# V5 SOFTWARE AND FIRMWARE REVISIONS

## SOFTWARE

Version 5.0 Build 30 – Initial Release 6-6-18

- Proper Firmware Version – 5.0 Build 30


Version 5.0 Build 31 – Release 6-26-18

- Added popup screen to tell user to make sure ignition power was cycled before TPS autoset
- Updated minimum zoom resolution in Active Speed Management when units are MPH
- Renamed transmission ICF dropdown from "GM 4L60/5E (2009+)" to "GM 4L70E (2009+)"
- Corrected transmission ICF pin mapping locked pins for Ford transmissions
- Custom Injector setup clarified to not include 4 and 6 cylinder engines at this time

- Proper Firmware Version – 5.0 Build 30


Version 5.0 Build 32 – Release 9-24-18
- Fixed bug in the log viewer that caused channel name to disappear at the top of the screen.
- Fixed bug in logger that caused long logs to be broken into smaller logs improperly. This was causing the subsequent logs to have the inputs/outputs not viewable.
- When updating the Target Air Fuel Table while online the fuel table is now updated and sent to the ECU as well.
- Fixed bug with software not always importing driveshaft curves into Traction Control
- Fixed bug that caused data log viewer parameters to disappear when hitting enter or escape.

- Proper Firmware Version – 5.0 Build 30

Version 5.0 Build 100 – Release 3-20-19

- "Custom" Injection Type configurable for 4 and 6 cylinder engines (previously only 8 cylinder)
- On "Custom" Injection Type, added editable "Duty Cycle" view to the three table is addition to Fuel Flow and Base Percent.
- Updates to USB Communications have increased the speed, increasing the monitor, strip chart, and PC logging rates
- Added integrated Comparison/Copy Tool to software
- Ability to use Holley PN 558-443 USB to CAN communication harness as an alternative to USB connection for communication as well as firmware updating.
- Internal Datalog Time/Date file naming structure changed from MMDDHHMM to DDHHMMSS (Day/Hour/Minute/Second)
- Datalogger sampling updates.  User can now select up to 300 samples/second.  There should be no frame skipping up to 100 samples/second, skipping may occur over 100 depending on variables.
- Add new transmission type "GM 4L70E (2009+) – uses harness 558-455
- Base Timing table lower limit changed from 0 degrees to -10 degrees
- 557-201 High Flow Boost Control Solenoid added to Solenoid Configuration Dropdown
- Boost PID values now editable to hundredths
- GM LSx Oil pressure sensor added to dropdowns

- Added New Ignition Output Type "Points Output Fixed Duty Cycle (MSD). As part of this update the previous selection of "Points Out" was change in name only to "Points Out Adjustable Dwell"
- Ability to utilize Pro Dash Accelerometer and GPS inputs in IO and Advanced ICFs.

  - Proper Firmware Version – 5.0 Build 100

Version 5.0 Build 110 – Release 4-24-19

- Resolved Individual Cylinder Fuel Trim issue in Comparison Tool. When individual cylinder trims were tables (not single values), the table values did not appear correctly on the tables. They did "copy" properly.

  - Proper Firmware Version – 5.0 Build 110

Version 5.0 Build 130 – Release 9-20-19

- Added MSD Pro 600 Compatibility
  - Added new ignition output type "MSD Pro 600-8"
  - Dwell table becomes "Ignition Power" table for Pro 600
  - "Dwell Time Offset" in Advanced ICF" becomes "Ignition Power Offset"
  - See instructions for MSD Pro 600 for complete information
- Added new Cam Sensor Type "Single Pulse – Ignore Cam After Start" – This choice operates the same as the "Single Pulse" selection, except once over the crank to run RPM the cam sensor input is ignored. If a loss or error occurs of the cam signal occurs, engine operation is not affected. This selection is not recommended for Coil-on-Plug applications as a loss of crank signal integrity can cause incorrect coil firing sequence.
- J4-B21 pin not locked for Ford Transmission Types
- Updates to software to reduce lost USB Comms
- Fixed bug with "VE Conversion" when using 16x16 fuel table
- Fixed several log viewer random crash issues

  - Proper Firmware Version – 5.0 Build 130

Version 5.0 Build 140 – Release 11-19-19

- Updates to revolve USB comms with Windows 8/8.1 and can benefit other operating systems

  - Proper Firmware Versions – 5.0 Build 130 and 5.0 Build 140

Version 5.0 Build 160 – Release 3-18-20

- Bug fix when opening very large log files.Move "CAN Settings" to separate tab in IO ICF for CAN channels
- New Canned Ignition Types:
  - "Sniper Hyperspark Sequential" (4, 6, 8 cylinder; clockwise and counterclockwise) – For Sniper Hyperspark distributors
  - "Sniper Hyperspark TBI" – 1 pulse/fire non-sequential – For Sniper Hyperspark Distributors
  - Holley Dual Sync – For Holley EFI Dual Sync Distributors
- New Custom Crank Types:
  - 12 Tooth (even spaced)
  - 24 Tooth (even spaced)
  - 24-2
  - 32-2

The following table shows compatibilities of all the crank and cam combinations. Use of a non-allowed combination will bring up a warning message and the engine will not fire.

| Crank | Cam | | | | | | |
|---|---|---|---|---|---|---|---|
| N = not allowed | | | | | | | |
| | GM LSx 4x | Single Pulse | Chrysler V8 NGC | Coyote Cam Locked | Coyote VVT | Single Pulse Ignore | Not Used |
| LSx 58 Tooth | | | N | N | N | N | |
| LSx 24 Tooth | | | N | N | N | N | |
| 60-2 | | | | N | N | N | |
| 1 pulse/fire | | | | | N | | |
| 36-1 | | | N | | | | |
| Chrysler NGC 36-2+2 | N | | | N | N | N | |
| 12-1 | | | N | N | N | | |
| 24-1 | N | | N | N | N | N | |
| 12 Tooth | N | | N | N | N | | |
| 24 Tooth | N | | N | N | N | | |
| 24-2 | N | | N | N | N | | |
| 32-2 | N | | N | N | N | | |

- Proper Firmware Version – 5.0 Build 160

Version 5.0 Build 170 – Release 4-14-20

- Updates to fix font and icon size issues on high resolution computers
- Added checkbox to let user select original Holley EFI font type and size or select the user's system font
- Changed "Space X Axis Evenly" option to be in a disabled state when software is installed. This is an option for 1x16 graphs and the option affects all graphs. It can be found by right clicking on a 1x16 table.

    - Proper Firmware Version – 5.0 Build 160 and 5.0 Build 170

Version 5.0 Build 171 – Release 4-21-20

- Fix bug where "right click" isn't available on some tables
- Custom ignition type of 12-1 Crank and GM LSx 4x Cam was incorrectly shown as invalid.
- Resolved issue where Ignition Reference Angle wasn't correctly auto-populated when changing from HEI and TFI Ignition Types to other types.

    - Proper Firmware Version – 5.0 Build 160 and 5.0 Build 170


**FIRMWARE**

Version HEFI_5000300.eep (5.0 Build 30) – Initial Release 6-6-18

    – Compatible Software Versions - 5.0 Build 30 and 5.0 Build 31


Version HEFI_5001000.eep (5.0 Build 100) – Initial Release 3-20-19

- Revisions to Davis Technologies TC1/2. Any timing restore will be added in linearly by the restore rate.
- Nitrous timing hold updates when stage turned off via input 1-8 and rev limiter
- Drive By Wire Updates
    o Throttle body can be "awakened" from sleep position when pedal is moved
    o Updated peddle error detection
    o Updates to throttle body error detection
- Firmware update process revisions
- Resolved previous V5 CAN compatibility issues with Ti-VCT module. (which doesn't work properly in previous V5)

– Compatible Software Versions - 5.0 Build 100


Version HEFI_5001100.eep (5.0 Build 110) – Initial Release 4-24-19

- Resolved Water/Meth ICF issue with 5.0 Build 100.  When using an injector driver output to run a water/meth nozzle, the output did not operate properly.

  - Compatible Software Versions – 5.0 Build 110


Version HEFI_5001300.eep (5.0 Build 130) – Initial Release 9-20-19

- Drive By Wire Updates
  - Updated "Ford PN 7R3Z-9E926-AA, 9R3Z-9E926-A, 9C3Z-9E926-C (3V/GT500 Modular) and "Ford PN BR3E-9F991-AB/BR3Z-9E926-C (11-14 Coyote) to allow for lesser minimum throttle opening.  Update firmware if a low enough target idle cannot be met.
  - Drive By Wire Update – Extended Range on allowable Pedal limits during TPS Autoset.  Update firmware if pedal fails during TPS Autoset.
  - Updates to reduce false error detection.
- Updates made to Ignition Output Type "Points Output Fixed Duty Cycle (MSD)".  If you are using this type it is recommended to update firmware.
- Fixed bug with "After Start Holdoff" value.  Value previously was not being utilized.

  - Compatible Software Versions – 5.0 Build 130

Version HEFI_5001400.eep (5.0 Build 140) – Initial Release 11-18-19

- Operation is the same as 5.0 Build 130.

  - Compatible Software Versions – 5.0 Build 140


Version HEFI_5001600.eep (5.0 Build 160) – Initial Release 3-18-20

- Updates to Ignition Output Type "MSD Pro 600-8" – updates to cranking RPM output dwell time calculation
- Correct "Efficiency #" CAN channels from MSD Pro 600.  Values were reading double actual value.

  - Compatible Software Versions – 5.0 Build 160, 170, 171

Version HEFI_5001700.eep (5.0 Build 170) – Initial Release 4-14-20

- Operation is the same as 5.0 Build 160.

  - Compatible Software Versions – 5.0 Build 170, 171