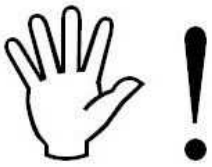
Instruction Manual

P/N 30-3508
2000–2005 Honda S2000
Infinity-6 and Infinity-8h*
Plug & Play Adapter Harness



STOP!

THIS PRODUCT HAS LEGAL RESTRICTIONS.
READ THIS BEFORE INSTALLING/USING!

THIS PRODUCT MAY BE USED SOLELY ON VEHICLES USED IN SANCTIONED COMPETITION WHICH MAY NEVER BE USED UPON A PUBLIC ROAD OR HIGHWAY, UNLESS PERMITTED BY SPECIFIC REGULATORY EXEMPTION. (VISIT THE "EMISSIONS" PAGE AT HTTP://WWW.SEMASAN.COM/EMISSIONS FOR STATE BY STATE DETAILS.)

IT IS THE RESPONSIBILITY OF THE INSTALLER AND/OR USER OF THIS PRODUCT TO ENSURE THAT IT IS USED IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IF THIS PRODUCT WAS PURCHASED IN ERROR, DO NOT INSTALL AND/OR USE IT. THE PURCHASER MUST ARRANGE TO RETURN THE PRODUCT FOR A FULL REFUND.

THIS POLICY ONLY APPLIES TO INSTALLERS AND/OR USERS WHO ARE LOCATED IN THE UNITED STATES; HOWEVER CUSTOMERS WHO RESIDE IN OTHER COUNTRIES SHOULD ACT IN ACCORDANCE WITH THEIR LOCAL LAWS AND REGULATIONS.

WARNING: This installation is not for the tuning novice! Use this system with EXTREME caution! The AEM Infinity Programmable EMS allows for total flexibility in engine tuning. Misuse or improper tuning of this product can destroy your engine! If you are not well versed in engine dynamics and the tuning of engine management systems DO NOT attempt the installation. Refer the installation to an AEM-trained tuning shop or call 800-423-0046 for technical assistance.

NOTE: All supplied AEM calibrations, Wizards and other tuning information are offered as potential starting points only. IT IS THE RESPONSIBILITY OF THE ENGINE TUNER TO ULTIMATELY CONFIRM IF THE CALIBRATION IS SAFE FOR ITS INTENDED USE. AEM holds no responsibility for any engine damage that results from the misuse or mistuning of this product!

*See next page for important information regarding the use of this harness with Infinity-8h

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OVERVIEW

The 30-3508 AEM Infinity Adapter Kit is designed for the 2000–2005 Honda S2000. These models include all 2.0L (AP1) engines as well as the early 2.2L (AP2) engines with a cable driven throttle body. This is a true standalone system that eliminates the use of the factory ECU. The use of this adapter makes the kit "plug and play" so no cutting or splicing wires is necessary. The base configuration files available for the Infinity EMS are starting points only and will need to be modified for every specific application.

The available AEM Infinity EMS part numbers for this adapter kit are:

- 30-7106 INFINITY-6
- 30-7108 INFINITY-8h

GETTING STARTED

Refer to the **10-7100 for EMS 30-7100 Infinity Quick Start Guide** for additional information on getting the engine started with the Infinity EMS. Base sessions are located in C:\Documents\AEM\Infinity Tuner \Sessions\Base Sessions

DOWNLOADABLE FILES

Files can be downloaded from www.aeminfinity.com. An experienced tuner must be available to configure and manipulate the data before driving can commence. The Quick Start Guide and Full Manual describe the steps for logging in and registering at www.aeminfinity.com. These documents are available for download in the Support section of the AEM Electronics website: http://www.aemelectronics.com/products/support/instructions

Downloadable files for 2000–2005 Honda S2000

- 7106-XXXX-75 Infinity-6 (XXXX = serial number)
- 7108-XXXX-76 Infinity-8h (XXXX = serial number)

OPTIONS

30-2001 UEGO Wideband O2 Sensor
Bosch LSU4.2 Wideband O2 Sensor that connects to AEM 30-3600 UEGO Wideband O2 Sensor Extension Harness

30-3600 UEGO Wideband O2 Sensor Extension Harness
Extension harness to connect AEM UEGO Wideband O2 sensor to 6-pin Deutsch

30-3602 IP67 Logging Cable
USB A-to-A extension cable: 39" long with right angled connector and bayonet style lock

*IMPORTANT INFINITY-8H INFORMATION

The primary difference between the **30-7106 Infinity-6** and **30-7108 Infinity-8h** is that the 8h lacks Peak & Hold injector drivers to run low impedance fuel injectors. High impedance (saturated, high-z) fuel injectors must be used with the Infinity-8h.

The Infinity-6 and Infinity-8h share a common pinout with the exception of four pins where the Infinity-8h has two each additional fuel injector and ignition coil drivers. Due to the additional fuel injector and ignition coil drivers, the 8h has two fewer digital inputs and lowside outputs. Use of this harness with an Infinity-8h will require slight modification and will result in loss of some plug and play function- OEM Coolant Gauge, Malfunction Indicator Light, and Brake Switch input.

Infinity Pin	Infinity-6 Function	Infinity-8h Function	30-3508 PnP Honda Pin	Notes
C1-3	Lowside6	Injector7	A1	OEM Coolant Gauge on **Infinity-6** or Injector7 on **Infinity-8h**
C1-4	Lowside7	Injector8	A18	MIL on **Infinity-6** or Injector8 on **Infinity-8h**
C1-31	Digital6	Coil7	Aux 6	Available Digital6 on **Infinity-6**; Coil7 not used on **Infinity-8h**. **** Must de-pin for use with Infinity-8h; Coil7 not used****
C1-32	Digital7	Coil8	A32	Brake Switch input on **Infinity-6**; Coil8 not used on **Infinity-8h**. **** Must de-pin for use with Infinity-8h; Coil8 not used****

INFINITY CONNECTORS

The AEM Infinity EMS uses the MX123 Sealed Connection System from Molex. Refer to the **10-7100 for EMS 30-7100 Infinity Quick Start Guide** for details on connector assembly and handling.

AEM strongly recommends that users become familiar with the proper tools and procedures for working with these high density connectors before attempting any modifications. The entire Molex MX123 User Manual can be downloaded direct from Molex at:

http://www.molex.com/mx_upload/family//MX123UserManual.pdf

INFINITY ADAPTER HARNESS

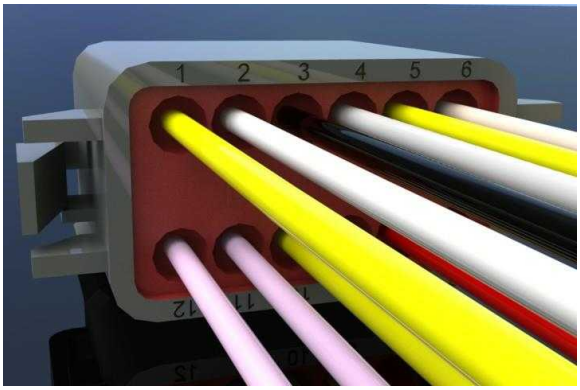
Included with the 2000–2005 Honda S2000 kit is an adapter harness. This is used to make the connection between the AEM Infinity EMS and the Honda wiring harness plug and play. This is depicted below with the 80-pin connector and the Honda header. There are also a few other integrated connectors within this harness described below.

The gray Deutsch 6P DTM “Lambda #1” connector is for connecting a UEGO wideband Bosch LSU4.2 sensor (AEM 30-2001). The UEGO extension harness (AEM 30-3600) mates the adapter harness to the sensor.

The gray Deutsch 4P DTM connector is used for “AEMNet”. AEMNet is an open architecture based on CAN 2.0 which provides the ability for multiple enabled devices, such as dashboards, data loggers, etc., to easily communicate with one another through two twisted cables (CAN+/CAN-).

The black Delphi 2-pin “Flash Enable” connector is used for secondary hardware flashing. The included shunt connector jumps the 2 wires together. Once initially flashed, the EMS is normally upgraded in the software, not using this connector.

The gray Deutsch 12P DTM “Auxiliary” connector (shown below) is used to adapt many common ancillary inputs and outputs easily. Included in the kit are a DTM 12P mating connector, 12 DTM terminals, and a DTM 12P wedgelock. If used, these components will need to be terminated by the installer or end user with 16–22awg wire (not included). Note: The pin numbering is molded into the connector, as shown.

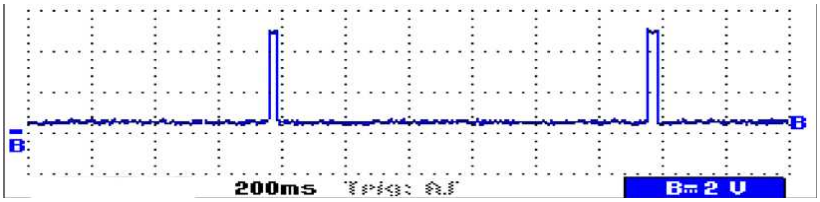


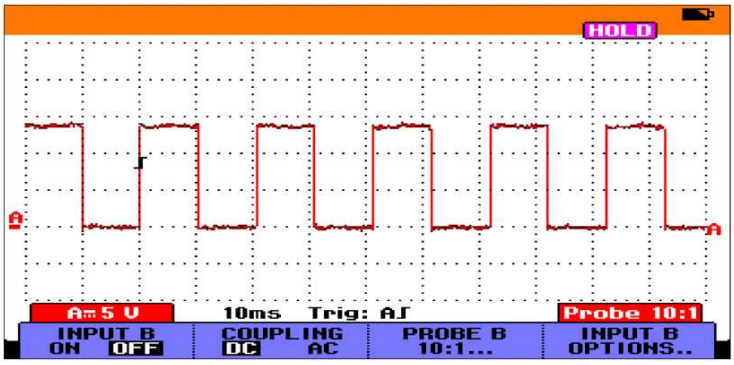
DASHBOARD

The AEM Infinity EMS for the 2000–2005 Honda S2000 drives the Tachometer, Coolant Temperature Gauge, and the CEL (Check Engine Light). Shown below are the AP1 and AP2 gauge clusters.

Rather than OBD2 diagnostics, the CEL light is now dedicated to the AEM “MILOutput” feature. The AEM MILOutput activates if any 1 of the following inputs are in an error state: air temp, baro pressure, coolant temp, exhaust back pressure, fuel pressure, UEGO #1, UEGO #2, MAF analog, MAF digital, MAP, oil pressure, or throttle position. If any of these sensors are not used, they should be turned OFF in the Wizard to avoid any false readings. To activate the MILOutput feature, go to the Wizard and check “Enable MIL Output” in Diagnostics.

The coolant temp gauge is ECU driven by a 5V 30ms pulse with a period that varies with ECT voltage, as shown. It is pre-calibrated using a combination of the LS6_Freq [Hz] 1-axis table and the LS6_Duty [%] 2-axis table.





Similarly, the Honda S2000 gauge cluster’s tachometer is also driven by the ECU, as shown. However, compared to the coolant temperature gauge, this signal is very elementary as it simply varies frequency with engine speed.

The Honda S2000 tachometer is pre-calibrated using a combination of the LS5_Freq [Hz] 1-axis table and the LS5_Duty [%] 2-axis table.

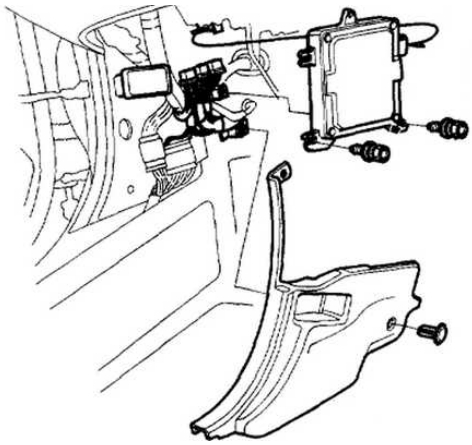
INFINITY EMS INSTALLATION

Step 1

First, make sure the Honda CD Player activation code is recorded and also take note of the radio presets. Next, open the hood and disconnect the battery. Remember to set the clock when reconnecting the battery.

The stock ECU is located on the left-side kick panel, as shown. Pop off and remove the door sill (not pictured) and kick panel cover, as shown.

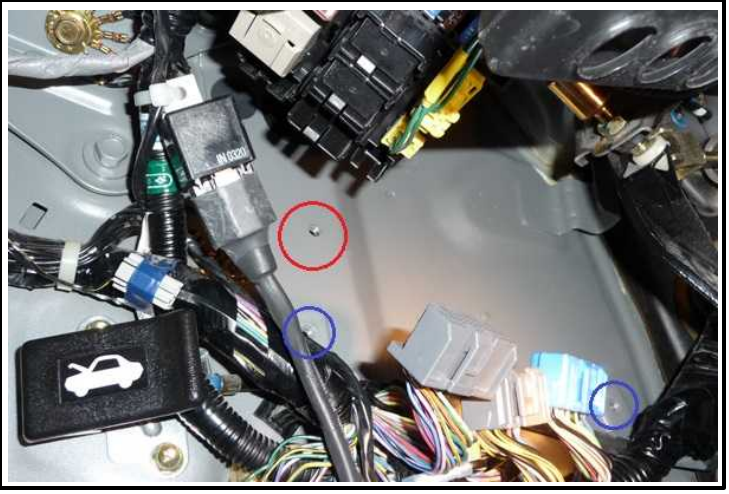
Carefully unplug the 3 ECU connectors by depressing the “thumb” lock on each connector. Avoid excessive stress or pulling on the wires, as this may damage the harness.



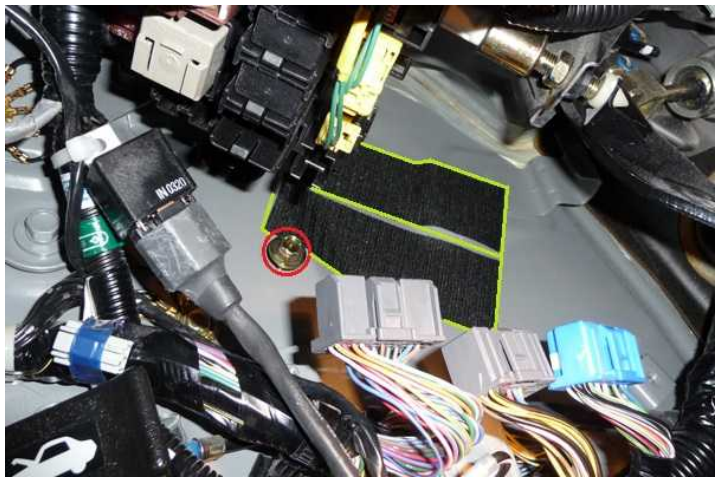
Step 2

To remove the ECU, unscrew the two mounting M6 bolts from the mounting bosses (circled in blue) using a 10mm socket wrench. These mounting bosses will not be reused.

As depicted in the picture, the sheet metal surface in the ECU location is not entirely flat. However, the included adhesive hook and loop (Velcro) will still be used to hold the Infinity EMS in place while 1 of the OEM ECU bolts will be reused to secure it to the spare M6 mounting boss, circled in red.



Step 3

Attach one side of the Velcro to the back of the EMS and the other to the chassis, as shown. Loosely screw the OEM ECU bolt into the spare boss, shown in red. Attach the AEM 80-pin connector to the EMS. Secure the Infinity connector by sliding the red locking tab. Slide the EMS all the way up until the adapter harness contours around the top side of the kick panel area. The OEM ECU bolt should just be present on the bottom side of the EMS. Position the EMS onto the hook and loop strip adhered to the chassis.	

Step 4

Move the EMS so half of the OEM ECU bolt's washer locks onto the EMS mounting tab's outer edge, as shown. Tighten this bolt. Next, connect the three OEM Honda ECU connectors to the Honda header found in the AEM adapter. Connect the included mini USB communication cable to the EMS. If there are to be any AEMnet devices that will be daisy-chained to the Infinity EMS, secure it to the AEM adapter's 4P Deutsch connector.	

Step 5

If a wideband UEGO sensor was purchased, put the car on a vehicle lift (or jack stands).

Weld in a bung or use an existing O2 sensor bung that is pre catalytic converter for optimal accuracy.

Use a 7/8” wrench to install the wideband UEGO sensor (OEM location shown).

The UEGO extension harness (sold separately) should be routed away from moving parts and should not come in contact with excessively hot objects.

Step 6

To get the UEGO extension harness into the cockpit, use the factory grommet on the left side firewall. RHD vehicles will differ.

Pull grommet from firewall. Cut a small slit in grommet and push Deutsch connector through. Reattach grommet to firewall. Mate extension harness to the Deutsch connector found in the AEM adapter.

If any of the auxiliary connections are to be installed now is the time to assemble these.

Reconnect the battery, and connect to the Infinity Tuner software. After all of the components are verified, reinstall the kick panel and door sill.

PINOUTS

Infinity Pinout

Dedicated	Dedicated and not reconfigurable
Assigned	Assigned but reconfigurable
Available	Available for user setup
Not Applicable	Not used in this configuration
Required	Required for proper function

Infinity Pin	Infinity Assignment	Honda Pin	Honda Description	Infinity Hardware Specification	Notes
1	LS 4	A17	A/C Clutch Relay	Lowside switch, 4A max, No internal flyback diode.	See Setup Wizard Page "LowSide Assignment Tables" for output assignment and 2D table "LS4_Duty [%]" for on/off activation.
2	LS 5	A19	Engine Speed Pulse	Lowside switch, 4A max with internal flyback diode. Inductive load should NOT have full time power.	The tachometer is pre-calibrated using a combination of the LS5_Freq [Hz] 1-axis table and the LS5_Duty [%] 2-axis table.
3	LS 6	A1	Engine Coolant Temp Gauge	Lowside switch, 4A max with internal flyback diode. Inductive load should NOT have full time power.	The coolant temp gauge is pre-calibrated using the LS6_Freq [Hz] 1-axis table and the LS6_Duty [%] 2-axis table. This signal is pulled up to 5V.
4	LS 7	A18	Malfunction Indicator Light	Lowside switch, 4A max, No internal flyback diode.	See Wizard page "LowSide Assignment Tables" for output assignment and 2D table "LS3_Duty [%]" for activation. MIL Activates when any of the following flags are true: ErrorAirTemp, ErrorBaro, ErrorCoolantTemp, ErrorEBP, ErrorFuelPressure, UEGO_0_Diag_error, UEGO_1_Diag_error, ErrorMAFAnalog, ErrorMAFDigital, ErrorMAP, ErrorOilPressure, ErrorThrottle.
5	UEGO1 Heat	---	---	Bosch UEGO controller	Lowside switch for UEGO heater control. Connect to pin 4 of Bosch UEGO sensor. NOTE that pin 3 of the Sensor is heater (+) and must be power by a fused/switched 12V supply.
6	UEGO1 IA	---	---	Bosch UEGO controller	Trim Current signal. Connect to pin 2 of Bosch UEGO sensor
7	UEGO1 IP	---	---	Bosch UEGO controller	Pumping Current signal. Connect to pin 6 of Bosch UEGO sensor
8	UEGO1 UN	---	---	Bosch UEGO controller	Nernst Voltage signal. Connect to pin 1 of Bosch UEGO sensor
9	UEGO1 VM	---	---	Bosch UEGO controller	Virtual Ground signal. Connect to pin 5 of Bosch UEGO sensor.
10	+12V Perm Power	B21	Voltage Back Up	Dedicated power management CPU	Full time battery power. MUST be powered before the ignition switch input is triggered.
11	Coil 4	C14	Ignition Coil Pulse No. 4	25 mA max source current	0–5V falling edge fire. Do NOT connect directly to coil primary. Must use an ignitor or CDI that accepts a falling edge fire signal.

Infinity Pin	Infinity Assignment	Honda Pin	Honda Description	Infinity Hardware Specification	Notes
12	Coil 3	C13	Ignition Coil Pulse No. 3	25 mA max source current	0–5V falling edge fire. Do NOT connect directly to coil primary. Must use an ignitor or CDI that accepts a falling edge fire signal.
13	Coil 2	C12	Ignition Coil Pulse No. 2	25 mA max source current	0–5V falling edge fire. Do NOT connect directly to coil primary. Must use an ignitor or CDI that accepts a falling edge fire signal.
14	Coil 1	C4	Ignition Coil Pulse No. 1	25 mA max source current	0–5V falling edge fire. Do NOT connect directly to coil primary. Must use an ignitor or CDI that accepts a falling edge fire signal.
15	---	---	---	---	---
16	---	---	---	---	---
17	VR0 (+) - Crank	C9	CKP -	Differential Variable Reluctance Zero Cross Detection	See Setup Wizard page Cam/Crank for options.
18	VR0 (-) - Crank	C8	CKP +	Differential Variable Reluctance Zero Cross Detection	See Setup Wizard page Cam/Crank for options.
19	VR1 (-) - Cam	C20	TDC1 +	Differential Variable Reluctance Zero Cross Detection	See Setup Wizard page Cam/Crank for options.
20	VR1 (+) - Cam	C21	TDC1 -	Differential Variable Reluctance Zero Cross Detection	See Setup Wizard page Cam/Crank for options.
21	LS 2	A20	Radiator Fan Control	Lowside switch, 4A max, No internal flyback diode.	See Setup Wizard Page "LowSide Assignment Tables" for output assignment and 2D table "LS2_Duty [%]" for on/off activation.
22	LS 3	B23	Idle Air Control Valve	Lowside switch, 4A max with internal flyback diode. Inductive load should NOT have full time power.	See Setup Wizard page and corresponding Tables for Idle Air Control.
23	Sensor GND	C7	Sensor Ground 1	Dedicated analog ground	Analog 0–5V sensor ground
24	Sensor GND	C18	Sensor Ground 2	Dedicated analog ground	Analog 0–5V sensor ground also found on aux connector
25	Digital 0 - Crank	---	---	10K pullup to 12V. Will work with ground or floating switches.	The S2000 uses a VR crank sensor.
26	Digital 1 - Cam1	---	---	10K pullup to 12V. Will work with ground or floating switches.	The S2000 uses VR cam sensors.
27	Digital 2 - Cam2	---	---	10K pullup to 12V. Will work with ground or floating switches.	The S2000 uses VR cam sensors.
28	Digital 3 – Flex Fuel	---	---	10K pullup to 12V. Will work with ground or floating switches.	Found on the Aux Connector. Input can be assigned to different pins. See Setup Wizard page Input Function Assignments for input mapping options.
29	Digital 4 - VSS#1	A9	Vehicle Speed Sensor	10K pullup to 12V. Will work with ground or floating switches.	See Setup Wizard page Vehicle Speed for calibration constant.
30	Digital 5 -	A27	A/C Switch Signal	10K pullup to 12V. Will work with ground or floating switches.	See Setup Wizard page for A/C activation

Infinity Pin	Infinity Assignment	Honda Pin	Honda Description	Infinity Hardware Specification	Notes
31	Digital 6 -	---	---	10K pullup to 12V. Will work with ground or floating switches.	Found on the Aux Connector. Input can be assigned to different pins. See Setup Wizard page Input Function Assignments for input mapping options.
32	Digital 7 -	A32	Brake Switch Signal	10K pullup to 12V. Will work with ground or floating switches.	Input can be assigned to different pins. See Setup Wizard page Input Function Assignments for input mapping options.
33	GND	B2	Power Ground 1	Power Ground	Connects to chassis ground and AEMNet
34	CAN A -	---	---	Dedicated High Speed CAN Transceiver	4P DTM Connector found in AEM adapter harness. Contact AEM for additional information.
35	CAN A +	---	---	Dedicated High Speed CAN Transceiver	4P DTM Connector found in AEM adapter harness. Contact AEM for additional information.
36	CAN B -	---	---	Dedicated High Speed CAN Transceiver	Not used
37	CAN B +	---	---	Dedicated High Speed CAN Transceiver	Not used
38	Temp 1 - Coolant Temp	C26	Engine Coolant Temp Sensor	12 bit A/D, 2.49K pullup to 5V	See "Coolant Temperature" Setup Wizard for selection.
39	Temp 2 - Air Temp (Manifold)	C25	Intake Air Temp Sensor	12 bit A/D, 2.49K pullup to 5V	See "Air Temperature" Setup Wizard for selection.
40	Temp 3 - Oil Temp	---	---	12 bit A/D, 2.49K pullup to 5V	Found on the Aux Connector. 0–5V analog signal
41	LS 0	A15	Fuel Pump Relay	Lowside switch, 4A max, No internal flyback diode.	Switched ground. Will prime for 2 seconds at key on and activate if RPM > 0.
42	LS 1	---	---	Lowside switch, 4A max with internal flyback diode. Inductive load should NOT have full time power.	Found in Aux Connector. See Setup Wizard page Boost Control for options. Monitor BoostControl [%] channel for output state.
43	GND	B10	Power Ground 2	Power Ground	Connect directly to battery ground.
44	Knock 0	C22	Knock Sensor	Dedicated knock signal processor	See Knock in Setup Wizard for options.
45	Knock 1			Dedicated knock signal processor	See Knock in Setup Wizard for options.
46	GND	B20	Logic Ground 1	Power Ground	Connect directly to battery ground.
47	12V_Relay_Control	---	---	0.7A max ground sink for external relay control	Connects to relay found in AEM adapter. Will activate at key ON and at key OFF according to the configuration settings.
48	+12V SW (Ign Switch)	B1	Power Source 1	10K pulldown	Full time battery power must be available at infinity pin 10 before this input is triggered.
49	+5V_Out	C19	Sensor Voltage 1	Regulated, fused +5V supply for sensor power	Analog sensor power
50	+5V_Out	C28	Sensor Voltage 2	Regulated, fused +5V supply for sensor power	Analog sensor power and found on auxiliary connector
51	Ana7 - Throttle	C27	Throttle Position Sensor	12 bit A/D, 100K pullup to 5V	0–5V analog signal. Do not connect signals referenced to +12V as this can permanently damage the ECU. See the Setup Wizard Set Throttle Range page for automatic min/max calibration.

Infinity Pin	Infinity Assignment	Honda Pin	Honda Description	Infinity Hardware Specification	Notes
52	Ana8 - Map	C17	MAP Sensor	12 bit A/D, 100K pullup to 5V	0–5V analog signal. See the Manifold Pressure in Setup Wizard for setup and calibration.
53	Ana9 - Fuel Press	---	---	12 bit A/D, 100K pullup to 5V	0–5V analog signal found on the Auxiliary Connector
54	VR2 (+) - Driven Wheel	---	---	Differential Variable Reluctance Zero Cross Detection	See Driven Wheel Speed Calibration in the Setup Wizard Vehicle Speed page.
55	VR2 (-) - Driven Wheel	---	---	Differential Variable Reluctance Zero Cross Detection	See Driven Wheel Speed Calibration in the Setup Wizard Vehicle Speed page.
56	VR3 (-) - Tag Wheel	---	---	Differential Variable Reluctance Zero Cross Detection	See Non Driven Wheel Speed Calibration in the Setup Wizard Vehicle Speed page.
57	VR3 (+) - Tag Wheel	---	---	Differential Variable Reluctance Zero Cross Detection	See Non Driven Wheel Speed Calibration in the Setup Wizard Vehicle Speed page.
58	HS Out 0	B12	VTEC solenoid Valve	0.7A max, High Side Solid State Relay	+12V High Side Drive. See Setup Wizard Honda VTEC page for options.
59	Stepper_1B	---	---	Automotive, Programmable Stepper Driver, up to 28V and ±1.4A	Be sure that each internal coil of the stepper motor is properly paired with the 1A/1B and 2A/2B ECU outputs. Supports Bi-Polar stepper motors only.
60	Stepper_2B	---	---	Automotive, Programmable Stepper Driver, up to 28V and ±1.4A	Be sure that each internal coil of the stepper motor is properly paired with the 1A/1B and 2A/2B ECU outputs. Supports Bi-Polar stepper motors only.
61	HBridge0_0	---	---	5.0A max Throttle Control Hbridge Drive	2000–2005 S2000 do not use drive by wire throttle.
62	HBridge0_1	---	---	5.0A max Throttle Control Hbridge Drive	2000–2005 S2000 do not use drive by wire throttle.
63	+12V	---	---	Main Power	12 volt power from relay powers the Infinity, Lambda sensor, and AEMNet
64	Injector 6 - Peak & Hold	---	---	Saturated or peak and hold, 3A max continuous	Spare injector output
65	Injector 5 - Peak & Hold	---	---	Saturated or peak and hold, 3A max continuous	Spare injector output
66	Injector 4 - Peak & Hold	B5	Injector 4	Saturated or peak and hold, 3A max continuous	Injector 4
67	GND	B22	Logic Ground 2	Power Ground	Connects directly to ground
68	+12V	---	---	Main Power	12 volt power from relay powers the Infinity
69	Ana19 - APP2	---	---	12 bit A/D, 100K pullup to 5V	0–5V analog signal. Do not connect signals referenced to +12V as this can permanently damage the ECU.
70	Ana18 - APP1	---	---	12 bit A/D, 100K pullup to 5V	0–5V analog signal. Do not connect signals referenced to +12V as this can permanently damage the ECU.
71	Ana16 - Throttle2	---	---	12 bit A/D, 100K pullup to 5V	0–5V analog signal found on the Auxiliary Connector

Infinity Pin	Infinity Assignment	Honda Pin	Honda Description	Infinity Hardware Specification	Notes
72	Harness_Flash_Enable	---	---	10K pulldown	Not usually needed for automatic firmware updates through Infinity Tuner. If connection errors occur during update, jump the 12V Flash Connector before proceeding with upgrade. Disconnect the 12V Flash Connector after the update.
73	Ana13 - Oil Press	---	---	12 bit A/D, 100K pullup to 5V	0–5V analog signal found on the Auxiliary Connector
74	Ana11 - Trac, Run, Launch Boost	---	---	12 bit A/D, 100K pullup to 5V	0–5V analog signal found on the Auxiliary Connector
75	Ana10 - Baro	---	---	12 bit A/D, 100K pullup to 5V	0–5V analog signal found on the Auxiliary Connector
76	Injector 3 - Peak & Hold	B4	Injector 3	Saturated or peak and hold, 3A max continuous	Injector 3
77	Injector 2 - Peak & Hold	B3	Injector 2	Saturated or peak and hold, 3A max continuous	Injector 2
78	Injector 1 - Peak & Hold	B11	Injector 1	Saturated or peak and hold, 3A max continuous	Injector 1
79	Stepper_2A	---	---	Automotive, Programmable Stepper Driver, up to 28V and ±1.4A	Be sure that each internal coil of the stepper motor is properly paired with the 1A/1B and 2A/2B ECU outputs. Supports Bi-Polar stepper motors only.
80	Stepper_1A	---	---	Automotive, Programmable Stepper Driver, up to 28V and ±1.4A	Be sure that each internal coil of the stepper motor is properly paired with the 1A/1B and 2A/2B ECU outputs. Supports Bi-Polar stepper motors only.

AUX Connector Pinout

Deutsch Pin	Infinity Pin	Wire Color	Pin Name	Default Pin Function
1	53	Yellow	Analog_In_9	Fuel Pressure
2	40	White	Analog_In_Temp_3	Oil Temperature
3	24	Black	AGND	Sensor Ground
4	50	Gray	+5V_OUT	Sensor +5V
5	73	Yellow	Analog_In_13	Oil Pressure
6	31	Tan	Digital_In_6	Digital 6
7	42	Pink	LS1	
8	63	Orange	+12V	+12V
9	28	Tan	Digital_In_3	Flex Fuel Sensor (Hz)
10	71	Yellow	Analog_In_16	Throttle2
11	75	Yellow	Analog_In_10	Baro
12	74	Yellow	Analog_In_11	Trac / Run / Launch Boost

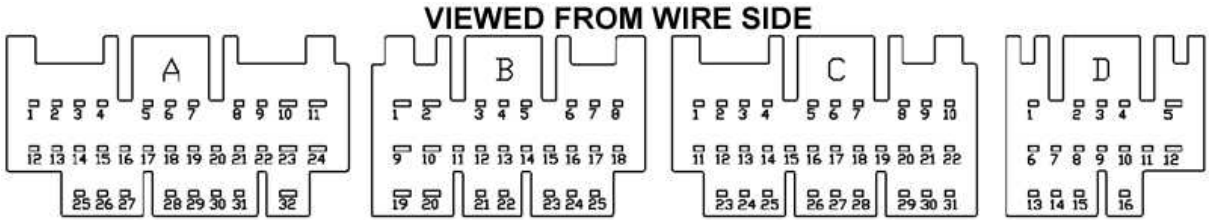
Miscellaneous Pinouts

LAMBDA 1		
Deutsch Pin	**Infinity Pin**	**Default Pin Function**
1	8	UEGO1 UN
2	6	UEGO1 IA
3	63	+12V
4	5	UEGO1 Heat
5	9	UEGO1 VM
6	7	UEGO1 IP

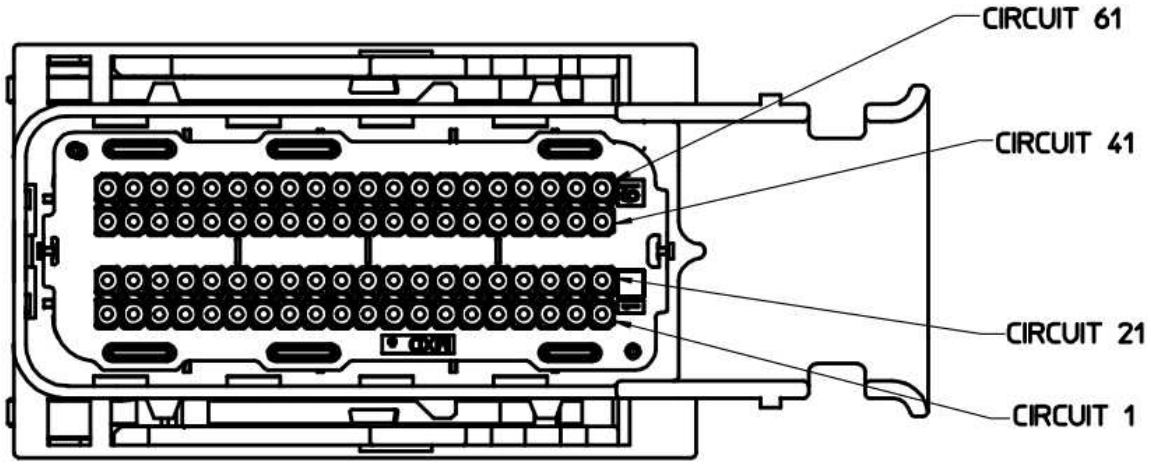
AEMNet		
Deutsch Pin	**Infinity Pin**	**Default Pin Function**
1	35	CAN A+
2	34	CAN A-
3	63	+12V
4	33	Ground

FLASH ENABLE		
Delphi Pin	**Infinity Pin**	**Default Pin Function**
A	72	Harness Flash Enable
B	10	Permanent Pow er

Honda Pin Numbering



Infinity Pin Numbering



Viewed from Wire Side

12 MONTH LIMITED WARRANTY

Advanced Engine Management Inc. warrants to the consumer that all AEM High Performance products will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12-month warranty period will be repaired or replaced at AEM's option, when determined by AEM that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of the AEM part. In no event shall this warranty exceed the original purchase price of the AEM part nor shall AEM be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product. Warranty claims to AEM must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12-month warranty period. Improper use or installation, accident, abuse, unauthorized repairs or alterations voids this warranty. AEM disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by AEM. Warranty returns will only be accepted by AEM when accompanied by a valid Return Merchandise Authorization (RMA) number. Product must be received by AEM within 30 days of the date the RMA is issued.

Please note that before AEM can issue an RMA for any electronic product, it is first necessary for the installer or end user to contact the EMS tech line at 1-800-423-0046 to discuss the problem. Most issues can be resolved over the phone. Under no circumstances should a system be returned or a RMA requested before the above process transpires.

AEM will not be responsible for electronic products that are installed incorrectly, installed in a non-approved application, misused, or tampered with.

Any AEM electronics product can be returned for repair if it is out of the warranty period. There is a minimum charge of $50.00 for inspection and diagnosis of AEM electronic parts. Parts used in the repair of AEM electronic components will be extra. AEM will provide an estimate of repairs and receive written or electronic authorization before repairs are made to the product.