

Smarty Touch User Guide

Thank you for purchasing the Smarty Touch! We have put a lot of hard work into the production of this tuner, and we sincerely hope you enjoy it. This is a guide that explains most features for the Smarty touch.

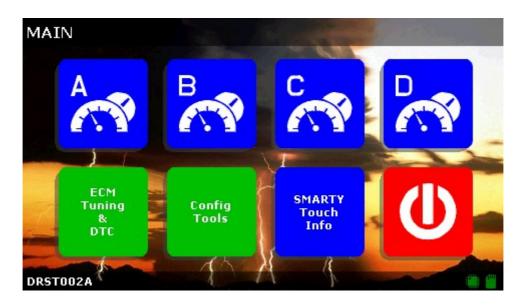
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The Main Menu



The Smarty Touch is operated by touching specific locations of the screen. We invested a lot of time and effort in to ensure the accuracy of the screen. The A, B, C, and D menu options are for your configurable dashboards. These are 4 different customizable gauge layouts that you can set up to your liking. There will be more on this topic later.

ECM Tuning & DTC is where the tuning side of things will be handled. Whether that is adding power to the truck, changing the tire size, or reading codes. This will be explained more in depth shortly.

Config Tools is where you can do things like request unlock codes (for TNT-R and SSR software), play with the audio, brightness, and Dashboard settings (such as refresh rate).

Smarty Touch Info will have options to show the current VIN number the Smarty is locked to, the version of Chrysler software on the ECM, and more information that is mostly used on our end for troubleshooting purposes.

You will notice that in the bottom right corner of the screen there are two icons. Ideally, they should both be green. The left icon is for communication, and the right icon is for the SD card.

For the ECM Communication Status Icon:

Red icon = No communication

Yellow Icon = Partial Communication

 $Green\ Icon = Complete\ communication$

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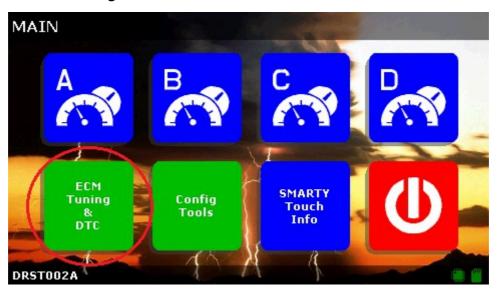
For the SD Card Status Icon:

Red = Not present or faulty Yellow = Check in progress Blue = Check in pause White = Not readable Green = Ready

ECM Tuning and DTC

This section explains the options and processes for programming the ECM of the truck, checking for diagnostic codes, and adjusting the tire size.

First, select "ECM Tuning & DTC":



Below is the menu that shows next. Power on Demand is currently only available on the 2003-2009 trucks. This allows you to make adjustments while driving, and is explained in a separate guide. *Note this only shows up once the truck is programmed.*

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The DTC option is for checking *Diagnostic Trouble Codes*. Typically a check engine light will be present when there are codes to check for. The Smarty will provide a readout of what the code is.

ECM refers to the *Engine Control Module,* IE: the engine computer. This is where all of the tuning is going to be selected and take place.

The ABS option is for tire size. This will allow you to correct the speedometer when running an after-market tire size. If you spend most of your time towing or loaded, we recommend loading the truck before taking your measurement (for best results). Note this option will not be present until the truck is programmed with a CaTCHER software.

Power on Demand (2003-2009)

This section will cover how to change the Power on Demand setting.

Keep in mind this option will not be present until the tuner is loaded on the truck.

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First, you will want to select the PoD function shown above. It will then proceed to the following screen:



In this menu, you can pick any value between 0-99, then hit program. 99 being the highest power, 0 being the least. There is another way to change this, however:



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By Selecting the circled option at the top of the screen while on a dashboard, it will show the keypad shown above. This can be done while driving.

This can be useful for slippery road conditions, letting someone borrow the truck or just simply governing yourself.

Diagnostic Trouble Codes

This section will show what the process of checking for DTC's will look like.

First, we want to touch the button shown below:



If you have any codes, they will be shown like so:



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If there are no codes stored, you will see this:



If there are codes stored, simply hit the Clear button to erase them:

At this point, you can exit and go back to the main menu!

ECM (Engine Control Module)

To get to the tuning options, we want to select the ECM menu option:



Keep in mind that you cannot change the tire size of the vehicle until it is programmed (ABS Option).

The following will be the next menu:

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Do note that "Get UDC from ECM" is currently only available for the 2003-2007 5.9L CR trucks.

We want to select the first option, Customize Tuning.

This is the menu you will see:



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Power Level Information

This sub-section will describe the power levels for the different applications.

1998.5-2002:

SW# 1 : Fuel Saver

SW# 2 : Only more fuel and Boost fooling

SW# 3 : Like # 2 + added timing

SW# 4: "Soft" CaTCHER no added timing

*SW# 5 : Like # 4 + added Timing

SW# 6: Mild CaTCHER no added timing

**SW# 7 : Like # 6 + added Timing SW# 8 : CaTCHER no added timing

SW # 9 : CaTCHER with Timing

The overall horsepower on a bone stock truck will be about 60 or 65 horsepower for the higher power levels. There is a large emphasis on driveability, smooth power delivery, and clean efficient tuning. The more modifications the truck has, the more power that will be made.

*Highest level we recommend on a stock automatic.

**Highest level we recommend on a stock clutch.

2003 - 2007, Standard REVO Software:

SW# 1: 30 Horsepower Increase, With timing

SW# 2:60 Horsepower Increase, Without timing

*SW# 3: 60 Horsepower Increase, With timing

SW# 4: 90 Horsepower Increase, Without timing

**SW# 5:90 Horsepower Increase, With timing

SW# 6: 160 Horsepower Increase, Without timing

SW# 7: 160 Horsepower Increase, With timing

SW# 8: 210 Horsepower Increase, Without timing

SW# 9: 210 Horsepower Increase, With timing

*Highest level we recommend on a stock Automatic

**Highest level we recommend on a stock Clutch

2003 - 2007, TNT-R Software:

SW# 1: 130 Horsepower Increase, With timing

SW# 2: 160 Horsepower Increase, Without timing

SW# 3: 160 Horsepower Increase, With timing

SW# 4: 190 Horsepower Increase, Without timing

SW# 5: 190 Horsepower Increase, With timing

SW# 6: 230 Horsepower Increase, Without timing

SW# 7: 230 Horsepower Increase, With timing

SW# 8: 260 Horsepower Increase, Without timing

SW# 9: 260 Horsepower Increase, With timing

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2007.5 - 2012, Standard REVO Software:

SW# 1: 30 Horsepower Increase, With timing SW# 2: 60 Horsepower Increase, Without timing *SW# 3: 60 Horsepower Increase, With timing SW# 4: 90 Horsepower Increase, Without timing **SW# 5: 90 Horsepower Increase, With timing SW# 6: 130 Horsepower Increase, Without timing SW# 7: 130 Horsepower Increase, With timing SW# 8: 170 Horsepower Increase, Without timing SW# 9: 170 Horsepower Increase, With timing

* = Highest level we recommend on a stock Automatic

** = Highest level we recommend on a stock Clutch

Changing the Power Level

After selecting the "Power Levels:" Option, this is the menu that will be present.



Select your power level based on the chart listed on page 8/9. Press on the desired level, and hit the enter button.

After selecting a power level, the next thing we are going to do is set up the Adjustable Options. By default, they are set on stock values. We recommend setting all of the options to a value of 1 (For timing, torque, rail pressure etc) until you have a good idea of how the truck feels. Different year models will have slightly different settings.

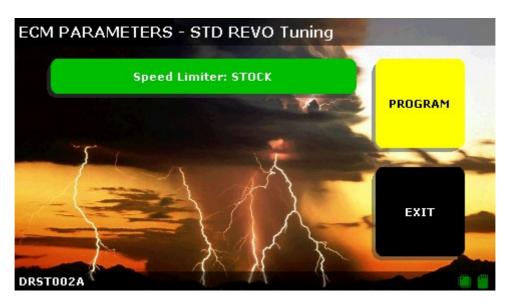
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In the case of a 5.9L Common Rail Dodge Cummins, These are some of the values you will see.

The next menu after selecting all of your options, and hitting the "NEXT" Button will look something like this:

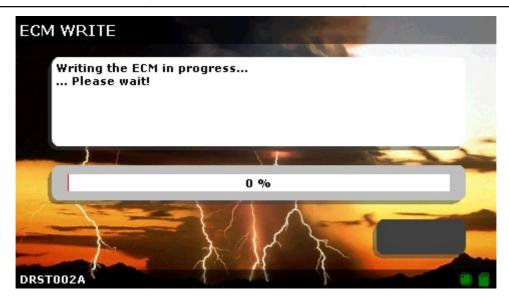


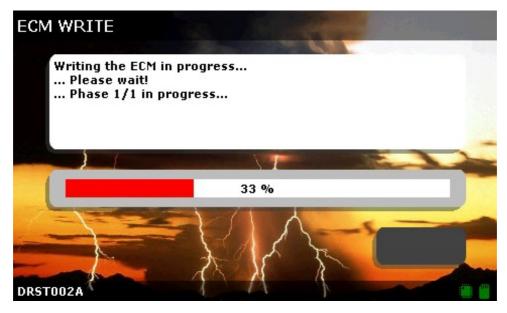
If you wish to modify the limiter on your top speed, this is where you can set it in Miles per Hour. After you have done this (or decided not to), go ahead and hit the program button.

You will then see these screens:

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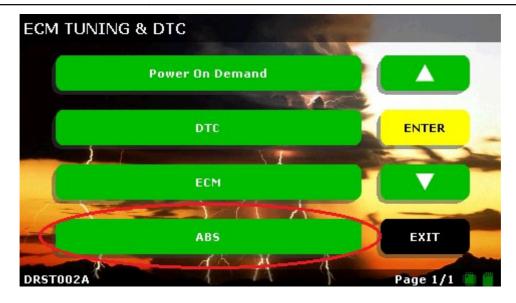
Once this loads to 100%, it will have you cycle the key on and off a couple of times. At this point it should tell you the programming was successful! You are done loading the power level at this time.

ABS Update

In the "ECM Tuning & DTC" menu, you will see this screen:

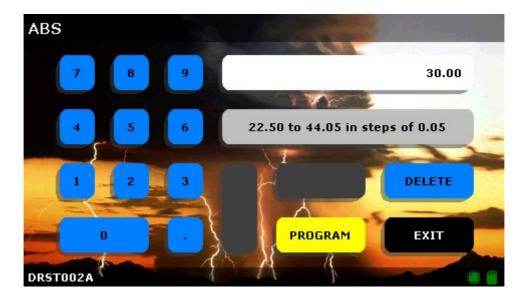
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The ABS option is for tire size adjustments. This will allow you to correct the speedometer when running an after-market tire size. If you spend most of your time towing or loaded, we recommend loading the truck before taking your measurement (for best results). Note this option will not be present until the truck is programmed with a CaTCHER software.

Once we select the ABS option on the touch, you will see this menu:



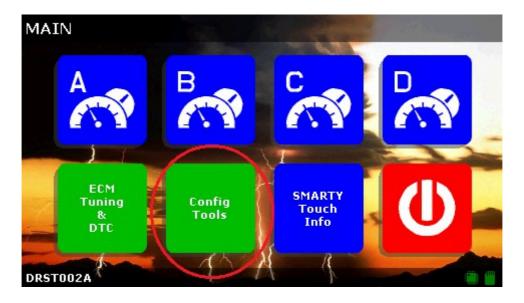
Simply select the value you need, and hit program! The change should now be active in the truck.

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Config Tools

This section describes the options inside of the "Config Tools" menu option.



First, we will want to select Config tools shown above. From there, you have a few options:



Not listed on this image is "Unlock Codes". These currently are only available for 5.9L Common rail trucks. You may have to scroll down using the arrows to find it.

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Unlock Codes

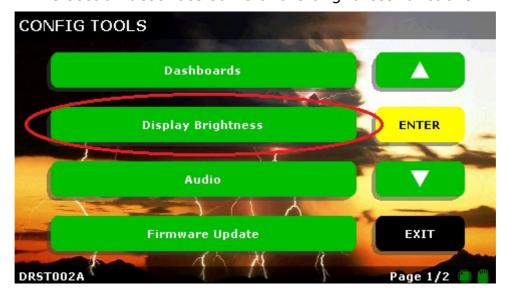
First, let's start off with Unlock Codes. You will see the following menu once selected:



Once we select the "Request Unlock Code(s)" it will bring you to a menu with two checkboxes, One is for TNT-R, one for the SSR. The TNT-R Software is free, we charge for the SSR software (please contact us for current pricing). For more details on the software for either option, give us a call or email.

Display Brightness

This section describes some of the brightness functions.



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First, we will want to select the "Display Brightness" in the "Config Tools" Menu.

The following is the next menu you will see:



On this part of the menu you can do a few things. The most useful being the "Use Sensor" Option. The monitor has a sensor in the front that will detect the current light level, and adjust the brightness accordingly.

We have tested this in full sunlight, and the screen should be very readable.

You can use the Min / Max settings to set the range you would like it to automatically adjust within.

If you simply want to leave the brightness in one place, put both sliders in the same location and hit save.

Dashboards

This section describes how to change the options that have to do with dashboards. Let's go over changing the parameters that the touch will monitor.

The first thing we will want to do is pick a dashboard to start working with. These are shown as "A", "B", "C", and "D" on the main menu of the Smarty.

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Here is an example of one of the dashboards:



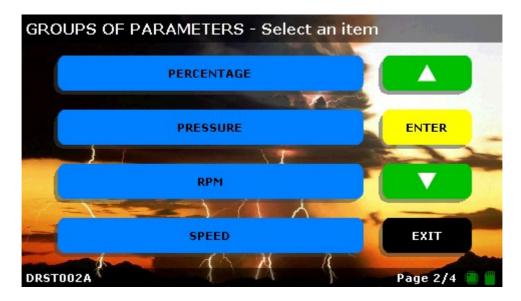
To change the parameters, we need to touch on a particular part of the screen. Here is an example:



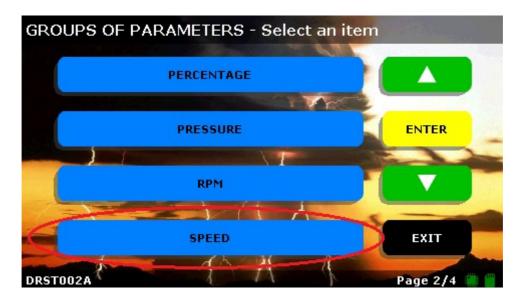
Once you select this, it will then bring up the following screen:

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The amount of parameters available depends on the model year of the vehicle.

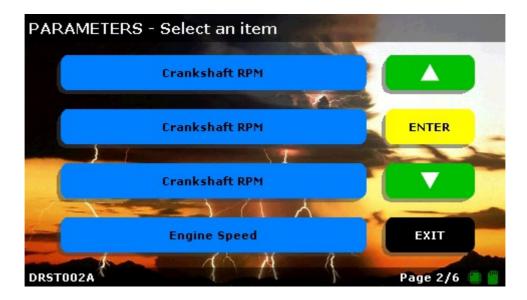


Once we select a group of parameters as shown above, it will bring up a sub-menu with the options relating to what you selected.

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In our example, here is the menu you would see:



Once we select an option and hit the enter button, this is what you will see:



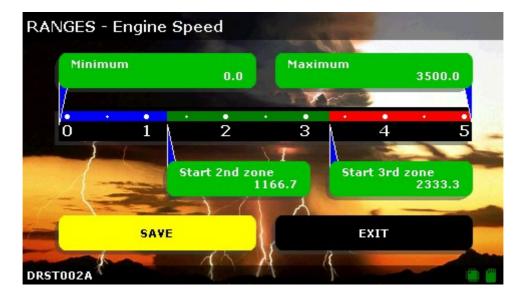
You are able to select the range that the gauges will actually show. In our example of engine speed, most people will not need more than the 3500 RPM. However, for those who will need more, you can set the range much higher.

The alarms will allow the Smarty to flash and make noise once a certain value of a parameter is met, if it is set up correctly. For example: On a stock engine you would not want to run more than around 3200 RPMs. You could set an alarm to let you know once you have hit that point.

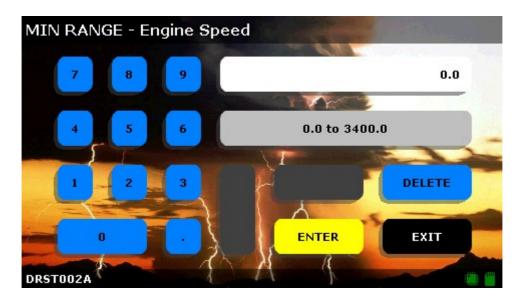
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Let's look at the "Ranges" menu.



Adjusting the range is fairly simple. Simply press on the zone you would like to adjust (you must touch the green bubble). You will then see this menu:



Simply input the value you would like, and hit enter! The menu will be very similar for each part of the range.

Let's take a look at how to configure the range.

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First, we will want to be back on this screen:



This time let's select "Alarms":



The menu here is fairly simple: A minimum and a maximum alarm. Check a box for each alarm you would like to use, and adjust the value by pressing on the green box to the right. You will see a keypad identical to the previous ones.

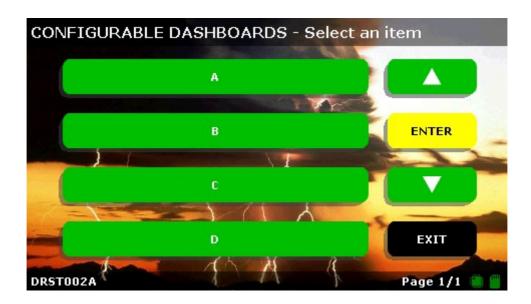
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Next we will look at how to configure the layout, and other options for the Dashboards. Let's navigate to the "Config Tools" Menu:



As shown above, next we want to select "Dashboards". You will then see the following menu:

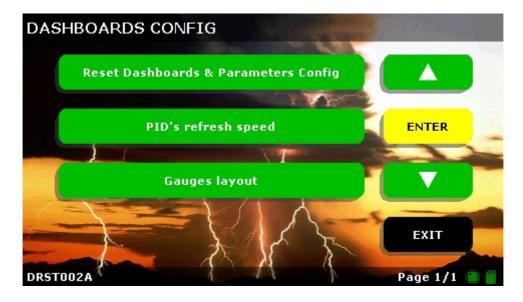


The "A", "B", "C", and "D" reference the menu options seen on the main menu. With these, you can configure each of the dashboards individually.

Let's take a look at "A", for example (keep in mind the options for each are the same).

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The top option will allow us to go back to the default settings the touch came with. The second option allows you to set how fast the tuner will refresh the parameters. Here is an example:

With rail pressure, the last couple of digits change VERY quickly. Probably too fast for most to keep up with in a lot of conditions. While this is technically the most accurate (especially for data logging), it can be hard on the eyes to read. So what you would do, is turn the refresh rate down. The Smarty will slow the number of samples taken from the computer, which will slow the changing of the value down.

The last option is simply to switch which gauge layout you would like.

If you select PID's refresh speed, here is the menu you will see:



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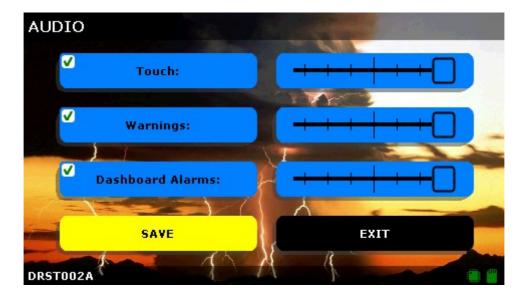


Audio Settings

This section will cover the menu options for the audio settings. Let's navigate to the "Config Tools" menu option.



Now select "Audio" as shown above.



The options on this menu are fairly simple. Ensure the box is checked if you would like the option enabled. You can also adjust the values with the slider.

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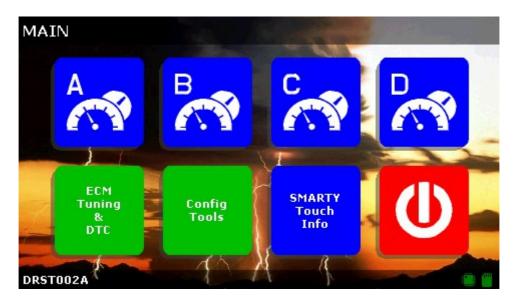
Checking for VIN Number Lock

Checking to see if the Smarty Touch is vin locked is a pretty simple process. There are a couple of methods.

The first method is when the Smarty first powers on. If it is not currently vin locked to a truck, it should show this disclaimer:



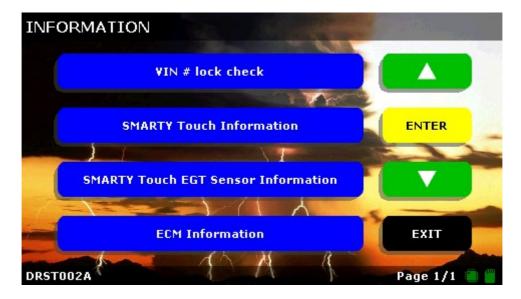
The other best way to check if the tuner is vin locked, is to first navigate to "Smarty Touch Info". This is accessed from the main menu.



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This is the next menu you will see. Simply select "VIN # lock check"



Finally you will see this screen:



If the Smarty Touch is not VIN locked, the above screen will inform you of that.

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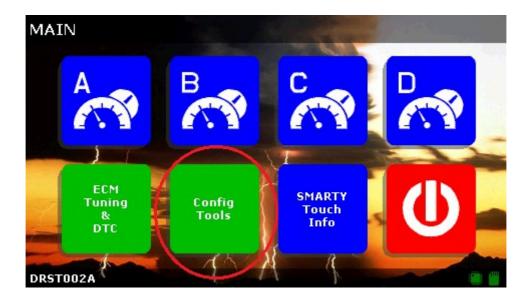


Firmware Updates

To update the Smarty touch, we will need to download the necessary files and load them on to the Smarty, replacing what is there.

There are two ways to apply the update to the Smarty. The first is to unplug the Micro-USB connector on the back of the monitor (after the Micro SD card has been inserted), and plug it back in. The Smarty should then show it is working on the update, as shown in the update guide.

The other way to do this would be to navigate to "Config Tools"



Once you are in this menu, select "Firmware Update"



The Smarty will guide you through the rest! You should only need this if the automatic update does not work.

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Data Logging

If your Smarty is up to date, it will be able to data log parameters being monitored by the Touch!

You can record up to 6 parameters at the same time, and it will log the PID's that are showing on one of the dashboards.

First, you will want to start with one of the dashboards:



Keep in mind that the Smarty is going to record the parameters that are shown on the screen at this time.

At the top of the screen there are some buttons we can press, such as the PoD option that was covered earlier. In this case we are looking for the red dot that signifies the record button:



It will continue recording until you press the button again, or the key is turned off (and the Smarty shuts off).

At this point you will need to take the SD card and head to a windows computer.

You will need to download this application to view the results of your logging.

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SMARTY

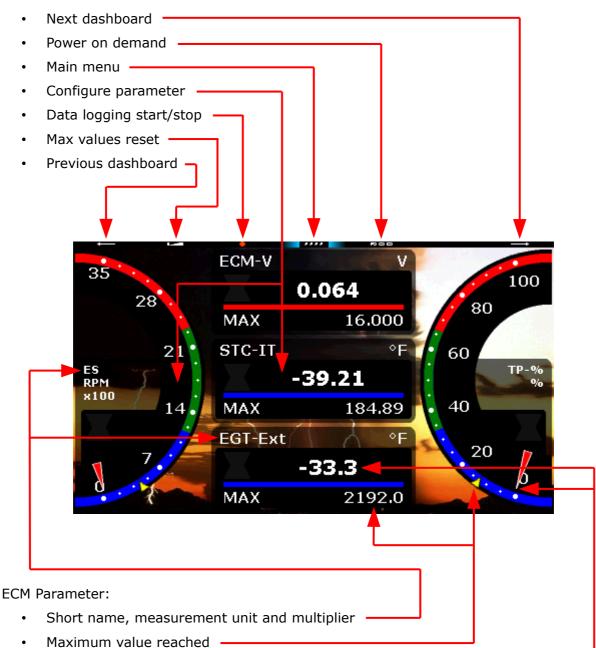
SMARTY Touch - Quick Guide

1 User interface

1.1.1 Dashboard

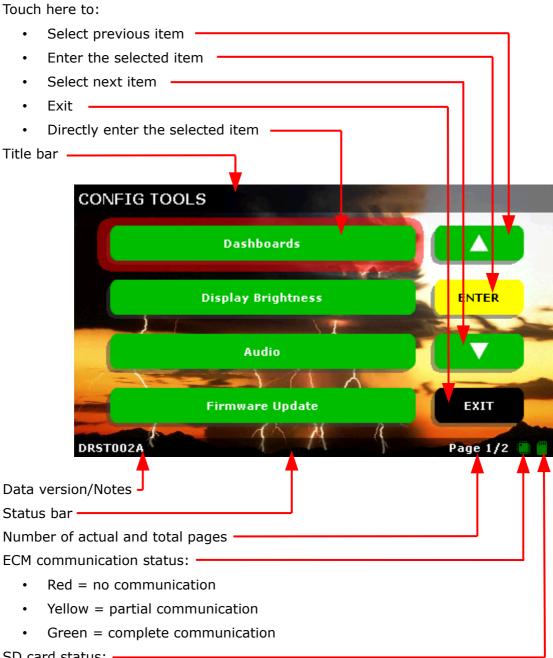
Actual value -

Touch here to:



SMARTY Touch - Quick Guide

1.1.2 List menu



- SD card status: -
 - Red = not present or faulty
 - Yellow = check in progress Green = ready
 - Blue = check in pause
- White = not readable



Smarty Touch ComMod Installation Guide

This guide details the process for installing the ComMod on 1998.5 to Present Trucks



Definition of terms:

OTF Cable : This is the cable used that attaches to the ComMod, and connects to the service bus, located under the hood.

OBDII: This stands for "On Board Diagnostics", the II being for the second iteration of this. The cable mentioned later will plug into the OBDII port, which is somewhere under the steering column, depending on the year.

Micro USB Cable : This is the cable we use going from the Controller of the Smarty touch, to the display unit.

Controller: The controller is a device we use to help facilitate connection from the Display unit, to the truck. This connects to the Micro USB, and OTF cables, as well as the ComMod. This is also where our optional EGT sensor hooks in.

ComMod: This is our Communication Module. This will allow us to use On the Fly tuning (**OTF**), also enables programming on the 2013+ trucks.

ECM: The ECM is the "Engine Control Module". This is the computer that is bolted to the side of the engine block.

OTF: Stands for "On the Fly". This is a feature that lets you modify tuning parameters in about a second.



Installation:

The installation process is slightly different depending on the year of truck. The main difference is where the service bus connector is located.

The first thing that will need to be done is to connect the ComMod to the controller of the Smarty, as shown below:



The next thing is to do is install the Smarty Touch normally:

On the back of the controller, there is a micro USB port. The micro USB cable will go from this port, to the display unit.

On the front of the ComMod shown above, there is a place to connect the OBDII Cable. This will go directly from here, to your OBDII port. There is also a connection for the OTF cable. The installation for the OTF cable is shown in the pictures on page 3.

The Display unit comes with a windshield mount, and uses a dual T pattern for mounting the display.

Before using the provided Zip ties to mount the controller securely, connect the OTF cable to the under hood service bus. Then connect the other end of the OTF cable to the ComMod. You will be routing this end of the cable through the firewall.



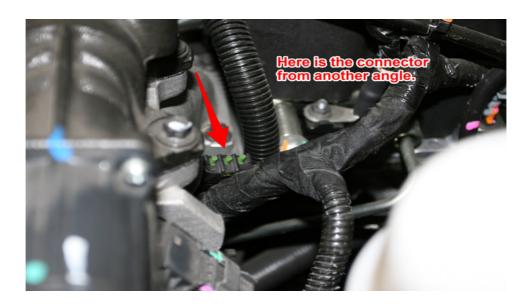
Here is the location of the Service bus we use on a 2015 truck:











The connector is typically located between the ECM, and the intake horn. On some trucks it may be towards the upper right portion of the ECM. It can vary where this connector is located, but it is usually within a couple of feet from the ECM. Sometimes it is closer to the firewall, and other times it is closer to the front of the truck.

The OTF cable is required to be installed for the On the Fly feature to work. It is also needed for programming the 2013+ trucks and returning them to stock software.

To program the truck, you will want to go to "ECM tuning & DTC". The ECM option is for tuning the truck.

There is no special procedure for disabling the RSA protection (only required on 2013+). The Smarty will automatically do this for you during programming.



SMARTY

Micro Tuner Model **Smarty Touch**

Cummins Diesels MY's 1998.5-Present*

Smarty Touch Update Guide





Updating the Smarty Touch

1.) Insert the SD card into the SD Adapter. (Included with the Smarty Touch)





As Illustrated below, the SD card will fit into the slot that is located on top of the USB Adaptor.



2.) Plug the Smarty Touch USB Adapter into an open USB port on your Computer and download the Smarty Touch SD Card Image

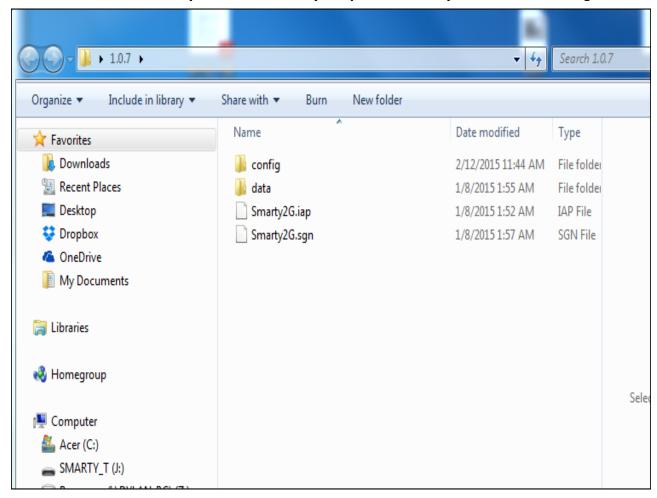
- a. Go to smartyresource.
- b. Click on the Smarty Touch Complete SD Card Image download link under Software Upgrade



Software Upgrade				
File Name	Description	Date	Size	
SMARTY Touch complete SD Card Image	SMARTY Touch Firmware: 1.0.7 Tuning database: DRST002A Years: from 1998.5 to 2012 Installation notes: Uncompress the file and copy its contents to the root of the SD card and insert it back into the SMARTY Touch. Then the easiest ways to update the Smarty Touch system are these: 1) Restart the monitor by unplugging the micro USB cable and then reconnect it. At this point the update procedure will start automatically. 2) It is always possible to use the manual update feature in the config tools menu. ("Firmware Update").	Jan.08, 2015	40.3 MB	

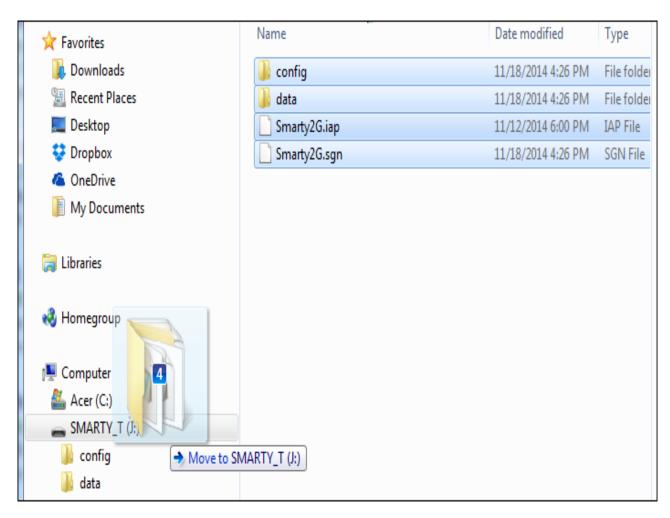


Below are the files that you will see when you open the Smarty Touch SD card image file.



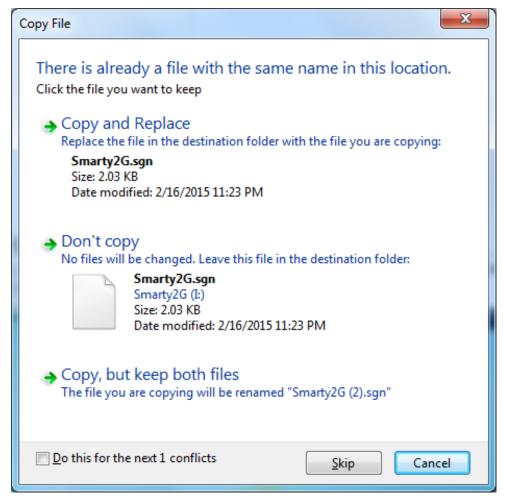


3.) Drag and copy the contents of this folder into the Smarty Touch SD card.



- a. Highlight the new content that is included in the latest SD card image that you just downloaded.
- b. Click and drag the content over on top of the Smarty SD card that should be displayed on the left pane, adjacent to the container that you are viewing the new content in. (**See Example Above**)
- c. A window will come up telling you that there is already a file with the same name in this location. When this shows up, make sure that the bottom left check box that says "Do this for the next X conflicts", then select Copy and Replace. (**See Example Below**) Continue to go through this procedure until all of the files are copied to the SD card.

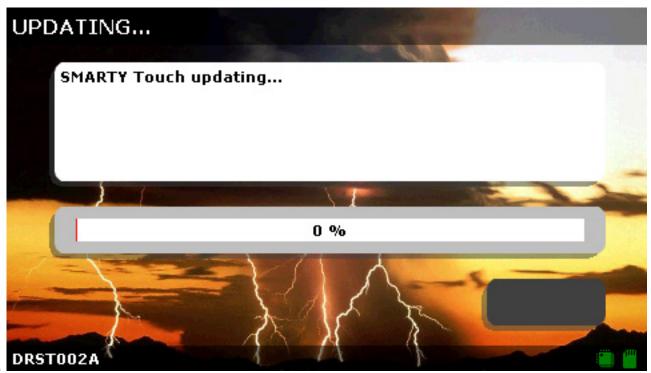




d. When the content finishes copying to the SD card, you are finished. You may bring the SD card to the Smarty Touch and then turn the ignition key on. The Tuner should begin updating automatically. Let this go through and you are finished!



Image of what you should see when you plug the SD card back into the display

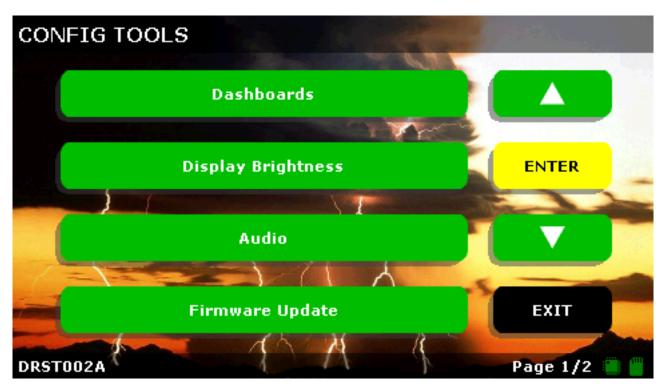




If it doesn't begin updating automatically:

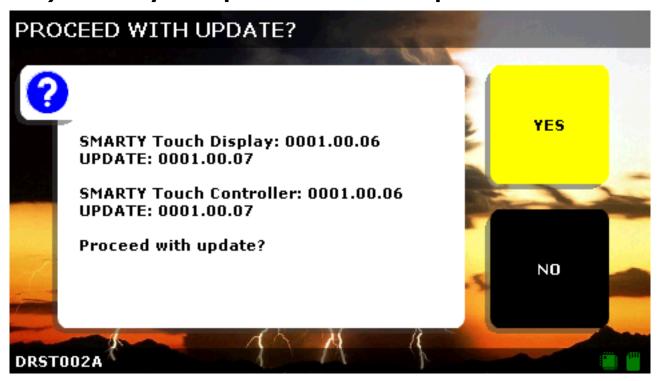
1.) Go to the Config. Tools menu point, located on the main menu.

2.) Select Firmware Update

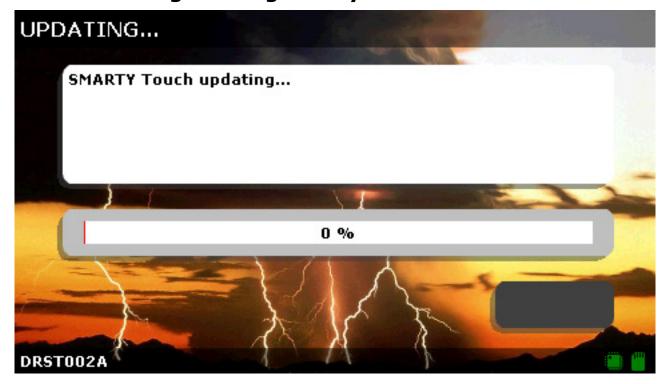




3.) Select yes to proceed with the update.



4.) The Smarty will begin loading the firmware update. Let this go through and you are finished!





#1 in Dodge Cummins Performance

THIS IS A HIGH PERFORMANCE PRODUCT USE AT YOUR OWN RISK

This product is intended for OFF ROAD USE ONLY This product is not intended to be used to break the law

Do not use this product until you have read the following agreement.

This agreement sets forth the terms and conditions for the use of this product.

The installation of this product indicates that the buyer has read and understands this agreement and accepts the terms and conditions.

DISCLAIMER OF LIABILITY

Smarty Performance King, it's distributors, jobbers and dealers (hereafter Seller) shall be in no way responsible for the product's proper uses and service. THE BUYER HEREBY WAIVES ALL LIABILITY CLAIMS.

The buyer acknowledges that he is not relying on the Sellers skill or judgement to select of furnish goods suitable for any particular purpose and that there are no liabilities which extend beyond the description on the face hereof, and the buyer hereby waivers all remedies or liabilities expressed or implied, arising by law or otherwise (including without any obligation of the seller with respect fitness, merchantability and consequential damages) whatever or not occasioned by thesellers negligence.

The Seller disclaims any warranty and expressly disclaims any liability for personal injury and damages. The buyer acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the buyer agrees to indemnify the Seller and to hold the Seller harmless from any claim related to the item of the equipment purchased. Under no circumstances will the seller be liable for any damages or expenses by reason of use or sale of any such equipment.

The Seller assumes no liability regarding the improper installation or misapplication of its products. It is the installers responsibility to check for proper installation and in doubt contact the manufacturer.

The buyer is solely responsible for all warranty issues from the manufacturer.

LIMITATION OF WARRANTY

Smarty Performance King (Hereafter Seller) gives Limited Warranty as to description, quality, merchantability, and fitness for any particular purpose, productiveness, or any other matter of the Seller's product sold herewith. The Seller shall be in no way responsible for the products proper use and service and the buyer hereby waives all rights other than those expressly written herein. This warranty shall not be extended, altered or varied except to be a written instrument signed by Seller and Buyer.

The warranty is limited to one (1) year from the date of sale and limited solely to the parts contained within the products kit. All products that are in question of warranty must be returned prepaid to the Seller and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by **Smarty Performance King**.

Under no circumstances will the Seller be liable for any labour charged or travel time incurred by in diagnosis for defects, removal, or reinstallation of this product or any other contingent expenses.

Under no circumstances will the Seller be liable for any damage or expenses incurred by reason of the use or sale of any such equipment.

In the event that the buyer does not agree with this agreement: THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE TO THE PLACE OF PURCHASE WITHIN TEN (10) DAYS FROM THE DATE OF PURCHASE FOR A FULL REFUND.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS THE TERMS AND CONDITIONS.