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Instruction Sheet

AMG2800 GUARDIAN - ADDING ETHERNET CARDS

1 Introduction

These instructions describe how to fit Ethernet cards into the AMG2800 Guardian Units. Each Ethernet channel is allocated a card slot from each video bank. The slot in Bank B is fitted with an input card containing an RJ45 connector and the corresponding slot in Bank A is fitted with an output card. A bus card is used to link them together and provide bi-directional operation. Ethernet is only supported from Guardian software version V3.35 onwards.

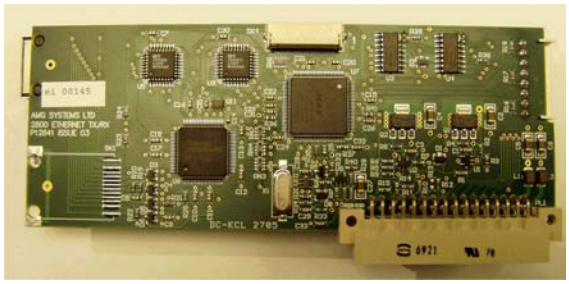
Caution: The AMG2800 contains static-sensitive components. Handle the unit with proper Electrostatic Discharge (ESD) procedures.

2 Identification of Parts

1. Ethernet Input Card (EICA) – Odd

The RJ45 connector is in the lower position so that the board can be fitted into **odd** numbered slots in Bank B.

2. Ethernet Input Card (EICA) – Even



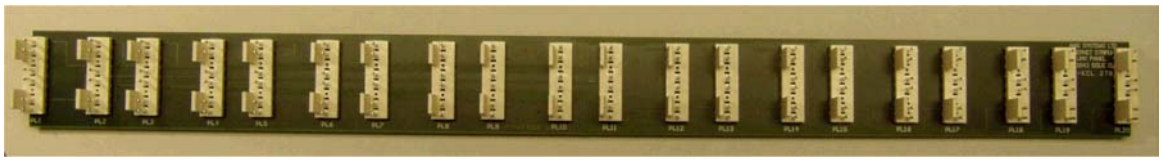
The RJ45 connector is in the upper position so that the board can be fitted into **even** numbered slots in Bank B.

3. Ethernet Output Card (EOCA)

The board is fitted into Bank A and requires no panel connection.

4. Ethernet Bus Card (EBCA)

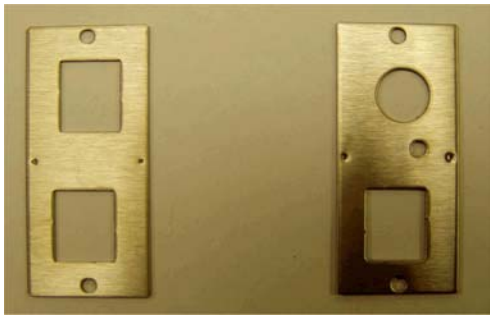
The board links the connectors on the rear of the Input and Output cards.



5. Rear Panel Metalwork, Blanking Plugs and Bus Card Pillars

The choice of parts dependent on the configuration.

AMG Reference	Description
M12644	Ethernet Rear Panel
M12646	BNC/Ethernet Rear Panel
F40016	Blanking Plug
F12655	Bus Board Pillar



3 Tools Required

- No1 Pozidrive/Supadrive Screwdriver (Farnell part number 266-796)
- Small flat-bladed screwdriver

If video cards are present then the following tool may be required.

- Socket, 3/8", Reach:14mm, AF: 14mm (Farnell part number 146-438)

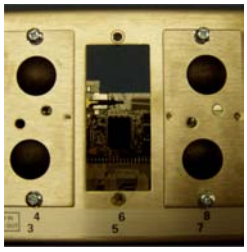
4 Removing the Top Cover

Ensure that the AMG2800 unit is powered down and the mains lead is disconnected from the rear inlet socket. If necessary move the unit to allow easy access to the top panel.
Undo the 3 screws along the rear edge, and the 2 screws on each side of the top cover, using a Pozidrive screwdriver.
Lift up the rear edge of the top cover approximately 20mm, and then slide it backwards to disengage the front edge from the slot behind the top of the front panel. The underside of the top cover rests on 6 'tin plated emc strips'. Make sure that these strips do not come off from the edges of the chassis.

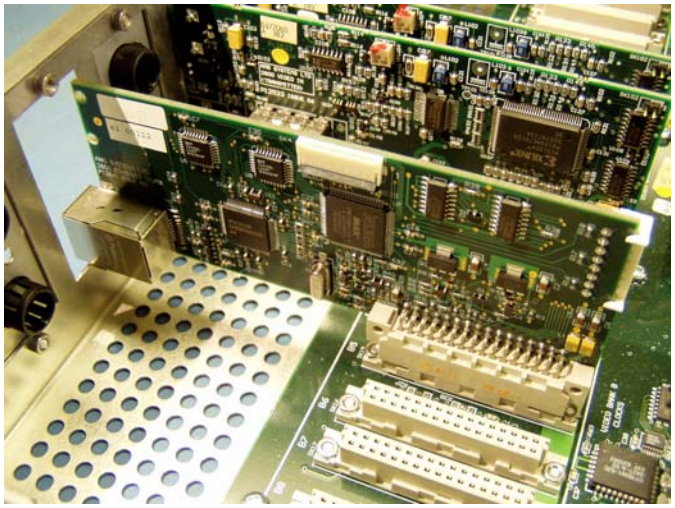
5 Fitting the Ethernet Cards

The following example shows Ethernet boards fitted to channel 5. Exact configurations will vary.

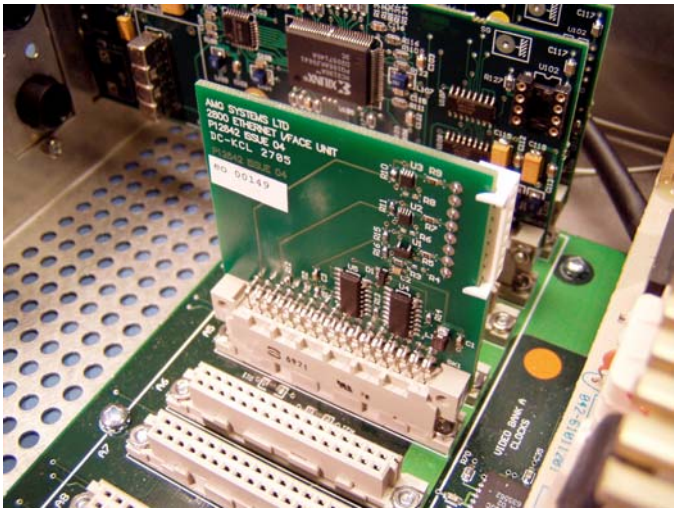
1. Remove the appropriate **rear panel metal work** from input Bank B. This depends on the position of the new channel to be added and whether video and/or Ethernet boards are already present.



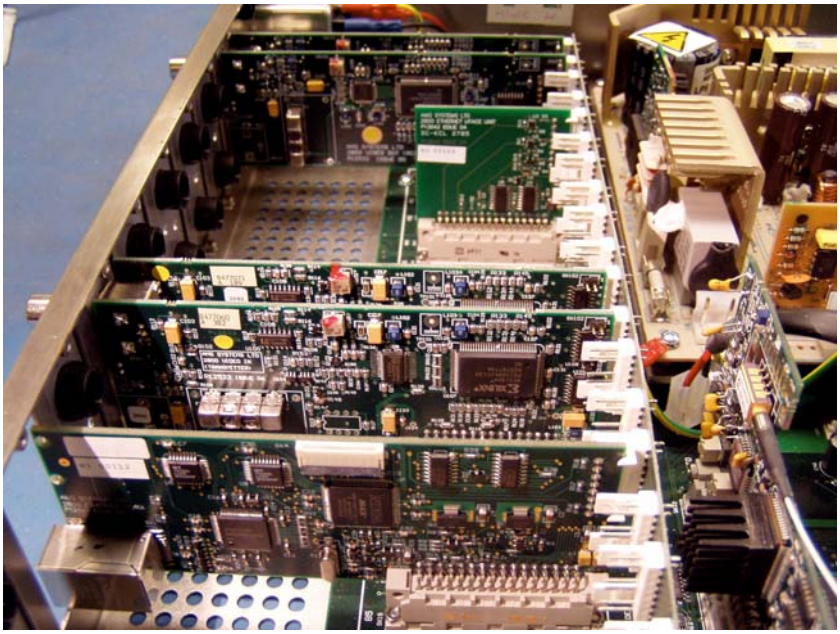
2. Fit the **Ethernet Input Card** into the slot in Bank B.
   Use the rear panel label and motherboard silkscreen to identify the slot numbering.
   Odd cards with a low-mounted RJ45 connector fit into odd numbered slots.
   Even cards with a high-mounted RJ45 connector fit into even numbered slots.



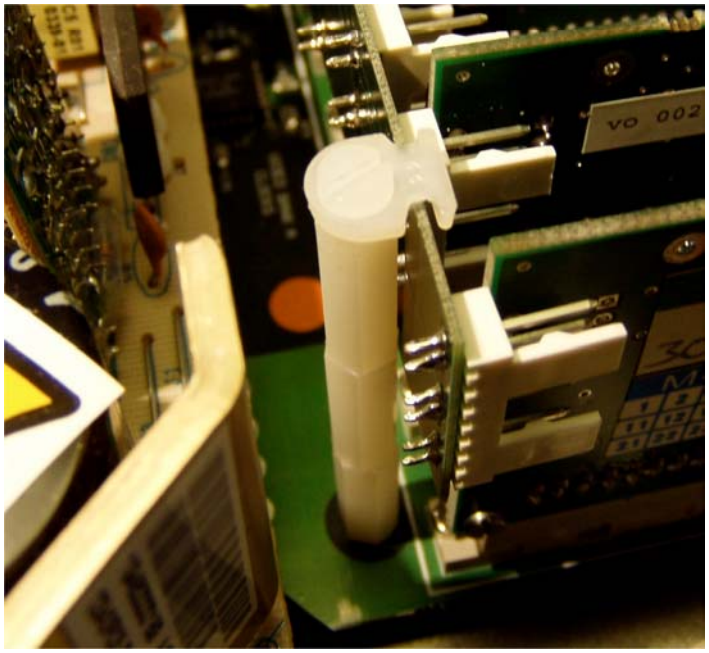
3. Fit the **Ethernet Output Card** into the slot in Bank A.
   Use the slot that corresponds to the position of the input card. For example, fit the Output card into Bank A slot 5 if the Input card is fitted into Bank B slot 5.



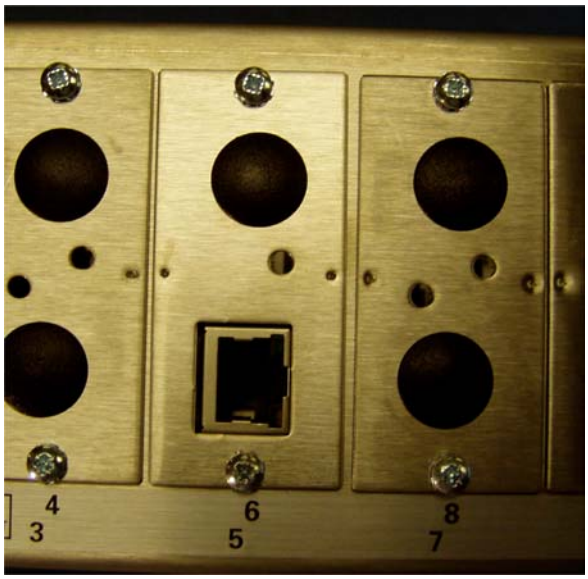
4. Fit the **Ethernet Bus Card** to the Input and Output boards using the locking connectors. Connector PL1 on the end of the bus board is aligned for connection to Ethernet cards in slot A1 in Bank A. Count along from this end to re-check the alignment with the other 2 boards. Up to 20 Ethernet boards may be connected to the bus card.



5. Fit the **support pillars**, if required, to hold the bus board in place. The pillars should be fitted if the ends of the bus board are able to flex too freely. The end with connector PL1 should not be allowed to touch the power supply heat sink.
Remove the screws in the motherboard directly below each end of the bus board.
Screw the pillars into the motherboard.
Tighten the clips on the end of the pillars to clamp the bus board.



6. Fit the new **rear panel metalwork** and any **blanking plugs** that are required.



6 Configuration Label

If fitted, update the configuration label on the side of the Guardian unit to show the new configuration.

7 Refitting the Top Cover

Fit the front edge of the top cover into the slot behind the front panel, without trapping any fibre optic cable. Lower the top cover down onto the chassis, making sure that the 6 ‘tin plated emc strips’ are not displaced.
Fit the 3 screws along the rear edge and the 2 screws on each side of the top cover, using a Pozidrive screwdriver.
Re-connect the mains supply lead and switch on the power.