

Product Contents

- 1x AMR-220
- 4x Plastic Cushions
- 1x 3-pole Pluggable Terminal Block
- 1x 4-pole Pluggable Terminal Block
- 1x RS-232 Cable
- 1x Power Adapter (24V DC 2.71A)
- 1x Power Cord
- 1x Reference Guide

Safety Suggestions

Read and Follow Instructions. Read all safety and operating instructions before operating the unit.

Retain Instructions. Keep the safety and operating instructions for future reference.

Heat Warnings. Adhere to all warnings on the unit and in the operating instructions.

Heat. Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.

Power Sources. Connect the unit only to a power supply of the type described in the operating instructions, or as marked on the unit.

Power Cord Protection. Route power supply cords so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to the cord plugs at power receptacles and at the point at which they exit from the unit.

Water and Moisture. Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.

Object and Liquid Entry. Do not allow objects to fall or liquids to be spilled into the enclosure through openings.

Servicing. Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.

Damage Requiring Service. The unit should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit does not appear to operate normally or exhibits a marked change in performance.
- The unit has been dropped or the enclosure has been damaged.

Cleaning

To clean this product, lightly dampen a lint-free cloth with plain water or a mild detergent and wipe the outer surfaces.

NOTE: Do not use harsh chemicals as damage to the unit may occur.

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

Industry Canada Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes:

1. Ce dispositif ne peut causer des interférences nuisibles.
2. Cet appareil doit accepter toute interférence reçue y compris des interférences qui peuvent provoquer un fonctionnement indésirable.



DECLARATION OF CONFORMITY (DOC)

The Declaration of Conformity for this product can be found on the RTI website at: www.rticorp.com/declaration

Contacting RTI

For news about the latest updates, new product information, and new accessories, please visit our web site at: www.rticorp.com

For general information, you can contact RTI at:

Remote Technologies Incorporated
5775 12th Ave. E Suite 180
Shakopee, MN 55379
Tel. (952) 253-3100
Fax (952) 253-3131
info@rticorp.com

Service & Support

If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance (see the Contacting RTI section of this guide for contact details).

RTI provides technical support by telephone or e-mail. For the highest quality service, please have the following information ready:

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.

Please do not return products to RTI without return authorization.

Limited Warranty

RTI warrants new products for a period of three (3) years (excluding consumables such as rechargeable batteries which are warrantied for one (1) year) from the date of purchase by the original purchaser (end user) directly from RTI / Pro Control (herein referred to as "RTI"), or an authorized RTI dealer.

Warranty claims may be initiated by an authorized RTI dealer using the original dated sales receipt or other proof of warranty coverage. In the absence of the receipt of purchase from the original dealer, RTI will provide warranty coverage extension of six (6) months from the date code of the product. Note: RTI warranty is limited to the provisions set forth in this policy and does not preclude any other warranties offered by third parties who are solely responsible for those other warranties.

Except as specified below, this warranty covers defects in product material and workmanship. The following are not covered by the warranty:

- Product purchased via unauthorized sellers or internet sites will not be serviced—regardless of purchase date.
- Damages caused by accident, misuse, abuse, neglect or acts of God.
- Cosmetic damage, including, but not limited to, scratches, dents and normal wear and tear.
- Failure to follow instructions contained in the Product Installation Guide.
- Damages due to products used in an application or environment other than that for which it was intended, improper installation procedures or adverse environmental factors such as incorrect line voltages, improper wiring, or insufficient ventilation.
- Repair or attempted repair by anyone other than RTI and Pro Control or authorized service partners.
- Failure to perform recommended periodic maintenance.
- Causes other than product defects, including lack of skill, competence or experience of user.
- Damage due to shipment of this product (claims must be made to the carrier).
- Altered unit or altered serial number: defaced, modified or removed.

RTI is also not liable for:

- Damages caused by its products or for failure of its products to perform, including any labor costs, lost profits, lost savings, incidental damages, or consequential damages.
- Damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation, commercial loss, any claim made by a third party or made on behalf of a third party.
- Loss of, or damage to, data, computer systems or computer programs.

RTI's liability for any defective product is limited to repair or replacement of the product, at the sole discretion of RTI.

In cases where the warranty policy conflicts with local laws, the local laws will be adopted.

RTI AMR-220

2x1 Audio Mixer Amplifier

Reference Guide



AMR-220 2x1 Audio Mixer Amplifier

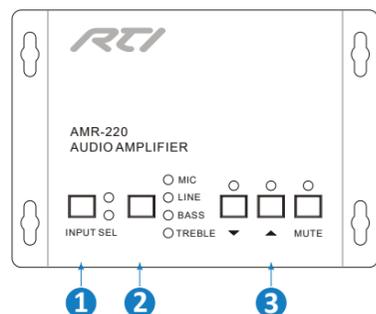
The AMR-220 is a 2x20 Watt Power Amplifier (Class-D), switchable to 1x40 Watt in bridge mode. The amplifier features two stereo inputs (1x3.5mm jack for line in, 2xRCA for L&R) and one balanced MIC input with ducking functions. Additional features of the AMR-220 include input and microphone volume control, bass and treble adjustments, microphone mixing with source audio, and three modes of microphone input support (48 dB gain, 48 dB gain with 48V phantom power, and line level). The AMR-220 has two methods of control: push button and RS-232.

The AMR-220 provides superior quality and reliability as well as these features:

- Supports stereo audio output 2x20W@40ohm, and mono output 1x40W@80ohm in bridge mode.
- Three audio output mode, supports STEREO, MONO and BRIDGE.
- Ducking function.
- Three-level MIC input, supports condenser microphone, dynamic microphone and wireless microphone.
- MIC port can support balance/unbalance signal with effective external noise suppression.
- Two stereo audio inputs, switchable by button and RS-232.
- Volume/Bass/Treble controllable by buttons and RS-232.
- Fast switching speed for good performance.
- Compact form factor with noiseless convection cooler.
- LED indicator, for power and working status.
- Antistatic case design provides protection for long-term, stable performance.

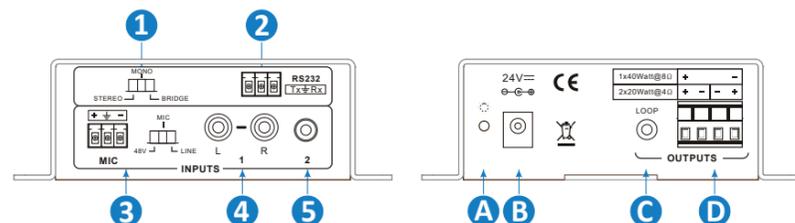
Installation & Operation

TOP PANEL DESCRIPTION



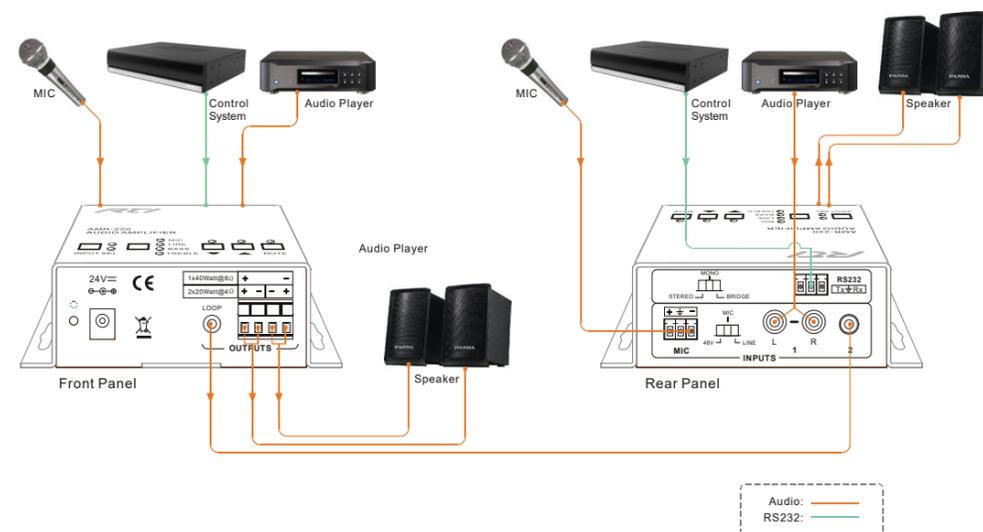
No.	Name	Function
1	Audio Input Selection	Press button to select the input audio source. Once selected, the corresponding LED will be lit. <ul style="list-style-type: none"> 1 is for dual mono audio input (2 RCA connectors for L&R) 2 is for stereo audio input (3.5mm mini jack).
2	Audio Control	Press this button to select the MIC or Line volume level or the Bass and Treble level. Once selected, use the Up/Down arrow buttons to adjust level.
3	Audio Adjustment	To adjust levels up/down or mute the corresponding audio. <ul style="list-style-type: none"> ▼ : Adjust level down (Ex. Turn down the volume) ▲ : Adjust level up (Ex. Turn up the volume) MUTE: Mute the output.

FRONT AND REAR PANEL DESCRIPTION



No.	Name	Function
1	Output Mode Selector	3-pole switch for output mode. STEREO – Stereo audio signals will maintain stereo audio on the outputs; 20 watts per output. MONO – Stereo audio signals will be summed to dual mono signals on the outputs; 20 watts per output. BRIDGE – Stereo audio signals will be summed to a single, high output audio output; 40 watts total output.
2	RS-232	3-pole captive screw connector for serial control, it can be connected with control system (Use a 3-pole captive to 9 pin female D connector) to control AMR-220.
3	Microphone Input	3-pole captive screw connector for microphone input. Use the switch to the right to select the input type: 48V (for condenser microphone), MIC (for dynamic microphone) and LINE (for line audio).
4	Audio Input 1	2 x RCA L&R stereo audio inputs.
5	Audio Input 2	3.5mm mini jack for stereo audio input for connection to an audio source or to the LOOP output of 2nd AMR-220.
A	Power Indicator	LED lights red when powered on.
B	Power Port	To connect with the power adapter (24V DC).
C	LOOP	If a second AMR-220 is required, plug a 3.5mm TRS to 3.5mm TRS cable between the LOOP output and Audio Input 2 of the second AMR-220.
D	Outputs	To connect with audio output devices, such as speakers (The connection type of speakers depends on the audio output mode: STEREO, MONO or BRIDGE).

CONNECTION DIAGRAM



BUTTON CONTROL



Audio Switching

The INPUT SELECT button will switch between:

- Input 1: RCA analog audio input.
- Input 2: 3.5 mm TRS input.

Volume and EQ Control

- The LEVEL SELECT button will switch between MIC, LINE, BASS, and TREBLE levels.
- When MIC or LINE are selected, the Down, Up, and Mute buttons will adjust the volume or mute the selected input.
- When BASS or TREBLE are selected, the Down and Up buttons will adjust the bass or treble levels of the analog audio input signal.

RS-232 CONTROL

To control the AMR-220 using serial communication from a control system, wire the RS-232 output of the control system to the AMR-220 RS-232 3-pole screw connector (pinout: Tx-Gnd-Rx).

- Baud rate: 9600
- Data bit: 8
- Stop bit: 1
- Parity bit: none

INSTALLATION

Visit the RTI dealer portal (www.rticorp.com/dealer) for additional instructions and specifications.

NOTE: Features and specifications subject to change without notice.