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 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
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.*
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. For an explanation of how it works, see:

http://smartyresource.net/forum/content.php?118-Power-On-Demand

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

![ECM Tuning & DTC Keypad](image)

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

![DTC Code](image)
If there are no codes stored, you will see this:

![No DTC found!]

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:

![ECM Tuning & DTC]

*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:
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:
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
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.
In the case of a 5.9L Common Rail Dodge Cummins, these are some of the values you will see. See the adjustable Options guide for specifics on the settings for each year:


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:
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:
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.
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.
Unlock Codes

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

![Unlock Codes Menu](image)

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.
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.
Here is an example of one of the dashboards:

![Dashboard Image]

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

![Dashboard Image with Hand Indication]

Once you select this, it will then bring up the following screen:
The amount of parameters available depends on the model year of the vehicle. Here is a list of all the possible parameters:

http://smartyresource.com/smartytouchpids.aspx

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.
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.
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:

![MinMaxRangesMenu](image)

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

![PARAMETER CONFIG - Engine Speed](image)

This time let's select “Alarms”:

![ALARMS - Engine Speed](image)

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.
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).
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. For more information, see this link:

http://smartyresource.com/smartytouchlayouts.aspx

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

![DISCLAIMER](image)

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.

![MAIN](image)
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.
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. For a guide on how to do this:


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.
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. We use Datplot as our graphing software: [http://www.datplot.com/](http://www.datplot.com/)

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