# User Manual

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3. Februar 2023

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# 1 Introduction

The ambient light is a lighting on the back of the television that projects the colors of the screen onto the wall, enhancing the movie experience.

As electrical engineering students at the Munich University of Applied Sciences, we developed a solution for the above concept as part of a project work. An external device processes the television's image information and generates the color information for the background lighting from it.

# 2 Commissioning

## 2.1 Adhere LED strip

To put the device into operation, you must first attach the LED strips to the sides of the TV/monitor. The number of LEDs to be mounted vertically and horizontally are already replaced in the right place with flexible wires, which should represent the corners.

It is important to make sure that you start in the bottom right corner (screen viewed from the front) and from there, counterclockwise, attach the LEDs.

## 2.2 Connect HDMI cable

Connect the HDMI cable to the desired video output device.

## 2.3 Start Raspberry Pi

To start the raspberry pi you only need to connect the power supply and the raspberry pi will boot automatically.

# 3 Operation

To operate the device you only need to connect it to the power supply. The connected HDMI device is automatically detected and the LEDs start to adapt to the screen.

# 4 Problem solving

## 4.1 HDMI input is not recognized

If the external video signal is not detected you have to reboot the Pi again. To do this, simply disconnect the power supply and then reconnect it.