**GEAZAN 6-Channel Interactive**

**Digital Audio Processor**

**(Model No.: RC0606E-U)**



Overview

RC0606E-U is a compact 6-channel interactive digital audio processor designed by GEAZAN. The unit provides 2 Microphone inputs, 4 Line inputs, 6 Line outputs, 1 wireless microphone input, and 1 USB 2.0 A interface. It adopts adaptive echo cancellation, adaptive dereverberation, adaptive noise reduction, and smart mixing technology and has an extremely high SNR reproducing a clear and natural sound. RC0606E-U is equipped with GEAZAN's exquisite and compact spherical omnidirectional microphone, the system perfectly picks up the sound and cancels echoes in a room size of 100m2.

According to the design ideas of GEAZAN’s smart, configuration-free and simple to use, RC0606E-U adopts adaptive algorithm and is ready to use after installation. It is convenient for engineers to install and debug, and also meets the needs of normalized interaction and audio collection of recording system.

Highlights

* More than 5m radius pick-up sounds each mic, cover full classroom in 2 mics
* Suitable for normalized recording and playback classrooms or conference rooms with interactive needs.
* Easy installation, reduced project deployment time.
* 1 USB audio interface can be integrated into the computer as a sound card.
* Visual control software simplifies panel operation.

Features

* 2 Balanced mic inputs, support 48V phantom power supply, phoenix connector.
* 4 Balanced line inputs, phoenix connector.
* 6 Balanced line outputs, phoenix connector.
* 1 Wireless microphone interface, 3.5mm connector.
* 1 Monitor headphone interface, 3.5mm connector.
* 1 USB2.0 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 rear panel, details are below:

1-2. MIC: Two balanced microphone input interfaces, supporting 48V phantom power supply, suitable for accessing omni-directional and directional microphone.

3. AUDIO: Line input interfaces. It can be connected to local sound source input, such as DVD, computer, etc.

4. AEC-REF: Line input interfaces. It can access the signal from the remote end in interactive and distance teaching, that is, reference signal input.

5. MIX: Line output interfaces. It can be connected to external recording equipment.

6. AEC-OUT: Line output interfaces. The processed audio signal is output to the far end.

7. SPK: Line output interfaces. It can be connected to an external power amplifier or an active speaker.

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

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

10. MONITOR: 3.5mm monitor headphone interface. It can be connected to a monitor headphone.

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

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

13. Power interface: DC-12V.

Appearance and Interfaces

**Front**



**Instructions for Front Panel**

|  |  |
| --- | --- |
| **Interface, Indicator and Knobs** | **Function Description** |
| POWER key | Power switch |
| RESET | Restore the factory configuration key. Long press 3s to restart the device and restore the factory configuration. |
| PAIR | Reserved function key. |
| POWER indicator | The power indicator remains on after power on. |
| RUN indicator | The operation indicator flashes slowly, indicating normal operation. |
| NETWORK indicator | Network connection indicator, always on when network and PC control terminal connection is established |

**Rear**



**Instructions for Rear Panel**

|  |  |
| --- | --- |
| **Interface, Indicator and Knobs** | **Function Description** |
| MIC (1-2) | 2 balanced microphone input interfaces, supporting 48V phantom power supply. |
| AUDIO (3-4) | 2 (left and right channel) line input interfaces, for the local audio source, such as DVD, computer, etc. |
| AEC-REF (5-6) | 2 (left and right channel) line input interfaces to access the signal from the remote end in interactive and distance teaching. |
| MIX (1-2) | 2 (left and right channel) line output interfaces, external recording equipment can be connected. |
| AEC-OUT (3-4) | 2 (left and right channel) line output interfaces to output the processed audio signal to the far end. |
| SPK (5-6) | 2 (left and right channel) line output interfaces, which can be connected to power amplifier or active speaker for local sound reinforcement output. |
| RS232 | The serial control interface, can be connected to the control terminal. |
| WL-IN | 3.5mm wireless microphone input interface. |
| MONITOR | 3.5mm monitor headphone interface. |
| USB2.0 type A interface | Support bidirectional audio data transmission. |
| Ethernet | RJ45 interface to PC for configuration. |
| Power interface | DC-12V. |

Specifications

| **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  | 250mm×165mm×45mm |