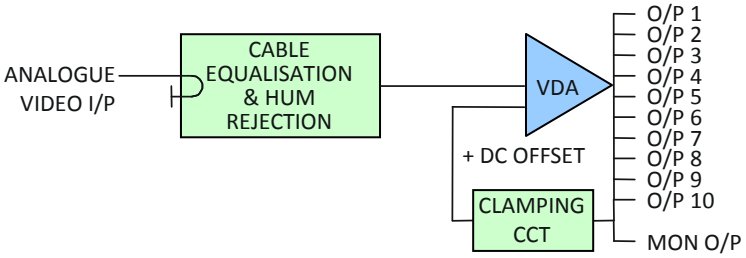
VA-700

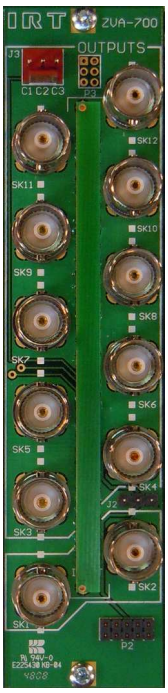
Analogue Video Distribution Amplifier

FEATURES

- **Loop through input.**
- **Ten BNC output's on rear.**
- **>30MHz Bandwidth.**
- **Front panel monitoring output.**
- **Cable equalization to 300m.**
- **Various clamping options.**
- **Longitudinal hum stripping.**
- **Front panel EQ and gain adjustment.**

BLOCK DIAGRAM VA-700 SIGNAL PATH





GENERAL

The VA-700 is a video distribution amplifier of modular Eurocard construction having facilities for cable equalisation, longitudinal hum reduction, and clamping.

The input is a bridging loop through type to facilitate connection to other equipment. Ten 75 Ω outputs are provided on the rear with an additional output on the front panel for ease of monitoring.

The input and output grounds are separated to provide rejection of longitudinally developed hum. The input is AC coupled and the output DC restored with options for no clamping or clamping to the internal or an external signal. The external clamping facility may be used to provide correct DC restoration in YUV & RGB signal situations.

The video gain may be varied by ± 3 dB from the front panel. Internal preset controls allow adjustment of the amplifier frequency response, optimisation of the longitudinal hum rejection, and stage output DC voltages.

Cable equalisation is provided for up to 300 metres of 75 Ω high quality cable with adjustment via the front panel.

The VA-700 may also be used as a pulse distribution amplifier. (Only 6 outputs may be used for 4 Vp-p).

VA-700

TECHNICAL SPECIFICATIONS

Input:

Type	Differential AC coupled.
Number	2.
Impedance	Looping.
Return loss	> 46 dB to 6 MHz.
Hum rejection	> 40 dB.
Maximum level	> 2 Vp-p (0 dB gain).

Outputs:

Type	DC coupled.
Number	11 (Ten on rear and one on front panel).
Impedance	75 Ω source terminated.
Return loss	> 40 dB to 6 MHz.
Overload	3.0 Vp-p on 4.43 MHz sine wave; 2.5 Vp-p on pulse.
DC level	Adjustable to 0 V.

Performance:

Gain	± 3 dB. Adjustable from front panel.
Frequency response	± 0.1 dB from 20 Hz to 20 MHz; ± 0.2 dB from 20 Hz to 30 MHz.
Differential gain	< 0.1% at 4.43 MHz (12.5% - 87.5% APL).
Differential phase	< 0.1° at 4.43 MHz (12.5% - 87.5% APL).
Noise	< -70 dB (unweighted).
Cross talk	< -75 dB (between modules).
Transit time	< 22° at 4.43 MHz.
Cable Equalisation	Up to 300 m, for Beldin YR23769 cable.

Power requirement:

Voltage	28 Vac CT (14-0-14) or ±16 Vdc.
Power consumption	< 3.5VA (all outputs loaded in 75 Ω).

Other:

Temperature		0 - 50°C ambient.
Mechanical		Suitable for mounting in IRT 19" rack chassis with input, output and power connections on the rear panel.
Finish	**Front panel**	Grey background, black lettering & red IRT logo.
	Rear assembly	Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals.
Dimensions		6 HP x 3 U x 220 mm IRT Eurocard.