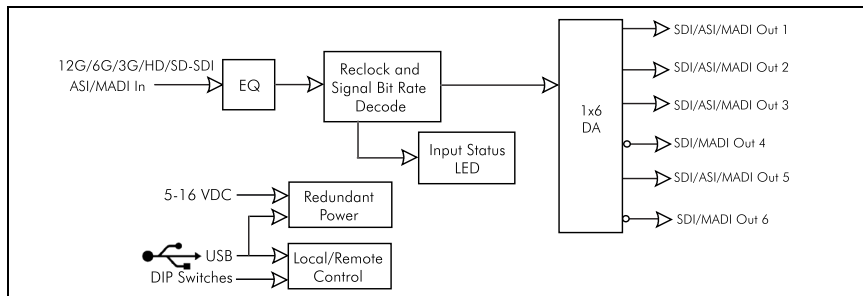


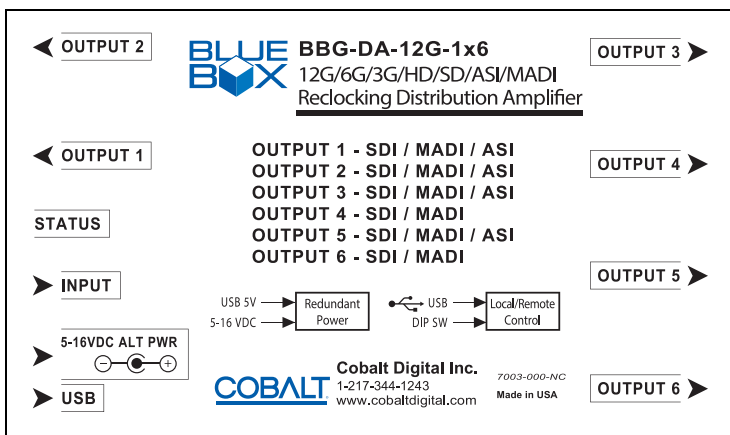
# BBG-DA-12G-1x6

## 12G/6G/3G/HD/SD-SDI / ASI / MADI Reclocking Distribution Amplifier With Input Status LED

The BlueBox™ DA-12G-1x6 Reclocking Distribution Amplifier (hereinafter “BlueBox™ DA-12G-1x6”) provides a small “throwdown” package that offers a 1X6 DA with automatic detect and reclock at 12, 2.970, 1.485, and 0.270 Gb/s. ASI is supported on 4 non-inverting outputs. The DA-12G-1x6 can be powered from USB and/or 5-16 VDC using an AC adapter (supplied).



The DA-12G-1x6 can be operated in automatic standard detect mode or in a manual standard mode. Non-inverting ASI reclock is available on **OUTPUT 1** thru **3** and **5** output ports.



### LED Indicator

The LED indicates the following modes:

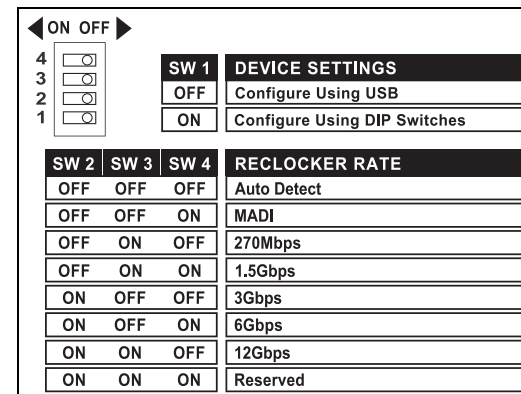
- Solid GREEN – Input detected (and of rate recognized by device). Normal operation.
- Flashing GREEN – No input (or input rate not recognized by device).
- Flashing AMBER – Settings have changed and are not currently saved (settings being written to memory).
- Flashing RED – Bootloader/firmware upgrade mode. Flashing red state persists while firmware is being uploaded and ceases when upload is complete.

### Connecting BlueBox™ DA-12G-1x6

- 1 Connect BlueBox™ DA-12G-1x6 power using either or both the USB port or the supplied AC adapter. Dual source (simultaneous) use provides power redundancy.
2. Connect SDI, ASI, or MADI input. Note the specific output ports that can be used for ASI (as shown on the previous page). This provides the basic connections. Other connections do not require termination if unused.

### Switch Settings

The 4-position switch allows forcing a reclocking rate or allow auto detect, and also allows mute upon input loss as shown below.



**Configure Using USB** allows BBG-DA-12G-1x6 to be configured and monitored using a GUI which replicates control settings shown here. When set to Configure Using USB, last-saved USB GUI settings take effect. When set to **Configure Using DIP Switches**, current DIP switch settings take effect.

### Specifications

Item	Description/Specification
SDI/ASI/MADI Input:	SMPTE 2082-1, 424M, 292M, 259M, ASI, MADI. (AES audio not supported)
Receive Performance; Equalized:	12 Gbps: 80m 3 Gbps: 160m 1.485 Gbps: 180m 143-360 Mbps: 400m
12G/3G/HD/SD-SDI / ASI / MADI Outputs:	Number of DA outputs: 6 Signal Level: 800 mV +/- 10% DC Offset: 0.0V +/- 0.5V Jitter 12 Gbps: Alignment (<100 kHz) Jitter: < 0.3 UI Timing (<10 Hz) Jitter: < 8 UI Jitter 6 Gbps: Alignment (<100 kHz) Jitter: < 0.3 UI Timing (<10 Hz) Jitter: < 4 UI Jitter 3 Gbps: Alignment (<100 kHz) Jitter: < 0.3 UI Timing (<10 Hz) Jitter: < 2 UI Jitter 1.5 Gbps: Alignment (<100 kHz) Jitter: < 0.2 UI Timing (<10 Hz) Jitter: < 1 UI Jitter 270 Mbps: Alignment (<1 kHz) Jitter: < 0.2 UI Timing (<10 Hz) Jitter: < 0.2 UI Impedance: 75Ω
Power Input:	<2 Watts; 5-16 VDC (compatible with Power Supply PS4 (North America) or PS5 (International). USB along with power supply provides power redundancy.
Dimensions (WxHxD):	5.8" x 2.9" x 1.1" (including connector projections) (147 x 74 x 28 mm)

## Warranty and Service Information

### Cobalt Digital Inc. Limited Warranty

This product is warranted to be free from defects in material and workmanship for a period of five (5) years from the date of shipment to the original purchaser, except that 4000, 5000, 6000, 8000, and Blue Box series power supplies, and Dolby® modules (where applicable) are warranted to be free from defects in material and workmanship for a period of one (1) year.

Cobalt Digital Inc.'s ("Cobalt") sole obligation under this warranty shall be limited to, at its option, (i) the repair or (ii) replacement of the product, and the determination of whether a defect is covered under this limited warranty shall be made at the sole discretion of Cobalt.

This limited warranty applies only to the original end-purchaser of the product, and is not assignable or transferrable therefrom. This warranty is limited to defects in material and workmanship, and shall not apply to acts of God, accidents, or negligence on behalf of the purchaser, and shall be voided upon the misuse, abuse, alteration, or modification of the product. Only Cobalt authorized factory representatives are authorized to make repairs to the product, and any unauthorized attempt to repair this product shall immediately void the warranty. Please contact Cobalt Technical Support for more information.

To facilitate the resolution of warranty related issues, Cobalt recommends registering the product by completing and returning a product registration form. In the event of a warrantable defect, the purchaser shall notify Cobalt with a description of the problem, and Cobalt shall provide the purchaser with a Return Material Authorization ("RMA"). For return, defective products should be double boxed, and sufficiently protected, in the original packaging, or equivalent, and shipped to the Cobalt Factory Service Center, postage prepaid and insured for the purchase price. The purchaser should include the RMA number, description of the problem encountered, date purchased, name of dealer purchased from, and serial number with the shipment.

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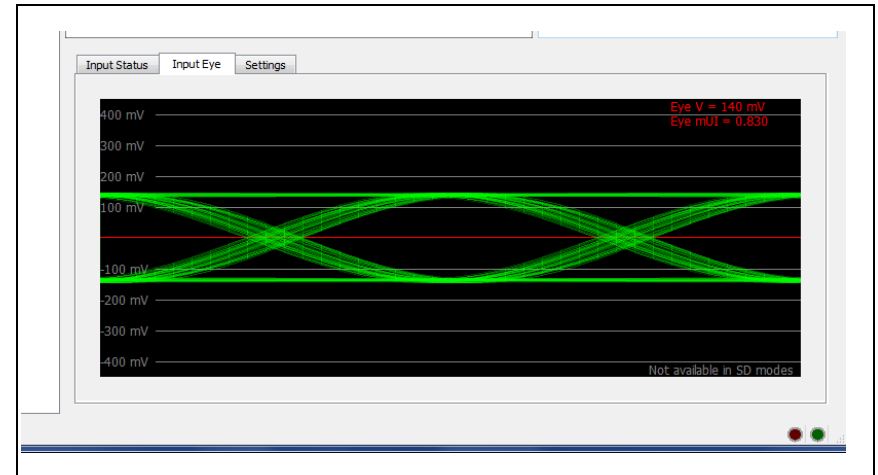
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## Eye Pattern Display

An input eye pattern can be displayed on the PC hosting BBG DA-12G-1x6 as follows:

- 1 With BBG DA-12G-1x6 connected to PC via its USB connection, open BBGConfig.
- 2 In BBGConfig app, click on the **Input Eye** tab. An input eye pattern is displayed (as shown in example below). Eye V and Eye UI measurements are also displayed.

**Note:** Eye Pattern display is not available for SD input signals.



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