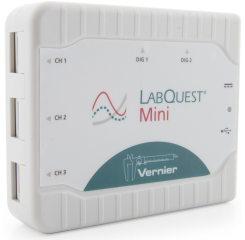
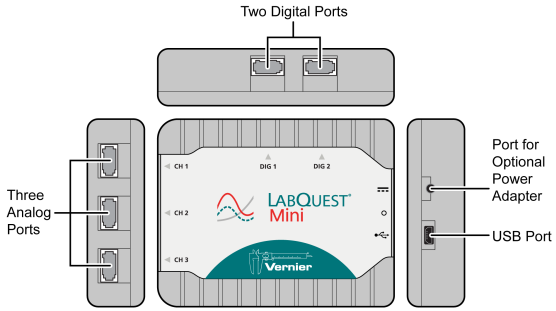
LabQuest® Mini
(Order Code: LQ-MINI)



LabQuest Mini is a multi-channel, data-collection interface that can be used to collect data from Vernier sensors on various platforms, such as Windows® and macOS® computers and Chromebook™ computing devices. LabQuest Mini supports a wired (USB) connection only.

The LabQuest Mini interface contains three analog ports (CH 1–CH 3), two digital ports (DIG 1 and DIG 2), a mini-USB connection, and a power adapter port (although power through this port is rarely needed).



Note: Vernier products are designed for educational use. Our products are not designed, nor are they recommended, for any industrial, medical, or commercial process such as life support, patient diagnosis, control of a manufacturing process, or industrial testing of any kind.

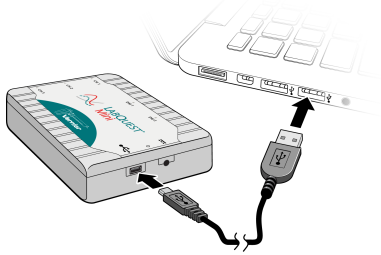
What's Included

- LabQuest Mini interface
- Mini USB cable

Getting Started

Follow these general procedures when using LabQuest Mini. For instructions on getting started with a specific sensor, see **www.vernier.com/start/lq-mini**

1. Install software appropriate for the data-collection platform you are using.
2. Connect a supported sensor to LabQuest Mini.
3. Connect the small end of the USB cable to the USB port on LabQuest Mini.
4. Connect the other end of the cable to a USB port on your computer or Chromebook. The LED will glow orange.



5. Start the software. The LED will change to green. You are now ready to continue your experiment.

Compatible Platforms, Software, and Sensors

See **www.vernier.com/manuals/lq-mini** for a list of platforms, software, and sensors compatible with LabQuest Mini.

Providing Power

Power for LabQuest Mini is supplied by the USB port of the computer or Chromebook to which it is connected. LabQuest Mini does not need batteries or an external AC power supply.

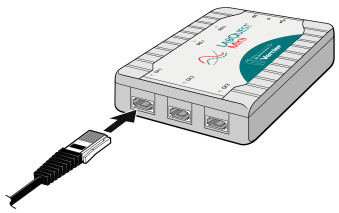
Note: There may be configurations that limit how much power is available from the USB port on a computer or Chromebook. Such configurations may include the use of other devices that require USB power at the same time as LabQuest Mini. In these situations, disconnect the other devices or use an external power supply (order code LQ-PS) to provide additional power to LabQuest Mini.

Connecting Sensors

LabQuest Mini supports two types of sensors—analog and digital. Connect sensors to the appropriate port on your LabQuest Mini.

Analog Sensors

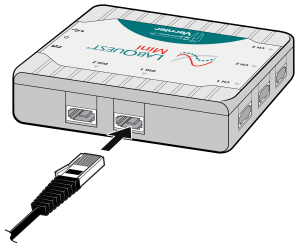
Examples of analog sensors are temperature probes, pH sensors, and force sensors. Up to three analog sensors can be connected to LabQuest Mini. The three ports for analog sensors (CH 1–CH 3) are located on the left side of the unit. These ports accept British Telecom-style plugs with a right-hand connector.



Digital Sensors

Examples of digital sensors include motion detectors, photogates, and rotary motion sensors. Up to two digital sensors can be connected to

LabQuest Mini. The two ports for digital sensors (DIG 1 and DIG 2) are located on the top side of the unit. These ports accept British Telecom-style plugs with a left-hand connector.



Note: Most sensors are automatically identified allowing the software to set up a default experiment. If you are using a sensor that does not auto-ID, you will need to manually identify the sensor in the software when supported.

LED Behavior

State	Meaning
Off	Not connected to USB host or no power from USB host
Orange	USB connected; not communicating with software
Green	Connected to host via USB; ready for data collection
Red	USB host failed to enumerate or USB port underpowered

Specifications

Resolution	12 bit
USB specification	2.0 full speed
Maximum sample rate (computers)	100,000 samples per second (one sensor) 10,000 samples per second (two or more sensors)
Maximum sample rate (Chromebooks)	10,000 samples per second
Minimum sample rate	0.00125 samples per second (800 seconds/sample)
Size	8.6 cm × 10.5 cm × 2.7 cm
Weight	100 g

Care and Maintenance

Water Resistance

LabQuest Mini is not water resistant and should never be immersed in water. If water gets in the device, immediately disconnect all sensors and cables. Allow the unit to dry thoroughly before using it again. Do not attempt to dry it using an external heat source.

Storage

Do not store LabQuest Mini in a chemical closet or in areas of concentrated chemical gases.

How the Interface Works

The LabQuest Mini interface is more than just a physical adapter between two different connectors. It is hardware that allows Vernier sensors to interact with computers and Chromebooks. LabQuest Mini contains dedicated electronics for precise sampling of sensor events. LabQuest Mini timestamps these events so measurements from multiple sensors can be analyzed simultaneously. To allow data to flow smoothly, LabQuest Mini manages the communication link between the sensors and the computing platform.

Troubleshooting

For troubleshooting tips and frequently asked questions regarding LabQuest Mini, see **www.vernier.com/til/2133**

Repair Information

If you have followed the troubleshooting steps and are still having trouble with your LabQuest Mini, contact Vernier Technical Support at support@vernier.com or call 888-837-6437. Support specialists will work with you to determine if the unit needs to be sent in for repair. At that time, a Return Merchandise Authorization (RMA) number will be issued and instructions will be communicated on how to return the unit for repair.

Accessories/Replacements

Item	Order Code
LabQuest Power Supply	LQ-PS
Mini USB Cable	CB-USB-MINI
Mini USB-C Cable	CB-USB-C-MINI

Warranty

Vernier warrants this product to be free from defects in materials and workmanship for a period of five years from the date of shipment to the customer.

This warranty does not cover damage to the products caused by abuse or improper use. This warranty covers educational institutions only.

Disposal

When disposing of this electronic product, do not treat it as household waste. Its disposal is subject to regulations that vary by country and region. This item should be given to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring that this product is disposed of correctly,

you help prevent potential negative consequences on human health or on the environment. The recycling of materials will help to conserve natural resources. For more detailed information about recycling this product, contact your local city office or your disposal service.


The symbol, shown here, indicates that this product must not be disposed of in a standard waste container.

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