SYSTEM NO.	**SSXVS001**

VEHICLES	YEARS
BMW 1 SERIES M135I 3 & 5 DOOR (F21 & F20, NONE XDRIVE)	2012 TO 2016
BMW 1 SERIES M140I 3 & 5 DOOR (F20 & F21 LCI, NON-OPF)	2015 TO 2018
BMW 2 SERIES M235I COUPÉ (F22) (NON XDRIVE)	2014 TO 2015
BMW 2 SERIES M240I COUPE (F22 LCI, NON-OPF & NONE XDRIVE)	2015 TO 2018
BMW 2 SERIES M2 COUPÉ (F87)	2016 TO 2018
BMW 3 SERIES F80 M3 & M3 COMPETITION SALOON (NON OPF/GPF MODELS ONLY)	2014 TO 2018
BMW 4 SERIES F82/83 M4 COUPE/CONVERTIBLE & M4 COMPETITION COUPÉ (NON-OPF EQUIPPED MODELS ONLY)	2014 TO 2018
MILLTEK SPORT PRODUCTS VALVESONIC + BMW F SERIES MODELS ALL	N/A

NOTES	Insert

TECHNICAL INFORMATION



NOTES	Insert

Installation:-

The installation of the module is completed by connecting the four wires using the supplied Posi-Lock screw lock connectors, detail of how to use these can be found here: -

http://www.easternbeaver.com/Main/Elec__Products/Posi-Lock/Posi-Install/posi-install.html

The wiring is connected directly to the back of the OBD2 port which is normally located in the drivers side footwell, the four wires connect as follows: -

Module Wire (Colour) --------→ OBD2 Wire (Pin / Colour)

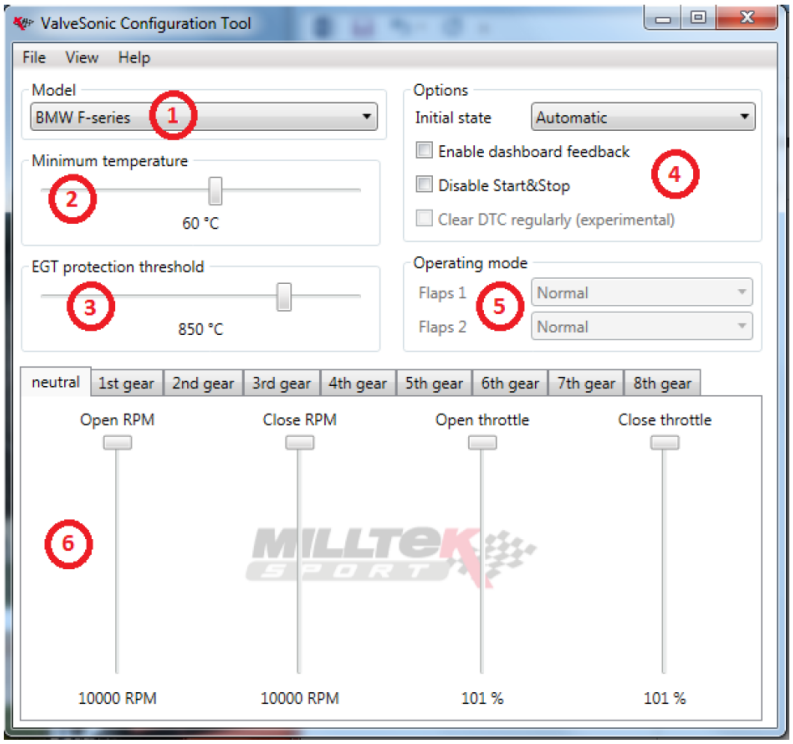
- Red cable <-> Red cable (pin 16)
- Black cable <-> Brown cable (pin 4)
- White cable <-> Blue cable (pin 14)
- Green cable <-> Grey cable (pin 6)

Installation of Software: -

- To program the module you must first download and install the Milltek Sport ValveSonic+ software, this can be found at: -
- http://www.milltekinnovation.com/valvesonicsoftware.cfm
- Your browser may give a security warning about downloading this file, this can be ignored, you may need to select the download option (top right corner or press Control-J) in Google Chrome and select "Keep" otherwise the file will be deleted.
- This requires a Windows PC with one available USB port (min Windows 7 either 32 or 64bit) and 150mb of free hard disk space and must be signed in with a user account with Administrator rights.
- Accept the defaults during the installation of the software, and if prompted restart the PC.
- Now open the application from the desktop icon it creates if it does not open automatically.

Programming the Module: -

Open the end of the module by removing the two screws on the blank panel, and connect the supplied USB cable to the module and then into one of the available USB ports on the PC/Laptop.
From the File menu select "Read Configuration from Module", this will load the current setup from the device, the following screen should be displayed: -



The options control the following settings and allow the module to be programmed to the end users preference:

1- Model – This must be left to BMW F-Series
2- Operating Temp, this controls the cold start function and sets a temperature of when the module will allow the valves to open
3- EGT Protection – Recommended to be left to 850c, this provides protection to force the valves open and prevent damage to the vehicles exhaust system
4- Options – This controls the default state of the valves and allows for additional function's such as disabling the start/stop and enabling dashboard feedback when the override has been set on the vehicles steering wheel
5- Operating Mode – Not used on BMW F-Series
6- Gear Selection Tabs – Enables configuration of the open and close points based on both RPM and throttle position by individual gear selected when the module is in its default state of Automatic mode.

Once all settings have been configured to the required parameters these need to be stored into the module. To store the configuration select "Write Configuration to Module" from the file menu. It is also possible to save a copy to a file for future reference, this can be done by selecting the "Save Config" option, this will create an .xml file on your local computer.

<u>Using the ValveSonic+ Module: -</u>

- Once the module has been configured it can now be plugged into the loom previously installed into the vehicle.

- Start the vehicle as normal and check for any warning lights, if any are displayed recheck the wiring installation is correct.

- Now test the vehicle by increasing the RPM or throttle position above the level previous configured for the Neutral gear or drive gear, the valve should open automatically.

- To enable the override to select the valves to be open or closed is controlled via the steering wheel by pressing the “+”, “-“, “+” then “-“- buttons in quick succession, if the dashboard feedback option has been selected you will see a confirmation of this being successful.

- If the override via the steering wheel has been used and you wish to reset to the module to the default automatic mode simply switch off and then back on the vehicles ignition.