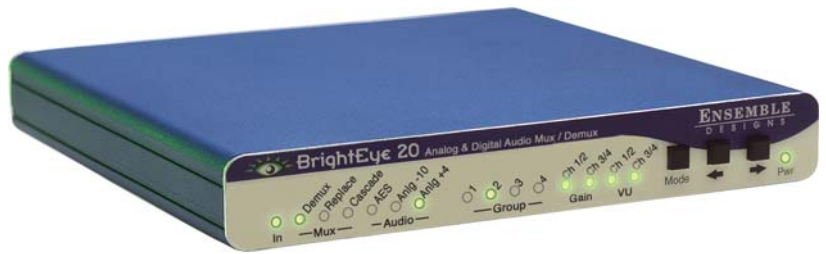


BrightEye 20

Analog Audio / AES Embedder or Disembedder



BrightEye 20 is a versatile audio Mux/Demux. With SDI video I/O, and both analog and AES I/O, it is field configurable for embedding or disembedding.

When configured as a multiplexer, BrightEye 20 has one serial digital video input and two AES digital audio inputs. Alternately, the 4 channel analog audio input can be used. The audio is embedded into the 601 video stream. The output is a serial digital video stream that contains the original video plus the two AES streams or four analog audio channels.

When configured as a demultiplexer, audio signals present in the incoming serial digital video signal are extracted and delivered simultaneously as two AES digital audio streams and as four analog audio channels.

Audio mixing, level adjustments, and channel shuffling can be applied to both the multiplexer and demultiplexer modes, and are accessed through BrightEye Mac or PC software. Audio group selection is also made through BrightEye Mac or PC software. A variety of audio connectors and adapters are available for integrating BrightEye 20 to any type of system.

Use in desktop and broadcast applications.

- ▶ Audio Embedder or Disembedder
- ▶ Analog and Digital Inputs
- ▶ Analog and Digital Outputs

Sample Rate 48 KHz
 Reference Level -10 dBu or +4 dBu
 Frequency Response ±0.1 dB, 20 Hz to 20 KHz
 Crosstalk <106 dB
 Dynamic Range >106 dB

AES/EBU Digital Inputs

Number Two (total of four channels) (selectable as inputs or outputs)
 Type AES3id
 Connectorization Coaxial, 75 Ω
 Bit Depth 20 and 24 Bit
 Sample Rate 30 KHz to 96 KHz (Sample Rate Converted internally to 48 KHz)
 Reference Level -18 or -20 dBFS (selectable)
 AC-3, Dolby-E Supported when inputs are synchronous

Analog Audio Outputs

Number Four (selectable as inputs or outputs)
 Type Balanced, transformerless
 Impedance 30 Ω
 Maximum Output Level 24 dBu
 Resolution 24 bits, 128x Oversampled
 Reference Level -10 dBu or +4 dBu
 Frequency Response ±0.1 dB, 20 Hz to 20 KHz
 Crosstalk <106 dB
 Dynamic Range >106 dB

AES/EBU Digital Outputs

Number Two (total of four channels) (selectable as inputs or outputs)
 Type AES3id
 Connectorization Coaxial, 75 Ω
 Bit Depth 24 Bit
 Sample Rate 48 KHz
 Synchronous to video output
 Reference Level -18 or -20 dBFS (selectable)

General Specifications

Size 5.625" W x 0.8" H x 5.5" D (143 mm x 20 mm x 140 mm) including connectors
 Power 12 volts, 7 watts (100-230 VAC modular power supply not included)
 Temperature Range 0 to 40° C ambient
 Relative Humidity 0 to 95%, non-condensing

Specifications

Video Input

Number One
 Signal Type 270 Mb/s SD Serial Digital (SMPTE 259M)
 Impedance 75 Ω
 Return Loss >15 dB
 Max Cable Length 300 meters

Video Output

Number One
 Signal Type 270 Mb/s SD Serial Digital (SMPTE 259M)
 Impedance 75 Ω
 Return Loss >15 dB
 Output DC None (AC coupled)

Analog Audio Inputs

Number Four (selectable as inputs or outputs)
 Type Balanced
 Impedance >15K Ω
 Maximum Input Level 24 dBu
 CMRR >60 dB, 20 Hz to 10 KHz
 Quantization 24 bits, 128x Oversampled