

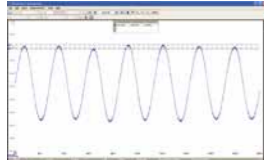
## AN INTRODUCTION TO OSCILLOSCOPE DIAGNOSTICS

### PICOSCOPE WAVEFORM LIBRARY

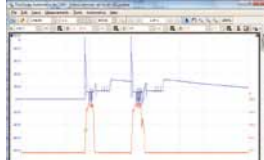
PicoScope includes a library of over 120 built-in tests. Each test includes all scope settings there is no need to set up the scope every time. You can save your own tests as files.



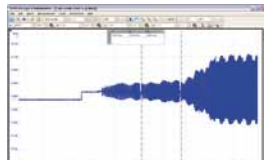
CAN BUS H & L LINES



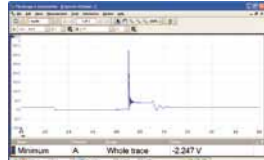
ABS SENSORS



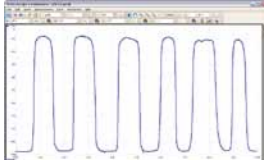
COMMON RAIL DIESEL INJECTOR



CRANKSHAFT SENSOR



PRIMARY IGNITION



LAMBDA SENSORS

**PICOSCOPE, THE PC OSCILLOSCOPE SOFTWARE FROM PICO TECHNOLOGY, IS SUPPLIED WITH EVERY PICO DIAGNOSTIC OSCILLOSCOPE**

#### SCOPE BUTTON

Click to return to the normal oscilloscope display mode.

#### CHANNEL CONTROLS

In "Auto" mode PicoScope adjusts the input range to fit the signal. You can override this to set your own range for each channel. "DC" preserves the DC component of the signal, while the "AC" filters anything below about 1 hertz.

#### CHANNELS A, B, C & D

These are linked to the channel controls above. Each channel corresponds to one of the BNC connectors on the PicoScope oscilloscope.

#### CHANNEL RULER

Drag a colored handle from the top of the window to the level you want to measure. The ruler legend shows the measurement.

#### TRIGGER MODE

AUTO displays a stable waveform when possible  
NONE always displays regardless of the waveform.  
SINGLE displays a single waveform then stops.  
REPEAT displays only stable waveforms.

#### AUTO SETUP BUTTON

Click this first to find your signal then adjust using the other controls.

#### TIMEBASE CONTROLS

Set the time interval across the screen, zoom factor, and record length.

#### TRIGGER MARKER

Shows the channel, signal level and time of the trigger event. Drag to adjust level and delay.

#### AUTOMOTIVE MENU

Contains a library of over 120 waveforms. Selecting one automatically sets up the scope to capture a waveform of that type.

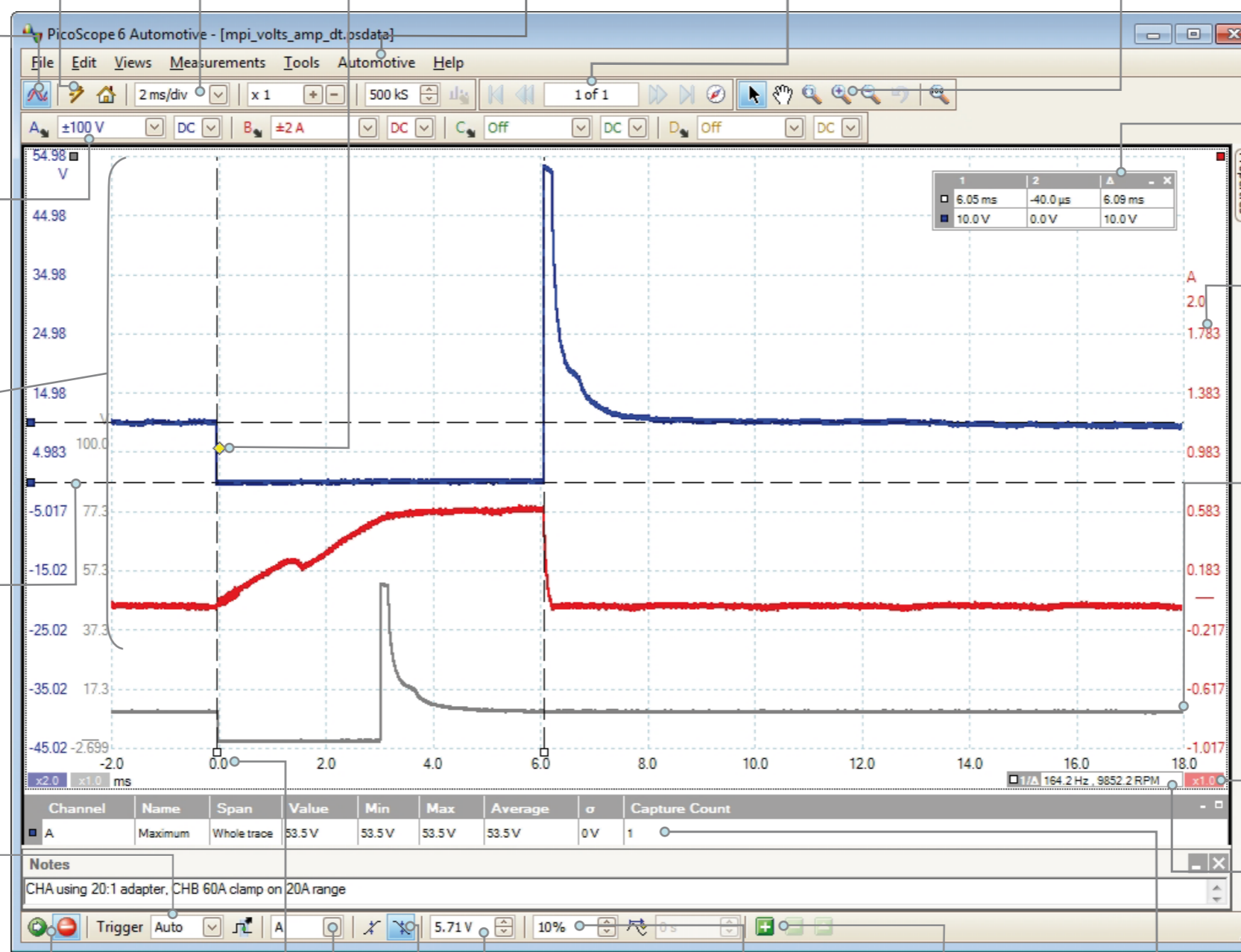
#### BUFFER CONTROLS

PicoScope stores up to 1,000 of the most recent waveforms in a buffer. Use these controls to search through them. Useful when you are trying to find an intermittent fault that might not be present on every waveform.

#### ZOOM BUTTONS

These affect the entire view. Zoom in and zoom out, zoom to a specified area, or pan the display. To zoom a single channel vertically without affecting the others, use the scaling buttons at the bottom of the view.

UPDATES TO PICO SCOPE CAN BE DOWNLOADED FREE OF CHARGE FROM [WWW.PICOAUTO.COM](http://WWW.PICOAUTO.COM)



**RULER LEGEND**  
Shows measurements of all rulers on screen. If a channel has two rulers enabled, then the legend also shows the difference between them.

**CHANNEL AXIS**  
There is a color-coded axis for each channel. Drag it up or down to position the channel.

**REFERENCE CHANNEL**  
This channel shows a waveform that was saved in a previous session using the Reference Waveforms tool. Retrieve it by using the Reference Waveforms tool again.

**SCALE AND OFFSET BUTTONS**  
There is a color-coded button for each channel. Click it to reveal the scale and offset controls.

**FREQUENCY & RPM INDICATOR**  
When you position two time rulers one revolution apart on a waveform such as a crankshaft sensor waveform, this indicator shows the frequency and RPM.

**STOP/START CONTROL**  
Click to start displaying waveforms. Click again to stop. The space bar on the keyboard has the same function.

**TIME RULER**  
Drag a white ruler handle from left to right to mark a point on the axis. The ruler legend shows the time at each ruler and the time difference between two rulers.

**TRIGGER SOURCE**  
Choose which channel to trigger on.

**EDGE SELECT**  
Trigger on rising or falling edges.

**THRESHOLD**  
Set the voltage at which the trigger operates, or drag the trigger marker.

**PRETRIGGER**  
How much of the waveform is captured before the trigger event. Linked to the horizontal position of the trigger marker on the screen.

**MEASUREMENT BUTTONS**  
Click to add an automatic measurement to the measurements table, or to delete or edit one.

**MEASUREMENTS TABLE**  
Lists all your dynamically updated automatic measurements with statistics. Click the Add Measurements button to add more. Choose from dozens of measurement types.

PICOSCOPE RUNS ON MICROSOFT WINDOWS XP (32-BIT), VISTA AND WINDOWS 7 (32-BIT AND 64-BIT)

### TOP TIME-SAVING ACCESSORIES



Pressure transducer WPS500



6-way breakout leads PP327



Fuse extension leads PP408



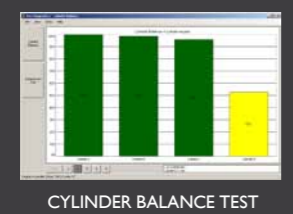
Coil-on-plug extension leads PP399



Coil-on-plug probe kit PP357



60 MHz probe MI007



CYLINDER BALANCE TEST