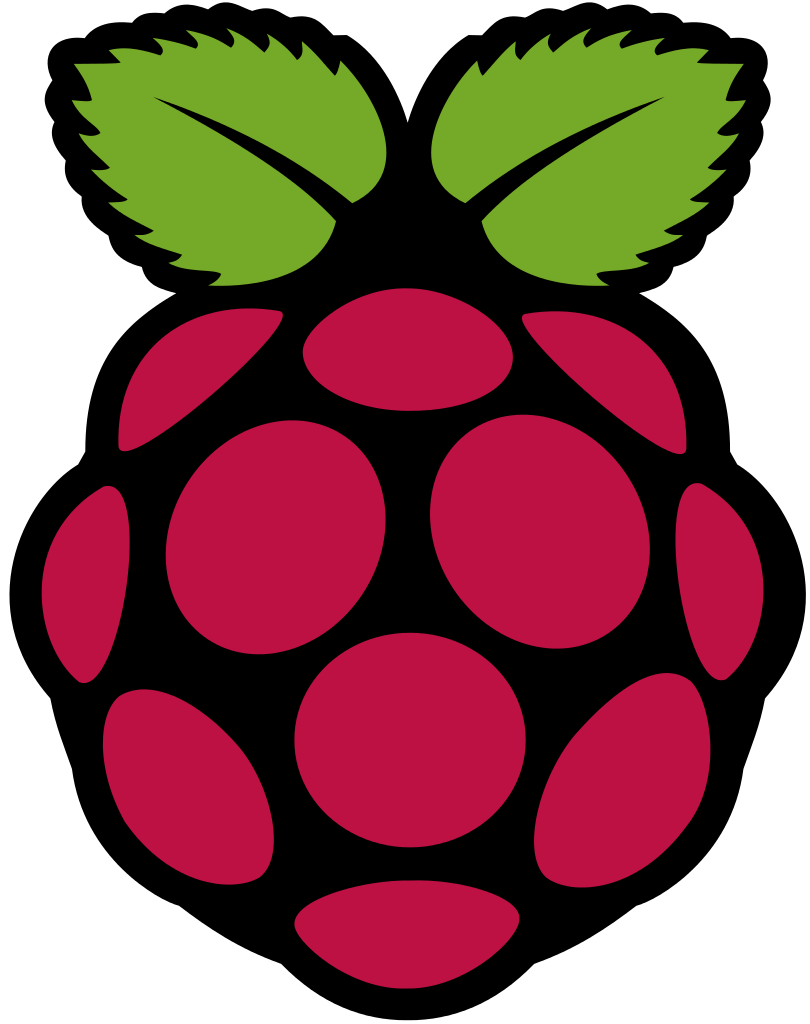
# Raspberry Pi Picture Frame



Instruction Manual

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# Table of contents

Contents

[About 3](#_Toc469846982)

[Setup 4](#_Toc469846983)

[Enabling Wi-Fi 4](#_Toc469846984)

[On-Screen Keyboard 4](#_Toc469846985)

[Adding photos 5](#_Toc469846986)

[Turn off the system 5](#_Toc469846987)

[Starting the slideshow 6](#_Toc469846988)

[Settings 7](#_Toc469846989)

[Home Page 7](#_Toc469846990)

[Settings 7](#_Toc469846991)

[Space Left 8](#_Toc469846992)

[Turn Off 8](#_Toc469846993)

[About 8](#_Toc469846994)

[Warnings 9](#_Toc469846995)

[Credits 10](#_Toc469846996)

[Software License 11](#_Toc469846997)

# About

The Raspberry Pi Picture frame is a digital picture frame written with “Free and Open Source Software” (FOSS) for the Raspberry Pi computer. This means that anyone can download the software, modify it, and run it themselves for free!

This was created due to short-comings in other digital picture frames:

* You could not sync with Google Drive, OneDrive, DropBox, etc.
* You had to turn off the frame, plug in the frame to a computer to upload new photos.
* The picture frame would not turn itself off at night, and you couldn’t change the settings from any device on the network.

Thus, the Pi Picture Frame was created. With the power of Linux’s symlinks, it will read any picture in the Pictures directory. The photos can live on the device directly, come from a cloud-service, be downloaded from the internet, live on a flash drive etc.

The Pi Picture Frame has a web-interface so any device on the network can turn the screen off, change the current picture, change the photo change interval, adjust the brightness, see how much space is left, and even tell the frame when to go to sleep or wake up.

View source code here: <https://github.com/xforever1313/PiPictureFrame>

# Setup

When plugging in the Pi Frame, you’ll see the Raspberry Pi logo appear, and then eventually, a desktop will appear. The desktop allows you to move pictures off a flash drive, enable wi-fi, delete photos, etc. This appears first so you can configure the frame before running it.

## Enabling Wi-Fi

In the upper right corner, you’ll see to the right of the blue-tooth logo a wireless logo. Click on this, and click on the wi-fi network you wish to connect to. Enter the password when prompted.

## On-Screen Keyboard

The on-screen keyboard is from the Raspberry Menu (upper left corner) -> Accessories -> Keyboard.

## Adding photos

All photos that show up in /home/pi/Pictures will be displayed. To get to this folder, open the “File Manager” via the desktop icon, and you’ll see the Picture folder in the home directory.

You can add photos in the following ways:

* Plug in a flash drive and drag the photos from it to the Picture folder.
* Plug in a flash drive or external hard drive via the USB ports and leave it in and create a symlink to the flash drive from the Picture folder.
* Sync with OneDrive, Dropbox, Google Drive, etc. and create a symlink to them in the Pictures folder.
* Download photos from the internet via the Chromium web browser and save them to the Photos directory.

## Turn off the system

To turn off the system, go to the Raspberry menu in the upper left corner, and select “Shutdown” at the bottom. Then choose if you wish to reboot or shutdown. When shutting down, wait until the green light STOPS flashing on the back of the frame before unplugging it. *The only way to turn the system back on after shutting down completely is to unplug the device, and plug it back in.*

## Starting the slideshow

Double click on the “StartFrame.sh” icon on the desktop. And select either of the two left-side options.

# Settings

Once the slideshow is started, you can access settings via the web-interface. On any device on your network, enter the address “picframe:10013/” in your favorite web browser. The settings panel will appear.

## Home Page

The home page shows the current picture being displayed, and an option to change the current image right away instead of waiting for the timeout.

## Settings

Change Sleep/Awake Time:

* Allows you to set when the frame turns off at night, and when it turns on again. This way the screen won’t get in your eyes when you’re asleep! Check the “Never go to sleep” checkbox if you never want the frame to go to sleep.

Brightness:

* Adjust the screen brightness. 100 is the brightest setting, 0 is the lowest setting.

Photo Change Interval:

* How many minutes you want the photo to change. Can be as little as 15 seconds (0.25) to an hour!

*Remember to hit the “Update Settings” at the end to lock in your settings, or they will not be saved.*

## Space Left

How much space is left on the device. On the Raspberry Pi, you’ll only care about the top graph. The bottom graph is for the boot partition, which you can ignore.

## Turn Off

Allows you to manually turn the screen on/off. It also allows you to exit the slideshow to go back to the desktop. To fully shut down or reboot the device, you need to go to the desktop first, and then shutdown or reboot from the Raspberry Menu.

## 

## About

About shows the software version and other information about the software.

# Warnings

* Since this device has a web interface with no password protection, it is designed for a home network. Do not put on a public network unless you want strangers controlling your frame.
* Unless you want people from outside your house controlling your frame, do not port-forward the pi-frame web port to a global port.
* When shutting down, wait until the green light on the back stops blinking before unplugging the frame.
* Use a correct power supply. If you see a lightning bolt appear in the upper right corner, you need a better power supply or cord. Should be 5V, 2.5A for a Raspberry Pi 3.
* If the screen doesn’t turn on after it goes to sleep or when toggled from the web interface, then you may need to have a separate power supply for the screen, and one for Pi.

# Credits

* Chart.js
  + Providing charts for the Space Left page.
  + <http://www.chartjs.org/>
* Pure.css
  + Providing the CSS for the web interface
  + <http://purecss.io/>
* PQIV
  + The slideshow software
  + <https://github.com/phillipberndt/pqiv/>
* Raspberry Pi Foundation
  + The Official Touch Screen
  + The Computer.

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