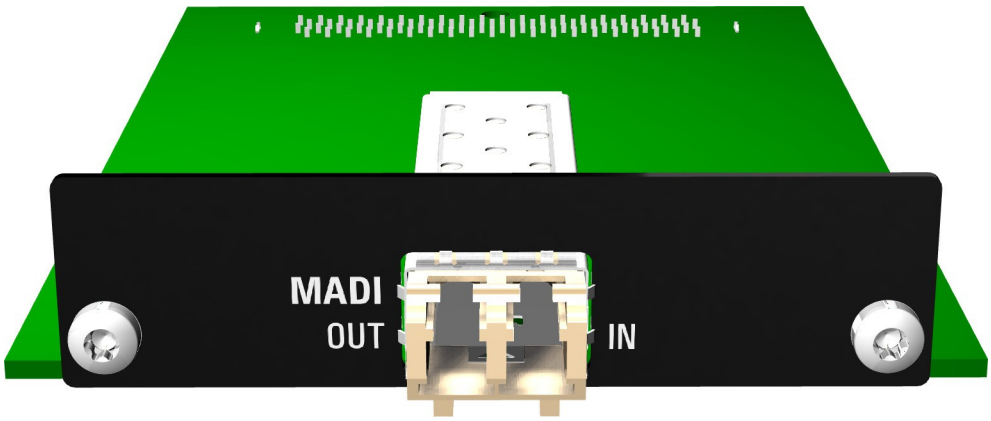
Appsys ProAudio

flexiverter



AUX-MADI-SFP

64x64 channel MADI Extension Card for FLX devices

User's Manual

((en))

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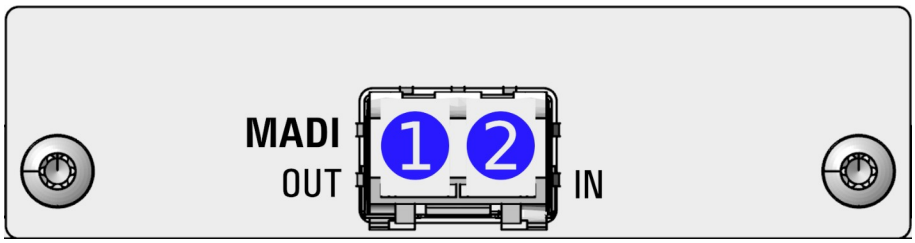
1. CONNECTORS



1	Output	Pre-installed is an SFP module for 1310nm, 125µm Multimode fiber with LC connectors. **Can be changed by the user to any other SFP compatible transceiver** (no vendor lock!) for use with other transmission media (e.g. single-mode fiber).
2	Input	

2. DESCRIPTION

The AUX-MADI-SFP card provides 64x64 channels of MADI over SFP.
It can be fitted into every **flexiverter (FLX)** device for the following purposes:

- to use the **FLX as standalone converter** between the built-in interface and this extension card
- to **add extra output splits** to existing FLX devices by "tapping" channels of another conversion
- to **add additional channels/protocols to the FLX** when it is used in double-flexiverter or flexiverter + multiverter configurations

For a detailed description of possible configurations, please refer to the manual of your base FLX device.

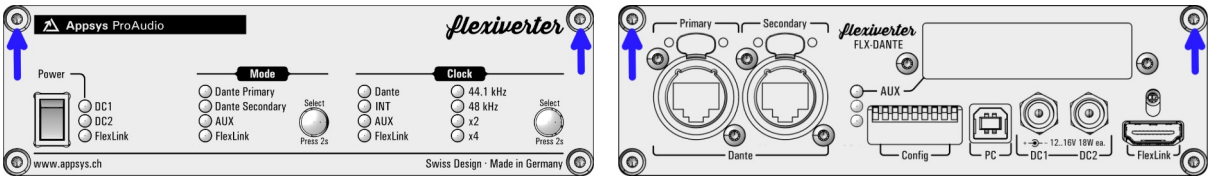
2.1. Box Contents

- 1 AUX-MADI-SFP card with pre-installed 1310nm, multimode SFP
- 1 Slot cover plate
- This manual

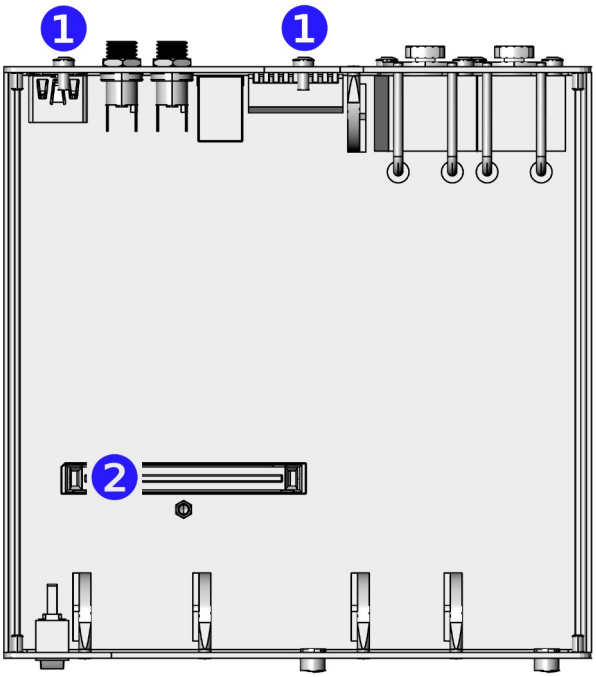
3. INSTALLATION

3.1. Opening the flexiverter

- Required: Torx T10 screwdriver
- Power off the device and detach all cables to avoid short-circuit or damage
- Detach the device from the rack-mount kit
- Remove the four top screws and the top cover by pulling it upwards:



3.2. Flexiverter Inside View



1. Screws for AUX cover plate
2. AUX card connector

3.3. Installing the card

- Remove the screws holding the cover plate, and the blank cover plate 1
- Insert the AUX card from inside, using the supplied cover plate.
  Make sure it is correctly fitted to the card connector 2
- Secure the card using two cover screws 1
- The card has been installed correctly if you are able to select an audio routing mode involving AUX (long-press MODE button to enter Route Mode Selection).

4. DIP SETTINGS

The behavior of the card can be controlled by DIP switches 4..6 on the FLX device. Changing the DIP settings will come immediately into effect.

AUX-MADI-SFP	4 96k frame* [1]	5 6 64ch output* [1]
	4 48k frame [1]	5 6 57ch (use for DiGiCo stagebox control) [1]
		5 6 56ch output [1]
		5 6 reserved

* Default setting

5. SELF-TEST

The card can be tested for correct operation by the user. This is done using the self-test mode, in which a special random test pattern is output on all channels. This pattern is looped back via an external cable into the corresponding inputs, where it is checked for consistency.

- Connect "MADI Out" to "MADI In" using an optical cable matching the installed SFP transceiver.
- Turn off the FLX, and hold down **Mode** button while switching on again
- Press **Mode** again until the "CLOCK" LEDs show "INT/48kHz" in cyan color. The device is now in self-test mode.
- The "AUX" LED in the MODE sections shows the result of the self-test:
  red: error/no connection
  green (loopback data received ok)
- Press **Mode** again or power off the device to exit self-test mode.

1 Applies to outputs only. Input format is always auto-detected, regardless of the switch setting

6. SPECIFICATIONS

Parameter	Value
Dimensions	118x80mm (WxH)
Weight	51g without SFP
Operating temperature	0..+55°C, non-condensing
Storage temperature	-40..+85°C, non-condensing
Cable lengths	Max. 500m 125µm Multimode fiber
Channel count	64x64 @ 48kHz (56/57ch modes can be configured) 32x32 @ 96kHz (28ch mode can be configured) 16x16 @ 192kHz (14ch mode can be configured)
Sample rates	44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
Latency	Interface <> Flexiverter internal: 2 samples

7. APPENDIX

7.1. Available AUX cards

At the time of writing (2021-11), the following AUX cards are available. More will come, please check www.appsys.ch for updates.

Item	Description
AUX-ADAT	16x16ch ADAT I/O (2x Toslink In+2x out). Supports also S/PDIF
AUX-AES3	8x8ch AES3 I/O on 1x DB25, fully transformer isolated
AUX-AES67	64x64ch AES67 network card
AUX-AVB[2]	16x16ch / 32x0ch / 0x32ch MILAN-approved AVB
AUX-DAC[2]	8ch analog outputs (1xDB25)
AUX-DANTE	64x64ch DANTE network card
AUX-MADI-COAX	64x64ch MADI for coaxial cable (BNC connectors)
AUX-MADI-OPTO	64x64ch MADI optical, SC connector (Multimode 125um 1310 nm)
AUX-MADI-SFP	64x64ch MADI for SFP (Small-Factor Pluggable) modules
AUX-WORDCLOCK	BNC wordclock I/O

2 Estimated availability: Q1/2022

7.2. Available FLX devices

At the time of writing (2021-11), the following FLX devices are available. More will come, please check www.appsys.ch for updates.

Item	Description
FLX-AES3	16x16 channel AES3 flexiverter (with AUX slot)
FLX-AES50	96x96 channel AES50 flexiverter (with AUX slot)
FLX-AES67	64x64 channel AES67 flexiverter (with AUX slot)
FLX-DANTE	64x64 channel DANTE flexiverter (with AUX slot)
FLX-MADI	128x128 channel MADI SFP & MADI coaxial module (with AUX slot)

7.3. Warranty

We offer a full two (2) year warranty from the date of purchase. Within this period, we repair or exchange your device free of charge in case of any defect*. If you experience any problems, please contact us first. We try hard to solve your problem as soon as possible, even after the warranty period.
* Not covered by the warranty are any damages resulting out of improper use, willful damage, normal wear-out (especially of the connectors) or connection with incompatible devices.

7.4. Manufacturer contact

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7.5. Recycling

According to EU directive 2002/96/EU, electronic devices with a crossed-out dustbin may not be disposed into normal domestic waste. Please return the products back for environment-friendly recycling, we'll refund you the shipping fees.

7.6. Document Revision History

1: Initial release

7.7. About this document

Document Revision: 1 · 2021-11-29

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