

User Guide

KI 734x Series Two way Loss & ORL Tester



www.kingfisher.com.au

Two-way Loss Tester



The fastest and easiest two-way loss tester

- Real time display of bi-directional average multi- λ link loss on both instruments
- 3 year warranty & calibration cycle
- No warm up required
- 360 hours battery life & interchangeable connectors
- 1200 storage space for dual λ test results

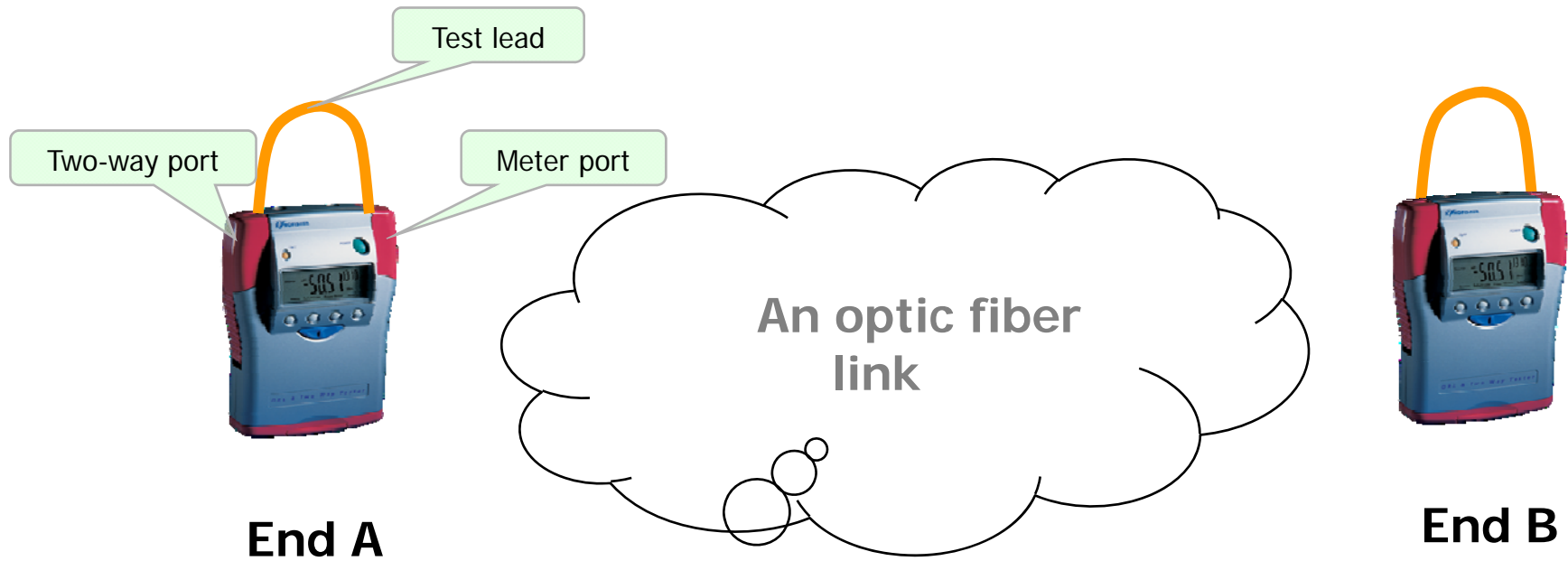
Fast & Easy For Bi-directional Testing

Step 1: Set references

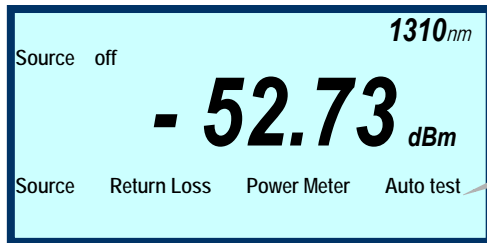
Step 2: Press the "Auto test" button

Real time bi-directional average multi- λ link loss display
on both instruments

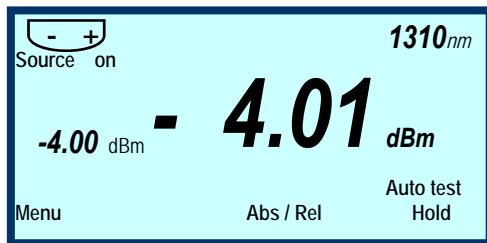
Step 1 - Set Reference At Both Ends



Set Reference Key Press Sequence

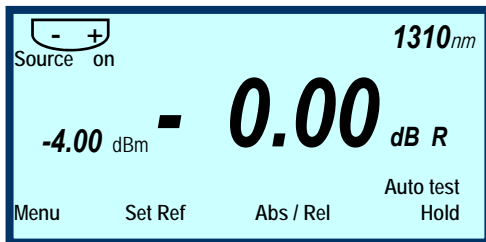


Pushing "AUTOTEST"



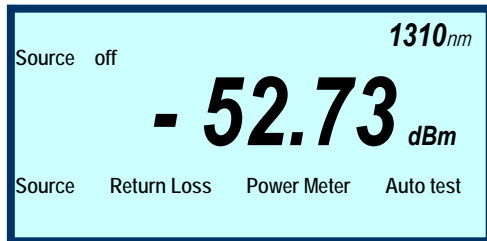
Alternates between 1310 and 1550 nm if 1310 & 1550 nm lasers are installed

Pushing "Abs / Rel"

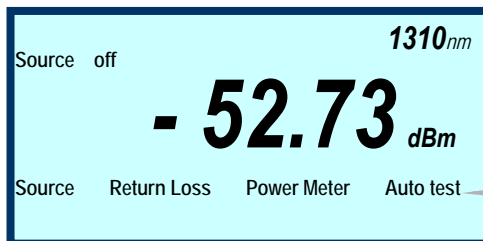
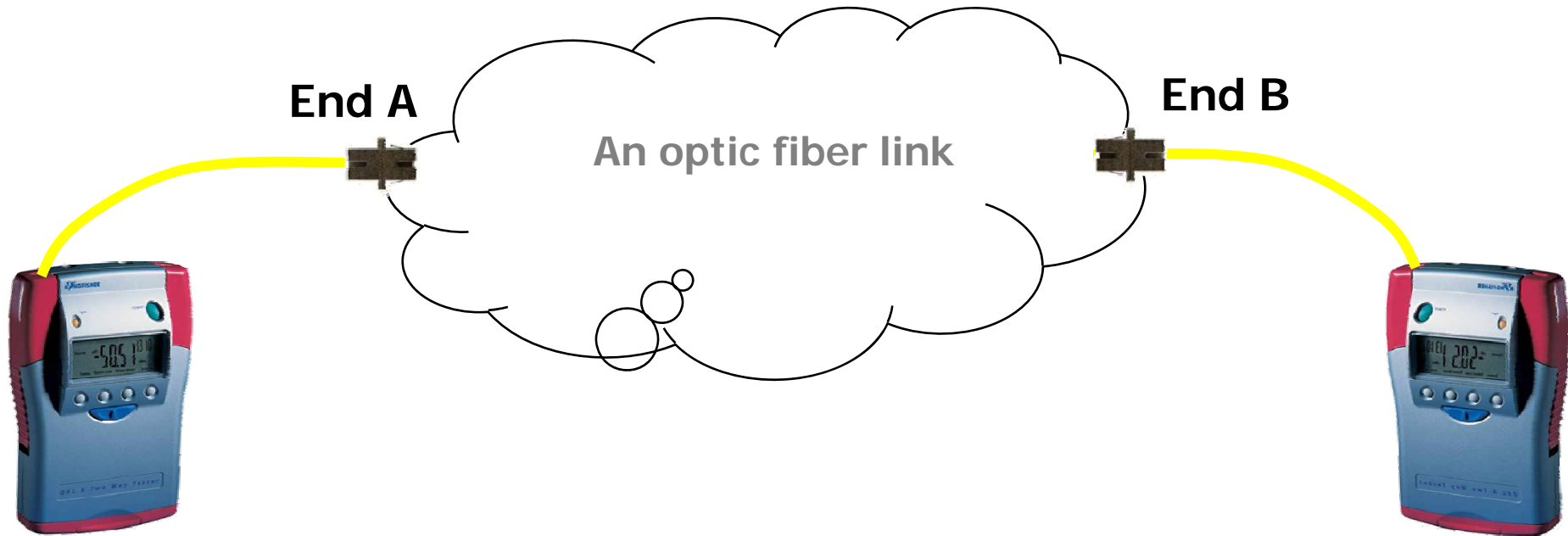


Holding "Set Ref" for 3 seconds to set reference for multi-λ

Pushing "Menu" to be back to the turn-on display

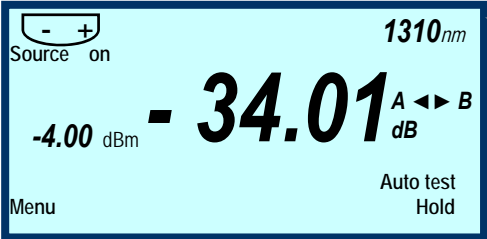


Step 2 - Measure Insertion And Return Loss

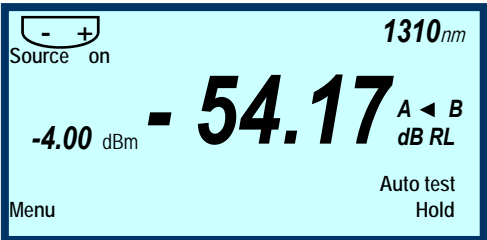
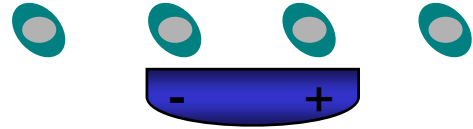


Pushing "Auto test" at one End.

Measure Insertion And Return Loss - Continue



Alternates between 1310 and 1550 if 1310 & 1550 nm lasers are installed



Press 'Select'

- Displays the average bi-directional link loss of multi-λ
- Displays Loss/Optical Power from A-to-B ('A ▶ B')
- Displays Loss/Optical Power from B-to-A ('A ◀ B')
- Displays ORL at A end ('A ▶')
- Displays ORL at B end ('◀ B')
- Back to the average bi-directional link loss display

Press 'Menu'

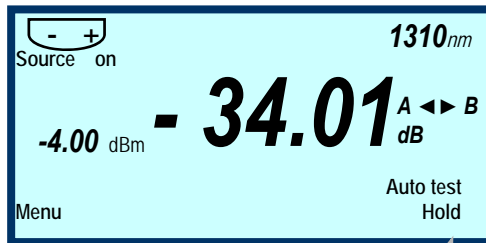


Pushing "STORE" to store average Loss, A-to-B Loss, B-to-A Loss, ORL at end A, ORL at end B of multi-λ

Testing is completed for the link.

Communication During Testing

End A

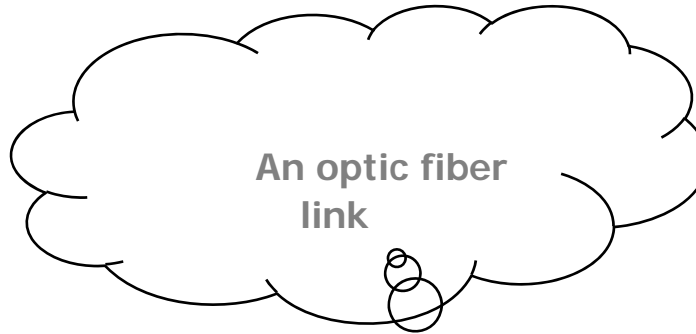


After completing one link test, pushing "Hold" will freeze the display on both units and the unit at End B beeps twice. This tells End B that a test has been completed.

End B

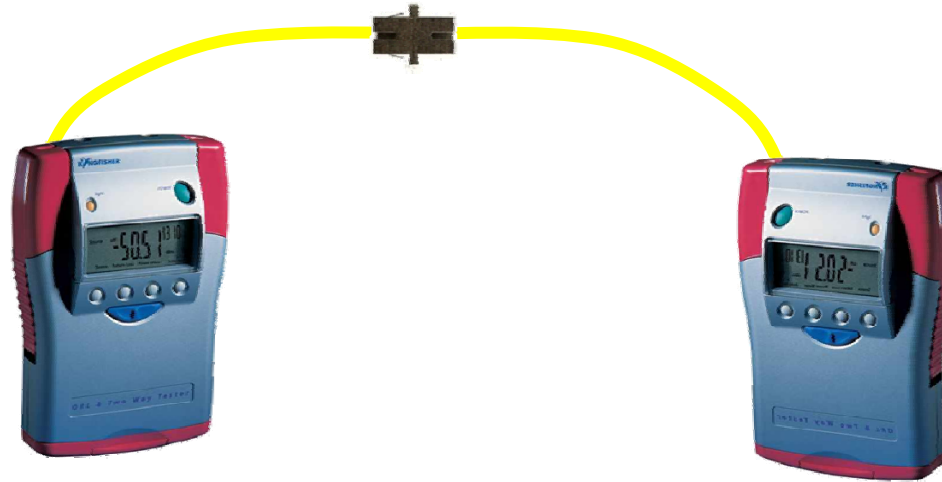


Then, End B connects to the next link and pushes "Hold". This releases the display on both units and the unit at End A beeps once. This tells End A that he is ready for the next test.



Increases the productivity in high fiber-count systems.

Set Ref In Autotest



Source on

1310nm

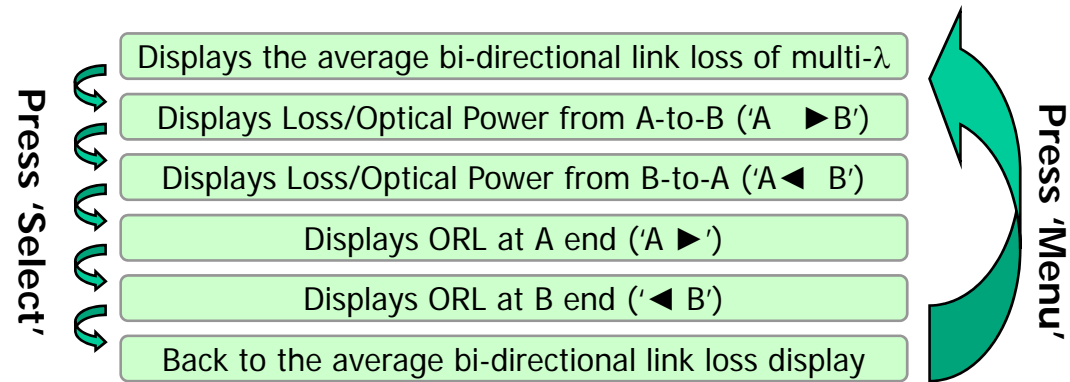
- 34.01 A ↔ B
dB

Menu Set Ref Auto test Hold

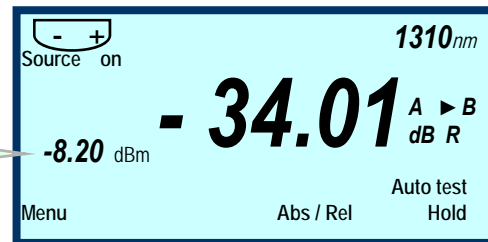
Displays average link loss for multi-λ.

Hold "Set Ref" for 3 seconds will set references on both units for multi-λ.

View Ref Value In Autotest



Unit A reference value

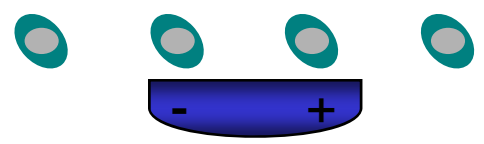


Displays link loss and reference value for multi- λ for A-to-B.

Unit B reference value

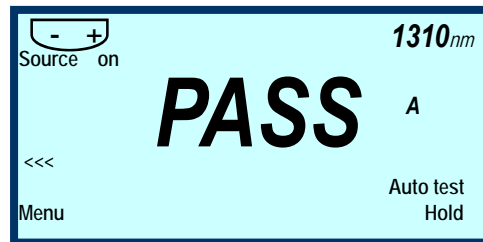
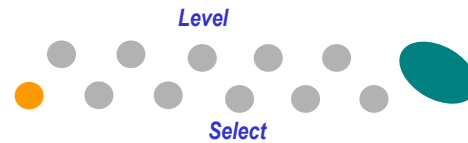


Displays link loss and reference value for multi- λ for B-to-A.



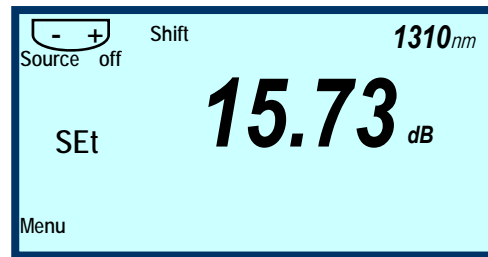
Pass/Fail Assessment

In Two-way testing mode, press 'Level' to enter Pass/Fail display mode.
To exit press 'Level' again, or press 'Select'.

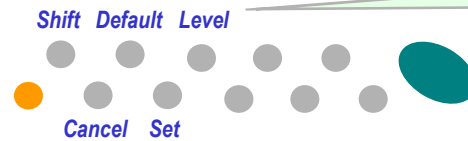


Insertion Loss Pass/Fail Threshold Set Up

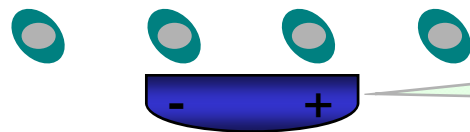
Multi- λ of Insertion Loss Pass/Fail criteria can be set.



Enter Power Meter mode.
Select two-way operational wavelength.



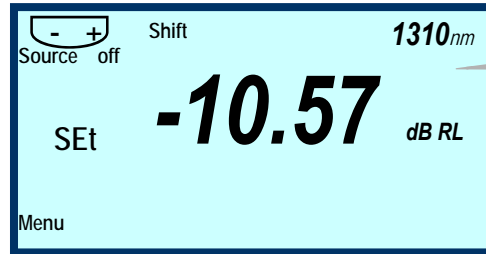
Use 'Shift' + 'Level' to set Average Insertion Loss Pass/Fail threshold, push 'Set' to store.



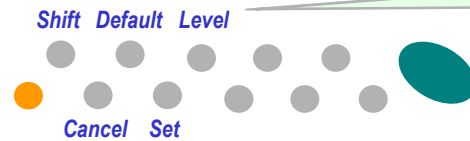
Select another two-way operational wavelength to set up Average Insertion Loss Pass/Fail threshold.

Return Loss Pass/Fail Threshold Set Up

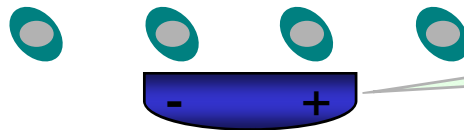
Multi- λ of Return Loss Pass/Fail criteria can be set.



Enter Return Loss mode.
Select wavelength.



Use 'Shift' + 'Level' to set Return Loss Pass/Fail threshold, push 'Set' to store.



Select another wavelength to set up Return Loss Pass/Fail threshold.

The Contents of User Memory


- Average loss for multi- λ
- Reference of both units for multi- λ
- ORL for multi- λ
- Nominal output power for multi- λ
- Location info by flashing symbol of either A or B

KITS™ testing software

Microsoft Excel - KITS221 sheet for Xing.xls

File Edit View Insert Format Tools Data Window Help

Kingfisher Connect Setup Save Load Merge Clear Print



Loss Testing Report

2.22U

- Manual data entry cells
- Programmed cells
- Protected cells. Can't be changed

Job No:	Project: Millman Hill	Date: 17-Dec-2003
Subject:	Stage:	Report/File No: R-171203-001
Section: YY-XX	Duct:	Comment:
Circuit ID: G-THUR-THUS-045	Cable: FNPEHJ/HS1	Drawing No: CD-40069/5
Route:	Sheath: MM 2550142	Other:

	Terminal ID	Sheath ID	Source S/N	Meter S/N	Operator Name
"A"	Thursday Is	F-THUR-THUT-3001		9157	Brian
"B"	R/T	F-THUR-THUT-3001		4	Xing

Fibre No	1 st Wavelength, nm								2 nd Wavelength, nm								Pass/Fail	Min. margin (db)		
	Pass / Fail Link Loss, dB								Pass / Fail Link Loss, dB											
	Pass / Fail ORL Loss, dB								Pass / Fail ORL Loss, dB											
	Ref level dBm		2nd value dBm		Link loss dB			ORL loss dB		Ref level dBm		2nd value dBm		Link loss dB					ORL loss dB	
A	B	A	B	A to B	B to A	Average	A	B	A	B	A	B	A to B	B to A	Average	A	B			
1	-6.39	-7.69	-16.42	-15.28	8.89	8.73	8.81	-33.97	-36.93	-6.55	-7.21	-12.95	-12.62	6.07	5.74	5.90	-35.32	-37.17	Pass	1.38
2	-6.39	-7.69	-16.48	-15.35	8.96	8.79	8.87	-34.07	-37.23	-6.55	-7.21	-13.00	-12.65	6.10	5.79	5.94	-35.39	-37.77	Pass	1.34
3	-6.39	-7.69	-16.56	-15.44	9.05	8.87	8.96	-34.22	-36.85	-6.55	-7.21	-13.07	-12.72	6.17	5.86	6.01	-35.59	-37.76	Pass	1.27
4	-6.39	-7.69	-16.38	-15.26	8.87	8.69	8.78	-34.19	-36.88	-6.55	-7.21	-12.94	-12.59	6.04	5.73	5.88	-35.58	-37.32	Pass	1.40
5	-6.39	-7.69	-16.38	-15.28	8.89	8.69	8.79	-34.31	-36.80	-6.55	-7.21	-12.93	-12.62	6.07	5.72	5.89	-35.56	-37.19	Pass	1.39
6	-6.39	-7.69	-16.48	-15.36	8.97	8.79	8.88	-34.41	-36.50	-6.55	-7.21	-14.45	-14.78	8.23	7.24	7.71	-36.72	-37.19	Fail	
7	-6.39	-7.69	-16.43	-15.33	8.94	8.74	8.84	-34.30	-36.80	-6.55	-7.21	-12.98	-12.63	6.08	5.77	5.92	-35.64	-37.19	Pass	1.36
8					0.00	0.00	0.00							0.00	0.00	0.00				
9					0.00	0.00								0.00	0.00	0.00				
10					0.00	0.00								0.00	0.00	0.00				
11					0.00	0.00								0.00	0.00	0.00				
12					0.00	0.00								0.00	0.00	0.00				
Minimum Average Loss (dB)							0.00	Minimum Average Loss (dB)							0.00					
Maximum Average Loss (dB)							8.96	Maximum Average Loss (dB)							7.71					

One click for 2 λ Loss/ORL testing data in 8 sec

Loss Testing / Data Logging / Label Printing / Meter reading