



### Features

- **Four Mic/Line inputs with individual priority pre-select switch for each channel**
- **Balanced inputs and output are individually switchable between mic and line-level**
- **12V phantom power individually selectable for each channel**
- **Individual gain controls for each channel**
- **Single threshold setting for all channels**
- **Priority pre-select feature allows priority of each microphone to be independently assigned**
- **Last Mic On keeps the most recently used microphone on for continuous room ambiance**
- **Switchable manual mode overrides automatic functions**
- **Master output level control**
- **Output level meter with Peak and RMS modes**
- **Link-compatible with AT-MX351 SmartMixers for expanded capacity**
- **TTL logic output signals available to control speaker or camera switching, tally lights, etc.**
- **Off attenuation for each input adjustable to -20 dB**
- **Mounts in a 19" rack space with included rack-mount adapter**

### Description

Audio-Technica's AT-MX341a SmartMixer® is a microprocessor-controlled, automatic-switching four-channel audio mixer designed to manage multiple-microphone sound systems in meetings, seminars, teleconferences, worship services, radio and TV broadcasts and A/V applications. It helps improve audio quality by keeping the number of open microphones to a minimum, thus reducing background noise, feedback and other distractions, while providing instant, completely transparent switching between channels. For use with low-impedance dynamic and condenser microphones (including wireless microphone systems), as well as with line-level sources, the AT-MX341a automatically gates microphones on and off for the best possible audio quality.

Each of the AT-MX341a SmartMixer's four balanced inputs provides switchable 12-volt phantom power and selectable -10 dB attenuation. Balanced inputs and output are individually switchable between mic and line-level. To custom-tailor conferencing needs, the mode of each microphone channel can be independently switched. The combination of switch settings results in three different modes of priority selection/operation. A "last mic on" feature keeps the most recently used microphone on for continuous room ambiance. For large multi-mic installations, as many AT-MX341a and AT-MX351 SmartMixers as needed can be daisy-chained via the Link Cable included with each unit.

If automatic functions are not desired, the AT-MX341a SmartMixer® can function in manual mode, bypassing the mixer's automatic switching and attenuation functions, causing the unit to behave like a conventional

mixer. TTL logic output signals are available to control speaker zones, camera switching, tally lights, etc.

### Architect's and Engineer's Specifications

The automatic audio mixer shall be a microprocessor-controlled, automatic-switching four-channel audio mixer. It shall be suitable for use with low-impedance dynamic and condenser microphones (including wireless microphone systems), as well as with line-level input sources. The automatic mixer shall be equipped with four balanced inputs, each providing switchable 12-volt phantom power. Independent front panel input level controls shall be provided for each input. Internal Mic/Line switches and 10 dB pad switches on each channel shall allow the automatic mixer to accept a wide variety of microphone and line-level signals. Each input shall be provided with an input gate indicator to show channel gate status. Input and output connections shall be via standard XLR-type connectors.

The mixer shall be designed to operate in one of three priority configurations, allowing certain inputs to have priority over other inputs. It shall be possible to independently configure the setting of each input channel, for one of the priority modes. Any combination of priority/ non priority selections shall be allowed for maximum operational flexibility. An adjustable master threshold control shall be provided to allow for setting the point at which the gates are triggered. Front panel status indicators shall be provided showing attenuation status. The mixer shall allow the last active microphone to stay active (on) so that ambient sound is never muted. The automatic mixer shall offer a manual mode, which bypasses the mixer's automatic switching and attenuation functions. The automatic mixer shall provide external logic control outputs to enable the mixer to interface with external devices for control and status indication. A control voltage output shall be provided for each channel. The control output shall provide +4V DC whenever its associated channel becomes active allowing the SmartMixer® to control other devices and/or tally lights.

One balanced audio output shall be provided to drive amplification systems or other equipment. An internal MIC/Line switch shall enable the SmartMixer® to feed mic- or line-level inputs. A master output control shall be provided to set the overall level of the automatic mixer. A built-in linking function shall allow multiple automatic mixers to be daisy-chained for large multi-mic installations. When operating in this way, the output for all of the linked mixers appears at the master mixer in the chain. Last mic on and other configuration settings shall cascade through the entire chain of linked mixers. Each mixer shall include the cable for linking units together.

The automatic mixer shall be a half-rack unit designed to mount with included rack-mount adapters in a standard 19" equipment rack. 12V AC through an external power supply shall power the automatic mixer.

The Audio-Technica AT-MX341a is specified.

# AT-MX341a

## Specifications

<b>Input impedance</b>	Mic: 4,000 ohms Line: 30,000 ohms
<b>Output impedance</b>	Line: 200 ohms Mic: 320 ohms
<b>Maximum input level</b>	Mic: -20 dBV Line: +30 dBV
<b>Maximum output level</b>	Line: +14 dBm (600 ohms) Mic: -40 dBm (600 ohms)
<b>Nominal output level (0 VU)*</b>	Line: +4 dBm (600 ohms), +4.4 dBV (open circuit) Mic: -46 dBm (600 ohms), -44 dBV (open circuit)
<b>Maximum gain</b>	≥70 dB
<b>Frequency response</b>	60 Hz to 30 kHz at -3 dB points
<b>Dynamic range</b>	75 dB +/-10 dB, dependent upon gain control settings
<b>Equivalent input noise</b>	-120 dBV (150 ohms) at maximum gain
<b>Input attenuation</b>	10 dB
<b>Mic/line input pads</b>	50 dB
<b>Microphone phantom power</b>	+12V DC
<b>Control voltage out</b>	+4V DC
<b>Power supply</b>	12V AC or 15–18V DC, either polarity; 150 mA, minimum
<b>Operating temperature</b>	32° to 104° F (0° to 40° C)
<b>Dimensions</b>	210.0 mm (8.25") W x 238 mm (9.38") D x 44 mm (1.75") H (including feet, knobs and connectors)
<b>Weight</b>	1.6 kg (3 lbs. 7 oz)
<b>Accessories included</b>	AC power supply; AT8325/1.0 Link Cable
<b>Optional accessory</b>	AT8628 Double rack-mount joining plate

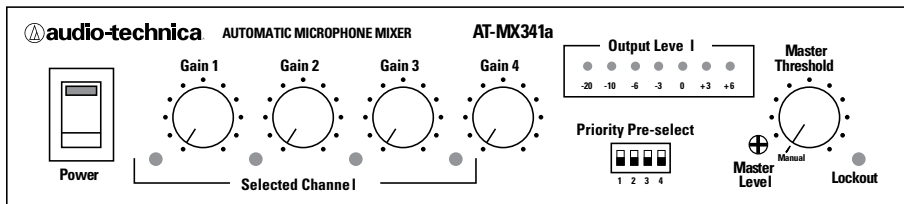
In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

\*Master level control at maximum (fully clockwise)

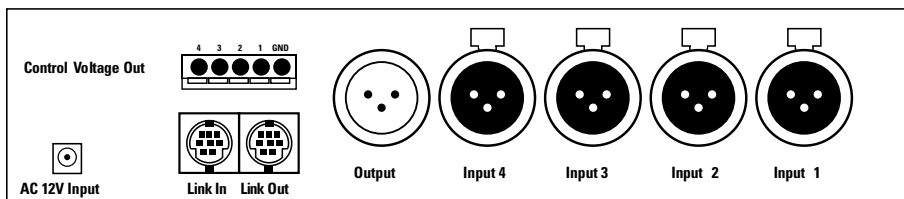
\*Input terminated with 150 ohms, A-weighted, using Audio Precision System One

Specifications are subject to change without notice.

front



back



**audio-technica**

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