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# install MagicMirror on Waveshare

This text is in english to reach more people.

**Sources**

- the Device at Pi-Shop.ch
- Waveshare Wiki for installation
- Update NodeJS
- SmartBuilds.io MagicMirror with Touchscreen

## Base System

Install the Base System via RaspberryPiInstaller

## Install Magic Mirror

Download latest MM Package from GitHUB MagicMirrorPage in my case it was Version 2.20.0.
Download and Unpack it with

```
wget
https://github.com/MichMich/MagicMirror/archive/refs/tags/v2.20.0.tar.gz
tar -xvzf v2.20.0.tar.gz
```

but better clone it with git:

```
git clone https://github.com/MichMich/MagicMirror
cd MagicMirror/
npm install --only=prod --omit=dev
cp config/config.js.sample config/config.js
```

start it with `npm run start`

### Install MMM-MacAddressScan

To make sure you have all dependencies, issue a

```
npm install ping
npm install sudo
```

as those both were missing in my case.

### Install MMM-RemoteControl

https://github.com/Jopyth/MMM-Remote-Control

### Install MMM-Modulebar

https://github.com/Snille/MMM-Modulebar/

### additional Modules

List of additional Modules: 3rd-party-modules

- SwissCommute Swiss Timetable via Sear.ch
- MagicMover
- WeatherGraph
- SwissLakeTemperature (Zürisee, Greifensee, Genfersee)
- smartTouch
- FlightRadarTracker
- Flights with Map
- News-QR
- OpeningHours-GooglePlaces
- Reddit Ticker
- CyberSecurity News
- WatchDog
- Touch rsp. Touch Wiki

### additional Calendars

- Schweizer Feiertage

### additional Ideas

- OnScreenMenü
- SmartTouch
- FlightRadarTracker
- CyberSecurityNews

# Control Monitor Settings

In order to be able to change the Brightness and Backlight of the Monitor you need to tweak a few things. Idea taken from MagicMirror Forum Post by aprilmaccydee

## Enable i2c in boot.ini

Edit `nano /boot/config.txt`
Add: `dtparam=i2c2_iknowwhatimdoing`
and then reboot the Raspberry

## Install ddcutil

Then `sudo apt install ddcutil`
Run `sudo ddcutil detect`

You should see an output like:

```
pi@raspberrypi:~ $ sudo ddcutil detect
Display 1
   I2C bus:             /dev/i2c-2
   EDID synopsis:
      Mfg id:           RTK
      Model:            RTK FHD
      Serial number:    [redacted]
      Manufacture year: 2011
      EDID version:     1.3
   VCP version:         2.2
```

## get Values

If you do, you can then run:
`sudo ddcutil getvcp 10 to get the brightness`

## set Values

`sudo ddcutil setvcp 10 [1-100]`
to set the brightness, where 1-100 is the desired value of the brightness

## known Values

| Number | Description | Values (default) |
|---|---|---|
| 10 | Brightness | 1-100 (20) |
| 12 | Contrast | 1-100 (50) |

| Number | Description | Values (default) |
|---|---|---|
| 14 | Color Preset | 0x01 = sRGB |
| 16 | Red Color Gain | 1-100 (50) |
| 18 | Green Color Gain | 1-100 (50) |
| 20 | Horizontal Position (Phase) | 0-100 (0) |
| 22 | Horizontal Size | unsupported |
| 30 | Vertical Position (Phase) | 0-100 (0) |
| 32 | Vertical Size | unsupported |
| 44 | Rotation | unsupported |

From:
https://aha-it.ch/wiki/ - **AHa-IT**

Permanent link:
**https://aha-it.ch/wiki/lx/pi/mm/waveshare-install?rev=1667835572**

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