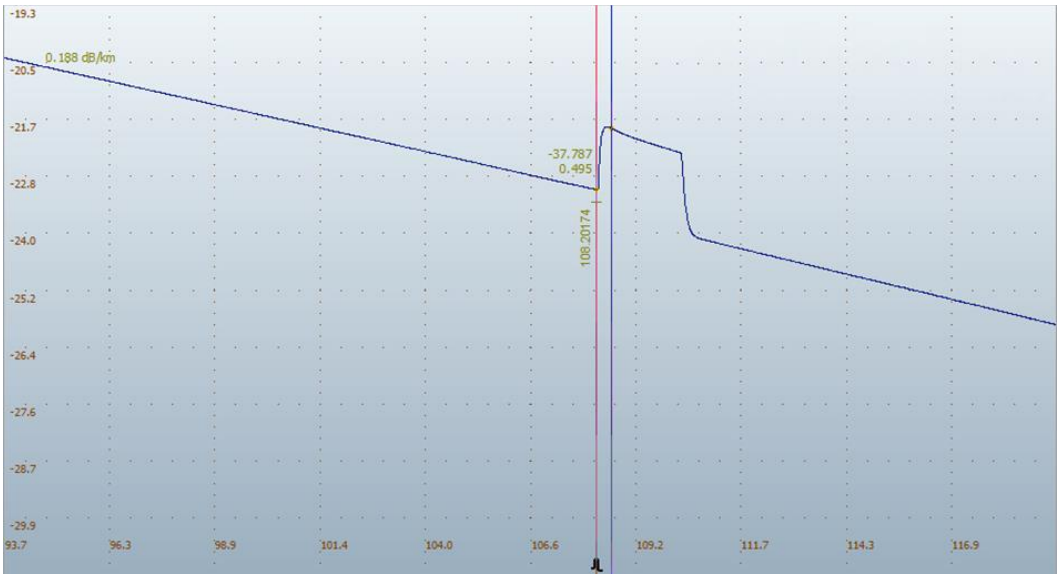
dB/km – Slope (attenuation divided by R-L distance)

3.2.6 Options Tab

Check **Lock markers** to drag markers left or right simultaneously and display the approximation line over the active trace.

3.3 Optical Return Loss (ORL)

This marker method measures the Optical Return Loss of a partial fiber section or the whole fiber link by placing the left (**L**) and the right (**R**) markers on the fiber link that is being tested. The measurement results are displayed in the **Information** panel. The **(L,km)** field indicates the distance of the left marker (**L**) while **(R,km)** field indicates the distance of the right marker (**R**) on the trace. **(R-L,km)** indicates the distance between the left and right markers. The **dB** field in the **Information** panel displays the attenuation between the left and the right markers while the **ORL, dB** field displays the ratio (in dB) of the optical power entered into the fiber link versus the power returned to the beginning of the fiber for the marked section.



ORL Information Panel and Trace Panel

3.3.1 Reflectance Coefficient Measurement – (Reflection)

This marker method is used to measure the reflection coefficient of a specific connector event. Place the right marker (**R**) on the peak of the reflected event. Place the left marker (**L**) on the base line of the trace directly before the event. The measurement results are displayed in the **Information** panel. The **(L,km)** field indicates the distance of the left (**L**) marker while the **(R,km)** field indicates the distance of the right marker (**R**) on the trace. **(R-L,km)** indicates the distance between the left and the right markers. The **Reflectance, dB** field displays the reflective coefficient between the left and the right markers.

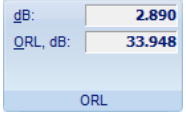
3.3.2 Length Tab

L – Distance to left marker

R – Distance to right marker

R-L – Distance between markers

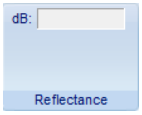
3.3.3 ORL Tab



dB – dB loss between L and R markers

ORL – ORL value between L and R markers

3.3.4 Reflectance Tab



The right marker must be placed on the top of the pulse and the left marker is placed on the pulse front at the backscattering level.

3.4 Trace Analysis

3.4.1 Threshold values for Automatic Trace Analysis

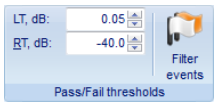
The parameter menu contains the threshold values that the OTDR uses to compare with the actual trace values when it's operating in the Automatic Trace Analysis mode. These values are entered by the OTDR operator and used to compare expected measurement values to actual measurement values. The measurement values are displayed in the **Events Table** and if the expected parameters are not met, the results are indicated by an asterisks '*' mark in the **Events Table**.

3.4.2 Analysis Tab

Analysis – Performs Auto Trace Analysis

Filter – Enables adjustment of trace filtration level

3.4.3 Pass/Fail Thresholds Tab



Event Loss (LT) – Threshold of the event attenuation value in dB. Events with attenuation value that exceeds the threshold value are then shown in the **Events Table.**

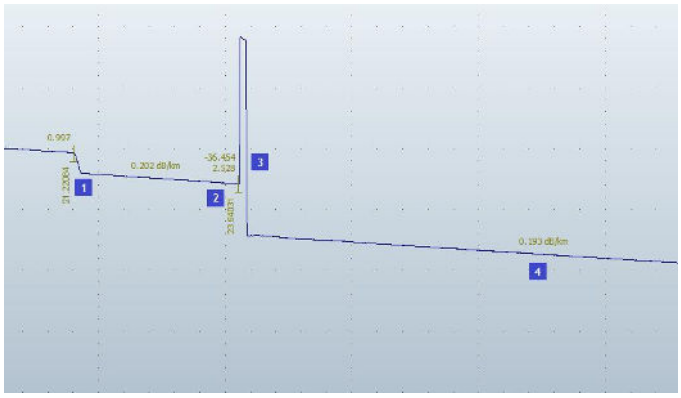
Reflectance (**RT)** – Threshold of the event reflectance value in dB. The reflected events with higher reflectance than the threshold value are shown in the **Events Table.**

End of Fiber (**ET**) – Threshold of the event attenuation value in dB to define the fiber end. The first event with an attenuation exceeding the threshold value is defined as the fiber end during the **Automatic Trace Analysis**. All subsequent events are then ignored.

Fiber Loss (CT) – Attenuation coefficient threshold value of the section in dB/km. Exceeding the attenuation coefficient threshold value then mark the section with an asterisks '*' in the **Events Table.**

If the thresholds are exceeded, the coefficient value are then marked with an asterisk '*' in the **Events Table**. However, this cannot be construed as certification. According to the EIA/TIA standards, true attenuation losses are only determined by a power meter and a laser source.

3.4.4 Auto Trace Analysis



Where

1. Splice Loss
2. Distance to Event
3. Connector Loss
4. Attenuation of fiber link and fiber section

After the OTDR finishes the measurement, it can also perform Automatic Trace Analysis if the option is enabled. Once the trace analysis is completed, the OTDR determines the **distance** of the fiber link, **distance to events**, the **attenuation** of the fiber link and sections, the Optical Return Loss (**ORL)**, the **splice losses**, and the **connector losses.** The events are also displayed in the **Events Table.**

The OTDR creates marks with inserted event symbols. From these marks, the OTDR determines the appropriate values. The event distance is displayed in vertical text on the trace. Fiber attenuation values are displayed in dB/*distance*.

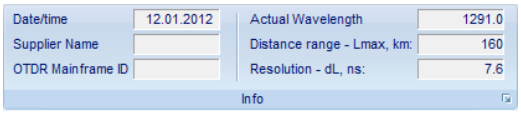
In the **Auto** mode, the OTDR compensates for the dead zone of the fiber link and calculates the attenuation from the end of the dead zone.

3.5 Trace Information

The Trace tab shows parameters for the currently active trace. Users can modify several variables if desired. This tab includes general information about the trace, such as date,

the manufacturer's information and the trace wavelength. It also includes marker information, index of reflection and back scattering values.

3.5.1 Information Tab



Date/Time – Displays time and date of recorded trace

Supplier Name – OTDR's supplier name

OTDR Mainframe ID – OTDR's hardware model

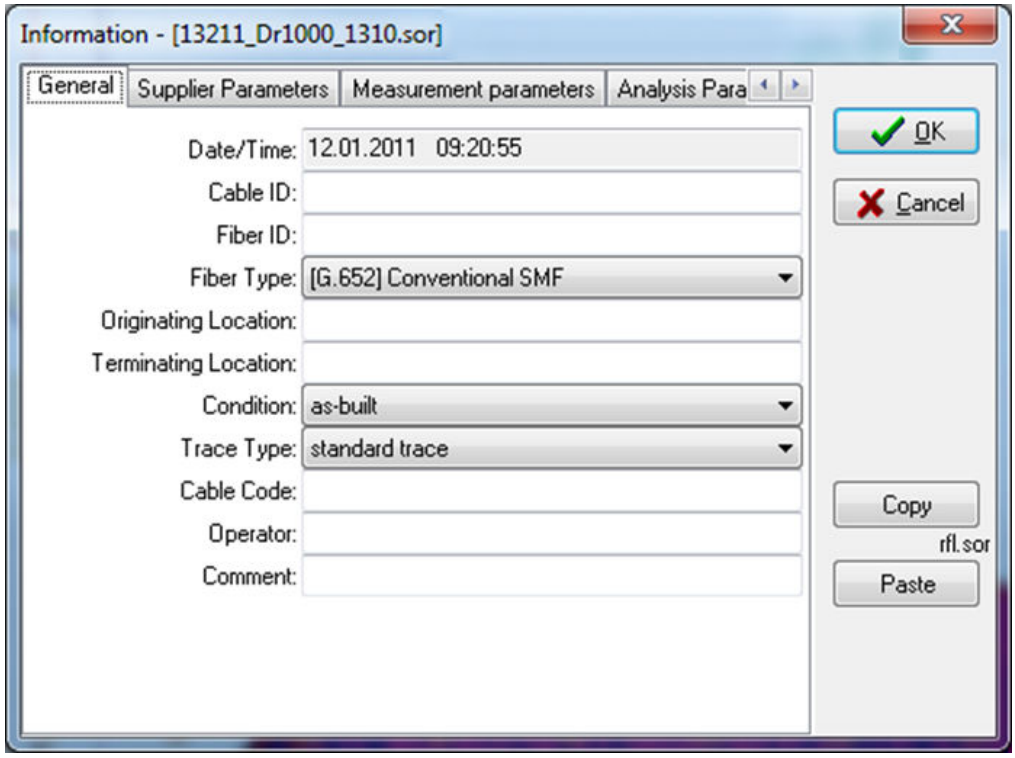
Actual Wavelength – Precise value of wavelength used

Distance Range (Lmax) – Distance set for this trace

Resolution (dL) – Measurement sampling distance

3.5.2 Trace Information Dialog

General tab



Date/Time – Displays date and time when the trace was recorded

Cable ID – Enter Cable ID

Fiber ID – Enter Fiber ID

Fiber Type – Fiber type selection

Originating Location – Enter originating location

Terminating Location – Enter terminating location

Condition – Select fiber condition

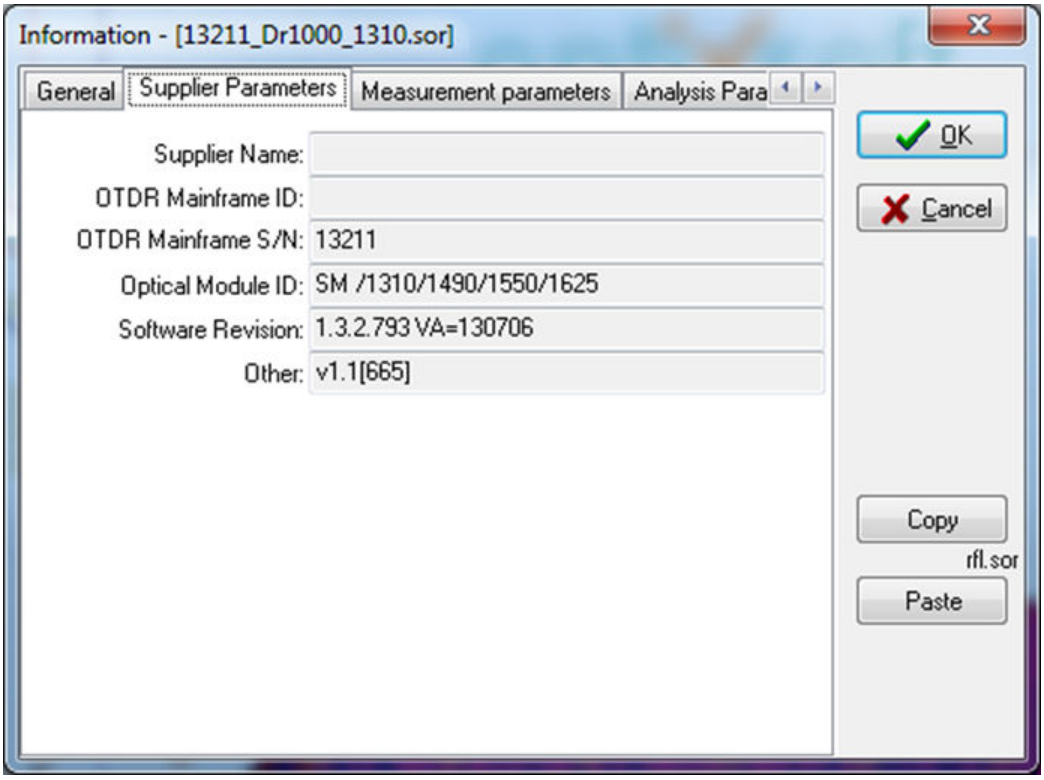
Trace Type – Select fiber trace type

Cable Code – Enter cable Information

Operator – Enter operator information

Comment – Enter additional comments

Supplier tab



Supplier Name – OTDR supplier's name

OTDR Mainframe ID – OTDR's mainframe ID

OTDR Mainframe S/N – OTDR's serial number

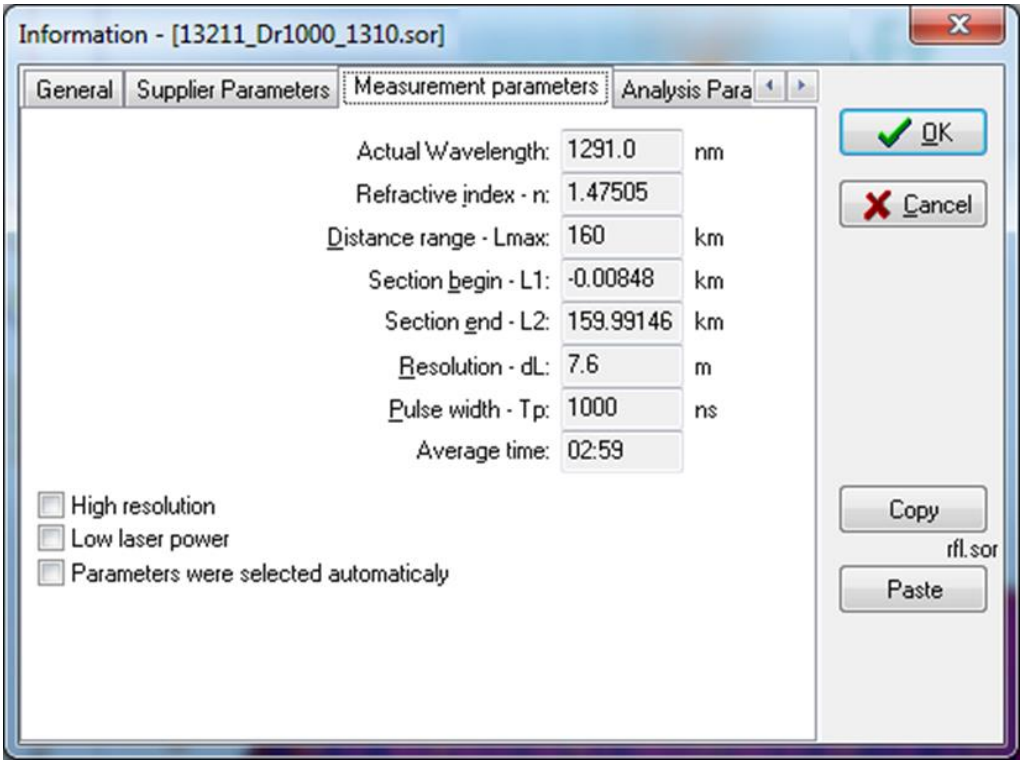
Optical Module ID – OTDR's modules ID

Optical Module S/N – OTDR's serial number

Software Revision – Software revision number

Other – Other module information

Measurement Parameters tab



Actual Wavelength – Precise value of wavelength

Refractive Index – Refractive index

Distance Range (Lmax) – Distance set for this trace

Section begin (L1) - Defines the location of the left marker

Section end (L2) - Defines the location of the right marker

Resolution (dL) – Measurement sampling distance

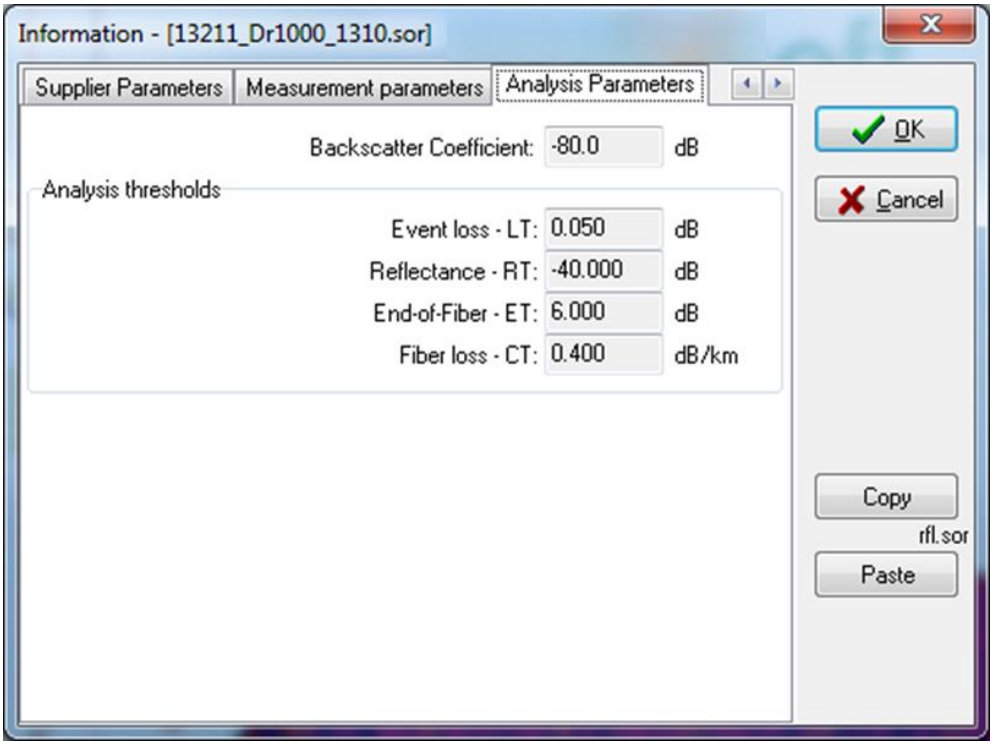
Pulse-width (Tp) – Pulse width

Number of Averages - 4095*Nav – Number of average set for this trace

High resolution – Indicates if high resolution was set

Low laser power – Indicates if low laser power was used

Analysis Parameters tab



Backscattering Coefficient – BC value

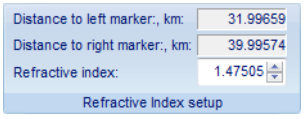
Event Loss - LT – Threshold of the event attenuation value in dB

Reflectance - RT – Threshold of the event reflectance value in dB

End-Of-Fiber - ET – Threshold of the event attenuation value in dB to define fiber end

Fiber Loss - CT – Attenuation coefficient threshold value of the section in dB/km

Refractive Index Setup tab

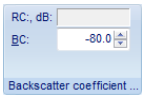


Distance to left marker, km – Defines the location of the left marker

Distance to right marker, km – Defines the location of the right marker

Refractive Index – Refractive index set for this trace

Backscatter Coefficient tab



RC, dB – Current value of Reflective Coefficient

Backscattering Coefficient – BC value of this trace

User Offset tab

User Offset – Shifts the zero point across the trace and calculates distance relative to the new 0 km position.

3.6 Compare

For a fast analysis of a multi-fiber optic cable with many events, the **Compare and Trace** functions are a very useful tool. With the **Compare and Trace** option, users can transfer marks and parameters from one fiber to another by simply pressing one key.

3.6.1 Compare and Trace Function

Selecting **Create R-Template** allows users to save data points of the marks on a trace to a buffer and transfer those points to a different trace for evaluation. After creating a template, it is possible to use the **Apply Template** and **Delete Template** functions. The template is the analysis calculations related to a particular trace.

The data stored in the template buffer can be erased and overwritten by repeating the above procedure. Each trace is displayed in its own separate window. However, users may insert several traces in one window for data comparison.

To insert a trace from one window into another window, simply follow the procedure below

1. Open the trace window to be copied
2. Click **Copy Trace** in the Compare Tab

The trace is then saved in the buffer displayed in the **Information** panel. The **Paste** function is activated once this is done.

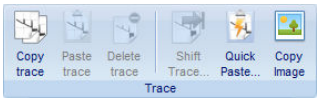
1. Open the host trace window
2. Click **Paste Trace** in the Compare Tab

The names of the inserted traces then appear in the **Information** panel under **Traces** (The host trace name then appears at the top of the list). It is possible to insert up to seven traces at the same time.

Only one trace is active in the host window. This is indicated by the symbol '**^**' beside the file name in the **Traces** window of the **Information** panel. It's possible to use the vertical markers to measure the length and the attenuation of each active trace. To make a trace active, simply double-click on its name in the **Information** panel. Pressing keys **CTRL+SPACE** when it is highlighted also activates the trace. Pressing **CTRL+PAGE UP** and **CTRL+PAGE DOWN** allows users to scroll up and down through traces in the **Information** panel.

To remove an inserted trace from the host window, select and highlight the trace then click the **Delete Trace** button.

3.6.2 Trace tab



Copy Trace – Copies trace to clip board

Paste Trace – Inserts trace from clip board to current trace

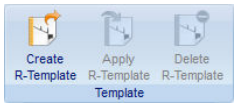
Delete – Deletes inserted trace

Shift Trace – Enables shifting of the trace vertically

Quick Paste – Enables a shortcut to paste previously opened traces

Copy Image – Copies image to clip board

3.6.3 Template Tab



Create R-Template – Saves the current trace as template

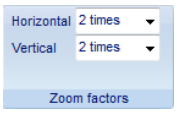
Apply R-Template – Applies template to trace

Delete R-Template – Deletes template

3.7 View

The View tab enables users to setup the viewing functions when looking at a trace. This includes trace zoom viewing, events table viewing and multiple trace viewing.

3.7.1 Zoom Factors Tab



Horizontal – Selects the horizontal zoom factor (x1.1, x1.3, x 2, x5, x10)

Vertical – Selects the vertical zoom factor (x1.1, x1.3, x 2, x5, x10)

3.7.2 Zoom Tab

Horizontal Zoom In – Zooms in Horizontally

Horizontal Zoom Out – Zooms out Horizontally

Restore Horizontal Scale – Restores H scale

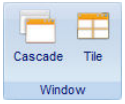
Vertical Zoom In – Zooms in Vertically

Vertical Zoom Out – Zooms out Vertically

Restore Vertical Scale – Restores V scale

Restore Scales – Restores both scales to default settings

3.7.3 Window Tab



Cascade – Cascades active traces

Tile – Tiles active traces

3.8 Measurement

Start (Averages) measurement mode with averaging is designed for measuring and analyzing all parameters of the fiber optic cable. When using this feature, the measurement average counter is displayed at the bottom of the main screen. The OTDR displays a progress bar (**N**umber of **Av**erages**)** at the bottom of the screen. This indicates time elapsed versus total measurement time. The unit beeps when the total measurement is completed.

Start (Live) – In the **Real Time** mode, the OTDR continues to run measurements according to the preset parameters.

Stop – Both **Average** or **Live** reading may be stopped by this command at any time during the measurement process.

This tab enables users to setup the desired parameters of the next trace to be measured.

These parameters are:

Wavelength

Distance

Pulse Width

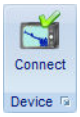
Averaging Time

Resolution

Backscattering co-efficient

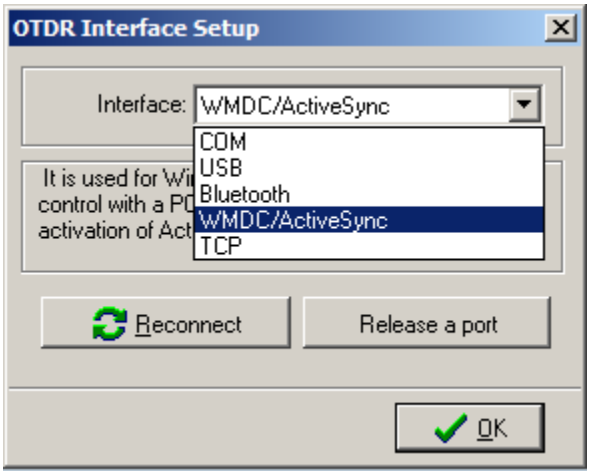
Index of Refraction value

3.8.1 Device Tab



Connect – Connect to OTDR unit through one of the interfaces available.

3.9 Interface Setup Dialog



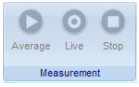
In this dialog you can select the interface for communication between Fiberizer Desktop and your device and connect them using the standard procedures.

3.9.1 Connecting OPX to Fiberizer via Windows Mobile Center

1. Download Windows Mobile Device Center to your PC
2. Open Mobile Device Center Application
3. Turn off OTDR – make sure all data are saved before power down
4. Connect the OTDR and the PC with the supplied USB cable
   Note: *The Mini USB connector attaches to the OTDR and the USB connector attaches to the PC*
5. Turn on the OTDR – The PC loads the drivers for the OTDR and connects through the Mobile Device Center

Click the **Connect** button at the Measurement tab to activate the Mobile Device Center connection. Once connection has been established between the PC and the ORDR unit, the Fiberizer application can manage the parameters and the activities of OTDR measurement.

3.9.2 Measurement Tab

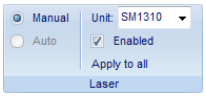


Average – Runs a normal measurement with averaging

Live – Runs a measurement in the real time mode

Stop – Stops the measurement

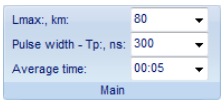
3.9.3 Laser Tab



Manual – Enables manual Parameter setup

Auto – The unit performs an Auto test to determine the appropriate parameters for cable under test

3.9.4 Main Tab

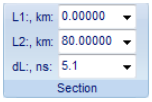


Lmax, km (Distance range) – Distance setting

Pulse width - TP – Selects width of output pulse

Average time – Average time for measurement

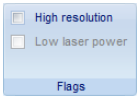
3.9.5 Section Tab



L1 and L2, km - Defines the acquired range within Lmax

dL, ns (Resolution) - Selects the measurement sampling distance

3.9.6 Flags Tab



High resolution – Increases measurement bandwidth

Low Laser Power – Decreases pulse power

3.9.7 Others Tab

Trace refreshing time – Used for Active mode only

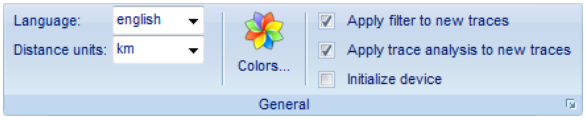
BC (Backscattering Coefficient) – Values of the optical pulses in dB scattered back to the OTDR from the optical fiber under test

Refractive index (n) – Adjusts the refractive index of the fiber in increments of 0.00001

3.10 Settings

The Settings tab enables the users to change the language as well as the measurement units. It also allows users to apply different parameters to a trace before or after a trace have been measured.

3.10.1 General Tab



Language – Changes the language – English, Spanish, or Korean

Distance unit – Changes the measurement value - Km, m, Ft, Kf or Mi

Colors – Selects element colors

Apply filter to new traces – Applies a Filter to all new traces

Apply trace analysis to new traces – Applies the Automatic Analysis mode to all traces

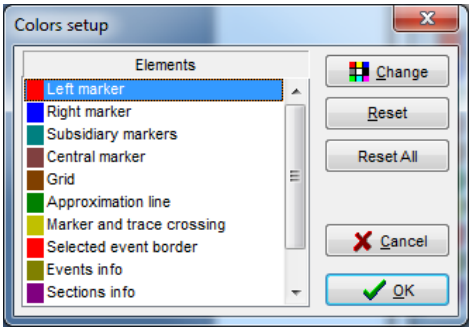
Initialize Device – Automatically checks the device connection when the software is launched

3.10.2 Color Setup Dialog

This option enables users to change the color scheme of the Fiberizer software elements by changing the color palette.

1. Highlights the specific Element
2. Selects **Change** to pop up the standard color selection window
3. Selects the colors you wish and press *OK*

Press **OK** To save changes and exit the dialog box or press **Cancel** to quit without changing any colors. Press the **Reset** button to reset colors to defaults.



Element Colors

- Left marker
- Right marker
- Subsidiary markers
- Central marker
- Grid
- Approximation line
- Selected event boarder
- Events information
- Sections information
- Trace Background
- Grid Marks

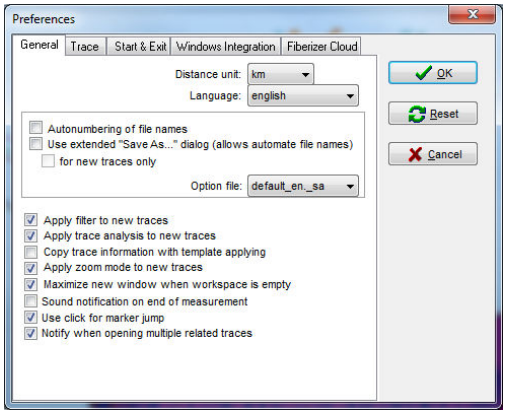
3.10.3 Preference Dialog

Press the **OK** button to save all changes.

Press the **Reset** button to reset default values.

Press the **Cancel** button to cancel all the changes.

3.10.4 General



Distance unit - Changes the measurement value – Km, m, Ft, Km or Mi

Language – Changes the language options – English, Spanish or Korean

Auto-numbering of file names – Automatically numbering the traces in the order the measurement taken

Extended Save As – Allows users to change the root directory of files

Color print – Prints with or without color

Use extended Print – Enables users to use the extended Print option

Apply a Filter on all new traces

Apply the 'Automatic' Analysis mode on all traces

Copy the trace information with template

Apply 'Zoom' option on new traces

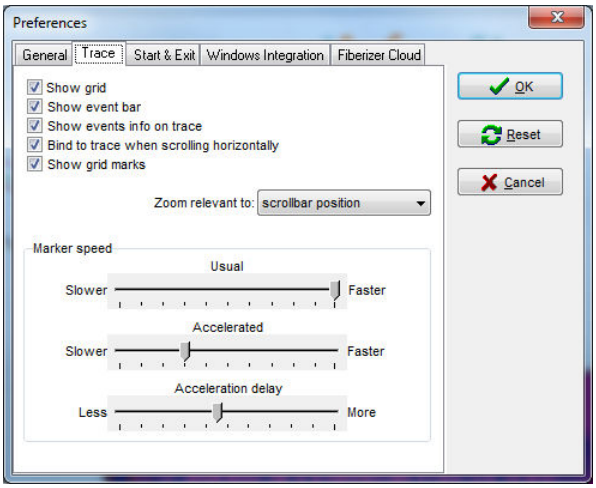
Maximize the trace window

Sound at the end of measurement

Use Click for Marker Jump

Notify when opening multiple related traces

3.10.5 Trace



Show grid – Turns on/off the background grid

Show event bar – Shows the bottom marker bar highlighted in Red

Show events info on trace – Turns on/off the automatic analysis measurement

Bind to trace when scrolling horizontally – Changes the starting point of horizontal scrolling

Show grid marks – Shows position marks on the grid

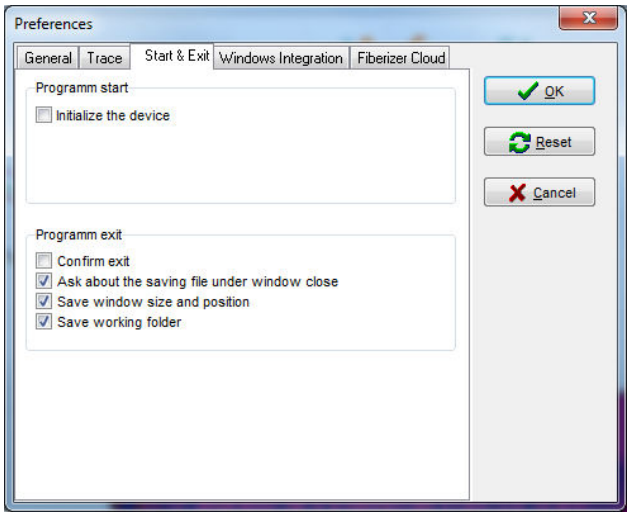
Zoom relevant to

- Left corner
- Center
- Right corner
- Scrollbar

Marker speed – The marker speed can be changed to varying speed

- Usual
- Accelerated
- Acceleration delay

3.10.6 Start & Exit



Initialize the Device – Automatically checks the device connection when software is launched

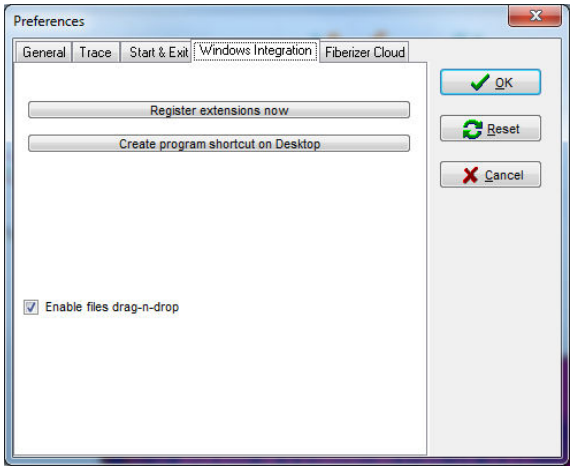
Confirm Exit – Confirms exit when closing program

Ask about saving file – Asks if the operator would like to save the trace before closing

Save Window size and position

Save working folder – Saves in last working directory

3.10.7 Windows Integration

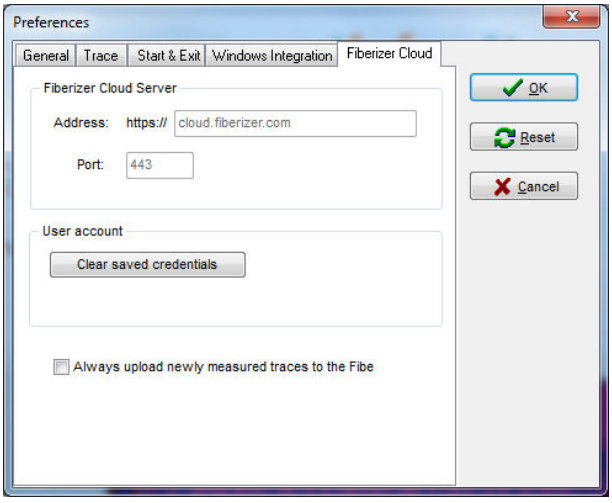


Register extensions now – Enables users to click on a *.sor file to be opened by Fiberizer software (if not already opened) and load the associated traces when the 'associated known file types' is checked.

Create a shortcut on the desktop of a PC or a Laptop

Enables users to drag a file onto the Trace window to open the file

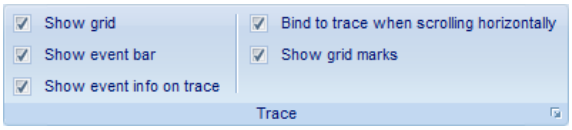
3.10.8 Fiberizer Cloud



Clear saved credentials – Enables users to log out of Fiberizer Cloud

Always upload newly measured traces to the Fiberizer Cloud – Checks this button if you want traces to be automatically sent to your Fiberizer Cloud account.

3.10.9 Trace Tab



Show grid – Turns on/off the background grid

Show event bar – Shows the bottom marker bar highlighted in Red

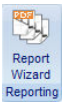
Show events info on trace – Turns on/off the automatic analysis measurement

Bind to trace when scrolling horizontally – Changes the starting point of horizontal scrolling

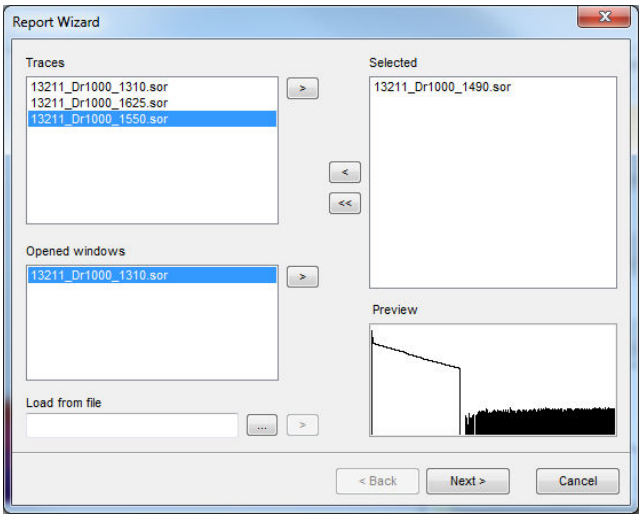
Show grid marks – Shows position marks on the grid

3.11 Batch Processing

3.12 Reporting Tab



Report Wizard Dialog



3.13 Events Table

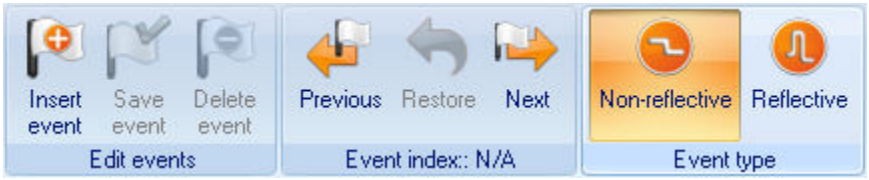
The **Events Table** lists the measurement values of the data points (marks, ⊥) on the fiber under test.

		Section		OF loss	Cumulative loss
Type		Distance	Loss		Reflectance
	Begin of fiber	0.00000 km			-39.319 dB
1.	Fiber section	22.84864 km		0.352 dB/km	8.043 dB
	Splice loss	22.84864 km	0.462 dB		
2.	Fiber section	9.97667 km		0.344 dB/km	11.937 dB
	Splice loss	32.82531 km	0.232 dB		
3.	Fiber section	25.05975 km		0.327 dB/km	20.363 dB
	Splice loss	57.88506 km	19.343 dB		

The Events Table contains the following information:

- Fiber sections numbered
- Section lenght
- Section loss коэффициент затухания на участке
- Cumulative loss
- Events at the ends of the section
- Event type
  - The fiber beginning
  - The fiber end
  - Reflective or non-reflective
  - Loss
- Event loss, dB
- Reflectance, dB

You can work with the **Events Table** in the **Event markers** tab.



If you select an event, the markers on the graph are distributed according to the event parameters.

To delete an event, click the **Delete event** button. The events at the beginning and at the end of the fiber cannot be deleted.

To edit an event, select it and then move its markers on the graph or change the values in the section shown below:

After you finished editing, click Save event to save the changes.

3.14 Event Table Window

Where:

1. Indicates Event without reflection
2. Indicates Event with reflection

4 DEFAULT SETTINGS

1 Default BC values

- -82 dB for SM at 1550 nm
- -77 dB for SM at 1310 nm
- -76 dB for MM at 1300 nm
- -68 dB for MM at 850 nm

2 Default RI values

- 1.4682 for SM at 1550nm
- 1.4675 for SM at 1310nm
- 1.486 for MM at 1300nm
- 1.4900 for MM at 850nm

For an exact index of refraction value of the cable, contact the fiber optic cable manufacturer.

3 Available values in km:

2, 5, 10, 20, 40, 80, 120, 160 and 240

4 L1 marker can be placed anywhere from 0 to L2 in the trace window.

5 L2 marker can be placed anywhere from the L1 to the **Lmax** in the trace window.

6 Shorter pulses are generally used for shorter distances and higher resolution. Longer pulse widths are required for longer fiber runs. The allowable pulse width is determined by the distance range **Lmax**.

7 **Number of Averages** (4096*Nav) defines the number of allowable trace averages when the OTDR measurement is running. **Nav** may be set to any of the following values

1, 2, 4, 8, 16, 32, 64, 128, 256

Averaging Time (min:sec) can be set by users for particular measurement.

5 ABOUT VEEX

VeEX (Verification Experts) is an innovative designer and manufacturer of test and measurement solutions addressing numerous technologies. Global presence through a worldwide distribution channel provides uncompromised product and technical support. Visit us online at www.veexinc.com for latest updates and additional documentation.

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End of User Manual