

**Some of the best executive decisions
are made before the meeting.**



SmartMixer® Automatic Mixers

**SmartMixers offer precision automatic input mixing
with unique digital microprocessor control**

AT-MX341a SmartMixer Four-channel Automatic Mixer

AT-MX351 SmartMixer Five-channel Automatic Mixer



What is a SmartMixer®?

Field-proven to be the easiest, most flexible way to automatically control a sound system, SmartMixers deliver fast, quiet and incredibly “smart” performance in a variety of applications. By keeping the number of open microphone channels to a minimum, they reduce background noise and other distractions. And they provide instant, completely transparent switching between channels. Now available in two models, SmartMixers offer a host of innovative features that ensure easy setup, effortless operation and unrivaled versatility.

Flexible Operation

SmartMixers feature priority pre-select switches for each channel. If all channels are priority “off” (no one has priority), the system opens just one microphone at a time, switching to the next only after the controlling channel falls quiet. The operation is so fast and silent that this is the recommended mode.

A single channel set to priority “on” will override all the others, useful for moderators and chairpersons. If all channels are priority “on,” any number of people can talk at once. Regardless of the priority switch settings, all mics not in use are attenuated by the mixer. SmartMixers also have a switchable manual mode, permitting them to function as conventional mixers.

Effective Digital Control

All switching is controlled by a digital microprocessor with proprietary algorithms for instant, seamless operation. Logic output signals permit control of speaker switching, camera selection or other circuitry. Because the logic is in a socketed OTP microprocessor, a new IC from A-T can quickly revise or update the programming at any time.

Easy Setup

In just minutes, even first-time users can set up any combination of the three automated operation modes for exactly the control needed:

1. Adjust channel 1 gain.*
2. Adjust other mic gains.
3. Select priority switch settings.
4. Adjust master output level.

Setup is complete!

The last-mic-on stays on so that ambient sound is always heard through the system, eliminating “dead air.” Channel LEDs indicate which mics are active. Mixer output level is indicated by 7 LEDs.

*AT-MX341a: Also adjust threshold

Designed for Expansion

Using the provided link cable, you can cascade as many SmartMixers as needed to create a system for large seminars or legislative bodies. The priority control system extends throughout the entire chain of SmartMixers. Each channel provides switchable phantom power for condenser microphones. Security covers are included to limit access to controls if desired.

SmartMixers are perfect for meetings, seminars, teleconferencing, and for use in broadcast and A/V studios.

Their versatility, flexibility, simplicity, and precision performance make them ideal as the hands-free heart of many sound and recording systems, from boardrooms to places of worship.

SmartMixer® Feature Comparison Chart

	AT-MX351	AT-MX341a
Balanced automatic Mic/Line inputs	4	4
Unbalanced Aux input	1	–
Priority pre-select switch for each Mic/Line channel	yes	yes
Automatic threshold setting	yes	–
Single threshold setting for all channels	–	yes
Phantom power selectable for each channel	48V	12V
Switchable manual mode	yes	yes
Master output level control	yes	yes
Individual gain controls for each channel	yes	yes
Limiters on each mic/line channel	yes	–
Output level meter with Peak and RMS modes	yes	yes
Off attenuation for each input adjustable to:	–40 dB	–20 dB
TTL logic output	yes	yes
Closure control of each input	yes	–
Pre- or post-controller audio output	yes	–
Switchable NOMA operation	yes	–
Headphone output with adjustable level	yes	–
19" rack mounting space (1U)	full	1/2
Rack-mount adapters included	yes	yes



AT-MX351

SmartMixer® Additional Features

AT-MX351

- Four automatic Mic and Line inputs, plus Aux in
- Automatic threshold setting
- Limiters on each mic channel prevent individual channel overload
- Balanced inputs and output, selectable Mic and Line-level
- Individual gain controls for each channel
- Switchable manual mode overrides automatic functions
- Master output level control
- Pre- or post-controller audio outputs from Mic and Line channels
- 48V phantom power individually selectable for each channel
- Off attenuation for each input adjustable to –40 dB
- Sub-D connector for TTL output, plus closure-control input for external control of each channel
- NOMA operation provided, can be turned on/off
- Output level meter with Peak and RMS modes
- Monitor headphone output with adjustable level
- Internal AC supply
- Mounts in a single 19" rack space
- Includes rack-mount adapters

AT-MX341a

- Four Mic and Line inputs with individual priority pre-select switch for each channel
- Single threshold setting for all channels
- Balanced inputs and output are individually switchable between Mic and Line-level
- Individual gain controls for each channel
- Switchable manual mode overrides automatic functions
- Master output level control
- 12V phantom power individually selectable for each channel
- Off attenuation for each input adjustable to –20 dB
- TTL logic output signals available to control speaker or camera switching, tally lights, etc.
- Output level meter with Peak and RMS modes
- Mounts in a single 19" half-rack space
- Includes rack-mount adapters
- Use optional accessory AT8628 to mount two AT-MX341a mixers in a single rack space.

SmartMixer® Specifications

AT-MX351

Input Impedance	
Mic	8,000 ohms
Line	50,000 ohms
Aux	50,000 ohms
Link In	20,000 ohms
Output Impedance	
Balanced	
Line	200 ohms
Mic	300 ohms
Unbalanced	400 ohms
Link Out	100 ohms
Preamp Out	750 ohms
Maximum Input Level	
Mic	-24 dBV
Line	+27 dBV
Aux	+17 dBV
Maximum Output Level*	
+22 dBm (600 ohms)	
Nominal Output Level (0 VU)*	
Balanced	
Line	+4 dBm (600 ohms), +4.4 dBV (open circuit)
Mic	-46 dBm (600 ohms), -44 dBV (open circuit)
Unbalanced	-10 dBV (open circuit)
Preamp Out	-10 dBV (open circuit)
Maximum Monitor Output	
700 mW, 20 ohm load	
Maximum Gain	
73 dB	
Frequency Response	
40 Hz to 22 kHz (-3 dB)	
Equivalent Input Noise¹	
-128 dBV (150 ohms) at maximum gain	
Input Attenuation	
10 dB	
Mic/Line Input Pads	
50 dB	
Maximum NOMA Attenuation	
≈20 dB (up to 100 mics on simultaneously)	
Microphone Phantom Power	
+48V DC	
Control Voltage Out	
+4V DC	
Power Supply	
120V/230V AC (switchable), 50/60 Hz, 10W	
Operating Temperature	
32° to 104° F (0° to 40° C)	
Dimensions	
16.93" (430 mm) W 9.38" (238 mm) D 1.75" (44 mm) H (including feet, knobs and connectors)	
Weight	
6 lbs 13 oz (3.1 kg)	
Accessories Included	
AC power cable, AT8325/1.0 link cable, rack-mount adapters, security caps	

*Master Level control at maximum (fully clockwise)

¹Input terminated with 150 ohms, A-weighted using Audio Precision System One

AT-MX341a

Input Impedance	
Mic	4,000 ohms
Line	30,000 ohms
Output Impedance	
Line	200 ohms
Mic	320 ohms
Maximum Input Level	
Mic	-20 dBV
Line	+30 dBV
Maximum Output Level*	
+14 dBm (600 ohms)	
Nominal Output Level (0 VU)*	
Line	+4 dBm (600 ohms), +4.4 dBV (open circuit)
Mic	-46 dBm (600 ohms), -44 dBV (open circuit)
Maximum Gain	
70 dB	
Frequency Response	
60 Hz to 30 kHz (-3 dB)	
Equivalent Input Noise¹	
-120 dBV (150 ohms) at maximum gain	
Input Attenuation	
10 dB	
Mic/Line Input Pads	
50 dB	
Microphone Phantom Power	
+12V DC	
Control Voltage Out	
+4V DC	
Power Supply	
12V AC, 150 mA, min.	
Operating Temperature	
32° to 104° F (0° to 40° C)	
Dimensions	
8.25" (210 mm) W 9.38" (238 mm) D 1.75" (44 mm) H (including feet, knobs and connectors)	
Weight	
3 lbs 7 oz (1.6 kg)	
Accessories Included	
AC power supply, AT8325/1.0 link cable, rack-mount adapters, security caps	
Optional Accessory	
AT8628 double rack-mount joining plate	



Audio-Technica offers a wide range of boundary microphone models, with a variety of available pickup patterns, for use in conference, recording and live-performance applications.

