Echo AIO-A1

Multichannel Acoustic Test Interface

The **Echo AIO-A1** is a multichannel acoustic interface built for production-line testing and QA/QC verification. Combining two 10W amplifier outputs and four mic/line analog inputs in a single unit, the AIO-A1 is an integrated, cost-effective, and reliable high-throughput audio test solution.
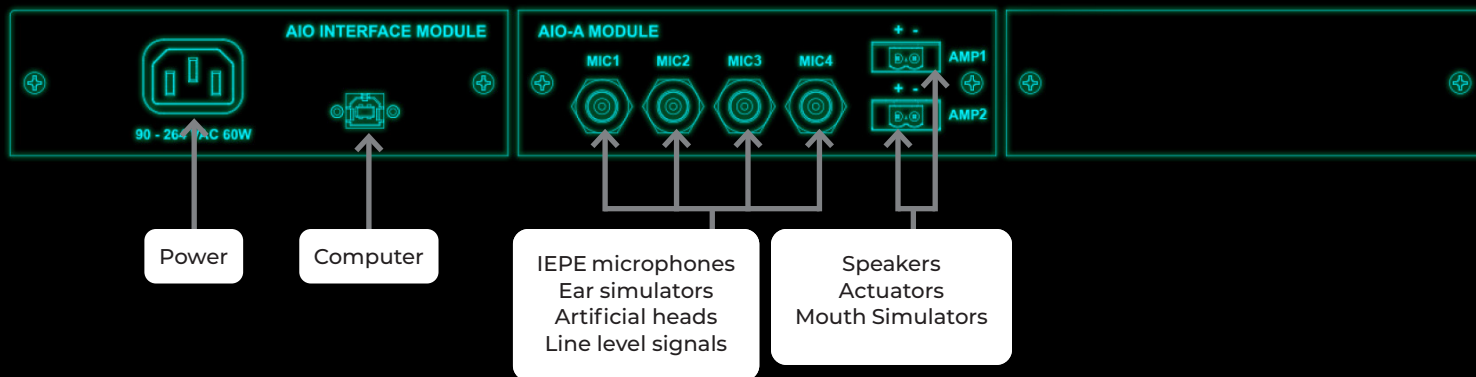
Each input can be individually configured as a line level input or as a measurement microphone input. Microphone inputs include an IEPE microphone conditioning amplifier with integrated constant current power supply (CCP).

The AIO-A1 presents a standard USB audio sound card interface and is compatible with most audio test software including APx500 Flex, LabVIEW, SoundCheck, and ARTA.

If you need more input or output channels, check out the Echo AIO-A2.

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AIO INTERFACE MODULE

90 - 264 VAC 60W

AIO-A MODULE

MIC1 MIC2 MIC3 MIC4 + - AMP1 + - AMP2

Power

Computer

IEPE microphones
Ear simulators
Artificial heads
Line level signals

Speakers
Actuators
Mouth Simulators

AIO-A1 SPECIFICATIONS	
Microphone / Line Inputs	
Input bandwidth	72 kHz
Input impedance	1 MΩ
Input gain	1x, 10x, and 100x
Full-scale input voltage (1x gain)	8.75 Vpk
Maximum input voltage	15 Vpk (do not exceed)
Dynamic range (1x gain, A-weighted)	> 110 dB
THD+N (1x gain, A-weighted)	< -95 dB (20 Hz – 20 kHz)
Frequency response	±0.5 dB (20 Hz – 20 kHz)
Constant current supply	4 mA, 21 V excitation voltage
TEDS	IEEE 1451.4 Class 1
Amplifier Outputs	
Output power (THD+N < .1%)	10 W continuous at 1 kHz
Maximum output voltage	13.5 Vpk
Frequency response	±0.5 dB (20 Hz – 20 kHz)
Interface	
Sample rates	48 kHz, 96 kHz, and 192 kHz
USB	USB 2.0 audio class compliant
Supported operating systems	Windows 7 or later, macOS
Audio APIs	ASIO, WASAPI, CoreAudio
AC power	Universal power supply, 90 - 264 VAC at 50 or 60 Hz
Dimensions and Weight	
Single unit	17.5" (44.4 cm) x 8.75" (22.2 cm) x 1.75" (4.4 cm), 7.2 lbs (3.3 kg)
Single unit boxed with cables	21" (53 cm) x 10" (25.4 cm) x 5" (12.7 cm), 8.75 lbs (4 kg)
Shipping carton (4 AIOs)	22" (55.8 cm) x 22" (55.8 cm) x 12.6" (32 cm), 42.5 lbs (19.3 kg)

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