

# **SECTION 1:** PARTS & CHECKLIST

# **BDX DEVICE**



# MICRO USB™ CABLE



HDMI/OBD II CABLE



SECTION 2:

PRE-INSTALL CHECKLIST

During the installation process you will need to connect the BDX to the internet. Also, in the unlikely event that technical support is needed, internet access may be required to troubleshoot. Our Technical Support team may also need to remotely connect to your computer to fix any issues you may be having.

Technical Support is available Monday - Friday between the hours of 8 A.M. and 5 P.M. Mountain Standard Time and can be contacted via phone or through live chat. If you need to contact Technical Support,

please be sure to have your device with you before initiating contact.

Make sure you have at least an hour to complete the initial setup, update, and installation process.



Fuse Puller | Voltage Tester | Battery Charger | Pliers

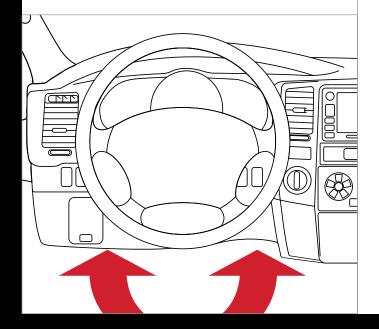
# **SECTION 3:**

READING THE VEHICLE INFORMATION

NOTE: Please make sure that all stock electronics are turned off and disconnect any aftermarket electronics as well.

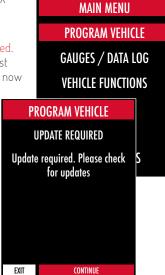
### POWERING UP THE BDX

1. Using the provided HDMI/OBDII Cable from section 1, plug the BDX device into the vehicle's OBDII Port commonly found within 24" of the steering column under the driver's side dash.



#### READING THE VEHICLE'S INFORMATION

- 1. At this point, the key should be in the ignition, but in the OFF position until prompted to turn key ON/RUN position.
- 2. From the Main Menu, select Program Vehicle.
- 3. Processing Data: The BDX is now reading your vehicle information.
- Updates: Internet Required. In order to install the most up-to-date files the BDX now requires internet access. You can access these files via two methods found in Section 4.



# **SECTION 4:**

THREE METHODS FOR UPDATING THE BDX

### METHOD #1: UPDATING VIA WIFI INSIDE THE VEHICLE

- 1. Select Continue from the Internet Required screen.
- 2. Select the WiFi network you would like to connect to. Use the middle button to confirm your selection.
- 3. Enter the network pass code using the arrow keys and the middle button to select.

METHOD #2: UPDATING VIA WIFI USING USB POWER

2. Select "Program Vehicle" from the main menu.

3. "Vehicle Updates" select "Confirm".

4 "Device Updates" select "Continue"

8. Unplug and return to the vehicle.

5. "Internet Required" select "Continue"

6. Follow on screen instruction to set up WiFi.

7. Follow on screen prompts until the "Up-To-Date" screen.

1. Plug the BDX into a computer or wall charger using the provided

4. Confirm the Wifi settings and select Continue.

Micro USB Cable.

# PROGRAM VEHICLE **CONNECT TO WIFI** SSID (NETWORK NAME) **Bully Dog** PASSCODE (SECURITY KEY)

NOTE: Unplug the BDX from your computer before proceeding.

METHOD #3: UPDATING USING UPDATER SOFTWARE

- 1. Go to: bullydog and click on the "Support" tab at the top of the page.
- 2. Locate and click the "BDX" option and then select "Downloads". You will see "Download Now" under the "Updater" section. Click "Download Now" to begin downloading and installing updater
- 3. Wait for that program to download, then double click and "Run" the BullyDogDeviceUpdater.exe file if it does not open automatically.
- 4. Follow the on-screen directions of the Device Update Software Installer until it allows you to click "Finish".
- 5. Connect your BDX to your Windows<sup>™</sup> based PC using the provided Micro USB™ cable. We do not offer support for Apple computers at this time.
- 6. Double click and open the Device Updater Software.
- 7. Click "Automatically Check for Updates".
- 8. Confirm the update by pressing the "Update" button. The update will now begin.
- 9. Let the updater run until it says "Your device is now up to date".
- 10. Unplug the BDX from your computer and proceed to Section 5.

# **SECTION 5:**

# TUNING THE VEHICLE

- Cloud Check If your dealer has sent you a custom tune using the cloud select "continue" to download the custom tune. If not select "Skip" and follow prompts.
- Select your tune from the following menu items:
  - Preloaded Bully Dog tunes for use on stock vehicles only.

Pre-Loaded Tune Files Custom Tune

Custom Tuning Dealer files, if there are any on the device

**PROGRAM VEHICLE** 

**CLOUD CHECK** 

Press CONTINUE to query Cloud for available custom tunes.

NOTE: Custom Tunes are built by Bully Dog's network of Custom Tuning Dealers and any questions related to them need to be directed toward the tuning dealer.

Return to Stock Restore original factory file to vehicle.

3. Highlight the tune you wish to use and select confirm.

- Read and acknowledge the street use notice.
- Depending on your vehicle there may be further parameters you can change under "Additional Tune Option". Select "Change" to view the available options or "Skip" to continue with downloading the tune only.
- The Tune and any Additional Tune Options will now be installed. Follow the on-screen directions to finish the process.

### STREET USE NOTICE This device is NOT LEGAL for sale or use in California on any pollution controlled motor vehicles.

Press CONTINUE to start

PROGRAM VEHICLE

programming.

NOTE: During the installation the BDX will be married to your (One) vehicle. Once married there is an unlock fee to un-marry the device from your vehicle in order to install it on another vehicle.

## **VEHICLE LICENSE** This BDX is unmarried.

Select CONFIRM to marry your BDX to this vehicle.

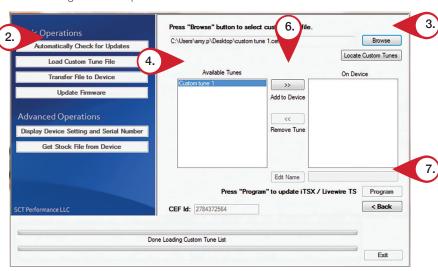
# **SECTION 6:**

# LOADING CUSTOM TUNES

# NOTE: Make sure the "Updater Software" from Section 4 Has been completed before proceeding with Section 6.

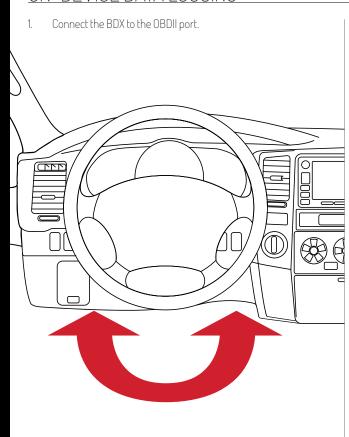
The BDX is capable of having custom tune files sent over the Cloud straight to the device from a Custom Tuning Dealer. If your Custom Tuning Dealer has chosen to email your file, you can load them onto the device using the Device Updater software.

- 1. From your e-mail, save your Custom Tunes (.cef files) to your computer's Desktop.
- 2. Open the Updater software and click the Load Custom Tune File button.
- 3. Click Browse and locate your custom tunes on your Desktop. Alternatively, you can also click Locate Custom Tunes.
- 4. Highlight the Tune you wish to load. The tune you selected should move to the Available Tunes section
- 5. Select the listed tune in the Available Tunes section, then click the >> button to move the selected tune to the On Device section.
- 6. Highlight the tune under the On Device section, then click program. Tunes can only be loaded one at a time. Repeat steps 3-7 for each tune, the device can hold up to ten custom tunes.



NOTE: To edit the name of the file as it appears on your device, you must highlight the file after transferring the file to the On Device section of Updater. Next to Edit Name, change the name of the file here. Select Save, then Program.

# **SECTION 7:** ON-DEVICE DATA LOGGING



From the Main Menu, scroll to Gauges/Datalog and press the center button on the BDX.

MAIN MENU PROGRAM VEHICLE **GAUGES / DATA LOG VEHICLE FUNCTIONS VEHICLE INFO DEVICE INFO DEVICE SETTINGS** 

3. On initial setup, you will need to select Configuration press the center button, and select your vehicle from a list of data log files.

In the future, you can continue without going through the vehicle selection.

CONFIGURATION FORD DIESEL 6.4L FORD DIESEL 6.7L FORD DIESEL 6.0L & 7.3L FORD GAS '07 & PRIOR YEARS FORD GAS '08 & NEWER FORD NON-US '11 & PRIOR

Once you select your vehicle, the default gauges will show up and can now be monitored.

**BATTERY VOLTAGE** 12.80 NOTE: Gauges are defaulted to 202.0

The items being monitored can be adjusted by pressing up or down on the device to highlight and then pressing the center button on the BDX to select which reading you'd like to change. Within this menu, you can change the item you're monitoring, and the units in which it will be displaying. You can also change the layout of the gauges within this menu.

- 6. To start or stop data logging, press the center button on the BDX while monitoring the gauges.
- While monitoring, press right or left on the device to go to the Gauges/Datalog menu. From this menu, you may start recording, select a data log file with which to log, change the gauge layout, and reset the min/max values on the monitor.

NOTE: If you are not seeing the value or the PID option you want, you can download and build your own configuration file using the Live Link datalogging software

# **SECTION 8:**

# ADJUSTABLE OPTIONS EXPLAINED

#### DIESEL VEHICLE SPECIFIC OPTIONS

# Performance/Extreme

The most aggressive preloaded diesel tune. Good for everyday use. racing, or economy but not recommended for any type of towing.

### Street/Performance

The Street tune has less power than Performance with a moderate gain over stock, safe for light towing, under 5,000 lbs.

#### Towing/Tow

This tune should be used when towing any significant load as the shifting is specific for towing.

For heavy loads, the engine and boost are left stock and only the transmission shift points are tuned.

Helps to increase engine braking while coasting to help lower braking temperatures.

# Locked at CT

Keeps the torque converter locked during deceleration to aid in engine braking.

# Lock In 1-2-3

Locks the torque converter in 1st, 2nd and 3rd gear.

More aggressive shift schedule keeping the engine in its power band longer.

### DIESEL & GAS VEHICLE OPTIONS:

#### Axle Ratio

Corrects shift patterns / speedometer for aftermarket axles / parts. (Not available on all vehicles)

Sets tire size to correct shift patterns/speedometer. (Not available on all vehicles)

### Idle Speed

Sets idle speed in RPM.

## Traction Control

On/Off setting disables traction control without using the TCS button.

# WOT Shift

Increase or Decrease the WOT shift points of each gear individually

# Shift Pressure

% change in transmission pressure during shifts. (+ equals firmer, - equals softer)

# GAS VEHICLE SPECIFIC OPTIONS:

Performance levels vary by the octane you select. Higher octane will provide higher performance increase.

Adjusts the octane based tunes to focus more on towing over performance.

# Global Spark

Add or remove timing advance to the entire RPM range.

# Spark by RPM

Add or remove timing by RPM range. (0-2000) (2000-4000) (4000-8000)

# WOT Fuel

Add or remove fuel at wide open throttle. (WOT)

# Fuel Injectors

Allows you to adjust for different sized injectors. (Not available on all vehicles)

# **CMCV** Deletes

Updates tune to handle the CMCV/IMRC delete plates modification.

### Fan Control Lowers the temperature at which the fan turns on.

Rev Limiter Drive Sets rev limit in RPM while in drive.

### Rev Limiter Neutral

Sets rev limit in RPM while in neutral.

#### Speed Limit

Remove, increase, or decrease the vehicle speed limiter. (AKA Governor)

not available on all vehicles.

# **SECTION 9:**

# FREQUENTLY ASKED QUESTIONS

### Q: When I try to update my tuner, it says "Please connect Bully Dog device" but it's already plugged in.

A: This is an issue with your PC's driver software. If problem persists, contact Bully Dog Tech Support and our support staff will walk you through fixing this issue.

# Q: When I connect the tuner to the vehicle, it doesn't power on.

A: Check for blown fuses specific to the OBDII Port/Cigarette Lighter for your vehicle.

# Q: Does the tuner have to stay plugged in to keep the vehicle tuned?

A: No, after tuning the vehicle you can disconnect the programmer and store it.

# Q: Can I stack/combine the BDX with another chip or tuning module?

A: All chips/tuning products must be removed prior to tuning with any Bully Dog device.

# Q: Can the vehicle be tuned while the engine is running?

A: We do not recommend tuning the vehicle while the engine is running as this can cause severe damage to the vehicle and the PCM.

# Q: Should I return to stock before taking my car to the dealer?

A: We recommend that you always return your vehicle to stock before returning to the dealership as this prevents the tuner from becoming locked if the dealer updates the PCM.

### Q: My device is telling me my car is a Shelby GT500 when I go to program vehicle or My device says Demo Mode when I read Device Info.

A: Check device settings and look for Demo Mode. If it is on disable it by turning it to off. This will cause the device to stop identifying your vehicle as a Shelby GT500 and will now operate as needed.

# Q: My vehicle is modified and I loaded a preloaded tune. Now it won't run as expected.

A: In most cases a modified vehicle requires a custom tune. There are set ups in the preloaded tune options to adapt to certain cold air intakes, however this is per vehicle and what works for one vehicle may not work on another. Please contact a Bully Dog Custom Tune Dealer for a custom tune if your vehicle is heavily modified.

# Q: Can I tune more than one vehicle with this programmer?

A: No, during the installation the BDX will be married to your vehicle. Once married there is an unlock fee to un-marry the device from your vehicle in order to install it on another vehicle.

