

Install the Raspberry Pi Operating System and Gugusse Compact C++ Software for use with the Gugusse PCB Version 3.1

This manual will get your Raspberry Pi and Control board up and running. It was current as of 9/2026. Items might change outside of our control.

Step 1 – Download the Raspberry Pi Imager

Use a computer to download the Raspberry Pi Imager from:

<https://www.raspberrypi.com/software/>

Raspberry Pi Imager

Raspberry Pi Imager is the quick and easy way to install **Raspberry Pi OS** and other operating systems to a microSD card, ready to use with your Raspberry Pi.

Download and install Raspberry Pi Imager on a computer with an SD card reader. Insert the microSD card you'll use with your Raspberry Pi into the reader and run Raspberry Pi Imager.

[Download for Windows](#)

[Read the documentation →](#)

[Download for macOS](#)

[Download for Linux \(x86_64\)](#)

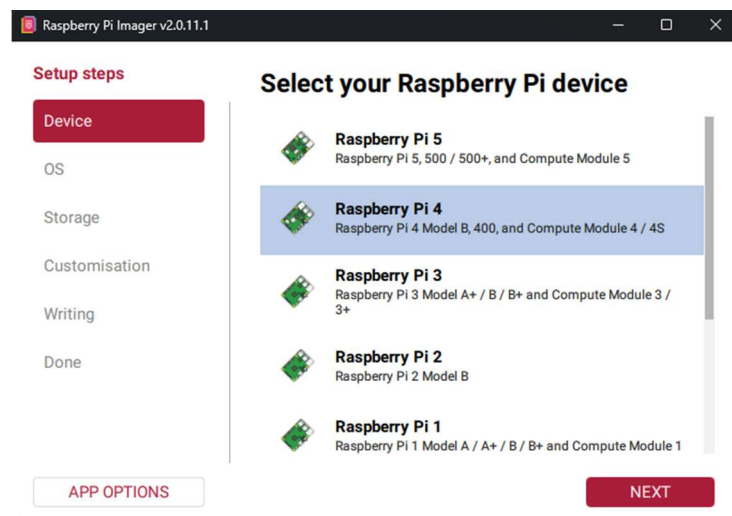
To install on **Raspberry Pi OS**, type
`sudo apt install rpi-imager`
into a terminal window



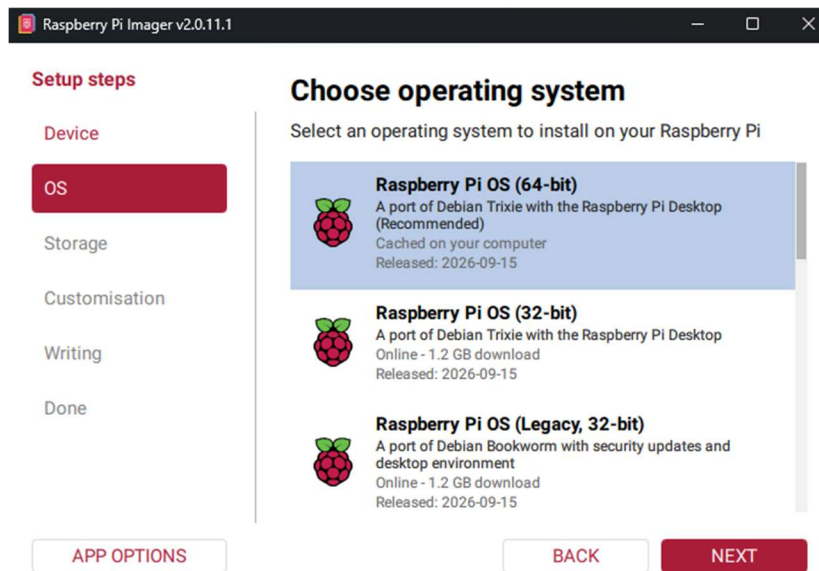
Step 2 – Install the OS on the MicroSD card

Insert a 16GB or larger MicroSD card in your computer and disconnect any external drives from your system. Run the Imager software.

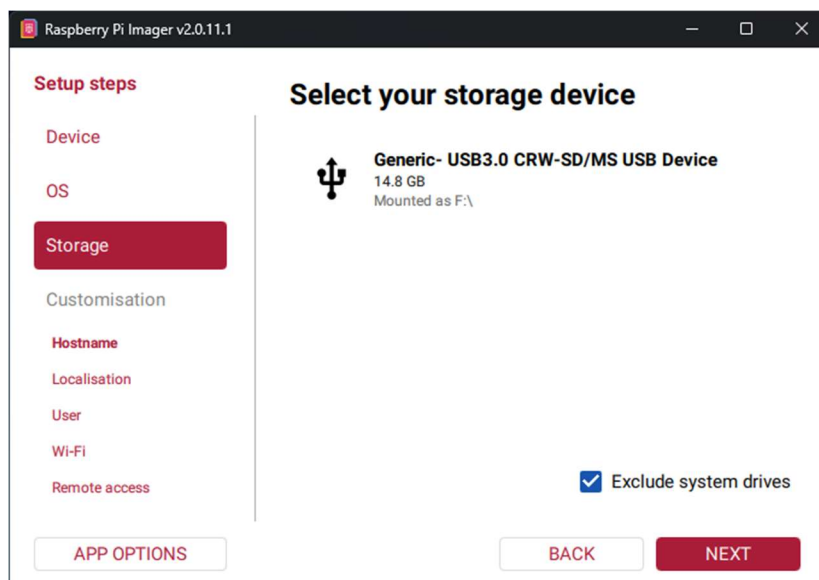
Pick your Raspberry Pi device from the list and click [Next]:



Choose Raspberry Pi OS (64-bit)(Debian Trixie) and click [Next]:

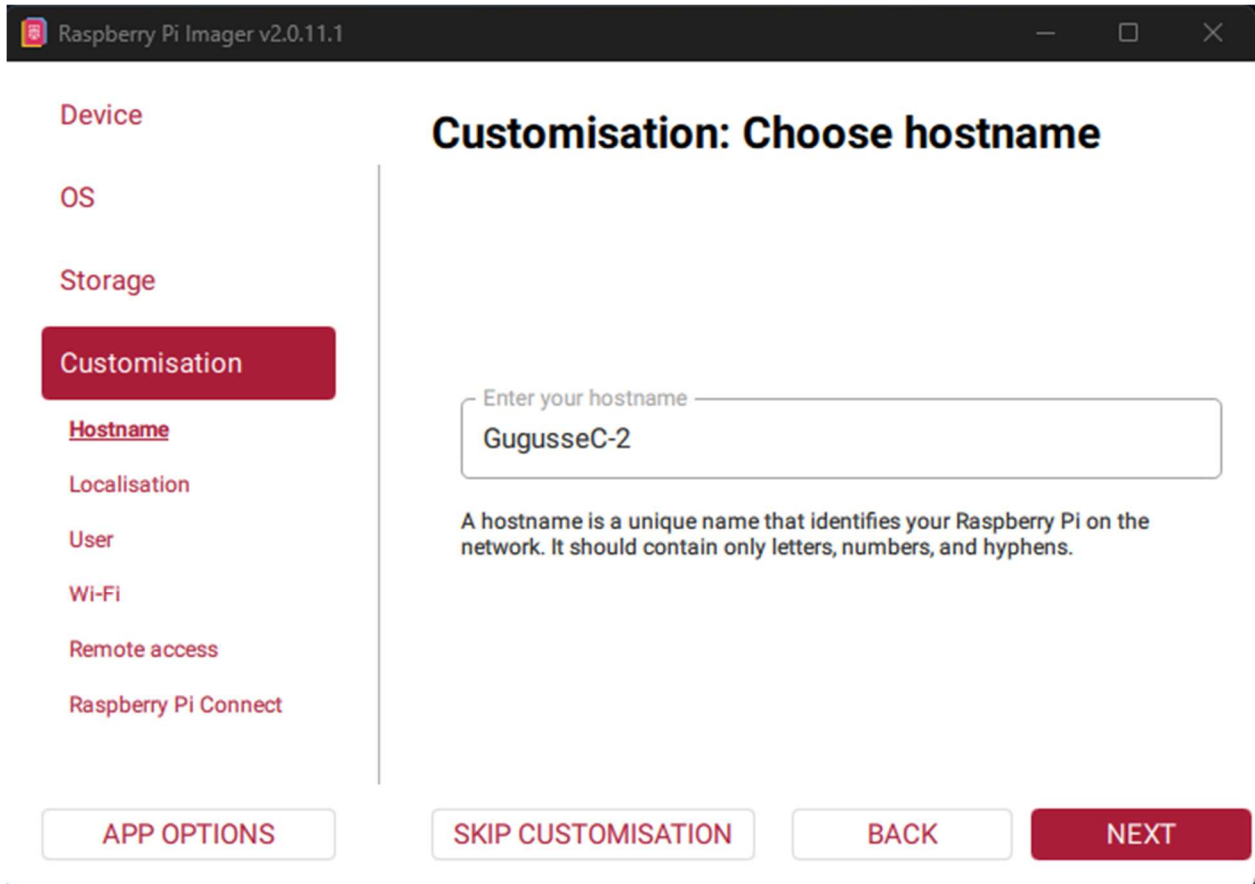


Select your MicroSD card and click [Next]:



The next part can be skipped if you want to configure your Raspberry Pi after you boot it up.

Set up your Customisation:



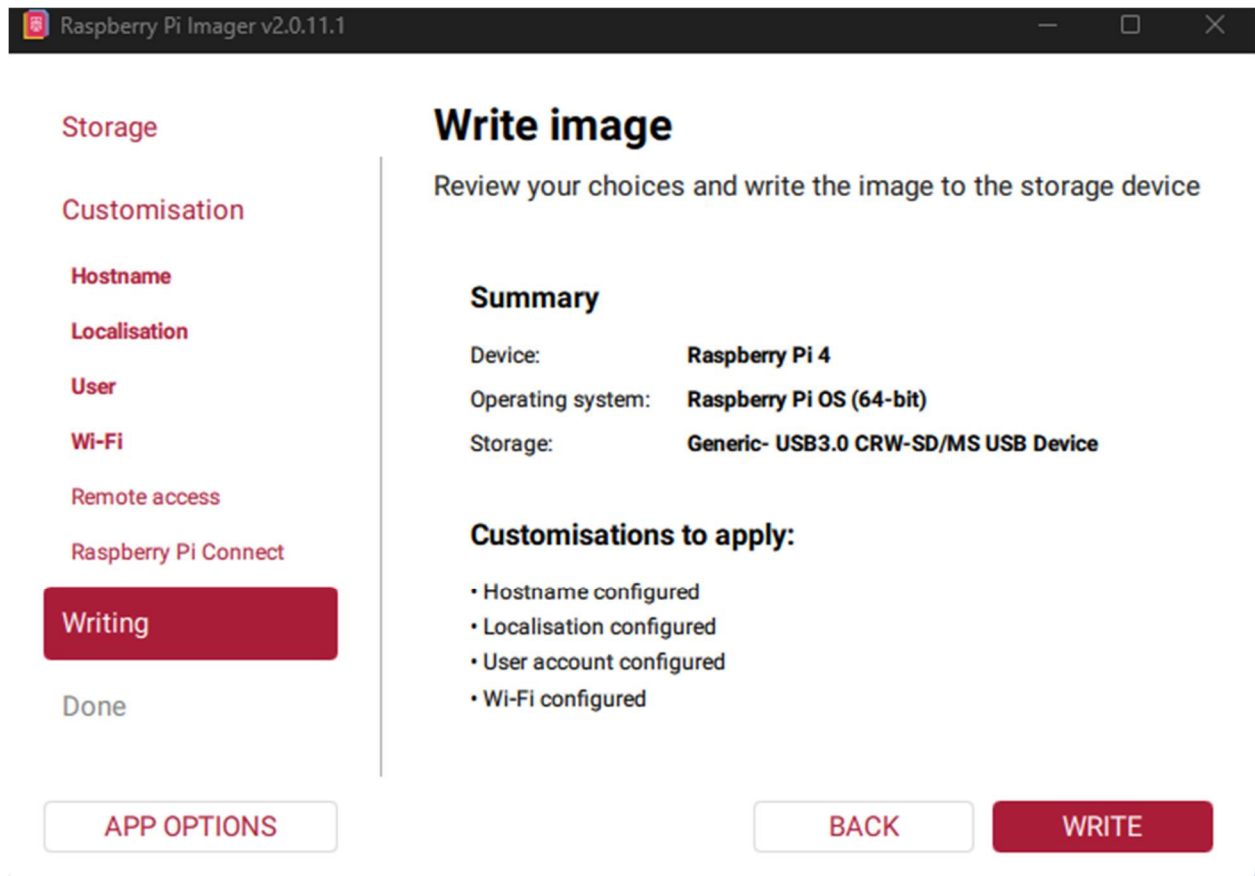
The screenshot shows the Raspberry Pi Imager v2.0.11.1 window. On the left is a sidebar with menu items: Device, OS, Storage, Customisation (highlighted in red), Hostname, Localisation, User, Wi-Fi, Remote access, and Raspberry Pi Connect. The main area is titled 'Customisation: Choose hostname'. It features a text input field with the placeholder 'Enter your hostname' and the text 'GugusseC-2'. Below the field is a note: 'A hostname is a unique name that identifies your Raspberry Pi on the network. It should contain only letters, numbers, and hyphens.' At the bottom are four buttons: 'APP OPTIONS', 'SKIP CUSTOMISATION', 'BACK', and 'NEXT' (highlighted in red).

You'll need to have:

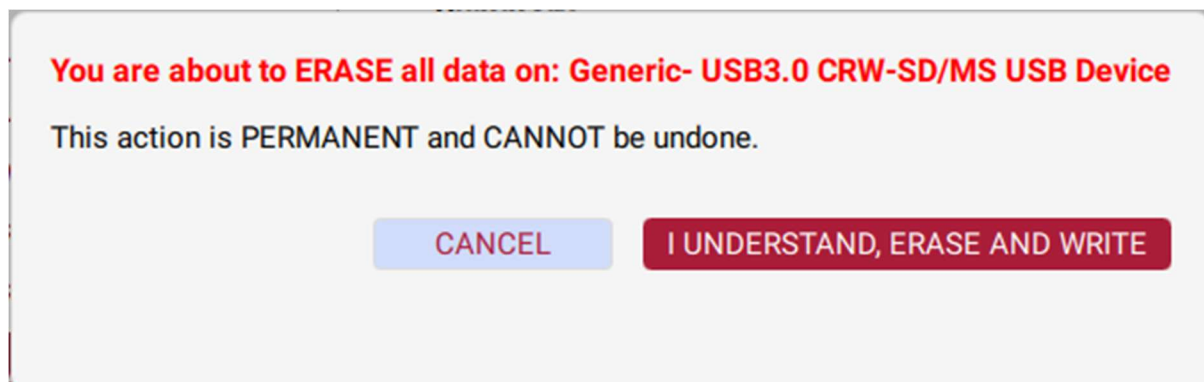
- A name for your Raspberry Pi (Make it up)
- Your Capital City (Ottawa for Canada, Washington D.C. for the US, etc.)
- Time Zone
- Keyboard Layout (US for English)
- Username: pi
- Password: Raspberry
- SSID: Your Wifi Network name
- Password: Your Wifi's Password
- Disable SSH
- Disable Raspberry Pi Connect

Set up everything until you get to the Writing Screen.

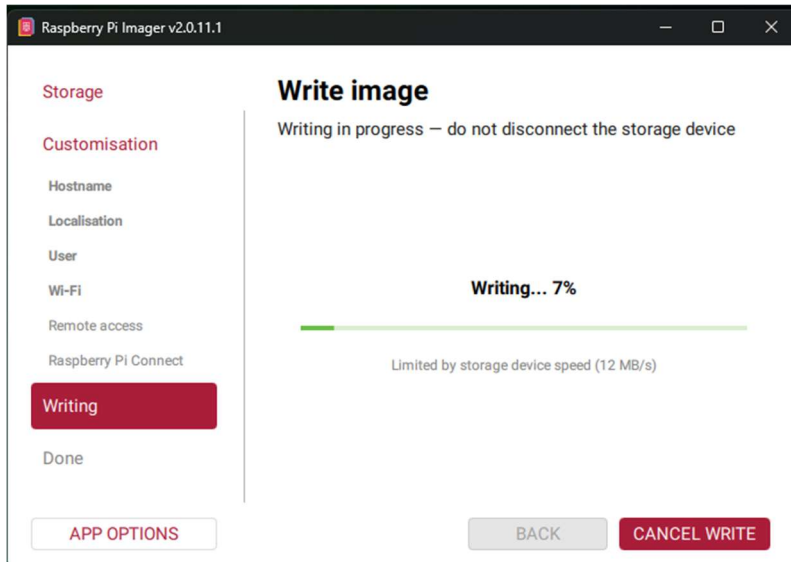
Choose [Write] to start building your new Operating System:



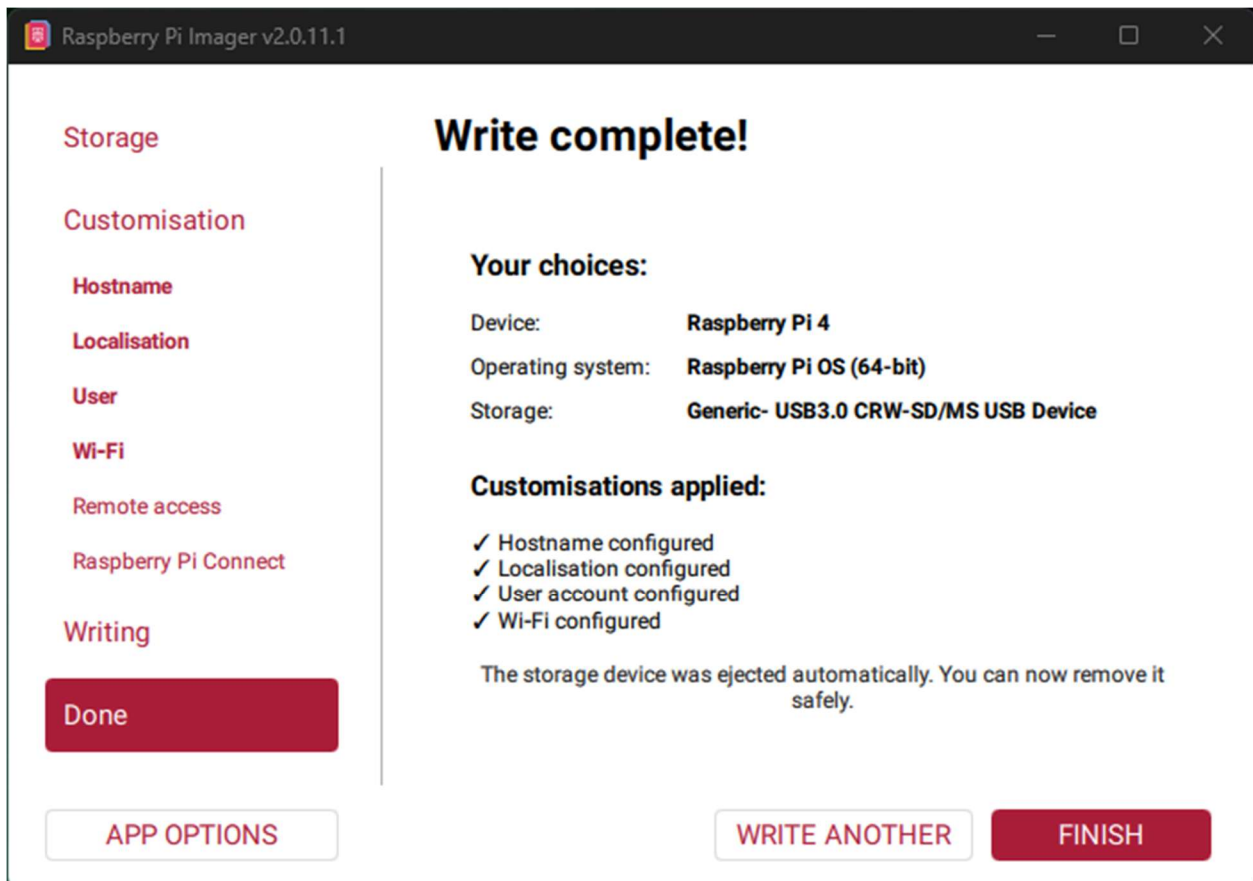
Choose [I UNDERSTAND, ERASE AND WRITE]:



Your system will start to build (please wait):

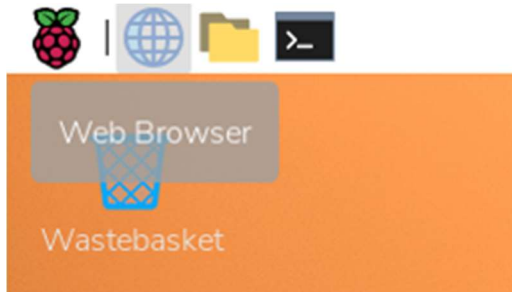


When verified, you'll get the following results. You can choose [Finish] and remove your MicroSD card at this point.



Step 3 – Download and Install the Gugusse Software

Insert your MicroSD card in your Raspberry Pi and allow it to boot. If you skipped the customisation when you built the card, you will need to configure it now. Make sure your Raspberry Pi is connected to the Internet. Once you get to the desktop, double-click on the Web Browser option on the top bar:



Type the following address into the browser address bar:

<https://github.com/meantux/c-gugusse/releases>

Click on the latest version of the software with a filename ending in .deb to download it:

v1.0.1-rc1 Latest Compare

 github-actions released this 12 hours ago  v1.0.1-rc1  c470736

Full Changelog: [v1.0.0-rc2...v1.0.1-rc1](#)

Assets 3

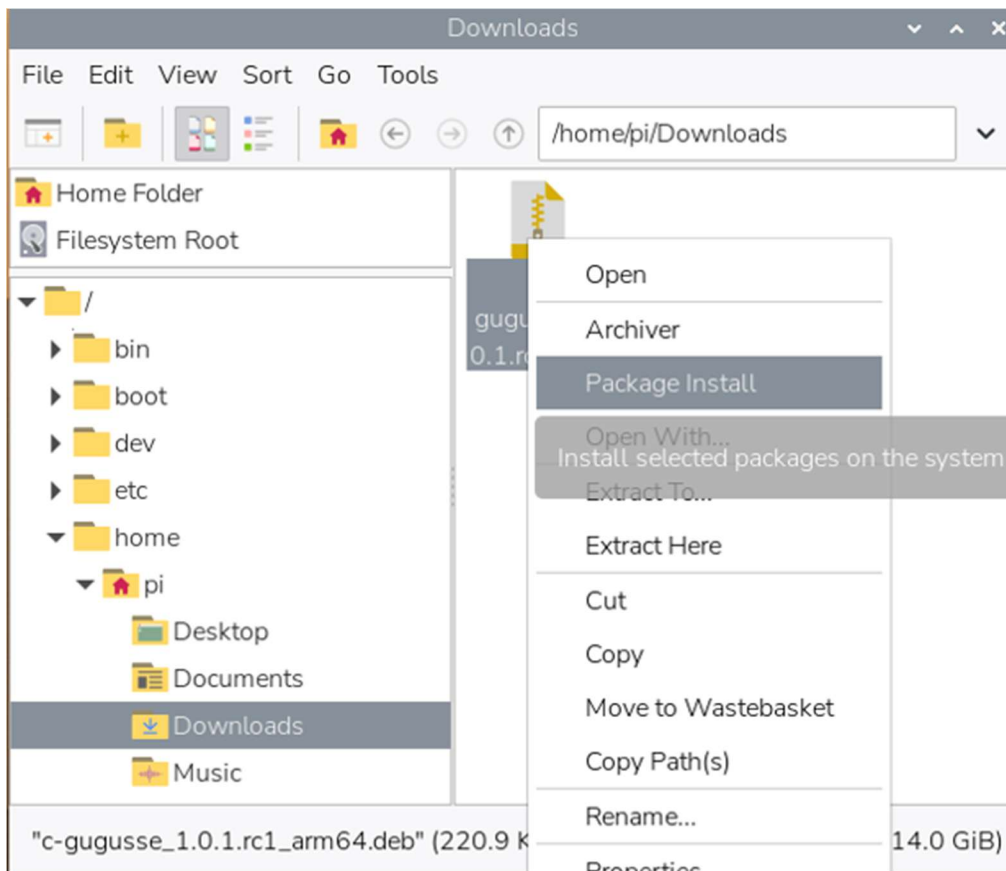
 c-gugusse_1.0.1.rc1_arm64.deb	sha256:9c756cdf4ea4...		221 KB	12 hours ago
 Source code (zip)				12 hours ago
 Source code (tar.gz)				12 hours ago

Click on the folder icon at the top of the screen to open the file manager:

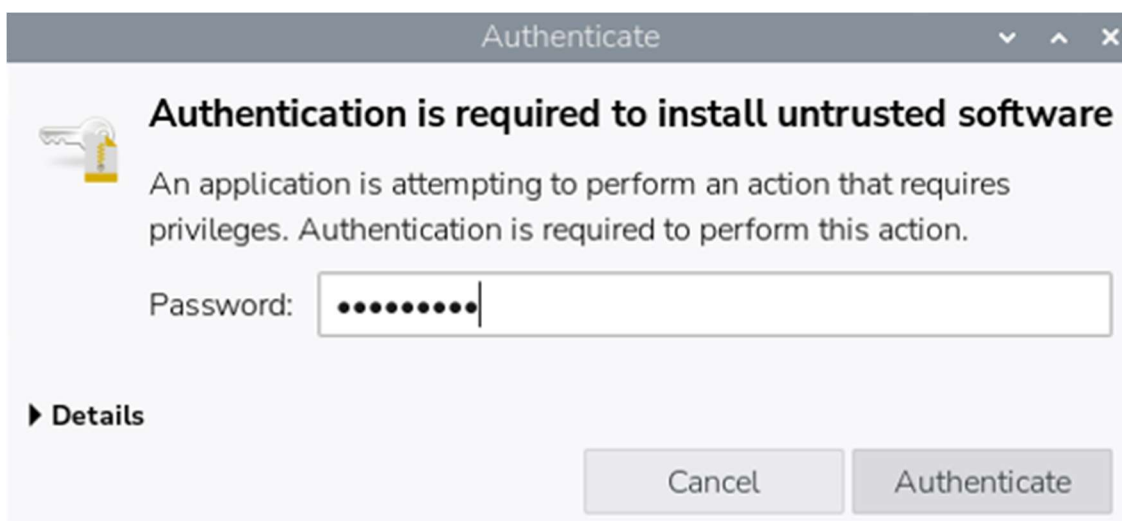


Note: This will install the software using the File Browser method; see **Step 3a** below to install via the terminal window.

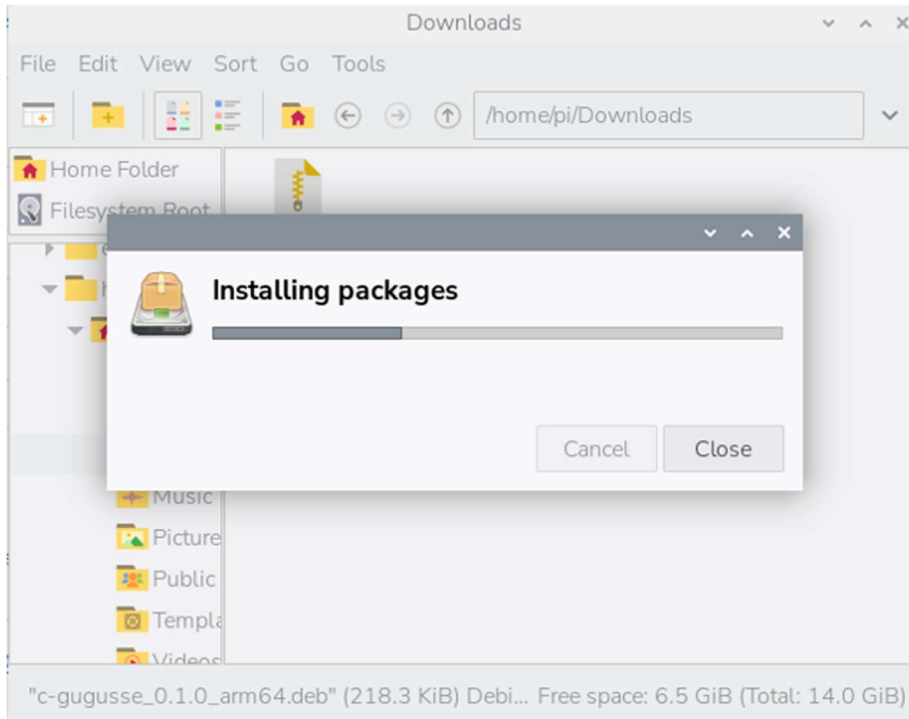
Find the Downloads folder and open it. **Right-click** on the file you downloaded and choose “Package Install”:



You will be asked to authenticate the install. Use the password you created when you built the Operating System (Raspberry if you followed our example):



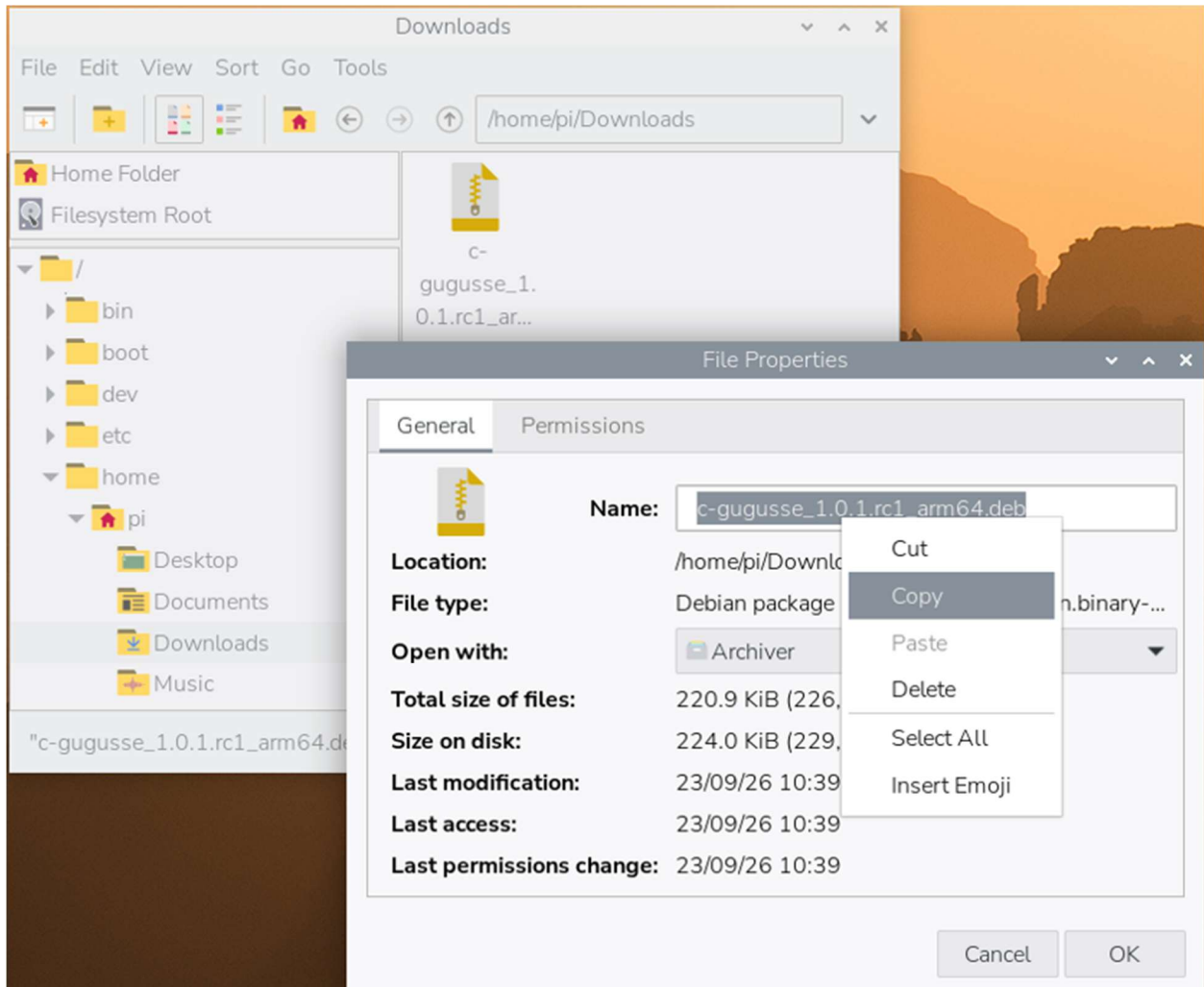
The software will install:



Skip to step 4 to continue.

Step 3a – Optional method to Install the Gugusse Software from a terminal window.

Download the package as shown above and in the File Manager, go into the Downloads Directory. Right-Click on the file you downloaded and choose “Properties”. Copy the filename by selecting it, right clicking and choosing Copy:



Open a terminal window with the  icon on the top bar. Type the following commands exactly as shown in the terminal window:

```
cd Downloads
```

```
sudo apt install ./c-gugusse_1.0.1.rc1_arm64.deb (Downloaded file name)
```

(Hint – After you type the ./ choose Edit-Paste from the terminal menu to paste in the filename.)

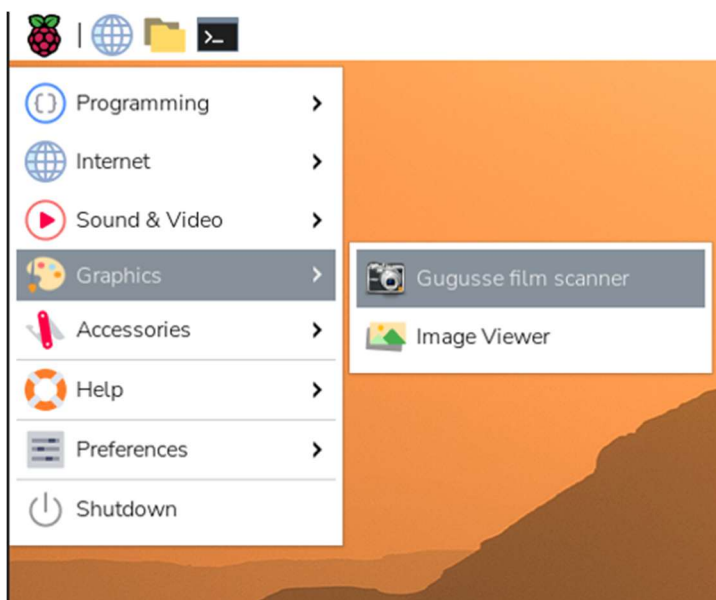
```
pi@GugusseC-2: ~/Downloads
File Edit Tabs Help
pi@GugusseC-2:~ $ cd Downloads
pi@GugusseC-2:~/Downloads $ sudo apt install ./c-gugusse_1.0.1.rc1_arm64.deb
Note, selecting 'c-gugusse' instead of './c-gugusse_1.0.1.rc1_arm64.deb'
Installing:
  c-gugusse

Summary:
  Upgrading: 0, Installing: 1, Removing: 0, Not Upgrading: 65
  Download size: 0 B / 226 kB
  Space needed: 831 kB / 6,926 MB available

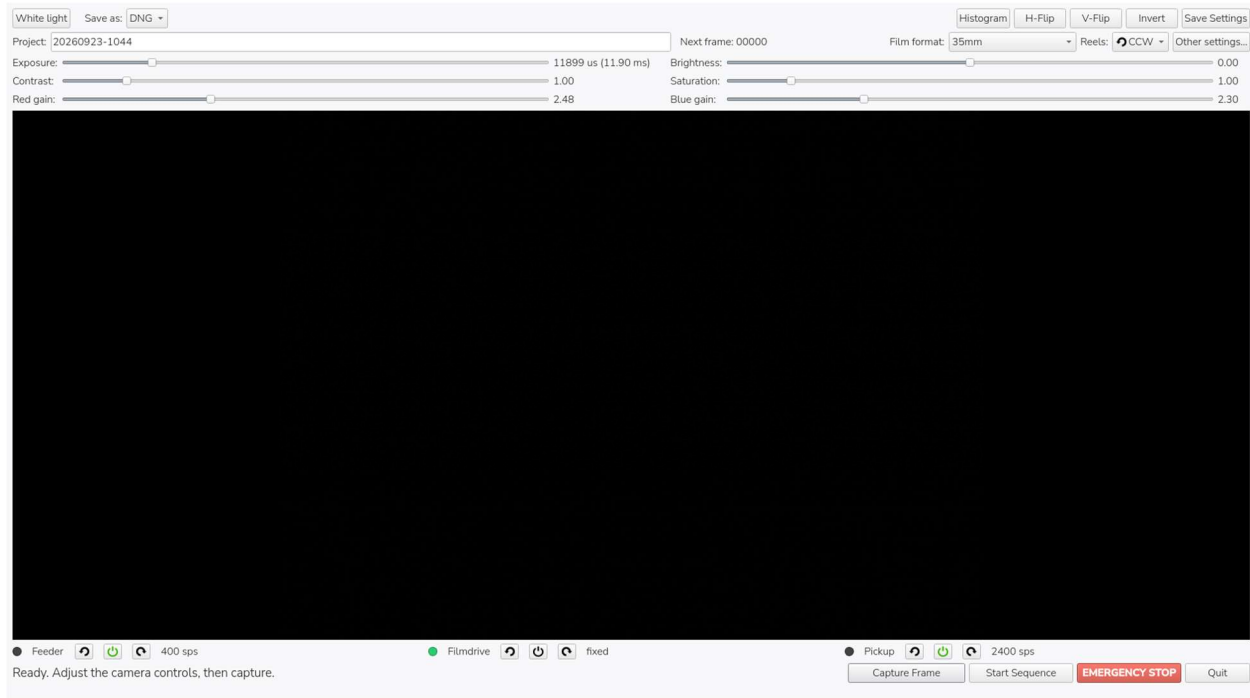
Get:1 /home/pi/Downloads/c-gugusse_1.0.1.rc1_arm64.deb c-gugusse arm64 1.0.1-rc1
[226 kB]
Selecting previously unselected package c-gugusse.
(Reading database ... 121361 files and directories currently installed.)
Preparing to unpack .../c-gugusse_1.0.1.rc1_arm64.deb ...
Unpacking c-gugusse (1.0.1-rc1) ...
Setting up c-gugusse (1.0.1-rc1) ...
Processing triggers for mailcap (3.74) ...
Processing triggers for desktop-file-utils (0.28-1) ...
Notice: Download is performed unsandboxed as root as file '/home/pi/Downloads/c-
gugusse_1.0.1.rc1_arm64.deb' couldn't be accessed by user '_apt'. - pkgAcquire::
Run (13: Permission denied)
pi@GugusseC-2:~/Downloads $
```

Step 4 – Run the Gugusse film scanner

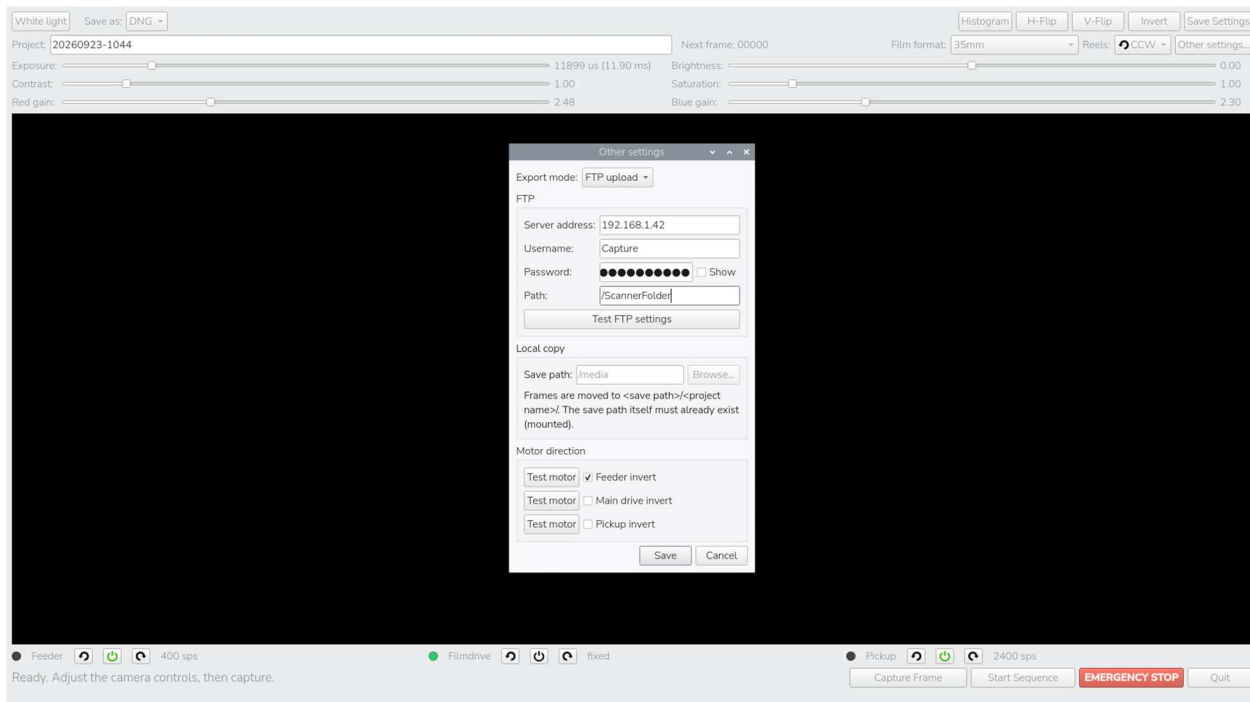
Click on the 'Raspberry' in the upper left corner of the desktop, then 'Graphics', then 'Gugusse film scanner' to run the scanning software:



This is the new scanning screen:

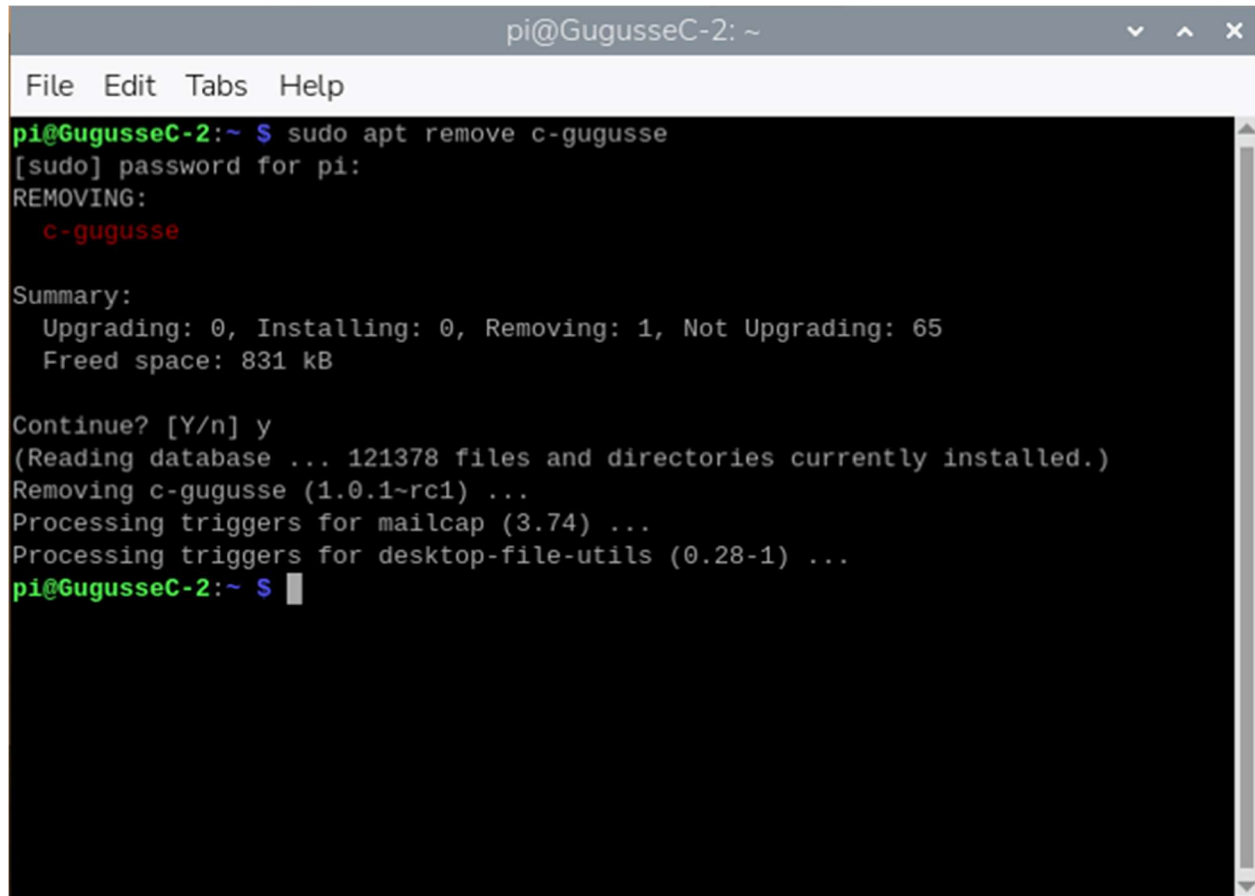


Hint: The FTP and Motor controls are now configured under [Other settings...] on the upper right of the screen:



If you ever need to remove the software; these are the commands to do it from a terminal window:

```
sudo apt remove c-gugusse
```

A terminal window titled 'pi@GugusseC-2: ~' with a menu bar (File, Edit, Tabs, Help). The terminal shows the command 'sudo apt remove c-gugusse' being executed. It prompts for a password, then shows 'REMOVING: c-gugusse'. A summary follows: 'Summary: Upgrading: 0, Installing: 0, Removing: 1, Not Upgrading: 65, Freed space: 831 kB'. It asks 'Continue? [Y/n] y' and shows progress: '(Reading database ... 121378 files and directories currently installed.) Removing c-gugusse (1.0.1~rc1) ... Processing triggers for mailcap (3.74) ... Processing triggers for desktop-file-utils (0.28-1) ...'. The prompt returns to 'pi@GugusseC-2:~ S'.

```
pi@GugusseC-2: ~
File Edit Tabs Help
pi@GugusseC-2:~ $ sudo apt remove c-gugusse
[sudo] password for pi:
REMOVING:
  c-gugusse

Summary:
  Upgrading: 0, Installing: 0, Removing: 1, Not Upgrading: 65
  Freed space: 831 kB

Continue? [Y/n] y
(Reading database ... 121378 files and directories currently installed.)
Removing c-gugusse (1.0.1~rc1) ...
Processing triggers for mailcap (3.74) ...
Processing triggers for desktop-file-utils (0.28-1) ...
pi@GugusseC-2:~ S
```

The Gugusse Compact and Software were Designed and Engineered by Denis-Carl Robidoux – All Rights Reserved.

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Details about the Gugusse Compact can be found at: <https://www.deniscarl.com/dokuwiki/doku.php?id=start>