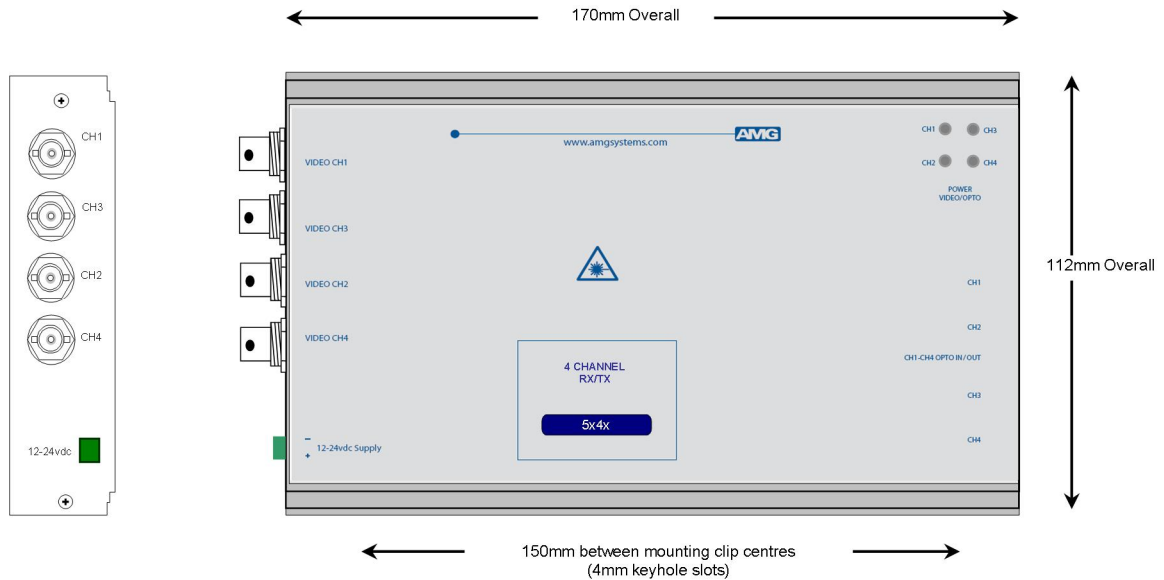


AMG5641 Instruction Manual

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



The **AMG5641** is a **QUAD** standalone system which provides four independent channels, each designed to transmit one video signal over one Multimode optical fibre. i.e. a total of four optical fibres.

The **AMG5641** is designed to be powered using an **AMG2001** standalone power supply.

The **AMG5641** is designed to operate with the **AMG5642** or **AMG5642R** four channel video receive unit in a point to point configuration. The R suffix in the partno. indicates a rackmount configuration.

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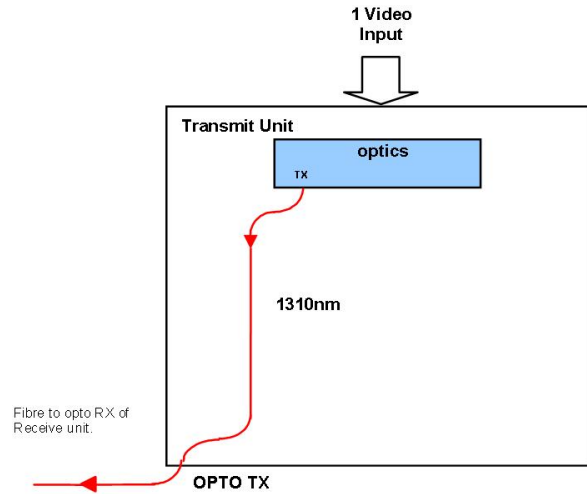
Introduction

Unit Functional Schematic

The **AMG5641** provides four independent, transmit channels.

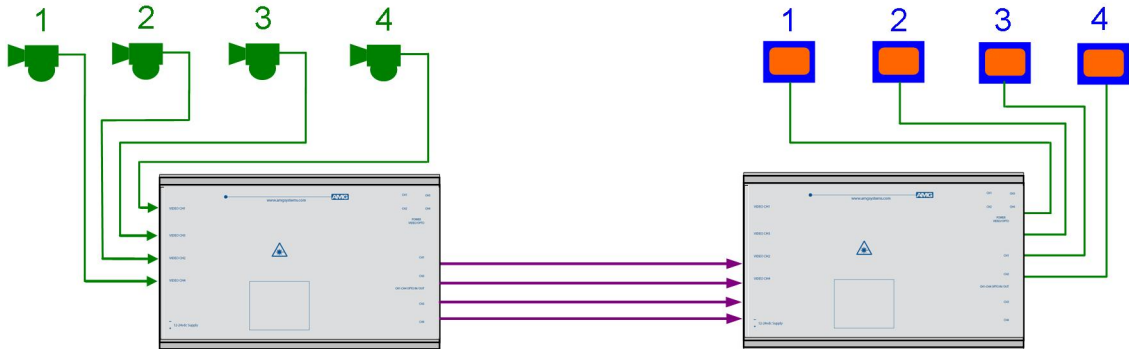
Each channel transmits one video signal to one of four corresponding receive channels of an **AMG5642** receive unit.

The schematic diagram shows one of the four available channels of the **AMG5641**



Optical Connection

The **AMG5641** connections are illustrated in the following example which shows an **AMG5641** four channel transmit unit together with an **AMG5642** configured as a quad channel point to point system.



Connections

Video Input Connections

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

Optical Connections

No. of Optical Connections1 per video channel
Minimum Optical Fibre.....Multimode 50/125 or 62.5/125**
Connector TypeSC/PC

Minimum Optical Launch Power-10dBm
Transmit Wavelength.....1550nm

Optical Link Dynamic Range20dB.

**Note: the transmission distance is limited by the bandwidth of the Multimode optical fibre. The optical data rate is 155Mbps/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

Connector TypeRemovable 2-pin, 3.81mm, Screw Terminal
Connector Partno.....Phoenix 1803578
Supply Voltage.....+12 to +15 Volts DC
Maximum Power2.5 Watts

Front Panel Indicators

Power LED Video only

Power / Video / Opto.....	Green	-	Video input.
	Red	-	Unit powered, no Video input.
	Off	-	No power applied to unit

Physical Information

Dimensions

Height 112mm
Width 170mm (excluding connectors)
Depth 35mm
Weight 600grams

Mounting Details

The AMG unit is supplied with a clip-on mounting bracket which should be attached to a panel or wall using 2 off 4.0mm screws, see diagram on page 1 for dimensions. The unit is clipped into the mounting bracket, and is then held firmly in position.

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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