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!
Optional Extension Harnesses for Modular Harness System

Extension harnesses compatible with the 3805 and 3809 V8 harness system are available.

**30-3805-00 GM Injector Adapter Harness**
Adapter harness that mates EV1 style injectors in standard GM cylinder order (odd cylinders on one bank, even cylinders on other) to Core Harnesses.

**30-3805-01 Ford Injector Adapter Harness**
Adapter harness that mates EV1 style injectors in standard Ford cylinder order (cylinders 1-4 on one bank, cylinders 5-8 on other) to Core Harnesses.

**30-3805-02 Single Channel Ignition Adapter Harness**
Adapter harness that mates AEM Single Channel Coil Driver (30-2841) to 30-3805 Core Harness. Coil driver takes 5v falling edge ignition trigger signal from Infinity and outputs a 12v rising edge signal. 12v rising edge signal can either be used to trigger an inductive coil directly or trigger a single channel CDI box (MSD 6A, etc).

**30-3805-03 VR Crank & VR Cam Adapter Harness**
Adapter harness that mates variable reluctance (VR) crank and cam sensors to Core Harnesses. Legs to each sensor are 48” long.

**30-3805-04 VR Crank & Hall Cam Adapter Harness**
Adapter harness that mates variable reluctance (VR) crank sensor and Hall Effect cam sensor to Core Harnesses. Legs to each sensor are 48” long.

**30-3805-05 Hall Crank & VR Cam Adapter Harness**
Adapter harness that mates Hall Effect crank sensor and variable reluctance (VR) cam sensor to Core Harnesses. Legs to each sensor are 48” long.

**30-3805-06 Hall Crank & Hall Cam Adapter Harness**
Adapter harness that mates Hall Effect crank and cam sensors to Core Harnesses. Legs to each sensor are 48” long.

**30-3805-07 GM Stepper Idle Control Adapter Harness**
Adapter harness that mates GM stepper idle control valve to Core Harnesses. IAC connector is flat and meant for use with later model style control valves.

**30-3805-08 Universal PWM Idle Control Adapter Harness** *(For use with 30-3805 only. Not compatible with 30-3809 Core Harness)*
Flying lead to mate universal PWM idle control valve to 3805 core harnesses. Connector to connect to control valve must be provided by end user.

**30-3805-09 GM Coil Adapter Harness - AEM High Output IGBT Smart Coils**
Adapter harness that mates AEM High Output IGBT Smart Coils (AEM p/n 30-2853) in standard GM cylinder order (odd cylinders on one bank, even cylinders on other) to Core Harnesses.

**30-3805-10 GM Injector Adapter - EV6**
Adapter harness that mates EV6 style injectors in standard GM cylinder order (odd cylinders on one bank, even cylinders on other) to Core Harnesses.

**30-3805-11 Ford Injector Adapter - EV6**
Adapter harness that mates EV6 style injectors in standard Ford cylinder order (cylinders 1-4 on one bank, cylinders 5-8 on other) to Core Harnesses.
30-3805-12 GM Coil Adapter Harness - GM "LS" Style Coils
Adapter harness that mates GM "LS" Style Coils in standard GM cylinder order (odd cylinders on one bank, even cylinders on other) to Core Harnesses.

30-3805-14 Crank/Cam Signal Adapter Harness - AEM Engine Position Module (EPM), 15"
Adapter harness that mates AEM EPM to Core Harnesses for crank/cam timing sensor inputs. 15" long for rear mounted distributor.

30-3805-15 Crank/Cam Signal Adapter Harness - FAST Dual Sync Distributor, 15"
Adapter harness that mates FAST Dual Sync Distributor to Core Harnesses for crank/cam timing sensor inputs. 15" long for rear mounted distributor.

30-3805-16 Crank/Cam Signal Adapter Harness - MSD Dual Sync Distributor, 15"
Adapter harness that mates MSD Dual Sync Distributor to Core Harnesses for crank/cam timing sensor inputs. 15" long for rear mounted distributor.

30-3805-17 Ford Coil Adapter Harness - AEM High Output IGBT Smart Coils
Adapter harness that mates AEM High Output IGBT Smart Coils (AEM p/n 30-2853) in standard Ford cylinder order (cylinders 1-4 on one bank, cylinders 5-8 on other) to Core Harnesses.

30-3805-18 Ford Coil Adapter Harness - GM "LS" Style Coils
Adapter harness that mates GM "LS" Style Coils in standard Ford cylinder order (cylinders 1-4 on one bank, cylinders 5-8 on other) to Core Harnesses.

30-3805-19 Crank/Cam Signal Adapter Harness - AEM Engine Position Module (EPM), 35"
Adapter harness that mates AEM EPM to Core Harnesses for crank/cam timing sensor inputs. 35" long for front mounted distributor.

30-3805-20 Crank/Cam Signal Adapter Harness - FAST Dual Sync Distributor, 35"
Adapter harness that mates FAST Dual Sync Distributor to Core Harnesses for crank/cam timing sensor inputs. 35" long for front mounted distributor.

30-3805-21 Crank/Cam Signal Adapter Harness - MSD Dual Sync Distributor, 35"
Adapter harness that mates MSD Dual Sync Distributor to Core Harnesses for crank/cam timing sensor inputs. 35" long for front mounted distributor.

30-3809-01 GM Throttle Body Adapter (For use with 30-3809 only. Not compatible with 30-3805 Core Harness)
For DBW use only. Adapter harness that mates GM DBW throttle body PNs 12570790, 12580760 (or equivalent) to 3809 core harness.

30-3809-00 GM Pedal Adapter (For use with 30-3809 only. Not compatible with 30-3805 Core Harness)
For DBW use only. Adapter harness that mates GM DBW Pedal PN 10379038 (or equivalent) to 3809 core harness.

30-3600 O2 Sensor Extension Harness
Extension harness to connect AEM UEGO Wideband O2 sensor to 6 pin Deutsch DTM in Infinity Mini Harnesses (30-3702/3703) and V8 core harnesses 30-3805 and 30-3809.

30-3601 IP67 Comms Cable
USB Mini-B comms cable; 39" long with right angled connector and bayonet style lock.

30-3602 IP67 Logging Cable
USB A-to-A extension cable: 39" long with right angled connector and bayonet style lock.
3805-21 Kit Contents

<table>
<thead>
<tr>
<th>AEM P/N</th>
<th>Description</th>
<th>Qty</th>
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<tbody>
<tr>
<td>36-3805-21</td>
<td>Crank/Cam Extension, MSD Dual Sync 35”</td>
<td>1</td>
</tr>
<tr>
<td>10-3805-21</td>
<td>Instruction Sheet</td>
<td>1</td>
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</table>
### 3805-21 MSD Dual Sync Harness, 35" Pinout

<table>
<thead>
<tr>
<th>C1 Pin</th>
<th>Wire Color</th>
<th>Gauge</th>
<th>Destination</th>
<th>DTM Plug, 12 Way</th>
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<tbody>
<tr>
<td>1</td>
<td>Black</td>
<td>22</td>
<td>C2-1</td>
<td>Crank/Cam</td>
</tr>
<tr>
<td>2</td>
<td>Red</td>
<td>22</td>
<td>C2-2</td>
<td></td>
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<tr>
<td>3</td>
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<td>22</td>
<td>C3-A</td>
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<tr>
<td>4</td>
<td>White</td>
<td>22</td>
<td>C3-B</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>BLK</td>
<td>22</td>
<td>Shield</td>
<td>Shield Ground</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Black</td>
<td>22</td>
<td>C2-1</td>
<td>Crank Position (VR+)</td>
</tr>
<tr>
<td>8</td>
<td>Red</td>
<td>22</td>
<td>C2-2</td>
<td>Crank Position (VR-)</td>
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<tr>
<td>9</td>
<td>Green</td>
<td>22</td>
<td>C3-A</td>
<td>Cam1 Position (VR-)</td>
</tr>
<tr>
<td>10</td>
<td>White</td>
<td>22</td>
<td>C3-B</td>
<td>Cam1 Position (VR+)</td>
</tr>
<tr>
<td>11</td>
<td>BLK</td>
<td>22</td>
<td>Shield</td>
<td>Shield Ground</td>
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**C2 Pin**

<table>
<thead>
<tr>
<th>C2 Pin</th>
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<th>Gauge</th>
<th>Destination</th>
<th>MSD Dual Sync CNK</th>
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<tbody>
<tr>
<td>1</td>
<td>Black</td>
<td>22</td>
<td>C1-7</td>
<td>Crank Position (VR+)</td>
</tr>
<tr>
<td>2</td>
<td>Red</td>
<td>22</td>
<td>C1-8</td>
<td>Crank Position (VR-)</td>
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**C3 Pin**

<table>
<thead>
<tr>
<th>C3 Pin</th>
<th>Wire Color</th>
<th>Gauge</th>
<th>Destination</th>
<th>MSD Dual Sync CAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Green</td>
<td>22</td>
<td>C1-9</td>
<td>Cam1 Position (VR-)</td>
</tr>
<tr>
<td>B</td>
<td>White</td>
<td>22</td>
<td>C1-10</td>
<td>Cam1 Position (VR+)</td>
</tr>
</tbody>
</table>

**NOTE:** The cable shield grounds are terminated at the ECU. Do not connect the shield grounds to anything on the vehicle. Doing so may introduce unwanted noise.