NETGEAR Orbi and Nighthawk MESH MANUAL FIRMWARE UPDATE Process

Summary

For user who wish to manually update their systems themselves by using a wired PC and web browser after downloading any new or available firmware update files that maybe available for their models' systems from NEGEAR.

1. How to download firmware files from NETGEARs download site per model system.
2. Unpack downloaded .zip firmware files.
3. Recommended practices to use a wired PC and web browser to manually send firmware update files to the satellite units first, then the main router unit lastly, using the satellite and main router web pages in a web browser.
4. Recommended after update processes to the system to help ensure the update is working well. Power OFF the router and satellites then back ON.
5. MS-Edge(Windows), FireFox(Mac and Windows), Safari(Mac) are recommended browsers

Download and acquire the necessary firmware files from NEGEARS download site per model system

Navigate to https://www.netgear.com/support/ in a web browser.
Locate the model number if need from your main router unit:

Be sure to back up the systems configuration to file, before starting a firmware update for safe keeping:
Nighthawk Mesh: https://kb.netgear.com/24231/How-do-I-back-up-the-router-configuration-settings-on-my-Nighthawk-router

Orbi Mesh: https://kb.netgear.com/000062080/How-do-I-back-up-the-configuration-settings-on-my-Orbi-WiFi-System
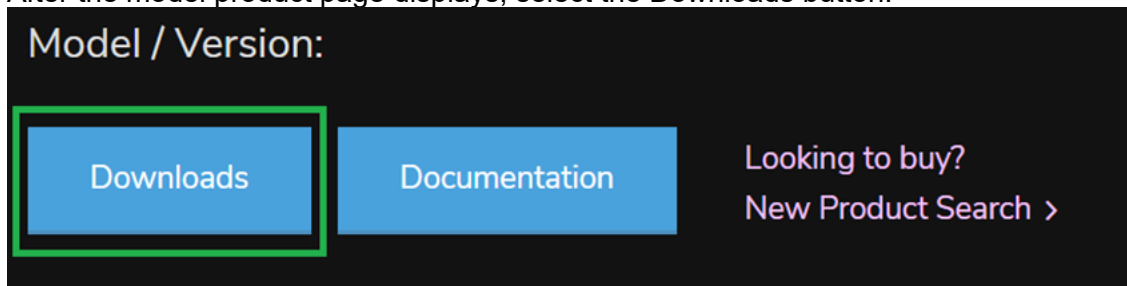
Orbi systems will start with CBR, RBK, RBKE or RBE.
Nighthawk Mesh systems will start with MK.
Input the model number of your Orbi or Nighthawk MESH system:
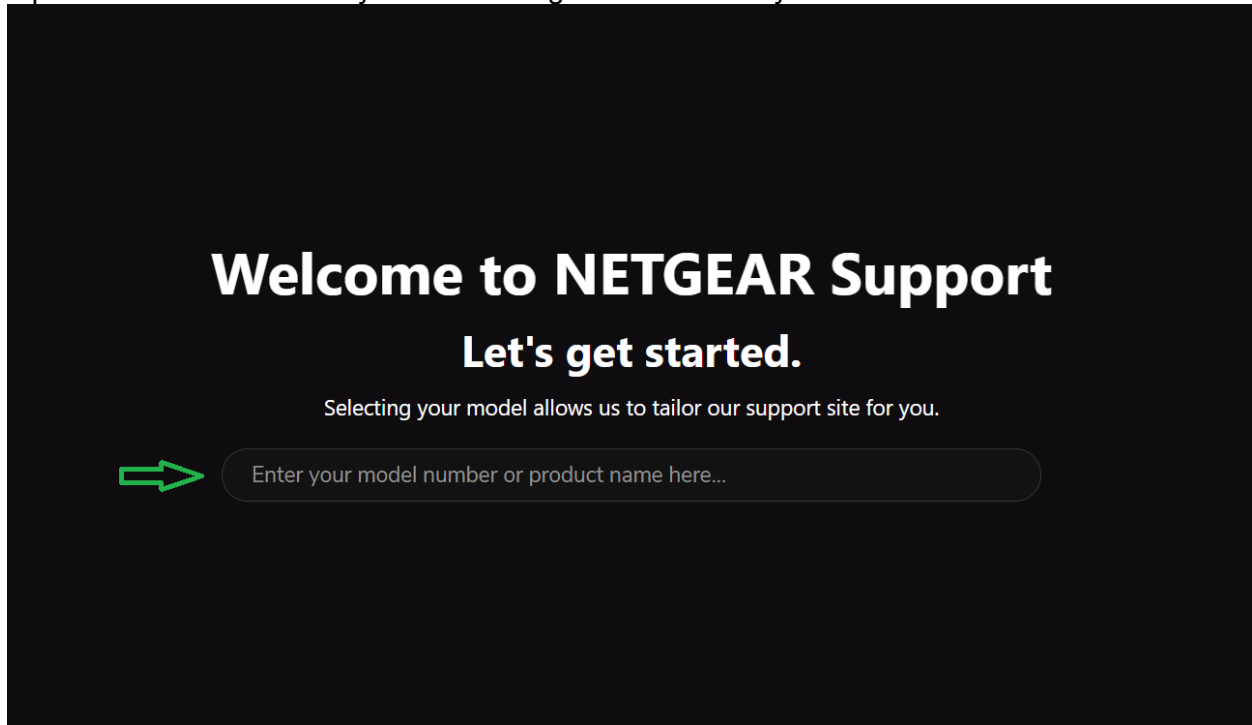
After the model product page displays, select the Downloads button:

Firmware and Software Downloads will be displayed in the web browser.
Orbi Mesh:

Firmware and Software Downloads

Current Versions

(Orbi Router) Firmware Version	⌄
(Orbi Satellite) Firmware Version	⌄
NETGEAR Orbi App (Android)	⌄
NETGEAR Orbi App (iOS)	⌄

➕ View Previous Versions

Nighthawk Mesh:

Firmware and Software Downloads

Current Versions

(Mesh Router) Firmware Version	⌄
(Mesh Satellite) Firmware Version	⌄
NETGEAR Nighthawk App (Android)	⌄
NETGEAR Nighthawk App (iOS)	⌄

➕ View Previous Versions

For all Orbi and Nighthawk Mesh systems, there are two separate firmware files needed to be downloaded. Select anywhere on the Current Versions web page to reveal a download or Release Notes link. Select the Router and Satellite options seen: Orbi and Nighthawk Mesh

Firmware and Software Downloads

Current Versions

(Orbi Router) Firmware Version

(Orbi Satellite) Firmware Version

NETGEAR Orbi App (Android)

NETGEAR Orbi App (iOS)

＋ View Previous Versions

Firmware and Software Downloads

Current Versions

(Mesh Router) Firmware Version

(Mesh Satellite) Firmware Version

NETGEAR Nighthawk App (Android)

NETGEAR Nighthawk App (iOS)

＋ View Previous Versions

A Download button will be displayed along with Release Notes. Two options here to download the necessary firmware files.

1. Select the blue Download button for the router unit then select on the satellite drop down to show the same blue Download button for the satellite:
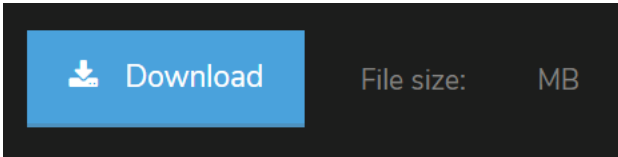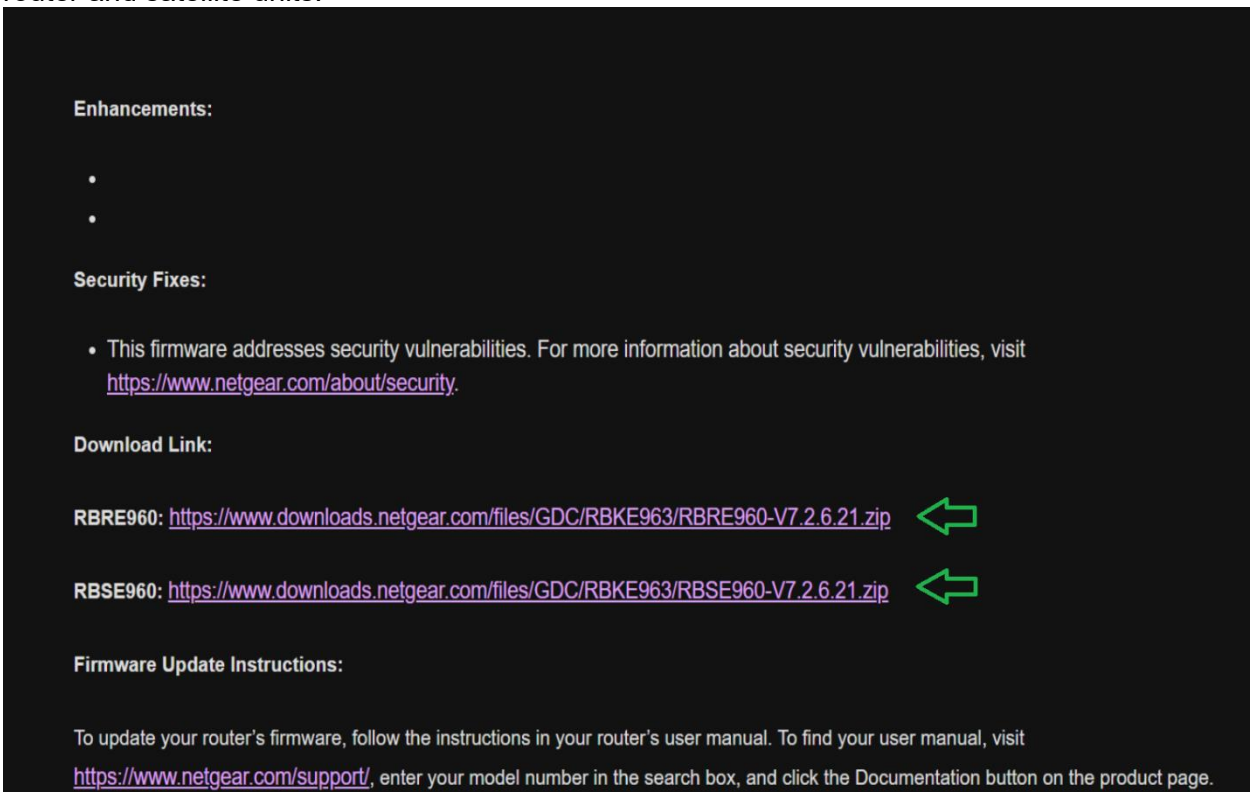

After selecting the download button, the file will be downloaded using the web browser to its designated location or have the browser download the file to your desktop, a recommended location.

2. Select the Release Notes link under the blue download button:
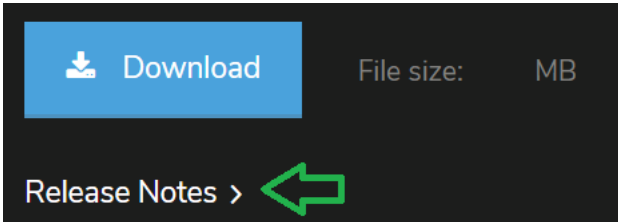
This will open the product system download page and show release note information about what is included in the available firmware update along with download link to both router and satellite units:


Select both router and satellite .zip files seen here, and the file will be downloaded using the web browser to its designated location or have the browser download the file to your desktop, a recommended location. Example is for Orbi 960 series. Same will be seen for Nighthawk Mesh systems as well.

Unpack the downloaded firmware .zip files.
Find and navigate to where the download .zip files are located and right select on each of the
.zip files. Right select on each file from the tool menu, select Extract All…
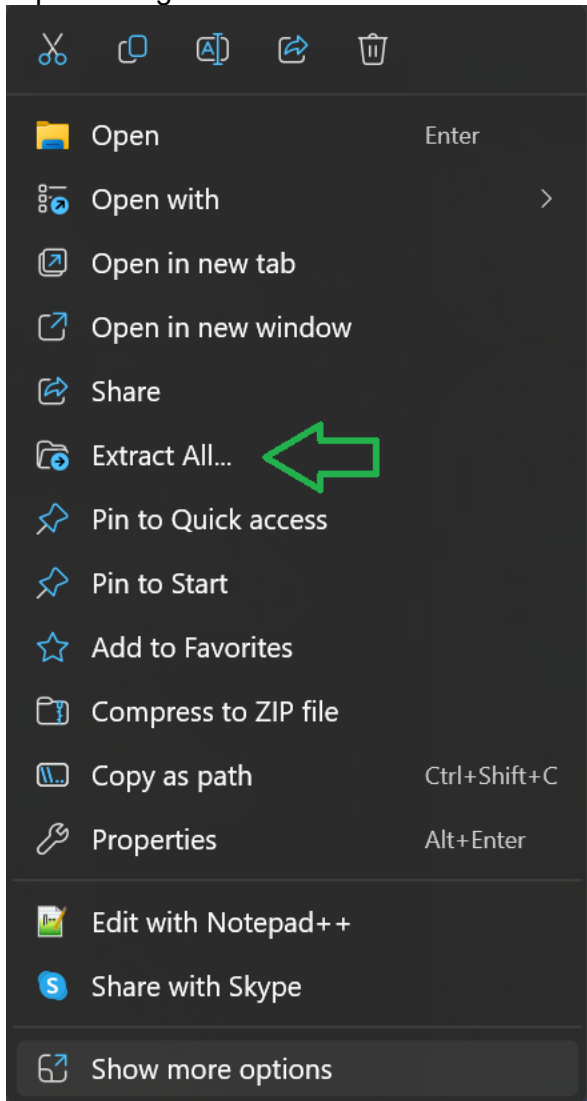
Other .zip file extractors like .7zip or other .zip file extraction programs may be used here.
Extract both the router and satellite .zip files.

Select a Destination and Extract the files from the .zip file:
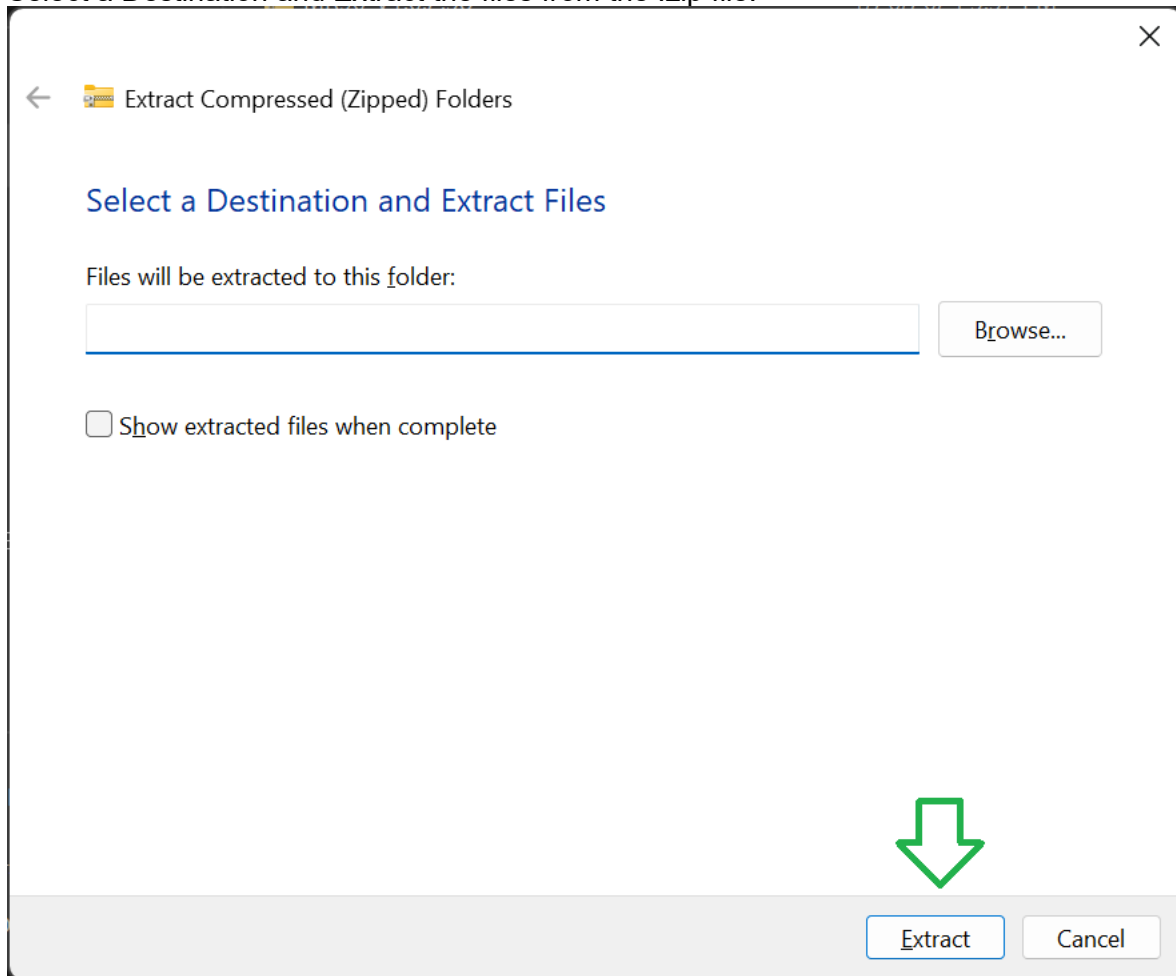
Browse to where the extracted files are to be extracted too. Recommended desktop or the default location seen in this window. Users Choice. Select the Extract button and the files will be extracted to this location. Do this for both the router and satellite firmware .zip files.

Observe the extracted files. There will be a .chk and a Release_Notes file within the extracted file folder as seen here:

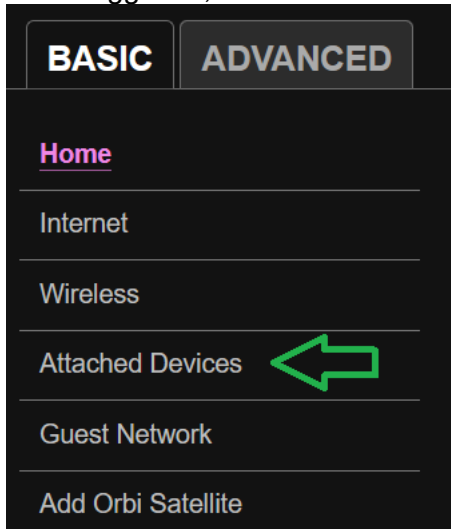| Name	Date modified	Type	Size
∨ Today			
.chk	1/26/2024 4:10 PM	Recovered File Fragm...	50,870 KB
_Release_Notes	1/26/2024 4:10 PM	Microsoft Edge HTM...	1 KB

DO NOT ATTEMPT to open the .chk file beyond this point. This is the actual firmware file that gets sent to the router or satellite units. You can open the Release_Notes file and view information within that file. Observe and take note of the difference in file names for the router and satellites. Router should have a RB**R** or M**R** in the file name. Satellite should appear as RB**S** or M**S** in the file name.

Prepare the system for manual firmware updating

Recommend bringing any remote satellites to near or same room as the router unit for quick and easy observation of the satellites that will be updated along with the main router unit.
If any satellites are ethernet connected to the router unit, these can be left in their remote locations.

Use a browser and browser tabs. Open a browser and log into the router unit using log in credentials.
Once logged in, select on the Attached Devices menu option:

Find the IP addresses for each satellite that's connected to the router unit:

Use the IP address seen here for each satellite and open a new tab with in your current opened browser for each of the IP addresses seen for each connected satellite.
Log into each satellite's web page using the same log in credentials for the router unit.
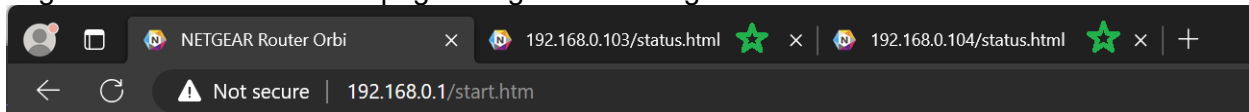
The browser should have one tab for the main router web page, then other tabs for each of the connected RBS.

Update all connected satellites.
After logging to the satellite's web page, select the Firmware Upgrade menu option:
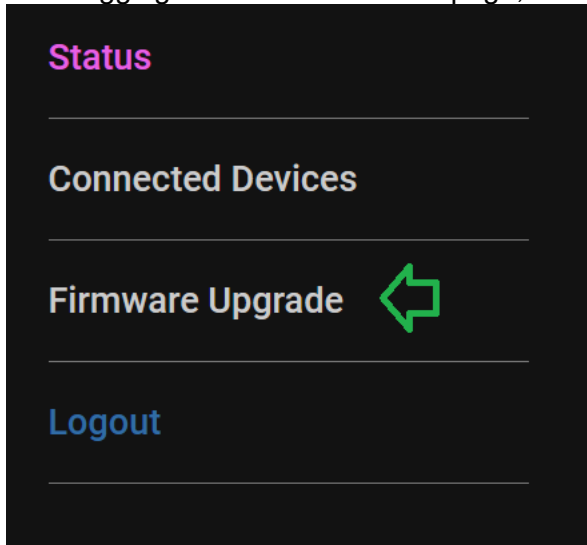
This will display a Firmware Upgrade and Upload Upgrade File window in the browser:
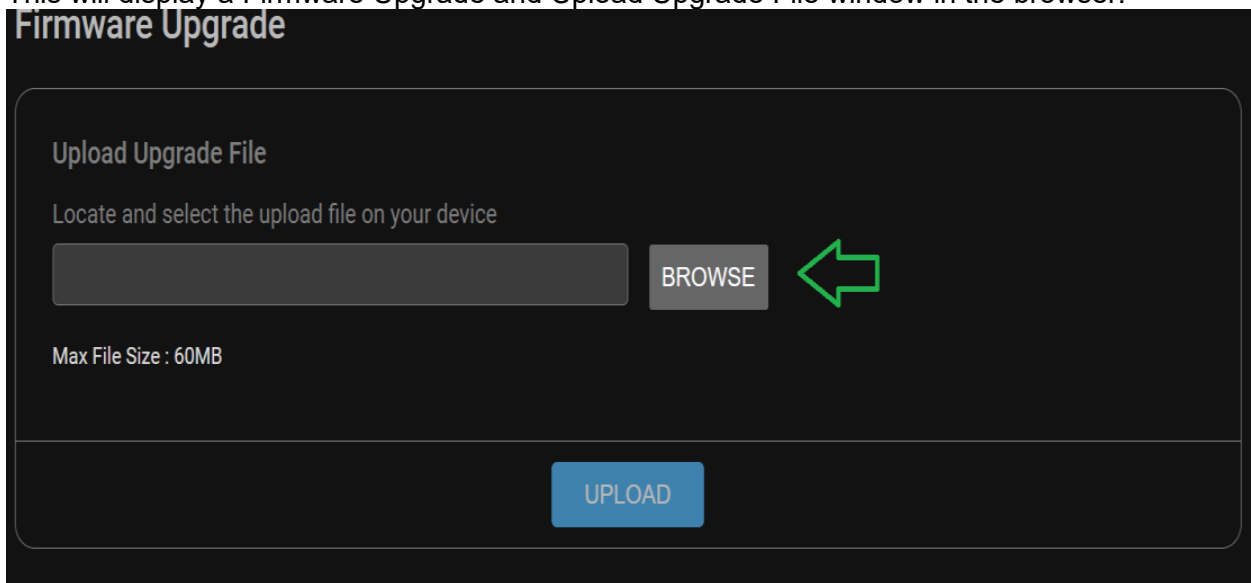
Select the BROWSE button and navigate to where the downloaded and extracted files are located. Find the satellite .chk firmware file first.

After selecting the satellite .chk firmware file, the Upload Upgrade File window will be populated:

Upload Upgrade File

Locate and select the upload file on your device

| -signed.chk ⭐ | BROWSE |

Max File Size : 60MB

➡️ UPLOAD

You can select the blue UPLOAD button here and do this one at a time for each satellite. NOTE: Alternative would be that you can log in to each satellite's web page on each browser tab and setup the firmware file to be loaded for each satelli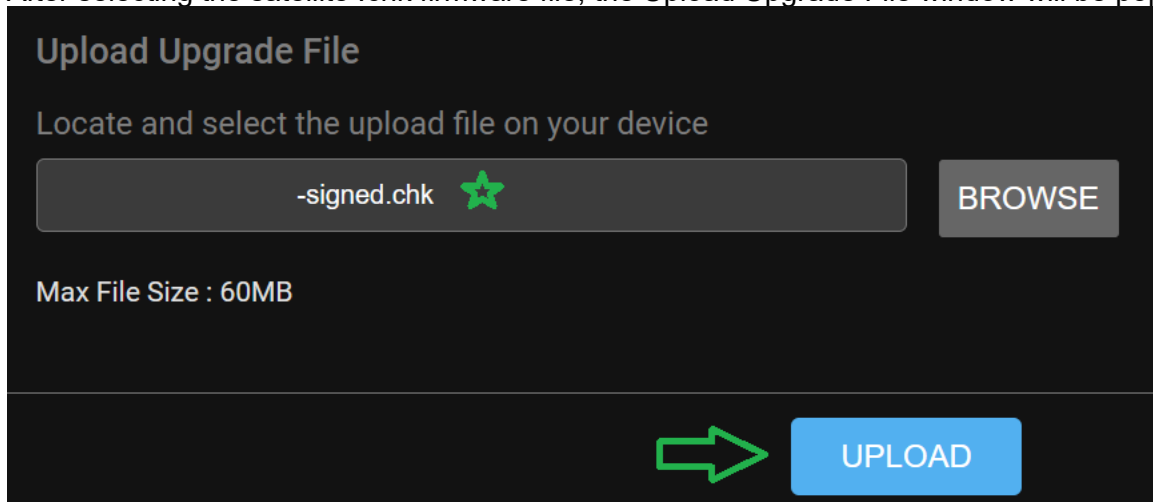te on their tabbed web pages. Once you have each satellite setup as above, then select the blue UPLOAD button on the first satellite to be updated and soon after the web page shows the progress circle, select the blue UPLOAD button on the next satellite that needs the file sent, until each satellite has been uploaded top.

After selecting the UPLOAD button, a note window should be seen giving information on how long the process takes:

Note: The update progress takes about 1-2 minutes.

Do not turn off the power or press the reset button during update

Next screen I the browser will be a progress circle:

Your Orbi Satellite is restarting, please wait ...

0%

Observe the front LED on the satellite unit(s). It should start to blink WHITE then as the progress circle gets to 100%, the front LED should stop blinking and turn BLUE for 3 minutes indicating a good sync and connection, then turn OFF, indicating normal operation.
Do not power off the satellites during this operation. Could cause damage and break the operation of the satellite(s).

Once the progress circle gets to 88-100%, the satellites web page will update and display the following:

I HAVE CONNECTED TO THE ORBI NETWORK
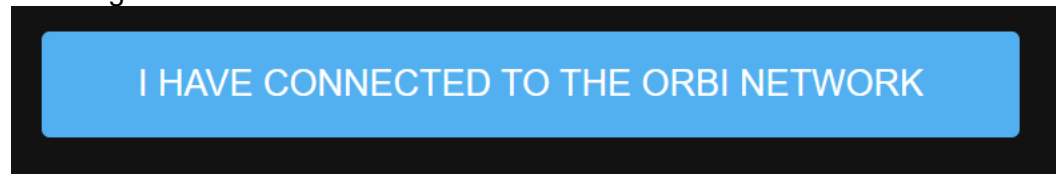
Or Nighthawk Mesh network here as well. Leave the satellite web pages alone here.
Note: After the last satellite has been sent the firmware file, you can immediately go to the routers web page and send it's FW file soon after the last satellite has been sent it's FW file if it was set up along with the satellite web pages for the firmware update in quick order.

<u>Update the routers firmware lastly</u>
After each satellite has been sent the satellite firmware, send the routers firmware file to the router unit. Select the Firmware Update from the Advanced tab/Administration menu:

BASIC | ADVANCED

ADVANCED Home

Setup +

Security +

Administration −

　Router Status

　Logs

　Attached Devices

　Backup Settings

　Set Password

　NTP Settings

　Firmware Update ⬅

Advanced +

Select the Manual Update tab:
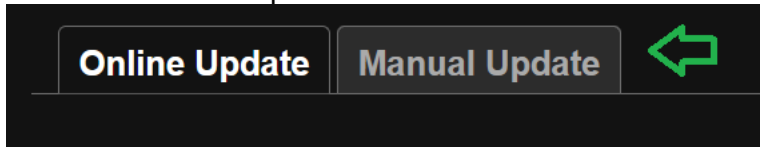
Select the BROWSE button and navigate to where the downloaded and extracted files are located. Find the router firmware file. Don't select the satellite firmware file.
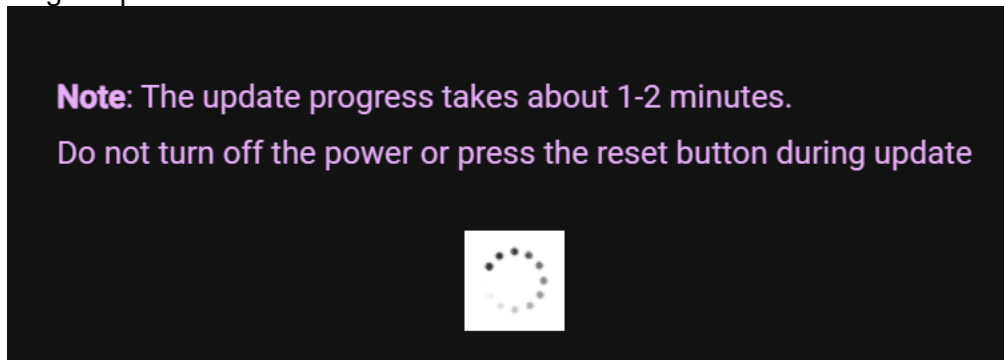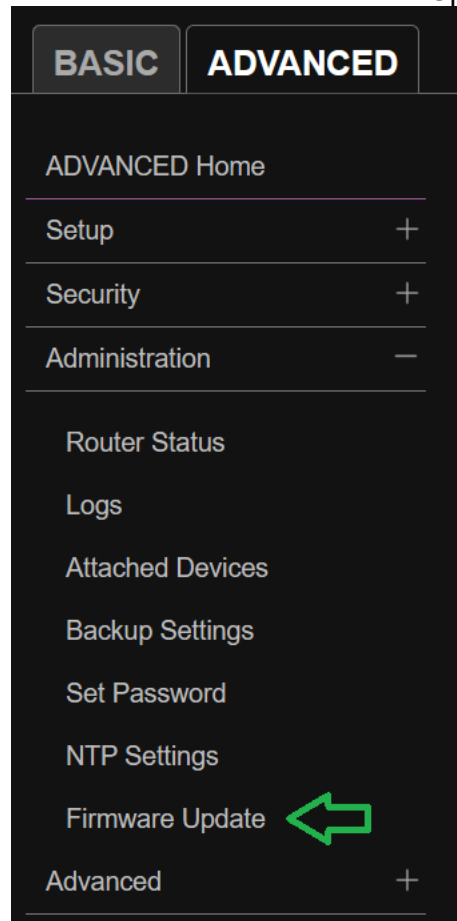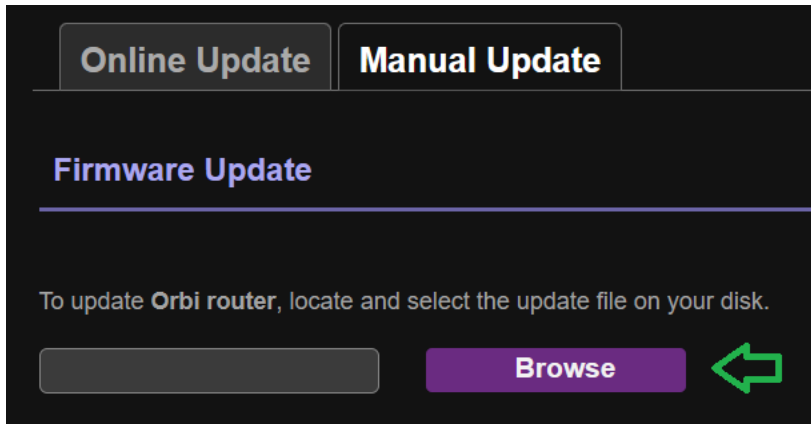

Select the blue UPLOAD button:

You will see a IP address of the router says message:

Select OK here.

Warning and Note on firmware version and time to process the firmware will be seen:

Firmware Update

Warning! The firmware you are trying to upload is the same as the one you had.
Do you still want to continue?
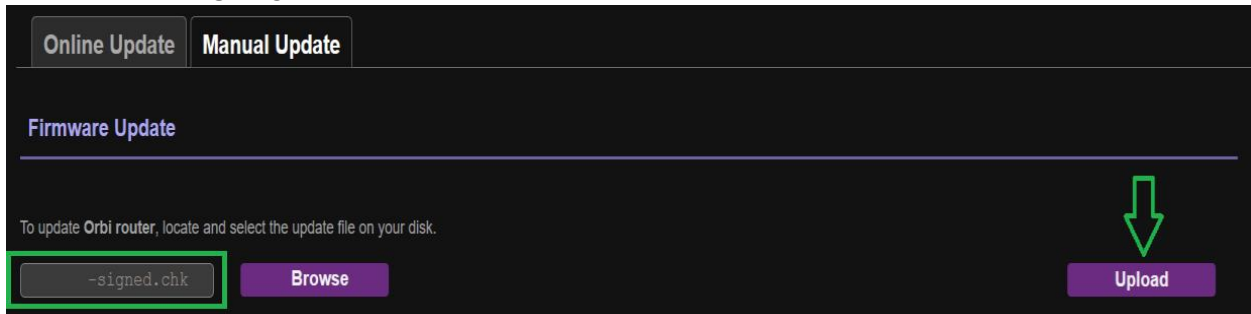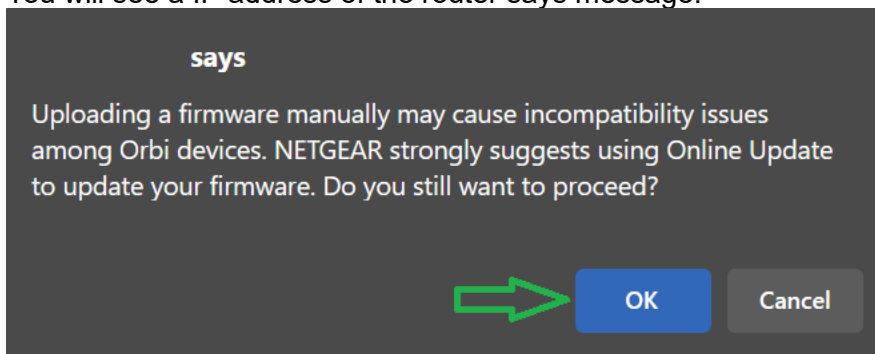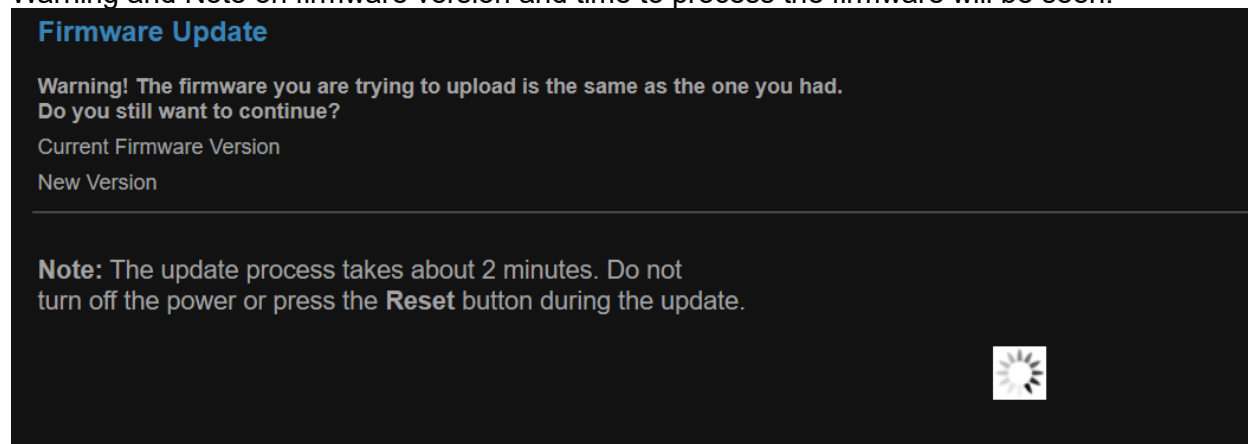
Current Firmware Version

New Version

Note: The update process takes about 2 minutes. Do not
turn off the power or press the **Reset** button during the update.

Then a Rebooting the router now message progress bar will display:

Rebooting the router now, please wait

Observe the front LED on the router unit. It should start to blink WHITE then as the progress bar get to the end, the front LED should stop blinking and turn OFF, indicating normal operation.

After all satellites and the router have been sent the firmware files and have process the firmware file and are back to ready. Recommend a power OFF of the router and all satellites for 1 minute then back ON with the router unit first, then satellites, one at a time. If satellites were taken to same room for this operation, can now be powered OFF and returned to their remote locations and powered back ON.

Give about 5-10 minutes for the router and all satellites to power ON and come to ready.

For Orbi systems, confirm that the front of the router LED turns OFF indicating normal operation and confirm that the satellites LED turns BLUE for about 3 minutes, then turns OFF, indicating normal operation.
Orbi Mesh: https://kb.netgear.com/31030/What-do-the-LEDs-on-my-Orbi-mean

For Nighthawk Mesh systems, LED on the router and satellites should blink WHITE then turn to BLUE and remain ON, indicating normal operation. AMBER LED maybe seen for a short time on the router and satellites, then turn BLUE.

Confirm on the router and satellites web pages that the firmware version has been updated to the version that was downloaded and installed.
Confirm operation of the system with your devices.
NOTE: If any problems are seen after the firmware update, even after the system was powered OFF then back ON and basic troubleshooting doesn't resolve the problem, a factory reset will need to be performed to see if this helps resolve the problem observed.
https://kb.netgear.com/31486/How-do-I-reset-my-Orbi-system-to-factory-default-settings
Or use the ERASE button on the routers web page to factory reset the router:
https://kb.netgear.com/000062081/How-do-I-erase-the-configuration-settings-on-my-Orbi-WiFi-System

Be sure to save off a new backup configuration to file for safe keeping. Saves time if a reset is needed.
https://kb.netgear.com/000062080/How-do-I-back-up-the-configuration-settings-on-my-Orbi-WiFi-System

Enjoy. 📡

KB Articles and References:
- https://kb.netgear.com/31573/How-do-I-manually-upgrade-firmware-on-my-Orbi-router-using-orbilogin-com
- https://kb.netgear.com/000037217/How-do-I-check-and-manually-upgrade-the-firmware-on-my-Orbi-satellite
- https://youtu.be/QDdC16Cz8tk?si=w7fyQ_YvoWltZnlL
- https://kb.netgear.com/23960/How-do-I-manually-update-the-firmware-on-my-NETGEAR-router