

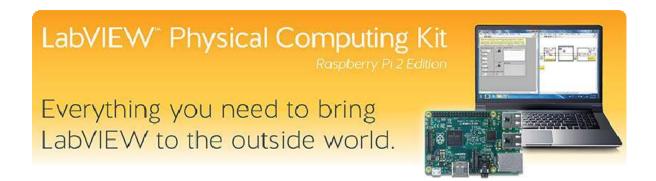
National Instruments

LabVIEW Physical Computing Kit for Raspberry Pi 2 (RETIRED)>> see standalone LabVIEW Home Bundle

SKU: 471-000-RET







The LabVIEW Physical Computing Kit includes the 32-bit version of LabVIEW Home and is compatible with Windows 10/8.1/8/7/Vista/XP (32-bit and 64-bit). Not compatible with OS X.

LabVIEW is a graphical programming platform used for data acquisition & analysis, instrument control, prototyping and more. LabVIEW Home Bundle has made this powerful software affordable for makers and students. But what if you want to connect your LabVIEW projects to the physical world?

That's why we've created the Physical Computing Kits. This version of the kit includes the popular Raspberry Pi 2 platform, combined with LabVIEW Home Bundle, it provides an inexpensive yet versatile way to connect to the outside world.

## What's in the kit?

The Raspberry Pi 2 Physical Computing Kit comes with:

- Raspberry Pi 2 Model B
- LabVIEW Home Bundle
- Micro USB Cable
- 8GB microSD card with adapter

With an upgraded 900MHz quad-core ARM Cortex-A7 processor, the Raspberry Pi 2 Model B is a powerful pocket-sized computer capable of being used for electronics projects, creating spreadsheets, word processing, browsing the internet, and playing games. It also plays high-definition video!

## Run LabVIEW beyond your computer!

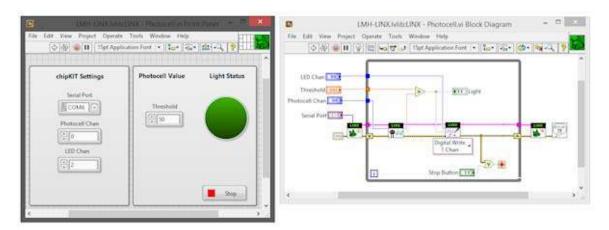
The Raspberry Pi is capable of many of the same things your computer does all for under \$100. What makes this board so powerful is a Broadcom BCM2836 and ARM Cortex-A7 quad-core processor SoC. It's great for processing applications and has connectivity for USB devices, like a mouse and keyboard. It requires a seperate SD card (8GB is recommended to store the Linux distribution) and a USB A to Micro-B cable for power.

The Raspberry Pi 2 is ideal for users who wish to learn how to program in multiple programming languages. Since it runs Linux, it allows users to deploy LabVIEW using LINX 3.0 and run the Rasperry Pi disconnected from the PC.

One application that we highly recommend would be to use the Raspberry Pi 2 to stream remotesensing data to a LabVIEW front panel running on a PC, which requires the use of a WiFi dongle (Wi-Pi) or an Ethernet cable plugged into a router.

With the Raspberry Pi 2, you'll have 4 USB ports, an HDMI port, 40 GPIO pins, an Ethernet port, combined 3.5mm audio jack and composite video, and a microSD card slot all at your disposal.

You'll also be able to quickly create your own graphical user interfaces. Does your project need switches, buttons, dials, numeric displays, or more? You'll be able to choose from hundreds of controls, graphs, and 3D visualization tools, then simply drag-and-drop them into place.



In LabVIEW, you can design your project's block diagram & graphical interface, all at once.

Once you have your LabVIEW program, you are able to deploy it to the Raspberry Pi 2 and run it remotely!

## **Need help getting started?**

You'll find a growing collection of tutorials and examples at LabVIEW MakerHub, including:

- A tutorial series for users new to LabVIEW and its interface https://www.labviewmakerhub.com/doku.php?id=learn:tutorials:labview:basics
- A tutorial series specifically for the Rasperry Pi 2. https://www.labviewmakerhub.com/doku.php?id=learn:tutorials:libraries:linx:3-0

These tutorials can walk you through an introduction to the LabVIEW interface, programming examples, setting up your Raspberry Pi 2 for deployment and running your LabVIEW code.