Thank you for purchasing the 7dBi Antenna Mod Kit for your Linksys router. You will see a tremendous improvement in both the signal strength and performance of your wireless network after you complete the steps described in this tutorial. First we will show you how to install the antennas for your router. Next we will teach you how to setup the DD-WRT firmware which will turn your $60 router into a powerful, highly configurable $600 router. Finally we will provide you with a tool that will help test the performance of your newly modified router.

WRT400N **Antenna Installation**

Instructions:

1. No soldering required
2. Open the unit. You can use a torque wrench (size T10) or the sharp end of a kitchen knife will work (we don’t recommend this).

3. Remove the UFL antenna connectors.

4. Now this part requires some patience. 5. Fitting your new UFL connectors into the little holes can take a little practice, and patience 6. So do this first: Practice removing the original UFL antenna cables and then putting them back on. 7. You will be attaching UFL cables to Antenna 1 and Antenna 2. 8. Now you are ready to drill. 9. Detach the stock UFL cables and remove the board from the unit. 10. Mark on the unit with a pen or whatever where you want to drill.

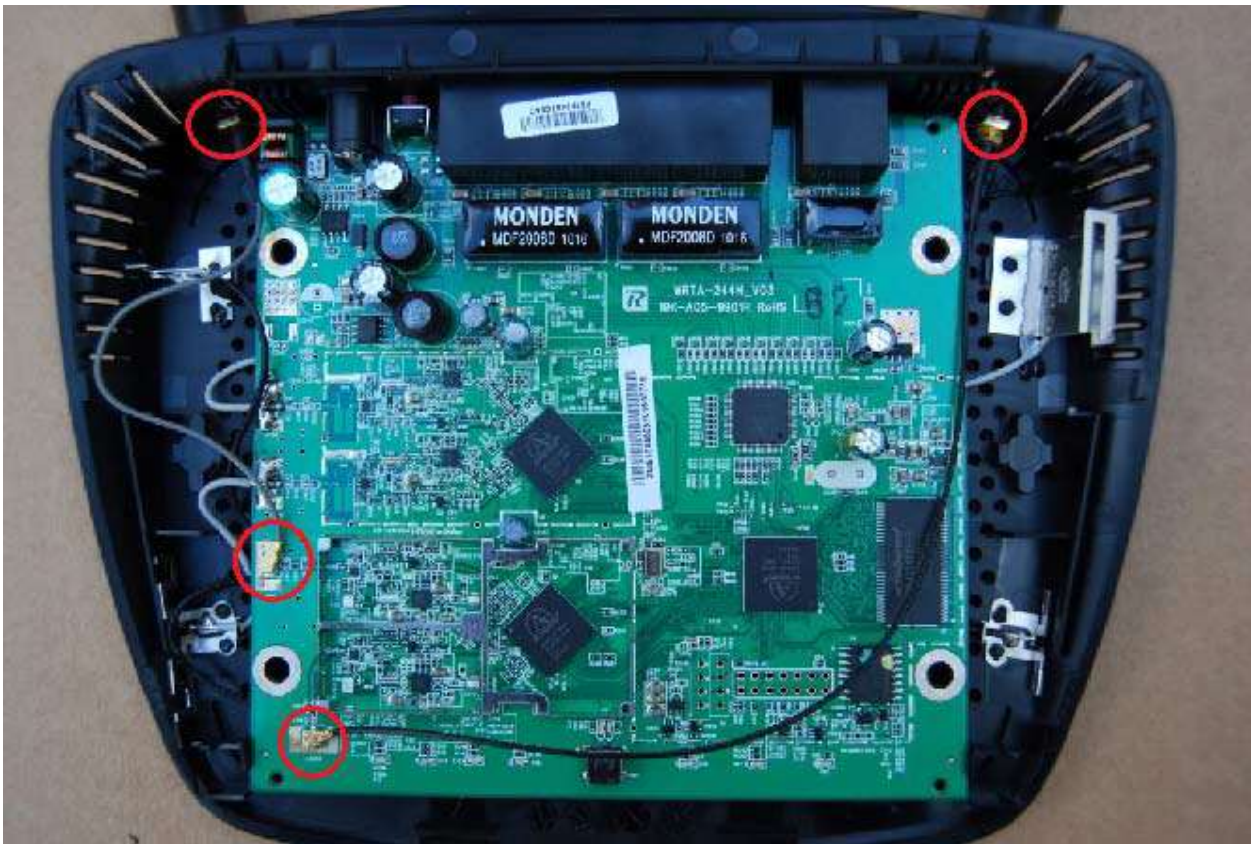
11. **Your mark should be on the corner of the case (see above images) so RP-SMA adapter will clear the board. <<Very important IF YOU DRILL IN THE WRONG SPOT THE BOARD WON'T CLEAR**
12. Drill a smaller hole first with a smaller bit and then go ahead and finish the drilling with the 1/4" drill bit.
13. You may want to get someone to help you hold the unit in place as you drill. Hold the unit vertically on a solid service before drilling. Take your time. No hurry!
14. After drilling there will be a little plastic left around the inside hole that will need removing. Just use a kitchen knife or other small knife to remove the plastic.
15. Attach the UFL cables and the RP-SMA Plugs and of course the 7dBi Antennas and you are set to go. Be sure the nut on the RP-SMA plug is nice and tight, otherwise your antennas will flop.

NOTE: When putting the case back together make sure none of the cables get pinched with screws. You
can secure them in place by using clear tape.

Enjoy

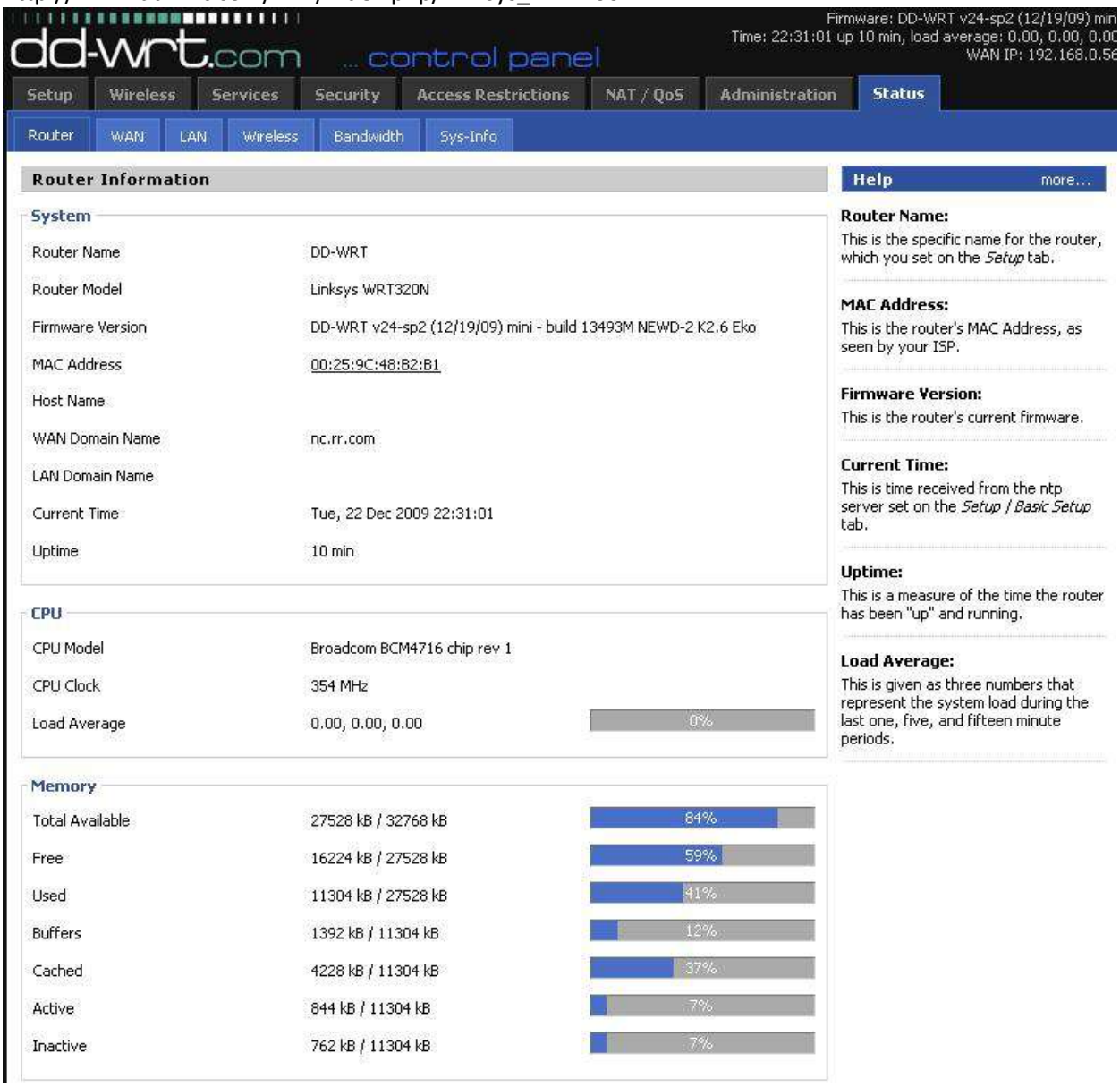
Inside of the WRT400N: Before the antenna modification

After the modification.



DD-WRT:

For optimal performance we recommend replacing the Linksys firmware with DD-WRT. This is a free third party firmware that will help turn your $60 router into a powerful, highly configurable $600 router.
http://www.dd-wrt.com/wiki/index.php/Linksys_WRT400N



DD-WRT Firmware installed on the Linksys WRT400N
Advanced Wireless Settings: TX/RX External Antenna adjustments, TX Power adjustments, etc…

WIFI Radar Scanner:

http://www.metageek.net/products/inssider/ (free download)

The WIFI Radar Scanner will show the signal strength of your router. We recommend using it before and after installing the antennas to see the improvement of the signal strength. It can also show you which antenna position and router location can give you the best signal. The closer to -0db the better the signal, and the closer to -100db the worse.