

M-PAK 14CX/HD Installation guide

For 2014+ Harley Davidson Road Glide

Table Of Contents

1. Remove the Seat	4
2. Remove the rear Tank Bolts	5
3. Remove the Front Tank Bolts	6
4. Disconnect the Fuel Line	7
5. Tank Removal	8
Special Note: Brake Lines	9
6. Expose the Harness	10
7. Power Harness	11
8. Exposing the Battery	12
9. Connecting the Power Harness	13
Note: Remove the Fuse	14
10. Windshield Removal	15
11. Vent AssemblyRemoval	16
12. Disconnect the Turn Signals	17
13. Remove the Turn Signals	18
14. Remove the Speaker Grill	19
15. Remove the Front Fairing Outer Screws	20
16. Remove the Front Fairing	21
17. Remove the Front Speakers	22

18. Trim the Enclosure Alignment Pins	23
19. Install the New Speakers	24
20. Remove the Headlight	25
21. Remove the Radio	26
22. Prepare the Harness	27
23. Connect the Power Harness	28
24. Connect the Input Plug	29
25. Connect the Speaker Wires	30
26. Connect to the Stock Harness	31
27. Connect to the Stock Harness	32
28. Remote Turn-on P&A Plug	33
29. Amplifier Mounting Plate	34
30. Mounting the Amplifier	35
31. Secure the Amplifier	36
32. Final Amplifier Installation	37
33. Confirming Fitment & Wiring	38
34. Finishing Up	
2 Channel Tuning Guide	
4 Channel Tuning Guide	



1. Locate the Philips head screw at the back of the seat and remove it being careful not to drop it. This will free the back of the seat. Raise it slightly and slide the seat toward the back of the bike until it comes free.

Note: It maybe necessary to remove the seat strap. The Philips screw for the strap can be found behind the saddle bag.



2. Remove the 2 bolts at the back of the tank under the seat. Don't drop them down by the battery. You will need them later.

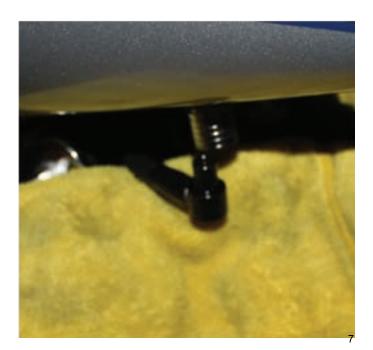


3. Remove the 2 bolts at the front of the tank. These are under rubber covers that must be removed first.



4. To disconnect the fuel line from the fuel tank, locate the quick disconnect fitting on the left side of the tank.

Push up on the chrome plated portion of the connector. Work the black elbow fitting free while holding the chrome fitting in the up position.

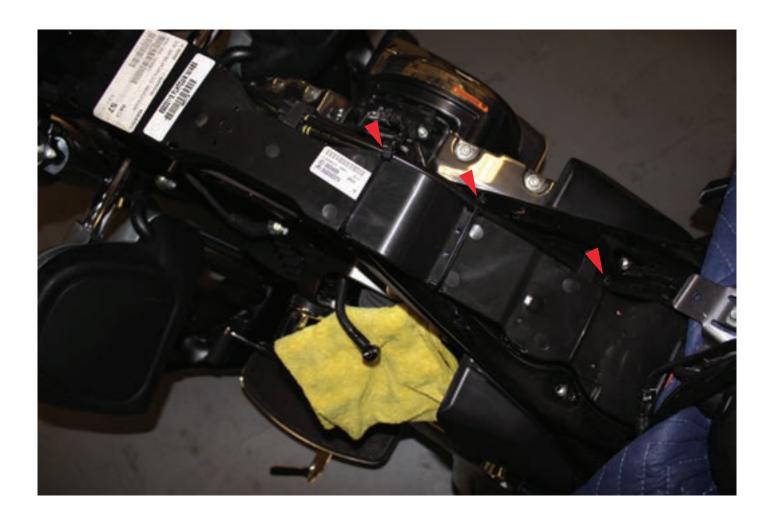


The elbow and attached fuel line should come free with very little effort. This fitting is self sealing however a small amount of fuel may drip for the connector. You may want to put a rag under it to catch any gas.

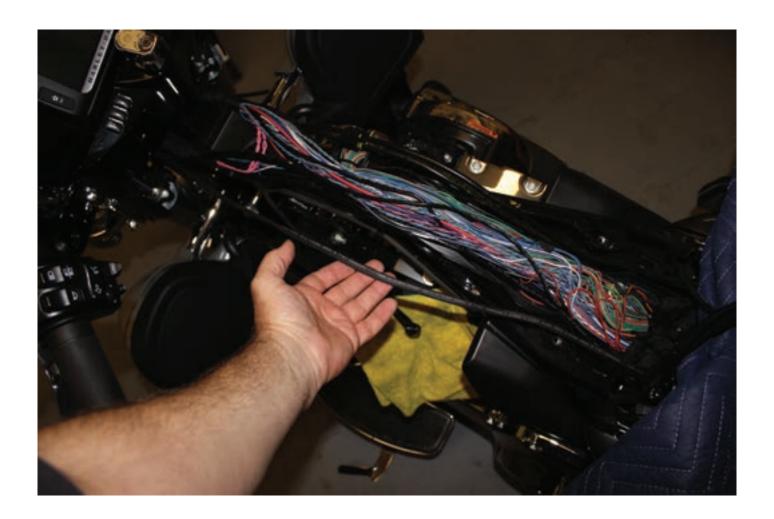


5. Short Cut. While it is advisable to remove the chrome "Dash Board" from the tank and fully disconnect all wires and lines attached, you can carefully swing the tank around and set it in the seat position. A great deal of care must be taken to insure nothing is scratched or damaged. If you are uncomfortable with this method, please watch the tank video below for complete tank removal instructions.

https://www.youtube.com/watch?v=TOaxIr8BCgU



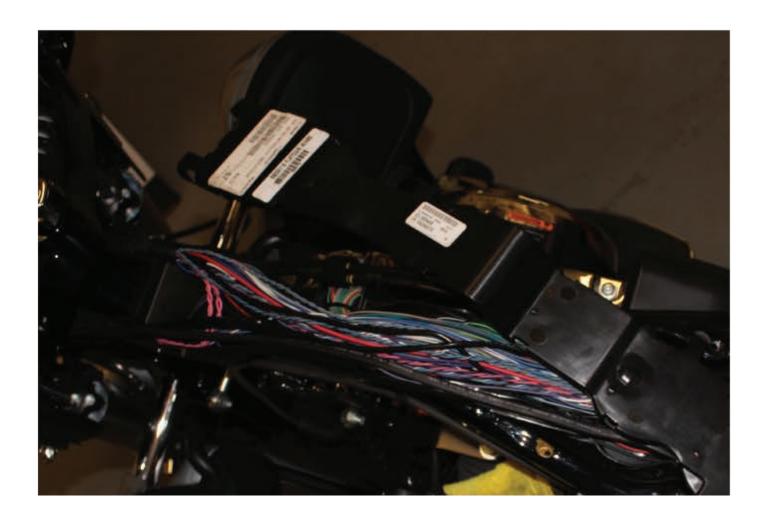
Special Note: This 2014 model has had 3 zip ties added under the tank the secure the brake lines. If your bike does not have these it is recommended that you contact your local dealer and find out if it is necessary. If they are present they must be replaced exactly as they are. ARC Audio takes no responsibility for this modification.



6. Remove the black plastic cover off the top of the wire cover on the back bone of the frame. No tools here, just work it loose from the tabs.

Lay the Provided HD Power Upgrade Harness in with the rest of the wires. Make sure the fuse holder is at the battery end. Nothing special here, just tuck it in place. Make sure you leave enough to make the connection to the battery.

Warning: Remove the supplied fuse from the fuse holder before you begin.



7. This is what it should look like before you put the cover back on.

At this point you can reverse the process, putting the cover back on and putting the tank back in place and secure all the hardware tightly. Don't forget the fuel line. Give it a gentle tug to make sure it is securely connected.

Warning: Do Not Use the Small Power Harness that is also provided in this kit. Only Use the 8 Gauge power harness provided.



8. Remove the 2 highlighted bolts. You may find it helpful to remove the control module (the one with 3 big plugs on it) on top of the battery cover.

Slide the battery cover forward as far as possible. There is a metal tab at the front that it ahs to clear before it can be lifted up.



9. You have now exposed the top of the battery. The 2 ends of the power harness with the metal ring terminal can now be connected to the battery at this location. Take extra care when working around the positive (+) battery terminal. You should always wear safety glasses when working with the battery.

Just a reminder, the red wire connects to the battery positive (+) and the black wire to the battery negative (-).



Whoops! Did you forget to remove the fuse?

Only install the fuse after ALL your connections to the battery and the amplifier are complete. There is a risk of significant damage and even fire if you forget this step.



10. Remove the 4- Torx head screws below the windshield. Warning: The windshield will be loose and ready to remove. Don't let it fall.



11. Remove the Upper vent assembly. No tools required here. It just pops off.



12. Unplug the turn signal. This is done from the top and requires no special tools.

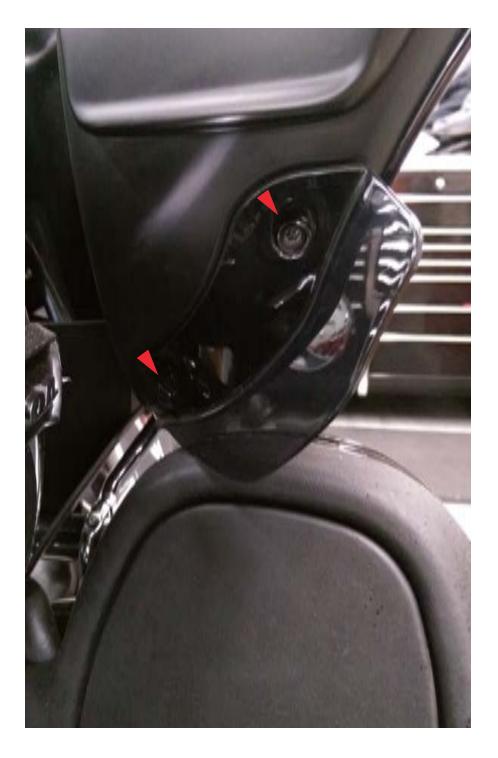


13. Remove both the left and right side turn signals.



14. Remove the speaker grill by prying gently on the inner side. Then remove the 2 Torx head screws holding the fairing.





15. Remove the 2 Torx head screws holding the lower outside edge of the fairing.



16. The outer fairing will now come off with very little effort. If it does not come off easily, look for a missed screw or bolt.



17. The original equipment speaker can now be removed and put aside. It will not be needed again. The 4 Trox head screws will be retained and used to hold the new speaker.



18. There is a plastic alignment pin, molded to the speaker housing. This must be trimmed flush with sharp flush cutters or a razor knife.

Warning: Razors of sharp or they are supposed to be anyway.

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19. The new speaker can now be plugged in a installed. The Side connectors are sized to the correct plug, large and small. We have found some bikes require that the rubber magnet cover be removed from the speaker for clearance. This has no negative effect on the speaker and will not affect your warranty. Secure the speaker with the original Trox head hardware.

24

Hint: The speaker does go through the hole. Start with the inner side first.

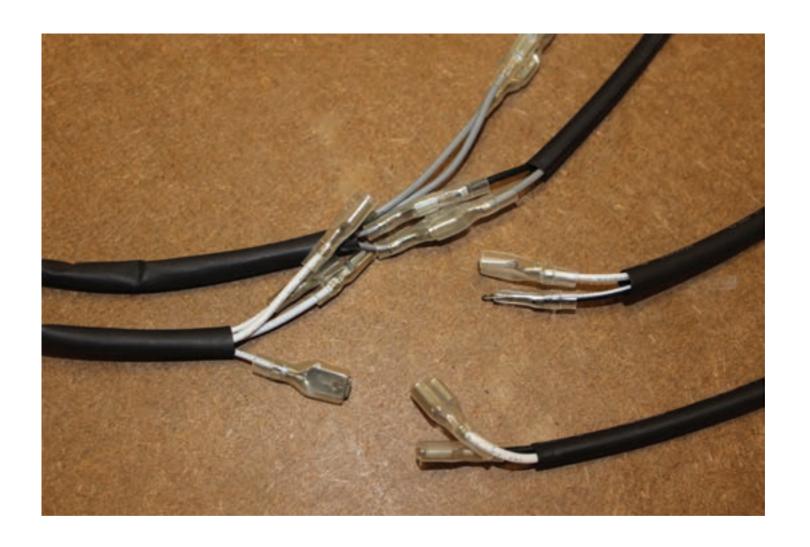


20. Remove the headlight by removing the 4 screws securing it to the fairing and unplug the harness. You will need access behind the headlight when mounting the amplifier.



21. It's time to remove the stock radio. The amplifier will be located upside down beneath the radio.

Remove the 4 Allen screws holding the radio in place. Disconnect all the plugs and harnesses from the rear.





22. You now need to assemble the speaker harness. Just plug the adapters to the ends of the harness, matching the connectors with their appropriate mate. Make sure the insulating covers are firmly in place. A shorted wire here will shut down or possible damage the system.

Note: The wire colors will not match. This is by design and should not be changed.

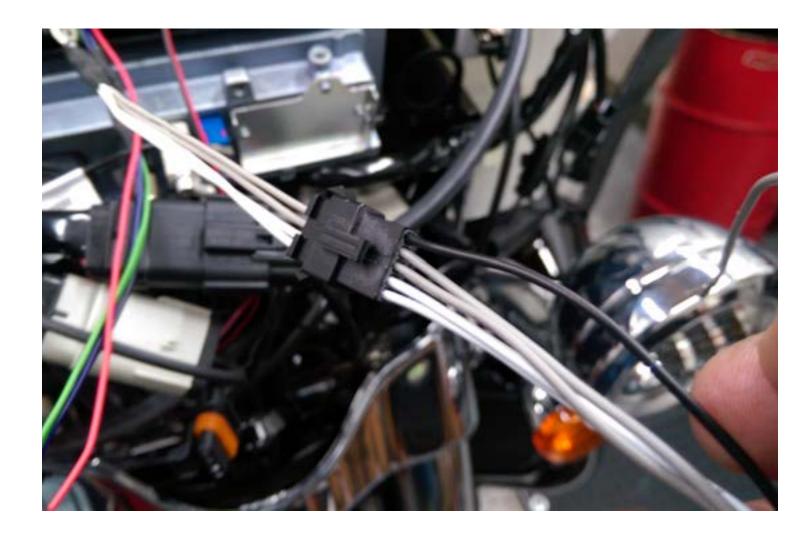


23. Connect the power harness from the battery to the 3 screw terminal block on the end of the amplifier. You did remember to remove the fuse from the harness right? The Red wire goes to the +12V terminal, black to GND and the

28

orange wire from the P&A connects to TURN ON.





24. Connect the black 5 pin plug to its mate on the High Level input plug. Use the matching wire colors (Gray and White) and connect it to the amplifier.

Note: The input selector switch should be set to 2CH. unless the you are installing in an Ultra or Ultra Classic and choose to use the rear inputs. This will require some custom wiring.

29

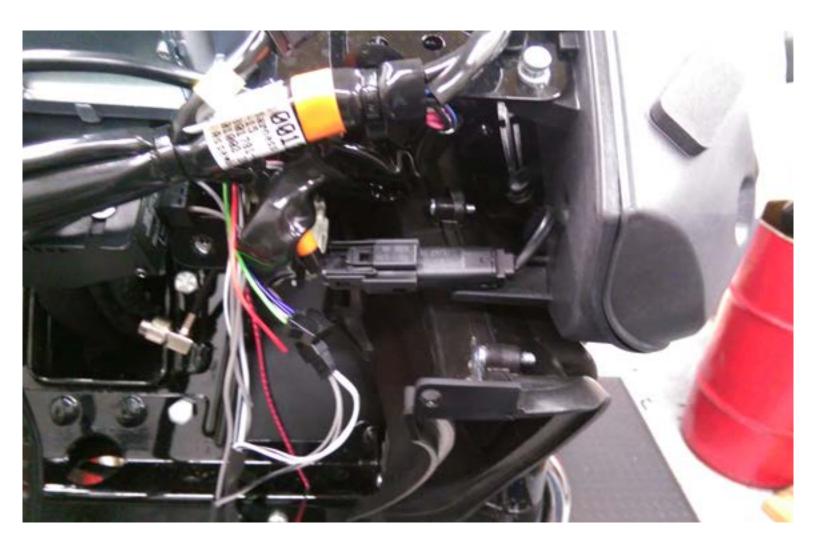
Note: The Black wire is not used in this installation.



25. On the end of the speaker harness are 4 stripped wires. Connect them to the 4 screw block terminal on the end of the amplifier with the controls.

Solid White = Left + White/Black = Left - Solid Gray = Right+ Gray/Black = Right -

Connect the Red TURN ON wire to the orange P&A wire provided in the kit and plug it into a avalible P&A connector.

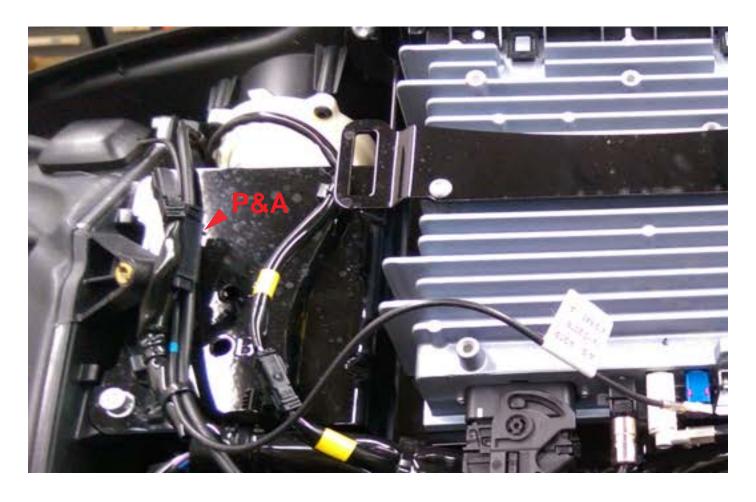


26. Locate the 2 wire Molex® connector. It can be found behind the speaker housing. This will match the connectors on the supplied harness. Unplug this harness and connect the matching ends of the supplied harness here. This connection will serve and both input to the amplifier and output to the speakers.

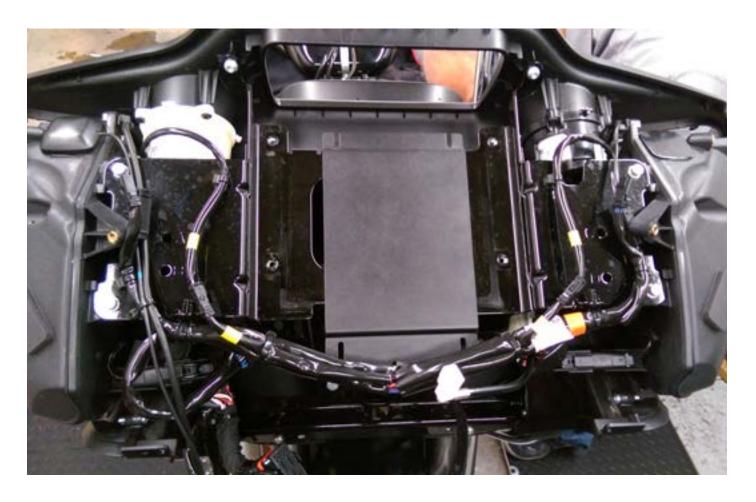


27. No tools are needed to make this connection. Make sure the connectors are fully seated and latched.

Note: Do Not pull this plug by the wires. It's expensive.



28. Locate the 2 pin connector we will use for remote turn on. The service manual calls this a "P&A" connector and it is intended to power or trigger accessories like this. There will be an empty plug in the end that will need to be removed. Once that cap has been removed you can plug in the provided orange wire and set it aside.



29. With the radio removed, you will see a large, black, steel bracket that is the main support for the fairing. The amplifier mounting place will lay on top of this support so that is it held in place by the radio when it is reinstalled.

Note: The short tab of the mounting bracket faces the rear of the bike closest to the gauges.

Wrong



Wrong





30. By now the amplifier should be completely wired and tuned. You will not be able to make any adjustments after this point without removing the amplifier. If needed temporarily reconnect the radio and test the system.

The amplifier inserts under the structural members of the fairing, directly behind the headlight.



31 Secure the amplifier to the bracket using the provided screws and washers. Some Blue Locktite® would be a good idea here.





32. The final amplifier installation should look something like this.



33. Looking through the opening for the radio, you can see the wiring exits on the left hand side (clutch level side). The steel structure around the amplifier is shaped perfectly to accept it with all the correct angles to provide clearance. Now would be a good time to insure the wiring is secure and will not abrade on anything metal.



34. With the radio reinstalled and connected the finished amplifier installation should look like this. Make sure you have all the connections at the radio correct, fully seated and tightly secured. The system should now be ready for a final system check.

Replace the fuse into the power harness under the seat. A small spark here is normal.

You can now switch the bike to the Acc. position. Start with the volume low. The system should come on and play sound. If everything is working, you can reverse the tear down procedures and reassemble the bike.



Crossover and Level Setting Instructions 6.5" Factory Radio

2 Speaker installation

Set to

4CH

Adjusting your amplifier is one of the most important steps in properly setting up your new audio addition.

SETTING THE GAINS

Start with the gains all the way down (Figure 1) and turn them to the position indicated in Figure 2.

SETTING THE CROSSOVER

In most cases the crossover will be set to HIGH. The "Crossover Freg" control should be set between 50Hz and 110Hz (Figure 3) depending on the flash in your stock radio.

SETTING THE BASS BOOST

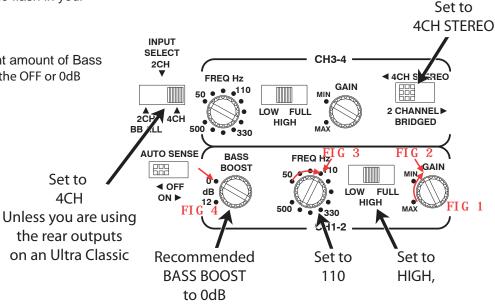
The 6.5" radio already has a significant amount of Bass Boost added. Set the Bass Boost to the OFF or 0dB position (Figure 4).

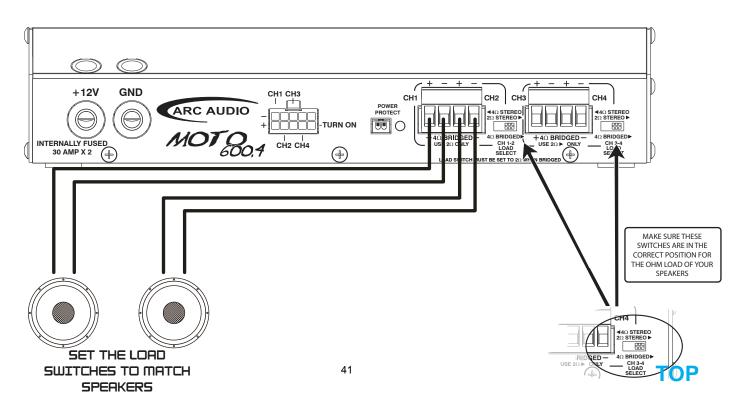
FACTORY EQUIPMENT NOTICE

HD factory radio's have been known to clip (or distort) at higher opertaing levels. ARC Audio recommends, but does not require that operation of the HD factory radio not be done at levels any higher than four bars from Maximum volume to optimize you experience and to ensure you the highest level of dynamic sound quality and performance possible

WARNING!!!!!!

YOU MUST TURN OFF YOUR MOTOR-CYCLES AUTOMATIC VOLUME CON-TROL (AVC) WHEN USING ANY MPAK KIT. FAILURE TO DO SO CAN RESULT IN DAMAGE TO THE EQUIPMENT AND TO YOUR LISTENING **EXPERIENCE!!**







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