

IQVDA00/01

Analog Video Distribution Amplifier with RollCall Control

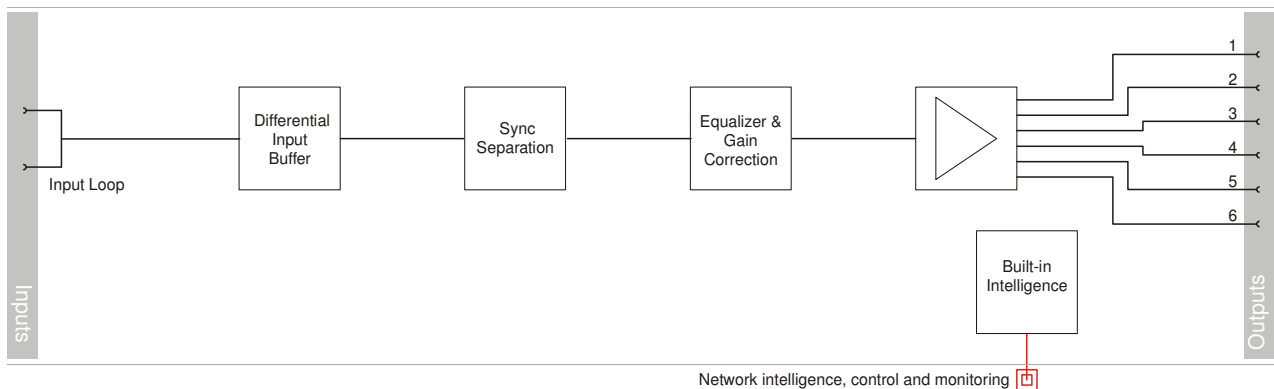
The IQVDA00/01 provides up to 14 equalized analog video outputs. Features include; adjustable gain and equalization, and full remote control and status reporting.

Does this module suit your application?

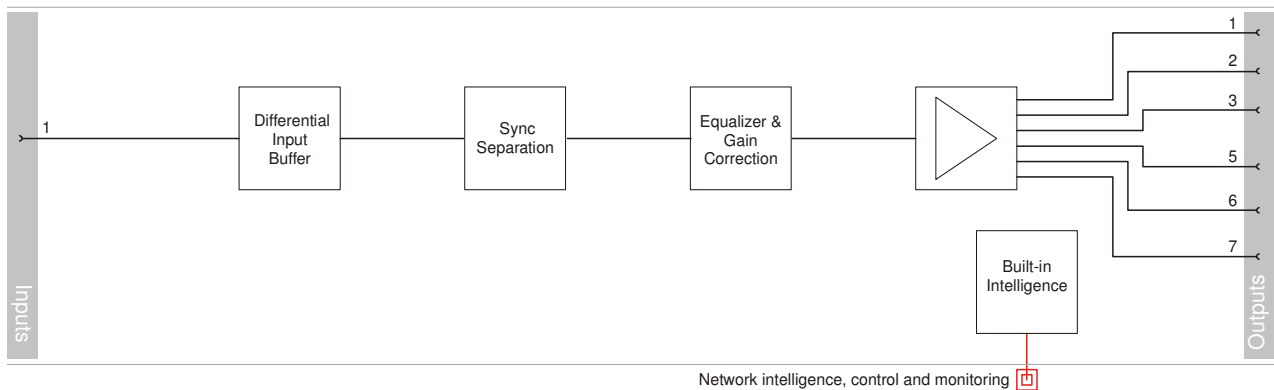
- Up to 14 high quality outputs
- Balanced Loop-through input
- Terminating input option on single width rear panel allows extra output
- 35 MHz bandwidth
- Adjustable gain and equalization
- Equalization for RG59U/Belden 8263 or PSF1/2/Belden 8281 (link selectable)
- Full RollCall remote control and signal identification
- Sync and burst level warnings
- Automatic gain control (AGC) with respect to sync height
- Automatic equalization (ACC) with respect to burst height

Why should you choose this module?

- Ideal distribution amplifier where input cable configuration is likely to change, such as OB trucks
- Remote control of control of gain and equalization
- Equalization for 3 different cable types up to 250 meters
- Automatic gain and equalization control mode available
- Sync and burst level warnings provided for low level signals
- 35 MHz bandwidth allows it to be used with HDTV component signals
- Differential input for excellent common mode rejection



Block Diagram showing IQVDA0001-1A

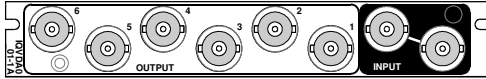


Block Diagram showing IQVDA0101-1A

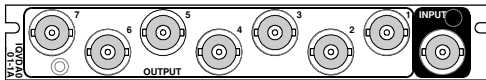
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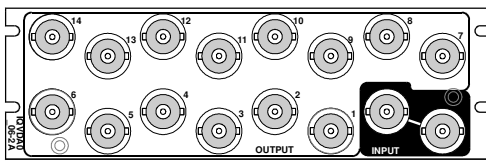
Order codes for IQH3A enclosures



IQVDA0001-1A Analog Video DA with RollCall. Loop-through input, 6 outputs.

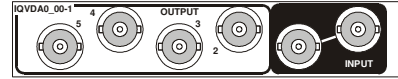


IQVDA0101-1A Analog Video DA with RollCall. Terminating input, 7 outputs.

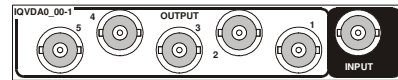


IQVDA0006-2A Analog Video DA with RollCall. Loop-through input, 14 outputs

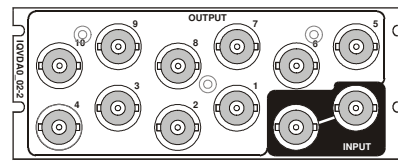
Order codes for other enclosures



IQVDA0000-1 Analog Video DA with RollCall. Loop-through input, 4 outputs.



IQVDA0100-1 Analog Video DA with RollCall. Terminating input, 5 outputs.



IQVDA0002-2 Analog Video DA with RollCall. Loop-through input, 10 outputs

For more details on enclosure types please refer to the Frames/Enclosures section

Inputs & Outputs

Signal Inputs

Video 1 Balanced loop-through
(terminating input option for single width rear panel)

Signal Outputs

Video Up to 14 Unbalanced Outputs

Card Edge & RollCall Controls

Controls via RollCall

Gain ± 4 dB in steps of 0.05 dB

Typical Equalizer performance

Belden 1694A

0-300 m +0.1 dB to 10 MHz
0-300 m +0.2 dB to 30 MHz
Belden 8281 (PSF1/2)
0-300 m +0.1 dB to 10 MHz
0-300 m +0.1 dB; -0.4 dB to 30 MHz

Belden 1855A

0-200 m +0.1 dB to 10 MHz
200-300 m +0.1 dB; -1.5 dB to 10 MHz

RG59B/U

0-100 m +0.1 dB to 15MHz
100-300 m +0.1 dB; -1.5 dB to 15MHz

NK 0.6/2.8

0-150 m +0.1 dB to 15 MHz
0-150 m +0.1 dB; -0.5 dB to 30 MHz

AGC [On/Off] - All recognized SD Sources
ACC [On/Off] - Composite Sources Only
Signal Identification Line Standard - PAL, NTSC, 625 MONO, 525 MONO, 1080p24, 1080i50, 1080i60, 720p50, 720p60, 720p25, 720p30, UNKNOWN
Selectable Clamp Off, On (Back Porch) and Sync tip
Signal level Sync and Burst amplitude $\pm 10\%$
Logging Signal Level Warning, Line Standard, Burst level warning

Indicators

Power OK
CPU OK
Status OK (Green)
Warning (Yellow)
Error (Red)

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Specifications

Frequency Response

(Without Equalization).....	10 kHz - 10 MHz \pm 0.1 dB
	10 MHz - 30 MHz \pm 0.2 dB
	35 MHz $<$ -1 dB
Differential Gain	Unity Gain - Better than 0.2%
Differential Phase	Unity Gain - Better than 0.2°
Signal/Noise Ratio	10 kHz – 7 MHz - Better than -66 dB (Unweighted)
Linearity.....	Better than 0.1%
50 Hz tilt K50Hz.....	Better than 0.1%
Output D.C.	$<$ 90 mV
Output Return Loss	better than 40 dB to 5.5 MHz, 35 dB to 30 MHz
Maximum Output Level	2.4 V pk to pk @ 30 MHz into 75 ohms
Insertion Delay	20 ns
Y-C Gain/ Delay inequality...	$<$ 1%, $<$ 1 ns
K2T, KPb	Better than 0.1%
Max. Input Level	+6 dB
CMRR	Better than 60 dB at 50 Hz, 40 dB 50 Hz to 8 MHz
Input Return Loss (Powered)	better than 40 dB to 5.5 MHz, 35 dB to 30 MHz

Input Return Loss (Un-Powered)	better than 33 dB to 30 MHz
Input Impedance.....	$>$ 22 k ohms
Headroom	+6 dB
Output Impedance.....	75 ohms \pm 1%
Gain	Unity \pm 1% as supplied
Clamp Rejection	8 dB typical at 50 Hz

Power Consumption

Module Power Consumption	3 W
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Mechanical

Complies with Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive (2002/95/EC)

EMC Performance Information

Environment	Commercial and light industrial E2
Peak Mains Inrush Current following a 5 second mains interruption	No mains input
Performance Information.....	Immunity to conducted common-mode RF interference (EN 55103-2 immunity phenomenon I6): Interference is just visible on critical picture material when a video input or output is subjected to modulated RF at a level of 3 V.