The optional 3G/HD/SD SDI (serial digital interface) embedder/de-embedder card is able to handle video signals according to the 3G (full HD), HD and SD standards; both level A and B versions of 3G signals are supported. Standards selection is performed automatically.

The card can act as an eight- or 16-channel embedder, an eight- or 16-channel de-embedder, or any combination thereof.

For the D21m I/O system it can be an eight- or 16-channel audio input card, an eight- or 16-channel audio output card, or an eight- or 16-channel input/output card.

These modes are determined by DIP switches located on the card (or by software, if supported).

The D21m SDI card hosts SRCs (sampling rate converters) for both the audio inputs (de-embedding) and outputs (embedding). So the mixing console can run independently of the video sync used for SDI.

The sampling rate converters can be bypassed; if so, the SDI card is fully compatible with transmitting the Dolby® E audio format.

Key Features

- Embedder and De-Embedder for 16 audio signals conforming to:
  - SMPTE 425M 2.97Gbit 3G-SDI
  - SMPTE 299M 1.485Gbit HD-SDI
  - SMPTE 272M–A 270Mbit SD-SDI
- Automatic format recognition and selection
- Video delay:
  - 1...4 Frames (3G)
  - 8 Frames (HD)
  - 15 Frames (SD)
- Transparent for Dolby E
- 2 SDI outputs OUT1, OUT2
- HF bypass relay for SDI IN -> OUT 1
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. Selection of which channels are to be embedded or de-embedded is performed by DIP switches on the card (or by software, if supported): either groups 1&2, groups 3&4, or all.

It is also possible to clear the SDI data structure possibly present in the incoming video signal and to allocate the groups from scratch.

Video signals can be delayed in frames.

The maximum delay is 4 frames (3G), 8 frames (HD) or 15 frames (SD). The delay is set either by DIP switches or, if supported, by software.