

# Help! My SkyBridge is stuck on Initializing!

How to reimage your SkyBridge Max or Plus model



# Things You Will Need

Here is a list of things you will need to be successful in reimaging your SkyBridge Max or SkyBridge PLUS hotspot

1. 5V/3Amp Power Supply for the unit
2. SkyBridge Max, or SkyBridge Plus (2.4" Screen, Black Case)
3. Current and Spare MicroSD Card
4. MicroSD Card reader (to reimage the MicroSD Card)
5. A Windows® or Apple® Computer.
6. Balena Etcher imaging Software
7. Your CallSign, DMR ID, and BrandMeister Account Password
8. Ethernet cable or your WiFi Settings if configuring to work with WiFi





# Recommended Cards and Readers

Some built in readers in laptops have been problematic, so we suggest a USB MicroSD card Reader. The one that Jeremiah in Tech Support Personally Uses, is made by UNI and can be purchased on Amazon (Not Sponsored)

Links to these recommendations will be in the show notes

[Uni Card Reader on Amazon](#)

This Card Reader has both USB Type-A and Type-C connections for your computer. This way it can be used with older and newer Computer systems. It works on Mac and Windows





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I recommend the [SanDisk Ultra 32GB Cards.](#)

We have tested these card, and are what we ship in new units.

If you have a MicroCenter nearby, Jeremiah has also tested the 32GB MicroCenter Brand MicroSD cards, and they have worked for him.





# Imaging Software

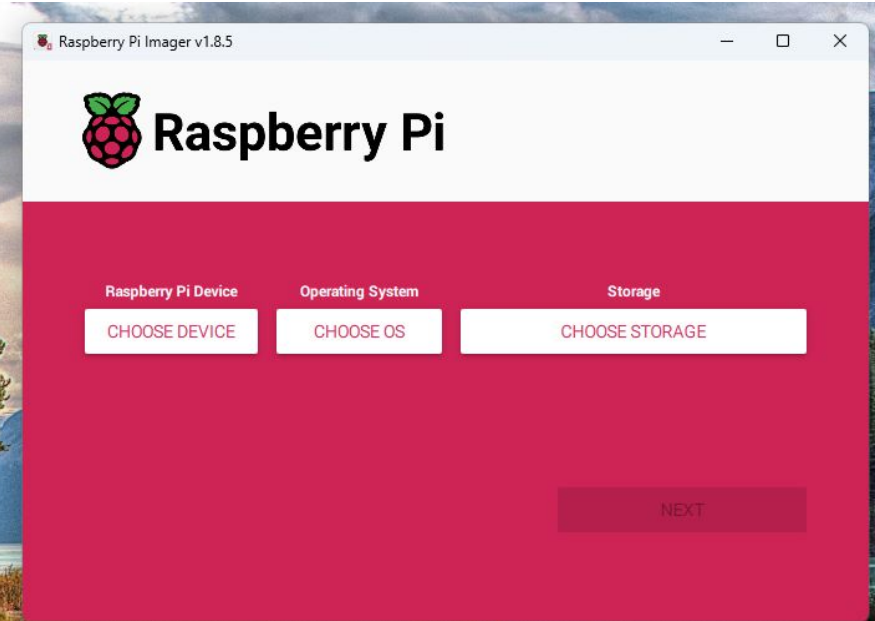
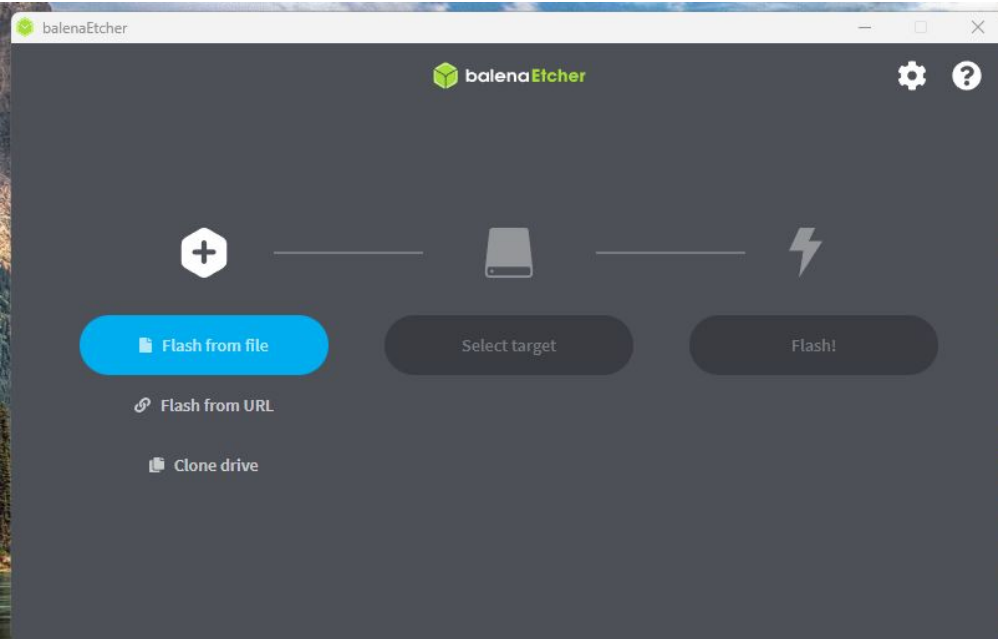
Balena Etcher is Jeremiah's choice of software because of only needing a few mouse clicks to get up and running. We will cover both Balena Etcher, and Raspberry Pi Imager as well though.

Balena Etcher and Raspberry Pi Imager, will both do integrity checks on the MicroSD card after imaging it, to verify that all the data wrote correctly and there are not card errors. Most of the initializing errors we have seen have been a combination of a failing power supply unit, and a corrupted card.



# Imaging Software

Below is an image of both programs, side by side for a visual of what the main screen on each looks like





# Links to download or Purchase

SanDisk Cards:

<https://www.amazon.com/SanDisk-2-Pack-microSDHC-Memory-2x32GB/dp/B08J4HJ98L/>

UNI Card Reader:

<https://www.amazon.com/uni-Adapter-Supports-Compatible-MacBook/dp/B081VHSB2V/>

Balena Etcher: <https://etcher.balena.io>

Raspberry Pi Imager: <https://www.raspberrypi.com/software/>

Image File for SkyBridge Max or Plus Model:

[https://w0chp.radio/WPSD\\_SkyBridge-Max\\_Latest.img.xz](https://w0chp.radio/WPSD_SkyBridge-Max_Latest.img.xz)



# WiFi Setup Info

To setup the WiFi while making the new card with the new image, please go to the link below, and fill in your wifi information. For compatibility reason, if you are using a SkyBridge PLUS with the **ALL BLACK USB** ports, please make sure you are using 2.4GHz WiFi. These are Raspberry Pi 3 based models, and only support 2.4GHz WiFi. The SkyBridge MAX and SkyBridge Plus units with the **2 black and 2 blue** USB ports, can use both 2.4GHz and 5GHz.

WPSD WiFi Configuration Page: <https://w0chp.radio/wifi-config-generator/>

You will need your WiFi SSID (WiFi Name), PSK (WiFi Password) and the Country you are located in.



# WiFi Setup Configuration Page Screen

Enter your information in the highlighted fields.

Then click Generate Config.



W0CHP.radio

## WPSD WIFI CONFIGURATION GENERATOR

This application is used to generate a WiFi configuration file for WPSD. After you've generated your config file, you can download it and place it in the '/boot' volume of your WPSD SD-Card; Then once it boots, it will connect to the WiFi network you've configured.

SSID:

PSK Passphrase:

Country:

Operating System:

(Note: **No** personal data is stored; anywhere, ever. This connection is encrypted with SSL.)

Document Version: f6dedb9 - Last Revision: 2/21/2024  
Permanent Link: <https://w0chp.radio/wifi-config-generator/>





# Download WiFi Configuration File

Click the “Download Configuration File” button.

Save this file to your desktop if possible. Otherwise, it should be located in your “Downloads” folder.

You will need this file once you are done writing the new image to the card.

On the next section we will go over downloading and re-imaging the MicroSD card in the SkyBridge Max, and SkyBridge Plus models.



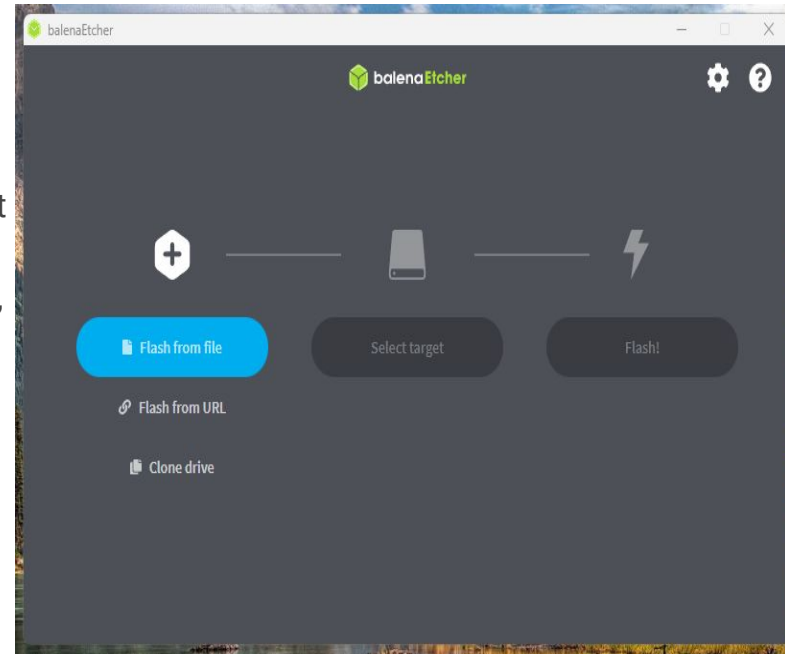


# The Steps to re-image

1. Once you have downloaded the required files, and installed your preferred imaging software, unplug the power from your SkyBridge unit.

This part isn't required, but it makes putting the card back in easier. Take the antenna off, and flip the unit over. Place the unit on your desk, with the screen facing down on your desk.


2. Very Carefully remove the MicroSD card and place it in the card reader for your computer. Be very careful removing the card as it can be dropped very easily, or break if mishandled.
3. For this example, we will use Balena Etcher. Open Balena Etcher, and click, **Flash From File**. Then select the WPSD\_SkyBridge-Max\_Latest.img.xz file.
4. Then click **Select Target** then click the drive with the MicroSD Card in it.
5. Then Click **Flash!**



# Adding WiFi Config (Optional if using Ethernet)

When the card completes verification, remove the card from the computer. Wait a few seconds, and then place it back in the computer. Then go to File Explorer, and look for the drive letter with the word **boot** next to it. This is where we will copy the wpa\_supplicant.conf file you created earlier.

Locate the wpa\_supplicant.conf file, and right click on it. On Windows 11, click **Show more options**, and then click **copy**. Then go to **This PC**, and click the drive letter with the word **boot** on it. You will see several files in that folder. Right click, and click **Show more options**, and then click **paste**. Once this is done, you can remove the card from the computer and place it back in the SkyBridge unit.





# Booting the SkyBridge

Now that you have your newly imaged card, let's get you up and running. Place the card back into the SkyBridge.

Be careful not to miss the card slot on the bottom of the unit as you could drop the card in the unit. Once you have the card back in the unit, flip it back over, and then put the antenna back on.

If you aren't using WiFi, plug in the ethernet cable into your router, and then into the SkyBridge unit. Once you have done that, plug in the power. Please wait at least 2 minutes. While the unit is booting, it will say Initializing on the screen.

When it's done booting, you will see NØCALL/1234567 on the Screen on your SkyBridge.





# Configuring your SkyBridge

In the top left corner of the data fields on the screen will be your network IP address. Either eth0: or wlan0: followed by a set of numbers. In your web browser put in those numbers without the eth0 or wlan0. Just the numbers by themselves.

This will load the WPSD Dashboard. Click on Admin. If it ask for a password and username, enter the following

Username: pi-star

Password: raspberry

Then on the menu, click WPSD Update and allow it to update the Software. Once you see, **Back to Dashboard** ←, on the bottom of the screen, click on **Configuration**. (Continued on next page)



# Configuring your SkyBridge (continued)

Where it says **Node Callsign:**, enter your amateur radio callsign. It should populate the **DMR/CCS7 ID** with your DMR ID.

The default frequency, is 446.550000MHz. Adjust as necessary for your codeplug. Color Code will be 1.

Under DMR Configuration, in the Brandmeister section you will need to pick the server closest to you. For the west coast, BM\_3103, for east coast, BM\_3104, and for central US, use BM\_3102

Next for hotspot security, this is the hotspot security password You created on the Brandmeister.network selfcare page.

Then you can click apply changes, and as long as all your info is correct, you will be up and running within a few minutes.

Once you have your SkyBridge your operational again, please go to Configuration, Backup/Restore, and click on the DOWN ARROW image to download a backup of your Settings. Anytime you make any changes, please backup before making the changes.

This concludes the lesson.

