



# V1664 & V1664SY

SDI to SECAM - 12 Bit Conversion

## FEATURES

- High quality SECAM encoder
- 12 bit digital conversion
- Excellent linearity & S/N ratio
- Looping reference
- Synchroniser option

## HIGH PERFORMANCE SECAM ENCODER



The V1664 accepts a single serial digital input and provides 4 analogue composite outputs coded to the SECAM standard. Two reclocked serial digital outputs are provided, looped from the input.

The V1664 exploits an adaptive notch filter in the luminance path to reduce cross-colour and minimise loss of luminance resolution. Both H & V SECAM signals are supported.

For situations where the module is used for transcoding from an original PAL signal, the chrominance response can be flattened, to minimise the effects of "double" filtering.

When equipped with the optional synchroniser (V1664SY), the looping reference input can be either PAL or SECAM coded video. A Delay Pulse output (TTL) is provided to drive an Audio Tracking Delay such as the V1635.

# V1664 & V1664SY

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### Technical Specification

**Format** EBU Tech 3267 and ANSI T14.223

#### Serial Input

Connector BNC  
 Impedance 75 ohms  
 Return loss >15dB, 5-270MHz  
 Cable 0-200m (Belden 8281)  
 Data rate 270Mb/s

#### Delay Indicator (V1664SY)

Level TTL  
 Connector BNC

#### Serial Outputs (2)

Connector BNC  
 Impedance 75 ohms  
 Return loss >15dB, 5-270MHz  
 Amplitude 800mV p-p (terminated)  
 D.C. offset 0V +/-0.5V  
 Rise and fall times 0.75 - 1.5ns  
 Drive capability Up to 250m (Belden 8281)

#### Frame Synchroniser (V1664SY)

Output offset range with respect to reference +/- 125 lines

#### Analogue Outputs (4)

Format SECAM  
 Level 1V p-p composite  
 Connector BNC  
 Impedance 75 ohms  
 Return loss >35dB to 5.5MHz

#### Reference Input

Level 1V p-p, Black & Burst  
 Impedance 75 ohms terminated

#### Video Performance

Luminance response +/-0.1dB to 5MHz  
 Chrominance response -3dB @ 1.3MHz  
 -30dB @ 3.5MHz  
 Response can be set flat for transcoding applications  
 Frequency response +/-0.1dB to 5MHz  
 Luminance non-linearity <0.2%  
 2T pulse response <1%K  
 2T bar response <0.5%K  
 50/60Hz square wave response <0.5%K  
 Differential gain <0.5%  
 Differential phase <0.7°  
 Luma/chroma timing error <10ns  
 Signal to noise ratio >68dB (weighted)

#### Ordering Information

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All Pro-Bel's quoted prices for interface modules include the supply of one suitable rear module. Please specify type required when placing order.

V16VR3B 3RU  
 V16VR1B 1RU

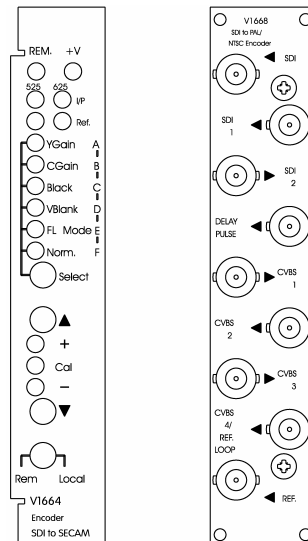
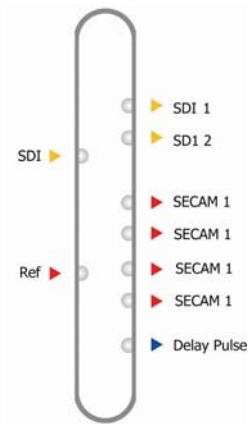
Note: Special versions of rear module are available on request.

#### Controls

Video gain -6dB +3.5db  
 Chroma gain -2.5dB to +1.94dB  
 Black level -50mV to +50mV  
 Vertical blanking Narrow / Wide  
 Horizontal blanking width Wide / Narrow  
 Sync fail mode Freeze-Freeze/3S/Black-Black  
 Output standard PAL B, G, I, M, N, NTSC, NTSC J, NTSC 4.43  
 Chroma filter On/Off

#### Additional for SY

V timing +75 lines  
 H timing +1/2 line  
 IP fail/mode



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