Installation of LoxBerry (English)

After you have build up the correct Hardware on your desk, let's begin with the installation.

1 Download

Download the latest LoxBerry image. The image includes the complete operating system and LoxBerry and will be written to the SD card later.

Links to download: Download und Spiegel-Sites

Unzip the file to get the included .img file.

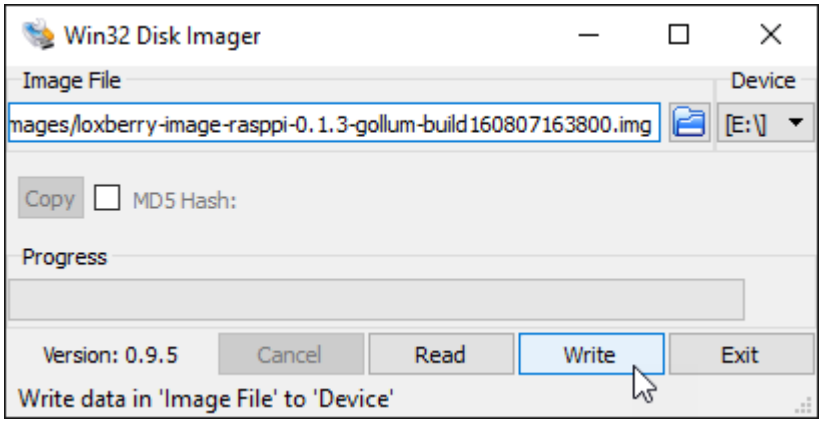
2 Write image to SD card

Microsoft Windows

Your SD card needs to be at least 4 GB in size. The downloaded image must be written to the SD card with a special SD card writer program. We recommend
Win32DiskImager: https://sourceforge.net/projects/win32diskimager/

Run Win32DiskImager with administrative privileges (right-click → Run as Administrator) and select the extracted .img file. **Please double-check the selected device - writing to the wrong device will delete it unrecoverable.**

Press Write to write the SD card. This will take some minutes.



After the Success message, unmount the device and put the SD into your Raspberry Pi.

For first setup you should use a LAN network cable connected to your network. You can configure Wifi access and disconnect the cable after you have finished the whole setup.

Plugin in the power to beginn the boot process.

Apple Mac

First format your SD card. You can use the tool *SD Card Formatter* from https://www.sdcard.org (find it under *Downloads*) *Remember where the SD card was mounted.*

For this example: **disk3 →** Remember "3″

Now unmount, but do not eject the SD.

Terminalclient:

```
sudo diskutil unmount /dev/disk3s1
```

After that, load the image to the SD card:

```
sudo dd if=Downloads/loxberry-image-rasppi-1.0.0_gandalf.zip of=/dev/disk3
bs=1m
```

After around 10 to 15 minutes, messages like below should appear.

```
1900+0 records in
1900+0 records out
1992294400 bytes transferred in 962.101778 secs (2070773 bytes/sec)
```

Now eject the SD, put it into your Raspberry, plug in the LAN and power cord and it will begin to start up.

3 First access

If you have configured your router to *not* assign IP addresses automatically by DHCP, read step 4 first. If you use DHCP (or you don't know what we are speaking of), continue here.

LoxBerry is configured via web browser. After your LoxBerry has booted, you need to know it's address. Most routers use local name resolution, therefore first try to connect by the hostname:

http://loxberry

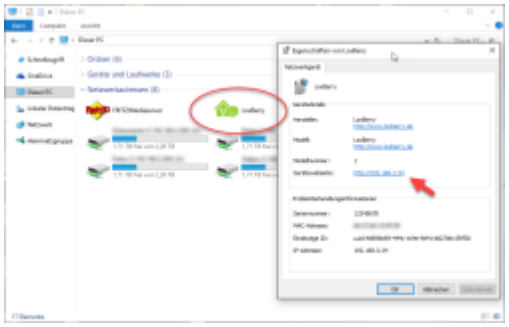
The default username and passwort: **loxberry / loxberry**

If you cannot access LoxBerry by that url, you need to find out it's IP address and use that in the address line of your web browser (e.g. http://192.168.1.10/). There are at least two ways to find out the IP address:

If you cannot access LoxBerry

Get LoxBerry's address by Windows network

Open Windows Explorer and locate "This computer". In the area "Network" you should find the LoxBerry icon. Open the properties by right-click. You will find the IP address of your LoxBerry and a link to open the web interface. Or simply doubleclick the icon.



Get LoxBerry's address from your router

Your router should have a list of network devices and IP addresses (possibly it's called "Network devices", or "DHCP", "Leases", or something like this). Use that IP address to access LoxBerry.

4 Optional: Manual IP address setting before first start

By default, LoxBerry is using DHCP to get an IP address assigned (as seen in step 3). If you don't have a DHCP server in your network, you can assign a static IP address before first boot.

Insert your SD to your card reader (on the PC or Mac) and open the "boot" partition with Windows Explorer oy our file explorer. Create a file there, called `network.txt` and insert following lines with any editor:

For a static IP address

network.txt

```
auto lo
iface lo inet loopback

allow-hotplug eth0
iface eth0 inet static
  address IPADRESSE
  netmask NETMASK
  gateway GATEWAY
```

```
  dns-domain loxberry.local
  dns-nameservers GATEWAY
```

For using Wifi with DHCP - Replace WLAN-NAME and WLAN-PASSWORD with your Wifi data

network.txt

```
auto lo
iface lo inet loopback

allow-hotplug wlan0
 iface wlan0 inet dhcp
 wpa-ssid WLAN-NAME
 wpa-psk WLAN-PASSWORD
```

Replace all words in capital letters with the data of your network environment. LoxBerry uses that config after the first boot. For more details, see the Debian documentation at https://wiki.debian.org/NetworkConfiguration#Configuring_the_interface_manually

5. Optional: Configure router

It is important, that Loxone Miniserver and LoxBerry can communicate. If you use hostnames in Loxone Config to connect to `loxberry`, this should work automatically. However, if you want to be on the save side and use IP addresses instead of hostnames, you should configure your router to assign the same IP address for LoxBerry all the time.

In the case, that suddenly you have communication problems, e.g. after some time or after a restart of Loxone Miniserver, the LoxBerry, or after a power outage, you also should do this.

Most routers provide a setting called something like "Always assign the same network address". On some routers you need to specify the MAC address (of LoxBerry) and the IP address that should be assigned.

Finished!

Now move on with first steps.