

AP800 Architectural and Engineering Specification

The echo canceller/automatic microphone mixer shall incorporate automatic microphone mixing, distributed echo cancellation, matrix routing in a single rack space unit.

The echo canceller/automatic mic mixer shall have 24 inputs and outputs: four line-level inputs, eight microphone/line selectable inputs, and 12 line-level outputs. Each mic/line input shall feature acoustic echo cancellation with 120msec of tail time. Each mic/line input shall have automatic gain control, phantom power, and automatic microphone mixing capabilities. Each echo canceller shall be able to reference one of the two echo cancellation (EC) reference choices or the EC reference bus. The unit shall have two internal and one across bus automatic microphone mixers, each with fully adjustable parameters. The microphone mixer must use PA adaptive, adaptive ambient, chairman override, first mic priority, last mic mode, and number of open mics.

The echo canceller/automatic mic mixer shall have a 12x12 internal routing matrix. Any input can be routed to any output or multiple outputs. In addition to 12 analog inputs/outputs, the matrix shall consist of three digital inputs/outputs from the network bus and two inputs/outputs from sub-processing.

The echo canceller/automatic mic mixer shall have six presets.

The unit shall have a 3-channel bi-directional audio bus to pass audio, system control, one EC reference bus, and one bus that passes mic mixer information. The maximum distance between linked units shall be 20 feet (6.10 meters). Up to eight units can be linked for up to 32 line inputs and 64 mic inputs.

The unit shall be set up and operated with intuitive software that allows complete configuration of the system. Additional control shall be handled RS-232 protocol with communication speeds up to 38,400 baud, contact closure, or front panel control. The unit shall have the ability to meter inputs, outputs, or an entire signal flow. Meters shall be provided on inputs and outputs, echo return loss, echo return loss enhancement, and gate parameters.

The unit shall have a frequency response of 20Hz to 15kHz and a signal to noise ratio of 65dB re 0dB, A-weighted. It shall operate in environments with up to 12dB of room gain.

The unit shall have an internal power supply that automatically adjusts between 100-240VAC of power input. The unit shall comply with FCC, CSA, and CE requirements.

The Gentner AP800 is specified.