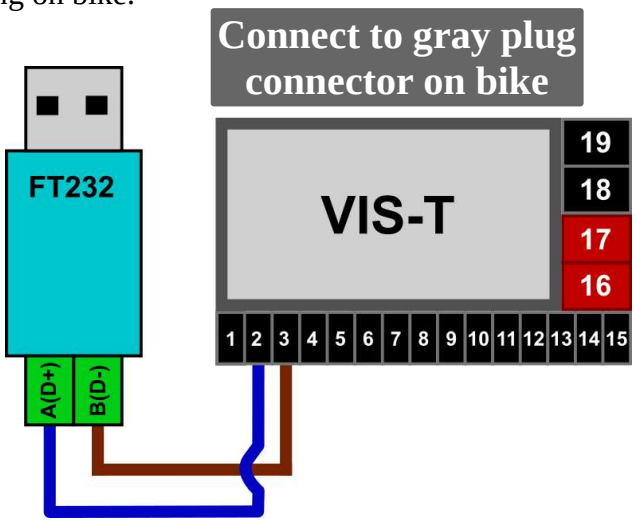
# VIS-T PROG

Connect VIS-T to USB tool as image below.
**To install the USB driver, see the end of the document.**

## 1. Power VIS-T with gray connector from bike.

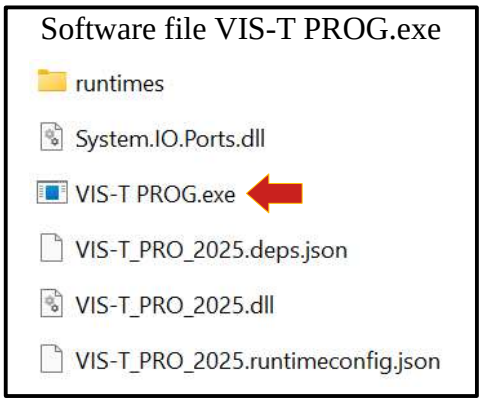
Suitable for setting VIS-T to operate gauge or real time setting on bike.

**!! DO NOT use for re-program models bike operate. !!**



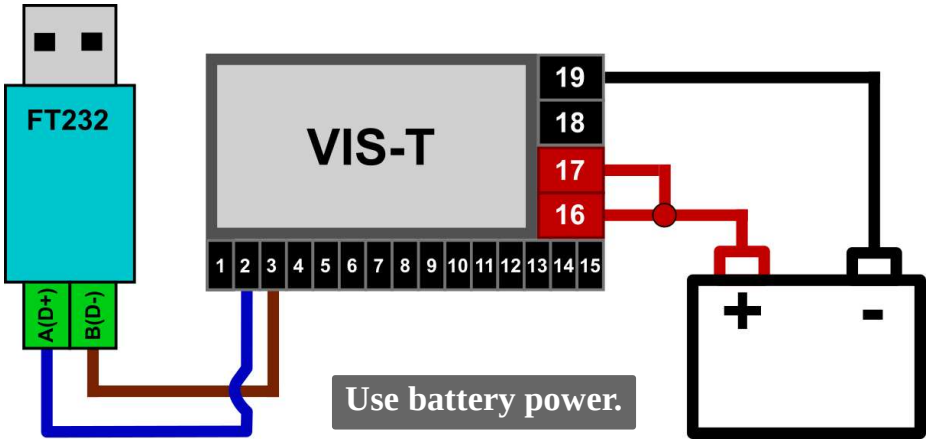

Process.
1.Connect wire data D+ , D- from USB to VIS-T.
2.Plug on gray connector on bike.
3.Turn ignition key to ON OFF-RUN is OFF
4.Open software, select correct comport and click connect.
5.Software will show information of VIS-T.
6.Adjust value or change setting in software.
7.OFF-RUN is ON or start engine to check result of setting.
8.After done process click “Disconnect button”
9.Remove data wire from VIS-T. Done.

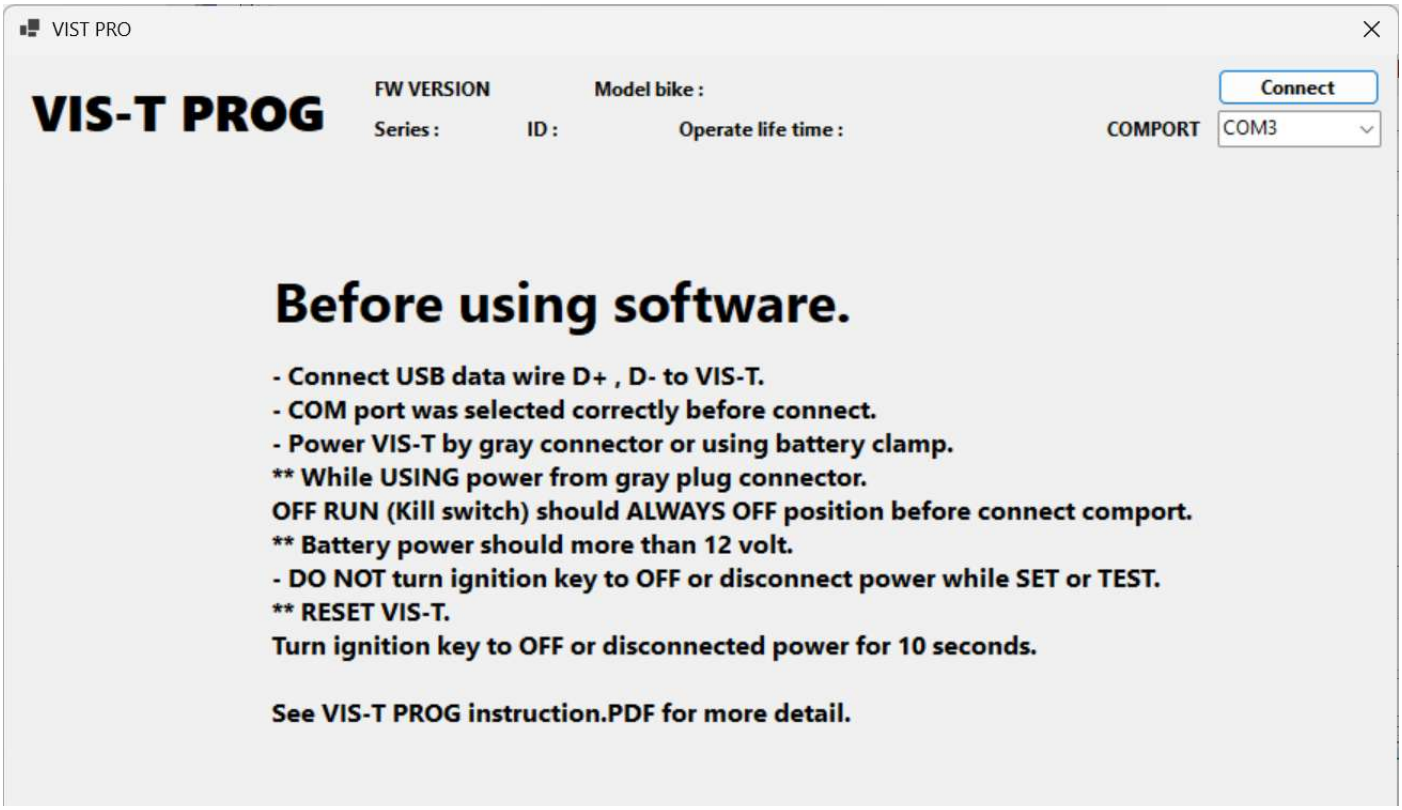
## 2. Power VIS-T with battery.



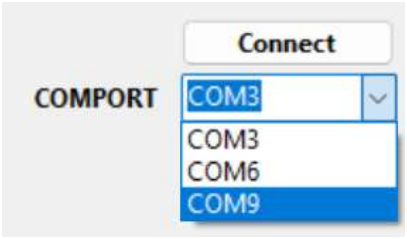

**Safely to re-program models bike operate.**
Setting VIS-T and gauge setting before attach on bike.

Process.
1.Connect wire data D+, D- from USB to VIS-T.
2.Clamp battery power.
3.Open software, select correct comport and click connect.
5.Software will show information of VIS-T.
6.Adjust value or change setting in software.
7.Use “driver test” to check indicator operate.
8.After done process click “Disconnect button”
9.Remove data wire & power wire from VIS-T.
10.Done.





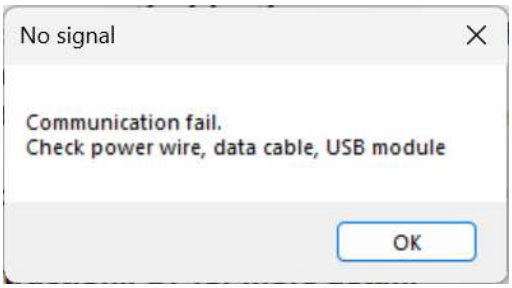

Some PC / laptop have more than one comport.
Make sure select comport correctly.

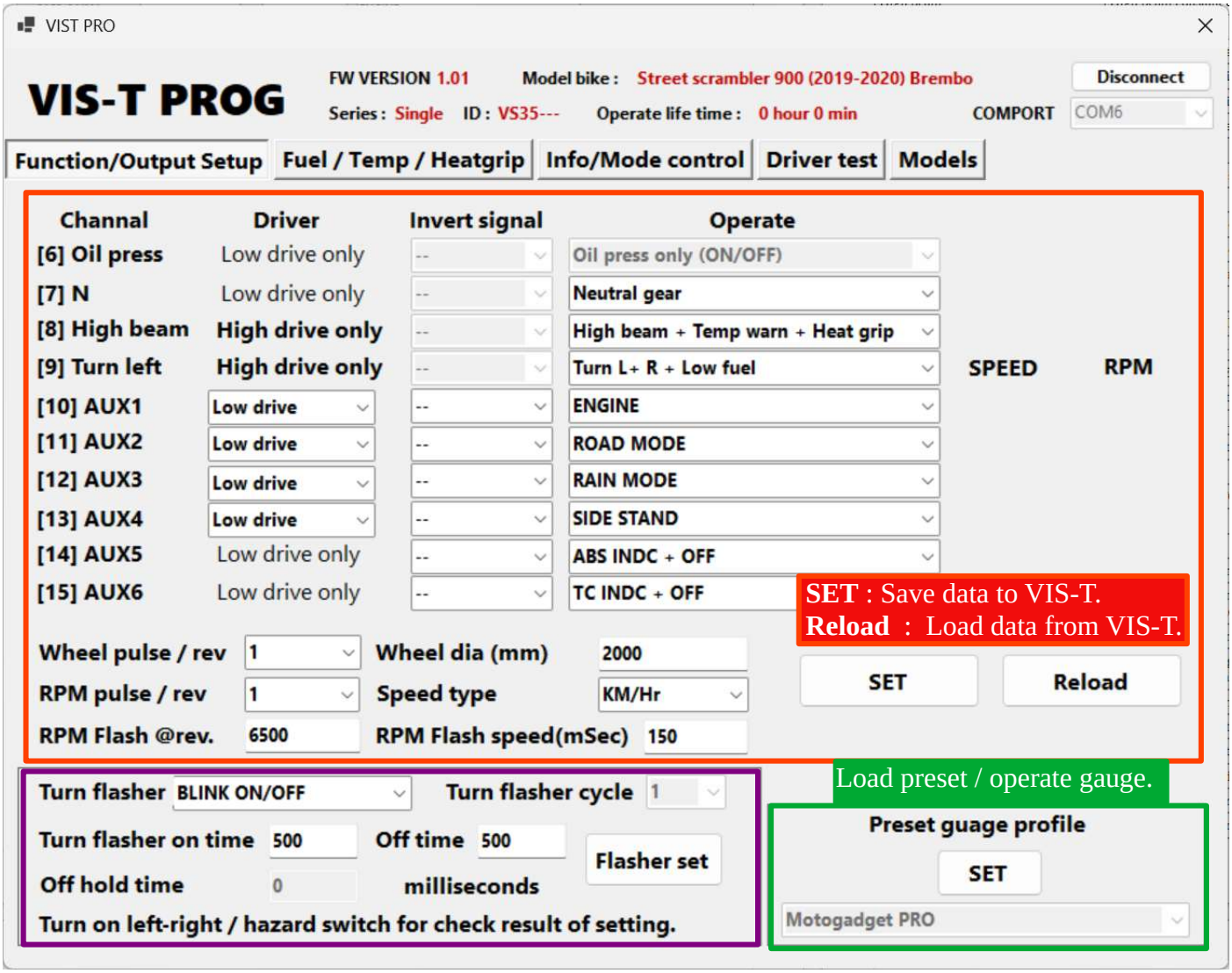



How to identify comport.
1.Unplug USB tool and open VIS-T PROG.
2.Check list of comport. *Note it.
3.Close VIS-T PROG and plug USB tool.
4.Re-open VIS-T PROG.
5.Check list of comport. New COMx will show up. This new is COMPORT from USB tool.

*If new COMx not appear. Try to reinstall driver or change USB port.

Make sure data wire is correct and VIS-T got power.
Check comport selected is correct.
Try to connect again.






# 1. Function/Output Setup

| | |
|---|---|
| **Driver High / Low** | **High drive** – Signal drive 12 volts output. |
| | **Low drive** – Signal switch to ground. |

| | |
|---|---|
| **Invert signal** | Use for invert signal output. |

| **Setting channel operate output signal.** | |
|---|---|
| **Oil press** | |
| Oil press (Blink) + Engine (ON/OFF) | Engine light constant on, Oil pressure fail detect will blink. |
| Oil press + Engine (mix ON/OFF) | Engine light constant on, Oil pressure fail detect constant on. |
| Oil press only (ON/OFF) | Oil pressure fail detect constant on. |
| Engine only (ON/OFF) | Engine light constant on. |
| **N** | |
| Neutral + Side stand | In neutral gear constant on. While engine running side stand down will blink. |
| Neutral gear | In neutral gear constant on. |
| **High beam** | |
| High beam + Temp warn + Heat grip | High beam constant on. Coolant temperature over heat will blink. Heat grip will blink. |
| High beam + Temp warning | High beam constant on. Coolant temperature over heat will blink. |
| High beam + Heat grip | High beam constant on. Heat grip will blink. |
| High beam | High beam constant on. |

| **Turn left** | |
|---|---|
| Turn L+ R + Low fuel | Mix turn indicator Left + Right signal. Low fuel is constant on. |
| Turn Left + Low fuel | Turn indicator Left signal. Low fuel is constant on. |
| Turn Left | Turn indicator Left signal. |
| Turn Left + Right | Mix turn indicator Left + Right signal. |
| **AUX [ 1 – 6 ]** | |
| Turn right | Turn Right indicator signal. (Available only AUX 1) * Set to **High drive.** |
| LOW FUEL | Low fuel indicator. |
| TEMP WARNING | Coolant temperature over heat will constant on. |
| TEMP WARNING Blink | Coolant temperature over heat will blink. |
| ENGINE | Engine light indicator. |
| SIDE STAND | Side stand indicator. |
| ROAD MODE | Riding ROAD MODE indicator. |
| SPORT MODE | Riding SPORT/OFF-ROAD MODE indicator. |
| RAIN MODE | Riding RAIN MODE indicator. |
| ABS INDC | ABS indicator operate as OEM gauge. |
| ABS OFF | ABS indicator while ABS-OFF will constant on. |
| ABS INDC + OFF | ABS indicator operate as OEM gauge. While ABS-OFF will constant on. |
| TC INDC | TC indicator operate as OEM gauge. |
| TC OFF | TC indicator while TC-OFF will constant on. |
| TC INDC + OFF | TC indicator operate as OEM gauge. While TC-OFF will constant on. |
| Cruise Active | Cruise indicator. |
| RPM [ AUX 1-6 ] | Indicator will constant on when reach over RPM as setting. |
| RPM [ AUX 1-6 ] + Flash | Indicator will constant on when reach over RPM as setting.<br>Flash when RPM reach over RPM Flash @REV setting. |
| Speed warning [AUX 1-6] | Indicator will constant on when reach over Speed as setting. |
| HEATGRIP – Blink | Indicator while heat-grip in using will constant on.<br>Step change will blink (Step 1) blink 1 time ~ (Step 2) blink 2 times. |
| HEATGRIP STEP-1 to STEP-6 | Indicator heat-grip will constant on as current step. |
| HEATGRIP BINARY [1] | Signal binary on heat-grip step bit 1. |
| HEATGRIP BINARY [0] | Signal binary on heat-grip step bit 0. |
| GEAR 1 to GEAR 6 | Indicator Gear 1-6 will constant on as current gear position. |
| GEAR BINARY [2] | Signal binary on gear position bit 2. |
| GEAR BINARY [1] | Signal binary on gear position bit 1. |
| GEAR BINARY [0] | Signal binary on gear position bit 0. |
| FUEL >= 90% ~ FUEL >= 10% | Indicator will constant on when fuel level equal [as value %] or more. |
| FUEL >= 10% + Blink | Indicator will constant on when fuel level more than 10%<br>Equal 10% or lower will blink. |
| FUEL <= LOW FUEL +10% Blink | Low fuel indicator constant on. Equal 10% or lower will blink. |
| FUEL BINARY [3] | Signal binary fuel level bit 3. |
| FUEL BINARY [2] | Signal binary fuel level bit 2. |
| FUEL BINARY [1] | Signal binary fuel level bit 1. |
| FUEL BINARY [0] | Signal binary fuel level bit 0. |

| | |
|---|---|
| **Wheel pulse / REV.** | Generate pulse per wheel revolution. Default set to 1. |
| **Wheel dia (mm)** | Wheel diameters in millimeter.<br>**<u>This value NOT wheel circular of tire on bike.</u>**<br>**Value should match as same as circular setting in gauge.**<br>Motogadget default is 2000, CV080 is 1277 other gauge depend on gauge setting. |

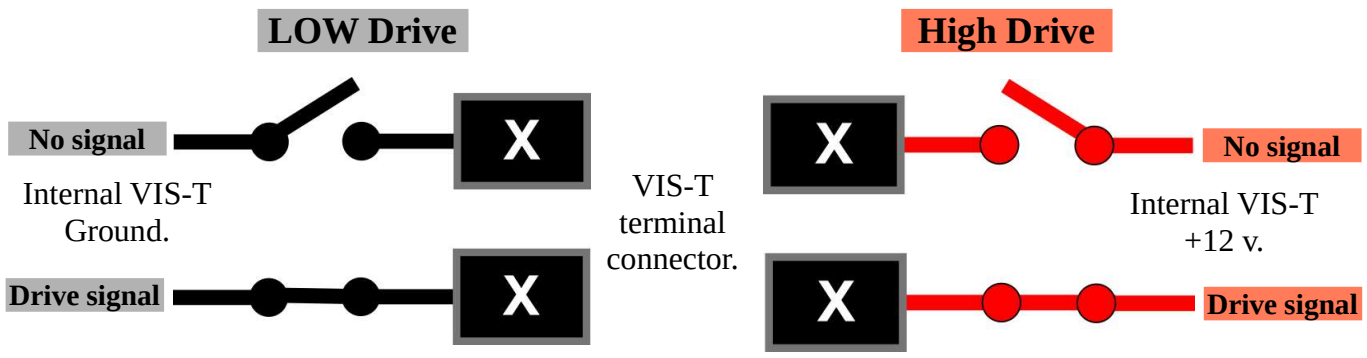
| | |
|---|---|
| **RPM pulse / REV.** | Generate pulse per engine revolution. Default set to 1. |
| **Speed type.** | **This setting use for display speed while VIS-T use INFO switch for setting only.**<br>**KM/Hr and M/Hr** should match display on each gauge. |

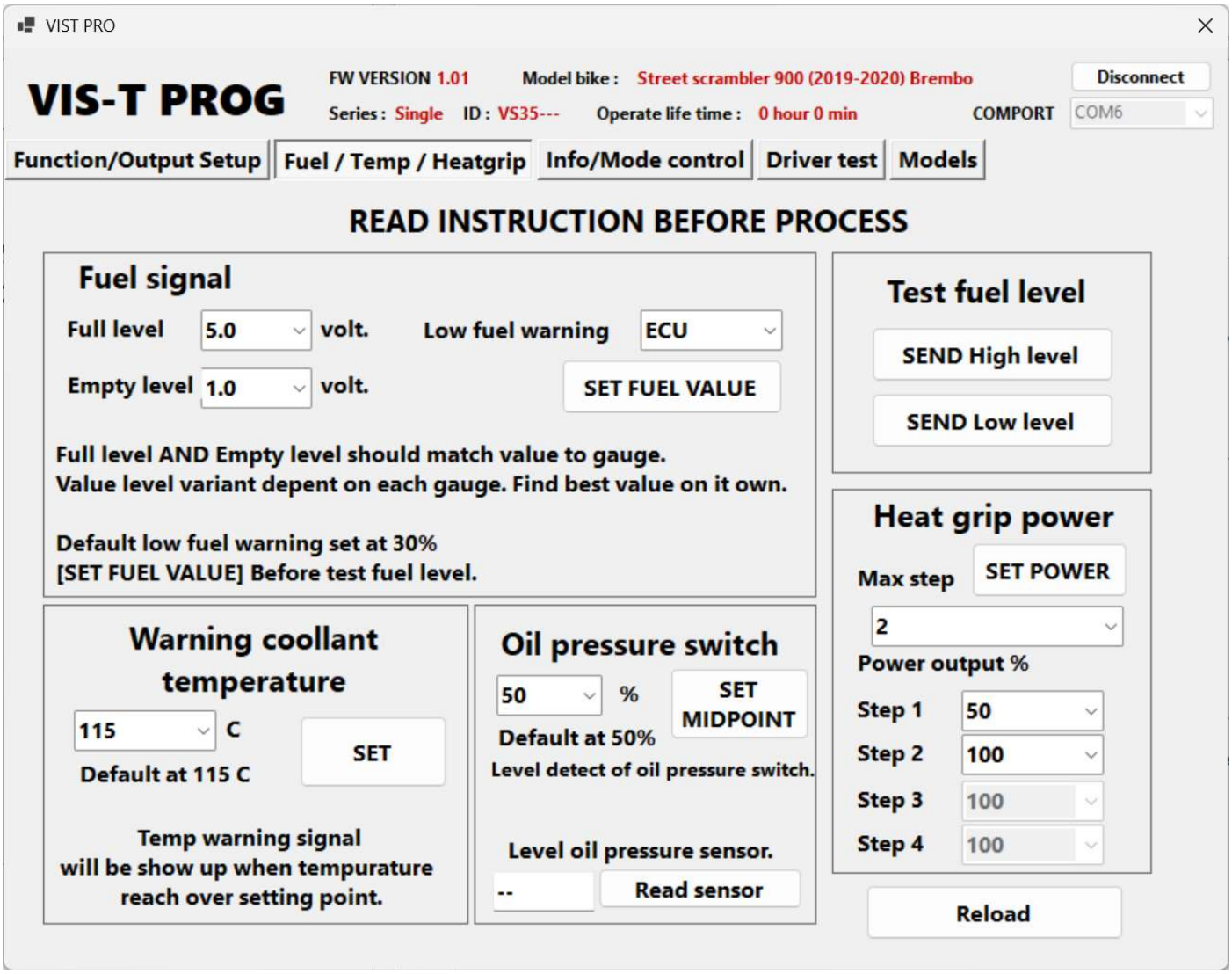
| | |
|---|---|
| **RPM Flash @REV.** | Set RPM flash value for **Operate <u>RPM [ AUX 1-6 ] + Flash</u>** |
| **RPM Flash speed.** | Frequency of RPM flashing in milliseconds. |

| **Turn flash** | **BLINK ON/OFF** Operate as flasher. |
|---|---|
| | Cycle 1<br>On time. (milliseconds) recommend value 500.<br>Off time. (milliseconds) recommend value 500.<br>Off hold time NOT use on this mode. |
| | **Flash ON/OFF – HOLD.** Flash in cycle and time. |
| | Cycle 1 to 10.<br>On time. (milliseconds) recommend value 50-200.<br>Off time. (milliseconds) recommend value 50-200.<br>Off hold time is NO voltage out to turn bulb. recommend value 300-600. |
| | (On time + Off time) x cycle = Turn bulb is lit up.<br>Off hold time = Turn bulb is shut. |

| **Preset gauge profile** | |
|---|---|
| **Universal / Manual** | Freely to adjust output and fuel voltage feeder. |
| **Motogadget TINY (4 Ind) / Classic V1** | Preset operate for Motogadget TINY and Motogadget Chrono classic V1. |
| **Motogadget MTS MINI** | Preset operate for Motogadget Motoscope MINI and Motosign MINI. |
| **Motogadget PRO** | Preset operate for Motogadget Motoscope PRO. |
| **Motogadget Classic V2** | Preset operate for Motogadget Chrono classic V2. |
| **ACEWELL CV-080** | Preset operate for ACEWELL CV-080. |
| * Each profiles have specific instruction setting and wiring diagram.<br>* Please follow on each gauge instruction for best operate. | |

## Simulate circuit High / Low drive setting.






# 2.Fuel / Temp / Heat grip

| **Fuel signal** | Full level & empty level using for generate voltage 0-5 volts for fuel wire gauge.<br><br>Check fuel wire gauge has support 0-5 volts or support fuel level resistant sensor type. Before connect to VIS-T CH.[18]Fuel. |
|---|---|
| **Full level.** | Set voltage feeder 0-5 volts. When fuel got full tank. |
| **Empty level.** | Set voltage feeder 0-5 volts. When fuel got empty tank. |
| **Low fuel warning.** | ECU means low fuel signal form ECU. *Recommend.<br>10-50% means override generate low fuel signal from fuel level.<br>Disable not generate low fuel signal. |

| **Test fuel level** | |
|---|---|
| **[Send high level]** | After click button. VIS-T will drive VIS-T CH.[18]Fuel as value of **Full level set.** |
| **[Send Empty level]** | After click button. VIS-T will drive VIS-T CH.[18]Fuel as value of **Empty level set.** |
| While setting in PROFILE Motogadget Classic V2 and Motogadget PRO. VIS-T CH.[18] Fuel is no voltage out is zero volt. Read instruction for teach fuel level on gauge manual.<br><br>While setting in PROFILE ACEWELL CV-080. Not require to set Full and Empty voltage. | |

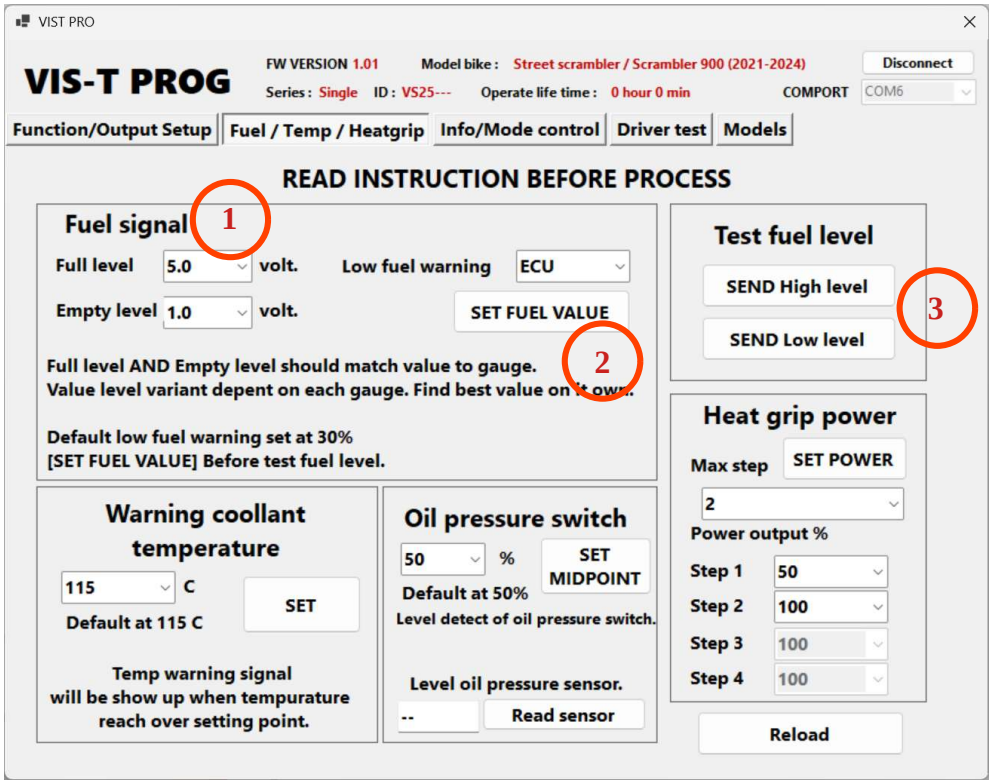
| | |
|---|---|
| **Warning coolant temperature.** | Freely to adjust 100-150 degrees C. *Recommend is 115 or 120 C.<br>When coolant temperature rise over of setting will generate High temp signal indicator. |

| | |
|---|---|
| **Oil pressure switch.** | Set of midpoint of level sensor value. *Recommend is 50%<br>This setting can not fix problem of oil pressure switch failure.<br>*Please follow “Oil pressure diagnostic section” for solve issues. |

| **Heat grip power.** | |
|---|---|
| **Disable** | Heat grip not operate. |
| **MAX Step** | Maximum step power of heat grip. |
| **Set step 1 – 4** | 10% is lowest power. 100% is full power. |
| Set step at 1 cycle. Operate cycle [OFF]→[Step 1]→[OFF]<br>Set step at 2 cycle. Operate cycle [OFF]→[Step 1]→[Step 2]→[Step 1]→[Step 2]→. . . . . .→[OFF]<br>Set step at 3 cycle. Operate cycle [OFF]→[Step 1]→[Step 2]→[Step 3]→[Step 1]→[Step 2]→. . . . . .→[OFF]<br>Set step at 3 cycle. Operate cycle [OFF]→[Step 1]→[Step 2]→[Step 3]→[Step 4]→[Step 1]→[Step 2]→. . . . . .→[OFF]<br>* Press & hold Heat grip switch 1 second to turn ON.<br>* Press & release Heat grip switch to next step.<br>* While heat grip in operate. Press & hold Heat grip switch 1 second to turn OFF. | |

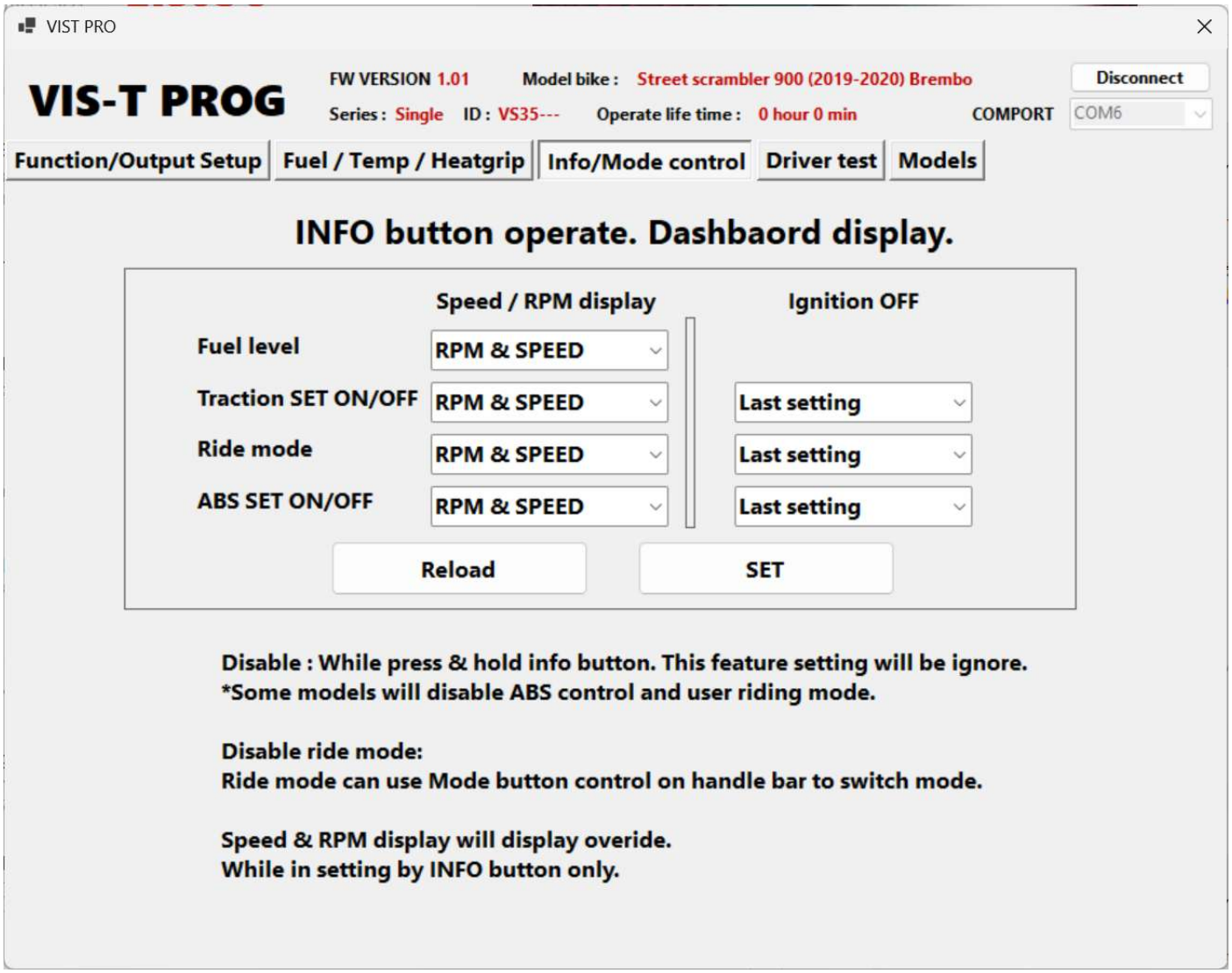
# Fuel leveling signal VIS-T channel [18].

1. Set fuel voltage.
2. Click on SET FUEL VALUE.
3. Send TEST fuel level to gauge.




**Before click SEND HIGH level / SEND LOW level click on SET FUEL VALUE to save value into VIS-T first.**

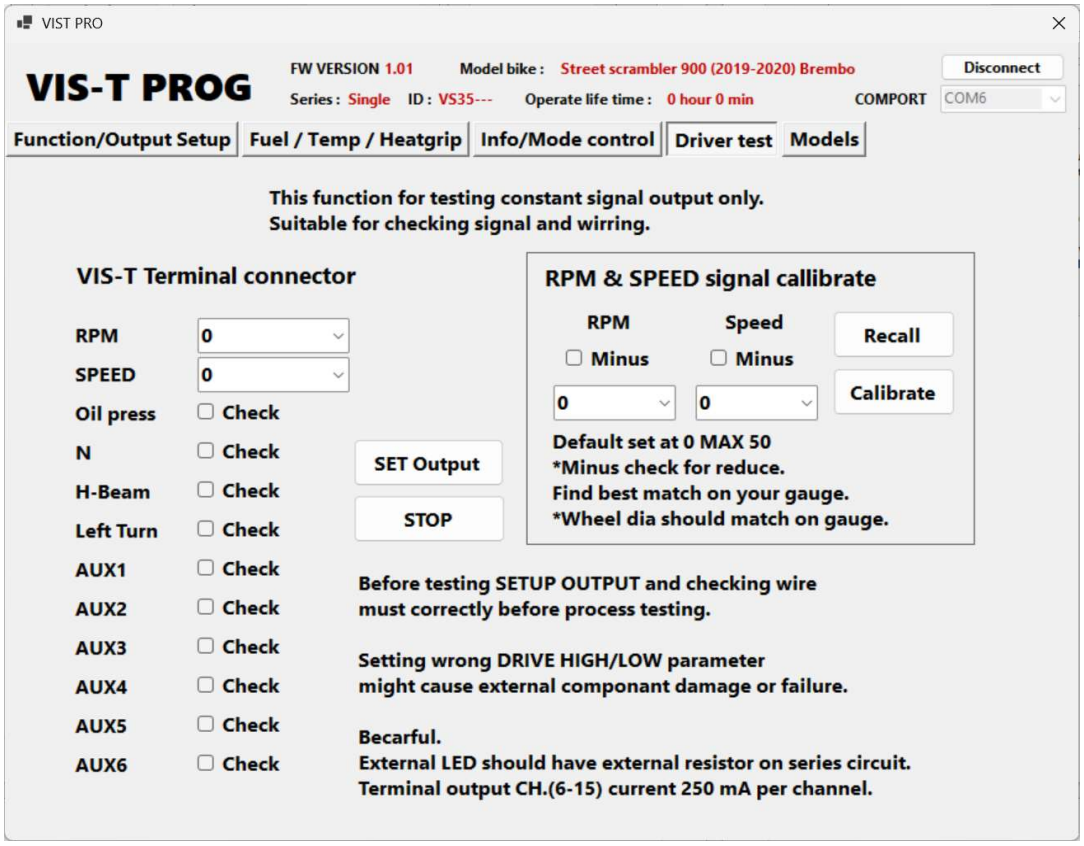
**After click on SEND HIGH level VIS-T channels 18 will drive voltage out as Full level voltage of setting.**
**After click on SEND LOW level VIS-T channels 18 will drive voltage out as Empty level voltage of setting.**




# 3.Info / Mode control

| **Fuel level.**<br>**Traction control**<br>**ABS**<br>**Ride mode** | **While using INFO button on handle bar to setting.** |
|---|---|
| **Speed / RPM display.** | |
| Disable | Ignore / skip step setting. |
| RPM & Speed | RPM & Speed will display on gauge. |
| RPM | RPM will display on gauge. |
| Speed | Speed will display on gauge. |
| No display | RPM & Speed NOT display on gauge. |
| **Ignition ON** | **After turn ignition key to ON position.** |
| Last setting | Using last setting operate. *Ignition off / remove battery not effect this memory. |
| Force ON | ABS / TC – Force ON reset to ON (Active). |
| Force OFF | ABS / TC – Force OFF reset to OFF (Deactivate). |
| Road mode | Force set to Road mode. |

| **Ignition ON** | **Setting VIS-T operate as same OEM gauge.** |
|---|---|
| Traction control | Set to Force ON reset to TC ON (Active). |
| ABS | Set to Force ON reset to ABS ON (Active). |
| Ride mode | Set to Road mode. |




## 4.Driver test

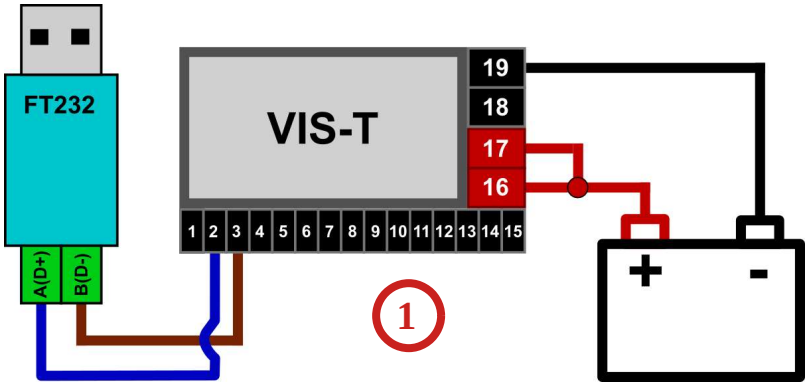
| **Test output signal.** | | **VIS-T output will drive signal to check indicator on gauge / dashboard display.** |
|---|---|---|
| **[ Channel ] VIS-T connector.** | | |
| [4] RPM | | Generate signal RPM. |
| [5] Speed | | Generate signal speed. |
| [6] Oil pressure.<br>[7] N<br>[8] H-Beam<br>[9] Turn<br>[10] AUX1 | [11] AUX2<br>[12] AUX3<br>[13] AUX4<br>[14] AUX5<br>[15] AUX6 | If Check box is [√] Check will generate signal. |
| **Process test.** | | |
| [Set Output] | | Click – Start generate signal. |
| [Stop] | | Click – Stop generate signal. Continue to default operate. |

| **RPM & SPEED signal calibrate.** | **Using for fine tune signal of RPM & SPEED pulse.** |
|---|---|
| **!! Before calibrate!!**<br>Set Wheel pulse & Wheel dia. In TAB PAGE “1. Function/Output Setup”<br>Speed type should set match on gauge display. | |
| **Process to calibrate step.** | |
| 1. Set RPM to 4000.<br>2. Set Speed to 80.<br>3. Click [Set Output] button. | Check RPM & Speed on gauge display.<br>If not precise match at 4000. Or Speed not match at 80. Use signal calibrate. |
| **RPM & SPEED signal calibrate.** | |
| 4. Click [Recall] button.<br>5. Try to change value 0 – 50<br>6. Click [Calibrate].<br>7. Click [Stop] button.<br>Done process. | If value set is 0. But RPM / Speed get value more than expect.<br>Check on [√] Minus.<br>Repeat change value and click [Calibrate]. *Repeat step 5 & 6.<br>Fine best stable value. |

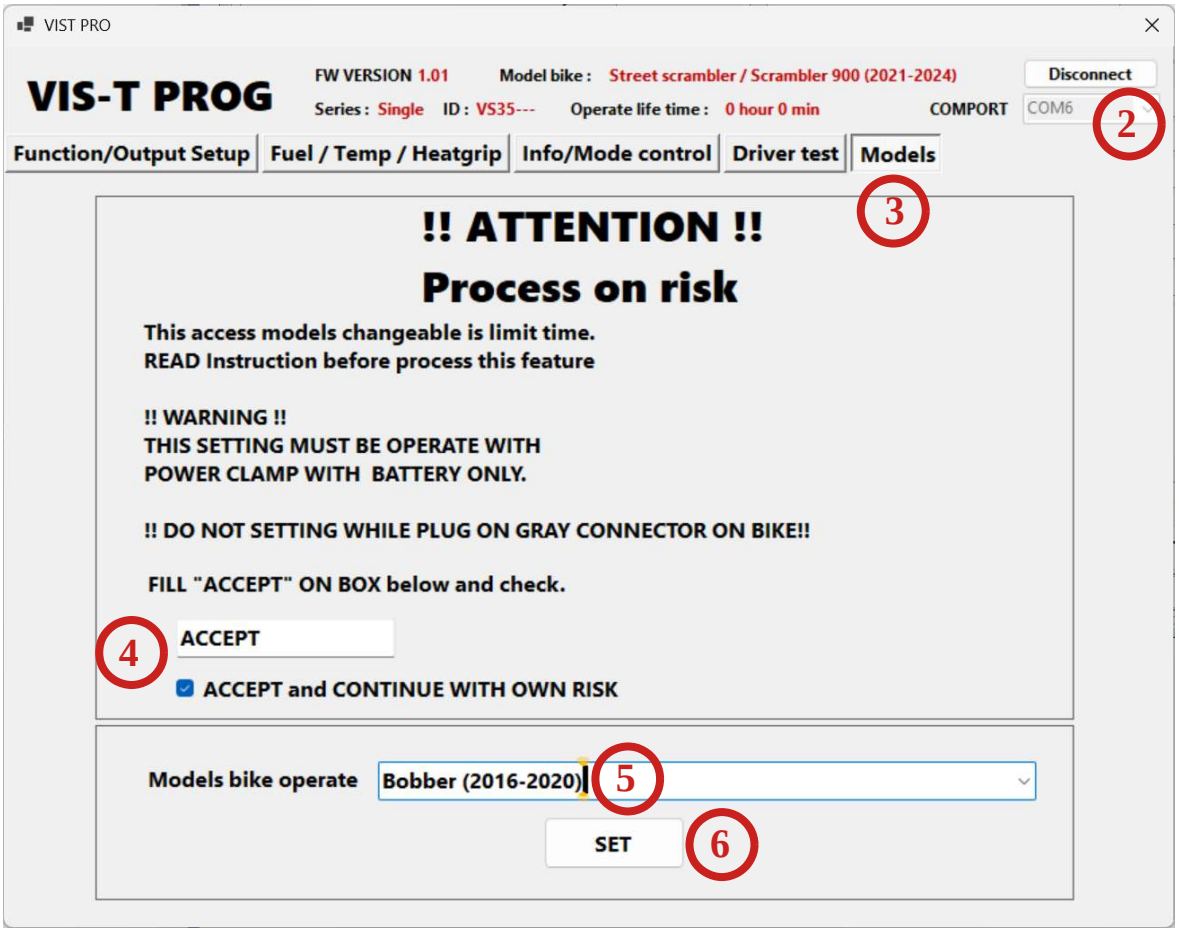
# Remodels bike.

**DO NOT Connect on gray plug on bike.**
Re-model bike operate should use power clamp with battery only.

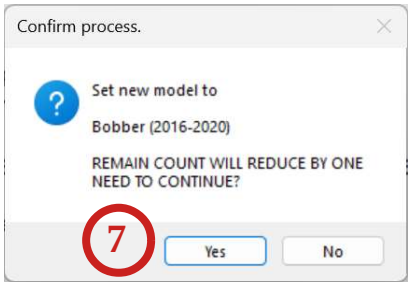
**!! BEFORE PROCESS !!**
This process has limit time access.
If Tab “Models” not show up after connect.
Means, Life time run out of access time.
**Remain set models has limit 3 times.**

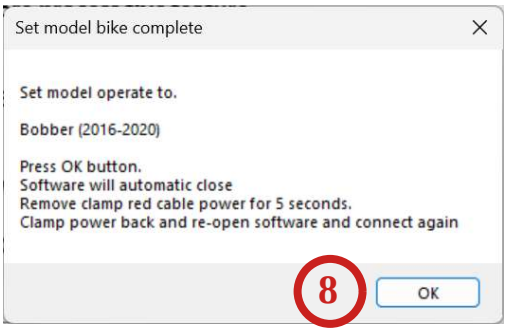



1.Prepare wiring as image.
2.Open VIS-T PROG and connect.
3.Click on TAB “Models”
4.Fill “ ACCEPT ” on box and check to allow models list.
5.Select model bike on list.




6.Click on SET button.
7.Click on YES to set new models.
Wait until
“Set model bike complete”
8.Click OK.
9.Remove power for 5 seconds.
10.Re-connect power.
11.Open VIS-T PROG and connect.
12.Done process.




!! Caution !! After click YES button. Do not remove power while during in this process until setup complete.

**Bike support list.**


## ☆ Dual Series ☆

- Street cup EU4
- T100 (2016-2020) EU4
- T100 (2021-2024) EU5
- T120 (2016-2020) EU4
- T120 (2021-2024) EU5
- T120 BLACK (2021-2024) EU5
- T120 BLACK (2025) EU5 ** Model A.
- T120 BLACK (2025) EU5 ** Model B.
- Thruxton EU4
- Thruxton R EU4
- Thruxton RS EU5
- Speed twin (2018-2020) EU4
- Speed twin (2021-2024) EU5

## ☆ Single Series ☆

- Street Twin (2016-2018) EU4 *** Nissin brake**
- Street Twin (2019-2020) EU4 *** Brembo brake**
- Street Twin (2021-2023) EU5
- Speed Twin 900 (2022-2024) EU5 (Needle gauge)
- Street scrambler (2016-2018) EU4 *** Nissin brake**
- Street scrambler (2019-2020) EU4 *** Brembo brake**
- Street scrambler (2021-2023) EU5
- Scrambler 900 (2022-2024) EU5
- Bobber (2016-2020) EU4
- Bobber Black (2017-2020) EU4
- Bobber (2021-2024) EU5 / (2025) EU5 ** Model A.
- Bobber (2025) EU5 **Model B

**** How identify model 2021 (EURO 5) looking for SAI valve. Locate under gas tank.**
**** Euro5 Model have 3 tri color ECU connector.**
**** Euro4 Model have 2 black ECU connector.**
**** Euro4 Model 2016-2020 don't have SAI valve.**
**** Street Twin & Street scrambler years 2018-2019 is a cross models.**
**Define by front brake caliper is Nissin or Brembo.**

**Models not support:**

- **Speed Master All models years.**
- **T100 (2025) EU5 Model B.**
- **T120 (2025) EU5 Model B.**
- **All special models (TFC bike.) (Limited numbered bike).**
- **TFT display. Speed twin 900 (2025) / Speed twin 1200 RS (2025).**

# USB tools driver install.

**USB driver and installation guide included in folder “USB DRIVER”.**

**Easy way to install.**
**Install driver from file “CDM2123620_Setup.exe”**
**Click > Extract > Next > Accept & next > Finish. It’s done.**

**Manual install driver.**
Select windows version and architecture.

Windows 7,8,10 and 11.
X86 (32bit) or X64 (64bit) version should select correctly.

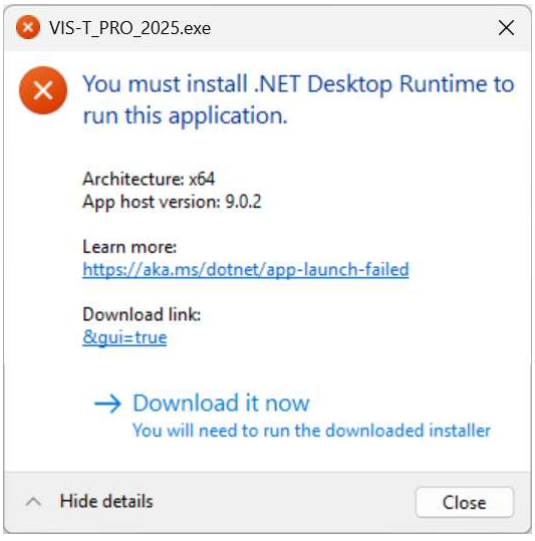
Driver download link.
https://ftdichip.com/drivers/vcp-drivers/

Installation guide download link.
https://ftdichip.com/document/installation-guides/

| Operating System | Release Date | X86 (32-Bit) | X64 (64-Bit) |
|---|---|---|---|
| Windows (Desktop)* | 2025-03-04 | 2.12.36.20 | 2.12.36.20 |
| Windows (Universal)*** | 2025-03-04 | 2.12.36.20U | 2.12.36.20U |

## VIS-T PROG require DOT NET framework.

If VIS-T PROG show popup while opening software require DOT NET.




File install in folder “DOT NET 9”

Install .NET framework from link below.
Recommend use .NET V9.0
https://dotnet.microsoft.com/en-us/download/dotnet

### .NET Desktop Runtime 9.0.9

The .NET Desktop Runtime enables you to run existing Windows desktop applications. **This release includes the .NET Runtime; you don't need to install it separately.**

| OS | Installers | Binaries |
|---|---|---|
| Windows | x64 \| x86 \| Arm64 \| winget instructions | |