BD30AV HD Series
Digital High Definition Video Audio Delay Line

BD30AV is the highest broadcasting quality solid state video audio delay line without data compression which is separated into HD & SD series.

BD30AV HD series is compatible with all formats of video and audio signals including high definition HD-SDI and standard definition SD-SDI signals input and output. It could be easily used in the high definition live show programming and On-Air TV broadcasting environments from the unwanted parts.

The maximum delay time of BD30AV HD series is up to 60 seconds for the HD-SDI video format, in the mean time 300 seconds delay time as the maximum for the SD-SDI video format.

Features

√ Up to 60 seconds' delay for the HD-SDI signal as the additional options. 30 seconds' delay are available in each standard model

√ Compatible with SMPTE 292M (1.485Gbps) – 1080i/60/59.94/50, 1080p/24/23.98(sF), 720p/60/59.94/50

√ Compatible with SMPTE 372M (1.285Gbps) – 1080p/60/59.94/50

√ Compatible with SMPTE 259M-c (270Mbps) – 525i/59.94, 625i/50

√ Adjust the input video format automatically

√ Up to 4 channel digital AES/EBU audio embedded signals supported as the options

√ Digital high definition TBC, frame synchronizer and GenLock function built-in as the options

√ De-embedded signal outputs for preview and program as the options

√ Provides 1 channel HD/SD-SDI digital embedded signal input, 2 channels HD/SD-SDI embedded signal output for preview before delay, 2 channels HD/SD-SDI embedded signal for program output after delay

√ Two Bypass modes for Bypass button and power off Bypass mode

√ Gen lockable

√ Provides RS-232 port. The stand alone 1U rack mountable external control unit as the option

Specifications

<table>
<tr><th colspan="2" style="background:yellow">Serial Digital Video Inputs</th></tr>
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Video Standard	SMPTE 292M 1.485Gbps, 1080i/60/59.94/50, 1080p/24/23.98(sF), 720p/60/59.94/50 SMPTE 372M 1.285Gbps, 1080p/60/59.94/50 SMPTE 259M-c 270Mbps digital component, 525i/60, 625i/50
Number of Inputs	1ea, BNC
Equalization	Automatic 100m @ 1.485Gb/s with Belden 1694, 25m when Bypass mode ON
Impedance	75Ω

Serial Digital Video Outputs	
Video Standard	Same as inputs
Number of Outputs	BNC x 2 for Program outputs, BNC x 2 for Preview outputs before delay
Signal Level	800mV ±10%
DC Offset	0V ± 0.5V
Rise/Fall Time	< 270ps @ 1.485Gb/s; < 800ps @ 270Mb/s
Overshoot	< 10% of amplitude
Alignment Jitter	< 0.2UI at both 1.485Gb/s and 270Mb/s
Timing Jitter	< 0.4UI @ 1.485Gb/s; < 0.2UI @ 270Mb/s
Impedance	75Ω

Genlock & Serial Control (Optional)	
Type	HD Tri-Level Sync. or NTSC/PAL Bi-Level Sync. (300mV) or color black (1Vpp)
Number of Connectors	BNC x2 (Input x1, passive loop-through x1)
Impedance	75Ω
Serial Control	RS-232 port. All front panel functions controllable by computer

Electrical & Mechanical	
Power	100 ~ 240 VAC ± 10%, 50/60 Hz, < 80W
Dimensions	480 (W) x 44.5 (H) x 526 (D) mm