

## **CLEAR K8 Digital Signal Processor**

K8



With its stable performance, excellent sound quality and years of dedication, Tendzone digital signal processor is now world-renowned. The CLEAR K Series is the newly developed fixed professional signal processor which is easy to use and cost-effective. It is tailored for conference audio systems and suitable for conference rooms, churches, star hotels, auditoriums, conference centers, multi-functional rooms, digital courts and other applications.

With graphical user interface, clear signal route and multi-type control medias like wall panels and cell phones, K8 does not only presents high-quality sound, but also provides high customer experience with strong compatibility, flexible control and simple operations.

### **Features:**

#### Inputs & outputs

8\* balanced microphone /line input, with 48Vphantom power supply & soft switch;8\* balanced line output;

#### Signal Processing

AEC: Acoustic echo cancellation, rapid elimination of echo in video conferencing; AFC: Adaptive feedback cancellation, employing high-speed floating-point digital algorithm provides feedback suppression for each microphone to prevent the system from squealing;

**AM**: Multi-mode of automatic mixing (AM), with threshold type and gain sharing type selectable;

**AGC**: Automatic gain control, to ensure smoothing output volume of the sound system and make sure the audiences won't be affected by variations of the speaker's distance from the microphone.

Outstanding sound quality with 24bit/48kHz sampling rate;

Optimized pre-process gain, with 0,6,30,36,42

dB multi-level adjustment, for MIC and LINE level;

Full-function matrix mixing with intuitive signal routing table and cross-point controllable level; Limiter responding instantly to the input level protects the post-devices perfectly.

A variety of parameter equalization type, PEQ, High-Shelf, Low-Shelf, Notch, can be flexibly applied to many occasions;

#### USB Recording

USB2.0 audio interface, easily play the USB audio resource and audio can be easily recorded;

#### A variety of control methods

Ethernet port: easy connection to computers and other network equipment;

RS-232 bidirectional serial control interface;

GPIO control interface: 8\* logic input/output, 4

\* voltage input control (can be connected to potentiometer or CLEAR CV4);

Compatible with TENDZONE full range RC panels via TCP/IP connection





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# Specification

Item	Specification
Scene storage:	8 presets
Input channel function	Preamplifier, Signal generator, Expander, Compressor, 5-band PEQ, High-Shelf,
	Low-Shelf, LP, HP and etc.
Output channel function:	optional 8-band PEQ or 31-band GEQ, Delay, Crossover, High and low pass
	filter, Limiter
AEC	Echo Elimination Tail Length: 256ms; Built-in ANC Noise Reduction: Max.
	18dB
Adaptive Feedback	16* Suppression points; With manual, dynamic, fixed type of processing, multi-
Cancellation (AFC)	modes optional
Sampling frequency	48kHz
Input to output dynamic range	106dB
Phantom power supply	DC 48V
Input common mode rejection	75dBu @ +20dBu, 60Hz
Channel isolation	106dB
Frequency response	$20$ Hz $\sim$ $20$ kHz ( $\pm 0.5$ dB)
Floor noise (A-weighted):	-90dBu
Equivalent input noise EIN:	≤-125dBu
Total harmonic distortion	≤0.0025% @1kHz, +4dBu
(THD+N):	_0.002370 @1K112, +4dbu
Maximum input gain:	42dB
Input impedance:	10KΩbalance
Output impedance:	Max. 100 ohm
Maximum output level:	20dBu
Operating voltage:	220VAC or 110VAC\50Hz
Power	60W
Size (width*depth*height):	44mmx488mm×260mm
Weight:	3.2kg

# **REAR PANEL**



