

SRM Module

3G-SDI

DVB-ASI

DVD-3214

3G/HD/SD-SDI / DVB-ASI Video Distribution Amplifier with Optional Bypass Relay

2024 Datasheet



The DVD-32014 is a 3G/HD/SD-SDI/ASI video distribution amplifier operating as a single-channel or dual-channel module.

Re-clocker for jitter removal and an equalizer for cable loss compensation are the main capabilities of the module. For reliability in the signal chain, in the case of power failure, each input signal is routed to one of the outputs by bypass relays.

This module offers two distinct routing modes: manual and auto change-over. In manual mode, users can manually select from four different modes for built-in 2x2 crosspoint. In auto change-over mode, two sub-modes are available: 1-to-8 and dual 1-to-4.

In the 1-to-8 mode, users designate their preferred input, and the module automatically executes change-over function based on the carrier lock status of the input signals. In the dual 1-to-4 mode, each output group receives signals from corresponding inputs unless an input becomes unlocked. Following a change trigger, the module can revert to the preferred input manually, automatically, or if the backup input becomes unlocked.

All adjustments and controls can be applied directly by onboard DIP switches and a webbased user interface. LED indicators on the front edge of the module inform the user about the operational status of the module.

Key Features

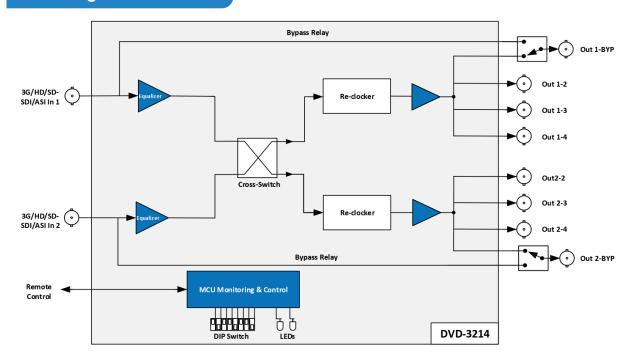
- Supports SMPTE 424M, SMPTE 259M, SMPTE 292M standards
- Built-in 2x2 router with manual or automatic control
- Change-over functionality
- · Web-based user interface
- Detection of the input signal format
- Re-Clocking for jitter removal
- Cable loss compensation
- Firmware Remote Upgrade
- Three different back panel options
- Status LED indicators

Back Panel



-3DRP or -3DRP-R

Block Diagram



Specifications

Digital Video Input		Digital Video Outputs		
Signal type	3G/HD/SD-SDI/ASI	Signal type	3G/HD/SD-SDI/ASI	
Standards	SMPTE 292M, SMPTE 259M,	Standard	SMPTE 292M, SMPTE 259M SMPTE 424M	
Number of	SMPTE 424M 2	Number of outputs	8	
inputs		Connector	BNC	
Connector	BNC	Impedance	75Ω	
Impedance	75Ω	Voltage level	800 mv ± 10%	
Cable length	Automatic compensation 3G: 60m (Belden 1694A) HD: 110m (Belden 1694A) SD: 250m (Belden 1505)	Jitter	< 0.2 UI (SD, HD) < 0.3 UI (3G)	
		Return loss	>15 dB to 270 Mb/s,	
Return loss	>15 dB to 270 MHz >12 dB to 1.5 GHz		>12 dB to 1.5 Gb/s, >10 dB to 3 Gb/s	
>10 dB to 3 Gb/s		Rise and fall time	0.4 to 1.5 ns (SD) <270 ps (HD) <135 ps (3G)	
		Overshoot	< 10% Amplitude	
		DC-Offset	0 V ± 0.5 V	
		Mechanical		
		Dimensions	230 mm × 100 mm (for Samim frames)	
Electrical		Environmental (Operating)		
Voltage	+12VDC (supplied from frame)	Temperature	5 °C to 45 °C	
Power	<5W	Humidity	0% to 90%	

System Requirements

Type	Product	Description
Frame	SRM-0645	1RU Frame with Controller
	SRM-0655	3RU Frame with Controller

Ordering Information

Order Code	Description	Type
DVD-3214	3G/HD/SD-SDI/ASI Video Distribution Amplifier	Main Board
DVD-3214-3DRP-R	Back-panel with Bypass Relay for DVD-3214 (compatible with SRM-0655)	Back Panel
DVD-3214-1DRP-R	Back-panel with Bypass Relay for DVD-3214 (compatible with SRM-0645)	Back Panel
DVD-3214-3DRP	Back-panel for DVD-3214 (compatible with SRM-0655)	Back Panel
DVD-3214-1DRP	Back-panel for DVD-3214 (compatible with SRM-0645)	Back Panel
DVD-3214-3SRP	Single Slot Back-panel for DVD-3214 (compatible with SRM-0655) x3 outputs for first channel & x2 outputs for second channel	Back Panel

With over two decades of extensive experience in the broadcast and media industry, Samim Group has emerged as a rapidly growing manufacturer and developer of professional-grade hardware and software solutions that cater to Broadcast Production Infrastructure, Intercom Systems, and Media Business Automation. We remain attuned to the latest technological advancements, ensuring we deliver high-standard solutions and products that can be marketed globally.

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