

4-VB40aX1 and 4-VB40aX2 Single and Dual Fuel Pump Voltage Booster Installation Guide



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Included Parts:

- DW VB40a Voltage Booster
- Power and Ground Wiring Pigtail
- Pump Power and Trigger Wiring Pigtail
- 50amp or 2x 25amp ATO Fuse



VB40a 40amp Voltage Booster Installation Guide

PLEASE READ: This guide is intended to aid in the installation of our products. It is recommended that factory manuals or instructions are followed to remove the fuel pump assembly from the vehicle. Instructions in this guide are generic and are intended to aid in the installation of a Brushless fuel pump controller. The factory manual should supersede any contradiction.

Note: The DeatschWerks VB40a voltage booster is limited to 40amps. Increased flow results will stop when total pump(s) amperage hits 40amps.

Below is a picture of some suggested tools that will make the installation process easier.



Wiring the Voltage Booster

1a – Follow the picture below for wiring your VB40aX1 single fuel pump booster. The Red wire should go to a switched 12v source that is key on power capable of handling 50amps. The Black wire should be grounded to the chassis or another suitable ground location. The Blue wire should connect to the Positive (+) terminal on the fuel pump, and the White wire will go to a switched ground to activate the booster.



VB40a 40amp Voltage Booster Installation Guide

1b – Follow the picture below for wiring your VB40aX2 Dual fuel pump booster. Each Red wire should go to a switched 12v source that is key on power capable of handling 25amps. The Black wire should be grounded to the chassis or another suitable ground location. Each Blue wire should connect to the Positive (+) terminal on one fuel pump, and the White wire will go to a switched ground to activate the booster.

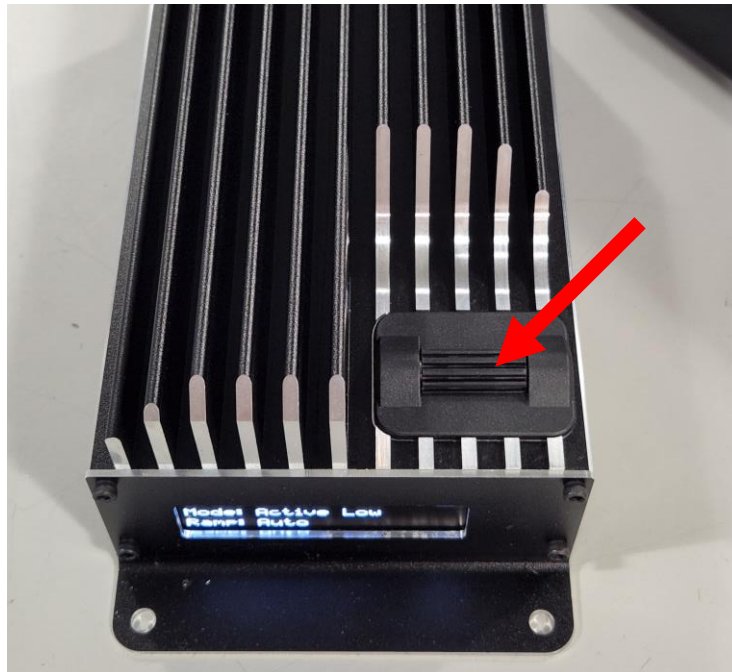


2 – Each wire is labeled on the back side of the controller.



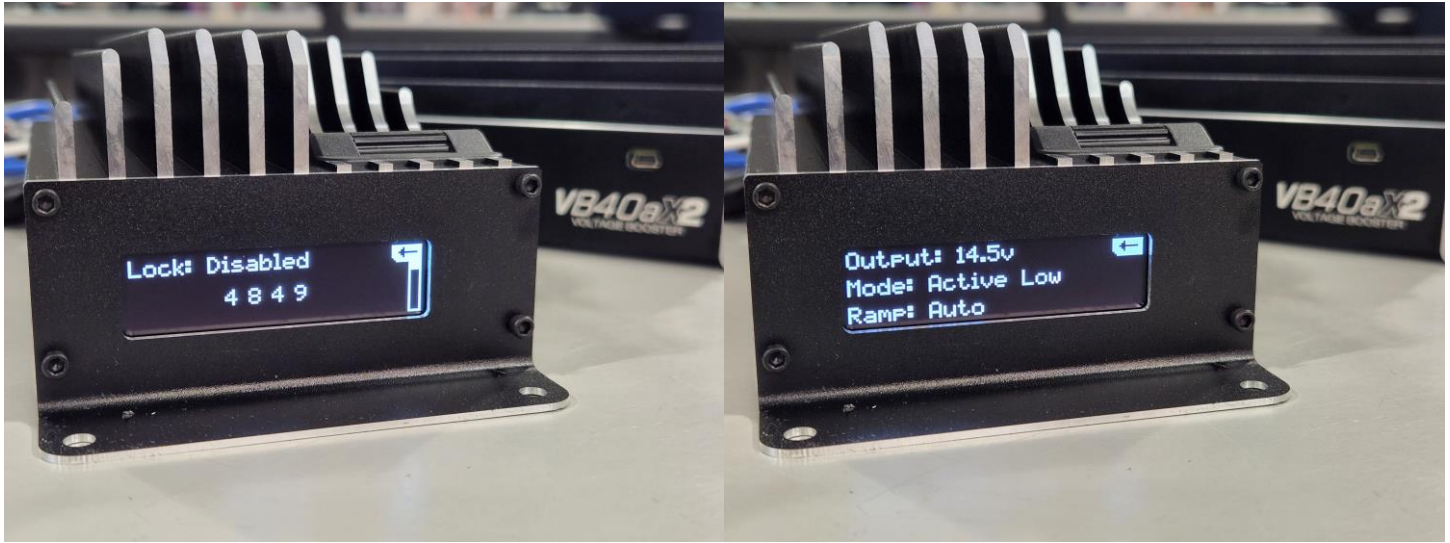
Menu and Operations

3 – When powered on you will be greeted by a DeatschWerks splash screen. To access, navigate and change settings use the roller wheel on the top of the VB40a. To select items, click the roller wheel in.



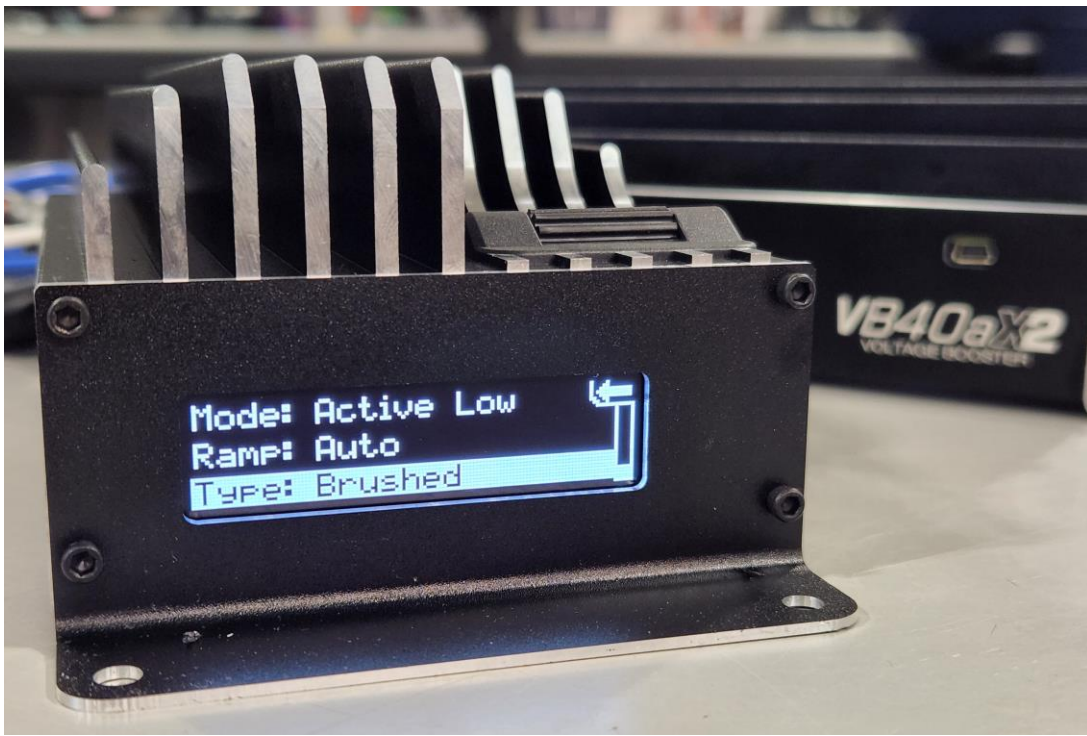
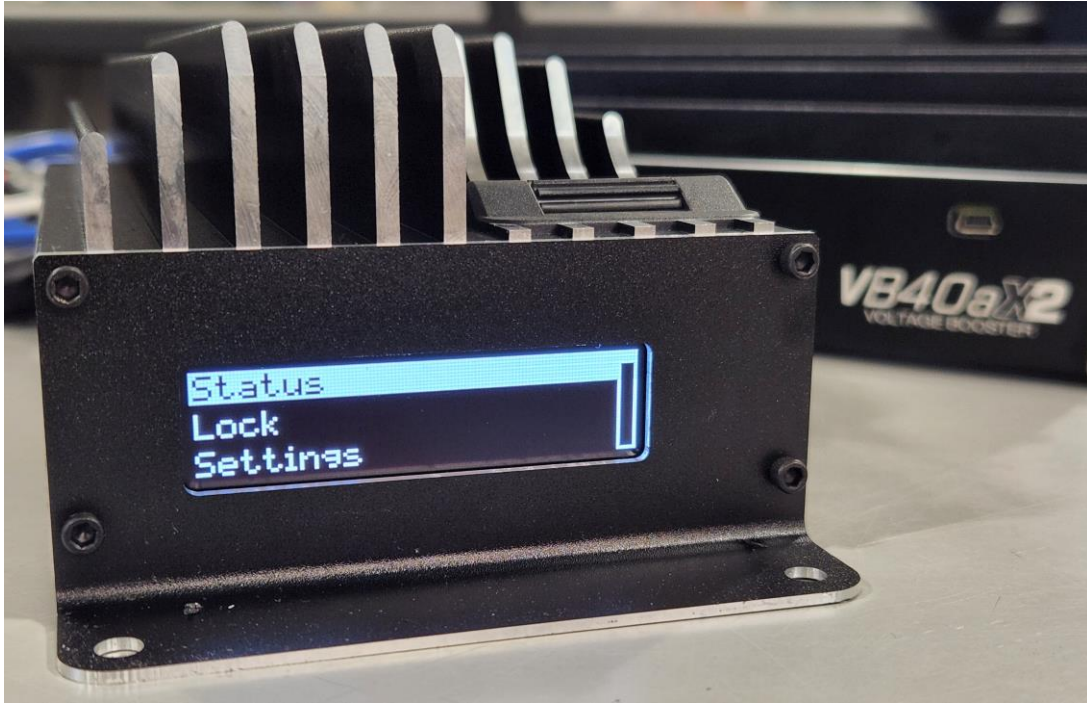
VB40a 40amp Voltage Booster Installation Guide

4 – Click the roller wheel to access the menu. If there is a lock set you will be shown the lock screen, enter the lock code if you have it. The default lock code is “4849” if it is present on a new booster. This will move you to the Status menu, this shows the current settings and the current voltage being output by the VB40a.



5 – Select the Settings menu to adjust the default settings of the VB40a.

- Mode:** Active Low = Grounding the white control wire to enable the boosted voltage selected.
Always On = Constant 18v output, control wire does nothing.
- Ramp:** Auto = This automatically picks the ramp rate depending on the voltage selected.
1.5s = 1.5 seconds from 14.5v to the voltage selected.
1s = 1 second from 14.5v to the voltage selected.
0.5s = 0.5 seconds from 14.5v to the voltage selected.
Instant = No delay from 14.5v to the selected voltage (can cause spikes if used over 18v)
- Voltage:** 14.5v (This is the base voltage, when not activated the booster always outputs 14.5v)
18v = When activated the booster will output 18v
20v = When activated the booster will output 20v
22v = When activated the booster will output 22v
26v = When activated the booster will output 26v (Only available in Brushless Type)
- Type:** Brushed = Used with standard brushed DC motors
Brushless = Use with brushless controllers and pumps, unlocks 26v setting.
- Lock:** Disable or Enable = Use the default lock code “4849” to enable or disable the lock.



For additional technical support please contact us at: TechSupport@Deatschwerks.com or 405.233.3991