

# WHEEL OF BASS 8"500W SLIM UNDER-SEAT ACTIVE

8"500W SLIM UNDER-SEAT ACTIVE POWERED CAR/TRUCK SUBWOOFER

# **OWNER'S MANUAL**

# ATTENTION: VISIT THE ROCKVILLE SUPPORT SITE FIRST!

## Who reads manuals?

Scan the **QR code** or go to **rockvillesupport.com/ wheel-of-bass** 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.



**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.



Thank you for purchasing this Rockville Wheel of Bass Underseat Active Subwoofer. This sub is an all-in-one solution to give you great sounding bass in your vehicle without taking up a lot of space. The enclosure is only 3.15 inches thick so that it can easily fit under your seat. It features a built-in amplifier, so installation and wiring is clean and simple.

The Wheel of Bass was designed with the customer in mind. We added high-level inputs so you can install the unit to an after-market or factory system that has no pre-amp outputs available.

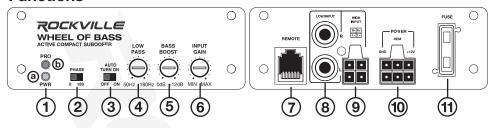
Please read this owner's manual carefully for proper use of your Wheel of Bass. Should you need assistance, please call our technical help line at 1-646-758-0144, 24 hours a day/7 days a week.

## **IMPORTANT SAFETY INSTRUCTIONS**



- To reduce risk of electric shock, never open the unit. There are no serviceable parts; refer service to the 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.

#### **Functions**



#### 1. POWER/PROTECT STATUS LEDs

The bottom green LED (a) indicates that the unit is receiving power. The top red LED (b), when illuminated, indicates that the unit has gone into protect mode.

#### 2, PHASE SHIFT BUTTON

The Phase Shift switch allows you to synchronize the phase of your subwoofer output to that of the other speakers in the vehicle. It can be set to 0° or 180°. Set the switch to 0 and listen to a track with some bass. Now set it to 180, listen to the same track, and see if the bass output improves or becomes worse. Set the switch to the setting which achieves the best results.

#### 3. AUTO TURN ON

The AUTO TURN ON setting is used in conjunction with high level (speaker level) connections. When the switch is in the ON position, the subwoofer will automatically power on when there is an input signal. Please note, this feature only works when connecting via high level inputs. It will not function when using low level (RCA) inputs. Do not use the remote turn on connection when using high level inputs.

#### 4. LOW PASS FILTER

The control marked LOW PASS FILTER will control the low-pass frequencies from 50Hz to 180Hz. It allows you to set the frequency range which the subwoofer will receive. The subwoofer will reproduce all sound below the frequency you set. If your system is unable to accurately reproduce midrange frequencies, you may want to set this control closer to 180Hz. If your system accurately reproduces midrange frequencies, set the control lower.

#### 5. BASS BOOST

The control marked BASS BOOST will allow you to increase the sound level of bass frequencies up to 12 decibels.

#### 6. INPUT GAIN CONTROL

Once your system is operational, set the input sensitivity using the control marked GAIN. 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 level your head unit distorts). When you begin to hear distortion, back down one notch. Now turn the GAIN control clockwise until you hear distortion, then turn it counterclockwise by a notch or until the distortion is gone. The unit's input sensitivity is now set. Please note that the GAIN control should not be mistaken for a volume control. It is intended to match the output level of your source unit to the input level of the unit. Do not adjust the GAIN to maximum unless your input level requires it.

#### 7. SUB LEVEL REMOTE CONTROL

The dash-mounted bass remote allows you to control the subwoofer's bass level from the comfort of the driver's seat. It features a power LED which indicates the unit is receiving power and operating nominally.

#### 8. LOW LEVEL RCA INPUTS

If your head unit has RCA outputs, connect these to the unit's Left and Right RCA input jacks. For best audio performance be sure to use high-quality RCA cables. Please note, when using these inputs, the AUTO TURN ON switch should be set to the OFF position.

#### 9. HIGH LEVEL (SPEAKER LEVEL) INPUTS

Many factory radios do not have preamp outputs, so we've equipped the Wheel of Bass units with High Level inputs. These inputs, also referred to as Speaker Level inputs, allow you to connect to the factory speaker wires (see page 3). They are called High Level inputs because

#### **Functions**

they convert the high voltage running through factory speaker wires to one the unit can handle.

10. POWER/GROUND TERMINALS and REMOTE TURN-ON CONNECTION

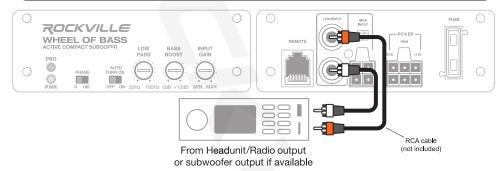
See page 4 for instructions on how to properly connect power, ground, and remote connections. **11. FUSE** 

The Wheel of Bass uses a 15 amp fuse. Never replace the supplied fuse with one of larger value. Use of a higher amperage fuse may cause damage.

#### LOW LEVEL INPUT

The low level (RCA) inputs are the prefered connection method. Most trunk or hatchback installations will require a 15-20 foot RCA cable, while pickup trucks and under-seat installations will require a 6-12 foot cable. For best audio performance be sure to use high-quality RCA cables. Be sure to run the RCA cables on the side of the vehicle opposite to the side used to carry the power and ground leads of the amplifier.

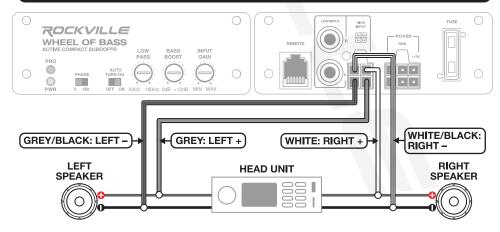
WARNING: Do not use high level and low level inputs at the same time. Make sure that the AUTO TURN ON switch is set to the OFF position when using low level inputs.



#### HIGH LEVEL INPUT

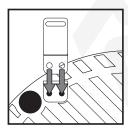
The high level input should only be used when your head unit lacks RCA outputs. Connect the harness to the high level input port, then connect the wires from the harness to the corresponding speaker wires from the head unit. Be sure to observe proper polarity in order to avoid audio phase problems.

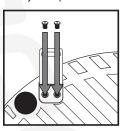
() WARNING: Do not use high level and low level inputs at the same time. Make sure to set the AUTO TURN ON switch to the ON position. Do not connect the remote turn on terminal when using high level inputs.

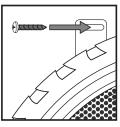


#### INSTALLATION

The Wheel of Bass features four mounting feet that must be attached to the bottom of the unit via predrilled holes (see diagram below). Never install in the engine compartment or on the firewall. Lay down the unit, mark the location of the mounting holes, and drill pilot holes for the screws. Be sure to watch for your gas tank, gas lines, and electrical lines. Place the unit and secure it to the mounting surface using the supplied screws. Please be sure to leave breathing room around the unit so that it can efficiently dissipate the heat it produces. Do not overtighten the screws.



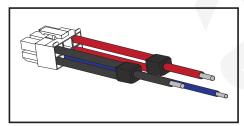




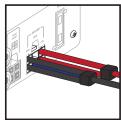
ATTENTION: As connections can work loose due to the vehicle's vibrations during normal operation, we recommend periodically tightening all power and ground connections.

# WIRING HARNESS

Connect the leads from the wiring harness to the corresponding cables (see the descriptions below and the wiring diagram on the next page) and plug it into the Power/Remote/Ground slot on the unit as shown in the illustration.







#### GROUND

Splice a 10-gauge or heavier wire to the power harnesses' Ground (black) lead. The connection should be as close to the unit as possible (40 inches or less). Connect the other end of the wire to any part of the vehicles's metal chassis. Make sure that there is no paint or other insulator blocking a good ground connection.

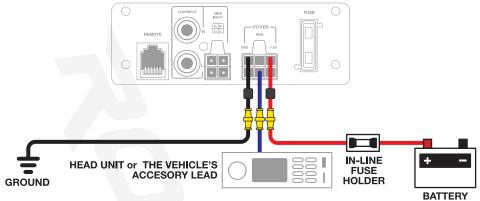
#### **REMOTE**

Splice a 16-gauge or heavier wire to the blue remote lead. Connect the other end of the wire to the head unit's remote output. This connection is responsible for turning the subwoofer 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 will turn the unit on with your vehicles's ignition.

WARNING: Do not use the remote connection when using high level inputs. Make sure that the AUTO TURN ON switch is set to the OFF position.

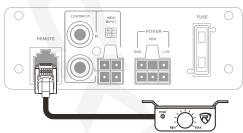
#### **POWER**

Splice a 10-gauge or heavier wire to the +12v positive (red) lead. Connect the other end of the wire to an in-line fuse holder which will in-turn be connected to the vehicle battery's POSITIVE (+) terminal. This in-line fuse offers protection against damage to the battery and electrical systems that may be caused by short circuits. Ensure the fuse holder is within 18 inches of the battery.



#### REMOTE CONTROL CONNECTION

Install the remote control securely under the dash or in a similar location where it will not distract the driver.



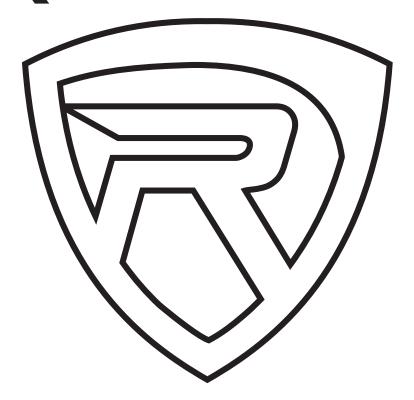
#### Features/Specifications

- Peak Power Handling: 500 Watts
- RMS Power Handling: 125 Watts
- Heavy Duty Mounting Feet
- PWM MOSFET Power Supply
- Low Level RCA Input
- High Level Inputs with Auto Turn-On Technology
- Adjustable Input Sensitivity
- Soft Delayed Remote Turn-On
- Thermal Protection Circuit, Short Protection Circuit
- Overload Protection Circuit
- Green Power/Red Protect LED
- Impedance: 4 Ohm
- Phase Switch: 0° or 180°
- Built-in Subsonic filter @ 20Hz
- Low Pass Filter: 50Hz 180Hz
- Bass Boost: 0 12dB @ 45Hz
- Frequency Response: 20Hz 180Hz
- Signal to Noise Ratio: >90dB
- THD: <0.5%
- Sensitivity: 90dB @ 1w/1m
- Input Sensitivity: Low Level: 200mV/High Level: 0.5V
- Fuse Rating: Single 15A
- Dimensions (L x W x H): 9.69" x 9.69" x 3.16"

## **TROUBLESHOOTING**

PROBLEM	SOLUTION			
No power	<ol> <li>Check your ground and power connections.</li> <li>Make sure the power terminal is receiving at least 12V.</li> <li>If using RCA inputs, make sure the Remote turn on is receiving at least 5VDC.</li> <li>Check the fuse and replace if necessary.</li> <li>Make sure the Protect LED is not illuminated. If it is, turn the amplifier off and then back on.</li> <li>Check the remote turn-on switch. It should be off is using RCA input and on if using high-level inputs.</li> </ol>			
Protection LED illuminates when the unit is powered on	<ol> <li>Check for short-circuits on high-level leads.</li> <li>Turn down the head unit's volume to prevent overdriving.</li> <li>Disconnect the high-level leads and reset the amplifier (turn off and then on). If the Protect LED still illuminates, the amp is faulty and needs servicing.</li> <li>If the signal is too hot, lower the gain level.</li> <li>Make sure the power connections are secure.</li> </ol>			
No output	<ol> <li>Check the fuse and replace if necessary.</li> <li>Make sure the unit is properly grounded.</li> <li>Make sure the Remote turn on is receiving at least 5VDC.</li> <li>Make sure the RCA cables are properly connected.</li> <li>Check your high-level connections.</li> <li>If your head unit has a separate subwoofer output, check the settings to make sure it is enabled.</li> <li>Check the remote turn-on switch. It should be off is using RCA input and on if using high-level inputs.</li> </ol>			
Low output	<ol> <li>Reset the gain control.</li> <li>Check the crossover control settings.</li> <li>Power and ground cables that are too thin a gauge size for the terminals may cause low sound. Determine the proper cable gauge necessary and replace existing cables.</li> </ol>			
High hiss sound	1.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. Noise can be picked up due to bad RCA cables. We recommend doing a test with different RCA cables. Replace the RCA cables if needed.			
Squealing noise	Check for improperly grounded RCA interconnects.			
Distorted sound	Make sure the input level control is set to match the signal level of the head unit. Always try to set the input level as low as possible.     Make sure all crossover frequencies are properly set.     Check for short circuits on the high-level leads.			
Amplifier gets very hot	<ol> <li>Make sure the wiring is correct and you are using the proper wires for your system.</li> <li>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.</li> <li>Check the location where your amp is mounted. Make sure it is in a spot where it will receive proper ventilation.</li> </ol>			
Engine noise (static type)	This is usually caused by poor quality RCA cables, which can pick up radiated noise. Use high quality cables and route them away from power cables.			
Engine noise (alternator whine)	Make sure the RCA grounds are not shorted to the vehicle's chassis.     Make sure the head unit is properly grounded.			





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