

RPI 3 and 4 LoopSign Deployment Guide

There is a very easy and reliable way to deploy LoopSign to a Raspberry PI3 and PI4.

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1. What do you need

- Raspberry Pi 4
- MicroSD card (recommended SD card size is 32GB and above, as fast as possible)
Please note that the Pi4 does not work with all kinds of SD card. If your Pi runs slow or gets unstable it is probably because of compatibility with the SD card. Then try another card brand.
- Hardware to «write» SD-Card
- Raspberry PI imager software
https://downloads.raspberrypi.org/imager/imager_latest.exe

2. LoopSign Image Deployment

- Download the latest LoopSign Image from this link:
https://sos.loopsign.eu/LS_Image/loopsign.img.gz
- Connect an SD card reader and insert the SD card you want to use.
 - Start Raspberry Pi Imager
 - In Operating System, Choose “Use Custom” and select the file you downloaded “loopsign.img.gz”
 - Choose storage (the SD-Card)
 - Click “Write”



- When “burning” has finished, insert the card in the RPI
- Connect Network and HDMI-1 (Port nearest the USB-C connector)
- Connect power and wait for a few minutes for initial setup.
- Note that if network is not connected it will take some extra time during startup

After starting up it will launch LoopSign demo page. (If network is connected)

Just press Alt+F4 to exit the kiosk browser.

2.1 Configure localization (Optional)

The PI is set up with Norwegian keyboard layout and TimeZone Oslo (Central Europe)

If you like to change this do as follows:

- Click Raspberry Icon  in top left corner
- Select "Raspberry Pi Configuration"
- Select "Localization" and set whatever settings you prefer.

2.2 Configure WIFI (Optional)

If you need to connect to a WIFI network,

Click the "Double red cross/ Arrows" Icon in the right top corner. And configure WIFI as needed



2.3 Configure screen orientation or resolution (Optional)

By default display runs in normal "landscape" mode 1080P 60Hz

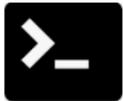
If needed this can be changed by using the desktop Application "Screen Configuration".

Double click on the "Screen configuration" Icon, select "Execute" then right click on HDMI1 and select orientation. Set the orientation to what you prefer.

2.4 Configure custom NTP server (Optional)

By default time sync is done by connection to a common NTP server on the internet. In most cases this is ok, however in the case where the network does not have NTP TCP port 123 open you need to specify an internal NTP server for time synchronization.

On the desktop, start a terminal window by clicking the LX Terminal icon up in the left corner.



Type the following in the terminal window then press enter:

sudo nano /etc/systemd/timesyncd.conf

Edit the file according to your needs.

To save file press "ctrl+o" then press "ctrl+x" to exit

```
[Time]
NTP=your.servername.goes.here
FallbackNTP=0.arch.pool.ntp.org 1.arch.pool.ntp.org 2.arch.pool.ntp.org 3.arch.pool.ntp.org
#RootDistanceMaxSec=5
#PollIntervalMinSec=32
#PollIntervalMaxSec=2048
```

3. LoopSign URL configuration and reboot time

To change the URL that is being played on the device just use the simple “LoopSign Configuration” application on the desktop. Double click the Icon and select “Execute”

- Change the URL to the corresponding screen in LoopSign that you want to play.
- Change the daily reboot time to whatever fits your needs

Press “Save” button and then the “Reboot” button

The RPI4 will now restart and play your screen.

4. Modules and browser updates

To make sure unit is up to date run an update of the OS and Chromium browser

On the desktop, start a terminal window by clicking the LX Terminal icon in the left corner.



Run the following commands in the terminal window:

Sudo apt-get update

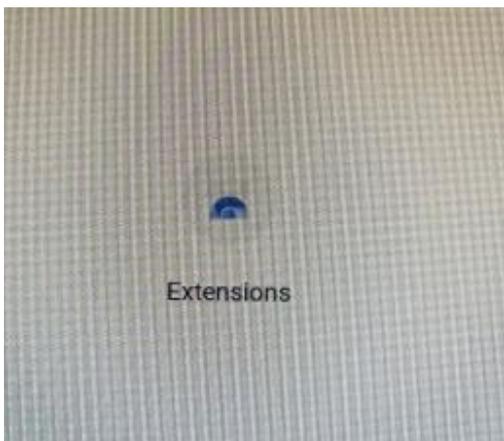
Sudo apt upgrade

sudo apt install chromium

sudo apt install chromium-browser

5. Known Issues

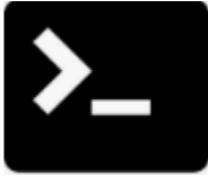
If your screen only shows a white screen with this icon in the middle, you need to do a manual configuration.



This might happen after you change the URL in the LoopSign config application the first time. The reason for the issue is lack of a space in the Exec command line.

To fix the issue please do as follows:

On the desktop, Click the LX Terminal icon up in the left corner.



Type the following command and press enter:

```
sudo nano /etc/xdg/autostart/loopsign.desktop
```

The file looks like this by default.

[Desktop Entry]

Type=Application

Name=LoopSign

Comment=Start chromium kiosk with LoopSign

Exec=chromium-browser --kiosk --incognito <https://play.loopsign.eu/app/20/lsp>

The problem is that there is a space missing between --kiosk and --incognito (--kiosk--incognito) So just make sure the Exec line looks like the above example (With your URL)

To save, press 'Ctrl+O' (WriteOut), then press 'Enter' when asked to confirm the filename.

To exit, press 'Ctrl+X' (Exit).

Now enter the command test your settings.

```
sudo reboot
```