



Haltech IQ3 Street Dash Guide

Thank you for purchasing a Haltech IQ3 Street dash. This guide provides information on the installation and basic use of your dash. Your dash is preconfigured by Haltech with some default values which you can customize at any time. For information on advanced dash functions, please see the documentation located on the USB stick included with your dash.



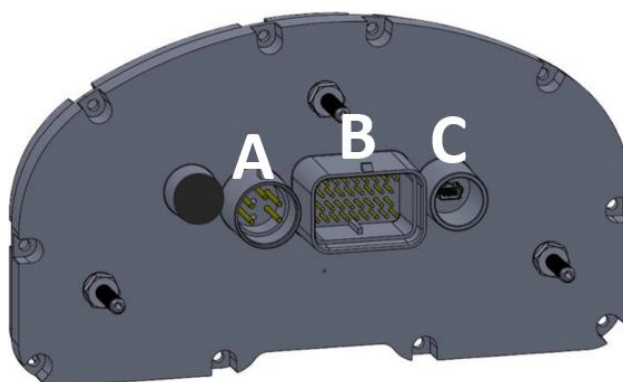
Rev 01

Installation & Wiring

Your Haltech IQ3 Street dash is compatible with many aftermarket and factory engine management systems on the market. The dash is preconfigured to work with a modern Haltech ECU such as the Elite Series and Platinum Series, and as such this guide is based around the installation process specifically for Haltech ECUs.

- For installation and configuration instructions for other supported ECUs, please contact the relevant ECU manufacturer. Adaptor cables are listed on the final page of this document.
- For installation and configuration as a standalone dash with no ECU connectivity, please see the complete IQ3S User Manual found on the included USB stick.

The rear of your IQ3 dash has 3 main connections. At a minimum, you are required to wire Switched 12v, Ground, and CAN High/Low (if connecting to an ECU) in order for it to operate correctly.

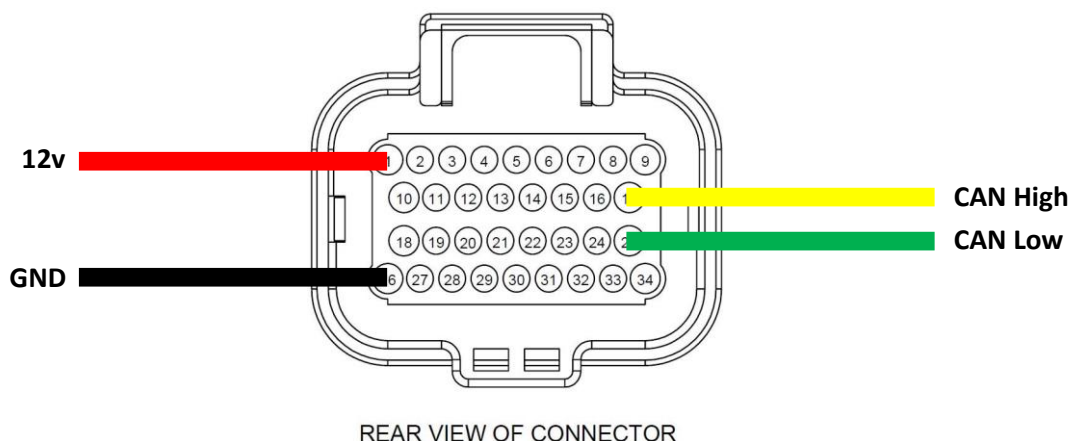


Port **A** is for expansion using Racepak VNET modules and sensors.

Port **B** is the main 34 pin connector for power, inputs and outputs, and CAN communication.

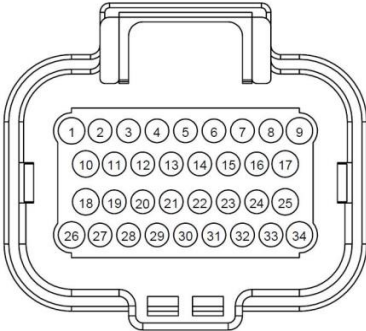
Port **C** is the Mini-USB programming port.

An appropriate cable is available from Haltech to make the CAN connection to your Haltech ECU Plug'n'Play.
 For installations with a CAN Hub or connecting directly to a Platinum ECU – **HT060200** DTM2 to 8-pin TYCO
 For connecting directly to an Elite ECU with no CAN Hub – **HT060201** DTM2 to DTM4
 For other manufacturer CAN cables, please see the final page of this document.



Installation & Wiring

34 Pin Connector Diagram

	Pin	Function	Colour	Connect to
 REAR VIEW OF CONNECTOR	1	Power	Red	Switched 12v ignition source
	2	Left Turn	Blue/White	Left indicator 12v wire
	3	Right Turn	Green/White	Right indicator 12v wire
	4	Park Brake	White	Handbrake ground switch
	5	High Beam	Brown	High beam 12v wire
	6	Tail Lights	Light Green	Tail light 12v wire (also used for Dim)
	8	Shift Light	Orange/White	Ground side of relay to activate shift light
	9	Tach	Yellow	Tach output from ignition system
	11	5v Output	N/A	5v Supply for sensor
	12	Signal GND	N/A	Signal ground for sensor
	13	Oil Press	Tan	Oil pressure sensor signal wire
	14	5v Output	N/A	5v Supply for sensors
	15	Signal GND	N/A	Signal ground for sensor
	16	Oil Temp	Green	Oil temperature signal wire
	17	CAN High	Yellow	ECU CAN High
	18	Cooling Fan	Violet/White	Ground side of relay to activate external fan
	19	5v Output	N/A	5v Supply for sensor
	20	Signal GND	N/A	Signal ground for sensor
	21	Fuel Level	Blue	Fuel sender signal wire
	22	5v Output	N/A	5v Supply for sensor
	23	Signal GND	N/A	Signal ground for sensor
	24	Coolant	Gray	Coolant temp signal wire
	25	CAN Low	Green	ECU CAN Low
	26	Ground	Black	Chassis Ground
	27	Ground	N/A	Additional ground for sensors
	28	Ground	N/A	Additional ground for sensors
	29	Button 2	Grey/White	Ground via momentary button 2
	30	Button 1	Brown/White	Ground via momentary button 1
	31	12v Output	N/A	12v Supply for sensor
	32	Speedo	Violet	Speed sensor signal wire
	33	Signal GND	N/A	Signal ground for sensor
	34	Warning	Orange/Yellow	Ground side of external warning light.

Bold pin assignments designate minimum required to operate dash with ECU connected.

Coloured pin groups are suggested, but not necessary.



Dash Programming

It is important you follow these steps to download the dash configuration file so you can begin editing it.

- 1) Connect the IQ3 dash as per the wiring instructions above and power it up.
- 2) Open the **RacePak Datalink II** Software after downloading and installing the latest version from the RacePak website: <http://www.racepak.com/pages/downloads/>
- 3) Connect the IQ3 dash to your PC via the included USB to Mini-USB Cable
- 4) Open the File menu, choose 'Open Car Configuration' and select: **'IQ3_Config_Street_Haltech'**
NOTE: *If you do not see this option, re-install the DataLink software. During installation you will be asked what products you are using the software with. Ensure 'IQ3 Configuration For Haltech Street' is selected.*
- 5) From the Settings menu, choose 'Scan COM Ports'.
The software will scan for the dash. When Successful, click 'OK'. NOTE: If unsuccessful, please check all connections and repeat steps 1 – 5.
- 6) Click 'Read' from the left Toolbar. You may receive a notification about configuration files, choose the first option to make default and continue.
- 7) In the information box that may appear, click **'Yes to ALL'** to continue.
- 8) Once successful, save the configuration by choosing File, then 'Save As'. Name your configuration file so you can easily find it later.
- 9) Make this configuration file your default by clicking the File menu then 'Default Configuration'.

You can now configure the dash to display parameters from the ECU.

Choosing your EFI CAN Mode

If using a Haltech ECU with Version 2 CAN mode, you can skip these steps.

For a full list of supported ECUs, see the final page of this document.

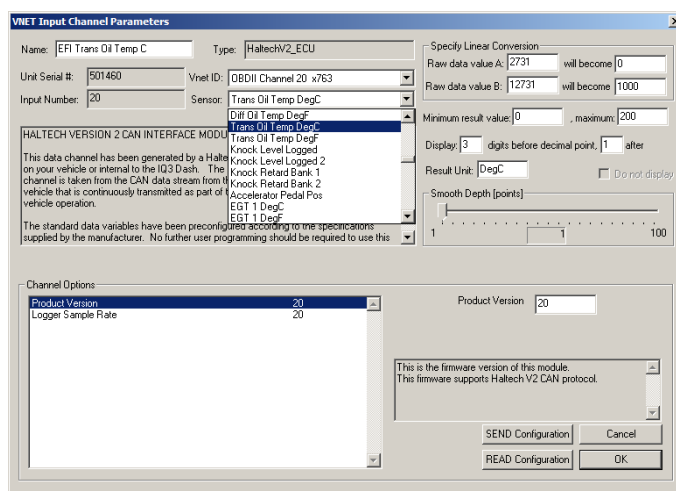
By default your Haltech IQ3 Street dash is set to receive v2 CAN data from a Haltech ECU, however this can be changed to a large range of other modern ECU CAN streams or OBD2 compliant vehicles manufactured after 2008 by following these steps

1. Right click on the 'IQ3 Haltech' channel, and choose the 'Dash Info' tab.
2. In the 'Custom Programming Options' section, choose 'ECU Type'
3. From the drop-down list that appears on the right side of the screen, choose your ECU Type
4. Once selected, press the 'SEND Configuration' button, click OK when successful.
5. Click OK to close the screen.
6. From the EDIT menu, choose 'Read VNET Configuration (all channels)'
7. Press 'Yes to ALL' in the window that appears.

Selecting data channels

The Haltech IQ3 Street Dash can receive almost any parameter from your ECU. The default configuration is programmed with the 20 most commonly used channels, if you wish to change one of these channels follow the steps below. ECU CAN channels are labeled with an 'EFI' prefix in the name.

- 1) For example, we may not require 'EFI Voltage' to be displayed on the dash, but instead 'EFI Trans Oil Temp' for which we have connected to the ECU on a spare Input. Right click on the channel which you wish to change.
- 2) In the Channel Parameter window that appears, open the 'Sensor' drop-down list and choose the sensor you wish to display data from. For our example we will change 'Battery Voltage' to 'Trans Oil Temp DegC'.



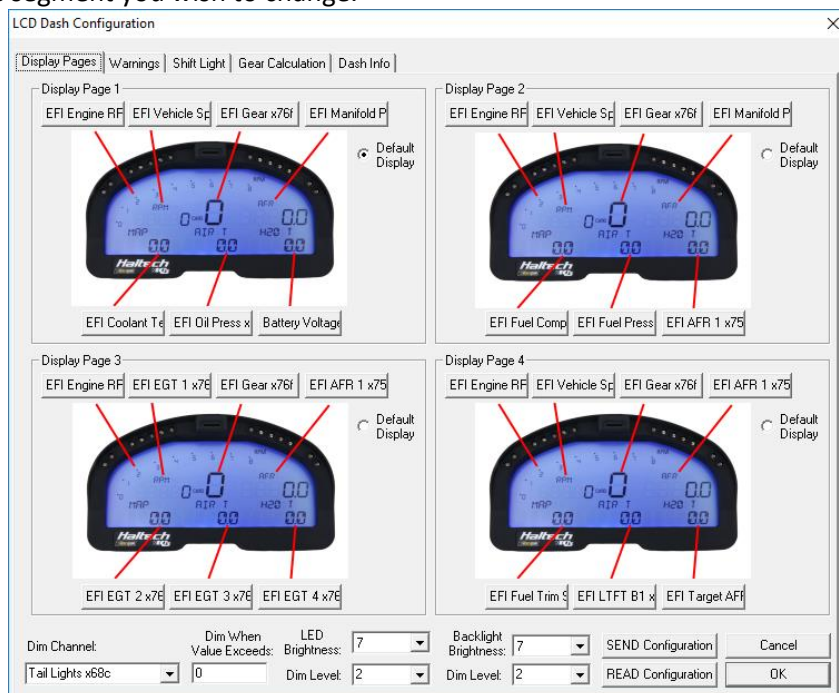
IQ3 Display
EFI Engine RPM
EFI Oil Press PSI
EFI Ign Timing L
EFI Manifold Pres
EFI Fuel Comp
EFI Check Engine
EFI Throttle Positi
EFI Coolant Temp
EFI AFR 1
EFI Miss Count
EFI Vehicle Speed
EFI Fuel Press PS
EFI Inj DC
EFI Intake Air Tem
EFI EGT 1 C
EFI EGT 2 C
EFI EGT 3 C
EFI EGT 4 C
EFI Gear
EFI Voltage

- 3) Click OK to apply the change and note our 'Voltage' channel has changed to 'Trans Oil Temp' in our list of channels.
- 4) Repeat this process for any channel you wish to change.
- 5) Click the blue 'Write' button in the left toolbar to write your changes to the Dash.
- 6) You can now place the channel in a segment on your dash using the steps on the following page...

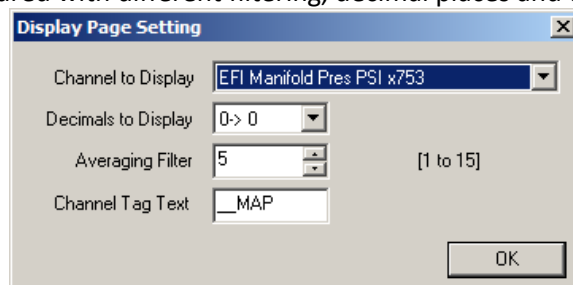
Configuring Dash Layout

Now we have our channels selected we can then configure our dash layout.

- 1) Right click the 'IQ3 Street' channel in the DataLink software.
- 2) Here you can choose the channels to be displayed on each segment of the Dash by clicking the buttons that correspond to the segment you wish to change.



- 3) Each segment can be configured with different filtering, decimal places and text values.

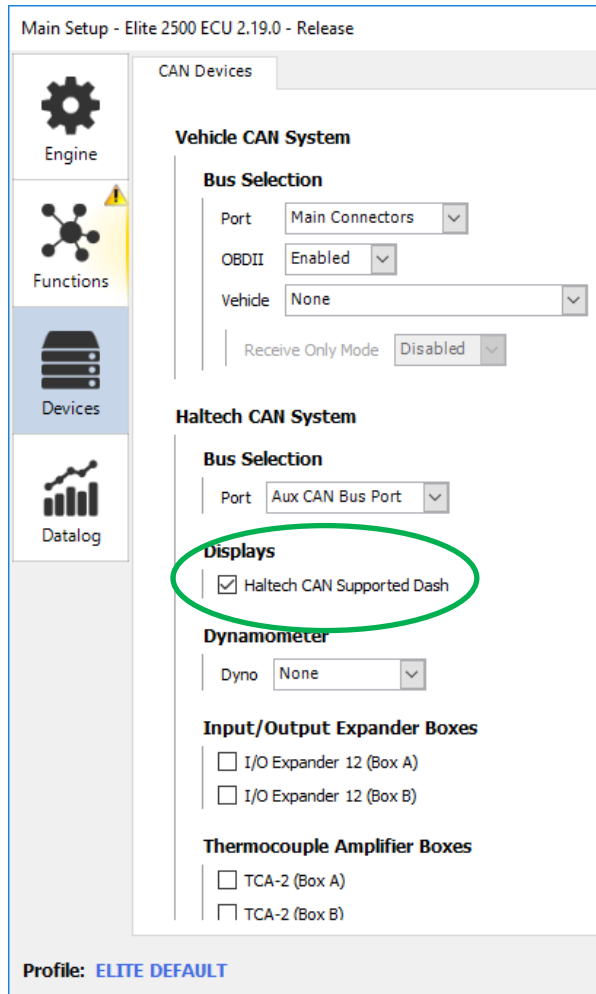


- 4) Your IQ3 Street dash has a single warning LED which is configured from the 'Warnings' tab. Click the warning conditions set you wish to configure and the Warning Light configuration window appears. Here you can choose the warning channel, channel limits, warning text and conditions for the warning to trigger. If multiple warnings are flagged at once, the dash will cycle through the active warnings.
- 5) The internal shift lights are configured from the 'Shift Light' tab. Your IQ3 is preconfigured for a 7500rpm shift with lights staged at 150rpm intervals from 6750rpm. Per gear limits can be configured here also.

Configuring Haltech Elite CAN Output

Follow these steps to configure the Haltech Elite ECU to broadcast the CAN stream to the dash.

- 1) Go Online with your ECU with the ESP software.
- 2) Choose Setup > Main Setup
- 3) Choose the 'Devices' section and tick the option labelled 'Haltech CAN Supported Dash'



Main Setup - Elite 2500 ECU 2.19.0 - Release

Engine

Functions

Devices

Datalog

CAN Devices

Vehicle CAN System

Bus Selection

Port: Main Connectors

OBDII: Enabled

Vehicle: None

Receive Only Mode: Disabled

Haltech CAN System

Bus Selection

Port: Aux CAN Bus Port

Displays

☒ Haltech CAN Supported Dash

Dynamometer

Dyno: None

Input/Output Expander Boxes

☐ I/O Expander 12 (Box A)

☐ I/O Expander 12 (Box B)

Thermocouple Amplifier Boxes

☐ TCA-2 (Box A)

☐ TCA-2 (Box B)

Profile: ELITE DEFAULT

- 4) Click 'OK' to save the setting.
- 5) Reboot your ECU by choosing Tools > Reboot ECU.



Non-Haltech CAN Connections

Your Haltech IQ3 Street dash is compatible with these modern ECUs via CAN connection:

- AEM V2/EMS-4/Infinity
- Atomic LS
- Atomic TBI (Plug'n'Play cable **280-CA-EFIATBI**)
- Big Stuff 3 (Plug'n'Play cable **280-CA-EFIBS3**)
- Electromotive TECGT
- EMS EM-Tech
- Emtron
- FAST XFI
- FuelTech FT250, FT300, FT350, FT400, FT500, FT500 V2, FT600 V2 (Plug'n'Play cable **280-CA-EFIFUEL**)
- Holley EFI (Plug'n'Play cable **280-CA-EFIHOL**)
- InjePro
- Life Racing F88
- Link G4+ (Plug'n'Play cable **280-CA-EFILINK**)
- MaxxECU
- MEFI4B (Plug'n'Play cable **280-CA-EFIMEFI**)
- Megasquirt
- MicroTech
- Motec
- Generic OBD2 (2008+ Vehicles Only) (Plug'n'Play cable **280-CA-EFIOBDII**)
- ProEFI
- Custom User Configured (**280-CA-EFICAN**)

Haltech Engine Management Systems

(A division of Lockin P/L, A.B.N. 68 061 744 303)

HEAD OFFICE: 3 Centre Place, Wetherill Park NSW 2164 Australia

t. +61 2 9729 0999 f. +61 2 9729 0900