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## Hardware

DIR-810L is a small Mediatek wireless AC750 router with no external antennae. DD-WRT supports rev A1/B1/C1.

## Specifications

<b>FCC ID (A1 revision)</b>	KA2IR810LA1
<b>Power</b>	12 VDC, 1 A
<b>CPU</b>	MediaTek MT7620A (580 MHz)
<b>Flash/RAM</b>	8 / 64 MiB
<b>Wireless1: protocol</b>	MediaTek MT7620A: b/g/n
<b>Wireless MIMO config</b>	2x2:2
<b>Wireless2: protocol</b>	MediaTek MT7620A: a/n/ac
<b>Wireless MIMO config</b>	1x1:1
<b>WAN / LAN ports</b>	1 / 4 (max 100 Mb/s)

## MTD Partitions

From a `dmesg` output:

### U-Boot

[TBD]

### DD-WRT

```
Creating 8 MTD partitions on "spi32766.0":
0x000000000000-0x0000000030000 : "u-boot"
0x0000000030000-0x0000000040000 : "u-boot-env"
0x0000000040000-0x0000000060000 : "factory"
0x0000000060000-0x0000000070000 : "Wolf_Config"
0x0000000070000-0x00000000f0000 : "MyDlink"
0x00000000e0000-0x0000000160000 : "ddwrt"
0x0000000170000-0x00000007f0000 : "linux"
scan from offset 170000
found squashfs at 274000
Creating 1 MTD partitions on "spi32766.0":
0x0000000274000-0x00000007f0000 : "rootfs"
0x00000007f0000-0x0000000800000 : "nvram"
```

- B1 revision has "squashfs at 275000" and rootfs: 0x275000-0x7F0000

## Flash Size Limit

*linux* partition is 6815744 bytes (6656 KB)

## Initial Flash

Be sure to use the correct revision directory for the A1/B1/C1 models.

## D-Link\_DIR-810L

1. Read the [Firmware FAQ](#), SoC forum, and device thread (see [Notes](#))
2. For initial flash, [27600](#) trailed builds (dlink-dir810l-#1 directory) are known to work
3. Attach an Ethernet cable to a router LAN port, and disable wireless on the computer.
4. Open OEM GUI (default IP Address is 192.168.0.1)
  - ◆ If not accessible, reset the router from the GUI (or press and hold reset until the lights flash)
  - ◆ Skip thru the setup steps until the Tools->Firmware Upgrade *can be accessed*
5. At the password prompt, put admin/admin or admin/password for the username/password
6. Go to the Router Upgrade link on the left side of the router gui and click on it
7. Navigate to and Choose the file that you downloaded, double checking that it is the mini-WNR2000v2.chk file and not some recipe your grandma sent you or some other router file
8. When it asks you if you want to upgrade to a different version, click on yes.
9. Wait FIVE full minutes after the upgrade appears to have finished. You can watch the lights on the front if you need something to do. As long as they are changing, you need to sit quietly and wait! If you screw this up you WILL brick your router. When the green and blue lights, and the connected port light have all stopped blinking, it should be ready as long as you have waited FIVE FULL MINUTES!
10. Log onto the router at <http://192.168.1.1/>
11. Set the username and password by TYPING in the boxes and hitting enter.
12. Reset the router as outlined in note 1 of the peacock announcement. THIS STEP IS IMPORTANT!
13. Repeat steps 12 and 13 and go in and configure your router. Hit save as you make your configurations before you switch to another tab, and when you are done, hit APPLY.

## Upgrade Flash

Flash from the GUI, **but first research build and device threads** (see [Notes](#)) for known issues

- DD-WRT [GUI is broken in builds after 41135 and before 41459](#) (r41461 was added to 41459)
- If upgraded without reset, the device will still work, but [Recovery](#) or [CLI update](#) is needed for further updates

## Recovery

1. Store a copy of the router firmware (.BIN) on the HDD of a local PC. Download the FW file ahead of time.
  2. Connect an Ethernet cable between one of the LAN ports on the rear of the router and the network port on the local PC
  3. Set a static IP address on the computer other than 192.168.0.1 (e.g. 192.168.0.7)
  4. Turn off the router, wait 10sec, then press and hold the reset button on the rear of the router
  5. Turn on the router while still holding the reset button, until the amber power light is blinking on and off
  6. Open a web browser and enter the following address: <http://192.168.0.1/>
    - If this fails, try another web browser as some will try to redirect to https, causing this to fail
1. *Choose File* then select *Upload* on the D-Link Router Recovery Mode
  2. After the firmware successfully loads, a Success page will display
- If upload fails, try a different web browser (MS Edge has been known to fail)

## Notes

If the 5 GHz radio (ba0) is not up after an upgrade, or has a high error rate, power off and wait 10 seconds to power up.

Ralink/Mediatek Forum: [Ralink SoC based Hardware](#)

Forum [device thread](#)