

AT-RMX64

4-Track Cassette Recorder/ 6-Input Mixer



A Powerful New Tool for:
Professional Musicians
Songwriters
Audio-Visual Production
Church Sound Reinforcement
and Recording
Theater Sound
Institutional Sound
Radio/TV Sound Production

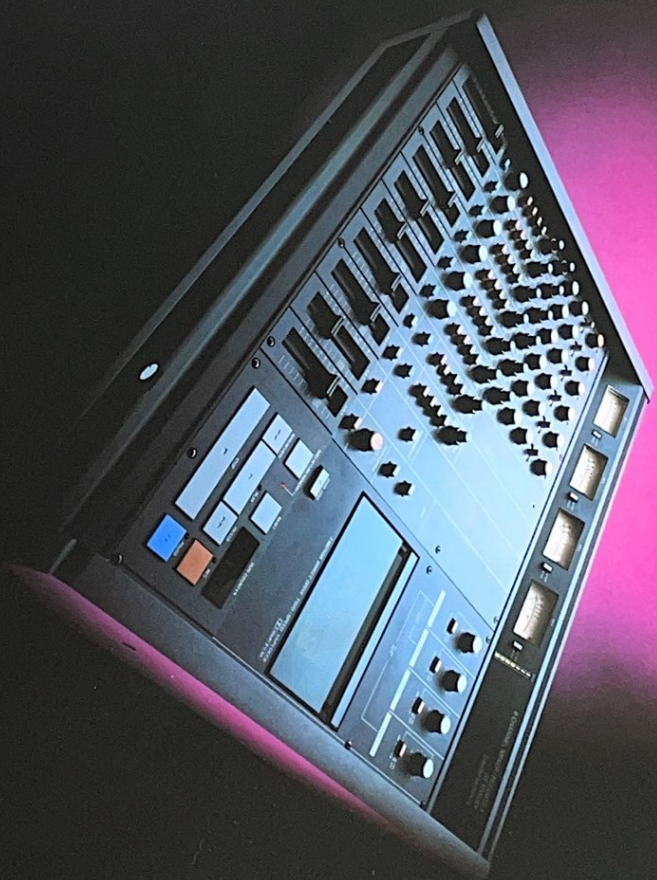


audio technica

The new AT-RMX64...
The only professional-quality,
complete recorder/mixer
virtually anyone can use,
and everyone can afford.

Once you've seen, heard, and touched the Audio-Technica AT-RMX64 recorder/mixer, you'll immediately realize that this is a unique tool that will enhance your creativity in sound. Whether you are making a recording, controlling a sound reinforcement system, or perhaps both at once. Whether you are an accomplished expert or a novice. Whether you are using state-of-the-art, semi-pro, or home equipment.

Our Design Philosophy



We started with one overriding basic: There can be no compromise with performance. So the AT-RMX64 interfaces with other equipment on real-world terms. Inputs handle everything from home and semi-pro equipment to the finest professional microphones. The tape recorder is fully compatible with home and professional cassettes. And outputs meet all professional standards, in every respect, as both a recorder and a live mixer.

The AT-RMX64 operation is also quite logical... almost intuitive. With all its features, we hesitate to claim the AT-RMX64 is simple to use, yet you can readily master the basics, adding complexity and sophistication as you need it and can utilize it. The built-in capability of the AT-RMX64 seems to grow as your own ability evolves.

The design and construction of the AT-RMX64 meets the high standards for quality and reliability which are a hallmark of every Audio-Technica product. Computer-grade components and thoughtful layout insure dependable operation in the studio or on the road, while service accessibility is outstanding. But of all its attributes, flexibility is the one characteristic you'll find most welcome. No matter where or how you use it, the AT-RMX64 is ready to meet the challenge

AT-RMX64 Applications



High-quality printed circuit components, modular assembly, speeds trouble-shooting and repair if needed.

In the Studio

The list of features for the AT-RMX64 is indeed impressive, but a list gives you only a taste of its unique capabilities. And, because it is so versatile, the AT-RMX64 will prove far more valuable than other multi-purpose "portable studio" equipment currently offered.

For instance, you have six input channels, not four. With electronically-balanced low-impedance inputs (no transformers to saturate) and 48V phantom power you can use the very finest professional condenser microphones if you wish. You have the capability to create both a "house" mix and several monitor or recording mixes at the same time.

There's full provision for out-board signal processing and patch connections for every input. The output levels of +4 dBm, not just -10 dBm, properly drive most power amps, telephone line sends, slide projectors, and other related equipment.

And the recordings you make at slow speed are fully compatible with any standard stereo cassette unit for speed, track width, spacing, and track assignments. With either Dolby B or C encoding if you wish. Or you can double the speed and get the very most from the cassette medium, including four discrete tracks.

Which features you'll use most will depend on who you are and what you need to do. Here are just some of the capabilities you'll discover in the AT-RMX64:

On Stage

The AT-RMX64 makes the ideal demo recording mixer/recorder. The specially-designed parametric EQ, normally found only in the most expensive recording mixes, provides a far greater variety of EQ options than you could expect to find in one with standard fixed EQ. Mix top-quality, phantom-powered pro condensers with any other mikes, and with direct inputs from your guitars, drum machines, or keyboards. Add special effects to any input or the entire board. Pan inputs across the standard stereo channels. Provide one mix to the recorder, and another to the musicians. Feed a separate headphone mix as needed.

Lay down a track wherever you wish in the 4-track high-speed mode. With Dolby B or C to control noise. Play from one combination of tracks while you record on the rest. Punch-in/out wherever you wish on one track or all. Adjust speed up to $\pm 15\%$ to match instrumental pitch. It's the most complete, most versatile personal recorder/mixer you can find.

With six inputs plus two returns available, you can set up the AT-RMX64 any way you need it. Feed separate mixes to one or two monitors, or add echo or other effects to individual channels or the entire mix... or a little of both! Feed mono or stereo, or even four channels to the house system. Provide equalized sound to one or all outputs, make reference recordings as you play, or mix pre-recorded tape with live sound... the possibilities are almost endless!

Or the AT-RMX64 can be used as a sub-mixer for your keyboards, drums, vocals, etc. With either microphone or direct inputs for any channel. And, unlike other 4-channel "portable studio" recorders, there's plenty of output (up to +18 dBm) to feed any PA amp directly. And, since you can use the same mixer for recording and on stage, you've saved money over two separate dedicated units.

In the Church

Using the AT-RMX64 you can send different mixes to each part of a large church the nursery, overflow room, and main sanctuary, for instance, or one mix to the name and another to the choir! Create a sound reinforcement mix with individual gain controls for room level, while also maintaining independent level controls for your recording. Or use the AT-RMX64 to control both the sound system and a telephone feed for radio broadcast in mono or stereo, while simultaneously making a slow-speed, standard format stereo tape recording of the service for shut-ins. With individual level controls for each output of each mix. Make 4-track master tapes of the choir or other events, complete with Dolby B or C noise reduction. Use outboard signal processing, such as limiters or other electronics on any channel, or the entire signal. The AT-RMX64 can be the single most useful item of sound equipment in the church.

The specially designed parametric EQ of the AT-RMX64 provides useful shelving/peak-dip equalization on each input to overcome environmental problems or alter sound character. And the added benefit of a variable high-pass filter on each input channel helps control popping and wind noise. You can feed the output to an external line or tape recorder while making a 4-track to 4-track safety cassette. And both inputs and outputs correctly match a wide range of equipment, from home stereos to fully professional recorders and power amplifiers.

A-V Production

The AT-RMX64 can be equally useful in creating master tapes for slide, film, and video productions; and as a "live" mixer in the field. With six input channels plus two return buses you can actually control as many as eight audio sources. Assign any input to any of the four recording tracks or sub-outputs. Feed mono, stereo, or even four channel sound to your sound system. Use any of the four tracks of the recorder for audio or control signals. Or create a stereo cassette which plays on any other home or professional equipment.

Other uses and applications for the AT-RMX64 will occur to you as you investigate its design and capabilities. With its careful integration of recorder and mixer, plus the host of connection options, the AT-RMX64 is far more than just a 6-channel mixer or a 4-track recorder. It is a unique production center with possibilities for creative audio not found in any other equipment. The AT-RMX64 is truly one of the great values in sound. Explore the opportunities at your Audio-Technica dealer today.

For Everyone

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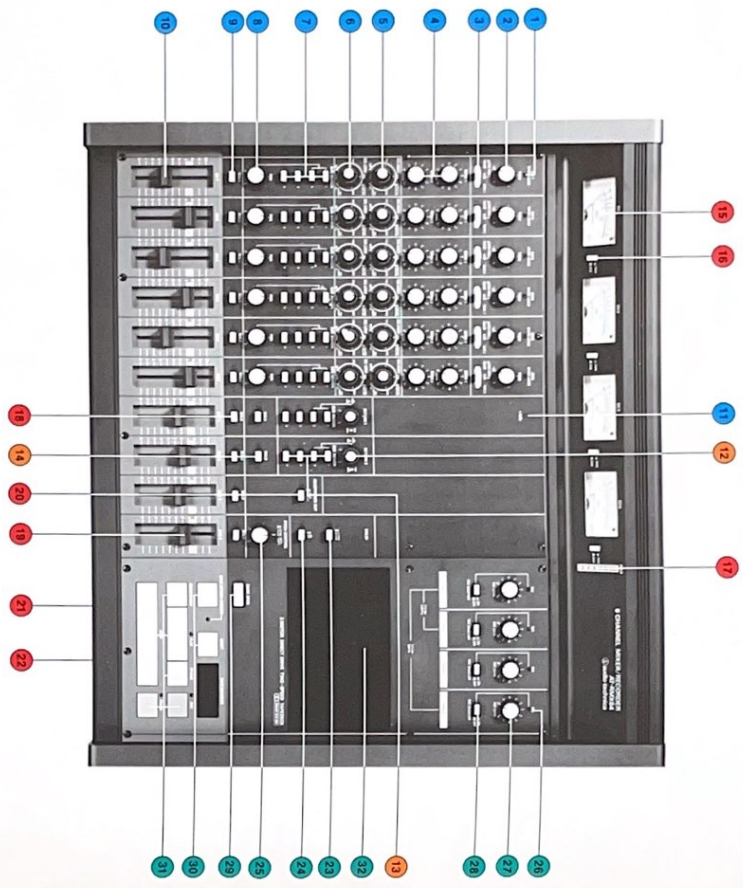


- 6 input channels plus 2 return inputs
- Balanced low-impedance, unbalanced low-impedance, or direct inputs
- Auxiliary stereo input
- 48V phantom power on all microphone inputs
- Overload LED on each input channel
- 20 dB fixed pad plus 40 dB variable trim pad for each input channel
- 72 dB total gain available (microphone input to sub output)
- Direct in/out connections for each input
- Two send busses with gain controls for each input
- Each send bus may be switched pre- or post-EO and ladders
- 6 low frequency variable high-pass or peak/dip parametric equalizers
- 6 high frequency shelving or peak/dip parametric equalizers
- Each input assignable to any sub output
- Latching Solo buttons monitor any input, return, or sub output
- Pan pot for each input and return assigned to sub/track 1-2
- 7-segment LED for solo level display
- Balanced and unbalanced sub outputs
- 4 independent tape outputs
- Solo bus output
- 4 stereo headphone jacks with gain control to monitor tracks (stereo) 1-2, sub outs (stereo) 1-2, or solo bus



- 3-motor direct drive
- Two speeds: 1 7/8 ips (4.75cm/sec) and 3 3/4 ips (9.5cm/sec)
- Pitch control varies speed $\pm 15\%$
- Dolby B and Dolby C noise reduction available with full encode/decode capability on each track
- Digital tape counter with zero memory return function with all stereo cassette players
- High-speed recording on any combination of tracks from 1 to 4
- Individual LED recording ready light for each track
- Any input or return signal can be assigned to any tape track
- Individual recording level control on each track
- Full solenoid control of tape motion
- Pause control
- Punch in/out footswitch connection

*Dolby is a registered trademark of Dolby Laboratories Licensing Corp.



Input Section (six inputs)

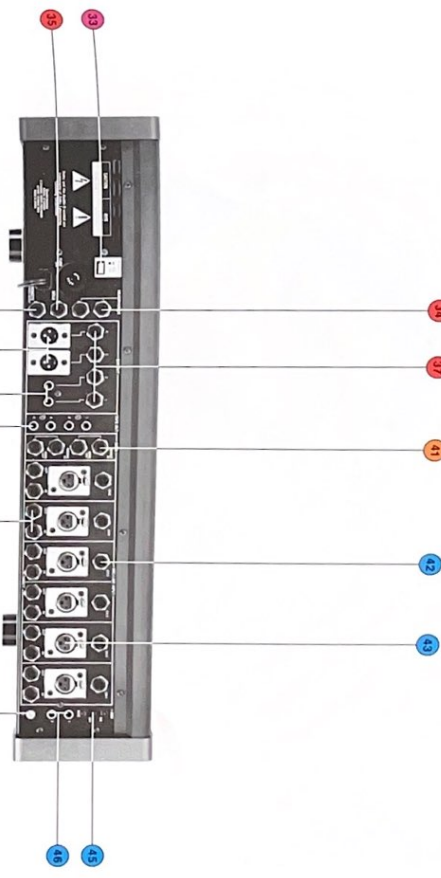
1. Input overload LED
2. 40 dB variable input trim pad
3. 20 dB fixed input pad and tape/aux input switch
4. Send 1 and 2 gain controls
5. Concentric high frequency EQ gain/frequency controls with push-pull shelving/peak-dip switch
6. Concentric low frequency EQ gain/frequency controls with push-pull high-pass/peak-dip switch
7. Output assignment switches
8. Channel 1-2 pan control
9. Solo monitor pushbutton
10. Linear input fader
11. 48V Phantom power LED indicator

Return Section (two returns)

12. Concentric return gain/pan control with push-pull pre-/post-EQ and fader assignment pushbutton
13. Return output assignment pushbutton
14. Return solo monitor pushbutton

Output Section (four sub outputs plus solo and headphone monitors)

15. VU meter with overload LED
16. Sub output/tape VU meter selector switch
17. Solo output 7-segment LED display
18. Solo monitor pushbutton
19. Linear output fader
20. Headphone channel 1-2 solo selector switch
21. Headphone level control with push-pull solo or sub 1-2/tape out select
22. Two stereo headphone jacks



Recorder Section

23. Delay B-Type/C-Type selector pushbutton
24. Delay On/Off pushbutton
25. Push-pull 3 1/4 ips/1 7/8 ips switch with variable speed (pitch) control
26. LED record indicator
27. Record level control
28. Record Ready pushbutton
29. Door access pushbutton
30. Zero return memory control with LED indicator, reset control and digital display
31. Tape motion controls, including play, fast forward, rewind, record, stop, and pause, plus play LED indicator
32. Two-speed, variable-pitch, direct drive, four-track tape recorder

Inputs and Outputs

33. Power On/Off switch
34. Duplicate stereo headphone jacks
35. Solo bus output
36. Punch in-out remote switch jack
37. Unbalanced sub outputs (channels 3-4)
38. Balanced sub outputs (channels 3-4)
39. Unbalanced sub outputs (channels 1-2)
40. Tape outputs (4)
41. Send and Return inputs and outputs
42. Unbalanced inputs (6)
43. Balanced low impedance inputs (6)
44. Direct in-out jacks (6 pairs)
45. 48V phantom power on-off switch
46. Auxiliary inputs
47. External system ground point

AT-11000 Specifications

Mixer

	Specification
Mic Input Sensitivity (balanced)	Max +4 dBm (Pnd -20 dB, Trm -40 dB)
Mic Input Impedance	Min -55 dBm (500 0 dB, Trm 0 dB)
Line Input Sensitivity (unbalanced)	4,000 ohms
Line Input Impedance	Max -4 dBm (Pnd -20 dB, Trm -40 dB)
Line Input Sensitivity (balanced)	Max -4 dBm (Pnd 0 dB, Trm 0 dB)
Line Input Impedance	33,000 ohms
Aux Input Sensitivity	44 dBm
Aux Input Impedance	100,000 ohms
Return Input Sensitivity	+4 dBm (Return gain at max)
Return Input Impedance	+4 dBm (Return gain at max)
Send Output (servo gain at max)	+4.2 dBm (EO/Fader)
Solo Output	+4.2 dBm (EO/Fader)
Solo Output (CH 1 & 2)	+4.6 dBm (CH 1 & 2)
Solo Output (CH 3 & 4)	+4.6 dBm (CH 3 & 4)
Maximum Output	+4.6 dBm (CH 1 & 2)
Headphone Output	+4.6 dBm (CH 3 & 4)
Hum and Noise	12 Watts at 8 ohms, 1 kHz
Total Harmonic Distortion	(at 0 VU with responsive gain at max)
Frequency Response	-12 dB (at 0 VU)
Equalization Frequency Range	20 to 20,000 Hz ±1.5 dB
Equalization Gain/Loss Range	Less than 0.05% (20 to 20,000 Hz)

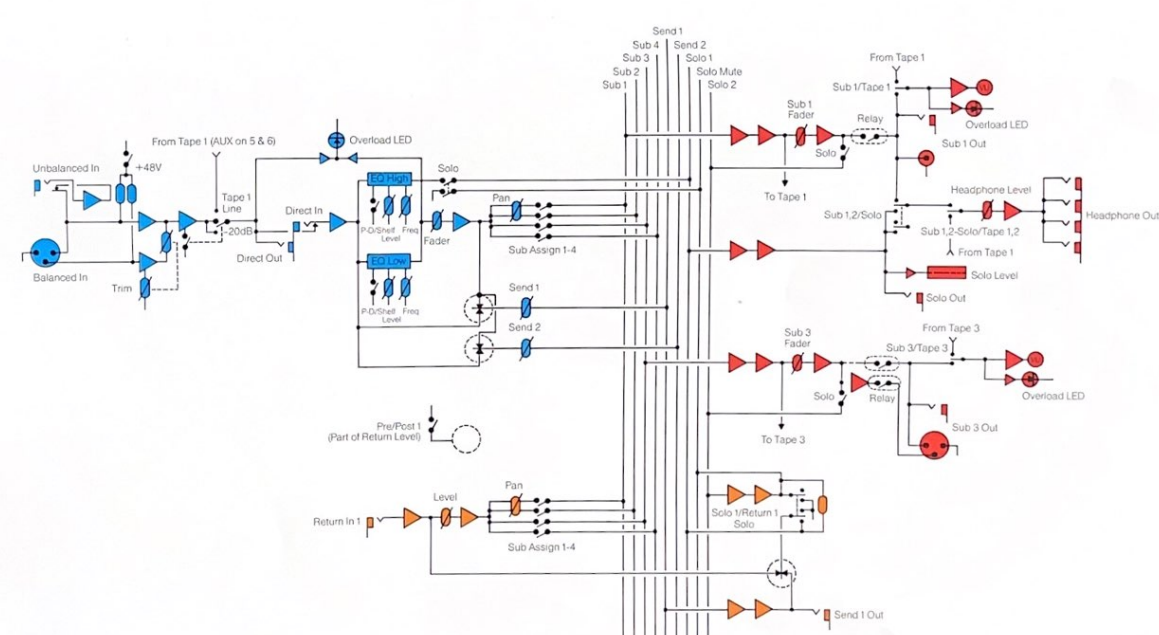
Recorder

	Specification
Tape Output Level	+4 dBm
Tape Output Impedance	100 ohms
Frequency Response (rec'd)	20 to 18,000 Hz
Frequency Response (rec'd)	1.5 dB from 40 to 15,000 Hz
Base Frequency	85 MHz
Signal to Noise Ratio	55 dB
Dolby NR Off	44 dB
Dolby C On	68 dB
Total Harmonic Distortion	Less than 1.5% at 0 VU/1 MHz
Channel Separation	Greater than 60 dB at 1 kHz
Peak Level Indicator	+8 dBm (1.4 VU)
Tape Type	Compact Cassette High Bias 70 µs EG Type II
Tape Speed	1 1/2 ips (4.75cm/sec) and 3 1/4 ips (9.5cm/sec)
Track Format	4 tracks @ 3 1/4 ips
Wow and Flutter	standard stereo @ 1 1/4 ips
Fast Wind/Reverse Time	0.04% RMS (JIS-A)
Tape Counter	80 seconds for C-60
Motor	4 Digit LED
	3 DC motors, direct drive servo-controlled capstan

General

	Specification
Dimensions	23.3" wide, 20.4" deep, 5.4" high 150 32cmx 51 80 137H
Weight	48.3 lbs (22065)
Power Requirements	120VAC, 60 Hz, 65 watts (220V AC, 50Hz 65Watt)

Specifications subject to change without notice



AT-11000 Specifications

Audio-Technica Professional Sound Products



- Microphones
- Cables
- Accessories
- Direct Boxes
- Tone Arms
- Phonograph Cartridges
- Stereophones



audio-technica

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