

## *Specifications:*

|                             |                                     |
|-----------------------------|-------------------------------------|
| Input Equalization          | Auto to 1000' Belden 8281           |
| Input Return Loss           | > 15 dB at 270 Mbit                 |
| Frequency Response          | 0-5.0 MHz +/- 0.25 dB               |
| K-Factor                    | < 1%                                |
| SCH Phase                   | < 0.9 degrees                       |
| Differential Gain           | < 0.8%                              |
| Differential Phase          | < 0.8%                              |
| S/N                         | > 72 dB                             |
| Chroma Luma Delay           | < 2 ns                              |
| Output Return loss          | > 35 dB                             |
| Input Signal Processing     | 10-bit                              |
| Output DAC Quantization     | 10-bit                              |
| Output Return Loss          | > 35 dB                             |
| Operating Temperature Range | 40-115F (5-46C)<br>(non-condensing) |
| Power                       | +5V @ 0.7 amps                      |
| Size                        | 3.7 x 3.6 in. (94 x 92 mm)          |



Model 6040  
Serial Digital 4:2:2  
To Analog Composite with Y/C  
Or Analog Component 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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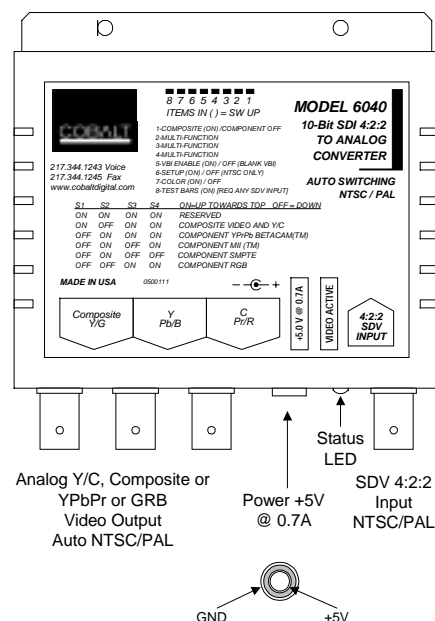
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The COBALT 6040 is a high quality full 10-bit digital encoder for converting 525/625 4:2:2 component serial digital (SMPTE 259M compliant) to analog NTSC/PAL composite with Y/C or analog component video. The user can select component RGB, YPbPr in BetaCam™, MII™, or SMPTE/N10 levels.

The 6040 is rich with features such as automatic NTSC/PAL detect and configuration, 7.5 IRE pedestal, color or monochrome select, and color bar generator.



The 6040 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. An externally accessible dip switch, adds flexibility for non-standard configurations.

**SWITCH-1 SETTINGS: OFF= Down ON = Up**

## SW 1-4 VIDEO MODE

| S1  | S2  | S3  | S4  | ON=UP TOWARDS TOP OFF = DOWN |
|-----|-----|-----|-----|------------------------------|
| ON  | ON  | ON  | ON  | RESERVED                     |
| ON  | OFF | ON  | ON  | COMPOSITE VIDEO AND Y/C      |
| OFF | ON  | ON  | ON  | COMPONENT YPrPb BETACAM(TM)  |
| OFF | ON  | OFF | ON  | COMPONENT MII (TM)           |
| OFF | ON  | OFF | OFF | COMPONENT SMPTE              |
| OFF | OFF | ON  | ON  | COMPONENT RGB                |

## SW 5 VBI BLANKING

- OFF - Bank VBI
- ON - Encode VBI

## SW 6 SETUP

- OFF - Pedestal not inserted in video.
- ON - 7.5 IRE pedestal inserted in video (For NTSC signals only).

## SW 7 COLOR / MONOCHROME

- OFF - Display video in Black & White (Pr Pb turned off, R=G=B, C turned off, color turned off on composite output).
- ON - Display video in color.

## SW 8 COLOR BARS ON/OFF

- OFF - Display video.
- ON - Display COLOR BARS.

NOTE: SDV input required to clock internal Bar Generator.

## 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. A dark LED indicates loss of power.

## GAIN ADJUST

Remove the top cover and adjust RP1 (located on the upper left side of the unit) to set the output gain. Replace top cover.