X4

QUICK START GUIDE

SCT

WWW.SCTFLASH.COM

SECTION 1:
PARTS & CHECKLIST

X4 DEVICE

MICRO USB™ CABLE

HDMI/OBD II CABLE

TOOLS NEEDED:
Fuse Puller | Voltage Tester | Battery Charger | Pliers

SECTION 2:
PRE-INSTALL CHECKLIST

INTERNET ACCESS
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.

ALLOW TIME FOR INITIAL SETUP
Make sure you allow up to 30 minutes to complete the initial setup and installation.

NEED FURTHER SUPPORT?
For additional troubleshooting and support, see our knowledge base on-line at sctflash.com/support.

Alterations made to the OEM configuration of a vehicle may violate the Clean Air Act if such alterations bypass, defeat, or render inoperative Elements of Design installed on a vehicle in compliance with the Clean Air Act. Users who alter Derive's products in any way are required to make their own individual determination that the altered products do not violate the Clean Air Act.

This device is not legal for sale or use in California on pollution controlled vehicles.

SECTION 3:
IMPORTANT ON-DEVICE INFO.

From the Main Menu, select Device Info.

Within Device Info, you will find :

SERIAL NUMBER:
Needed for dealers to create custom tunes for your vehicle and device.

FIRMWARE VERSION:
This is essentially your device's operating system.

TUNE REVISION
The version number of your preloaded tunes.

UNLOCKS LEFT:
Number of unlocks remaining. An unlock is used when the tuned vehicle is returned to stock and a different vehicle is programmed.

MARRIED STATUS:
Unmarried = Unlocked and ready for vehicle pairing.
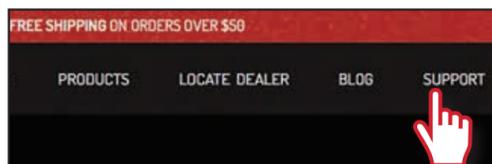
Married = Locked to a vehicle.

VBATT:
The amount of voltage being run through the device from your vehicle's battery. As a general rule, 12.75+ volts is needed to flash a tune to a vehicle.

SECTION 4:
UPDATING YOUR X4 DEVICE

INSTALLING THE UPDATER SOFTWARE

NOTE: Make sure the X4 is unplugged from your computer before starting this process.

1. Go to: sctflash.com and click "Support" tab at the top of the page.

FREE SHIPPING ON ORDERS OVER $50

PRODUCTS   LOCATE DEALER   BLOG   SUPPORT

1. Locate and click the "SCT Software" option and then click on "Downloads". You will see "Device Updater". Click to begin downloading and installing on your computer.

2. Wait for that program to download, then double click and "Run" the SCTDeviceUpdater.exe file if it does not open automatically.

3. Follow the on-screen directions of the SCT Device Update Software Installer until it allows you to click "Finish".

4. Follow the on-screen directions of the SCT Drivers Installer until it allows you to click "Finish".

5. Your SCT Device Updater Software and Drivers are now fully installed and ready for use.

UPDATING YOUR X4

1. Prior to updating your X4 you will need to return the vehicle back to stock, if not at stock already.

2. Connect your X4 to your Windows™ based PC using the provided Micro USB™ cable. Unfortunately, we do not offer support for Apple computers at this time.

3. Double click and open the SCT Device Updater Software.

4. Click "Automatically Check for Updates".

5. Confirm the update by pressing the "Update Now" button. The update will now begin.

6. Let the updater run until it says "Your device is now up to date".

7. You may now unplug your device from your computer and load a tune to your vehicle.

SECTION 5:
READING VEHICLE VIN AND STRATEGY/OS PART#s

MAIN MENU
- PROGRAM VEHICLE
- GAUGES / DATALOG
- VEHICLE FUNCTIONS
- VEHICLE INFO
- DEVICE INFO
- DEVICE SETTINGS

From the Main Menu, select Vehicle Info.

Once on the Vehicle Info screen, you'll be asked to turn the key on. The VIN# will display as well as the Strategy for Ford vehicle/device. GM vehicle/device, will display the OS Part Numbers.

SECTION 6:
CHECKING/CLEARING VEHICLE TROUBLE CODES
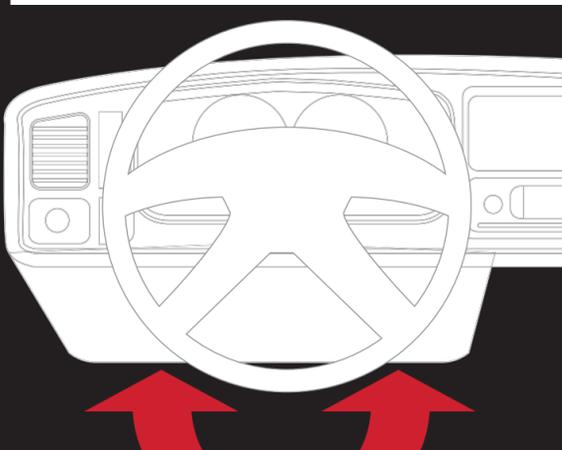
From the Main Menu, select Vehicle Functions.

Within this menu, you will be given the option to read or clear DTCs (Diagnostic Trouble Codes). Finally, make your selection and follow the on-screen prompts.

MAIN MENU
- PROGRAM VEHICLE
- GAUGES / DATALOG
- VEHICLE FUNCTIONS
- VEHICLE INFO
- DEVICE INFO
- DEVICE SETTINGS

SECTION 7:
PROGRAMMING THE VEHICLE

POWERING ON THE X4
To power up your device using the provided HDMI to OBDII cable, connect to the vehicle's OBDII port. The OBDII port is most commonly found within 24" of the steering column under the driver's side dash.

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

BEGIN PROGRAMMING

1. From the Main Menu, select Program Vehicle.

2. At this point, the key should be in the ignition, but in the OFF position until prompted to turn key ON/RUN position.

MAIN MENU
- PROGRAM VEHICLE
- GAUGES / DATALOG
- VEHICLE FUNCTIONS
- VEHICLE INFO
- DEVICE INFO
- DEVICE SETTINGS

Two clicks

Within Program Vehicle, there are 2-3 selections depending on the state of the vehicle.

- Pre-Loaded Tune Files = Preloaded SCT tunes for use on stock vehicles only.

- Custom Tune = Custom Tuning Dealer files, if there are any on the device.

- Return to Stock = Restore original factory file to vehicle.

USING PRE-LOADED TUNE FILES
Once you follow the first "Key On" prompt, the device will show you a selection of vehicles and engine sizes. Select yours here. This will take you to Adjustable Options where you will be able to adjust to different performance levels, vehicle characteristics, and options including, but not limited to, speed limiters, axle ratio and tire size. (Adjustable Options are vehicle specific). For more information on Adjustable Options, please see the Adjustable Options Explained section of this guide.

PROGRAM VEHICLE

FUEL OCTANE

- ☑ 93 OCTANE
- ☐ 91 OCTANE
- ☐ 87 OCTANE

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

USING CUSTOM TUNES
To install Custom Tunes, select Program Vehicle, and scroll down to the Custom Tunes section. If your device contains any custom tunes for your vehicle, this is where they will be listed. Once you've found your desired tune select it by highlighting it on the menu and then pressing the center button on the X4 to choose the tune. Next, follow the on-screen instructions to load the tune to your vehicle. If no custom tunes are listed the device will refer you to our website to find a custom tuning dealer.

RETURNING TO STOCK
With SCT devices, your stock file is stored during the initial programming. The stock file stays on the programmer until returned to stock. From Program Vehicle, select Return to Stock and follow the on-screen instructions to advance through the programming process.
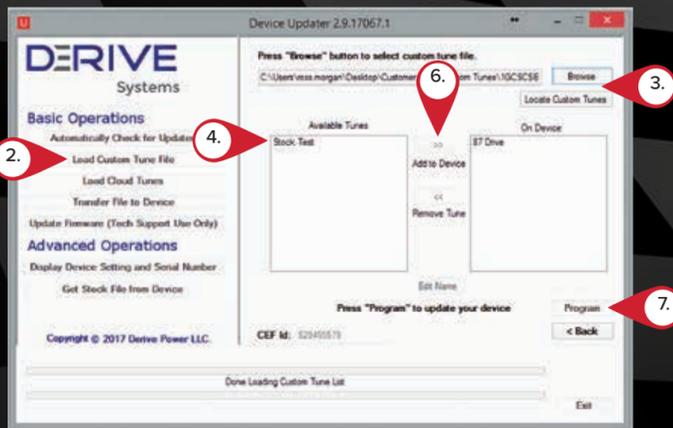
SECTION 8:
LOADING CUSTOM TUNES

Download and install the SCT Device Updater software and Drivers from : www.sctflash.com/support
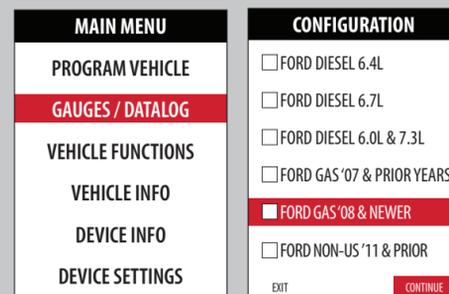
1. From your e-mail, save your custom tunes (.cef files) to your computer's Desktop.

2. Open the SCT Device Updater software and click the Load Custom Tune File button.

3. Click Browse and locate your custom tunes on your Desktop. Alternatively, click Locate Custom Tunes.

4. Highlight the Tune you wish to load.

5. The tune you selected should move to the Available Tunes section.

6. Select the listed tune in the Available Tunes section, then click the >> button to move the selected tune to the On Device section.

7. 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"**.
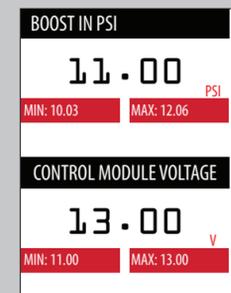
SECTION 9:
ON–DEVICE DATA LOGGING

1. Connect the X4 to the OBDII port.

2. From the Main Menu, scroll to Gauges/Datalog and press the center button on the X4.

MAIN MENU	CONFIGURATION
PROGRAM VEHICLE	☐ FORD DIESEL 6.4L
GAUGES / DATALOG	☐ FORD DIESEL 6.7L
VEHICLE FUNCTIONS	☐ FORD DIESEL 6.0L & 7.3L
VEHICLE INFO	☐ FORD GAS '07 & PRIOR YEARS
DEVICE INFO	☒ FORD GAS '08 & NEWER
DEVICE SETTINGS	☐ FORD NON-US '11 & PRIOR
	EXIT CONTINUE

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.

4. Once you select your vehicle, default gauges will show up and you can now monitor these gauges.

5. 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 X4 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.

```
BOOST IN PSI
  11.00        PSI
MIN: 10.03   MAX: 12.06

CONTROL MODULE VOLTAGE
  13.00        V
MIN: 11.00   MAX: 13.00
```

6. To start or stop data logging, press the center button on the X4 while monitoring the gauges.

7. 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 cant display a specific value from the preloaded config files, you can download and build custom config files via our Live Link software. 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 from sctflash.com/support.

SECTION 10:
ADJUSTABLE OPTIONS EXPLAINED

DIESEL VEHICLE SPECIFIC OPTIONS

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

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

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

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

Jake Brake
Exhaust brake 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.

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

DIESEL & GAS VEHICLE OPTIONS:

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

Tire Size
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 by MPH.

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

GAS VEHICLE SPECIFIC OPTIONS:

Tune Type
Performance levels vary by the octane you select. Higher octane will provide higher performance increase. 93 octane would be the highest increase.

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)

NOTE: Adjustable Options vary for each vehicle and are not available on all vehicles.

SECTION 11:
FREQUENTLY ASKED QUESTIONS

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

A: This is an issue with your PC's driver software. See our knowledge base at: www.sctflash.com/support for help.

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

A: Check for blown fuses specific to the OBDII port 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 X4 with another chip or tuning module?

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

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

A: Yes, but only one vehicle may be tuned at a time and you MUST return the vehicle to the stock to before tuning another vehicle.

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 SCT Custom Tune Dealer for a custom tune if your vehicle is heavily modified.

Q: I keep getting error code 110AF/110AE. The device tells me to update my device, but it is already up to date.

A: You need to read vehicle info and write down your ECU Strategy/ECM OS Part Number. After you've read vehicle info you need to go to your computer and update the device using SCT Device Updater to download the additional files needed to tune your vehicle.

Q. what is the difference between an unlock and a reset?

A. An Unlock is required when a device is "Locked/Married" to a vehicle that is no longer available. A Reset is needed when you have exceeded the "5 unlocks" on the device. Please call SCT Tech Support to have your device Unlocked / Reset.

Q: I brought my vehicle to get work done at a dealership and they flashed the vehicle now the device is telling me it is the incorrect vehicle.

A: See our knowledge base at: www.sctflash.com/support for help.

NOTE: Devices have five unlocks. An unlock is used when the device is transferred from one vehicle to another.

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