

# Arduino IDE

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This is an installation guide for the Arduino IDE on Ubuntu.

## Pick a version

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Version:

## Download and extract the Arduino IDE

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Either download it from the Arduino website, or use Wget to download it directly.  
Then extract the archive to `~/opt`.

```
$ cd /tmp
$ wget https://downloads.arduino.cc/arduino-1.8.9-linux64.tar.xz
$ mkdir -p ~/opt/
$ tar -xf arduino-1.8.9-linux64.tar.xz -C ~/opt/
```

## Install the Arduino IDE

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The default installation folder is `~/local`.

There seems to be a bug in the installation script that expects `~/local/share/icons/hicolor` to be present, so we'll have to create that directory first.

```
$ mkdir -p $HOME/.local/share/icons/hicolor
$ cd $HOME/opt/arduino-1.8.9
$ ./install.sh
```

You'll get a warning **Removing symlink failed. Hope that's OK. If not then rerun as root with sudo.** You can safely ignore it, because we'll make the right symlink ourself:

```
$ mkdir -p ~/.local/bin
$ ln -s ../../opt/arduino-1.8.9/arduino ~/.local/bin/
$ ln -s ../../opt/arduino-1.8.9/arduino-builder ~/.local/bin/
```

If `~/local/bin` is not already in your path, add it:

```
$ echo "export PATH=\"$HOME/.local/bin:$PATH\"" >> ~/.profile
$ source ~/.profile
```

## Add your user to the dialout group

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Your user needs access to the serial ports of you computer in order to upload sketches to the Arduino.  
You can either add your user to the group manually, using the following command:

```
$ sudo usermod -a -G dialout $USER
```

Alternatively, you can run the `arduino-linux-setup.sh` script to do it for you. It'll also handle udev rules for some Arduinos and programmers, and fixes some modemmanager problems.

```
$ sudo ./arduino-linux-setup.sh $USER
```

## Start the Arduino IDE

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You should now be able to start the Arduino IDE from the start menu, by double-clicking an `.ino` file, or from the terminal:

```
$ arduino
```

## Tested on

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- Ubuntu 18.04 - Arduino 1.8.9