



AECS

AUTOMOTIVE WORKSHOP EQUIPMENT

ATS 500XM SCOPE KIT

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AUTOMOTIVE EQUIPMENT | TRAINING | TECH SUPPORT

ATS 500XM - SCOPE KIT


The ATS500XM Scope Kit, is ready to go out of the box. With a very powerful 2 channel scope, with signal generator, easy to use software and laptop. It contains everything you need for professional diagnostics.

FEATURES:

- Quick set up – guides you where to hook up and how to measure.
- Pre-record examples will assist in analysing measured signals.
- Measure serial and CAN bus signals in one recording.
- High accuracy long recording, without drop outs.
- 1000's of wiring diagrams.
- 10k+ of diagnostic tutorials.
- Signal generator (record-transmit).

Scope can be used as:

- Spectrum analyser.
- Data logger.
- Multimeter.
- Arbitrary waveform generator.
- Protocol analyser (CAN/J1939/K).

 Works seamlessly with AECS training, online training & technical support.

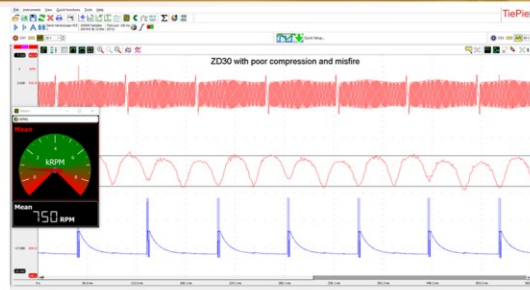
SPECS:

- Fast 500MS/s sampling speed per channel.
- 32 million samples record buffer per channel. 300 to 10000 times more memory compared to most scopes.
- High speed signal generator.
- 14/16 bit resolutions (256 times more resolutions compared to standalone scopes).

What's in the kit:

- ATIS Pro database & Multi-Channel (diagnostic software).
- G Force sensor.
- 80 and 600 Amp current clamps.
- Comprehensive Scope - Level 1 training.
- 1yr Technical support (via forum and phone).
- Purpose built aluminium scope tool case.
- Silicone shielded low distortion ATS oscilloscope leads.
- Full set of alligator clips, spiky & Hirschman probes.
- 68 Break out leads.
- Personalised laptop - 15.6" screen, W10
- Solenoid driver (optional)

**UNPARALLELED
EXTENSIVE
DIAGNOSTIC (MATH)
FUNCTIONS TO
SATISFY ANY SKILL
LEVEL.**



**POWERFUL
ACCURATE
VERSATILE**



ATS 500XM SCOPE KIT



What's in the kit:

- ATIS Pro database & Multi-Channel (diagnostic software).
- G Force sensor.
- Trigger button.
- 80 Amp current clamp.
- 600 Amp current clamp.
- Alligator clips.
- Piercing probes.
- Hirschman probes.
- 100x coil BNC.
- 100x coil 4mm.
- 68 Break out leads.
- Purpose built aluminium scope tool case.
- 2 x silicone shielded low distortion ATS oscilloscope leads.
- Personalised laptop - 15.6" screen. W10.
- 1 Comprehensive scope Level 1 training.
- 1yr Technical support (via forum and phone).
- Solenoid driver (optional)

AECS
TRAINING
ELECTRONIC DIAGNOSTIC TRAINING

**Comprehensive
Scope Training
Level 1
ATS1-1**

COURSE: Comprehensive Scope Training - Level 1
 COURSE ID: ATS1-1
 DURATION: 2 Days
 VERSION: 141022-2

AECS provides immersive training with theory and practical hands-on experience. With 25+ years quality, in-house designed training sessions, we are committed to empower new and experienced industry leaders to become proficient and productive.

EXPERIENCED TRAINERS | HANDS ON TRAINING | WORLD CLASS TRAINING | INNOVATIVE CULTURE

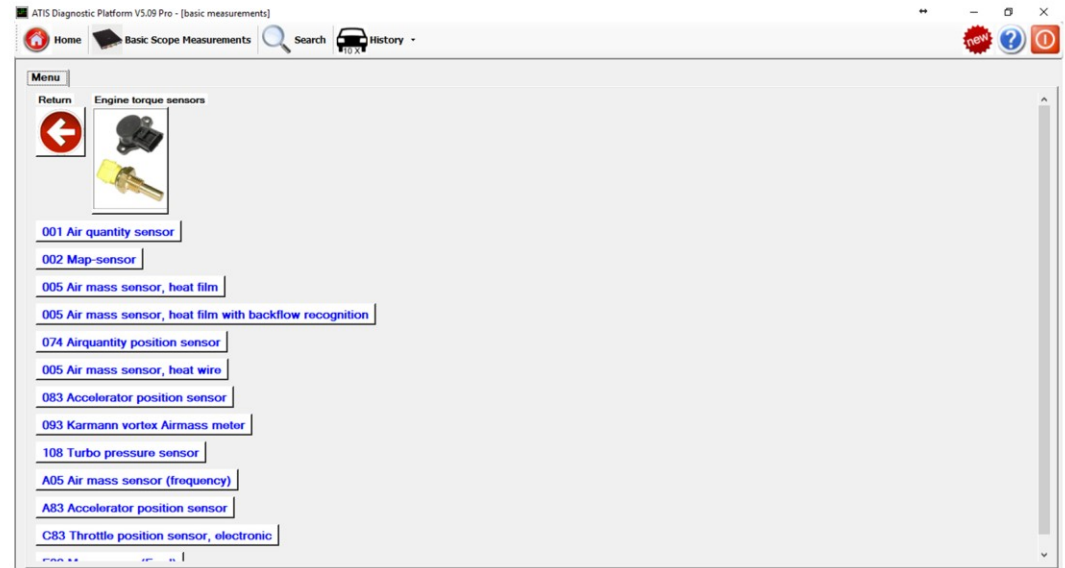
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GUIDANCE

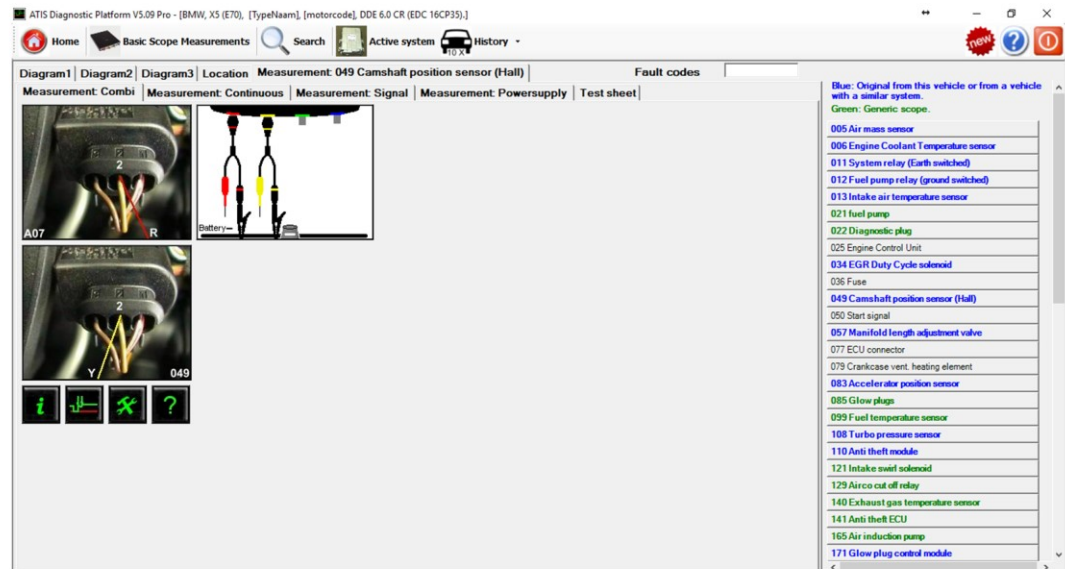
ATIS software is able to guide you to the correct scope setting for the component that you want to measure with pre-recorded vehicle specific sample patterns* for power supply voltage, sensor patterns and actuator current. Quickly analyse vehicle's sensors and actuators with pre-recorded signals that set up the scope to measure with one click.

*ATIS Pro only.



CONNECTION

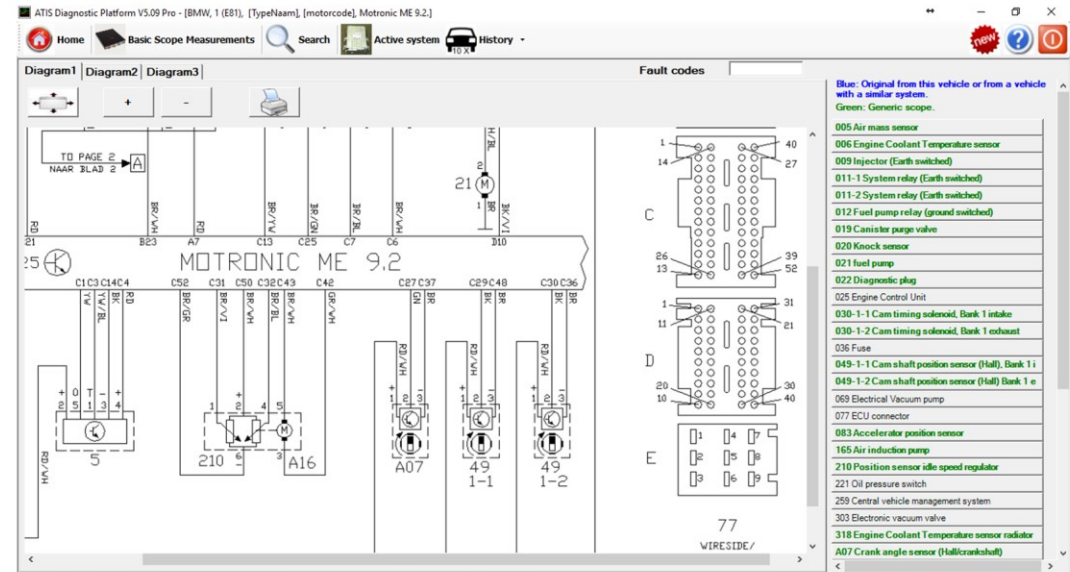
Connect to the right pin every time. ATIS software will show you where and how to connect to a sensor or actuator that you are trying to measure, with easy to follow photos and component location information.



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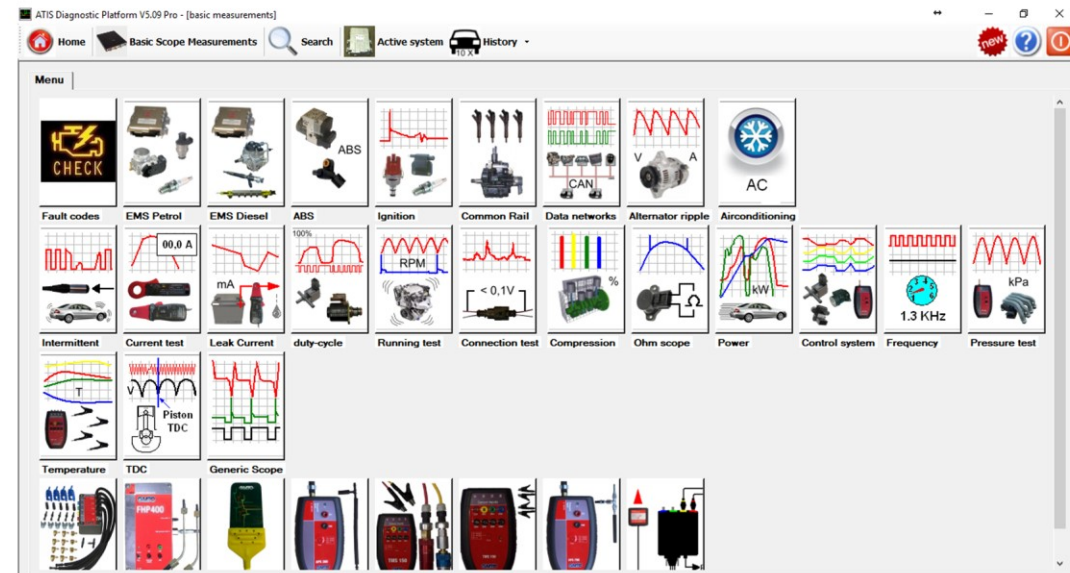
DIAGRAMS

Ever struggled to find the correct wiring diagram for the vehicle you are working on? ATIS contains 1000's of wirings diagrams of engine management, abs, can-data and climate control systems. Excellent for complex European cars.



OPTIONS

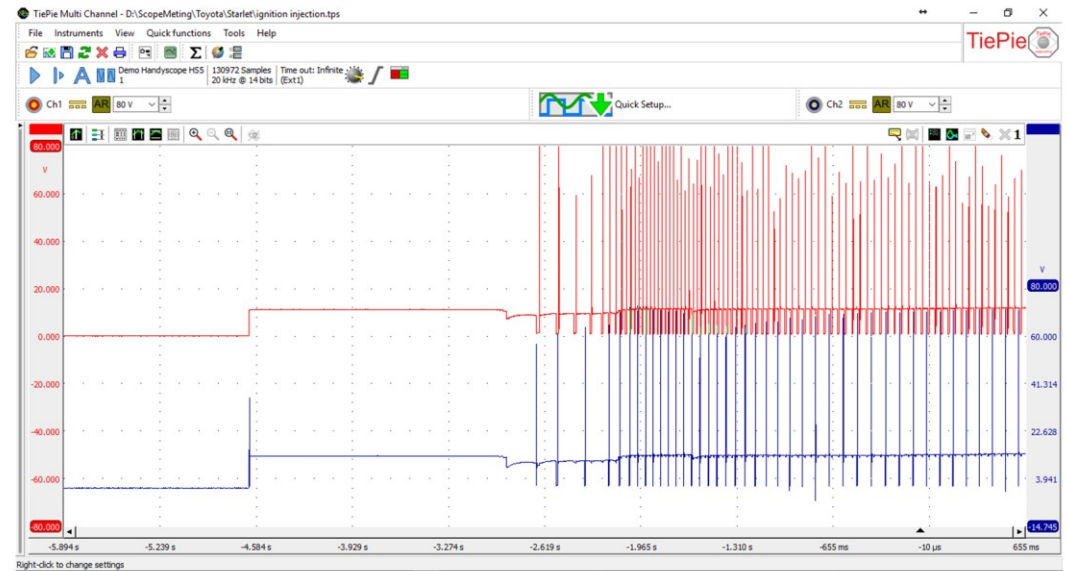
Configure your scope kit the way you want it. Go for a kit or add current clamps, accelerometers, return flow sensors, and many more. Each extra has its own specific diagnostic application and pre-set. On a budget, you can always add these extras at a later stage.



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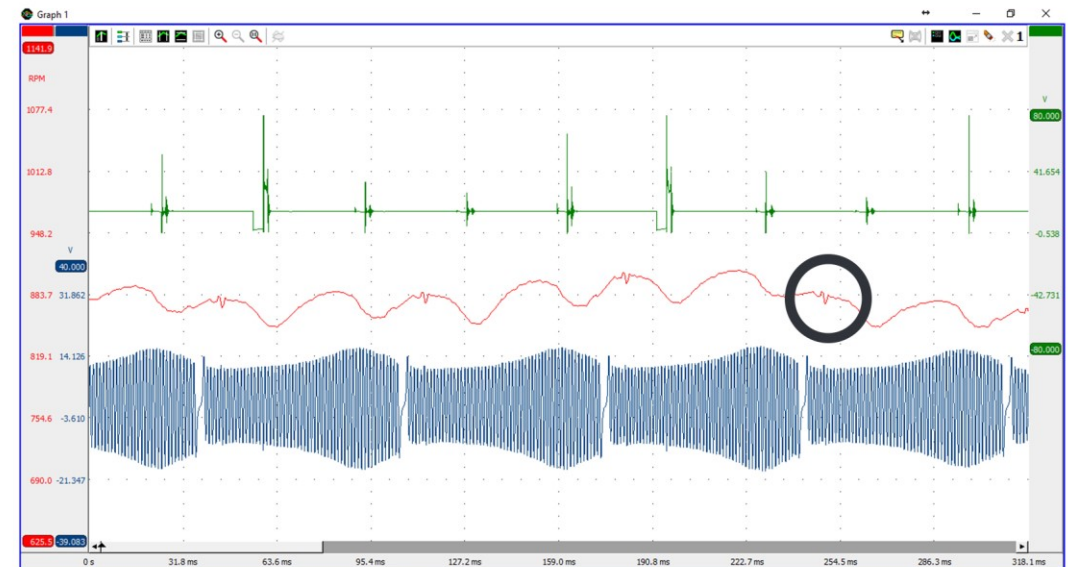
CAPTURE EVERYTHING

The large recording buffers and high sample rates of the ATS Scope range means that you can capture the whole event from key-on, winding over, running to stalling or whatever your application may be. Accessible with easy pre-sets.



SMART

Quickly and accurately identify which cylinder is misfiring with a calculated RPM trace from a crank angle sensor voltage. See what the ECU is trying to achieve by analysing solenoid valves, duty-cycle and many more advanced functions. Unique to ATS scopes.



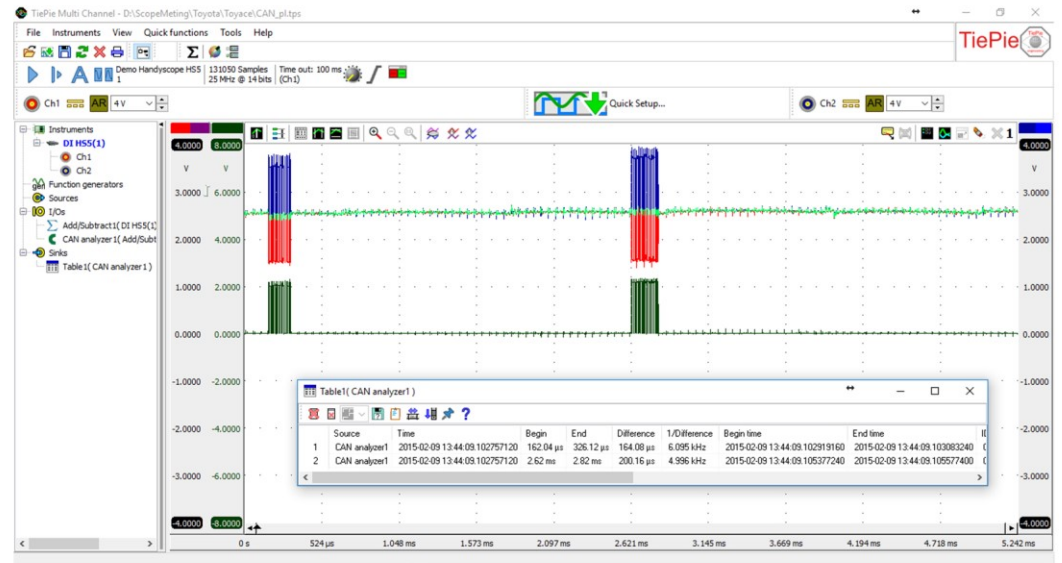
SAMPLE PATTERNS

The Automotive Technical Information system (ATIS) software package which is compatible with any ATS Scope contains 1000's of pre-recorded patterns off vehicles that you will see in your workshop. Ever wondered if that airmass sensor is contaminated? It's easy to check and compare.



THE ANALYST

Advanced signal processing functions allow you to translate CAN databus voltages to data packets enabling you to see what an ECU is saying or find a fault in the communication circuit.



EASY TO FOLLOW

For some of the finest scope accessories, you may want to read how to prepare to get the best recording results the first time. How do you get a KW reading out of the car with a simple G force sensor connected to the scope? Just follow a set of simple on-screen instructions.

The screenshot shows the ATIS software interface for a 'Measurement: Power' setup. The main content area features two diagrams: one showing a car with a sensor on the floor and another showing a sensor connected to a PC. Below these are four icons with instructions: an 'i' icon for measurement conditions, a 'g' icon for opening the scope measurement, a 'g' icon for diagnostic information, and a '?' icon for scope program information. A section titled 'Additional measuring Information:' provides detailed instructions for performing the test on a level road, including steps for stopping, calibrating, accelerating, and recording.

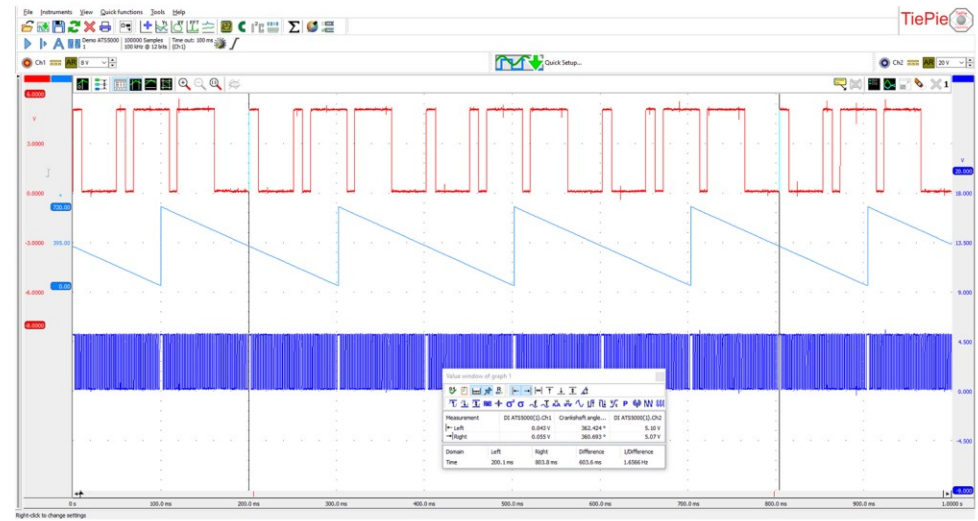
CAM CRANK PRE-SET

You will find in the ATIS database how to 'hook up' your scope, as well as an actual recording of a cam crank, in relation to a new or near new vehicle. Makes it too easy to see if you have a stretched chain or skipped belt.

The screenshot shows the ATIS software interface for a 'Measurement: Timing of crankshaft and camshaft' setup. The main content area features three diagrams: a close-up of a crankshaft sensor, a wiring diagram, and a sensor being installed. Below these are four icons with instructions: an 'i' icon for measurement conditions, a 'g' icon for opening the scope measurement, a 'g' icon for diagnostic information, and a '?' icon for scope program information. A section titled 'Additional measuring Information:' provides instructions for starting the engine and measuring the signal during starting or running. On the right side, there is a vertical list of diagnostic codes and their descriptions, such as '085 Air mass sensor' and '088 Engine Coolant Temperature sensor'.

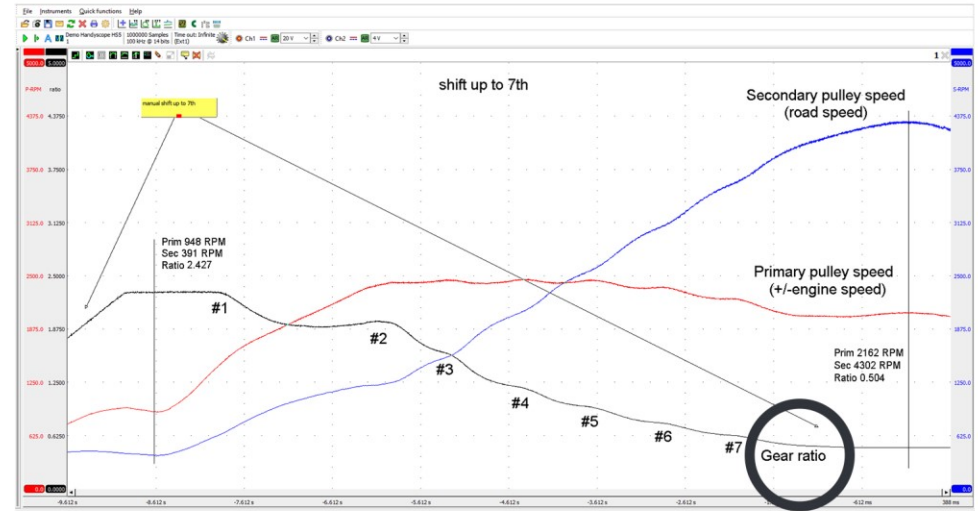
CRANK ANGLE CALCULATION

Convert the crankshaft signal to a crank angle degree calculated line. Have the line reset every 360 or 720 degrees. Check for cam timing variations with the utmost precision to detect stretched timing chain. Check injection timing variations to find the source of for example Diesel knock. Use the crank angle function to make an XY graph (ignition over crank angle).



MATHEMATICS

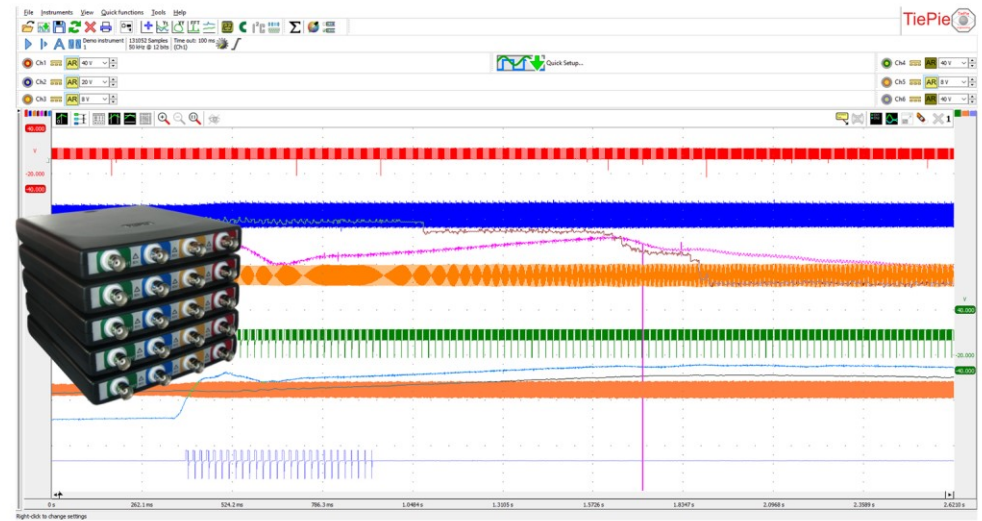
Advanced live mathematic functions. Combine signals with ease. Make complex multi signal diagnostics easy. If you don't understand the signals, AECS provides training and technical support to make it easy!
Sample image: CVT diagnostics.



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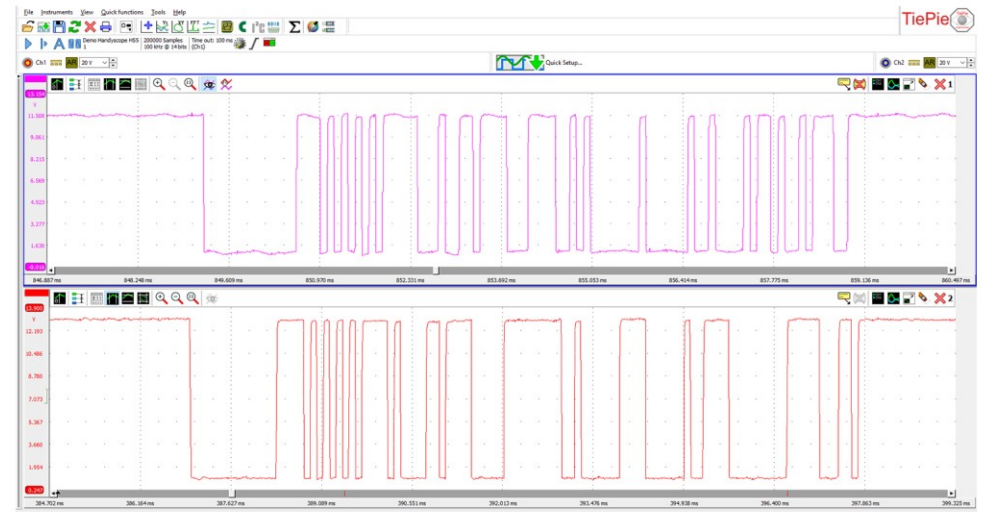
UNIQUE

Join two or more scopes with the ATS scope's unique single source triggering system. For example, measure with a 4 channel ATS scope's channel the crank shaft sensor, and measure with a 2 channel the cam shaft signal. Both will be perfectly sync'd. Unique to ATS scopes.



MULTI-SCREEN

Multiple screens can be setup with the click of a button to compare long recordings in detail. Check to see if a car's signal is good or if it has failed.



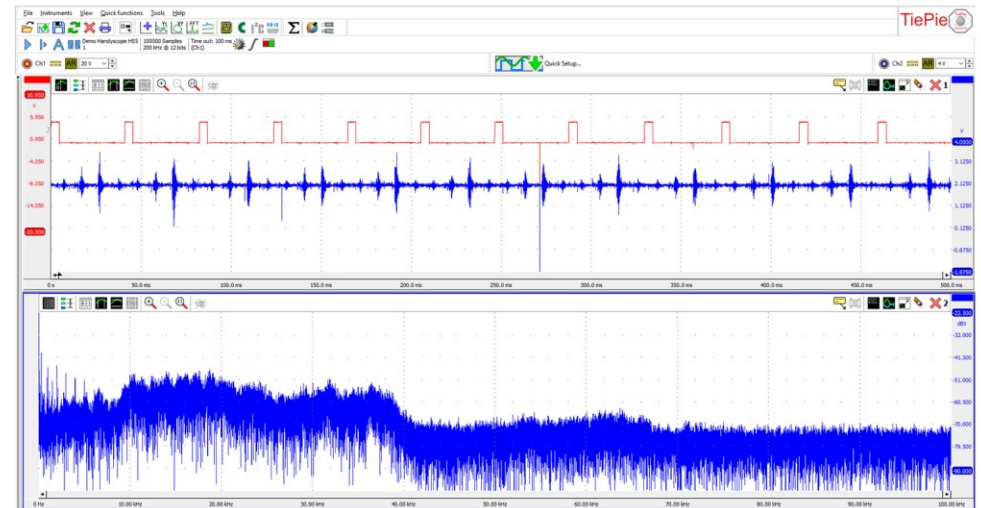
VERY LONG

Need to have a 'long' recording? Record for hours or even longer with the signal logging function. The recordings made in a live scope screen are seamlessly laced (without drop out) in the data logger. A Unique function.



SPECTRUM ANALYSER

Analyse signals (for example a knock sensor) with the standard spectrum analyser. See at what frequency (tone) the knock occurs.



AECS

AECS makes it easy when it comes to Automotive equipment, training and technical support. Find out more about AECS and what we do.



Our equipment empowers workshops throughout Australasia. AECS has a vast array of equipment and tools for your workshop. We believe that every workshop should have the best equipment.



AECS provides world class immersive training with theory and practical hands on experience to empower new and experienced technicians become proficient and productive.



AECS technical support, can assist you with problematic vehicles including: car, commercial vehicles, agriculture, marine and off highway. AECS provides full access technical support for equipment; from our premium forum with a vast database specialising in scope and scan tool, and support.

Calibration & Maintenance.

AECS offers an annual brake tester, emission tester, trans flush station and aircon service equipment calibration and maintenance service to your door.

Technical Articles.

AECS produces monthly technical articles that are free. Since 1999 our technical articles have been a great source for learning for many around the world. We share on many areas from correct equipment use through to difficult technical questions and vehicle cases.



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