

# **eSCAN** release notes:

## **Revision History:**

### **04/29/2018: Rev 1.3.4:**

- Very large update to Volumetric Efficiency baseline database.
- Added Volumetric Efficiency support for pressurized induction systems (please note that these can vary more than naturally aspirated engines).

### **02/19/2018: Rev 1.3.3:**

- Added a component that was missing from the 1.3.2 installer

### **01/08/2018: Rev 1.3.2:**

- Major compiler update for more powerful functionality in future updates.
- Updated Mode06 Jaguar, Landrover, and Nissan.
- Updated DTCs Mini & Landrover.
- Minor enhancements to GUI.

### **05/26/2017: Rev 1.31:**

- Added EScan Elite Manual.
- Updated custom VE information from VIN lookup for better VE tests.
- Improved Compression Test for six cylinder engines.
- Allows custom VIN entry in case there is an issue with the VIN read from the DLC.
- Fixed issue where "L Brake Pull" was saying "R Brake Pull" when activated.

### **04/11/2017: Rev 1.30:**

- Updated VIN Database lookup to cover vehicles through 2017.
- Updated BMW, added Mini, and made minor changes to other sections of Mode 6 data.
- Added reminder message to remove VCI from OBDII port when program exits.
- Enhancements to EScan Elite Accelerometer Tests.
- Enhancements to EScan Elite Relative Compression Test algorithm.
- Changed EScan Elite Relative Compression Test to allow test to run via Bluetooth instead of USB only.

### **01/27/2017: Rev 1.28:**

- Kia-Hyundai Mode 6 non-CAN update.
- Added Audi to CAN Mode 6 database.
- Added to scaling capabilities of CAN Mode 6 database.
- Added X axis on Dual/Combo graph and moved up slide bar to make it easier to compare the two graphs.
- Minor documentation update.

### **10/12/2016: Rev 1.27:**

- Added "Total Fuel Trim" indicators to Info tab.
- Added "Maximum/Average" selector to Fuel Trim tab.
- Added Average/Maximum selector to Temperature Table.
- Added time indication arrow to Temperature Table.
- Fixed EScan Manual shortcut to point at new PDF manual instead of old Flash File.
- Added VW CAN Mode6 data.
- Minor Edit to Volvo CAN Mode 6 data.
- Minor Edit to non-CAN BMW section.
- Fixed problem with non-CAN Mode 6 lookup that was in last release.

### **06/23/2016: Rev 1.26:**

- Added or updated Mode 6 data for BMW, Honda/Acura, and Volvo.
- Added option to enter VIN decode info on main screen if VIN gets entered manually.
- Added help descriptions for "Clear All", "Enable Info PIDs", and "Units" on the PIDs tab.
- Changed how Diesel selects VE TP Type

### **03/18/2016: Rev 1.25:**

- Enhancements to the WRAF Catalyst Efficiency test.
- Updated Mode 6 for GM, Ford, Chrysler, Hyundai and Kia.
- Replaced EScan manual with an entirely new PDF manual.
- Updated several of the '?' help text sections within the EScan built-in help.
- Changed EScan icon and Logo.
- Enhancements to the Temperature Test.
- Added VIN to saved reports.
- Added VIN Decode Information to main screen.
- Updated VIN Database.

### **12/10/2014: Rev 1.24:**

- The EScan will now identify what type of vehicle (make, model, and engine) is connected.
- Wide Band Oxygen Sensors now work with the Info alert lamps.
- Volumetric Efficiency Test Has over 700 scaled engines and will now display if engine is scaled or the EScan is running in generic mode.
- NEW: VE/TFT comparison test. This test will compare the Volumetric Efficiency Test data with the Total Fuel Trim Test data in order to quickly diagnose fuel control and engine performance problems.
- Power test will now give you the expected Horsepower of the engine being tested, and the expected elevation corrected Horsepower at the test site.
- Fuel Efficiency test will calculate how the fuels energy was used to move the vehicles weight.
- Catalytic Efficiency Test will now use Wide Band Oxygen Sensors for catalyst testing.
- Temperature test will give you the rate at which the coolant has gained heat energy and can be used to diagnose the cooling system.

### **6/13/2014: Rev 1.23:**

- Setup for 1280x728 screen size default (wide screens). Do not install this update if your screen resolution is less than 1280x728.
- GM Mode 6 data updated to present date.
- Fixed problem when hold was turned off but data wasn't loaded the chart selects would reset to default.
- Fixed cosmetic issue on Cat Eff Tab text on lower two LED's that were overlapping.
- Added "DTCs:VIN" to UpdateVIN so the variable gets updated here as well as at startup.

### **01/03/2014: Rev 1.22:**

- The EScan now talks to you! The Info lights have voice commands that speak as the lights change so you can hear what is happening while doing test drives. This can be disabled or re-enabled on the main screen with the "Enable Voice Status" button.
- The "Sharpshooter/Sim Inj" tab has been removed since it is not needed.
- The "Sharpshooter/Auto Diag" has been removed since the Easy button has been replaced with the voice commands.
- The EScan installer script has been updated to work properly with Windows 8 and Windows 8.1 computers.

### **09/05/2012: Rev 1.21:**

- Made PCM addressing changes to KWP2000 protocol that will fix connection problems with some VW s, Audi s, Volvos, and other makes.
- Made PCM addressing changes to 11-bit CAN protocol that will fix connection problems with some VW s, Audi

s, Volvos, Range Rovers, Hondas, and other makes.

- Made PCM addressing changes to 29-bit CAN protocol that will fix connection problems with some VW s, Audi s, Volvos, Range Rovers, Hondas, and other makes.

- Updated "OBD Requirements to Which Vehicle is Designed" to include KOBD and several other new results.

### **3/24/2011: Rev 1.20:**

- Added ability to auto adjust window size when increasing for larger screens.

- Added option to print with grey background on graphs to save ink.

- On Tools Menu, if no other tools are found it will say "No Other Tools Installed" instead of saying nothing.

- Changed the installation directory from c:\Program Files to c:\Automotive Test Solutions to keep all ATS programs, settings, and data files in one location that Windows will not prevent access to.

### **1/12/2010: Rev 1.19:**

- Optimized to work better with Windows 7 and 64-bit Windows.

- Made changes to 1024x574 Netbook size option to use scroll bars, to remember and reload 1024x574 Netbook settings on startup, and to resize TR page.

### **10/28/2009: Rev 1.18:**

- Added "Size to 1024x574 (Netbooks)" option under Window menu. This will automatically adjust window size to fit Netbooks that have 1024x600 pixel resolution.

- Changed data and Tool paths to be compatible with the default c:\Program Files (x86)\ folder that the EScan gets installed in on

Windows 64-bit.

- Modified report loading to properly display PID data that was saved in report.

- Fixed spelling of Volkswagen on DTC's and VE table.

- Updated EScan Flash based user manual to cover latest version of EScan usage and installation.

- Changed all Flash based help files and videos to maximize on screen by default. This will force them to fit on any screen (big or small). They can still be adjusted to any other size manually.

### **9/10/2009: Rev 1.17:**

- Added Porsche Mode 6 Data.

- Updated and simplified Chrysler Mode 6 Data.

- Updated and simplified Mitsubishi Mode 6 Data.

- Added feature to automatically set the EScan serial port number, customer no longer needs to set the port manually.

- Improved the Auto Search function.

- "X" in upper right corner now works to close program.

- Added driver install for new Blue USB to Serial Bridge.

### **6/9/2009: Rev 1.16:**

- Updated 29bit CAN coverage for the non-Pro EScan VCI.

- Enhanced Pro VCI's auto initialization routine.

### **4/20/2009: Rev 1.15:**

- Improved automatic OBDII bus type search for EScanPro (does not affect original EScan).

- Changed Freeze Frame to readout all Freeze Frames instead of just selected Freeze Frame.

- Added automatic readout of Freeze Frame data.

- Added delay between clearing and re-reading DTCs for vehicles that don't reset the DTCs instantly.

- Modified CAN filter when clearing DTCs to allow reading of DTCs from any responding modules.

### **2/10/2009: Rev 1.14:**

- Enabled 29bit CAN bus.
- Mode6: Added Mitsubishi CAN coverage.
- Mode6: Edited Honda CAN & added 2008-2009 years.
- Added several VE custom engine setups

### **3/11/2008: Rev 1.13:**

- Added CAN addressing and filtering to decrease the possibility of reading incorrect DTCs, Mode6, or other data.
- Made the faster multi-PID CAN mode work better on vehicles that previously would not work in this mode such as Chryslers.
- Changed temperature checks to also work if engine is not running to alert bad sensor readout when the engine is stopped.
- Added "Get Veh.Inf." button on main EScan tab that will read additional Mode9 data (Cal. IDs, Cal CVN#,s, and IPT) besides just the VIN like was done previously.
- Added "Mark Continuous Data (Page Up)" button that will mark points on data that is being saved continuously. This is to remember significant events in time while doing a long record.

### **11/14/2007: Rev 1.12:**

- Fixed a problem in rev 1.11 that prevented calculated PIDs from being displayed in the graphs or digital readouts. No other changes were made in this release.

### **10/25/2007: Rev 1.11:**

- Enabled SharpSHOOTER Power tab.
- Enabled "Set Engine" selector on VE page that uses more accurate VE calculations on engines in database. Note that our database of engines will continue to grow over time. This will make VE calculations for specific engines more accurate than the generic engine setting.
- Added Pop-up to show O2 sensor locations for different vehicles. There is a new button on the Monitors, O2, and SharpSHOOTER/Cat Eff tabs that allows you to access drawings of O2 sensor locations for different engines.
- Added Speed to Temperature Chart
- Added EID CAN bus protocol which is used on some CAN vehicles.
- Added error note to the Catalyst Efficiency test about setting the proper Front & Rear O2 sensors for each bank.
- Fixed problem where Info light gray-out would flash grayed and then ungrayed at startup.
- Changed Mode 6 CAN to not show yellow (close to limit) if Min, Max, and Values are equal.
- Added Jaguar, Mercedes, and Suzuki to manufacture specific DTCs.

### **5/7/2007: Rev 1.10:**

- Added independent scales to Dual/Combo graph and auto scaling to each trace.
- Added 50 points to possibilities for #points graphed (shows finer resolution).
- Added to Toyota Mode6 coverage.
- Fixed a problem that caused KWP2000 communications error in Rev 1.09.
- Removed Vacuum tab because Vacuum (MAP sensor) will soon be used as an option on the Volumetric Efficiency tab as another way to calculate Volumetric Efficiency. This is expected to be released with version 1.11.
- Windows VISTA support: Note that NI VISA 4.1 or newer driver is required (see driver below).
- Now works with Belkin USB/RS232 adapter (see driver below).
- Now works with Bluetooth wireless.
- We still recommend using Windows XP because VISTA is new and hasn't been fully tested in multiple circumstances on multiple computers.

### **4/2/2007: Rev 1.09:**

- Trouble Shooting Examples: Added "TR" button to access popup screen with several examples of how to use the EScan to troubleshoot drivability problems. Note that more and more examples will be added over time.
- Sharp SHOOTER Volumetric Efficiency: Added TAF and VE calculated PIDs. Changed labels on VE page.
- Added VE calculation info to VE help text.

- Changed default VE corrections.
- Added Air Temp and Altitude to VE Pop-up.
- Added VE Entered Info pop-up to calculated VE and TAF PID select.
- Sharp SHOOTER Catalyst Efficiency: Subtracted 10% for each color range (i.e. doesn't turn yellow until below 80% instead of 90% like before).
- Sharp SHOOTER Temperature: Enabled initial Sharp SHOOTER temperature warm-up rate functionality.
- Graphs: Changed max graph points to 5000.
- Enabled Stacked & Dual/Combo graph scroll bars, measurement arrow, and "Number of Points Displayed" whenever Hold is on.
- Added "None" to data channel select options.
- Added the ability to select the PID order of graphed loaded data.
- Significantly speeded up PWM (Ford) communication rate.
- Fixed error that would occasionally cause incorrect fuel trim readings due to multiple ECUs responding (seen on VPW).
- Fixed error that would occur on some CAN vehicles when duplicate DTC or Pending code responses occurred.
- Fixed error that prevented some higher level PIDs from being available.
- Windows VISTA Support: We now have the EScan working in VISTA but only under specific circumstances.
- Presently, we've only been able to use it on computers that have built in RS232 ports or with the IOGear "ATEN" USB/RS232 adapter with updated drivers installed.
- The Belkin USB/RS232 adapter and the BlueTooth adapter that we normally sell do not yet have VISTA drivers from their manufactures.
- We still recommend using Windows XP but will continue to work towards better VISTA support.

#### **1/26/2007: Rev 1.08:**

- Added setup option to change bus type from automatic to specific bus type.
- Added options to change sensors used on CE test.
- Mode6: Updated Chrysler Data through 2007.
- Updated Honda/Acura Data through 2007, including CAN.
- Added Isuzu Data.
- Added Honda Passport Data -Same as Isuzu Data.
- Added SAAB Data, including CAN.
- Added several Saturn and Cadillac vehicles.
- Fixed problem where last out of set of CAN Mode6 bytes was ignored on some multi OBDMID/TID combinations.
- Fixed problem with cross rate in calculated PIDs (rates displayed were swapped).
- Added Temperature Compensation for VE calculation.
- Added prevention of erroneous HEX valued DTCs and Pending Codes unless values are in database.

#### **10/15/2006: Rev 1.07:**

- Fixed problem with vehicles that had non-PCM ECUs respond first. This problem was usually noticeable if only a few PIDs showed up on PID list and occurred on some Chryslers and other ISO vehicles. This version of the EScan distinguishes the PCM ECU from others.
- Some Mode6 and DTC explanation changes.
- Info tab "# Codes" now updates after clearing DTCs.
- Minor speed improvements.
- Improved accuracy of PID Time calculation.

#### **9/18/2006: Rev 1.06:**

- Numerous Mode6 changes and additional coverage.
- Added option to read all or read selected Mode6 data continuously.
- Added help buttons for "Mode6" and "DTCs" tabs.
- Fixed VIN reading for non-CAN vehicles.
- Changed Monitors to more visible LEDs instead of check boxes.

- Re-arranged Monitors layout to be more logical.
- Added "Monitors Complete" indicator and monitors "# not run" to Info tab.
- Added additional support of ISO vehicles.

#### **8/24/2006: Rev 1.05:**

- Added Options screen that allows changing of CAN multiple PID read mode and Demo Mode.
- Added initial Sharp SHOOTER™ Vacuum tab.
- Multiple Mode6 changes: Added and modified data for multiple manufacturers.
- Info/Time to Engine Temp: Added Orange color and "Warming Too Fast" if warming too fast. - Added "Warming Too Slow" text for warming too slow.
- Fixed problem with non-CAN Mode6 reads if I16 data.
- Added Text Reports: Save, Load, and Print Text Report Data buttons on Controls tab.
- Added Demo Mode button to make it easy to change on & off.
- Added Animated Help Videos for Fuel Trim and Volumetric Efficiency.

#### **7/24/2006: Rev 1.04:**

- Added routine to automatically search for and find the serial port that the EScan is connected to. Also added an indicator for the EScan being in or out of demo mode.
- Mode 6 changes: Fixed problem with reading low limits. Added Mode 6 data for GM, Chrysler, and Ford.

#### **7/7/2006: Rev 1.03:**

- Mode 6 changes: Added Nissan, Added additional vehicles for Toyota and Lexus, Changes to Chrysler data, added Honda/Acura data. Alphabetized Makes and made other minor changes.

#### **6/20/2006: Rev 1.02:**

- Mode6 changes to Chrysler data and added Honda/Acura data.
- Changed MIL Info Light and #DTCs to also read pending codes and be yellow if pending.
- Changed order of tabs (DTCs & Monitors earlier).
- Added VE Multipliers to screen.
- Added yellow background color to Mode 6 Test Value background if close to limit.

#### **6/13/2006: Rev 1.01:**

- Added different color background on PID list to distinguish Calculated PIDs.
- Changed requirements for Cat Test Rear O2 to turn green.
- Added note to "snap throttle twice" for the O2 test.

#### **6/11/2006: Rev 1.00:**

- Initial Release.