

Version 2.035, 29-03-2017

- Bug from versions 2.030 – 2.034 with pullups when BT CAN stream enabled fixed,
- Gear detection bug fixed
- 1JZ/2JZ CAM#2 support added for faster synchronization
- For ALS pedal position is used instead of TPS
- Bug with CLT/IAT error code at device startup fixed
- DBW CAN BUS control is assigned to fixed ID 0x667

Version 2.034, 13-03-2017

- Copy / Paste functions for tables use windows clipboard (it is possible to copy tables cells to Excel)
- Race Technology dash serial stream fixed (low update rate)
- Honda S2000 CAM#2 support added for faster synchronization
- Swift 3rd gen CAN oil pressure switch support

Version 2.033, 10-03-2017

- Fix for user defined CAN

Version 2.032, 07-03-2017

- Fix for high DPI laptops displays,
- Golf R32 can stream added,
- User defined CAN stream UI improved,
- ALS max egt is now calculated using internal EGT as well as CAN EGT

Version 2.031, 06-03-2017

- Firmware 2.030 doesn't contain all listed features and fixes. 2.031 is the proper one

Version 2.030, 06-03-2017

- User defined CAN stream,
- CAN output added for Nitrous output,
- Differential controller oil pump maximum work time added,
- Differential controller behavior during Launch control could be defined,
- Check engine code added for differential control (when oil pump cannot build required pressure),
- Switch input could be used as Oil pressure sensor input,
- Nitrous active state added to the EMU CAN stream,
- Gear and gear ratio is calculated when speed source is CAN wheel speed

Version 2.029, 16-02-2017

- Lancer EVO CAN stream update: steering wheel angle, yaw rate
- Nissan 350ZX CAN stream coolant fan support added

Version 2.028, 16-02-2017

- USB packet timeout restored to the value from version 2.026 (fix connection issue on slow PC)
- EVO X CAN stream fixed
- Nissan 350ZX CAN stream added
- Lotus 2ZZ cable throttle CAN stream added
- Idle control PWM generator bug fixed (when the PC connected to device)
- Log based autotune bug fixed
- Bug with loading autos save logs fixed

Version 2.027b, 25-01-2017

- Connection time improvement

Version 2.027, 24-01-2017

- All inputs / outputs could be labeled by user (Show assigned outputs / inputs and press right mouse button to rename)
- Boost blend now works correctly with CAN Analogs
- USB communication improved
- Firmware upgrade time improved (25sec instead of 30 sec)
- Switch#1-#3 debouncing added
- Dwell error value is correct when spark cut occurs
- Visible min and max values for given channel are marked on the log
- Drawing log speed is improved by a factor of 5
- Open log window allows also opening EDL-1 files
- Numeric keypad could be used for entering table values

Version 2.026, 05-01-2017

- All pressure sensors are defined as 2 point 2D table. Each sensor has own x axis (voltage). **Due to this modification when upgrading from older firmware pressure sensors calibration should be corrected!.**
- Differential control added (for EVO 9,10) and Haldex,
- Differential oil pressure sensor added,
- Quick tune display log channels could be customized (right mouse button)
- New log groups (pressure and temperature)
- Crash when right mouse button was pressed on log group icon fixed

Version 2.025, 29-12-2016

- Lotus CAN stream fixed (fuel level and check engine status)
- Suzuki Swift 2nd gen CAN stream added
- TAB+Arrows allow to swap between windows

- Default deskto layout added

Version 2.024, 17-12-2016

- Output for VVTi control could be inverted (for HBRIDGE low side control)

Version 2.023, 13-12-2016

- Haldex 4gen control strategy added (requires modification of haldex module)
- Ignition outputs 4+5 could be paired
- PWM output signal generation bug fixed
- VSS max value increased to 500 km/h
- DBW calibration package included

Version 2.022, 08-12-2016

- DC Ref table in DBW configuration can be in function of target pos or throttle pos
- Tables processing speed optimized
- VSS value is calculated correctly when speed source is CAN
- Real time autotune improved (lock cells)

Version 2.021, 06-12-2016

- Idle DC correction in function of IAT
- Real time autotune improved

Version 2.020, 04-12-2016

- Wizard for temperature and pressure sensors
- Real time autotune replaces “K” key based autotune (experimental)
- Bug when restoring password protected device to factory state fixed

Version 2.019, 26-11-2016

- Internal MAP could be used as BARO when external MAP is used
- VIPER V10 trigger added
- Device delayed off using virtual output as off condition
- Renault Clio CAN stream fixed
- Help updated

Version 2.018, 18-11-2016

- DBW PWM control signal generation modified to decrease heat and lower the throttle noise
- Bug with initialization of DBW and FlexFuel input when there was CAN BUS error during startup
- Boost control solenoid can be disabled by switch / analog

Version 2.017, 04-11-2016

- PC USB communication improved
- ECM CAN switch board support improved
- PMU CAN communication improved

Version 2.016, 30-10-2016

- Support for CAN keyboard connected to PMU
- New temperature sensors added (gear box oil, differential oil, power steering fluid, pre IC)
- Default state for CAN keyboard can be defined
- Overrun fuel cut bug fixed (the cut was always performed above resume RPM)
- Tabs added for graph window to speed up switching between different log sets (shortcut keys from 1 to 6)

Version 2.015, 17-10-2016

- 8 CAN analog inputs added (from PMU device)
- 8 CAN Switches added (16 total)
- CAN support for CAN switch board (8 switches + 2 analogs) (CAN ID 0x666)
- 3 momentary switches added (could be controlled via CAN switch board or CAN keyboard)
- CAN ID for EGT moved to 0x660 and 0x661
- CLT engine protection bug fixed
- Now all BLACK files (log, calibration, scope, DL1 logger files) are associated with application and could be opened just by mouse click,
- Fuel cut reason log group added
- Graph log window improved:
 - Zoom extent
 - Channel autoscale
 - Scaling center is at the cursor
 - Extended popup menu (mouse button right) allow fast channel change or setup
 - Different line style (thin, thick, dots)
 - Up to 16 channels on the log

Version 2.014, 08-10-2016

- Bosch LSU 4.2/4.9 response speed improved
- Alternator control added
- When importing DL1 data logger data, log window refreshes correctly
- All files associated with BLACK (project, log, scope DL1 log) can be opened just by clicking

the file