

iEA Release Notes and Revision History:

12/29/2021 Rev 1.1.8:

- Added 4 Cylinder, 1-2-3-4 Firing Order.
- Added 8 Cylinder, 1-2-7-8-4-5-6-3 Firing Order.
- Added 8 Cylinder, 1-8-7-3-6-5-7-2 Firing order.
- Fixed issue with 4 channel mode on MultiTool.

09/25/2021 Rev 1.1.7:

- Added option to switch MultiTool Graph to 4 channels instead of 8 for larger channel viewing.
- Changed range for H2O sensor to be OK to make more accurate checks.
- Added "1-2-7-8-4-5-6-3" to the 8-cylinder firing orders.
- Fixed typo on Setup Screen from "bet Tested" to "be Tested".

09/25/2020 Rev 1.1.6:

- Updated default file path location.

08/13/2020 Rev 1.1.5:

- Now supports the new eSCOPE ELITE8 along with the eSCOPE ELITE4 with the same program.
- Note that '4' was removed from the iEA ELITE name and program will auto-detect if the hardware is an eSCOPE ELITE4 or an eSCOPE ELITE8.
- Manual was converted to a format that will not cause issues with virus programs.
- Added Annotation Color controls
- Changed to new file format that includes multiple pieces of information about file within the file itself.

06/14/2019: Rev 1.1.4:

- Measure Raw Strip Chart mode automatically switches between 2 Channels enabled in Misfire mode and 4 Channels enabled in Compression mode.
- While manually Marking Cam Shaft, the program no longer goes to Compression tab if not setup and running to avoid pop-up error.
- Measure has new Frequency Plot option that plots frequency changes over time.
- Measure now calculates Deg instead of Deg/ms
- Measure now adjusts Deg as you move cursors after initially set.
- Measure adjusts Cylinder Marking as you adjust #Cyls and Offset.
- Measure now sets Offset default to 0.00 to avoid confusion.
- Measure now default binary file names to .rec instead of .bin but both still work the same.

02/14/2019: Rev 1.1.3:

- Added ability to change printer from default and to disable header on print outs
- Added ability to remember a zoom location (Zoom Set) and to return to that zoom location (Zoom Back) on Measure screen
- Added calculator to Measure screen to pop-up Windows Calculator
- Added "RPM" and "deg/ms" indicators that calculate when "Mark Cam Shaft" or "Mark Cylinders" buttons are pressed
- Added option on preferences screen to use thin scope lines
- Added "Exhaust Valve Opening" and "Intake Closure" setpoints on Setup tab and on Controls tab indicators
- Added "Scaled Engine" and another indicator showing multiple possible problems on the Controls tab.

- Added 30 Deg tick marks to Compression and Measure live data graphs

01/09/2018: Rev 1.1.2:

- Added version that supports eSCOPE ELITE4.
- Now installs with appropriate eSCOPE installers.
- One version works with eSCOPE PRO & LIMITED and another version works with eSCOPE ELITE4.
- Major compiler update for more powerful functionality in future updates.

7/13/2016: Rev 1.09:

- Added Pressure Testers video tutorial that used to be a separate video to main program. New icon that works better with all backgrounds.

6/20/2016: Rev 1.08:

- New Logo and Icon, minor 1999 BMW V8/12 changes.

7/16/2014: Rev 1.07:

- Revision 1.06 had the incorrect scaling factors for the 300 psi and 30" Hg sensors. This has been fixed and is very important to install version 1.07 if presently using 1.06. Note that revisions 1.05 and earlier do not have this problem.
- In misfire mode, an error will often pop-up warning "!! Not Connected or Poor Connection !!" if using the latest +/-25" H2O sensor even when the sensor was working properly. This issue has been resolved.

6/13/2014: Rev 1.06:

- Setup for 1280x728 screen size default (wide screens). Do not install this update if your screen resolution is less than 1280x728.
- Updated multiple GM and other firing patterns.
- Added file loaded file name to be displayed on front panel text.
- Fixed problem on preferences screen that locked up application if you closed window using 'X'.
- Added Rev2 30HG and 300PSI pressure sensors.
- Modified scaling for Rev2 of Vacuum and 300 psi sensors.

2/03/2012: Rev 1.05:

- Updated scaling for newer pressure transducers.

3/24/2011: Rev 1.04:

- Added multiple Engine block pictures and firing orders through the year 2011.
- Added new Flash based user's manual that can be accessed from the Help/EMissFireDetector Manual menu.
- 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.

12/22/2009: Rev 1.03:

- Optimized to work better with Windows 7.
- Added "Size to 1024x574 (Netbooks)" option.
- Allowed user to close window (X).
- Changed zeroing routine.

- Changed Trigger setup to work better with original eSCOPE

03/04/2009: Rev 1.02:

- Added numerous engines to engine database and updated some of the images.
- Updated setup pictures to have more detail and reflect new setup for compression.
- Enabled demo mode playback of binary (.bin) files. Previously this was limited to one second text (.txt) files. Also made playback mode speed similar to actual data collection speed (it's much faster!). Program will now automatically switch between default Misfire and Compression demo files unless a custom demo file has been selected.
- Added "RPM" indicator to "Measure" tab.
- Made significant changes to Compression analysis including the following:
- Added "Camshaft Timing" analysis for intake and exhaust camshaft timing.
- Added "Ignition Timing" analysis.
- Added "Approximate Idle" analysis
- Added "Expected Compression" analysis for both "Cranking" and "Snap Throttle".
- Added "Vacuum" analysis that compares calculated vacuum in cylinder to vacuum measured from Hg sensor at vacuum port.
- Compression (300 psi) sensor is now to be used on Channel 3 and Vacuum (30"Hg) sensor is now to be used on Channel 4. This allows Misfire (20"H2O) sensor to be left on Channel 1 when switching between Misfire and Compression testing.

10/5/2008: Rev 1.01:

- Modified sensitivity limits on automated adjustments.
- Enabled report generation for misfire results.

9/12/2008: Rev 1.00:

- Major enhancements to automated misfire analysis accuracy.
- Enabled "Steady Miss", "Random Miss", "Bank 1 Miss", and "Bank2 Miss" indicators.
- Simplified some of the misfire setup adjustments. There is now a "Coarse Sensitivity" and "Fine Sensitivity" adjustment to increase sensitivity of detections.
- Changed calculation for "Misfire %" to be based on recent history instead of all history since counting began.
- Setup MISFIRE/COMPRESSION modes to ask mode at startup. Depending on which mode is selected, items on Configuration, Misfires, and Compression tabs will disappear if they do not apply to configuration. Switching between modes is easier to understand.
- Edited and added more help that displays when you press the '?' buttons on each tab