CHANGE LOG

Version 3.044 07-02-2025

V2 IMPORTER

- Work in progress – Imports trigger settings and sensors.

CAN

- MQB platform support added.
- MQB platform added for Decode VW coding tool.

ACCELERATION ENRICHMENT (ACC ENRICH)

- Acc. CLT correction range increased to 250%.
- Async. Acc. CLT correction table added.
- Async. enrichment CLT correction bug fixed.

USER SWITCHES

- Flex Fuel input can be used as a switch input (switched to ground).

BUZZER

- Buzzer can be activated by function.

TACHOMETER (TACHO)

- Bug from version 3.044 fixed.

OUTPUTS

- Electric water pump control added.
- Volvo EHPS (power steering) support added.

FUNCTIONS

- Bitwise AND bug fixed.

IDLE CONTROL

- Idle ON if MAP over bug fixed.

GEAR SHIFT

- Min TPS to cut and 89iiiuuuuuuuuuMax TPS to blip parameters added.
- Gear shift can be initiated by gearshift sensor (Lever configuration).

KNOCK CONTROL

- Per-gear gain added.

HELP

- Added all log channel bitfields and enumerations to functions help.

DRIVE-BY-WIRE (DBW)

- Boost target limit table added (allows boost control under minimum spring load).

KNOCK SENSORS

- Restore rate previously always worked as 1° per cycle – Fixed.

TRIGGER WIZARD

Supported engines:

- BMW E36 M52B20, M54

- BMW E46 N42B18

- FORD FOCUS MK2 ST225 B5254

- LEXUS IS200 1G-FE

- NISSAN VQ35

- VW R32 BUB, BFH

Version 3.043 07-01-2025

CUSTOM AXES

- Added support for Baro.

FUEL PUMP

- The fuel pump state now reflects the actual state of the pump (previously influenced by the "Invert output" option).

- Added a fuel pump test option to facilitate fuel system testing.

TACH OUTPUT

- Added a second switchable RPM multiplier.

PRESSURE SENSORS

- Added support for a nitrous sensor.

- Code size optimizations.

GENERAL

- Code size optimizations.

CAN BUS

- Improved support for Renault Clio 3RS (AC request, fuel consumption).

- Improved stream for Subaru GH.

HELP

- Updated the ignition section.

- Updated the DSG section.

CANBUS

- **Polaris RZR 2024** support added.

- **DSG (Direct-Shift Gearbox)**

    - Torque reduction ignition and cut tables added (requires further testing).

    - DSG gearbox torque reduction request log channel added.

IDLE

- Cycling idle **Cut RPM** and **Resume RPM** minimum values limit lowered (1000 and 500).

- Ramp-down delay functionality added.

SHORT TERM TRIM

- Rich and Lean limits are now 2D tables as a function of airflow.

KNOCK CONTROL

- Fuel/spark cut delay default value set to **250ms**.

CUSTOM AXES

- Injectors' **Duty Cycle (DC)** range issue fixed.

- **Boost target** added as a channel for all custom axes.

VVTI & VTEC

- Minimum engine oil temperature parameter added.

DBW (Drive-by-Wire)

- **ITB (Individual Throttle Body) mode**:

    - When parameter **Disabled** and no RPM is enabled, the DC is set to **-100%** (no output current).

LOGGING

- Min/Max flags visibility now follows global settings.

CLIENT SOFTWARE

- **TPS default values** for VE table in **Alpha-N strategy** corrected (**0-100%** instead of **0-20%**).

- **Tree view items**:

    - Double-clicking now closes the existing frame on the desktop.

- **Autotune 3D window**:

    - Properly refreshes the **X-axis bins** (**MAP ↔ TPS**).

- **Trigger Wizard**:

    - Nissan **350Z (VQ35)** trigger wizard added.

- Various bugs fixed.

Version 3.041 11-11-2024

Trigger Types

- Renix Triggers Added and Tested:

    - Renix 66-2-2-2 (Renault Alpine) and Renix 44-2-2 (Clio Williams) triggers have been implemented and validated on the bench.

Paddle Shift

- Downshift Preload Time:

    - Minimum value reduced from 10 ms to 2 ms for improved responsiveness.

Launch Control (LC)

- Prestage State Added:

    - A new prestage state is introduced for enhanced control.

- Bug Fix:

    - Issue with entering the exit state during target RPM changes has been resolved.

Boost Control

- CO2 Control Strategy Added:

    - Implemented a new CO2-based control strategy for precise boost management.

Sensors

- Wastegate Dome Pressure Sensor Added:

    - Support for wastegate dome pressure monitoring integrated.

DSG (Direct Shift Gearbox)

- ESP Data Sharing:

    - ESP now sends data to the traction control strategy.

- Torque Reduction Handling:

    - Traction control torque reduction is applied to the CAN engine torque value.

- Logging Improvements:

    - Torque % and Actual Torque (Nm) channels now reflect corrected torque values.

Traction Control (TC)

- ESP Torque Reduction Mode Added:

    - A new mode that incorporates ESP torque reduction into the strategy.

Drive-By-Wire (DBW)

- Autocalibration Bug Fixed:

- Fixed TPS voltage direction issue in the DBW autocalibration tool.

- **Timeout Definition:**

  - CAN control timeout can now be defined for more flexible configurations.

Client Software

- **CSV Export:**

  - Resolved issues with CSV data export functionality.

- **Crash Fixes:**

  - Fixed crashes related to:

    - Opening windows using the keyboard.

    - Exiting the application when all desktop windows are closed.

- **Trigger Type Translation:**

  - Updated to immediately reflect the number of teeth when trigger types are translated.

- **Comment Editor:**

  - Enhanced for better usability.

- **Help Panel Resizing:**

  - Adjusting the help panel no longer restarts text display from the beginning.

Log Groups

- **Channel Sorting:**

  - All channels are now sorted across log groups for easier navigation and analysis.