



# Control Lab 10

User Guide 1.0.3



# Installing Control Lab IO

Control Lab IO can be installed on Windows (32/64-bit versions of 7 SP1, 8, and 10), macOS (10.10 Yosemite and above), Raspberry Pi (3B, 3B+, and 4B running Raspbian Buster), or Ubuntu (18.04 LTS).

## Getting started

Install serial port or adapter drivers before installing Control Lab IO. If installing on Microsoft Windows 7 SP1, you also need to download and install, **Microsoft .NET Framework 4.8 Runtime**.

### Installing on Windows

1. Download **control-lab-io\_1.0.1\_win-x64/x86.msi**
2. Double-click .msi installer
3. Click next
4. Choose destination folder and click next
5. Click install
6. Click yes
7. Click finish

### Installing on macOS

1. Download **control-lab-io\_1.0.1.dmg**
2. Double-click .dmg to mount
3. Drag-and-drop into Applications folder.

### Installing on Raspbian

1. Download **control-lab-io\_1.0.1\_armhf.deb**
2. Right-click .deb and click Package Install
3. Click install
4. Enter password if prompted
5. Click ok

### Enable serial port on Raspbian

1. Open Raspberry Pi Configuration
2. Click on Interfaces tab
3. Enable Serial Port and click ok
4. Click yes to reboot

### Installing on Ubuntu

1. Download **control-lab-io\_1.0.1\_amd64.deb**
2. Right-click .deb and click Open with Software Install
3. Click install
4. Enter password if prompted
5. Close Ubuntu Software Install

### Enable serial port by adding user to dialout group

1. Open Terminal
2. Enter command on step 3 and replace \$USER
3. *sudo adduser \$USER dialout*
4. Restart

## Shortcuts

### Windows, Raspbian, and Ubuntu

Close application: **CTRL+W**  
Toggle full screen: **F11**

### macOS

Close application: **Command+W**  
Toggle full screen: **Control+Command+F**

## FAQ

Q: I am using a USB hub and Control Lab IO does not establish a connection.

A: Not all USB hubs are currently supported. Connect your serial cable directly to the computer.

## Motor Controls

Controls output for motors A-H.

### Direction

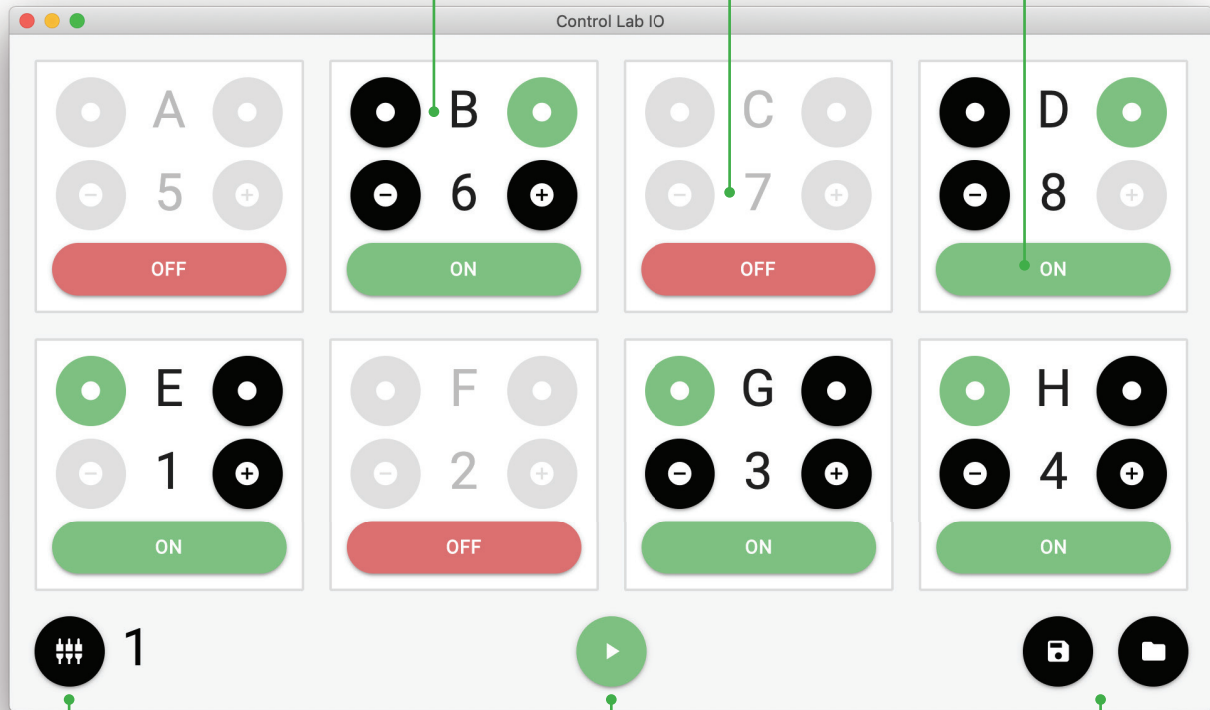
Toggle between forward and backward.

### Speed

Press to increase or decrease motor speed (1-8).

### On / Off

Press to turn motor on and off.



### Control Lab Drop-down

Press to select the Control Lab Interface B you wish to control (1-4). Drop down only displays connected devices.

### Play / Pause Toggle

Spacebar or Enter | Return

Press to toggle between **play mode** and **pause mode**.

### Save / Load Buttons

CTRL+S / CTRL+L

Press save to record current configuration. Press load to recall last configuration.

## Play / Pause Modes

**Pause mode** allows you to set the motors to **stand-by on** (orange).  
**Stand-by on** motors will activate in **Play mode**.

**Play mode** activates motors (green + pulse).

