

# IQVDA00/01

## Analog Video Distribution Amplifier with RollCall Control

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

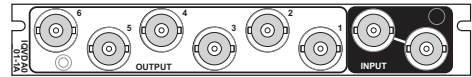
### Features

- 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?

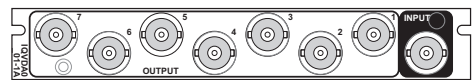
- Ideal distribution amplifier where input cable configuration is likely to change, such as OB trucks
- Remote control of gain and equalization
- Equalization for 3 different cable types, up to 300 meters for Belden 1694A
- Automatic gain and equalization control mode available
- Sync and burst level 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

### Order codes



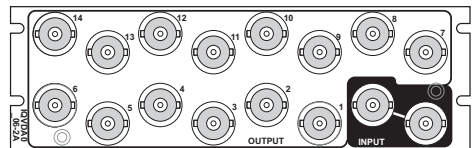
#### IQVDA0001-1A

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



#### IQVDA0101-1A

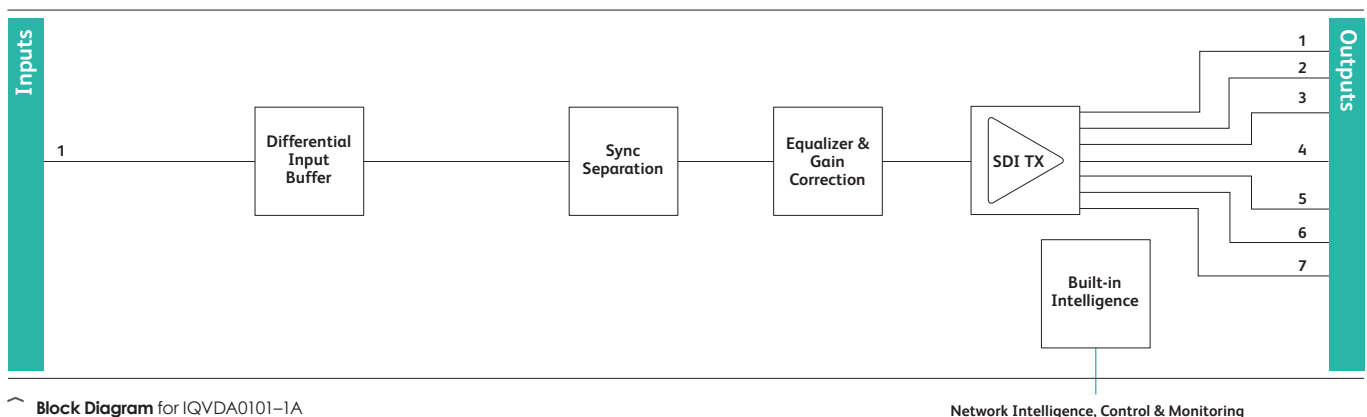
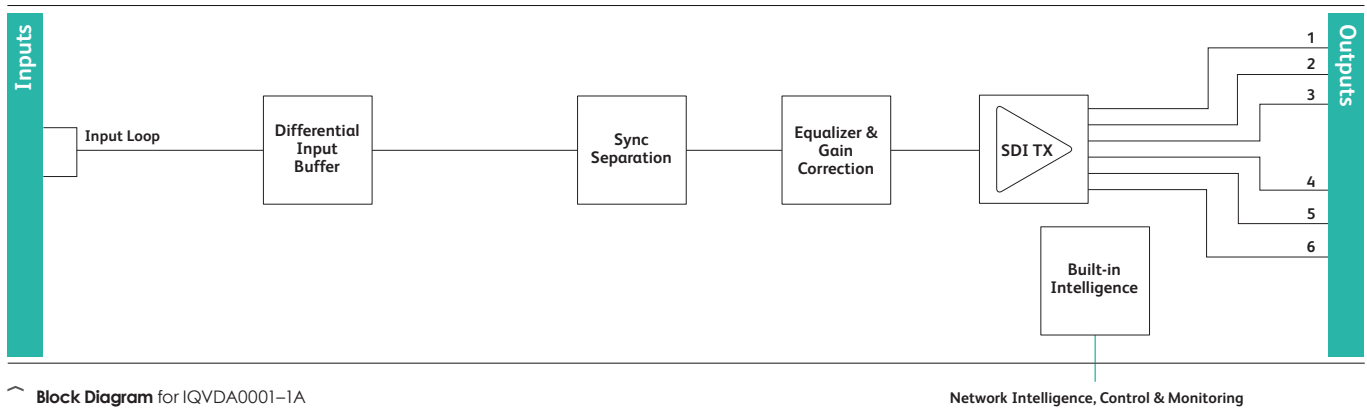
Analog Video DA with RollCall. Terminating input, 7 outputs.



#### IQVDA0006-2A

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

For more details on enclosure types please refer to Frames and Hardware section.



### Technical Specification

#### Inputs and Outputs

##### Signal Input

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

##### Signal Outputs

Video Up to 14 Unbalanced Outputs

#### Controls

##### Controls via RollCall

Gain  $\pm 4$  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 15 MHz  
100-300 m +0.1 dB; -1.5 dB to 15 MHz

###### 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)

#### 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  
Unity Gain - Better than 0.2%  
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 filt 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 3W Max (A Frames)  
2 PR (B Frames)

#### 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