

HDS-201s

automatic, synchronous protection switch

The HDS-201s is a synchronous protection switch for SD-SDI, HD-SDI, and DVB-ASI signals, providing automatic and seamless switching of critical digital paths for broadcast applications. The HDS-201s will switch seamlessly even between two mistimed input sources.

In standard 2x1 switches available in the market today, switching is performed in line with the SMPTE specified switching point (SMPTE RP168-2002). With these units switchover occurs at a pre-determined point. Therefore, no matter where in the frame the physical switch takes place, the switch itself does not perform the operation until line 4 of the next frame. This works well when manually switching between two sources and a 'clean' manual switch over will always be achieved. However a clean switch cannot be achieved in this configuration when, for example, the primary input fails. The HDS-201s overcomes this problem and provides a clean switch on the failure of the primary input. It does this by retiming the input signals and switching in response to incorrect or missing video signals (for example missing timing reference signal TRS).

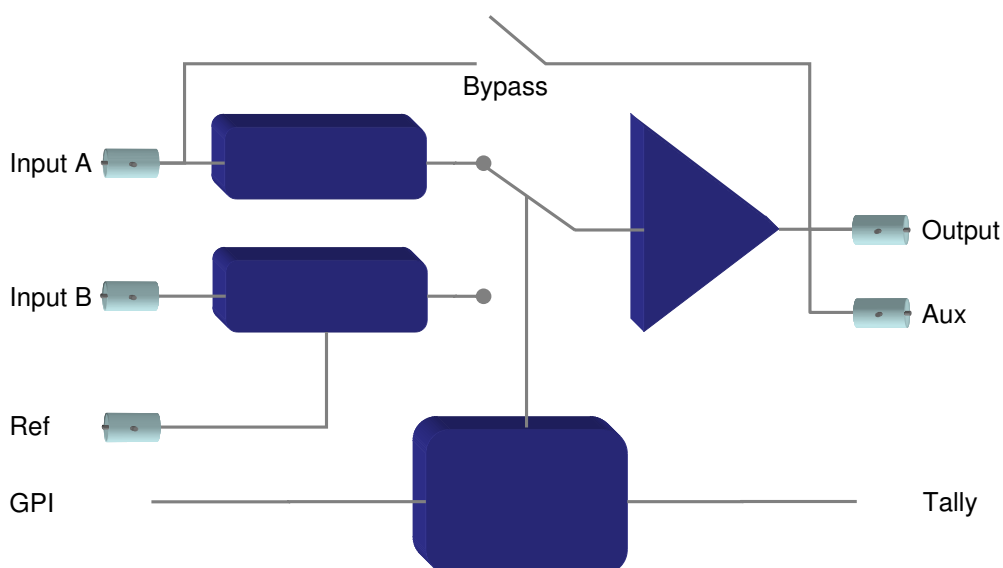
Two modes of switching are provided; automatic and non-resetting. When set to automatic the HDS-210s will immediately switch back to the primary signal once that signal has been restored. In the non-resetting mode, the secondary input remains routed to the output, even after the primary input has recovered.

In the event of a power failure, the signal is protected by a passive, fail-safe bypass relay that ensures there is an output even in the event of a total power failure.

The tally output gives status of the selected source allowing GPI's to be triggered.

Features

- HD-SDI or SD-SDI input (auto selecting)
- Full frame synchronization (SD, part frame in HD)
- Automatic or manual switching via GPI
- Full control and status monitoring through the edge of card LED's
- Bypass Protection Switch for Critical Signal Paths
- Alarm generation
- Remote control and monitoring



Inputs

Serial Digital Input

HD Serial Digital 1.485 Gb/s SMPTE 274M, 292M or 296M
SD Serial Digital 270 Mb/s SMPTE 259M or
DVB-ASI 270Mb/s

Analogue timing reference

Standards Supported (auto detected)

1080i (SMPTE 274M -4,5,6) 50, 59.94 or 60 Hz
720p (SMPTE 296M -1,2,3) 50, 59.94 or 60 Hz
1080p (SMPTE 274M -9,10,11) 23.98, 24, 25 Hz
1080sF (RP211 -14,15,16) 23.98, 24, 25Hz
625i 50
525i 59.94
DVB-ASI

Outputs

Serial Output Signal

Two (primary and Aux)

General

Power Consumption

<7.0 watts

Temperature Range

0 to 40° C ambient

Relative Humidity

0 to 95% (non-condensing)

Ordering Information

Part Number

HDS-201s

Frames and Options

FR1U-10 - Rack mounting 1U frame with single PSU and 6 card capacity
FR1U-20 - Rack mounting 1U frame with dual PSU and 4 card capacity.
FR3U-10 - Rack mounting 3U frame with single PSU and 15 card capacity
FR3U-20 - Rack mounting 3U frame with dual PSU and 15 card capacity.

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