Stingray Specification 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 8Ω 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 beamforming, AGC, and automatic mixing.

Inputs:

Four Mic Level inputs:

- Balanced

- 48V Phantom via a 5.6KΩ resistor

- Gain: 14dB to 42dB in steps of 4 dB

- Separate mute request input: 10KΩ 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: 20KΩ

Speaker Input

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

Speaker Output:

Non-amplified:

- Line level: 2V ptp
- Output Impedance: less than 100Ω

Four amplified outputs:

- 15 Watt into 8Ω each

System Output:

USB or Analog

Analog:

- Balanced
- Line level: 2V ptp

Programming Options:

Automatic mixer designation:

- <u>Mic Inputs:</u> 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.

- <u>Line inputs:</u> 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