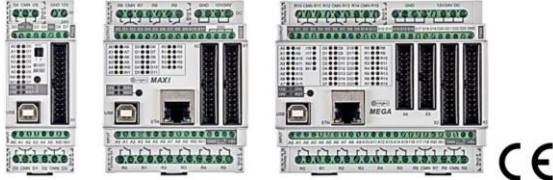# Controllino Quickstart Guide

Thank You for choosing Controllino

This quickstart guide will help you to get started quickly with CONTROLLINO and gives valuable tips for safe handling. Please familiarize yourself with it.

INFO: you can download this quickstart guide, a detailed instruction manual and a "PINOUT table" from our website: https://controllino.biz/downloads/

Additional questions on set-up will be answered on our GitHub-page:
https://github.com/CONTROLLINO-PLC/CONTROLLINO_Library

SAFETY PRECAUTIONS:

IMPORTANT! CONTROLLINO is able to switch **high voltages** – make sure only trained people are using it! Read the quickstart guide and instruction manual carefully before using it. They explain the correct usage of the product and indicate possible dangers. Observe operating and maintenance instructions. Damages resulting from the non-observation of this manual do not constitute a warranty claim and CONELCOM GmbH does not accept any liability.

IMPORTANT! The relay outputs are divided into 2 blocks **Block A / Block B**. Due to security reasons, within one block you may only use one type of switching circuit. This means that within block A, you may only use 230V **or** DC which is not SELV (Safety Extra Low Voltage) and SELV circuit on block B or vice versa. **It is not possible to combine these two types of circuits in one block! See image below. Obey all security precautions for your own safety!**

Block B   Block A

Do not mix switching circuits! ①

CONTROLLINO Quickstart Guide – follow these steps to get started:
1. Install the programming/development environment (e.g. Arduino IDE)
2. Install CONTROLLINO software-library for Arduino IDE
3. Install CONTROLLINO hardware-library for Arduino IDE

1. Install the Programming/Development Environment:

For your CONTROLLINO to work, you need to create a programme for it.

You can basically use any programming/development environment that is suitable for Arduino. You can find recommended software on our websites' **programming area:** https://controllino.biz/programming/

The most simple and cost-free choice is using the Arduino IDE.

You can download the ARDUINO IDE here:
http://www.arduino.cc

We always recommend to download the latest version of Arduino IDE. ②

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2. Install CONTROLLINO Software-Library for Arduino IDE:

After you have installed the Arduino IDE, you must install the CONTROLLINO library. Proceed as follows:

Start the Arduino IDE. In the menu navigate to **Sketch → Include Library → Manage Libraries**.

③
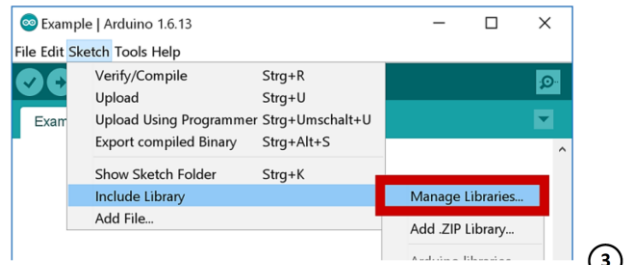
In the window that opens called Library Manager write "Controllino" into the search box. Out of the items shown, select CONTROLLINO library by CONTROLLINO and click **Install**:
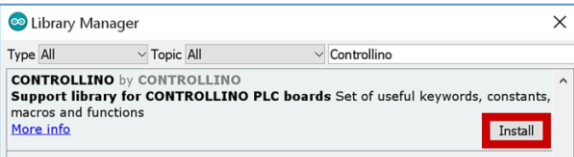

An automated process will install the CONTROLLINO library on your PC. Successful installation is shown with an **INSTALLED** label next to the item name:

④
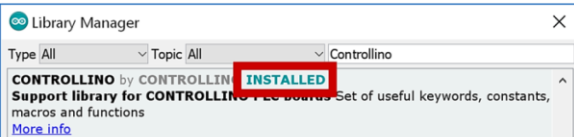
### 3. Install CONTROLLINO Hardware-Library for Arduino IDE:

Navigate in the menu to **File → Preferences**. Paste the following address into the field labelled "Additional Boards Manager URLs:" and press **OK**:

https://raw.githubusercontent.com/CONTROLLINO-PLC/CONTROLLINO_Library/master/Boards/package_ControllinoHardware_index.json
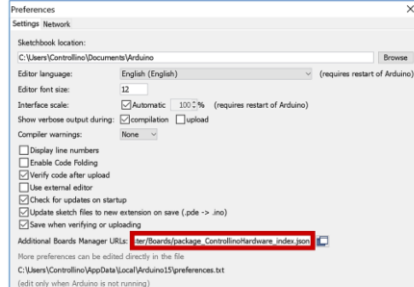
↑ You can copy and paste this link from our GitHub-page (look for "Installation guide"):
https://github.com/CONTROLLINO-PLC/CONTROLLINO_Library

⑤

Navigate in the menu to **Tools → Board: „Arduino** *(name of your last used board)"* **→ Boards Manager**. In the Boards Manager window that is opening, type CONTROLLINO into the search box. CONTROLLINO Boards will be shown. Then click **Install** for automatic installation of the CONTROLLINO hardware.
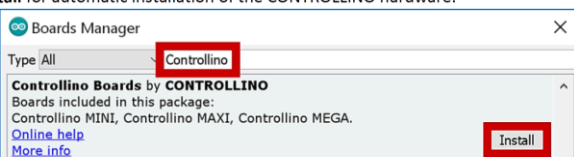
Successful installation will be indicated by showing **INSTALLED**. The CONTROLLINO library package will install CONTROLLINO specific examples (see **File → Examples → Controllino Library** (bottom of menu)). Your installation is now finished.

You can now connect your CONTROLLINO to the USB port. The **D0 LED will start to blink (1 sec. ON, 1 sec. OFF) to show it's working properly.** This behaviour disappears after uploading the first sketch. Navigate to **Tools → Port** and choose the connected CONTROLLINO. You can now start programming in Arduino IDE. ⑥