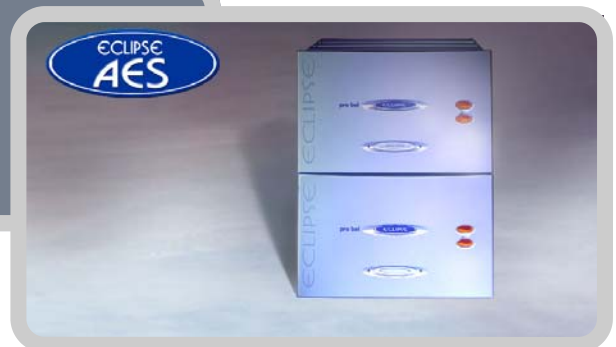


FEATURES

- Compact architecture, 128 x 128 in 7RU and 256 x 256 in 14RU
- Expandable to 768 x 256 in only 42RU
- Mixed synchronous/asynchronous architecture
- Audio modify functions
- Unique technology for AES breakaway
- Available in balanced or unbalanced configurations
- Backup control and power supply options
- Compatible with all Pro-Bel control systems

A NEW ERA IN AES ROUTING - ECLIPSE AES OFFERS OUTSTANDING PERFORMANCE AND UNIQUE 'CLEVER CROSSPOINT' TECHNOLOGY



The way forward for digital audio routing

Breaking the boundaries set by AES crosspoint routers, Eclipse AES is set to revolutionise the way we think about switching AES bitstreams. The very latest technology and innovations make Eclipse AES more than just another crosspoint router. Eclipse AES provides the perfect partner for the SD and HD Eclipse routers.

An architecture for all occasions

Suited to most demanding and challenging applications, Eclipse provides a high performance compact architecture, while remaining cost effective. Built-in flexibility ensures Eclipse is the ideal choice for applications from the very simplest 128 x 128 router up to a 768 x 1024 system requiring redundant controllers and PSU's.

Each Eclipse router is constructed from multiple 7RU frames connected together using internal or external cable assemblies and can be supplied for either balanced or un-balanced operation. Connecting two, 7RU, 128 x 128 base router frames together provides a 256 x 256 router in only 14RU. Adding further 7RU; 128 channel input frames to the 'stack' permits a 768 x 256 router to be constructed in one standard rack, occupying 42RU. For routers beyond 256 destinations, multiple 256 output 'stacks' may be interconnected to a maximum size of 768 x 1024.

Breaking the barriers

AES crosspoint routers have provided simple cost effective solutions for routing digital audio signals asynchronously. At Pro-Bel we have provided, as standard, the ability to switch digital audio through crosspoint routers in a mixed synchronous/asynchronous environment.

Eclipse adopts this same mixed environment operational feature, providing as standard the benefit of 'click free' switching. The flexibility of Eclipse AES when used in a synchronous environment is further enhanced by offering audio modify capabilities normally associated with analogue or TDM based routing systems.

The ability to swap the left and right channels, send the left or right channels to both outputs or even provide a mono mix differentiates this router from a normal AES crosspoint switcher.

But what makes Eclipse AES really unique is Pro-Bel's 'clever' crosspoint technology which provides the ability to split the left and right channels of a single AES bitstream, permitting full Left/Right breakaway operation, while remaining within the digital domain.

Peace of mind

For added security, optional backup PSU's and router control modules are available. Eclipse AES is fully compatible with all current Pro-Bel controllers, affording you the peace of mind that it can be incorporated with either a new or existing system.

Technical Specification

BALANCED CONFIGURATIONS

Inputs

Signal	110Ω transformer coupled, balanced and floating to AES 3-1992
Reference	110Ω transformer coupled, balanced and floating to AES 11—1991 75Ω terminating—SDV 75Ω loop through—Analogue Video
Max input cable length	Typically up to 200m of 110Ω balanced, audio cable

Outputs

Signal	Single output per destination 110Ω transformer coupled, balanced and floating to AES 3—1992
Output level	4V p-p nominal
Output monitor	Single output

Performance

Sample rate	32 to 54kHz
Transmission	Fully transparent to all bi-phase mark data

Operating Modes

All inputs independently assignable for synchronous or asynchronous operation

Synchronous mode	All inputs reframed to external reference with switching transition timed to frame preamble. Option for channel status and validity data to be passed transparently or forced to pre-set state assignable for each synchronous output. Outputs digital silence under no input signal condition
Propagation delay	4 samples
Asynchronous mode	All inputs relocked at bit rate with channel status and validity data unmodified (No audio modify capability)
Propagation delay	2 samples

GENERAL SPECIFICATION

Power

Power consumption	Auto sensing 90 to 240 V ac 50/60Hz 128 x 128, 400W 256 x 256, 400W Input frame <400W each
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Mechanical

Size	19 inch rack mounting x 487mm (19") deep (excluding connectors)
Weight	40Kg (88lb) per 7RU
System sizes	128 x 128 7RU 256 x 256 14RU 512 x 256 28RU 768 x 256 42RU

Monitoring

PSU monitor	Failure alarm relay
Fan monitor	Failure alarm relay

Environmental

Cooling	Fan assisted, intake and vent at sides Operating temperature 0 to 40 degrees Celsius
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UNBALANCED CONFIGURATIONS

Signal	75Ω transformer coupled, unbalanced to AES 3 id—1995
Reference	75Ω transformer coupled, unbalanced to AES 3 id—1995 75Ω terminating—SDV 75Ω loop through—Analogue Video
Typically up to 200m nominal cable (PSF 1/2M; Belden 8281 or equivalent)	

Signal	Single output per destination 75Ω transformer coupled, unbalanced to AES 3—id 1995
Output level	1V p-p nominal
Output monitor	Single output

Sample rate	32 to 54kHz
Transmission	Fully transparent to all bi-phase mark data

Control

Remote control	4 x RS485 Protocol: Pro-Bel General Switcher
Configuration	Main: 1 x RS232 Backup (option): 1 x RS232

Connectors

Signal (balanced)	Input: 15 way D type plug Output: 15 way D type socket Combined AES reference and output monitor: 9 way D type socket
Signal (unbalanced)	Input: BNC Output: BNC Reference: BNC
Power	3 way IEC
PSU/Fan monitor	9 way D type socket
Remote control	9 way D type socket
Configuration	9 way D type socket

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