

OTDR Trace Manager Software

User's Manual

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1. Introduction

Thank you for choosing Shineway Technologies.

OTDR Trace Manager software is a special application developed for OTDR. It allows the previously stored measurement records in the instrument to be uploaded to a PC to be displayed, saved or printed. Users are provided with convenient data management function, including editing, browsing, saving, backup, printing and ASCII format output.

2. Software installation

2.1 Computer system requirement

Requirements for operating system and hardware:

- Operating System: Microsoft Windows 98/2000/xp/VISTA/WIN7/ WIN8/ WIN10
- Internal memory: 64MB or above
- Hard disk: 40 MB or above (Space available)
- CD-ROM driver: 8 speed or above
- 9 pin series port or USB port

2.2 Software installation

- 1) Start Windows
- 2) Exit all other running applications, if windows is currently running
- 3) Insert the installation disk into CD-ROM, choose to enter into the Trace Manager file
- 4) Double click setup.exe to install
- 5) Follow the instructions of installation wizard step by step till installation completed

3. Software GUI

3.1 GUI

After installation of OTDR Trace Manager software, click run, and the GUI will be as follows:

Parameters 🗆 🔍 🛛
Marker Inf 🗆 🛛 🔀
Total Fiber 🗖 🔲 🖾
T

Figure 3.1

Contents of GUI: menu, tool bar, trace display window (spectral line), events list window (Events Table), measurement and analysis parameter window (Parameter Sheet), fiber information window (fiber section information), information window of fiber chain. (information of fiber chain) and status bar.

3.2 Menu, tool bar and status bar

Main GUI of OTDR Trace Manager software is as in Figure 3.1. The menu bar includes: file, edit, view, window and help five items.

Tool bar is right below menu bar. Use mouse pointer to highlight menu bar and operation reference will pop up. To display tool bar or not is controllable. Click "show toolbar" of menu "view" and tool bar display will switch between on and off. Tool bar is actually shortcut keys to complex operation. All the functions on tool bar can be realized through menu operation, however in a more complicated way. The tool bar operation is much easier and more convenient.

Status bar is at the very bottom of GUI, to display information or reference of the current menu or tool bar application. Status bar is a briefing of the current menu application or the function of tool bar. Users can have a basic understanding of the current application.

3.2.1 File

Menu "File" is as in Figure 3.2. Functions can be realized under "file" menu: upload trace file, open file, save opened file, ASCII format output, printing configuration, printing preview, printing, batch print preview, batch print, batch edit and exit application.

OTDR Trace Manager - []	Hala	
Upload Trace File	пер	1 12 12 13 14
Open Multi-traces	Ctrl+O	Parameters C C X
Save Save As	Ctrl+S	
ASCII Export		
Print Option Print Preview Print Setup		
Print	Ctrl+P	🛢 Marker Inf 🗖 🔲 🔀
Batch Print Preview Batch Print Batch Edit		
Exit		
1 E:\liyun\\dtfw_1310_20vc 2 E:\liyun\\jijd_1310_20vc 3 sh_5-5-30-1550_0001 4 sh_2.5-5-30-1550_0001		s[d Attn.[dB/km] Cum.Loss[Dist.Prev.[km] Dist.Enc
• • • • • • • • • • • • • • • • • • •		· · · · · · · · · · · · · · · · · · ·

Figure 3.2

3.2.2 Edit

"Edit" menu is as in Figure 3.3. Users can edit events list through "edit" menu: add event, delete event and edit information of optic fiber. Information of optic fiber is explanatory text relating to trace file that users type in. For each measurement, users can save measurement trace with palmOTDR. This software has provided users an interface for text input. For each trace file, users can input relating information (No. of cable, No. of fiber, type of fiber, beginning of fiber, end of fiber, manufacturer and measuring people). With this information, users can identify the corresponding relations between trace file and fiber chain.

📮 si	ShinewayTech OTDR Trace Manager - []										
File	Edit	View	OTDR \	Nindow He	elp						
1		Add Ev	ent		at 15 I	10, m, mi	↔ 🥊 1	2 3 4			
P		Delete I	Event								Parameters 🗆 🖾 🖾
Ē		Edit Tra	ce Inform	ation							
											Marker Information
P	Event	Table									📮 Total Fiber Inform 👝 🔲 🕱
No	. Т	уре	Locati	Refl.[dB]	Ins.Loss[d	Attn.[dB/km]	Cum.Loss[Dist.Prev.[km]	Dist.End[km]	Loss Prev.	
								-			
	_									4	J

Figure 3.3

3.2.3View

"View" menu is as shown in Figure 3.4. This menu is to control on and off of tool bar, status bar, marker operation, trace display: zoom in and out horizontally and vertically, and the display style of trace. A trace is composed of many dots. If users need to review details of trace, they can zoom in and out trace horizontally and vertically.

Trace display style refers to: trace can be displayed in dots or line; parting line displays or not; parting line can help users to read numbers vertically or horizontally; event status bar displays or not, with which users can know type of events easily.

¢ c	OTDR Trace Manager - []										
File	ile Edit View OTDR Window Help										
B	😅 🚔 🚺 Show Toolbar 👔 🎝 🙀 🐜 🕫 🖌 🚧 🥵 1 2 3 4										
	Trac		Show Statu	s Bar							Parameters
ĿĔ	mac		Lock Marke	er A B							
			Zoom out								
			View Full Tr	race							
			Analyze Ins	ertion Loss							
			Analyze Re	flectance							
			Length Unit	ts							
			View Prefer	rences							
		_									📮 Marker Informati 🗖 🔲 🔀
É											·
9	Ever	nt Table	Э								📮 Total Fiber Infor 👝 😐 🕺
N	o.	Туре	Locati	Refl.[dB]	Ins.Loss[d	Attn.[dB/km]	Cum.Loss[Dist.Prev.[km]	Dist.End[km]	Loss Pr	
	_										
114		_								4	
											11

Figure 3.4

3.2.4 OTDR

"OTDR" menu is as shown in Figure 3.5-1. This menu is to control reanalyze events and pass/fail threshold .

Ó) Shi	newayTech (OTDR Trac	e Manager	- 0						
Ī	ile	i De C	Trac	e Reanalysis	;	ta ta == +1	⊷ ? 1	2 3 4	-		
ſ	📮 т	race	Pass	s/Fail							Parameters 🗆 🖾
											Marker Informati
	_										
Ľ	Щ E	vent Table									Total Fiber Infor
	No.	Туре	Locati	Refl.[dB]	Ins.Loss[c	d Attn.[dB/km]	Cum.Loss[Dist.Prev.[km]	Dist.End[km]	Loss Pr	
L	•					III				•	/
L											h.

Figure 3.5-1

If users need to change some parameters to suit for the fact requirement, they can click "Trace Reanalysis" and then resetting the parameters, as shown in Figure 3.5-2:

Trace Reanalysis									
Acquisition Fiber Settings									
WaveLength	850nm		•						
IOR	1.496			Default					
Scat. Coef(dB)	Scat. Coef(dB) -36								
Analysis Paramete	rs	0.2	ar	Default					
		0.2	ш.	Deraurt					
Keflection Ihres	nold	-56	dB	Default					
End Threshold		3	dB	Default					
Apply Cancel									
	Figu	re 3.5-2							

Pass/Fail threshold: Users can set up pass/fail threshold to analyze whether the relevant parameters in the trace information overload. If it is beyond the threshold, it will be displayed in red to alarm users. The Pass/Fail threshold is shown in Figure 3.5-3.

Pass/Fail Threshold	
Wavelength 1300	
🔽 All select	
Ins.Loss	0.000 dB
🔽 Connector Loss	0.000 dB
✓ Relf	0.000 dB
🔽 Atte.	0.000 dB/km
🔽 Link loss	0.000 dB
🔽 Link ORL	0.000 dB
	Default
ОК	Cancel

Figure 3.5-3

3.2.5 Window

"Window" menu is as in Figure 3.6. This menu is mainly designed to control the display of sub windows in Figure 3.6 (Trace window, events table window, parameter window, information of fiber chain). Tile function can display sub windows in a layout as in Figure 3.6. Other sub menus take selected window as current active window.

Ŵ	OTD	R Trace M	anager -	0										
Fi	e E	dit View	OTDR	Wir	ndow) He	elp								
	2 é	ì 🖬 B	. 6		Cascade	•		HL.	→ ? 1	2	3 4	-		
	🖡 Tra	ice		✓	Trace	L.						• 8	Parameters	
					Paramet	ters								
					Marker	Information								
					Total Fil	per Informatio	n							
				_										
													P	
Ш													🖨 Marker Inf	
	Eve	ent Table											📮 Total Fiber	
	No.	Туре	Locati	. R	efl.[dB]	Ins.Loss[d	Attn.[dB/k	:m]	Cum.Loss[Dist.Pr	ev.[km]	Dist.Enc		
	_													
	•		_	-				_				F.	1	
														//

Figure 3.6

3.2.6 Help

"Help" menu is as in Figure 3.7. This menu displays the version of the software.

OTDR Trace Manager - [] File Edit View OTDR Window H	elp		
jø	About OTDR Trace Manager	1 2 3 4	
Trace			Parameters
			Marker Inf
Present Table No. Type Locati Refl.[dB]	Ins.Loss[d Attn.[dB/km] Cu	m.Loss[Dist.Prev.[km] Dist.Enc	Total Fiber
	m	Þ	

Figure 3.7

3.3 Information sub window

3.3.1 Trace display window

Click "Open..." under "File" menu to open a trace file, and trace curve will display in the trace display window, as in Figure 3.8. The x-axis stands for distance (unit: km); y-axis stands for backward scatter power (Unit: dB). There are A, B two markers, and click either one to activate it. Use mouse pointer to click and drag marker to move the marker, and position information will change accordingly. By moving marker, horizontal distance and vertical power can be read manually. Zoom in and out of trace actually depends on the activation of marker. In the following figure, the straight line stands for normal optic fiber, and peaks are reflection events in fiber chain. The sudden descend at the end of trace stands for the end of optic fiber. After the end, it's noise. The very bottom of the figure is event property signal which explains the event type.



Figure 3.8

3.3.2 Events list window

Trace data collected by palmOTDR will be processed automatically and analysis results display in event list, as in Figure 3.9.

Ģ	Event Table											
N	o.	Туре	Locati	Refl.[dB]	Ins.Loss[d	Attn.[dB/km]	Cum.Loss[Dist.Prev.[km]	Dist.Enc			
	1	⊢ Start	0.00000	-47.840	-,	-,	-,	-,	4.34907			
	2	ዲ Refl.	2.16049	-46.292	15.113	0.325	0.707	2.16049	2.18858			
	3	H End	4.34907	-14.415	-,	0.651	17.248	2.18858	-,			
	_											
14												

Figure 3.9

Introduction of items in events list: No.: sequence of event happened in optic fiber chain; Type: beginning, end, reflection and non reflection event; Distance: distance from OTDR to event point; Reflection value: value of reflection event; Insertion loss: vertical decline of dB; Attenuation coefficient: Value of attenuation per kilometer between current event point and previous event point in optic fiber chain;

Cumulative loss: dB value of loss from 0km to current event point;

Dist. Prev.[km]: the distance from the previous event;

Dist. End. [km]: distance from the end event;

Comment: Notify other detail of the event.

3.3.3 Parameter window

Parameter window displays measure environment of current displayed trace, including measurement parameters and analysis parameters. Measurement includes range, pulse width, average time and wave length. Analysis parameter includes IOR, scattering coefficient, end threshold, non reflection threshold, reflection threshold and samp.dist. For meanings of those parameters, please refer to *User's manual for palmOTDR*. Parameter window is as in Figure 3.10.

🛱 Parameters 🗌	
Range :	10.0 km
PulseWidth :	300 ns
Wavelength :	1310 nm
IOR :	1.46740
Scatter Coef. :	-49.6 dB
Average Time :	00:01:06
End Threshold :	30.000 dB
NRefl. Threshold	0.500 dB
Refl. Threshold	-65.000 dB
Samp. Dist:	2.55 m

Figure 3.10

3.3.4 Information window of fiber section

This window is as in Figure 3.10. It displays the distance between marker A and B, attenuation coefficient, and loss information. Two points loss is the difference of vertical power between marker A and B. two points attenuation is two points loss of marker A and B divided by horizontal distance of marker A and B.

🛱 Marker Inf (
A-B:	2.58697 km
2pt. Loss:	16.740 dB
2pt. Attn.:	6.471 dB/km
LSA Attn.:	9.083 dB/km
Ins.Loss at A:	-6.006 dB
Refl. at A:	-80.453 dB
2pt. ORL:	37.815 dB
Cum.Loss to A	17.232 dB
J	

Figure 3.11

3.3.5 Information window of fiber chain

Information window of fiber chain is as in Figure 3.12. Contents display here are: date of

measurement, length of fiber chain, loss of fiber, attenuation, and events number of fiber.

🛱 Total Fiber	
Measure Date:	11/05/2012 15:
Total Length:	4.34907 km
Total Loss:	17.247 dB
Total Attn.:	3.966 dB/km
Total ORL:	16.556 dB
Event Number:	3
1	

Figure 3.12

4. Software functions

4.1 Upload trace data

Saved traces can be uploaded to PC via serial port cable or USB cable.

- Upload traces through USB interface cable:
 - 1. Connect PC and palmOTDR with USB interface cable;
 - 2. Power on palmOTDR;
 - 3. Click "Computer" on PC, find the "removable disk" and click it then enter into the "trace" document folder which saved measurement traces, you can freely copy, paste or delete them.
- Upload with RS232(or USB) interface cable(suit for below V6.07 of instrument software version, at the same time you must install USB driver on your PC when you want to upload via USB interface cable.):
 - 1. Install the software, and run
 - 2. Power off palmOTDR

- 3. Connect palmOTDR to PC through RS232(or USB) interface cable
- 4. Power on the instrument, and run OTDR Trace Manager software. Under menu "file", select "Upload trace file…", interface will be as in Figure4.1, choose communication port(USB/RS232), and click "OK", choose the saved position of traces, and then start uploading data.

Note:

OTDR Trace Manager - []		
File Edit View OTDR Wind	dow Help	
Upload Trace File		12 월 🛰 🕫 📔 🤋 🕹 🕹
Open	Ctrl+O	
Multi-traces	۰.	
Save	Ctrl+S	
Save As		
ASCII Export		
Print Option		
Print Preview		
Print Setup		
Print	Ctrl+P	
Batch Print Preview		
Batch Print		
Batch Edit		
Exit		
1 Shine cto2 r20km 1us 1/	525	Attn.[dB/km] Cum.Loss[D

Communicatio	ons Setting	5	—
Port	RS232	•	OK
RS232	COM1	-	Cancel
BaudRate	115200	-	
DataBit	8	-	
Parity	NONE	-	
StopBit	1	-	



Figure4.1.

4.2 Browse Traces

4.2.1 Tool bar



Move mouse pointer to tool bar, and reference of buttons will pop up. Their functions are:

- 1. Open file
- 2. Save file
- 3. Printing preview
- 4. Printing
- 5. Edit information of optic fiber
- 6. Zoom in trace horizontally
- 7. Zoom out trace horizontally
- 8. Zoom in trace vertically
- 9. Zoom out trace vertically
- 10. Full screen
- 11. Analyze insertion loss (the five-point measurement to test the Insertion loss)
- 12. Analyze reflectance
- 13. Lock marker A and B
- 14. Display version

4.2.2 Open trace file

Select "Open trace file..."under "File" menu, and choose the trace file to be reviewed, as shown in Figure 4.2. If the layout of sub windows is irregular, select "Tile" under "Window" menu, and the sub windows will automatically rearrange as shown in the following figure.

File E	DR Trace M dit View	Aanager - I OTDR N	le:\liyun\1_1 Mindow H	6_1310.sor) elp ටි. ිරි. 10	. 12 1	H ? 1	2 3 4	1				
🛡 Tr	ace 1.05	om/Div 6	.0 dB/Div									Parameters
		8	1.47353 km	n	A 3.654							Range : 10.0 km PulseWidth : 300 nm Wavelength : 1310 nm D0R : 1.46740 Scatter Cost : 49.6 dB Average Time : 00:01:06 End Threshold : 30.000 dB WRefl. Threshold : 50.000 dB Samp. Dist : 2.55 m Marker Information -65.000 dB Arb: 2.55 m Qut. Long: 16.501 dB 2pt. Attn.: 7.566 dB/km L54 Attn.: 10.653 dD/km L54 Attn.: 10.653 dD/km Ferl. at A: -9.11 dB Refl. at A: -9.13 dD
ŀ			-∕€			4		<u> </u>	1 11	1	· · · ·	Cun.Loss to A 17.055 dB
Ev No. 1 2 3	ent Table Type ⊢Start A. Refl. I End	Locati 0.00000 2.16049 4.34907	Refl.[dB] -47.840 -46.292 -14.415	Ins.Loss[d	Attn.[dB/km] -, 0.325 0.651	Cum.Loss[0.707 17.248	Dist.Prev.[km] 2.16049 2.18858	Dist.End[km] 4,34907 2,18858	Loss Prev.[dB]	Comment		Total Fiber Information Image E3 Wensure Date: 11/00/2012 15:57:17 10

Figure 4.2

4.2.3 Zoom in and out of trace

As shown in Figure 4.2, trace curve displays in trace window. Users can proceed on the following operations of trace so as to review details of it.

First, Drag marker to trace detail to be reviewed, then:

Zoom in trace horizontally: Select "Zoom in trace horizontally" on "window" menu or click on the tool bar.

Zoom out trace horizontally: Select "Zoom out trace horizontally" on "Window" menu or click on tool bar

Zoom in trace vertically: Select "Zoom in trace vertically" on "Window" menu or click It on the tool bar

Zoom out trace vertically: Select "Zoom out trace vertically" on "Window" menu or click for the tool bar.

Full screen: Select "Full screen" on "Window" menu or click An on the tool bar

Note: 1) Zoom in or out of trace all centers on the activated marker.
2) The software supports floating menu operation, right click mouse on Spectral line window, operations can be performed will display. In this way, zoom in and out of trace can also be realized.

4.2.4 Review trace information

Trace information includes: trace measurement parameter, analysis parameter, information of fiber section, information of whole fiber chain, and events list.

4.2.4.1 Trace parameter

As shown in Figure 4.3, measurement parameter and analysis parameters display in parameter window.

🛱 Parameters	
Range :	10.0 km
PulseWidth :	300 ns
Wavelength :	1310 nm
IOR :	1.46740
Scatter Coef.	: -49.6 dB
Average Time :	00:01:06
End Threshold	: 30.000 dB
NRefl. Threshold	d 0.500 dB
Refl. Threshold	d -65.000 dB
Samp. Dist:	2.55 m



🖨 Marker Inf	
A-B:	2.58697 km
2pt. Loss:	16.740 dB
2pt. Attn.:	6.471 dB/km
LSA Attn.:	9.083 dB/km
Ins.Loss at A:	-6.006 dB
Refl. at A:	-80.453 dB
2pt. ORL:	37.815 dB
Cum.Loss to A	17.232 dB

4.2.4.2 Information of fiber section

Figure 4.4

Distance between marker A and B should be considered as one section of optic fiber. Its information is as in Figure 4.4.

4.2.2.3 Information of whole fiber chain

Distance from beginning to end should be considered as a fiber chain, as in Figure 4.5.

🛱 Total Fiber	
Measure Date:	11/05/2012 15:
Total Length:	4.34907 km
Total Loss:	17.247 dB
Total Attn.:	3.966 dB/km
Total ORL:	16.556 dB
Event Number:	3
1	

Figure 4.5

4.2.2.4 Review events list

The trace curve is declining at a fixed slope. Any sudden peak or descend should be considered as an event. palmOTDR process measured data automatically and create events list, as shown in Figure 4.6.

For details relating to events list, please refer to chapter 3.3.2 events list window.

¢	Eve	ent Table							• 🕺
N	о.	Туре	Locati	Refl.[dB]	Ins.Loss[d	Attn.[dB/km]	Cum.Loss[Dist.Prev.[km]	Dist.Enc
	1	⊢ Start	0.00000	-47.840	-,	-,	-,	-,	4.34907
	2		2.16049	-46.292	15.113	0.325	0.707	2.16049	2.18858
	3	H End	4.34907	-14.415	-,	0.651	17.248	2.18858	-,
	_								
14									•

Figure 4.6

4.3 Save trace

Users can save opened trace file as other file. Click "save trace file" under "File" menu to save trace with old file name. Click[save as ...] under [File] menu to save trace with a new file name.

4.4 ASCII format output

The format of OTDR Trace Manager software file is not open to the public, therefore, no third party software can open a OTDR trace file. OTDR Trace Manager software provides a third party software interface. Data can be exported in ASCII format, then users can use a third party application to open and review the data.

Select "ASCII format output" under "File" menu, as in Figure 4.7. information and format can be selected, press "Enter" to choose save path and file name.



Figure4.7

4.5 Edit information of optic fiber

Select "Edit information of optic fiber" under "edit" menu, or click to start editing information of optic fiber, as shown in Figure 4.8. Information of optic fiber is a description of measurement trace displayed in trace window. Users input relevant information for efficient management and mark of measurement files. Upon completion of editing, press "Enter" to confirm.



Figure 4.8

4.6 Revise events list

The situation of field measurement is ever changing, therefore, palmOTDR analysis software can not guarantee every analysis is correct. The software provides an interface for users to revise events list, for example add event and delete events.

4.6.1 Add event

If a event on measurement trace is not listed in events list, due inaccuracies caused by all kinds of reasons (poor SNR, inadequate parameter configuration, or bugs of the software itself). In this case, user can use the function of "add event", to manually add this event into events list. First, click this

button " To enable five-spot; Second, move the marker and the 4 point to the right position; Third, click the "Add Event", which is in the "Edit", as in Figure 4.9; And then, all the information of this event are calculated by the software, and then press OK to add new event.



Figure 4.9

4.6.2 Delete event

If an event is not on the measurement trace is listed in events list, due inaccuracies caused by all kinds

of reasons (poor SNR, inadequate parameter configuration, or bugs of the software itself). In this case, user can use the function of "delete event", to manually delete this event from events list. Highlight the event to be deleted, and then select "Delete event" under "Editing" menu. User chooses the type of event, and type in event features, then press "Enter" to add event to events list. Or, right click on events to be deleted, a floating menu pops up, as in Figure 4.10. The revision can also be realized.



Figure 4.10

4.7 Printing

4.7.1 Printing options

Select "Printing options..." under "File menu", as shown in Figure 4.11, users can select contents to be printed.

Note: The Multi Trace is that the number the the trace in one paper.

Ψ	race 1.	.05 km/Div	6.0 dB/Div								8	Parameters	
			3 1.47353 kr	n			Print Option F Trac Trac S Trac S S F Trac S S F Trac S S F Trac S S F Trac S S S F Trac S S S S S S S S S S S S S S S	s e Informatio how Grid how Marker r Info t Table er Info	G Wormal (Visable Trace (Multi Trace Cancel			Renge : 10.0 km PulseWidth : 300 ns Wawelength : 1310 nm 10K : 1.46740 Scatter Coef. : -49.6 dD Average Time : 00.01:06 End Threshold : 30.000 dB DRefl. Threshold - -66.000 dB Smap. Dist: 2.55 m Marker Information A=9: 1.47353 km 2pt. Loss: -30.085 dB 2pt. Loss: -30.085 dB 2pt. Attn.: -20.411 dD/Am 2pt. 0.922 dW/Am 1.7.400 dB Refl. at A: -47.7.400 dB 2pt. OB; 39.647 dB Cum.Loss to A dB	
ф в	vent Tab	ole										Total Fiber Information	
No.	Туре	Locati.	. Refl.[dB]	Ins.Loss[d	Attn.[dB/km]	Cum.Loss[Dist.Prev.[km]	Dist.End[km]	Loss Prev.[dB] C	omment		Measure Date: 11/05/2012 15:5	7:17
2	F St	art 0.0000 A 2.1604	0 -47.840	15.118	0.825	0.707	2 16049	4.34907	0.780			Total Length: 4.34907 km	
-	H Er	nd 4.3490	7 -14.415		0.651	17.248	2.18858		1.421			Total Attn : 3.966 dB/km	
- 5													

Figure 4.11

4.7.2 Printing setup

Select "Printing setup" under "File" menu, as shown in Figure 4.12, users can select printer, printing paper, and printing direction.

Name:	HP LaserJet 1220 Series PCL	•	Properties
Status:	Ready		
Type:	HP LaserJet 1220 Series PCL		
Where:	IP_192.168.0.111		
Comment	t		
Paper		- Orientation	n
Size:	A4 💌		Fortrait
Source:	Automatically Select	A	C Landscape

Figure 4.12

4.7.3 Printing preview

Users can preview before printing to check if printing is good. Select "printing preview" under "file"





Figure 4.13

4.7.4 Printing

Printer is correctly installed on Windows. Select "Printing" under "file" menu, or click on tool bar, then click "OK".

4.7.5 Batch edit

OTDR Trace Manager has Batch-edit function. According to different demand, users can edit trace information of several trace files in one fold one time. Select "Batch Edit" under "file" menu, as in Figure 4.15.



Figure 4.15

4.7.6 Batch print

OTDR Trace Manager has Batch-print function. According to different demand, users can print several trace files in one fold at one time. Select "Batch Print" under "file" menu, as shown in Figure



Figure 4.16

4.7.7 Batch print preview

Users can preview before batch print to check if printing is good. Select "batch print preview" under "file" menu, as shown in Figure 4.17.



Figure 4.17

4.8 Exit software

_								8					
File	dit View	OTDR V	Window H	elp									
U	pload Trac	e File		to	1 a 🛰 🛋	9 1	2 3 4						
c	pen			Ctrl+O								Parameters	
N	lulti-traces					B 4.18165 km						Range : 10.0 km	
S	ave			Ctrl+S	i	D HIOTOD KII						PulseWidth : 300 ns	
S	ave As											Wavelength : 1550 nm	
۵	SCIL Expor	•										IOR : 1.46790	
												Scatter Coef. : -52.1 dB	
P	int Option.	-										Average Time : 00:03:00	
P	int Preview	1										End Threshold : 30.000 dB	
P	nint Setup			-								NRefl. Threshold 0.500 dB	
P	int			Ctrl+P		4						Refl. Threshold -65.000 dB	
в	atch Print P	review		-		• • • • • • • • • • • • • • • • • • • •	1					pamp. Dist: 2.55 m	
В	atch Print											A Marine Information	
8	atch Edit					1						marker information	
												A-B: 2.02190 km	
	at											2pt. Attp. 7,880 dB/km	
1	1_16_1550			1		J						LSA Attn.: 4.144 dB/km	
2 1_16_1310						k						Ins.Loss at A: 7.464 dB	
3 1_16_16_1310								الارتاب الملاية	ALC: NO DE LA COMPANY	والتركية المراراة	الماركون والمانينية	Refl. at A: -85.631 dB	
- 4	4 E:\liyun\\sjmq_1550_20vc+						1. 1. 1.	1 N N	' '	4	· · · · · · ·	2pt. ORL: 40.283 dB	
_				1		<u> </u>						J. UR. LO33 TO A U. 484 db	
D Ev	ent Table											Total Fiber Information	
No.	Туре	Locati	Refl.[dB]	Ins.Loss[d	Attn.[dB/km]	Cum.Loss[Dist.Prev.[km]	Dist.End[km]	Loss Prev.[dB]	Comment		Measure Date: 11/05/2012 15:	69:18
1	⊢ Start	0.00000	-48.703					4.34759				Total Length:	
2	A Refl.	2.15976	-47.885	14.624	0.194	0.419	2.15976	2.18784	0.489			Total Loss:	
3	H End	4.34759	-15.378	-,	0.545	16.237	2.18784		1.315			Total Attn.: dB/ka	
												Total ORL: 16.532 dB	
												Event Number: 3	
Quit Q	DR Trace I	Manager										12	

Press "Exit" under "File" menu. as shown in Figure 4.18.

Figure 4.18

5. Contacting Customer Service

Please check our web site (**www.shinewaytech.com**) for updates to this manual and additional application information. If you need technical or sales support, please contact local **Shineway Technologies** Customer Service.

Shineway Tec	hnologies (China), Inc.:
Address:	FI.7, Zhongtai Plaza, No.3 Shuangqing Rd, Haidian District, Beijing, China
Postal code: 1	00085
Tel:	+86-10-62953388
Fax:	+86-10-62958572
Email:	support@shinewaytech.com
WEB:	www.shinewaytech.com

THANK YOU FOR CHOOSING SHINEWAY TECHNOLOGIES!