

### *Specifications:*

Input Return Loss	> 15 dB at 270 Mbit
Input Equalization	1000' Belden 8281
Frequency Response	0-5.2 Mhz +/- 0.25 dB
K-Factor	< 1%
SCH Phase	<1.5 degrees
S/N	>70 dB
Operating Temperature Range (non-condensing)	40-90 degrees F.
Power Required	+5V @ 0.35 amps
Output DAC Quantization	10 bits
Input signal Processing	8 bits



Model 4010  
Serial Digital 4:2:2  
To Composite Analog Encoder

### *Owner's Manual*

This product is not authorized for use in life support systems.  
Product liability limited only to the replacement of this unit. Cobalt Digital Inc. does not assume any liability for loss of use due to failure of this component.

*Specifications subject to change without notice.*

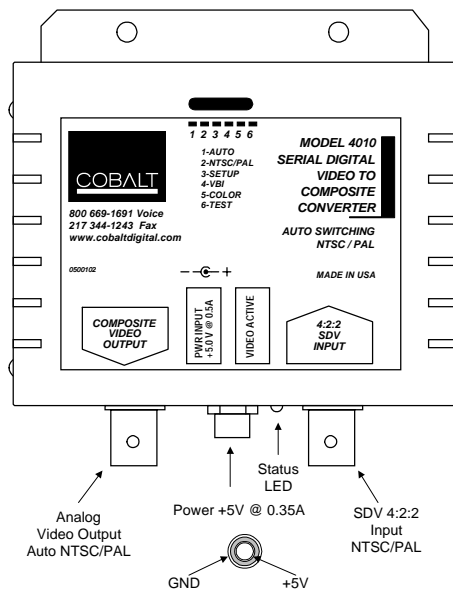
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The COBALT 4010 is a high quality digital encoder for converting 525/625 4:2:2 component serial digital (SMPTE 259M compliant) to analog NTSC/PAL composite video. The 4010 is rich with features such as automatic, as well as manual, NTSC/PAL detect, configurable or automatic 7.5 IRE pedestal, color or monochrome select, VBI blanking select and built in test modes.



The 4010 is simple to use and is designed to default to auto-detect and display color NTSC/PAL analog composite video, once a 4:2:2 serial digital video source is supplied. Internal dip switch, adds flexibility for non-standard configurations.

**SWITCH-1 SETTINGS:** OFF=DOWN (toward BNC) ON= UP

**SW 1-1 OVERRIDE**

- OFF - Auto-detect NTSC/PAL from incoming digital video stream.
- ON - Manually set NTSC/PAL video mode.  
(in auto-detect mode, a 7.5 IRE pedestal is added for NTSC ONLY)

**SW 1-2 NTSC-PAL SELECT**

- OFF - Display NTSC video.
- ON - Display PAL video.  
(NTSC-PAL select is only affected when the OVERRIDE SW1-1 is set on.  
This switch sets up the output display mode only)

**SW 1-3 SETUP**

- OFF - 7.5 IRE pedestal inserted in video.
- ON - Pedestal not inserted in video.  
(SETUP is only affected if the OVERRIDE SW1-1 is set on.)

**SW 1-4 VBI**

- OFF - Video during VBI passed through the encoder.
- ON - Video during VBI blanked.

**SW 1-5 MONOCHROME**

- OFF - Display video in color.
- ON - Display video in Black & White (color burst-chrominance off).

**SW 1-6 TEST**

- OFF - Encode and display converted video.
- ON - Display internally generated modulated ramp test pattern.

**LED INDICATOR**

The front panel LED can be used to indicate a 'video lock' or video active condition. A blinking LED indicates a loss of the serial digital input signal. Should the LED fail to turn ON, even if a valid input source is connected, potentiometer RP1 (located on the right center of the unit) may be slowly adjusted until the 'video lock' is achieved. Center RP1 by finding the endpoints of video re-locking. A dark LED indicates loss of power.

**GAIN ADJUST**

Adjust RP2 (located on the lower left side of the unit, near the video output BNC) to set the output gain.