

Cultural Makerbox

Recipy: Blink with Arduino

Recipe 1

Getting Started with Arduino and Genuino UNO

This document explains how to connect your Uno board to the computer and upload your first sketch.

- [Quick Start](#)
- [Install the board drivers](#)
- [Launch the Arduino Software \(IDE\)](#)
- [Open your first sketch](#)
- [Select your board type and port](#)
- [Upload the program](#)
- [Get inspired](#)

Quick Start

The Uno is programmed using the Arduino Software (IDE), our Integrated Development Environment common to all our boards. Before you can move on, you **must** have installed the Arduino Software (IDE) on your PC, as explained in the home page of our [Getting Started](#).

Connect your Uno board with an A B USB cable; sometimes this cable is called a *USB printer cable*



The USB connection with the PC is necessary to program the board and not just to

power it up. The Uno automatically draw power from either the USB or an external power supply. Connect the board to your computer using the USB cable. The green power LED (labelled **PWR**) should go on.

Install the board drivers

If you used the Installer, Windows - from XP up to 10 - will install drivers automatically as soon as you connect your board.

If you downloaded and expanded the Zip package or, for some reason, the board wasn't properly recognized, please follow the procedure below.

- Click on the Start Menu, and open up the Control Panel.
- While in the Control Panel, navigate to System and Security. Next, click on System. Once the System window is up, open the Device Manager.
- Look under Ports (COM & LPT). You should see an open port named "Arduino UNO (COMxx)". If there is no COM & LPT section, look under "Other Devices" for "Unknown Device".
- Right click on the "Arduino UNO (COMxx)" port and choose the "Update Driver Software" option.
- Next, choose the "Browse my computer for Driver software" option.
- Finally, navigate to and select the driver file named "**arduino.inf**", located in the "Drivers" folder of the Arduino Software download (not the "FTDI USB Drivers" sub-directory). If you are using an old version of the IDE (1.0.3 or older), choose the Uno driver file named "**Arduino UNO.inf**".
- Windows will finish up the driver installation from there.

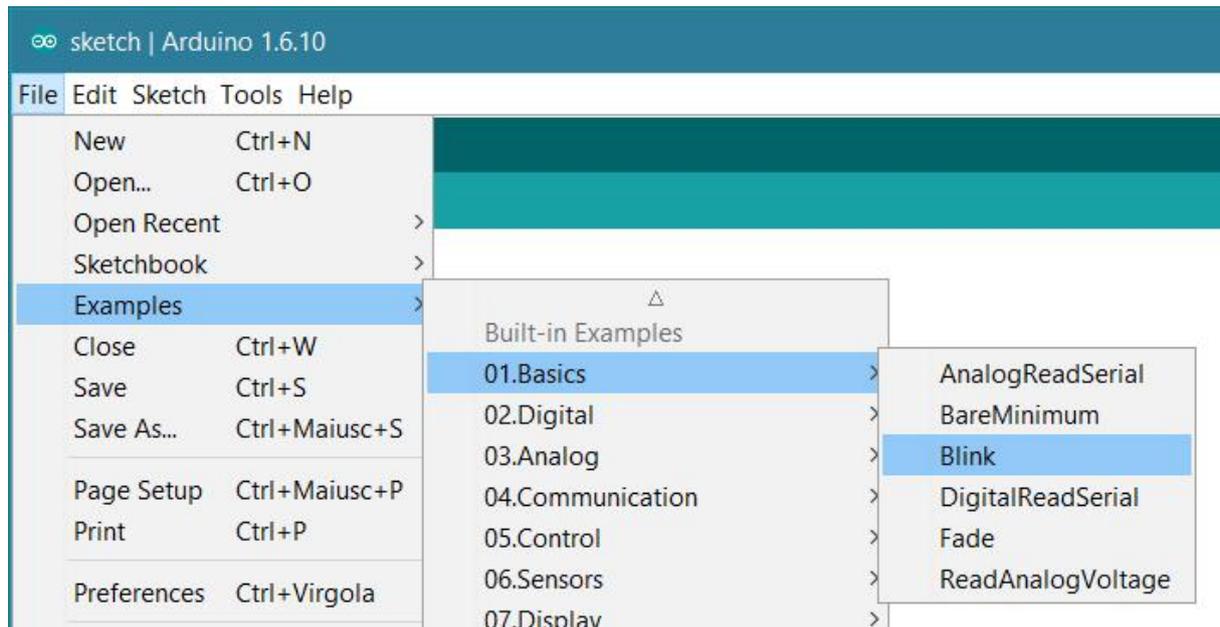
See also: [step-by-step screenshots for installing the Uno under Windows XP](#).

Launch the Arduino Software (IDE)

Double-click the Arduino icon (arduino.exe) created by the installation process. (Note: if the Arduino Software loads in the wrong language, you can change it in the preferences dialog. See [the Arduino Software \(IDE\) page](#) for details.)

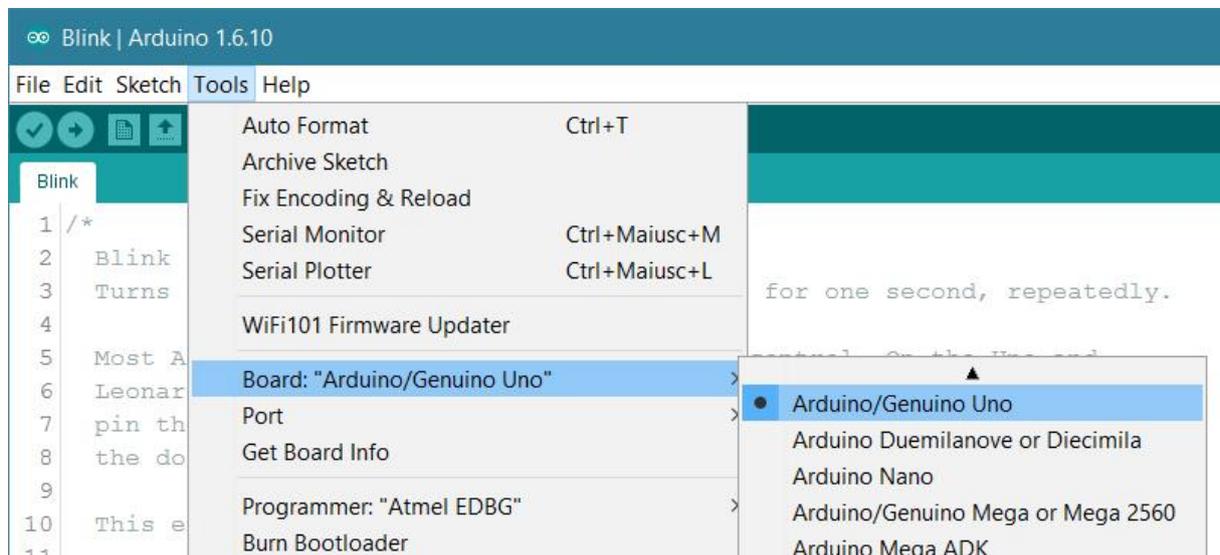
Open your first sketch

Open the LED blink example sketch: **File > Examples >01.Basics > Blink**.

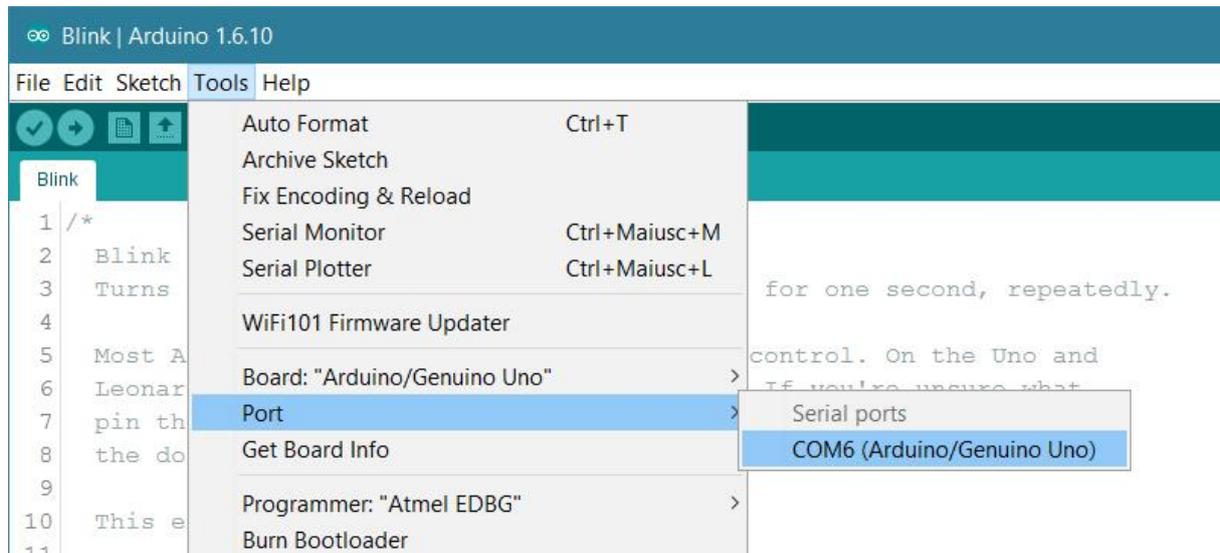


Select your board type and port

You'll need to select the entry in the **Tools > Board** menu that corresponds to your Arduino or Genuino board.

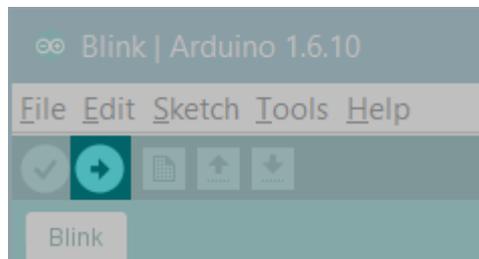


Select the serial device of the board from the Tools | Serial Port menu. This is likely to be COM3 or higher (COM1 and COM2 are usually reserved for hardware serial ports). To find out, you can disconnect your board and re-open the menu; the entry that disappears should be the Arduino or Genuino board. Reconnect the board and select that serial port.



Upload the program

Now, simply click the "Upload" button in the environment. Wait a few seconds - you should see the RX and TX leds on the board flashing. If the upload is successful, the message "Done uploading." will appear in the status bar.



A few seconds after the upload finishes, you should see the pin 13 (L) LED on the board start to blink (in orange). If it does, congratulations! You've gotten Arduino or Genuino up-and-running. If you have problems, please see the [troubleshooting suggestions](#).

Get inspired

Now that you have set up and programmed your Uno board, you may find inspiration in our [Project Hub](#) tutorial platform, or have a look to the tutorial pages that explain how to use the various features of your board.

- [examples](#) for using various sensors and actuators
- [reference](#) for the Arduino language

Source: <https://www.arduino.cc/en/Guide/ArduinoUno>

Recipe 2

Build Your first interactive circuit, using a switch, a resistor and an LED.
Arduino is just the power source for this circuit

Watch the Arduino Video Tutorial - 01 Get to know your Tools with Massimo Banzi

<https://www.youtube.com/watch?v=grU7eNPBRxk>

Build Your first interactive circuit, using a switch, a resistor and an LED.
Arduino is just the power source for this circuit

You can use the instructions witch comes from the “Arduino Project Book”



The “Arduino Project Book” is license as

Learning resources:

10 arduino beginner projects explained by Massimo Banzi (co-founder of Arduino):
[https://www.youtube.com/watch?list=PLT6rF_I5kknPf2qIVFlvH47qHvqvzkknd
&v=grU7eNPBRxk.](https://www.youtube.com/watch?list=PLT6rF_I5kknPf2qIVFlvH47qHvqvzkknd&v=grU7eNPBRxk)