

## VBH-5BB 75 Ω component video isolator

- Eliminates hum bars caused by ground loops
- Exceptional performance, will not deteriorate picture quality
- Very high ground isolation: 120 dB CMMR typ at 60 Hz
- Precise impedance matching ensures minimal reflection

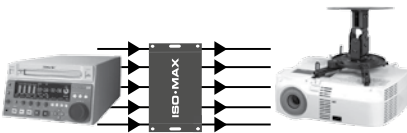


The Iso•Max VBH-5BB is a five channel 75 Ω video isolator for component video that is used to prevent 60 cycle 'hum bars' even where ground voltage differences can be very large such as in ceiling mounted projectors in house of worship, conferences centers and night clubs.

Designed for use with standard RG59 type coaxial cable, the VBH-5BB combines true 75 Ω BNC connectors with a unique humbucking circuit to deliver an exceptionally linear bandwidth with virtually zero insertion loss, contamination or artifact. Plug and play easy to use, the VBH-5BB features a flanged, electrically isolated housing that is easily mounted on standard 19" rack rails or inside a NEMA enclosure. One simply connects the passive device in series and problems such as ground loops are eliminated, reducing noise by as much as 56 dB at 60 Hz.

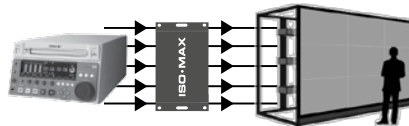
The VBH-5BB is a tremendous time saver as it eliminates excessive troubleshooting when hunting down sporadic problems. Once installed, it often eliminates future service calls that can be attributed to non-related voltage fluctuations caused by cycling refrigeration systems, power transformers or nearby industrial facilities that may be causing power disruptions.

## Applications



### VBH-5BB with a projector

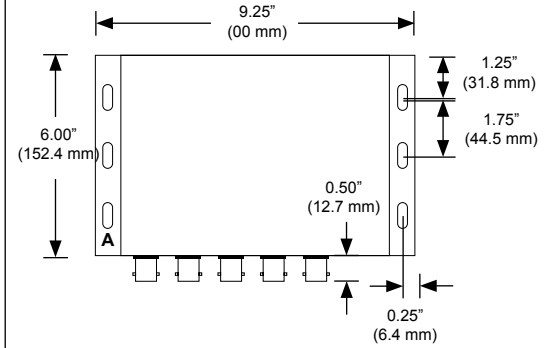
Often the projector is mounted in the ceiling, where separate circuits supply the projector and the source video player. Isolating the transmission line with the VBH-5BB helps eliminate hum bars and improves the picture quality.



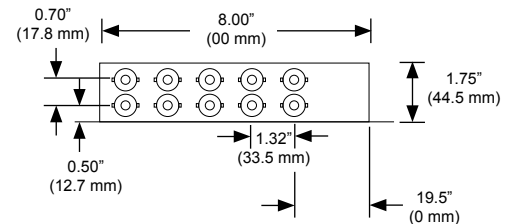
### VBH-5BB in a live show

Today, live shows often combine video backdrops and screen projections to the action on stage. The challenge is keeping the video feed clean when the various equipment that surrounds it may be 'polluted' by motors, dimmers, and power transformers. Isolating the video system with the VBH-5BB solves the problem.

## Dimensions



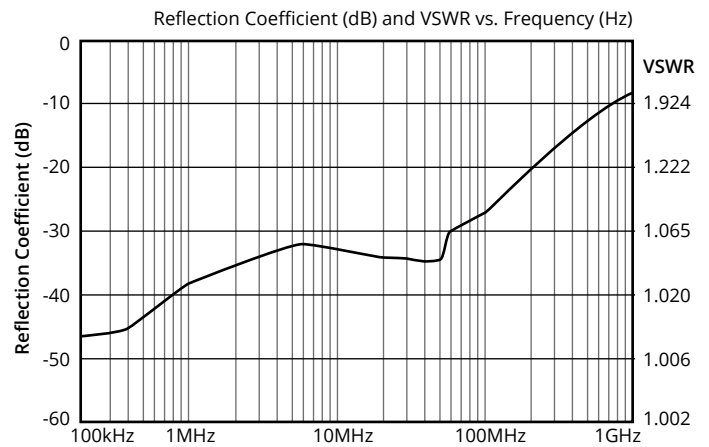
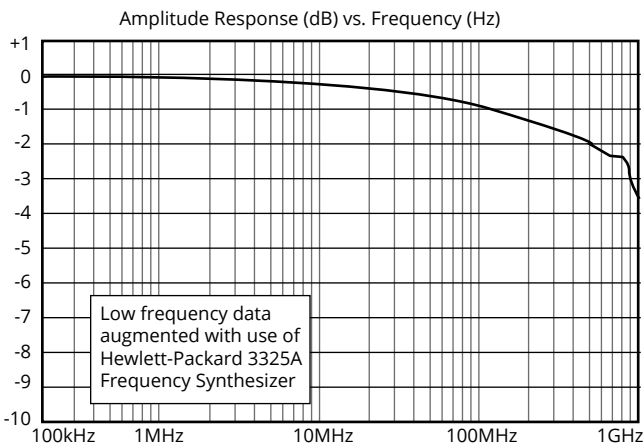
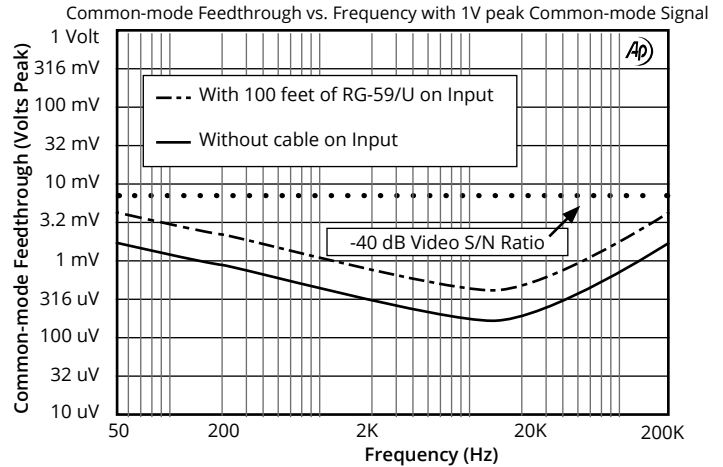
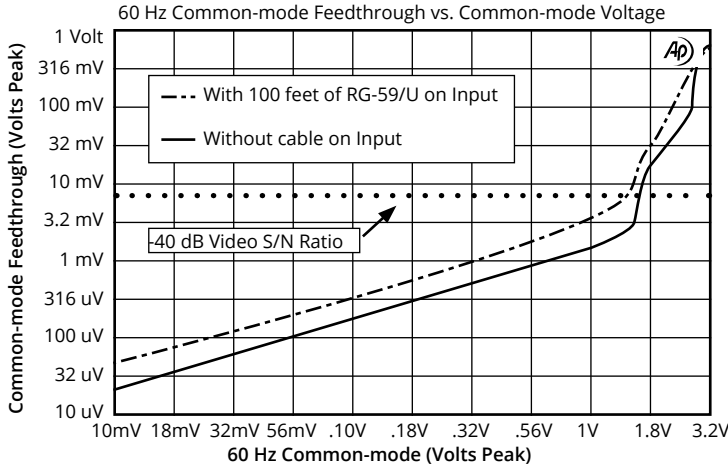
A = 0.20" (5.0 mm) x 0.70" (17.8 mm) Oval Cutout



## VBH-5BB-P

Portable five channel 75 Ω video isolator for component video.



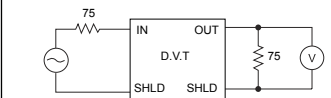


PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Zi	10 kHz, test circuit 1		75 Ω	
Insertion loss	10 kHz, test circuit 1 (referred to -6.02 dB)		-0.05 dB	-0.10 dB
	100 kHz, test circuit 1 (referred to -6.02 dB)		-0.005 dB	
High Frequency Response, ref 10 kHz	1 MHz, test circuit 1 (referred to -6.02 dB)		-0.005 dB	
	3.58 MHz, test circuit 1 (referred to -6.02 dB)		-0.10 dB	
	10 MHz, test circuit 1 (referred to -6.02 dB)		-0.20 dB	
	100 MHz, test circuit 1 (referred to -6.02 dB)	-1.00 dB	-0.80 dB	
Low Frequency Response Ratio	test circuit 1		DC	
	60 Hz, test circuit 2, no cable	50 dB	56 dB	
Common - mode rejection ratio	60 Hz, test circuit 2, with 100 feet (30.5 m) of RG-59/U cable at input		48 dB	
	60 Hz, test circuit 3, 3% THD	1.4 Vpeak	1.7 Vpeak	
Inductance	60 Hz, 500mVrms, shield, input to output		200 mH	
DC resistances	center conductor, input to output		0.70 Ω	
	shield, input to output		0.20 Ω	
Capacitances	center conductor to shield		200 pF	
Time Delay Skew between channels			0.1 nS	0.5 nS
Weight			6.28 lbs. (2.85 kg)	
Temperature range	operation or storage	0°C		70°C

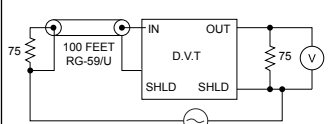
(source Z - load Z - 75 Ohms, signal level = 1Vpp unless otherwise noted, specifications apply to all 3 independent channels)

IMPORTANT NOTE: THIS PRODUCT IS NOT INTENDED FOR USE IN CIRCUMSTANCES WHERE THE DC OR PEAK AC VOLTAGE BETWEEN INPUT AND OUTPUT CONNECTIONS EXCEEDS 34 VOLTS OR WHERE ITS FAILURE COULD CAUSE INJURY OR DEATH.

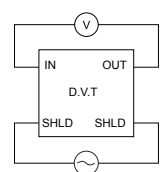
Test Circuit 1:



Test Circuit 2:



Test Circuit 3:



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