



PURERESONANCEAUDIO®

MX82 RACK MOUNT MIXER

INSTALLATION AND OPERATION MANUAL



Caution: Please read this manual carefully before operating.
Damage caused by misuse is not covered by the warranty.

SAFETY PRECAUTIONS

- Be sure to read the instructions in this section carefully before use.
- Be sure to follow the instructions in this manual as safety symbols and message conventions are considered very important precautions.
- We also recommend you keep this instruction manual handy for future reference.

SAFETY SYMBOLS AND MESSAGE CONVENTIONS

Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety risks.



WARNING!

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.



CAUTION!

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.



WARNING!

WHEN INSTALLING THE UNIT

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, bend, damage or modify the power cord. Also, avoid using the power cord near heating appliances and never place heavy objects (including the unit itself) on the power cord as this could result in fire or electric shock.
- Do not install or place the device in an unstable place such as a wobbly table or sloped surface. Otherwise, the device may fall and cause personal injury and/or property damage.

WHEN THE UNIT IS IN USE

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
 - If you detect smoke or a strange smell coming from the unit
 - If water or any metallic object gets into the unit
 - If the unit falls, or the unit case breaks
 - If the power supply cord is damaged (exposure of the core, disconnection, etc.)
 - If it is malfunctioning (no tone sounds)
- To prevent a fire or electric shock, never open or remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest dealer.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit.

CAUTION!

WHEN INSTALLING THE UNIT

- Never plug in or remove the power supply plug with wet hands, as doing so may cause electric shock.
- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.
- When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.
- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.

WHEN THE UNIT IS IN USE

- Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.
- Make sure that the volume control is set to the minimum position before the power is switched on. Loud noise produced at high volume when the power is switched on can impair hearing.
- Do not operate the unit for an extended period of time with the sound distorting. This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.
- If dust accumulates on the power supply plug or in the wall AC outlet, a fire may result. Clean it periodically. In addition, insert the plug in the wall outlet securely.
- Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more. Doing otherwise may cause a fire or electric shock.

PLEASE NOTE:

Due to product upgrades, some of the features and specification in this user manual may or may not match the actual functions of the unit.

DESCRIPTION

The Pure Resonance Audio MX82 audio mixer provides 2-zone routing, mixing, and intuitive control over 8 channels in a compact 1U rack-mountable chassis. Ideal for professional and commercial installations, the MX82 seamlessly integrates multiple sources into one or two output zones. Featuring two balanced microphone inputs with 3-band tone control, gain control, phantom power, and priority ducking functionality for paging and announcements, the MX82 offers exceptional versatility. Additionally, the six balanced stereo or mono inputs effortlessly connect a variety of line-level audio sources. The front panel provides easy access to the individual channel volume controls, 2-band tone control for each zone, and an LED VU meter for precise adjustments. With the inclusion of both a remote mic input and balanced priority input on the back, the MX82 seamlessly integrates with a paging microphone or an emergency voice alarm system.

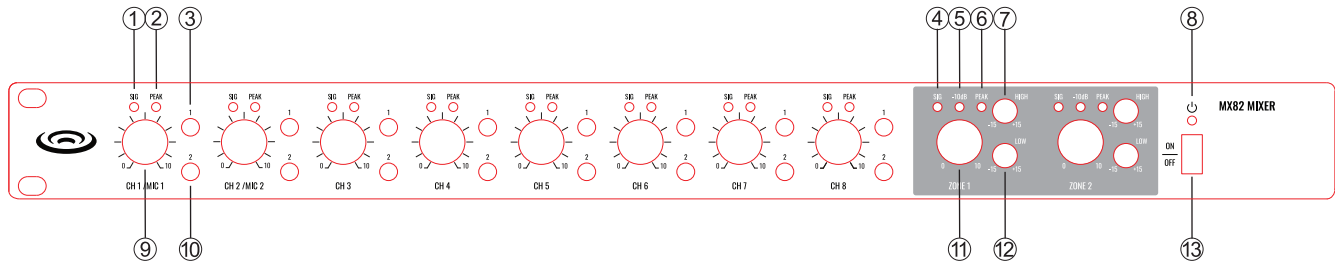
FEATURES

- Compact 1U rack-mountable design
- 2 Zone outputs with 2 band EQ, external mute connector, stereo or mono switch
- 8 Convenient balanced inputs with signal and clipping protection indicator lights, remote mic input, and balanced priority input
- Channels 1-2: 3-band EQ, individual gain control, phantom power switch, and priority switch
- Channels 3-8: Individual gain control and stereo or mono switch
- Priority remote mic features audio ducking and paging zone selection (for use with PRA-MX8-PM)

SPECIFICATIONS

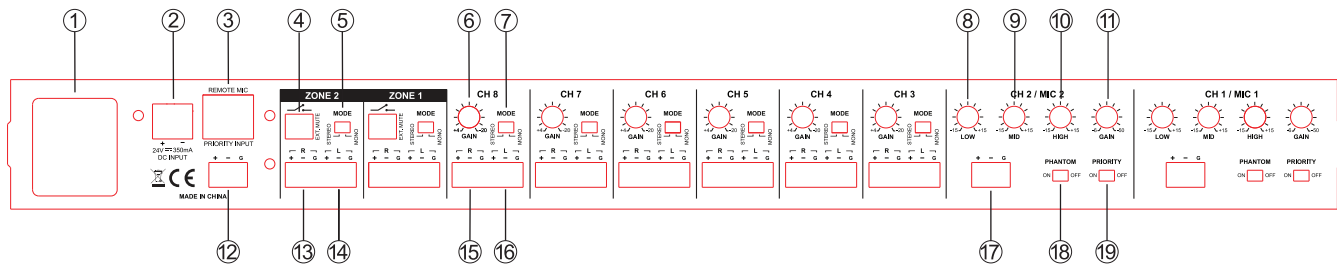
Input Sensitivity / Impedance	Mic Input (CH 1-2): -50 dB~ -6 dB / 20k Ω Bal. Stereo Line Input (CH 1-6): -20 dB~ +4 dB / 20k Ω Bal. Stereo / Mono Remote Mic Input: RJ45 Priority Input: 0 dB / 600 Ω Balanced
Output Level / Impedance	0 dB / 600 Ω Balanced Stereo / Mono
Phantom Power Supply	CH 1-2 option
Frequency Response	20Hz - 20kHz \pm 1 dB
Distortion (THD)	< 0.01%
Signal-to-Noise (S/N) Ratio	> 90 dB
Priority Ducking	> 70 dB
Equalization	Input - High: 12 kHz \pm 15 dB / Mid: 2.5 kHz \pm 15 dB / Low: 80 Hz \pm 15 dB Output - High: 10 kHz \pm 15 dB / Low: 100 Hz \pm 15 dB
Indicator	CH 1-2: Signal and clipping CH 1-6: Signal, -10 dB, and clipping for output channel
Power	AC 100 - 240V, 50 / 60Hz / DC24V
Dimensions (H x W x D)	1.73" (44 mm) x 19" (482 mm) x 12.6" (320 mm)
Weight	8.16 lbs (3.7 kg)

FRONT PANEL



1. **Channel SIG (Signal Indicator Light)** - When there is an audio signal input, the signal indicator lights up
2. **Channel PEAK (Signal Peak Indicator Light)** - When the indicator light is on, the machine has reached the peak of the rated power output. To avoid distortion or clipping, the volume knob should be appropriately adjusted to reduce the volume
3. **ZONE 1 Selector** - Depress button to send this channel to ZONE 1
4. **ZONE Signal Indicator Light** - When an audio signal is going to zone, the indicator light will light up
5. **ZONE Signal Level Indicator** - When an audio signal reaches -10 dB indicator light lights up
6. **ZONE PEAK (Signal Peak Indicator Light)** - When the indicator light is on, the machine has reached the peak of the rated power output for this ZONE. To avoid distortion or clipping, the volume knob should be appropriately adjusted to reduce the volume
7. **ZONE High-Frequency EQ Adjustment:** Knob adjusts the high frequencies on the specified zone
8. **Power Indicator Light** - When the amplifier is turned on, the power indicator light turns on to indicate that the amplifier is in a working state. When the power is turned off, the power indicator light goes off
9. **Channel Volume Knob** - When the knob is rotated clockwise, the volume will gradually increase. When rotated counter-clockwise, the output level will decrease
10. **ZONE 2 Selector** - Depress button to send this channel to ZONE 2
11. **ZONE Volume Knob** - When the knob is rotated clockwise, the volume in the specified ZONE will gradually increase. When rotated counter-clockwise, the volume in the specified ZONE will decrease
12. **ZONE Low-Frequency EQ Adjustment** - Knob adjusts the high frequencies on the specified zone
13. **Power Switch:** Button turns the unit on and off

BACK PANEL



1. **Power Cord Connection (IEC):** Connection point for IEC power cable
2. **DC Power Connection:** Connection for external DC power supply
3. **Remote Paging Mic:** RJ45 connection for remote paging mic (MX8-PM)
4. **ZONE External Mute:** Connection for external muting
5. **ZONE Stereo / Mono Switch** - Choose between a stereo or mono OUTPUT on a specified ZONE
6. **Channel Specific Gain Knob** - Adjust the gain on a specified channel by adjusting the knob
7. **Channel Specific Stereo / Mono Switch** - Choose between a stereo or mono INPUT
8. **Channel Specific Low-Frequency EQ Knob** - Boost or cut the low-frequencies by adjusting the knob
9. **Channel Specific Mid-Frequency EQ Knob** - Boost or cut the mid-frequencies by adjusting the knob
10. **Channel Specific High-Frequency EQ Knob** - Boost or cut the high-frequencies by adjusting the knob
11. **Channel Specific Gain Knob** - Adjust the gain on a specific channel by adjusting the knob
12. **Priority Input Connection:** Euroblock connector
13. **ZONE OUTPUT: Stereo Right** - Right stereo OUTPUT for specified ZONE
14. **ZONE OUTPUT: Stereo Left** - Left stereo OUTPUT for specified ZONE
15. **Channel INPUT: Stereo Right** - Right stereo OUTPUT for specified ZONE
16. **Channel INPUT: Stereo Left** - Right stereo OUTPUT for specified ZONE
17. **Channel Input:** Balanced INPUT for the specified channel
18. **Channel Phantom Power Switch:** Turn on or off phantom power for the specified channel
19. **Channel Priority Switch:** Turn on or off priority on a specified channel

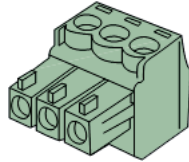
CONNECTIONS

CONNECTION STANDARDS

The input and output connections for audio equipment are performed corresponding to international wiring standards for professional audio equipment.

3-PIN TERMINAL BLOCK

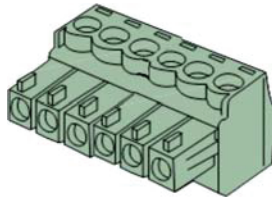
For balanced signal input and link output connections.



Left: Ground
Center: Signal-
Right: Signal+

6-PIN TERMINAL BLOCK

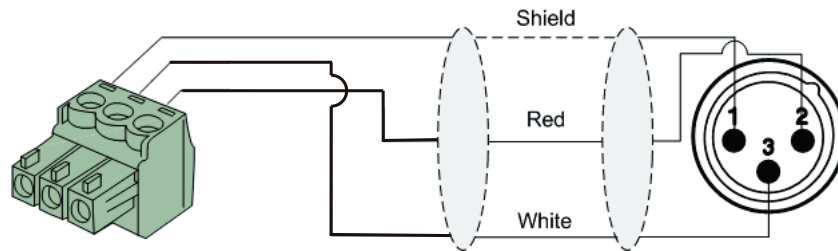
For balanced stereo input and link output connections.



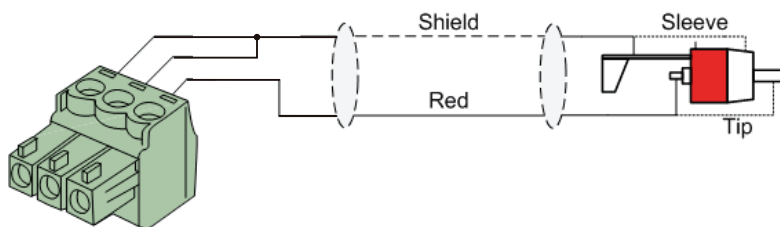
L { **Left:** Ground
Center: Signal-
Right: Signal+

R { **Left:** Ground
Center: Signal-
Right: Signal+

For balanced line output connections:



For unbalanced line output connections:



SERVICE

In the event of a malfunction, ensure the problem is not related to operator error or system devices external to this unit. Once it is certain that the problem is related to the product, contact your warranty provider as described in the warranty section of this manual.

LIMITED WARRANTY

PRO ACOUSTICS, LLC. ("PRO ACOUSTICS") warrants this product to the original purchaser to be free from defects in materials and workmanship (subject to the terms set forth below), for the following periods from the date of purchase.

THIS WARRANTY COVERS THE LISTED PRODUCTS AGAINST DEFECTS IN MATERIALS OR WORKMANSHIP FOR THE FOLLOWING PERIOD

Warranty Terms	
Speakers	2 Years
Amplifiers & Electronics	1 Year
Microphones	1 Year
Accessories	1 Year

PRO ACOUSTICS will repair or replace (at PRO ACOUSTICS's option) this product or any defective parts (excluding electronics and amplifiers) in this product.

Your authorized PRO ACOUSTICS dealer will inspect the product and, if your dealer is not equipped to perform the repair of your PRO ACOUSTICS product, they will replace your product or return it to PRO ACOUSTICS for repair, at their discretion. Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the warranty period, must be presented to obtain warranty service.

This warranty is invalid if the factory applied serial number has been altered or removed from this product. This warranty is invalid if this product was not purchased from a PRO ACOUSTICS authorized dealer. Cosmetic damage or damage due to the accident, acts of God, misuse, abuse, negligence, commercial use, or modification of, or to any part of, the product are not covered in this warranty. This warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than PRO ACOUSTICS or a PRO ACOUSTICS dealer which is authorized to do PRO ACOUSTICS warranty work. Any unauthorized repairs will void this warranty.

This warranty does not cover products sold as is.

REPAIRS OR REPLACEMENTS AS PROVIDED UNDER THIS WARRANTY ARE THE EXCLUSIVE REMEDY OF THE CONSUMER/PURCHASER. PRO ACOUSTICS U.S.A. SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PRACTICAL PURPOSE.

This warranty gives you specific legal rights. You may have other rights which vary from state to state.

Specifications may change without notice.

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