



# M.1K2

## MADI Routing System

**D.O.TEC® M.1k2** is a MADI routing system with 16 ports, offering a powerful **routing matrix** for 1024 audiochannels. It fills the gap between small routing concepts and large cross bars solutions. A **scalable and flexible hardware design** meets individual demands.

Two I/O slots can be equipped with different I/O modules (BNC, SC optical, SFP), e.g. 8 x SC and 8 x BNC. It is possible to start with one module (8 ports) and upgrade to 16 ports later on.

#### MADImatrix

All audio channels can be **routed arbitrarily** - in **groups** or **individually**. Non audio signals can be routed as well. All input signals are refreshed keeping the user bits unchanged at the output.

#### Embedder / De-Embedder Matrix

Serial data (MIDI, RS-232, RS-422/485) of the hardware interfaces or embedded in the MADI signal can be routed separately from the audio signal. 4 GPOs can be used for signalling events or integration within the studio environment.

#### Clocking

The M.1k2 can be clocked by any **MADI input**, a **wordclock signal**, a **video reference input** or it can serve as **clock generator**. The system clock is supplied at two additional wordclock outputs.

#### PolySync

Each MADI port may be assigned to a clock group extending the application of the M.1k2 in mixed clock environments too.

#### Remote access

A network connection gives full access to all controls using a **web browser interface**. Simultaneous access with user management is possible from different places and there is no restriction to a specific operating system. Firmware updates can be run via ethernet or USB.

#### Safe operation

The M.1k2 offers highest reliability through **two phase-redundant power supplies** with inlets and switches on the rear panel.

Two MADI ports can be defined as **redundant** to each other. An automatic changeover is executed **click free**. The user will be informed by the software interface or a GPO event can be triggered.

#### Technical Details

MADI Ports (I/O):	2 x I/O modules with 8 ports per module
Modules:	SC-Socket multi/single-mode coaxial BNC, 75 Ω SFP
Wordclock (I/O):	coaxial BNC - 1 x Wordclock In coaxial BNC - 2 x Wordclock Out (75 Ω termination switchable)
Video reference input:	coaxial BNC (75 Ω termination switchable), Black Burst (PAL, NTSC)
GPO (DSUB-9):	2 x switched voltage (max. 12 V, 200 mA), 2 x Optocoupler
RS-232:	DSUB-9
RS-422/485:	DSUB-9 (422 / 485 switchable)
MIDI I/O:	DIN
Remote:	RJ45 Ethernet Connector (100 Mbit/s) integrated Webserver
Service:	USB 2.0 for firmware updates (Windows PC)
Supported Samplerates:	44.1, 48, 88.2, 96, 176.4, 192 kHz (+/- 12,5%)
MADI Formats (I/O):	48k Frame, 96k Frame, 56/64 channel, S/MUX
Power supply:	2 x 84 V to 264 V AC / 47 Hz to 63 Hz / safety class 1
Dimensions:	Width 19" (483 mm) Height 2 HU (89 mm) Depth 10" (254 mm)
Weight:	about 4 kg

