

Intelix Audisey Athena-16 Architectural Specifications

The matrix mixer/amplifier shall provide 16 microphone level inputs, 16 amplified outputs, and 16 line-level monitor outputs. All input and output connectors shall be screw terminal plug connectors. Each input to output crosspoint shall provide full user control of parameters including level, ramp time, and slew rate. Ramping and ducking of crosspoint levels shall be under user control. All inputs shall be capable of being arbitrarily mixed to any output. The gain adjustment of level at each crosspoint shall be from -100 dB to 0 dB. The matrix mixer/amplifier shall be programmable through dual RS232 serial ports, TCP/IP ethernet port, or a front panel USB port. A TCP/IP call out feature shall allow for remote connection via the IP LAN or WAN for diagnostics and monitoring or control purposes. An internal client authorization feature shall provide for IP security. The matrix mixer/amplifier shall implement DSP (digital signal processing) input and output presets. There shall be up to 64 DSP presets for input channels and 64 DSP presets for output channels. The matrix mixer/amplifier shall be capable of storing up to 128 system presets, recallable via serial commands, contact closure inputs, or the front panel of the matrix mixer/amplifier. System presets shall include crosspoint levels and optionally input and output channel presets. All presets shall be stored in nonvolatile memory onboard the matrix mixer/amplifier. The matrix mixer/amplifier shall provide for a calendar clock event scheduler function. Presets, level control, and routing shall be among the functions which can be scheduled as onetime or repetitive events by the scheduler utility. The matrix shall be capable of external DC control via digital I/O ports. The matrix shall include a front panel control menu LCD panel. The control panel shall provide for crosspoint and input/output channel level control and channel and system preset control. The front panel controls shall implement a key sequence control lock feature for system security. The matrix shall be capable of saving and restoring all settings in the event of a power failure. The frequency response of the matrix mixer shall be $\pm .5$ dB from 20Hz to 20kHz and +0, -3 from 10Hz to 30kHz. Crosstalk shall be better than -80dB. Control point attenuation resolution shall be .4 dB per step. Input impedance shall be 2K Ohms balanced and 1K Ohms unbalanced with a maximum level of +26dBu RMS and an input gain range of 0 to 60 dB. Line level output impedance shall be 220 Ohms unbalanced and 440 Ohms balanced, with a maximum level of +26dBu RMS. The speaker outputs shall be 100 watt into 8 ohms with a 800 watt aggregate maximum. The speaker outputs shall be capable of directly driving 25 Ohm speaker systems. The matrix mixer shall be an Intelix Audisey Athena-16.