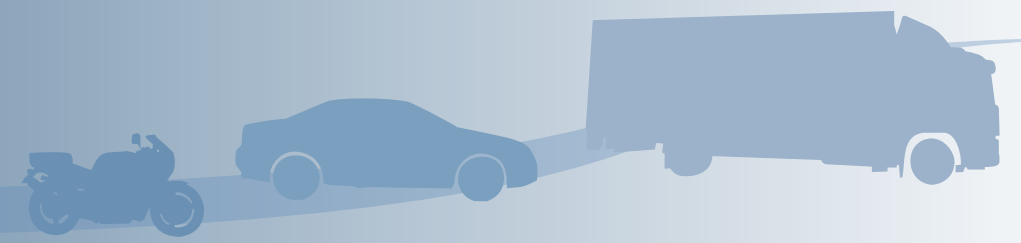


# PicoScope<sup>®</sup> Automotive

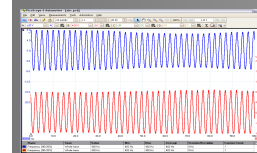
## A quick introduction to Oscilloscope Diagnostics



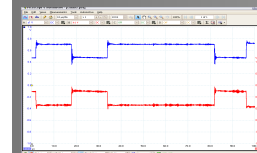
### PicoScope waveform library

PicoScope includes a library of over 80 built-in tests. Each test includes all the scope settings, so you don't have to set up the scope every time. You can save your own tests as files.

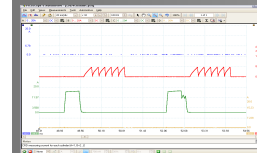
Here are just a few examples:



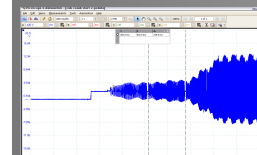
ABS sensors



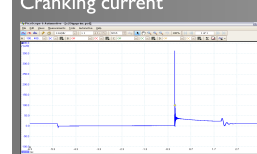
CAN Bus H and L lines



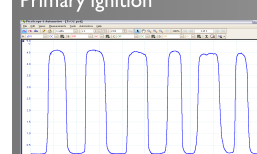
Common rail diesel injectors



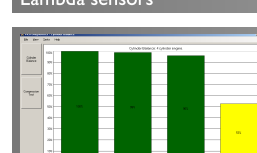
Cranking current



Primary ignition



Lambda sensors



Cylinder balance test

**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 "AC" filters out anything below about 1 hertz.

**Channels A and B**  
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.

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

**Stop/Start control**  
Click to start displaying waveforms. Click again to stop. The space bar on the keyboard has the same function.

**Pico Diagnostics**, the easy-to-use diagnostic software, is supplied with every PicoScope oscilloscope.

**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 signal level and time of the trigger event. Drag to adjust level and delay. Use the Trigger Toolbar buttons at the bottom of the screen for more options.

**Automotive menu**  
Contains a library of over 80 waveforms. Selecting one automatically sets up the scope to capture a waveform of that type.

**Zoom buttons**  
These affect the entire view. Zoom in and 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.

**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.

**Reference waveforms button**  
Click to save an input channel for later use. Click again to retrieve a saved waveform. The reference waveform appears on the screen just like a live input channel.

**Ruler legend**  
Shows measurements of all rulers on the 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 showing the measurements and units 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 button. Retrieve it by clicking the Reference Waveforms button again.

**Frequency and 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.

**Scale and offset buttons**  
There is one color-coded button for each channel. Click it to open the scale and offset controls.

**Trigger mode**  
"Auto" displays a stable waveform when possible. "None" always displays regardless of the waveform. "Single" displays a single waveform and then stops. "Repeat" displays only stable waveforms.

**Trigger source**  
Choose which channel to trigger on.

**Edge select**  
Trigger on rising or falling edges.

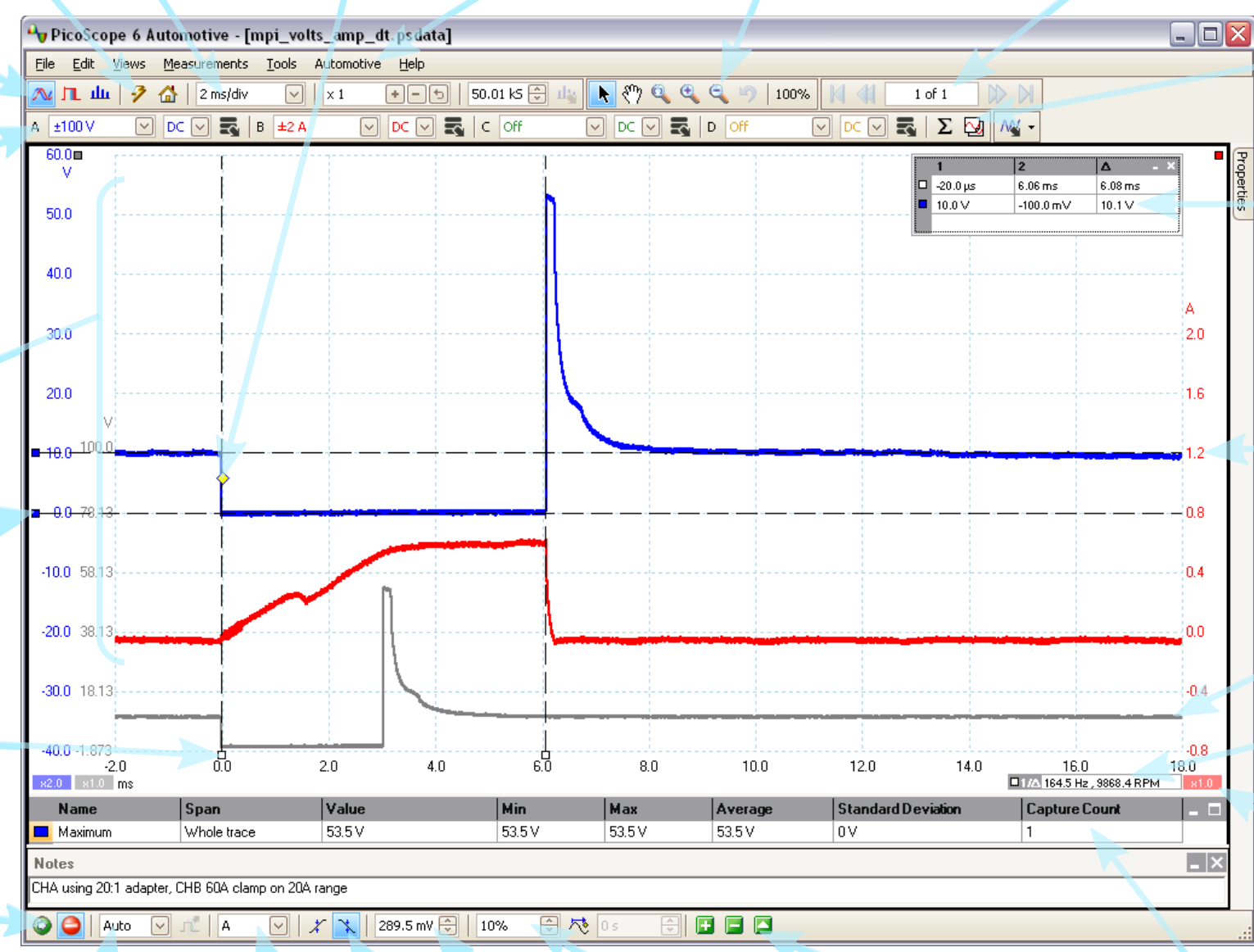
**Threshold**  
Set the voltage at which the trigger operates, or drag the trigger marker.

**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.

**Updates to PicoScope**  
can be downloaded free of charge from the Pico Technology website.



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**PicoScope runs on**  
Microsoft Windows XP (32-bit) and Vista (32-bit and 64-bit)

### Our top time-saving accessories:

