

Quartet 3G Ready ASI & HD/SD-SDI Switching Distribution Amplifier

- Ideal for supporting encoder redundancy without a DTA
- Automatic or manual switching
- Auto rate detection



features

Inputs (2):

- A) Primary input
- B) Secondary input used as a backup

Front panel LEDs (2):

Power - Green indicates powered up
Signal - Green indicates a valid signal is being passed through the system.

Modes selectable via external RST (2):

- When LEFT and CENTER terminals are shorted together the PRIMARY signal passes.
- When the RIGHT and CENTER terminals are connected the SECONDARY signal passes.
When any of the previous two modes are selected the unit will not use the redundancy backup signal. When the unit is not in manual override mode it uses the secondary signal as a backup.

Redundancy Backup

When signals on both the primary and secondary are valid the primary signal will pass. If this signal is lost then the secondary signal will pass. If there is no secondary and primary signal, no input passes. Once a valid signal is connected the unit will then pass that signal, however the primary input takes precedence so if both signals are again connected the primary will pass. If the primary is lost again the unit switches to secondary. If the primary is then reconnected it will go back to passing the primary. All inputs use autorate detection.



Specifications

- Auto rate detection
- Manual input selection or auto switching modes
- Dual input switcher (primary and secondary inputs)
- Passes standards from 143 Mb/s to 2.97 Gb/s (2.97 Gb/s not currently tested)
- 350 m cable length equalization at 270 Mb/s
- 175 m cable length equalization at 1.485 Mb/s
- 120 m cable length equalization at 2.97 Gb/s

Power

1 input (5-25V)

1 output (internally and fused connected to input)
current supply per unit 250mA max.

* Vout can supply up to 4 additional units (5 units per Adtec power supply) Internal fuse will trip when overloaded and reset after overload is removed.

Signal

Input Voltage Swing (0 m cable length)

@270/1485 Mb/s: 720950 mVpp

@2.97 Gb/s: 720880 mVpp

- DVBA5I up to 270 Mb/s

- HD/SDSDI 270 Mb/s, 1.485 Gb/s, and 2.97 Gb/s (2.97 untested)

Output Voltage Swing

Nominal: 800 mVpp

MinMax: 500/1200 mVpp

Jitter

Line driver

@270Mb/s : 260 ps (estimated)

@1485Mb/s : 97 ps

@ 2970Mb/s: 85 ps

Temp

Max ambient temperature

+70 C

Min ambient temperature

0 C