## 3Gbit Dual SDI/ASI Distribution Amplifier

### Description

The DVD 5820 can be configured as a single channel 1>8 or dual channel 1>4 SDI distribution amplifier. Each channel can be set to reclocking or non-reclocking mode. This module is ideally suited for demanding digital multi-format broadcast and professional applications.

The module auto-detects the input video standard with support for all SDI video formats up to 3Gbit/s. In non re-clocked mode the module will transparently pass any data between 15Mbit/s and 3Gbit/s. Support for ASI/DVB and SMPTE 310 signals is also provided.
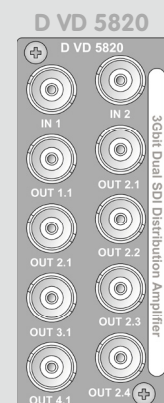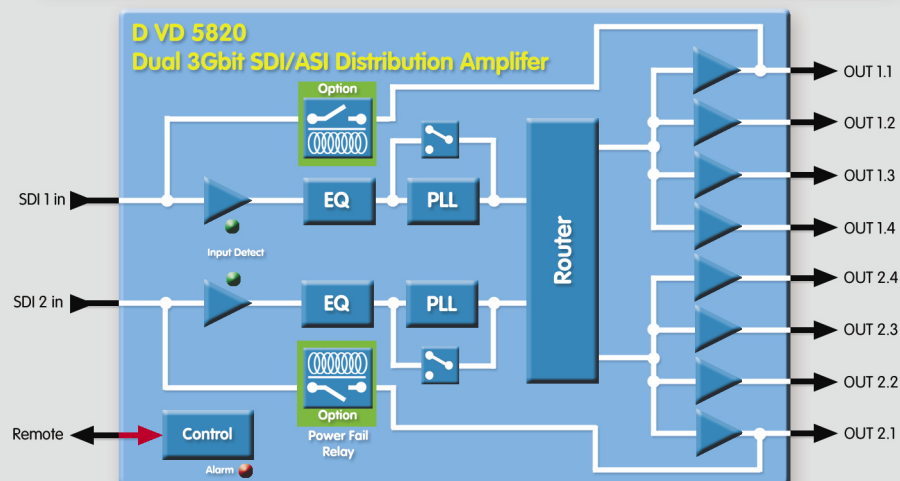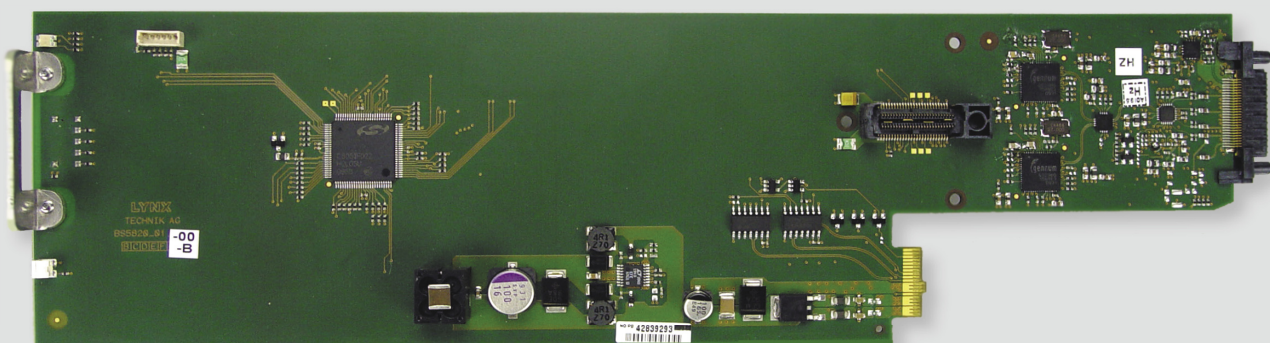
In 1>8 mode either input can be mapped to the 2 banks of 4 outputs. The optional mechanical relay will connect the inputs to one of the outputs in the event of a power failure.

Local settings are provided via an integrated dip switch on the card edge.

Remote control, status monitoring and error reporting is possible when using the LYNX control system.

### Features

- Supports all SDI video formats
- Supports ASI/DVB and SMPTE 310 streams
- Dual channel 1>4 or flexible 1>8 mapping
- Reclocking or non-reclocking mode (selectable).
- Auto-detect input video standard.
- Transparently pass data between 15Mbit/s and 3Gbit/s in non re-clocked mode.
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication
- Optional power fail relay connecting input to output

- Remote control, status monitoring and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot Swappable

## Specifications

### Video Inputs

| | |
|---|---|
| Signal Type | Serial Digital Video SMPTE 259M, 292M, 424M DVB-ASI and SMPTE 310 |
| Video Standard | All formats ( 270Mbit/s through 2.97Gbit/s) |
| Input level | 0.8 v peak to peak |
| Input Impedance | 75 Ohms |
| No. Of inputs | 2 |
| Connector | BNC |
| Return loss | > 15dB (1.485Gbit) > 10dB (2.97Gbit) |

### Video Outputs

| | |
|---|---|
| Signal Type | Serial Digital Video SMPTE 259M, 292M, 424M DVB-ASI and SMPTE 310 |
| Video standard | Follows input |
| Output level | 0.8 v peak to peak |
| Output impedance | 75 Ohm |
| No. Of Outputs | 8 (2x4) |
| Connector | BNC |
| Return loss | > 15dB (1.485Gbit) > 10dB (2.97Gbit) |
| Jitter | < 0.20 UI (270 MHz) < 1.0 UI - Timing Jitter - (1.485Gbit - 2.97Gbit) < 0.20 UI - Alignment Jitter - (1.485Gbit - 2.97Gbit) |

### Performance

| | |
|---|---|
| Cable equalization | Up to 250M using Belden 8281 (270Mbit) Up to 140m using Belden 1694A (1.485Gbit) Up to 80m using Belden 1694A (2.97Gbit) |
| Control | Local settings using on board dip switches. Remote control possible when used with LYNX controller |
| Status monitoring (LED) | Signal presence for each input plus general alarm |

### Operation modes

| | |
|---|---|
| Single channel | Single 1>8 (either input can be mapped to the 8 outputs) |
| Dual channel | Dual 1 > 4 |
| Re-clocking | Clocked or non re-clocked operation (each channel, selectable) |

### Electrical Specifications

| | |
|---|---|
| Operating Voltage | 12 VDC |
| Power Consumption | < 4W |
| Safety | IEC 60950/ EN 60950/ VDE 0805 |

### Mechanical

| | |
|---|---|
| Size | 283mm x 78mm |
| Weight | CardModule 120g, connector plate 50g |

### Ambient

| | |
|---|---|
| Temperature | 5°C to 40°C Maintaining specifications |
| Humidity | 90% Max non condensing |

Specifications subject to change

## Settings and Control

### Local Settings

| | |
|---|---|
| Re-clocking | clocked / non re-clocked |
| Modes | Dual channel = 2x1>4 Single channel = 1x1>8 (using input 1) Single channel = 1x1>8 (using input 2) |

### Settings Available from Control System

Local controls duplicated. No additional parameters provided via the control system

### On Board Indicators / LEDs

| |
|---|
| Input 1 Present / No Input |
| Input 2 Present / No input |
| General Alarm Indicator – 3 Color |

## Options

### OH DVD RL2 - Bypass Relay

Optional mechanical relay which will connect SDI IN 1 to SDI OUT 1.1 and SDI IN 2 to OUT 2.1 in the event of a power failure.

## Ordering Information

| Model # | Part Number | Description | Includes |
|---|---|---|---|
| D VD 5820 | 5155105820 | 3Gbit Dual SDI Distribution Amplifier | CardModule, Rear termination Panel, + Mounting Screws, and Reference Manual |
| OH DVD RL 2 | 5155105800 | Bypass Relay | Rear termination panel with integrated mechanical relay. |