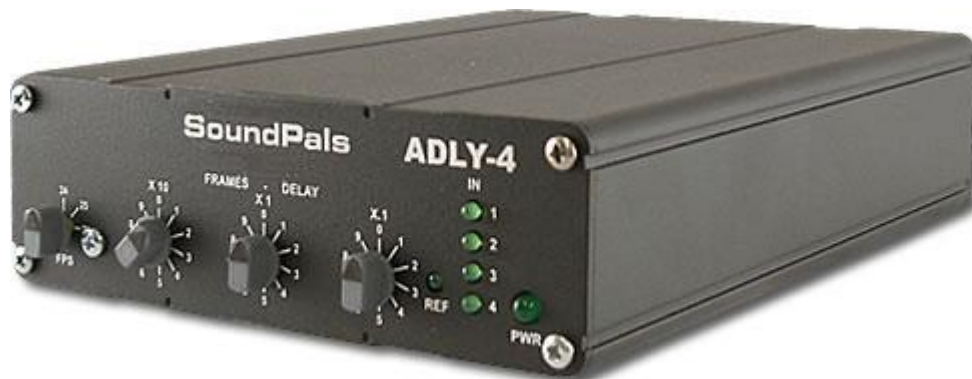




Data Sheet

ADLY-4 - AES Audio Delay



The power supply is sold separately

Key Features

- Delay selectable in 0.1 frame increments
- 8 (4 AES pairs) channels of I/O
- Balanced or unbalanced versions
- Frame rate selection
- Internal or external reference
- Input validity indication
- Compact size: 5.2"W x 1.62"H x 6.625"D (15.2 x 4.1 x 16.8 cm) less connectors

The ADLY-4 is an easy-to-use and cost-effective solution for systems timing problems where audio to video synchronism is paramount. Both the ADLY-4A (balanced AES3 I/O) and ADLY-4B (unbalanced AES3id I/O) offer up to eight channels (4 AES pairs) of inputs and delayed outputs. These problem solvers are ideal for digital audio/video installations where the video path length is longer than the audio path length. Dial in up to 99.9 frames of delay in increments of 0.1 frames, using the X0.1, X1, and X10 frame delay selectors. Set frame rate with the FPS selector with 24, 25, or 30 FPS. The ADLY-4 provides an external

looping AES3id reference input, or switch the unit to internal reference and use input number one. Front panel LED indicators show inputs validity, external reference presence, and power.

Housed in the familiar SoundPals compact, rugged aluminum enclosure, they use independent power supplies, or mount up to three units in a 1RU rack mount frame with a central power supply.

ADLY-4 MODELS		
I/O	Balanced AES3	Unbalanced AES3id
Product #	ADLY-4/A	ADLY-4/B
Connectors	Phoenix	BNC

RJM & Associates, LLC

175 Joerschke Dr., Suite A, Grass Valley, CA 95945
Phone: 530-205-3437 Fax: 530-273-8482

Email: info@rjmandassociates.com

Web: www.rjmandassociates.com

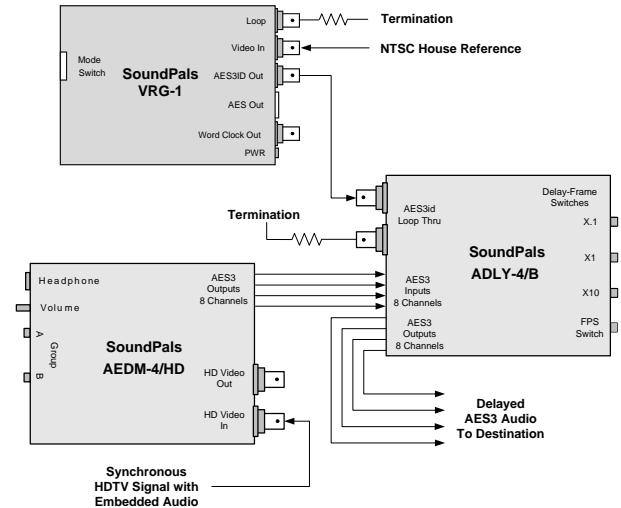
ADLY-4 AES Audio Delay

Technical Data		
	ADLY-4/A	ADLY-4/B
	AES3 Inputs	AES3id Inputs
Nominal amplitude	2-8 Volts Peak-Peak	400mV to 1.2 Volts Peak-Peak
Sample Rate	30-50KHz	30-50KHz
Input impedance	110Ω ±20% (0.1-6.0MHz)	75Ω ±20% (0.1-6.0MHz)
Input Word Length	Up to 24 bits	Up to 24 bits
	AES3 Outputs	AES3id Outputs
Nominal amplitude	3.5 Volts Peak-Peak	900 mV to 1.1 Volts Peak-Peak
Sample Rate	30-50KHz	30-50KHz
Rise time	15-30ns	15-30ns
Output impedance	110Ω	75Ω
Output Word Length	Up to 24 Bits (same as input word length)	Up to 24 Bits (same as input word length)
Status Bits	All status bits are passed through unchanged	All status bits are passed through unchanged
AES3id Reference Input		
Min. eye opening	165mV x 0.5 UI (typical level 1 V p-p)	165mV x 0.5 UI (typical level 1 V p-p)
Input impedance	75Ω	75Ω
Sample frequency	30-50KHz	30-50KHz
Internal Delay through Unit		
All Switches set to 0	166uS ± 20uS	166uS ± 20uS
Maximum Delay	99.9 frames	99.9 frames
Options		
RT-2	1RU rack tray for mounting up to 3 units, with power supply	
PSU-1	90-260V 50/60Hz in-line power supply, with detachable IEC power cord	
Environmental Specifications		
Dimensions (less connectors)	5.2W x 1.62H x 6.625D 13.2 x 4.1 x 16.8 cm	
Power	<150mA @ 6Vdc	
Operating Temperature	10 – 50°C	
Operating Humidity	10 – 90% RH non-condensing	

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Application Diagrams

There are many uses for SoundPals in music recording, radio or television broadcasting, DVD/CD/CR-ROM mastering, and video production and post-production.



In this application, a house video reference is connected to the SoundPals VRG-1 AES/word clock generator to create an AES3id reference signal that is locked to your house reference signal. This AES3id signal is routed to the External Reference BNC input on the ADLY-4/B. Its loop through output is then terminated in 75Ω. The Reference Selection Switch is set to the down position to lock the ADLY-4/B to the external BNC input. The FPS is set to 30 frames to be frame accurate to the NTSC signal. A synchronous HDTV signal with the embedded audio you want to delay is fed to a SoundPals AEDM-4/HD audio de-embedder. This unit de-embeds any two of the four channel groupings into eight channels (four AES3id channel pairs) of synchronous audio. This audio is fed to the SoundPals ADLY-4/B Delay module. The output of the ADLY-4/B Delay module provides the eight channels (four AES3id channel pairs) of audio, delayed by the number of frames set by the three decade selector switches. In this application, all AES signals are locked to the house reference.



ADLY-4/A Rear View



ADLY-4 Front View



ADLY-4/B Rear View