

PROFESSIONAL SIX-CHANNEL AUDIO MIXER WITH DSP PROCESSOR

AMX7312 OWNER'S MANUAL



Thank you for purchasing the *Audio2000'S*[®] professional six-channel audio mixer with DSP processor! 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	1-2
Precautions	3
Package Contents	4
Features	4
Functions and Controls	4-6
Specifications	7
Troubleshooting	8
Service Information	9

WARNING

* TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. *THIS APPLIANCE SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING WATER AND THAT NO OBJECT FILLED WITH LIQUIDS SUCH AS VASES SHALL BE PLACED ON APPARATUS.



This lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



Warning: To reduce the risk of electric shock, do not remove cover (or back) no userserviceable parts inside. Refer servicing to qualified service personnel.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) in structions in the literature accompanying the appliance.

IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 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.

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.

PACKAGE CONTENTS

ltems

Quantities

AMX7312 Six-Channel Audio Mixer 1 Multi-Voltage AC/DC Power Supply Cord 1 Owner's Manual 1

FEATURES

- 1. 6-Channel Audio Mixer
- 2. Microphone + Stereo Line Inputs
- 3. Built-in DSP Processor
- 4. Ultra-Musical 3-Band EQ on All Channels
- 5. Built-in MP3 Player Supporting a Variety of Music Formats
- 6. LED Display for Showing the Playing Status
- 7. Peak LED Indicators on All Channels
- 8. High-Accuracy Level Indicator
- 9. Phantom Power Switch (+48V)
- 10. Sealed Rotary Control Knobs to Resist Dust and Grime
- 11. Rugged Steel Chassis

ി

(4)

(5)

6

9

10

12. Multi-Voltage Power Supply for Worldwide Use

FUNCTIONS AND CONTROLS

CHANNEL INPUT

- 1. [MIC] Input Jack --- This is a balanced XLR microphone input jack. This XLR input jack is to be connected to a microphone through a balanced microphone cable with a male XLR plug.
- 2. [LINE] Input Jack --- This is an unbalanced 1/4" input jack. This 1/4" input jack is to be connected to a microphone, a musical instrument, or an audio device (such as CD player) through an unbalanced cable with a 1/4" TS plug.
- 3. [INSERT] Jack --- This is a 1/4" TRS phone jack allowing you to insert external line devices (such as gating, compressing, equalizing, and /or reverb effects) into the signal path. This insert jack is configured with "TIP" send and "RING" return.
- 4. [GAIN] Control Knob --- This knob is used to raise or lower the gain level of the input signal. When the audio level is higher than a predetermined threshold, the [PEAK] LED indicator (refer to numeral 9) will keep blinking until the audio level goes below the threshold.
- [HIGH] Treble-tone Control Knob --- This knob is used to adjust the gain for the input signal band centered at 12.5KHz in the range from -15dB to +15dB.
- 6. [MID] Alto-tone Control Knob --- This knob is used to adjust the gain for the input signal band centered at 2.5KHz in the range from -15dB to +15dB.
- [LOW] Bass-tone Control Knob --- This knob is used to adjust the gain for the input signal band centered at 80Hz in the range from -15dB to +15dB.
- 8. [FX] Control Knob --- This knob is used to adjust the level of the signal routed from this channel to the reverberation line. This signal level will vary according to the settings of the channel attenuators (HIGH, MID,LOW). The signals from the stereo channel (R and L) will be mixed before being routed to the reverberation line.

- 9. [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.
- 10. [LEVEL] Control Knob --- This knob is used to raise or lower the audio volume of the signal from this channel.

STEREO AND AUX CHANNELS



 USB interface and MP3 display --- The volume and sound quality of the audio signal from the USB interface are controlled by the control knobs of the [5/6 USB] channel.
[+48V PHANTOM] Button/LED --- When one or more

condenser microphones are connected to the XLR [MIC] input jacks (refer to numeral 1 in the CHANNEL INPUT section), press this [+48V PHANTOM] button to turn on the 48V phantom power to the condenser microphones via the XLR [MIC] input jacks. When the 48V phantom power is turned on, the phantom power LED light will be turned on.

3. [5/6][USB] Selection Button --- Press down this button to select the stereo channel [5/6].

- When this button is depressed, press this button again to raise the button to select the USB input.
- 4. [3/4] Stereo Input Jacks --- These are the ¼" 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 1/4" TS plug 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.
- 5. [5/6] Stereo Input Jacks --- These are the ¼" TS input jacks for channel 5 and channel 6. Channel 5 is utilized as the left channel while channel 6 is utilized as the right channel in the stereo mode. If only one 1/4" TS plug is connected to channel 5 and the channel 6 input jack is not connected, the mono audio signal to channel 5 will be routed to channel 6 simultaneously, such that both channel 5 and channel 6 carry the same mono audio signal.
- 6. [TAPE/CD IN] Stereo Input Jacks --- These are the Tape/CD stereo RCA input jacks. The volume and sound quality of the audio signal from these RCA input jacks are controlled by the control knobs of the [5/6 USB] channel.
- 7. [REC OUT] Stereo Record Out Jacks --- These are the stereo RCA record-out jacks. The audio signal to the stereo RCA record-out can be assigned from any input channel. The level of the stereo RCA record-out signal is controlled by the stereo level fader (refer to numeral 6 in the MAIN CONTROL section on page 6).

MAIN CONTROL



- 1. Stereo Signal Level Meter --- This is a stereo signal level meter configured with three green LED lights at the bottom, one yellow LED light at the middle, and one red LED light at the top on both the left channel side and the right channel side. When the red LED light is turned on frequently, the [MAIN OUT] output signal level may need to be lowered by adjusting the [STEREO] level fader (refer to numeral 6). The red POWER LED indicator lights are placed below the green level meter LED lights.
- 2. [DELAY] Control Knob --- This control knob is used to adjust the depth of the reverberation.
- [REPEAT] Control Knob --- This control knob is used to adjust the repetition times of the reverberation.
 IFX LEVEL1 Control Knob --- This effects return level
- control knob is used to adjust the volume of the reverberation effect.
- 5. [PHONES] Level Control Knob --- This control knob is used to adjust the earphone volume.

- 6. [STEREO] Level Fader --- This level fader is used to adjust the [MAIN OUT] output (refer to numeral 1 in Section MAIN TERMINALS) signal volume.
- 7. [SEND] Level Control Knob --- This control knob is used to adjust the signal level from the [SEND] output jack (refer to numeral 2 in Section MAIN TERMINALS).
- 8. [RETURN] Level Control Knob --- This control knob is used to adjust the signal level to the [RETURN] input jack (refer to numeral 2 in Section MAIN TERMINALS).

MAIN TERMINALS



- [MAIN OUT] Stereo Output Jacks --- These are stereo main output 1/4" TS jacks. These jacks are to be connected to power amplifiers or active speakers.
- 2. [SEND & RETURN] Jacks --- Both the [SEND] and the [RETURN] jacks are 1/4" TS jacks. The [SEND] output can be utilized alone as a monitoring signal to a power amplifier or an active speaker. The [RETURN] input jack can be utilized alone as an input jack connecting to an external sound source. External line devices (such as gating, compressing, equalizing, and /or reverb effects) can be inserted into the signal path between the [SEND] output jack and the [RETURN] input jack to provide the desired sound effects.
- 3. [PHONES] Stereo Output Jack --- This is a 1/4" TRS jack for the stereo monitoring earphones.

POWER SUPPLY



 [DC IN] Power Supply Socket --- A supplied AC/DC power supply cord is to be connected to this [DC IN] power supply socket, supplying DC+15V, DC-15V, DC+48V, and ground.
[POWER] Switch --- This is an ON/OFF power switch.

USB MODULE



A. USB Insert

B. POWER LED Indicator

- C. " ► "PLAY/PAUSE Button --- Press this button to start playing the music from the USB device. Press this button again to have the music paused. When the music is paused, press this button will continue the music from where it was paused.
- D. " Here'' PREV Button --- Press this button to skip the current track and jump back to the previous track.
- E. " In it is button to skip the current track and jump to the next track.

SPECIFICATIONS

INPUT CHANNELS	MONO: MIC/LINE	2	
	STEREO: LINE	2	
	USB	1	
	TAPE/CD INPUT	1	
OUTPUT CHANNELS	MAIN OUT	1	
	PHONES	1	
	RETURN	-	
BUS	MAIN OUT	1	
	SEND	1	
INPUT CHANNEL	PAD	26dB	
FUNCTION	EQ	HIGH: Gain +15dB/-15dB, Frequency: 12KHz	
		Shelving	
		MID: Gain +15dB/-15dB, Frequency: 2.5KHz	
		Shelving	
		LOW: Gain +15dB/-15dB, Frequency: 80Hz Shelving	
	PEAK LED	LED turns on when post EQ signal reaches 3dB below clipping point	
LEVEL METER	2*5-Segment LED Meter (+6, +3, 0, -3, -10 dB)		
EFFECTS	Built-in		
PHANTOM POWER	1011		
VOLTAGE	+48V		
POWER	±15VDC +48VDC		
INPUT	13VDC +40VDC		
POWER	14W		
CONSUMPTION			

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
Power can not be turned	Power Supply cord was not	Securely connect the power supply cord to
on	connected or was not	the mixer DC input and/or the AC power
	connected securely.	outlet.
	The power supply cord is defective.	Replace the power supply cord.
	The AC power outlet has no	Connect the power supply to an AC power
	power.	outlet with proper power.
	The AC power source is from an AC power extension cord and the power switch of the	Turn on the power switch of the AC power extension cord.
	extension cord is not turned on.	
No output sound	The power is off.	Turn on the power.
	The stereo level fader was turned to minimum.	Adjust the stereo level fader to have an optimal output level.
	The main output audio cable is missing or defective.	Connect, repair or replace the audio cables
One channel no sound	The gain control knob to the channel was turned to minimum.	Adjust the gain control knob to that channe to have an optimal output level.
	The level control knob to the microphone channel was turned to minimum.	Adjust the level control knob to that channe to have an optimal output level.
Microphone no sound	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.
	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.
Distorted sound	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 consignee to file a claim with the delivery company for any damaged that occurs during shipping. In the case that the shipping carton is in good condition but the unit is damaged or defective, call *Audio2000*[°]S[®] at 805/523-2759.

FACTORY SERVICE

If the equipment needs factory service, call *Audio2000'S*[®] at 805/523-2759 for a Return Authorization number (RA number) and the address of the authorized service representatives. Insure and ship the product, prepaid, in its original carton along with proof of purchase in the form of a bill of sale or receipted invoice to the above address. Please clearly write the RA number on the shipping carton. Also enclose a note describing the problem along with any other helpful information such as where and how the unit was used.

LIMITED WARRANTY

H&F Technologies, Incorporated (H&F) hereby warrants that **Audio2000'S[®]** products will be free from defects in material and workmanship for a period of 1 (one) year from date of purchase. At its option, H&F will repair or replace the defective product and promptly return it to you.

The Limited Warranty will not cover any item that has been, in H&F's estimation, subject to alteration, misuse, neglect, accident or improper installation. In addition, any service not performed by H&F or an authorized service center will terminate terms of this warranty. Normal wear and tear of this product will not be covered by this or any implied warranty.

No liability will be accepted for damages/loss directly caused from the use of this product. H&F's liability shall be limited to the repair/replacement of this product if found to be defective.

© 2017 H & F Technologies, Incorporated (website: www.audio2000s.com)