

5015 Dual Monitoring Converter - Serial Digital 4:2:2 to Analog Composite with Reclocked SDI

The Cobalt Digital 5015 is a high performance Dual 4:2:2 Serial Digital Video to Analog Composite and reclocked SDI converter card that is compatible with Industry Standard Digital frames.

The end user to selects the analog or digital output configuration as need for a given application. The board has two, A and B SDI conversion encoders. The A encoder has four outputs of which two are fixed analog composite and two can be configured as SDI or analog composite. The B converter has three outputs. One is fixed analog and the other two can be configured as reclocked SDI or analog composite video.

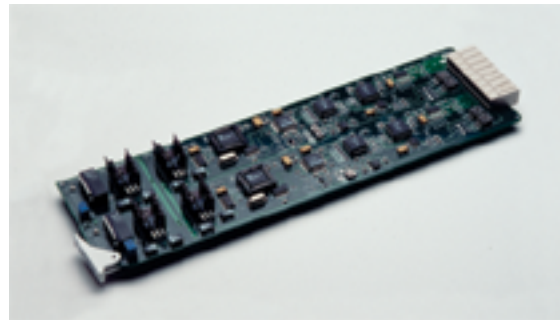
Output gain control for analog composite is adjustable from the card edge as well as configuration switches for both converters. Gain level can be set +/- 10 IRE.

Configuration settings are Setup On/Off, Color Bars On/Off (Color Bar mode requires an active SDI input to be present to clock the output composite encoder), Color On/Off (off for better performance on a monochrome monitor).

The low power consumption of the 5015 allows 10 cards to be installed in a 2U frame yielding 20 conversions per frame.

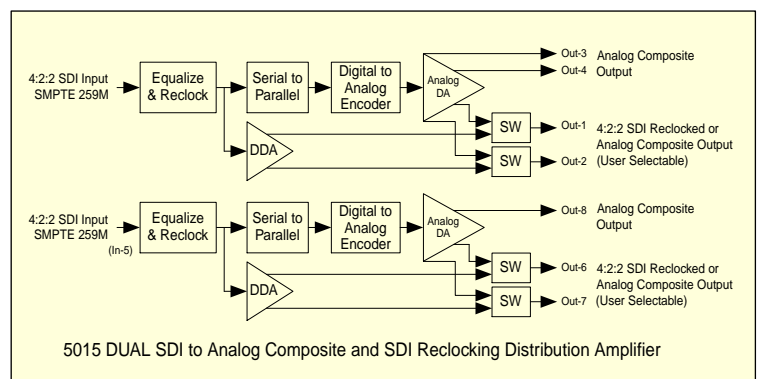
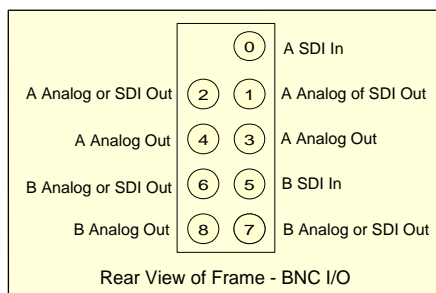
Features

- u Cost-effective monitoring solution
- u Dual converters on one card (4:2:2 SMPTE 259M-C)
- u 20 conversions with one 2U Digital frame
- u Both analog composite & 4:2:2 SDI reclocked outputs
- u Encoder: 10-bit DAC, 8-bit data path
- u Frequency Response 0-5 MHz +/- 0.25 dB
- u Auto NTSC/PAL detect and configure
- u Input signal presence indicator
- u Built-in color bar test generator (analog output)
- u Video gain control accessible on card edge
- u User selectable digital outputs two per converter
- u Five year warranty



Specifications

Number of Inputs	Two
Format	525 or 625 SMPTE 259-C 4:2:2 SDI
Equalization	Auto to 1000' Belden 1694 (typical)
Return Loss	> 17 dB at 270 Mbit
Number of Outputs	4 on A converter and 3 on B converter User selectable
Digital outputs:	Reclocking - Up to 2 on A and 2 on B converter (User switchable with composite analog)
Level	800 mV +/- 10%
Return Loss	> 17 dB at 270 Mbit
Delay	10 nS
Analog Outputs:	4-2 on A converter and 3-1 on B converter User Selectable
Standard	Composite video auto-detecting 525/625
Video Level	100 IRE +/- 10 IRE (user adjustable)
Sync	- 286 mV +/- 10%
Frequency Resp.	0-5 MHz +/- 0.25dB
K-Factor	< 1.5%
Differential Gain	< 1%
Differential Phase	< 1%
Noise	< 70 dB
Chroma/Luma Delay	< 2nSec
SCH Phase	< 2 degrees
Encoding	10 bit DACs, 8 bit input path
Setup	User selectable on/off for NTSC
Return loss	> 35 dB at 5 MHz
Power	Positive Rail 6.5 Watts; Negative Rail 0.5 Watts
Temperature Range	40-110 degrees F
Humidity:	Non-condensing
Indicators	Two data lock indicators (one per converter)



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