



MBQ-STG2-RAD

STAGE 2, 400 WATT TWO SPEAKER RZR Tuned Audio Package

Installation Manual



INTRODUCTION

MB QUART STAGE 2 RZR TUNED AUDIO SYSTEM

Thanks for choosing MB QUART. This RZR Tuned Audio System has been meticulously engineered to install into your vehicle. We have made the process so simple you will be in and out of the installation in about 2.5 hours.

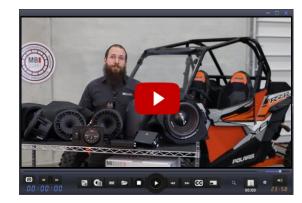
This manual is laid out in **CHAPTERS**, for the full STAGE 5, there are 20 **CHAPTERS** in total. This manual will be much shorter. Within each **CHAPTER** there may or not be **STEPS**. Do them

in the order presented to avoid mistakes and frustration.



UPGRADES

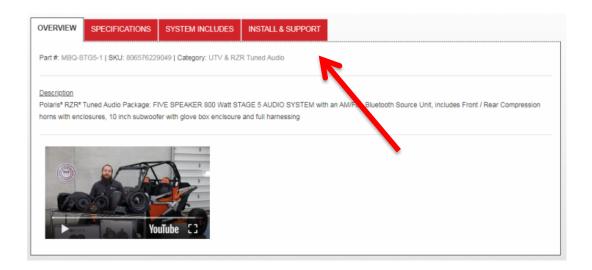
The up-arrow denotes an upgrade to your STAGE system is available. Different STAGE systems will be denoted within the **CHAPTERS**. You can always upgrade STAGE 3 and 2 to add rear pods or the subwoofer to a STAGE 5.



INSTALL VIDEO

We strive to create a companion "how to" install video for most of our systems. The video will have additional details on making your installation a breeze.

If available, you can locate your specific video on the website. Just type in your model number in the search box and then look on the INSTALL & SUPPORT tab.





WARRANTY

Your audio system is covered by a 1 year warranty from the date of invoice. It is important that you keep your sales receipt. Furthermore, it is crucial that you record and store a record of the serial numbers for each of the components that are included in your system. In the rare instance that a warranty claim is needed both proof of purchase and serial numbers are required. Additional information is on the back page.

- A) Sales Receipts show: the seller, date of purchase, model and price paid
- B) Serial numbers for the components

INCLUDED

The STG5 system ships in two boxes. Make sure to account for all components before

The STG2-RAD system ships in one box. Make sure to account for all components before attempting installation.

- AM/FM, Bluetooth Source Unit with a mounting adapter
- Compact 2 channel amplifier
- Dual Amplifier Harness with mounting hardware (for mounting sub amp later)
- Dual Amplifier Mounting Plate
- Kick Panel Pods
- Two 8 inch compression horns (kick panel speakers)
- Two compression element diaphragm covers with instructional manual
- USB and 3.5mm dash mount input accessory
- 2 black swivel mount brackets for cage mounting tower speakers

If you feel something is missing, please contact Maxxsonics directly via email – support@maxxsonics.com

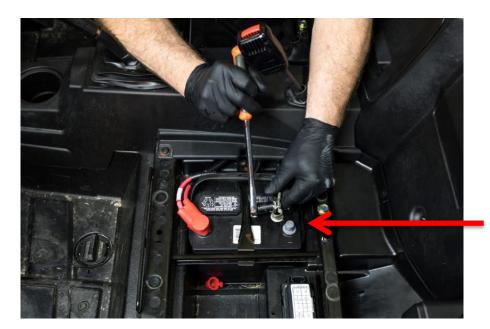
NOTE – Hardware for mounting components to enclosures and other items you will need are packed within the packaging for each piece. Do not dispose of any packaging until you have completely installed your system and certain you have accounted for every piece.



SAFETY

Prepare your machine to safely work on it and add accessories.

- Turn the ignition off and remove the key
- Remove the negative terminal of the battery (FIG S-1)
- Use a packing blanket other soft material to protect your machine
- Safety Glasses always wear eye protection



(FIGS-1)



TIME & TOOLS

You will need about 2.5 HOURS to complete this installation depending on who is "helping."

The following are a list of tools you will need for any of the MB Quart UTV/RZR Tuned Audio packages. Depending on which system you are installing, you may or may not need all of them. You might also find you own more specialized tools to get the job done. Share the pics of your installation on our social channels to help others.

Besides the tools listed, you will also find it helpful to have some music ready for the TEST & TUNE step. We recommend:

- USB with Music pre-loaded
- Bluetooth Device like a phone with music or music app

TOOLS YOU WILL NEED

- Wire Strippers and Crimpers
- 5/16" Drill Bit
- Drill
- Blue Painters Tape
- Marker
- ½" Open Box Wrench
- ½" Socket (preferably deep)
- 10mm Socket
- Ratchet
- T25 Torx Driver
- T40 Torx Driver
- Bojo Tools (Pry Tools)
- Flush cut wire cutters (Zip Ties snipping)
- 1 Friend



CHAPTER 1 – PREPARATION FOR INSTALLATION

Before you start dismantling your machine, we suggest you prepare all your components, enclosures and harnesses.

These steps will follow the CHAPTERS of the Installation Videos when completed. Additionally, it will make life less stressful to have everything ready when you are ready to put each component into the machine.

STEP 1 – CONFIRMING POWER TO BUS BAR

The Polaris RZR and our Tuned Audio System requires a harness that connects the battery under the seat to the busbar harness that is located under the hood.

The harness is shown in FIG 1-1. Check that your machine has this harness installed. If not, you can purchase from your dealer or Polaris online. The part numbers are 2881551 or 2881646 depending on which machine you own.



(FIG 1-1)



CHAPTER 2 – PREPARE YOUR KICK PANEL COMPRESSION HORNS

NOTE - Do not proceed with CHAPTER 3 until you have properly prepared the speakers with their compression diaphragm covers. Refer to the manual called MBQ-POD. You can also find this manual on-line by searching the model number.

Shown in FIG 2-1 is one picture from the MBQ-POD manual which will guide you step-by-step through preparing the kick panel compression horn speakers for installation into the kick panel enclosure and the RZR.



(FIG 2-1)

Removing the large back plate and installing the special compression horn diaphragm covers dramatically reduces the depth of the compression horns which ultimately allows our overall kick panel enclosure to be shallower than you would think. This assures maximum leg room for driver and passenger in the vehicle.



UPGRADES

In the following chapters we are showing removing the grab bar and seats. They are an important step when upgrading with the subwoofer and/or rear pods. You can skip them for this RZR Tuned RZR Package.



CHAPTER 3 - VEHICLE DISASSEMBLY

STEP 1 - REMOVE HOOD

Start with removing the hood. This is where you will access the bus bar (FIG 3-1). Confirm that your machine has the busbar installed by the dealer or by you. If your busbar harness has not been installed, see Chapter 1 of this manual for clarification



(FIG 3-1)



STEP 2 - REMOVE TOP OF DASH

Remove the top of the dash shown in FIG 3-2 by removing the screws.



(FIG 3-2)

STEP 3 – REMOVE THE GRAB BAR

Remove the grab bar shown in FIG 3-3 by removing the retaining clip and pin and firmly pulling the grip toward the rear of the vehicle.



(FIG 3-3)



STEP 6 - REMOVE SEATS

Remove seats by pulling on the lock clip (FIG 3-4) located between the bottom and upright portion of the seat.



(FIG 3-4)

Behind the seats in the center of the machine is the panel where you access the oil filter. You will need to remove this in order to feed and secure the rear speaker harness



STEP 7 - REMOVE CENTER CONSOLE

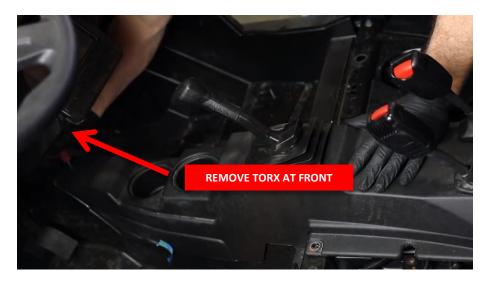
Use the painters tape to mark where you remove each of the push pins and/or T-40 screws shown in FIG 3-5.

It is wise to get some small disposable cups or sandwich bags to label the different screws to keep track of them.



(FIG 3-5)

There is a T-40 at the front of the center console in the dark. Don't miss it. FIG 3-6.



(FIG 3-6)

For additional technical information, go to the "SUPPORT" tab at MBQUART.com

There you will find helpful, FAQ, TEQ Tips and you can contact Technical Support via email.

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Gently push the shifter and seat belt boots back through the console as show as shown in FIG 3-7.

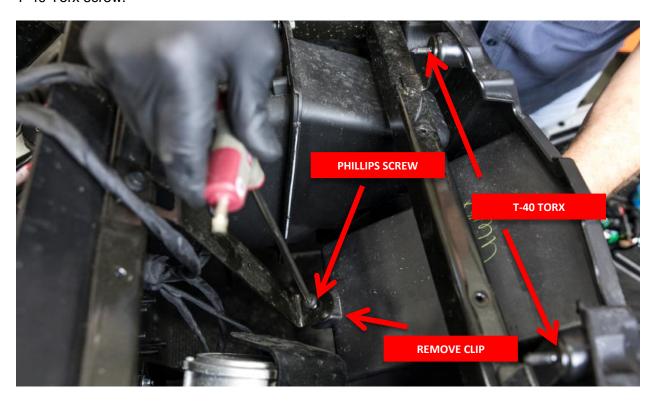


(FIG 3-7)



STEP 8 - PULLING DASH BOX

To remove the DIN dash box from the dash, there are three points to address. First, locate the rear support bracket the down bracket at the rear of the pocket and remove the T-40 Torx screw.



(FIG 3-8)

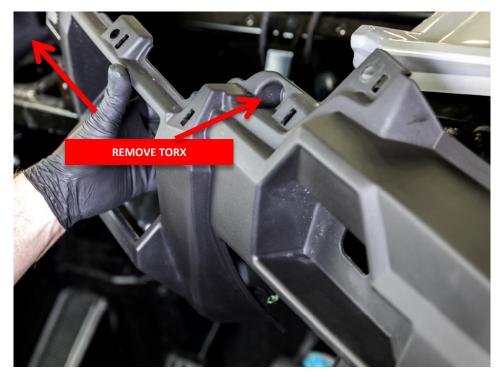
Remove the clip shown on the right from the back of this pocket and set aside for re-use when mounting your new dash source unit. You will reuse the screw that was in the OEM piece shown in FIG 3-8.





STEP 9 - PULLING FRONT DASH

Remove 4 Torx screws from the front of the dash





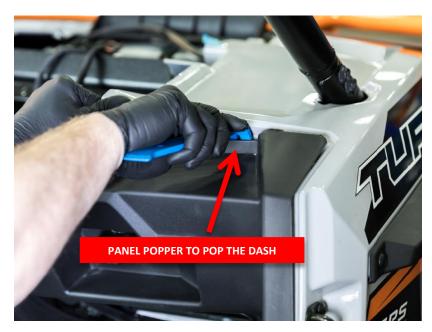
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STEP 10

Using a large panel popper to release X clips from the front dash assembly





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STEP 11 - REMOVING THE GLOVE BOX

Remove 2 - 10mm bolts on the top of the subwoofer where it is fastened to the internal framework. See holes in FIG 3-9. The glove box will easily slide out.

We will use a different mounting method for the new subwoofer.





(FIG 3-9)

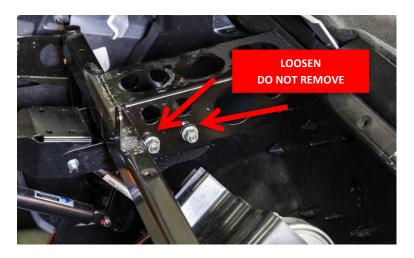


CHAPTER 4 – PREPARE VEHCILE FOR AMPLIFIER MOUNTING PLATE

NOTE - Before installing the amplifier plate with the amplifier in position, you must prepare the mounting area in the vehicle.

STEP 1 - Loosen the 16mm nuts that secure the steering column to the support frame shown in FIG 4.1. These nuts are very hard to loosen. Be careful.

Do not remove these steering column nuts, only loosen to create an 1/8 inch gap between the nut and the frame shown in FIG 4-2. You will not retighten these nuts until the Chapter 18 section of the installation manual.



(FIG 4-1)



(FIG 4-2)



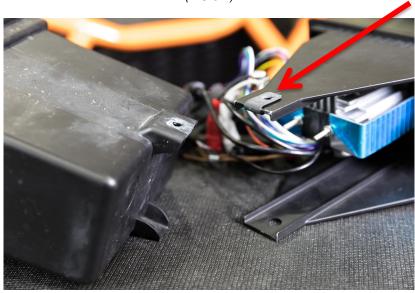
PREPARATION

CHAPTER 5 – SOURCE UNIT & DASH ADAPTER PREP

NOTE - Make sure you have removed the metal clip from the OEM dash pocket mentioned in the "dismantle" chapter. You will need this metal clip for mounting the new dash pocket to the RZR. Shown in FIG 5-1 and 5-2.



(FIG 5-1)



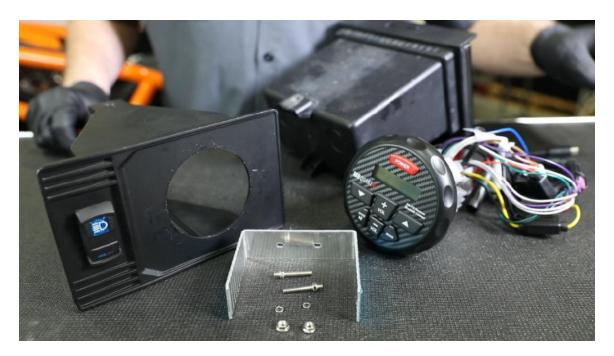
(FIG 5-2)



PREPARATION

STEP 1 – Working on your bench or another flat surface, install your new source unit into the dash plate adapter shown in FIG 5-3

Refer to the manual included in the source unit to mount and secure the unit into the adapter.



(FIG 5-3)



PREPARATION

STEP 2 – Insert the long threaded bolts with the molded bolt closest to the source unit When set face down, the source unit should look like FIG 5-4.





(FIG 5-4)

For additional technical information, go to the "SUPPORT" tab at MBQUART.com

There you will find helpful, FAQ, TEQ Tips and you can contact Technical Support via email. ©2018 Maxxsonics USA

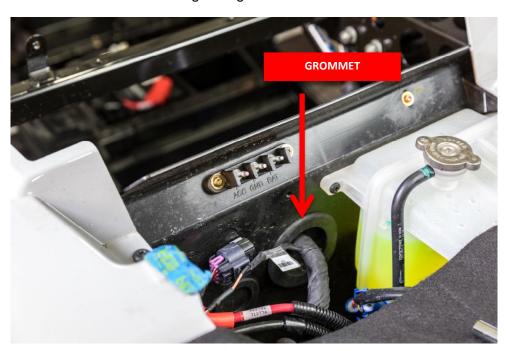


CHAPTER 6 - INSTALL POWER HARNESS AT BUSBAR

Before we position the system harness and wire everything up we need to prepare the power portion of the harness.

NOTE – For any audio system and in fact electrical accessory for RZR you must have a busbar installed. The busbar brings power from the battery up to the back side of the dash. See Chapter 1 for busbar details.

STEP 1 - You will start at the bus bar. Lay the Power, Ground and Accessory portion of the harness in the vehicle and you begin to run each of the connectors to the appropriate component. The harness will run through the grommet shown in FIG 6-1.



(FIG 6-1)



Slice the firewall grommet on the top side to the rubber as shown in FIG 6-2.

This will allow you to move the required harnesses from the Busbar to the dash and up to the amplifiers. You can use black electrical tape to seal the slice in the grommet now or during final inspection.



(FIG 6-2)

STEP 2 – Push the radio and amplifier connections through the grommet. Leave them accessible while you complete the connections at the busbar shown in FIG 6-2.



(FIG 6-3)

NOTE – In some vehicles there is an unused grommet near the passenger foot well shown in FIG 6-3. DO NOT use this due to the placement of the subwoofer enclosure. Use the grommet picture that has a wire look present shown in FIG 6-2.



STEP 3 – Complete the connection at the busbar as shown in FIG 6-4. Mount the audio harness first, with the OEM RZR connections on top. This allows you to use the red boot on the powerline, keeping your install clean and looking factory installed.



(FIG 6-4)

Zip-tie this power portion of the harness into place. Assure that no added wiring is near any moving parts or components that generate large amounts of heat.





The following shows the installation of two amplifiers. Your system will have only the full range amplifier until you upgrade to the subwoofer system.

CHAPTER 7 – MOUNTING AMPLIFIER(S) & INSTALLATION

Mount your amplifier as pictures in FIG 7-1 on the dual amplifier plate.

NOTE - These instructions are always written with the assumption that both amplifiers and all speakers are present. This is because, everyone will want to upgrade to more sound with speakers and subwoofers.

STEP 1 - With the amplifiers mounted to the plate, slide the Dual Amp Plate into position with the double groove portion of the bracket sliding between the steering column supports shown in FIG 7-2 and the 16mm nuts and washers. Do not tighten down yet.



POWER & SPEAKER
CONNECTIONS

AUDIO CONNECTIONS
AND ACCESS





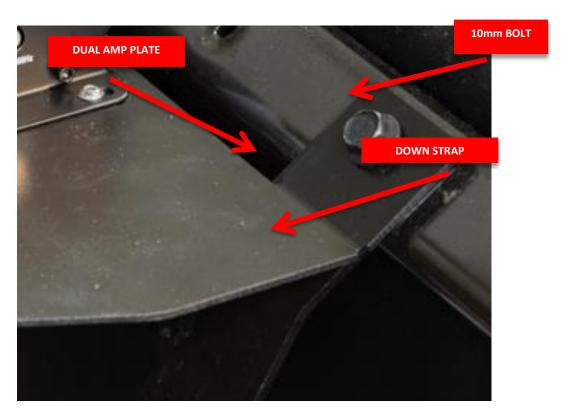
(FIG 7-2)



NOTE - The Dual Amplifier Harness is designed and laid out to perfectly connect power and speaker connections on the driver's side of the amplifiers while the RCA audio connections are on the passenger side of the RZR.

Make sure your amplifiers are mounted in the position shown in FIG 7-1. This configuration is critical to make sure you can access your fine tune adjustments for crossover and bass boost.

STEP 2 - On the front edge you will secure the plate with the 10mm bolt you removed from the dash pocket which will also hold the bracket then will ultimately support the new dash pocket with the source unit also shown in FIG 7-3.



(FIG 7-3)



NOTE – Once the amplifiers are connected, make the following adjustments to the setting. See CHAPTER 11 – TEST & TUNE for additional information on final system adjustments and best-settings.

TUNED PACKAGE	TWO CHANNEL AMPLIFIER	MONO AMPLIFIER
MBQ-STG-5-1	HP-OFF-LP/BP Switch to HP - High Pass	Bass Boost to 0dB
MBQ-STG-3-1	HP-OFF-LP/BP Switch to HP - High Pass	Bass Boost to 0dB
MBQ-STG-2-1	HP-OFF-LP/BP Switch to – OFF	N/A
MBQ-SUBSYS-1	N/A	Bass Boost to 0dB

NA2-400.2 AMPLIFIER



NA2-400.1 AMPLIFIER





CHAPTER 8 – DUAL AMPLIFIER & SPEAKER HARNESS CONNECTIONS

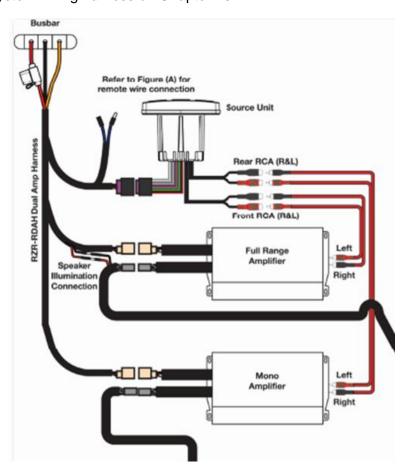
With your amplifier(s) mounted, we can now start laying in the speaker harness and plugging in all the connectors.

NOTE – While you are working on your system, we recommend covering the amplifiers to avoid scratching them or inadvertently hitting the crossovers with a wrench or screw driver.

STEP 1 – Plug in the power/ground connector of the two channel and the mono amplifier. At the same time, if you have illumination, connect the red/black. Additionally, you can connect the subwoofer and full range speaker connectors. See FIG 8-1.

NOTE – The following shows the radio in place, this is only reference for the amplifier connections that are mounted on the dual amplifier plate.

Review the full system wiring harness on Chapter 15.



(FIG 8-1)

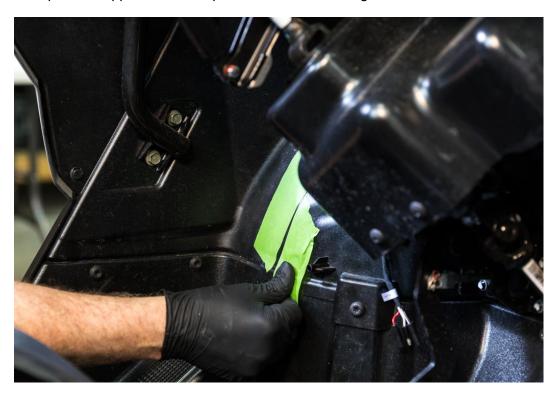


CHAPTER 9 - MOUNTING THE KICK PANEL SPEAKERS

Through hundreds of installations, we have found it smartest to mount speakers and subwoofers in this order.

- 1) Driver kick panel
- 2) Subwoofer
- 3) Passenger side kick panel

STEP 1 - Using colored painters tape shown in FIG 9-1, you need to mark the fender of the RZR where you will need to drill. To do this, hold an empty left or right pod in your hand. Hold the pod into place to approximate the position of the mounting holes on the internal fender.



(FIG 9-1)

Set the unit down and put colors tape onto the fender behind the pod until you can see the tape through the mounting holes when you hold the pod back into place.

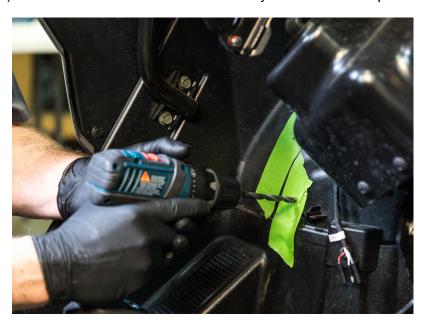


Next, use your Sharpie to mark the mount holes on the painters tape. Repeat the mounting process for the other pod Shown in FIG 9-2.



(FIG 9-2)

STEP 2 - Drill (4) 5/16 inch holes into the fender where you marked the tape shown in FIG 9-3.



(FIG 9-3)



STEP 3 - Remove any tape from the fenders. With the included hardware, mount the pod. The bolt and 1 washer mount through the fender into the pod. This leaves only the head of the bolt visible behind the tire shown in FIG 9-4.

NOTE - Make sure that the wires behind the enclosure have remained accessible for connecting to the harness. Use some painters tape to keep them from getting blocked by the enclosure.

STEP 4 – Push the included bolt through a washer then through the fender

This will come through the fender and into the kick panel speaker enclosure.



(FIG 9-4)



STEP 5 - Using the 5/16 inch bolts, washers, and nuts, mount the enclosure shown in FIG 9-5.



(FIG 9-5)

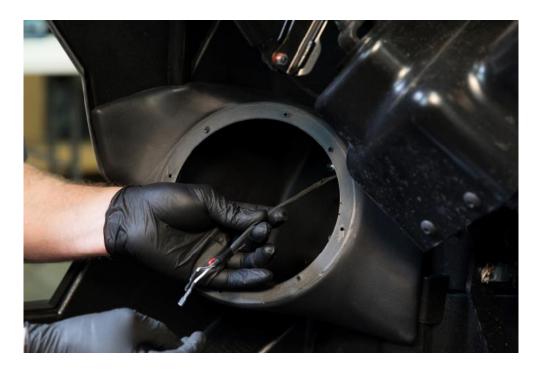
Make sure you use a washer on the inside of the enclosure against the internal wall of the pod which you sandwich against the fender of the RZR. Use your ½ inch ratchet and wrench to secure the pod.

Use a small racket and an open box wrench for convenience.

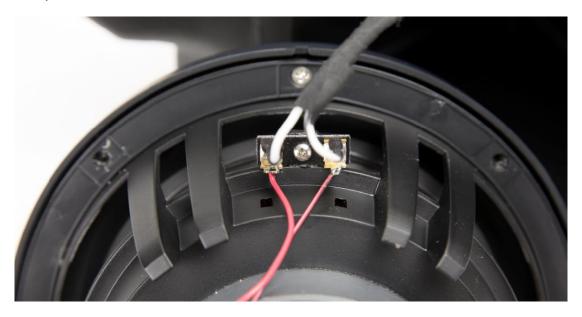
Wire the speaker and illumination if present and use the supplied screws to mount the speaker to the enclosure.



STEP 6 – Identify the harness wires from inside of each pod and connect the wires to the back of the compression horn speakers.



Connect speaker wires as shown in FIG 9-6.



(FIG 9-6)

For additional technical information, go to the "SUPPORT" tab at MBQUART.com

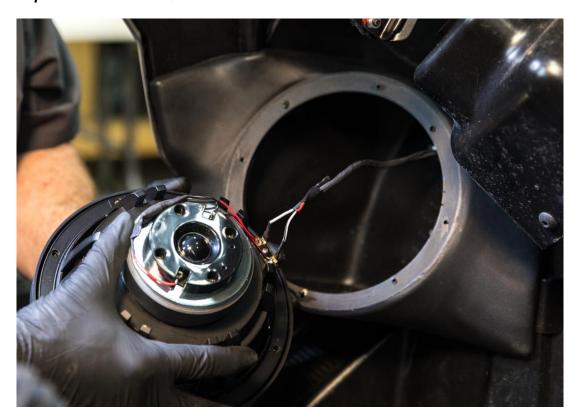
There you will find helpful, FAQ, TEQ Tips and you can contact Technical Support via email. ©2018 Maxxsonics USA



STEP 7 – With the speakers now properly wired, you can mount the speaker to the enclosure.

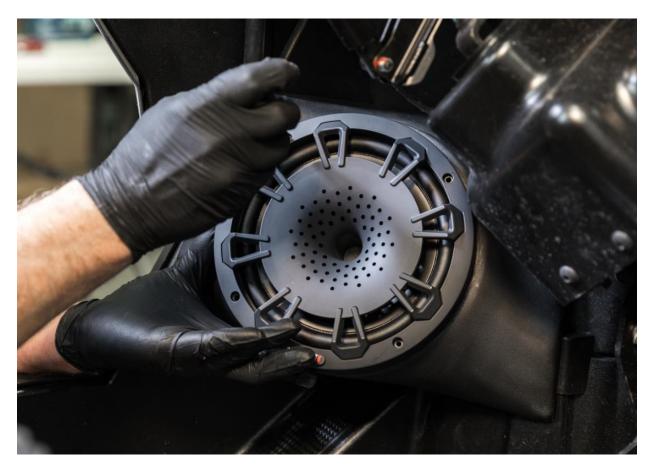
NOTE – The speakers shown being mounted here have already had their compression horn covers installed. This dramatically reduces the depth of the speaker ultimately allowing our kick panel enclosure to be shallower.

Refer to the compression horn diaphragm replacement manual included with the speakers called MBQ-POD.





STEP 8 – With the compression horn wired properly you can position the speaker and mount with the included hardware. We suggest you mount with hand tools to avoid blowing out the screws. Final speaker position is shown in FIG 9-7.



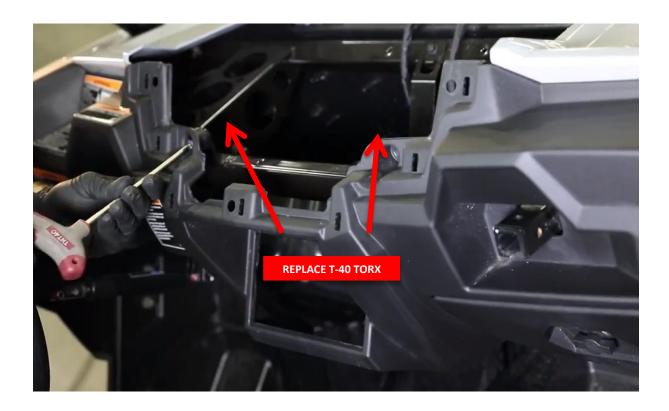
(FIG 9-7)

Repeat the process from STEP 1 – 8 for the passenger side kick panel.



CHAPTER 10 - DASH REASSEMBLY

Now you will do a partial reassembly of the front dash and loosely set into the vehicle.

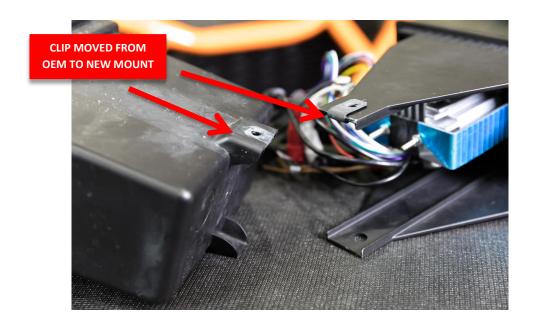


This will allow the source unit mount to be to be installed in place so the harness can be finished in the proper location. You will button up all panels in the last step.

STEP 1 – With the harness routed through the vehicle, the next step will be to bring the source unit connectors and RCA cables to the dash box.



NOTE – Make sure you retained the metal clip mentioned in CHAPTER 3. Your source unit will not mount properly in the dash pocket it without it.

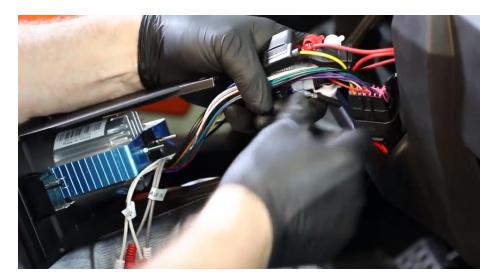




The final trim should look perfect with all dash panels in place and your new source unit mounted in the dash adapter.



After all your connections have been made, gather all the cables and set into the dash pocket.



Make sure the metal clip stays at the top where you will secure to the bracket coming down from the dash.





STEP 2 – Push the dash assembly into place until you feel and hear a snap as the entire assembly seats into place.

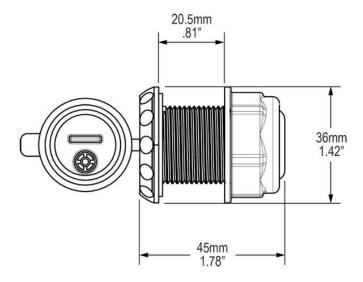




STEP 3 - MOUNT THE USB & 3.5mm DASH ADAPTER

Every machine and more importantly every RZR owner is different. With the STAGE Tuned Audio packages, we include a dual input dash adapter. This means that no matter how you connect your audio system or which RZR you have, you have plenty of connections.

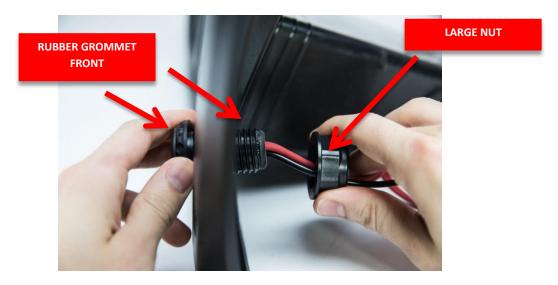
NOTE – The included USB and 3.5mm will require a 1 inch hole. There is a 10 foot (3.0 meters) cable that will extend the USB and AUX input from your source unit.



Mount the USB/3.5mm adapter somewhere in the vehicle that it will be accessible but not too low in the vehicle where it can be submerged in deep water. Due to the rubber gaskets intended for the front and the back of the mount all you need is a small smooth surface. If you are not installing a subwoofer in your system, inside the glove box is a good installation location.



After you have drilled the hole in the mounting surface, make sure to pull all the wires through the rubber grommet with the small "door" for the front. This seals the USB and 3.5mm input on the front face. Additionally, there will be a rubber grommet on the rear of the mounting surface, all secured by the large nut. See FIG 10-1



(FIG 10-1)

NOTE – The large thumb nut only needs to be finger tight. Two rubber grommets help the unit seal to the mounting surface.



(FIG 10-2)

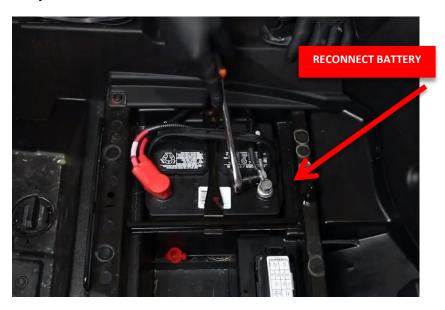
Dual Accessory Mounted with after-market voltage meter mounted above

Once your dual input and USB charge port are installed as shown in FIG 10-2, you can connect the USB to the source unit connector and the 3.5mm RCA connectors to the source unit AUX-1 input. After the TEST & TUNE chapter has been completed, you should zip tie up any excess cables.



CHAPTER 11 - TEST & TUNE

Nearly done, but it is smart to confirm that everything is working before you put the machine back together. With the harness connected to the busbar, you can now reconnect the negative terminal of the battery.



Turn the ignition key to the ACC position and push the PWR button on your source unit.

NOTE – The following instructions are for confirming connectivity of the system you just installed. Refer to the full manual for the source unit to use features like Bluetooth® pairing, adjusting treble and bass or working with the EQ.

Here is a check list so you know you did not forget something.

With the power "ON" use the list here to check the system for all of the following. Make sure you are using the controls on the source unit to confirm Left is Left and Right is Right. There will be no change from Front to Rear as all speakers are on the same 2 channel amplifiers.

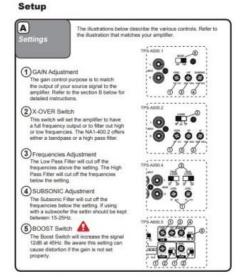
- Power on
- USB
- O BT MUSIC FOLLOWING THE PAIRING INSTRUCTIONS IN YOUR SOURCE UNIT
- O RADIO UNLESS YOU HAVE INSTALLED AN ANTENNA, YOU WILL ONLY HEAR STATIC
- SPEAKERS CONFIRM ALL YOUR SPEAKERS AND AMPLIFIERS ARE CONNECTED CORRECTLY

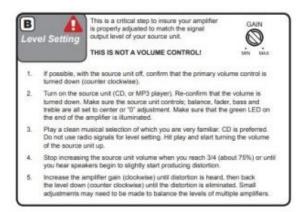


STEP 1 – FINE TUNING AMPLIFIER SETTINGS

Refer to Chapter 7 for baseline settings before proceeding with this section.

After you have confirmed and tested that all components are working you will tune the amplifiers. When setting up your amplifiers you will refer to the manual inside each amplifier. However, through hundreds of installations we have determined the following settings are ideal for the following STAGE Tuned Audio Packages.





NOTE – Gain control, it is important to adjust each amplifier gain as described in the manual. Remember, these settings are NOT volume controls. Gain controls, properly adjusted help properly balance the system sound between lows, highs and minimize distortion that comes from the source unit.

UPGRADES – If you installed the STAGE 5, you are set. However, if you add the subwoofer system or add rear pods, always check back to this guide to see if your amplifiers should be readjusted for the new components you have added.

Listen for a clear, crisp audio sound.



CHAPTER 12 - VEHICLE REASSEMBLY

Follow along the Dual Amplifier audio harness and zip tie the harness to the machine to assure it doesn't come loose during rides. Once your harness is secure, you can begin reassembling all the panels.

Here is a checklist so you do not forget anything:

- OIL COVER ON ENGINE COMPARTMENT BEHIND THE SEATS
- CENTER CONSOLE
- SEATS
- Nuts on steering wheel column
- FRONT OF DASH CHECK YOUR ALIGNMENT ON WHERE THE DASH MEETS TO THE SUBWOOFER
- TOP OF DASH
- Hood

NOTE – It is critical to the safe operation of your vehicle that the nuts holding the steering column be retightened to 40 foot pounds of torque



CHAPTER 13 - FINAL INSPECTION

Here is a check list to make sure your vehicle is ready to hit the trails. You should Pull & Tighten everything so that you know your RZR and your audio equipment are secure.

- Nuts on harness at the bus bar
- ELECTRICAL TAPE ON THE SPLICE AT THE FIREWALL GROMMET
- LEFT KICK PANEL ENCLOSURE MOUNT AND WIRED
- O RIGHT KICK PANEL ENCLOSURE MOUNT AND WIRED
- AMPLIFIER MOUNTED AND ALL NUTS ARE SECURED TO DUAL AMPLIFIER PLATE
- Nuts on steering wheel column
- HARNESSES TO AMPLIFIERS
- SUBWOOFER SPEAKER HARNESS AT AMPLIFIER
- FRONT AND REAR SPEAKER HARNESS AT AMPLIFIER
- ACCOUNT FOR ALL YOUR TOOLS.

NOTE – It is critical to the safe operation of your vehicle that the nuts holding the steering column be retightened to 40 foot pounds of torque.



CHAPTER 14 - SHOW YOUR FRIENDS

Congrats on a great install and an awesome RZR audio upgrade. Get on the trails, show your friends and show us too. We're all over social media, just like you.

We use:

@MBQUART

#MusicDefined

#RZRLIFE

#RZR

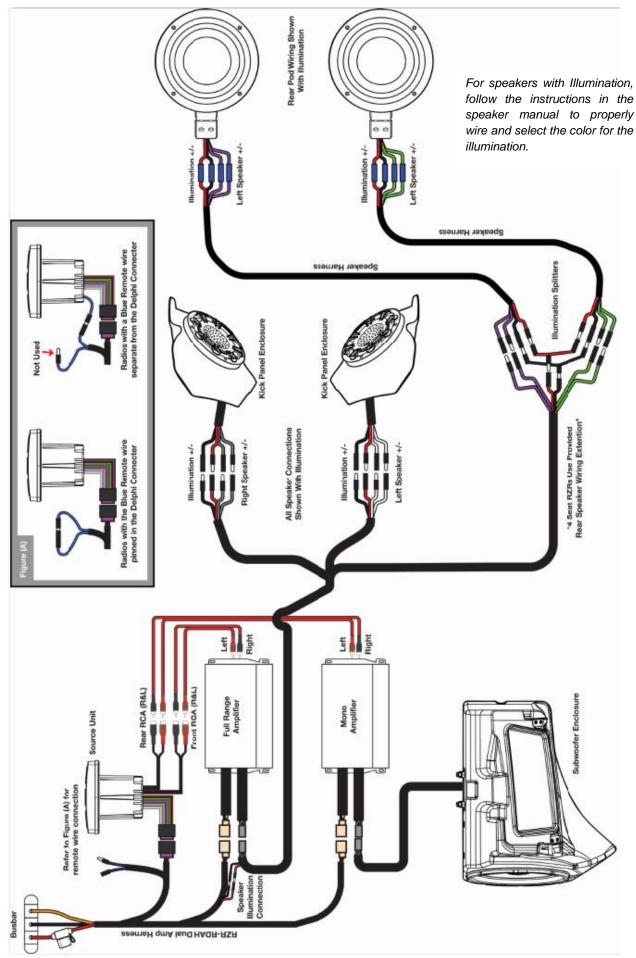


CHAPTER 15 - LAYOUT HARNESS

In our design, you absolutely cannot make a mistake. Speaker connectors are color coded for front rear, left and right. If you accidently make a mistake, it will not fit into the connector or bullet plug.

Refer to the harness layout shown on the next page to plug everything into the components.







RECORD RETAILER & PRODUCT INFORMATION HERE

Purchased From		
	STORE NAME	DATE OF PURCHASE
Source Unit		
	MODEL NUMBER	SERIAL NUMBER
Amplifier (2 channel)		
	MODEL NUMBER	SERIAL NUMBER
Front Speakers (Pr)		
. , ,	MODEL NUMBER	SERIAL NUMBER



NOTES PAGE



NOTES PAGE

