

## What You Will Need

1. A WRT-310N Router (or equivalent).
2. A small CPU Cooler (I used an old Pentium-3 Cooler by Cooler Master that I had laying around).
3. A good thermal ADHESIVE (I used a compound from Arctic Silver).
4. A security Torx bit set (to un-screw the screws holding your router together).
5. A good fan the same size as your heat sink (may be included with it).
6. Solder and a Soldering Iron.
7. Electrical Tape.
8. Thermal Compound remover (Alcohol can work, used to remove the old crud from your heatsink).
9. A file set or a grinder.

## How To Do It

Step 1:

When you first open up your router, it should look roughly like this, minus the electrical tape and with a passive heat sink on the area the tape surrounds.

<http://mywebpages.comcast.net/Raptor2213//WRT310N/ DSC0153.JPG>

<http://mywebpages.comcast.net/Raptor2213//WRT310N/ DSC0157.JPG>

Remove the passive heat sink CAREFULLY.

Remove all traces of the goop that held your former heat sink on.

Grind/file your heat sink to seat FULLY on the chip. If it rocks at all, you haven't done it good enough.

Use electrical tape to cover the area around the chip to avoid accidental contact.

Step 2:

Only do this if your unit has a 12VDC Input!

Flip the board over and solder either your fan leads, or a fan connector as shown in this image.

<http://mywebpages.comcast.net/Raptor2213//WRT310N/ DSC0163.JPG>

Step 3:

Replace the board, and apply your thermal adhesive.

If it requires dry time, use a C-clamp and LIGHTLY tighten it to hold the heatsink in place. It is advisable to do this with the top of the router sitting on top so that you are sure it fits.

## Mod\_your\_WRT-310N

Wait for it to dry. If using a compound, you can tell by seeing how sticky your mixed compound is. When it's hard, wait another 5-15 min to be safe.

<http://mywebpages.comcast.net/Raptor2213/WRT310N/DSC0168.JPG>

<http://mywebpages.comcast.net/Raptor2213/WRT310N/DSC0172.JPG>

<http://mywebpages.comcast.net/Raptor2213/WRT310N/DSC0174.JPG>

Here's the final product:

[http://mywebpages.comcast.net/Raptor2213/WRT310N/IMG\\_0252.JPG](http://mywebpages.comcast.net/Raptor2213/WRT310N/IMG_0252.JPG)