RB-LCD10-2

10.1" touchscreen display Manual

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This guide was written under Raspberry Pi OS Bookworm for the Raspberry Pi 4 and 5. It has not been checked with newer operating systems or hardware.

1. GENERAL INFORMATION

Dear customer,
Thank you for choosing our product. In the following, we will show you what you need to bear in mind during commissioning and use.

Should you encounter any unexpected problems during use, please do not hesitate to contact us.

2. ASSEMBLY OF DISPLAY

2.1 Assembling the display

First remove the display, the stand and the base neck of the display. Insert the metal rectangle of the base neck into the appropriate guide on the display housing (near the USB label).

Fix the base neck in place by screwing down the round fixing washer located directly in front of the metal rectangle.

Now insert the neck of the base into the stand and screw it tight using the screws provided.

2.2 Mounting a Raspberry Pi

If you want to operate the display with a Raspberry Pi, you can use the mounting platform provided for this purpose.

To do this, remove the supplied mounting platform and attach your Raspberry Pi to it.

Once you have attached your Raspberry Pi, place the mounting platform on the back of the display and mount it **(screw holes 9 -Vesa)**.

The display is now fully assembled and should look like the picture below.

2.3 Connection to a device

First connect the display to the enclosed power supply unit. Next, connect the HDMI cable to the display and to the device to be used.

To be able to use the touch functions, the enclosed USB cable must also be connected to the display and the device to be used.

Achtung! Verwechseln Sie nicht die USB-Anschlüsse. Um die Touch-Funktionen nutzen zu können, muss am Display der USB-Anschluss mit der Aufschrift „Touch“ verwendet werden.

3. USE OF THE DISPLAY

3.1 Manual installation & calibration

For use with a Raspberry Pi, a few settings must first be edited in raspi-config. To do this, enter the following command:

```
sudo raspi-config
```

In raspi-config, you must now select Wayland under 6 Advanced Options, A6 and switch from Wayfire to X11 there. To do this, select X11 and confirm the activation with Yes and the subsequent question about restarting the Raspberry Pi.

If you do not want to install our prepared image or integrate the display into an existing system, you can of course also install the display manually.

First connect the two devices with the appropriate HDMI cable supplied. Connect both the display and your Raspberry Pi with the power cables provided.

Next, we check whether the connected display is also recognized by our Raspberry Pi. We do this by using the following command:

```
kmsprint | grep Connector
```

Now that we have confirmed that the connected display is recognized, we can continue.

The next step is to check all connected devices for their names, as these names will be required later on. To do this, we use the following command:

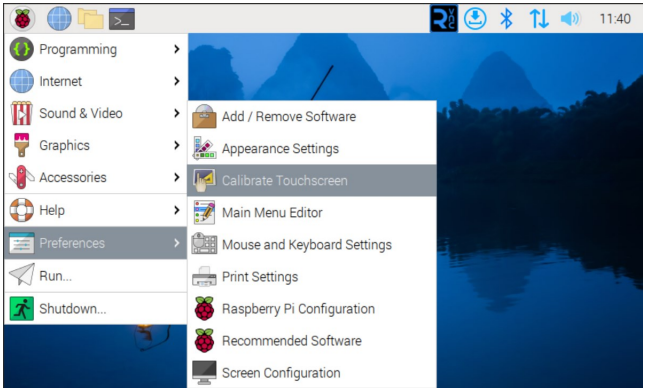
```
xinput list
```

Once you have executed the command, you should see a list of different devices and their names. You must also have **"eGalax Inc. USB TouchController"** in this list. If this is the case, we can continue with the next step.

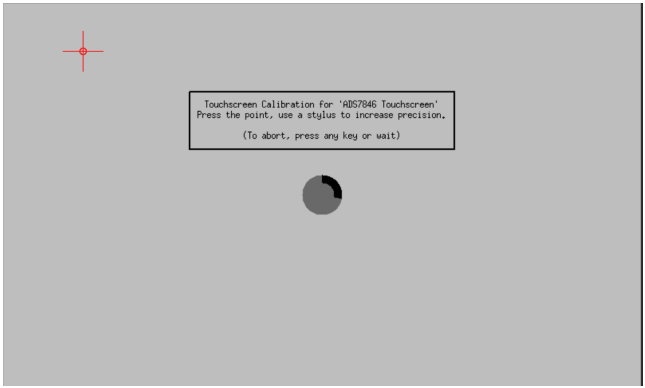
The next step is the first calibration of the display on your Raspberry Pi. To be able to perform this calibration, two libraries are required, which you can download and install with the following command.

```
sudo apt-get install xserver-xorg-input-
evdev xinput-calibrator
```

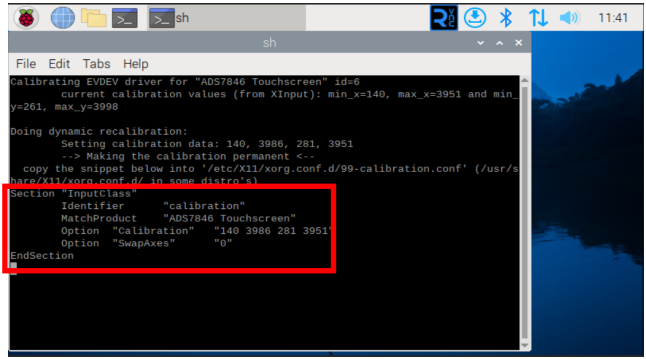
Once the required libraries have been installed, you can now click on **Start → Preferences → Calibrate Touchscreen**.



Now follow the instructions on the display and press the red dots that appear on the display. For increased precision, we recommend using an input pen (stylus).



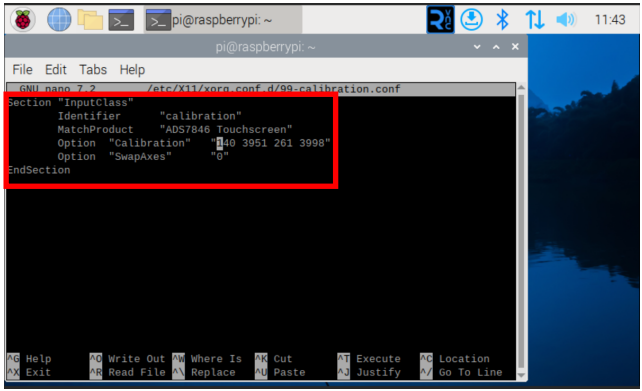
The following window should then open:



Note or copy the lines marked in the picture between **"Section..."** and **"EndSection"** (It could be that there is more than you can see in the picture above. Simply copy everything).

Now open a terminal window and enter the following command:

```
sudo nano /etc/X11/xorg.conf.d/99-calibration.conf
```



Now replace the lines marked in the image with the previously noted values.
Then save the changes with **CTRL+O** and close the file with **CTRL+X and Enter**.

Then restart your Raspberry Pi with the following command to apply the changes.

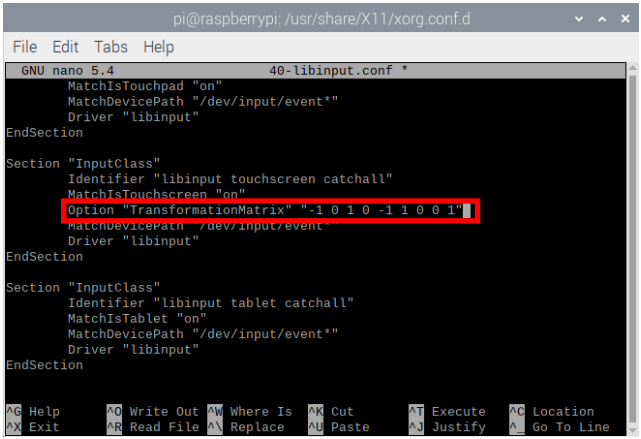
```
sudo reboot
```

Once your Raspberry Pi has booted up again, one last change needs to be made. So that you can also use the touch function when you want to rotate your display, you need to add something to the 40-libinput.conf file. To do this, open the file with the following command:

```
sudo nano /usr/share/X11/xorg.conf.d/40-libinput.conf
```

Search for the paragraph InputClass for Touchscreen and enter the following line under the line **MatchIsTouchscreen "on".**

```
Option "TransformationMatrix" "1 0 0 0 1 0 0 0 1"
```



Depending on how you rotate the display, other options may be necessary, please note the following specifications:

90° = "TransformationMatrix" option "0 -1 1 1 0 0 0 0 0 1"
180° = "TransformationMatrix" option "-1 0 1 0 -1 1 0 0 0 1"
270° = "TransformationMatrix" option "0 1 0 -1 0 1 0 0 0 1"

Please note that the settings only take effect after the system has been restarted.

Then save the change with **CTRL+O** and close the file with **CTRL+X and Enter**.

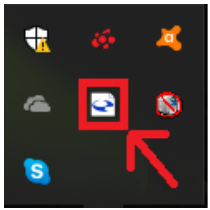
On some systems, the latest drivers may not be fully functional. In this case, better results can be achieved with an older driver. You can download an older driver **here**.

3.3 Use with a Windows PC

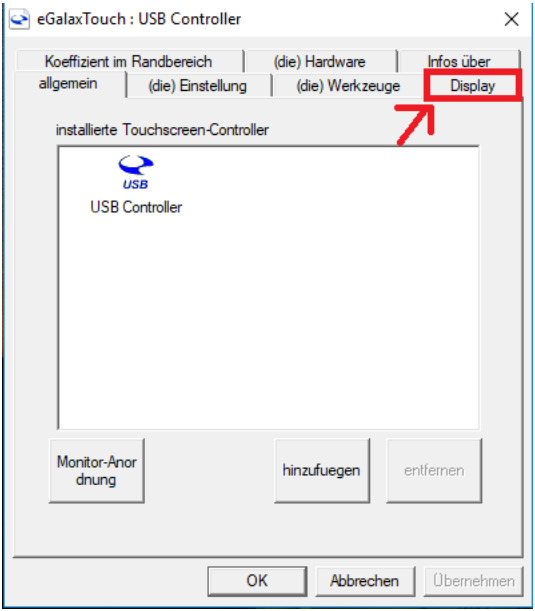
Connect the display with the enclosed power cable. Now connect your computer and the display with an HDMI or VGA cable, depending on your preference. You can also connect your computer to the touch interface using a USB cable if touchscreen operation is required. However, this requires an additional driver installation.

The latest drivers for the touch function can be found on **this website**.

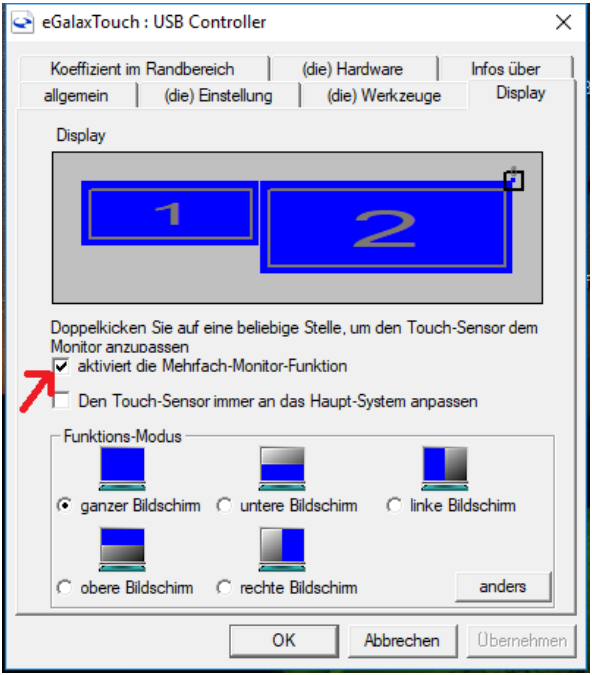
To ensure the touch function of the display even when using multiple screens, the multi-monitor function must be activated in the eGalax Touch program. To do this, first open the program:



You must then select the Display tab:



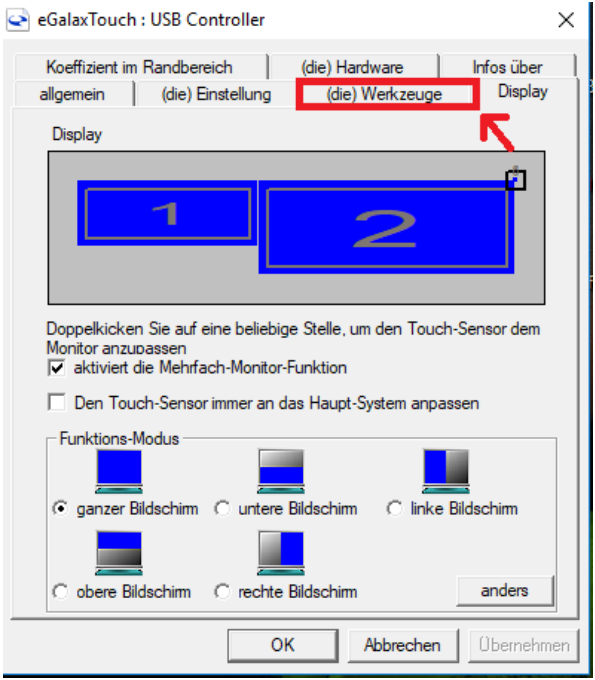
Now activate the multiple monitor function:



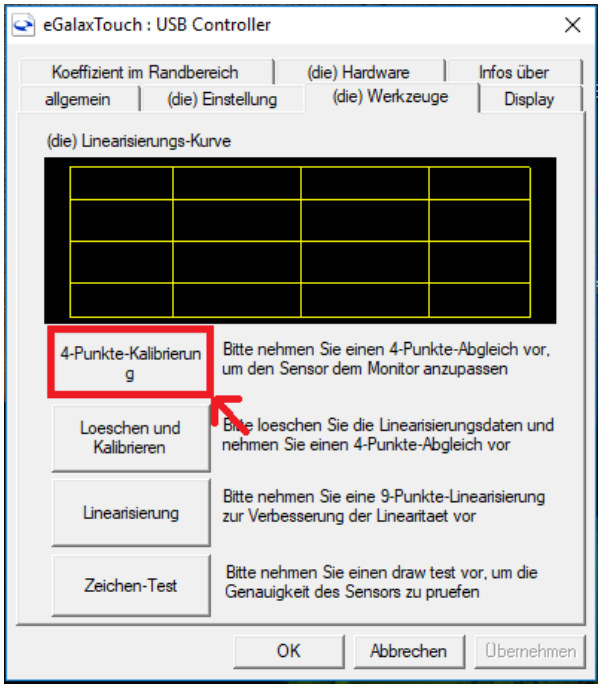
First double-click on the display that is your touch display so that the calibration is displayed correctly in the next step.

After activation, you will be prompted to perform another calibration. If this is not done automatically, proceed as follows:

Select the **Tools** tab(s):



Now you need to click on the **4-point calibration** to perform a new calibration:



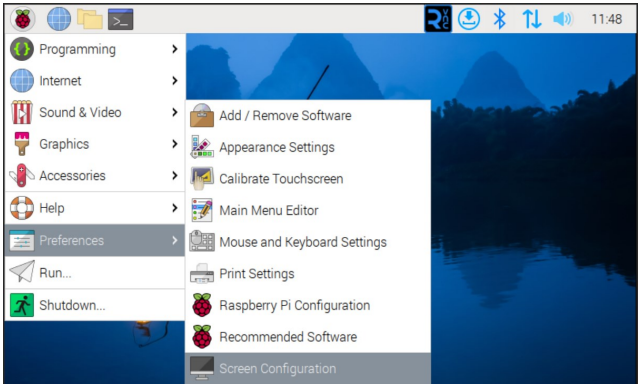
If there is a problem with the recognition of the USB touchscreen driver, the eGalax Touch driver must be uninstalled and reinstalled.

During the installation, make sure that you have connected the USB cable to the computer and the touch interface of the display.

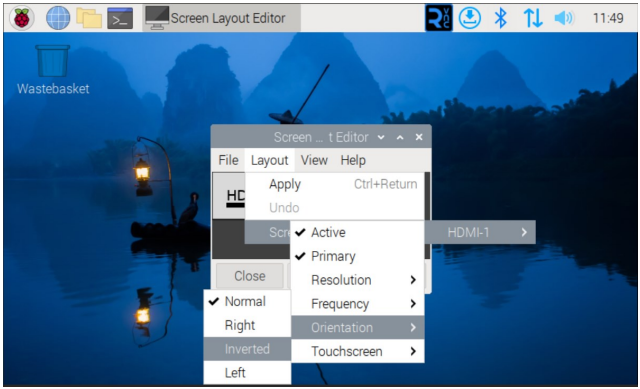
4. ROTATE DISPLAY

To rotate the display on the screen, proceed as follows:

Click **Start → Preferences → Screen Configuration**



Click on **Layout → Screen → HDMI-1 → Orientation** and select the desired orientation of the display.



Then click **Apply** to confirm.

5. OTHER INFORMATION

Our Information and Take-back Obligations according to the German Electronic Law (ElektroG)

Symbol on Electric and Electronic Devices:

This crossed-out dustbin means, that electric and electronic devices do **not** belong into household waste. You have to return the used device to a registration place. Before handing over, you must remove the waste (rechargeable) batteries which are not enclosed by the device.

Return Options:
As end user, you can hand over the used device (which essentially serves for the same function as the new one bought with us) free of charge for disposal at purchase of the new device. Small devices which do not have outer dimensions bigger than 25 cm, can be handed over for disposal in normal household quantities independently of purchasing a new device.

Option of return at our company site during our opening hours:
Simac E. H. GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

Option of return nearby:
We will send you a parcel stamp with which you can send us your old device free of charge. For using this, please contact us via e-mail at pickup@joy-it.net or via telephone at 02845 93 60 -23.

Information on packaging:
Please pack your old device safe for transport. If you do not have suitable packaging material or you do not want to use your own material, please contact us and we will send you an appropriate package.

5. OTHER INFORMATION

We are also there for you after your purchase. If any questions remain unanswered 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 - Thu: 09:00 - 17:00 Uhr, Fri: 09:00 - 14:30 Uhr)

For further information please visit our website:
www.joy-it.net

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