



The R6300v2 is an ARM device. **DO NOT USE** this guide for the MIPS R6300 "v1".

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# Hardware Specs

|                         |                                     |
|-------------------------|-------------------------------------|
| <b>CPU</b>              | Broadcom BCM4708A0                  |
| <b>CPU Speed</b>        | 800 MHz (2 Cores)                   |
| <b>Flash ROM</b>        | 128 MB                              |
| <b>RAM</b>              | 256 MB                              |
| <b>Radios</b>           | BCM4360 5 GHz & BCM4331 2.4 GHz     |
| <b>WLAN Support</b>     | a/n+ac 3x3:3 & b/g/n 3x3:3          |
| <b>WLAN Max Speed</b>   | 450 Mb/s (2.4Ghz), 1300 Mb/s (5Ghz) |
| <b>Antenna Location</b> | Internal                            |
| <b>Switch</b>           | 4x GigE LAN + 1 GigE WAN            |
| <b>USB</b>              | 1x USB 3.0 + 1x USB 2.0             |
| <b>Power Adapter</b>    | 12VDC 2.5A wall wart                |

## R6300v2 Versions

There are at least **three variants of the R6300v2** device. Charter (an ISP) puts out a custom R6300v2 unit with "Model: R6300v2" on the bottom and blue coloring on the front, not the standard yellow. When you open the stock firmware web interface you will note a "CH" at the end of the stock firmware name/version.

- There is another ISP unit for "Spectrum Wifi" with a blue stripe, no "CH" on the bottom label, and whose firmware has no trailing "CH". The Initial Flash R6300V2CH.chk file from Kong worked, along with upgrading.
- Another ISP unit is for "COX Communications" with *boardid* U12H240T33. None of the below files seem to work in the upgrade process. For further information about updating these units see this thread. [Netgear R6300v2 COX Link](#)

***Be careful to flash the correct INITIAL firmware for your version!***

| Version                               | R6300v2                                     | R6300v2CH (Charter ISP)                |
|---------------------------------------|---|--|
| <b>Router Label (<i>board id</i>)</b> | R6300v2 (U12H240T00)                        | R6300v2 (U12H240T70)                   |
| <b>Netgear Support</b>                | <a href="#">OEM Link</a>                    | <a href="#">Charter Firmware Link</a>  |
| <b>DD-WRT supported since</b>         | 23082 2013-12-12                            | Since Kong's initial v2CH file (below) |
| <b>DD-WRT Initial Flash file</b>      | <a href="#">26138 factory-to-dd-wrt.chk</a> | <a href="#">R6300V2CH.chk</a>          |
| <b>MD5 of Initial Flash File</b>      | f801997c59cb7a734ac41afc2e929a98            | 6c5d1b70e994ffea71850e3d6b677d69       |

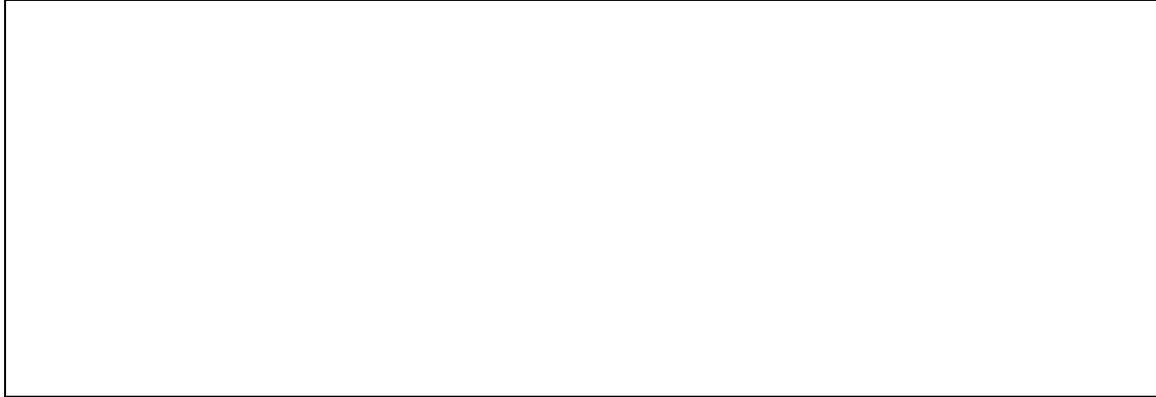
**Determine your R6300v2 variant & download the proper initial flash file from the table above:**

1. Connect to the router (using router DHCP is fine) via LAN cable or WiFi
2. In web browser, go to <http://192.168.1.1> or <http://www.routerlogin.net> and login (if you have to reset details, including default username/password, are in flash section below)
3. Click on Advanced > Administration > Router Status
4. Check the Stock Firmware version for a trailing "CH"
5. If there is a "CH" download the "CH" initial flash file, if not you can use the regular initial flash file

6. See yellow highlights in screenshot below for details.

- Also see the *R6300v2 Versions* section above about the "Spectrum Wifi" variant

**Screenshot of R6300v2CH unit:**



## Netgear AC1450

This has *boardid* U12H240T99: see more info at [Netgear AC1450](#)

## Flashing Instructions

Read the [Firmware FAQ](#). Also see the [Peacock Announcement](#) for historical reference on Broadcom routers, even if some details do not apply to an ARM device.

### Initial DD-WRT Installation

**Verify you have the appropriate build!**

From stock Netgear firmware to DD-WRT on a R6300v2:

1. Turn on router, wait for Power light to go solid green, then reset router:
  1. Reset Per Netgear Documentation: Use the end of a paper clip or a similar object to press and hold the Reset button on the back of the router for at least 7 seconds. The router resets, and returns to the factory configuration  
Note: WiKi author recommends holding reset for at least 20 seconds.
  2. After releasing Reset button, router should reboot with much flashing of lights.
  3. Wait for Power light to go solid green again.
2. Connect PC to one of router's LAN ports with a network cable (using router for DHCP is okay). This should be the ONLY connection for the router & PC
3. Clear web browser cache.
4. In web browser, go to <http://192.168.1.1> or <http://www.routerlogin.net> netgear default username & password is "admin" & "password" respectively (no quotes)

5. Click on Advanced > Administration > Router Update
6. Select special **.chk** firmware file you downloaded from table above.
7. After the router says it is done... wait at least 5 minutes longer (5 full earth minutes) for it to fully reboot and power light to go solid green again. (Why wait? See peacock Note 1 "Important2" bold paragraph.)
8. In web browser, go to <http://192.168.1.1>
9. Verify DD-WRT successfully installed.
10. Reset router (as documented above), and wait for router to reboot and Power light to go solid green again.
11. In web browser, go to <http://192.168.1.1> (you should see the DD-WRT create password screen)
12. Create a password using the standard DD-WRT GUI
13. Set Password, Login and manually configure DD-WRT.

**Note:** Some users have needed to reset NVRAM from the CLI, see the "NO 30-30-30 reset..." section below for details. While these last few steps may not be necessary, the wiki author has performed them without issues.

14. Telnet over to router (username = root & password = the one you just set)
15. From telnet pass the following command (without quotes): "nvram erase && reboot"
16. ...wait for router to reboot and Power light to go solid green again (5 minutes).
17. In web browser, go to <http://192.168.1.1> (you should be back at the set password screen again)
18. Set Password, Login and manually configure DD-WRT.

**Note 1:** If you get an error message stating that the firmware you are loading is the same or older than the stock firmware on the unit, that is fine. Have it load the firmware anyway.

**Note 2:** While not always necessary it is also a best practice to set your computer to a static IP of 192.168.1.8 (or to whatever subnet the router is on) for flashing. Also when flashing from a windows client I like to open a command prompt window and pass the following command (no quotes) "ping 192.168.1.1 -t -i 200" and watch the TTL responses during the process. Remember to set your client back to get IP from DHCP when you are finished.

## DD-WRT Upgrade

Download **.bin** (trailed **.chk** build would also work) file for desired build: see [Where do I download firmware?](#).

Locate correct firmware in folder **netgear-r6300v2**: do *not* use **broadcom\_K26** nor **broadcom\_K3X** folders.

Follow *Initial DD-WRT Installation* except use *DD-WRT Administration->Firmware Upgrade*. Reset afterward.

## Return to Stock

Flashing back to Netgear Firmware is supported. Just use the dd-wrt web interface and upload netgear firmware. Since netgear is not using the same password var as dd-wrt you have to reset the router after you flashed back to netgear firmware, otherwise the netgear webif will not accept the default password. (Per Kong's pre-Oct. 2014 "readme" file.)

## Build Information

It is generally recommended to use latest builds, **but first read the forum build threads** to avoid bad builds.

### Forum threads for reference:

- [Support for Netgear R6300 / R6300v2](#) covers both v1 and v2 so read carefully!
- [New Broadcom ARM driver](#) was the rallying point for Kong build testing (deprecated).
- Since this device has a similar architecture to the R7000, forum info related to it could also be beneficial.

## DO NOT 30-30-30 Reset ARM Devices

**Reset notes:** In early 2015, Kong announced [a reset is required for certain upgrades as well](#). Do NOT restore an NVRAMBAK from previous build as it will undo the reset. While not always necessary, a reset with manual configuration is recommended for large version changes, and required before reporting issues.

There are a few methods to reset. The first is using the reset button:

- When DD-WRT is running, press and hold the reset button until the lights flash (>10sec).

**GUI Reset:** To restore default nvram settings either:

- Select the factory reset option from the firmware upload GUI drop-down menu:
  - ◆ *Administration->Firmware Upgrade*
  - ◆ Select the firmware file and "reset to defaults" from the drop-down menu, then click *Upgrade*
- ...or use the reset to default settings option:
  - ◆ *Administration->Factory Defaults*
  - ◆ Select radio button, then *Apply* settings

**From telnet/ssh (CLI):** Telnet (or SSH, if enabled) to the device and see [Erasing NVRAM](#), as this is build-dependent.