Fusion3

EDGE 3D Printer

ADVANCED:
UPDATING THE INTERNAL SD CARD

Revision 6/21/2023

UPDATING EDGE'S INTERNAL SD CARD

How to update EDGE's internal SD card and when you may need to do this.

WHEN TO DO THIS

Occasionally we may send out firmware or software updates for EDGE that cannot be installed like normal updates (see "*Maintenance - Installing Firmware Updates*" module for that procedure). These unusual updates must be applied in a different way that involves updating the internal SD card directly. This module will walk you through how to do this.

REQUIREMENTS

- You must have administrative access to your computer, so you can install new software.

- You should be comfortable using applications such as the [Raspberry Pi Imaging tool](#).

- You will need some way to put a microSD card in your computer. Either a micro-to-fullsize adapter or a microSD reader, or microSD to USB adapter.
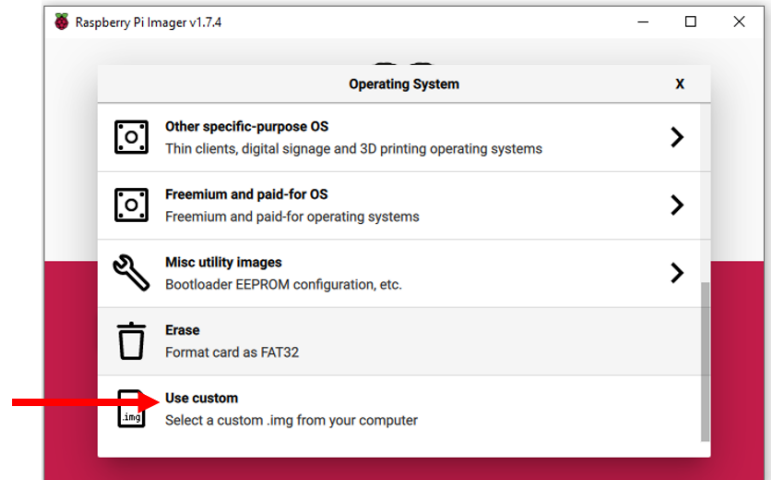
What if I Can't Install the Imaging Tool?

We understand that not everyone has administrative access to their computers and this may not be possible for all users. We will make these updates available pre-installed on SD cards for a nominal cost through our online store. More information will be provided on a case-by-case basis from Fusion3.
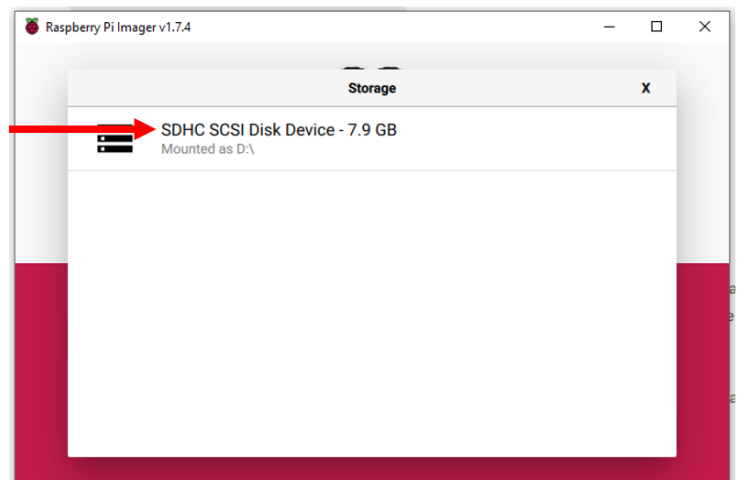
PROCEDURE

1. Remove the internal SD card from the printer by following the instructions in the "*Repair - Internal Memory Replacement*" module.

2. Install the microSD card into your PC using the adapter.

3. Windows will pop up a window telling you it needs to format the disk in order to use it. Click "close" or "ignore" to as many of these as you get.

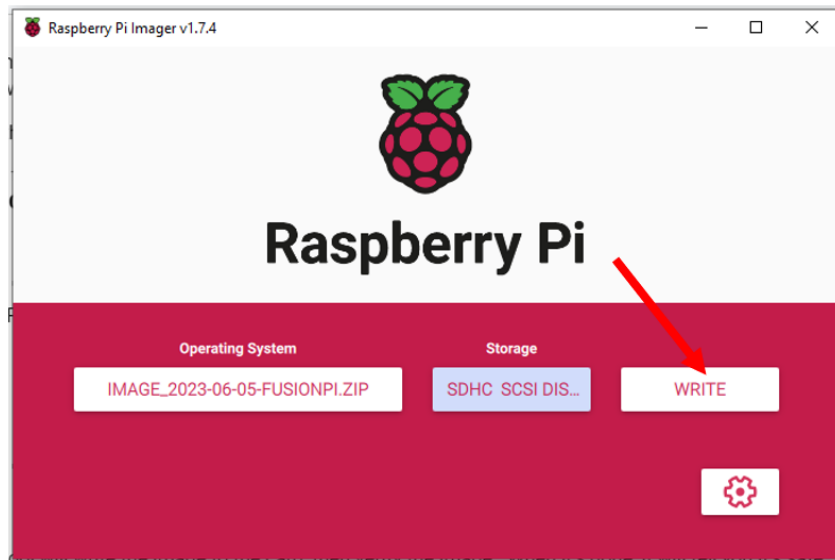4. Download the [Raspberry Pi Imager](#) and install it.

5. Download the SD image from Fusion3. A link will be provided separately from these instructions. This will be in the format of a .zip file. A full image will be 1-2GB in size.

6. Run the Raspberry Pi Imager.

7. Click the "*Operating System*" button. In the "*Operating system type*" menu, scroll down and select "**Use Custom**".
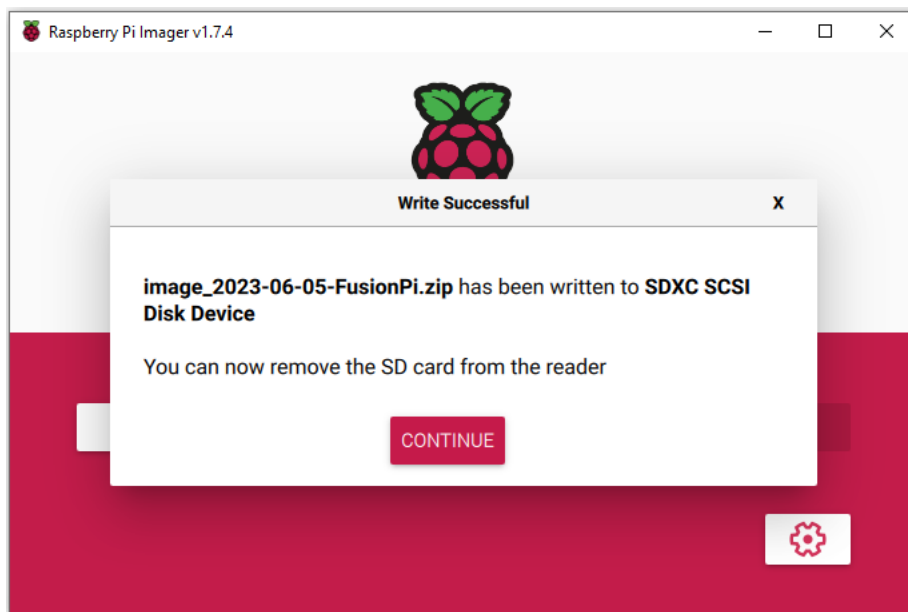

8. Click "*Choose Storage*". If you only have the microSD card and no other external storage attached to your PC, there will only be one entry in the list. Select it.

   a. If you have multiple external storage devices attached to your PC, **make sure you select the right one**. The next step is going to overwrite all contents on the storage device.

9. Click "*Write*" and click "Yes" to confirm you want to proceed.

10. The tool will write the image to the card, then verify the image. When it's done, it will tell you it's safe to remove the card.

11. Windows will (again) throw warnings about the card being unusable. Ignore them.

12. Remove the card from your PC and reinstall it back into the printer by following the instructions in the "*Repair - Internal Memory Replacement*" module.

13. Power the printer on and make sure it boots fully.

14. (Some updates, not all) Go to *Utilities > Console >* and type "**M997 S0**" and press SEND or ENTER. This will update the control board's firmware.

15. Check your *Utilities > Info* screen against information provided from Fusion3 to confirm everything updated successfully.