

Combo HD/SD SDI Dual Reclocking Distribution Amplifier (32 1x4 DA's in 3RU Rack Space)

Model 500DA2Q-HD

The Evertz 500DA2Q-HD Dual HD Reclocking Distribution Amplifier provides the highest density DA in the industry allowing up to 32 HD or SDI Distribution amplifiers in a 3RU rack space. It provides inexpensive distribution of your SMPTE 292M (1.5 Gb/s), SMPTE 259M (143 to 360 Mb/s), SMPTE 344M (540 Mb/s), DVB-ASI or SMPTE 310M (19.4 Mb/s) or any other SDI signal within the 143 Mb/s to 1.5 Gb/s range. The 500DA2Q-HD features two auto-equalized inputs and can be configured either as a single DA with eight reclocked outputs or as two separate DAs with four outputs each. In the case of dual operation, each DA can be individually set via jumpers for either reclocking or non-reclocking.

The 500DA2Q-HD is housed in the 500FR *exponent* frame that will hold up to 16 modules.

Features

- Normal mode for SMPTE 292M (1.5 Gb/s) SMPTE 259M (143 - 360 Mb/s) or SMPTE 344M (540 Mb/s) signals - autodetects correct bit rate
- Jumper selectable mode for DVB-ASI
- Jumper selectable non-reclock mode for SMPTE 310M(19.4Mb/s) signals or any other SDI signal within the 143 Mb/s to 1.5 Gb/s range
- Configurable as 1 DA with 8 outputs or 2 DAs with 4 outputs each
- Fully hot-swappable from front of frame with no BNC disconnect required
- Independent isolated output drivers to ensure no cross channel loading effects (i.e. no need to terminate unused outputs)
- Module health and 2 x 4 Mode Status LEDs
- Reclocker(s) Locked, Carrier Present and Video Standard LEDs for each DA channel
- Tally output on Frame Status bus upon loss of input signal

Card Edge LEDs:

- Module Health Status
- 2x4 mode operation
- Reclocker rate detection
- Reclocker Locked
- Carrier Present

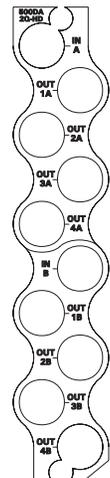
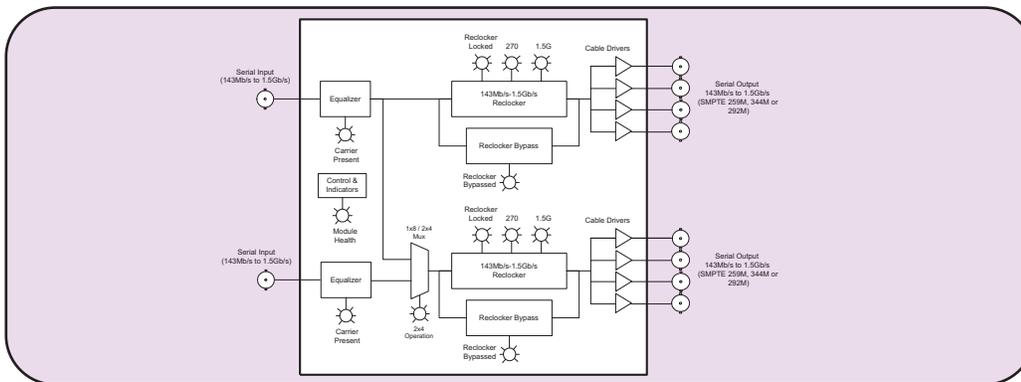
Inputs:

- 2 inputs
- SMPTE 292M (1.5 Gb/s), SMPTE 259M (143 to 360Mb/s), SMPTE 344M (540Mb/s), DVB-ASI or SMPTE 310M(19.4Mb/s)
- Auto equalization to 100m Input A, 90m Input B(Belden 1694) @1.5Gb/s

Outputs:

- 4 reclocked outputs per input
- Jitter < 0.2UI

500DA2Q-HD Block Diagram



Specifications

Serial Video Input:

Standards

Reclocked: SMPTE 292M (1.5 Gb/s), SMPTE 259M (143 to 360 Mb/s), SMPTE 344M (540 Mb/s), DVB-ASI

Non-reclocked: SMPTE 310M (19.4 Mb/s)
Any SDI signal in the 143Mb/s to 1.5 Gb/s range

Connectors:

Equalization:

Input A: Automatic to 100m @1.5Gb/s with Belden 1694A or equivalent cable

Input B: Automatic to 90m @1.5Gb/s with Belden 1694A or equivalent cable

Return Loss:

>10 dB up to 1.5 Gb/s

Serial Video Outputs:

Number of Outputs:

2 x 4 Mode: (mode set by jumper)
4 reclocked from each input
Reclockers can be bypassed separately for each input

1 x 8 Mode: 8 reclocked from Input A (1)
Reclockers can be bypassed

Connector:

BNC per IEC 169-8

Signal Level:

800mV nominal

DC Offset:

0V ±0.5V

Rise and Fall Time:

200ps nominal

Overshoot:

<10% of amplitude

Return Loss:

>10 dB up to 1.5 Gb/s

Jitter:

< 0.2 UI

Electrical:

Voltage:

+ 12VDC

Power:

6 Watts

EMI/RFI:

Complies with FCC Part 15 Class A
EU EMC Directive

Physical:

Number of slots:

1

Ordering Information:

500DA2Q-HD

Combo HD/SD SDI Dual Reclocking Distribution Amplifier (2 - 1 x 4)

Enclosure:

500FR

Compact High Density Distribution Frame

S501FR

Standalone enclosure