



PicoScope USB Oscilloscope

QUICK START GUIDE



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1 English

1.1 Introduction

Thank you for purchasing a Pico Technology PC Oscilloscope. This guide explains how to install the software, including the product manual, from the disc supplied.

Once you have finished the basic installation, the *User's Guide* and *Data Sheet* will provide further information about setting up and using the oscilloscope.

1.2 Safety information

To prevent possible electrical shock, fire, personal injury, or product damage, carefully read this safety information before using the product. In addition, follow all generally accepted safety practices and procedures for working with and around electricity.

The product has been designed and tested in accordance with the European standard publication EN 61010-1:2010, and left the factory in a safe condition. The following safety descriptions are found throughout this guide:

A **WARNING** identifies conditions or practices that could result in injury or death. A **CAUTION** identifies conditions or practices that could result in damage to the product or equipment to which it is connected.

Symbols

These safety and electrical symbols may appear on the product or in this guide.

Symbols	Description
	Direct current.
	Alternating current.
	Chassis ground terminal. This symbol is now used in place of the equipotential symbol which may appear on older products.
	Equipment protected throughout by double insulation or reinforced insulation.
	Possibility of electric shock.
	Caution.
	Static awareness. Static discharge can damage parts.
CAT	EN61010 measurement category.
	Do not dispose of this product as unsorted municipal waste.

Maximum input ranges

Observe all terminal ratings and warnings marked on the product.



WARNING

To prevent electric shock, operate within the safe input range for your scope, which can be found in the *User's Guide*.

WARNING

To prevent electric shock, take all necessary safety precautions when working on equipment where voltages above the specified input range may be present. Although the front-panel BNC inputs of the oscilloscope are designed to withstand accidental overloads, contact with voltages outside of the specified measuring range presents a risk of electric shock.

WARNING

To prevent injury or death, the oscilloscope must not be directly connected to the mains (line power). To measure mains voltages, use a differential isolating probe specifically rated for mains use, such as the TA041 listed on the Pico website.



CAUTION

Operation outside of the safe input range is likely to cause permanent damage to the oscilloscope and other connected equipment.

Grounding



WARNING

The scope's ground connection through the USB cable is for measurement purposes only. The oscilloscope does not have a protective safety ground.

WARNING

Never connect the ground input (chassis) to any electrical power source. To prevent personal injury or death, use a voltmeter to check that there is no significant AC or DC voltage between the oscilloscope ground and the point to which you intend to connect it.



CAUTION

Applying a voltage to the ground input is likely to cause permanent damage to the oscilloscope, the attached computer, and other equipment.

CAUTION

To prevent measurement errors caused by poor grounding, always use the high-quality blue USB cable supplied with the oscilloscope.

External connections



WARNING

To prevent injury or death, use only the power cord and adaptor supplied with the product. These are approved for the voltage and plug configuration in your country. Note that not all oscilloscopes require a power cord.

Environment



WARNING

To prevent injury or death, do not use in wet or damp conditions, or around explosive gas or vapor.



CAUTION

To prevent damage, always use and store your oscilloscope in appropriate environments. Further information on temperature and humidity specifications for both the storage and usage of the oscilloscope can be found in the *User's Guide*.

Care of the product

The product contains no user-serviceable parts. Repair, servicing and calibration require specialized test equipment and must only be performed by Pico Technology or an approved service provider. There may be a charge for these services unless covered by the Pico five year warranty.



WARNING

To prevent injury or death, do not use the product if it appears to be damaged in any way, and stop use immediately if you are concerned by any abnormal operations.



CAUTION

Do not tamper with or disassemble the oscilloscope, connectors or accessories. Internal damage will affect performance.

CAUTION

Do not block any of the instrument's air vents as overheating will cause damage to the oscilloscope.

CAUTION

When cleaning the oscilloscope, use a soft cloth and a solution of mild soap or detergent in water. Do not allow water to enter the oscilloscope casing, as this will cause damage to the electronics inside.

1.3 Contents

Please check that your PicoScope PC Oscilloscope package contains:

- PicoScope PC Oscilloscope
- USB cable
- Pico software disc
- Quick Start Guide

Some product packs and scope bundles may contain additional items. See the *User's Guide* for a full contents list.

1.4 System requirements

To ensure that PicoScope operates correctly, you must have a computer with at least the minimum system requirements, as shown in the following table. The performance of the PicoScope software will improve with a more powerful PC, and will benefit from a multi-core processor.

Item	Minimum specification	Recommended specification
Operating system	Windows XP (SP3), Windows Vista, Windows 7, and Windows 8. 32- or 64-bit (not Windows RT).	
Processor	300 MHz	1 GHz
Memory	256 MB	512 MB
Free disk space*	1 GB	2 GB
Ports	USB 1.1 port	USB 2.0/3.0 port**

* The PicoScope software does not use all the disk space specified in the table. The free space is required to make Windows run efficiently.

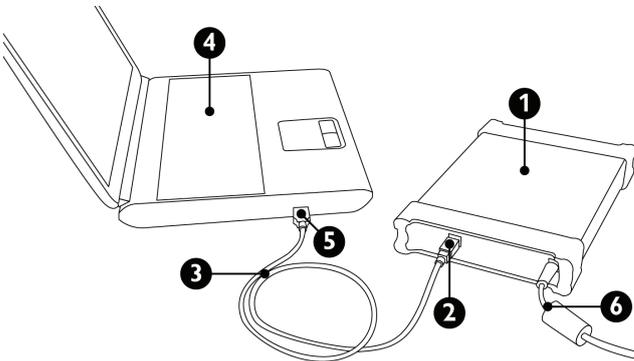
** Oscilloscopes which use USB 3.0 may not achieve the maximum specifications when plugged in to a USB 2.0 port.

1.5 Installing the PicoScope software

Stop!

Do not connect the oscilloscope until the software has been successfully installed.

1. Insert the Pico software disc into your CD drive. It should start automatically, but if it does not simply go to **My Computer** and select the Pico CD.
2. Select the appropriate language.
3. Follow the on-screen instructions to install the PicoScope software. Do not connect the oscilloscope until the installation is complete.
4. If your oscilloscope is mains powered, connect the mains lead (line cord) to the mains adaptor, and plug it into a mains power socket. Then connect the DC power lead to the back of the oscilloscope, and switch on the mains power.
5. Connect the oscilloscope to your PC using the USB cable supplied. See the connection diagram below for more information.



1. PicoScope PC Oscilloscope
2. Oscilloscope USB port
3. Pico Technology USB cable
4. PC
5. PC USB port
6. DC power lead (if supplied)

6. Follow the instructions in the Windows **New Hardware Found** wizard, which will run automatically. If the wizard asks to connect to **Windows Update**, select **No**.
7. The **New Hardware Found** wizard may run twice. If this happens, repeat the previous step.
8. Select **PicoScope 6** from the Windows **Start** menu.
9. If the oscilloscope has a probe connected, touching the probe tip with a finger should show a small 50 Hz or 60 Hz signal in the oscilloscope window.

1.6 Free newsletter

Pico Technology sends out a free monthly newsletter by email. This gives news of product launches, software upgrades and application notes, as well as hints and advice. We treat your email details as confidential and will not pass them on to any third parties. To subscribe visit:

www.picotech.com/newsletter/

1.7 Software updates and replacement

The latest versions of all Pico software and manuals can be downloaded free of charge at:

www.picotech.com

If you require a new software disc, please contact Pico Technology or your distributor. There may be a small charge for this service.

1.8 Writing your own software

The software disc contains all the manuals and drivers you will need to develop your own custom programs easily. Follow section 1.5 to install.

1.9 Input connections

The product manual installed with the software contains complete descriptions of input connections. Follow section 1.5 to install the software and the manual.

1.10 Specifications

The *User's Guide* and *Data Sheet* contain the latest specifications for your PicoScope PC Oscilloscope. We recommend that you print a copy of the specification table and keep it for easy reference.

1.11 Technical support

Regularly updated technical support information can be found at the Pico Technology technical support website and users' forum here:

www.picotech.com/support/

