



Vehicle Diagnostic Kits

PicoScope Oscilloscopes

NVH Diagnostics

Pressure Transducers

EV Solutions



PicoScope® improves diagnostic efficiency and repair reliability



PicoScope® 4225A And 4425A

PicoScope® Diagnostic Oscilloscopes are designed to improve vehicle repair efficiency. Available in 2 and 4-channel models, a PicoScope measures changes in current, voltage, temperature, pressure, and other variables in a vehicle's components and systems. It then displays those results as a waveform, on a connected PC or tablet, to help repair technicians accurately diagnose faults and confidently recommend fixes. Most importantly, a PicoScope can help eliminate unnecessary tear-down, wasted labor, and costly part-replacement guesswork. Packaged with selected probes, leads, adapters, and accessories, PicoScope kits are available for a range of budget levels and supported capabilities.

A PicoScope diagnostic oscilloscope can help:

- Connect and run over 155+ Guided Tests in its built-in library
- Find troublesome intermittent faults
- Test many components/systems with minimal teardown
- Investigate issues with no, multiple, or misleading fault codes
- Diagnose charging and starting faults
- Trace problems with actuators not monitored by the ECU
- Perform CAN/Communication bus analysis
- Identify mechanical problems
- Locate and correct challenging NVH issues
- Provide objective data for manager/customer discussions



A Good Place To Start

PQ176 - PicoScope® 4425A Starter Kit



PicoScope 4425A
PicoBNC+ premium test leads (4)
Flexible backpinning probes (2 red, 2 black)
Small crocodile clips (2 red, 2 black)

Battery clip (1 red, 2 black)
Multimeter probe (1 red, 1 black)
USB cable 1.8m

Also available:
PQ175 PicoScope 4225A (2 Channel) Starter Kit

PQ178 - PicoScope® 4425A Standard Kit



PicoScope 4425A
60 A AC/DC BNC+ current clamp
2000 A AC/DC BNC+ current clamp
Standard (ATC) fuse extension lead
Mini (ATC) fuse extension lead
BNC+ secondary ignition pickup (2)
BNC+ COP and signal probe
3m BNC+ premium test leads (4)
Flexible backpinning probes (4 red, 4 black)
BNC+ 10:1 scope leads
Backpinning probe set

Small crocodile clips (2 red, 2 black)
Battery clip (2 red, 2 black)
Multimeter probe (2 red, 2 black)
S-hook
Shrouded to unshrouded adapter (4 red)
HT extension lead (2)
USB cable 1.8m
Carry case

Also available:
PQ177 PicoScope 4225A (2 Channel) Standard Kit
PQ222 PicoScope 4425A (4 Channel) Vehicle Assessor Kit

The PicoBNC+® Intelligent Probe Interface

PicoBNC+® connectors add some unique capabilities to PicoScope 4225A and 4425A oscilloscopes. Part of our **Intelligent Probe Interface**, these enhanced inputs allow the scope to recognize attached accessories, power them as necessary, indicate active channels, and auto-match measurement units between the software and probe to reduce errors. They're also backwards compatible, as standard BNC inputs, for older accessories while opening the door for more robust features in the future.



PicoScope® Software PicoScope® 7

PicoScope Automotive App

Product descriptions, application examples, how-to videos and more



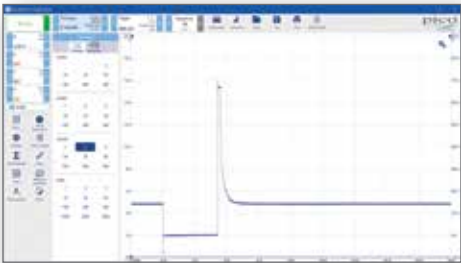
PicoScope® 7 is the next-generation user software for PicoScope diagnostic oscilloscopes made popular by OEM and independent repair technicians worldwide. It is the clean, simple interface that provides functional access to all the performance and efficiency a PicoScope has to offer. Available for the Windows, Linux and Mac operating systems, PicoScope 7 can be downloaded at any time for free. You can even try it for yourself, in demo mode with no scope attached, to see how it works.

Visit: www.picoauto.com/downloads

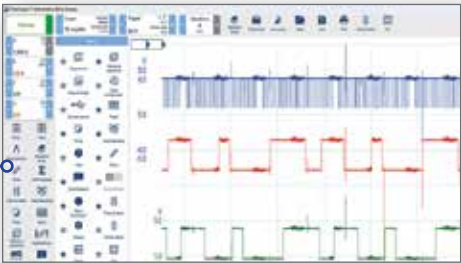
With more and more PCs and other devices being built with **Touch Control** capabilities, PicoScope 7 now gives you the freedom and flexibility to tap, push, expand, and drag your way to a more convenient diagnostic experience.



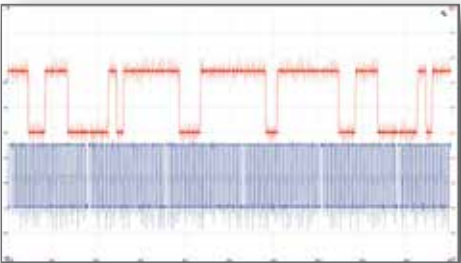
With PicoScope 7, **Navigation** is streamlined. Tools, settings, and resources can all be accessed in one or two clicks, with adjustments made quickly and easily by mouse or keyboard. Situational fly-out menus, icons, and large, clear labels make for a great user experience.



More than 30 advanced features (such as serial decoding, math channels, masks) can be selected and pinned to a personalized **Favorite Functions Menu**. This keeps the most often used features immediately available to maximize workflow flexibility and time efficiency.



PicoScope 7 includes a comprehensive set of improved **measurement, mask, filter and math channel functions**. It also supports the display of multiple waveforms at the same time, divided subsection views on the same screen and even the full screen devoted to a waveform.



Great Ways To Add Capabilities

PQ180 - PicoScope® 4425A Advanced Kit



- PicoScope 4425A

60 A AC/DC BNC+ current clamp

2000 A AC/DC BNC+ current clamp

BNC+ temperature probe

2 Pin breakout lead

Maxi fuse breakout lead

JCASE fuse extension lead

Breakout lead 2 pin ACS

Breakout lead for ATC style fuses

Extension lead for mini style fuses

BNC+ secondary ignition pickup (4)

Earth wire for coil pack

BNC+ COP and signal probe

BNC+ resistance test lead

HT extension lead (4)

Professional breakout lead set

3m BNC+ premium test leads (4)
- Flexible backpinning probes (4 red, 4 black)

BNC+ 10:1 scope leads (2)

Backpinning probe set

Small crocodile clips (2 red, 2 black)

Battery clip (2 red, 2 black)

Large dolphin clip (1 red, 1 black)

Multimeter probe (2 red, 2 black)

Ultrasonic parking sensor detector

S-hook (2)

Shrouded to unshrouded adapter (4 red)

USB cable 1.8m

4.5m USB cable

Carry case

Ask about:
PQ184 PicoScope 8 Channel Professional Kit

PQ194 - PicoScope® 4425A Master Kit



- PicoScope 4425A

60 A AC/DC BNC+ current clamp

2000 A AC/DC BNC+ current clamp

BNC+ temperature probe

2-Pin ACS connector breakout lead

3-Pin Kostal connector breakout lead

2-Pin Kostal connector breakout lead

3-Pin AMP superseal connector breakout lead

Maxi fuse breakout lead

JCASE fuse extension lead

Breakout lead 2 pin ACS

Breakout lead for ATC style fuses

Extension lead for mini style fuses

BNC+ secondary ignition pickup (4)

Earth wire for coil pack

BNC+ COP and signal probe

BNC+ resistance test lead

HT extension lead (4)

Professional breakout lead set

3m BNC+ premium test leads (4)

Flexible backpinning probes (4 red, 4 black)

Insulation piercing test clips (2 pk)

CAN test box

Carry cases (2)
- BNC+ 10:1 scope leads (2)

Backpinning probe set

Small crocodile clips (2 red, 2 black)

Battery clip (2 red, 2 black)

Large dolphin clip (1 red, 1 black)

Multimeter probe (2 red, 2 black)

Keyless entry carrier signal detector

Ultrasonic parking sensor detector

S-hook (2)

Shrouded to unshrouded adapter (1 blk, 4 red)

Shrouded 4mm to sprung hook (1 blk, 1 red)

4.5m USB cable

WPS500X transducer kit (14 standard parts)

Large hose adapter

10mm deep reach adapter tip

16mm Ford Triton adapter tip

18mm short reach adapter tip

Adapter AST to WPS500X comp hose

Vacuum tap for WPS500X

Adapter for WPS500X to AST equipment

Fuel hose pressure tap: small

Fuel hose pressure tap: medium

WPS500X adapter kit B

Popular Accessory Kits For Special Applications

PQ129 - NVH Standard Diagnostic Kit



Combined with a PicoScope 4425A diagnostic oscilloscope, this kit provides the ability to identify and diagnose unwanted vehicle vibration and noise sources.

- Also available:
- PQ126 NVH Starter Diagnostic Kit
 - PQ120 NVH Advanced Diagnostic Kit
 - PQ316 Optical Sensor Kit (for propshaft balancing)

PP939 - WPS500X Pressure Transducer Kit



With unparalleled resolution and accuracy, this kit is designed for performing quick and efficient analysis of in-cylinder, intake and exhaust pulses for pressure and vacuum.

- Also available:
- PQ038 WPS500X Maxi Kit

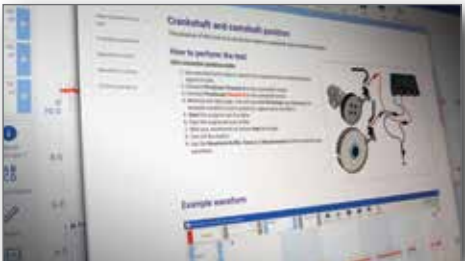


559-292-7851
support@aeswave.com

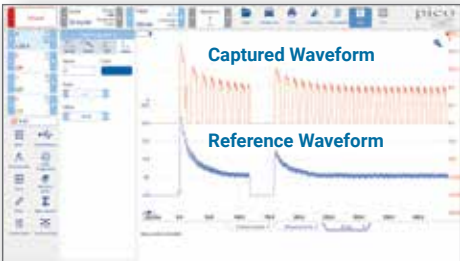
A new feature in PicoScope 7, our **Intelligent Probe Interface** immediately recognizes probes that are attached to our PicoBNC+ connectors and configures the user software for immediate use. This not only saves time, but it also eliminates mismatched measurement values.



Another special feature of PicoScope 7, **Guided Tests** help technicians run 155+ important evaluations. Diagrams, descriptions, and screen captures show how to connect, run, and evaluate the waveforms of each test. Now included are tests for EV and Off-Highway vehicles.

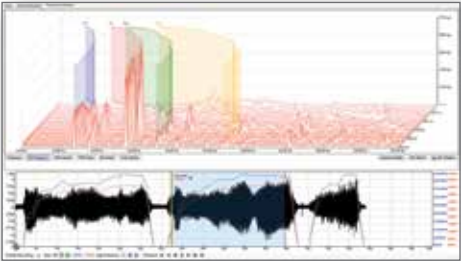


Our cloud-based **Waveform Library** contains 9300+ reference entries to help users configure their scope to test unfamiliar vehicles and to recognize both good and bad captured waveforms. Access is free and users can also upload their own waveforms to share or store.



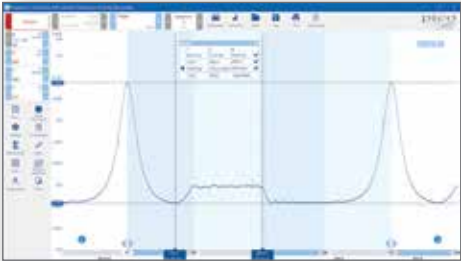
NVH Software PicoDiagnostics®

An NVH Diagnostic Kit teamed with our **PicoDiagnostics®** software turns intangible driver complaints into visible vibration measurements that can be used to pinpoint many potential issues and demonstrate a successful repair following service.



WPS500X Software PicoScope® 7

Our **PicoScope 7** software and a WPS500X accessory kit allows users to accurately view vacuum and pressure waveforms alongside electrical component signals, in real time, to provide an unparalleled view into potential engine and mechanical malfunctions.



Diesel And Off-Highway Diagnostics

PQ179 - PicoScope® 4425A Diesel Kit



- PicoScope 4425A
- 60 A AC/DC BNC+ current clamp
- 2000 A AC/DC BNC+ current clamp
- 2 Pin breakout lead
- 3-Pin Kostal connector breakout lead
- Maxi fuse breakout lead
- JCASE fuse extension lead
- Breakout lead 2 pin ACS
- Breakout lead for ATC style fuses
- Extension lead for mini style fuses
- 5m BNC+ premium test leads (4)
- Flexible backpinning probes (4 red, 4 black)
- Keyless entry carrier signal detector

- BNC+ 10:1 scope leads (2)
- Backpinning probe set
- Small crocodile clips (2 red, 2 black)
- Battery clip (2 red, 2 black)
- Multimeter probe (2 red, 2 black)
- Ultrasonic parking sensor detector
- S-hook (2)
- Shrouded to unshrouded adapter (4 red)
- USB cable 1.8m
- 4.5m USB 2.0 cable
- Carry case

PQ195 - PicoScope® 4425A Engine And Hydraulics Kit



- PicoScope 4425A
- 60 A AC/DC BNC+ current clamp
- 2000 A AC/DC BNC+ current clamp
- BNC+ temperature probe
- 2-Pin ACS connector breakout lead
- 3-Pin Kostal connector breakout lead
- 2-Pin breakout lead
- Maxi fuse breakout lead
- JCASE fuse extension lead
- Breakout lead for ATC style fuses
- Extension lead for mini style fuses
- 3m BNC+ premium test leads (4)
- Flexible backpinning probes (4 red, 4 black)

- Carry cases (2)
- Charging cable: USB A male to mini 5 pin 2m
- BNC+ 10:1 scope leads (2)
- Backpinning probe set
- Small crocodile clips (2 red, 2 black)
- Battery clip (2 red, 2 black)
- Multimeter probe (2 red, 2 black)
- S-hook (2)
- Shrouded to unshrouded adapter (4 red)
- 4.5m USB 2.0 cable
- 2m BNC to BNC cable
- 5m Insulated BNC to insulated BNC cable
- WPS600C pressure transducer 60/600 bar (2)

PQ332 - PicoScope® 4425A Off-Highway Elite Kit



- Off-Highway PicoScope 4425A-099
- 60 A AC/DC BNC+ current clamp
- BNC+ temperature probe
- 2-Pin ACS connector breakout lead
- 3-Pin Kostal connector breakout lead
- 2-Pin Kostal connector breakout lead
- 3-Pin AMP superseal connector breakout lead
- JCASE fuse extension lead
- Breakout lead for ATC style fuses
- Extension lead for mini style fuses
- BNC+ COP and signal probe
- BNC+ resistance test lead
- 5m BNC+ premium test leads (4)
- Flexible backpinning probes (2 red, 2 black)

- Insulation piercing test clips (2 pk)
- Carry cases (3)
- BNC+ 10:1 scope leads (2)
- Backpinning probe set
- Battery clip (2 red, 2 black)
- Multimeter probe (1 red, 1 black)
- S-hook
- 4.5m USB 2.0 cable
- WPS500X low-pressure transducer
- Bleed hose for WPS500 pressure transducer
- Universal vacuum adapter
- Vacuum hose for WPS500
- Exhaust adapter for WPS500
- Charging cable: USB A male to mini 5 pin 2m

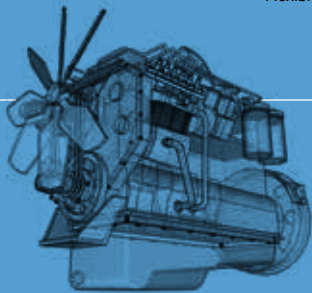
- Fuel hose pressure tap for WPS500X: medium
- Fuel hose pressure tap for WPS500X: small
- Vacuum tap for WPS500X
- 2-Pin breakout lead (2)
- 2-Pin Deutsch breakout lead
- 4-Pin large Deutsch DTPxx-4 breakout lead
- 4-Pin Deutsch breakout lead
- BNC+ current clamp 2000A AC/DC
- BNC+ 60A small jaw current clamp
- WPS600C pressure transducer 60/600 bar (2)
- Telescopic pack: 45x45 length 8080-120mm
- 5m Insulated BNC to insulated BNC cable

Also available:
PQ324 PicoScope 4425A Off-Highway Entry Kit
PQ331 PicoScope 4425A Off-Highway Expert Kit



More Vehicles And Systems

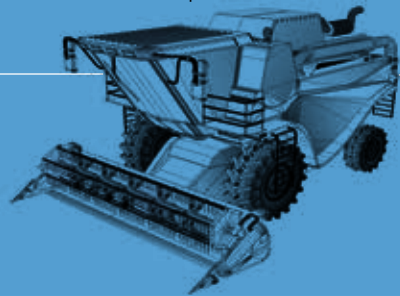
In addition to cars and light trucks, the kits on these two pages expand the capability and efficiency of PicoScope diagnostic oscilloscopes to service medium and heavy-duty diesel trucks, tractors, excavators, industrial equipment and much more. Typical tests include:



- Intake manifold pressure
- Coolant temperature
- Timing
- Oil pressure
- Crankcase pressure
- Battery starting and charging

- Injector signals
- Fuel rail pressure sensor
- Low fuel priming measurements
- Electric motor testing
- Cylinder contribution measurement
- Relative compression testing

- CAN bus testing
- Adblue component testing
- DPF pressure testing
- Exhaust gas pressure for combustion anomaly
- Hydraulic pump testing PQ test with flow meter
- Hydraulic motor pressure and flow testing



Vehicle access requirements vary significantly. These kits offer a mix of testing accessories including current clamps, pressure sensors, probes, leads, fittings and adapters.

Heavy Duty/Off-Highway Guided Tests



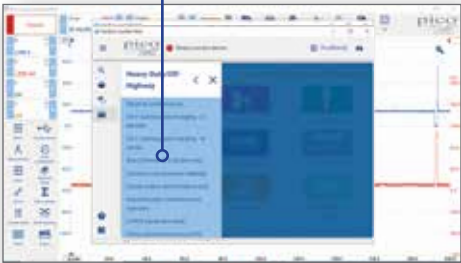
559-292-7851
support@aeswave.com

To help technicians take advantage of the powerful capabilities of our Diesel and Off-Highway kits, our team of application experts have added ten tests to the **PicoScope 7 Automotive Guided Test Library** specific to heavy-duty and off-highway (HD-OH) diagnostics. Each test includes detailed information to help HD-OH technicians increase their understanding of oscilloscope usage and waveform evaluation. These descriptions cover necessary accessories, connection diagrams, special considerations, and even a pre-loaded example waveform to use for comparison purposes and to auto-configure the user's scope to run the chosen test.

Step 1 - Launch the PicoScope 7 user software and click on the **Heavy Duty/Off-Highway icon** in the bottom right corner of the Guided Tests popup toolbox.



Step 2 - Select the desired test from the Heavy Duty/Off-Highway tests listing in the sidebar of the popup toolbox.



Step 3 - Follow the directions to run the test and read the notes and guidance included to analyze the waveform and work through potential faults to a resolution.



AVAILABLE TESTS

- GT903 – Denox 2.2 health check
- GT904 – Engine health and performance system test
- GT907 – 24V Battery starting and charging in parallel
- GT908 – 24V Battery starting and charging in series
- GT909 – Electronically controlled unit injector
- GT911 – J1939 Serial decoding
- GT913 – Common rail pressure hold check. System leak test
- GT914 – Relative compression
- GT933 – Hydraulic pressure
- GT934 – Hydraulic flow

Tools and solutions for EV safety and diagnostics

PQ196 - PicoScope® 4425A EV Diagnostic Kit



This kit provides the essential tools technicians need to service and maintain electric vehicles of all types. This includes high and low voltage diagnostics, as well as insulation testing and safety testing.

15+ EV Guided Tests Added To PicoScope 7

PQ326 - MT03A Milliohm and Motor Tester Kit



Designed to quickly and accurately test the earth bonding integrity and motor winding resistance on electric motors of various kinds, this tool can also measure the resistance of switches, relays, connectors, bus bars, and general wiring.



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