

Contents

- [1 Hardware Specs](#)
- [2 Initial Flashing Instructions](#)
- [3 Upgrading DD-WRT](#)
- [4 Build Information](#)
- [5 Recommended Build](#)
- [6 Reverting to Stock](#)
- [7 Overclocking](#)
- [8 Unbricking](#)
- [9 Forum](#)

Hardware Specs

CPU	Broadcom BCM4718
CPU Speed	480 MHz
Flash ROM	8 MB
RAM	64 MB
Radios	2.4 GHz and 5 GHz
WLAN Support	a/b/g/n
WLAN Max Speed	N750: 300 Mb/s (2.4Ghz) 450 Mb/s (5Ghz)
Antenna Location	Internal
Switch	4x GbE + 1 GbE WAN
USB	1x USB 2.0

Initial Flashing Instructions

Read the [Peacock Thread](#) for reference on Broadcom routers.

- Flashing from OEM firmware requires the initial trailed build mini .chk file (with WNDR4000 in the name)
- Upgrades use the **nv64k** (or trailed) build and **not the nv60k nor generic builds.**

See [Where do I download firmware?](#) for links.

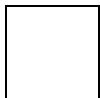
- Do not use latest builds without first researching the new build threads

Initial install: download the **K2.6_mini-WNDR4000.chk** trailed build from the `broadcom_K26` folder

1. Set a static IP on the PC (e.g. 192.168.1.8, subnet 255.255.255.0, gateway 192.168.1.1)
2. Connect the PC to a router LAN port (recommended to disconnect all other ports)
3. Reset the router.
4. In your web browser, go to <http://192.168.1.1>
5. Click on "Router Upgrade".
6. Upload the .chk trailed build, downloaded above.
7. Wait 5 minutes after the router says it is done, then perform another reset.
8. Set a strong password to login

- To use DHCP IP assignment, remember to unset the static IP set in the above instructions.

Upgrading DD-WRT



Verify the build you plan to flash is less than 7995392 bytes (**7808 KB**) or you risk bricking.

Use the `broadcom_K26` or `broadcom_K3X nv64k` build (or trailed build with **WNDR4000** in the name). To upgrade from a K26 to K3X builds it is recommended to use a trailed build. Upgrade DD-WRT from the *Administration->Firmware Upgrade* page, and reset if any issues are encountered.

Build Information

Only use builds with **nv64k** or **WNDR4000** in the name for upgrading, or you risk bricking. **Always verify builds are less than 7995392 bytes (7808 KB) or it may brick the router.** For build links, see [Where do I download firmware?](#)

Recommended Build

As of January 2019:

- **r38060 K3X**

Reverting to Stock

To revert to stock Netgear firmware from DD-WRT over an Ethernet connection from PC to WNDR4000 LAN port:

1. Reset the WNDR4000 using the button on the base.
2. Download the latest firmware from [Netgear WNDR4000 Support](#).
3. Configure the PC port to static IP of 192.168.1.10 with a netmask of 255.255.255.0
4. Telnet from PC to 192.168.1.1, and login as "root" with password "password". ([PuTTY](#) is a good telnet client to use.)
5. Enter commands "erase linux" and then "reboot".
6. To flash the firmware, use the procedure at [Reinstall the firmware on a router without the setup CD recovery tool](#). *Be sure to wait until the Power light turns green!*
7. Reset the WNDR4000 using the button on the base.
8. Restore the PC port to dynamic IP.

After the WNDR4000 boots up with the new firmware, login with "admin" and "password".

Overclocking

The WNDR4000 CFE supports "overclocking" (the BCM4718 is rated for 533 MHz, but this model is underclocked to 480 MHz), though it is advised to add a heat sink or otherwise improve cooling or airflow. The DD-WRT GUI should be able to select between the original 480 MHz along with 500 and 533 options. The SoC references the pll20mhz_table from [hndmips.c](#) and can be manually set using the following:

- nvram set clkfreq=480,240,120 (OEM speed)
- nvram set clkfreq=500,250,125
- nvram set clkfreq=530,265,132
- nvram set clkfreq=533,266,133 (OEM speed of the E4200v1)

Verify this setting with `nvram get clkfreq` then run the following to apply:

- nvram commit && reboot

Note: DD-WRT uses an 'overclocking' nvram parameter which can override the manual settings after boot. In this case, unset this parameter or change it to match your CPU speed (only the first setting, e.g. 533).

Unbricking

For more information:

- **Netgear Support:** Reinstall the firmware on a router without the setup CD recovery tool
- **DD-WRT:** TFTP Flash and Serial Recovery
- **Serial port pinout:** Serial cable connection WNDR4000
 - ◆ Rx: JP1-2 (connect to Tx on the TTL adapter)
 - ◆ Tx: JP1-5 (connect to Rx on the TTL adapter)
 - ◆ GND: JP1-6 (NOTE: a normal pin will not fit through this hole)
 - ◆ Vcc: JP1-1 (**NOT NEEDED**)
- NOTE: based on several reports, there are two different board layouts for the "WNDR4000"

Pin short recovery **NOT RECOMMENDED EXCEPT AS A LAST RESORT**

- That said, the procedure is to short the MX25L3206E serial flash *Clock Input (SCLK) & Serial Data I/O (SI) pins*
 - ◆ These are the two pins diagonally opposite to pin 1 (indicated by the SOP package dot impression)
 - ◆ They are both TTL signal inputs, so there is no danger *except in the user shorting the wrong pins*.
1. When the router is powered on, the power LED lights, then all LEDs light then go out (LED check)
 2. As soon as the LED check goes out, carefully short the pins (5 and 6) for 3 seconds then remove
 3. The power LED should go off upon short removal, then start blinking green, which means TFTP is running
 4. TFTP OEM firmware, then after loading the router should reboot. The trailed k2.6 mini may also work.

Forum

The original device thread disappeared in late 2015: latest archive.org snapshot

- This has replaced it.

Broken reset button (WNDR3700v3 is identical)