**GEAZAN Interactive Digital Audio Processor**

**(Model No.: MC180V2-E)**



Overview

MC180V2-E is a pendant professional digital audio processor use for far field sound pickup, designed by GEAZAN. It supports 2 balanced microphone cascade inputs by an additional RJ-45 connector for daisy-chain connections,1 external wireless microphone input, 2 stereo inputs, 3 stereo outputs, and 1 USB interface, 1 RJ-45 ethernet port for control communication. It has acoustic echo cancellation, adaptive noise suppression, adaptive reverberation suppression and intelligent mixing functions.

MC180V2-E is equipped with GEAZAN's exquisite and compact spherical omnidirectional microphone and wireless microphone to achieve excellent remote interactive effects and local recording effects. It meets the needs of high-quality audio for distance education and conferences, and has a very high signal-to-noise ratio. The sound quality is clear and natural.

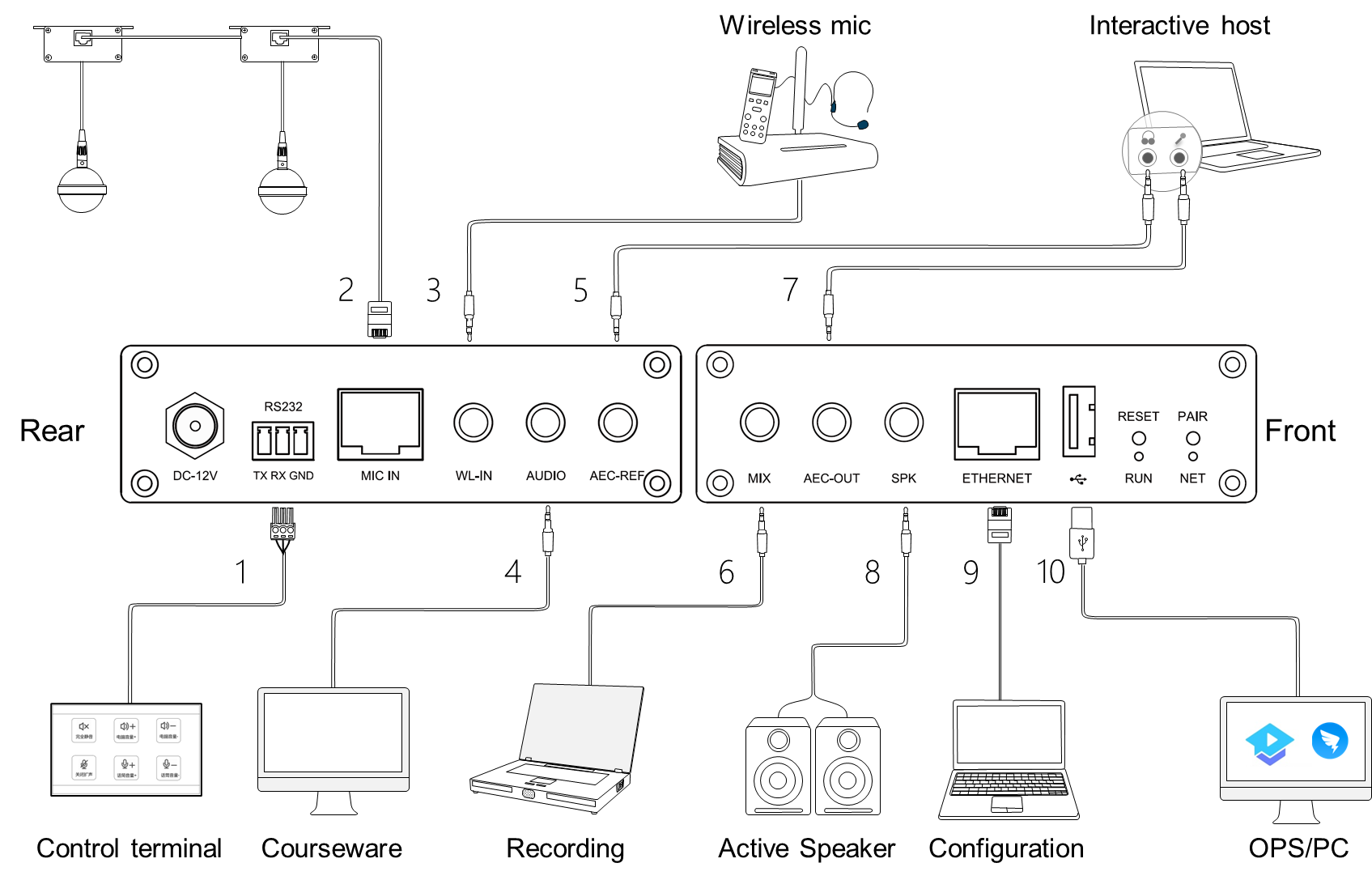
Highlights

* + With USB audio interface, it can be integrated into large screen or PC as sound card to import and export professional audio.
  + RJ45 standard Ethernet port, 3.5mm standard audio port and USB 2.0 port are adopted to solve the problem of cable production.
  + Professional audio, a new generation of echo cancellation and noise suppression algorithm with excellent performance, clear speech quality, smooth interaction and no echo.
  + Visual control software.
  + Suitable for normalized recording and playback classrooms and interactive teaching.

Features

* 1 microphone input network interface, which can access two wired microphones.
* 1 external wireless microphone input, using 3.5mm headphone interface.
* 2 stereo line input, using 3.5mm headphone interface.
* 3 stereo line outputs, using 3.5mm headphone interface.
* 1 USB 2.0 type A interface, supports bidirectional audio data transmission.
* 1 RS232 serial port, which can be connected to the control terminal.
* 1 RJ45 interface, which can be connected to the configuration computer.
* 1 RESET key to restore the default factory settings.

Connection and Usage



Devices will be connected through the interfaces in the front and rear panel, details are below:

1. RS232: Serial control interface. It can be connected to the external control terminal.

2. MIC IN: Microphone input network interface. It supports 48V phantom power supply and can connect two microphones in cascade through network cable.

3. WL-IN: 3.5mm wireless microphone input interface. It can be connected to a wireless microphone.

4. AUDIO: 3.5mm line input interface. It can be connected to local sound source input, such as DVD, computer, etc.

5. AEC-REF: 3.5mm line input interface. It can access the signal from the remote end in interactive and distance teaching, that is, reference signal input.

6. MIX: 3.5mm line output interface. It can be connected to external recording equipment.

7. AEC-OUT: 3.5mm line output interface. The processed audio signal is output to the far end.

8. SPK: 3.5mm line output interface. It can be connected to an external power amplifier or an active speaker.

9. ETHERNET: RJ45 interface. It can be connected to the configuration computer.

10. USB2.0 type A interface: It supports bidirectional audio data transmission.

Accessories List

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Model | Image | QTY | Description |
| 1 | MC180V2-E |  | 1 | Digital audio processor. |
| 2 | ML100-M |  | 1 | Master microphone connection box. |
| 3 | FM280 |  | 1 | Spherical omnidirectional microphone. |
| 4 | ML100-S |  | 1 | Slave microphone connection box, optional. |
| 5 | FM280 |  | 1 | Slave microphone, optional. |

Specifications

1. **Audio Processor MC180V2-E:**

|  |  |
| --- | --- |
| **Parameter** | **Value** |
| Frequency Response (20Hz~16kHz @ +4dBu): |  |
| Microphone Channel | +0/-2dB |
| Line Input Channel | +0/-0.5dB |
| THD +N (1kHz @ +4dBu): |  |
| Microphone Channel | < 0.009% |
| Line Input Channel | < 0.007% |
| Equivalent Noise | < -84dBu(20Hz~16kHz@22dB) |
| Dynamic Range | > 105dB(20Hz~16kHz@0dB) |
| Maximum Input Balance |  |
| Microphone Channel | -2dBu |
| Line Input Channel | 20dBu |
| Maximum Output Balance | 20dBu |
| Maximum Gain |  |
| Microphone Channel | 50dB |
| Line Input Channel | 0dB |
| Input Impedance |  |
| Microphone Channel | 2.2KΩ |
| Line Input Channel | 20KΩ |
| Output Impedance | 400Ω |
| Sampling Frequency | 32kHz |
| A/D-D/A Converter | 24-bit |
| Phantom Power | DC 48V |
| Size | 109mm×136mm×30mm |

1. **Spherical Microphone FM280:**

| **Parameter** | **Value** |
| --- | --- |
| Transducer Type | Φ24 back electret condenser |
| Circuit Characteristics | JFET impedance transformation; electronic balance |
| Directionality | Omnidirectional |
| Frequency Response | 50Hz-20kHz |
| Sensitivity | -44±3dB (0dB=1V/Pa@1kHz) |
| Rated Output Impedance | 2.2kΩ |
| Minimum Load Impedance | 1kΩ |
| SNR | 75dB(S:(f=1kHz@1Pa) N:(A-Weighted curve)) |
| Maximum Sound Pressure Level | 115dB(f=1kHz，THD＜1%) |
| Power Supply | Support 48V phantom power supply |
| Dynamic Range | 104dB（20Hz-20kHz@2.5kΩ） |
| Maximum Output Electrical Level | -50dBu（20Hz-20kHz, THD<1%@2.5kΩ） |
| Working and Storage Temperature | 0-45℃/-20-70℃ (32 - 113 °F/-4 to 158 °F) |
| Working and Storage Humidity | 10% - 90% (non-condensing) |
| Output Connection and Cable | Mini XLR-3 Male/ Twisted Shielded MIC Cable |
| Color | Matte black |
| Net Weight | 43g |
| Dimensions | Φ53×54mm |