KINGFISHER INTERNATIONAL

August 2008

Training Manual:
KI7400 & 7800 Series Sources

Level 1, V2.0

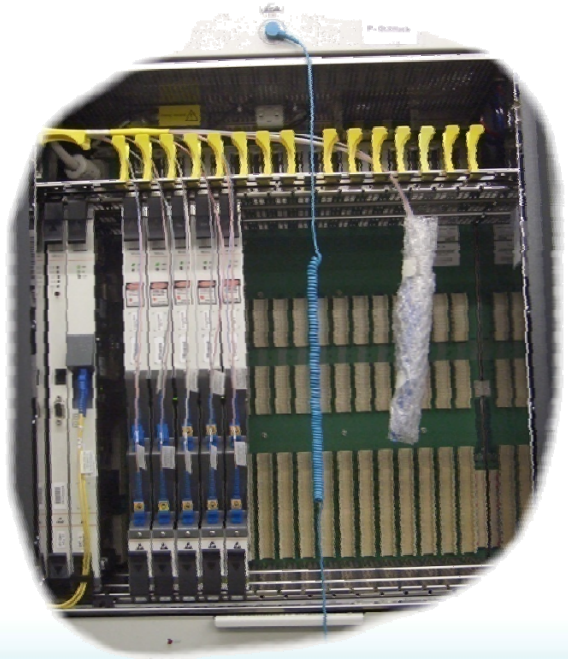
kingfisher.com.au

Course Contents

1. General features
2. Models
3. Instrument care
4. Instrument setup
5. Sending light & test tone
6. Change test tone frequency

1./ General Features

- Autotest capability
- Autotest compatible with Agilent N series instruments
- Single port for MM, Single port for SM
- Up to 4 SM λs from 1 port
- Very long battery life – 190 hours
- DC power socket
- Optical test tone generator
- Industry standard connectors - including SFF



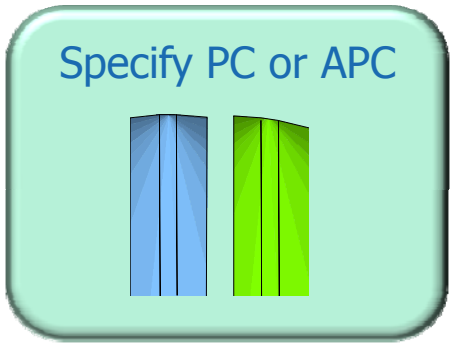
ISO 9001 · 7 YEAR EXTENDED WARRANTY · 3 YEAR STANDARD WARRANTY

2./ Models

There are two model styles:

1. KI7400 Series - **preferred by telcos & those requiring higher stability**
   - Ultra Stable laser light source
   - Single port
   - Up to 4 laser λs
   - Zero warm up

2. KI7800 Series – **general purpose**
   - LED & Laser source options in same instrument
   - Up to 4 laser λs
     - Left Port - Laser
     - Right Port - LED **
   - Usual warm up timing
   - ** LED source EF compliant for 50µm



3./ Instrument care

Keep the instrument in its carry case during storage and transport

- Use only high quality batteries.
- For prolonged storage remove batteries.

- The instrument is resistant to normal dust and moisture, however it is not waterproof.
- If moisture gets into the instrument, remove batteries & dry it out carefully before using it again.

- Where possible, keep instrument away from strong sunlight.

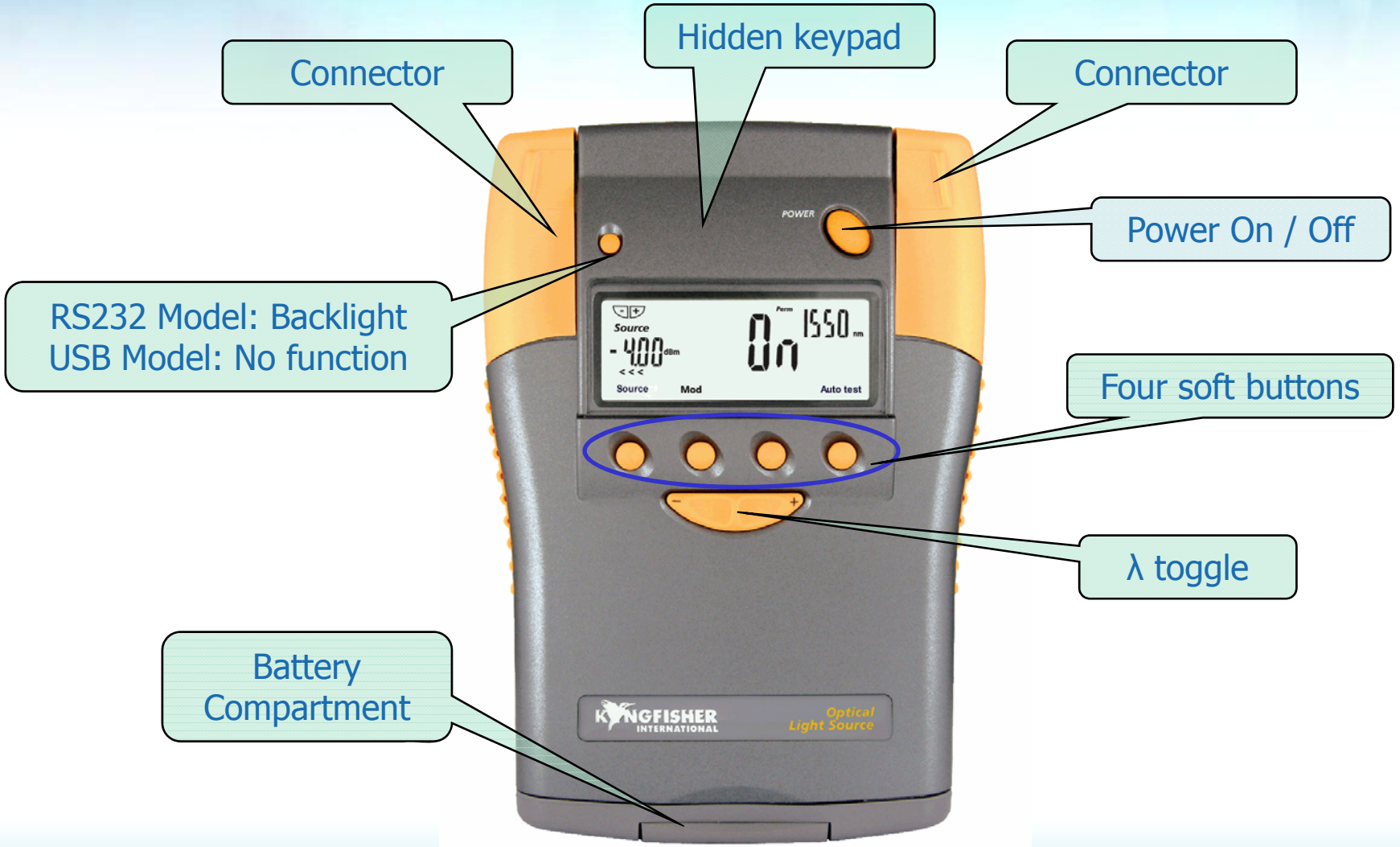
- Clean the instrument case using Iso-Propyl-Alcohol (IPA) or other non solvent cleaning agents.

DO NOT use Acetone or other active solvents as damage may result.

4./ Prepare Instrument

a) Keypad
b) Fit batteries
c) Power On / Off
d) Launch / Test cord configuration
e) Fit / remove adaptors

a./ Keypad


Hidden keypad
Connector
Connector
POWER
Power On / Off
RS232 Model: Backlight
USB Model: No function
Source
-4.00 dBm
Perm
1550 nm
Source
Mod
Auto test
Four soft buttons
λ toggle
Battery
Compartment
KINGFISHER INTERNATIONAL
Optical
Light Source

To Fit Batteries.

- Hold instrument in 2 hands with thumbs resting on battery compartment latch.
- Press latch down and push away from case.
- Insert 2 'C' cells

Or

- Insert 2 'AA' cells using the supplied AA-C battery converters.

Battery life.

Alkaline 'C' batteries : 190 Hrs
Alkaline 'AA' batteries : approx 75 hours

Low Battery Display.

Indicator shows when approximately 10 hours left.

Warning.

Do not use lithium batteries or other batteries with a nominal voltage greater than 1.8 V. The instrument may become damaged

c./ Power On / Off

10 minutes auto Off or Permanent operation

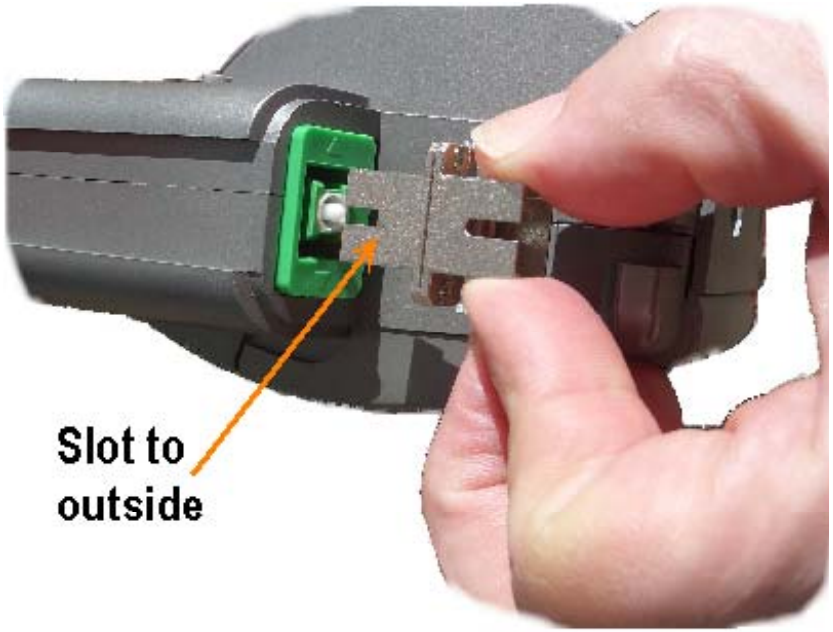
d./ Launch / Test cord configuration

The light source is either PC or APC connector specific. This is determined when ordering the instrument, and can only be changed at the factory.

- SM APC connector instruments, **green** connector housing
- SM PC connector instruments, **blue** connector housing
- MM PC connector instruments, **beige** connector housing

Choose test cord interface to match required configuration

e./ Adaptor - fitting



Adaptor - removal

Current models:

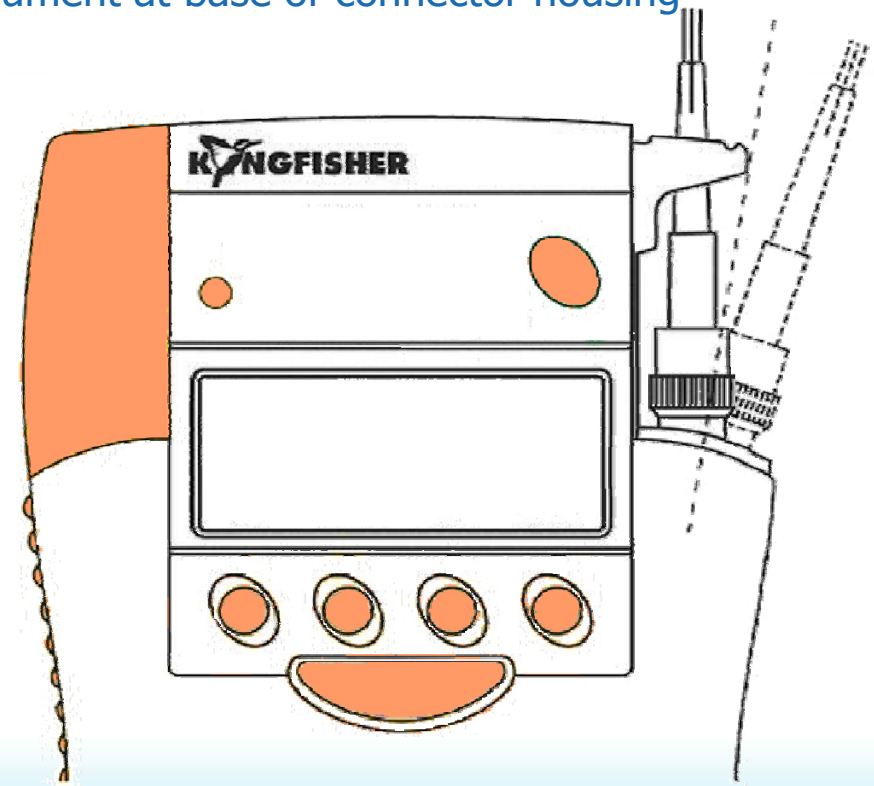
- Locate quick release button on rear of instrument at base of connector housing
- Push and hold button in
- Pull out existing adaptor
- Fit new adaptor

OR

- Remove as per 'early models'

Early models:

- Move adaptor interface to mid position
- Pull out existing adaptor
- Fit new adaptor



5./ Sending Light

Source can be operated in one of 3 ways:

a) Autotest:

- automatically toggle between all λs
- Preferred mode for loss testing as testing time is greatly reduced.
- Minimises error as meter always displays correct λ.

b) Manual:

- Single λ operation
- Preferred mode for level monitoring.

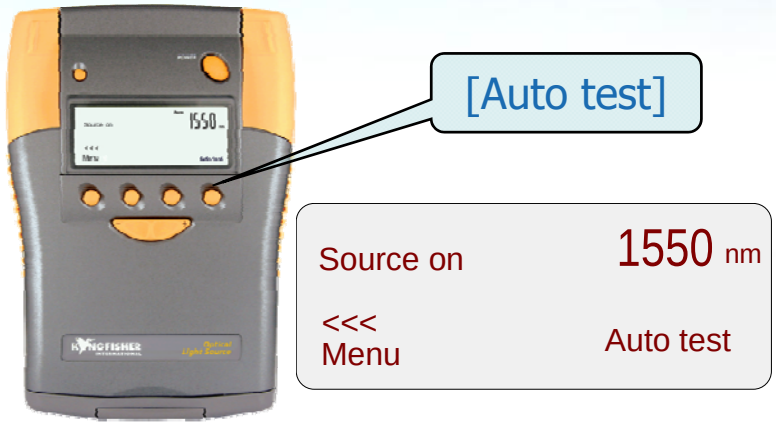
c) Modulated:

- Sends test tone

a./ Auto Test Mode

Start Autotest:

- Press [Auto test]
  - LCD displays: <<< &/Or >>> indicating the active port
  - Transmitted data: nominal output power, serial number & λ
  - Compliant power meter: automatically toggle between source λs



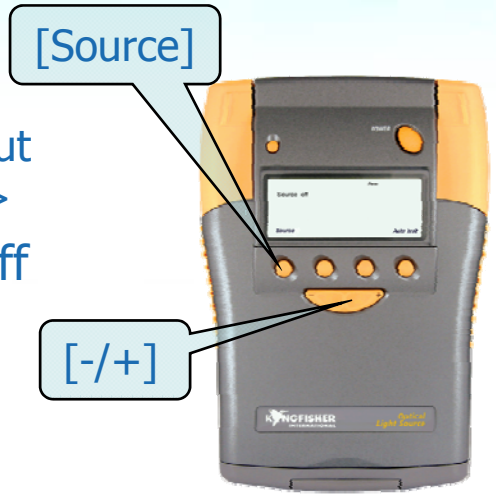
Stop Autotest:

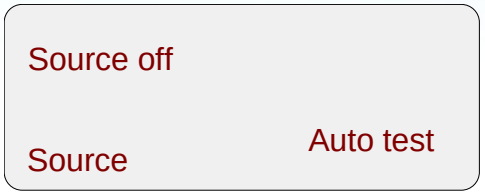
- Press [Menu]

b./ Manual Mode

Source On:

- Press [Source]
  - Source displays, λ, nominal output power & active port: <<< / >>>
- Toggle [-/+] to select λ or turn off





Source Off:

- Press [Menu]

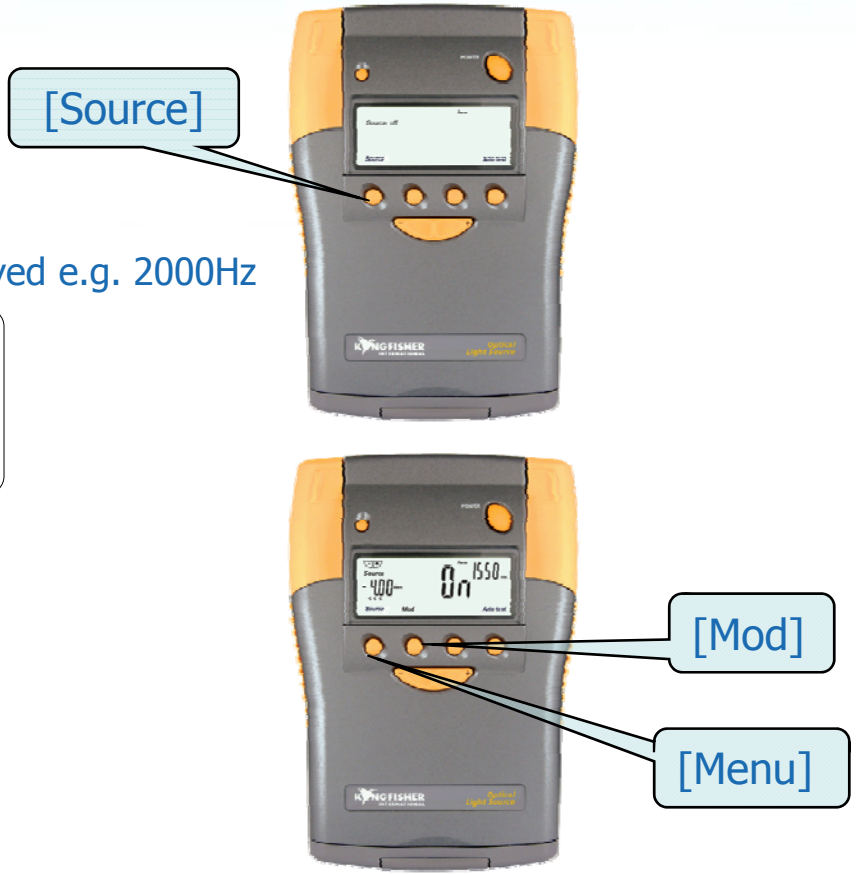
or

- Toggle [-/+] to off position

Instrument must be in Manual Mode not Autotest

Modulation On:

- Press [Source]
- Press [Mod]
  - Modulation wavelength is displayed e.g. 2000Hz



Modulation Off:

- Press [Mod] or Press [Menu]

6./ Change modulation frequency

RS232 Models

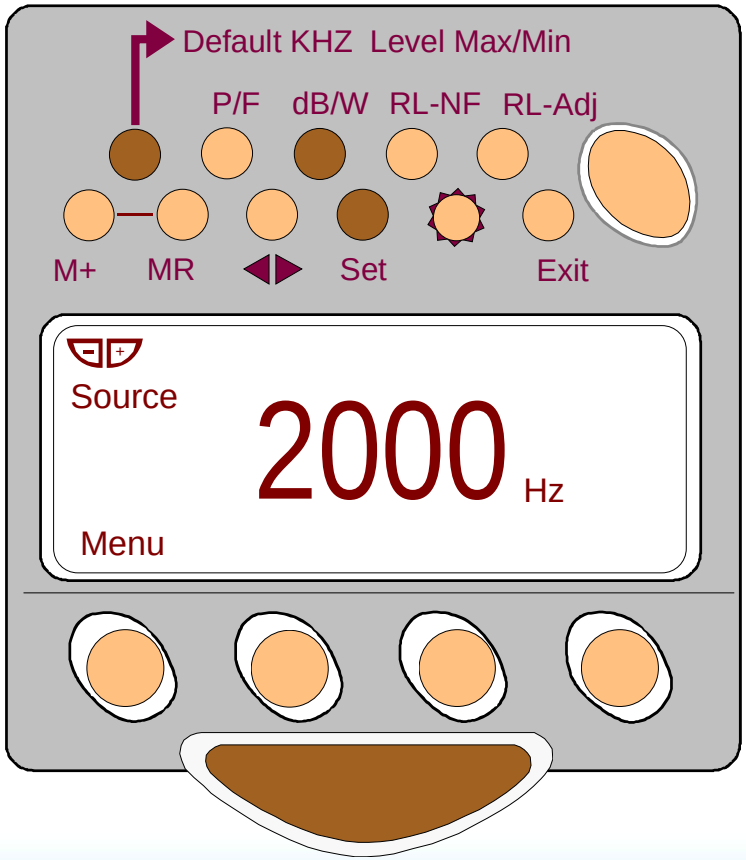
Set up source in manual mode

- Open Hidden keypad
- Press [KHz]
- Toggle [-/+] to scroll : 270Hz, 1kHz, 2kHz
- Press [SET] to select tone frequency
- Press [CANCEL] to exit without changing

USB Models

Set up source in manual mode

- Open Hidden keypad
- Press [Γ] then [KHz]
- Toggle [-/+] to scroll : 270Hz, 1kHz, 2kHz
- Press [Set] to select tone frequency
- Press [Exit] to exit without changing



KINGFISHER INTERNATIONAL

Application Notes

Comprehensive selection available at

www.kingfisher.com.au/ApplicationNotes.htm

CE ISO 9001 7 YEAR EXTENDED WARRANTY 3 YEAR STANDARD WARRANTY