



# **Data Logger for Agilent Handheld Multi-function Calibrator and Meter**

## **Installation Guide**



**Agilent Technologies**

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# Introduction

The Agilent U1401A/U1401B Handheld Multi-Function Calibrator/Meter has a bidirectional (full duplex) communication capability that enables data transfer from the multimeter to a PC. The required accessory for this is an optional IR-USB cable, to be used with an application software that is downloadable from the Agilent Web site.

The U1401A Data Logger is an application software that is targeted to extend the capabilities of the U1401A/U1401B Handheld Multi-Function Calibrator/Meter. The software provides a simple graphical user interface (GUI) that allows you to perform basic controls and measurements through the PC. The software also adds a long-term data recording function to the instrument.

# 1 System Requirements

## Hardware requirements

### Instrument requirement

- ✓ U1401A/U1401B Handheld Multi-Function Calibrator/Meter
- ✓ Option U5481A IR-USB cable

### PC requirements

PC requirements	Specification (minimum)
Processor	1.6 GHz Pentium® IV or higher recommended
Operating System	Windows® XP Professional or Home Edition, (Service Pack 1 or later), Windows® 2000 Professional (Service Pack 4 or later), Windows Vista® or Windows 7 (Professional, Ultimate)(32-bit and 64-bit) - 32-bit application running on WOW64 (Windows-on-Windows 64-bit) emulator
Video	800×600 screen resolution (1280×1024 recommended)
Browser	Microsoft® Internet Explorer 5.01 or higher (6.0 or higher recommended)
Available RAM	512 MB or higher (1.0 GB or higher recommended)
Hard Disk Space	1.0 GB free disk space at runtime

## Software requirements

<b>Software requirements</b>	<b>Version (minimum)</b>
Microsoft® .NET Framework	Version 3.5
Visual Basic	Version 6.0 Runtime
PL-2303 USB-Serial Driver	Version 14.0.0.162 or higher

## 2 Installing the Data Logger

You may obtain the application software from Agilent Web site to install the U1401A Data Logger.

### NOTE

- Prior to installing the Data Logger, ensure that your PC meets the minimum system requirements for installation and operation processes.
- If you are installing a newer version of the Data Logger, the InstallShield Wizard will prompt you to override the installed older copy of the Data Logger. Click **Yes** to proceed with the installation.

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### Downloading the application software from the Web

- 1 Go to <http://www.agilent.com/find/handheld-calibrator-meter>, and download the U1401A Data Logger application software.
- 2 Save the file to any location on your hard disk.
- 3 Disconnect any instrument that is connected to your PC and close all other applications on your PC.
- 4 Double-click the saved installation file to begin installation.
- 5 If you do not have any of the prerequisites installed, the InstallShield Wizard software prerequisite will appear.
- 6 Click **OK** to begin the installation of the listed missing prerequisites.
- 7 Once the above installation has completed, installation of the Data Logger will proceed as normal.
- 8 Follow the instructions on your screen to begin the installation.
- 9 Click **Finish** once the installation has completed.
- 10 A shortcut to this software will be created on your desktop.





Data Logger  
for Agilent  
Handheld  
Multi-function  
Calibrator and  
Meter

### 3 Equipment Setup and Connection

Connect the U1401A/U1401B Handheld Multi-Function Calibrator/Meter to a computer for instrument control:

- 1 Set up the communication parameters of the U1401A or U1401B, and the personal computer you are using. The default values for baud rate, parity, data bit, and stop bit in the U1401A are 9600, n, 8, and 1 respectively.
- 2 Ensure that the USB driver and the IR transfer software has been installed on your computer.
- 3 Attach the optic side of the cable to the communication port on the meter. Ensure that the Agilent logo side is facing upwards.



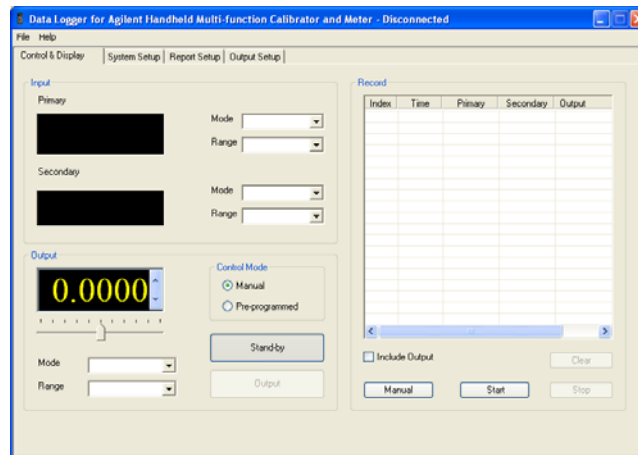
- 4 Plug the USB cable terminal end into the USB port of your personal computer.



- 5 Use the Data Logger to retrieve the data that you need.

## 4 Testing the Equipment Connections

- 1 Turn on the U1401A/U1401B Handheld Multi-Function Calibrator/Meter and the computer.
- 2 If a USB connection is being used and this is the first time that the U1401A/U1401B has been connected to the PC, then a New Hardware dialog will appear. Use the default selections to install the driver.
- 3 Start the Data Logger software from the Windows Start menu (**Start** (Windows taskbar) > **All Programs** > **Agilent** > **Data Logger for Agilent Handheld Multi-function Calibrator and Meter**) or double-click the **Data Logger for Agilent Handheld Multi-function Calibrator and Meter** software icon on your desktop and a screen similar to the one below will be displayed:

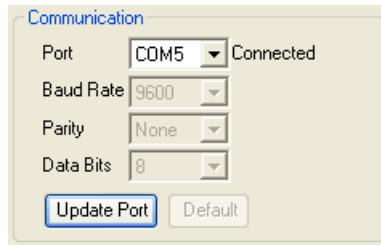


- 4 The Data Logger will automatically search for the connected instrument via the supported IO connectivity – IR-USB option.
- 5 Ensure that your connected instrument is powered on. The instrument's serial number will be displayed when the Data Logger is successfully connected to the instrument.



## System Setup

The Communication setup frame allows you to configure the communication port settings of your PC to match the U1401A/U1401B Handheld Multi-Function Calibrator/Meter. Click **Default** to reset the parameters to the software default parameters.



The screenshot shows a dialog box titled "Communication" with a light beige background. It contains four rows of settings, each with a label and a dropdown menu. The first row is "Port" with a dropdown set to "COM5" and the text "Connected" to its right. The second row is "Baud Rate" with a dropdown set to "9600". The third row is "Parity" with a dropdown set to "None". The fourth row is "Data Bits" with a dropdown set to "8". At the bottom of the dialog are two buttons: "Update Port" (highlighted with a blue border) and "Default".

### NOTE

The Data Logger will automatically search all communication ports for your connected instrument. If you change communication ports, click **System Setup > Update Port** to prompt the Data Logger to search for the new communication port.

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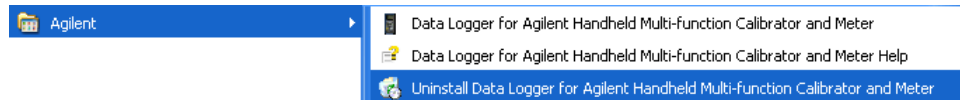
# Removing the Data Logger

The software can be removed either from the Windows Start menu or by the Windows Add/Remove Programs.

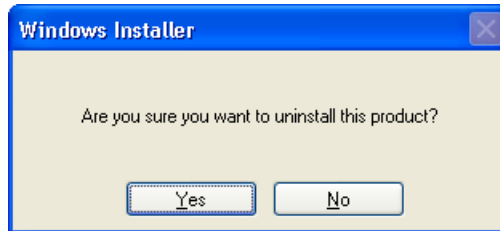
## Uninstalling from the Windows Start menu

To remove the software from the Windows Start menu, proceed as follows.

- 1 Select **Start** (Windows taskbar) > **All Programs** > **Agilent** > **Uninstall Data Logger for Agilent Handheld Multi-function Calibrator and Meter**.



- 2 The Windows Installer dialog box will appear and prompt you to confirm the complete removal of the application. Click **Yes** to proceed. To cancel the uninstallation, click **No**.

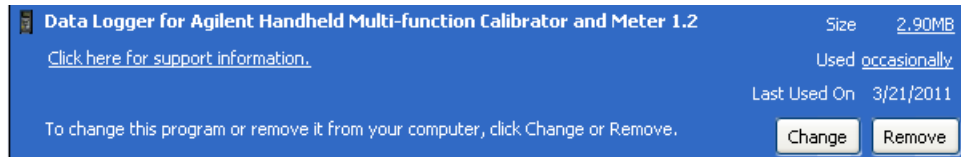


- 3 Follow the instructions on the screen to complete the removal process.

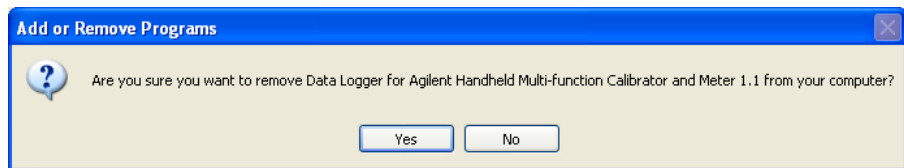
## Uninstalling from the Windows Add/Remove Programs

To remove the software by the Windows Add/Remove Programs, proceed as follows.

- 1 Select **Start** (Windows taskbar) > **Control Panel** to open the Control Panel window.
- 2 Double-click **Add or Remove Programs**. The Add or Remove Programs window will appear containing a list of currently installed programs.
- 3 Browse the list of currently installed programs to search for the **Data Logger for Agilent Handheld Multi-function Calibrator and Meter 1.1** as shown below.



- 4 Click **Remove** to uninstall the selected application.
- 5 The Add or Remove Programs dialog box will appear and prompt you to confirm the complete removal of the application. Click **Yes** to proceed. To cancel the uninstallation, click **No**.



- 6 Follow the instructions on the screen to complete the removal process.

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