

*Software Installation and  
Quick Start Guide*

*LabMax™ PC*





*Software Installation and Quick Start Guide*

# *LabMax PC*



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## **Preface**

This guide includes:

- A section that describes how to install or uninstall the LabMax PC software.
- A series of “mini-tutorials” that shows step-by-step instructions on connecting a sensor to your LabMax meter, taking measurements, and saving data for later viewing.

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**For complete operating instructions, refer to the LabMax User manual, available in Adobe<sup>®</sup> PDF format on the CD-ROM that shipped with your product.**

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## **Publication Updates**

To view information that may have been added or changed since this publication went to print, connect to [www.Coherent.com](http://www.Coherent.com).

## **System Requirements**

- 600 MHz or faster processor
- Microsoft<sup>®</sup> Windows XP<sup>®</sup>, Windows 7<sup>®</sup> (32- or 64-bit), or Windows 8<sup>®</sup> (32- or 64-bit)
- 512 MB of RAM
- 190 MB of free hard disk space
- CD-ROM drive
- USB and/or RS-232 port
- 1024 x 768 screen resolution

## **Signal Words and Symbols in this Manual**

This documentation may contain sections in which particular hazards are defined or special attention is drawn to particular conditions. These sections are indicated with signal words in accordance with ANSI Z-535.6 and safety symbols (pictorial hazard alerts) in accordance with ANSI Z-535.3 and ISO 7010.

### **Signal Words**

Two signal words are used in this documentation: **WARNING** and **NOTICE**.

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#### **WARNING!**

**Indicates a hazardous situation that, if not avoided, could result in death or serious injury.**

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#### **NOTICE!**

**Indicates information considered important, but not hazard-related.**

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### **Symbols**



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**This symbol is intended to alert the operator to the presence of exposure to hazardous visible and invisible laser radiation.**

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**This symbol is intended to alert the operator to the presence of important operating and maintenance instructions.**

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# SOFTWARE INSTALLATION

This section describes how to install LabMax PC software and drivers, or uninstall the software.

- Installing Windows XP (p. 2)
- Installing Windows 7 or Windows 8 (p. 4)
- Uninstalling the software (p. 5)

## Installing Windows XP



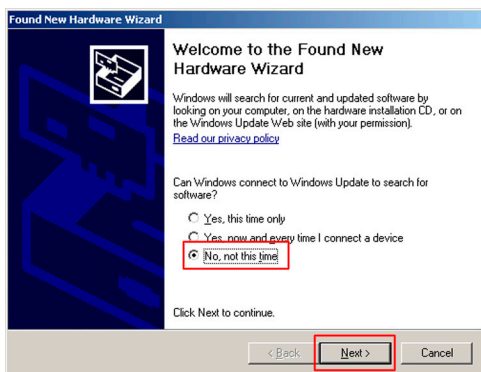
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### NOTICE!

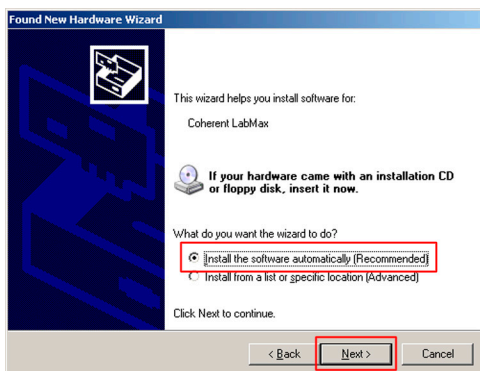
Install the LabMax PC software *before* you connect the meter to the computer.

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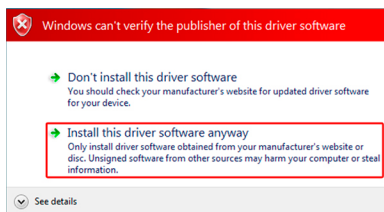
- Step 1:** Insert the LabMax CD into your CD-ROM drive. If *Autorun* is enabled on your system, installation will start automatically; otherwise, select **Run** from the Start menu and then type **D:\setup.exe** (substitute the appropriate letter of your CD-ROM drive for **D**).
- Step 2:** When the following screen appears, select “No, not at this time,” and then click the **Next** button to continue the installation.



**Step 3:** Select “Install the software automatically (Recommended)” on the following screen and then click **Next**.



**Note:** If a window similar to the one shown below appears, click the **Install this driver software anyway** radio button to continue the installation.



**Step 4:** Follow the rest of the on-screen instructions to complete the installation.

For complete operating instructions, refer to the LabMax User manual, available in Adobe<sup>®</sup> PDF format on the CD-ROM that shipped with your product.

## Installing Windows 7 or Windows 8



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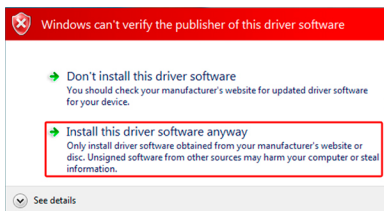
### NOTICE!

**Install the LabMax PC software *before* you connect the meter to the computer.**

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**Step 1:** Insert the LabMax CD into your CD-ROM drive. If *Autorun* is enabled on your system, installation will start automatically; otherwise, double-click the LabMax **setup.exe** file in the folder that appears on the desktop.

**Note:** If a window similar to the one shown below appears, click the **Install this driver software anyway** radio button to continue the installation.



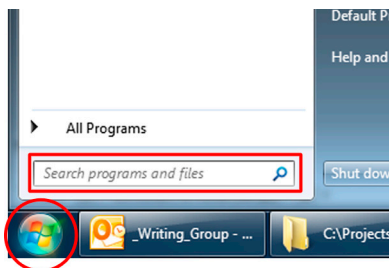
**Step 2:** Follow the on-screen instructions to complete the installation.

For complete operating instructions, refer to the LabMax User manual, available in Adobe® PDF format on the CD-ROM that shipped with your product.

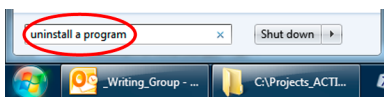
## **Uninstalling the Software**

Use this procedure to remove the software from your computer:

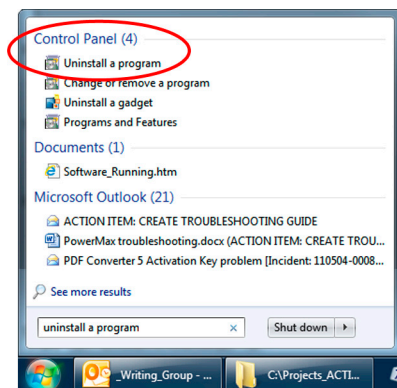
1. Click the **Start** button in Windows to display the Search box.



2. Type **uninstall a program** in the Search box.

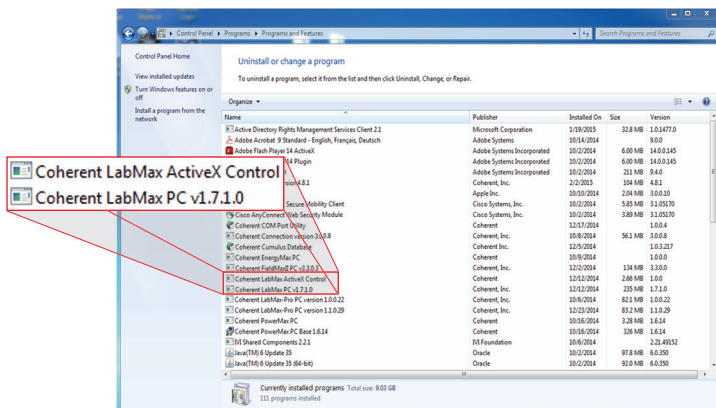


3. Click **Uninstall a program** under Control Panel.



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4. There are two files you must uninstall: *Coherent LabMax ActiveX Control* and *Coherent LabMax PC v1.7.1.0*. Double-click each file name (one at a time) and then click the **Yes** button to confirm the deletion.



## QUICK START

This section presents “mini-tutorials” that describe how to connect a sensor to your LabMax meter, take measurements within minutes, and save your data for later viewing.

Tutorials include:

- Measuring power with a thermopile or optical sensor (p. 9)
- (*LabMax-TOP meter only*) Measuring energy with a pyroelectric sensor (p. 10)
- Saving data to a file on the local drive (p. 11)
- Moving a file to the USB flash drive (p. 12)



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### **WARNING!**

**Follow all laser safety procedures. The laser must be blocked or switched OFF before starting any of the procedures described in this section.**

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### **WARNING!**

**Power to the LabMax meter must be OFF before starting any of the procedures described in this section.**

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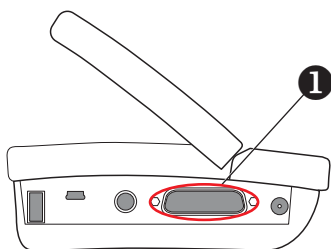
***NOTICE!***

**Do not exceed the power/energy density limits of the sensor.**

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## Measuring Power With a Thermopile or Optical Sensor

This tutorial describes how to take a power measurement using a thermopile or optical sensor.

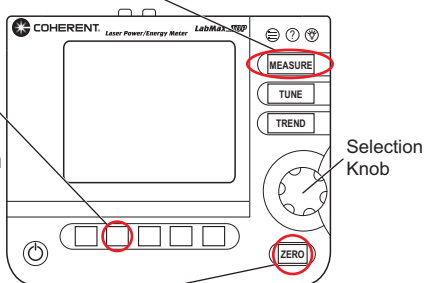


Connect a thermopile or optical sensor to the 25-pin connector and turn the meter ON.

*Note: Contact Coherent if the sensor has a BNC plug and did not ship with a 25-pin adapter (refer to the “Calibration and Warranty” section of the User manual for contact information).*

**2** Press the MEASURE button.

**3** Press the RANGE soft key and then turn the Selection knob to select the range. Select Auto if you want the meter to select the best measurement range for you.

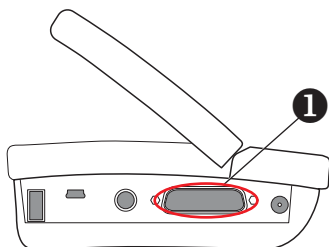


**4** Block the beam and then press the ZERO button to set the baseline for the new measurement.

**5** Unblock the beam, take the measurement, and observe the result on the display.

## Measuring Energy With a Pyroelectric Sensor

(LabMax-TOP meter only) This tutorial explains how to take an energy measurement using a pyroelectric sensor.



Connect a pyroelectric sensor to the 25-pin connector and turn the meter ON. *Note: Contact Coherent if the sensor has a BNC plug and did not ship with a 25-pin adapter (refer to the “Calibration and Warranty” section of the User manual for contact information).*

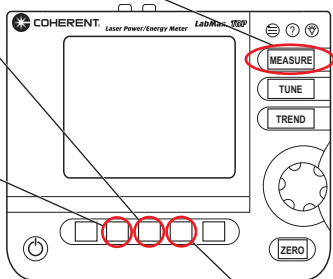
2 Press the MEASURE button.

If Watts mode is currently selected, toggle the UNITS soft key to select Joules mode.

3

Press the RANGE soft key and then turn the Selection knob to select the range. *Note: Auto range is not available for this type of sensor.*

4



5

Press the TRIG LEV soft key and then turn the Selection knob to adjust the trigger threshold. Make sure the trigger threshold is set *below* the energy level you plan to measure and *above* the level at which the system triggers on noise.

6 Take the measurement and observe the result on the display.

## Saving Data to a File on the Local Drive

In this tutorial you will create—and save data to—a file that's stored on the local drive (/loc). The tutorial on p. 12 shows how to move a file to the USB flash drive. You can also save data directly to the USB flash drive by navigating to the USB drive in step 2, in the following illustration.

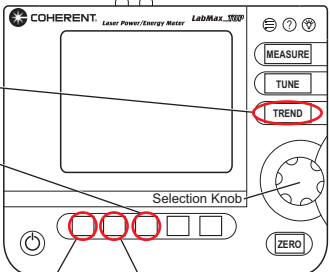
The diagram illustrates the steps to save data to a file on the local drive using the COHERENT LabMax\_500P Laser Power/Energy Meter. The device features a large LCD screen, a numeric keypad, and several function buttons: MEASURE, TUNE, TREND, and ZERO. Below the screen are five soft keys, each represented by a small square icon. The steps are as follows:

- 1** Press the TREND button. (The TREND button is circled in red on the device.)
- 2** Press the FILE MANAGER soft key and navigate to the /loc drive. *Note: The drive (/loc or /usb) that opens in FILE MANAGER defaults to the last drive accessed during the previous session, or to the /loc drive if no USB flash drive is attached to the meter.*
- 3** Press the EXIT soft key.
- 4** Press the TREND SETUP soft key.
- 5** Set the Duration value to the sample size you want to save to file.
- 6** Press the SAVE soft key.
- 7** Press the CREATE FILE soft key.
- 8** Create a file name on the TREND: Name Log File screen.
- 9** Press the SAVE soft key.
- 10** Press the START soft key.
- 11** When data collection is complete, press the RESET soft key.

-- Data is now saved in the file previously created in step 8. --

## Moving a File to the USB Flash Drive

This tutorial shows how to move a file from the local drive (/loc) to the USB flash drive (/usb) connected to LabMax.

- 
- 1 Attach a USB flash drive to the connector on the side panel.
- 2 Press the TREND button.
- 3 Press the FILE MANAGER soft key and navigate to the /loc drive. *Note: The drive (/loc or /usb) that opens in FILE MANAGER defaults to the last drive accessed during the previous session, or to the /loc drive if no USB flash drive is attached to the meter.*
- 4 Highlight the file you want to move.
- 5 Press the COPY MOVE soft key.
- 6 Navigate to a folder using the Selection knob, if you wish, and then press the MOVE soft key.
- 7 Press the ENTER/Set button to dismiss the confirmation dialog box.

-- The file selected in step 4 has been moved to the /usb drive and removed from the /loc drive. --



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