



**FOUR-CHANNEL AUDIO MIXER WITH USB
INTERFACE AND SOUND EFFECT**

**AMX7304
OWNER'S MANUAL**



Thank you for purchasing the **Audio2000's**[®] four-channel audio mixer with USB interface and sound effect! For the best results and the utmost satisfaction from your new unit, please read this manual thoroughly, and retain it for future reference. For more information, please visit our website (www.audio2000s.com).

CONTENTS

Warning.....	1
Precautions.....	1
Safety Instructions	2
Package Contents	3
Features.....	3
Functions and Controls.....	4-6
Connection.....	7
Specifications.....	8
Troubleshooting.....	9
Service Information.....	10

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

On Safety

* Operate only on designated AC power supply (120V AC in North America).

* Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.

* Unplug the unit from the wall outlet or set the Master switch to OFF if it is not to be used for several days.

* To disconnect the cord, pull it out by the plug. Never pull the cord itself.

On Installation

* Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

* Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

On Repackaging

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as it was originally packed at the factory.

IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) Grounding or Polarization This product may be equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 16) Ventilation Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 17) The MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

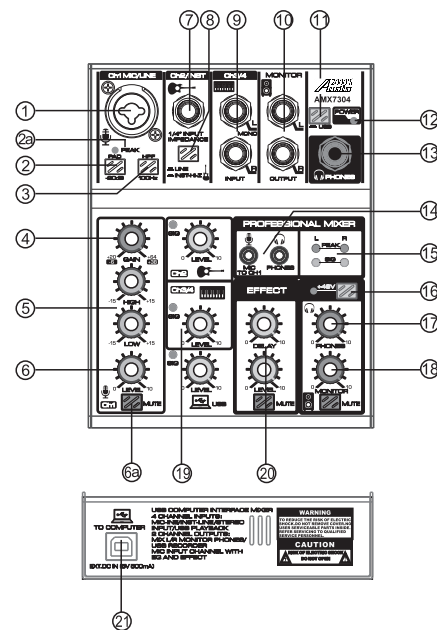
PACKAGE CONTENTS

<u>Items</u>	<u>Quantities</u>
AMX7304 Four-Channel Audio Mixer	1
Multi-Voltage AC/DC Power Supply Cord	1
Owner's Manual	1

FEATURES

- 4-Channel Audio Mixer
- Built-in USB Interface to Computer for Recording and Music Playing Applications
- Built-in Sound Effects Processor
- Microphone + Stereo Line Inputs
- Ultra-Musical 2-Band EQ on Channel 1
- Peak LED Indicator on Channel 1
- Output Signal and Peak Indicators
- Phantom Power Switch (+48V)
- Sealed Rotary Control Knobs to Resist Dust and Grime
- Rugged Steel Chassis

FUNCTIONS AND CONTROLS

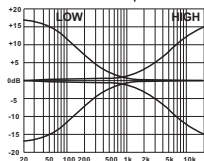


- Ch 1 MIC/LINE Input Jack** --- This input jack can be connected to a microphone or other audio device. This input jack is a combo XLR/1/4-inch jack which can be a balanced XLR microphone/line input jack or an unbalanced microphone/line input jack.
- PAD Button**--- Press down this PAD button to attenuate the channel 1 input by 20 dB. When this PAD button is released, the channel 1 input will go back to normal (no attenuation). Typically, this PAD button is pressed when the PEAK LED light turns on frequently even if the GAIN knob (refer to numeral 4) is turned fully to the left.

NOTE: Turn the LEVEL knob (refer to numeral 6) to the minimum before pressing this PAD button to avoid noise.

- PEAK LED Indicator** --- This PEAK LED indicator will keep blinking when the input signal level is higher than a predetermined threshold. When the PEAK LED indicator is blinking, adjust the gain control knob (refer to numeral 4) to a lower gain level until the PEAK LED indicator stops blinking to maintain the sound quality.

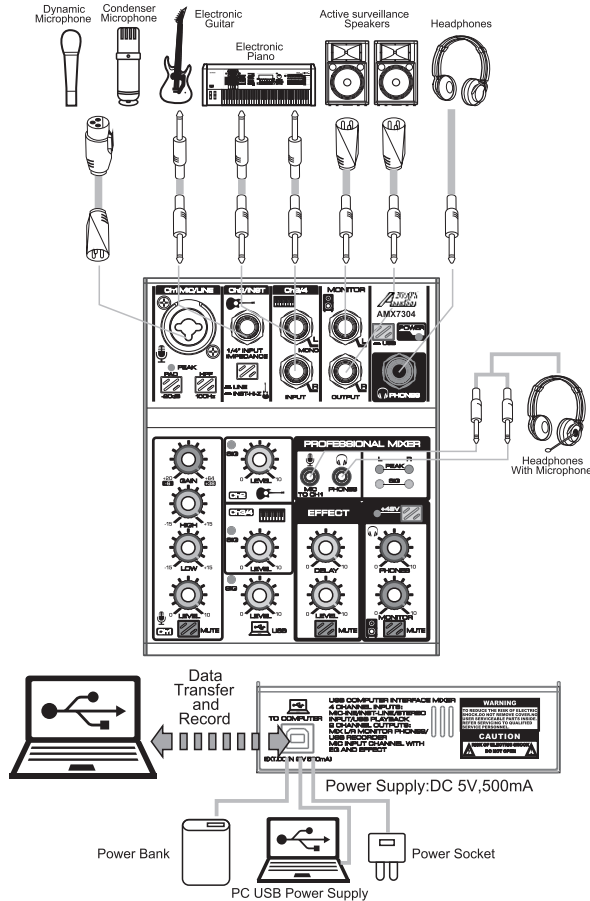
- 3. HPF Button** --- Press down this HPF (High Pass Filter) button to cut down the level of the signal under 100 Hz.
- 4. GAIN Control Knob** --- This knob is used to raise or lower the gain level of the input signal. Turn this GAIN control knob to the left when the PEAK LED indicator flashes frequently.
- 5. Two-Band EQ for Channel 1**---There are two equalizer (EQ) control knobs, HIGH and LOW. The HIGH control knob is used to adjust the gain for the input signal band above 12.1KHz in the range from -15dB to +15dB. The LOW control knob is used to adjust the gain for the input signal band below 80Hz in the range from -15dB to +15dB. The waveform of the high/low equalizer is broom shaped as follows:



- 6. LEVEL Control Knob** --- This knob is used to raise or lower the audio volume of the signal from this channel (channel 1).
- 6a. MUTE Button** --- Press down this button to turn off the channel 1 output.
- 7. CH2/INST Input Jack** --- This is a 1/4-inch TS input jack for channel 2. This channel 2 input jack can be connected to a musical instrument, such as an electric guitar or an electric bass. This input jack can also be connected to a mono line device.
- 8. GUITAR/LINE Converting Button** --- This button is used for channel 2 to be connected to an instrument or a line source. Press down this button to have the Ch2/Inst input jack (refer to numeral 7) to be connected to a high-impedance instrument, such as an electric guitar or an electric bass. Release this button to have the Ch2/Inst input jack to be connected to a low-impedance mono line device.
- CAUTION:** Before operating this button, turn all output controls (such as the Speakers knobs and Headphones knobs) fully to "0"(minimum). Sudden high level peaks caused by the converting operation can damage external devices as well as the hearing of those present.
- 9. CH3/4 Stereo Input Jacks** --- These are the 1/4" TS input jacks for channel 3 and channel 4. Channel 3 is utilized as the left channel while channel 4 is utilized as the right channel in the stereo mode. If only one device, such as an electric keyboard, is connected to channel 3 and the channel 4 input jack is not connected, the mono audio signal to channel 3 will be routed to channel 4 simultaneously, such that both channel 3 and channel 4 carry the same mono audio signal.
- 10. MONITOR OUTPUT Jacks** --- These jacks are 1/4" TRS jacks and are used to connect to powered monitor speakers or amplifiers. These jacks support both balanced and unbalanced connection.
- 11. USB/BLUETOOTH Selection Button** ---Press down this button to select the USB input. When this button is depressed, press this button again to raise the button to select the Bluetooth input.
- 12. POWER LED Indicator** --- This power LED indicator is to indicate that the power supply to this mixer has been connected and turned on.

- 13. PHONES Stereo Output Jack** --- This is a 1/4" TRS jack for the stereo monitoring headphones/earphones.
- 14. 3.5mm Jacks for Microphone with Monitor Earphones** --- These two 3.5mm jacks include a 3.5mm TS (mono) jack for the microphone (MIC) and a 3.5mm TRS (stereo) jack for monitoring earphones (PHONES).
- 15. Output Level Indicator** --- This is a stereo signal level indicator configured with green LED lights (SIG) at the bottom and red LED lights (Peak) at the top for both the left channel side and the right channel side. Flashing green LED lights indicate normal input signals. When the red LED lights are flashing, the MONITOR output signal level may need to be lowered by adjusting the monitor output level control knob (refer to numeral 18).
- 16. +48V Phantom Power Button/LED Indicator** --- When a condenser microphone is connected to the XLR [MIC] input jack (refer to numeral 1), press this +48V phantom power button to turn on the 48V phantom power to the condenser microphone via the XLR [MIC] input jack. When the 48V phantom power is turned on, the phantom power LED indicator light will be turned on.
- NOTE:** Turn OFF the +48V phantom power whenever NO condenser microphone is connected to the channel 1 input jack. Make sure that the +48V phantom power is OFF before connecting/disconnecting a cable to/from the channel 1 input jack.
- 17. PHONES Level Control Knob** --- This control knob is used to adjust the volume of headphones/earphones.
- 18. MONITOR Level Control Knob/MUTE Button** --- This control knob is used to adjust the MONITOR output (refer to numeral 10) volume. When the MUTE button is pressed down, the MONITOR output will be turned off.
- 19. Level Control Knobs** --- These level control knobs are used to adjust the levels of the following channels: CH2, CH3/4, and USB.
- (a) **Ch2:** This CH2 level control knob is used to control the volume of Channel 2 which is connected to an electric guitar, an instrument or a line-level audio device.
- (b) **Ch3/4:** This CH3/4 level control knob is used to control the volume of Channels 3/4 which are connected to an electric keyboard or a line-level audio device.
- (c) **USB:** This USB level control knob is used to control the volume of the signals from a computer via the USB 2.0 terminal.
- 20. EFFECT Controls & MUTE Button**--- There is a built-in high quality effect processor for channel 1 in this audio mixer. There are two control knobs to adjust the effect delay (DELAY) and effect level (LEVEL). The LEVEL control knob is used to adjust the echo effect level. Turn this LEVEL control knob clockwise to increase the echo effect level and counter-clockwise to decrease it. The DELAY control knob is used to adjust the echo time interval. Turn this DELAY control knob clockwise to increase the echo time interval and counter-clockwise to decrease it. Press the mute BUTTON to turn the echo effect on/off.
- 21. USB 2.0 Terminal** --- Use the included USB2.0 cable to connect this USB 2.0 terminal to a computer. The connected computer supplies power to the AMX7304 mixer via the USB cable. The connected computer can be used to send audio data to the mixer for audio playing or to receive audio data for recording. A power bank can also be used to supply power to the mixer via the USB cable. Any external power supply must meet the following requirements:
Output voltage: 4.8V to 5.2V
Output current: 0.5A or higher

CONNECTION



SPECIFICATIONS

FREQUENCY RESPONSE	±1dB, +4dBu@1KHz	
T.H.D.	<0.5%@+4dBu (20Hz-20KHz)	
INPUT CHANNELS	MONO: MIC/LINE	1 (including Headset Mic with Plug-In Power and MUTE)
	STEREO: LINE	1
	USB PLAYBACK	1
	MONO: GUITAR	1
OUTPUT CHANNELS	MONITOR L/R OUT	1
	PHONES	2 (including Headset Phones)
BUS	STEREO	1
INPUT CHANNEL FUNCTION	CH1 MIC/LINE	GAIN: -14 - +40 dB PAD: 20 dB +48V Phantom Power with LED PEAK LED: LED turns on when the signal reaches 3 dB below clipping level. 2-BAND EQ: 80Hz, 12KHz (Gain +15dB/-15dB) LEVEL Knob EFFECT: Digital Echo (Delay, Level, Mute)
	CH2 INST/LINE	IMPEDANCE Switch SIGNAL LED, -3dB LEVEL Knob
	CH3/4 LINE	SIGNAL LED, -3dB LEVEL Knob
	USB AUDIO	Mono Input/Stereo Output USB Audio Class 2.0 Compliant Sampling Frequency: Max 48KHz, Bit Depth: 16-Bit Type B Connector SIGNAL LED, Playback, -3dB Playback LEVEL Knob
LEVEL METER	2X2 Point LED Meter (PEAK, SIG)	
EFFECTS	Built-in	
PHANTOM POWER VOLTAGE	+48V	
POWER REQUIREMENTS	DC 5V, >500mA	
POWER CONSUMPTION	2.5W, Max.	
DIMENSIONS (W x H x D)	4.7" x 1.4" x 6.1" (120 x 36 x 154 mm)	
NET WEIGHT	1.32 lbs (0.6Kg)	

TROUBLESHOOTING

Should problems occur, they are, in many cases, due to simple operation mistakes or the like. On the basis of the following checks, you will be able to rectify a number of problems yourself without difficulty. If the problem cannot be remedied after the following checks, please consult your dealer.

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
No Power	Power Supply USB cord was not connected or was not connected securely.	Securely connect the USB cord to the mixer 5V input and power supply source.
	The USB cord is defective.	Replace the USB cord.
No output sound	The power source, such as computer or power bank, has no power.	Turn on the power source or recharge the power source first.
	No power.	Refer to the above NO POWER problem section.
	The MONITOR level control knob was turned to minimum.	Adjust the MONITOR level control knob to have an optimal output level.
One channel no sound	The main output audio cable is missing or defective.	Connect, repair or replace the audio cables.
	The gain control knob to the channel was turned to minimum.	Adjust the gain control knob to that channel to have an optimal output level.
Microphone no sound	The level control knob to the microphone channel was turned to minimum.	Adjust the level control knob to that channel to have an optimal output level.
	No phantom power to the condenser microphone	Turn on the phantom power.
	The gain control knob to the microphone channel was turned to minimum.	Adjust the gain control knob to that microphone channel to have an optimal microphone output level.
Distorted sound	The level control knob to the microphone channel was turned to minimum.	Adjust the level control knob to that microphone channel to have an optimal microphone output level.
	The amplitude of the input signal is over the threshold.	Adjust the gain control knob to lower the input gain.
	The amplitude of the main output signal is over the threshold of the connected amplifiers or active speakers.	Adjust the stereo level fader to lower the main output level.

SERVICE INFORMATION

SHIPPING DAMAGE

If the shipping carton is found to be damaged, notify the delivery company immediately. Save the damaged carton as evidence for the delivery company to inspect. It is the responsibility of the shipper to file a claim with the delivery company for any damage that occurs during shipping. In the case that the shipping carton is in good condition but the unit is damaged or defective, call H & F Technologies, Incorporated, U.S.A. at 805-523-2759.

WARRANTY PERIOD

For the period of one (1) year from date of original retail or online purchase for parts and 90 days for labor (the Warranty period) from an authorized **Audio2000'S®** dealer, H & F Technologies, Incorporated, U.S.A., warrants that products distributed by H & F Technologies, Incorporated in the U.S.A. that fail to function properly under normal use due to manufacturing defect when installed and operated according to the owner's manual instructions enclosed with the unit will be repaired or replaced with a new or reconditioned product with comparable value, at the discretion of H & F Technologies, Incorporated, without charge to you for parts or actual repair work. Parts supplied under this warranty may be new or rebuilt at the option of H & F Technologies, Incorporated.

This Warranty period for retail or online customers commences upon the date of retail sale, online sale, or the time that the product is first put into use, whichever occurs first.

This Warranty is valid for 90 days from the date of purchase on any product which is used in any trade or business, or in an industrial or commercial application.

PRODUCT

This warranty covers the product during the warranty period with the proof of purchase only. In the event service is required, call H & F Technologies, Incorporated at 805-523-2759 for a Return Authorization number (RA number) and the product must be delivered within the Warranty period, transportation prepaid by the product owner from within the United States. You will be responsible for removal and installation of the product. H & F Technologies, Incorporated will pay for the standard shipping cost for returning the product to you within the continental United States for all necessary repairs or replacements which are covered by the warranty.

No liability will be accepted for damages or loss directly caused from the use of this product. H & F Technologies, Incorporated's liability shall be limited to the repairs or replacements of this product if found to be defective.

WHAT'S NOT COVERED

- 1) Any damage to the products resulting from alteration, modifications not authorized in writing by H & F Technologies, Incorporated, misuse or abuse, neglect, accident, improper installation, damage due to lightning or due to power surges, subsequent damage from leaking, damaged or inoperative batteries or the use of batteries not conforming to those specified in the owner's manual instructions.
- 2) The cost of parts or labor, which would be otherwise provided without charge under this warranty, obtained from any source other than a H & F Technologies, Incorporated Authorized Service Company or other designated location. This warranty does not cover defects or damages caused by the use of unauthorized parts or labor, or from improper maintenance.
- 3) Normal wear and tear of this product, including but not limited to headset and lapel microphones, earphone ear cushions, microphone clip, and microphone mesh grille.
- 4) Any product that has been used as a rental unit.