

# How to load firmware using MacOS Ventura (Workaround)

Currently, MacOS Ventura (version 13.0 and higher) displays an error message when you try to load firmware to your Raspberry Pi Pico. While we hope this bug will be resolved soon by Apple, we are unsure when or if that will happen. The Raspberry Pi, ARM, and Mirco:bit teams are all trying to work with Apple to correct the issue.

In the meantime, there are two workarounds you can try.

It's also important to understand that this issue only affects **the firmware loading process**. Piper Make will still work normally, and most users won't experience this issue.

## Method 1:

Use a different computer. As strange as it sounds, if you have access to a Chromebook, PC, or Mac running an older OS (any MacOS version 12 or less), then you can simply use that computer to load the firmware onto your Pico. This is the easier and faster method.

- On a different computer, go to <https://make.playpiper.com>.
- When the site opens, click **SETUP MY PICO** in the lower-left corner of the screen.
- Then, follow the onscreen instructions.
- Once the firmware is installed, you can go back to Piper Make on your Mac.

## Method 2:

This method will require you to open and run a command using the Mac's terminal, and is a bit advanced for many users.

- First, go to <https://make.playpiper.com>.
- Next, make sure your Pico is **UNPLUGGED** from your computer.
- On your Pico, press and hold the small white **BOOTSEL** button down while plugging the Pico back into your computer. Once it is plugged in, you can release the BOOTSEL button.
- Next, in the upper-right corner of the screen click **SETTINGS > DOWNLOAD FIRMWARE**
- Then, using the Finder on your Mac, make sure a file named **piper\_circuitpython.uf2** is there.
- Make sure there is nothing extra in the filename.
  - For example, if you've downloaded this file before, the new one you just downloaded might be named **piper\_circuitpython (1).uf2**.
  - If that is the case, delete the older version and change the name of the new file to **piper\_circuitpython.uf2**
- Press **⌘-Spacebar**. A search bar will open. In it, type **terminal.app**
- Then the terminal will open. Copy this text:
  - `rsync Downloads/piper_circuitpython.uf2 /Volumes/RPI-RP2/`
- Press Enter. Your computer is now loading the firmware, and this can take up to 30 seconds.
- When your computer is finished loading the firmware, unplug your Pico.
- Plug the Pico back in (don't press BOOTSEL). The Pico should show up as a drive named **CIRCUITPY** in the Finder and it should work normally in Piper Make.