

MICAMP M-32

32-channel microphone amplifier for almost all microphones.



The Marenius MICAMP M-32 is a 32-channel microphone amplifier designed for use with multiple microphone types. All audio and control data are transferred through a single MADI interface, simplifying setup and connectivity. The MICAMP M-32 features a highly precise and versatile clock network, ensuring maximum flexibility in various audio environments. Encased in a durable aluminum chassis, this amplifier is built for reliability and longevity.

Meet the MI

32 Microphone Channels

The device features 32 low-noise channels, each configurable for various input types, including dynamic, 48V, 200V, 4mA (28V) CCP/ICP/IEPE/CCLD microphones/accelerometers and line. The gain can be set in calibrated 6dB steps. The frequency range covers 5Hz to 40kHz. Input channels can also support DC coupling upon request.

Line Outputs

The MICAMP M-32 is equipped with 12 line outputs, making it ideal for use with Dolby Atmos® systems.

Power Input

The MICAMP M-32 is powered by an external power-source accepting 10 - 18 V. The units maximum power consumption is 100 W with all channels activated and the power amplifier running at full power, but much care has been taken to only power the absolute necessary for battery powered use cases.

MIDI over MADI controllable with TEDS

The configuration of MICAMP M-32 is made via conventional MIDI or MIDI over MADI which enables a completely galvanically isolated device. Each channel can read TEDS data from the microphone and calibration data from the amplifier for each gain step.

Automatic Clock Sync

The interface includes an advanced clock synchronization function, allowing it to synchronize with various master clocks. An internal clock is available if no external clock is provided. The clock circuitry is designed with extremely low jitter, ensuring high precision. A word clock output is also provided, and all word clock I/O is fully galvanically isolated.



Intuitive software control

The amplifier can be controlled by the supplied software or with third-party software through MIDI scripting. All TEDS data can be exported to csv or displayed directly in the software. When the device has received a change, it automatically stores the configuration to non-volatile memory. The device can also be used as a standalone unit.

Each channel's configuration is reflected both on the device's front panel and in the software interface. All channels are monitored for clipping, there is also a signal detect indication for each channel in both the software and the front panel.

CAMP M-32



Dual Headphone Amplifiers

The MICAMP M-32 features two independent headphone amplifiers, each with individual controls and solo functionality for every input.

Optional USB Streaming

Two channels can be sent through USB audio. This feature enables seamless streaming of audio to devices such as a car head unit via a Bluetooth-enabled smartphone.

Digital Output Control

The device is equipped with 8 automotive-grade digital outputs for controlling external devices such as amplifiers, speaker switches, relays, and similar equipment. These outputs can be managed remotely through the provided software or via third-party MIDI-enabled software or hardware.

Optional Speaker Measurement

The MICAMP M-32 has the ability to replace two input channels with current and voltage measurement to measure speaker impedance. The device is equipped with a 2x20W amplifier, providing flexibility for users to choose between utilizing the internal amplifier or connecting an external one for their measurement needs.

AES/EBU and S/PDIF

The MICAMP M-32 includes 8 fully galvanically isolated AES/EBU inputs and 8 fully galvanically isolated outputs. The inputs are completely clock independent and are re-clocked to the low jitter internal clock circuitry.

All the connections you need

Microphone/Line Inputs

200V w. TEDS:	32x 7P LEMO
CCP/I CP/IEPE/CCLD/28V w.TEDS:	32x SMB
Dynamic/48V:	32x XLR
Balanced/Unbalanced line inputs:	32x 1/4" TELE

Analog inputs/outputs

Balanced/Unbalanced line outputs:	12x 1/4" TELE
Headphones:	2x STEREO 1/4" TELE
Speaker outputs:	1x STEREO
Speaker 4-wire CV measurement:	1x MONO (SpeakON)

Digital inputs/outputs

AES/EBU inputs (25P DSUB, TASCAM):	8x pairs (16 channels)
AES/EBU outputs (25P DSUB, TASCAM):	8x pairs (16 channels)
S/PDIF inputs:	1x TOSLINK (2 channels)
S/PDIF outputs:	1x TOSLINK (2 channels)
USB Audio Class 2 Interface (A2DP):	1x USB-C (2 channels)
MADI (SC):	1x TX, 1x RX
MIDI (5P-DIN):	1x input, 1x output, 1x thru
WORDCLOCK IN:	1x BNC
WORDCLOCK OUT:	1x BNC

Power

Front:	1x 4P XLR with remote
Back:	1x 4P XLR with remote



Specifications MICAMP M-32

General Specifications

Sampling frequency:	48kHz / 96kHz, 24bit
Equivalent input noise:	134dBu (A-weighted)
THD+N:	-108dB (20kHz BW)
Dynamic range:	123dB (A-weighted)
Frequency response:	5Hz to 40kHz (± 0.5 dB)
Channel separation:	-135dB
Gain:	-20dB to +42dB
Max input level:	+20dBu (0dBFS)
Polarization voltage A:	200V ± 10 V
Polarization voltage B:	48V ± 1 V
CCP current:	4mA (28V)
Input impedance microphone:	2k Ω
Input impedance line:	9k Ω

Speaker Amplifier

Speaker amplifier power (4 Ω):	2x20W continuously
Minimum load:	3.2 Ω
V measure range:	0-40Vrms
I measure range:	0-10Arms

Clocks

Word clock output voltage:	5Vpp
Word clock input voltage:	2Vpp to 5Vpp
Internal clock phase jitter:	0.2ps RMS

Power

Voltage range:	10-18V
Remote control:	10-18V
Digital outputs (NPN):	max 60V, 0.9A, protected
Power consumption:	100 W max

MARENUS

Excellence in electronics design and production since 1976.

Marenius' history is long and characterized by curiosity and innovations. From 1976 to the present day there is still the same spirit and commitment in the design and production of electronics. Our passion for electronics development started with proprietary Hi-Fi equipment, with the focus later shifting to audio and video equipment for TV, film and radio production, with a special penchant for sound mixers. Over the years, Marenius has also produced a number of products in marine and automotive electronics. Then as now, Marenius has always gone about this with a craving for the new, the untested and a quest for challenges..

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