

## UE9 Quickstart Guide: Please Read This First!

Go to [labjack.com](http://labjack.com) for the latest documentation, software and firmware. Examples for various languages are available online, including C, VB, and LabVIEW. The following installation instructions are for Windows.

The LabJack UE9 User's Guide is the complete documentation for the UE9. It is distributed in PDF format and can be found in the LabJack start menu group or online at [labjack.com](http://labjack.com).

**Install the software first:** Install the software using the CD or by downloading the latest UD installer from [labjack.com](http://labjack.com). Although all necessary software is available at [labjack.com](http://labjack.com), do not discard the CD as it includes a fully licensed copy of DAQFactory Express which is not available by download.

**Connect the USB cable:** The USB cable provides data and power (most USB ports). After the UD software installation is complete, plug in your LabJack UE9 and Windows should prompt with *"Found New Hardware"* and shortly after the Found New Hardware Wizard will open. When the Wizard appears, tell it to *"Install from a list or specific location"* and *"Search for the best driver ..."* and browse to specify the proper install directory for your version of Windows:

*C:\Program Files\LabJack\driver\install\UE9\LJWin\**

Do not use the *"Install the software automatically"* option, unless you are just installing the UE9 on a different USB port on a PC which has previously done a successful install of the UE9 on another USB port.

**... or to use Ethernet:** The UE9 has a 10Base-T Ethernet connection. This connection only provides communication, so power must be provided by an external power supply or USB connection. The UE9 ships with an Ethernet patch cable that would normally be used to connect to a hub or switch. A direct connection from the UE9 to a computer generally requires a crossover cable which is not included. Complex networks might require the assistance of your network administrator to use the UE9, but the following information is often sufficient for basic networks.

The LEDs on a switch/hub/NIC can be used to determine if you have an electrically valid connection. An orange LED is often used to indicate a good 10Base-T connection, but consult the manual for the switch/hub/NIC to be sure. In the case of a direct connection between PC and UE9, if Windows says *"A network cable is unplugged"* or similar, it suggests that the UE9 is not powered or the wrong type of cable is connected.

One basic requirement for TCP communication is that the UE9's IP address must be part of the subnet and not already used. Open a command prompt window and type *"ipconfig"* to see a listing of the IP address and subnet mask for a particular PC. If the PC shows a subnet mask of 255.255.255.0, that means it can only talk to devices with the same first 3 bytes of the IP address. The default IP address of the UE9 is 192.168.1.209, which will generally work on a network using the 192.168.1.\* subnet (unless another device is already using the .209 address). If the IP address of the UE9 needs to be changed, the easiest way is via USB with the LJControlPanel application.

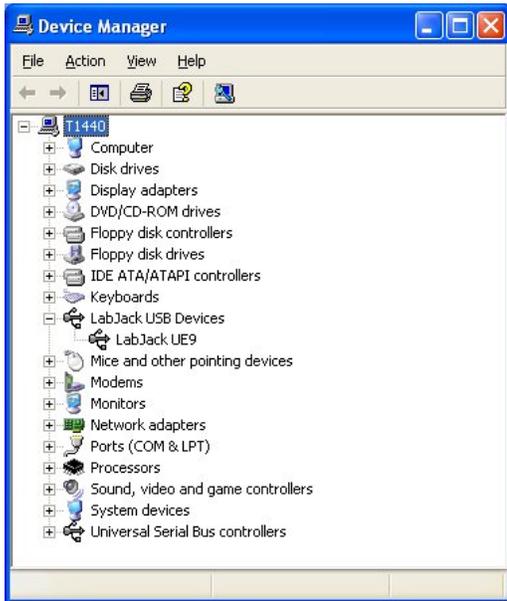
LJControlPanel and Ping (open a command prompt window and type *"ping 192.168.1.209"*) are useful utilities for testing basic Ethernet communication. It is a good idea to attempt to Ping the desired IP address before connecting the UE9, to see if anything is already using that address. A more extensive Ethernet troubleshooting utility called UE9ethertest is available at [www.labjack.com/files/utilities](http://www.labjack.com/files/utilities) .

**Run LJControlPanel:** From the Windows Start Menu, go to the LabJack group and run LJControlPanel. Click the *"Find LabJacks"* button, and an entry should appear for the connected UE9 showing the serial number. Click on the TCP or USB entry below the serial number to bring up the UE9 configuration panel. Click on *"Test"* in the configuration panel to bring up the test panel where you can view and control the various I/O on the UE9.

**USB Only:** If LJControlPanel does not find the UE9 over USB, check Windows Device Manager to see if the UE9 installed correctly. One way to get to the Device Manager is:

Start => Control Panel => System => Hardware => Device Manager

The entry for the UE9 should appear as in the following figure. If it has a yellow caution symbol or exclamation point symbol, right-click and select "Uninstall" or "Remove". Then disconnect and reconnect the UE9 and repeat the Found New Hardware Wizard as described above.



**DAQFactory Software:** The UE9 can be monitored and controlled with many software packages and programming languages. One software option is DAQFactory from AzeoTech. The UE9 CD includes a fully licensed copy of DAQFactory Express (check [daqexpress.com](http://daqexpress.com) for updates). DAQFactory Express is capable of handling many user applications, but if a more capable version of DAQFactory is needed visit [azeotech.com](http://azeotech.com) or your LabJack reseller for purchasing information. Also included on the CD is a trial version of the full DAQFactory product so you can try advanced features not included with DAQFactory Express.

DAQFactory is very powerful and flexible. We recommend the following as resources for learning how to use DAQFactory with the LabJack UE9:

- 1) DAQFactory – UE9 Tutorial.pdf : This document is a good place to start. It is a PDF format tutorial that steps through many DAQFactory features and specifically covers using DAQFactory with the UE9.
- 2) Example Documents: There are example documents (CTL files) for the LabJack UE9 in the DAQFactory Express start menu group. Check [azeotech.com](http://azeotech.com) for more examples and knowledgebase entries.
- 3) DAQFactory Guided Tour: The guided tour is accessed from the Contents tab after starting "Help" from within DAQFactory.

#### **Declaration of Conformity**

**Manufacturers Name:** LabJack Corporation

**Manufacturers Address:** 13701 W Jewell Ave, STE 284, Lakewood, CO 80228, USA

Declares that the product

Product Name: LabJack UE9

Model Number: LJUE9

conforms to the following Product Specifications:

**EMC Directive: 89/336/EEC**

EN 55011 Class A

EN 61326-1: General Requirements

and is marked with CE