# ThinkNode M9 Meshtastic

# How to Format the microSD Card, Remove Viruses, and Reload the SD Card Contents

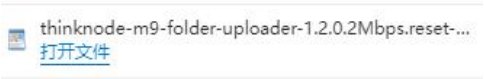
## 一、Purpose of This Document

This procedure is used to format the micro SD card, remove viruses from the micro SD card, and download new map files.

## 二、Download the Formatting Firmware and Redownload the Maps

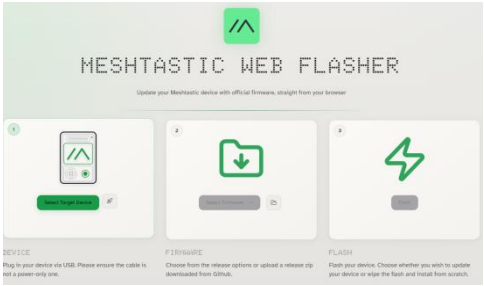
**Note: Before proceeding with the following steps, please confirm that the device is still running its original official firmware. If it has been redeveloped or modified, please first upgrade to the official firmware using the method described in reference point 3, and then proceed with these steps. Failure to do so may cause issues with subsequent map downloads, such as being unable to connect to the device as mentioned in point 22.**

1. Go to the firmware download page for formatting the SD card on the Elecrow ThinkNode M9:
https://m9.thinknode.cc/thinknode-m9-folder-uploader-1.2.0.2Mbps.reset-message.app.bin
The file will be downloaded automatically, as shown in the upper-right corner of the webpage below.

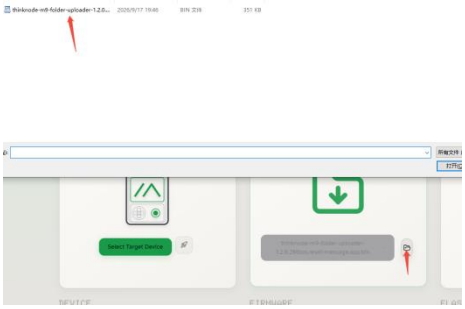



2. Save the file in a new folder so that it is easy to locate.

2. Go to the official Meshtastic firmware flashing website:
https://flasher.meshtastic.org/




4. Click the folder icon and upload the saved bin file:thinknode-m9-folder-uploader-1.2.0.2Mbps.reset-message.app



| 5. The firmware has been imported. | 6. Select the target device. |
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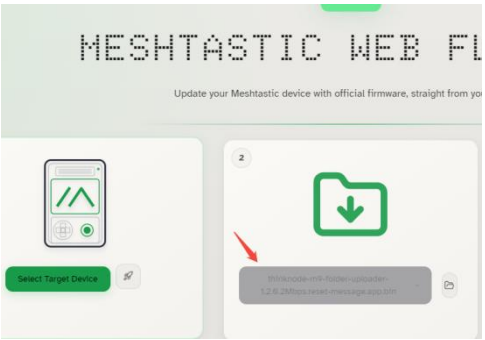
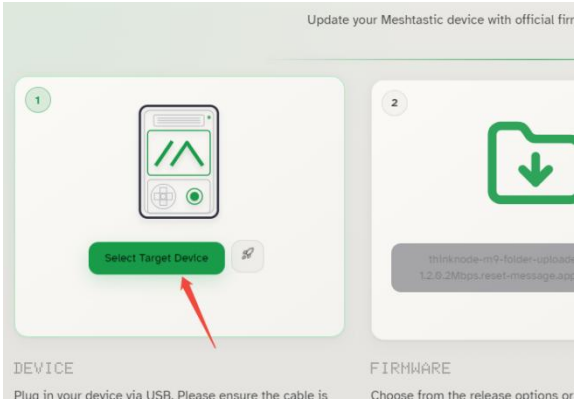
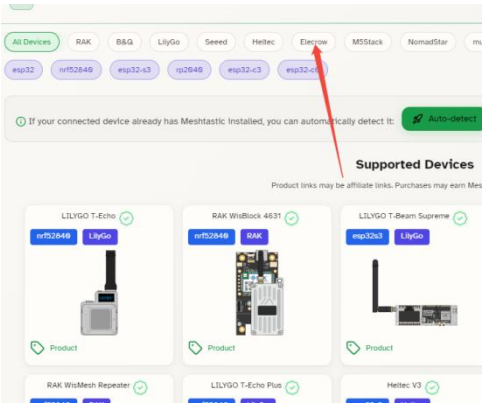
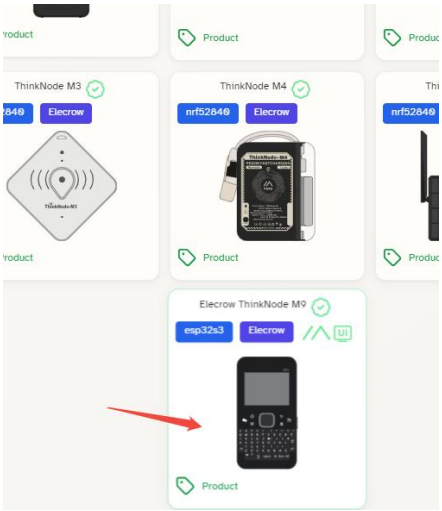
|  |  |
| 7. Open the device list and select Elecrow. | 8.Scroll down and locate M9. |
|  |  |
| 9. The M9 device is displayed. | 10. Connect the device via USB. |
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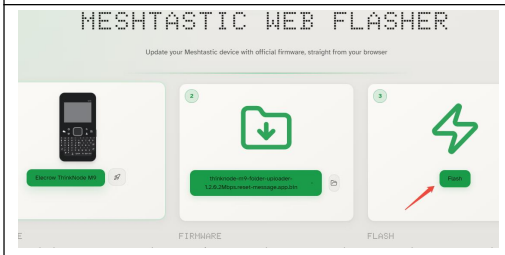
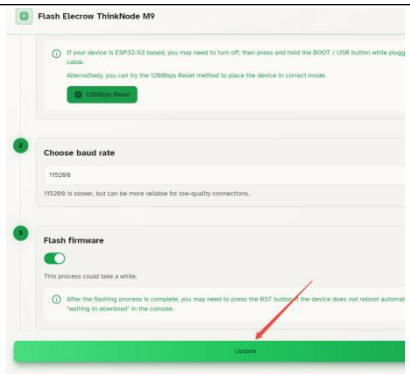
| 11. Clickflash | 12. On the flashing screen, click updata. |
|  |  |

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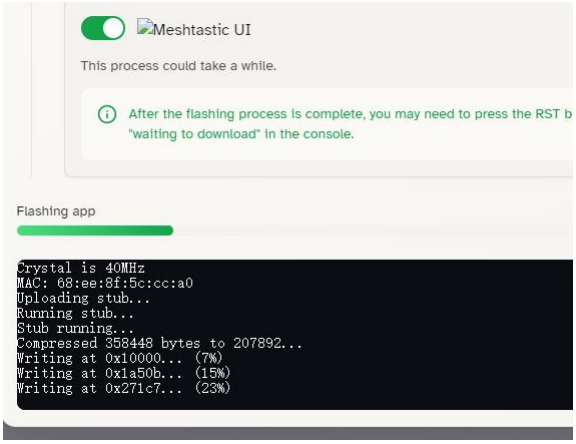
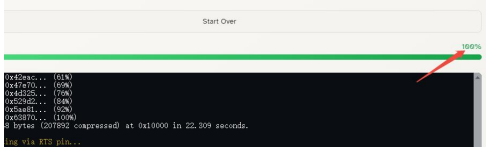
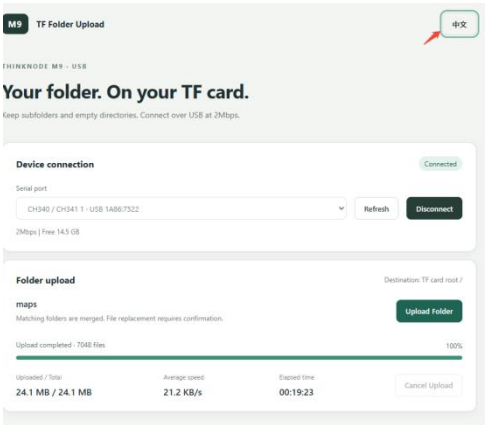
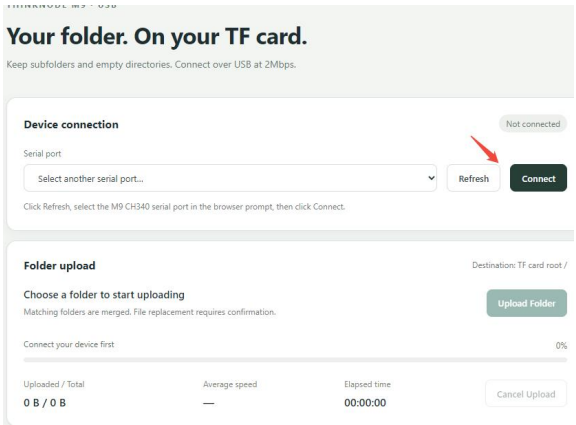
|---|---|
| 13. Select the port. The port for this device is com5. Click Connect. Select the port number that corresponds to the actual device. | 14. Wait for flashing to complete. |
| |  |
| 15.Flashing reaches 100%. After flashing is complete, close this page to prevent the serial port from remaining occupied and interfering with map flashing in the next step. | 18.Toggle the switch on the right side of the device to restart it. After the device restarts, it will automatically perform a quick format of the SD card, completely removing all content, including viruses. The card can then be used safely.(Note that it is normal for the display to remain blank.) |
|  | |
| 19. Go to the map flashing website: [https://m9.thinknode.cc/](https://m9.thinknode.cc/) select English or Chinese at the location indicated by the arrow. | 20. Click Connect Serial Port. |
|  |  |

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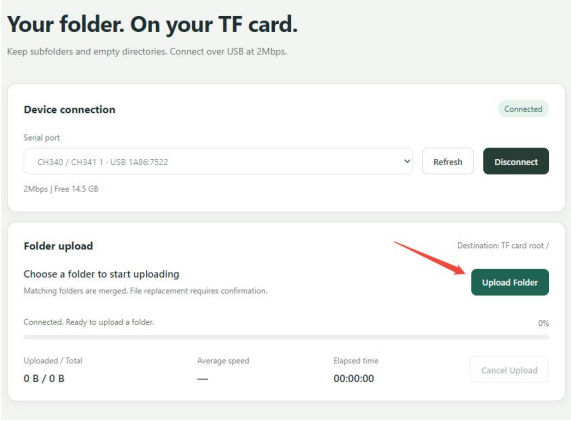
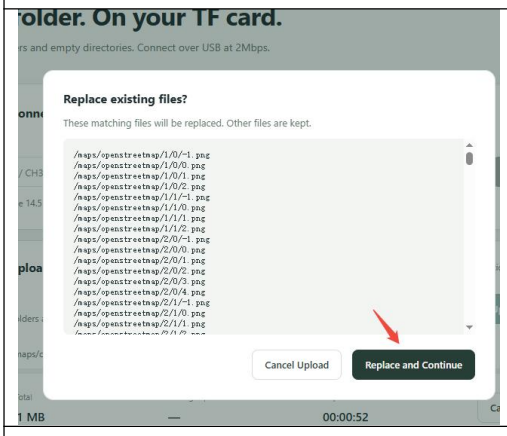
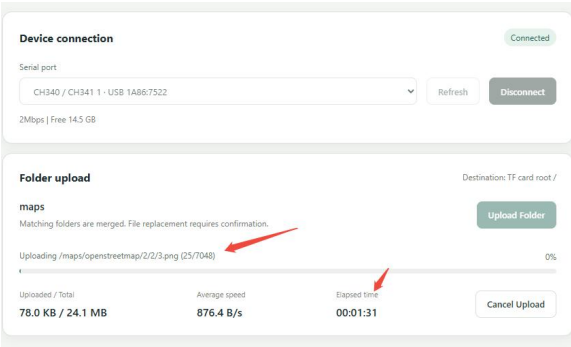
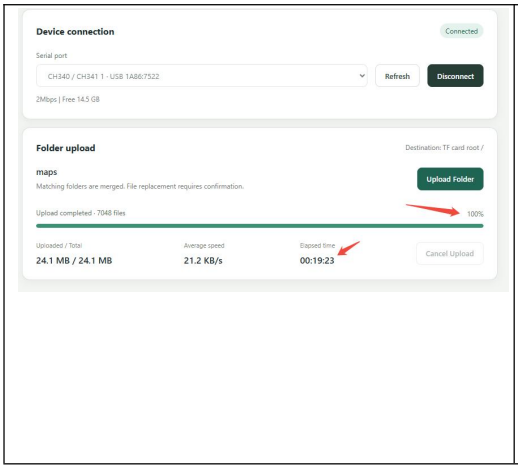
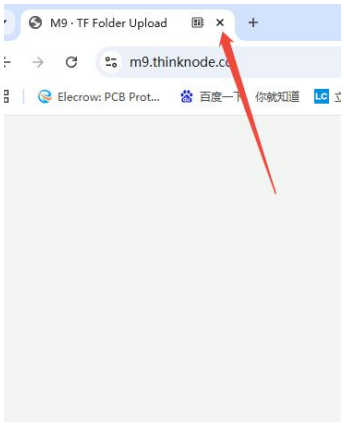
|---|---|
| 21. Select the port. The port for this device is com5. Click Connect. Select the port number that corresponds to the actual device. | 22. Upload the map files folder. |
| |  |
| 23. Select the maps folder. Refer to Section 4 for instructions on creating the maps folder. | 24.Allow the website to view and copy files. |
| | |
| 25. Click Replace and Continue. | 26.Wait for the download to complete. This is expected to take 15 minutes. |
|  |  |
| 27. The download is complete, and the SD card has been updated. | 28.Close this webpage (it must be closed to avoid interfering with subsequent operations). |




## 三、Reinstall the Official Meshtastic Firmware

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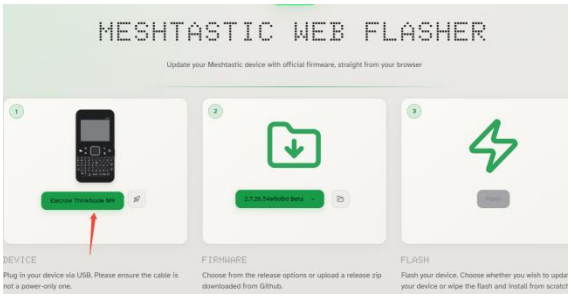
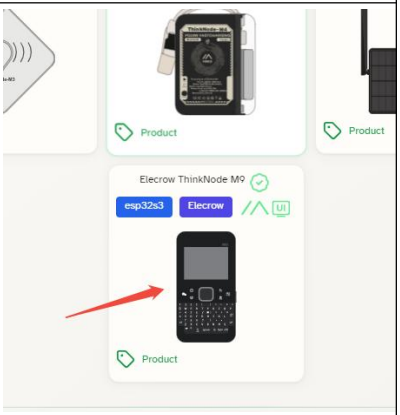
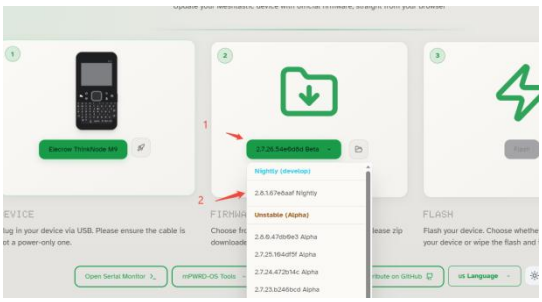
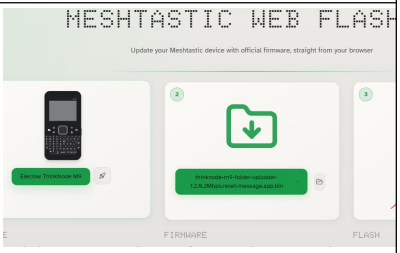
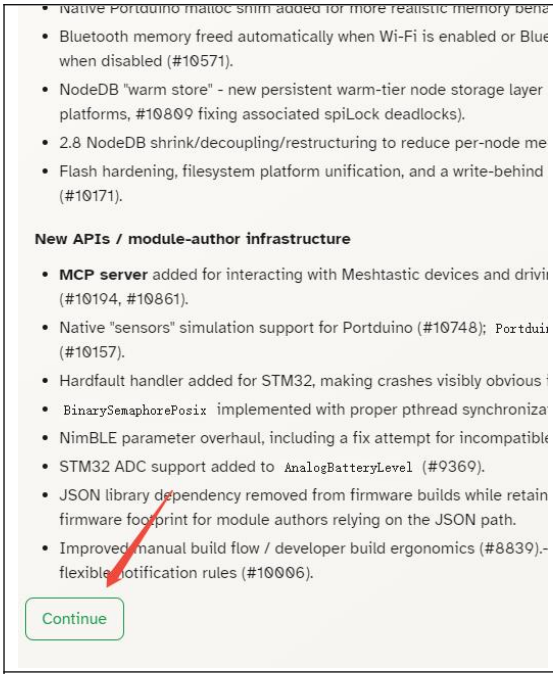
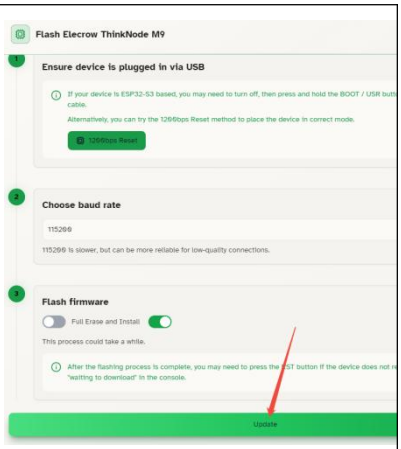
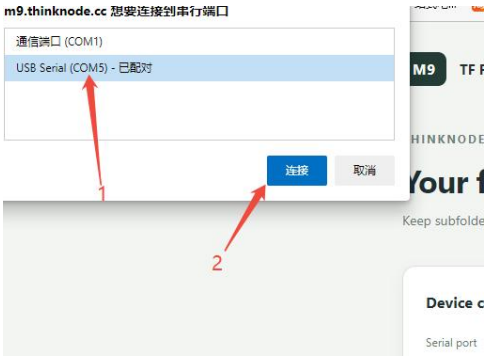
| 1. Go to the official Meshtastic firmware flashing website: https://flasher.meshtastic.org/ | 2. Select ThinkNode M9. |
|   |   |
| 3.Select the latest firmware version, as shown in the figure. | 4.Click flash. |
|  |   |
| 5.Scroll down and locate continue. | 6.Click Upate. |

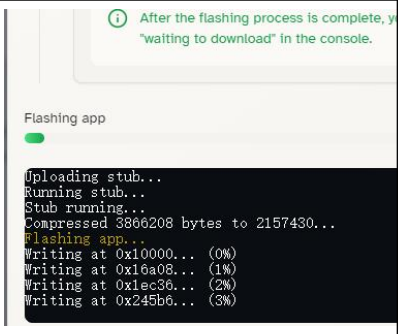



7. Select the port. The port for this device is com5. Click Connect. Select the port number that corresponds to the actual device.

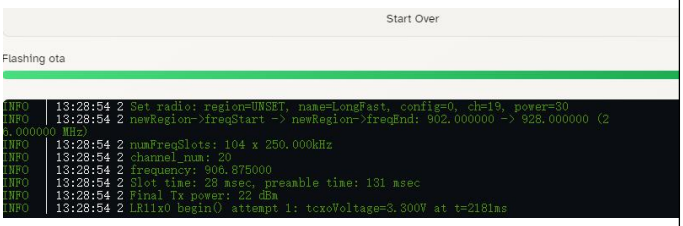
8.Wait for the download.




10.Flashing reaches 100%. After flashing is complete, close this page to prevent the serial port from remaining occupied and interfering with map flashing in the next step.

11. Restart the device.



12. Press and hold the center button.

13.Tap Map.

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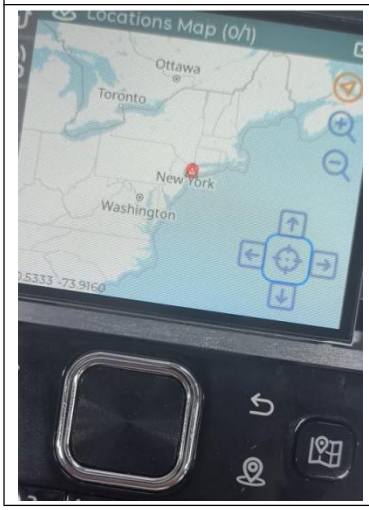
| 14. The newly imported map can now be viewed. The upgrade is complete. | |
|  | |

## 四、Reference for Creating the maps Folder

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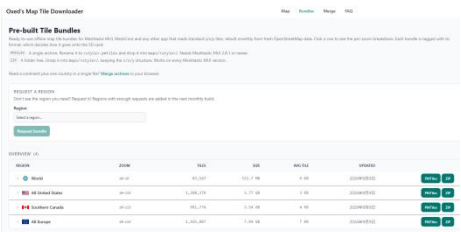
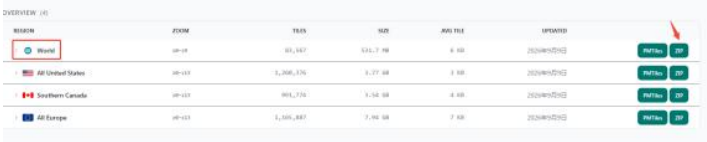
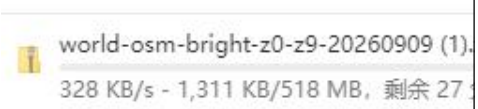
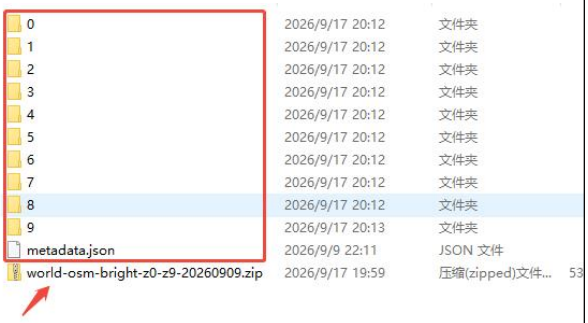
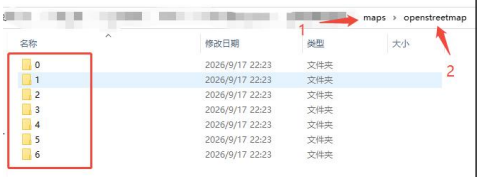
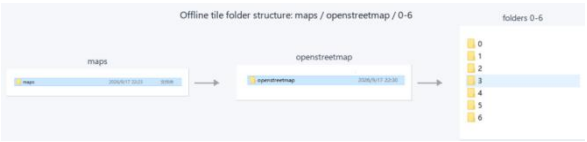
| 1. Go to the map download page:<br>https://download.tiles.coalition.space/bundles |
|  |
| 2.Download a map. For example, for the world map, select zip. |
|  |

| | |
|---|---|
| 3. Start the download. The time required to download the map depends on the network speed and file size. | 4. After downloading, the map will be a compressed archive, as indicated by the arrow. Extract it. The extracted contents are shown in the red box. |
|  |  |
| 5. Create two new folders: maps and openstreetmap. Place all maps in the folders. The figure only shows map levels 0-6. | 6.The details are shown in the figure below. The maps folder is now complete. |
|  |  |