

Proteus™



Full broadcast specification motion-adaptive standards converter

Proteus is a fully-featured affordable SDI Standards Converter with integrated Audio Delay and Synchronisation

Proteus sets a new benchmark for a fully-featured broadcast specification standards converter at an extremely attractive price. In response to growing industry concerns over lip-sync errors, Proteus offers a fully integrated adjustable audio delay and synchronisation up to several seconds. These are features previously found only on much more expensive and bulky units.

- Advanced motion-adaptive standards conversion algorithm
- 10 bit SDI, Composite (NTSC, PAL) Component and Y/C In and Out
- High Quality NTSC/PAL decoder (10 bit, 4-line adaptive comb)
- Optional Aspect Ration Conversion (ARC)
- Full audio delay and synchronisation options for AES, Analogue and Embedded
- Video and Audio processing controls, audio dubbing and channel swap
- Format converter, synchroniser, TBC and audio mux/demuxer
- Compact and rugged field portable/ desktop unit or rack-mount version



Proteus-P and Proteus-R: technical specifications

General Specifications

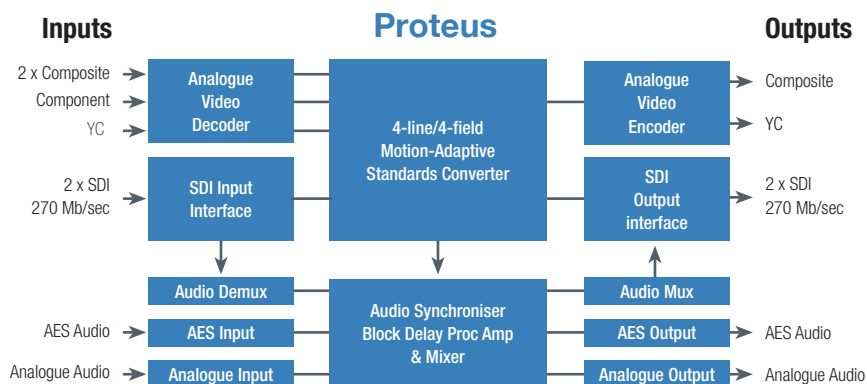
Video inputs	2 x Serial Digital SDI 270Mb/s (525/625) SMPTE 259M 75 Ohm BNC 2 x Analogue Composite NTSC/PAL/SECAM auto detect 1 Vp-p, 75 Ohm BNC Y/C NTSC/PAL Mini DIN4 (Proteus-P only) YUV NTSC/PAL (both inputs PAL/NTSC auto-detect)
Genlock	Black & Burst reference input 1 Vp-p, 75 Ohm BNC Loop through
Video outputs	2 x Serial Digital SDI 270Mb/s (525/625) SMPTE 259M 75 Ohm BNC 2 x Analogue Composite NTSC/PAL 1 Vp-p, 75 Ohm BNC Y/C NTSC/PAL Mini DIN4 (Proteus-P only) YUV NTSC/PAL 75 Ohm BNC (via optional break-out cable on Proteus-P)

Signal Processing

Conversion method	Advanced 4-field/4-line motion-adaptive algorithm for high quality bi-directional conversion between 525/NTSC and 625/PAL
Composite decoder	10 bit, 4 line adaptive comb filter, multi-standard decoder. Auto detects all common NTSC, PAL and SECAM standards. Locks to weak, noisy or unstable signals.
Composite encoder	12 bit NTSC/PAL broadcast specification encoder
Video proc amp	Video Gain Adjustment: ± 6 dB; Chroma Gain Adjustment: +6dB to Zero Black Level Adjustment: ± 20 IRE; Pedestal: +7.5 IRE (on or off) Hue Control (NTSC input): ± 180 deg
Dynamic range	Video 10 bit (12 bit internal processing). Audio 20 bit (24 bit internal processing)
Synchroniser range	Infinite Window
Genlock adjustment	Up to 1 Frame (H & V Adjustment)

Specification for Audio Option

Inputs	4 channel embedded; 2 x AES Balanced; 2 x Stereo Analogue Balanced
Outputs	4 channel embedded; 2 x AES Balanced; 2 x Stereo Analogue Balanced
Mux/Demux	Optional Embedding of 4 channels of 20 bit audio from AES & analogue audio inputs Optional De-embedding of 4 channels of 20 bit audio to AES & analogue audio outputs
Audio proc amp	Audio Level ± 12 dB
Audio delay	User adjustable block delay
Synchronisation	Auto-tracking audio synchroniser that follows the video synchroniser
Dimensions	Proteus-P portable unit: 300mm wide x 190mm deep x 42mm high Proteus-R rack-mount unit: 1RU standard unit x 250mm deep
Power requirements	Proteus-P portable unit: XLR-4 inlet to psu accepting 10-14V d.c. @ 2.4A (reverse polarity protected) Proteus-R rack-mount unit: IEC mains inlet to psu accepting 90-264V a.c. 47-63Hz 30W max



Rear of Proteus-R rack-mount unit



Rear of Proteus-P portable unit

As part of its policy of product improvement, Brick House Video Ltd. reserves the right to change these specifications without notice.