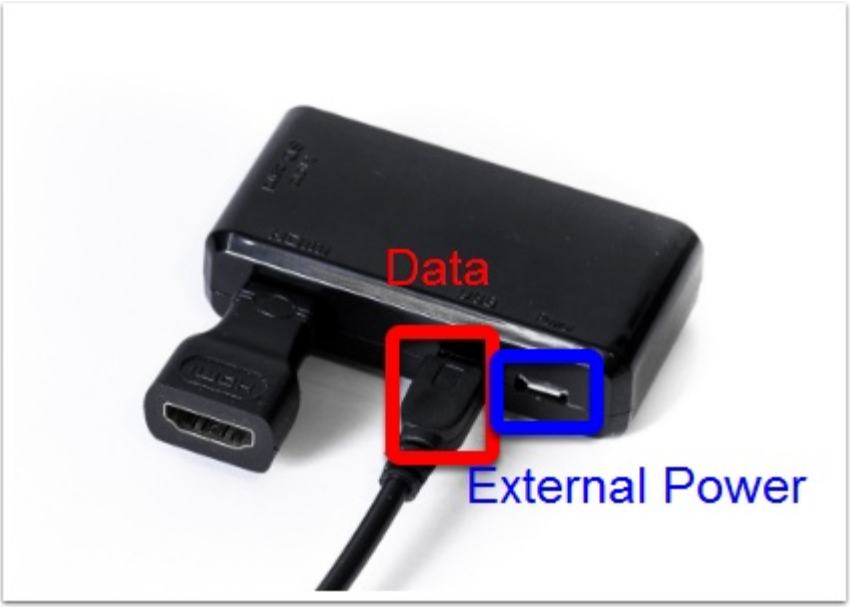
Video Output Module Quick Start

This quick start guide describes how to use the video output module together with the DIY-Thermocam.

The purpose of the video output module is to create an HDMI or analog video output for displaying the screen content on an external monitor.

There is a two-position slider on top of the power switch. In order to charge the device over the USB port, it normally should be in the upper position.

If you want to supply the video output module with power from the integrated battery, put it to the bottom position as shown.



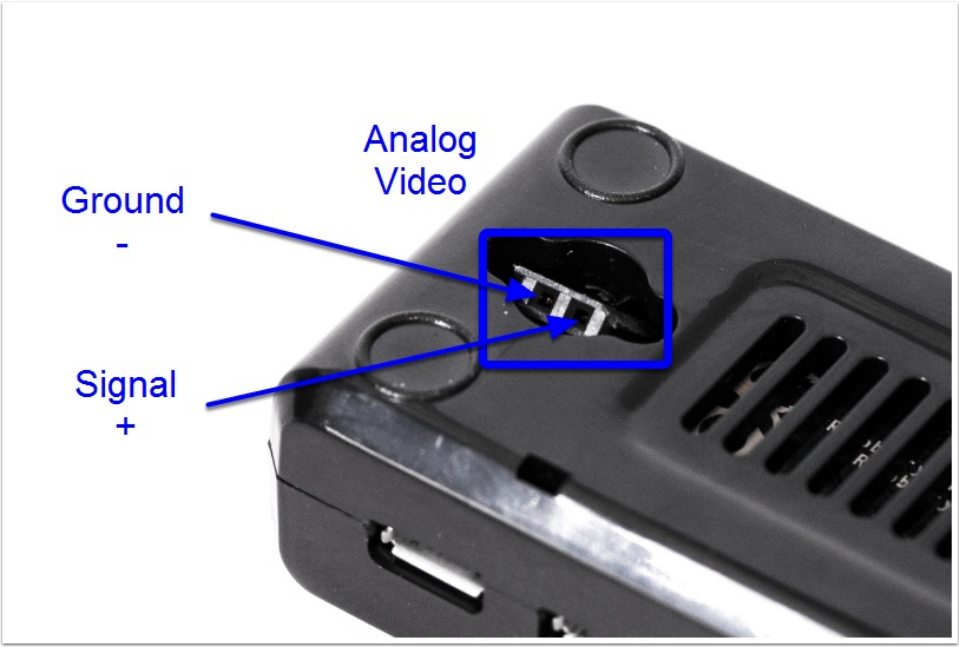
You can also use the USB cable from the Thermocam and support the video output module from an external USB power supply over the port labeled "Power".

If you have put the two-position slider on the DIY-Thermocam to the upper position, that method will also charge the Thermocam itself.

Connect the USB OTG adapter to the microUSB data port labeled "USB" on the video output module.

Then use the microUSB cable that was delivered with the video output module and put it into the OTG adapter.

Connect the other end to the USB port of the DIY-Thermocam, so that there is a connection between the Thermocam and the module.



For the video output, you have two different options.

First, you can connect a screen over HDMI by using the enclosed HDMI adapter.

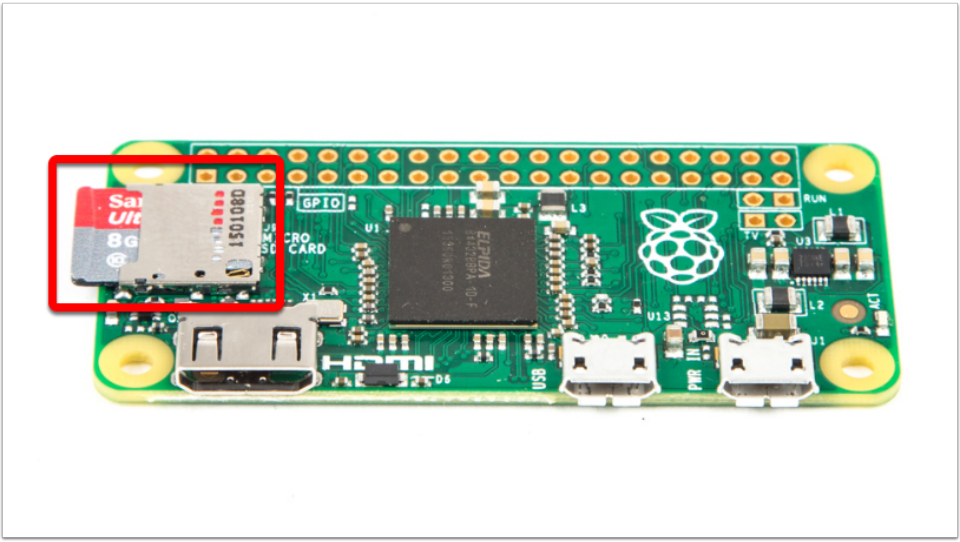
Or alternatively, you can connect an analog video transmitter to the two pins on the backside.

The left pin of the analog video signal goes to ground, the right delivers the signal itself.

To get a signal from the video output module, turn the DIY-Thermocam on and wait for the boot procedure to be completed on both devices.

Afterwards, the connection will be established automatically and you should see the thermal image on the screen.

The video output module only receives images, when the Thermocam is in live mode.



Sometimes, it may be required to upgrade the video module software due to protocol changes inside the DIY-Thermocam firmware.

To do so, open the black enclosure of the video output module and remove the Pi Zero from the inside.

Unplug the microSD card and put it into a card reader on your PC. Then open the boot partition showing up in your workspace.

Download the newest firmware from the website and extract all files to the boot partition by overwriting the already existing ones.

Put the microSD card back into the Pi Zero and close the enclosure. You should now be able to use the newest device firmware together with the video output module.