



ELITE 1000/1500
Dodge SRT4 03-05
QUICK START GUIDE
HT-140940



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It is unlawful to tamper with your vehicle's emissions equipment.

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ELITE 1000/1500

Dodge SRT4

Plug n Play Harness Kit

Quick Start Guide

Congratulations on purchasing a Haltech Engine Management System. This *fully programmable* product opens the door to virtually limitless performance modification and tuning of your vehicle. Programmable systems allow you to extract all the performance from your engine by delivering precisely the required amount of fuel and ignition timing that your engine requires for maximum output under all operating conditions.

This quick startup guide will walk you through installation of a Haltech ECU into a Dodge SRT4. This guide is accompanied by the full service manual located on the software USB provided with the ECU that you or your tuner will need to refer to before completing your installation and configuration. The Manual can also be accessed via the software it self by pressing "F1" on your keyboard on the ESP Software.

Compatibility

The Haltech Elite Dodge SRT4 Plug n Play Kit is compatible with the following vehicles:

- Dodge Neon SRT4 2003-2005

Supported ECU's

- Elite 1000
- Elite 1500

Included in Haltech Elite Dodge SRT4 Kit (HT-150940)

- Elite 2500 ECU with USB Cable and associated hardware
- Plug & Play Parallel Harness with integrated ignitor

Optional Accessories (Sold Separately)

- Haltech Single Channel CAN Wideband Controller Kit (HT-059976)
- FlexFuel Sensor includes Plugs n Pins (HT-011000)
- ECU Pins Only Pack of 10 (HT-030050)

Harness Overview

The Haltech Elite Dodge SRT4 plug and play solution allowing for full control of the engine while maintaining functionality of the dashboard and transmission.

Installation is simple and easy as the harness is designed for the engine, all lengths are correct and all wires are clearly labeled.

Notes on Installation:

- Make sure your vehicle is ready to be worked on.
- Please make sure to perform a Throttle and Pedal Calibration before starting the vehicle.
- Please make sure the ECU and all wiring is installed properly and away from extreme heat sources.

WARNING!

Damage can occur to your ECU if your ignition system is not configured correctly. Please make sure to load the Base Map for the ignition coils you will be using.

- Keep all wires away from the exhaust manifold and extreme sources of heat.
- The harness is designed to plug directly into the OEM wiring loom.
- Base maps are available by emailing sales@haltech.com.au or usasupport@haltech.com.



Figure 1 - HT-140940 Parallel Harness

Installation:

- Disconnect Battery
- Access and unplug factory ECU. The factory ECU is located at behind the driver side headlight.
- Install plug n play parallel harness and connect Haltech Elite and factory ECU.
- Route 1.8m (6') Haltech Elite sub-harness into driver compartment and firmly secure Haltech Elite. Fasten ignitor to included heatsink bracket and secure.
- Securely install harness ring terminal to battery ground.
- Reconnect Battery.
- Connect and configure Haltech Elite to suit engine setup and confirm TDC offset before attempting to start.

*For Technical Help Videos check us out at
www.youtube.com/haltechecu*

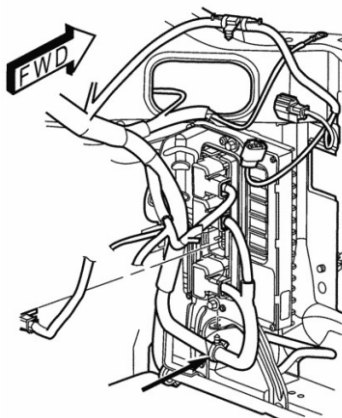


Figure 2 - Factory ECU Location

WARNING!

It is recommended that the Haltech ECU be installed inside the cabin to keep it away from heat and water intrusion. The front cover must be installed to maintain IP67 water resistant rating.

If you wish to leave a USB cable plugged into the ECU then you must contact your Haltech dealer to purchase caps for each connector inside the lid as well as a sealed USB cable.

Additional Features

The Haltech Elite ECU will have additional features that can be configured and connected through the provided Auxiliary (Aux) Function connectors. The Aux connectors provide outputs and inputs that can be configured in the software for different functions. These can be, but are not limited to:

Digital Outputs

- Air Con Output
- Aux Fuel Pump
- Boost Control
- ECU Diagnostic Light
- Intercooler Fans
- Thermo fans
- Shift Light

Digital and Analog Inputs

- Switched Inputs
- Aux. RPM Limit
- Flex Fuel Sensor
- Vehicle/Driveshaft Speed Sensors
- Trans Brake Input Switch
- Launch Control Switch
- Flat Shift Switch

Auxiliary Functions Connectors:

Position	Connection	Function
1	AVI 1	Analog Input
2	SPI 2	Sync. Pulsed Input
3	SPI 3	Sync. Pulsed Input
4	SPI 4	Sync. Pulsed Input
5	AVI 6	Analog Input
6	Signal Ground	Signal Ground
7	12V DC	12V DC
8	5V DC	5V DC

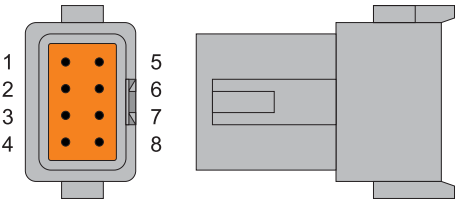


Figure 3 - Auxiliary Inputs Connector

Position	Connection	Function
1	DPO 1	Digital Pulsed Output
2	DPO 2	Digital Pulsed Output
3	DPO 3	Digital Pulsed Output
4	12V DC	12V DC



Figure 4 - Auxiliary Outputs Connector

Position	Connection	Function
A	AVI 5	Analog Input
B	5V DC	5V DC
C	Signal Ground	Signal Ground



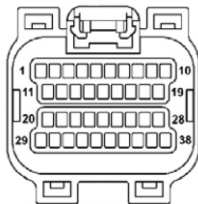
Figure 5 - Auxiliary Pressure Connector

Position	Connection	Function
A	AVI 9 (MAP)	Analog Input
B	5V DC	5V DC
C	Signal Ground	Signal Ground

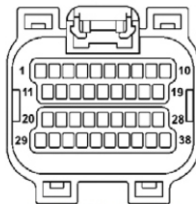


Figure 6 - Auxiliary MAP Connector

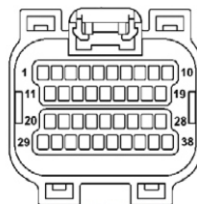
Function	Elite	SRT-4	Notes
DPO 2	A1	-	Direct Connect to Aux Outputs Connector Pin 2
AVI 4	A2	C1-20	Oil Pressure Signal
Ign 1	A3	Haltech Ignitor	Coil 1
Ign 2	A4	Haltech Ignitor	Coil 2
Ign 3	A5	-	-
Ign 4	A6	-	-
Ign 5	A7	-	-
Ign 6	A8	-	-
+5V	A9	-	Direct Connect to Aux Input Connector Pin 8 & Aux Pressure Connector Pin B
Ground	A10	C1-9	Ring Terminal 6' to Battery Ground
Ground	A11	C1-18	
+8V	A12	-	-
Ignition Switch	A13	C1-11	Ignition Switch
AVI 10	A14	C2-21	TPS
MAP	A15	C2-23	MAP
AVI 2	A16	C3-11	A/C Request Input (Idle Up)
AVI 3	A17	C3-26	Clutch Switch
DPO 1	A18	-	Direct Connect to Aux Outputs Connector Pin 1
Injector 1	A19	C2-14	Injector 1
Injector 2	A20	C2-13	Injector 2
Injector 3	A21	C2-12	Injector 3
Injector 4	A22	C2-11	Injector 4
DPO 3	A23	-	Direct Connect to Aux Outputs Connector Pin 3
DPO 5	A24	-	-
DPO 6	A25	C3-3	ECR Output Splice
+12V Switched	A26	C3-19	+12V Switched
Injector 5	A27	-	-
Injector 6	A28	-	-
Injector 7	A29	-	-
Injector 8	A30	-	-
Stepper 1 P1	A31	C2-38	Idle Air Control
Stepper 1 P2	A32	C1-28	Wastegate Solenoid
Stepper 1 P3	A33	C3-6	Low Speed Fan
Stepper 1 P4	A34	C3-4	High Speed Fan
Crank Trigger +	B1	C2-35	Crank Signal
Cam Home +	B2	C2-34	Cam Signal
IAT	B3	C2-30	IAT
ECT	B4	C2-20	ECT
Crank -	B5	-	-
Cam -	B6	-	-
SPI 4	B7	-	Direct Connect to Aux Input Connector Pin 4
SPI 1	B8	C1-13	VSS
SPI 2	B9	-	Direct Connect to Aux Input Connector Pin 2
SPI 3	B10	-	Direct Connect to Aux Input Connector Pin 3
+12V Switched	B11	C3-28	+12V Switched
AVI 6	B12	-	Direct Connect to Aux Inputs Connector Pin 5
AVI 1	B13	-	Direct Connect to Aux Inputs Connector Pin 1
Signal Ground	B14	-	Direct Connect to Aux Pressure Input Connector Pin A
Signal Ground	B15	-	Direct Connect to Aux Inputs Connector Pin 6
Signal Ground	B16	-	Direct Connect to CAN Connector
Ignition 7	B17	-	-
Ignition 8	B18	-	-
DPO 4	B19	-	-
AVI 5	B20	-	Direct Connect to Aux Pressure Input Connector 1 Pin C
Knock 1	B21	C2-25	Knock 1
Knock 2	B22	-	-
CAN High	B23	-	To CAN Connector Pin 4
CAN Low	B24	-	To CAN Connector Pin 3
DBW 1	B25	-	-
Haltech Dual Channel Ignitor			
Coil Negative #1	1	C2-10	18" To Coil #1
ECU Ignition Output #1	2	C2-10	84" To ECU #1
-	3	-	-
Chassis Ground	4	C1-9	18" Chassis Ground
-	5	-	-
Coil Negative #2	6	C2-9	18" To Coil #2
ECU Ignition Output #2	7	C2-9	84" To ECU #2



C1 BLACK/BLACK



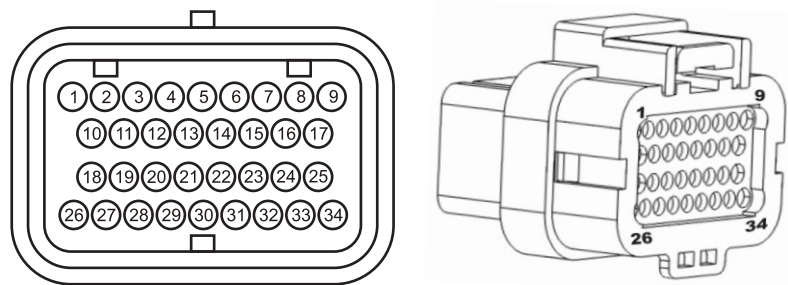
C2 BLACK/ORANGE



C3 BLACK/WHITE

**Figure 7 - Parallel Harness Pinout
Looking into Factory ECU Connector**

Harness Pinout

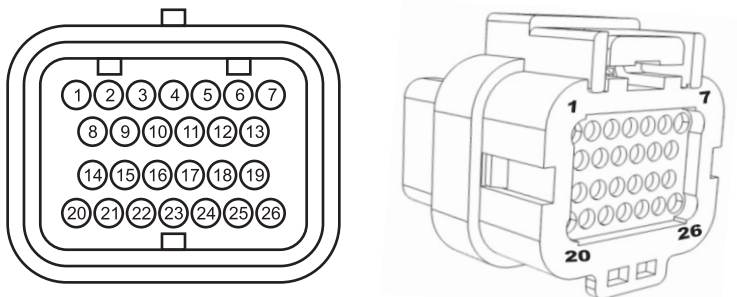


ECU CONNECTOR (34 PIN)

Position	Connection	Function	Notes
A1	DPO 2	Digital Pulsed Output	Direct Connect to Aux Outputs Connector Pin 2
A2	AVI 4	Analog Input	Oil Pressure Signal
A3	IGN 1	Ignition Output 1	Ignitor/Coil 1
A4	IGN 2	Ignition Output 2	Ignitor/Coil 2
A5	IGN 3	Digital Pulsed Output	-
A6	IGN 4	Digital Pulsed Output	-
A7	IGN 5	Digital Pulsed Output	-
A8	IGN 6	Digital Pulsed Output	-
A9	5VDC	5V Sensor Power	Direct Connect to Aux Input Connector Pin 8 & Aux Press & MAP Conn Pin B
A10	Chassis Ground	Chassis Ground	-
A11	Chassis Ground	Chassis Ground	-
A12	8VDC	-	-
A13	Ignition Input	Ignition Input	1 Ignition Switch
A14	AVI 10	TPS Signal	2 TPS
A15	AVI 9	MAP Signal	3 MAP
A16	AVI 2	Analog Input	4 A/C Request Input (Idle Up)
A17	AVI 3	Analog Input	5 Clutch Switch
A18	DPO 1	Digital Pulsed Output	6 Direct Connect to Aux Outputs Connector Pin 1
A19	INJ 1	Injection Output 1	Injector 1
A20	INJ 2	Injection Output 2	Injector 2
A21	INJ 3	Injection Output 3	Injector 3
A22	INJ 4	Injection Output 4	Injector 4
A23	DPO 3	Digital Pulsed Output	Direct Connect to Aux Outputs Connector Pin 3
A24	DPO 5	Digital Pulsed Output	-
A25	DPO 6	Engine Control Relay	ECR Output Splice
A26	Injector Power Input	Injector Power Input	+12V Switched
A27	INJ 5	Digital Pulsed Output	-
A28	INJ 6	Digital Pulsed Output	-
A29	INJ 7	Digital Pulsed Output	-
A30	INJ 8	Digital Pulsed Output	-
A31	Stepper 1	Idle Control Output	Idle Air Control
A32	Stepper 2	Idle Control Output	Wastegate Solenoid
A33	Stepper 3	Idle Control Output	Low Speed Fan
A34	Stepper 4	Idle Control Output	High Speed Fan

Figure 8 - 34 Pin Harness Connector Pin Allocation

Figure 4 - Auxiliary Functions Connector



ECU CONNECTOR (26 PIN)

Position	Connection	Function	Notes
B1	Trigger +	Crank Signal	Crank Sensor Signal
B2	Home +	Cam Signal	Cam Sensor Signal
B3	Air Temp	-	Intake Air Temp Sensor Signal
B4	Coolant Temp	-	Coolant Temp Sensor Signal
B5	-	-	-
B6	-	-	-
B7	SPI 4	Synchronized Pulsed Input	Direct Connect to Aux Input Connector Pin 4
B8	SPI 1	Synchronized Pulsed Input	VSS
B9	SPI 2	Synchronized Pulsed Input	Direct Connect to Aux Input Connector Pin 2
B10	SPI 3	Synchronized Pulsed Input	Direct Connect to Aux Input Connector Pin 3
B11	ECU Power	+12V Switched	+12V Switched
B12	AVI 6	Analog Input	Direct Connect to Aux Inputs Connector Pin 5
B13	AVI 1	Analog Input	Direct Connect to Aux Inputs Connector Pin 1
B14	Signal Ground	Signal Ground	Direct Connect to Aux Pres & MAP Input Connector Pin A
B15	Signal Ground	Signal Ground	Direct Connect to Aux Inputs Connector Pin 6
B16	Signal Ground	Signal Ground	Direct Connect to CAN Connector
B17	IGN 7	Digital Pulsed Output	-
B18	IGN 8	Digital Pulsed Output	-
B19	DPO 4	Digital Pulsed Output	-
B20	AVI 5	Analog Input	Direct Connect to Aux Pressure Input Connector 1 Pin C
B21	Knock 1	Knock 1	Knock 1
B22	Knock 2	-	-
B23	CAN Hi	To CAN Connector Pin 4	To CAN Connector Pin 4
B24	Can Lo	To CAN Connector Pin 3	To CAN Connector Pin 3
B25	DBW 1	Digital Pulsed Output	-
B26	DBW 2	Digital Pulsed Output	-

Figure 9 - 26 Pin Harness Connector Pin Allocation

Notes:

[illegible]

Haltech

ENGINE MANAGEMENT SYSTEMS



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