M Solutions

User Guide

MS-MC6B

Digital Audio Cascading Unit



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Notices

- This MSolutions product contains electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection is highly recommended in order to protect and extend the life of your equipment.
- The transmission distances of HDMI over CAT cables are measured using TE CONNECTIVITY 1427071-6 EIA/ TIA-568-B termination (T568B) of cables is recommended for optimal performance. To minimise interference of unshielded twisted pairs in the CAT5e/6 cable, do not run the HDBaseT / CAT5e/6/6a cabling with or in close parallel proximity to mains power cables.
- Do not substitute or use any other power supply other than the enclosed unit, or an MSolutions approved replacement. Do not disassemble either the Transmitter or Receiver units for any reason. Doing so will void the manufacturer's warranty.
- MSolutions reserves the right to change the specifications of this unit without prior notice. As a result of this, physical representations or graphical elements contained within this user guide may not be accurate.

Introduction

The MS-MC6 cascade digital array microphone adopts advanced technologies, including blind beamforming adaptive fast pickup algorithm, intelligent voice tracking, intelligent noise reduction, echo cancellation, automatic gain and de-reverberation. It features a built-in powerful audio processing unit, with ultra-low signal processing latency, and is equipped with infrared remote control. The MC6B is a digital audio processor that allows cascading of upto six MS-MC6 microphones, to achieve even coverage over larger conference rooms.

Key Features

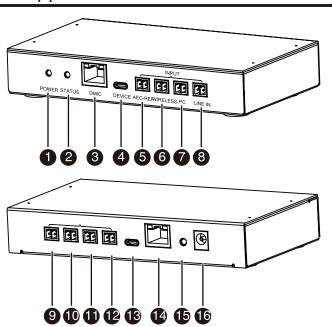
- Adopts specially designed chips, embedded architecture, professional digital audio processing, precise volume control, high efficiency and low delay.
- Integrates new-generation digital audio technologies such as automatic noise suppression (ANS), automatic gain control (AGC), automatic echo cancellation (AEC), automatic equalization, intelligent microphone mixing, anti-reverberation.
- Supports up to 6 cascade microphone input and 4-channel line input. Supports extended wireless microphone, 4-channel line output, USB audio input and output.
- Supports standard POE to power digital microphone, RJ45, USB and line audio interface connection. Features plug and play, simple wiring, long-distance transmission and strong anti-interference ability.

Quick Start Guide

1 Packing List

| Name | Quantity | Name | Quantity |
|-----------------|----------|------------------------|----------|
| Audio Processor | 1 | Audio Conversion Cable | 1 |
| Power Adapter | 1 | Quick Start Guide | 1 |
| Phoenix Head | 8 | - | - |

2 Appearance and Interface



| No. | Name | Description |
|-----|----------|--|
| 1 | POWER | Power indicator, always on when powered on. |
| 2 | STATUS | Status indicator, will flash quickly when the microphone is not connected or when interacting with the microphone, and will flash slowly after the interaction with the microphone is completed. |
| 3 | DMIC | Digital microphone interface, support standard POE power supply, connecting microphone through POE network cable. |
| 4 | DEVICE | USB audio interface, used as the device to connect USB host. |
| 5 | AEC-REF | Audio input interface, which can input the audio reference signal sent from the remote classroom. |
| 6 | WIRELESS | Audio input interface, which can input audio signal of local wireless microphone. |
| 7 | PC | Audio input interface, which can input audio signal of local PC. |
| 8 | LINE IN | Audio input interface, which can input audio signal of local line audio equipment. |
| 9 | MIX | Audio output interface, which can mix and output the sound collected by the local microphone and the audio signal sent from the remote classroom to the recording host, etc. |

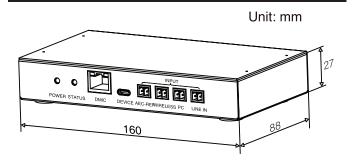
| No. | Name | Description |
|-----|---------|--|
| 9 | MIX | Audio output interface, which can mix and output the sound collected by the local microphone and the audio signal sent from the remote classroom to the recording host, etc. |
| 10 | MON | Audio output interface, which can output the collected sound from the local microphone to the local monitoring device. |
| 11 | SPK-OUT | Audio output interface, which can output the audio signal sent from the remote classroom to the local speaker. |
| 12 | AEC-OUT | Audio output interface, which can output the collected sound from the local microphone to the local terminal or recording host, etc. |
| 13 | HOST | Reserved USB host interface (not enabled). |
| 14 | LAN | RJ45 interface, connected to configuration computer or network switch. |
| 15 | RST/KEY | Reset key, used to restore the default parameters of the device. |
| 16 | DC 12V | Power adapter DC interface, 12V/3A. |



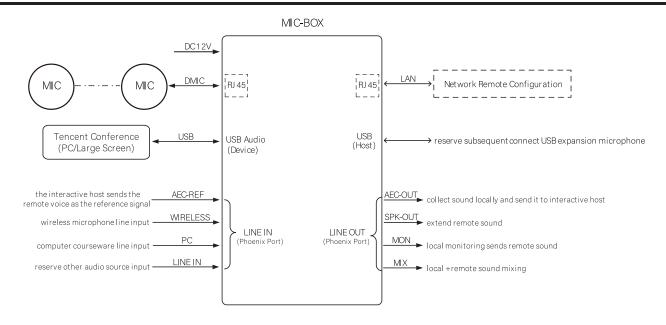
3 Product Specifications

| Hardware Interfaces | | |
|------------------------|---|--|
| Network Interface | 1 x uplink LAN interface | |
| | 1 x downlink cascade DMIC interface, cascade up to 6 microphones | |
| USB Interface | 1 x DEVICE interface, used as USB audio device to connect USB host (such as PC) | |
| | 1 x HOST interface, used as USB host to connect USB device | |
| Audio Interface | 4 x INPUT phoenix interface, unbalanced line audio input | |
| | 4 x OUTPUT phoenix interface, unbalanced line audio output | |
| Power Interface | DC 12V | |
| General Specifications | | |
| Power Supply | DC 12V/3A | |
| POE | POE 48V power supply, support IEEE802.3 AT | |
| Dimension | 160mm x 88mm x 27mm | |
| Net Weight | 0.4Kg | |

4 Product Dimensions

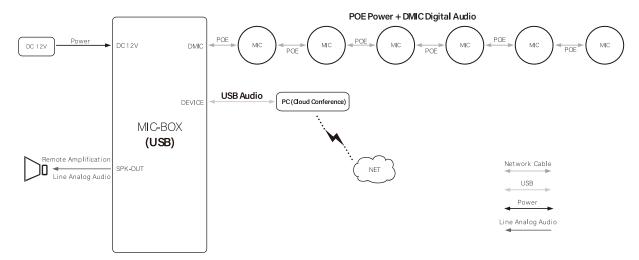


5 Interface Description

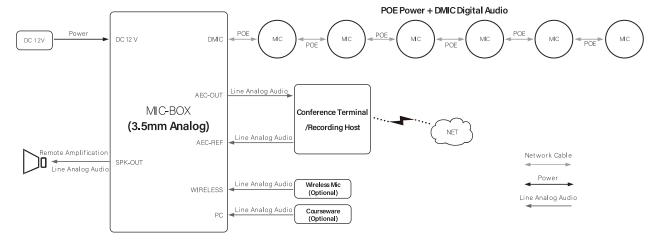


6 Network Application

6.1 USB Application



6.2 3.5mm Analog Application



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