

Requirements

The following components are required to use the board:

- 1 Arduino™ UNO or similar
- 5 jumpers (jump wires) pin to socket

Hardware

The display has 2x5 pin contacts that are used to establish the connection to the Arduino™. The Arduino™ is connected to the pin strip on the side of the MAX7219 (read the label on the pin strip).

The following overview shows the functions of the contacts.

VCC	Power supply (5 V/DC)
GND	Ground power supply
DIN	Data input
CS	Chip select
CLK	Clock signal

Operation

Connect the display to an Arduino™ UNO as follows:

Display	Arduino™
VCC	+5V
GND	GND
DIN	D12
CS	D10
CLK	D11

Note:

If you want to connect another display, connect it to the 5 pin contacts that are still available (on the opposite side of the MAX7219).

The wiring should be connected in a 1-to-1 configuration.

BN 2268120

8x8 Matrix Display Module MAX7219 for Arduino™

GB Operating instructions

Latest operating instructions

Download the latest operating instructions at www.conrad.com/downloads or scan the QR code shown. Follow the instructions on the website.



Delivery contents

- 8x8 Matrix Display Module MAX7219 for Arduino™

Description

The 8x8 LED dot matrix display is the ideal extension for your Arduino™. It allows you to display cool icons or play simple animations.

The display features a MAX7219 LED driver for controlling the LEDs. This allows the 64 LEDs on the display to be individually controlled by only three wires.

In addition, several of these displays can be connected in series. This provides a simple way to build small ticker displays.

Product features

- 8x8 LED dot matrix
- MAX7219 LED driver
- Arduino™ compatible
- Can also be used for other microcontrollers
- Easy to control thanks to Arduino™ library
- Only 3 control cables are required
- Several displays can be connected in series

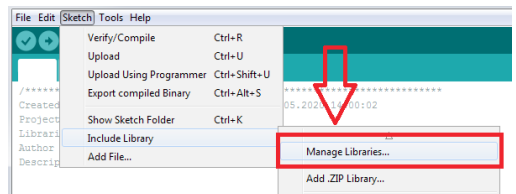
Test program

The LedControl libraries are required to operate the display.

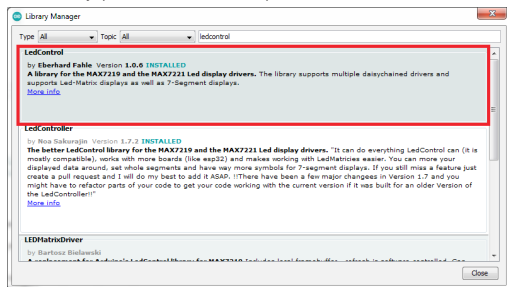
You also need to use Arduino™ IDE version 1.8.7 or later.

Download the LedControl libraries from the Arduino™ IDE.

To do this, open the **"Manage Libraries..."** menu, which you will find in the Arduino™ IDE under **"Sketch" - "Include Library"**.



Enter "**LedControl**" in the search field and install the "**LedControl**" library (from Eberhard Fahle).

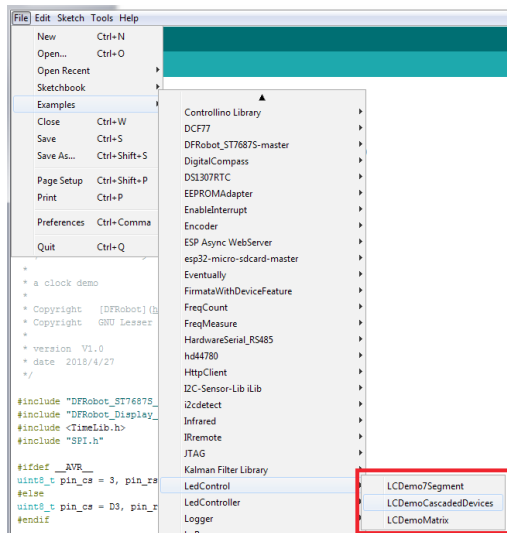


After installation, go to "**Examples**" to view various examples that you can try out with this display.

If necessary, change the pin assignment in the examples to your wiring configuration!

A detailed description of the library can be found at the following link:

» <https://github.com/wayoda/LedControl>



Disposal



Electronic devices are recyclable waste and must not be placed in household waste. At the end of its service life, dispose of the product in accordance with the applicable regulatory guidelines.

You thus fulfil your statutory obligations and contribute to the protection of the environment.

Specifications

Operating voltage	5 V/DC
Current consumption (max)	140 mA (all LEDs on)
LED driver.....	MAX7219
Interface.....	Serial (DIN, CS, CLK)
Modules cascadable.....	Yes
Pin spacing of pin strip (width).....	2.54 mm
Mounting holes Ø	3 mm
Dimensions (W x H x D)	32 x 15 x 50 mm
Weight	18 g

Note:

There are now several libraries on the Internet for the MAX7219 that you can use with this display. In the examples, you only need to adjust the connection pins.

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