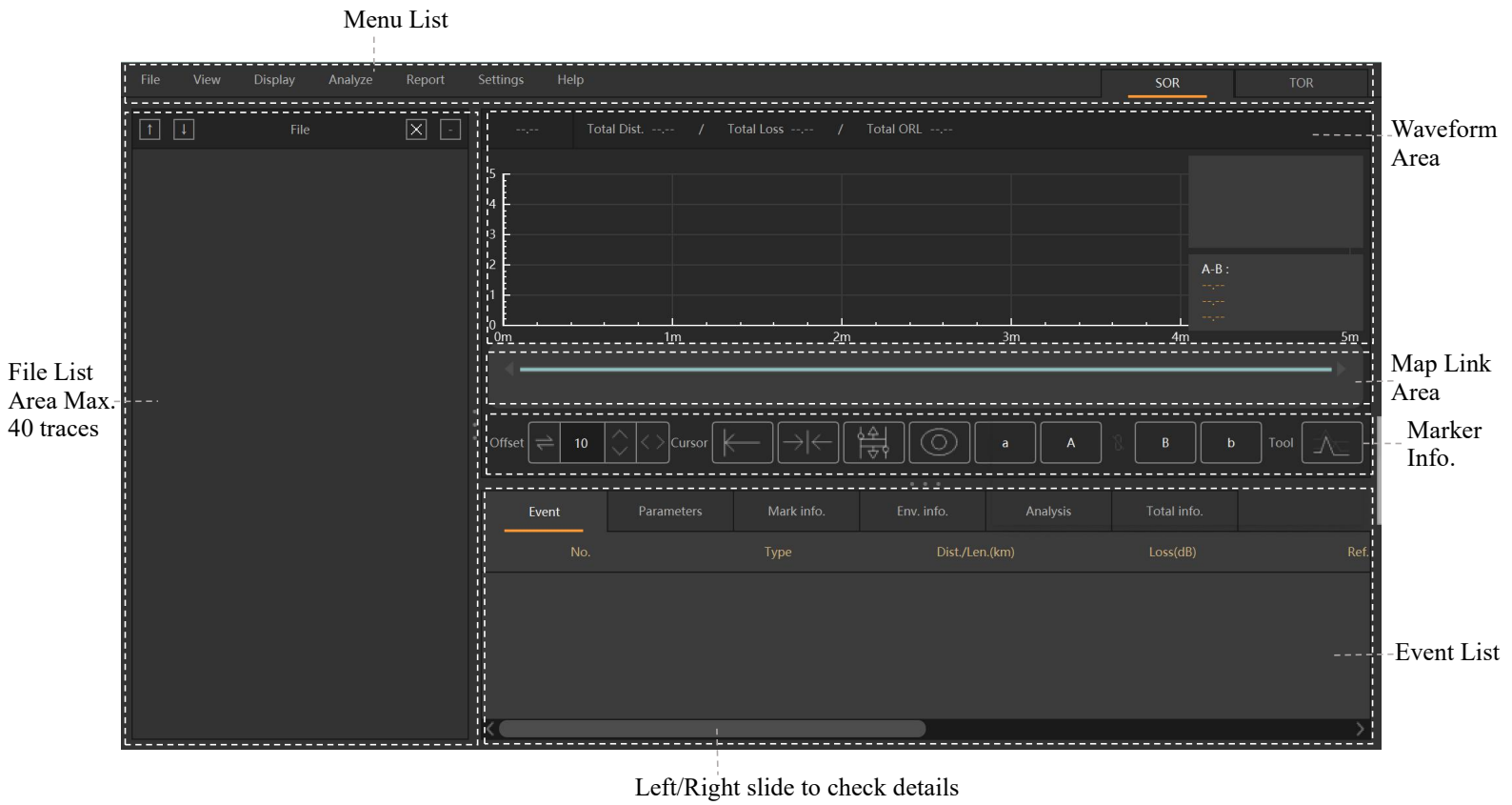
OTDR PC Software Manual -SOR Interface



1. Menu

1) File

A. Open (max. 40 traces, *.sor)

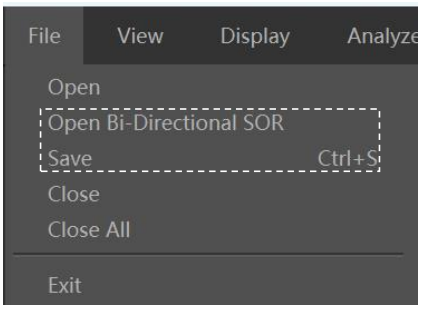
B. Open Bi-Directional SOR (No in TOR)

C. Save (No in TOR)

D. Close, close file selected.

E. Close All, close all files.

F. Exit



2) View

A. Waveform Display On

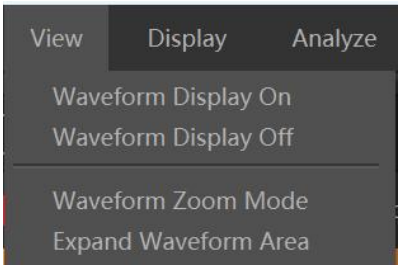
B. Waveform Display Off

C. Waveform Zoom Mode

Zoom in/out in X&Y direction.

D. Expand Waveform Area

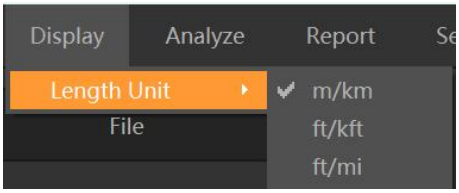
Waveform restore button under marker info.



Restore, long press waveform restore button under marker info, then drag to the middle of SOR interface, expanded area restore.

3) Display

A. Length Unit, setting m/km, ft/kft, or ft/mi.



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4) Analyze

A. DR - show analysis result for first choosing.

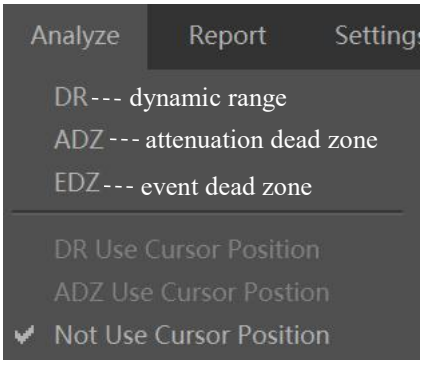
B. ADZ - display ADZ when reflect event selected.

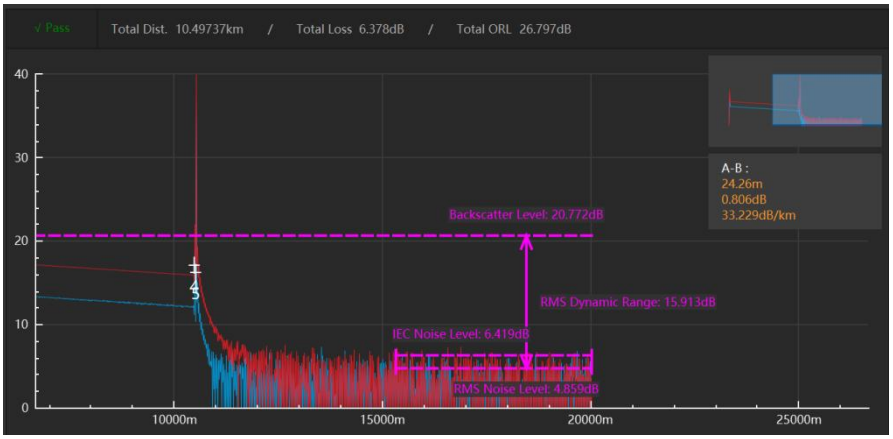
C. EDZ - display EDZ when event selected.

D. DR Use Cursor Position (when DR was ticked, can be chosen)

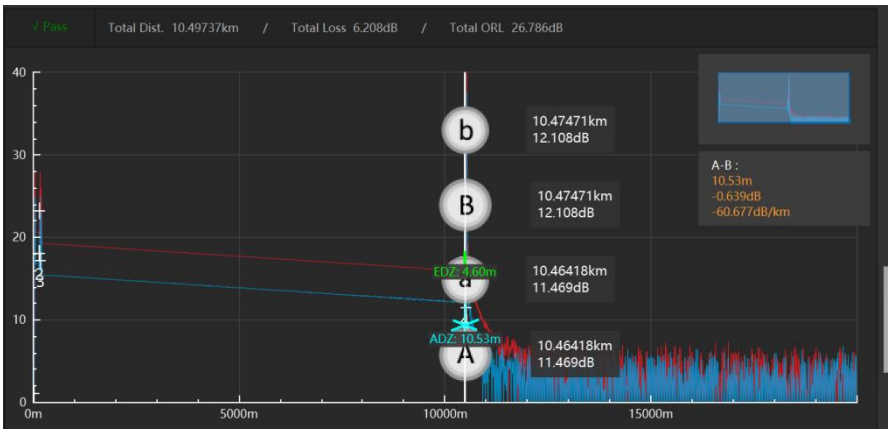
E. ADZ Use Cursor Position (When ADZ was ticked, can be chosen)

F. Not Use Cursor Position





DR waveform analysis



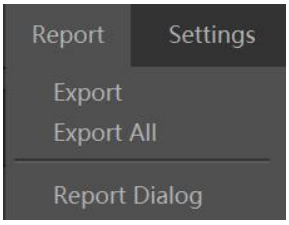
ADZ&EDZ waveform analysis

5) Report

A. Export, export a file selected.

B. Export All, export all files.

C. Report Dialog



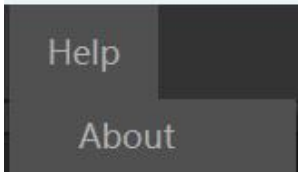
6) Settings

A. Language

B. Option, if a query window pops up each time when exit.

7) Help

A. About, software version information.



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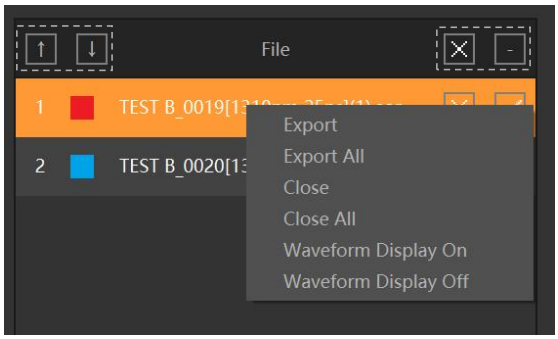
2. File List



1) Switch files.

A. Left click to select a file.

B. Click up/down button on upper left to switch.

2) Close files

A. Click "×" on upper right to close all.

B. Click "×" at the behind of a file to close.

C. Right click on file list to choose "Close" or "Close All" files.

3) Hide curves

A. Click "-" on upper right to hide or view all curves.

B. Click "√" at the behind of the file to hide or view the curve.

C. Right click to choose Waveform Display On/Off.

4) Export/Export All

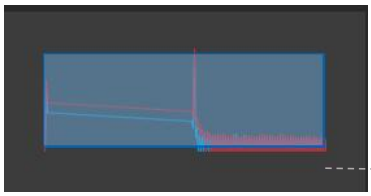
A. Right click on file list to choose export a curve or export all curves.

3. SOR Waveform Area Analysis

1) Waveform info, on the upper left of the waveform, including pass/not pass, total distance, total loss and total ORL info.

2) Thumbnail, display the whole waveform.

3) A-B cursors information, show distance, attenuation value and rate between cursor A and B.



Thumbnail

A-B cursors information

4) Map Link

A. Long left click on map link, a hand icon appears, left/right move to check all events.

B. SOR/TOR Events icon with tick below means pass, while cross means not pass, if a frame is around over 1 event, it means "M" event.

C. Left click event icon, A, a, B, b cursors will locate on the waveform of selected event, also event selected in event list.

5) Offset banner (waveform move vertically/horizontally)

From left to right is step button, step value, up/down button, left/right button. Click to make waveform move and restore.

Detailed operation, see 8. Move and restore horizontally / vertically

6) Cursor control banner

From left to right is cursor reset, cursors center, adjust cursor location up/down automatically, hide/show cursor, cursor move together button. Click to control cursors. Detailed operation , see 6. Cursor Operation

7) Tools banner

Click tool icon, its frame becomes orange. Selected curve becomes red, while others in gray.

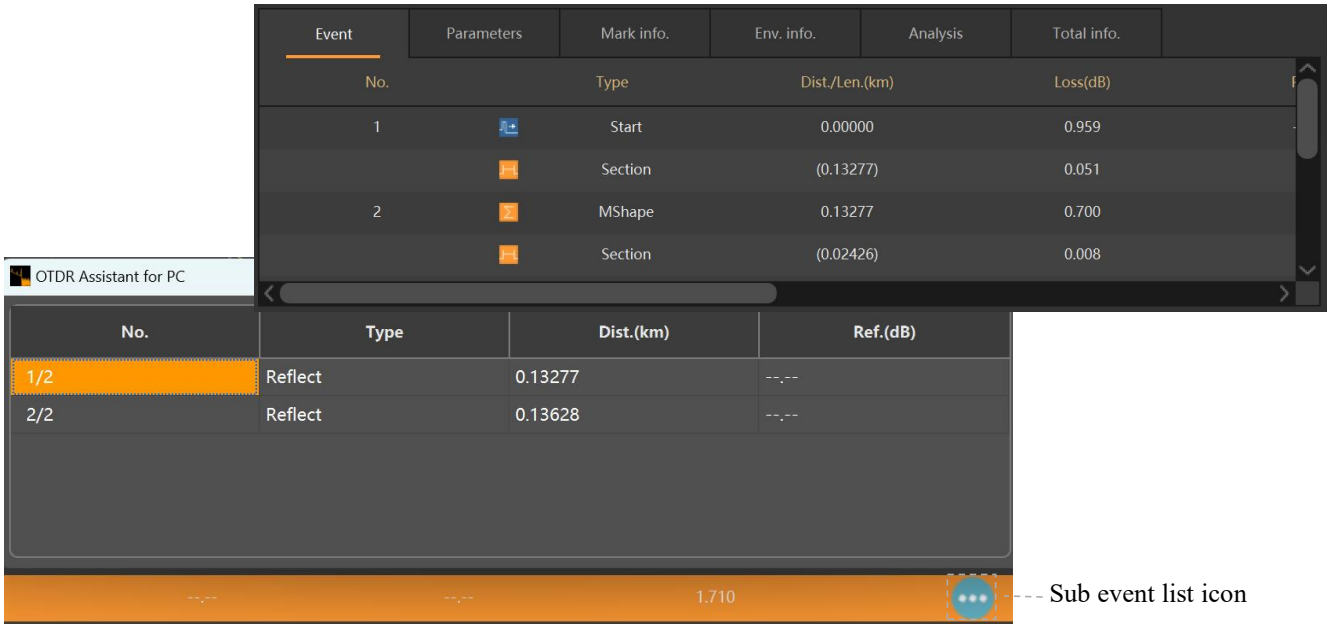
4. Data List

1) Event

A. Click a event, A, B:a, b cursors locate in waveform area of the event, also event icon in map link is selected too.

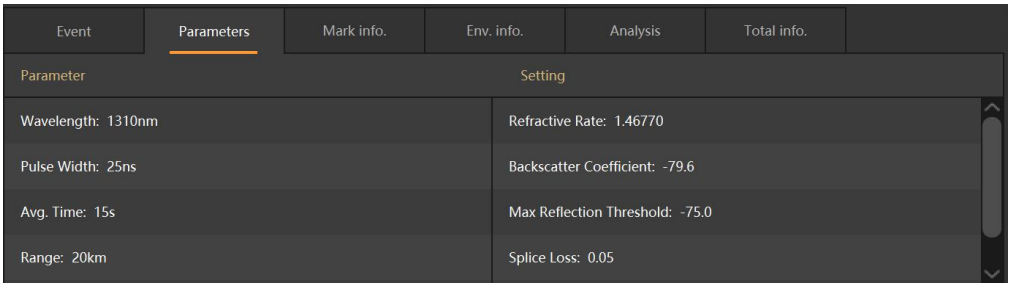
B. Select a event, left/right slide to check events details; Click data list menu, switch modules.

C. When events are close, merge event (M type) will generate. Click sub event list icon, check merge event information.



Sub event data info

2) Parameters



3) Mark info., click “Save” in menu to save company, customer, cable ID, fiber ID and remark information edited in blank.

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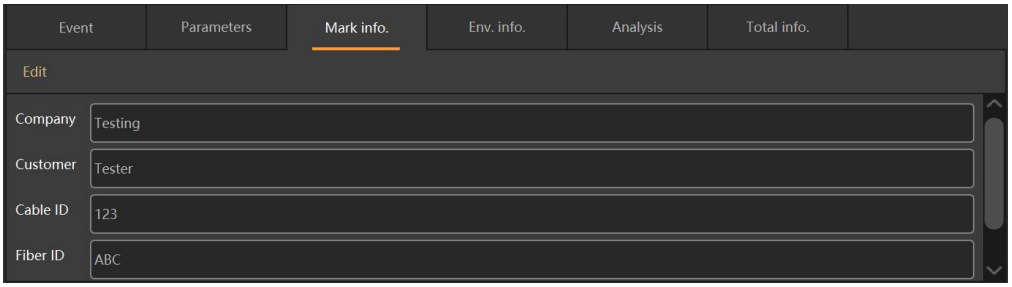
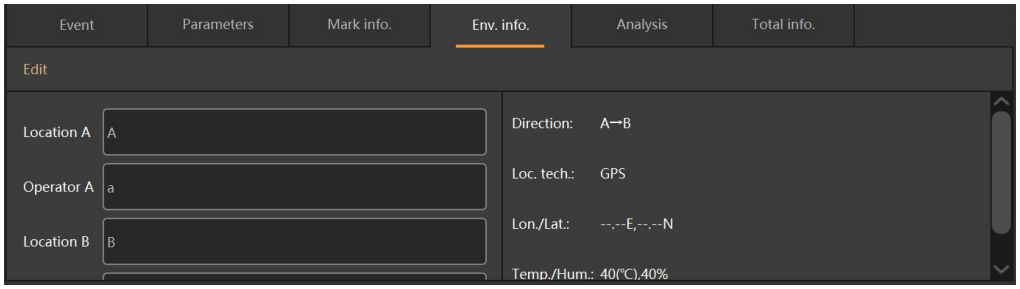


4) Environmental info. Location A/B, operator A/B information can be edited and saved in blank.

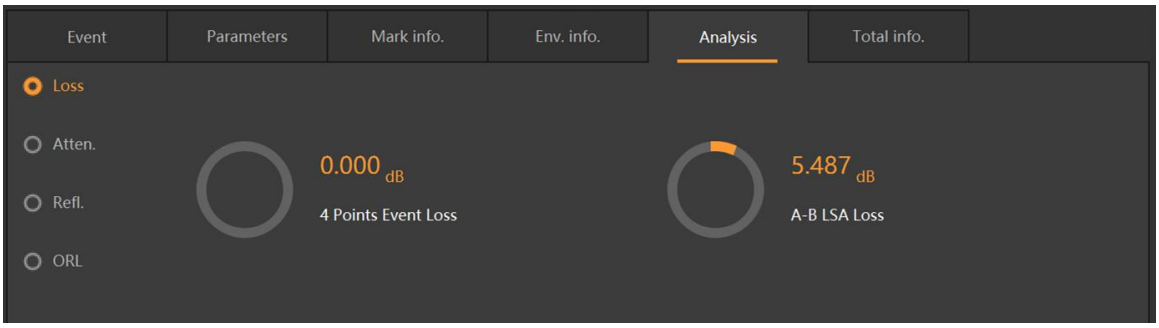


5) Analysis

Loss: four-point method has a, A, b, B four cursors, move cursors, the difference between the “a, A” LSA value and “b, B”LSA value can

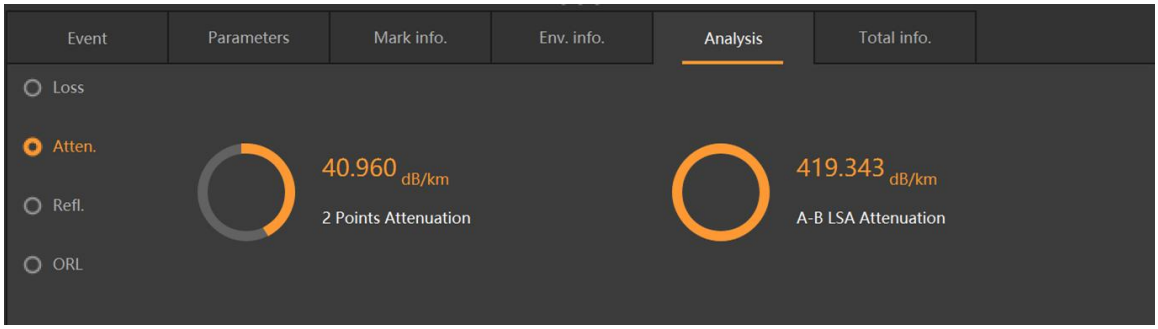
be used to judge the loss more accurately.

A-B LSA Loss: Use two-point method to calculate loss. Calculate the difference between A and B by “A, B” LSA slope .

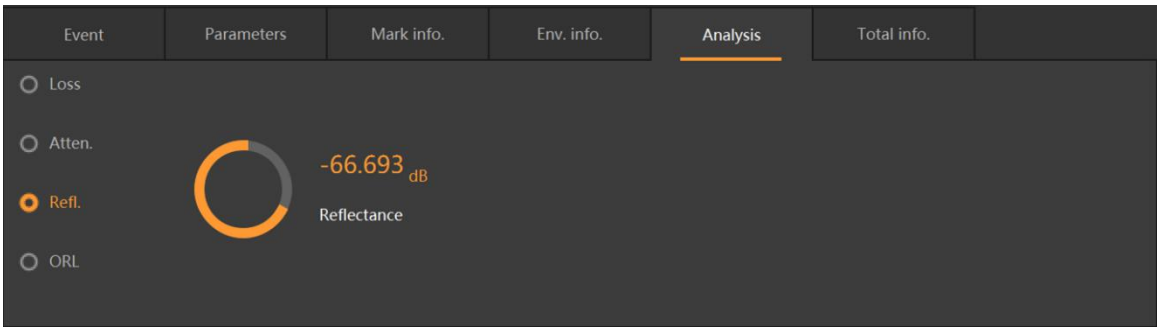


Attenuation Rate: Two-point attenuation: calculate the real attenuation between cursor A and B, then unitized the loss per kilometer to show, easily disturb by noise.

A-B LSA attenuation rate: calculating the LSA slope between cursor A and B to obtain attenuation value unitized and show. Attenuation rate is relatively stable.



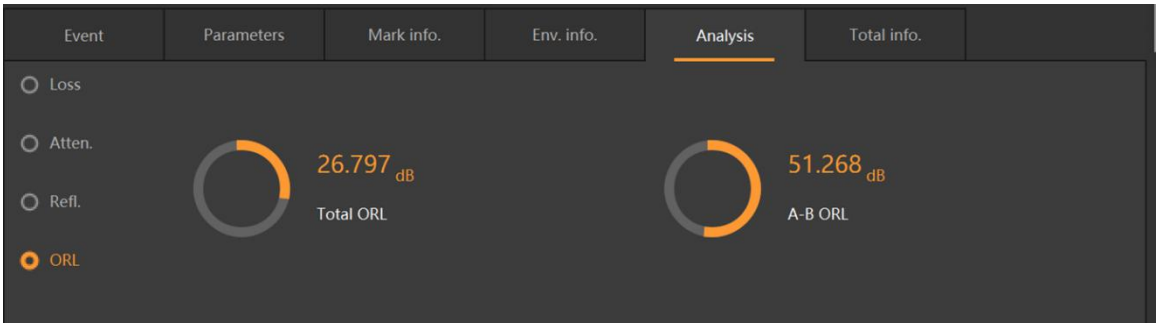
Reflectance: Three-point method reflection has a, A and B three cursors. Set “ a, A” at the flat position before reflection, the initial power is obtained after LSA average, and set B in the highest point of reflection to show the reflection value.



ORL Loss

Total ORL: calculate the ORL value in the entire circuit.

A-B ORL: calculate the ORL value between cursor A and B.



6) Total information

5. Report

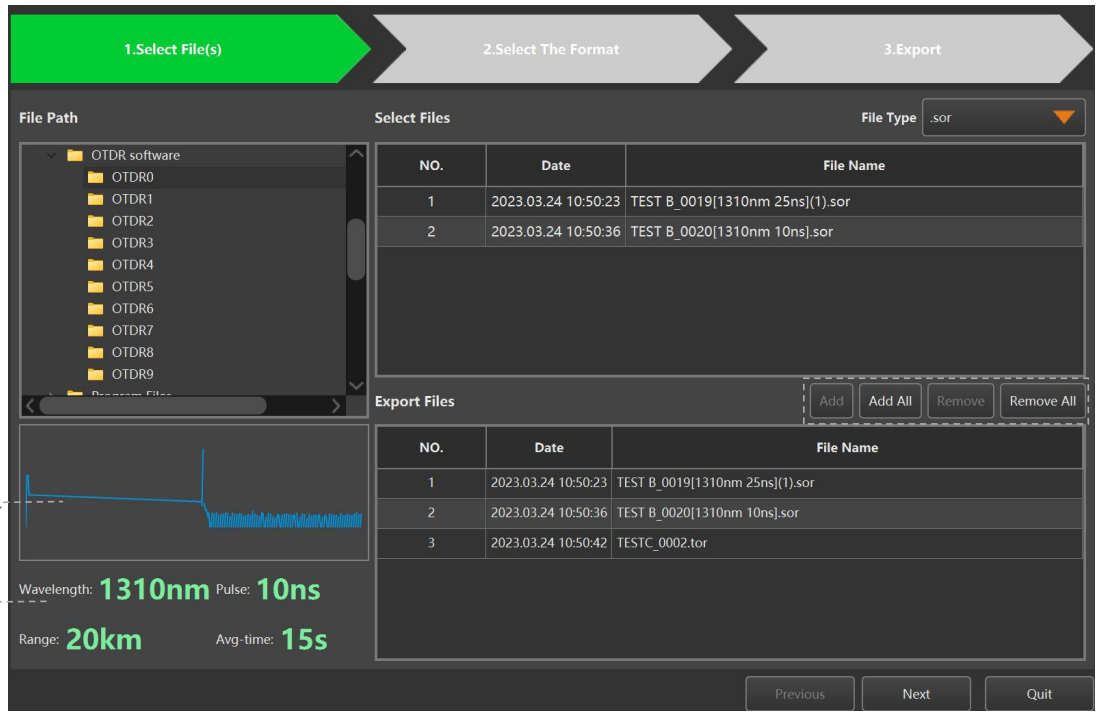
1) report-report dialog to select files.

2) Add export files.

A. Pressing “Ctrl”or “Shift” to choose more than one files when in select files list/export files list. Meanwhile click add/add all button can add partial or total files to export files list, click remove/remove all buttons to move partial or all files in export files list.

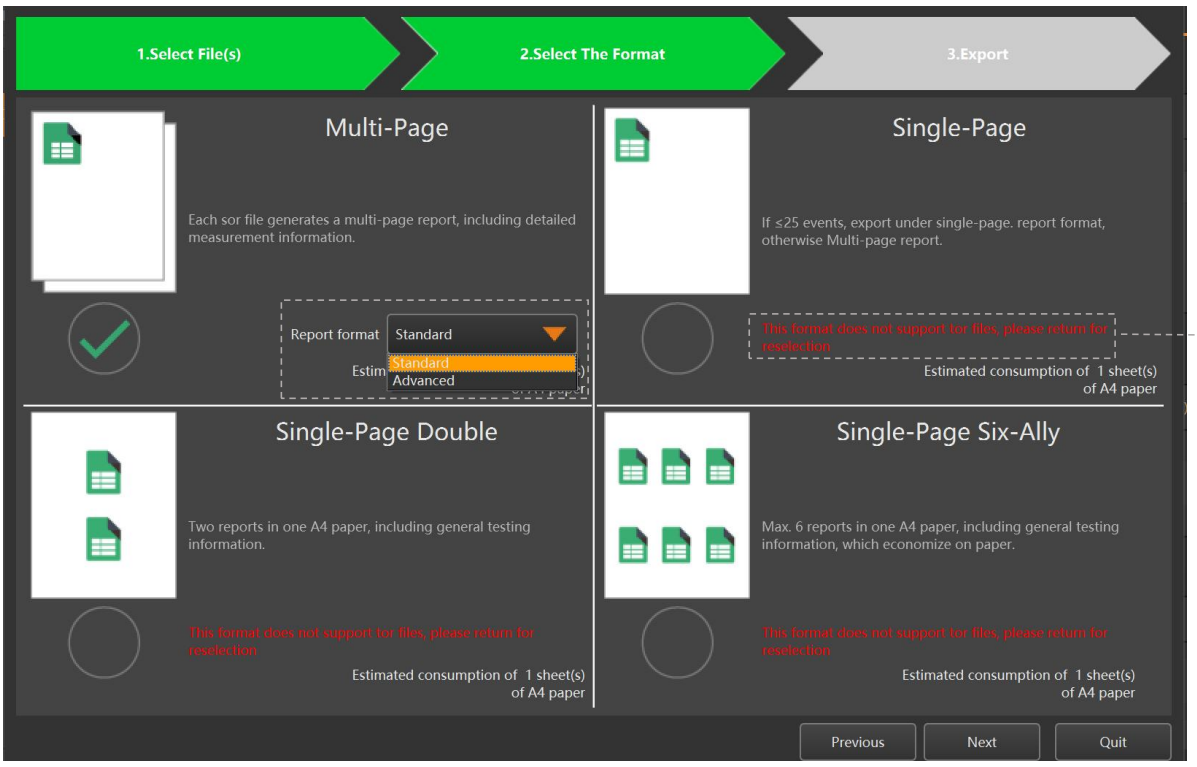
B. When files are in export files list, change file type and continue to add files, can export “*.sor” and “*.tor” files together.

C. Open a folder, drag files to export files list, also can add files.



Selected *.sor file waveform preview area

Selected *.sor file waveform information



Not support *. tor files

3) Choose Report Format

A. Enter “select the format” directly.

a) Menu -report-export/export all (sor*)

b) File list-right click-export/export all (sor*)

B. PDF multi-page format. and XLS single-page, single-page double and single-page six-ally formats.

C. XLS format supports printing preview, printing and export function. (only sor*)

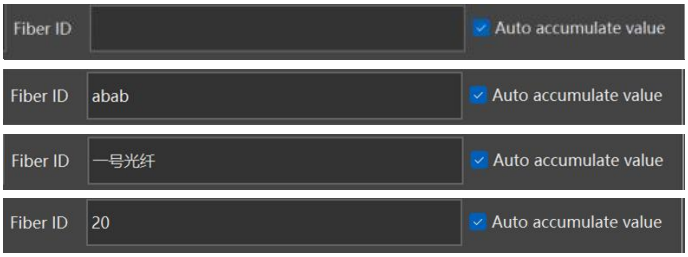
D. Multi-page report support standard/advanced format options.

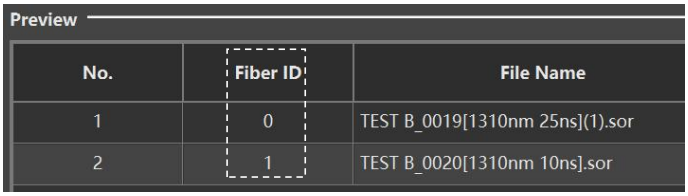
4) Export

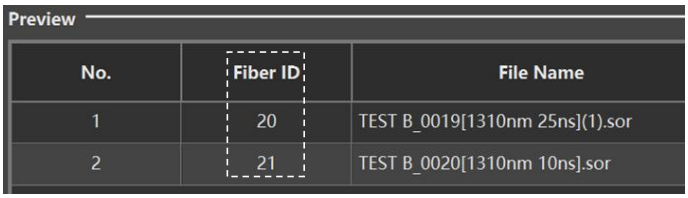
A. Select format and click “Next” to enter export interface.

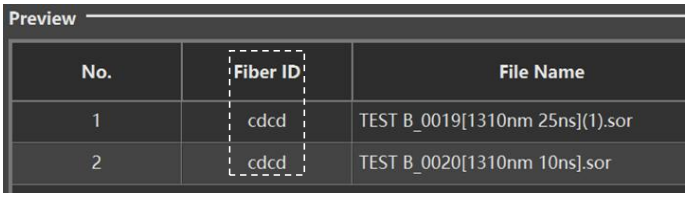
B. Customer information setting.

a) Use following information: Select and input information will appear in all exported/printed reports. If auto accumulate value is chosen and information filled in being a number, Fiber ID remark in export/print report will start to accumulate from this number. When filling in Chinese/English or blank, fiber ID remark in export/print report will start to accumulate from 0; If auto accumulate value is not chosen, Fiber ID remark will be the actual filling content.









b) Use the file’s own information: Displaying information of the export/print report is the file’s original one.

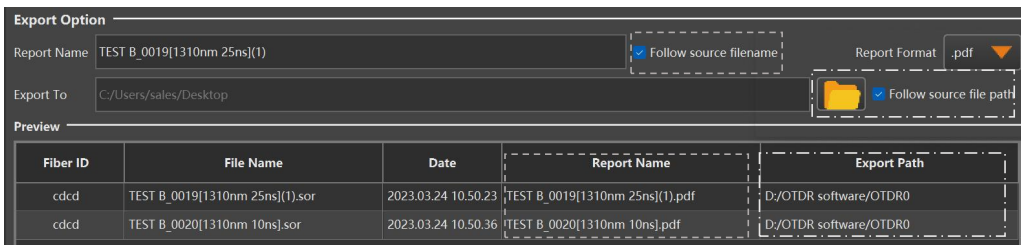
C. Export option

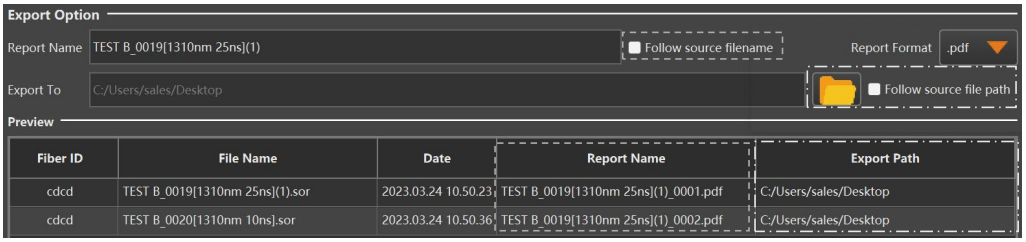
a) When export a file, Follow source filename file path are not displayed.

b) When export multiple files and tick “Follow source filename”, report name is same with sor/tor file name; when no choosing “Follow source filename”, report name is the first file name_0001.

c) When export multiple files and choose “Follow source file path”, the exported file will be saved in the position of the first sor/tor file by default; when no choosing “Follow source file path”, exported file will be saved in the position of the corresponding sor/tor file.

d) .pdf and .xls, format can be chosen.





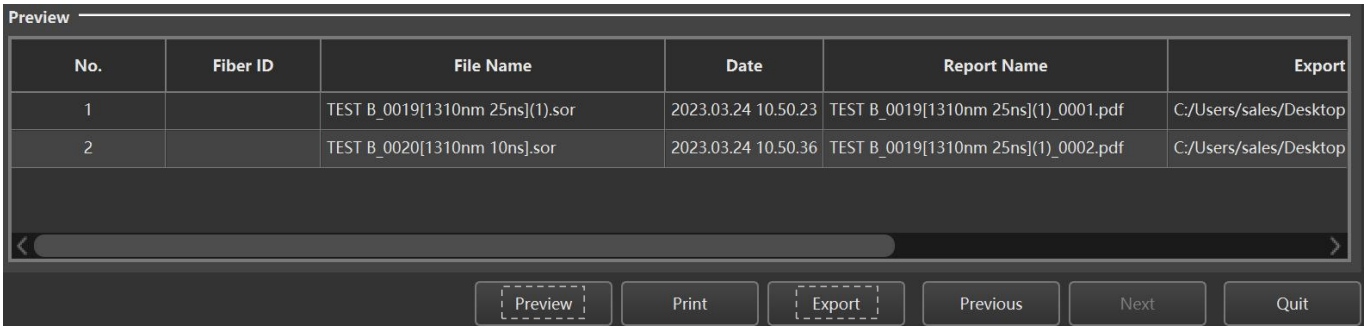
D. Export/Print report

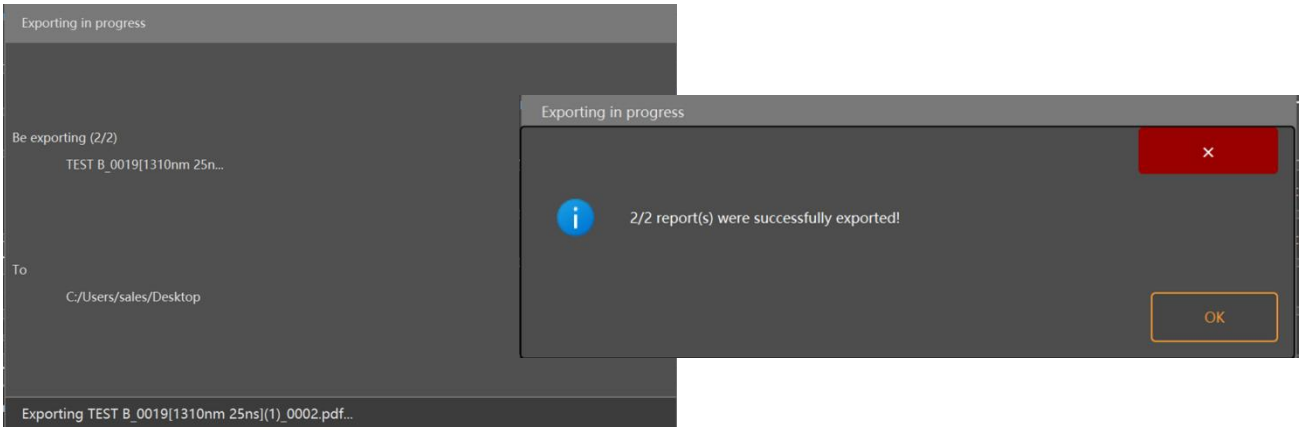
a) Selected file in preview list, click preview button to preview.

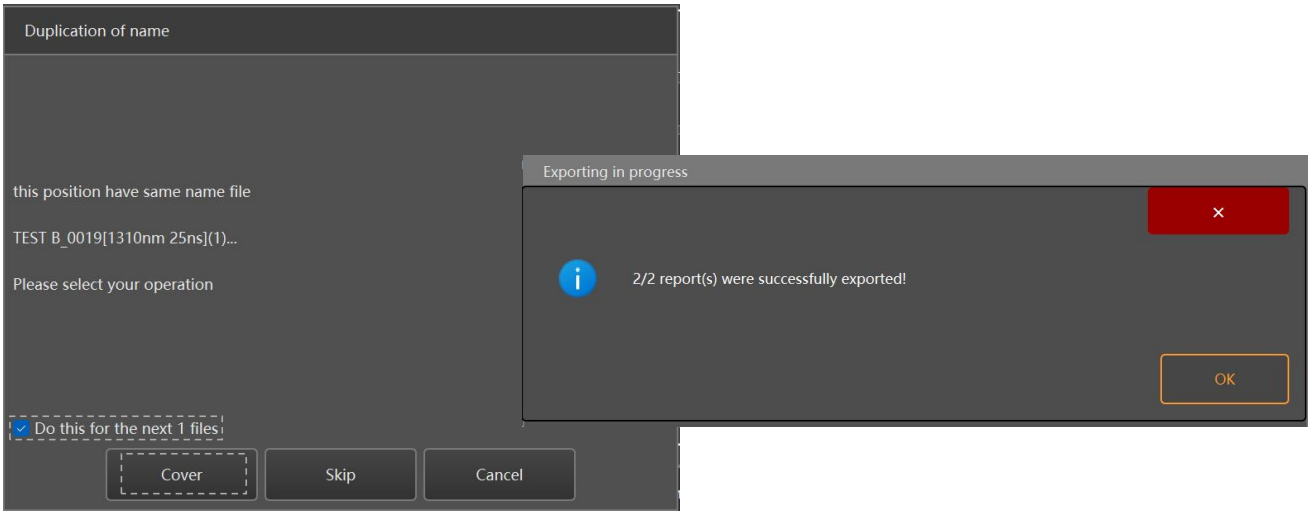
b) Click “Print ” button or printer icon in the upper right corner of the print preview interface. A printing window pop up, and all file reports in the preview list will be printed by default.

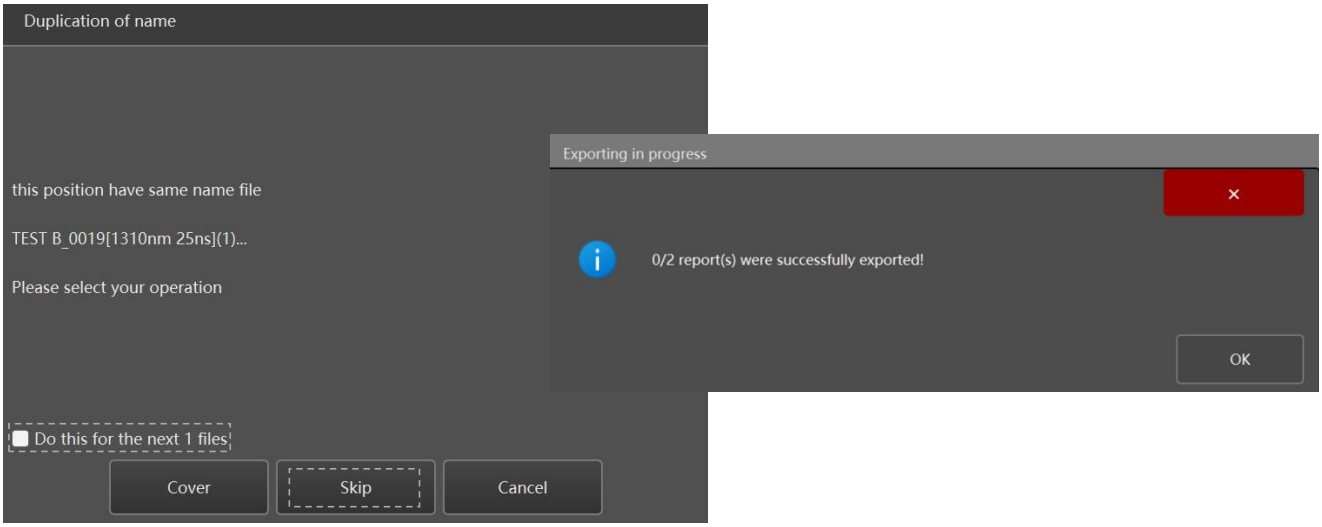
c) Click “Export”, and pop up the “exporting in progress” prompt box. After exporting, the “export result” prompt box pop up to check whether the file is exported successfully.

d) When there are files with the same name in the report export path, click export report and pop up the rename dialog (when no selecting “Do this for the next n files ”, and click “Cover/Skip”, a rename dialog will pop up for each exported file, which needs to be confirmed. If selected, all files will be exported without multiple confirmation). After exporting, the “export result” prompt box will pop up to check whether the file has been exported successfully.



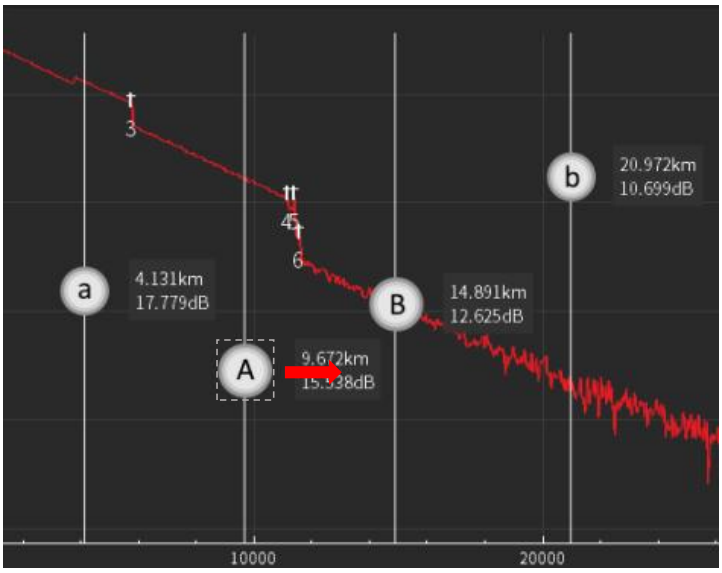






6. Cursor Operation

1) Movement, in the waveform area, left click the cursors and hold the mouse, the mouse cursor changes to a cross, then drag to move the cursors left or right.



2) Locate

A. Click on cursor reset button, A, B, a, b cursors will locate to the beginning of the waveform.

B. Click on center cursor button, A, B, a, b cursors will locate to the middle of the waveform.

C. Click on adjusts the cursor position up/down automatically button, A, B, a, b cursors locate to longitudinal mean interval in the waveform.

D. Click on display cursor button, A, B, a, b cursors to hide/display.

E. Cursors move together:

a) Click icon between A and B cursor, set/cancel four cursors for moving together.

b) Click each cursor button, selected one is orange. when move a cursor, other cursors also move.

7. Zoom-in/out and restore

1) Zoom-in/out

A. Partial zoom-in, right click on the zoom-in curve and drag to top right or bottom right in the diagonal direction.

B. Whole zoom-in/out, click waveform zoom mode, roll the mouse to zoom in/out waveform in X&Y direction, press and hold “Ctrl” key, and roll the mouse to zoom in/out in the X direction. Press and hold “Shift” key, roll the mouse to zoom in/out in Y direction.

2) restore

Double left/right click in the waveform area, current waveform will restore to the original one.

8. Move and restore horizontally / vertically

1) move horizontally / vertically

2) Left click without release in the waveform area, and drag the mouse to make the waveform move UDLR.

3) Restore

Double left/right click in the waveform area, current waveform will restore to the original one

4) Accurate vertically move and restore, for curves comparison easy.

A. Step button: Click up/down button, then click to switch between 0.1 , 1 and 5.

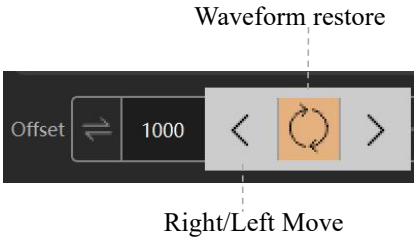
Click left/right button, then click to switch between 1/10/100/500/1000/5000.

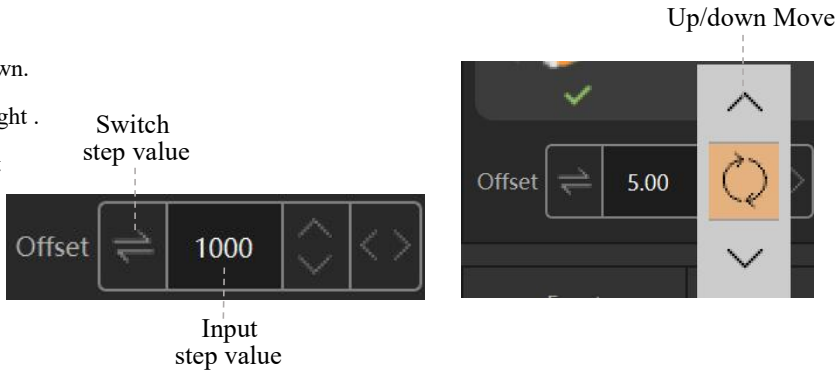
B. Step value: input value manually which is range from 0.01 to 10 vertical and 1,100000 horizontal.

C. Up/down button: click to move the selected waveform up/down.

D. Left/right button: click to move the selected waveform left/right .

E. Reset button: click reset button between up/down or left/right buttons to restore waveform to original position.





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