

AMG4742R Instruction Manual

4 Channel Video Receive Unit for a Singlemode Fibre Link



The **AMG4742R** is a rackmount four channel video receive unit designed to receive 4 video signals over one Singlemode fibre.

The AMG4742R is designed to plug into an AMG2005 or AMG2009 subrack, which in turn fits into a 19" rack system.

The AMG4742R is designed to operate with AMG4741 or rackmount equivalent AMG4741R four channel video transmit unit in a point to point configuration.

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Introduction

Unit Functional Schematic



Optical Connection

The AMG4742R is connected as illustrated below when used with an AMG4741R 4-channel transmit unit acting as a point to point system.



Connections

Video Output Connections

No. of channels	4
Connectors	.75 ohm BNC Socket.
Output Impedance	.75 ohm terminated.
Output Level	.1 Volt p-p nominal
Frequency Response	.10Hz to 7MHz.

Optical Connections

PRIMARY OPTO IN	
Connector	LC/PC
Optical Fibre	One fibre - Singlemode
Primary Optical Sensitivity	22dBm
Wavelength	1310nm

Power Connection

Power supplyfrom plug in connection on the AMG2009 / AMG2015 subrack Power consumption10 Watts max.

Front Panel Indicators

Power LED	
Power Green Off	 unit powered no power applied to unit
Video Output LED's	
Video Present CH1-4Green Org Off	 video signal present on output BNC channel present but no video on O/P BNC no video channel present
Fibre Optic LED's	
Primary Opto Sync TXGreen Off	 optical channel transmitting optical channel not transmitting
Primary Opto Sync RXGreen Org Off	 optical channel receiving optical channel receiving but not sync. optical channel not transmitting

Physical Information

Dimensions

Height	3U Plug-in
Width	14HP
Depth	170mm excluding connectors
Weight	1000grams

Mounting Details

The unit is designed to be mounted within an AMG2009 or AMG2015 Subrack on standard card guides.

Removal / replacement from / to the Case

Note: - The AMG unit PCB's are static sensitive. Handle with proper care and use normal electrostatic discharge (ESD) procedures. Use properly grounded protection (for example, wrist straps) when handling the PCB.

To remove units from the case to access the data expansion boards and the daughter boards, remove the 2 or 4 fixing screws on the rear panel and slide the PCB's out of the case. Ensure that the fibres do not snag or get trapped.

To replace the PCB's into the case, slide the PCB's gently into the case aligning the boards with the appropriate slots. Ensure that the fibre do not snag or get trapped.

Safety

AMG Optical Fibre Products use Class 1 laser systems in accordance with EN 60825-2:2000.

It is always advisable to follow good practice when working with optical fibre systems. This includes:

- Do not stare with unprotected eyes or with any unapproved collimating device at fibre ends or connector faces, or point them at other people.
- Use only approved filtered or attenuating viewing aids

For other safety issues and advice on good practice associated with optical fibre systems, please see EN 60825-2:2000 or your local safety officer.

Maintenance and Repair

There are no user serviceable parts within AMG products. See unit data sheet for full specification.

In case of problem or failure, please call your local support centre or contact: **AMG Systems Ltd.** at 3 The Omega Centre, Stratton Business Park, Biggleswade, Beds., SG18 8QB, UK.

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