



TENDZONE

WebGem 0808

DIGITAL AUDIO PROCESSOR



WeGem 0808 DSP Overview

The WebGem 0808 DSP from Tendzone presents a comprehensive suite of versatile audio DSP tools designed specifically for AV integrators. WeGem 0808 DSP has eight analog audio input channels and eight analog audio output channels.

Tendzone's user-friendly Web-UI interface, the DSPs support standard bidirectional control via RS-232, TCP/IP, and GPI, making them compatible with popular third-party control systems. For local room control, users can create a custom web control interface that operates across various platforms, including Windows, iOS, macOS, and Android.

Tendzone WebGem series delivers powerful audio processing capabilities combined with flexible control options, making it an ideal choice for AV integration projects, widely used in conference room, education, hotel, courtroom etc

Features

Comprehensive DSP : Each model includes Automatic Gain Control (AGC), a compressor/limiter, an expander, matrix mixing, and a standard 5-band parametric EQ. The adaptable speaker processor offers 10, 15, or 31-band equalization, delay, crossover, and filtering.

Enhanced Audio Clarity: Adaptive Echo Cancellation (AEC) and Adaptive Feedback Cancellation (AFC) technologies, ensuring superior audio clarity for any application.

Outstanding Sound Quality: Provides 24-bit/48kHz audio quality, with 16 in/16 out Dante network audio that is AES67 compatible.

Intelligent Ducker: DUCKER function reduces background music volume during speech.

Auto Mix: Gain-sharing type (AM) and threshold type (GAM) auto mixing to manage multiple microphone outputs.

Limiter: Protects the back stage equipment from damage, ensuring the longevity of your audio system.

Customization Options: We offer customizable user control interfaces, allowing clients to design their own user interfaces through web pages for straightforward operation.

Muti control function :With RS-232, TCP/IP and GPIO interfaces for complete control function.

User-Friendly Web-UI: Easy configuration through a straightforward graphical interface, compatible with multiple platforms including Windows, iOS, macOS, and Android.

USB interface: USB2.0 audio interface supports USB disk recording and playback, USB-B computer sound card interface supports 2x2 channels.

Application

- Meeting Rooms
- Conference Center
- House of Worship
- Courtrooms
- Classrooms
- Training Rooms
- Hotels
- Lecture Halls
- All Hand Space

SPECIFICATIONS

| General Performance | |
|------------------------------|---|
| Frequency Response(A/D/A) | 20Hz~20kHz (±0.5dB) |
| Sampling Rate | 48kHz,24bit |
| Dynamic Range(A/D/A) | >110dB, A-weighted (20Hz-20kHz@0dB Gain) |
| THD | ≤0.005%@1kHz, +4dBu |
| Latency (A/D/A) | 5.8 mS, inputs routed to outputs |
| Noise Floor (A-weighted) | ≤-90dBu |
| Crosstalk | ≤-105dB@+20dBu, 1kHz |
| S/N Ratio | >110dB, A-weighted (20Hz-20kHz@0dB Gain) |
| Channel Isolation | ≤-105dB@+20dBu, 1kHz |
| Preset Numbers | 50 |
| Audio Input/Output | |
| Model | WebGem 0808 |
| Connector | 3.81 mm terminal blocks |
| Number of Analog Channels | 8in8out |
| Phantom Power | DC 48±6V,10mA |
| Input Impedance | 2KΩ balance |
| Output Impedance | 200Ω balance |
| Maximum Input Level | 20dBu |
| Maximum Output Level | 20dBu |
| Max Input Gain | 40dB |
| Front Panel | |
| Indicator Light | Power/RUN/LINK |
| Display Screen | 1.8" colour LCD display Displays device name, IP address, input/output level and mute status, current scene, software version |
| Select Button | A push-to-turn button |
| Rear Panel | |
| UAC(USB Bidirectional Audio) | 2x2 sound card, sampling rate 48kHz,16bit, interface type USB-B, data transmission protocol USB2.0; |
| USB | Interface type is USB-A and the data transfer protocol is USB2.0. Support recording and playback, can play MP3/WAV format audio files, support FAT32 format U disk, recording file format WAV |
| RS232 | 4pin 3.81Phoenix terminal |
| GPIO | 8ch ,customized input and output, 12pin 3.81 Phoenix terminal |

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|---|-----------------------------|
| LAN (TCP/IP Network Port) | Ethernet 10/100/1000MB RJ45 |
| Electrical and Physical Parameters | |
| Power Supply | AC100-240V±10%, 50/60Hz |
| Power Consumption | 24W |
| Operating Temperature | 0°C-45°C |
| Relative Humidity | 30%~70%R.H. |
| Dimensions | 484mm*280mm*44mm |
| Package size | 570mmx410mmx135mm |
| Net Weight | 3.0Kg |
| Shipping Weight | 3.5Kg |

Rear Panel

