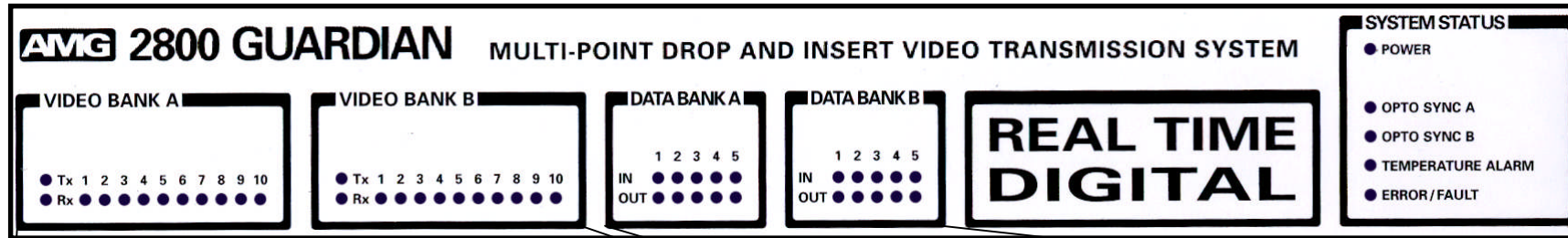


AMG 2800 Guardian Front Panel Indicators



Video Bank A and Video Bank B (normal operation)

● Tx

ON: bank configured for 1 to 10 video input **Vin** cards
(connected to HS Opto Transmitter)
OFF: no video input cards

● Rx

ON: bank configured for 1 to 10 video output **Vout** cards
(connected to HS Opto Receiver)
OFF: no video output cards

1 2 3 4 5 6 7 8 9 10

● ● ● ● ● ● ● ● ● ● Video Channels

ON: a video card is fitted in the channel slot and the video signal is present on the rear bnc (but the matrix determines if a Vin signal is switched onto the fibre).
OFF: either a video card is fitted in the channel slot but the video signal not present on the rear bnc or no video card is fitted

Notes:

- The standard configuration is for,
 - Video Bank A = Rx = Video output
 - Video Bank B = Tx = Video Input
- All LEDs are GREEN

Data Bank A and Data Bank B (normal operation)

1 2 3 4 5 IN ● ● ● ● ● Data Input Channels

ON: data interface daughterboard fitted & data/audio stream present at input
INTERMITTENT: data interface daughterboard fitted & data/audio burst present at input
OFF: no data interface daughterboard fitted

OUT ● ● ● ● ● Data Output Channels

ON: data interface daughterboard fitted & data/audio stream present at output
INTERMITTENT: data interface daughterboard fitted & data/audio burst present at input
OFF: no data interface daughterboard fitted

Notes:

- All LEDs are GREEN

AMG 2800 Guardian Front Panel Indicators (cont)

System Status (normal operation)

● POWER

GREEN: Mains power is connected.

The standard 2800 configuration for the opto slots,

- Rear panel fibre INPUT connects to High Speed (HS) Receiver in OPTO A slot
- Rear panel fibre OUTPUT connects to High Speed (HS) Transmitter in OPTO B slot

● OPTO SYNC A (normally HS Opto Rx)

GREEN: OK. All synchronisation and comms signals present on incoming optical fibre.

ORANGE (OCCASIONAL): OK. Due to the system comms ECHO character, generated by the master unit, circulating around fibre optic ring.

This is used to check the loop integrity.

ORANGE (>50% of TIME): Marginal fault. Loss of system comms ECHO character due to either,

- marginal input power level (spec: -20dBm, typical: -23.5 dBm), video and data signal unaffected but problems with MUXcomm.
- very low optical power input (spec: < -20dBm, typical: < -23.5 dBm), with noise affecting video & data signals & MUXcomm operation.

ORANGE (CONTINUOUS): Fault. Loss of system comms ECHO character due to either,

- a break in the fibre optic ring (not INPUT fibre) with the loss of data signals, MUXcomm operation & possible loss or noisy video.
- critically low optical power input (< -23.5 dBm), with noise affecting video & data signals and MUXcomm operation.

RED: Fault. Due to either

- extremely low optical INPUT power or total loss of input due to fibre break
- clock synchronisation problem between preceding HS Opto Tx and this unit's HS Opto Rx due to electronics failure

● OPTO SYNC B (normally HS Opto Tx)

GREEN: OK. All synchronisation and comms signals present at transmitter.

ORANGE (OCCASIONAL): OK. Due to system comms ECHO character, generated by the master unit, circulating around fibre ring network.

Used to check the loop integrity.

ORANGE (>50% of TIME): Marginal fault. Loss of system comms ECHO character. The OPTO SYNC B status (HS Opto Tx) is updated from the incoming OPTO SYNC A status (HS Opto Rx) in order to relay the information around the entire fibre optic network. Therefore refer to the OPTO SYNC A information in the section above.

ORANGE (CONTINUOUS): Fault. Loss of system comms ECHO character. Refer to the OPTO SYNC A information in the section above.

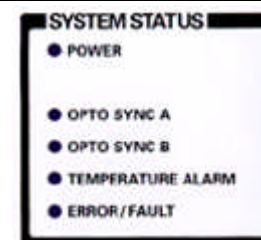
RED: Fault with the unit probably due to the HS Opto Transmitter.

● TEMPERATURE ALARM

RED: Laser and/or the internal temperatures are out of acceptable range.

● ERROR/FAULT

RED: Hardware or software fault in the unit.



AMG 2800 Guardian Front Panel Indicators (cont)

Video Bank, Data Bank and System Status (power-up sequence)

Prior to the normal operation described above there is a 3-stage LED power-up sequence as shown below. This can be used for fault finding if there is a problem with a unit.

1. LED TEST

- All the LEDs light sequentially from left to right through the video and data banks, then upwards through the system status section and finally holding all the LEDs on for approximately 1 second.
- All video bank and data bank LEDs are GREEN but for the status section the POWER LED is GREEN, the OPTO SYNC A & B LEDs are (bi-colour) ORANGE, the TEMPERATURE ALARM and ERROR/FAULT LEDs are RED.

2. CONFIGURATION CHECK

- The LEDs illuminate for approximately 3 seconds to show which boards are fitted.
- The VIDEO BANK LEDs illuminate to indicate the video direction and which channels are fitted in the bank.
- The DATA BANK OUT 2, OUT 3 and OUT 4 LEDs illuminate when a main Data Motherboard card is fitted.
 - The OUT 1 LED will illuminate if a Lo Speed Opto Tx daughter board is present
 - The OUT 2 LED will illuminate if a Lo Speed Opto Rx daughter board is present.
 - The IN LEDs on the upper row will illuminate for every Data Interface Card present.
- In the SYSTEM STATUS section the OPTO SYNC LEDs illuminate to indicate if a HS Opto Tx or Rx boards is fitted.
 - OFF = no HS Opto board fitted to the opto slot
 - ORANGE = HS Opto Rx board fitted
 - GREEN = HS Opto Tx board fitted
- The ERROR/FAULT LED in the status section illuminates if there is a problem identifying a board or if the CPU card has a memory problem.

3. LOAD STATUS CHECK

- The GREEN LEDs illuminate for approximately 3 seconds to show that each card is initialised and operational.
- If there is a problem then the RED ERROR/FAULT LED illuminates and the relevant GREEN LED is absent. Most of the LEDs that illuminate in the configuration sequence are present in the CONFIGURATION CHECK with the exception of the DATA IN LEDs that represent the data daughter boards.