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TFT Display for ProEFI
Installation Manual
Doc version 1.3

Notice: This product is intended for Off-Road use only.
Never take your eyes off of the road while using this device.
If you are uncomfortable with wire termination, please have
this device installed by a competent shop.

**** Notice! This device should be configured by competent personnel. Raising the BOOST too much or reducing the Traction Control too much can have severe consequences. You could blow your engine and or lose control of your vehicle****

ECU Connections:

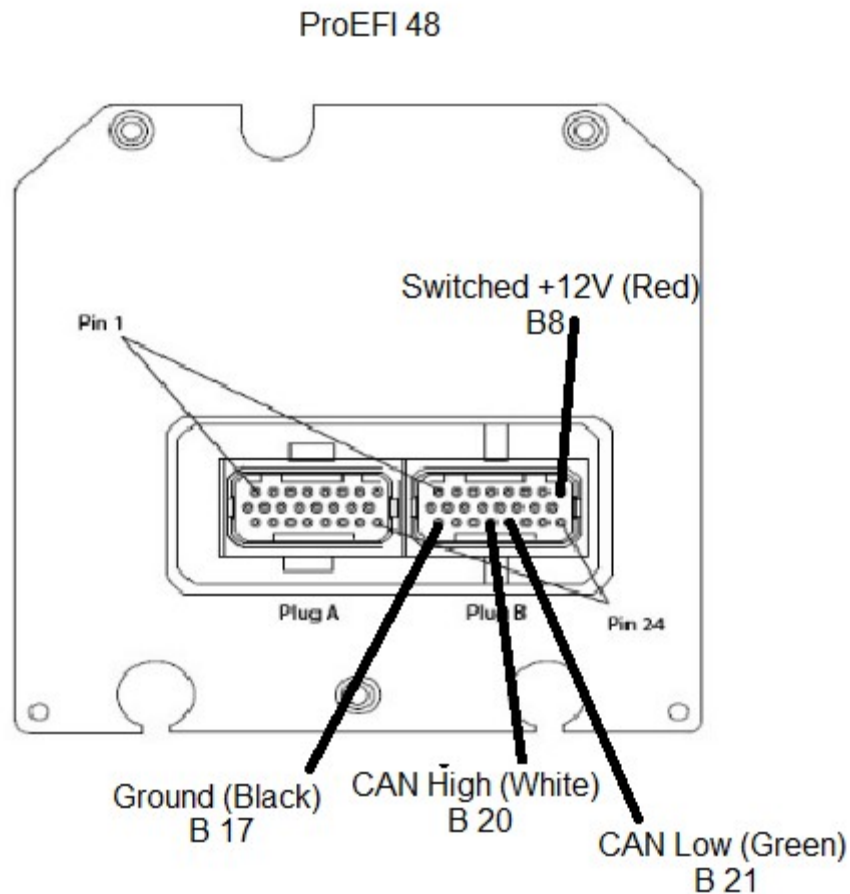
ProEFI 48:

Install a Blue T-Tap or solder wire B17 and plug in the Black ground wire form the 10 foot gauge cable.

Install a Blue T-Tap or solder wire B08 and plug in the Red power wire form the 10 foot gauge cable.

Install a Red T-Tap or solder wire B21 and plug in the Green CAN low wire form the 10 foot gauge cable.

Install a Red T-Tap or solder wire B20 and plug in the White CAN high wire form the 10 foot gauge cable.



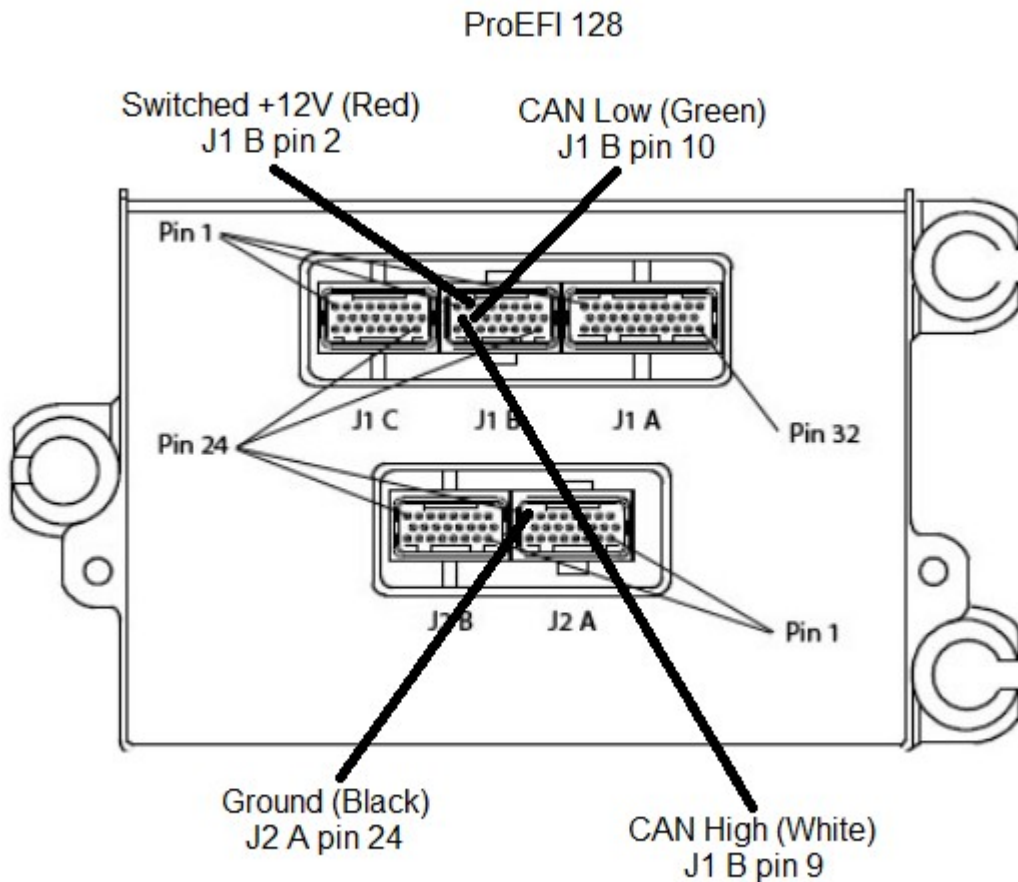
ProEFI 128

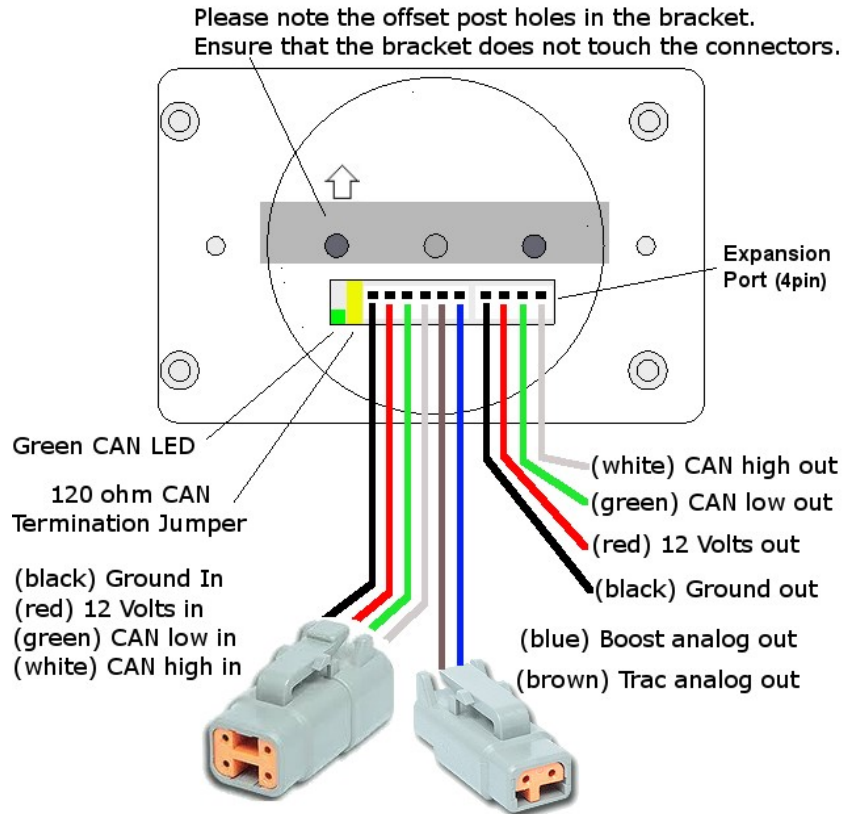
Install the T-Tap or solder wire J2 – A24 and plug in the Black ground wire form the 10 foot CAN gauge cable.

Install the T-Tap or solder wire J1- B02 and plug in the Red power wire form the 10 foot CAN gauge cable.

Install the T-Tap or solder wire J1- B10 and plug in the Green CAN low wire form the 10 foot CAN gauge cable.

Install the T-Tap or solder wire J1 B09 and plug in the White CAN high wire form the 10 foot CAN gauge cable.





2 Pin Analog Out Connector (Brown and Blue Wires)

The two pin DTM connector is used for an analog output for boost and traction control. **This option is not used when using the CAN XMIT option.** The number of voltage steps may be programmed using the BOOST PWM STEPS and TRAC PWM STEPS buttons in the settings. Ideally, more features may be controlled by using the CAN bus output instead of the analog outputs. Connect the blue and brown wires to the corresponding inputs that are selected for your application. There are more details regarding under the Gauge Setup Options section.

Data LED: This indicator will flash when ever the gauge is energized and CAN communications are present and a valid parameter is selected to be displayed. Use this to confirm communications.

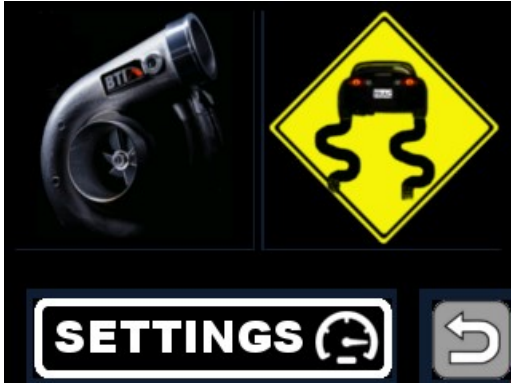
CAN Bus Termination Jumper: Remove this jumper if the gauge is not the last device on the CAN Bus. If there are multiple gauges, the last gauge should be the only gauge with the jumper installed. Leave the jumper installed if the gauge is a stand alone installation and there is nothing else on the CAN Bus.

*** Notice that ProEFI ECUs require that the proper termination resistance be present in order to function***

Gauge Setup Options:

Touch the cog wheel on the touch screen in order to configure the gauge.





This will bring you into a screen where the Boost Control, Traction Control, and Settings can be accessed.

Press the **SETTINGS** button will allow you to make the following changes:



UNITS button will allow the user to toggle between SAE and SI units. This applies to temperature, pressure, speed, and distance.

O2 DISPLAY button will change how the Oxygen sensor data is displayed. The options are AFR and Lambda.

O2 Count: Select "1X" if you are running 1 wideband O2 Sensor, select "2X" if you

will be running 2 wideband sensors.

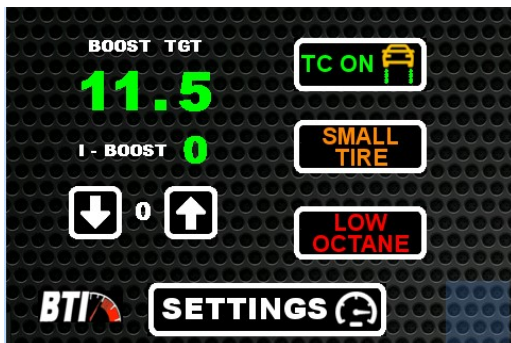
8 Bit Scale select this option if you find that the 0-100% values are off on Ethanol, TPS, or IDC.

RPM Scale: Select "8000 RPM" if your redline is below 8000 RPM or select "10000 RPM" if redline is higher.

Warnings: enable this feature to see warnings from the ECU on the screen.

CAN XMIT Enable this button to transmit commands over CAN, Disable to use analog outputs. This display emulates the CAN transmissions output by the ProEFI displays. These inputs must be configured in the ProEFI software.

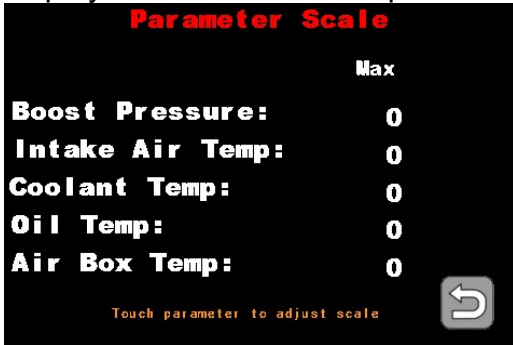
Variable Scale Use this button to switch the AFR from the variable scale that is dependent on ethanol content to the **Gasoline Scale** where 14.7 is stoich.



The options when CAN XMIT is enabled are:

- Boost Target (1-5)
- Traction control on / off
- Small Tire / Big Tire
- Low / High Octane.

These outputs are transmitted over CAN and must be configured in the ProEFI software. The Switch Input Source in the ProEFI software must be set to “Can display” for each of these options to function



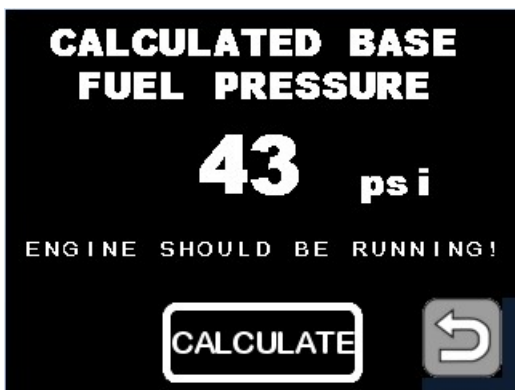
Parameter scale: Use this screen to set the maximum range for boost pressure and various temperature slide bars and graphs. Example: You will be running a 30 psi boost target. The max boost pressure could be 35 psi to give the slide bars and graphs the best resolution. The same goes for temperatures. These values should be entered with respect to which units are selected: SI or SAE. If SI units

are selected, Boost Pressure should be entered in kPa and temps should be entered in Celsius. If SAE units are selected, Boost Pressure should be entered in psi and temps in Fahrenheit.



Shift Light Configuration:

Touch the gear that you wish to change the shift light RPM on. That gear number will appear above the up and down arrows for verification. Use the up and down arrows to adjust the shift light RPM set-point of said gear. Press the back arrow button at the bottom right hand corner to save the settings. The shift light should flash once the settings are saved.



Base Fuel Pressure configuration:

In order to calculate the base fuel pressure, the engine should be idling. Press the CALCULATE button and the base pressure will be calculated and displayed. This is used on the fuel screen in order to graph the fuel pressure vs. boost pressure for simple regulator function verification.



TRAC and BOOST PWM Steps: (analog outputs only not used when CAN Xmit is enabled)

Use these two buttons to configure how many steps are to be programmed in the ProEFI software for Boost and Slip. Typically the scale is from 0-5 volts and the max amount of steps allowed is 7 which give you 8 settings (0-7). Example: a value of 7 here would make each step would have a value of .71 volts. A value of 1 here

would give the step a value of 5 volts. It is **imperative** to view each step in the ProEFI software when configuring this as there could be a potential difference with regard to ground.

**** Note that these two settings should be configured by competent personnel. Raising the BOOST too much or reducing the SLIP too much can have severe consequences. ****

Warranty:

All BTI Gauges carry a 1 year warranty effective at the time of purchase.

- This warranty extends only to products distributed and/or sold by BTI Gauges. It is effective only if the products are purchased and operated in the USA. (Within the USA including US 48 States, Alaska and Hawaii.)
- This warranty covers only normal use of the computer. BTI Gauges shall not be liable under this warranty if any damage or defect results from (i) misuse, abuse, neglect, improper shipping or installation; (ii) disasters such as fire, flood, lightning or improper electric current; or (iii) service or alteration by anyone other than an authorized BTI Gauge representative.
- You must retain your bill of sale or other proof of purchase to receive warranty service.
- No warranty extension will be granted for any replacement part(s) furnished to the purchaser in fulfillment of this warranty.