

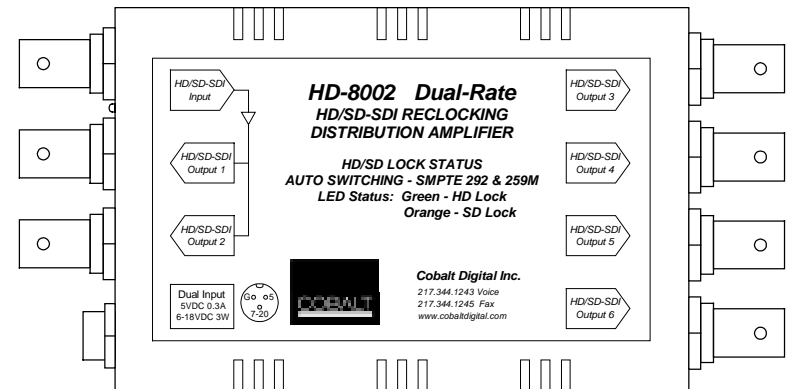
## Specifications

SDI Input:	SMPTE 292 & 259M 1485/1483, 540, 360, 270, 177, 143 Mb/s
Input Return Loss	> 12 dB at 1.5 GHz
Operating Temperature Range	40-100 degrees F.
Output Return loss	> 11dB at 1.5 GHz
Output Jitter (Bars input)	HD: < 0.2 UI SD: < 0.1 UI
Operating Temperature Range	40 -110 degrees F (5-43C)
Humidity	(non-condensing)
Power Input	+5-18 VDC < 3W
Size	BNC-BNC 6"x3"x1" (153x76x25mm)

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.



## Model 8002 HD/SD-SDI Reclocking Distribution Amplifier With HD/SD Lock Status



Specifications subject to change without notice.

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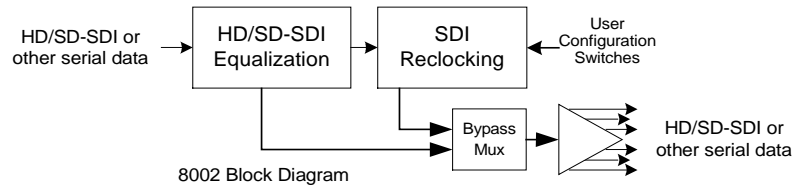
Cobalt Digital Inc.

## Owner's Manual

Cobalt Digital Inc. 2006

The COBALT 8002 is a high-quality six output HD/SD-SDI distribution amplifier. The 8002 will automatically detect and reclock data at 1485, 1483, 540, 360, 270, 177, and 143 Mb/s. The 8002 outputs will mute when no input is detected. The device can be powered from an external supply of 5 VDC to 18 VDC.

**Block Diagram**



**Features**

The 8002 can be operated in automatic standard detect mode or in a manual standard mode. The user can bypass the reclocking circuitry if desired. The device can reclock and distribute ASI data on 3 of its 6 output ports.

**Led Indicator**

The front panel LED indicates video lock. When an HD rate signal is locked it will light green, when an SD rate signal is locked it will light orange. If no signal is locked it will remain dark.

**Switch Settings**

					<b>8002 SWITCH SETTINGS</b>
1	<input type="checkbox"/>				<b>S1 Rate Select Mode</b> On = Auto Detect Off = Manual (see S2, S3, S4)
2	<input type="checkbox"/>				
3	<input type="checkbox"/>				
4	<input type="checkbox"/>				
5	<input type="checkbox"/>				
6	<input type="checkbox"/>				
<b>◀ OFF ON ▶</b>					
	S2	S3	S4		<b>Forced Reclocking Rates (S1-Off)</b> On On On    1.483/1.485 Gb/s On On Off    540 Mb/s Off Off On    360 Mb/s Off Off Off    270 Mb/s Off On On    177 Mb/s Off On Off    143 Mb/s
	S5	Mute on input loss			On = Mute Off = Pass Signal
	S6	Detect 177 Mb/s			On = Support 177 Mb/s Off = Pass DVB/ASI
	S7	Reclocking			On = Reclocked Off = No-reclocking
	S8	Auto Bypass			On = Bypass reclocker when no lock Off = Attempt reclocking when no lock
<b>Remove Cover to access S7 and S8</b>					

- S1 – Selects automatic or manual rate detection. ON for automatic. OFF for manual.
- S2, S3, S4 – Selects format in manual mode. See table for settings
- S5 – Mute control. ON to mute output when input absent. OFF to unmute output when input is absent.
- S6 – 177Mb and DVB/ASI format select. ON to auto detect 177Mb. OFF to autodetect DVB/ASI\*.
- S7\*\* – Reclocking control. ON to activate reclocking. OFF to bypass reclocking.
- S8\*\* – Auto Bypass Control. ON to bypass reclocking when input unlocked. OFF to attempt reclocking when input unlocked.
- \* Outputs 1, 3, and 5 are inverting. Therefore ASI is only available from outputs 2,4, and 6
- \*\* Remove back panel to access S7 and S8