TERMINATOR X

TERMINATOR X FIRMWARE & SOFTWARE REVISION LOG

The latest Terminator X ECU Firmware, Terminator X Handheld Firmware and Terminator X PC Software is available for download at www.Holley.com. The ECU and Handheld firmware are included in the Terminator X SD Card Contents as well as with the PC software. A full list of changes and improvements can be found in the PC software's included revision log.

It is recommended to update to the latest firmware on both the ECU and the Handheld at the same time. When updating the ECU the current calibration will be removed, requiring that the wizard be re-run or a saved calibration be loaded. It is recommended to download the calibration and save it to a computer before updating the ECU, you can then upload it back to the Terminator X.

Terminator X V2 Software is not compatible with Terminator X V1 ECU Firmware. To use V2 software with a V1 ECU, the ECU and handheld MUST be updated to V2 Firmware. Opening a Terminator X V1 calibration with Terminator X V2 software, will update the calibration from V1 to V2. A V2 calibration cannot be loaded into a V1 ECU. A Terminator X V1 calibration cannot be used in a Terminator X ECU with V2 Firmware.

The 3.5" TSLCD can be used to update the ECU & the Calibration from V1 to V2 when using Handheld Firmware V2 Build 50 (tslcd35-terx.2.0.50.fwu) or later.

Any Terminator X or Terminator X Max ECU can be updated to use V2 Firmware.

Latest Version 2 Compatible Firmware and Software	
Handheld Firmware	tslcd35-terx.2.0.80.fwu
ECU Firmware	SNEFI_02000800.eep
Software	VERISON 2.0 BUILD: 80

Latest Version 1 Compatible Firmware and Software	
Handheld Firmware	tslcd35-terx.1.8.2.fwu
ECU Firmware	SNEFI_010001300.eep
Software	VERISON 1.0 BUILD: 121

VERSION 2

GM LTx Direct Injection Support:

HANDHELD FIRMWARE: **tslcd35-terx.2.0.20.fwu** – Wizard Support for GM Gen V LTx Direct injection (L83, L86, LT1) & 4500 Terminator X Stealth Throttle Bodies

- Added additional system types and functionality to the wizard for new Engine Types
- When Non Timing Controlled Ignition type is chosen, "Ign Timing" parameter displays "N/A"
- Added additional injector lists and individual injectors to the Wizard Options:
    - Accel Injectors, FRPP Injectors, Bosch 210 & Siemens Deka 80

TERMINATOR X ECU FIRMWARE: **SNEFI_02000300.eep** – Phase 4 Terminator X ECU Firmware, Support for GM Gen V LTx Direction injection engines
- Added support for GDI controller
    - GM LTx VVT Control
    - GM LTx DI Fuel Pressure Control
- Added Pro-Dash Can Input Support (using V2 Pro Dash Firmware)

TERMINATOR X PC SOFTWARE: **VERISON 2.0 BUILD: 30** –Terminator X PC Software: Phase 4 Terminator X ECU Firmware

- GM Gen V LTx Direct Injection Calibrations added to the "Base Cals" folder
- Opens up supporting parameters for GM Gen V LTx Direct Injection Engines (L83, L86, LT1)
- Opens up Variable Cam Timing Table for GM Gen V LTx Engines
- Opens up parameter to support for Direct Injection Type
    - DI Target Fuel Pressure Table
- Opens up parameter to support TBI Injection Type: Terminator X Stealth 4500 8 Inj Throttle Body
- Added Ignition Types: GM GEN V LTx W/VVT & GM GEN V LTx Non-VVT (Locked Cam)
- Added additional injector drop downs
    - Accel Injectors
    - Ford/FRPP Specific
    - 210 lb/hr Bosch
    - 80LB Siemens Deka IV
    - GM GEN V LTx DI Injectors
- Added Pro-Dash Can Input Support (using V2 Pro Dash Firmware)

GEN 3 HEMI VVT & Chrysler 46RE Support:

HANDHELD FIRMWARE: **tslcd35-terx.2.0.50.fwu** – Wizard Support for Gen 3 HEMI VVT, SRV and 46RE Trans Control
- V1 to V2 Calibration/ECU Firmware Upgrade Feature
- Bug Fix – Custom Gauge Selection to Display Gauge Chosen

TERMINATOR X ECU FIRMWARE: **SNEFI_02000500.eep** – Terminator X ECU Firmware, Support for GEN 3 HEMI VVT & 46RE Trans Control
- Added support for Gen 3 HEMI VVT Control
- Added support for Chrysler 46RE Transmission Control

TERMINATOR X PC SOFTWARE: **VERISON 2.0 BUILD: 50** –Terminator X PC Software:

- GEN 3 HEMI VVT Calibrations added to the "Base Cals" folder
- Opens up Variable Cam Timing Table for Gen 3 HEMI engine Types
- Added Ignition Types: Gen III HEMI 60-2, with VVT

- Added Transmission Support: Chrysler 46RE (1996-2000.5, 2000.5+)

Universal Crank & Cam trigger updates:

HANDHELD FIRMWARE: **tslcd35-terx.2.0.50.fwu** –
- No changes

TERMINATOR X ECU FIRMWARE: **SNEFI_02000700.eep** – Terminator X ECU Firmware, Support CAN IO Modules and more crank sensor patterns
- Added support for CAN IO module
- Added support for new custom ignition types:
    - 24 tooth evenly spaced
    - 12 tooth evenly spaced
    - 36-2
    - 32-2
    - 24-2
    - 24-1
    - 12-1

TERMINATOR X PC SOFTWARE: **VERISON 2.0 BUILD: 70** –Terminator X PC Software:

- Added email tune and log support
- Added CAN IO module support
- Added missing tooth diagram to custom ignition setup
- Added new shift point calculator to trans icf.
- See rev log included in PC software for full list of changes.

2x4 Throttle Body Support:

HANDHELD FIRMWARE: **tslcd35-terx.2.0.80.fwu** –
- Added 2x4 4150 and 4500 throttle body options to wizard
- Added terminator X fuel injectors to wizard

TERMINATOR X ECU FIRMWARE: **SNEFI_02000800.eep** – Terminator X ECU Firmware

- Several small bug fixes and quality of life improvements
- See release notes included in PC software for full list of changes

TERMINATOR X PC SOFTWARE: **VERISON 2.0 BUILD: 80** –Terminator X PC Software:

- Added Dual pane navigation
- Added vertical markers for ET/MPH on data logs
- Added Terminator X injector data.
- Numerous other small fixes and quality of life changes.
- See release notes included in PC software for full list of changes

VERSION 1

Phase 1: LS Engines:

HANDHELD FIRMWARE: **tslcd35st_terx_01_04_0330.fwu** – Initial Terminator X Handheld Firmware

TERMINATOR X ECU FIRMWARE: **SNEFI_01000280.eep** – Initial Terminator X ECU Firmware, GM LS support

TERMINATOR X PC SOFTWARE: **VERISON 1.0 BUILD: 5** – Initial Terminator X PC Software Release

Phase 2: Universal MPFI:

HANDHELD FIRMWARE: **tslcd35st_terx_01_06_0440.fwu** – Wizard Support for Universal MPFI

- Added additional system types and functionality to the wizard for Universal MPFI
- Added Ignition Types: CD Box, Coil (-), Ford TFI, GM HEI, Holley Dual Sync, Magnetic, Sniper Hyperspark Distributors
- Added additional Map Sensor Selections:
  - N/A & Nitrous: 1 Bar (538-24), 1 Bar SS (554-133)
  - Turbo & Supercharged: 2Bar(538-13), 3Bar(554-107), 3.5Bar SS (554-134), 5Bar SS (554-108)
- Added 4 Cylinder & 6 Cylinder Support

TERMINATOR X ECU FIRMWARE: **SNEFI_01000101.eep** – Phase 2 Terminator X ECU Firmware, Universal MPFI support
- Bug Fix – Timing Modifiers based on CTS and MAT allows for X axis scale adjustment

TERMINATOR X PC SOFTWARE: **VERISON 1.0 BUILD: 102** –Terminator X PC Software: Phase 2 Terminator X ECU Firmware

- Various Calibrations added to the "Base Cals" folder
- Opens up parameters to support Universal MPFI ECU Firmware
- Added Ignition Types: CD Box, Coil (-), Ford TFI, GM HEI, Holley Dual Sync, Magnetic, Sniper Hyperspark Distributors,
  - Custom Crank Options include: 1X, 36-1 58x & 60-2
  - Custom Cam Options include: 1X, 4X LS
- Added Transmission Support: 2009+ 4L70E, AODE, 4R70W Early and Late
- Added 4 Cylinder & 6 Cylinder Support
- Added Support for High Flow Boost Control Solenoids (557-201)
- Added Support for 1 Channel Can EGT (554-184C) and 8 Channel Can EGT (554-186)
- Bug Fix – User now allowed to edit top scaling cell of Y axis in fuel table to match MAP sensor

Phase 3: Ford Coyote, Ford Mod Motor, Chrysler Gen 3 HEMI & TBI:

HANDHELD FIRMWARE: **tslcd35-terx.1.7.7.fwu** – Wizard Support for Ford Coyote, Ford Mod Motor, Chrysler Gen 3 Hemi & 4150 Terminator X Stealth Throttle Bodies

- Added additional system types and functionality to the wizard for new Engine Types
- Added filtering of selections in the wizard, dependent upon previous choices
- Added Ignition Types: Ford Coyote w/ Ti-VCT, Ford Mod Motor 2V/4V Waste-Spark Coils, Ford Mod Motor 2V/4V COP, Gen 3 Hemi 36-2+2 Waste Spark, Gen 3 Hemi 36-2+2 COP, Gen 3 Hemi 60-2 non-VVT

  tslcd35-terx.1.8.0.fwu – Updated Wizard, Programmed Injector Data Updated

  tslcd35-terx.1.8.2.fwu – Updated Wizard and Table Scaling Bug Fixed

- Gen 3 Hemi Spark Tables Updated
- Tables using CTS and MAT or MAP for X or Y axis scaling, now matches respective sensor scaling within Calibration

TERMINATOR X ECU FIRMWARE: **SNEFI_010001200.eep** – Phase 3 Terminator X ECU Firmware, Support for Ford Coyote, Ford Mod Motor, Chrysler Gen 3 Hemi & 4150 Terminator X Stealth Throttle Bodies
- Added support for Coyote Ti-VCT
  SNEFI_010001300.eep – Update for Chrysler DBW parameters

TERMINATOR X PC SOFTWARE: **VERISON 1.0 BUILD: 120** –Terminator X PC Software: Phase 3 Terminator X ECU Firmware

- Coyote, Mod Motor & Gen 3 Hemi Calibrations added to the "Base Cals" folder
- Opens up supporting parameters for Coyote, Mod Motors, Gen 3 Hemi
- Opens up parameter to support TBI Injection Type
  - Support for Terminator X Stealth 4150 4 & 8 Injector Throttle Bodies
  - Support for the Legacy Terminator TBI throttle bodies (550-405/406)
- Added Ignition Types: Ford Coyote Locked Cams, Ford Coyote w/ Ti-VCT, Ford Mod Motor 2V/4V Waste-Spark Coils, Ford Mod Motor 2V/4V COP, Gen 3 Hemi 36-2+2 Waste Spark, Gen 3 Hemi 36-2+2 COP, Gen 3 Hemi 60-2 non-VVT
  - Additional Custom Crank Options include: Chrysler NGC 36-2+2
  - Additional Custom Cam Options include: Chrysler V8 NGC, Ford Coyote Pass Side Intake Cam Locked, Ford Coyote Pass Side Intake cam w/ Ti-VCT
- Added additional injector drop downs
  - Coyote Specific
  - Gen 3 HEMI Specific
  - Ford/FRPP Specific (19 lb/hr, 24 lb/hr, 30 lb/hr)
  - Snake Eater Performance (SEP 850cc, SEP 1000cc, SEP 1500cc)

  VERISON 1.0 BUILD: 121 –Terminator X PC Software: Updated Data in Injector Drop Downs