

OC 1 oscilloscope (Scope-Meter)

All-in-one handheld device (5 MHz), multi-meter (real effective), frequency counter (10 MHz) and revolutions counter

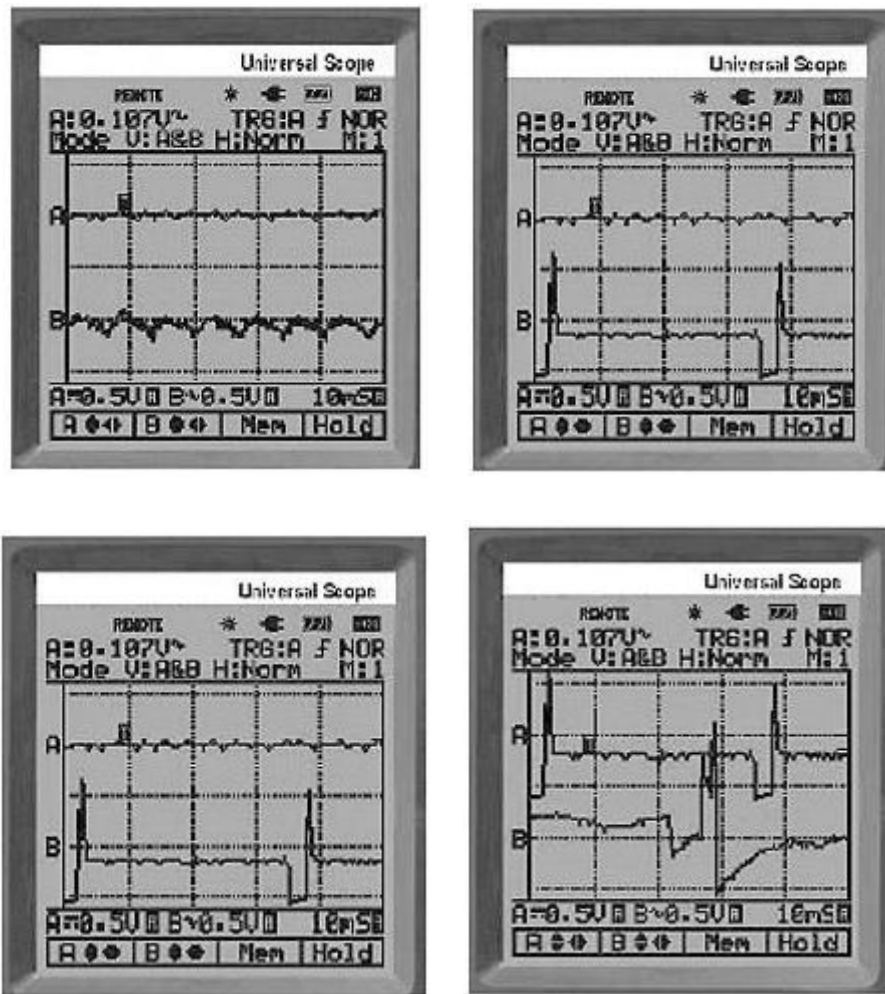
The OC 1 handheld oscilloscope is a measuring instrument with multiple functions for use by electricians in the industrial sector, mechanical engineers, in laboratories, and research and development. The oscilloscope covers the space between a normal multimeter and a portable multi-function oscilloscope, and all of this in the format of a compact professional oscilloscope. Apart from its multiple functions, this oscilloscope is attractive due to its wide frequency range (5 MHz) and its two channels. At the same time that it indicates measurement values it also shows the wave form, and vice versa, for distinct numerical measurement values it shows its oscilloscope graphic. The large display simultaneously shows the parameters of the multimeter function and the wave form. The keypad is very comfortable to use. Thanks to its software and USB cable, it's easy to save data directly to a computer.

- 2 channel digital oscilloscope
- Measurement quota of 50mS/s per channel
- DC Analogue bandwidth up to 5MHz
- Trigger functions such as automatic activation
- Multimeter with automatic True RMS range
- Frequency counter (10MHz)
- Auto settings for ease of use
- Menu control via keypad
- 132 x 128 píxeles backlit graphic display
- Memory for up to 16 readings
- USB interface for DMM measurement values and transmission of wave length measurements
- Data storage function via a computer
- Powered by lithium battery or mains adaptor
- Standards: IEC-1010-1/ 664; CAT III/600V



OC 1 handheld oscilloscope

Images of the display of the oscilloscope



Technical specifications

Oscilloscope

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|------------------------------|--|
| Input channels | 2 |
| Frequency bandwidth | 5 MHz DC |
| Measurement quota | 25 MS/s (dual), 50 MS/s (singular) |
| Input | AC, DC |
| Input impedance | 1 M Ω |
| Accuracy | $\pm 30\%$ vertical / $\pm 0.01\%$ horizontal |
| Input protection | 600Vrms |
| Vertical deviation | 50mV/div to 500V/div, 5div |
| Horizontal deviation | 1 μ s to 5 s/div |
| Trigger | CHA / CHB / external / augmenting / decreasing / automatic |
| A/D video transducer | Resolution: 8 bit |
| Memory for measurement waves | 16 curves |

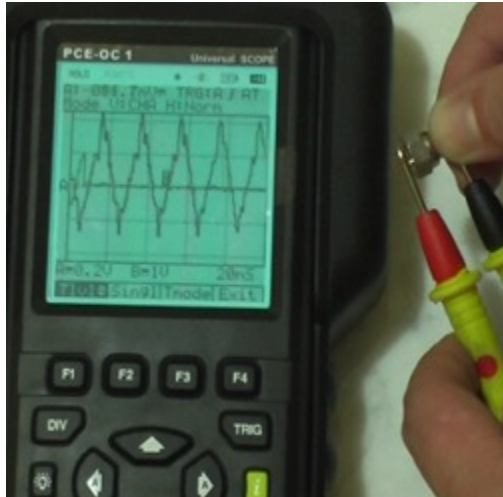
| Multimeter | |
|-------------------------------------|--|
| Range selection | automatic, manual |
| DC voltage range / accuracy | 500mV to 1000V; $\pm 0.3\%$ +3 digits |
| AC measurement range (True RMS) | 300mV to 750V; $\pm 0.75\%$ +5 digits (5 to 450Hz) $\pm 2.0\%$ +5 digits (450Hz to 5kHz) 2.5% +5 digits (5kHz to 20kHz) |
| Resistance measurement range | 5 / 50 / 500 k Ω / 5 M Ω ; $\pm 0.5\%$ +5 digits |
| Transit test | 1.7V test voltage (acoustic signal) |
| Frequency range | 100Hz / 1 / 10 / 100kHz / 1 / 10MHz $\pm 0.05\%$ +5 digits |
| Impulse width | 2 μ s to 500ms; Impulses >2 μ s |
| Revolutions | 240 to 60,000 r.p.m. |
| Regulation factor | 25 to 75% |
| Input impedance | 1 M Ω |
| General properties | |
| Display | 132 x 128 pixels, 63 x 65mm, high resolution graphics with back lighting |
| Auto shut-off | adjustable / can be disabled |
| Power | 4 Ni-MH rechargeable batteries (1.2V) or mains adaptor which comes included |
| Computer port | USB |
| Dimensions (width x height x depth) | 90 x 195 x 40mm |
| Weight | 460g |
| Standard | DIN 57 411 / VDE 0411; IEC 1010; EN 61010; CAT III / 600 V |

Examples of use for the PCE-OC 1 handheld oscilloscope



The image above shows the repair to a humidity balance. The signal being measured by the OC 1 oscilloscope is directly related to the 230V of power and the charging sequence. The charge and discharge sequence can be observed.

The image above shows scales response of the output from a thermometers output in repair using the OC 1 oscilloscope. This output measurement shows the control processor, which controls the thermometers processes, is functioning perfectly.

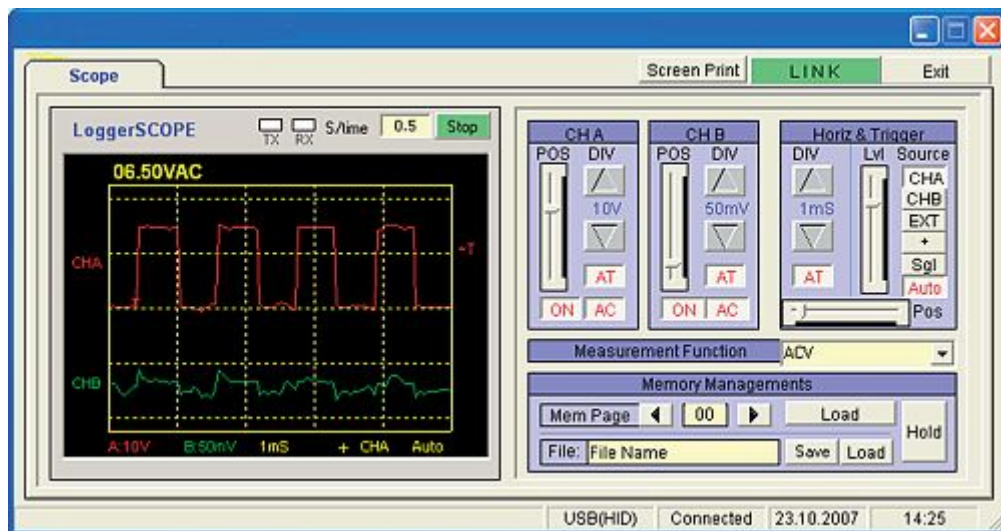


The image above shows the signal received by a TV controller making sure that the signal that has arrived is weak, which is why channel reception is poor.



Attach the clamps to measure using channel A. These clamps come with order and have a maximum capacity of 1000V.

Software for the OC 1 handheld oscilloscope



Contents

OC 1 handheld oscilloscope, software with USB cable, set of test cables, carrying case, rubber support, adaptor/AC charger, Ni-MH rechargeable battery and user's manual


Optional accessories

- [ISO calibration certificate](#)

for companies that wish to include this device in their set of internal testing tools or for annual recalibrations. The ISO certificate includes a laboratory calibration and a control document with all the measurement values.



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| <p>- Amp clamp adaptor Adaptor for indirect measurement of current up to 1000A without interrupting the cable.</p> <ul style="list-style-type: none"> - Range: 200 / 1000A DC / AC - Accuracy: $\pm 1.5 / 2\%$ - A DC zero reset - Dimensions: 190 x 64 x 33mm - Maximum diameter of cable: 33.5mm |  |
| <p>- Revolutions adaptor Adaptor with revolutions sensor and 1m cable. For optical measurement of revolution between 100 and 20,000 RPM in two ranges.</p> <ul style="list-style-type: none"> - 0.1mV DC / 1 RPM (range 1) - 0.1mV DC / 10 RPM (range 2) - Dimensions: 190 x 73 x 37mm |  |
| <p>- Pressure adaptor Adaptor with pressure sensor and 1m cable. For absolute measurement of pressure between 3.5 and 3500kPa.</p> <ul style="list-style-type: none"> - Accuracy: $\pm 1\%$ (up to 1700 kPa); $\pm 2\%$ (up to 2400 kPa) and $\pm 5\%$ (up to 3500 kPa) - Resolution: 0.1/ 1 kPa - Dimensions: 100 x 50 x 25mm; 1/4" sensor |  |
| <p>- Humidity adaptor Adaptor with humidity sensor in a handle and with 1m cable.</p> <ul style="list-style-type: none"> - Range: 10 to 95% r.h. - Accuracy: $\pm 3\%$ r.h. - Resolution: 0.1% r.h. Dimensions: 100 x 50 x 25mm |  |
| <p>- Light adaptor Adaptor with light sensor and 1m cable.</p> <ul style="list-style-type: none"> - Three ranges: 0 to 2000 / 0 to 20,000 and 0 to 50,000 lux - Accuracy: $\pm 5\%$ - Resolution: 1, 10, 100 lux - Dimensions: 100 x 50 x 25mm |  |
| <p>- Air velocity adaptor Adaptor with an air velocity sensor and 1m cable.</p> <ul style="list-style-type: none"> - Range: 0.2 to 30 m/s; - Accuracy: $\pm 2\%$ - Resolution: 0.1 (m/s; km/h; knots) - Dimensions: 100 x 50 x 25mm |  |
| <p>- Sound adaptor Adaptor with sound sensor and 1m cable. A-weighting; can be externally calibrated SC 41 calibrator)</p> <ul style="list-style-type: none"> - Ranges: 30 to 130dB (in three ranges) |  |

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| <ul style="list-style-type: none">- Accuracy: ± 1.5dB (IEC 651 clase II)- Dimensions: 107 x 53 x 29mm | |
| <p>- EMF adaptor Adaptor with EMF sensor and 1m cable. Range: 0 to 20 microTesla / 200 milliGauss Accuracy: $\pm 4\%$ Resolution: 0.1 μTesla / 1 milliGauss Bandwidth: 30 to 300 Hz Dimensions: 100 x 50 x 25mm</p> |  |

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