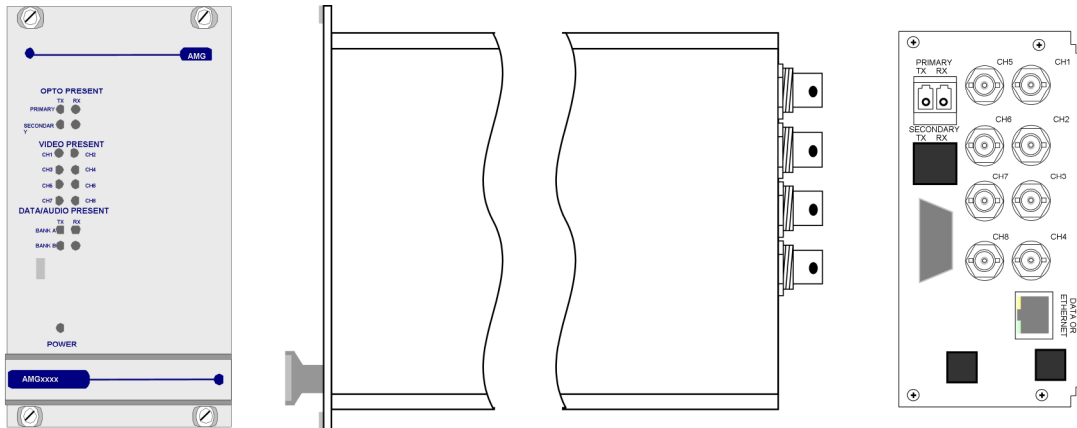




# AMG4682R Instruction Manual

## 8 Channel Video Receive Unit for a Multimode Optical Fibre Link



The **AMG4682R** is a rackmount eight channel video receive unit designed to receive 8 video signals over one Multimode fibre.

The **AMG4682R** is designed to plug into an **AMG2005** or **AMG2009** subrack, which in turn fits into a 19" rack system.

The **AMG4682R** is designed to operate with **AMG4681** or rackmount equivalent **AMG4681R** eight channel video transmit unit in a point to point configuration.

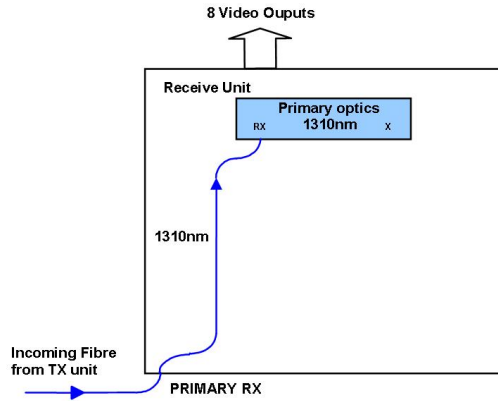
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# Introduction

## Unit Functional Schematic

The **AMG4682R** drops off up to 8 video signals transmitted from the **AMG4681**.



## Optical Connection

The **AMG4682R** is connected as illustrated below when used with an **AMG4681** 8-channel transmit unit acting as a point to point system.



## **Connections**

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### **Video Output Connections**

No. of channels .....8  
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  
Primary Optical Sensitivity .....-22dBm  
Wavelength .....1310nm  
Optical Fibre .....Multimode 50/125 or 62.5/125\*\*

\*\*Note: the transmission distance is limited by the bandwidth of the Multimode optical fibre. The optical data rate is 1.25Gbits/s. The maximum bandwidth specification at this data rate for Multimode fibre is 2km. although in most cases the units will operate successfully over longer fibre lengths. It is advisable however for distances greater than 2km, to have the optical fibre tested.

### **Power Connection**

Power supply .....from plug in connection on the AMG2009 / AMG2015 subrack  
Power consumption .....10 Watts max.

## **Front Panel Indicators**

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### **Power LED**

Power .....	Green	-	unit powered
	Off	-	no power applied to unit

### **Video Output LED's**

Video Present CH1-8 .....	Green	-	video signal present on output BNC
	Org	-	channel present but no video on O/P BNC
	Off	-	no video channel present

### **Fibre Optic LED's**

Primary Opto Sync TX..... Not Used

Primary Opto Sync RX .....	Green	-	optical channel receiving
	Org	-	optical channel receiving but not sync.
	Off	-	optical channel not transmitting

## **Physical Information**

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### **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**

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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**

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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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