

Issue 1.0

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PRODUCT OS807
SINGLE CHANNEL AUDIO INTERFACE
USER MANUAL
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USER MANUAL

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1. PRODUCT DESCRIPTION

1.1 GENERAL

The OS807 is a audio link and is supplied as a single Euro size PCB.

This card plugs into the OS800 (19" sub rack system)or can be housed in a (Metal Box with Power supply). It contains one transmit channel and one receive channel. It uses FM modulation and setting up will be needed for different audio levels. It can be configured for 2 Wire or 4 Wire operation.

2. FEATURES:

The card is shown in figure 1

The card is arranged from top to bottom as :

Receive channel Rx1
Transmit channel Tx1

The transmit channel receives audio input, conditions and transmits this on the fibre.

The signal can be seen on the test point. The maximum allowable signal on this point is 4 Volt PP.

The receiver channel receives the optic signal and demodulates the signal. This signal can be measured on a test pin on the front of the card. There is a variable resistor to increase/decrease the output signal. There is an LED on the receiver channel that will light up when it receives a FM signal on the optical fibre.

CHANNEL	VARIABLE RES	TESTPOINT	FUNCTION
TX1	VR 1	TP 1	Hybrid Balance ADJUST
RX1	VR 2	TP 2	OUTPUT SIGNAL ADJUST

TP 3 = 0 Volt point for measurements.

3. INDICATIONS

The unit has 4 leds which indicate the following:

Link OK Optic Communications is received and the unit is locked onto the carrier signal.

Power 8 VDC is present.

Power 5 VDC is present

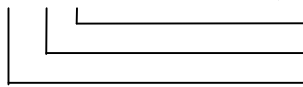
Power -5 VDC is present

4. STOCK CODE SELECTION

4.1 ORDERING INFORMATION:

Stock Code selection:

OS807[x][x][x]/[ver] Version.(not specifically required for ordering)



Power supply option if metal box option.

Optic Connector Option.

Optic option.

OPTIC OPTION	WAVELENGT H	RANGE	BUDGET DISTANCE	OPTIC CONNECTOR OPTION		POWER SUPPLY OPTION	
A	850nm	Short range multi mode	3.5km	A	SMA	A	220VA C
B	1300nm	Medium range multi mode	12km	B	ST	B	110VA C
G	1300nm	Short range multi/single mode	8/12km			C	48V DC

4.2 VERSION HISTORY

OS807 ___/a - FIRST PRODUCTION VERSION

5. PREPARATION FOR USE

5.1 UNPACKING

Check for physical damage caused during transportation. Return any damaged equipment.

5.2 INSTALLATION

Check that the voltage supply matches that of the equipment before installation commences. Connect the power cable. The DC. power connections are shown on the rear panel. The equipment has no ON/OFF switch and is therefore active as soon as power is connected.

Connect the audio cables.

5.3 CONNECTION:

The card has two optic connectors: one for Transmit Audio and the other for Receive Audio. The electrical connection is made on RJ11 plugs. Pins 3 & 4 is used when a 2 wire system is used. Pins 3 & 4 output and pins 2 & 5 input is used when a 4 wire system is used.

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 has to be swapped over to the 2W position.

The electrical inputs and outputs are fully isolated via audio transformers.

Power is supplied either from the 19" Back plane of the OS800 Sub Frame or from The metal Box enclosure and power supply.

5.4 COMMISSIONING

If the link is correctly connected and the Link OK light is on then the audio link should be operational.

6. OPERATORS INSTRUCTIONS

The unit needs no operator intervention to function. If a fault arises, it is necessary to observe the led indications and to perform such procedures as first line maintenance.

7. MAINTENANCE INSTRUCTIONS

No routine maintenance is required on this equipment.

8. SPECIFICATION :

8.1 ELECTRICAL

INPUT : Normal - 0dBm 2V peak to peak
Maximum - 6dBm 4V peak to peak
Impedance 600 Ohm.

OUTPUT : Level 0dBm Impedance : 600 Ohm

Frequency response : 50 Hz to 15 kHz (minimum)

Transmission mode : FM modulation, Carrier 200kHz

Modulation Index : 30%

Input has an adjustable gain and can amplify 3dB

Power Supply:

+ 12V, - 5V (uses existing power from LL700 system)

Alternatively it can be housed in a metal box with power supply.

Optical

Standard option, other options are available.

wavelength : 850nm or 1300

Connector : ST

Power budget : 12 dB

Source : LED = - 18 dBm

Detector : Pin Diode = - 30 dBm

8.2 MECHANICAL

Dimensions : 100mm x 160mm x 20mm (W,L,H)

Weight : 150 grams Card only.