Tesla Model X

Active Sound Installation Guide

V1.0

May 2020

Supplied Parts

Single Generator Kits

Quantity	Description	Notes
1	Milltek Sport Active Sound Module	Metal Cased Module
1	Milltek Sport Active Sound EV Gateway	Smaller Plastic Case Module
1	Wiring Loom for Single Generator Installation	
1	Blue Posi-Tap Wiring Connector	
2	Red Posi-Tap Wiring Connectors	
1	Sound Generator (MSSGFK04)	4 x M8 x 16mm Bolts and Washers
1	Body Mounting Bracket (MSSGFK33)	
1	Securing Plate (MSSGFK34)	
1	Floor Support Bracket (MSSGFK35)	
10	Cable / Zip Ties	

Single Generator + RSE Option Kits

Quantity	Description	Notes
1	Milltek Sport Active Sound Module	Metal Cased Module
1	Milltek Sport Active Sound EV Gateway	Smaller Plastic Case Module
1	Wiring Loom for Single Generator + RSE Installation	
1	Blue Posi-Tap Wiring Connector	
2	Red Posi-Tap Wiring Connectors	
1	Sound Generator (MSSGFK04)	8 x M8 x 16mm Bolts and Washers
1	Body Mounting Bracket (MSSGFK33)	
1	Securing Plate (MSSGFK34)	
1	Floor Support Bracket (MSSGFK35)	
1	RSE Speaker (MSVS048)	
1	RSE Mounting Bracket (MSSGFK36)	
10	Cable / Zip Ties	

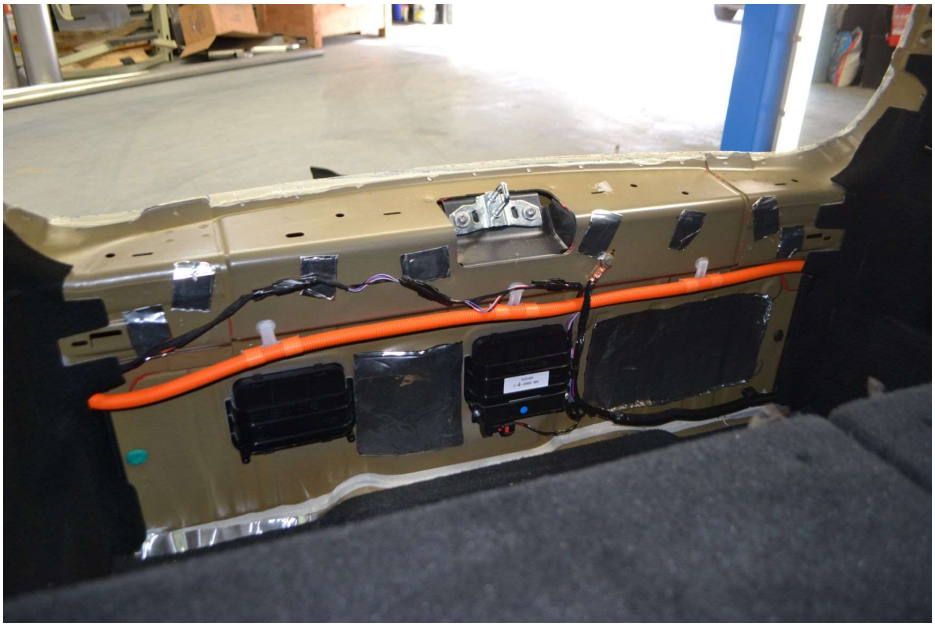
- **Installation of the Sound Generator Hardware and Connecting the Wiring Loom**

1. Open the rear trunk and remove the lower trim panel and side trim panels



2. Remove the rubber seal and the lower carpeted trunk cover – **NOTE The rubber sealing strip has white glue/sealant under it so we recommend coving the interior trims and fabrics where possible.**

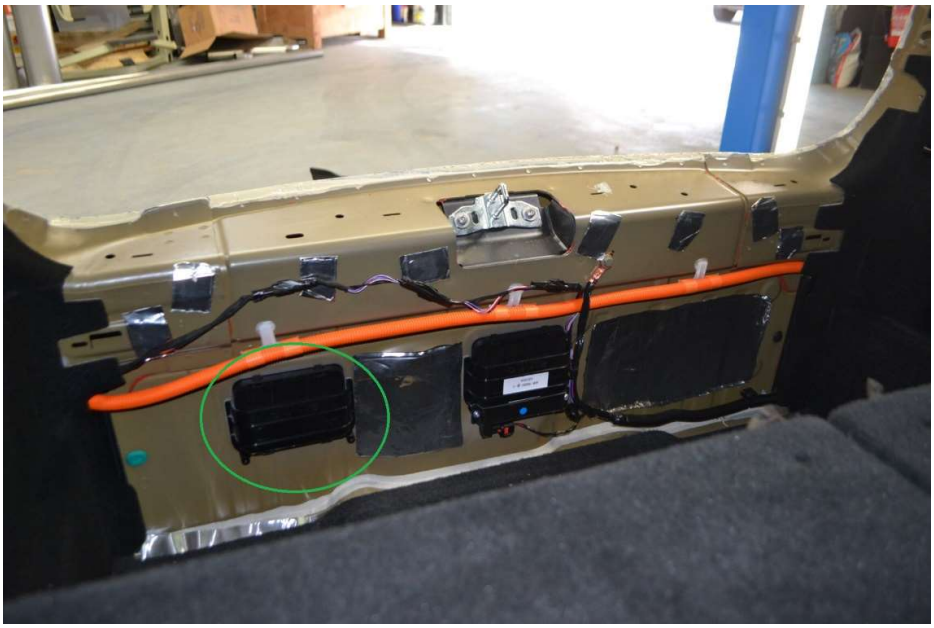
3. Remove the inside carpet covering the area on the back of the trunk nearest to the rear bumper



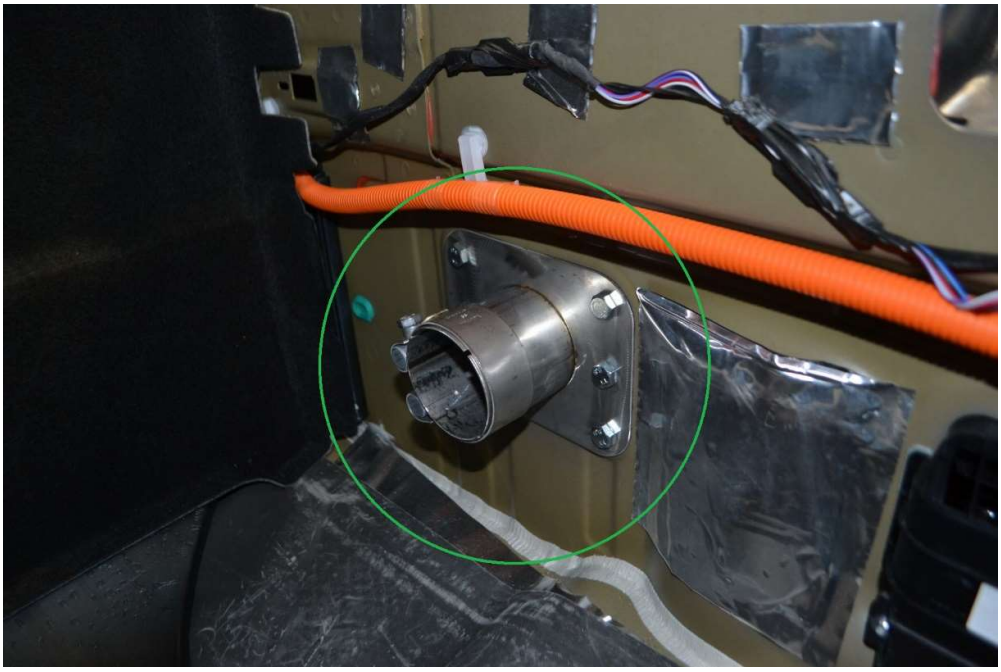
4. Now remove the cover for the tow bar connector on the under tray

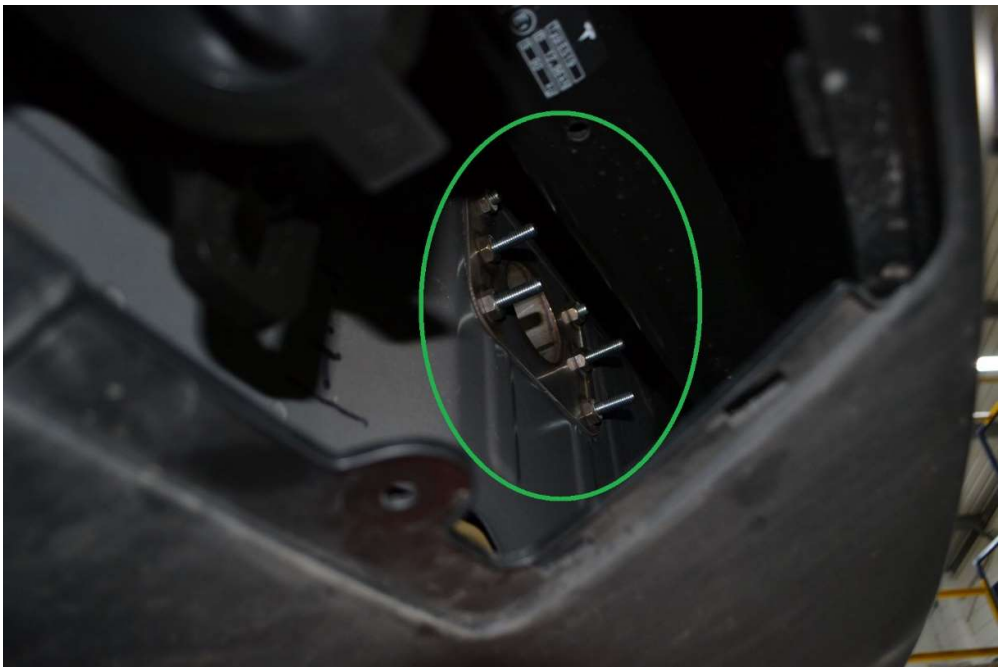


5. Next remove the plastic vent shown below



6. Now install the Body mount bracket and securing plate as shown below, NOTE – Installing the RSE optional speaker fix the RSE mounting plate in place before bolting the two main brackets together (third image)





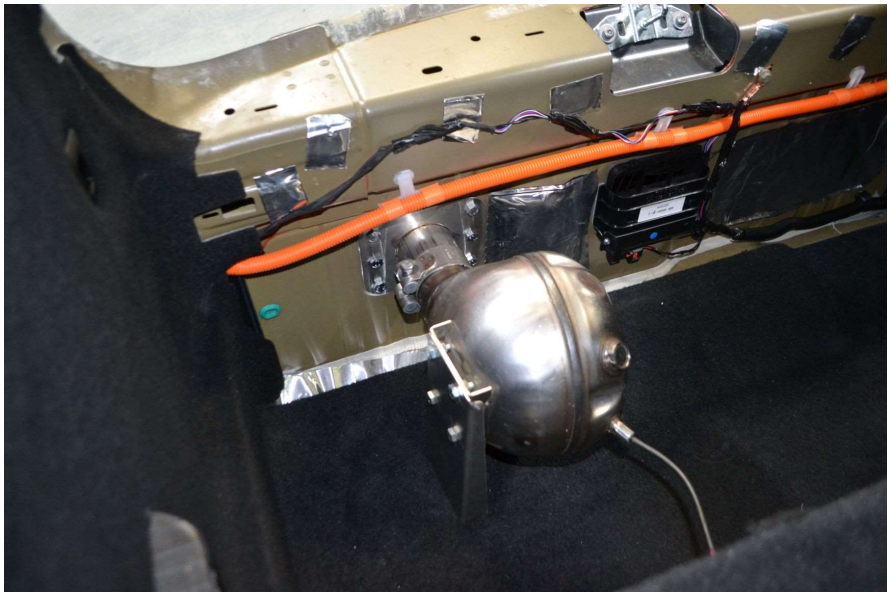
Optional RSE Bracket



7. If installing the RSE speaker now mount it with the supplied bolts to the RSE bracket



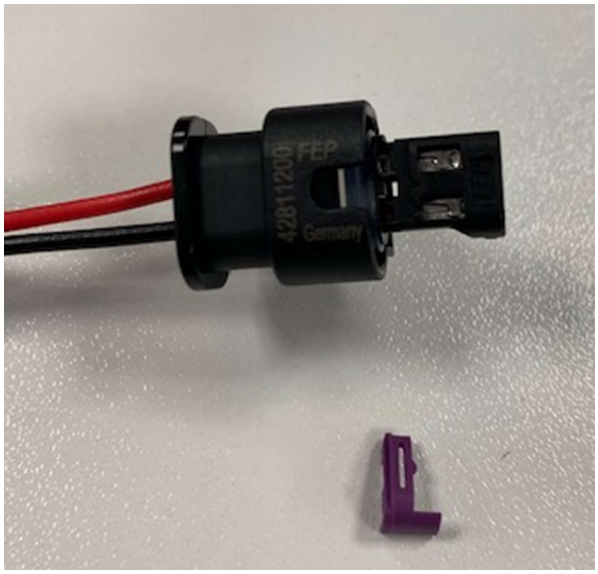
8. Now attach the Floor Support Bracket to the base of the Sound Generator and check fitment on the outlet stub



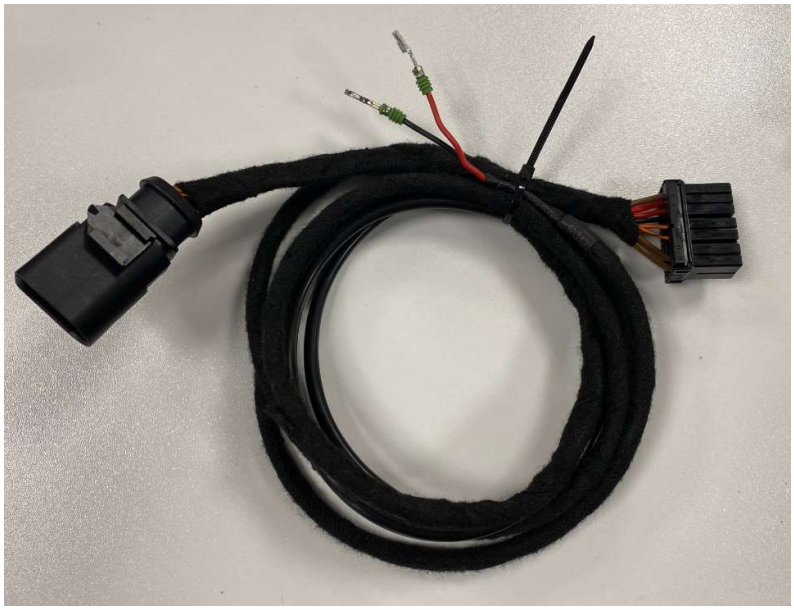
9. Once happy with the fitment of the body mounting plate and the main sound generator position, the rear carpet section need to be carefully cut to allow it be reinstalled later with the sound generator in it's final position

10. Before continuing any further ensure the car is powered off by selecting the **"Power Off" option from the menu under "Safety and Security"**

11. Now working on the right hand side of the trunk, connect the Sound Generators to the loom, if cables are loose and not in the black connectors, slide the purple locking piece from the connector and insert the silver pins and gently into the connector (NOTE – Red goes to PIN 2 and Black to Pin 1) and then refit the purple locking tab

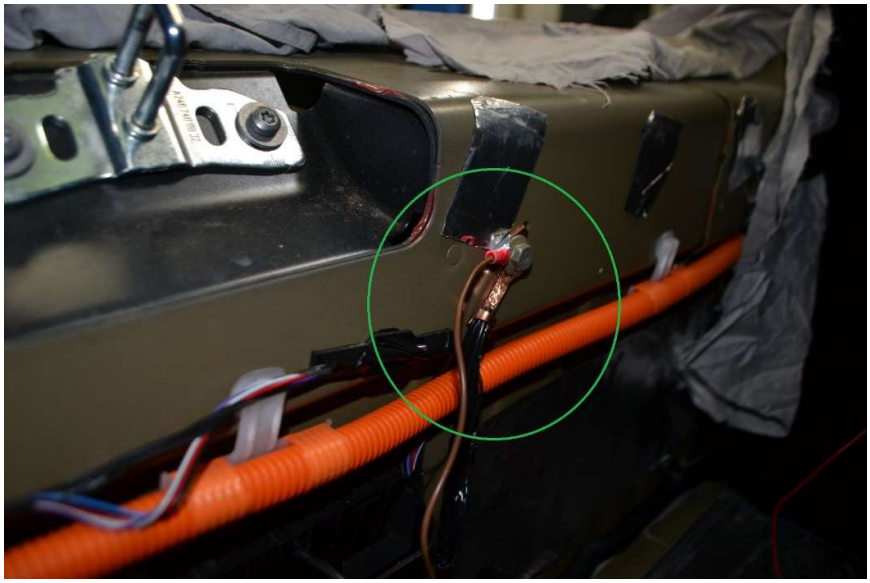


12. If installing the optional RSE speaker the connection for this comes from the adapter section of the loom, the main sound generator connection is from the main loom section



13. Connect to the plug on the Sound Generator ensure they click in place and secure the cable with the supplied cable / zip ties, running the cable around the back of the vehicle alongside the existing cables.

14. Now locate a suitable earth point and connect the brown wire with round ring connector to the vehicle's chassis



15. Now run the long can bus wiring to the front the vehicle along the right-hand side of the car, the can bus cable is the small twisted pair cable.

16. These are connected to the small blue diagnostics plug under the main display screen, pull down on the cubby hole below the screen to access the plug

17. Connect the wires as follows: -

    Car Wire - Green with White Tracer = CANBUS High – Connect the Orange with Black Tracer Wire on the loom

    Car Wire Solid Green = CANBUS Low – Connect the Orange with Brown Tracer Wire on the Loom

    Note – Alternative colours are sometimes used for the CAN BUS wiring for the Active Sound kit as outlined below: -

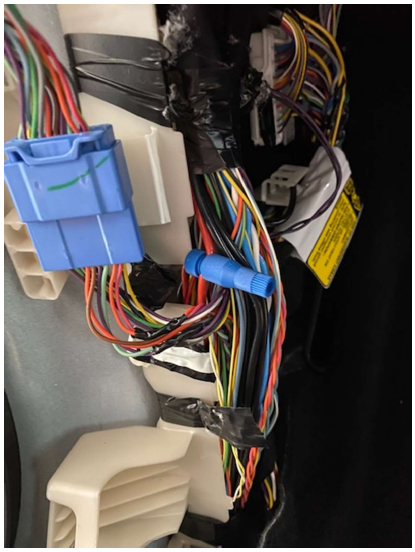
    Loom - Blue with Red Tracer = CAN BUS High - Car Green with White Tracer

    Loom - Red Solid Wire = CAN BUS Low – Car Solid Green

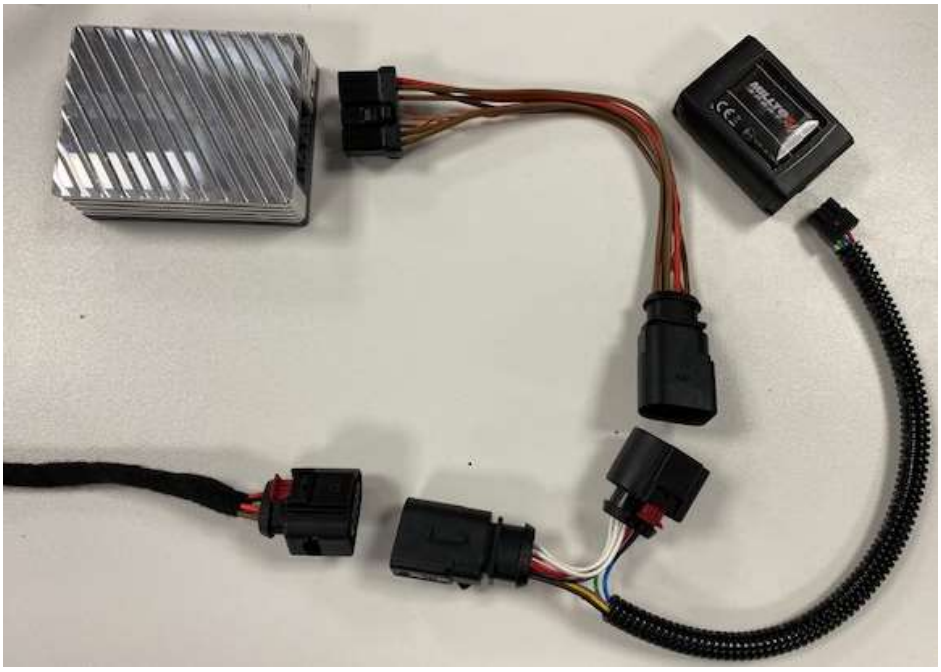
    Yellow with Red Tracer = CAN BUS High – Car Green with White Tracer

    Yellow with Brown Tracer = CAN BUS Low – Car Solid Green

18. Now connect the 12v Red cable to a suitable 12v Switch Live feed, this can vary depending on the age of the vehicle, but is normally found in the main loom near the footwell on the right hand side of the vehicle, known good 12v switch live wires in the model X will be thick Red with White or Grey Tracer, connect using the supplied Blue POSI-Lock connector, **always test with a 12v circuit tester or Multimeter first!**



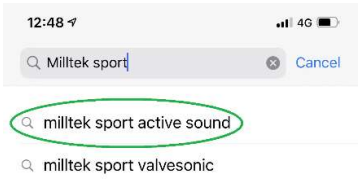
19. Next Connect the modules to the loom as shown below

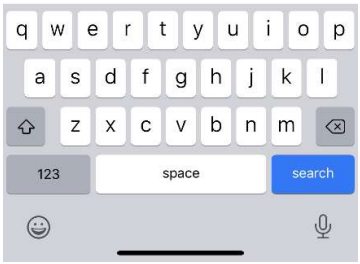


20. The system is now ready to be tested, it is highly recommend you test before fully re-installing the trim panels etc, however to prevent any errors you should loosely re-install the rear bumper and connect the parking sensor cables back together to prevent any errors or fault codes being stored.

- **Setting up the App and Testing the Active Sound System**

1. On your Smart Phone visit the Apple App Store or Google Play Store and search for “Milltek Sport” and select “Milltek Sport Active Sound”

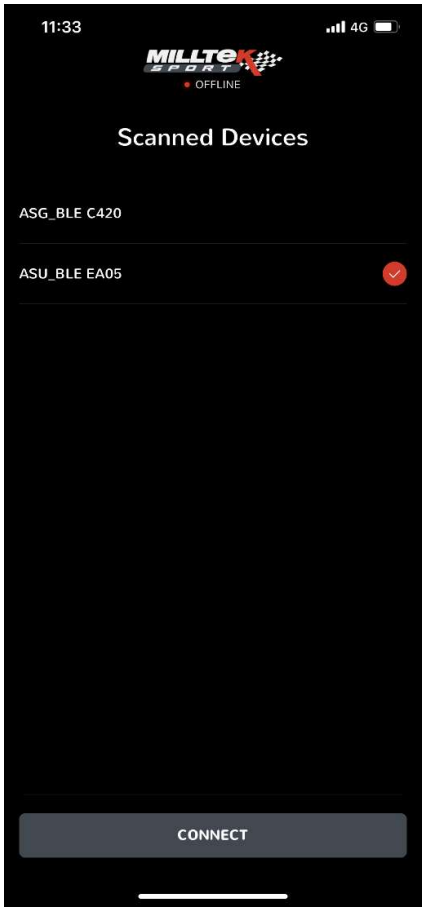




2. Download and install the app (Free of charge), before opening ensure your devices Bluetooth is enabled, if you open the app without Bluetooth enabled it will prompt you, close the app switch Bluetooth on from your devices system menu and restart the application.

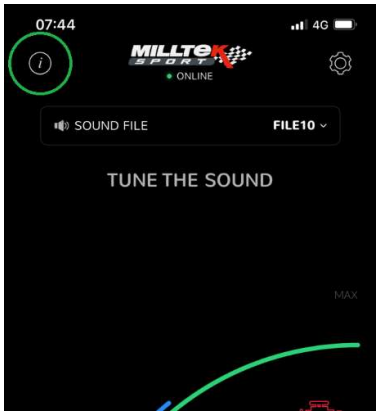
3. Get into the driver's seat and press the brake pedal to wake/power the car back on, **do not engage "Drive" or attempt to move the vehicle at this time.**

4. Open the application and it will go to the Device selection screen, if all connections have been made successfully the app will show two available devices: -

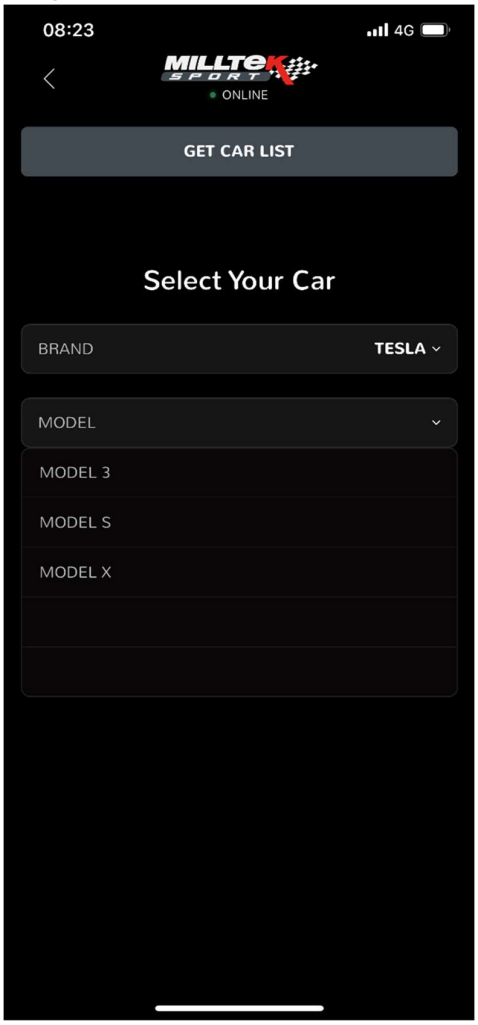


5. Select the device name that starts with “ASU_BLE XXXX” and click on Connect. When Prompted enter the default passcode of “0000”.

6. Now press the “I” icon at the top left of the app screen



7. Then select “Download Manager” and click on “Get Car List”



8. Now select the Make “Tesla”, then the Model “Model X” and click on download, the control module will be updated with the latest settings for your vehicle, once complete you will get a message confirming.

9. Now return to the App’s main where you can configure the settings. To test ensure the Volume is set to at least 50% by clicking on the Green bar and sliding this higher.

10. Now gain ensuring the car is in **“PARK”!** press the throttle pedal and the Sound generators should respond to your throttle input.

11. For a copy of the full operation manual of the Milltek Sport Active Sound App please email info@millteksport.com to request a PDF copy

- **Completing the Installation**

Once the system has been successfully tested, the remaining trim panels can be re-installed in the reverse order of the removal.

It is important to check cables are secure and free from being trapped when the trim is re-fitted, the main loom and modules in the left-hand side rear of the trunk should also be secured with the supplied zip/cable ties.

- ## Troubleshooting

- **Unable to Connect to the module to test?**

    - Check the 12v power cable and using a multi-meter confirm you have 12v DC on the red wire going to the loom powering the Milltek Sport Active Sound Control modules

    - Check the 10amp Fuse on the loom

    - Check the connections for the loom and module are correct as shown in step 36

- **Module is found in the app but cannot connect?**

    - Check you are entering the correct passcode of 0000

    - Power off the car and unplug the modules for 10 mins and try again

- **Module is found by the App, you can enter the passcode but does not respond to the throttle input?**

    - With only the large Metal module connected to the loom, Check the CANBUS connections and ensure these haven't been switched over, this can be confirmed by the "CAN OK" message within the app select the "Diagnostics" option by pressing the "Cog" icon on the main App screen, if it shows "CAN FAILED" then there is an issue with the wiring connection to the vehicle

- **Module is found by the App, you can enter the passcode but does not make any sound?**

    - Check the connection to the Sound Generators and ensure these haven't been damaged or switched over, this can be confirmed by the "Output 1 OK" for Left Hand Generator or "Output 2 Ok" for Right Hand Generator message within the app by selecting the "Diagnostics" option by pressing the "Cog" icon on the main App screen, if it shows "Output X Open / Short" then there is an issue with the wiring connection to the Sound Generator(s)