SPECIFICATIONS:

DIGITAL

Input Signal:	SMPTE-292 HDSDI (10 bit) ♦ 720P 23.98/24/25/29.97/30/59.94/60 ♦ 1080I 59.94/60/50 ♦ 1080P 25/29.97/30 23.98/24p/(sF) ♦ 1035I 59.94/60
Input Equalization:	430ft (130 Meters) Belden 1505A
Return Loss:	> 15 dB
Output:	Two HDSDI equalized input copies

ANALOG

Output Signal:	DUAL HD-Analog: YPbPr, RGB & SVGA
Frequency Response:	Y: 0-30 MHz +/- 0.25 dB Pb/Pr: 0-15 MHz +/- 0.25 dB
DAC Quantization:	10 bits across active video
Return Loss:	>30dB
Connectors:	HD15 with adapters cables for BNC outputs.
Sync:	Composite: Bi/Tri-Level; H/V SVGA and Sync on Video
Reticules	4x3 or 16x9 Safe Area
Reticule Color	Black or White
Options:	Remote Reticule control
Operating Range:	40-110 degrees F. (non-condensing)
Input Power:	+5VDC @ 0.9A Optional 7-20VDC 6W
Size:	5.4” x 3” x 1” (137 x 76 x 25mm)

This product is not authorized for use in life support systems. Product liability is 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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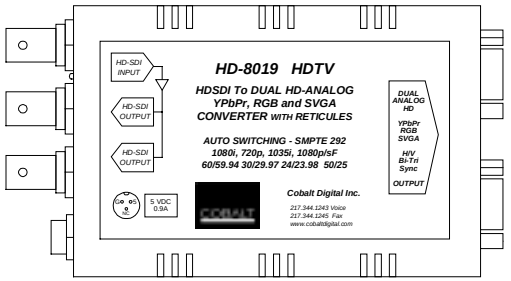
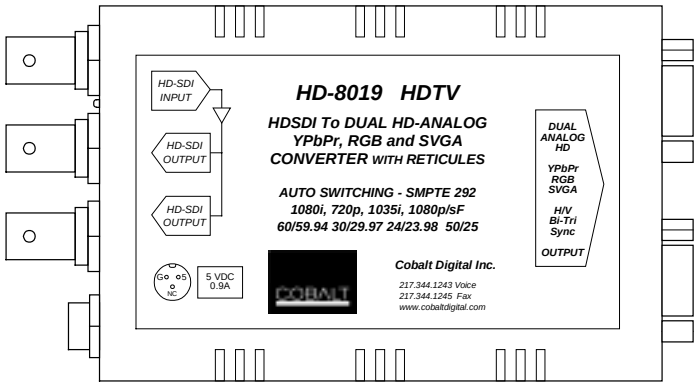
Rev. 1.0 gjz

Model HD-8019
HDSDI SMPTE-292 Digital to Dual Output HD-Analog Converter With Reticules



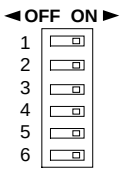
Owner’s Manual

The HD-8019 is a high-quality, 10-bit, digital to dual output analog converter for SMPTE-292 HDSDI signals. This unit can directly feed most SVGA monitors. In addition, the HD-8019 can feed analog HD tape decks or HDTV monitors. The unit includes two equalized HDSDI copies for loop through applications.



The HD-8019 is simple to use and will auto-detect and display SMPTE-292 HDSDI signals. An externally-accessible dip switch adds flexibility for alternate configurations.

SWITCH SETTINGS:



SW1-1 COMPONENT MODE OR SVGA
- OFF - Component video with Composite Sync
- ON - SVGA video with H & V Sync

SW 1-2 RGB/YPrPb SELECT
- OFF - Y Pb Pr
- ON - RGB

SW 1-3 BI / TRI LEVEL SYNC
- OFF - Bi - Level Sync output
- ON - Tri - Level Sync output

SW 1-4 SAFE AREA RETUCULES (720 & 1080 MODES)
- OFF - Reticules On
- ON - Normal Video

SW 1-5 RETICULE MODE
- OFF - 16x9 Safe Area
- ON - 4x3 Safe Area

SW 1-6 RETICULE COLOR
- OFF - Black
- ON - White

CONFIGURATION EXAMPLES:

MODE	SYNC	SW1	SW2	SW3	SW4	SW5	SW6
SVGA		ON	ON	ON	ON	ON	ON
YPbPr	H&V Sync	ON	OFF	ON	ON	ON	ON
YPbPr	Tri-level Sync	OFF	OFF	ON	ON	ON	ON
YPbPr	Bi-level Sync	OFF	OFF	OFF	ON	ON	ON
RGB	H&V Sync	ON	ON	ON	ON	ON	ON
RGB	Tri-level Sync	OFF	ON	ON	ON	ON	ON
RGB	Bi-level Sync	OFF	ON	OFF	ON	ON	ON

RETICULE FUNCTIONS

Two Safe Area Reticules are available that outline a 90% image space for a 16x9 image or a 90% image space of a 4x3 window in a 16x9 image. The reticules include a center cross pulse. Other reticules are optional.

LED INDICATOR

The front panel LED has three modes indicating status. Solid on indicates signal lock. A blinking LED indicates loss of signal lock. A dark LED indicates loss of power.

OUTPUT GAIN ADJUST

This unit is calibrated at the factory and should not require adjustment. If desired, the user may override these setting settings by adjusting master gain potentiometer RP2.

In addition to the master gain control there are three gain controls, one for each color signal YPbPr/RGB. To calibrate the analog output, set the master gain potentiometer in mid-center. Apply a color bar (100%) HDSDI signal. Set the analog output to YPrPb (Switch 2 OFF) and connect the output to a 75 ohm load. Using an oscilloscope or HD waveform monitor, adjust each channel's (YPrPb) total gain to 700 mV.

The color difference channels should have a zero volt DC offset, with signal levels going +/-350 mV for a total swing of 700 mV. Confirm RGB operation by setting switch 2 ON and checking for 700 mV levels.

The HD-8019 will automatically lock to the following signal rates:

1080i 60/59.94/50 **1080p** 30/29.97/25/24/23.98 **1080sF** 24/23.98
720p 60/59.94/50/30/29.97/25/24/23.98 **1035i** 60/59.95