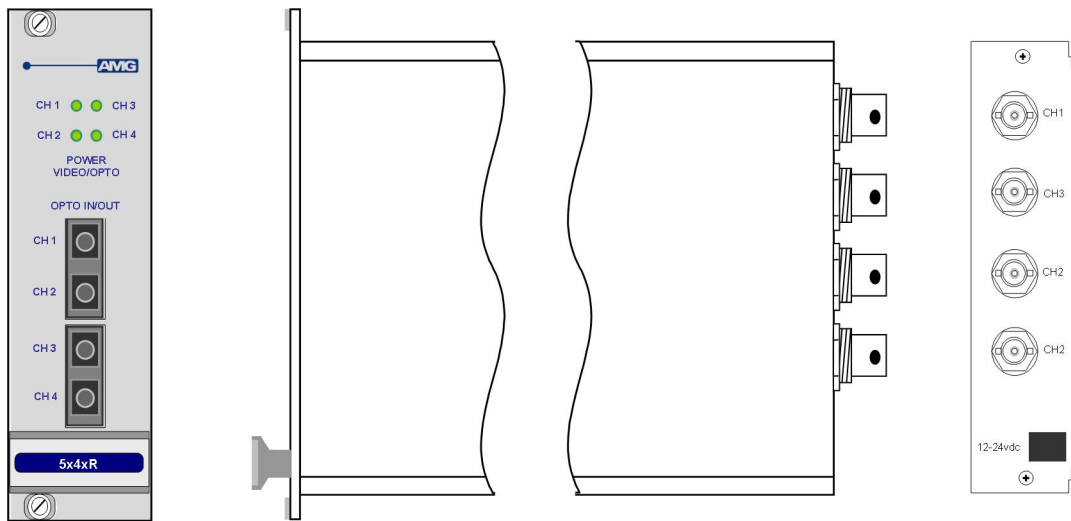


AMG5642R Instruction Manual

Quad System with 4x Independent Channels each of : [Single Channel Video Receive Unit for a Multimode Fibre Link]



The **AMG5642R** is a **QUAD** rackmount system which provides four independent channels, each designed to receive one video signal over one Multimode optical fibre. i.e. a total of four optical fibres.

The **AMG5642R** is designed to plug into an **AMG2005** or **AMG2009** subrack, which in turn fits into a 19" rack system.

The **AMG5642R** is designed to operate with four **AMG5611** single channel video transmit units or one **AMG5641R** rackmount four channel video transmit unit in a point to point configuration.

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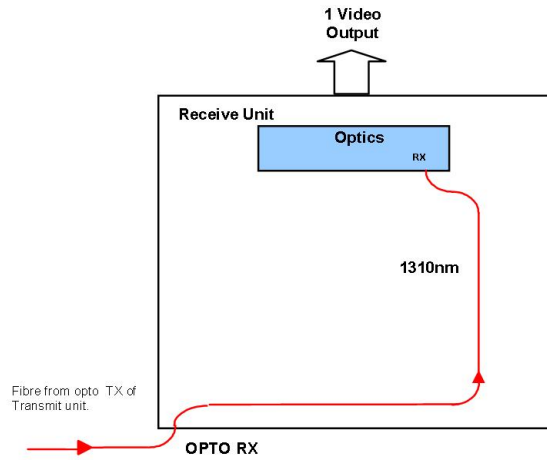
Introduction

Unit Functional Schematic

The **AMG5642R** provides four independent, receive channels.

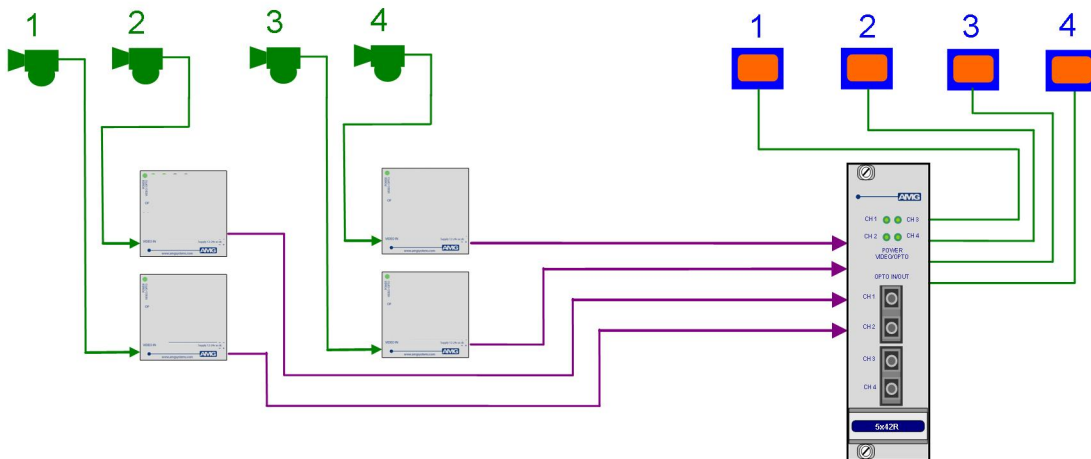
Each channel receives one video signal from up to four independent **AMG5611** transmit units.

The schematic diagram shows one of the four available channels of the **AMG5642R**



Optical Connection

The **AMG5642R** connections are illustrated in the following example which shows four **AMG5611** single channel transmit units together with an **AMG5642** configured as a quad channel point to point system.



Connections

Video Output Connections

No. of channels4 independent video channels
Connectors75 ohm BNC Socket.
Output Impedance75 ohm terminated.
Output Level1 Volt p-p nominal
Frequency Response.....10Hz to 7MHz.

Optical Connections

No. of Optical Connections1 per video channel
Optical FibreMultimode 50/125 or 62.5/125**
ConnectorSC/PC

Minimum Optical Sensitivity.....-30dBm
Receive Wavelength.....1310nm

Optical Link Dynamic Range20dB.

**Note: the transmission distance is limited by the bandwidth of the Multimode optical fibre. The optical data rate is 155Mbits/s, which may restrict operation to a maximum fibre length of 7km, although in most cases the units will operate successfully over longer fibre lengths. It is advisable however for distances greater than 7km, to have the optical fibre tested.

Power Connection

Power supplyFrom plug in connection on the AMG2009 or AMG2015 subrack
Power consumption2.5 Watts max.

Front Panel Indicators

Power LED

Power / Video / Opto.....	Green	-	Video present & opto sync.
	R/G	-	Opto sync. but no video present.
	Red	-	No opto sync.
	Off	-	No power applied to unit.

Physical Information

Mounting Details

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

Dimensions

Height 3U Plug-in
Width 7HP
Depth 170mm excluding connectors
Weight 600grams

Removal / replacement from / to the Case

Note: - The AMG unit PCB is 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 out of the case.

To remove the PCB from the case for example to access a Low Speed Data mode switch, remove the 2 fixing screws on the rear panel and slide the PCB sufficiently out of the case to enable access to the switch.

To replace the PCB into the case, slide the PCB gently into the case, if necessary aligning the board with the appropriate slots.

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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