

## SMART BOOSTER



The plug-in main unit can't be placed in the engine or other high-temperature areas.

- ⚠ To prevent damage to the vehicle, please use only higher than RON97 unleaded petrol or high-grade diesel fuel.
- ⚠ Make sure the internet connection is stable when manipulating Airforce system. VAITRIX is not responsible for any damages caused by incorrect data transmission.
- ⚠ To avoid incorrect data transmission and wrong operation, please use only VAITRIX OEM parts.
- ⚠ After installation, maintenance period needs to be shortened. It is suggested to maintain the car every 6 months or 5,000 km. To avoid damages to an engine and components, it is recommended to replace cold spark plugs every 10,000 km.
- ⚠ Please contact certified VAITRIX technicians or download paid data of corresponding car models while installing the product or adjusting the value.
- ⚠ Do not disturb safety equipments such as seat belt, airbag system or car devices (ex. Engine control system, wheel and brake system.) when installing the product. Disturb above devices may cause unpredictable accidents or fires.
- ⚠ In any case, VAITRIX shall not be responsible for any damage or loss to the factory components after installation of the product.
- ⚠ In any case, VAITRIX shall not be responsible for any damage caused through the use (or not available to use) of the product and even VAITRIX is informed that possible damages may occur.

### COMPONENTS IN THE BOX

#### SMART BOOST PACKAGE

- SMART BOOST ECU(PRO/PLUS/BASIC) x1
- UNIVERSAL HARNESS x1
- CABLE TIES x4
- INSTRUCTION MANUAL x1

#### WIRE HARNESS PACKAGE

- VEHICLE SPECIFIC HARNESS (ACCORDING TO CAR MODEL)

### SPECIFICATION

- 4 mapping tables, each with 255 data cells Include:
  - 2 sets of on / off switch for methanol / water injection
  - 2 sets of power control for methanol / water injection pump
- Mapping can be adjusted through AirForce ONE software.

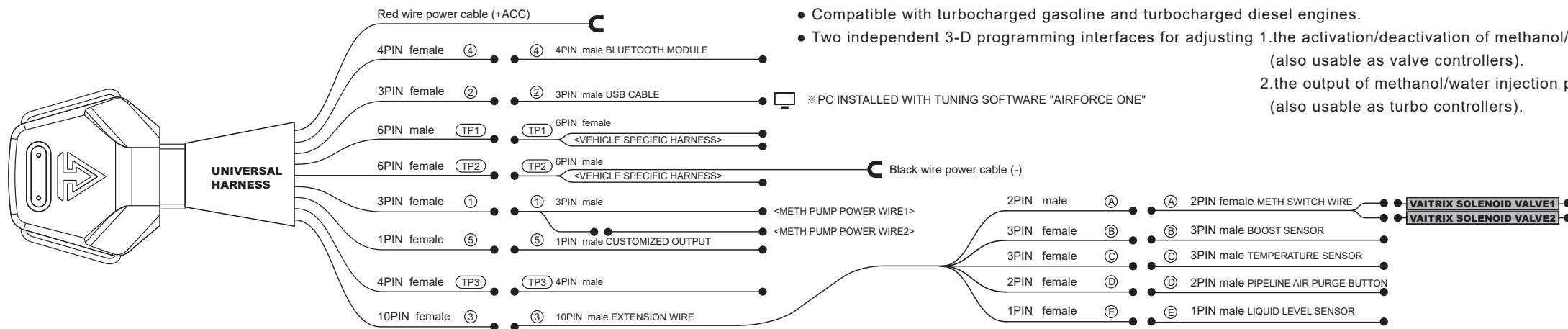
### OPTIONAL COMPONENTS & DESCRIPTION

- USB Data Cable-----Used to connect to the AirForce system.
- Extension Wire-----Used to expand additional functionalities.
- Mobile Bluetooth Module-----Only supports mode switching for Android smartphones.
- Exhaust Temperature Sensor----Used to detect vehicle exhaust temperature.
- Pressure Sensor-----Used to detect vehicle turbocharger pressure.
- Methanol Water Injection Kit

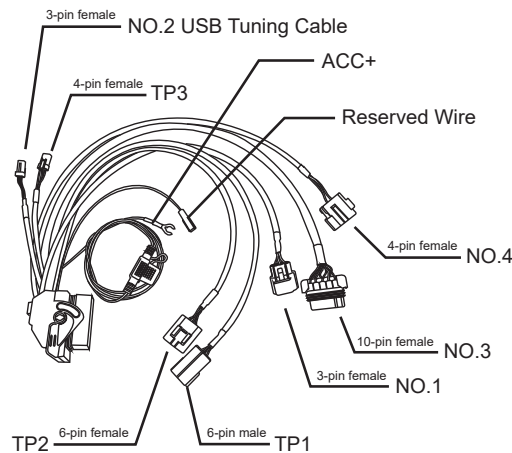
### FEATURES

- Non-destructive Plug&Play design, won't void the warranty.
- Download programming data for different vehicle models and tuning stages, making performance upgrades easier.
- Restore the vehicle to factory default settings immediately by cutting off power to the external computer.
- 32-bit+32-bit CPU with enhanced stability and processing power.
- Compatible with turbocharged gasoline and turbocharged diesel engines.
- Two independent 3-D programming interfaces for adjusting
  - 1.the activation/deactivation of methanol/water injection (also usable as valve controllers).
  - 2.the output of methanol/water injection pumps (also usable as turbo controllers).

### ACCESSORIES INSTALLATION DIAGRAM



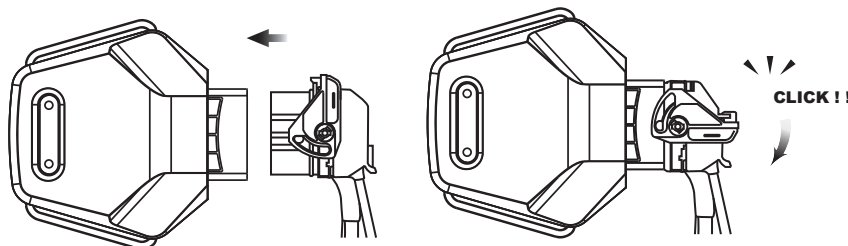
### UNIVERSAL HARNESS INSTALLATION DIAGRAM



★The main ECU harness are packaged separately and are not included in the box.

- TP1 (6-pin female) & TP2 (6-pin male)
  - connect to Car-Model Specific Harness
- NO.1-MWI Power Duty-1
- NO.2-USB Tuning Cable
- NO.3-Optional Extension Wire
- NO.4-Bluetooth Module
- Red Power ACC+ Wire (Anode 12V)
- 1-pin Reserved Wire
- TP3-Car Specific Harness

### UNIVERSAL HARNESS INSTALLATION DIAGRAM

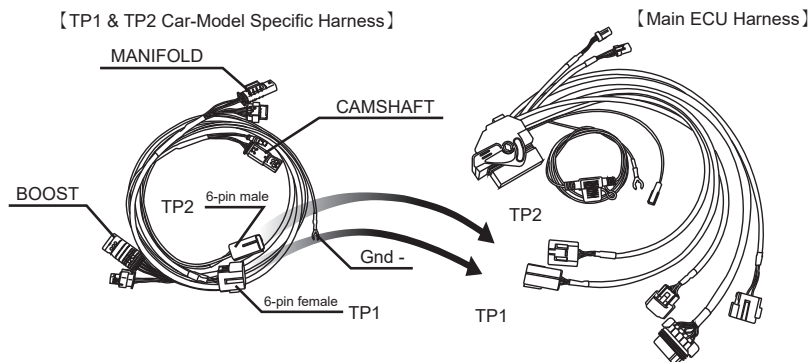


•Connect the VAITRIX SMART BOOSTER ECU with the Main ECU Harness

Pull the latch to the end.

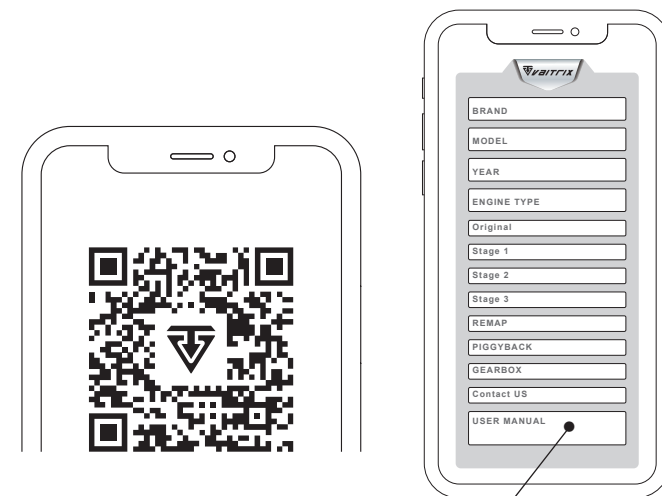
Pull the plug out of the socket.

### UNIVERSAL & VEHICLE SPECIFIC HARNESS INSTALLATION DIAGRAM

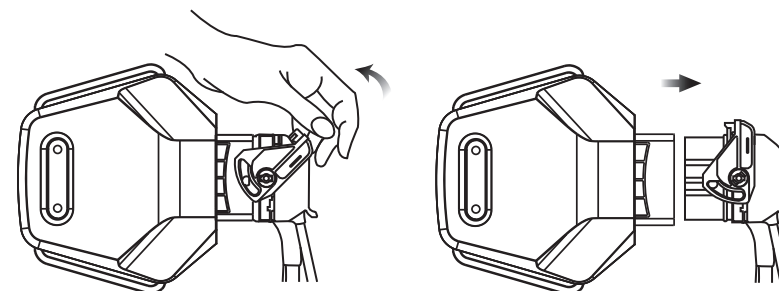


- Connect each wire of the Main Harness with the wire of the Car-Model Specific Harness with the same number label one by one.
- Connect the connectors in other end of the Car-Model Specific Harness to various devices in the engine bay. For the exact location of each device, please refer to the Tuning Installation Manual available in VAITRIX website, we will put a paper of installation guide inside the kit.

### UNIVERSAL HARNESS & CAR ENGINE CONNECT DIAGRAM



- ⚠ Scan the QR CODE above , then go to [www.vaitrix.com](http://www.vaitrix.com) front page. After selecting the vehicle information, the corresponding engine room connector location (PDF) will be displayed below



•Disconnect the VAITRIX SMART BOOSTER ECU with the Main ECU Harness

● ACC+ (Anode) of the Main ECU Harness

● Make sure the positive terminal should be connected to the positive terminal of the battery.

If you encounter any problem during installation or operation :

- Remove ACC+ from the car battery to restore factory default.
- Remove 20A fuse to restore factory default.

⚠ Please note that during installation, if the positive and negative wires contact each other or are installed in the wrong position, the internal PCB will be short-circuited and burned.

⚠ For the position of MANIFOLD 、CAMSHAFT and BOOST connector, please see the diagram attached in wire set. If you have any problem, please reconnect these three connectors to their original factory connectors.

● Please refer to the Installation Manual to find the MANIFOLD sensor connector (located downstream the throttle valve) .

● Please refer to the Installation Manual to find the correct location of the CAMSHAFT sensor connector.

● Please refer to the Installation Manual to find the BOOST sensor connector (located upstream the throttle valve) .

● Ground wire of the Main ECU Harness

● Make sure the ground wire is connected to an unpainted metal point.

### SMART BOOST BASIC PIGGYBACK ECU OPERATION METHOD

After confirming that the above connectors are properly connected, turn the car key to ACC (ignition on). When the blue light turns on, it indicates that SMART BOOST BASIC PIGGYBACK ECU has started.

To turn off the piggyback ECU, press and hold the button for 3-5 seconds until the blue light turns off, indicating that SMART BOOST BASIC PIGGYBACK ECU has shut down. To turn it on, press and hold the button for 3-5 seconds until the blue light turns on, indicating that SMART BOOST BASIC PIGGYBACK ECU has started.

< SMART BOOST BASIC >

⚠ SMART BOOST BASIC PIGGYBACK ECU operates with a continuously illuminated blue light.

## TROUBLESHOOTING

**Q: What to note when wiring SMART BOOST PIGGYBICK ECOand gauge**

**A : Connect signal wires to the vehicle first, then to the external module to avoid interference.**

### SMART BOOST PLUS/SMART BOOST PRO/SMART BOOST MI PIGGYBACK ECU Operation Method

POWER ON SCREEN

ECU VERSION

SMART BOOST PLUS

SMART BOOST PRO

SMART BOOST MI

Left - Power Button

Right - Water Injection Pre-Spray Button

< SMART BOOST PLUS/SMART BOOST PRO/SMART BOOST MI >

Pressing the pre-spray (pipeline purge) button will activate the system for 6 seconds. A countdown of 6 / 5 / 4 / 3 / 2 / 1 will be displayed, with an hourglass symbol rotating in both directions. Injection will continue throughout the countdown until the 6-second cycle is complete.

The low water level warning symbol alerts the driver to refill the fluid. The system will not forcefully shut down.

Press and hold the power button for 6 seconds. A count-down of 6 / 5 / 4 / 3 / 2 / 1 will be displayed before executing the power on/off process. The hourglass symbol will rotate in both directions until the LCD screen turns off.

⚠ SMART BOOST PLUS/SMART BOOST PRO/SMART BOOST MI , PIGGYBACK ECU's LCD screen enters sleep mode after 20 seconds of standby. Press any button to wake it up.



## 內容物

外掛電腦包裝盒

- 外掛電腦 (專家款 / 玩家款 / 入門款)x1
- 共用線組x1
- 綁帶x4
- 使用說明書x1

線組包裝盒

- 專車專用線組(依車款配線)x1

## 選配配件內容物

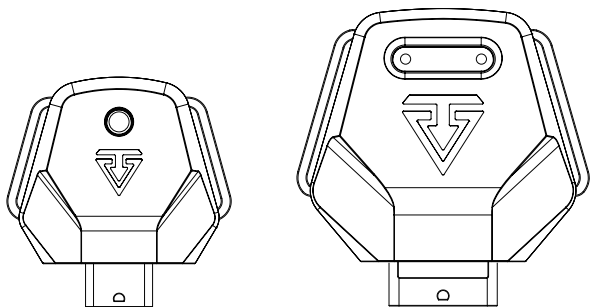
- USB數據線-----用於連接至AirForce系統。
- 延長線-----用於擴展更多功能。
- 手機藍芽模組-----僅支援Android系統的手機進行模式切換。
- 排溫感知器-----用於檢測車輛排氣溫度。
- 壓力感知器-----用於檢測車輛渦輪壓力。
- 水噴套件

## 規格

- 包括4個編程表，每個表格255個數據單元
- 專家款：2組甲醇/水噴射的啟用/停用開關
- 2組甲醇/水噴射泵的功率控制
- 玩家款：1組甲醇/水噴射的啟用/停用開關
- 1組甲醇/水噴射泵的功率控制
- AirForce ONE
- 專家款 / 玩家款可通過AirForce ONE軟件調整編程

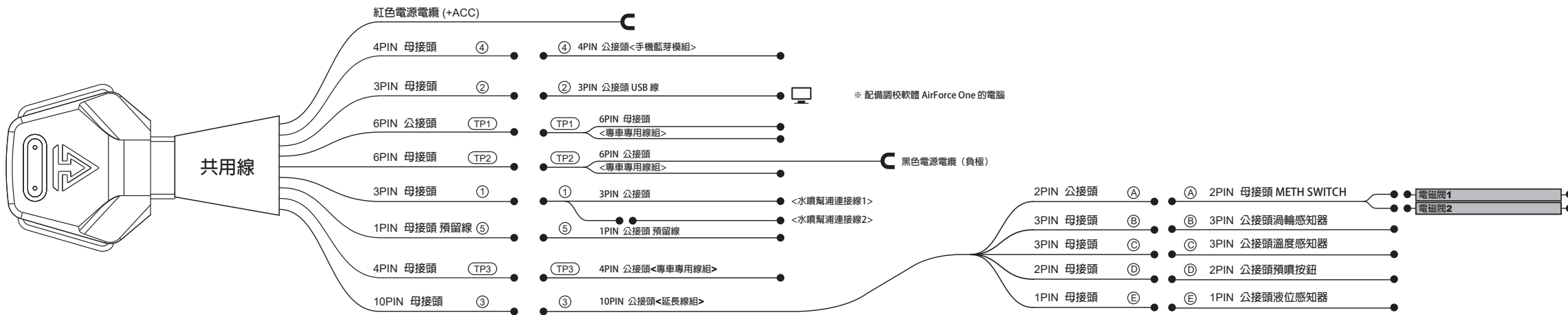
## 特色

- 非破壞性即插即用設計；不會使保固失效。
- 可下載不同車型和調校階段的編程數據。使性能升級更加容易。
- 切斷對外掛電腦的電源供應，即可恢復車輛原廠默認設置。
- 32bit+32bit CPU，穩定性和處理能力更強。
- 支援渦輪增壓汽油和渦輪增壓柴油引擎。
- 兩個獨立的3-D編程介面，可調整開關甲醇/水噴射的啟用/停用（也可用作閥控制器）。
- 兩個獨立的3-D編程介面，可調整甲醇/水噴射泵的輸出（也可用作渦輪控制器）。



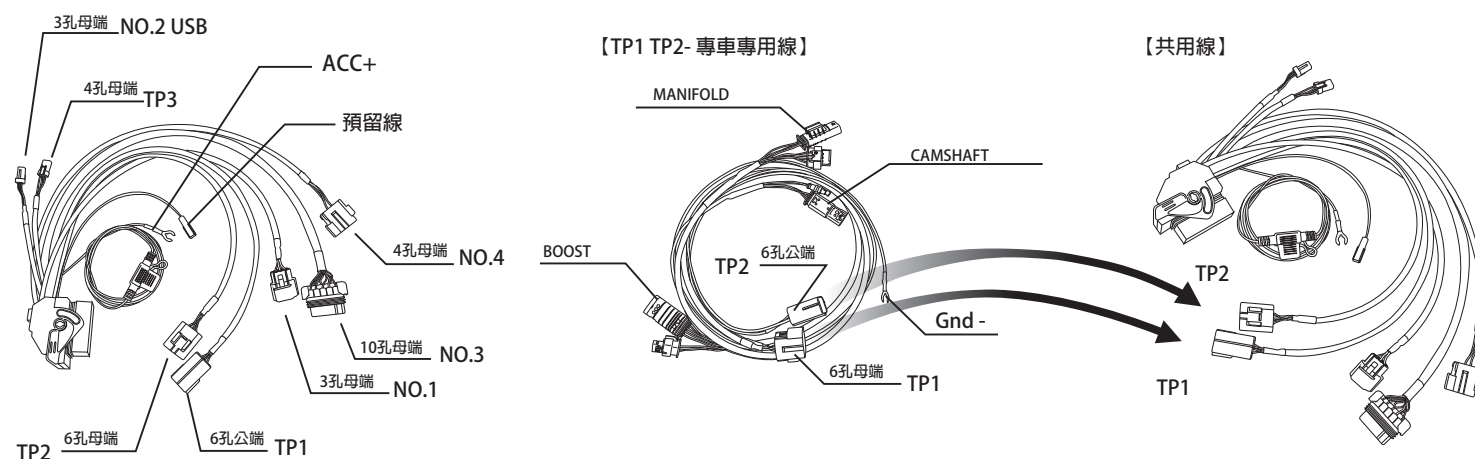
## 外掛電腦安裝說明書

## 配件安裝示意圖



## 共用線安裝示意圖

## 共用線與專用線連接安裝示意圖

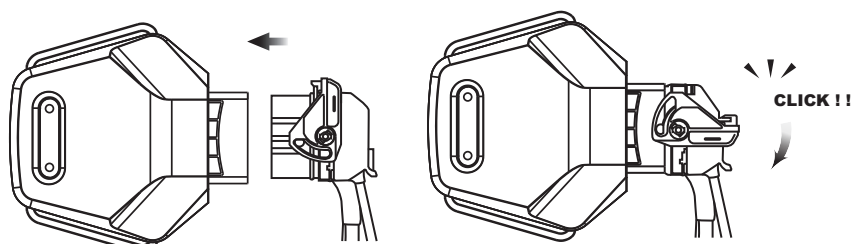


- TP1 TP2- 專車專用線
- NO.1-水噴升壓模組
- NO.2-USB數據線
- NO.3-選配延長線
- NO.4-手機藍芽模組
- 1孔預留線
- TP3- 專車專用線
- 紅色電源電纜ACC+ (正極12V)

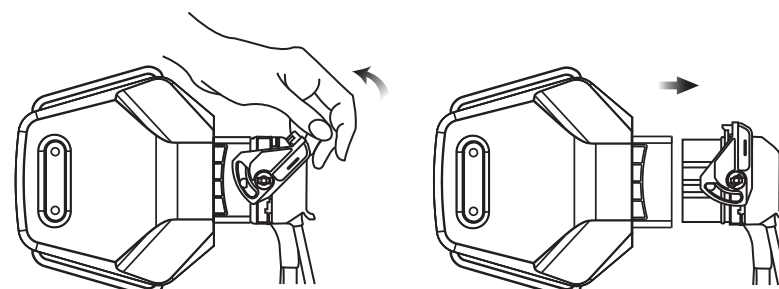
★共用線為另外包裝，不在包裝盒內

- 共用線TP1、TP2與專用線TP1、TP2對接
- 專用線另一端接車子，車子端接插位置可參考官網INFORMATION內的外掛安裝說明書，出貨時亦會於夾鏈袋內附上一張安裝位置示意圖。

## 安裝通用線組

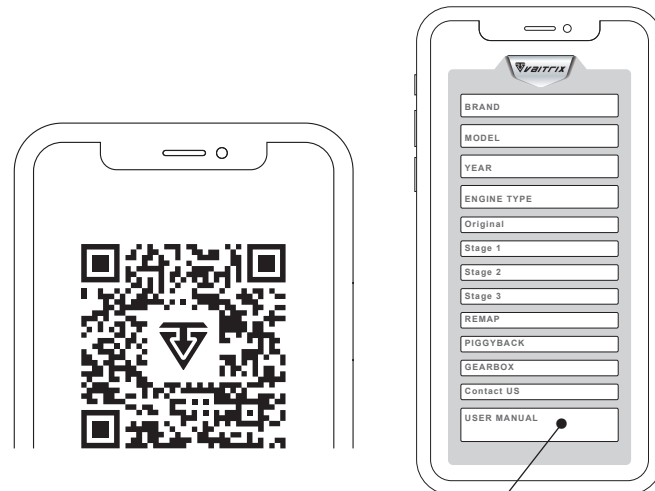


●VAITRIX外掛電腦與上共用線-緊配



●VAITRIX外掛電腦與接共用線-卸除

## 專用線與汽車引擎室連接示意圖下載



掃描上方QR CODE進入(www.vaitrix.com)首頁  
選擇車輛資訊後，下方將顯示對應引擎室接插位置(PDF)



外掛主機不能放在引擎中  
太高溫的地方

為了避免車輛損壞，請只使用RON97以上的無鉛汽油或高級柴油燃料。

操作Airforce系統時，請確保網絡連接穩定。VAITRIX對因數據傳輸不正確而造成的任何損壞概不負責。

為了避免數據傳輸不正確和操作失誤，請只使用VAITRIX原廠零部件。

安裝後，保養周期需要縮短。建議每6個月或5000公里進行一次車輛保養。為了避免引擎和零部件的損壞，建議每10000公里更換一次冷火花塞。

在安裝產品或調整數值時，請聯繫經認證的VAITRIX技術人員，或下載相應車型的付費數據。

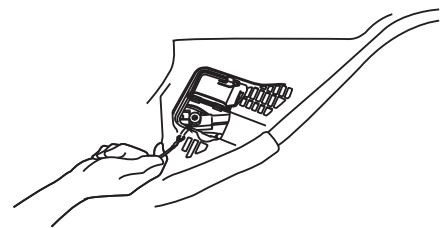
安裝產品時，請不要干擾安全設備，如安全帶、氣囊系統或車輛設備（例如發動機控制系統、車輪和制動系統）。干擾上述設備可能導致不可預測的事故或火災。

在任何情況下，安裝產品後，VAITRIX對工廠零部件的任何損壞或損失不負責任。

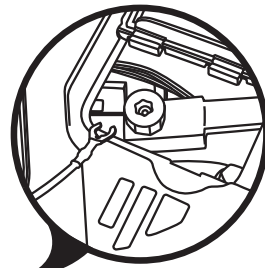
在任何情況下，VAITRIX 對於因使用（或無法使用）本產品所造成的任何損害概不負責，即使 VAITRIX 已被告知可能會發生損害。



●共用線 (正極)



●注意正極請接電池正電



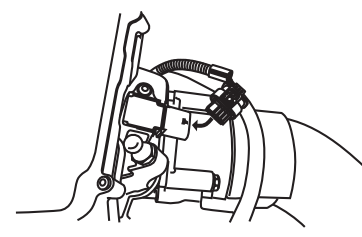
- 有任何問題可以先移除ACC+ (正極)恢復原廠
- 有任何問題可以先移除保險絲20A恢復原廠



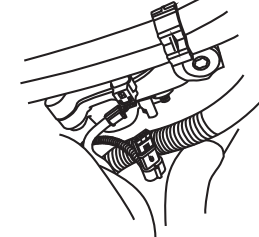
請注意，安裝時，如果正負極線接觸或安裝位置錯誤，會導致內部PCB短路並燒毀。

MANIFOLD、CAMSHAFT 和 BOOST 連接器的位置請參考線束中所附的示意圖。

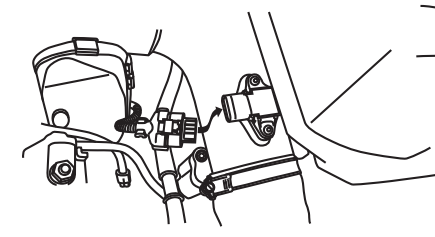
- 有任何問題請把這三個接頭都接回原廠接頭。



●請對照網路安裝說明書，選找正確MANIFOLD(節氣門後)位置



●請對照網路安裝說明書，選找正確CAMSHAFT(凸輪軸)位置



●請對照網路安裝說明書，選找正確BOOST(節氣門前)位置



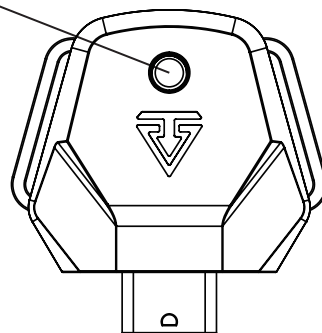
●專用線負極

●注意負極是否導通，負極搭鐵請勿鎖在烤漆

## 入門版BASIC外掛電腦操作方式

上述接頭確認連接完畢，汽車鑰匙過ACC(紅火)藍光亮起，代表入門版BASIC外掛電腦已開機。

如需關閉外掛按鍵長按3-5秒，藍光熄滅，代表入門版BASIC外掛電腦已關機  
如需開機使用按鍵長按3-5秒，藍光亮起，代表入門版BASIC外掛電腦已開機



< 入門版BASIC >



入門版BASIC外掛電腦工作狀態全時亮藍光

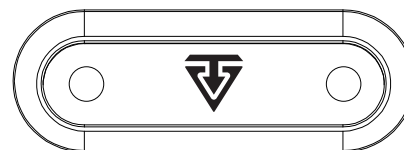
## 問題排解

**Q：**安裝外掛與儀錶時接線要注意什麼？

**A：**訊號線應先接原車，再接外掛，避免干擾或攔截。

## 玩家版PLUS / 專家版PRO / 水噴版MI外掛電腦操作方式

開機畫面



電腦版次



玩家版PLUS



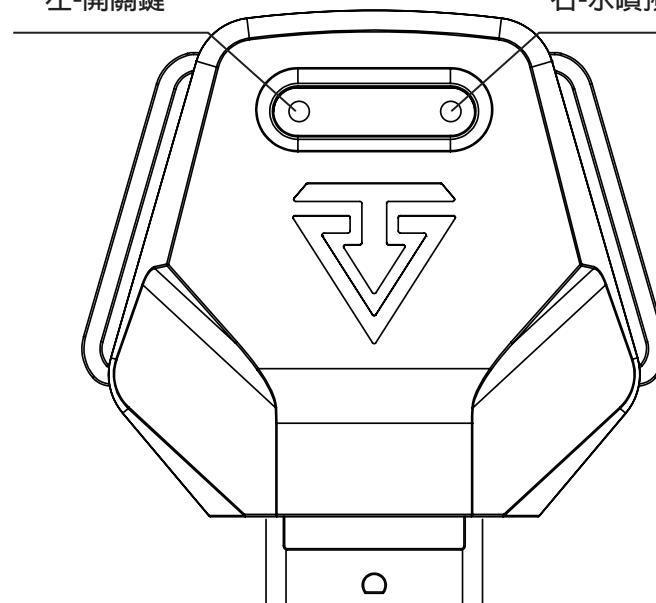
專家版PRO



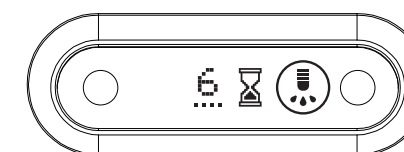
水噴版MI

左-開關鍵

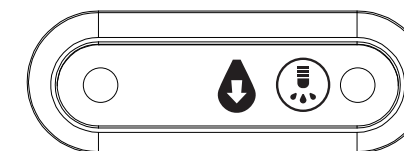
右-水噴預噴鍵



< 玩家版PLUS / 專家版PRO / 水噴版MI >



按預噴(管路排空)將會持續做動6秒，倒數6/5/4/3/2/1  
沙漏符號同時正反旋轉，倒數時持續噴射直到6秒結束。



低水位符號警示，提醒車主需補充燃料，系統不會強制停止。



按開關符號持續6秒，倒數6/5/4/3/2/1後執行開/關機，  
沙漏符號同時正反選轉，直到液晶屏幕熄滅。



玩家版PLUS / 專家版PRO / 水噴版MI，  
外掛電腦液晶顯示屏待機20秒後呈現休眠狀態，任意按鈕喚醒