Kingray
Specialists in Digital TV Distribution Solutions

INSTALLATION MANUAL

MODEL: KOT001A
Optical Fibre Transmitter

PRODUCT FEATURES

- Wide Band Type: 47~2600MHz
- Suitable for Digital TV and Satellite TV application
- One fibre can transmit Digital TV (DVB-C, DVB-T) and Satellite TV (DVB-S)
- Cooled HGHL DFB laser provides better system stability
- 1555nm TX can be amplified by EDFA, YEDFA to cover large-scale FTTH and is compatible with any FTTx PON technology
- Dual power supply, 1+1 backup

MAIN APPLICATION

- FTTH for Digital TV and Satellite TV
- FTTx PON (EPON, GPON)
- Other digital video application

RELATED PRODUCTS

- Optical Receiver: KOR001, KOR100 & KOR002
- Optical Amplifier: KOA Series - 1550nm CATV Erbium Doped Fibre Amplifier

WARNING

Unit

To reduce the risk of fire, electric shock or product damage,

- Do not expose this unit to rain, moisture, dripping or splashing.
- Do not power on the unit until the ground wire has been connected.
- Use the recommended accessories.
- Do not remove covers.
- Do not repair this unit by yourself. Refer servicing to qualified service personnel.
- This equipment is not suitable for use in locations where children are likely to be present.

AC power supply cord

The power plug is the disconnecting device.

Install this unit so that the power plug can be unplugged from the socket outlet immediately.

CAUTION

Placement

To reduce the risk of fire, electric shock or product damage

- Ensure this unit is well ventilated.
- Do not obstruct this unit's ventilation fan.
- Do not place the unit on equipment that may become hot. The heat can damage the unit.

TRANSMITTER CONTROLS, INDICATORS, AND ALARMS

All instructions listed below refer to the representation of the front panel shown in the below diagram.

The user scrolls through the TX menus using the push buttons found on the front panel of the TX.

THE OPERATION OF THE PANEL

1   Open Menu

A.   Plug in 100-240VAC power supply

B.   Turn on power switch in the rear panel
Front panel display   "KEY OFF"

Laser	Status lamp red
RF Input	Status lamp red
Temp	Status lamp green
Power	Status lamp green
LAN	Status lamp dark

C.   Press laser start-up key switch
Front panel display KEY ON.......Laser status lamp turn green.

Menu Operation

Press ◄\► key to choose the menu that needs to be amended. Press ▼ key to enter, push ◄ to shift, and press ► to change the value. Press ▼ to save the result and exit.

For example; amend IP setup menu, IP: 192.168.000.015; if you want to change 5 to 6, use ◄\► to choose the IP menu, press ▼ to enter, press ◄ to choose the place of 5, press ► to change 5 to 6, and then press ▼ to save the amended

2   Start-Up Main Menu

You may wish make a record of the parameters.

Pressing the ◄\► button will display below menu in sequence.

Menu #1	**Model**	Descriptor Type of Equipment and Model
Menu #2	**S/N**	Serial Number
Menu #3	**Date Code**	Date Code
Menu #4	**Output Power**	Output Optical Power
Menu #5	**Laser BIAS Current**	LASER BIAS Current
Menu #6	**Laser TEC Current**	TEC Current
Menu #7	**Laser Temp**	Laser Temperature
Menu #8	**Input RF Level**	RF Level
Menu #9	**+5V Monitor**	Power Voltage Reading
Menu #10	**-5V Monitor**	Power Voltage Reading
Menu #11	**+8V Monitor**	Power Voltage Reading
Menu #12	**System Temp**	System Temperature
Menu #13	**IP**	IP Address
Menu #14	**Submask**	IP Sub Mask
Menu #15	**Gateway**	Gateway Address
Menu #16	**Trap1**	TRAP1 Address
Menu #17	**Trap2**	TRAP2 Address

TECHNICAL INDEX

Performance			Index			Supplement
			Min.	Typ.	Max.	
Optical Features	Laser Type	A Type		Cooling DFB		
	CATV Operation Wavelength	(nm)	1550	1555	1560	
	Equivalent Noise Temperature	(dB/Hz)			-155	
	Side Mode Suppression Ratio	(dB)	35			
	Optical Isolation	(dB)	30			
	Optical Output Power	(dBm)		6		
	Return Loss	(dB)	50			
	Optical Connector			SC/APC		
RF Features	Operating Bandwidth	(MHz)	47		2600	
	Input Range	(dBµV)	77		87	
	Flatness	(dB)	-2.0		+2.0	47~860MHz
			-0.5		+0.5	40MHz
			-2.0		+2.0	950~2600MHz
	Return Loss	(dB)	10			47~2400MHz
	Channel Loading	(CH)		64QAM		Digital TV
				36		QPSK or FM
	Input Impedance	(Ω)		75		
	RF Connector			F-Female		75Ω
General Specifications	Network Management Interface			RJ45		SNMP
	Power Supply	(V)	100		240	220VAC (Dual Supply)
	Input Current	(A)			0.2	
	Power Consumption	(W)	5		20	
	Operating Temp	(ºC)	-5		+50	
	Storage Temp	(ºC)	-40		+85	
	Relative Humidity	(%)	+5		+95	
	Size	(")		19 x14.5x1.75		

Laser Class: 1

CAUTION: Use caution when handling fibres. Do not exceed fibre manufacturer's pulling tension or bend radius specifications when removing fibre bulkhead connector plate.

This warranty against defects is given by GME Pty Ltd ACN 000 346 814 (We, us, our or GME). Our contact details are set out in clause 2.7. This warranty statement only applies to products purchased in Australia. Please contact your local GME distributor for products sold outside of Australia. Local distributor details at www.gme.net.au/export.

1.   Consumer guarantees

1.1   Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

1.2   To the extent we are able, we exclude all other conditions, warranties and obligations which would otherwise be implied.

2.   Warranty against defects

2.1   This warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.

2.2   We warrant our goods to be free from defects in materials and workmanship for the warranty period (see warranty table) from the date of original sale (or another period we agree to in writing). Subject to our obligations under clause 1.2, we will at our option, either repair or replace goods which we are satisfied are defective. We warrant any replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.

2.3   To the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited

a)   in the case of goods we supply, to any one of the following as we decide -
(i)   the replacement of the goods or the supply of equivalent goods;
(ii)   the repair of the goods;
(iii)   the cost of repairing the goods or of acquiring equivalent goods;

b)   in the case of services we supply, to any one of the following as we decide –
(i)   the supplying of the services again;
(ii)   the cost of having the services supplied again.

2.4   For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three months from the date of the original repair. We agree to re-repair or replace (at our option) any materials or workmanship which we are satisfied are defective.

2.5   We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty (to the extent permitted at law), we agree to supply those services again at no extra charge to you.

2.6   To make a warranty claim you must before the end of the applicable warranty period (see warranty table), at your own cost, return the goods you allege are defective, provide written details of the defect, and give us an original or copy of the sales invoice or some other evidence showing details of the transaction.

2.7   Send your claim to:
GME Pty Ltd.
17 Gibbon Rd, Winston Hills,
NSW 2153 Australia.
Tel: (02) 8867 6000
Fax: (02) 8867 6199
Email: servadmin@gme.net.au

2.8   If we determine that your goods are defective, we will pay for the cost of returning the repaired or replaced goods to you, and reimburse you for your reasonable expenses of sending your warranty claim to us.

3.   What this warranty does not cover

3.1   This warranty will not apply in relation to:
(a)   goods modified or altered in any way;
(b)   defects and damage caused by use with non Standard Communications products;
(c)   repairs performed other than by our authorised representative;
(d)   defects or damage resulting from misuse, accident, impact or neglect;
(e)   goods improperly installed or used in a manner contrary to the relevant instruction manual; or
(f)   goods where the serial number has been removed or made illegible.

4.   Warranty period

4.1   We provide the following warranty on GME and Kingray products. No repair or replacement during the warranty period will renew or extend the warranty period past the period from original date of purchase.

Product Type	Warranty Period
Optical Fibre Transmitter	1 Year