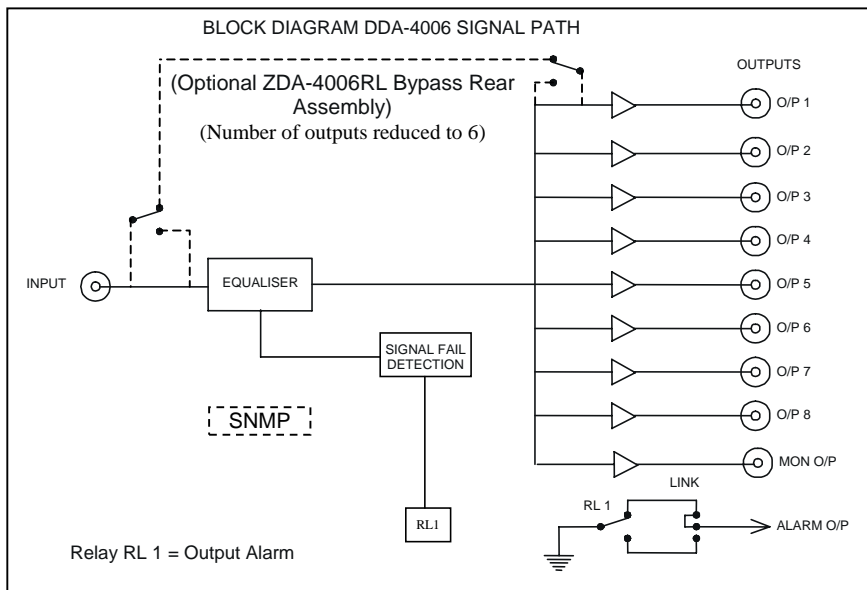


270 Mb/s ASI/SDI 8 O/P Distribution Amplifier Type DDA-4006



Features:

- For use as buffer or distribution amplifier.
- 8 x in-phase 270 Mb/s ASI or SDI non reclocked outputs.
- Automatic input equalisation to 250 metres.
- Automatic output muting on no input.
- Front panel monitoring output, signal presence LED and external alarm contacts.
- Optional plug-in SNMP monitoring module.

General:

The DDA-4006 270 Mb/s serial digital video distribution amplifier provides the user with a single standard module to cover a wide range of distribution and monitoring functions for ASI or SDI signals.

The DDA-4006 supersedes the DVA-3006 and provides all of its predecessor's functions together with the added option of a Simple Network Management Protocol (SNMP) monitoring module for use with IRT's SNMP system frame.

Due to the fact that standard loop through techniques used in the analogue domain are unsuitable to the digital domain most digital equipment comes with no facility to route the input signal to other locations. As a result a DA is required at almost every point in the digital chain.

Serial digital signals also suffer severe deterioration over relatively short cable distances. The DDA-4006 provides a means of extending the working distances that can be achieved by equalising and re-transmitting the data mid route.

The DDA-4006 may also be used to provide input equalisation for devices not having this feature, as most unequalised inputs will only support cable lengths of less than 20 metres.

Frequent re-clocking of serial digital signals can lead to serious increases in jitter with resultant data errors. The DDA-4006 does not include re-clocking so as to minimise these errors, leaving re-clocking to be done by the receiving device. For applications requiring reclocking the DDA-4007 should be used.

An optional rear assembly, ZDA-4006RL (sold separately), provides a bypass relay to switch the Input (SK1) to Output 1 (SK2) in the event of a power failure. When this bypass rear assembly is used, number of outputs is reduced to 6.

The DDA-4006 is designed to fit IRT's Standard Eurocard frame as well as IRT's 4000 series frame for use with IRT's SNMP system and may be used alongside any other of IRT's analogue or digital Eurocards.

DDA-4006 Technical Specifications

Input:

Number 1.
 Impedance 75 Ohm.
 Return loss >20 dB 5 MHz to 270 MHz.
 (>15 dB with optional ZDA-4006RL bypass rear assembly)
 Equalisation Automatic, better than 250 metres at 270 Mb/s for Belden 8281 or equivalent cable (reduces to approx. 200m when LK2 is closed).

Outputs:

Number 8 ASI or SDI plus one front panel monitoring output.
 Signal level 800 mV ± 10%
 Impedance 75 Ohm.
 Return loss >20 dB 5 MHz to 270 MHz.
 (>15 dB with optional ZDA-4006RL bypass rear assembly)
 DC offset Nil.

Performance:

Output rise time <1 ns, (700 ps typically).
 Residual Jitter <0.1 UI (measured with up to 300m of Belden 8281 or equivalent cable)

Connectors:

BNC.

Indicators:

Power LED (green) for +5 Vdc.
 Signal present LED (green) when signal present.

Power requirement:

Voltage 28 Vac CT (14-0-14) or ±16 Vdc
 Consumption 2.0 VA (including ZDA-4006RL optional rear assembly).

General:

Temperature range 0 - 50° C ambient
 Mechanical Suitable for mounting in IRT 19" rack chassis with input, output and power connections on the rear panel.

Dimensions 6 HP x 3U Extended Eurocard (220 mm x 100 mm).

Weight With rear assembly 340g.

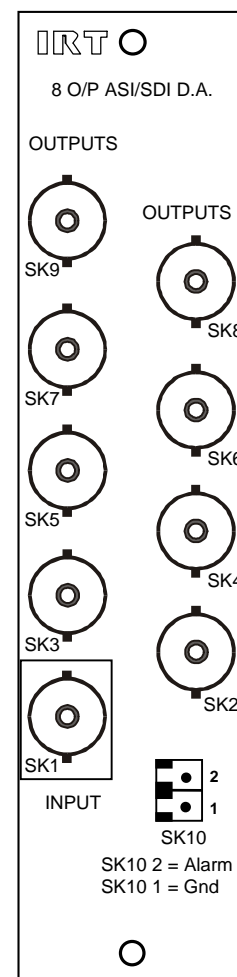
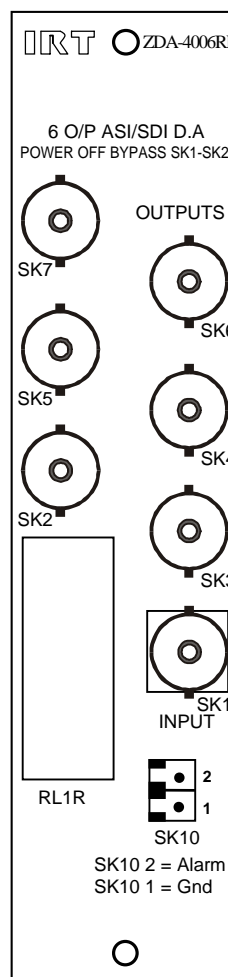
Finish: Front panel Grey background, silk-screened black lettering & red IRT logo

Rear assembly Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals

Supplied accessories Rear connector assembly with matching connector for alarm outputs.

Optional accessories ZDA-4006RL relay bypass rear assembly (6 O/P).

SMU-4000 SNMP plug-in module for use with 4000 series frame fitted with SNMP "Agent"



Due to our policy of continuing development, these specifications are subject to change without notice.

Detailed specifications available from:

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