## Peace of Mind



Increasing SDI circuit reliability



### **UFM-80SDICS**

#### **SDI Changeover Switcher**

This is a modular-type SDI changeover switcher that can be mounted in a UFM frame.

Seamless automatic switching of 3G/HD/SD-SDI signals increases duplex transmission reliability.

This SDI seamless switcher duplicates the uncompressed SDI signal over a fiber-optic line and monitors the SDI signals of 2 systems decoded after duplex transmission, and switches seamlessly to the other line when signal loss, video freeze, audio mute or other errors are detected.

#### Mounting multiple switchers into a single unit greatly reduces the installation space.

Downsizing can be achieved by equipping multiple modules to a single UFM frame. Up to five modules can be equipped to the UF-106B, and up to nine modules to the UF-112. In addition, different module types can also be simultaneously equipped.

#### **Features**

#### Video error monitoring function

SDI CRC errors that occur in the transmission paths of 2 systems and screen-freeze due to codec are monitored, enabling automatic switching to the normal signal.

#### Audio error monitoring function

Audio problems and muting errors are monitored, enabling automatic switching to the normal signal.

#### Delay adjustment function

The delay amount generated between the difference between the transmission paths and equipment of 2 systems can be corrected up to MAX 20 frames.

#### Frame synchronizer (FS) function

The built-in FS function can lock the output to an external REF signal even when 2 inputs are asynchronous.

#### Supports 8 ch audio

Four systems (8 ch) of embedded audio are supported, and PCM audio can be switched seamlessly by cross-fade processing.

#### **SNMP (Simple Network Management Protocol)**

Control and monitoring using SNMP is supported (optional)

#### SDI signal pass-through function

When the power is off, the pass-through function operates and the input signal is output to  $\mbox{OUT1}.$ 

#### Supports 3G\*, SD and HD

Various formats such as 3G (1080/50p, 59.94p, 60p), HD (1080/50i, 59.94i, 60i) and SD (525/60, 625/50) are supported.

\* Supports Level-A and Level-B.

#### **GUI**

The status of each signal input can be monitored and unit control settings can be made using the dedicated GUI. A log of error contents and switching events are saved together with time information in the computer as a CSV file.



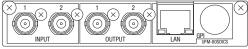
# Duplex transmission Duplex transmission CONVERTER CONVERTER Modular-type Multiple lines are combined into a single unit.

#### **External View**

Front panel



#### Back panel



#### **Specifications**

Video input	Television format	3G-SDI: 1080/50p, 59.94p, 60p (compliant only to YC4:2:2)
		HD-SDI: 1080/50i, 59.94i, 60i, 23.98PsF, 25PsF, 29.97PsF, 30PsF, 720/50p, 59.94p, 60p
		SD-SDI: 525/60, 625/50
	Transmission format	3G-SDI: SMPTE424M 3 Gbps
		HD-SDI: SMPTE292M 1.5 Gbps
		SD-SDI: SMPTE259M 270 Mbps
	Number of inputs	BNC x 2
Video output	Television format	Same as input
	Transmission format	Same as input
	Number of outputs	Main line system outputs: BNC x 1 (Output 1 has pass-through function)
		Monitor output: BNC x 1 (Output switched between Input 1 and Input 2)
Embedded audio	Number of channels	Supports 8 ch / Cross-fade switching (PCM) / Supports 16 ch audio pass-through
		(Passed through a sampling rate converter, except during audio pass-through)
	Sampling rate	48 kHz, 20/24-bit
Reference	Input signal	Same as Video input
Functions	Last memory function	Various setting contents are backed up in the memory, and reloaded at power-on
	Delay adjustment	Both system inputs adjustable up to MAX 20 frames
	Video error monitor	Synchronization, CRC, Video freeze, Black detection, Color detection
	Audio error monitor	Packet, Audio mute
	Frame synchronizer	Synchronizes the output signal to a reference signal
	SDI signal pass-through	Relay bypass from Input 1 to Output 1 (when the power is off)
Interface	Ethernet	10BASE-T, 100BASE-TX (Settings and monitoring of the dedicated GUI), SNMP support (optional)
	GPI	Settings and monitoring of 7 ports
Other	Power / Consumption	+24 V DC supplied from the UFM frame / Approx. 20 W
	Consumption current	Approx. 0.8 A
	Dimensions / Weight	Front: 106 (W) x 293.2 (D) (mm) Rear: 108.5 (W) x 96 (D) x 20 (H)(mm) / Approx. 1 kg
	Accessories	Operation manual
	Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)

#### UF-106B Universal Frame (6 Modules)

- Capable of holding up to 6 modules (boards) according to the system.
- Capable of holding UF-106BPS redundant power supply (optional). (Max 4 modules with a redundant power supply)
- Permits hot swapping of power supply and modules.
- All modules can be replaced through the front side.
- Alarm detections and status indications are displayed on the front-side LED.
- Includes loop-through connector as Genlock input. Genlock input signal can be distributed to all modules.
- Control module is prepared for remote control (optional).

#### **UF-112** Universal Frame (12 Modules)

- Capable of holding up to 6 12 modules (boards) according to the system.
- Capable of holding UF-112PS redundant power supply (optional).
- Permits hot swapping of power supply and modules.
- All modules can be replaced through the front side.
- Alarm detections and status indications are displayed on the front-side LED.
- Includes loop-through connector as Genlock input. Genlock input signal can be distributed to all modules.
- Control module is prepared for remote control (optional).



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