# ROUND 1.28" LCD DISPLAY

Circular IPS LCD display with 4-Wire SPI interface

## 1. GENERAL INFORMATION

Dear customer,

thank you for choosing our product. In the following, we will show you what to consider during commissioning and use.

Should you encounter any unexpected problems during use, please feel free to contact us.

## 2. BASICS

The 1.28" LCD display convinces with its high-resolution IPS display and its circular display surface. With a color depth of 65,000 colors, the display is of particularly high quality.

Due to the control via the SPI interface, the display is ideally suited for use as an output device on microcontrollers and single board computers.

## 3. APPLICATION EXAMPLE ARDUINO

First connect the module to your Arduino as follows:
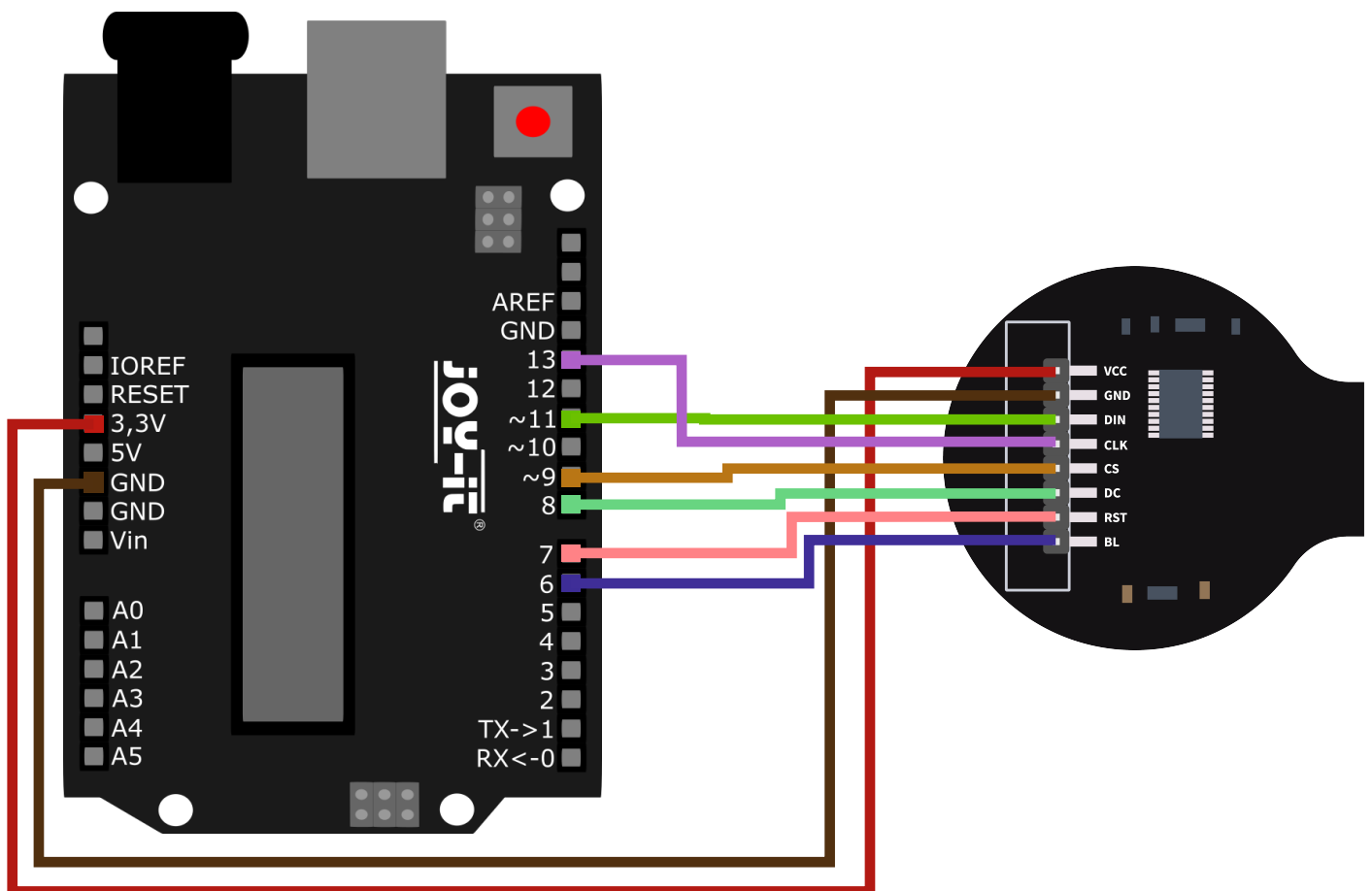
| ARDUINO | 1.28" LCD DISPLAY |
|---------|-------------------|
| 3,3 V | VCC |
| GND | GND |
| D11 | DIN |
| D13 | CLK |
| D9 | CS |
| D8 | DC |
| D7 | RST |
| D6 | BL |

For the use of our software example the installation of the **GFX Library for Arduino** is required. To install it, first open the library manager in your Arduino IDE at **Sketch → Include Library → Manage Libraries**.

Here, type **GFX Library for Arduino** in the search box and install the library titled **GFX Library for Arduino**.

You can download the sample program **here**. Open this and transfer it to your Arduino.

## 4. APPLICATION EXAMPLE RASPBERRY PI

First connect the module to your Raspberry Pi as follows:
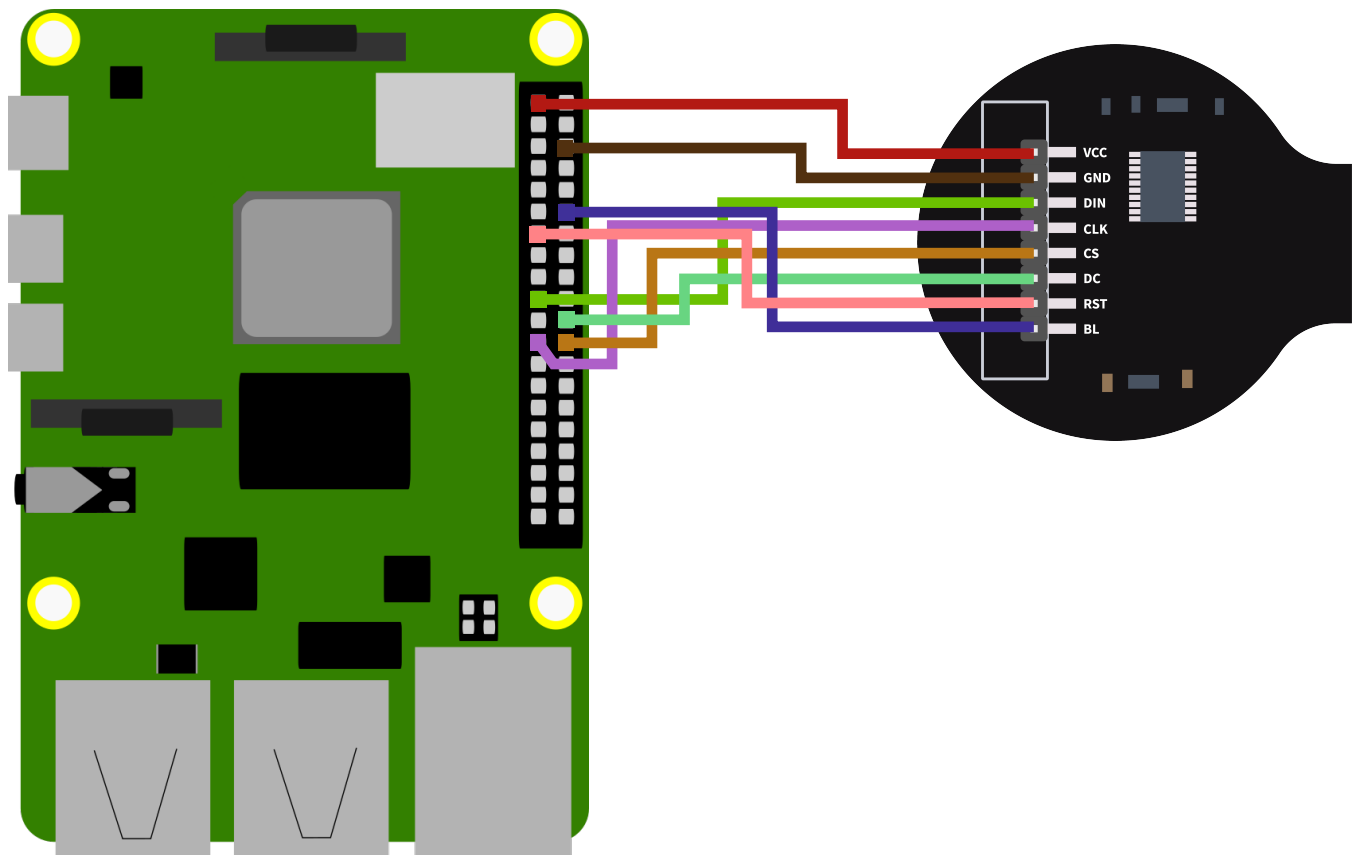
| RASPBERRY PI | 1.28" LCD DISPLAY |
|---|---|
| 3,3 V | VCC |
| GND | GND |
| GPIO10 | DIN |
| GPIO11 | CLK |
| GPIO8 | CS |
| GPIO25 | DC |
| GPIO27 | RST |
| GPIO18 | BL |

Before we can use the sensor, we first need to enable the I2C interface on the Raspberry Pi. Open a new terminal window and enter the following command to open the Raspberry Pi configuration menu:

```
sudo raspi-config
```

Navigate here to the menu **3 Interfacing Options** and activate **I4 SPI** here. Now you can download and unpack the sample program with the following command:

```
sudo apt-get install python3-pip
sudo pip3 install Pillow
sudo apt install python3-numpy
sudo apt-get install libopenjp2-7
wget https://www.joy-it.net/files/files/Produkte/SBC-LCD1.28R/SBC-LCD128R-RPi.zip
unzip SBC-LCD128R-RPi.zip
```

Now run the sample program:

```
sudo python3 SBC-LCD128R.py
```

## 5. INFORMATION & TAKE-BACK OBLIGATIONS

Our information and take-back obligations under the Electrical and Electronic Equipment Act (ElektroG)

**Symbol on electrical and electronic equipment:**
This crossed-out trash can means that electrical and electronic equipment does not belong in the household trash. You must hand in the old equipment at a collection point. Before dropping off, you must separate used batteries and accumulators that are not enclosed in the old device from the old device.

**Return options:**
As an end user, when you purchase a new appliance, you can return your old appliance (which performs essentially the same function as the new one purchased from us) for disposal free of charge. Small appliances with no external dimensions larger than 25 cm can be returned in normal household quantities, regardless of the purchase of a new appliance.

**Possibility return to our company location during opening hours:**
SIMAC Electronics GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

**Possibility return in your area:**
We will send you a parcel stamp with which you can return the device to us free of charge. To do this, please contact us by e-mail at Service@joy-it.net or by phone.

**Packaging information:**
Please pack your old device securely for transport. If you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

## 6. SUPPORT

We are also there for you after the purchase. If you have any questions or problems arise, we are also available by e-mail, telephone and ticket support system.

E-Mail: service@joy-it.net
Ticket-System: http://support.joy-it.net
Phone: +49 (0)2845 9360 – 50 (Mon. - Thur.: 09:00 - 17:00 ó clock, Fri.: 09:00 - 14:30 ó clock)

For more information visit our website:
**www.joy-it.net**