

# BrightEye 41

## Video/AES/Tri-Level Sync Distribution Amplifier

BrightEye 41 is a distribution amplifier that accepts analog video, AES digital audio, or Tri-Level Sync signal. It can also be used with SMPTE 310M, Dolby E and AC-3 signals. It provides unity gain fanout over a frequency range of DC to 10 MHz. It can handle composite and component analog video, coaxial AES digital audio, or a high definition Tri-Level Sync signal.

When using a digital to analog video converter and multiple outputs are needed, BrightEye 41 can be used to distribute and provide those additional output signals. BrightEye 41 works well with video converters BrightEye 10 and BrightEye 16. BrightEye 41 is also useful in conjunction with the BrightEye 54 sync pulse generator and test signal generator for distributing Tri-Level Sync, AES and composite signals.

This is a simple device, with no USB port and no interface to BrightEye Mac or PC software. Front panel indicators show the presence of an input signal and power.

### Features

- **Use with converters and SPGs in order to have more outputs**
- **DA for analog video signals**
- **DA for high definition Tri-Level Sync**
- **DA for AES digital audio, AC-3 and Dolby E**
- **DA for SMPTE 310M**



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## Video/AES/Tri-Level Sync Distribution Amplifier

### Input Signal

Number	One, terminating
Signal Type	NTSC/525, PAL/625 Composite video, AES digital audio or Tri-level Sync
Impedance	75 $\Omega$
Return Loss	>40 dB to 5 MHz

### Output Signal

Number	Four
Signal Type	Follows Input
Impedance	75 $\Omega$
Return Loss	>40 dB to 5 MHz
DC offset	Follows input +/- 50 mV
Delay	10 ns (14° NTSC, 17° PAL)
Frequency Response	$\pm 0.1$ dB, 0 to 5.5 MHz $\pm 0.3$ dB, 0 to 10 MHz
Signal to Noise	68 dB
K Factor	2T Pulse <0.25%
Differential Phase	10-90% apl <0.1 deg
Differential Gain	10-90% apl <0.15%
Gain Stability	<0.2 dB variation over operating temp

### General Specifications

Size	5.63" W x 0.8" H x 5.98" D (143 mm x 21 mm x 152 mm) including connectors and flange
Weight	14 oz
Power	12 volts, 1 watt (100-230 VAC modular power supply)
Temperature Range	0 to 40° C ambient (all specs met)
Relative Humidity	0 to 95° non-condensing
Altitude	0 to 10,000 ft.

