MicroDA, VDA-2EQ, VDA-4, VDA-8 Video Distribution Amplifiers

Manual Version 2.11



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Video Distribution Amplifiers

Introduction

Burst Electronics manufactures a series of Video Distribution Amplifiers. These units use the latest in high speed monolithic operational amplifier technology. The result is wide bandwidth, high gain stability, low differential gain and phase. Models are available from the MicroDA to the VDA-8 eight output version. All units contain internal regulated bipolar supplies and are powered by external 12 Vdc. Perfect for field or studio applications. All models work in either NTSC or PAL.

Four Output MicroDA

The four output MicroDA is a compact unit featuring a looping input. A wide bandwidth of 33 MHz assures clean video. Gain is adjustable ±3 dB. There is an internal jumper to select

75 Ohm termination, an external terminator is not required.



Four Output DA Model VDA-4 and VDA-4YC

The VDA-4 has the same features, performance,

and specifications as the MicroDA. There is a rear panel switch to select an internal 75 Ohm termination resistor on the loop through input. **Optional Rack** Mounts available: RM-4 (or RM-334, or RM-344).



Options available: Y/C (S-VHS, Hi8), Rack Mount

Eight Output DA Model VDA-8

The VDA-8 has the same features, performance, and specifications as the VDA-4, except with 8

outputs. There is a rear panel switch to select an internal 75 Ohm termination resistor on the loop through input. **Optional Rack**

Mounts available:

RM-3 (or RM-334, or RM-344).



Options available: Rack Mount

Two Output Model VDA-2EQ

The Model VDA-2EQ has the ability to equalize

video over RG-59 cable lengths up to 1000 feet (300 meters).

To Adjust:

The Model VDA-2EQ has three adjustments: Gain, EQ, and Rise Time. To equalize for long



cable lengths, input either SMPTE Bars or Multiburst. Use a Waveform Monitor and Vectorscope, at the end of your cable, to view the video signal while these adjustments are made.

- Adjust Gain to 1 volt (-40 IRE sync tip to 100 IRE White).
- Adjust EQ for correct vector lengths (or flat waveform if using multi-burst).
- Adjust Rise Time (here SMPTE Color Bars work best) for no overshoot when going from setup to 100 IRE white (no chroma).
- Go back and tweak all three adjustments until you have an undistorted video signal.

Specifications:

Input: 1 Volt standard video (NTSC or PAL)

Input Impedance: HiZ (looping) or 75 Ohms, (jumper

selected)

Coupling: DC throughout

Internal Power: ±5 Vdc derived from external

12 Vdc

Outputs: Two, Four, or Eight, 75 Ohms

Output Voltage: 4 Vpp max Delay Input to Output: 10ns

Output Impedance: 75 Ohms 1%

Frequency Response: DC to 33 MHz 0.2 dB Gain: Unity, adjustable ±3 dB

S/N: 68 dB Differential Gain: 0.03% Differential Phase: 0.05°

Video Connector: BNC (4 pin MiniDIN with Y/C Version)

Open or Short, infinite duration Output Protection: Power:

120 VAC 60 Hz, 3 Watts, UL Listed

Wall Module (included)

DC Powered: 10 to 16 Vdc (polarity insensitive),

200 mA or less

Size MicroDA / 2EQ: 4.4W x 2.4H x 1.3D inches

Size VDA-4 / Y/C: 4.2W x 1.5H x 5.5D inches

Size VDA-4PC 0.75W x 3.95H x 4.95D inches

Size VDA-8: 5.6W x 1.5H x 7.0D inches

Warranty: One Year Parts and Labor

NOTES