

AI-81 Sound Reinforcement & Interactive Audio Processor



The AI-81 audio processor for sound reinforcement and interactive audio features a professional-grade audio processing chip with a quad-core 1.5GHz processor. It integrates industry-leading audio pre-processing algorithms, including automatic feedback cancellation (AFC), automatic noise suppression (ANS), automatic echo cancellation (AEC), automatic gain control (AGC), reverberation reduction (ARR), steady-state noise suppression, transient noise suppression, and beamforming, effectively enhancing the quality of voice amplification and interactive audio.

Widely used in educational settings for classroom sound reinforcement, it allows teachers to deliver lectures without relying on wireless handheld microphones or fixed gooseneck mics, completely freeing their hands for natural movement around the podium. It is also suitable for speaker amplification in conference rooms. With multiple functional modes, it supports flexible deployment across various scenarios, including local sound reinforcement and remote interactive applications.

Technical Specifications

	Function	Specification
Arithmetic	Support algorithm	AFC、ANS、AEC、AGC、ARR
	Acoustic Feedback Gain	$\leq 18\text{dB}$
	Noise Reduction Depth	$\leq 30\text{dB}$
	Echo Cancellation Depth	$\leq 90\text{dB}$
	Echo Cancellation Tail Length	$\leq 1\text{s}$
	Reverb Suppression	$\leq 18\text{dB}$
	Maximum Gain	$\leq 30\text{dB}$
Hardware Specifications	Sampling Rat	48k
	Frequency Response	100Hz~20kHz, $\pm 0.5\text{dB}$
	Total Harmonic Distortion (THD)	$\leq 0.1\%$
Other specifications	Operating Voltage	DC12V
	Dimensions (L x W x H)	270x163x52(mm)
	Operating Temperature	-10℃~50℃
	Storage Temperature	-20℃~70℃
	Color	Black