



RoPieee

Installation Guide

What is RoPieee?

RoPieee (<https://ropieeee.org>) is a custom appliance that acts as a dedicated Roon endpoint and/or Roon display (<https://roonlabs.com>) running on modern Raspberry Pi hardware, with audio output over USB or a HAT. The project has three aims:

1. Easy to create appliance, with no Linux knowledge required.
2. No ongoing maintenance required (self-updating).
3. Full integration with the Raspberry Pi official 7" display (to view artwork and track information from Roon in real time via the API).

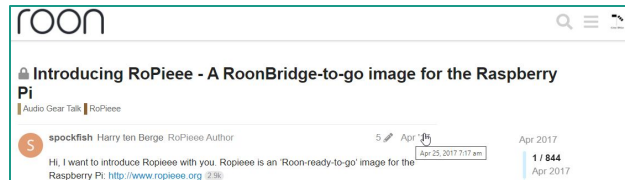


History of RoPieeee

Harry ten Berge (@spockfish) introduced RoPieeee to the Roon forum on April 25, 2017, and it became an extremely popular Roon endpoint appliance on Raspberry Pi hardware. Eventually, other streaming platforms support was added (as RoPieeeeXL).

In 2021 Harry decided to modernize and update RoPieeee, resulting in a new, optimized version released in early 2022.

In 2024, the streaming features of XL were merged into a consolidated, single version of RoPieeee.



For the classic **RoPieeee Beginner's guide** (deprecated), see <https://ropieeee.codexwilkes.com/downloads/ropieeee-guide-for-beginners.pdf>



Why not RoPieeee?

RoPieeee aims to offer an appliance-like endpoint experience for the Roon user. If you desire other non-supported functionality (such as ssh access) or customizable settings other than what is offered in the web gui, it may not be a good fit for your requirements: use a generic OS implementation such as DietPi or Raspberry Pi OS instead.

Further, sometimes features available or working in a prior version may not be carried forward based on other considerations, at the **developer's sole discretion**.

Since RoPieeee is volunteer-led and free of license cost, there are no commercial support mechanisms other than what is available through the Roon forum at <https://community.roonlabs.com/c/audio-gear-talk/ropieeee/56>. If you desire traditional support offerings, similarly a commercial product may be a better option for you.



Other Preliminary Notes

RoPieee does not support HDMI (neither for display nor for audio), and it disables the HDMI port after booting. This means that for Roon (or other supported applications), HDMI is not a valid output and will not work.

RoPieee runs on a modern linux kernel, so any attached USB DAC or USB WiFi dongle must have reasonable, standard, existing linux support to work properly.

Roon Server does not run on ARM architecture, and therefore must be run elsewhere, often on a NUC running ROCK, a normal PC or Mac, or perhaps a Roon Nucleus. See <https://help.roonlabs.com/portal/en/kb/articles/architecture>.



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Hardware





Hardware Summary

1. Raspberry Pi
2. MicroSD card (8g minimum)
3. Power supply (ensure sufficient amperage if using a HAT and/or display)
4. Audio HAT (if using)
5. USB DAC (if using)
6. Official Raspberry 7" display (if using)
7. Hardware remote (if using)
8. Case



RoPieeee Hardware Prerequisites

Raspberry Pi 3, Compute Module 3+, Zero 2 W, Compute Module 4, Pi4, or Pi5.

- Appropriate, safe power supply (2.5 or 3 amp, depending on Pi model and installed hardware).
- RoPieeee requires well under 1g of memory to run well, so any supported Pi model is sufficient.
- MicroSD card of at least **8g** size.

Audio HAT (if using as an audio endpoint and not using USB to connect to your DAC).

- Check https://www.ropieeee.org/audio_hardware/ for currently supported hardware.
- “HAT” means “hardware attached on top”, eg an add-on board such as DAC for analog output (RCA or XLR), a DIGI board for digital output (S/PDIF, Toslink, AES/EBU), or an amplifier (speaker terminals).



Which Raspberry Pi?

Although RoPieee runs on most modern Raspberry Pi hardware, many Roon forum members inquire about which model “sounds the best” or has the “best performance”.

RoPieee is neutral to the audio chain, as it delivers bit-perfect data to the USB port or onboard HAT. However, there are some advantages of the different models depending on your use case, notably USB improvements of the Pi 4 compared to the Pi 3.

Effective v2024-06, RoPieee on Pi5 will not support WPA3 using internal WiFi hardware.

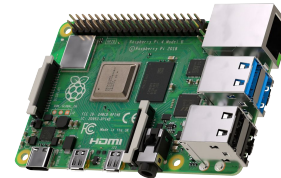
Raspberry Pi Model	HAT (DAC, DIGI)	USB	Notes
Pi 3	✓		
Pi 3+ (Wifi)	✓		
Compute Module 3+			
Zero 2 W			<i>Wireless setup (April 2023)</i>
Compute Module 4			
Pi 4	✓	✓	<i>1g ram sufficient</i>
Pi 5	✓	✓	No WPA3 support

Pi Hardware Configurations

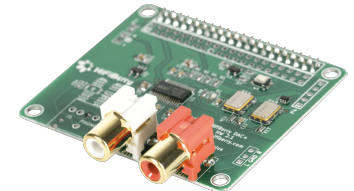
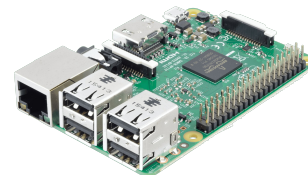
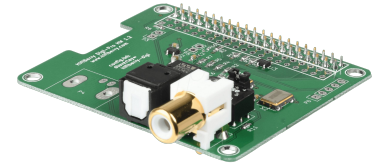
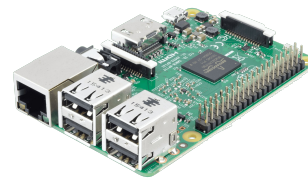
Example 1: Raspberry Pi running RoPieee using USB to connect to a DAC. Pi 4 and up preferred.

Example 2: Raspberry Pi running RoPieee with a supported audio HAT to output a digital signal (S/PDIF etc) connected to an external DAC. ("DIGI boards").

Example 3: Raspberry Pi running RoPieee with an audio HAT that outputs an analogue signal connected to an external amplifier. ("DAC boards").



Any RoPieee-supported audio HAT, including DIGI, DAC, and amplifier boards.

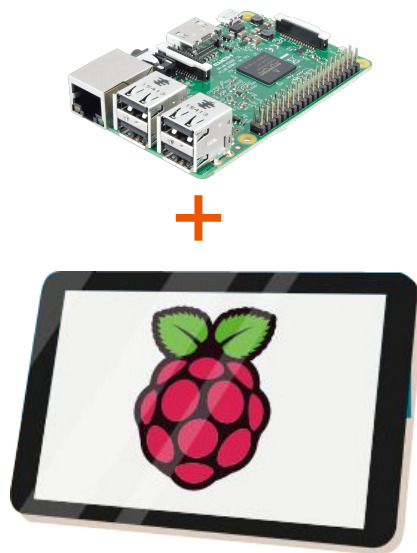


RoPieeee + Official Raspberry Pi 7" Display

RoPieeee supports the official Pi 7" display to view Roon track information + artwork, as well as offer basic play controls, either in a display only configuration or display + audio.

NB: only the official Raspberry Pi 7" display is supported.

Also, HDMI output is turned off once RoPieeee boots, so attaching an external monitor is almost never beneficial.



RoPieee + Remote Control

RoPieee supports the use of hardware remote control:

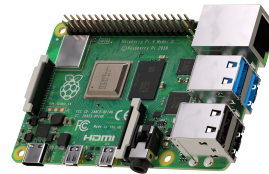
OSMC

<https://osmc.tv/store/product/osmc-remote-control/>

Flirc

<https://flirc.tv/>

Other devices may be supported in the future: check the Roon forum for updates.





Raspberry Pi Case

Appropriate case for Pi model, including whether using a HAT and/or display.

- Flirc case (or similar heat dispersing case) highly recommended (<https://flirc.tv/collections/case>).

Official Raspberry 7" display (if using a display).

- Case for display and Raspberry Pi (check case shape carefully if also using a HAT).



Hardware Assembly Tips

The microSD card is installed in the Raspberry Pi “upside down”, eg pins facing up. Some people find using a pair of tweezers helpful, especially with the video cable installed when using the Raspberry Pi official 7” display.

Brass spacers often are easier to use than the plastic ones often included with audio HATs. Ebay has many brass M2.5 spacers of various lengths, along with screws and nuts. 12mm is a good length.

Be sure to use a decent, safe, sufficient amperage power supply.

Raspberry 7" Official Display Tips

When attaching the cable from the display to the Raspberry Pi (see the right side in the photo), you may have to open the black tabs to slide the cable in (“out to the side” on the display board; “up” on the Pi board). This may take more force than expected. Be sure to install the correct side of the cable!

If you want to attach an audio HAT as well, you will have to power the display and Pi separately (eg you can’t jumper the power, as shown in this picture). A dual microUSB cable is ideal for this if using a Pi 3.

Depending on display placement and stand used, microUSB right-angle adapters may be useful.



Software

II



RoPieeee

RoPieeee has different OS versions to accommodate different hardware, notably a Pi3, Pi4, and a Pi5 version. Be sure to download the correct installation file for your specific hardware!

<https://ropieeee.org/software>

Other specialized builds may also be available from the same link, and if they apply to your hardware download those instead.

Raspberry Pi model	RoPieeee version
<ul style="list-style-type: none">• Raspberry Pi 3 (any)• Zero 2 W• Compute Module 3+	RoPieeee for Pi3
<ul style="list-style-type: none">• Raspberry Pi 4 (any)• Compute Module 4	RoPieeee for Pi4
<ul style="list-style-type: none">• Raspberry Pi 5 (any)	RoPieeee for Pi5 <i>Nota bene: Effective v2024-06, WPA 3 using internal WiFi hardware not supported.</i>

Any other Raspberry Pi hardware is not supported.

Installation

III



Installing RoPieee Overview

1. Verify working internet connection using ethernet, including DNS.
2. Download RoPieee from <https://ropieee.org/software/>, selecting the correct version (Pi3, Pi4, or Pi5).
3. Copy image to microSD card using a utility such as Etcher (<https://www.balena.io/etcher/>) or Rufus (<https://rufus.ie/>).
4. Install RoPieee.
5. Enjoy well-made latté. *Or, a dram if you prefer.*

<https://ropieee.org/software/>



RoPieeee Networking Prerequisites

- A. Working network connection
 - Working DNS access.
 - Unfiltered outgoing connections to internet.
- B. Ethernet (eg wired with cable) or stable wireless for initial install and configuration
 - Wi-fi can be configured later after initial setup if initially built using an ethernet connection.

Audio streaming is generally more stable over ethernet, so preferred.



1) Download RoPieeee

Download the latest RoPieeee image, selecting the correct version based on your PI hardware.

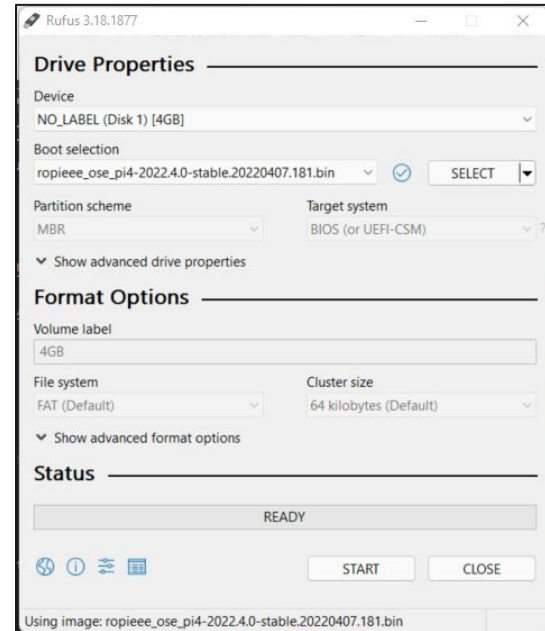
<https://ropieeee.org/software/>

2) Copy RoPieeee image to microSD card

Use an imaging tool (Etcher <https://www.balena.io/etcher/> or Rufus <https://rufus.ie>) to copy the downloaded RoPieeee image to an empty microSD card (8g or larger).

- Etcher is available for Windows, MacOS, and linux.
- Make sure the image is stored locally, not on a network share.
- NB: if using Etcher, you can use the compressed image directly.

→ **Make sure the target destination (eg the blank microSD card) is the intended storage device to be erased and written to!**





3) Assemble Pi and Install RoPieeee

1. Physically install microSD card with RoPieeee image into a RoPieeee-supported Raspberry Pi.
2. Attach official Raspberry Pi 7" display (if using).
3. Attach audio HAT (if using).
4. Assemble everything in case.
5. Attach Ethernet cable (with known working internet, including valid DNS). If using wireless, configure that in step 7.
6. Attach appropriate cable for power.
7. If using wireless for setup, configure wireless (see next two slides)
8. Wait until the green status LED⁽¹⁾ slowly pulses every 2 seconds [1/2 Hz] (there will be several reboots).
9. Attach the USB DAC (if using) and ensure that it is powered on.
10. Launch web administration interface for final configuration via a web browser.

RoPieeee is designed to be installed without the need for a computer screen or keyboard (i.e. headless), but it must be connected to the Internet during installation and initial configuration. Configuration options can be accessed via a web browser after installation is complete.

⁽¹⁾ *Not to be confused with the Ethernet activity LED.*

3b) Setup wireless for install

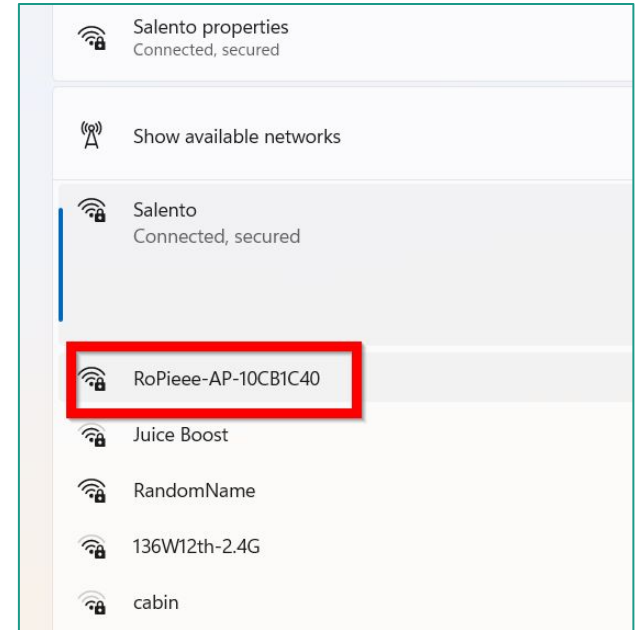
If ethernet is not available or practical (eg using a Zero W 2), it is possible to setup wireless during the initial boot process.

1. During the initial boot sequence if valid internet is not detected, after a few minutes RoPieee will create a wireless Access Point (AP) with a network name similar to:

RoPieee-AP- [unique_id]

2. Using a laptop or mobile device, join to this wireless network using the password:

goropieeee



3b) Setup wireless for install (2)

- When connected, browse to the following IP address to select your wireless network and enter your password. The unit will reboot, connect to your production wireless network, and then will continue the installation process.

<http://192.168.250.1>



Advice from @spockfish

Wait for all of the installs to complete, ensuring that all of the reboots are finished. This may take up to 20 minutes if on a lower speed internet connection or located far away from RoPieee HQ.

@spockfish suggests that preparing and enjoying a well-made latté during this installation phase yields optimal RoPieee results; @wizardofoz reminds us that alternative beverages work well too.



<https://49thcoffee.com/>

Configuration

IV



RoPieeee is ready for configuration

If all goes well, your new RoPieeee device will now have finished installation and is ready for configuration. This is done in three steps:

1. Adjust RoPieeee settings via a browser.
2. Enable in Roon settings.
3. Adjust on-screen display settings (if applicable).

1) RoPieeee configuration

Using a browser, open the web interface of the new RoPieeee device by going to <http://ropieeee.local> or directly via its assigned IP address (for example, something like <http://192.0.2.10>). You can determine the IP using a port scan application or via your router interface, often in a DHCP tab. If using the official 7" Pi display, the opening error message will indicate the IP of the endpoint as assigned by your router via DHCP.

Port scan applications, such as Fing (<https://www.fing.io>) for iOS or Android, can be used to scan your local network and determine the allocated IP address. The default machine name is "ropieeee".

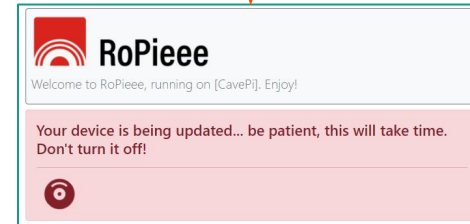
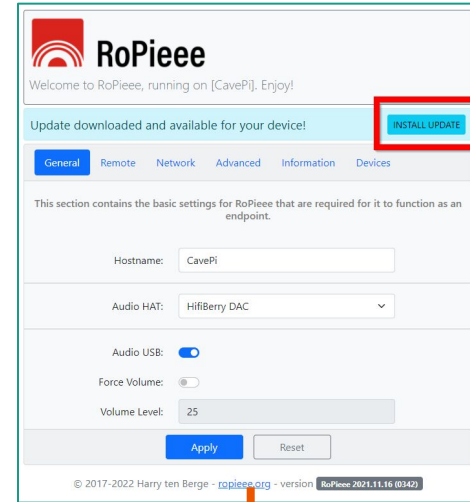
If you open the web interface before the install is finished, you may see an "in progress" message.



1a) Install updates

Install any updates that are available.

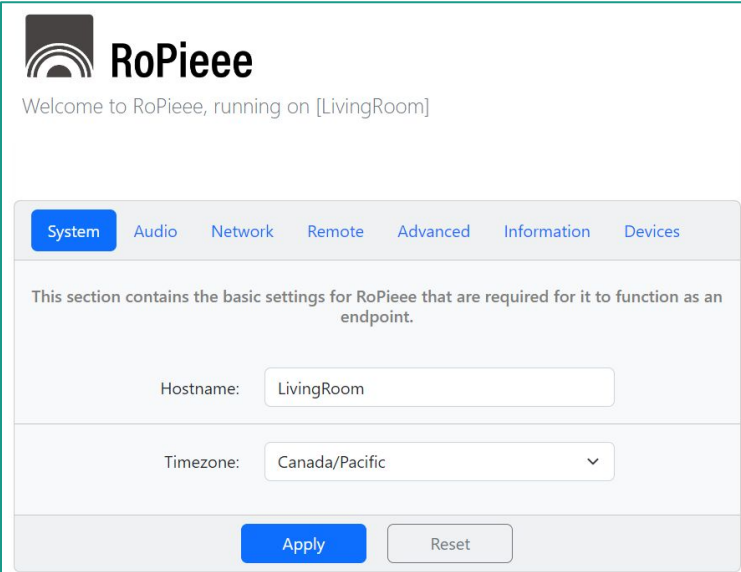
Once you commit the changes, you may be asked to reboot the device; do so whenever requested. Some reboots may also occur automatically.



1b) Adjust the System settings

- Define the hostname.
- Set timezone.

Once you commit the changes, you may be asked to reboot the device; do so whenever requested.



The screenshot shows the 'System' settings page of the RoPieee interface. At the top, there is a logo and the text 'Welcome to RoPieee, running on [LivingRoom]'. Below this is a navigation bar with tabs: 'System' (selected), 'Audio', 'Network', 'Remote', 'Advanced', 'Information', and 'Devices'. The main content area is titled 'This section contains the basic settings for RoPieee that are required for it to function as an endpoint.' It contains two settings: 'Hostname' with a text input field containing 'LivingRoom', and 'Timezone' with a dropdown menu showing 'Canada/Pacific'. At the bottom of the settings area are two buttons: 'Apply' (blue) and 'Reset' (grey). The footer of the interface displays the copyright information: '© 2017-2023 Harry ten Berge - ropieee.org - version RoPieee 2023.04 (0892)'.

RoPieee

Welcome to RoPieee, running on [LivingRoom]

System Audio Network Remote Advanced Information Devices

This section contains the basic settings for RoPieee that are required for it to function as an endpoint.

Hostname: LivingRoom

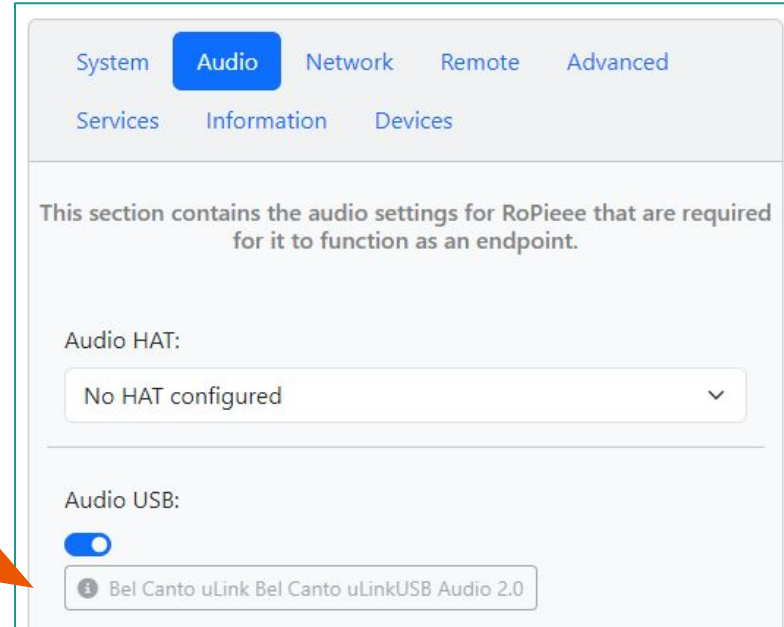
Timezone: Canada/Pacific

Apply Reset

© 2017-2023 Harry ten Berge - ropieee.org - version RoPieee 2023.04 (0892)

1c) Adjust the Audio settings

- Select the supported audio HAT from the dropdown that matches your physical hardware or adjust the “Audio USB” tick box if using a USB DAC.
- If the DAC is recognized (powered on and supported), information about the DAC will be displayed.



The screenshot shows the 'Audio' settings page in the Raspberry Pi configuration tool. The 'Audio' tab is selected. The page contains the following elements:

- Navigation tabs: System, **Audio**, Network, Remote, Advanced, Services, Information, Devices.
- Introductory text: "This section contains the audio settings for RoPieee that are required for it to function as an endpoint."
- Audio HAT: A dropdown menu currently showing "No HAT configured".
- Audio USB: A toggle switch that is turned on (blue).
- DAC information: A box displaying "Bel Canto uLink Bel Canto uLinkUSB Audio 2.0" with an information icon on the left.

An orange arrow points from the 'Audio USB' toggle switch to the DAC information box.

1d) Network settings

If wishing to use WiFi or define a static IP, this can be configured once all of the other setup parameters are complete and all reboots completed.

Wireless must be enabled before it can be configured. After enabling, switch to the **Wireless** mini tab to select your SSID and enter your wifi password. You will need to use the **Scan** button to locate your wireless SSID (it won't auto-populate).

→ **TIP: use DHCP reservations in your router rather than using a static IP.**

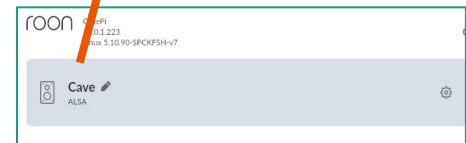
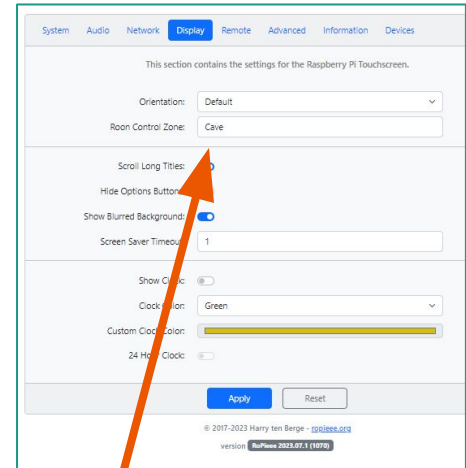
The screenshot shows the 'Network' configuration page for RoPieee. At the top, there are tabs for System, Audio, Network (selected), Display, Remote, Advanced, Information, and Devices. Below the tabs, a message states: 'This section contains the network settings for RoPieee's network configuration.' There is a toggle switch for 'Enable Wireless' which is currently turned off. Below this, there is a 'Wired' tab. The 'Configuration Method' is set to 'DHCP' via a dropdown menu. A tooltip points to the dropdown with the text 'Select the method for IP address configuration.' and a 'More info' button. Below the configuration method, there are input fields for 'IP Address' (10.0.1.238), 'IP Netmask' (255.255.255.0), 'Gateway' (10.0.1.1), and 'MAC Address' (b8:27:eb:96:90:72). At the bottom, there are 'Apply' and 'Reset' buttons. The footer contains copyright information: '© 2017-2023 Harry ten Berge - ropieee.org - version RoPieee 2023.04 (0889)'.

1e) Adjust the Display settings (if using)

- If the display is upside down, change the display orientation setting to “Rotated” (this is case dependant).
- Type the name of the Roon Zone that the display should be associated with (e.g. what content should display on the screen): this must be exactly as is specified in Roon settings. (Please copy and paste if there is any doubt!)
- Remember to enable in **Roon Settings → Extensions**, if necessary.

NB: The display can show content from any Roon Control Zone, not just the Raspberry Pi attached to the display.

The value defined in the Display tab must match the Zone defined in Roon Settings → Audio exactly.

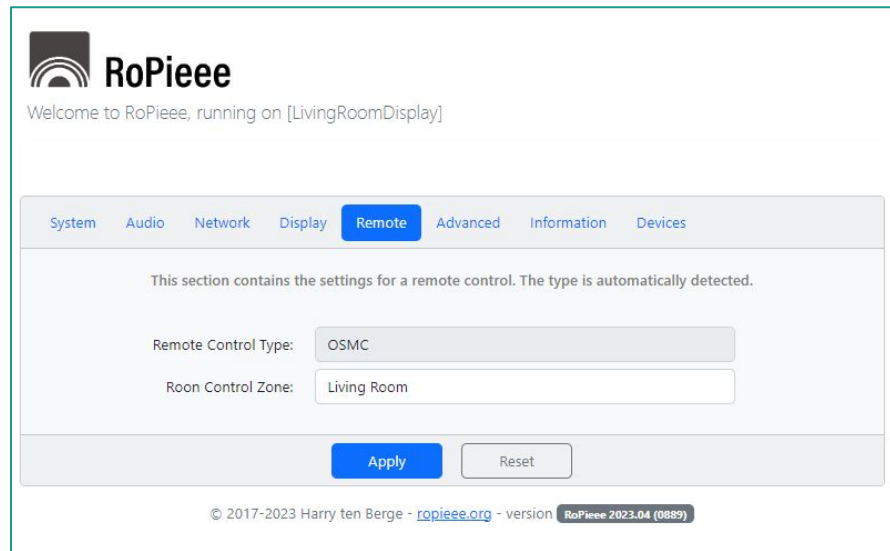


1f) Adjust the Remote settings (if using)

The OSMC remote and Flirc USB dongle are currently supported (they are detected automatically).

Type the Roon Control Zone that the remote control should be associated with: this must be exactly as is specified in Roon settings. (Copy and paste if there is any doubt.)

Remember to enable in [Roon Settings → Extensions](#), if necessary.



The screenshot shows the RoPieee web interface. At the top, there's a logo and the text "Welcome to RoPieee, running on [LivingRoomDisplay]". Below this is a navigation bar with tabs: System, Audio, Network, Display, Remote (selected), Advanced, Information, and Devices. The main content area has a heading "This section contains the settings for a remote control. The type is automatically detected." followed by two settings: "Remote Control Type:" with a dropdown menu showing "OSMC", and "Roon Control Zone:" with a text input field containing "Living Room". At the bottom of the settings area are two buttons: "Apply" (blue) and "Reset" (grey). The footer contains copyright information: "© 2017-2023 Harry ten Berge - ropieee.org - version RoPieee 2023.04 (0689)".

OSMC notes

On the OSMC remote, the play/pause button, forward, back, and volume (if applicable) buttons are active.

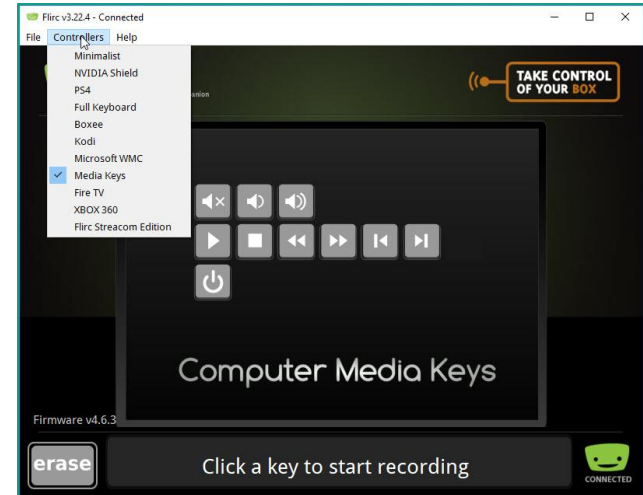
The “i” key toggles the display (when using) to blank or clock (if enabled).



Toggles display

Flirc notes

Use the 'Media Keys' profile when setting up the Flirc USB dongle. See <https://flirc.tv/support/flirc-usb> for Flirc support. The power button toggles the display (if using).



1g) Advanced settings

The **Advanced** tab contains optional settings not required for basic use. Please note that the auto-update functionality requires the reboot schedule to be defined.

The blinking LED on the Pi can be turned off, if desired.

The useful Alarm Clock extension by **Jan_Koudijs** can be enabled and run directly in RoPieee.

Use the “Send Feedback” button to send diagnostic logs if requested; report the unique number identifier to the Roon forum.

System Audio Network Display Remote **Advanced** Information Devices

This section contains advanced settings. Only change them if you know exactly what you're doing!

Update Channel: Stable

Auto Update: ☒

Reboot Schedule: Monthly

Reboot Time: 08:04 AM

Web Authentication: ☐

Web Password:

Green LED: Off

Alarm Clock: ☒

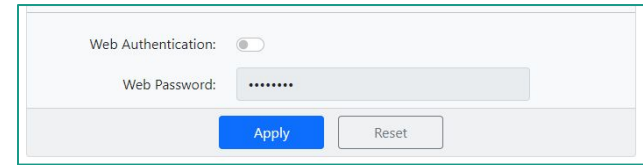
Apply Reset

Shutdown Reboot Reinstall Roon Bridge Send Feedback

1h) Security settings

The **Advanced** tab also contains some security settings that can be adjusted, such as setting a password for web access to the RoPieee configuration.

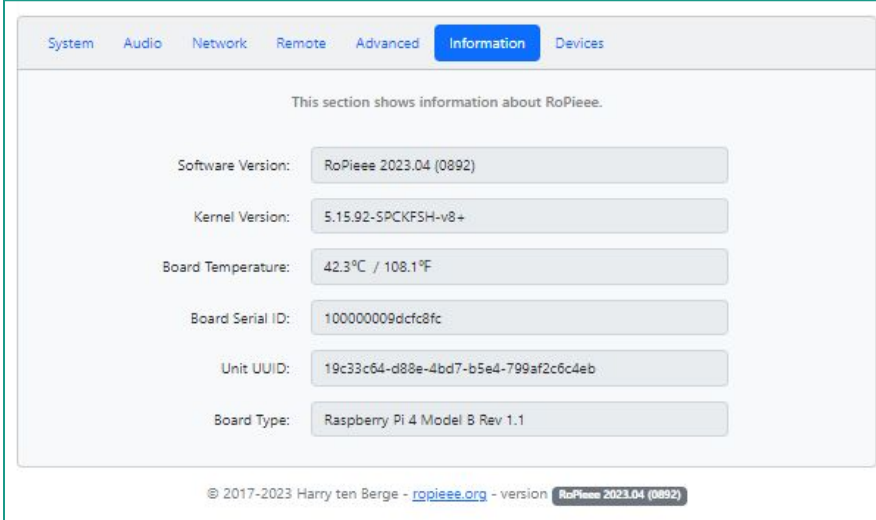
If you forget the password, there is no recovery mechanism, and a re-flash will be required.



The screenshot displays a configuration window with a light gray background. At the top, the text 'Web Authentication:' is followed by a toggle switch that is currently turned off. Below this, the text 'Web Password:' is followed by a text input field containing seven dots. At the bottom of the window, there are two buttons: a blue 'Apply' button and a gray 'Reset' button.

1i) Information tab

Information about the Raspberry Pi may be found in the **Information** tab. Please note that if there is a USB firmware upgrade available, it will be found here.



The screenshot displays the 'Information' tab of the RoPieee web interface. The navigation bar at the top includes 'System', 'Audio', 'Network', 'Remote', 'Advanced', 'Information' (highlighted), and 'Devices'. Below the navigation bar, a message states: 'This section shows information about RoPieee.' The main content area lists several system details, each with a label and a corresponding value in a light gray box:

- Software Version: RoPieee 2023.04 (0892)
- Kernel Version: 5.15.92-SPCKFSH-v8+
- Board Temperature: 42.3°C / 108.1°F
- Board Serial ID: 10000009d1cf8fc
- Unit UUID: 19c33c64-d88e-4bd7-b5e4-799af2c6c4eb
- Board Type: Raspberry Pi 4 Model B Rev 1.1

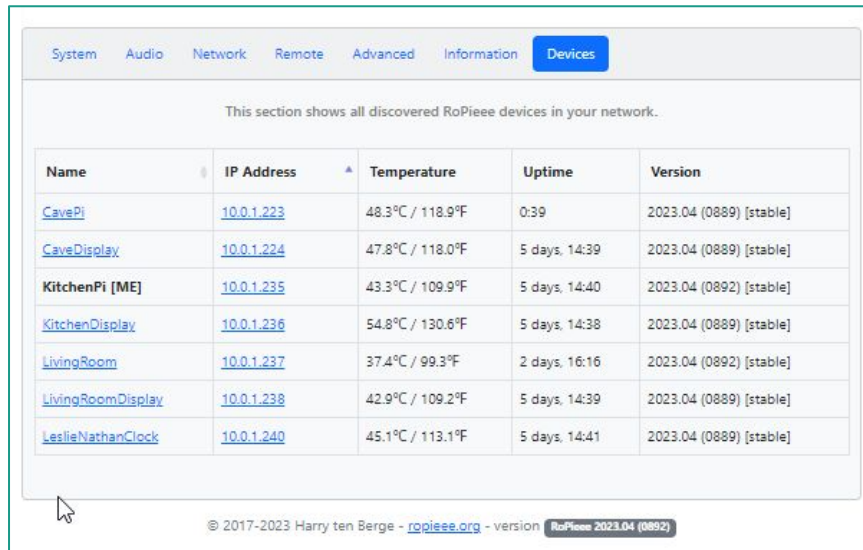
At the bottom of the interface, the copyright notice reads: '© 2017-2023 Harry ten Berge - ropieee.org - version **RoPieee 2023.04 (0892)**'.

1j) Devices tab

If you have more than one RoPieee device in your network, the **Devices** tab will present information about each one, along with links to the respective configuration pages.

If any of the devices require an update, it will be indicated to the right of the version number.

If you only have one RoPieee device, the tab will not appear.



Name	IP Address	Temperature	Uptime	Version
CavePi	10.0.1.223	48.3°C / 118.9°F	0:39	2023.04 (0889) [stable]
CaveDisplay	10.0.1.224	47.8°C / 118.0°F	5 days, 14:39	2023.04 (0889) [stable]
KitchenPi [ME]	10.0.1.235	43.3°C / 109.9°F	5 days, 14:40	2023.04 (0892) [stable]
KitchenDisplay	10.0.1.236	54.8°C / 130.6°F	5 days, 14:38	2023.04 (0889) [stable]
LivingRoom	10.0.1.237	37.4°C / 99.3°F	2 days, 16:16	2023.04 (0892) [stable]
LivingRoomDisplay	10.0.1.238	42.9°C / 109.2°F	5 days, 14:39	2023.04 (0889) [stable]
LeslieNathanClock	10.0.1.240	45.1°C / 113.1°F	5 days, 14:41	2023.04 (0889) [stable]

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1k) Other streaming options

Configuration of other various optional streaming services offered by RoPieee is not in scope for this introductory document.



2) Enable in Roon settings

If using as an audio endpoint, eg using a HAT (audio add-on board) or USB DAC, enable in [Roon Settings](#) → [Audio](#).

- If using an USB DAC, it must be connected to your Pi and powered on to appear in Roon settings.
- Any installed HAT must be supported by RoPieee and specified correctly in RoPieee configuration settings, including any required reboot, in order to appear in Roon settings.

If using as a display or using a hardware remote control, enable the RoPieee extension in [Roon Settings](#) → [Extensions](#). You may need to use a PC or tablet to make this change, as some mobile devices don't display this settings area.



3) Display settings

Tapping the physical display toggles between displaying the playing content, screen off (black), and the clock (if enabled). The “i” key on the OSMC remote and the power button on the Flirc remote also trigger this behavior.

The following display settings are accessed by tapping the lower right corner of the physical display:

- Screen brightness (turn down to reduce power requirements).
- Clock brightness.

To adjust most other display settings, use the Display tab of the RoPieee configuration webpage.

Troubleshooting





Potential installation problems (1)

Is the copy of the image file to a blank micro SD card failing when using Balena Etcher?

- Some users report success with Rufus (<https://rufus.ie/>) in situations when Etcher fails. If using Rufus, you may have to toggle the file setting from “ISO Image” to “All files”.

Do you have a recently manufactured Raspberry Pi and an expected and supported feature isn't available?

- It may be that RoPieee needs to be updated with the new hardware CPU revision codes in order to identify the device correctly. Send feedback via the Roon forum and this will get fixed.
- Did you remember to enable the RoPieee extension, if applicable?



Potential installation problems (2)

Is the install process seeming to fail?

- Check your DNS settings, and check for basic networking connectivity, including being connected via Ethernet. RoPieee needs to download RoonBridge during the initial install.
- Did you use the correct version of RoPieee for your supported device, eg for the Pi 3, Pi 4, or Pi 5?

Pi 3 version	Pi 4 version	Pi 5 version
Raspberry 3 (any) Zero 2 W Compute Module 3+	Raspberry 4 (any) Compute Module 4	Raspberry 5 (any)



Potential installation problems (3)

Using a display and it doesn't seem to work?

- Make sure you are using the official Raspberry Pi 7" Display.
- Make sure the value in the RoPieee Display tab is spelled exactly the same as the Roon endpoint: copy and paste the value from [Roon Settings](#) → [Audio](#) if there is any doubt.

Using a display and the configuration tab doesn't appear in the web administration gui?

- The display hardware is detected at two points: at installation and during the configuration step of any settings change. To trigger the detection of display hardware (perhaps newly added), toggle any setting to initiate the configure process (which setting does not matter).
- Also, verify that all of the cables are plugged in correctly.



Potential installation problems (4)

Is the Raspberry Pi not seeming to boot, and the LED is blinking 7 times on and off?

- Ensure that the Raspberry Pi is a supported model, eg either a Pi 3, Zero 2 W, Compute Module 3+, Compute Module 4, Pi 4, or Pi5 (not an earlier model).



Potential installation problems (5)

What is this red screen when I log into the web gui?

- As of 2024, the minimum SD card size is 8g. If you are using a smaller card, there will be a warning that a future upgrade may fail.

Warning: disk too small

The SD card of this unit is too small: RoPieee requires at least an **8 GB** disk.

This means this unit cannot be updated: there isn't enough free space available.

The advise is to replace the SD card with a fresh one.

If you need any assistance you can visit the [RoPie forum](#) where you'll find other users that are willing to help out if you're having questions.

And finally you can also have a look at the excellent [RoPieee Beginner's Guide](#).

Continue



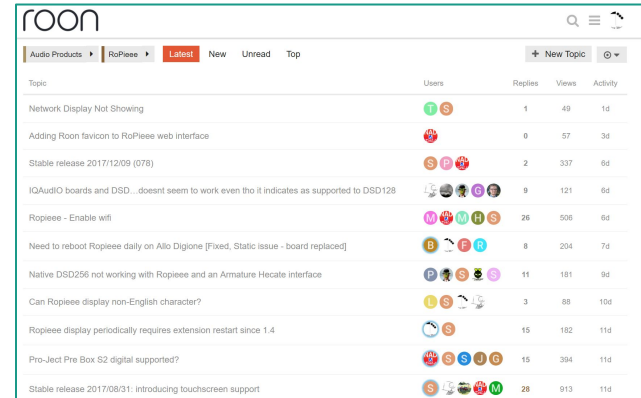
Other diagnostic steps

- Re-flashing your microSD card is sometimes necessary in case of card corruption, though you should first try a few reboots (both of the Pi itself and whatever is running your Roon Server).
- Also, take note of the status LED on the Pi: is it flashing at $\frac{1}{2}$ Hz (about every 2 seconds) or faster (install still in progress)?
- Sometimes rebooting your Roon Server on its own is beneficial, especially for display update issues.
- If networking seems to be the issue, rebooting your network infrastructure, from the core router outwards, is occasionally helpful.

Getting Help

For technical support or general RoPieee questions, see the RoPieee section in the Roon forum:

<https://community.roonlabs.com/c/audio-gear-talk/ropieee/56>



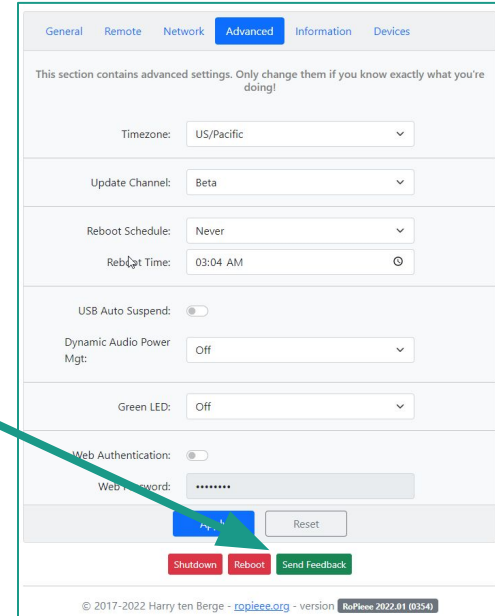
The screenshot shows the Roon forum interface. At the top, there's a navigation bar with 'Audio Products' and 'RoPieee' selected. Below this, a table lists various forum topics. Each row includes the topic title, a list of user avatars, and columns for 'Replies', 'Views', and 'Activity'.

Topic	Users	Replies	Views	Activity
Network Display Not Showing		1	49	1d
Adding Roon favicon to RoPieee web interface		0	57	3d
Stable release 2017/12/09 (078)		2	337	6d
IQAudio boards and DSD ...doesn't seem to work even tho it indicates as supported to DSD128		9	121	6d
RoPieee - Enable wifi		26	508	6d
Need to reboot RoPieee daily on Allo Digione [Fixed, Static issue - board replaced]		8	204	7d
Native DSD256 not working with RoPieee and an Armature Hecate interface		11	181	9d
Can RoPieee display non-English character?		3	88	10d
RoPieee display periodically requires extension restart since 1.4		15	182	11d
Pro-Ject Pre Box S2 digital supported?		15	394	11d
Stable release 2017/08/31: Introducing touchscreen support		28	913	11d

Submitting feedback

In some cases, you may be asked to submit technical feedback (logs and such). This can be done via the **Advanced** tab.

Be sure to copy the **unique identifier** when posting back to the Roon forum.



General Remote Network **Advanced** Information Devices

This section contains advanced settings. Only change them if you know exactly what you're doing!

Timezone: US/Pacific

Update Channel: Beta

Reboot Schedule: Never

Reboot Time: 03:04 AM

USB Auto Suspend: ☐

Dynamic Audio Power Mgt: Off

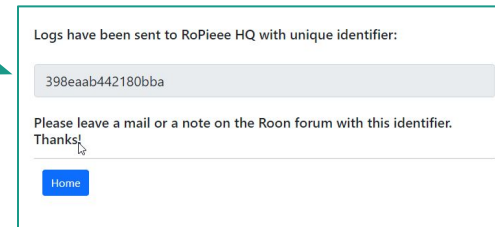
Green LED: Off

Web Authentication: ☐

Web Password:

Shutdown Reboot **Send Feedback** Reset

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Logs have been sent to RoPieee HQ with unique identifier:

398eaab442180bba

Please leave a mail or a note on the Roon forum with this identifier. Thanks!

Home

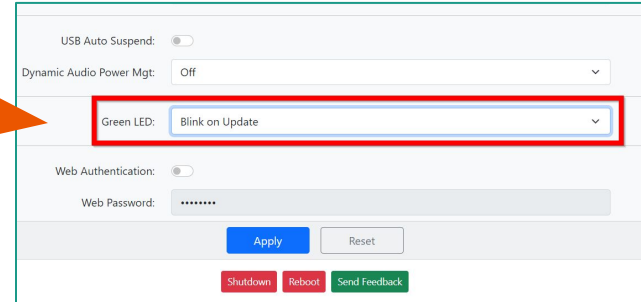
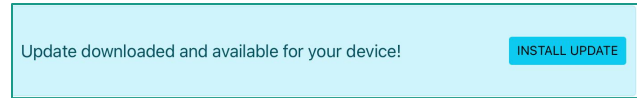
Maintenance

VI

Maintenance

From time to time, updates may be available for your RoPieee device, and a message will appear in the web administration. The **Devices** tab, if applicable, will also indicate that an update is available.

The green LED¹ can be configured to flash when an update is available: this setting is configured on the **Advanced** tab.



¹ Not to be confused with the Ethernet LED light.



Maintenance (2)

The web administration page will update as the status changes, including some potential reboots as necessary.

Welcome to RoPieee



Wrapping up installation... Don't interrupt!

This can take a few more minutes, but we are almost there!

During this step the device might reboot a few times.

I hope you enjoy this product. [Donations](#) are welcome ;-)



Maintenance (3)

In general, the overall update process takes a few minutes, and soon your RoPieee will be ready.

Please note that if the update should fail, RoPieee will revert to the previous version (which is still cached on the Pi). Usually it is not necessary to reflash (unlike Classic RoPieee): reboot, wait a bit, and try again.

Welcome to RoPieee

Your device is initialising ...

It will be up and running in a moment, so please be patient ...

I hope you enjoy this product. [Donations](#) are welcome ;-)

FAQ

VII



FAQ (1)

I am using WPA3 for wireless and my RoPieee Pi 5 doesn't work.

- As of June 2024, the Pi5 will not support WPA 3 using the internal WiFi chipset.
- Use an external WiFi dongle if WPA3 is required.
- See <https://community.roonlabs.com/t/ropieee-wifi-and-wpa3/274084>.

Can I stream via Bluetooth?

- Streaming via Bluetooth is no longer supported as of April 2022.

Donate



Donate to RoPieee

RoPieee is a volunteer-led project (thank you @spockfish), with hosting and other direct costs. If you enjoy RoPieee, please consider contributing on an annual basis:

<https://ropieeee.org/donate/>

Enjoy the music



Nathan Wilkes
<https://cappellaborealis.com/>