

MOTORCYCLE TUNES



*Amplified Speakers Featuring
ARC AUDIO Amplifier*

Thanks for purchasing a Motorcycle Tunes Audio Systems.

Email pictures of your installation, and we will add them to our website. Send email to motorcycltunes@aol.com
Be sure to include the year, make, model of your bike, and any notes the installation that may help others.

IMPORTANT: These instructions are condensed general instructions. Please see the enclosed ARC AUDIO instructions for more information and complete instructions. Motorcycle Tunes is NOT responsible for any damage to your bike or equipment caused by improper installation or faulty equipment. Installation is not rocket science, these instructions are intended to be simple as possible so that anyone can install. If you are not comfortable with the installation process, we recommend talking with your local car audio shop about installing for you.

CAUTION: DISCONNECT THE NEGATIVE CABLE FROM THE MOTORCYCLE BATTERY, ENSURE IT IS ISOLATED FROM THE BATTERY BEFORE BEGINING.

Begin by planning on where you are going to mount the speakers and amplifier. Plan the wire routing, you don't want it around the exhaust to or rub. You also don't want to route the power cable next to the audio input cable, because this can add noise to the system.

Amplifier Power

The amplifier will use 3 power wires. We have supplied the 3 wires needed for this setup in the kit. If you need to shorten this, you will need to shorten the wires on the bare wire ends before you attach them to the amplifier. If you need to lengthen the wires, you will want to run all new wires, and not try to extend the current wires.

Step 1: Red Wire (+12V) - This is the BIGGER Red wire with the Fuse box and ring terminal. Hook this to the +12V terminal on the amplifier and the ring terminal to the positive battery post.

Step 2: Black Wire (GND) – Hook this wire the closest metal frame of the motorcycle. And to the GND on the amplifier.

Trim the length of the ground wire, keep it short as possible, 18' LONG MAXIMUM

Step 3: Red Wire (TURN ON) – This is the SMALLER Red wire. Hook this to the TURN ON terminal on the amplifier and the other end wired to a switched and fused 12v power source on your bike. You can use a test light to find a wire that turns on/off with your key, such as a headlight wire, or you can add a mechanical switch inline with a 12 volt source to activate the amplifier. This is what will turn the amplifier on/off with your key.

Step 4: Run the power plug up to where you are going to install the amplifier.

Speaker Mounting

Step 5: Mounting the Speaker Clamps: Get an idea where you want to mount the speakers. Mount the clamps to your bars. There will be a gap on the clamps that will tighten up when the speakers are installed..

Important: Make sure the speakers will not interfere with your steering, or gauges.

Step 6: Mounting the Speakers: Mount each speaker to the clamp and make sure they are secured, but do not apply too much torque to the nut. **The bottom mounting bolt is chromed stainless steel. The treads on this bolt can be stripped easily if the nut tightened too much, or if the nut is not perfectly aligned before tightening.** Run the speaker wires down to where you are going to mount the amplifier. You may want to run the Audio Adapter Cable at this time a well.

Amplifier Speaker Output Plug – This is a small 4 prong plug, with 4 short speaker wires on it.

Step 7: Hooking up the speaker wires to the Amplifier Speaker Output Plug.

Left Chrome Speaker **Red** to the L +
Left Chrome Speaker **Black** to L -

Right Chrome Speaker **Red** to R +
Right Chrome Speaker **Black** to R -

Step 8. Amplifier Audio Input.

Audio Adapter Cable – This is a 6 foot long cable, one end has RCA plugs on it, the other end has a 3.5mm Jack on it.

Plug rca plugs into the corresponding colored RCA input jacks on the amplifier.

Run the 3.5mm end of this cable up to where you want to mount the inline volume control.

or

If you elected to get the Bluetooth Receiver – Please Refer to the Bluetooth Receiver Instruction insert at this time.

Step 9: In-Line Volume Control – This is used to make adjustments to the volume while you ride. T

Plug the Male end of the above Amplifier Audio Input, into the Female Jack of the In-Line Volume Control. Most people use cable ties to mount this volume control to their handlebars.

The male end of the In-Line Volume Control will plug into the headphone jack or audio output jack of your audio device.

If you have an iPhone or Android Phone, you can go to the app store and download a third party speed based volume control, some are free some cost.

Step 10. Check Wiring.

RECHECK YOUR WIRING, AND MAKE SURE EVERYTHING IS HOOKED UP CORRECTLY.

There are two power wires on the Amplifier Power Plug, The bigger red wire, should have a fuse inline before connecting to the positive battery terminal.

The smaller red wire should be hooked to a switched and FUSED 12v power source that turns on/off with the key.

The Black wire should be hooked to the frame of your bike, and should be short as possible. No longer than 18 inches max.

You can now reattach the negative battery terminal to the battery post.

Make sure that all wires are away from hot areas, and that everything is secured to your bike. Before your turn on the power, make sure that your devices volume is turned down. You can damage your speakers/amplifier if your device is at full or loud volume when the amp is turned on. You will always want to start off with a low volume and build up to a louder volume. This will prolong the life of your speakers/amplifier. Everything should now be hooked up correctly. You can now use the speakers.

When you turn the key on, the amplifier light should also come on, this indicates that it is properly hooked up.

CAUTION: HOOKING THE AMPLIFIER UP INCORRECTLY CAN CAUSE PROPERTY DAMAGE OR PERSONAL INJURY.

STEP 11. Setting up the amplifier. Before you mount the amplifier, you want to get set the settings because it may not be easily assessable once installed.

Make sure the volume on your audio device is turned down, then Plug the 3.5mm male end of the Volume Control into the headphone jack or audio output jack of your device.

Turn on the Key, this will power up the amplifier

Turn on your audio device, and push play, turn you can adjust the volume on your device and use the the in-line volume control.

The only setting on the amplifier you should worry about is the gain dial, for most people turning this up about $\frac{3}{4}$ is the sweet spot, but it is a personal preference. See Amplifier Setting Chart for how to set gain.

Step 12 Mounting the Amplifier


Securely mount the amplifier to the motorcycle.

Step 12: Safety Check

Important: Make sure that your driving ability is not hindered by the items added to your bike, and that you can safely operate your bike before your road test the equipment. Motorcycle Tunes yields all responsibility of any damage caused by or any damage that may result from the Motorcycle Tunes audio system. When purchasing our item, you are agreeing to release Motorcycle Tunes of all legal liabilities of all products/advice given through website, instructions, email, or phone. As the purchaser, you are agreeing to assume all responsibility of the items once they have been shipped.

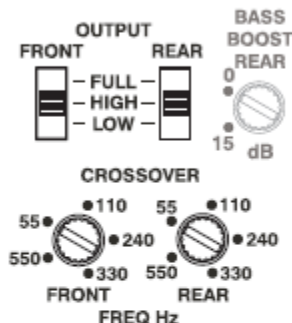
To adjust the gain setting, turn the amplifier gains all the way down (counter-clockwise). Turn the source unit volume up until distortion is audible and then turn it down a bit until the distortion is inaudible. This will be about all the way up on most source units. Next, increase the amplifier gain setting until adequate volume is achieved.

NOTE: Best signal to noise and dynamic range are realized with the gain at minimum. Most users find adequate gain and volume is achieved at about halfway in the adjustment range.

 **CAUTION:** Avoid setting the amplifier gain very high as noise and distortion will increase significantly.

Crossover Controls

A crossover is a device that removes unwanted frequencies from a speaker or amplifier. A tweeter can easily be destroyed by bass notes if they are not filtered out. Likewise a subwoofer will not sound natural if it is playing midrange notes. A crossover removes these sounds from the speaker. As you might guess, careful adjustment is needed to ensure that all the speakers are playing the right sounds and that you are left with no "holes" or low spots in the frequency response.



Bass Boost

This amp has an adjustable bass boost. On the 4 channel KS 125.4, the Bass Boost will be directed to the front speakers. Begin your adjustments at low volume. If you do not hear any improvement then the woofer does not need any boost.

Use Bass Boost carefully. The demands on power output are tremendous. Try to minimize the use by changing woofer position or the enclosure size.

