EDA ED-HMI2220-070C Embedded Computers User Guide

Contents

EDA ED-HMI2220-070C Embedded Computers

Specifications:

- Model: ED-HMI2220-070C
- Manufacturer: EDA Technology Co., LTD
- Application: IOT, industrial control, automation, green energy, artificial intelligence
- Platform: Raspberry Pi technology
- Support: Mechanical Engineer, Electrical Engineer, Software Engineer, System Engineer

Safety Instructions:

- This product should be used in an environment that meets the requirements of design specifications to prevent failure or functional abnormalities.
- Avoid illegal operations that may lead to personal safety accidents or property losses.
- Do not modify the equipment without permission to prevent equipment failure.
- Securely fix the equipment during installation to prevent falling.
- Maintain a distance of at least 20cm from the equipment if it has an antenna.
- Avoid using liquid cleaning equipment and keep the product away from liquids and flammable materials.
- Indoor use only.

Installation:

1. Ensure the environment meets design specifications before installing the product.

2. Securely mount the equipment to prevent it from falling.
3. If the product has an antenna, maintain a distance of at least 20cm during use.

Maintenance:

- Regularly check for any signs of damage or wear and tear. Ensure proper ventilation around the product for optimal performance.

Contact Us
Thank you very much for purchasing and using our products, and we will serve you wholeheartedly. As one of the global design partners of Raspberry Pi, we are committed to providing hardware solutions for IOT, industrial control, automation, green energy and artificial intelligence based on the Raspberry Pi technology platform. You can contact us in the following ways: EDA Technology Co., LTD
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Phone: +86-18217351262
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Foreword Related Manuals

- All kinds of product documents contained in the product are shown in the following table, and users can choose to view the corresponding documents according to their needs.

Documents	Instruction
ED-HMI2220-070C Datasheet	This document introduces the product features, software, and hardware specifications, dimensions, and ordering codes of the ED-HMI2220-070C series to help users understand the overall system parameters of the products.
ED-HMI2220-070C User Manual	This document introduces the appearance, installation, startup, and configuration of the ED-HMI2220-070C series to help users use the product better.
ED-HMI2220-070C Application Guide	This document introduces the OS downloading, flashing to eMMC/SD card, and partial configuration of the ED-HMI2220-070C series to help users use the product better.

Users can visit the following website for more information: **https://www.edatec.cn**

Reader Scope
This manual applies to the following readers:

- Mechanical Engineer
- Electrical Engineer
- Software Engineer
- System Engineer

Related Agreement Symbolic Convention

Symbolic	Instruction
	Prompt symbols, indicating important features or operations.
	Notice symbols, which may cause personal injury, system damage, or signal interruption/loss.
	May cause great harm to people.

Safety Instructions

- This product should be used in an environment that meets the requirements of design specifications, otherwise it may cause failure, and functional abnormality or component damage caused by non-compliance with relevant regulations are not within the product quality assurance scope.
- Our company will not bear any legal responsibility for personal safety accidents and property losses caused by the illegal operation of products.

- Please do not modify the equipment without permission, which may cause equipment failure.
- When installing equipment, it is necessary to fix the equipment to prevent it from falling.
- If the equipment is equipped with an antenna, please keep a distance of at least 20cm from the equipment during use.
- Do not use liquid cleaning equipment and keep away from liquids and flammable materials.
- This product is only supported for indoor use.

Installing OS
This chapter introduces how to download an OS file and flash to an eMMC/SD card.

- Downloading OS File
- Flashing to eMMC
- Flashing to SD Card

Downloading OS File
If the operating system is damaged during use, you need to re-download the latest version of the OS file and flash it to an eMMC/SD card. The download path is: ED-HMI2220-070C/raspios.

Flashing to eMMC (optional)
When you purchase an ED-HMI2220-070C, you can select an eMMC or SD card. If you select the ED-HMI2220-070C with the eMMC version, you need to flash to eMMC when reinstalling the operating system. It is recommended to use the Raspberry Pi official tools. The download paths are as follows:

- Raspberry Pi Imager: **https://downloads.raspberrypi.org/imager/imager_latest.exe**
- SD Card Formatter: **https://www.sdcardformatter.com/download/**
- Rpiboot: **https://github.com/raspberrypi/usbboot/raw/master/win32/rpiboot_setup.exe**

Preparation:

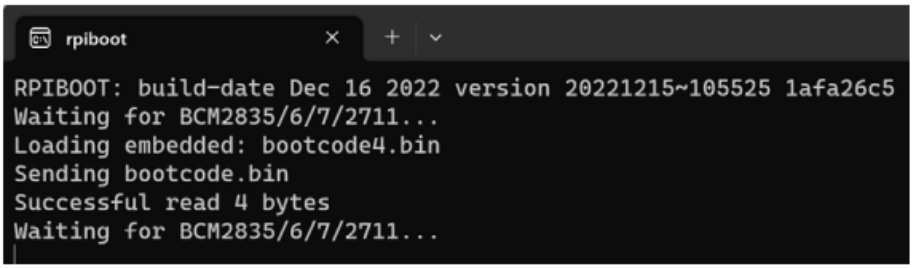
- The downloading and installation of the official tools to the computer have been completed.
- A Micro USB to USB-A cable has been prepared.
- The OS file has been obtained.

Steps:
The steps are described using the Windows system as an example.

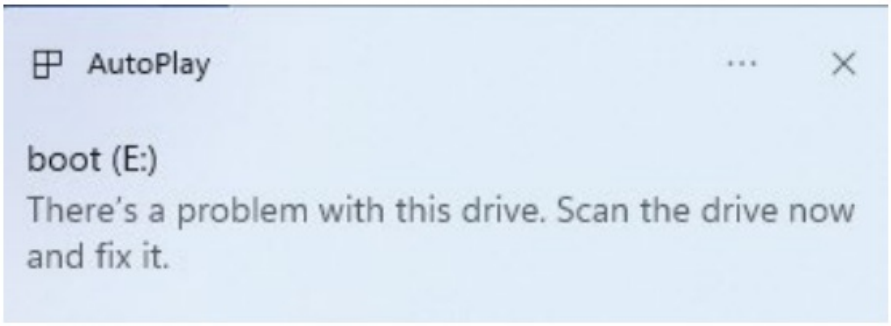
1. Connect the power cord and USB flashing cable, as shown in the figure below.

    - Connecting to a power cord: One end is connected to the 2Pin Phoenix terminal on the device side, and the other end is connected to the external power supply.

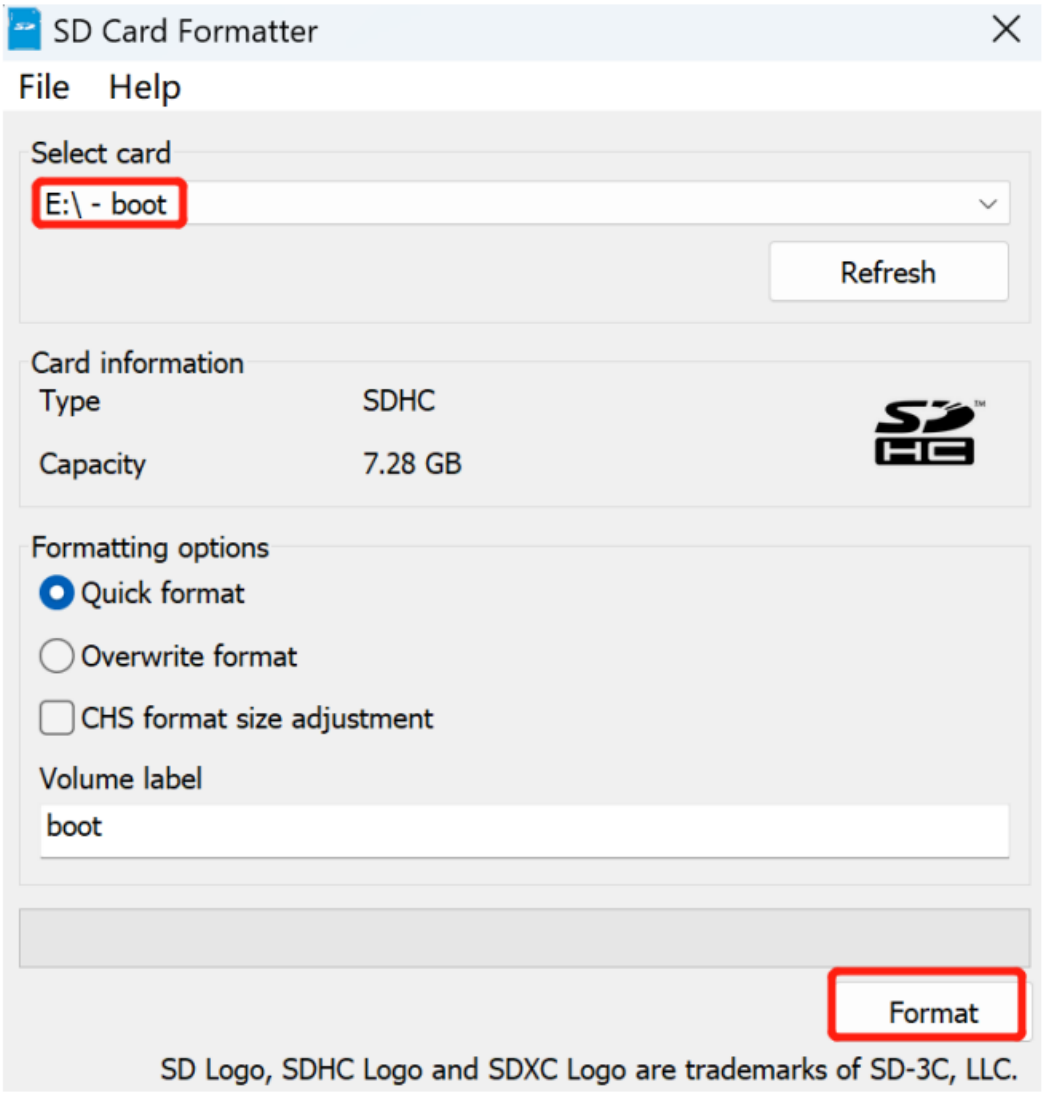
1. Disconnect the power supply of ED-HMI2220-070C, and then power it on again.
2. Open reboot tool to automatically convert the drive to a letter.



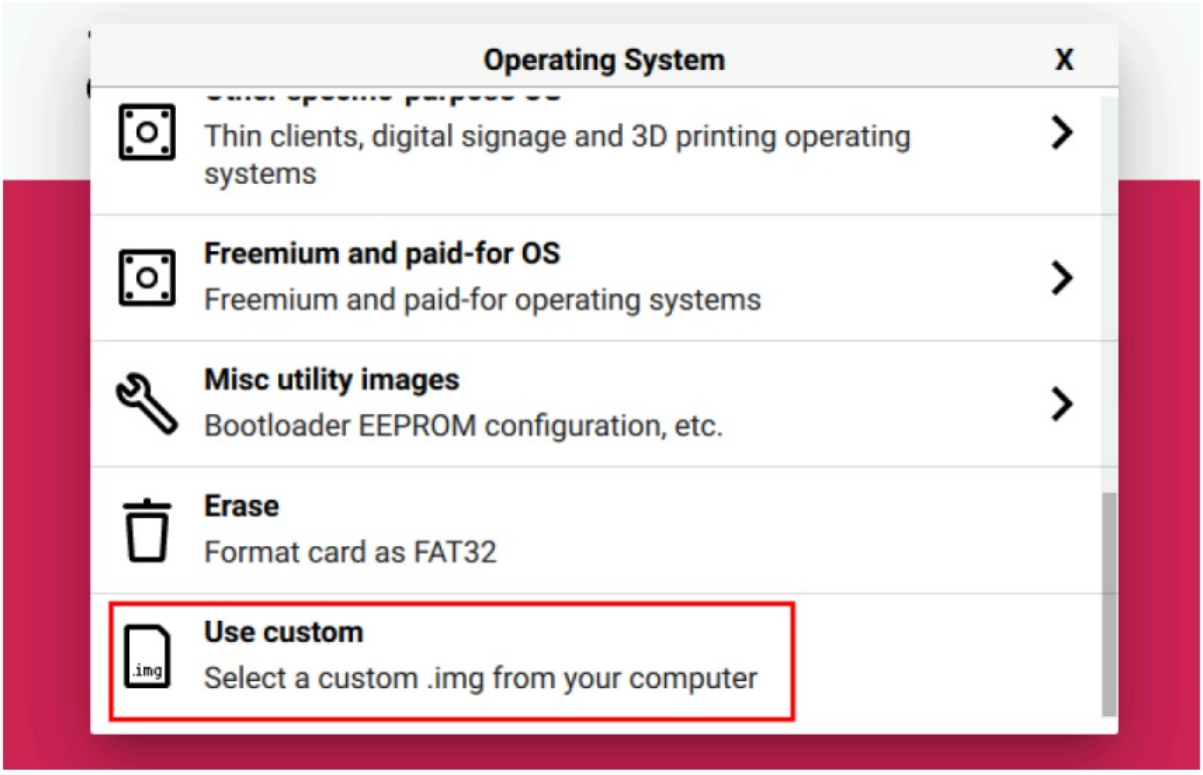
3. After the completion of the drive letter, the drive letter will pop up in the lower right corner of the computer, as shown in the figure below E drive.



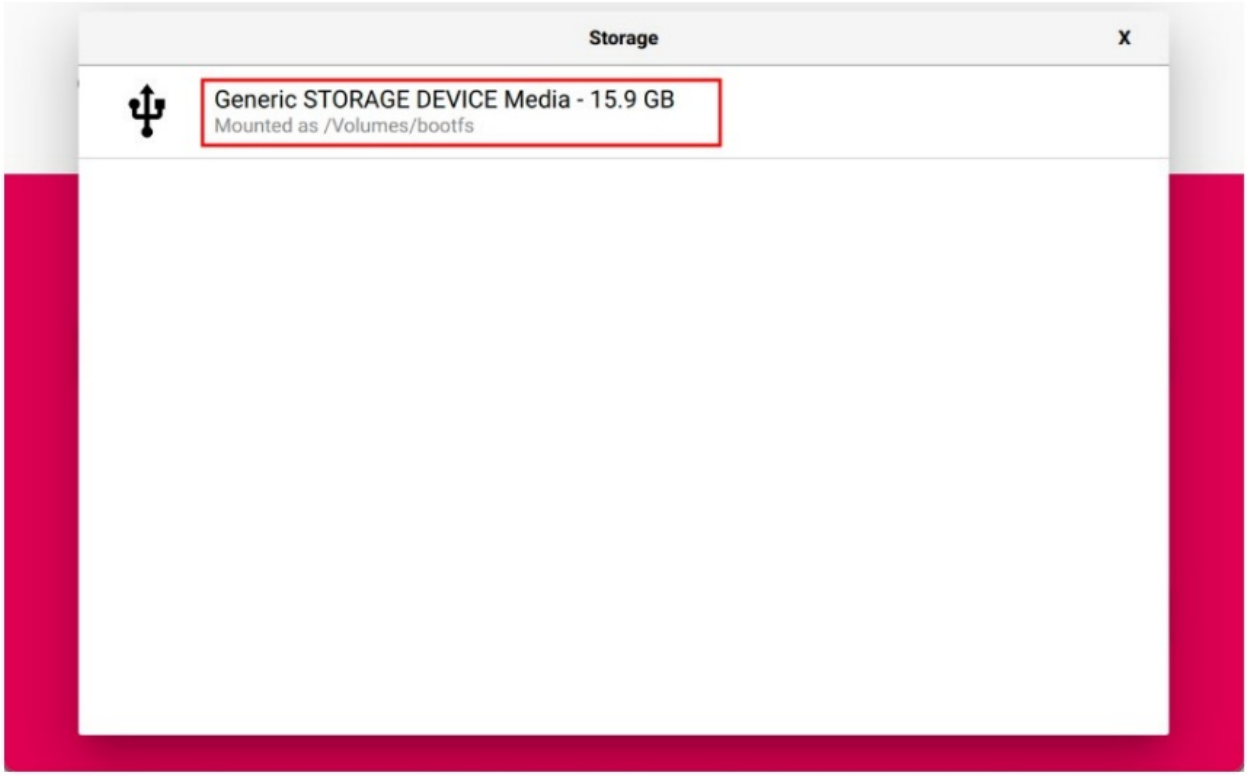
4. Open the SD Card Formatter, select the formatted drive letter, and click “Format” at the lower right to format.



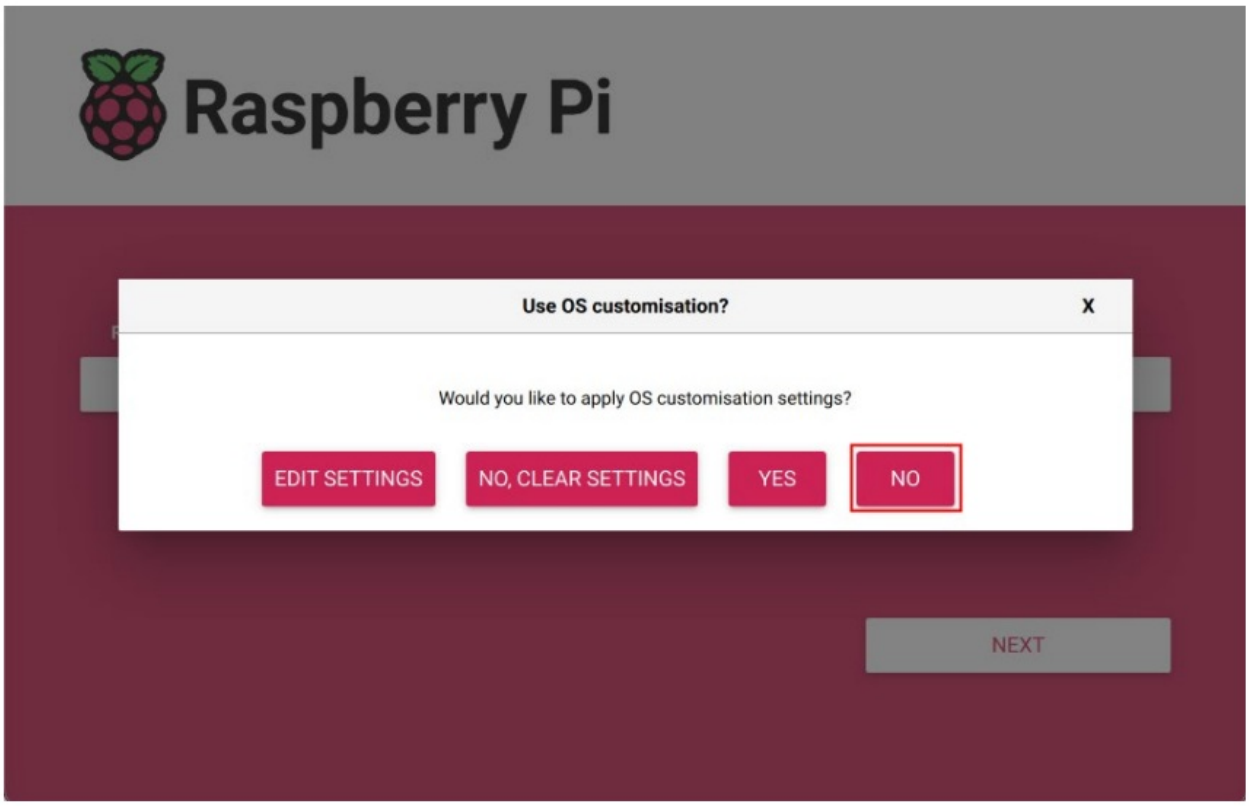
5. In the pop-up prompt box, select “Yes”.
6. When the formatting is completed, click “OK” in the prompt box.
7. Close SD Card Formatter.
8. Open Raspberry Pi Imager, select “CHOOSE OS” and select “Use Custom ” in the pop-up pane.



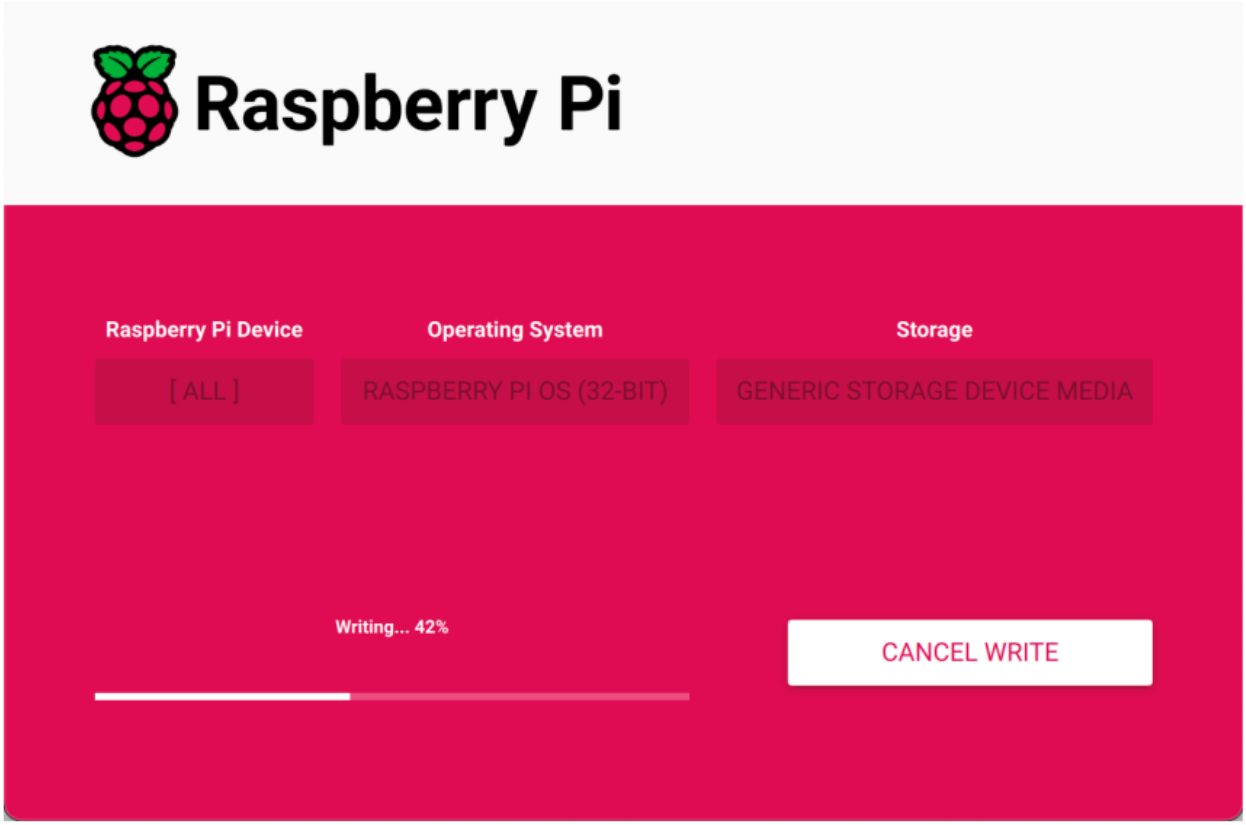
9. According to the prompt, select the OS file under the user-defined path and return to the main page.
10. Click “CHOOSE STORAGE”, select the default device in the “Storage” interface, and return to the main page.



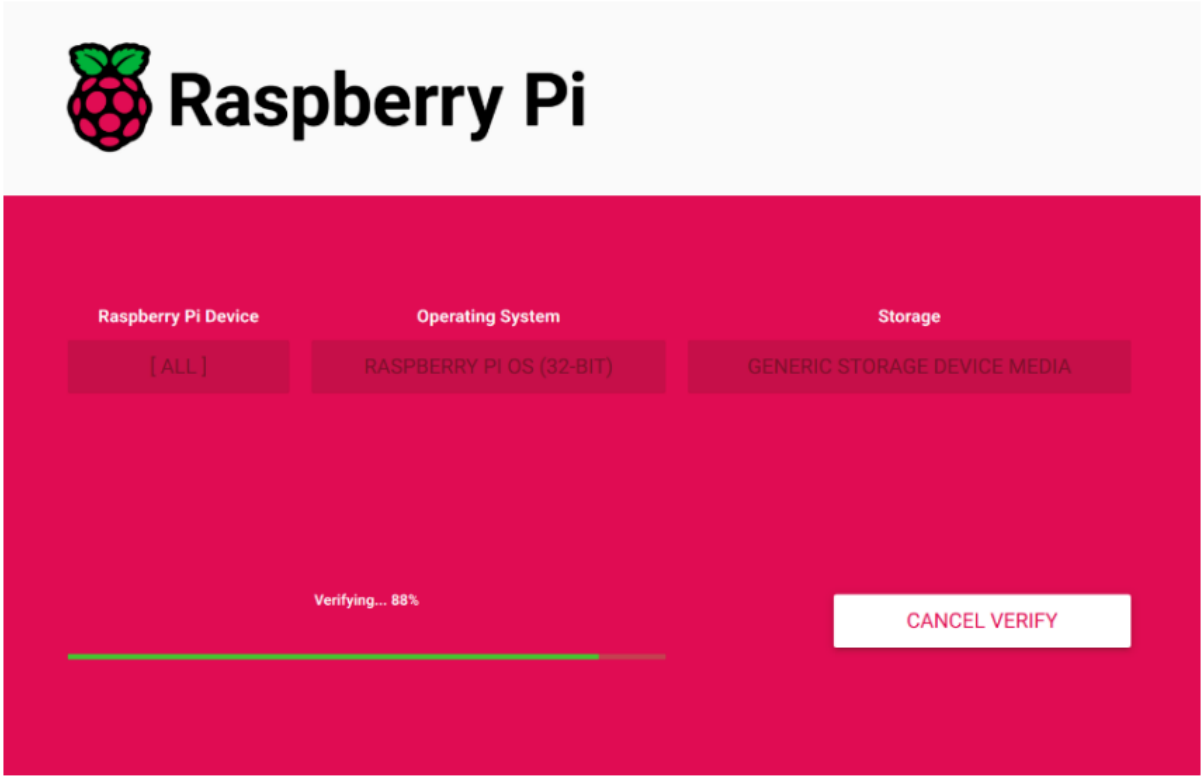
11. Click “NEXT”, and select “NO ” in the pop-up “Use OS customization?” pane.



12. Select “YES” in the pop-up “Warning” pane to start writing the image.



13. After the OS writing is completed, the file will be verified.



14. After the verification is completed, click “CONTINUE” in the pop-up “Write Successful” box.
15. Close the Raspberry Pi Imager, remove the USB cable, and power on the device again.

Flashing to SD Card (optional)

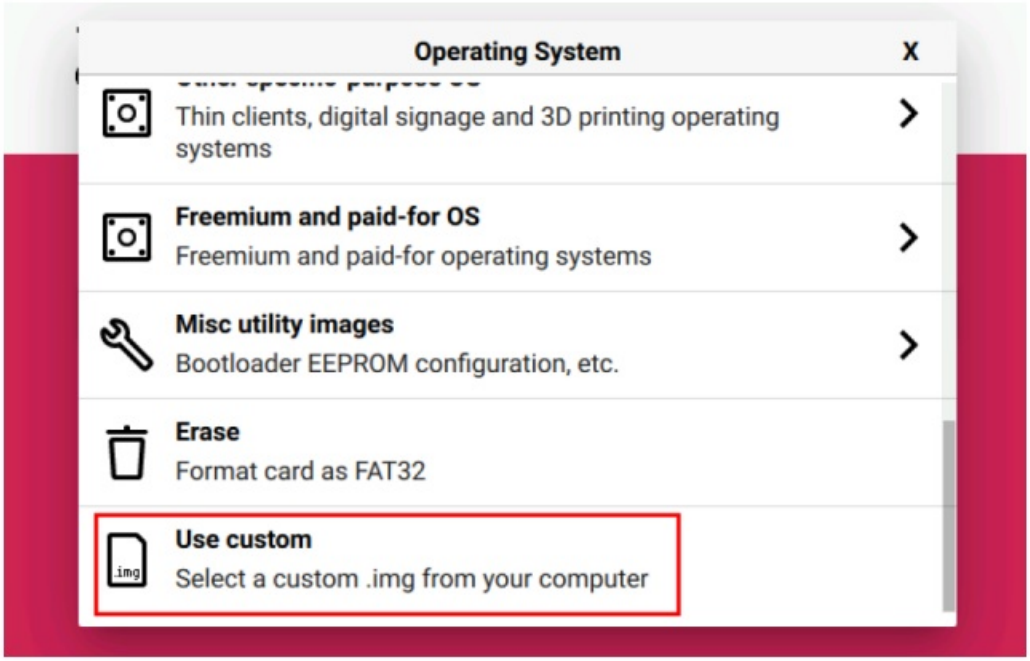
When you purchase an ED-HMI2220-070C, you can select an eMMC or SD card. If you select the ED-HMI2220-070C with SD card version, you need flash to SD card when reinstalling the operating system. It is recommended to use the Raspberry Pi official tool. The download path is as follows: Raspberry Pi Imager: **https://downloads.raspberrypi.org/imager/imager_latest.exe**

- **Preparation:**
- The downloading and installation of the Raspberry Pi Imager tool to the computer have been completed.
- A card reader has been prepared.
- The OS file has been obtained.
- The SD card of ED-HMI2220-070C has been obtained.
    - Find the location of the SD card, as shown in the red mark of the figure below.

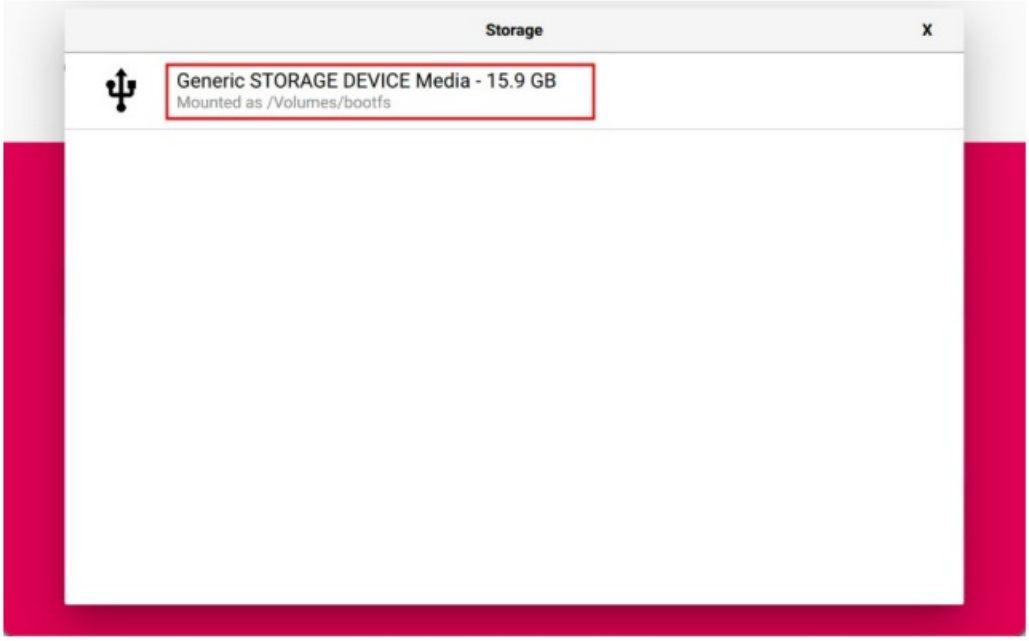
    - Press the SD card into the card slot with your hand to pop it out, and then pull out the SD card.

Steps:
The steps are described using the Windows system as an example.

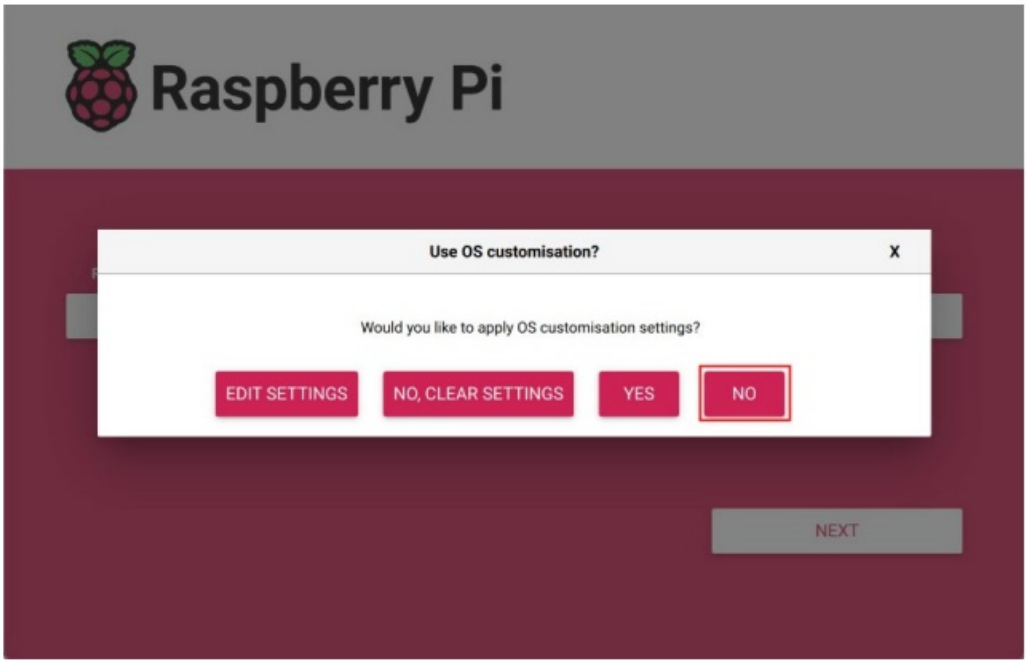
1. Insert the SD card into the card reader, and then insert the card reader into the USB port of the PC.
2. Open Raspberry Pi Imager, select “CHOOSE OS” and select “Use Custom ” in the pop-up pane.



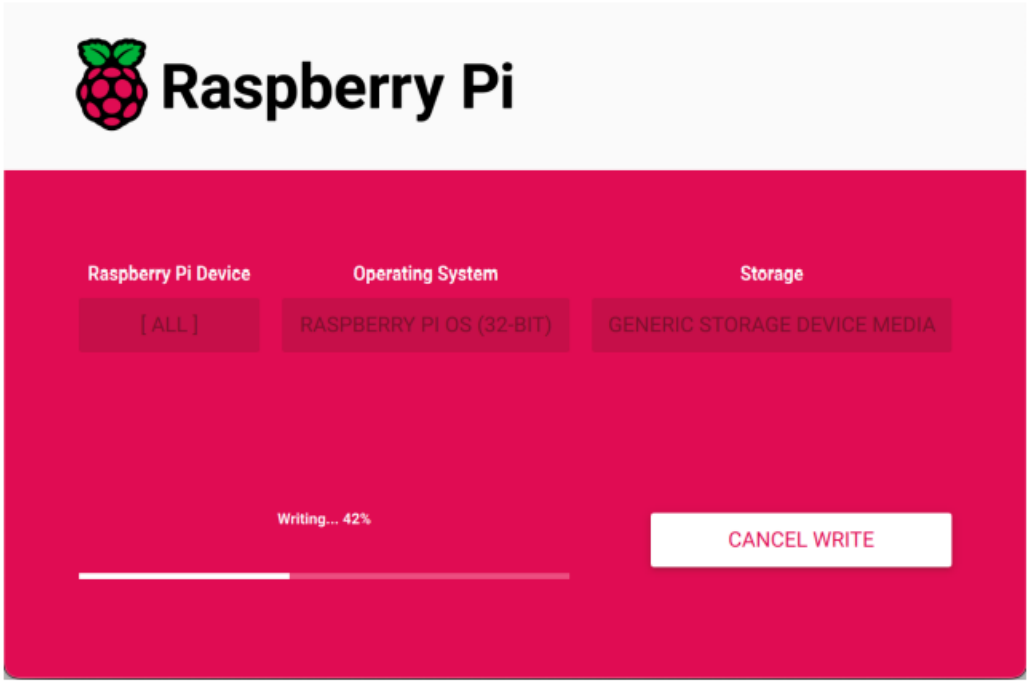
3. According to the prompt, select the downloaded OS file under the user-defined path and return to the main page.
4. Click “CHOOSE STORAGE”, select the default device in the “Storage” interface, and return to the main page.



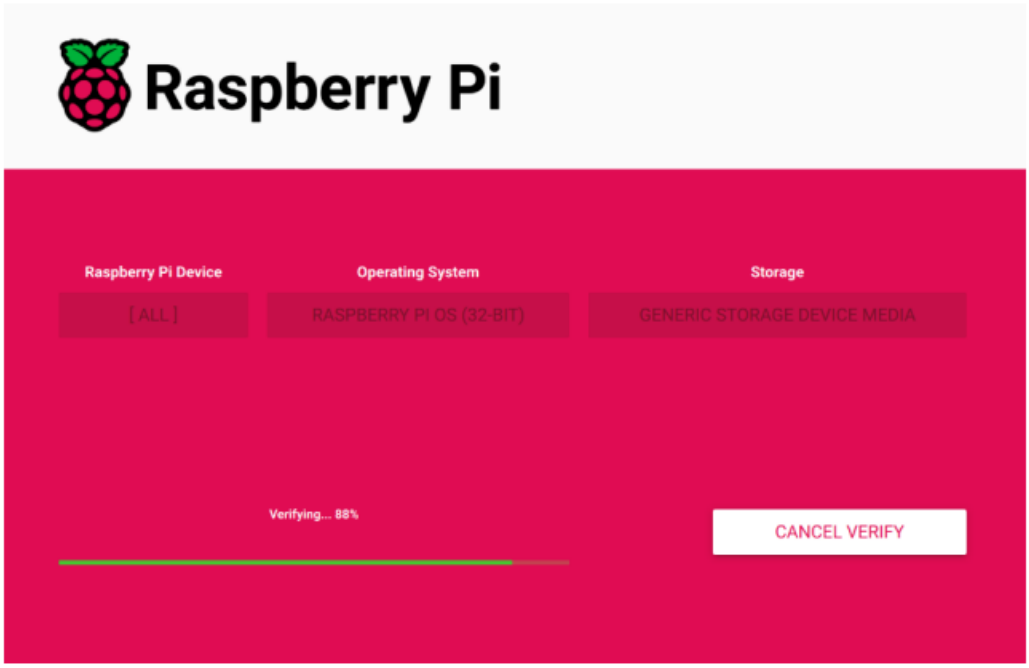
5. Click “NEXT”, and select “NO ” in the pop-up “Use OS customization?” pane.



6. Select “YES” in the pop-up “Warning” pane to start writing the image.



7. After the OS writing is completed, the file will be verified



8. After the verification is completed, click “CONTINUE” in the pop-up “Write Successful” box.
9. Close the Raspberry Pi Imager, and remove the card reader.
10. Insert the SD card into ED-HMI2220-070C, and then power it on again.

Firmware Update
After the system starts normally, you can execute the following commands in the command pane to upgrade the firmware and optimize the software functions.

- sudo apt update
- sudo apt upgrade

FAQs

Q: Can I use this product outdoors?
A: No, this product is only supported for indoor use.

Q: What should I do if the equipment falls during installation?
A: Securely fix the equipment to prevent it from falling. If it falls, inspect for any damage before use.

Q: How far should I keep the antenna from the equipment?
A: Maintain a distance of at least 20cm between the antenna and the equipment during use.

Documents / Resources

	EDA ED-HMI2220-070C Embedded Computers [pdf] User Guide ED-HMI2220-070C Embedded Computers, ED-HMI2220-070C, Embedded Computers, Computers

References

- downloads.raspberrypi.org/imager/imager_latest.exe
- ____
- Download SD Card Formatter for Windows and Mac (UPDATED)
- User Manual