



ELECTRONIC FUEL INJECTION

Holley EFI Pro Dash Product Firmware Overview

The latest Pro Dash firmware update (5.0 Build 49) uses a single firmware version for both the 6.86" (PN 553-112) and 12.3" (PN 553-111) Pro Dashes. It also supports all of the following products:

- Holley EFI HP, Dominator, and Terminator ECU's (V4 and V5 versions)
NOTE: You must use ECU software/firmware version 5.0 Build 130 to obtain the ability to use dash inputs as defined below.
- Terminator X and Terminator X Max ECU's
- Sniper ECU's

When you connect to an ECU for the first time, or change from one ECU TYPE to another, the dash will bring up a message asking if you want to change to the default screens for that product. If you select "NO", whatever screens you presently have will be retained. If you select "YES", it will set the screens to the default Holley designed screens that are specific to that product.

12.3" Pro Dash Updates

There are a few areas in the interface that have been "cleaned" up to be more intuitive, but general functionality remains the same. These minor updates were already performed on the 6.86" dash.

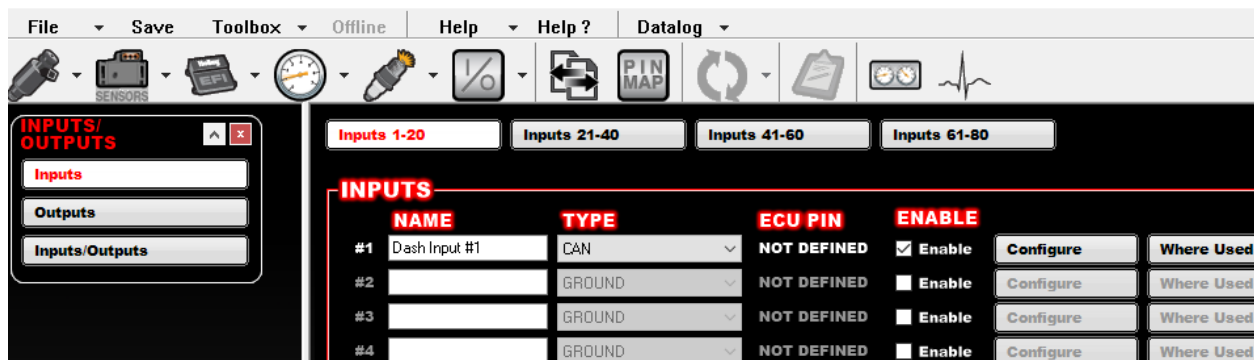
Ability to Use Dash Inputs in Holley EFI ECU's

A very nice feature in this new version is the ability to use inputs to the dash actively in an HP or Dominator ECU via CANbus. This applies only to the first thirteen dash inputs ("io.1" through "io.13"). It does not apply to the four switched (sw.1 through sw.4) and two RPM (rpm.1 and rpm.2) inputs. Note that Inputs 1-13 can be configured as many types (sensor, switched, RPM).

6.86" (and 12.3") users will need to update to this firmware version to take advantage of this. ECU software/firmware needs to be V5 Build 130 or greater.

To set this up, perform the following (this needs to be done for each dash channel used):

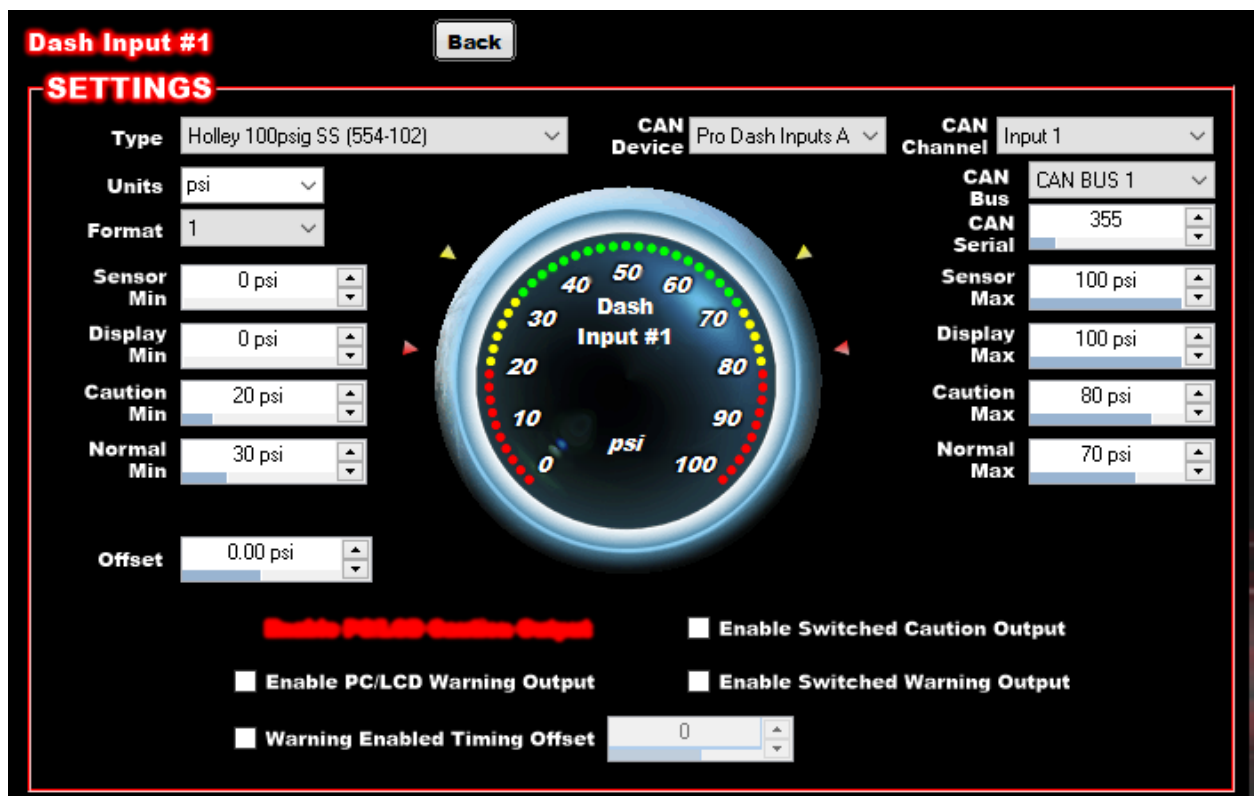
- 1) Refer to the full Pro Dash manual to configure and wire the input to the dash. It is always a good idea to verify that the input reads properly on the dash.
- 2) In the Holley EFI software, add the Input/Output ICF. Enable (checkbox) the input, select "CAN" for the type, and enter a name. The name can be anything you want.



3) Select the "Configure" button. Enter the following:

- **CAN Device** – Select "Pro Dash Inputs A" for Dash Inputs 1-8. Select "Pro Dash Inputs B" for Dash Inputs 9-13. Selecting "Pro Dash GPS" will allow use of the GPS Channels and "Pro Dash IMU allows use of the X, Y, and Z channels from the dash G-Meter
- **CAN Channel** – Select which dash input channel you want to use.
- **CAN Serial** – You MUST enter the serial number for the Pro Dash. You can get this through the dash in "Configuration", and "About"
- **Type** – There are a couple of options. The first is to select "Raw". Then select the desired units, format, and range. The second choice, if the sensor used on the dash is in the dropdown, is to pick that, which will populate the units and range. You do NOT need to select any "custom" sensor and enter a curve. The value sent from the dash is the actual sensor reading, not an analog voltage.

The following example has Input 1 set up as a 100 PSI pressure sensor on the first CAN input (if using the 2nd CAN input on Dominator ECU select "CAN BUS 2"). The dash CAN serial number is 355 in this example (enter serial specific to your dash).

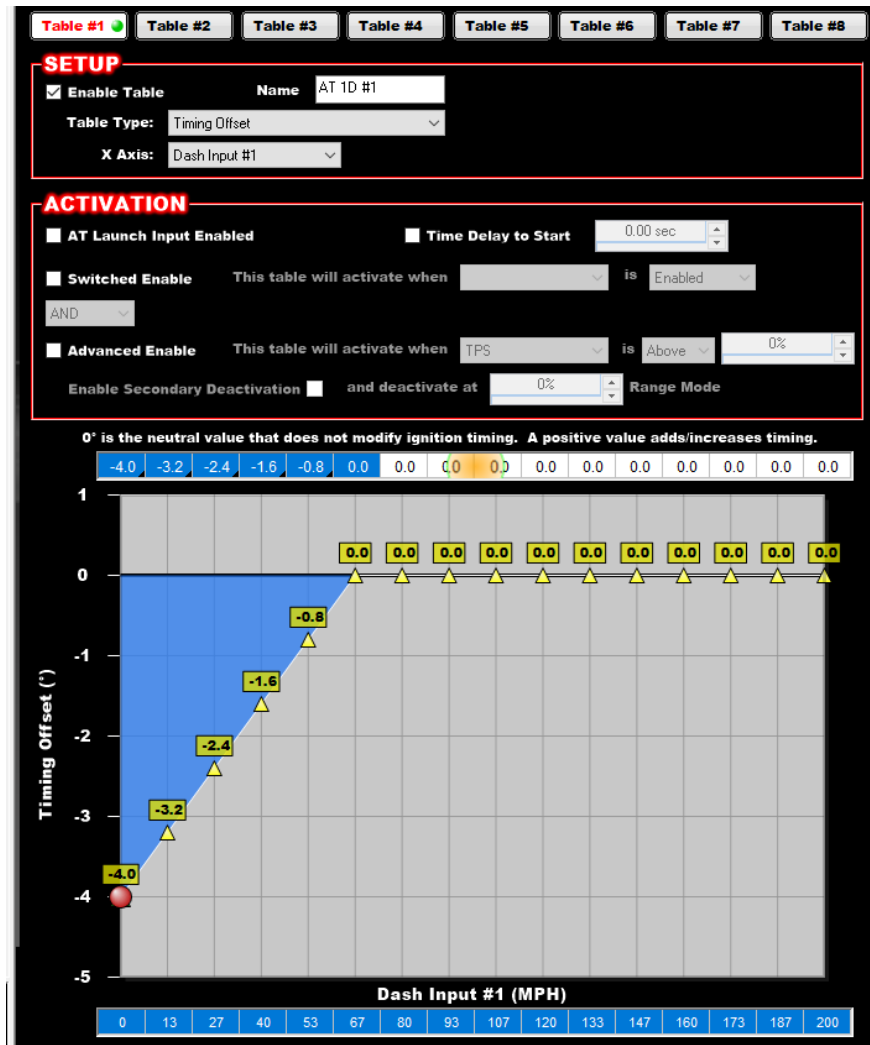


4) At this point everything should be configured.

5) Notes on how this can be used in the Holley EFI software:

- Using this input elsewhere in the software: These dash inputs are considered a SENSOR INPUT no matter how they are configured in the dash. If configured as a switched input in the dash, they are still treated as a sensor input in the EFI software. A switched input is considered to be a "0 or a 1". They will show up anywhere a sensor input can be used, such as on an axis, or in the Input/Output ICF as a "Sensor Input Trigger".

In the following example “Dash Input #1”, which was configured as vehicle speed in the dash, is used on the X axis of a 1D table in the Advanced ICF.



In the following example, the ECU output will activate when RPM is above 400 and the “Dash Input #1” (which is configured as a switched input *in the dash*) is turned on.

Fan [Back] [Input Triggers] [Linked Outputs] [Timer]

SWITCHED INPUT TRIGGERS

Number 0

AND

SENSOR INPUT TRIGGERS

Number 2 All Sensor input(s) will activate switched output when enabled

This output will activate when Dash Input #1 is Above 0.0

Enable Secondary Deactivation

This output will activate when RPM is Above 400 RPM

Enable Secondary Deactivation

- Note that dash inputs cannot be used for “Canned ICF Inputs”. They can only be defined as an input in the Input/Output ICF. For example, you can use an input to the dash for the “N20 Enable” in the nitrous ICF or the “Timing Retard #1” in the System Parameters ICF. Use the input pins on the ECU for these purposes.
- Note that the following information from the Dash is also available. To use these, the “CAN Device” needs to be set to “Pro Dash IMU” or “Pro Dash GPS”
 - Accel X
 - Accel Y
 - Accel Z
 - GPS Latitude
 - GPS Longitude
 - GPS Elevation
 - GPS Speed
- Note that due to the fact these inputs are on the CANbus, they may not react within a few milliseconds. If you are expecting an input to react within .005 seconds for example, it would be best to use an input directly wired to ECU.

Date: 10-4-19

