Welcome to Vernier LabQuest Emulator 1.5

The LabQuest Emulator (LQM) is computer software that can be used to demonstrate the functions of a LabQuest on a computer. Usually this is done in order to project the image for a group presentation. The emulator performs almost all functions of the LabQuest itself, including collecting data from a LabQuest unit connected to the computer.

The emulator will also allow the easy collection of screen images. This is useful in creating documentation for LabQuest.

This version of LQM contains LabQuest App version 1.5, released in March 2011. The LQM also includes other applications, including the Periodic Table and Stopwatch. The Audio Function Generator and Power Amplifier applications will start, but they cannot control the output of an attached LabQuest. These two applications are provided for the purpose of demonstrating the user interface and for collection screen shots. A future version of LabQuest Emulator may allow control of a LabQuest audio output.

LQM is available for Windows XP (32 bit only), Vista (32 and 64 bit) and Windows 7 (32 and 64 bit) only.

Collect Data with LabQuest Emulator

Here's how to quickly collect some data with LQM.
1. Wake up your LabQuest by pressing the silver power button on the upper left corner.
2. Connect a sensor (auto-ID capable) to one of the ports on your LabQuest.
3. Launch LQM. After a short startup delay, LQM will find the LabQuest, and then detect the sensor.
4. At this point click on the LQM screen, using the computer mouse, in the same way you would tap the actual LabQuest screen using the stylus. Consult the LabQuest Reference Guide for details on the use of LabQuest App.

Tools

1. Choose Copy Screen from the Edit menu to place a copy of the current LabQuest screen on your computer clipboard. This is useful for creating documentation.
2. Sample data files are provided with LQM. Choose Open from the File menu in LabQuest App, and then open the folder titled sample_data.
3. LQM can open data files from a real LabQuest if they are placed in a special folder before LQM is launched. If you copy files to this location after LQM is launched, they will not be visible until you exit and restart LQM.
   a. Save a LabQuest file to a USB drive or SD card using Save from the file menu in LabQuest App.
   b. Copy this file to your computer, and place in the folder LQM_user_files, located in c:/Program Files/Vernier Software/ LabQuest Emulator/. (Non-default installations may have a different location. A shortcut to this folder is placed in your Start menu under Vernier Software by the LQM installer.
   c. Launch LQM.
   d. Choose Open from the File menu in LabQuest App, and navigate to the LQM_user_files folder. Select your file, and click Open.
4. Since the LQM cannot communicate with a spectrometer or the LabQuest internal microphone, we have provided virtual versions of these sensors for demonstration purposes. Only one virtual sensor can be used at a time.

     a. Choose Spectrometer from the Virtual Sensor menu to connect a virtual spectrometer for demonstration. You can only collect simulated data, but general operations can be shown.

     b. Choose Internal Microphone from the Virtual Sensor menu to connect a virtual microphone for demonstration. You can only collect simulated data, but general operations can be shown.

5. LQM can be used without a LabQuest, although you cannot collect data without the hardware. If LQM does not detect a LabQuest at startup time, a dialog will alert you to this. You can choose to continue into LQM without a LabQuest if desired. You can then open files and manipulate data therein.

Troubleshooting

1. Turn on your LabQuest before connecting to your computer, and before launching LQM.
2. LQM cannot collect data if it is not communicating with a LabQuest. The LQM window title bar will read LabQuest Connected once a LabQuest is found, and No Device Detected otherwise. An indicator is also displayed in the lower right corner of the LQM screen. It shows a LabQuest with a caution symbol if no LabQuest is detected.
3. If LQM cannot find the LabQuest, check to see if another application such as Logger Pro or Logger Lite has control of LabQuest. Only one computer application at a time can communicate with a LabQuest. Exit LQM, verify that LabQuest is connected, has power, and is turned on, and then restart LQM.

Limitations

1. LQM cannot print.
2. LQM cannot communicate with USB sensors such as spectrometers, GC or GPS, whether attached to the computer or to an attached LabQuest.
3. The LabQuest internal microphone is not supported.
4. Any files saved by LQM will be available within the emulator, but you cannot transfer these files to the actual LabQuest, Logger Pro, or any other application.
5. LQM cannot control the audio output of an attached LabQuest. As a result the Power Amplifier and Audio Function Generator applications do not actually do anything beyond demonstrating the use of these applications.

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