



PHOENIX Audio Technologies

MT700 - Stingray Distributed Array Mixer Data Sheet



The Stingray is an eight channel (four microphone and four line input) automatic DSP mixer for installed room applications. The number of inputs can be easily extended to support up to 60 microphone inputs using the Phoenix proprietary daisy chain protocol. The Stingray is networkable and can be controlled using any device sitting on the same LAN (PC, Smart Phone, other). Each unit supports USB, SIP, and analog communication for use with VoIP, SIP client, and Video Conferencing Codec solutions respectively.

Each Stingray is equipped with four amplified speaker outputs that can push four 8Q speakers with 15Watts of power. A chain of Stingrays, which can be up to 15 units long, can be broken into any number of zones. Each zone can be assigned up to four Auxiliary or Podium microphone inputs, which can be played back in the room's speakers using sound reinforcement.

The Stingray uses Phoenix's proprietary echo canceling, noise suppression, distributed array beam-forming, AGC, and automatic mixing.

Inputs:

Four Mic Level Inputs:

- Balanced
- 48V Phantom via a 5.6K Ω resistor
- Gain: 14dB to 42dB in steps of 4 dB
- Separate mute request input: 10K Ω pull-up resistor and should be short to GND to mute

* The Stingray can receive the mute request from any of the microphones and will mute the entire room.

Four Line Level Inputs:

- Balanced
- No Phantom
- Input level: 2V ptp
- Input Impedance: 20K Ω USB or analog
- Analog: line level 2V ptp
- Input impedance: 20K Ω

Speaker Input:

- USB or analog
- Analog: line level 2V ptp
- Input impedance: 20K Ω

Speaker Output:

Non-Amplified Outputs:	Four Amplified Outputs:
Speaker Input <ul style="list-style-type: none">• USB or Analog• Line level: 2V ptp• Output Impedance: less than 100Ω	<ul style="list-style-type: none">• Balanced• No Phantom• Input level: 2V ptp• Input Impedance: 20KΩ USB or analog• Analog: line level 2V ptp• Input impedance: 20KΩ

System Output:

<ul style="list-style-type: none">• USB• Analog: Balanced / Line level: 2V ptp

Programming Options:

Automatic mixer designation:

- Mic Inputs: All mic inputs from both the primary and secondary units in the daisy chain will be mixed together. The secondary unit's mixed inputs will be sent up the daisy chain to an upper level unit. The mixing is controlled by the daisy chain's primary unit. The primary unit adds the mixed input signals to the unique channels (primary unit's line inputs) and sends it to the analog, USB, and SIP outputs.
- Line inputs: All line inputs from both the primary and secondary units in the daisy chain will be mixed together. The secondary unit's mixed inputs will be sent up the daisy chain to an upper level unit. The mixing is controlled by the daisy chain's primary unit. The primary unit adds the mixed input signals to the unique channels (primary unit's line inputs) and sends it to the analog, USB, and SIP outputs.

Line input assignment:

- Podium: Input will be added to the result of the mixing process. It will also be available to playback on the local speakers.
- The user can program four separate volume levels:
 - Level of signal sent to the far end
 - Local speakers – output 1&2 of primary unit
 - Local speakers – output 3&4 of primary unit
 - Local speakers – output level of all secondary units

- Auxiliary: Input will be added to the result of the mixing process. It will also be available to playback on the local speakers.
- The user can program four separate volume levels:
 - Level of signal sent to the far end
 - Local speakers – output 1&2 of primary unit
 - Local speakers – output 3&4 of primary unit
 - Local speakers – output level of all secondary units
- Mixing input: Only relevant when the mixer is assigned for line inputs, in which case this will be the default setting.
- Mute: This is the default setting when the mixing is assigned to the mic inputs.

Microphone Sensitivity: available gains 14dB to 42dB in steps of 4dB Primary/Secondary designation

SIP

For more information, please visit our [Phoenix Audio Technologies website](#).