### User's Manual

Model 735070 AQ7932 OTDR Emulation Software Operation Manual



#### Introduction

Thank you for your purchasing of this AQ7932 OTDR Emulation Software. This user's manual describes the basic operating procedures of AQ7932. Use this manual together with the AQ7932's help facilities. In this manual, the descriptions are based on Windows2000.

continuing improvements to the program's performance and functions.

#### Notes

The contents of this manual describe AQ7932 OTDR Emulation Software Ver.3.05. IF you are using another version of the software, the operating procedures or the figures given in this manual may differ from the actual software. The contents of this manual are subject to change without prior notice as a result of

### Operating Environment (Software / Hardware)

#### Recommended Operating Environment of the PC

ltem	Description
OS	Microsoft® Windows ® 2000, Microsoft Windows XP,
03	Microsoft Windows Vista
Excel	Microsoft Excel 2000 or later
	(When the XLS file output function is used.)
	Clock speed
	An environment where the OS comfortably operates
	Capacity of the HDD
	At least a free hard disk space of 20 MB is required for installation
	Capacity of the RAM
	128 MB at least (256 MB or more is recommended.)
PC	* The printer spooler may take up a large amount of memory during continuous printing or report output. If the free disk space become insufficient, the program may not run properly.
	Display
	Resolution of 1024 $\times$ 768 dots at least
	Disk drive
	CD-ROM drive

#### Trademarks

Microsoft, Windows, Windows XP, and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the U.S.A. and other countries.

Other company and product names mentioned herein may be the trademarks of their respective owners.

For purposes of this manual, the TM and  ${\rm I\!R}$  symbols do not accompany their respective trademark names or registered trademark names.

#### Revisions

First Edition October, 2005 2nd Edition December, 2008

## Contents

Notes Opera Trade	i ating Er marks∍	vironment (Software / Hardware)	···i ···i
Chapt		Waveform Analysis ·····	
1-1	Loadir	ng the Waveform File	··1
1-2	Setting	g Up the Screen Properties ······	3
1-3	Analys	sis with One Waveform (Normal Mode)	··4
1-4		sis with Two Waveforms (2Way Trace Mode)	
1-5		Search ·····	-
1-6	Printin	.d	10
Chapt	er 2	Editing and Saving Data	11
2-1	Chang	jing the Group Index and Inserting Comments on a Section Basis	11
2-2		Batch Conversion	
2-3	Saving	g Files after Converting the File Format by One Operation	14
Chapt	er 3	Making a Report ······	16
3-1	Trace	Output ·····	17
3-2	Total T	able Output	21
Chapt	er 4	Troubleshooting	26
4-1		es Related to Waveform Analysis	
4-2	Troubl	es Related to Making a Report ·····	26
Chapt	er 5	Related Software	<u>2</u> 7
5-1	OTDR	Project File Editor	27

### Chapter 1 Waveform Analysis

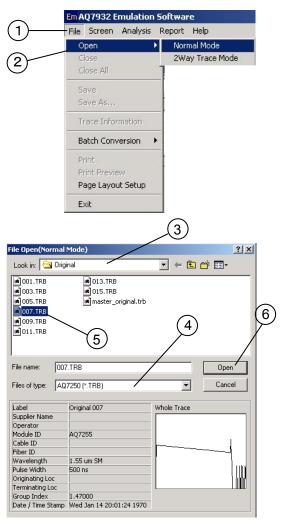
- 1-1 Loading the Waveform File
  - Displaying the Waveform
    - 1. Click [File] in the menu.
    - 2. Click [Open] [Normal Mode].

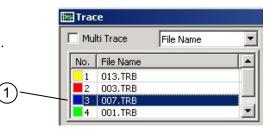
- 3. Select the folder storing the waveform file you want to display.
- Select the file type.
   (Select the file format of the waveform file you want to display.)
- Select the file you want to display. The label, measurement conditions, and the overall view of the selected file will be displayed.
- Click [Open]. The waveform will be displayed on the trace screen.

If you want to display another waveform, repeat the steps 1 through 6.

#### Closing the Displayed Waveform

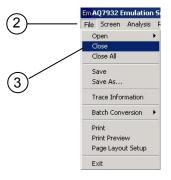
1. Select the waveform file you want to close.

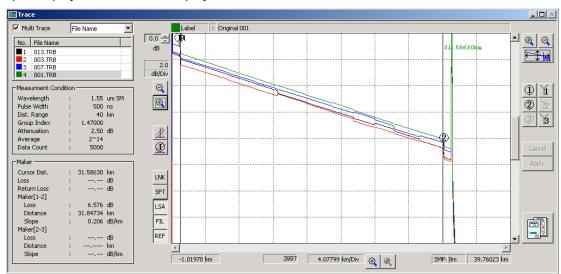




- 2. Click [File] in the menu.
- 3. Click [Close].

The selected waveform file will close. If you want to close all the waveforms currently being displayed, click [Close All].





<Sample Display>

Waveform display when two or more number of waveforms have been loaded

When two or more number of waveforms have been loaded, you can determine to display only the current waveform or all the waveforms on the trace screen.

Mark the [Mult Trace] checkbox.

If a checkmark is placed, you can display two or more number of waveforms on the trace screen.

(Up to eight waveforms can be displayed.)

📰 Tra	ce 🛛		
Mu Mu	lti Trace	File Name	-
No.	File Name		
1	001.TRB		
2	003.TRB		
3	013.TRB		
4	015.TRB		-

In the file list area, you can display not only the file name but also the label.

				Selectable between file name and label
Trac	e			
Mul	lti Trace	Label	· ·	
No.	Label	File Name		
1	Original 001			
2	Original 003		in the	
3	Original 013			
4	Original 015		-	

#### 1-2 Setting Up the Screen Properties

You can change the default setting to the desired one.

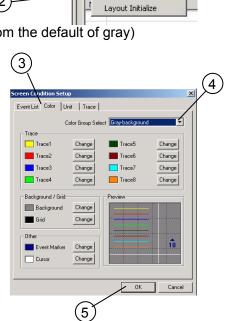
If you change the setting, the software starts up with the new setting from the next time on.

- 1. Click [Screen] in the menu.
- 2. Click [Trace Screen Setup].

#### Changing the Color

Example: Changing the background color to white (from the default of gray)

- 3. Click the [Color] tab.
- 4. Select [White-background] from the [Color Group Select] pull-down menu.
- Click [OK]. The background color will change to white.



Em AQ7932 Emulation Softwa File Screen Analysis Report

Image ✓ Trace
Image ✓ Whole Trace

🖌 Event List

Trace Screen Setur

 $\overline{\mathbf{v}}$ 

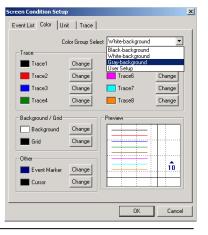
Н



In the color group, there are three default values provided for black, white, and gray backgrounds respectively.

The default trace colors are preset which are suitable for each background.

Furthermore, selecting [User Setup] allows you to change the colors of background and trace individually.



In the same manner, you can change the following items. For details, see the help facilities of the AQ7932. (Click [Help] - [Contents] in the menu. [Contents] - [Screen menu] - [Screen setup])

- Changing the Number of Displayed Digits and the Unit
- The Shape of the Cursor (Cross or Line), Show/hide the Grid
- Changing the Item To Be Displayed in the Event List
- →Contents →Screen Menu

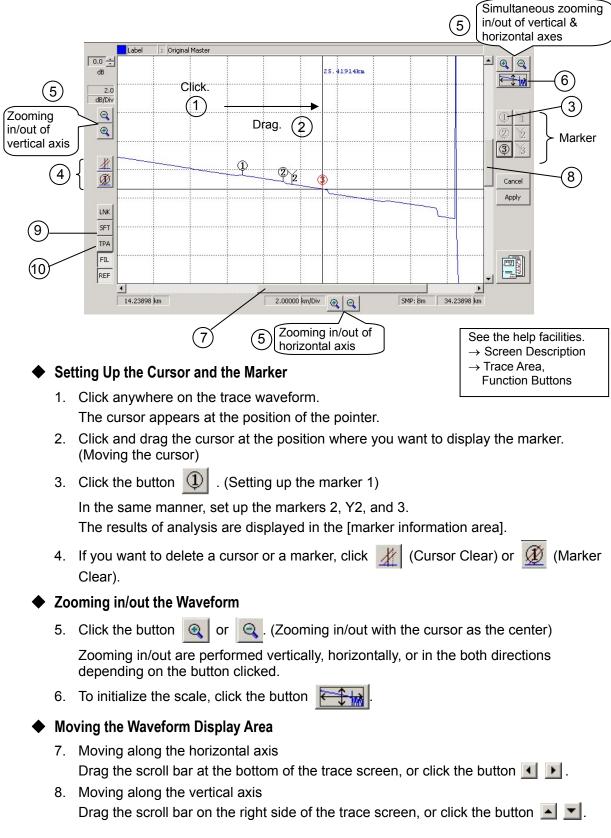
See the help facilities.

 $\rightarrow$ Screen Condition Setup

#### 1-3 Analysis with One Waveform (Normal Mode)

This section describes the operations to zoom into the waveform and set up the marker which are necessary to measure the distances and losses.

For the measuring method of them, see [Basic Measurement] of the help facilities.



#### • Displaying the Approximate Line

- 9. Click the slope fit button SFT
- 10. Click the LSA button LSA or TPA button TPA as necessary.



The marker 1 is used as an example in the following explanation.

The procedures are the same for other markers.

#### • Operation with a Mouse

- 1. Move the mouse pointer into the circle of the marker 1.
- 2. Drag the pointer to the position to which you want to move the marker. (Left-click the mouse, and the cursor moves to the center of the marker.)
- 3. Release the left button at the position to which you want to move the marker. (The marker 1 is set.)
- 4. Press the Confirm button Apply

#### • Operation with a Marker Button

- 1. Move the cursor to the position to which you want to move the marker.
- 2. Press the button of the marker you want to move.
- See the help facilities.  $\rightarrow$  Screen Operations  $\rightarrow$  Marker Operation

#### Note

Markers can move in the range of 1 < Y1 < Y3 < 2 < Y2 < 3.

(You can call up the cursor by left-clicking the mouse anywhere on the trace screen.)

The color of the marker turns "red" just after it was moved indicating that the position of the marker is uncertain.

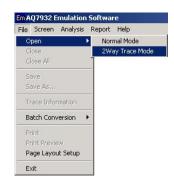
Pressing the Confirm button confirms the position of the marker, and the marker color turns "white".

See the help facilities.  $\rightarrow$  Terminology List  $\rightarrow$  Slope Fit  $\rightarrow$  LSA  $\rightarrow$  TPA

#### 1-4 Analysis with Two Waveforms (2Way Trace Mode)

#### Displaying the Waveforms

- 1. Click [File] in the menu.
- 2. Click [Open] and [2Way Trace Mode]. The File Open(2Way Trace Mode) dialog box will appear.



File Select

File Select

🔽 🗢 🖻 🖝

•

? X

Open

Cancel

File Select

File Select

#### Differential Waveform

For the two fibers, their waveforms and the difference between them are displayed.

This function is useful for measuring the secular changes of a fiber and similar purposes.

3. Click [Subtract Analysis].

#### Loading the Waveform File To Be Used as the Reference

- 4. Click [File Select] in the [Reference File] area.
- 5. Select the folder storing the waveform file you want to display.
- 6. Select the file type. (Select the file format of the waveform file you want to display.)
- 7. Select the file you want to use as the reference.
- 8. Click [Open].

#### Loading the File To Be Compared with

- 9. In the same manner, click [File Select] in the [Comparison file] area. Load the file to be compared with.
- 10. Click [OK].

OK Cancel 0.0 0 业更 Cursor Dist. Loss Return Loss Maler[1-2] Loss Distance Stope Maler[2-3] Loss Distance Stope LNK SFT 日田市 dil km dil/km

5.00000 km

File Open(2Way Trace Mode)

Analysis Type Subtract Analysis

C 2way Analysis

Reference File Folder Name

File Name

Comparison file Folder Name File Name

Label

Label

Look in: 🔂 Sub

D1\_001.TRB D1\_003.TRB

File name

Files of type: AQ7250 (\*.TRB)

File Open(2Way Trace Mod

C:\sample\Datas\Sub\

non 4.07799 km/Div @ @

5297; 8m

40.22993 14

D1\_001.TRB

D1 001

Analysis Type

C 2way Analysis Reference File

Folder Name File Name

Comparison file

Folder Name File Name

Label

Label



Reference file: D1\_001.TRB Comparison file: D1 003.TRB Diff (Difference):

Comparison file - Reference file



田田田

#### Saving the Difference Data in CSV Format

- 11. Click [File] in the menu.
- 12. Click [Save As...].
- 13. Specify the location to store the file and the file name, and click [Save].

#### Both-end-composite Waveform

A fiber is measured bidirectionally (in both the original and reverse directions). The reverse-direction waveform is horizontally flipped and displayed on the screen together with the original-direction waveform.

The more correct value of splice loss can be obtained by averaging the splice losses in each event list.

3. Click [2way Analysis].

# Loading the Original-direction Waveform Data

4. Click [File Select] in the [Original Direction File] area.

The succeeding steps are the same as those for the differential waveform described on the previous page. See them.

halysis Type	sis				
2way Analysi					
riginal Direction	File				
Folder Name	C:\sample\Datas\2way\				
File Name	BO_001.trb	File Select			
Label	Original				
everse Direction	File				
Folder Name	C:\sample\Datas\2way\				
File Name	BR_002.trb	File Select			
Label	Reverse				

#### Loading the Reverse-direction Waveform Data

- 5. Click [File Select] in the [Reverse Direction File] area. The succeeding steps are the same as above.
- 6. Click [OK].

<Sample Display>

Original-direction file: BO\_001.TRB

Reverse-direction file: BR\_002.TRB

Both: Both waveforms displayed (Original-direction and reverse-direction) (The reverse-direction file is horizontally flipped and display

horizontally flipped and displayed.)

 Carbon
 Label
 Is Organit

 1
 The home
 Image: Source S

• Saving the Event List of Both-end-composite Results in CSV Format

- 7. Click [File] in the menu.
- 8. Click [Save As...].
- 9. Specify the location to store the file and the file name, and click [Save].

Note

You cannot edit any event during an analysis with two waveforms.

#### 1-5 Auto Search

#### • Setting Up the Analysis Conditions

- Display the waveform you want to analyze. (You cannot set up the conditions without any waveform displayed on the screen.)
- 2. Click [Analysis] in the menu.
- 3. Click [Analysis Condition Setup].



4. Set up the threshold values (Splice Loss, Return Loss, and End of Fiber).

See the help facilities.
$\rightarrow$ Analysis Menu
$\rightarrow$ Analysis Condition Setup

Search Condition Setup			2
Search Condition Analysis Condi	tion		
Thresholds			
Splice Loss	0.01	÷ dB	[0.01 - 9.99]
Return Loss	60	÷ dB	[20 - 70]
End of Fiber	10	÷ dB	[3 - 10]
Backscatter Coefficient Level			
1.55 um	-52.00	🛨 dB	[-64.9910.00]
		04	Cancel

5. Click the tab of [Analysis Condition].

See the help facilities. → Analysis Menu → Analysis Condition Setup

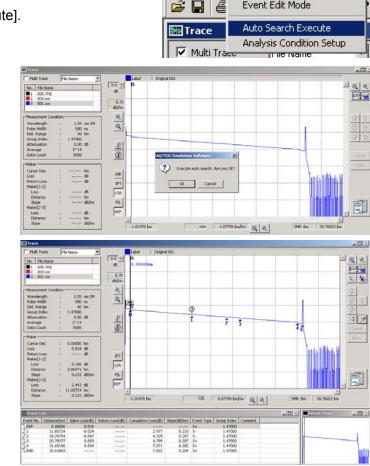
- 6. Set up the Group Index.
- 7. Set the filter to ON or OFF.
- 8. Select LSA or TPA.

See the help facilities.
$\rightarrow$ Terminology List
$\rightarrow$ Group Index
$\rightarrow$ Filter
$\rightarrow$ LSA
$\rightarrow$ TPA

Group Index			
		1.47000 ≑	[1.00000 - 1.99999]
Filter			
C ON	<ul> <li>OFF</li> </ul>		
LSA / TPA-			
ESA	C TPA		

#### Executing Auto Search

- 1. Click [Analysis] in the menu.
- 2. Click [Auto Search Execute].
- 3. Click [OK].



File

Em AQ7932 Emulation Software

Screen Analysis Report Help

Event Edit Mode

#### <Sample Display>

Results of auto search

#### Editing an Event

The following describes the operations to insert an event, delete it, and move it to an appropriate position.

#### Inserting an Event

1. Move the cursor to the position on the trace waveform to which you want to insert an event, and click 🐋

#### Deleting an Event

Move the pointer to the number of the event on the trace waveform you want to delete, 1. and click it.

Otherwise, click the desired event number in the event list.

Click the button.

#### Moving an Event

- 1. In the event list, click the number of the event you want to move.
- 2. Click the circle of the marker 2 on the trace waveform. The color of the marker 2 will change to red.
- 3. Click and drag the marker to the position to which you want to move the event.
- See the help facilities.  $\rightarrow$  Screen Operations → Marker Operation

See the help facilities.

 $\rightarrow$  Analysis Functions  $\rightarrow$  Event Edit Mode

4. Click [Marker Confirm].

Note

You cannot edit any event during an analysis with two waveforms.

#### 1-6 Printing

- 1. Click [File] in the menu.
- 2. Click [Page Layout Setup].



 Click [Current Trace] in the [Trace Setup] area.
 Mark the checkbox of the item you

want to print out.

4. Click [OK].

If you want to print out a screen with two or more number of waveforms, select [Multi Trace].

[Margin Setup] is also available.

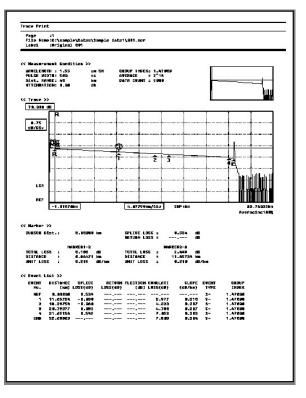
Margin —				
Left	0.4	Right	0	.2 -
Тор	0.3	Bottom		.2
Unit	inch			

5. Click [Print Preview] from [File] in the menu.



The changes you have set on the trace screen will be reflected. (Zooming in/out, marker position, etc.)

Title			
Trace Print			
Trace Setup			
🔿 Multi Trace			
Current Trace			
✓ Trace			
🔽 Marker Info	ormation		
🔽 Event List			
Color Setup			
C Color	Mono	ochrome	



### Chapter 2 Editing and Saving Data

This chapter describes the functions for organization and management of measurement data.

#### 2-1 Changing the Group Index and Inserting Comments on a Section Basis

#### Changing the Group Index on a Section Basis

1. Right-click the group index of the event number you want to change in the event list.

<Sample Display> Changing the group index of the fiber between the event numbers 2 and 3

Event No.	Distance(km)	Splice Loss(dB)	Return Loss(dB)	Cumulative Loss(dB)	Slope(dB/km)	Event Type	Group Index	Comment
LREF	0.00000	0.534	,		,	S+	1.47000	
<b>_</b> 1	11.65724	-0.030	ومعربيت	2.977	0.210	S-	1.47000	
<u>Г</u> 2	18.29754	-0.060	,	4.323	0.207	S-	1.47000	
13	20.79377	0.083	0.000 (0.000)	4,780	0.207	5+	1.47000	
14	31.65156	0.549	·,	7.052	0.202	S+	1.47000	Insert Comment
LEND	32.63863	,	,	7,803	0.204	S+	1.47000	Change Group Index
							/	Delete Event

Right-click here.

2. Click [Change Group Index].

Change Group Index		×
Event No.2 - Event No.3		
1.47000		
	OK	Cancel

3. Click [OK] after changing the value.

See the help facilities.	
$\rightarrow$ Screen Description	
$\rightarrow$ Event List	

#### Inserting Comments on a Section Basis

- 1. In the event list, right-click the number of the event to which you want to insert a comment.
- 2. Click [Insert Comment].

Event No.3 OK Cancel	OK Cancel	Event Comment Edit			×
OK Cancel		Event No.3			
	See the help facilities	1	ОК	Canc	el

 $\rightarrow$  Event List

3. Click [OK] after writing a comment.

#### 2-2 Label Batch Conversion

Since Label batch conversion directly converts the labels of the loaded files, considerable care should be exercised when using this function.

- 1. Click [File] in the menu.
- 2. Click [Label] in [Batch Conversion].



#### Selecting Files and Converting Their Labels Individually

- 3. Click [Select Files as individually].
- 4. Click [File Select].

<ul> <li>Select Files as inc</li> <li>Select Files as Fo</li> </ul>		File Select
File Type Folder Name	SOR (*.SOR)	Folder Select
ile Name	Label	
All Clear	Clear N	lumber of selected files 0
All Clear	Clear N	lumber of selected files 0

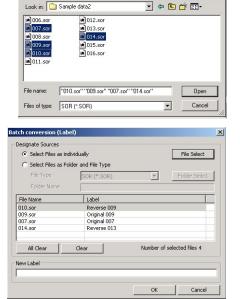
? ×

#### Selecting the Files of Which the Labels You Want To Convert

5. Click files while holding down the [Ctrl] key.

7. Enter a new label name and click [OK].

6. Click [Open].

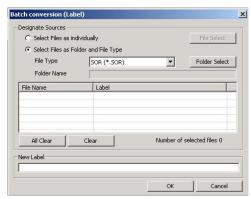


8. A confirmation message will appear. Click [OK].

AQ7932 B	mulation Software	1
٩	Label batch conversion was completed	
	OK	

#### Converting the Labels of All Files in a Folder by One Operation

- 3. Click [Select Files as Folder and File Type].
- 4. Click [Folder Select].
- 5. Specify the folder storing the waveform files of which the labels you want to convert.
- 6. Select the file type.(Select the file format of the waveform file.)
- 7. Enter the new label name and click [OK].



8. A confirmation message will appear. Click [OK].

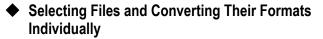
AQ7932 B	mulation Software	×
<b>i</b>	Label batch conversion was comple	ted
	ОК	

### 2-3 Saving Files after Converting the File Format by One Operation

This section describes the operation to save files after converting their file format by one operation.

The file formats after conversion are limited to Telcordia (.SOR), Bellcore (.SOR), and BMP (.BMP).

- 1. Click [File] in the menu.
- 2. Click [File Type] in [Batch Conversion].



- 3. Click [Select Files as individually].
- 4. Click [File Select].
- Select the files of which the file format you want to change.
   Click files while holding down the [Ctrl] key.
- 6. Click [Open].
- 7. Click [Next].
- 8. Click [Folder Select].
- 9. Select the folder in which you want to save the files after conversion.
- 10. Select the file format after conversion from the [File Type] pull-down menu.
- 11. Click [Next].

tput Folder \sample\DEMD		
i loangio lo arrio		Folder Select
е Туре		
elcordia (*.SOR)	•	
	< Back	Next> Can

Em AQ7932 Emulation S

▶ File 1

File Select

▼ Folder

Number of files0

Next > Cancel

- 🗢 🗈 💣 🎫

•

File Select

Folder Sele

Number of files5

< Back Next > Cancel

Open

Cancel

×

x

? ×

File Screen Analysis Open Close Close All

Save Save As... Trace Information Batch Conversion

Print Print Preview Page Layout Setup Exit

esignate Source Files (1/3)

Select Files as individually

C Select Files as Folder and File Type

A07250

Clear

Labe

013.TRE

15 TRE

"011.TRB" "005.TRB" "001.TRB" "015.TRB" "

Label Original 011 Original 005 Original 001 Original 015 Original Maste

Source Files

File Name

•

Clear All

Look in: 🔂 Original

001.TRB

005.TRB 007.TRB 009.TRB 009.TRB

File name:

Files of type: AQ7250 (\*.TRB)

Designate Source Files (1/3)

C Select Files as Folder and File Type File Type A07250 (\* TBB)

Clear

Source Files Select Files as individually

File Name 011.TRB 005.TRB 001.TRB 015.TRB master original.trb

Clear All

13 TRE

12. Click [Finish].

13. A confirmation message will appear. Click [OK].

AQ7932 E	mulation Software	x
٩	File type batch conversion was c	ompleted
	ОК	

#### • Converting All Files in the Folder by One Operation

- 3. Click [Select Files as Folder and File Type].
- Select the file type from the pull-down menu. (Select the file format of the files you want to convert.)
- 5. Click [Folder Select].
- 6. Specify the folder storing the waveform files you want to convert.
- 7. Click [Next].

Now the files you want to convert have been loaded.

8. Click [Next].

- 9. Click [Folder Select].
- 10. Select the folder in which you want to save the files after conversion.
- 11. Select the file format after conversion from the [File Type] pull-down menu.
- 12. Click [Next].

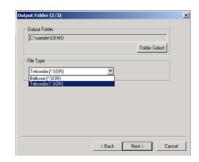
13. Click [Finish].

14. A confirmation message will appear. Click [OK].

File Type	AQ7250 (*.TRB)		
Number of selected files 5 Designate Folder			
C:\sample\Da	stas\Original\		
Dutput			
File Type	Telcordia (*.SOR)		
Output Folder			
C:\sample\DE	мо		
	If you want to execute , Please click Finish		

C Select Files as	individually File :	Select
Select Files as	Folder and File Type	
File Type	AQ7250 (*.TRB)   Folder	Select
Folder Name	SOR (* SOR) A07250 (* TRD)	
File Name	AQ7250 [* TRB]	

<ul> <li>Select Files as individually</li> <li>Select Files as Folder and Fil</li> </ul>			File S	elect
File Type		50 (*.TRB)	▼ Folder	Select
Folder Name	C:\sar	nple\Datas\Original		
File Name		Label		•
001.TRB		Original 001		
003.TRB		Original 003		
005.TRB		Original 005		
007.TRB		Original 007		
009.TRB		Original 009	-	- <sup>-</sup>
Clear All	Clear	1	Number of file	s10



File Type	AQ7250 (*.TRB)
Number of selected files Designate Folder	10
C:\sample\Datas\C	riginal\
Output	
File Type	Telcordia (*.SOR)
Output Folder	
C:\sample\DEMO	
	If you want to execute , Please click Finish

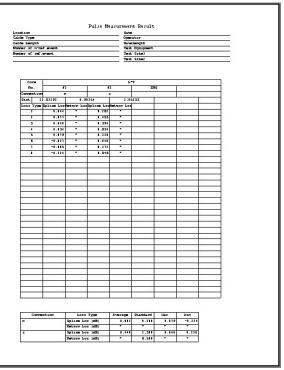
### Chapter 3 Making a Report

This chapter describes the operations to make a report of the trace output of waveform files or a total table of the measured values.

ľ



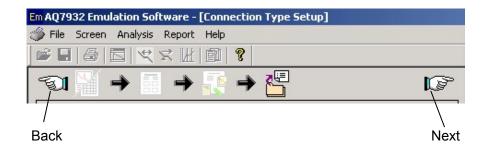
Location Calum Type	Desta	10
Cable Type Cable Langth		
Cuide Length Renker of arcef.event	Navalangth Test Equipment	100
Ronker of stref, event. Ronker of ref, event.	Test Satel	
NUMBER OF THE POPULATE	Test. Satel	
<u>.</u>	JHIL SALMC	
ana maana waxaa kalka	and and the second second second	
· · · · · · · · · · · · · · · · · · ·	1444 a	
	···	
-Aha John Hards and Manager	with below and the second statements	
many the subsection of the second		
	the marked in procession of the second se	1 1
	transmit that a loss at any a	1 1
energy of the Multiples	summer a float Mall had a second and the	1 1
	ener men e sandal de la la la ser anna la	1 1
a an an an an an	82. <u>1.8</u> 1.99 950 1.09%	1 1
This is a line of the		
		1 1
<b>□</b> <del>□</del>	ĨĨ <del>───────────────────────────────────</del>	
		1 1
	with bitm (after they also and a Mathian	
	the state of the second s	1 1
terr and a summer a the sum of		
	evenese stat a tott a norm a	
	tent ma tauta distante erretata	
		1 1
and the second second table	man.t marine tes an line	1 1
1444 - Think all all all all all all all all all al		
	110	1 1
┉┢┼┼┼┼┼┼┼┼┼	┕━╹╠╋┼┼┼┼┼┼┼┼┼┼┼┼	
<del>₿│┿╪╪<sub>╈┲┿╤</sub>╵╻</del> ┣┼┤	<del>ĬĨ → → → a a → ↓ b →</del>	
	·- <del>│ │ │ │ │ │ │ │ │ │ │ │ │</del>	1 1
Line in the second s		
The first and a deal for the first and a shallow	weite heles Jahre Hand als 31.4Mdm	1 1
eveness stat a lot as a	evenese stat a like as even a	
The Matter States	anna a dea Maille anna an	
		1 1



<Sample Total Table Output>

Proceed with the operation along the steps of the report wizard.

You can return to the previous step any time when you want to change or add the settings. Even if you quit halfway through the report wizard, the latest settings are kept retained.



### 3-1 Trace Output

#### Launching the Report Wizard

- 1. Click [Report] in the menu.
- 2. Click [Report Wizard].

### Step 1 -- Layout Selection

1. Click [Trace]. A checkmark will be placed.

- 2. Select the number of waveforms printed on a page.
- 3. Select the printing direction. (Specify this option when 4, 6, or 8 Traces per page has been selected. The right figure shows a sample of the horizontal direction.)
- 4. Click [Next].

#### Step 2 -- Layout Options (Page Layout)

1. Fill the desired item fields as necessary. (Up to 50 characters) You can change the title and the item names.

(Direct entry for the title; selection from the pull-down menu for the item names)

2. Click [Next].

#### Step 3 -- Layout Options (Trace Output Structure)

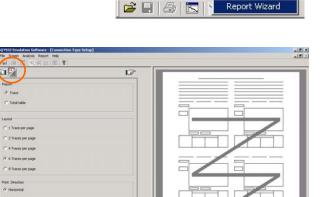


- 1. Select either 1way or 2way from the pull-down menu.
- 2. Select either screen or standard image of AQ7270/60 from the pull-down menu.
- 3. Fill the desired item fields in the [Trace Header] area as necessary.

You can change the item names by selecting from the pull-down menu.

4. Click [Setup].

	< UI 🙃 💡	
й 🎽 🗕 🔝	₹	1
Output Form	$\overline{}$	
Wavelength Number	1 Wavelength	
Direction	1way 💌	
Order of Trace Output		
Order of Output	In Core number Order	
Order of Event	In Core number Order	
2way Order	1Way and 2Way alternation 💌	
Trace Image		
Image	AQ7260 💌	
Addition of a Ever	nt Marker	
✓ Trace of each ever	nt is output.	
Trace Header		
Whole Trace		
Core No.	Whole Wave     Total Loss	-
1	1 1	
Event Trace		
Site	Event No. Measure Di	: 🗾
	Iter	n Edit
Total Loss		
Total Loss Calculation method	Loss between Marker 1 and 2	



Em AQ7932 Emulation Software

File Screen Analysis Report Help

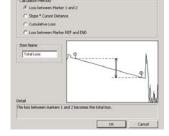
1	104		
	OTDR Measurement Result		
1°	Ben Lication	* Date	
	Location		
	Cable Type Cable Length	1000	
	Number of rivel event Number of ref.event	Operator	
	Date	-	_
	Operator Wavelength	Sharmer	
	Test tagenere	· Wavelength	
	Party if conferred	· Test Epigment	
	PARKE IS CHE AVES	T Les chapses	2
	Famber of ref.evert.	· Text Stel	
	Akeren .	and the second second	
	(fiote)	Test Ste2	2
		Copy from Tutal table 2h	ee.Edt

Nest Oose

	T	-
		-
		-10



- Select the calculation method of the total loss.
   Select the desired calculation method and click it. ("Loss between Markers 1 and 2" is most commonly used.)
- 6. Click [OK].
- 7. Click [Next].



10

#### Step 4 -- Trace File Selection



- 1. Set up the number of cores and the start core No.
- 2. Select the file format same as that of the waveform files.
- 3. Click [File Select].

- 4. Click [Folder Select].
- 5. Select the folder storing the waveform data you want to load.

Among the files in the folder, the files of the format specified in Step 2 above are displayed.

6. Click [Batch Set].

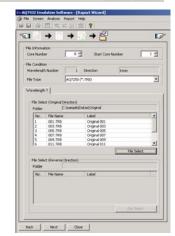
From among the selected waveform files, as many number of files as set in Step 1 are set.

7. Click [OK].

8. Click [Next].







#### Step 5 -- Master Event Position



This section describes the operation to set the event position (master) to be used as the reference for making a report.

The master event is set up by either of [File Open] and [Auto Generation].

If a measurement is made bidirectionally, the master events must be set up for both directions respectively.

The master setup by [Auto Generation] is used as an example in the following explanation.

dition | Search Condition | Analysis Condition |

\* \* \* \* \*\* [1 - 10] [1 - 100]

+ 🕅

Auto Resul

Original

Next Cancel

< >

[1-10]

OK Cancel - 🗆 🗵

(4`

neg otuA tre ration from Event Lis

aration from Auto Search

Wave 1

Direction Original Dire No. File Name

File Open File Name

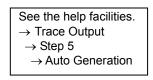
Auto Generation

003. 3

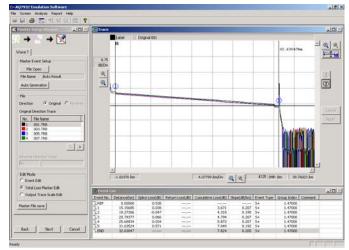
Event Edit Total Loss Marker Edit Output Trace Master File save

Back

- 1. Click [Auto Generation]. The [Event Auto Generation Setup] window will appear.
- Select [Generation from Auto Search]. Set up Search Condition and/or Analysis Condition as necessary.
- 3. Click [OK].



- 4. If a measurement is made bidirectionally, the master events must be set up for both directions respectively. Click [Reverse] in the [File] area, and then perform Steps 1 through 3.
- 5. Click [Total Loss Marker Edit]. (Not available if this setup is not necessary due to the total loss setup in the [ Step 3 -- Layout Options (Trace Output Structure)].)
- 6. Place the marker 1 at the start point of the fiber, and the marker 2 at the endpoint.
- 7. Click [Output Trace Scale Edit].
- 8. On the right side of the trace window, click [All] or click [Event] according to the desired vertical/horizontal scale and waveform display position. (If not set, the overall waveform will take the scale at the moment the file is saved, and the event waveform will take an automatically adjusted scale.)
- 9. Click [Next].



5

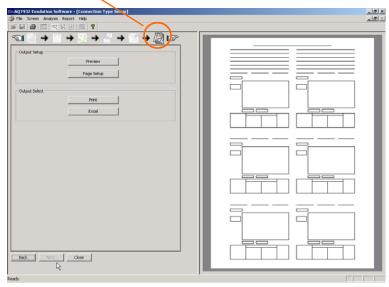
(7



#### Step 6 -- Output Setup



1. Click [Preview]. A printing screen will appear.

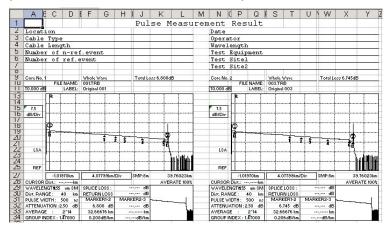


 Click [Print]. Printing will be performed. (You can perform enlargement of the screen display or other operations using other icons.)

Em AQ7932 Emulation Software - [Connection Type Setup]           Emint         Next Page         Prey Page         Iwo Page         Zoom In         Zoom Out         Close	
Print         Next Page         Prey Page         I wo Page         Zoom In         Zoom Out         Close	
	An and a second

3. Click [Excel].

The waveform will be output as an Excel file in the form of a report.



#### 3-2 Total Table Output

#### ◆ Launching the Report Wizard

- 1. Click [Report] in the menu.
- 2. Click [Report Wizard].

#### Step 1 -- Layout Selection

1. Click [Total Table]. A checkmark will be placed.

a 🔛

A-30/For 1way data: Loss and Return

- Select the combination of the data type (1way or 2way) and the item(s) to be displayed.
- 3. Click [Next].



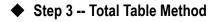
 Fill the desired item fields as necessary. (Up to 50 characters) You can change the title and the item names.

(Direct entry for the title; selection from the pull-down menu for the item names)

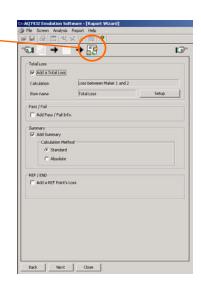
2. Click [Next].

AQ2932 Encodation Software In The Screen Academ Report	t mip			
	R 9 23 → 2	12		 
tele				 
OTCR Measurment Roout				 
Location	Date Date		F	
<b>F</b>				
Cable Type	Des stor			_
		_		
Cable Langth	Vavelength			
Number of nivel.event	Test Eggment			
Г <u>.</u>	1			
Number of ref.event	Test Stel	2		
(94/18)	Test Skeil	2		

Ø



- 1. Click [add a Total Loss]. (Mark the checkbox.)
- 2. Click the item(s) to be added to the total table as required. (Mark the checkbox.)
- 3. Click [Next].



### Em AQ7932 Emulation Software File Screen Analysis Report Help

\_8×

#### Step 4 -- Trace File Selection



- 1. Set up the number of cores and the start core No.
- 2. Select the file format same as that of the data files to be summarized.
- 3. Click [File Select].

- 4. Click [Folder Select].
- 5. Select the folder storing the waveform data you want to load.

Among the files in the folder, the files of the format specified in Step 2 above are displayed.

	Select (Orig	inal)	SOR (*.SOR)	
	ider Name Io. Elle F		Label	
Fle	Select (Rev	erse)		File Select
Fol	der Name	Ec) sample (0	Label	
				File Select

• 19

1

ø

folder Name	C:\sample\Data\Sample da	K82					Folder	Select
lle Type	SOR (*.SOR)			File :	Select (Original)			
File Name	Label			No.	File Name	Label		- 11
003.sor	Original 003 Original 005		Batch Set					
006.sor 007.sor 008.sor 009.sor	Reverse 005 Original 007 Reverse 007 Original 009		5et					
009-sor 011.sor 012.sor 014.sor	Original 009 Original 011 Reverse 011 Reverse 013		Gen H					
015.sor 016.sor	Original 015 Reverse 015		Gray					
	Total File Number	- 11				Total File N.	mber	
Option File Sort File Name Filt	Ascending Order     Asphy     W.     1300m	1.039	scending Order					
						ac.	1 4	ancel

 Click [Batch Set].
 From among the selected waveform files, as many number of files as set in Step 1 are set.



7. Click [OK].

File Condition Unexpon Direction Unexpon File Type File Type File Select (Chipting) Folder Name Critisenpelificate/Sample data2 File File Select (Chipting) File File Select (Chipting) File File Select (Theoreme)		· → · · ·	→ 👯 → 😤
None         Sole (*.5ck)           File Select (Original)         File Select (Signal)           Folder None         Citismple(Data)Sample data2           No.         File Same           1         003.ser           000.ser         Original 005           4         003.ser           000.ser         Departs 005           6         007.ser           6         Original 007           7         011.ser           Chank 001         11			8 👜 Start Core Number 1
None         Sole (*.5ck)           File Select (Original)         File Select (Signal)           Folder None         Citismple(Data)Sample data2           No.         File Same           1         003.ser           000.ser         Original 005           4         003.ser           000.ser         Departs 005           6         007.ser           6         Original 007           7         011.ser           Chank 001         11	File Cor	dition	
No.         Charmele/Data/Sample data2           No.         Feb Name         Label           1         00.5 or         Original 003           2         005.5 or         Original 003           4         00.5 or         Original 003           4         00.5 or         Original 007           6         00.5 or         Original 001           7         01.6 or         Original 001           11.6 or         Original 001           7         01.6 or         Original 001           7         01.6 or         Original 001           7         01.6 or         Original 001           11.6 or         Original 011         Original 011	Directio	n	Iway
No.         Charmele/Data/Sample data2           No.         Feb Name         Label           1         00.5 or         Original 003           2         005.5 or         Original 003           4         00.5 or         Original 003           4         00.5 or         Original 007           6         00.5 or         Original 001           7         01.6 or         Original 001           11.6 or         Original 001           7         01.6 or         Original 001           7         01.6 or         Original 001           7         01.6 or         Original 001           11.6 or         Original 011         Original 011	File Tvs		SOR (*.SOR)
Foldor Name         Colsemptification/Sample data2           No.         File Name         Label           1         003.sor         Organal 003           2         005.sor         Organal 003           3         006.sor         Organal 003           4         000.sor         Person 005           5         000.sor         Deverso 007           6         001.sor         Organal 001           7         011.sor         Organal 011			
No.         File Name         Label           1         0.00.scr         Orand 000	File Sek		
1         0.03.ser         Original 003           2         005.ser         Original 005           3         0.06.ser         Reverse 005           4         007.ser         Original 007           5         0.06.ser         Original 007           6         007.ser         Original 007           7         0.01.ser         Original 007           11.ser         Original 017           File Select         File Select           File Select Pharense)         File Select	Folder	Name C:\sample	(Data)(Sample data2
1         0.03.ser         Original 003           2         005.ser         Original 005           3         0.06.ser         Reverse 005           4         007.ser         Original 007           5         0.06.ser         Original 007           6         007.ser         Original 007           7         0.01.ser         Original 007           11.ser         Original 017           File Select         File Select           File Select Pharense)         File Select	No.	File Name	Label
2 005.507 Organi 005 3 005.507 Drugshi 005 4 000.407 Organi 007 5 000.507 Organi 007 5 000.507 Organi 007 2 011.607 Organi 011 			
3         000-sor         Review 005           4         007-sor         Organi 007           5         008-sor         Review 007           6         007-sor         Organi 017           7         011-sor         Organi 017           7         011-sor         Organi 017           7         File Select         File Select			
1 007.ser     1007.ser			
6 003 see Origina 009 2 013 see Origina 001 File Select (Reverse) Folder Name	4	007.sor	
2 011.6er Original 011 Plie Select Plie Select (Reverse) Folder Name	5	008.sor	Reverse 007
File Select. File	6	009.sor	Original 009
File Select (Reverse) Folder Name	2	011.sor	Original 011
Folder Name	-		File Select
Folder Name	et. e.t.		
No.   File Name   Label	Folder	Name	
	No.	File Name	Label

8. Click [Next].

#### Step 5 -- Master Event Position



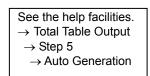
This section describes the operation to set the event position (master) to be used as the reference for making a report.

The master event is set up by either of [File Open] and [Auto Generation].

If a measurement is made bidirectionally, the master events must be set up for both directions respectively.

The master setup by [Auto Generation] is used as an example in the following explanation.

- 1. Click [Auto Generation]. The [Event Auto Generation Setup] window will appear.
- 2. Select [Generation from Auto Search]. Set up Search Condition and/or Analysis Condition as necessary.
- 3. Click [OK].



4. If a measurement is made bidirectionally, the master events must be set up for both directions respectively. Click [Reverse] in the [File] area, and then perform Steps 1 through 3.

- 5. Click [Total Loss Marker Edit]. (Not available when the checkbox of [add a Total Loss] has not been marked in [ Step 3 -- Total Table Method] because this setup is not necessary.)
- 6. Place the marker 1 at the start point of the fiber, and the marker 2 at the endpoint.
- (# X + 99 0 0 0 tion (F or 
   No.
   File Nat

   1
   003.80

   2
   005.91

   3
   006.92

   4
   007.9
   EdR Mude C Event EdR 4.07799 keyter @ 4 Master File save 0.195 5+ 0.195 5+ 0.190 5+ 0.196 R 4.559 7.002 8.069 Sad. Nent Canol

(5)

ion Condition Search Condition Analysis Condition

÷ % [1 - 10]

+ % + %

OK Cancel

< >

+ 🔀

Original

Back Next Cancel

´4`

[1 - 100]

[1 - 10]

Master Event Auto generation method Generation from Event List

Generation from Auto Search

Tolerance Section Dist.(2way)

+

Master Event Setup

File Open File Name Auto Result

Auto Generation

Direction Original Direction Trace 
 No.
 File Name

 1
 003.sor

 2
 005.sor

 3
 006.sor

 4
 007.sor

Edit Mode Event Edit Total Loss Marker Edit Master File save

Generation Condition Tolerance Section Dist

Uniformity

7. Click [Next].



### Step 6 -- Output Setup



- 1. Click [Preview].
- 2. Click [Print]. Printing will be performed. (You can zoom into the screen display using [Zoom In].)



				OIDK Mee	suremen	ement Result					
ation					Date						
le Typ					0040	ator					
le Len					Marrie	length					
	n-ref					Scalement					
ber of	t ref.e	vent				Site1					
No	». Г	2	1	7	2	1	SID				
onne	ctior	I	3	7			ND.				
Dist	ction 19.	7 94538	11.6	1 4908	1.0	4418	c 				
Dist	ction 19.	7 94538 pliceLoss	11.6 leturnLoss	4908 spliceLoss	1.0	4418	eturnLos				
Conne Dist Loss	ction 19. Typel	7 94538 pliceLoss 0.221	11.6 leturnLoss	7 4908 011ceLoss 0.862	1.0- NeturnLoss	4418	eturnLos < 28.113				
Conne Dist Loss 1 2	ction 19. Typel	7 94538 pliceLoss 0.221 0.104	11.6 leturnLoss *	4908 SpliceLoss 0.862 0.625	1.0- NeturnLos -	4418	<pre>ceturnLos &lt; 28.113 &lt; 20.049</pre>				
Conne Dist Loss 1 2 3	ctior 19. Types	94538 pliceLoss 0.221 0.104 0.010	11.6 leturnLoss •	r 4908 6pliceLoss 0.862 0.625 0.269	1.0 NeturnLoss -	4418 SpliceLos:	<pre>c c teturnLos &lt; 28.113 &lt; 20.045 &lt; 32.495</pre>				
Conne Dist Loss 1 2	ctior 19. Types	7 94538 pliceLoss 0.221 0.104	11.6 leturnLoss *	1 4908 6pliceLoss 0.862 0.625 0.269 0.550	1.0- NeturnLos -	4418 SpliceLos	<pre>c teturnLos &lt; 28.113 &lt; 28.045 &lt; 32.498 &lt; 29.545</pre>				
Conne Dist Loss 1 2 3	ctior 19. Types	94538 pliceLoss 0.221 0.104 0.010	11.6 leturnLoss •	r 4908 6pliceLoss 0.862 0.625 0.269	1.0 NeturnLoss -	4418 SpliceLos:	<pre>deturnLos &lt; 28.113 &lt; 20.045 &lt; 32.498 &lt; 29.545 &lt; 32.873</pre>				
Conne Dist Loss 1 2 3 4 5 6	ctior 19. Type) 1 2 3 4 5	94538 pliceLoss 0.221 0.104 0.010 -0.150 -0.019 0.100	11.6 leturnLoss * * * *	4908 (pliceLoss 0.862 0.625 0.269 0.550 0.391 0.667	1.0 heturnLoss * * *	4418 SpliceLoss • • •	<pre>c c teturnLos &lt; 28.113 &lt; 20.049 &lt; 32.493 &lt; 29.540 &lt; 32.873 &lt; 29.060</pre>				
Conne Dist Loss 1 2 3 4	ctior 19. Type) 1 2 3 4 5	7 94538 pliceLoss 0.221 0.104 0.010 -0.150 -0.019	11.6 leturnLoss * * * *	4908 pliceLoss 0.862 0.625 0.269 0.550 0.391	1.0 ReturnLoss * *	4418 SpliceLoss	<pre>deturnLos &lt; 28.113 &lt; 20.045 &lt; 32.498 &lt; 29.545 &lt; 32.873</pre>				

En AQ7932 Emulation Software - [Raport Wizard]

3. Click [CSV].

<Sample CSV Output Display>

	A1	▼ fx	Comm	ent								
	A	В	С	D	E	F	G	н		J	K	L
1	Comment	SAMPLE		Title	OTDR Mea	asurement	Result					
2	Direction	1Way		Location		Date						
3	RL Meas	on		Cable Type	е	Operator						
4	Cores	8		Cable Len	qth	Wavelengt	h					
5	Unit	km		Number of	n-ref.event	Test Equip	ment					
6				Number of	ref.event	Test Site1						
7						Test Site2						
8												
9												
10												
11		Event No.		F1	F1	F2	F2	END	END		Total Loss	Total Loss
12		Event type		n	n	n	n	С	С			
13		Factor		SpliceLos	ReturnLos	SpliceLos	ReturnLos	SpliceLos	ReturnLoss		Distance	Loss
14		Site		1	1	1	1	1	1			
15		Distance		19.94538	19.94538	11.64908	11.64908	1.04418	1.04418			
16	Core No.											
17		1		0.221	*	0.862	*	*	< 28.113		32.63863	8.042
18		2		0.184	*	0.625	*	*	< 28.849		32.63863	7.754
19		2		0.01	*	0.269	*	*	< 32.495		32,63863	7.33
20		4		-0.15	*	0.558	*	÷	< 29.545		32,63863	7.409
21		5		-0.019		0.391		*	< 32.871		32,63863	7.125
22		6		0.1		0.667		*	< 29.368		32,63863	7.422
23		7		-0.134		0.791		*	< 28.608		32.63863	7.955
		8		-0.05		0.18		÷	< 32.215		32,63863	7.444
24 25				0.00		0.10						

4. Click [Excel].

<Sample Excel Output Display>

	A1		-		fx.																	
	A	В	C	D	E	F	G	Н	1	J	K	L	M	N	0	Ρ	Q	R				
1							0	TDR	Me	asu	irer	nent	Re	sul	t		1					
2	Locatio	n										Date										
3	Cable 1	Гуре		1 1				1				Operat	or	1								
4	Cable L	ength		1				1				Wavele	ngth	1								
5	Numbe	r of n-r	ef.event	. 1				1				Test E	quipme	nt								
6	Numbe	r of ref.	event	1. 1				1				Test Si	te1	1								
7				1				1				Test Si	te2									
8																						
9	Co	ore			Splice Loss and Re							Loss [d	в]									
10	N	о.		F	F1 F2			Ef	ND .	0												
11	Conn	ection		, i	1			0	٦		0		>	j)			×1					
12	Dist		19.9453	3		11.64	908	1		1.04	4418					_						
13	Loss	Туре	Splic	eLoss	ReturnLoss		ReturnLoss		oss SpliceLoss		ReturnLoss		SpliceLoss		eLoss ReturnLoss		ReturnLoss			_		
14		1 0.2		0.221	83		0.862		8	1. B		3	< 28.113			_						
15	2			0.184	83			0.625	8				< 28.849									
16		3		0.010	83			0.269	8			5		32.495		_						
17		4		-0.150	83			0.558	3					29.545								
18		5		-0.019		8 <b>5</b> - 1		0.391						32.871								
19		6		0.100	83			0.667	8			<b>.</b>	<	29.368								
20	1	7		-0.134	83			0.791	8			3	<	28.608								
21	1	3		-0.050	83	5		0.180	a a a a a a a a a a a a a a a a a a a			1	) Sa	32.215								

#### Setting Up the Standard Values

Set up the standard values for Splice Loss, Reflection, and Return Loss. A value deviating from the standard value is displayed in red. (NG judgment) The number of totals of NG is displayed.

1. Click [Total Table Edit].

	Title Edit									
Connectior Dist	S	F1 n		F2		END		Total	Loss	
				n	n		c	Distance	Loss	NG Number(Total)
	19.94538		11.64908		1.04418				SpliceLoss	
1		0.221	W.	0.862	<u>#</u>	Ŵ	< 28.113	2.63863	8.042	
2		0.184	ŵ	0.625	ŵ	ŵ	< 28.849	2.63863	7.754	ReturnLoss
3		0.010	ŵ	0.269	ŵ	Ŵ	< 32.495	2.63863	7.330	
4		-0.150	ŵ	0.558	ŵ	Ŵ	< 29.545	2.63863	7.409	
5		-0.019	ŵ	0.391	ŵ	Ŵ	< 32.871	2.63863	7.125	Search
6		0.100	ŵ	0.667	<u>*</u>	Ŵ	< 29.368	2.63863	7.422	
7		-0.134	ŵ	0.791	ŵ	Ŵ	< 28.608	2.63863	7.955	Connection Type Setu
8		-0.050	Ψ.	0.180	Ŵ	w.	< 32.215	2.63863	7.444	Exit

See the help facilities.  $\rightarrow$  Total Table Output  $\rightarrow$  Step 6  $\rightarrow$  Total Table Edit

2. Click [Connection Type Setup].

Standard									Limits Setup -	
Connection Type Name	Splice Loss			Reflection			Return Loss		Standard1	
n c	-	0.70 -	dB dB	20.00		dB	6.50	dB	C Standard2	
		0.00	dB	ſ	고 0.00 문	dB	0.00	dB	C Standard3	)
		0.00 *	dB	Γ	0.00	dB	0.00	dB		
		0.00 -	dB	Γ	0.00	dB	0.00	dB		
		0.00 *	dB	Γ	0.00	dB	0.00	dB		
		0.00	dB	Γ	0.00 -	dB	0.00	dB		
		0.00 -	dB	Γ	0.00 로	dB	0.00	dB		
2		0.00 -	dB		0.00 -	dB	0.00	dB		
		0.00 🚽	dB		0.00	dB	0.00	dB	ОК	Cancel

Set up the connection type name (splice, connector, n, c) of the event and these standard values.

The NG judgment is performed based on the standard values set up here. You can store up to three combinations of standard values.

See the help facilities.
ightarrow Total Table Output
$\rightarrow$ Step 6
ightarrow Total Table Edit
$\rightarrow$ Connection type setup

### Chapter 4 Troubleshooting

#### 4-1 Troubles Related to Waveform Analysis

- (1). It is difficult to place the cursor correctly on an event point on the trace screen.
  - $\rightarrow\,$  Click the event number in the event list. The cursor correctly falls on the corresponding event point on the screen.
- (2). Tried to click and drag a displayed event mark, but it would not move.
  - → Click the event mark, and click and drag the circle of the marker 2. The marker 2 will turn red. After moving, click the confirm button Apply
- (3). Tried to click and drag a marker, but it would not move to the destination.
  - → The movable range of the markers is limited. Markers can move in the range of 1 < Y1 < Y3 < 2 < Y2 < 3.</p>
- (4). When two or more number of waveforms are displayed, it is difficult to distinguish each waveform because they are overlapping one another.
  - → Change the waveform offset display value at the upper left of the trace screen by clicking the ▲ and ▼ buttons. With the current waveform as the center, other waveforms will vertically scroll.

#### 4-2 Troubles Related to Making a Report

- (1). Cannot capture the bidirectional data during output of waveform or total table.
  - $\rightarrow$  Separate the folder to store the original-direction file and the reverse-direction file.
- (2). The master file cannot be loaded.
  - → The master file must have the file format and the measurement conditions (wavelength) identical to those of the waveform file to be output. Check them.
- (3). Wish to hide the cursors or markers when outputting waveforms.
  - → Cursors and markers cannot be deleted during output of reports. Delete cursors and markers in normal analysis, resave (overwrite) the data, and create the report again.
- (4). Wish to change (set) the cursor position when outputting waveforms.
  - $\rightarrow$  Perform one of the following procedures.
  - 1. Move (or set the position of) the cursor in normal analysis, resave (overwrite) the data, and create the report again.
  - Set the waveform header to [Total Loss] and the total loss calculation method to [Slope \* Cursor Distance], then change the cursor position under [Total Loss Marker Edit] in the master setup screen.

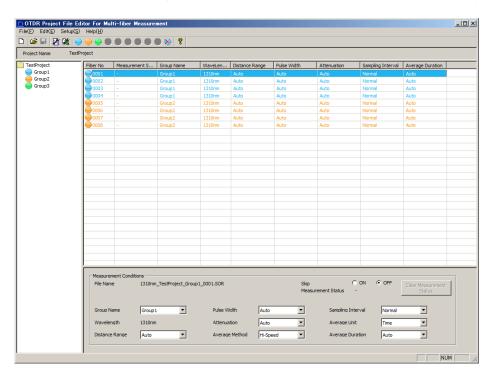
(Note that this method cannot be used if total loss is not used.)

### Chapter 5 Related Software

#### 5-1 OTDR Project File Editor

OTDR Project File Editor is software that supports the Yokogawa OTDR (AQ7270 series version 2.03 or later), and enables you to easily create files in Windows for the multicore fiber measurement function.

To start the software, double-click the icon created upon installation, or from the Windows [Start] menu click All programs > AQ7932 Emulation Software > OTDR Project File Editor.



For detailed operating instructions, refer to the Help file that comes with the software.