

Calibration Notes for 2006-2009 Honda Civic Si AccessPORT Calibration Stage1+AEM2CAI v103



Calibration and Calibration Notes Updated: 10/30/09

Description: Stage1+AEM2CAI v103 is intended for 2006-2009





HARDWARE



**FUEL REQUIREMENTS** 



**Power Output:** +10.8% HP / +6.1% lb-ft. Results may vary.

**Revision Notes:** 

1.03 - Removed variable camshaft phasing (VTC) upper limit, improved VTC transitions at higher loads, and revised VTC setting in High VTEC.

1.02 - Improved variable camshaft phasing for smoother high VTEC engagement, optimized VTEC window functionality, and improved throttle mapping.

and fuel economy.

USDM/CDN

Calibration Name: Stage1+AEM2CAI v103

Compatible with AccessPORT

Latest Calibration Rev: 1.03

Honda Civic Si vehicles with a new AEM 2-piece CAI system w/ air straighteners ONLY. Ignition advance, fueling, camshaft phasing, and VTEC window has been optimized. VTEC is set to 5700 RPM and the Rev Limiter is set to 8500 RPM. Minimum 91 Octane fuel.

Hardware Requirements: Stock vehicle with a AEM 2-PIECE CAI SYSTEM and STOCK FUEL INJECTORS ONLY. Caution: By-passing the coolant lines from your throttle body assembly will likely cause fuel trims to be excessive (+8 to +11%), more information can be found

here. Fuel Requirement: Minimum 91 octane.

**1.01** - 2007-2009 Civic Si calibrations updated to effectively remove speed limiter. The speed limiter does not exist on the 2006 Civic Si.

We have noticed that comparing the below dyno graphs to other dyno graphs that we have recorded on the same chassis dyno is difficult to do. Several factors must be taken into account including gearing (both the ratio of the gear these tests were performed in and the final drive ratio), aerodynamics, testing conditions, parasitic drivetrain losses, effectiveness of cooling fans, etc. We have published these graphs because we want to do what we can to educate our end users. Several qualitative improvements have been made to the calibration for this vehicle which cannot be graphically represented. Please take these dyno graphs for what they are, a graphical representation of measured torque and calculated horsepower across the below RPM range during a wide open throttle pull in 4<sup>th</sup> gear. We hope that you enjoy the improvements we have made to the calibration for this vehicle.

Much of the power output of these engines depends on what hardware has been installed on the vehicle. Some intake and exhaust systems perform better than others, thus allowing the engine to make greater horsepower on the same ECU mapping. We have optimized ignition advance, fueling, camshaft phasing, MAF calibrations, and VTEC windows for specific hardware combination, but the power output of a map may be greater when higher quality, properly designed hardware is installed on the vehicle.

## <<<<CRITICAL INFORMATION !!! CRITICAL INFORMATION !!! CRITICAL INFORMATION !!!>>>>>

## Additional Notes:

For use with a stock or very mildly modified normally aspirated 2006-2009 USDM/CDM Honda Civic Si only. Additional modifications such an underdrive pulley and cat-back exhaust system are still within the acceptable parameters of this calibration. THIS MAP IS INTENDED TO BE USED WITH THE AEM 2-PIECE CAI SYSTEM W/ AIR STRAIGHTENERS ONLY.

NO OTHER AFTER MARKET INTAKES ARE CERTIFIED COMPATIBLE WITH THIS CALIBRATION. THE INSTALLATION OF ANY OTHER HARDWARE SUCH AS HIGH-FLOW CATALYSTS, STRAIGHT PIPES, HEADERS OR FULL CATLESS EXHAUST MAY ALLOW THE VEHICLE TO RUN LEANER THAN DESIRED, WHICH CAN CAUSE ENGINE DAMAGE. Running ANY OTHER after market intake system has the ability to compromise the performance of our calibration and possibly compromise the engine. Best if used with a minimum of 91 octane. If any detonation is present even when using 91 octane, try using octane booster. Rev Limit set at 8500 RPM.



Dyno Graph = Stage1+AEMSRI v100 with A/F Tracing

The above dyno graph demonstrates the fuel curve that should be measured from a sealed exhaust stream. The RPM reference can be found on the X-axis in pink numbers; the A/F Ratio reference can be found on the Y-axis in black numbers. If your fuel curve is not within +/- .5 A/F from this calibration, while running the Stage1+AEM2CAI v103 calibration on your USDM/CDM 2006-2009 Honda Civic Si, then you may need to have the vehicle analyzed by a professional tuning facility. Hardware such as other intake systems, headers, and catless race pipes can skew the MAF sensor signal and/or create a dangerously lean fuel curve. This calibration has been established to run with the **AEM 2-piece CAI system w/ air straighteners only**.