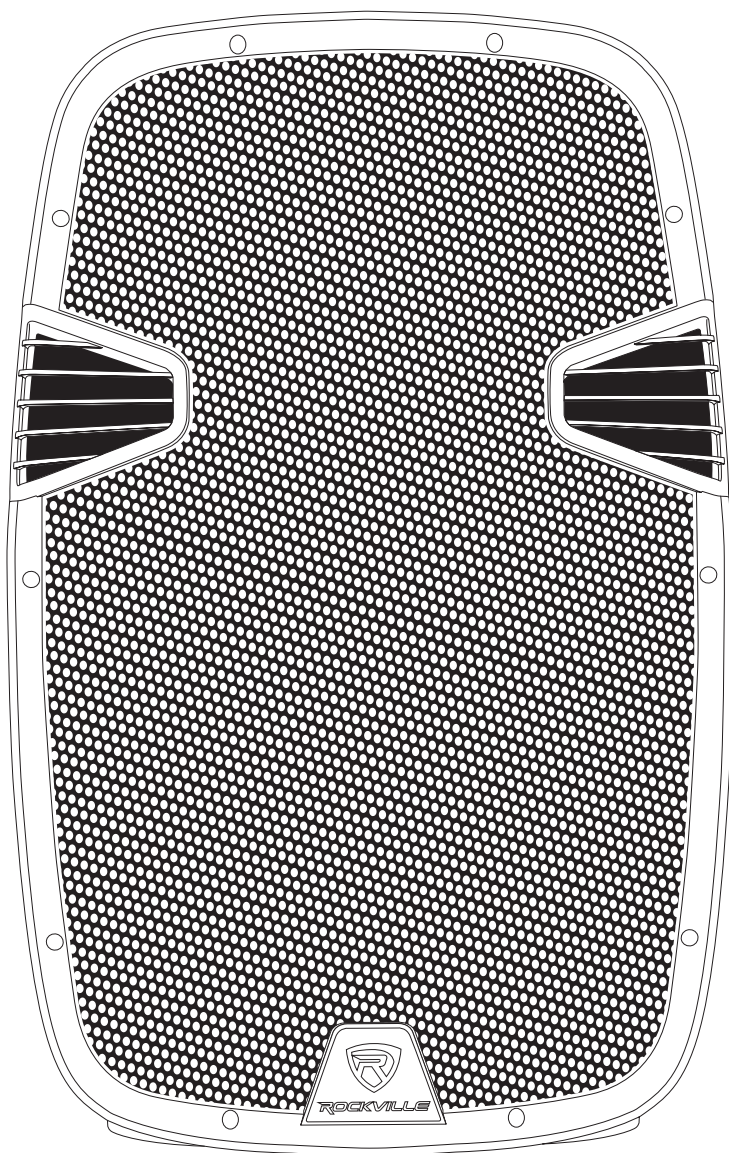


ROCKVILLE



OWNER'S MANUAL
RAM12BT V2/RAM15BT V2

Thank you for purchasing this Rockville RAM Bluetooth v2 pro audio speaker.

When you're looking for a quick sound reinforcement solution, you don't want to be bogged down with a bunch of cables, stands, and extra PA gear. The Rockville RAM BT V2 portable system is what you want to have on hand. This all-in-one PA has everything you really need to be heard. You can plug in your guitar or keyboard, and even your MP3 player or BT music source and be up and running instantly. What's more, you can stand-mount your speakers so they can really be heard even at a distance. Complete with two wireless microphones and the ability to sing along to your music or make speeches. With a high quality rechargeable battery, compact light-weight design, and integrated carrying handles and wheels, you can easily pick up and go with your Rockville portable all in one system.

We have spared no expense in manufacturing these speakers to meet the highest quality standards. With proper care and installation this unit will provide you with the highest levels of sound quality. We hope that this unit will bring you years of performance and reliability. Our goal to you and to your audience is to hear "live performance sound" the way it was meant to be experienced.

Please read this installation guide carefully for proper use of your RAM Bluetooth v2 pro audio speaker. Should you need technical assistance please call our technical help line at 1-646-758-0144, Monday through Friday, 9am to 5pm EST.

IMPORTANT SAFETY INSTRUCTIONS



- To reduce risk of electric shock, never open the unit. There are no user serviceable parts, refer service to an authorized Rockville service center.
- Do not expose this unit to any kind of moisture.
- Please ensure that the unit is situated in a properly ventilated area.
- Make sure the unit is placed on a level and stable surface.

SPECIFICATIONS

RAM12BT V2

- Power: 600 Watts Peak/300 Watts Program/150 Watts RMS
- 4 Ohm 1.5" KSV High Power Voice Coil
- 25mm, 8 Ohm Titanium Diaphragm Tweeter
- 60oz Magnet Motor Structure

RAM15BT V2

- Power: 800 Watts Peak/400 Watts Program/200 Watts RMS
- 4 Ohm 2" KSV High Power Voice Coil
- 34mm, 8 Ohm Titanium Diaphragm Tweeter
- 80oz Magnet Motor Structure

Features

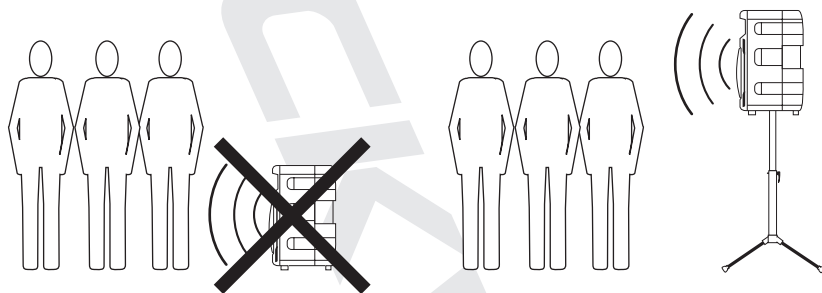
RAM12BT V2/ RAM15BT V2

- Bluetooth signal input. Now you can input any audio signal from your Bluetooth enabled music player or phone. No cables necessary!
- USB/SD digital MP3/FM radio music player. Input audio signals, special effects, or any pre programmed audio file and amplify it through your system.
- Wireless remote control. Enjoy the added convenience of being able to adjust any of the MP3 player functions, including volume, from the included wireless remote.
- Wireless VHF Mic Capability (2 wireless mics included) with independent volume control.
- Digital signal processor for “Delay/Echo” effect. Now you can control the echo delay. No external signal processing unit necessary, the digital effect is built in.
- LCD screen displays MP3 functions including BT connectivity.
- Unit features one XLR mic input and a 1/4" TRS input for added versatility.
- High-power 2-way pro sound reinforcement speaker system for live sound and playback applications.
- Compact and light weight system delivers distortion free sound even at extreme SPL.
- Linear Class AB amplifier technology: high power, transparent sonic performance.
- Internal switch-mode power supply for low distortion audio with superior transient response.
- 5-Band Graphic Equalizer allows you to custom tailor your sound to your venue by boosting and cutting specific frequencies to improve sound quality and clarity.
- State-of-the-art Japanese made pure titanium-diaphragm compression driver for crystal clear high-frequency reproduction.
- Ultra-wide dispersion, 40° large-format horizontal wave guide horn molded directly into the cabinet.
- Ultra-low noise Mic input via XLR & 1/4" TRS stereo jack with independent level controls.
- RCA line input with separate level adjustment.
- RCA line output for linking of additional components.
- 35mm pole socket for stand mounting.
- Built-in wheels and retractable top handle for increased portability and transport convenience.
- High-quality components and exceptionally rugged high impact ABS construction.
- Amplifier clip limit LED indicator & power LED cabinet rear.
- Built in 12V/9A battery with optional external battery connection for extended battery life. Internal battery will charge when unit is plugged in.
- External user serviceable fusing.

Setting Up Your RAM BT V2 Professional Sound System

Your RAM BT V2 unit is set up to produce the full spectrum of sound from its woofer and tweeter horn combination. The lower frequencies seek out the floor of the room they are playing and travel along the floor and walls. The tweeter horn is more directional. Hence when setting up your system its more important to make sure that the tweeter horns are not blocked by any furniture and are located / aimed at ear level to the listening audience. Woofer aiming is not as critical as explained previously due to the nature of the woofer sounds able to travel through various paths even when blocked.

It is therefore recommended that when setting up your system you set up your speakers on speaker stands, such as the Rockville model RVES05 (not included) so that the tweeter sounds will radiate above the listening crowd. This will guarantee optimum sound dispersion and achieve clear vocal sound reproduction.



How To Avoid Irritating Feedback

The placement of your microphone is critical in avoiding feedback through your RAM BT unit. Never set up your microphone in front of the speaker. Always set up your microphone behind the speaker. When approaching the speaker to make any adjustments, we recommend approaching the speaker from the rear and not walking directly towards the front of the speaker.



Stage Monitor Setup

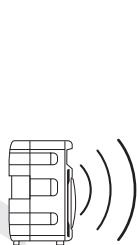
Unlike a PA setup which face the crowd, stage monitors are set up to face the performer on stage and to direct the sound towards them. This presents a particular problem as now feed back may occur. To avoid stage monitor feedback the following precautions should be taken.

1. Choose a microphone with high directivity, i.e. cardioid or hyper-cardioid polar pattern.
2. Never point the microphone directly down in front of the speaker. Holding the microphone in normal position will allow you to be closer to the stage monitor without feedback.
3. See illustration below as to position of microphones when mounted in stand.
Cardioid polar pattern microphones should always be at a 90 degree angle to the axis of the stage monitor. Hyper Cardioid polar pattern microphones should be positioned at an acute angle to the stage monitor.

You may choose to add a feedback eliminating processor to your system for additional flexibility on stage.



Cardioid Polar Patter



Hyper Cardioid Polar Patter

A Word About System Volume Controls

There is really only one volume control on the RAM BT unit, that is the knob marked MASTER.

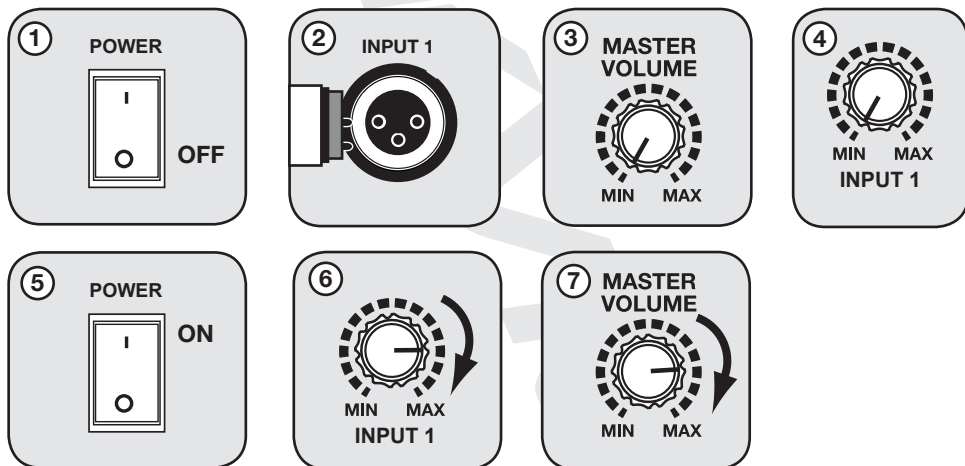
The Mic In Balanced volume controls as well as the wireless mic volume controls are matching devices to match the preamp voltages of the microphones with your RAM BT unit. Never turn these up to maximum unless indicated by the instructions below. With a properly matched signal your system will produce less distortion, be subject to less feedback, and will produce louder, cleaner and clearer sound. Use the Master control as your volume once all inputs are matched properly.

Microphone Presentations

Your RAM BT features two ultra-low noise Mic/Line inputs via XLR & 1/4" TRS stereo jacks.

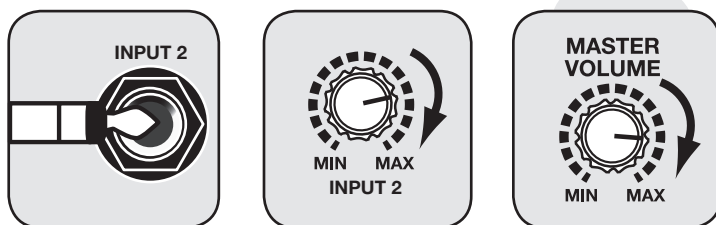
1. Make sure the RAM BT unit power switch is in OFF position.
2. Plug in your microphone.
3. Keep Master Volume at Min position.
4. Turn Input 1 Level to Min position.
5. Switch on the RAM BT unit.
6. Slowly turn Input 1 Level clockwise until you achieve appropriate volume setting
Proper function is achieved when you hear audible distortion. The above adjustment matched the microphone preamp to the input volume of the RAM BT unit.
7. Now turn up the Master Volume to necessary volume by rotating clockwise.

Always stand behind the RAM BT unit when making your microphone adjustments to avoid feedback distortion.



Multi-Microphone Hook Up

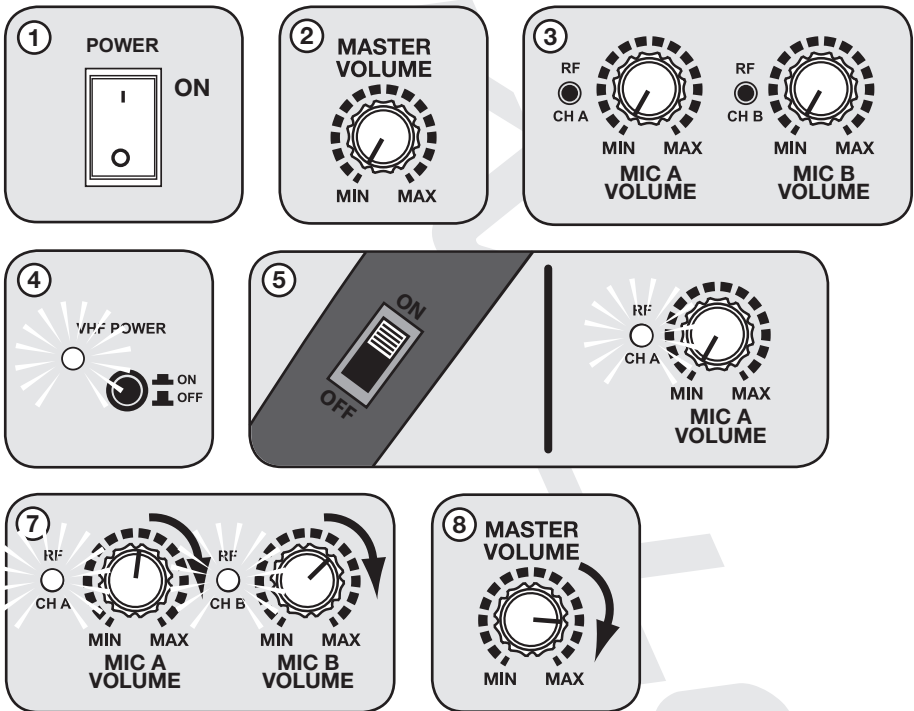
Set up microphone #1 as instructed above. Using same set up instructions, insert microphone #2 into ultra-low noise 1/4" TRS input which features its own separate Volume control. Use this Volume control to increase the microphone level and balance the inputs between the two microphones before attempting to adjust the Master Volume.



Wireless Microphone Set-Up

Your RAM BT unit comes with two wireless microphones. To connect the microphones to the unit follow these steps:

1. Make sure the RAM BT unit power switch is in ON position.
2. Keep Master Volume at Min position.
3. Keep both Mic A Volume and Mic B Volume and Channel B wireless Mic Volume at Min position.
4. Press the VHF power on button (red indicator LED should be on).
5. Switch on one microphone. It should automatically connect to the corresponding channel and the LED for that channel should light up.
6. Repeat steps 1 through 5 for the second microphone.
7. Use the Mic A / Mic B volume controls to adjust each microphone's volume.
8. Now turn up the Master Volume to necessary volume by rotating clockwise.

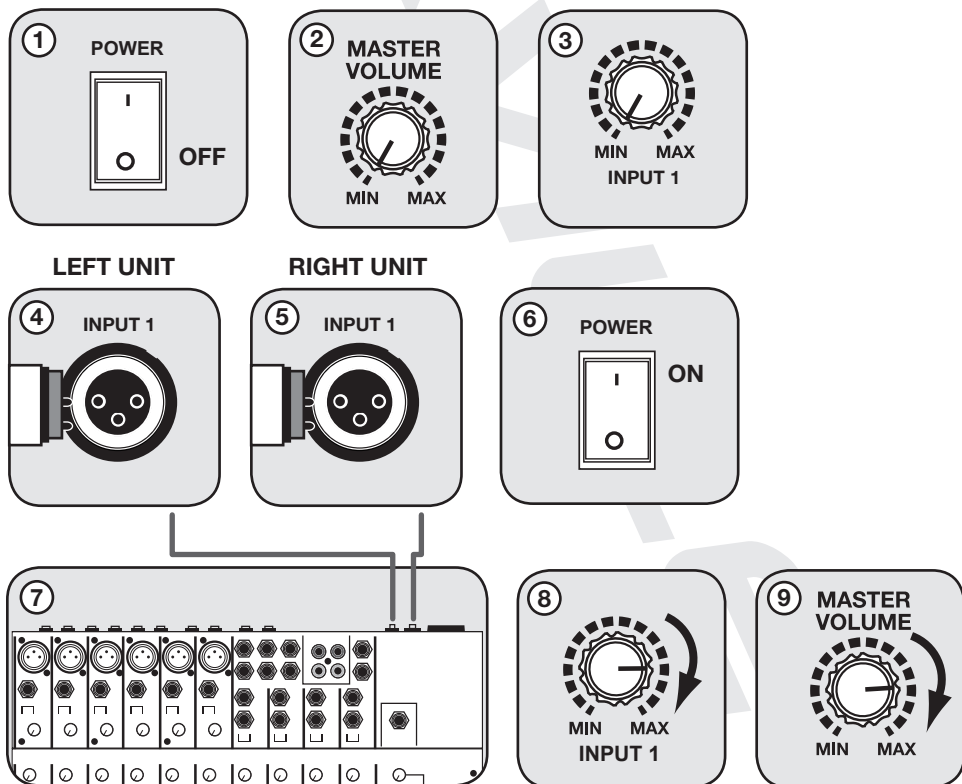


Public Address / Concert Mixer Setup

When setting up for larger venues, a mixing console becomes a critical piece of equipment for appropriately mixing signals from multiple inputs such as singers, speakers, effects devices, musicians and of course allows for multiple speaker utilization.

To connect a mixing console begin by.

1. Make sure the RAM BT unit's power switches are in the OFF position.
2. Turn Master Volume to 0 position (both units).
3. Turn Input 1 Level to 0 position (both units).
4. Connect the LEFT OUTPUT of mixer to the Mic In connection of your Left RAM BT unit.
5. Connect the RIGHT OUTPUT of mixer to the Mic In connection of your Right RAM BT unit.
6. Switch ON your RAM BT units.
7. Slowly raise the level of the mixer output to the 0dB level position.
8. Slowly turn Input 1 Level clockwise until you achieve appropriate volume setting
Proper function is achieved when you hear audible distortion. The above adjustment matched the mixer preamp to the input volume of the RAM BT units.
9. Turn Master Volume up to achieve proper volume (both units).

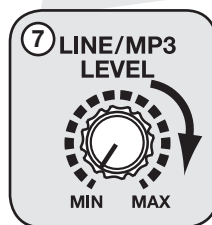
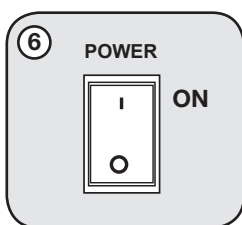
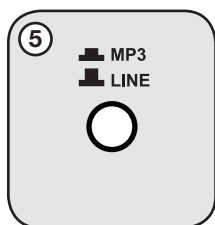
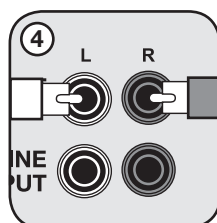
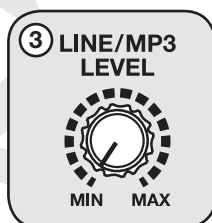
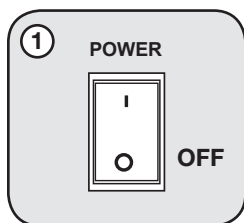


Line Input Feature

You can use the Line Input function when you wish to hook up an additional stereo signal source: Mixers, Keyboards, CD players, DVD music players, MP3 players etc. can be plugged directly in to the RCA jacks labeled LINE INPUT.

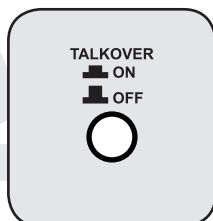
To connect a mixer, keyboard, CD, DVD music player or MP3 player.

1. Make sure the RAM BT unit power switch is in OFF position.
2. Turn Master Volume to 0 position.
3. Turn Line/MP3 Level control to 0 position.
4. Connect the music source unit to the RCA jacks marked Line Input.
5. Use the push button (located next to RCA jacks) to select between Line input or MP3 input.
6. Switch ON your Power Gig unit.
7. Slowly turn the Line/MP3 Level control clockwise until you hear audible distortion, then turn it down slightly. This indicates the maximum input voltage gain is matched and set properly.
8. Turn Master Volume up to achieve proper volume.



Talk over Feature

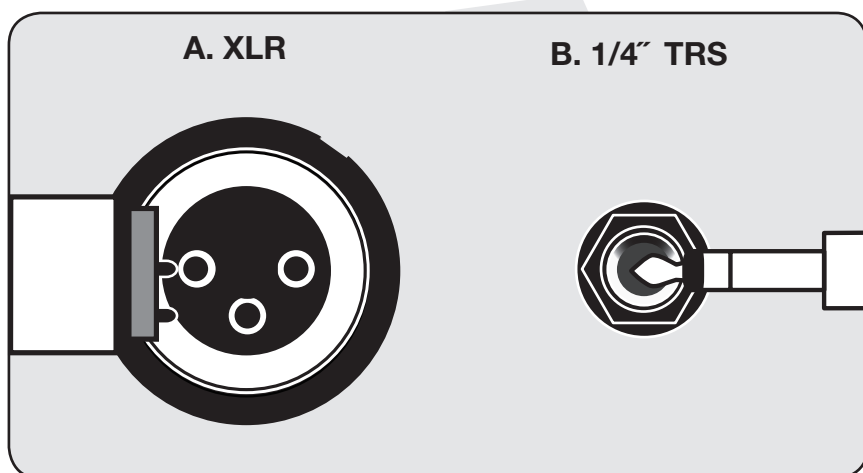
In the ON position the TALK OVER function gives the microphone priority over all other features so that the microphone's volume level will be higher. When the TALK OVER function is in the OFF position, the microphone can be used in conjunction with any other feature (Bluetooth, MP3, SD, etc.) at the same sound level.



XLR / 1/4" TRS Inputs

A. Mic input port accepts XLR type connectors and is designed to suit a wide range of unbalanced signals. We recommend using professional balanced dynamic, condenser or ribbon mics as they are least likely to be affected by interference. Low cost, high impedance mics can be used, however the level of background noise is higher since an unbalanced circuit is far more susceptible to interference.

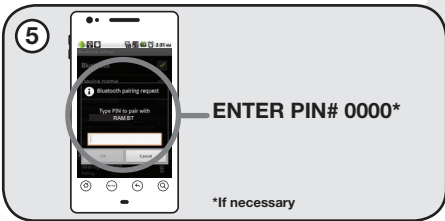
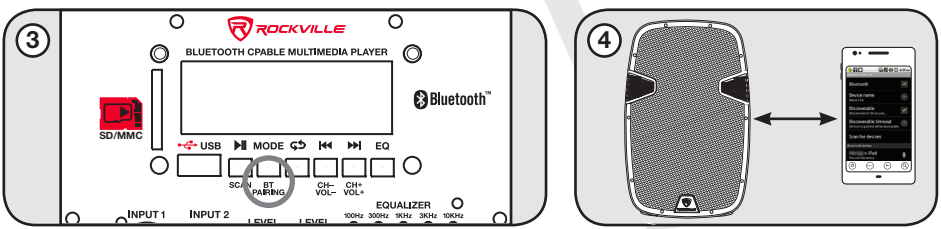
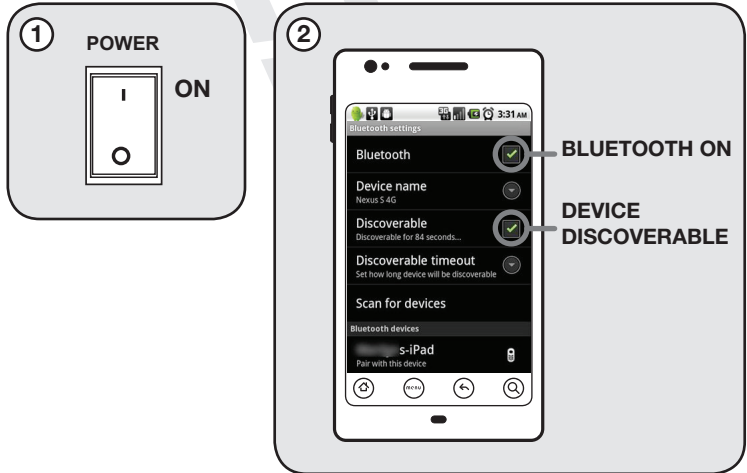
B. Line input port accepts unbalanced 1/4" TRS plugs.



Bluetooth Pairing

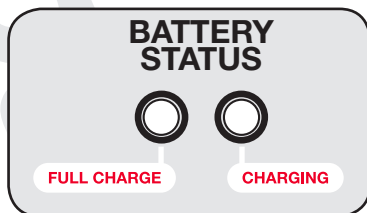
To connect your iPod, iPhone, MP3 player, Android phone or any other Bluetooth capable device follow the steps listed below.

- 1. Make sure the RAM BT unit's power switch is in the ON position.
- 2. Turn on the Bluetooth feature on your device and ensure that it is in "discoverable" mode.
- 3. Push the Mode button on your RAM BT unit until you are in Bluetooth mode.
- 4. Once in Bluetooth, the unit should automatically pair with your device. If not, look for "ROCKVILLE" on your device and select it.
- 5. If you are using an older device with Bluetooth 2.0 and below, your phone may prompt you to enter a PIN number in order to pair with the RAM BT unit. Please use the following pin: 0000.



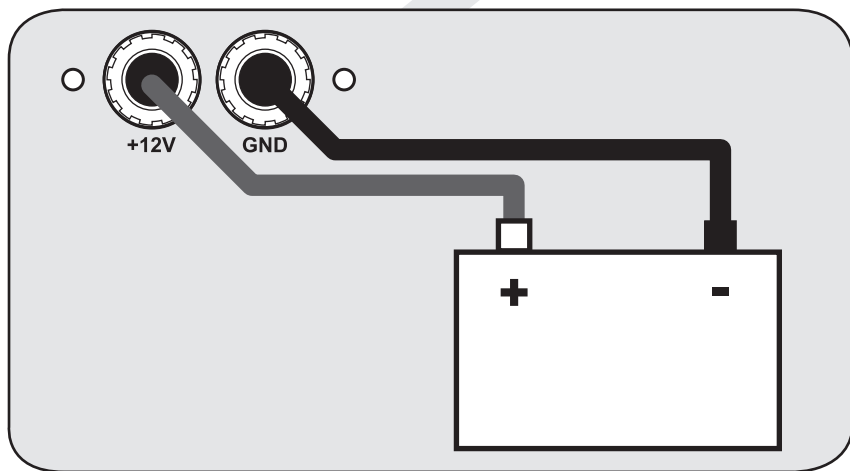
Built-in Battery

This unit includes a built-in 12 volt, 9 amp battery. This convenient features allows you to use your RAM BT for up to 12 hours in any situation where outlets are not readily available. No need to concern yourself with extension cords and the such. The unit comes with battery status LED indicators to let you know the status of the battery and when to charge the battery. The battery can run for up to 12 hours on a full charge. To charge the battery simply plug it into an outlet. Battery takes approximately 6 hours to charge. The battery is fully charged when the left LED is on and the right LED is off. While charging the left LED is off and the right LED is on. When the battery is drained it is important that you immediately turn off your unit to prevent damage to the battery.



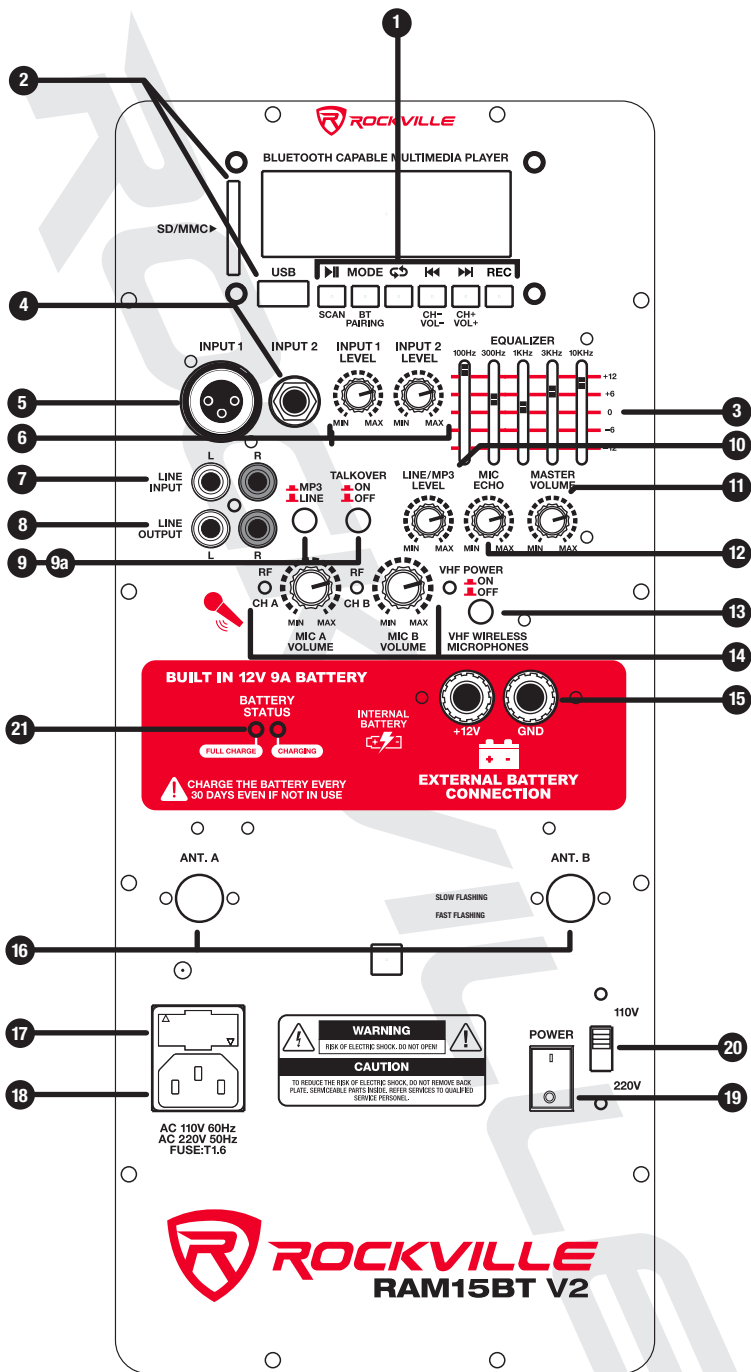
External Battery Power

As well as having a built-in battery, the RAM BT also has the ability to power up using an external battery. Simply hook the unit up to any 12V car battery or 12V power source. We recommend you use spade terminals to connect the power cables to the unit's power and ground inputs. Remember, RED is POSITIVE (+12V) and BLACK is NEGATIVE (-).



Notes

Handwriting practice lines with a large, light gray watermark reading "Learn to Write" diagonally across the page.



1. MP3 Player controls.

- Press Play button once to play track, press again to pause. Press and hold scan stations when in FM mode.
- Mode control switches between input modes: Bluetooth, USB, SD / MMC, and Radio.
- Previous / Next track buttons also serve as volume controls. For track control quickly press button. For volume control press and hold button.
- EQ presets

2. USB and SD/MMC Card input.

3. 5 band equalization control panel.

- Adjust the low frequencies to $\pm 12\text{dB}$
- Adjust the mid frequencies to $\pm 12\text{dB}$
- Adjust high frequencies to $\pm 12\text{dB}$

4. Input 2 port accepts balanced and unbalanced $\frac{1}{4}$ " TRS plugs. Its main purpose is for microphone input but can accept signals from a variety of sources such as keyboards, electronic drums, tape recorders, mixers, etc. When you use an unbalanced $\frac{1}{4}$ " TRS plug, the line input automatically turns the ring into ground.

5. Input 1 port accepts XLR type connectors. Its main purpose is for microphone input but can accept signals from a variety of sources such as keyboards, electronic drums, tape recorders, mixers, etc. We recommend using professional balanced dynamic, condenser or ribbon mics as they are least likely to be affected by interference. Low cost, high impedance mics can be used, however the level of background noise is higher since an unbalanced circuit is far more susceptible to interference.

6. Input 1 and Input 2 level controls.

7. MP3 / Line RCA input.

8. MP3 / Line RCA output.

9. MP3 / Line input selector switch

9a. Talk over On / OFF selector switch

10. MP3 / Line level control.

11. Master volume control.

12. Mic Echo effect control.

13. Wireless Microphone VHF transmitter power control.

14. Mic A and B connection indicator LEDs and Volume controls.

15. Built in 12V/9A battery with optional external battery connection.

16. Wireless microphone antennas.

17. Fuse compartment.

18. IEC AC power socket.

19. Power switch.

20. Variable voltage selector switch (110V / 220V)

21. Internal battery status indicator (see previous page for indications)

Troubleshooting

PROBLEM	SOLUTION
No power	<ol style="list-style-type: none">1. Make sure the unit is plugged in and the power switch is in the ON position.2. Check that the power cable is plugged in tightly to the unit.3. Check and replace the fuse if necessary. See fuse replacement diagram on the facing page.4. If people or equipment tend to step and roll over or stretch your power cable it can get damaged. Always try a second cable to test for shorts in original cable. Dispose of original damaged power cables immediately.
No sound/ distorted sound	<ol style="list-style-type: none">1. Check that all appropriate cables are plugged in correctly.2. Check the Master Volume settings.3. Be sure Volume and Level of appropriate channels are set above 0 and matched correctly.4. Be sure your microphone is on.5. If using a mixing console make sure fader and balance are set to center positions and levels are increased.6. Check the MP3/Line button to ensure the proper source is selected.7. If volume and EQ settings are maxed out, turn one of them down as you may be overdriving the unit.
Buzzing sound	Make sure you are using a proper cable. For ¼" cables, there are 3 types: instrument, TS (unbalanced), and TRS (balanced). Check the requirements of the connected gear and the input of the speaker and make sure you are using the appropriate cable.
Mic feedback	Point the mics away from the speaker. Make sure the mics are in back of the speaker, not in front of it.
Poor Mic sound	<ol style="list-style-type: none">1. Make sure the microphones are on and the levels are turned up.2. If using wireless mics, make sure they are on and the volumes are turned up. Make sure the VHF wireless selector button is in the ON position.3. Check wireless mic batteries.
Bluetooth pairing fails	<ol style="list-style-type: none">1. Check to see that both devices are turned on and that your Bluetooth device is discoverable.2. Turn both devices off and then on again.3. Make sure you've selected the proper source.4. Make sure that the Bluetooth device is within 5 feet of the unit.5. Move both devices away from other Bluetooth devices.6. Make sure that the unit is not paired to a previously paired device.
No SD or USB playback	<ol style="list-style-type: none">1. Make sure you've selected the proper source.2. Make sure that the audio files are in the specified format.

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

Responsible party name: Rockville

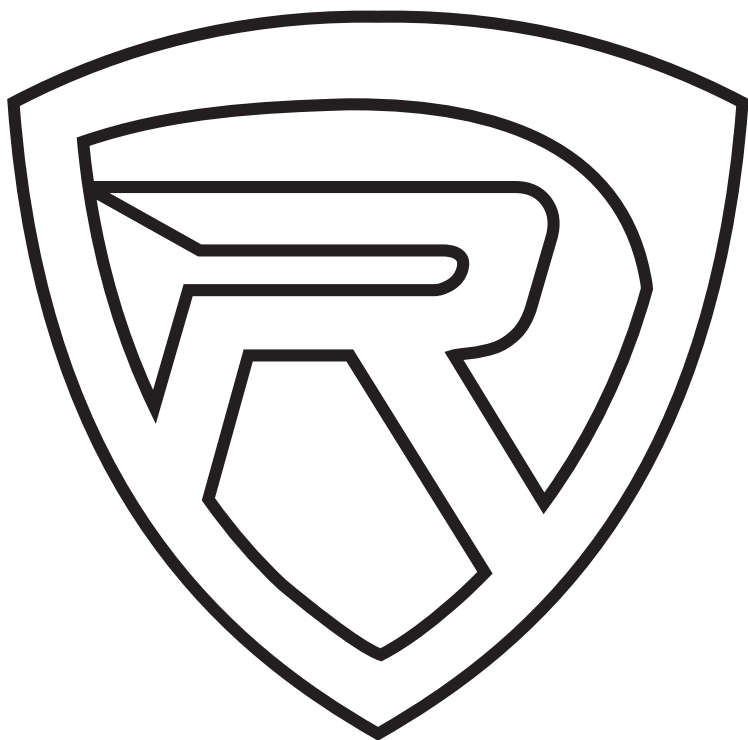
Address: 600 Bayview Ave.
Entrance A
Inwood, NY 11096

Hereby declares that the product(s) RAM BT pro audio speakers comply with FCC rules as mentioned in the following paragraph:

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: 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. 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 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.



ROCKVILLE

RockvilleAudio.com

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