ROCKVILLE

ATOM 8

8 CHANNEL 3500W CLASS D MARINE AMPLIFIER w/BLUETOOTH

OWNER'S MANUAL

ATTENTION: WATCH THIS VIDEO BEFORE FIRST USE!

Who reads manuals?
Scan the **QR code** or go to **rockvillesupport.com/SKU** to access how-to video(s), the owner's manual, and other important information you may need to get the most out of your item.

If you prefer written instructions, please read ahead! *With Rockville you get many options.*

rockvillesupport.com/atom-8w

rockvillesupport.com/atom-8b

Missing items? If you ordered a bundle that includes more than one product and you are missing part of your bundle then it just means your order shipped from two different warehouses. You will receive the remaining items very soon. If you have any concerns or inquiries, feel free to call our customer support center at 1-646-758-0144, 24 hours a day/7 days a week.

Introduction

Thank you for purchasing this Rockville ATOM 8 amplifier. Over the years, the technology used to create audio amplifiers has grown by leaps and bounds. Our competition is satisfied with just continuing to build the same units year after year without thought for improvement, but not Rockville. We consider it our mission to use our expertise in developing the latest technologies and to bring you the absolute best sounding amplifiers on the market and of course at a reasonable price. You will be amazed at the quality and power that these new amps offer.

We have spared no expense in designing these amplifiers, creating the most rugged, reliable, powerful and best performing amplifiers. In fact we are so sure of the quality, that we backup every ATOM 8 amplifier with one year warranty which exemplifies our commitment to the end user. (See enclosed warranty vesseld for details.)

Please read this installation guide vesselefully for proper use of your ATOM 8 amplifier. Read this entire guide fully before attempting your installation. Should you need assistance, please call our technical help line at 1-646-758-0144, 24 hours a day/7 days a week.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: BE AWARE! Use of this amplifier at extreme high volumes for extended periods of time may cause hearing loss and or hearing damage. During periods of prolonged high volume levels it is recommended that you use ear safety devices. Your ability to hear necessary traffic sounds will be impaired. Always keep your sound volume at reasonable levels when operating your vessel. We at Rockville want you listening for many years to come.

- When installing the amplifier, secure it tightly. An unmounted amplifier in your vessel can cause serious injury to passengers and damage to your vvessel if it is set in motion by an abrupt maneuver or sudden stop.
- To reduce risk of electric shock, never open the unit. There are no user serviceable parts, refer service to the Rockville service center.
- Please ensure that the unit is situated in a properly ventilated area.

Installation

Installation Basics

Before you begin your installation, disconnect the NEGATIVE(-) terminal from your vessel's battery. This safety precaution will avoid possible short circuits while wiring your amplifier. Rockville amplifiers operate on 12-volt negative ground systems only. It is recommended that you layout your sound system design on paper first. This will help you during the installation so that you will have a wiring flow chart and not miss-wire any of your components.

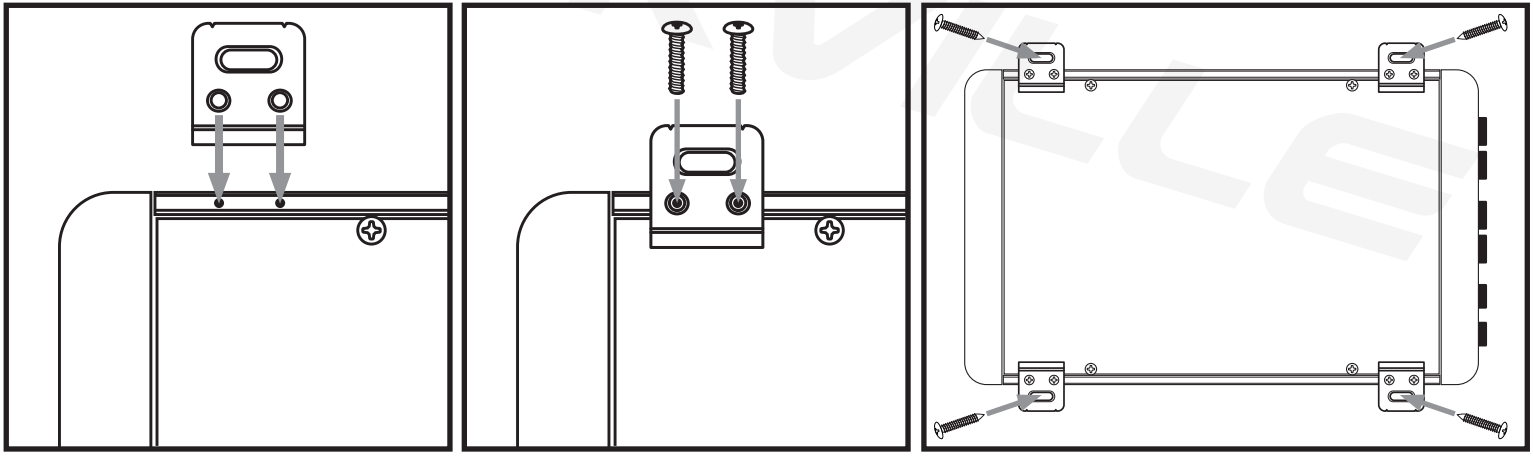
Never install an amplifier in the engine compartment or on the firewall. Please be sure to leave breathing room around the amplifier heat sink so that it can dissipate the heat it produces efficiently. The amplifier can be installed either horizontally or vertically.

When mounting the amplifier, be sure to watch for your gas tank, gas lines and electrical lines. Do not drill or mount any screws where they might penetrate the gas tank of your vessel.

Mounting The Amplifier

The ATOM 8 amplifier features four mounting feet which must be attached to the bottom of the amp via predrilled holes (see diagram below). Choose a convenient mounting location with unobstructed airflow. Lay down the amplifier and mark the location of the mounting holes. Remove the amplifier and drill pilot holes for the screws. Place the amplifier and secure it to the mounting surface using the supplied screws.

DO NOT OVER TIGHTEN THE SCREWS.



Wiring

1. Make sure to disconnect the **NEGATIVE (-)** terminal from your vessel's house battery.

2. Attach an 8-gauge or heavier wire to the amplifier screw terminal marked **GND**. Connect the other end to the house battery's **NEGATIVE (-)** terminal. The connection should be as close to the amp as possible (20 feet or less). For runs of 20 feet or more, you will need 4-gauge or heavier wire. If the black ground wire does not reach the battery, it can be connected to a metal part of the vessel. Make sure that there is no paint or other insulator blocking a good ground connection. When installing multiple amplifiers, mount them in close proximity so that they can all share the same ground point.

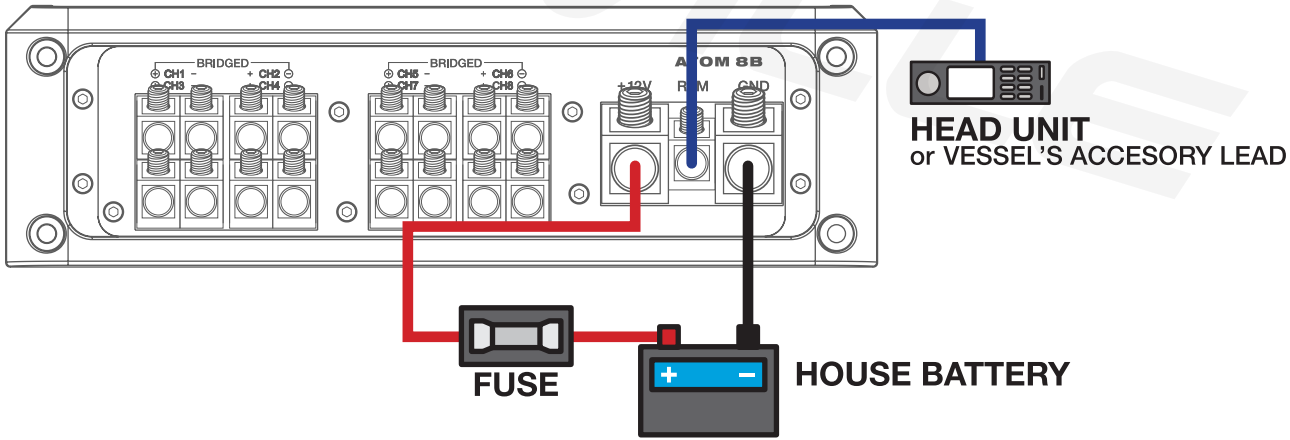
3. Connect the remote terminal to the head unit's remote output using 18-gauge or heavier wire. This connection is responsible for turning the amplifier on and off with the rest of the system. If there is no dedicated remote output, make this connection to the power antenna lead. Should your head unit not have *any* turn-on leads, you can wire the remote terminal to an accessory lead, which turns the amplifier on with your vessel's ignition.

4. Use 8-gauge or heavier wire to connect the screw terminal marked **+12V** to the house battery's **POSITIVE (+)** terminal. In order to protect the battery and electrical systems of your vessel, add an in-line fuse holder within 18″ of the battery. This in-line fuse offers protection against damage from short circuits. The power wire should terminate in a large ring terminal connected directly to the **POSITIVE (+)** terminal. An optional second fuse can be installed closer to the amplifier for additional protection to the amplifier itself. If installing multiple amplifiers, install a distribution block near their location and, using a 4-gauge wire, connect the block to the in-line holder that is connected to the battery.

5. Insert fuse(s) into the in-line fuse holder(s) and check that all connections are properly secured.

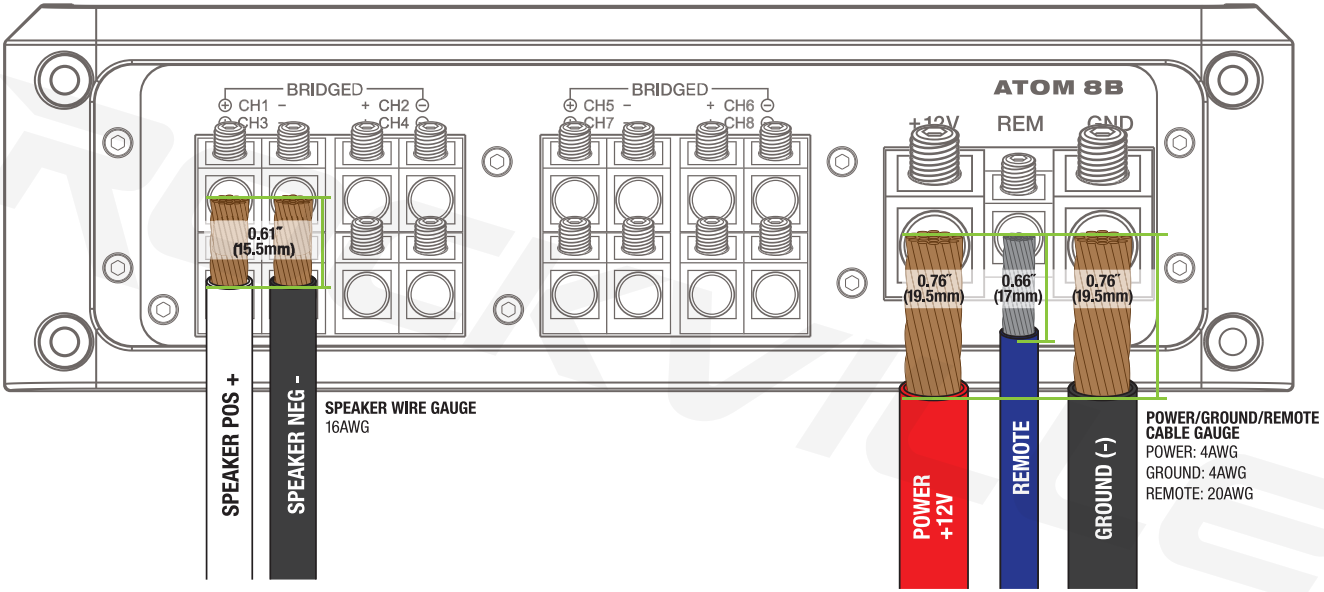
6. Before powering up the system, set all the amplifier's level controls to minimum, the crossover/setting switches to the desired postion, and the head unit's volume to 75%.

We have received amplifiers back to our service department with melted power/ground terminals caused by a bad ground connection. When there is a lack of good ground, heat builds up at the contact screws of the amplifier terminal. Over time the heat generated will begin to melt the terminal. It is a good practice to feel the power and ground wires near the amplifier after using the amp for a while. If the wires feel hot to the touch you probably have a bad or loose connection. If after adjusting your connections the wires still feel hot, you should upgrade to next heaviest gauge wire. As connections can work loose due to vehicle vibrations we recommend periodically tightening all power and ground connections.

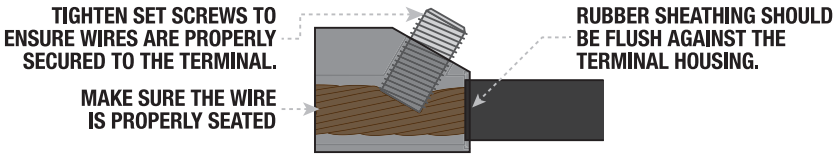


⚠ ATTENTION ⚠

FOR BEST PERFORMANCE BE SURE TO STRIP YOUR WIRE, AT MINIMUM, AS PER THE DIAGRAM BELOW.



TERMINAL DIAMETER: POWER/GROUND = Φ0.33in (8.5MM), REM = Φ0.15in (4MM), SPEAKER = Φ0.15in (4MM)
TERMINAL DEPTH: POWER/GROUND = 0.76in (19.5MM), REM = 0.66in (17MM), SPEAKER = 0.61in (15.5MM)



Settings

Adjusting The System

1. Once the system is operational, set all crossover points to approximate settings. In the case of a basic sub woofer system, set the Low Pass Filter (LPF) crossover at 100Hz or so. Set the Bass EQ to 0 dB. Turn the controls using a small flat head screwdriver. Do not apply any pressure while turning as this might break the control unit.

2. Now set the amplifier's Input Sensitivity. The control accessible on the side of the amplifier marked LEVEL (gain) adjusts the input sensitivity. Turn it counterclockwise to the MIN position. Adjust your head unit's volume gain to the maximum it can go before signal distorts or to the loudest gain, which is usually about 75 – 85% on most head units (you can also use an oscilloscope to see at what gain your head unit distorts). When you begin to hear distortion in the sound, back down one notch. Now turn the LEVEL control on the amp clockwise until you hear distortion. Turn the LEVEL control counterclockwise by a notch or until the distortion is gone. The amp's input sensitivity is now set. It is helpful to have a second person to help you set the gain. When setting up a multi-amp system, set each amplifier's level controls separately. Start off with the bass amplifier, then adjust the highs amplifier's level control to match. Please note that the level control of any vessel amplifier should not be mistaken for a volume control. It is a sophisticated device designed to match the output level of your source unit to the input level of the amplifier. Do not adjust the amplifier level to maximum unless your input level requires it. Your system can also be extremely sensitive to noise when the LEVEL is set to maximum and does not match your input signal. These adjustments need to be made only once when first setting up the system.

3. Once you are satisfied with the level control settings, use any equalizer controls to adjust the system's tonal level for personal preference. Keep in mind that after equalizing, you may have to go back and reset the amplifier's level controls.

If your unit has been professionally installed please do not change the gain settings set by the installer, he is the professional!

Using the Electronic Crossovers

Each set of channels (1 – 4 & 5 – 8) on the ATOM 8 amp has its own fully adjustable 12dB per octave crossover with differential circuitry. This makes the ATOM 8 ideal for subwoofers (sealed and vented), full range speakers, midrange speakers, and even tweeters.

- **Coaxial or component speakers:** Set the CROSSOVER switch to FULL (preferred) or HPF. Now the HPF control will adjust the high-pass frequencies between 50Hz – 250Hz.
- **Low-Pass/Subwoofer systems:** Set the CROSSOVER switch to LPF. Now the control marked LPF will adjust the low-pass frequencies from 50Hz – 250Hz. A frequent mistake made is setting the low-pass frequency too low, especially when using vented subwoofer enclosures. We recommend that for most installations you do not set the frequency knob lower than 80Hz.

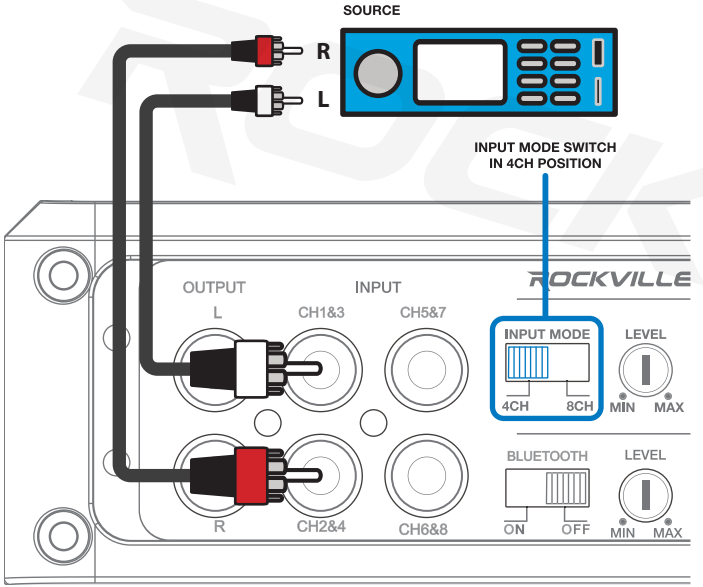
Audio Preamp Input

These amps feature RCA pre amp inputs. Run RCA cables from your sound source to the amplifier inputs. Be sure to run the RCA cables on the side of the vessel opposite to the side used to route the power and ground leads of the amplifier. We suggest you use high quality, shielded RCA patch cords to help reduce and eliminate unwanted electrical noise to your system. Use good quality RCA interconnect cables. Cheaper cables usually have poor shielding that can cause interference pickup.

Input Configurations

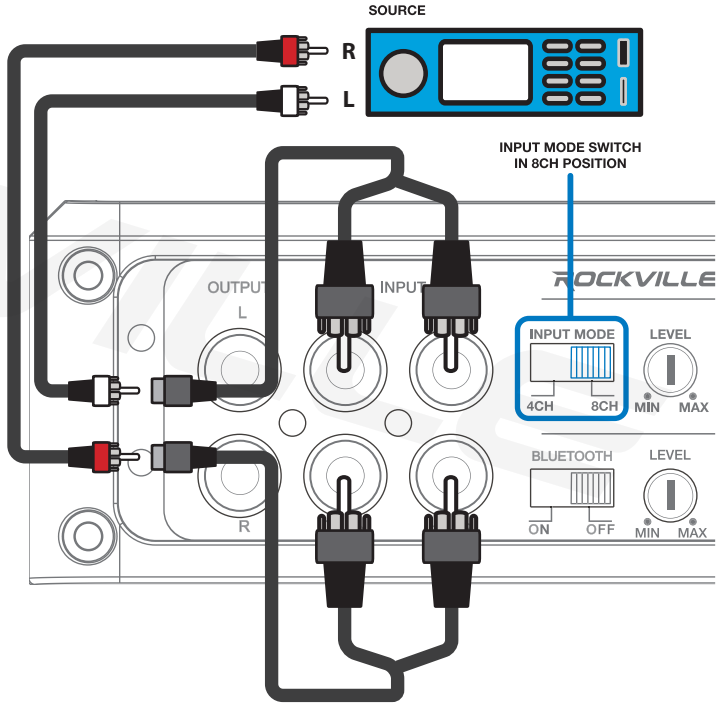
2 Channel Input, 4 Channel Mode

If your head unit has one single pair of RCA outputs, use a male to male RCA cable to send the Left channel signal to the channel 1&3 input jack. Use a second male to male RCA cable to send the Right channel signal to the channel 2&4 input jack. Set the Input Mode Switch to 4Ch. Output will occur on all 8 channels. There will be Left and Right balance.



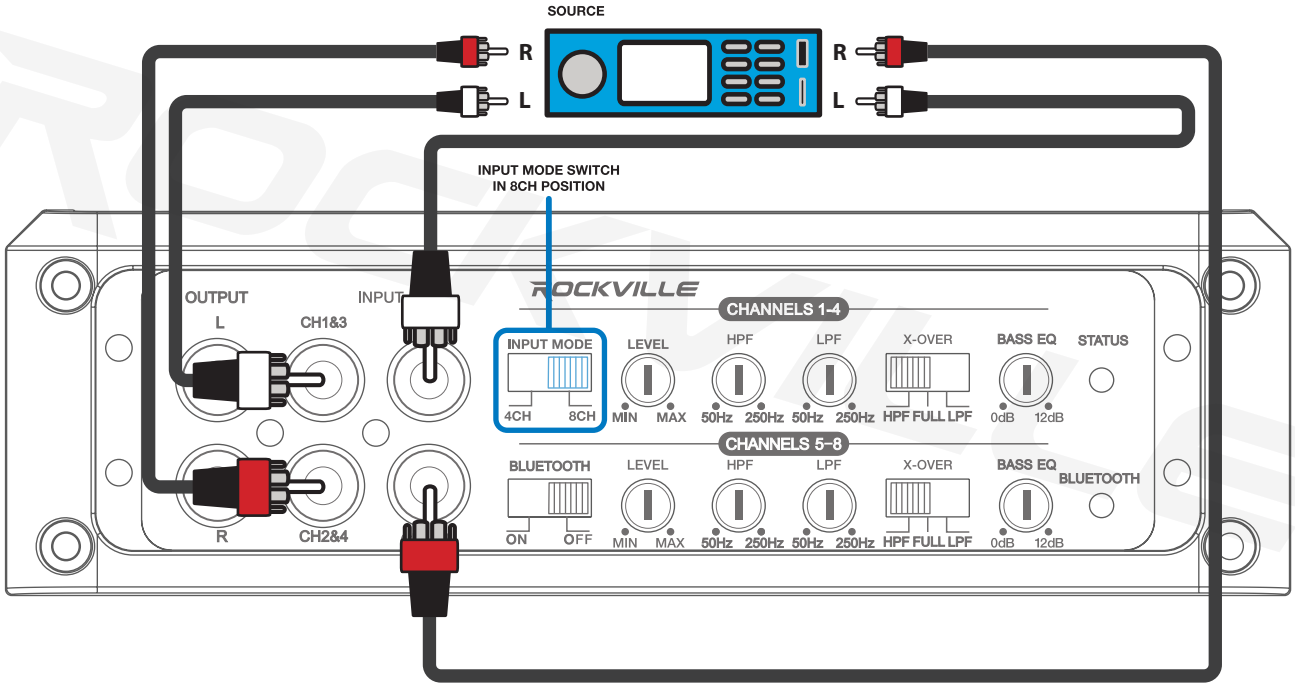
2 Channel Input, 8 Channel Mode

If your head unit has one single pair of RCA outputs, use a female to dual male Y adaptor to send the Left channel signal to the channel 1&3 and channel 5&7 input jacks. Use a second female to dual male Y adaptor to send the Right channel signal to the channel 2&4 and channel 6&8 input jacks. Set the Input Mode Switch to 8Ch. Output will occur on all 8 channels. There will be Left and Right balance.



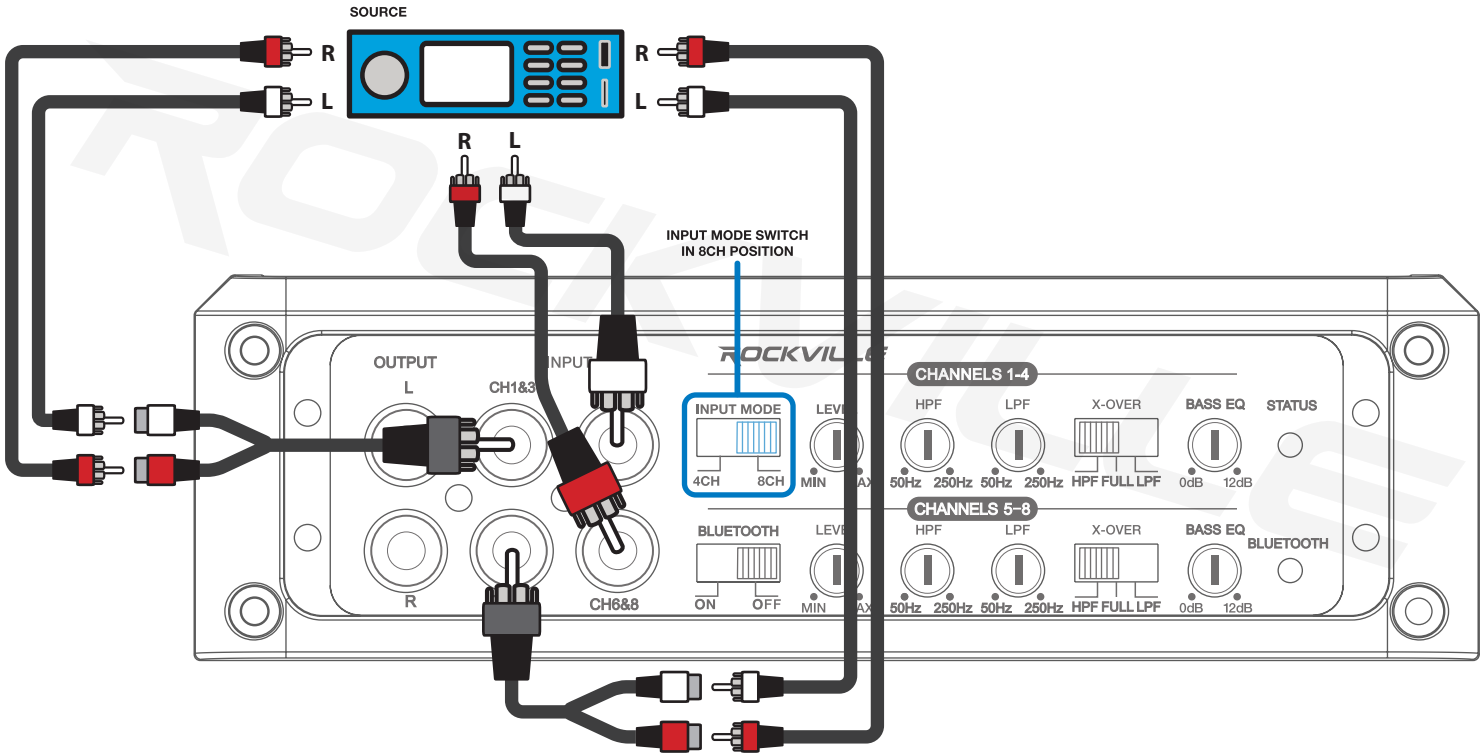
4 Channel Input

If your head unit has two pairs of RCA outputs, input Front Left and Front Right in to amplifier channels 1&3 and 2&4 input jacks. Rear Left and Rear Right in to amplifiers channels 5&7 and 6&8 input jacks. Set the Input Mode Switch to 8Ch. Output will occur on all 8 channels. There will be Left and Right balance and Front to Rear fader with constant subwoofer.



6 Channel Input

For head units with two pairs of RCA outputs and a subwoofer output; use a dual female to male Y adaptor to send the Front Left and Front Right output to the channel 1&3 input, use a second dual female to male Y adaptor to send the Rear Left and Rear Right ouput to the channel 2&4 input. The signal from the Subwoofer Left output will be sent to the channel 5&7 input and the signal from the Subwoofer Right output will be sent to the channel 6&8 input. If your head unit has only a single subwoofer output, use a male to dual male Y adaptor to send the signal to the channel 5&7 and channel 6&8 inputs respectively. Set the input mode to 8Ch. Output will occur on all channels. There will be Left and Right balance and Front to Rear fader with constant subwoofer.

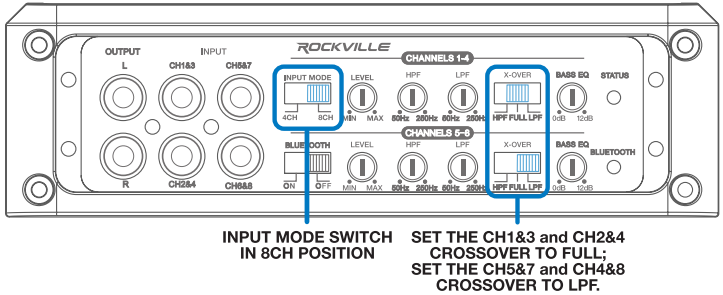


Output Configurations

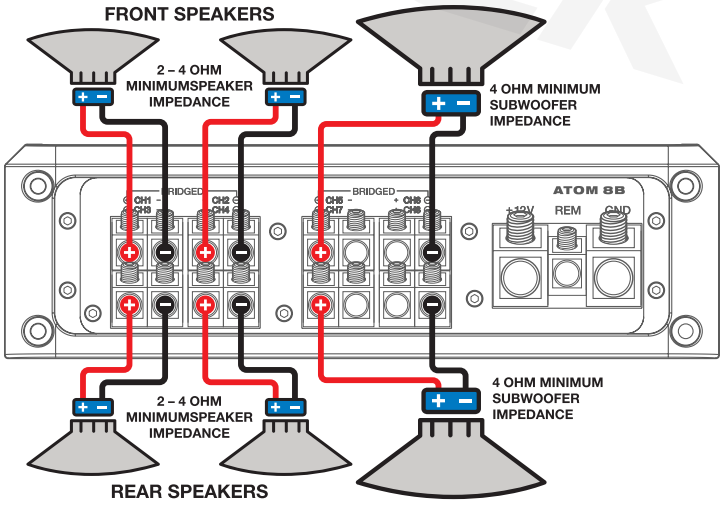
Four or Eight Full Range Speakers with Two or Four Subwoofers

Connect four full range speakers on channels 1&3 and 2&4 being vesseleful not to load any single channel below 2 ohms stereo. Set the corresponding crossover mode switch to Full Range. Alternately, you can connect 8 full range speakers (2 per channel) on channels 1&3 and 2&4.

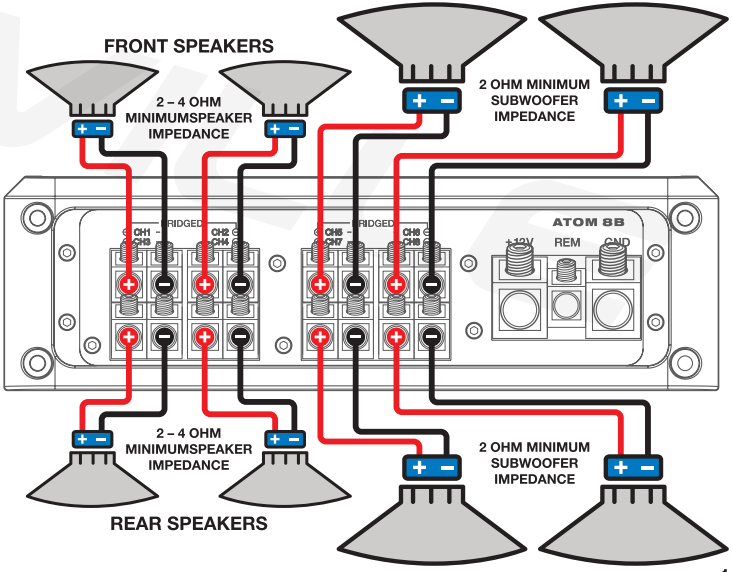
Connect two woofers, one each bridged, to ch5/ch6 and ch7/ch8; or connect 4 woofers, one each on channels 5&7 and 6&8. Be vesseleful not to load any single channel below 4 ohms. Set the corresponding crossover mode switch to LPF.



4 Full Range Speakers w/2 Subwoofers

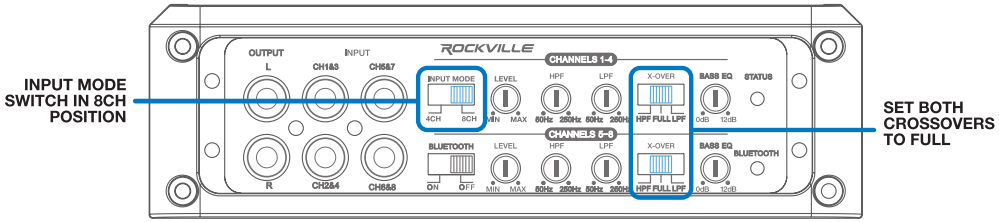


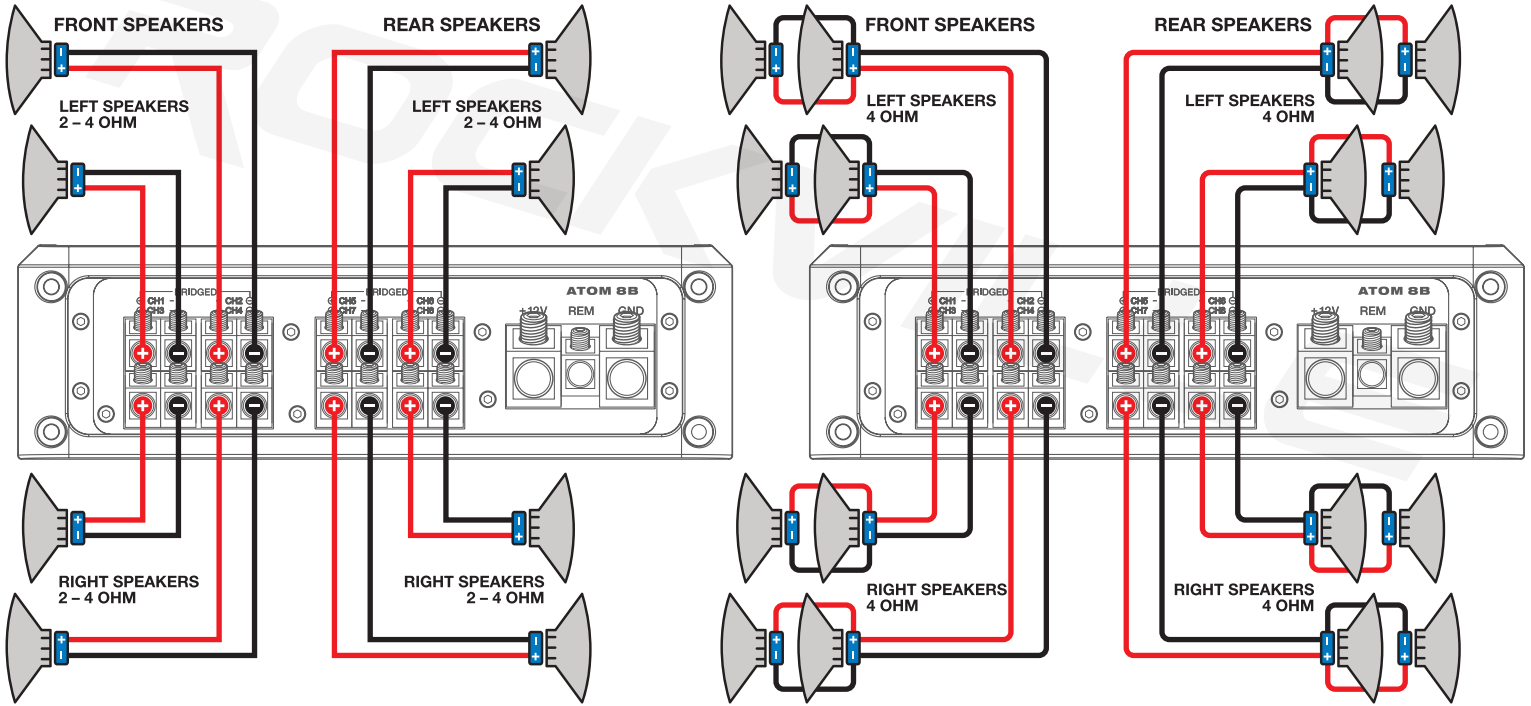
4 Full Range Speakers w/4 Subwoofers



Eight or Sixteen Full Range Speakers

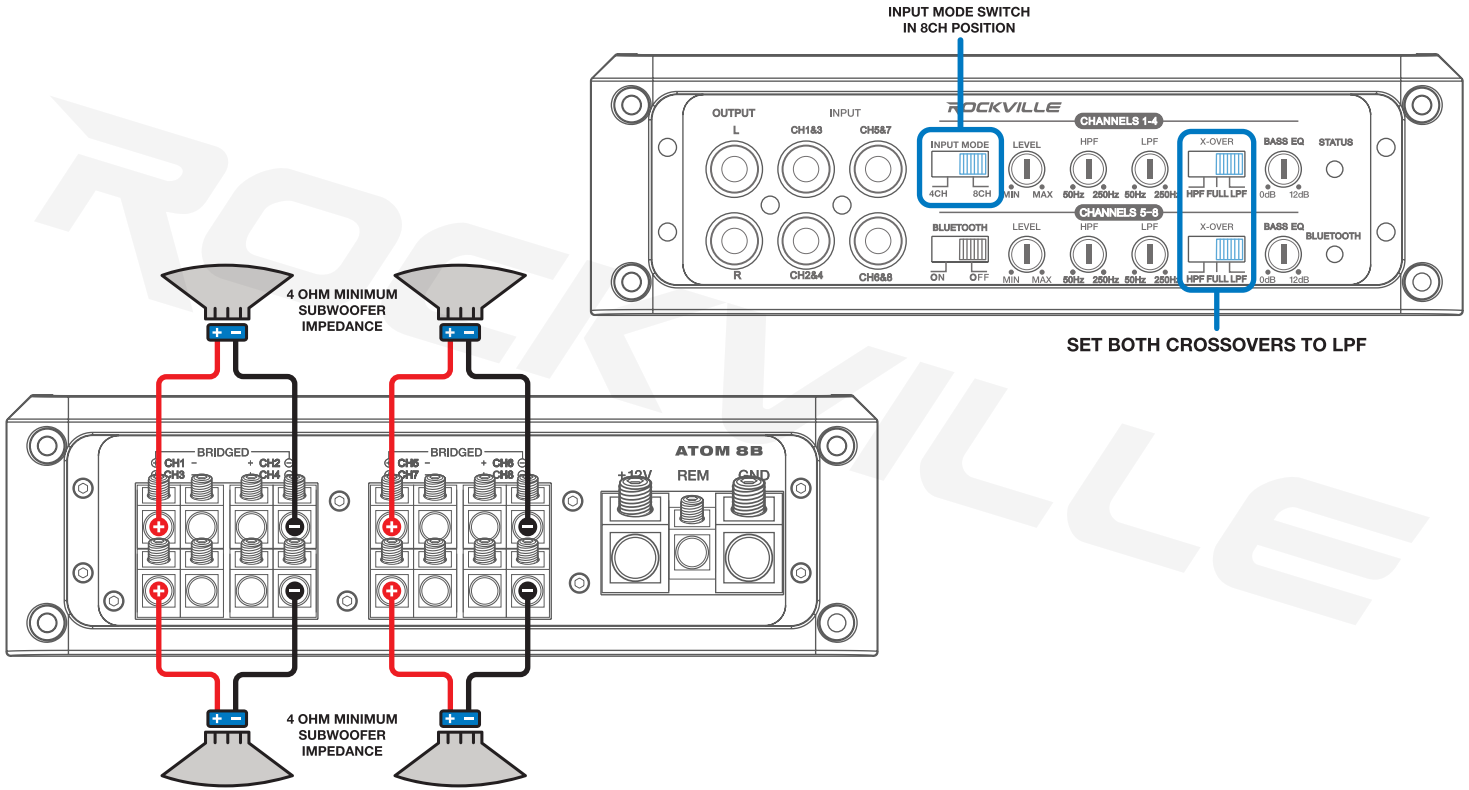
Install any combination of speakers independently on all 8 channels being vesseleful not to load any single channel below 2 ohm stereo. Alternately, you can connect up to two speakers per channel for a total of sixteen full range speakers .For typical 6″ x 9″ or 6.5″ or component speaker installs, set the crossover mode switches to FULL.





Four Subwoofers

Connect four woofers, one each bridged, to ch1/ch2, ch3/ch4, ch5/ch6 and ch7/ch8. Make sure the load does not go below 4 ohms. Set both crossover mode switches to LPF.



Features

Bluetooth

The ATOM 8 provides Bluetooth connectivity via an auto-paring feature. See page 15 for the detailed instructions. Please note: when Bluetooth mode is active, RCA input is disabled.

Bass Equalization Circuitry

A narrow “Q” peaking equalization circuit is included in the amplifiers. The equalization system is preset at 45Hz. The equalizer control allows you to add up to 12dB of bass boost. Utilize the bass equalizer to tailor your bass response to your systems needs. Make sure your speakers can handle the extra power output! It would be foolish to add 12dB of gain to low excursion 8˝ and 10˝ Sub woofers or mid ranges and tweeters. It’s a sure way to blow your speakers.

Audio Output Section

The audio output section of this amplifier features rugged, fast switching MOSFETs.

4-Way System Protection Circuitry

ATOM 8 amplifiers feature our unique IC controlled protection circuitry. This sophisticated circuit constantly monitors the heat sink internal temperature and various voltages, adjusting the amp automatically and protecting it from dangerous conditions. The status LED located on the input panel of the amplifier provides indication of the amplifier status. It will be green when the amplifier is receiving proper power, ground and remote voltages and the IC monitoring sequence indicates the amp is functional. In case the amplifier encounters a diagnostic condition as listed below, the LED will turn red indicating a diagnostic condition. When a diagnostic condition is sensed the amplifier will then go into a self-preservation mode and, if the cause of the diagnostic condition is not corrected, will eventually shut down. There are certain critical diagnostic conditions which will turn the amplifier off immediately.

Thermal Protection: When the amplifier reaches an unsafe operating temperature of 80 degrees Celsius the amplifier will turn off. Once the amplifier cools down to a safe temperature, it will automatically turn on again. If you live in a hot climate and your amp is installed in an enclosed space, we suggest installing additional cooling fans to exhaust the hot air which can build up in the installation area. This will help keep the ambient temperature in that area as low as possible so that your amps work flawlessly and without any musical interruption.

Speaker Short Circuit Protection: Should your speakers short circuit due to voice coil burn out, or should the amplifier sense an impedance too low to handle, the Protection LED will light, indicating a diagnostic condition. Turn off your system, disconnect one speaker at a time and try to determine which speaker might be faulty. Correct the condition and restart the amplifier. You must reset the amplifier by turning it OFF and then ON again by the Remote power connection after correcting a diagnostic condition. (Turn your radio off and then on again.) Clipping or total shutdown may also be a result of a bad ground connection or loose ground. If you find that your speakers and speaker wires are not shorted, please check your ground and power connections.

Input Overload Protection: This circuit will either shutdown the amplifier completely or make the amplifier spurt on and off indicating that it is in a diagnostic condition. Turn the system off and reduce the gain on the amplifier or volume from your head unit, this should result in a corrected condition.

DC Offset Protection: Should any DC voltage try to enter the amplifier via the speaker terminals it will cause the amplifier to shut down and not operate until this condition is remedied. This circuit will also protect damaging high DC voltages from reaching your speakers should your amplifier ever malfunction.

You must reset amplifier by turning it OFF and then ON again after correcting a diagnostic condition (turn your radio off and then on again). If the amplifier stays in protection after a reset, it is most likely faulty. Please note: To reset the amplifier, you must first diagnose what caused the problem, correct the fault and restart the system.

Mute, Delay, and Soft Start Technology

This an anti-thump, mute and delay circuit that eliminates irritating speaker damaging turn-on and turn-off transients normally experienced with less expensive amplifiers.

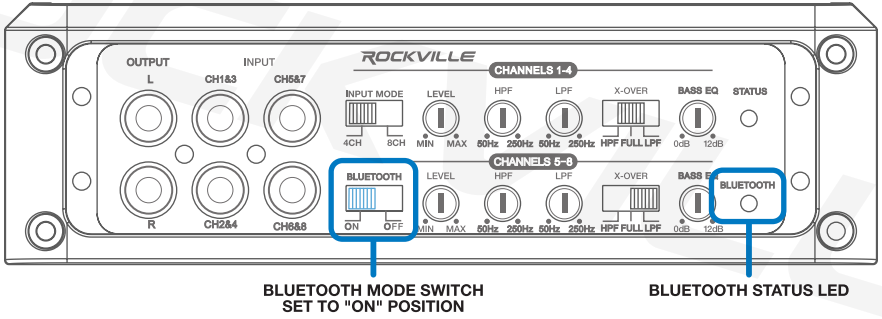
Battery Voltage

ATOM 8 amplifiers feature a convenient LED readout which displays the current voltage input while the amp is in use. The amp will go into protect mode when the voltage goes below 10 volts or above 16 volts.

Bluetooth

Pairing

Place the Bluetooth switch in the ON postion. The Bluetooth status LED will flash blue indicating the amp is in pairing mode. Now find and select ATOM BT on your device's list of available Bluetooth connections. Upon successful pairing, the Bluetooth status LED will be solid blue.



Operation

Browse, select, play/pause files, and control volume from your device. To terminate the connection, disconnect via your device and set the Bluetooth mode switch to the OFF position.

Features/Specifications

- Dyno Certified RMS Power Output
  2 Ohm: 110 Watts x 8 Channels <1% THD+N
  4 Ohm: 70 Watts x 8 Channels <1% THD+N
  4 Ohm Bridged: 220 Watts x 4 Channels <1% THD+N
- Peak Power Output
  3500 Watts
- Peak Bridged Power Output
  4 Ohm Bridged: 880 Watts x 4 Channels
- Variable High-Pass Filter: 50Hz – 250Hz at 12dB/per Octave
- Variable Low-Pass Filter: 50Hz – 250Hz at 12dB/per Octave
- Bass Equalization: Fully Adjustable 0 – 12dB at 45Hz
- Frequency Response: 10Hz – 30kHz
- S / N Ratio: >95dB
- Minimum THD: < 0.05%
- Damping Factor: > 150 @ 100Hz
- Input Voltage: 280mV - 7V
- Channel Separation: >45dB
- Input Impedance: 15k ohm
- 80 Amp External Fuse
- Dimensions: (W x H x L) 6.7″ x 2″ x 10.8″

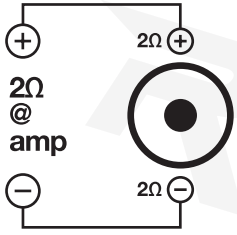
- High-Speed MOSFET Power Supply
- Digital Class D Audio Topology
- Studio-Grade Output Stage Integrated Circuit
- Micro Size Architecture with SMD Component Circuitry
- 4-Way System Protection Circuitry (DC, Short, Thermal, Overload)
- Status Mode LED Indicator
- Configurable to 8, 6, or 4 channels
- 4CH/8CH Input Mode Selector
- Independent Crossover Controls for CH1 – 4 and CH5 – 8
- Bluetooth Wireless with Auto Pairing
- RCA Line Output
- Voltage display on amp
- Full Range/Low Pass/High Pass Configurable
- Anti-rust RCA Input
- Anti-rust Bolt Down Molded Block Terminals
- Heavy-Duty Aluminum Alloy Heat-sink
- Stainless steel end caps, mounting hardware, and bottom plate
- Conforms to the American Boat and Yacht Council (ABYC) Marine Electronic Standards
- UV and Salt Water Resistant Paint, Silk Screen and Heat Sink Enclosure
- Non-Corrosive Black Hairline Finish Aluminum Casing (ATOM8B)
  White Powder Finish Aluminum Casing (ATOM8W)
- Marine-Grade Conformal Coated Boards Resist Corrosion from Salt Spray and Moisture

Woofer Wiring Guide

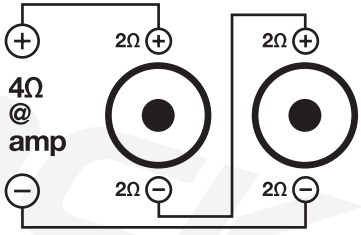
Please note that the minimum impedance load for ATOM 8 amplifiers is 2 ohm stereo and 4 ohm mono bridged. Lower impedance loads will cause overheating and may damage the amplifiers.
Do not mix different impedance speakers in series and /or parallel combinations, as unequal power sharing and acoustic outputs will result.

SVC configurations

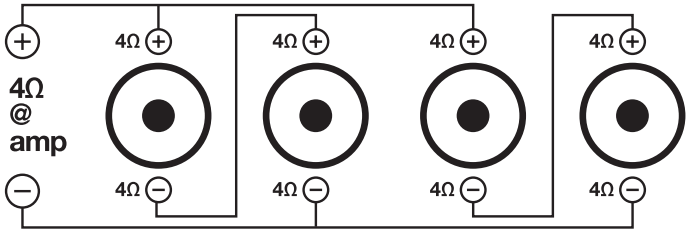
ONE 2Ω SVC WOOFER = 2Ω LOAD



TWO 2Ω SVC WOOFERS = 4Ω LOAD



FOUR 4Ω SVC WOOFERS = 4Ω LOAD



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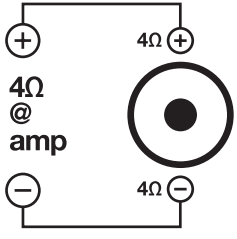
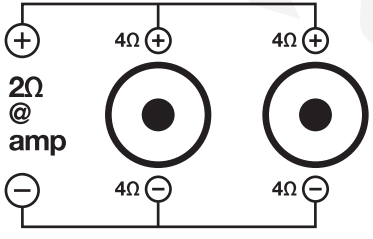
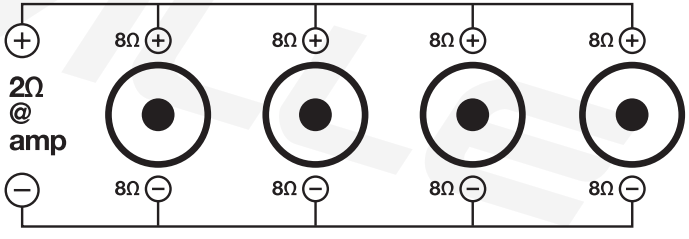


TWO 4Ω SVC WOOFERS = 2Ω LOAD

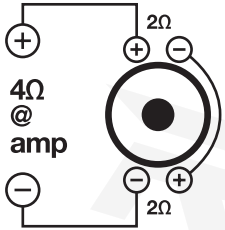


FOUR 8Ω SVC WOOFERS = 2Ω LOAD

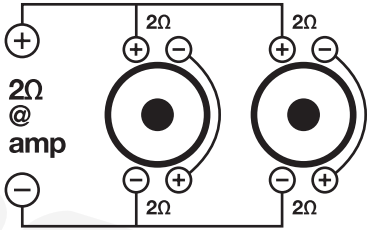


DVC configurations

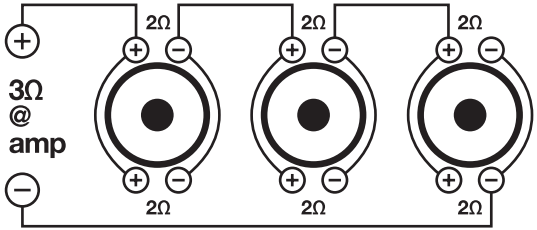
ONE 2Ω DVC WOOFER = 4Ω LOAD



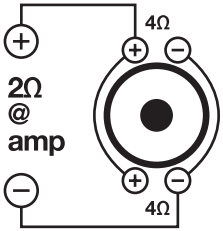
TWO 2Ω DVC WOOFERS = 2Ω LOAD



THREE 2Ω DVC WOOFERS = 3Ω LOAD



ONE 4Ω DVC WOOFER = 2Ω LOAD



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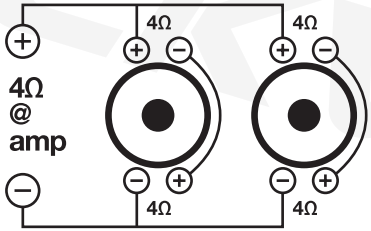
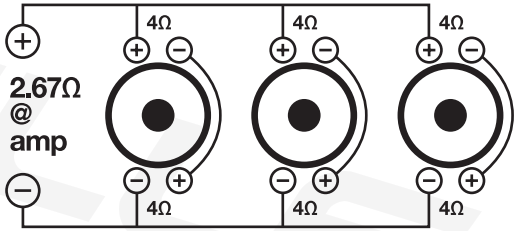
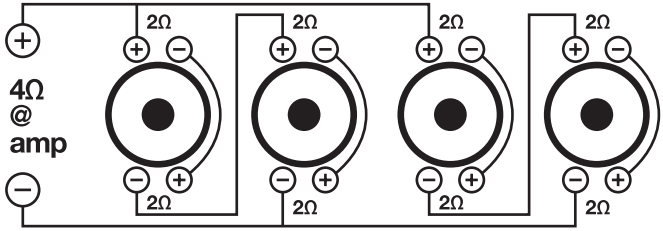


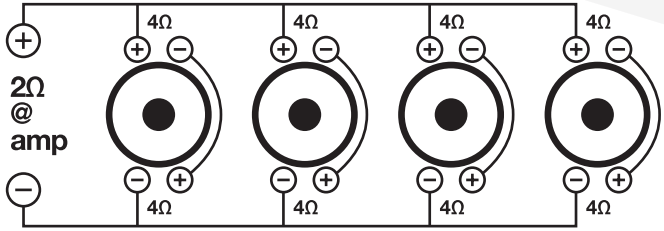
THREE 4Ω DVC WOOFERS = 2.67Ω LOAD



FOUR 2Ω DVC WOOFERS = 4Ω LOAD



FOUR 4Ω DVC WOOFERS = 2Ω LOAD



Troubleshooting

PROBLEM	CAUSE/SOLUTION
Amp goes into protect mode	1. **Short-circuit protection** - Caused by the power or ground wire not being fastened tightly. Disconnect the speakers from the amp. If the amp is still in protect mode, you now know the issue is somewhere with the power, ground, or remote wire. You should check and make sure the ground is tight. You should check the power wire terminals. Make sure the positive is going to the positive, and the negative is going to the negative. If all this is secure, you can use a multimeter and make sure you are getting 12 – 14.4 volts coming from your power wire. If this is all checking out properly, then you should check that the remote wire is properly connected to the remote wire on your receiver. Many times people mistakenly connect it to the antenna wire instead. If this is correct, you should also use a multimeter and make sure your remote wire is getting 5 volts. 2. **Thermal protection** - This happens when the amplifier overheats. Check that your subwoofers are compatible with your amp and that they are wired correctly. 3. **Blown speaker** - To check for a blown speaker, disconnect all the speakers from the amplifier. If the amp goes out of protect mode, then the problem is indeed a blown speaker. Find which speaker is blown and replace it. 4. **Wrong speaker impedance** - Replace the speaker(s) with one of the proper impedance. 5. **Speaker wires touching** - If the positive and negative speaker wires that run from your speakers to your amplifier touch each other either by the speaker terminals or by the amplifier terminals, the amp will go into protect mode. Check all speaker connections to ensure that the wires are not touching. 6. **Reverse polarity protection** - Reverse polarity means the positive and negative power wires are backward. Connect the speaker wires to the correct terminals. 7. **Power wire gauge** - If your power and ground wire are not thick enough, the amp will go into protect mode to protect itself from unsafe signals. Be sure to use the proper gauge wires. 8. **RCA cables** - RCA patch cables that are grounded out or otherwise faulty can also cause the protect light to come on. To check this, you can simply hook up a set of known good RCA cables to your head unit and amp. If that causes the light to turn off, replacing the RCA cables will fix the problem.

PROBLEM	CAUSE/SOLUTION
Amp won't power on	1. The external fuse is not properly secured to the power wire or is not making proper contact to the wire. Ensure the fuse is properly seated and making contact. 2. Your external fuse (inside the fuse holder) is blown. Replace the fuse. Never replace the supplied external fuse with one of a larger value 3. Check the ground wire. Make sure the connection is 100% secure and tight. 4. Power wire is not connected properly to the ring terminal or it has acid corrosion on it. Check the connection to the ring terminal and use a wire brush to clean any corrosion off the ring. 5. Check the power wire. Make sure the positive is wired to the positive, and the negative is going to the negative. Make sure the power wire is secure. 6. Check the remote turn-on wire. Make sure that this wire is connected securely to the amplifier on one end, and make sure the other end is connected to the remote turn on of the receiver. A common error we see is the remote turn-on gets connected to the antenna wire instead of the remote turn-on wire of the head unit. Please note the remote turn-on wire is a required wire. The amp will not work if this is not connected. It is also possible the remote terminal is loose and fell out. 7. Power wire is connected to the ground terminal of the amplifier. Connect the power wire to the +12V terminal of the amp. 8. Power or ground wire became loose. Check all connections and make sure they are tight.
Power but no sound	1. Check if any protection lights are on. If protection lights are on, please refer to the "4-Way System Protection Circuitry" section on page 14 and the "Amp goes into protect mode" section on page 19. 2. Make sure the RCA cable that is plugged into your amplifier is plugged into the RCA input. If you have it plugged into the RCA output, then the amplifier will not get any sound. 3. Check the RCA cable that is going from the amplifier to the receiver. We recommend having a spare RCA cable to test with. Many times RCA cables go bad since they are thin cables. You can also test your

PROBLEM	CAUSE/SOLUTION
Power but no sound	RCA signal using a multimeter. 4. The next thing to check is the speaker wire that is going from the amp to the speakers. If the amplifier is in bridged mode, then be sure you connected the speaker wire to the proper terminals. 5. Check your gain – on the amp and/or on your bass remote. If it is on 0, then turn it up slowly. 6. Check the RCA cable that is plugged into your receiver. Make sure you plugged the amplifier into the pre-amp output that is red and white. In many cases we have seen customers plug the RCA into the RCA video of their receiver, which is yellow. If this is the case, just plug the RCA into the proper connections and your problem will be solved. 7. There is a setting on your receiver that can disable your RCA outputs. The setting is under fader/balance control. On your receiver navigate to fader/balance and find the setting, then make sure you enable front, rear, and sub pre-amp outputs. Sometimes the head unit will allow you only to enable front and rear, which would cause the amp to have no sound. 8. Speaker wire is not making a good contact on the speaker output of the amp or on the speaker terminal. You need to make sure the speaker wire is securely tightened into the speaker terminal and the amplifier terminal. 9. A pinched or cut speaker wire that is now not running a signal. Speaker wire is very thin and can rip or tear easily. If you have spare speaker wire, then you can test this issue with new speaker wire and see if that solves your issue. You can also visually inspect your current speaker wire. 10. Make sure the positive and negative speaker wire are running to the positive and negative speaker terminal of the amp. If they are reversed, then the speaker will play no sound or very little sound.
Amp is clipping	1. Speakers/subs are too powerful for the amplifier you are using. Check the compatibility of your speakers/subs. Replace incompatible speakers/subs with compatible ones. 2. If the speakers/subs are wired at a lower impedance (ohms) than the amp is supposed to be playing, this can cause the amp to clip. Wire the speakers/subs at the proper impedance.

PROBLEM	CAUSE/SOLUTION
Amp is clipping	3. If the gain setting is too high, this can cause the amp to clip. The proper way to set your gain is to turn your receiver volume to 75% of the max, and then slowly turn your gain up. The second you hear any slight distortion, turn it down one notch and leave it at that setting. Amps are not meant to be played with the gain up to the max. If this is the case, lower your gain slowly until you hear the amplifier stop clipping. 4. A poor ground cable connection can cause your amp to clip because improper power is getting to the amp. Check your ground connection and make sure that the cable is securely tightened. 5. A very common cause of amplifier clipping is power and ground wire that is too thin of a gauge size for the amplifier. Determine the proper wire gauge necessary and replace existing wires. 6. If using multiple devices that all have a volume control (such as an equalizer or processor, receiver, and the amp), then you would need to lower one or two of those devices to stop the amp from clipping.
Distortion, background noise, crackling, or hissing in the speakers	1. First check to see how your wires are run. If your RCA cables and speaker wire are run alongside your power cables, they will pick up feedback. If this is the case, you will need to run the RCA cable on the other side separate from your power cable. 2. A poor ground cable connection can cause your amp to clip because improper power is getting to the amp. Check your ground connection and make sure that the cable is securely tightened. 3. Engine noise – You will know it is engine noise if every time you rev your engine the noise gets louder. You can install a ground loop isolator on the receiver's power lead to cut down on signal pollution. Most often, however, engine noise comes from a loose or intermittent ground connection. Make sure your ground connection is tight and that you are using the proper gauge cable. 4. If your gain on your amp is set to the max and your receiver has a high preamp voltage, it will cause some unwanted noise. To properly set your gain, play a CD or other music. Now put the receiver volume to 75% – 80% of the max. Then slowly turn the gain of the amp to a setting where you do not hear a loud hiss. A low hiss is acceptable, as with music playing you will never hear it. Please note the amp gain is not a volume control. It is meant to be matched to the pre-amp voltage of a head unit. It is important to properly set your gain when you buy a new amp.

PROBLEM	CAUSE/SOLUTION
Distortion, background noise, crackling, or hissing in the speakers	5. Noise can be picked up due to bad RCA cables. Specially the super cheap ones. We recommend doing a test with different RCA cables. Replace the RCA cables if needed. 6. Low-quality speaker wires will also cause noise. We recommend you buy high-quality insulated speaker wire made for marine applications.
Sound is too low	1. This can be caused by wiring at too high of an impedance (ohms) and the amp puts out low power, at 4 or 8 ohms for example. To resolve this you will have to properly wire your speakers/subs to the amplifier. 2. Check the gain level on the amp. You may need to turn it up. 3. Power and ground wire that are too thin of a gauge size for the amplifier may cause low sound. Determine the proper wire gauge necessary and replace existing wires. 4. Make sure your positive and negative speaker wires are not reversed, as this would cause the sub to move but not make much noise. 5. Check your crossover setting on your amplifier. You may need to filter out more high frequencies, which your sub is not meant to play. So make sure it's on low pass mode and then you also should try lowering the frequency of that low pass crossover and see if that helps. 6. On your receiver it is very common to have a volume level control for the pre-amp outputs (separate from your master volume control). To fix this, you can navigate to the audio settings, and search for subwoofer level controls, as well as front and rear pre-amp output controls. Crank up the level on this setting and you will be back in business. 7. Amplifier may not be powerful enough. If this is the case, we recommend upgrading to a more powerful amplifier.
Amp keeps blowing fuses	**Main Fuse** - If you determine that your main fuse is blowing, then you'll want to pay attention to when it blows. Try inserting a good, properly rated fuse with your head unit—and amplifier—turned off. If the fuse blows immediately, when everything is off, then you're probably dealing with some kind of short in the power cable between the main fuse and the distribution block, or between the main fuse and the amplifier if there is no distribution block in the system.

PROBLEM	CAUSE/SOLUTION
Amp keeps blowing fuses	**Distribution Block Amp Fuse** - If both sides of the main fuse have power, and one side of the distribution block has power, but the other side of that fuse is dead, then you're either dealing with a shorted power wire or an internal amplifier fault. There are a few ways to determine which one is the culprit, depending on how your amp is installed and where the wires are routed. 1. Check if you can see power wire that connects the distribution block to your amp. In an ideal situation, you'll be able to see the entire length of the wire. If that isn't possible, then the next best thing is to just disconnect the power wire from your amp, make sure that the loose end isn't in contact with ground, and check whether the fuse still blows. If it does, then the problem is in the power wire, and replacing it will almost certainly fix your problem. Of course, you'll have to take vessele when routing the new wire so that it doesn't end up shorting out as well. If the fuse doesn't blow with the power wire disconnected from your amp, then you have an internal amplifier problem. **Internal Amplifier Fuse** - If the fuse blows when the amp is turned up, then you likely have subwoofers that are either incompatible or that are wired at too low of an impedance. Rewire to achieve proper impedance, or replace the subwoofers with compatible ones. Check and make sure the power and ground wires did not get crossed. Also, check and make sure your speaker wires are not crossed.
Amp gets very hot	1. The main reason amps overheat is if the impedance they are running at is very low, or if the subwoofer requires more power than the amp can give it. Also if the wiring cannot give the proper current fast enough, it can cause the amp to get hot as well. Make sure the amp is running at the proper impedance, or use subwoofers that are compatible with the amp. Make sure the wiring is correct and you are using the proper wires for your system. 2. A poor ground cable connection can cause your amp to get very hot. Check your ground connection and make sure that the cable is securely tightened. 3. Check the location where your amp is mounted. Make sure it is in a spot where it will receive proper ventilation.

PROBLEM	CAUSE/SOLUTION
Amp or powered sub does not turn off when you turn off the vehicle	1. This situation happens when you connect the remote turn-on wire to a constant 12V power wire (often this is a yellow wire) instead of to the remote turn-on wire of your receiver's wire harness. Pull out your receiver and plug the amplifier's remote turn-on wire into the proper remote turn-on terminal of your receiver's wire harness. 2. In a rare situation, the remote turn-on wire input is touching the power wire, which can also cause this same issue. If this is what is happening, then simply take the remote turn-on wire out of the amplifier terminal and vesselefully put it back in so that it is not touching the power wire.
One channel on the amp isn't working	1. Check the RCA cable that is going from the amplifier to the receiver. We recommend having a spare RCA cable to test with. Many times RCA cables go bad since they are thin cables. You can also test your RCA signal using a multimeter. 2. Check the RCA cable that is plugged into your receiver. Make sure you plugged the amplifier into the pre-amp output that is red and white. In many cases we have seen customers plug the RCA into the RCA video of their receiver, which is yellow. If this is the case, just plug the RCA into the proper connections and your problem will be solved. 3. There is a setting on your receiver that can disable your RCA outputs. The setting is under fader/balance control. On your receiver navigate to fader/balance and find the setting, then make sure you enable front, rear, and sub pre-amp outputs. Sometimes the head unit will allow you only to enable front and rear, which would cause the amp to have no sound. 4. Speaker wire is not making a good contact on the speaker output of the amp or on the speaker terminal. You need to make sure the speaker wire is securely tightened into the speaker terminal and the amplifier terminal. 5. Make sure the positive speaker wire is connected to the positive terminal on the speaker and on the amp, and make sure the negative is connected to the negative. 6. Each channel on your amplifier has a gain control. Make sure the gain on this channel of the amplifier is turned up.

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

Responsible party name: Rockville

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

Hereby declares that the product Rockville ATOM 8 8 channel amp complies 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 to 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.