DataMaxx Pro Dash 8 Instruction Manual

Table of Contents

Introduction

Congratulations on your new purchase of the DataMaxx Pro Dash. Your dash has the ability to show an unlimited combination of sensors and will allow you to customize the look and feel for your particular style.

When you first get your dash you will notice that it is in a nice aluminum enclosure and has a pigtail with a 6c Deutsch connector. In the box you should have both a 12' Dash Extension Cable and a 120v Wall Charger with mating Deutsch Connectors.

If you would like, you can plug in the wall charger and connect it to your dash immediately. It will go through a slow boot process that can take around 60 seconds to get to your DataMaxx gauges. Once here you can swipe left or right to see the two default gauge pages. This is simply a default calibration, and not likely the sensors you have installed, so ultimately we will end up replacing these gauges with something that fits your specific application. But for now we can play with the dash some and see some of the functionality.

Initial Setup & Calibration

The first step in setting up your new data logger is to follow the primary instructions in the manual as if you do not have a dash. After getting everything physically installed, the manual will have you calibrate your unit to the sensors you physically have installed. At the end of this process it would typically have you click on the Configure LCD button, which you will not be doing with the new Pro Dash. Once you have everything calibrated, send the calibration back to the DataMaxx via the SD card and wait one minute for it to go through the calibration process.

Once your main module hardware has been calibrated, we can now setup your Pro Dash to talk to your DataMaxx. To do this, click and hold anywhere on the screen and a menu will pop up. Click on More Options, then Diagnostic Menu and finally select Forget All Sensors. The screen message area will likely say Discovering Sensors and then Sensor Discovery Complete. Congrats, you can now start to customize your screen however you like.

We have pre-fabricated two different pages of gauges that you can toggle between by swiping left or right. Now that the Pro Dash has learned your sensors, you can touch and hold on a gauge, select Edit Gauge, and select a different sensor from the Gauge Sensor dropdown list. You can also change, the size, gauge type, refresh rate and min and max range of the gauge. If you don't like the gauge there, you can easily delete it or move it. You can also create a new page by touching and holding anywhere on the screen, select More Options and then Add New Page. There are infinite options for customization and more options and features will likely be added in the future.

Editing An Existing Gauge

Edit A Gauge

As you can see on your dash, you already have quite a few gauges on the screen and you may like the setup but want to tweak it for your particular application. This is made extremely easy and intuitive because it will act just like a smart phone that you're already used to using.

Simply place your finger on the gauge you want to edit and hold it there. A menu will appear and you can select Edit Gauge. Once here you will be presented with 3 different tabs that control all of the aspects of displaying this gauge to you. You should never need to go into Advanced and unless you are trying to change the colors of the name, value or needle, we don't need to go into the Style tab, so we'll focus on the General tab where most of the settings are made.

- **Gauge Sensor** – This is where you set what channel this gauge is going to display. The dropdown list will initially only have ExtPwr until it is connected to your DataMaxx Main Module. Once connected your Dash will automatically sense all of the sensor on your DataMaxx and you will then have those sensors as options in your drop down list. Please note that whatever name you calibrate a channel for in the DataMaxx calibration process is what will be displayed here.

- **Gauge Size** – Easily change the size of gauge. Choose between Extra Small, Small, Medium, Large and Extra Large.

- **Gauge Type** – Allows you to change the look and feel of the gauge. You options are Full Needle Dial, 90% Needle Dial, Half Needle Dial, Alphanumeric, Switch Display, Record and Thermometer.

- **Refresh Rate** – This modifies how quickly the needle updates and how much smoothing is involved. The default refresh rate is fast, however, if you have a signal that is noisy and the needle is bouncing around too much, move the refresh rate to Medium or Slow. Options are Full (no smoothing or delay, 100% raw data), Fast (quick reaction, minimal smoothing), Medium (quick reaction, more smoothing), Slow (slower reaction, max smoothing).

- **Gauge Range** – This will determine what the minimum and maximum values shown on the gauge will be. There are typically two methods to setting the min and max. The first is to set it based on the min and max ability of the sensor in question (i.e. 15 psi min is 0 and max is 15). The second option is to set them in a way that allows your ideal condition make the needle stay at 12 o'clock. If you always want to launch the car when the temp gets to 140 then make the min 70 and the max 210. This means the the 140 degree ideal range will be when the needle is perfectly at 12 o'clock and gives you instant visual feedback.

- **Scale Type** – This will change whether the gauge numbers will be divided by 1, 100 or 1,000. If you are using the gauge for RPM you will likely want to set it to divide by 1,000.

- **Gauge Target** – Setting the gauge target will place a red line where the needle should be. This gives you a reference point for what the needle should be. Setting the +/- of the gauge target will place a green background behind the red target line so that you will know that as long as the needle is bouncing around the green, that you're good to go. This is especially useful for starting line times when you want to make sure your pressures are where the should be and that

you engine is as warmed up as you want.

- **Gauge Warn** – Setting the warn level on the gauge will cause the gauge name and the gauge number to flash colors, attracting your attention to the problem. If you want to change from <=, simply click on the button and it should toggle between <=, =, >=

- **Save** – Once you are done making changes to your gauge, be sure to click on the Save button at the top right. If you click outside of the text box it will cancel the gauge editing and not save any changes that were made.

Move Gauge

If you would like to move the position of one of your gauges, the process is extremely easy. Simply touch and hold the gauge you want to move, and then select the Move Gauge option. You will now notice that a square green border appears to show you the boundraies of the gauge. You can now place your finger on the gauge and move it to whatever location you would like. Once you lift your finger off the screen the gauge location will be saved, so be sure to keep your finger on the screen until your happy with the new location. It is ok to place gauges on top of or behind other gauges.

Bring To Front / Send To Back

The DataMaxx Pro dash gives you a lot of flexibility on how you would like your display to look and feel. This means that you can have gauges that can overlay each other to some degree so we can maximize our screen. And once we have the ability to overlay, we have to have the ability to choose which one is on top of the other. This is done easily by placing your finger on the gauge you want to change, and then select either Bring to Front to make it be on top of all other gauges or Send to Back to make it behind other gauges.

Delete Gauge

If you want to delete the gauge, simply place your finger on the gauge you wish to delete and hold it there. When the menu option appears, select Delete Gauge. Note that this does not delete the sensor settings on your data logger but just removes that particular display from your dash page.

Creating a New Page

Your DataMaxx Dash has the ability to show an unlimited combination of sensors and we accomplish this by having multiple pages you can swipe between. By default, your dash should have two pages, one with a tach in the center and 4 other dial gauges and the second page should have a tach on the left and all 8 EGT temperatures on the right. You can get between these two pages by swiping left or right on your dash.

To add a new page place your finger anywhere on the screen and hold it there. If you were touching a

gauge you will first have to choose More Options. You should now see options such as Add New Page, Delete Page, Move Page Left and Move Page Right. Select the Add New Page option and you should now have a blank page with nothing but messages to start with. You will notice messages has a green box around it and ready to move, so move it to whatever position you would like. You are now ready to start adding any combination of gauges you wish.

Installation

Installing the DataMaxx Pro Dash is a pretty simple process. The first step is determining exactly where the dash will go and how it will mount to the 4 vibration mounts on the back of the dash. You can utilize the paper drill template that will help you get the dash centered and determine where the holes should be drilled. It is recommended to cut out the template and tape it to it's mounting location so you can confirm it is centered. After drilling the 4 holes, install the dash using the vibration mounts and the washers and locknuts. Do not over-tighten as it can rip the vibration mounts in half.

Coming out of the DataMaxx Pro Dash is a pigtail with an 6 conductor Deutsch connector. A pre-fabricated Deutsch connector with a 12' CAN Bus cable should have come with your order. Plug the Detusch connector in and run the CAN Bus cable back to any of the 5 CAN Bus ports inside of your main module. Ensure the shield wire is connected to one of the 4 ground connections.

Calibrating For Your Sensors

When you first get your DataMaxx Pro Dash, you will have multiple gauges that have names like Engine and Exhaust, but they may not match your actual installation. And when you first get your dash, before you connect it to the main module you only have a single sensor in your drop down list (ExtPwr). This is because we clear out the default calibration data before shipping.

Once you connect your DataMaxx Main Module and power up, the DataMaxx Pro dash will go through a series of sensor discoveries and should ultimately find all of the sensors that you have already calibrated on your Main Module. After the sensor discover is done, you can confirm that your sensors are there by creating a new gauge and looking at the Gauge Sensor dropdown list.

If you are moving the DataMaxx Pro Dash to a different data logger or have made calibration changes to your DataMaxx Main Module, you will need to clear out the default calibration. To do this place your finger on the dash and hold, if you were on a sensor select More Options. Then select the Forget All Sensors options.

Charging Your Pro Dash

Your DataMaxx Dash will turn on either quickly within 2 seconds (fast boot) or within 1 minute (slow boot). Your first time turning on the dash it will boot slowly, displaying a logo, then an android desktop and then it will automatically open the DataMaxx Pro Dash app that has all of your gauges. At this point, when you remove power from the dash, it will turn off after 30 seconds of inactivity. Then when you apply power again it will to a fast boot that instantly shows your gauges within 2 seconds. Your

dash will continue in the fast boot mode until either the internal battery gets below 15% or you do not turn it on for 4 hours.

After 4 hours of inactivity, the DataMaxx Pro Dash will go into a slow boot mode to conserve battery. This design should allow you to always get a quick boot to your gauges when you are actively racing yet conserve battery when there is too much time between rounds or the car is sitting.

Charging your internal dash battery can be done two different ways. The first, and most simple is to just leave power on to the dash. Whenever the dash is on, it is charging its small tablet battery and keeping it topped off. If you remove power to the dash, the tablet will turn off after 30 seconds and it is no longer charging the battery. The other option to charge the battery is to remove the Deutsch connector from the car wiring and plug it in using the optional wall transformer. This allows you to charge the DataMaxx Pro Dash without having to keep any of the electronics in your car on.

After a race it is recommended to charge the battery to full capacity (100% or 4 hours) and then manually power off the unit so we can conserve the most amount of battery and be ready for the next race with close to 100%. To do this, disconnect power from the dash, and within 30 seconds push and hold on the screen, if a sensor was touched select More Options, Diagnostic Menu, Send Shutdown Message. The tablet should immediately turn off, will be conserving the battery and will then go into slow boot the next time power is applied. If you do not send the shutdown message, your battery will drain slightly until it hits the 4 hour window and it will then disconnect the battery with typically 80% of the battery capacity left for the next race.

Upgrading Your Pro Dash

When a new version becomes available for the Pro Dash, we will notify via our email list that was given during your initial purchase. If you would like to add yourself to this list, feel free to email sales@computech.com asking to be added to the Pro Dash Updates Email List.

The update file will be downloaded from a link on our site at computech.com/pro-dash and will be a file named datamaxx.tar. All you have to do is place this file on a thumb drive and then place into the side of the DataMaxx Pro Dash. After a couple seconds a DataMaxxDash Installer will appear. Click on the Run Setup button, then click on Install. After it is done it will toggle back to the gauges and you can remove the thumb drive.

Troubleshooting

It's Not Reading Any Of My Sensors Correctly

If you are not seeing any of your sensors read correctly, it could likely be that you have not yet gone through the Forget All Sensors process that allows the Pro Dash to learn what sensors are out there. To do this, we first have to have the main module calibrated using the desktop software. We will not utilize the configure LCD button but will send the calibration back to the main module. Once the main module has been properly calibrated, we can then click and hold anywhere on the screen until a menu appears, click on More Options, Diagnostic Menu and then Forget All Sensors. The screen message area will likely say Discovering Sensors and then Sensor Discovery Complete. Congrats, you can now start to customize your screen however you like.

We have pre-fabricated two different pages of gauges that you can toggle between by swiping left or right. Now that the Pro Dash has learned your sensors, you can touch and hold on a gauge, select Edit Gauge, and select a different sensor from the Gauge Sensor dropdown list. You can also change, the size, gauge type, refresh rate and min and max range of the gauge. If you don't like the gauge there, you can easily delete it or move it. You can also create a new page by touching and holding anywhere on the screen, select More Options and then Add New Page. There are infinite options for customization and more options and features will likely be added in the future.

Dash Won't Turn On

When you turn on power after not using for more than 4 hours, the dash will take up to 60-90 seconds before your screen displays the gauges. If nothing shows up on your screen at all then disconnect the Detusch connector, wait 2 minutes and then plug back into power.

Leave powered for a minimum of 10 minutes to give a completely dead battery time to charge enough to run. If after that 10 minutes, you see no activity on the screen at all, use a paperclip or small allen wrench and push and hold the reset button for 10 seconds on the side below the usb port.

If that fails to turn the screen on at all, use a volt meter to ensure the Black and red pin on the car wiring side of the Detusch connector has 12v. Black should be pin 1 and Red should be pin 3. If you do not have 12 volts, you need to clean up the wiring between the main and lcd.

If you do have 12 volts, it is possible that your internal dash battery is dead. Leave 12v on for a minimum of 30 minutes, then remove power for 1 minute and plug back in. This should cause the unit to go into the slow boot and display the gauges within 1-2 minutes.