## 6.3.6 SDI I/O Card (VISTA, OnAir, ROUTE 6000)

A949.0442



The HD/SD SDI (serial digital interface) embedder/de-embedder card is able to handle video signals according to the SD as well as the HD standard. It can act as an eight-channel embedder, an eight-channel de-embedder, or as a combination of the two. Therefore, for the D21m I/O system it may act as an eight-channel audio input card, an eight-channel audio output card, or an eight-channel input and output card. These three modes are determined by DIP switches located on the card.

The SDI standard defines up to 16 audio channels transmitted within a video signal. These 16 channels are divided into four groups of four channels each. The user can select which two groups are to be embedded or de-embedded by DIP switches on the card: either groups 1&2, or groups 3&4. It is also possible to clear the SDI data structure possibly present in the incoming video signal and to allocate the groups from scratch.

The D21m SDI card hosts sampling rate converters for both the audio inputs (de-embedding) and outputs (embedding). So the mixing console can run independent of the video sync used for SDI. The sampling rate converters can be bypassed. When bypassed, the SDI card is fully compatible to transmitting the Dolby® E audio format. If power is switched off, the input is hardware-bypassed to output A. *If the SRCs are bypassed, the card works at a sampling rate of 48 kHz only.* 

Operating modes

8-ch console output (embedder) and/or 8-ch console input (de-embedder)

Selectable SDI groups

1&2, or 3&4

Connectors

IN, OUT A, OUT B, THROUGH (BNC, 75  $\Omega$ )

Cable length

max. 50 m

**Audio latency\*** (de-embedder + embedder)

CD 42.6

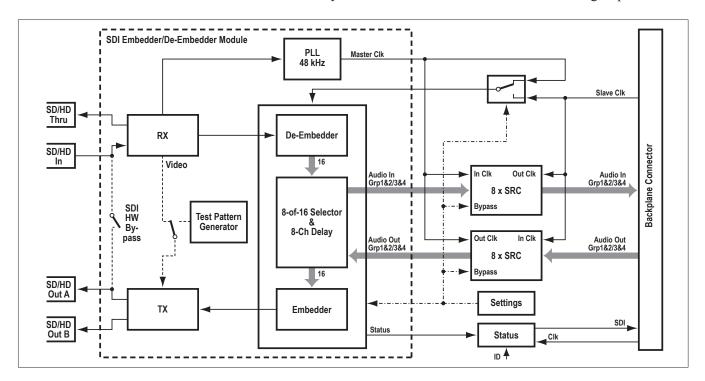
 $\textbf{Current consumption} \ (5 \ V)$ 

HD: <800 μs; SD: <2.6 ms

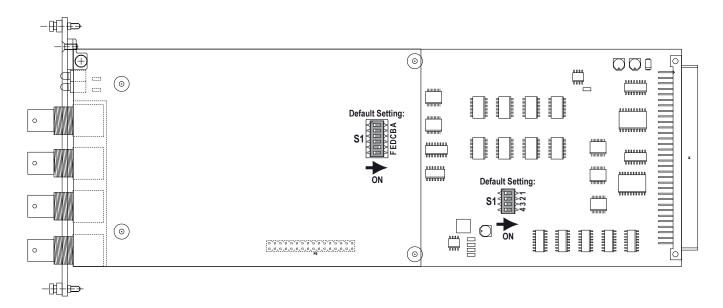
**Operating temperature** 

0-40 °C

\* Audio latency times are identical for all channels and all groups.







LEDs SDI LOCK

Indicates a valid (HD or SD) SDI signal at the input.

**HD** Indicates a valid HD SDI signal at the input.

DIP Switches S1

Switch	Setting
1	OFF: Enable de-embedder (factory default)
2	OFF: Enable embedder (factory default)
3	OFF: SRC bypass (factory default)
4	reserved (must always be OFF)

## **DIP Switch on SDI Module**

Switch	Setting
Α.	OFF: De-embedder groups 1&2 (factory default)
Α	ON: De-embedder groups 3&4
D	OFF: Embedder groups 1&2 (factory default)
В	ON: Embedder groups 3&4
	ON: All audio data in SDI will be cleared
С	(factory default: OFF)
	OFF: no delay (factory default)
D	ON: 40 ms delay on all 8 SDI in channels
_	OFF: transparent for channel status bit
E	ON: generate channel status bit (factory default)
	OFF: NTSC 525 test pattern is generated if no SDI input signal is present (fac-
F	tory default)
	ON: NTSC 1080i60 test pattern if no SDI input signal is present

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