

<p>PRODUCT LLD837</p> <p>SINGLE CHANNEL AiPHONE or AUDIO & E & M TO FIBRE INTERFACE USER MANUAL</p> <p>23 June 2008</p>

LLD837 TEST CERTIFICATE

Product	:	LLD837
Serial No	:	
Job No	:	
Test		Criteria
		Result
Power Supply		+10V & +5V
Audio Carrier Freq		225kHz \pm 100Hz
Data Carrier Freq		70kHz \pm 100Hz
Input Signal Level		0dBm (2Vp-p)
Lock Indicator		Operational
VCO Lock Voltage		~4Vdc
Data Duty Cycle		50%
Optic TX Level		> -20dBm
Optic RX Sensitivity		< -28dBm
AiPhone Master		Operational
AiPhone Slave		Operational
Tested By:		/ /

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USER MANUAL

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1. PRODUCT DESCRIPTION

1.1 GENERAL

The LLD837 is a single channel LEF Series AiPhone to fibre interface unit. The unit is supplied as a DIN Rail mountable box (which uses external 12Vdc power supply). It contains one transmit channel, and one receive channel. It uses FM modulation to send the audio and data across the fibre link. The audio frequency response is 50Hz to 17kHz. The data channel is used by the on-board processor to send contact echo information. The data rate is 9600Baud.

The unit is compatible with the LEF Series of AiPhone Intercom interfaces. It can thus extend the AiPhone audio signal as well as provide a contact to remotely trigger a Gate Motor. Provision is also made to indicate the Gate LED in the opposite direction. There is finally an additional Auxiliary Input and Output that can be used to extend an additional contact. This will have to be connected to an external relay.

2. FEATURES:

Easy to install.
Up to 2km on Multimode Fibre
Provides immunity to electrical transient interference.
Compatible with LEF AiPhone Series of Intercoms.

3. INDICATIONS

The unit has 2 leds that indicate the following :

POWER The unit is powered.

LOCK The unit is locked onto a valid FM carrier signal from the fibre cable.

4. STOCK CODE SELECTION

4.1 ORDERING INFORMATION:

Stock Code selection:

LLD837MAB - DIN Rail Mountable unit, 2km multimode, 12Vdc, Master Side

LLD837SAB - DIN Rail Mountable unit, 2km multimode, 12Vdc, Slave Side

5. PREPARATION FOR USE

5.1 UNPACKING

Check for physical damage caused during transportation. Return any damaged equipment to the supplier. The manufacturer is not responsible for any damage caused during transportation.

5.2 INSTALLATION

The DIN rail unit simply clips on to a standard DIN rail. Check that the supply voltage matches that of the equipment, before installation commences. Connect the power cable. The equipment has no ON/OFF switch and is therefore active as soon as power is connected.

5.3 CONNECTION:

FIBRE :

Connect the local TX fibre port to the remote unit's RX fibre port, and vice versa.

AiPHONE :

For connection to AiPhone equipment, see the connection diagram at the end of the leaflet..

AUDIO & E & M (Optional):

The Audio connection is made via an RJ11 plug. For a 4-Wire system, pins 3 & 4 are audio output, and pins 2 & 5 are audio input. For a 2-Wire system, pins 2 & 5 are used.

Pin 6 is used for M-Input, and pin 1 is used for E-Output signals. The unit is supplied in 4-Wire configuration as the default set-up. For connection to a 2-Wire system, Links 1, 2 and 3 have to be swapped over to the 2W position, as seen on the card. The audio electrical inputs and outputs are fully isolated via audio transformers.

5.4 COMMISSIONING

If the link is correctly connected and the **Link OK** led is ON, then the audio link should be operational.

6. OPERATORS INSTRUCTIONS & FAULT DIAGNOSIS

The unit needs no operator intervention to function.

If a fault arises, it is necessary to observe the led indications. If the power led is OFF, check if there is power to the unit. If there is power, then the unit is probably faulty and needs to be sent in for repairs. If the LOCK led is OFF, then the fibre link should be checked for consistency, and the losses measured. If the fibre tests ok, then the unit needs to be sent in for repair.

7. MAINTENANCE INSTRUCTIONS

No routine maintenance is required on this equipment.

8. SPECIFICATION :

8.1 ELECTRICAL

Frequency Response : 50Hz to 17kHz (-3dB Cut-off Frequency Points)

Transmission Mode : FM Modulation, Audio Carrier @ 225kHz, Data Carrier @ 70kHz

Modulation Index : Audio 30%; Data 80%

Power Supply:

DIN Rail Unit : +12Vdc, 200mA

Optical:

Transmission Wavelength : 850nm

Connector : ST

Power Budget : 8dB

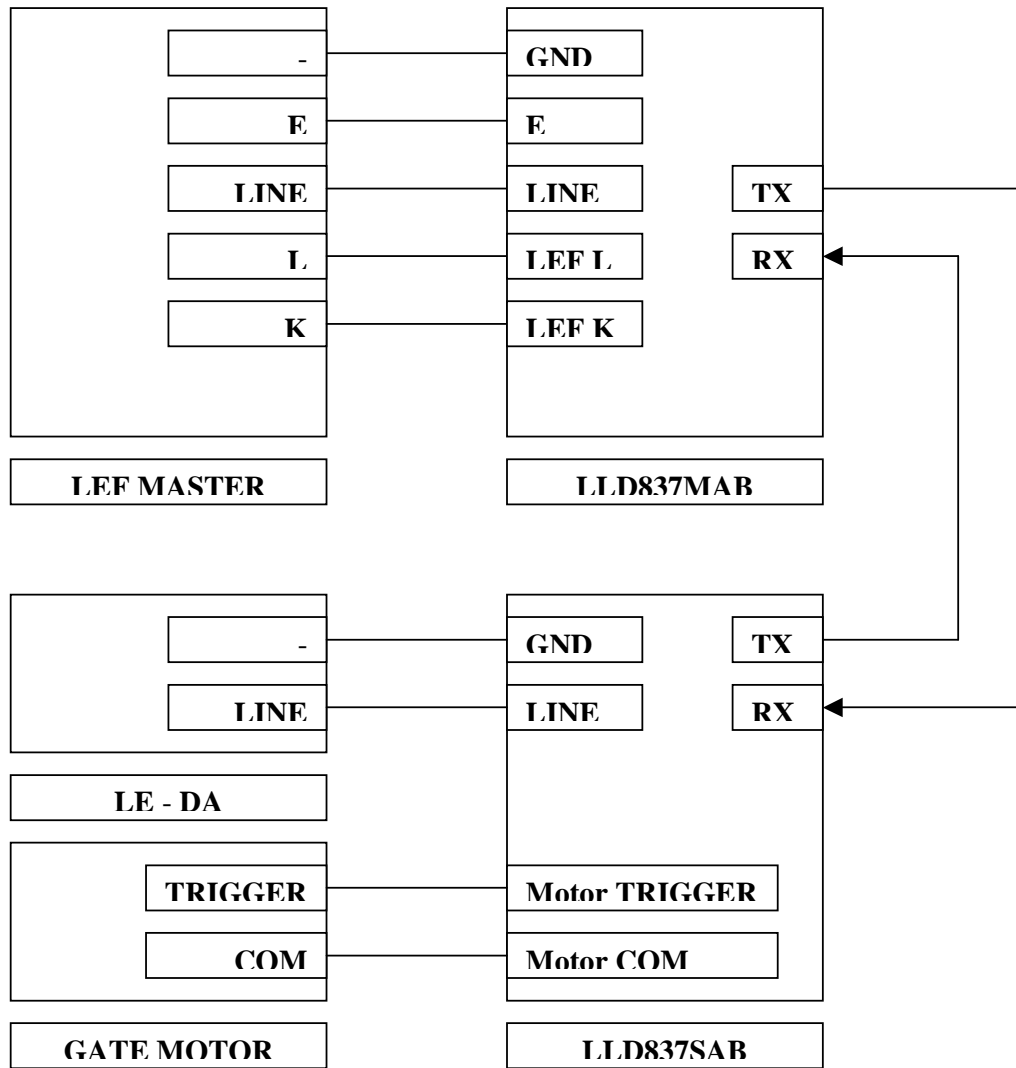
Distance : Up to 2km on a good multimode fibre

8.2 MECHANICAL

Dimensions : 105mm x 110mm x 60mm (W,L,H)

Weight : ~150g

9. CONECTION DIAGRAM



10.

CONTACT DETAILS

Email: support@addvid.co.za

Web: www.addvid.co.za

Manufactured by:

**Advanced Digital Devices (Pty) Ltd
Unit 17 Bond Street Business Park
cnr Bond & Kent Streets
Randburg
Johannesburg
South Africa
2125**

**P.O. Box 2549
Randburg
Johannesburg
South Africa
2125**

Tel: +27 11 789 4420

Fax: +27 11 789 4422