

OS802U.DOC
Author : W.D.
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PRODUCT - OS802
SINGLE CHANNEL VIDEO RECEIVER
WITH AGC
USER MANUAL
VERSION 2.0
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USER MANUAL

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1. PRODUCT DESCRIPTION

1.1 General

The OS802 is a single channel video on fibre receiver unit with AGC.
This is a stand alone unit receives an optic signal and converts it into a composite video signal.

This unit is fully compatible with the OS800 sub rack system.
The unit utilise mains power.

1.2 Basic System Description

The unit consists out of a fibre to video receiver and one unregulated power supply.
The power for this unit comes in trough an 3pin screw terminal.

The Optic signal is received by an Optic connector on the side of the unit.
This Optic signal is converted to an video signal. This Video signal is fed into a video amplifier to adjust the size of the signal received to an acceptable signal level.

Features

- Compatible with standard composite video.
- Interface directly to the OS801 Miniature Single channel video transmitter or to the OS803T 3 channel video transmitter.

Uses

- Security systems.
- Long distance noise free video transmission.

1.3 Indications

Video signal - Indicates Video signal present.

2. PRODUCT STOCK CODES

OS802 1 Channel Video on Fibre Receiver with 850nm optics and ST optic connectors.

3. PREPARATION FOR USE

3.1 Unpacking

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

3.2 Configuration of the links.

Link 1 selects AGC or manual gain operation. When the link is in position the AGC operation is selected. When Link 1 is out the manual operation is selected.

Link 2 & 3 selects normal or invert Video signal. This link is factory set and depends on the optic type used. Usually when 1300nm optics are used then Link 2 must be in and C17 must be in position and C18 not, and when 850nm optics are used Link 3 must be in and C18 must be in position and C17 not.

When 1300nm optics are used C26 must be in position otherwise not.

3.3 Installation.

The unit is mounted and the power is connected.

Connect the fibre and the BNC connector to the unit and take care not to bend the fibre.

If Link 1 are selected for manual gain adjustment then the following procedure is followed.

This gain adjustment is reachable from the Left hand side of the unit.

By connecting the ground lead of the oscilloscope to the ground Testpin the signal can be tested by connecting to the VID_OUT Testpin. The gain is normally adjusted using a standard reference signal from a pattern generator at the Optic transmitter. The received Video signal is then monitored on the oscilloscope. The gain is now adjusted to get a 300mV sync signal. The oscilloscope must be set to line sync.

4. OPERATOR'S INSTRUCTIONS

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

5. MAINTENANCE INSTRUCTIONS

No routine maintenance is required on this equipment.

5.1 First line maintenance.

5.1.1 Instruments and tools required

Optic power meter

Multi-meter.

Oscilloscope.

5.1.2 Maintenance procedure

When arriving at a suspect link it is always necessary to ensure that the unit has been correctly coupled and to note the video indicator of the equipment.

Check that all fibre connectors are plugged in correctly and that the fibre is undamaged.

The first course of action is to check the power supply.

If the unit is coupled and the supply is correct but the video indicator is not on, disconnect the fibre from the unit and plug the fibre into an optic power meter to see if any optic signal is coming out of the fibre. If there is no optic signal the problem is with the fibre or the transmitter.

If the optic signal is present and the unit is still not operating check to see if the gain is set to automatic or manual and try to readjust the gain. Use the Oscilloscope and measure the output. The correct size for the sync pulse is 300mV.

If all these tests have been done and the system is still not operational the unit must be returned to the supplier for repair.

6. Ordering Information:

Model Number: OS802AB - Single Channel Video on Fibre Receiver with AGC
with 850nm Optics and ST connectors

7. SPECIFICATIONS

7.1 Electrical Characteristics

Power Connector:	Power Cable to be plugged in.
Input Voltages:	230V AC @ 10mA
Video Output Connector	BNC Female - 75Ω
System Bandwidth:	100Hz to 10MHz
Differential Gain:	2% typical
Differential Phase:	3° typical

7.2 Optical Characteristics

Wavelength:	850nm
Connector:	ST
Fibre:	Multi mode
Sensitivity:	-26dB to give 300mV Sync signal.

7.3 Physical Characteristics

Overall Unit Dimensions -	Length -	101 mm
	Width -	115 mm including all connectors
	Height -	48 mm
	Weight -	300 g (max)