

WIRELESS EXCELLENCE

Free Space Optics (FSO) CF FSO alignment module Overview



About Wireless Excellence

Founded in 1995 and with headquarters in Oxford UK, Wireless Excellence Limited is a leading designer and supplier of outdoor and indoor Broadband Wireless communication products.

With a complete range of solutions including Radio, Microwave, Millimeter-Wave, Free Space Optics, WiFi and WiMax solutions, customers in over 60 countries have chosen Wireless Excellence as the “one stop shop” solution of choice for dependable wireless networking.

About FSO

FSO Technology leverages Infrared beams for communication purposes, and unlike Fibre based systems, does so wirelessly. Speeds in excess of a Gigabit are readily available and distances of 4km are possible.

Our FSO links have been deployed in over 60 countries including major telecom and corporate networks, and have many advanced features which increase flexibility, reliability, performance, management capability and total-cost-of-ownership.

Description

Wireless Excellence Alignment Modules are used to ensure optimum alignment and rapid installation of FSO links.

Installers use the Alignment Modules during the alignment process to talk to colleague at the remote end of the link and to convert local and remote RSSI into audible beeps. The Alignment module generates the FM audio signal from the microphone and controls whether the FM audio or Data is transferred from the local head over the laser link to the remote laser head. It also displays link statistics (both local and remote) including firmware versions of the laser head and the alignment module. The higher the pitch and the higher the frequency of tones the stronger the RSSI at the local head. The local RSSI tones are NOT heard through the headphones at the local end. The tones that can be heard through the headphones are generated at the remote end. The alignment module is used to set the optical output power of the laser either automatically or manually using the Automatic Transmit Power Control feature.

Alignment Module Features

- On-screen readout of link performance
- Duplex Audio voice circuit
- Audible tones ensure rapid alignment
- Controls ATPC features
- Used to align CableFree FSO units

Benefits

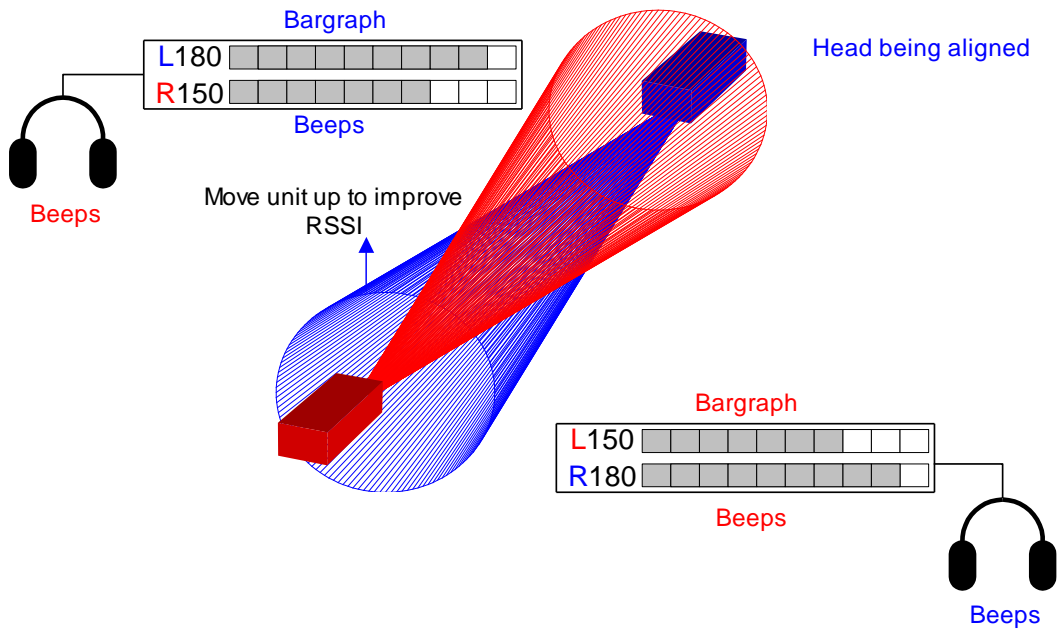
- Saves time on site
- Ensures rapid, accurate alignment
- Can be used to re-align a “live” link without outage
- Simple at-a-glance diagnosis of link statistics
- Audio voice circuit saves GSM/cell phone calls
- Local & Remote RSSI means a “one person swap” for maintenance is possible

Product Specifications

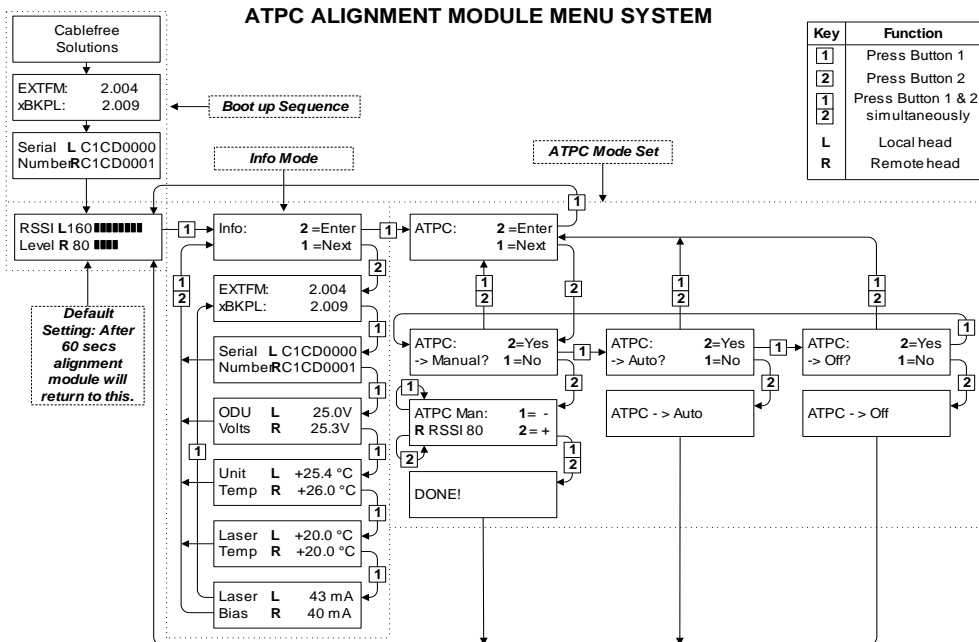
Specification	FSO Alignment Module
<i>Connectivity</i>	
FSO connector	15W “D” connector
Audio Circuit	Headset with microphone
Audible tones	Inbuilt speaker
Switches	FM voice/data mode, Audible tones on/off
Buttons	2-button menu system views status and controls ATPC
<i>Indicators</i>	
LCD Display	Onscreen display of RSSI (signal level), ATPC modes, temperature, serial number etc
LEDs	Power and FM lock (incoming voice)
<i>Environmental</i>	
Power Consumption	3.84 W
Operating Temperature	-20...+60 °C
<i>Mechanical</i>	
Dimensions (mm)	150 x 70 x 30mm (excluding headphones)
Weight	0.35 kg



FSO Alignment Principles



ATCP alignment module menu system



For More Information

Contact Wireless Excellence Limited for more information on our Installation & Management solutions.

T: +44 (0870) 495 9169
 F: +44 (0871) 918 7618
 E: sales@wirelessexcellence.com
 W: www.wirelessexcellence.com

Wireless Excellence Limited
 Sandford Gate
 East Point Business Park
 Sandy Lane West
 Oxford OX4 6LB