

Thank you for purchasing the Antenna Mod Kit for your Linksys router. First we will show you how to install the antennas for your router. We will also provide you with a tool that will help test the performance of your newly modified router.



E2500 Antenna Installation Instructions:

1. No Soldering required (here is the list of tools you will need)

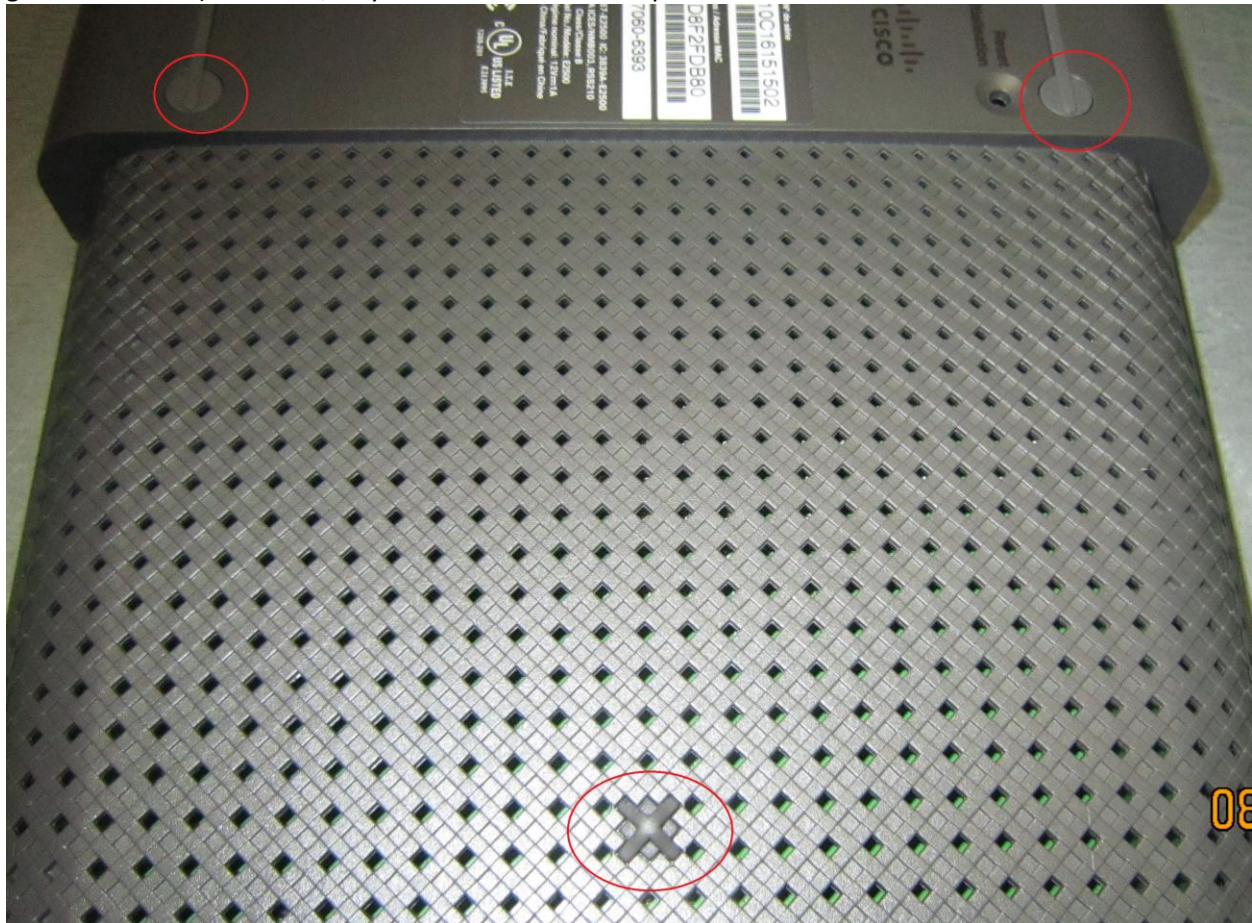
Phillips screw driver

8mm Socket with a ratchet

8mm Open End Wrench

Butter Knife

2. Open the unit. Remove the rubber stands first (the two top ones don't fully remove it just pick it up to get to the screw) and then, all you need is a small Philips screw driver.





The top and bottom of the router separate nicely with some help from you.

Wedge them apart with a kitchen knife or an object that is not sharp.

Begin prying the unit open just down from the vent holes.

The case is on tight, so pry open around the edges a little at a time.

Be patient; she'll eventually pop open for you.

If you brake couple of clips don't worry about it, happens to the best of us.



3. Remove the UFL antenna connectors.

4. Now this part requires some patience.

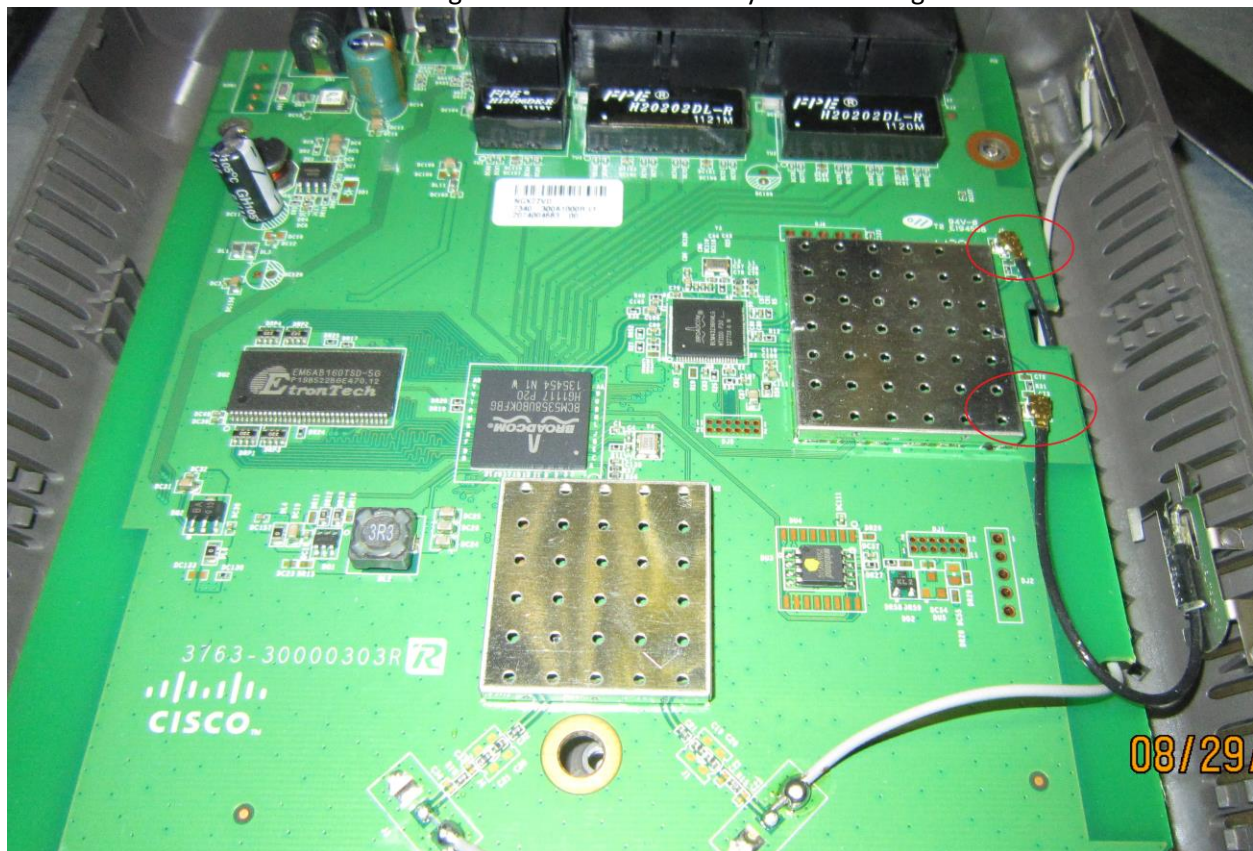
5. Fitting your new UFL connectors into the little holes can take a little practice, and patience

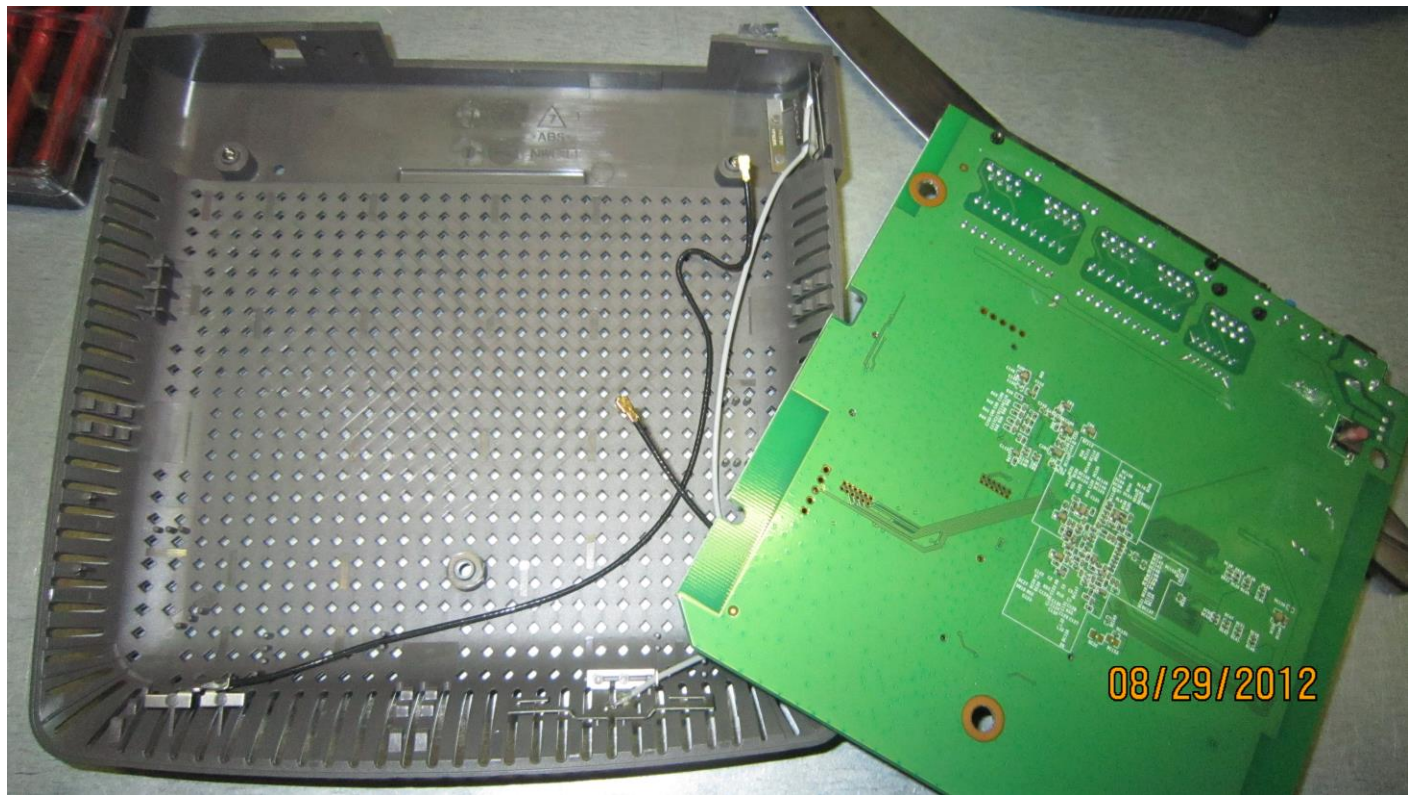
6. So do this first: Practice removing the original UFL antenna cables and then putting them back on.

7. You will be attaching 2 UFL cables (see images below for reference)

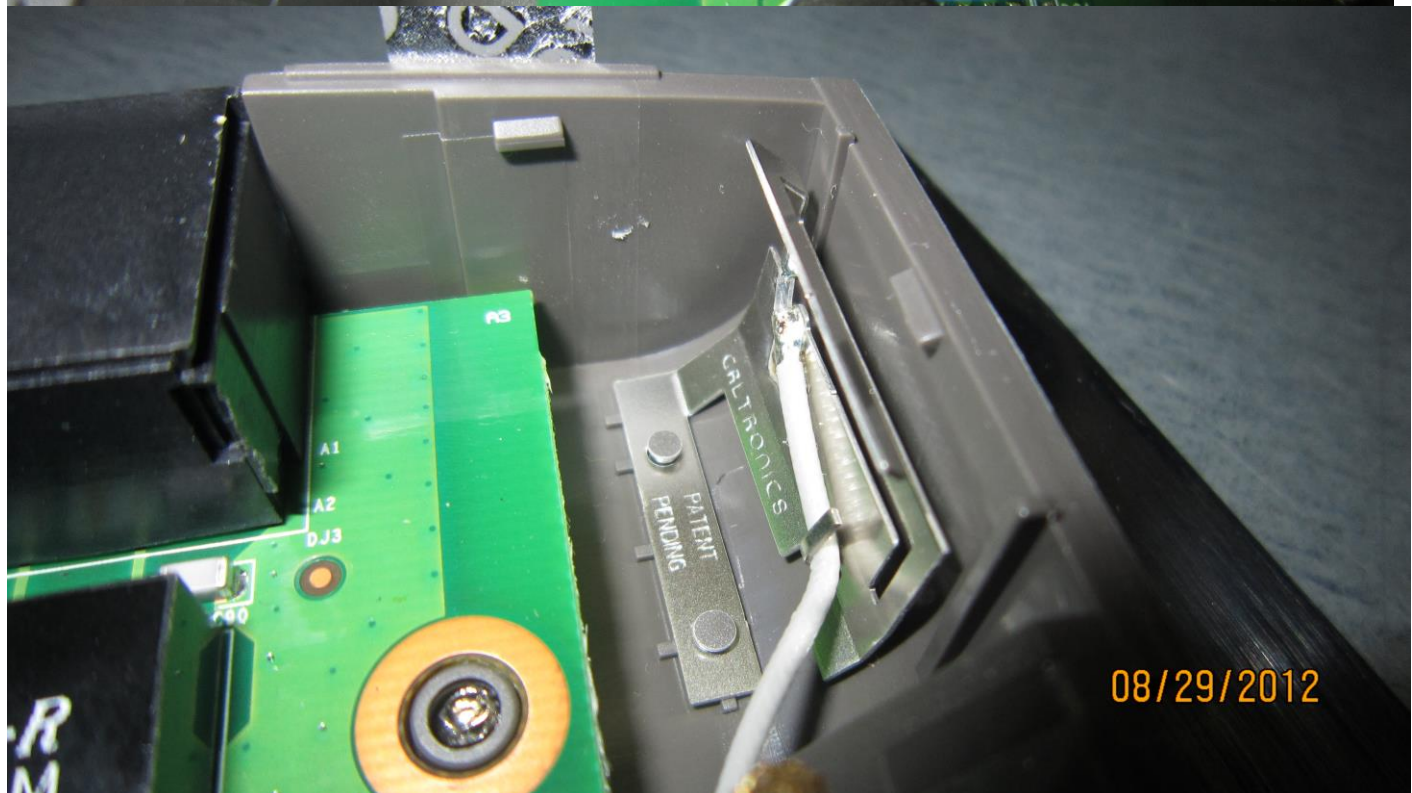
8. Now you are almost ready to drill.

9. Detach the 2 stock UFL cables and get the board out the way of the drilling.





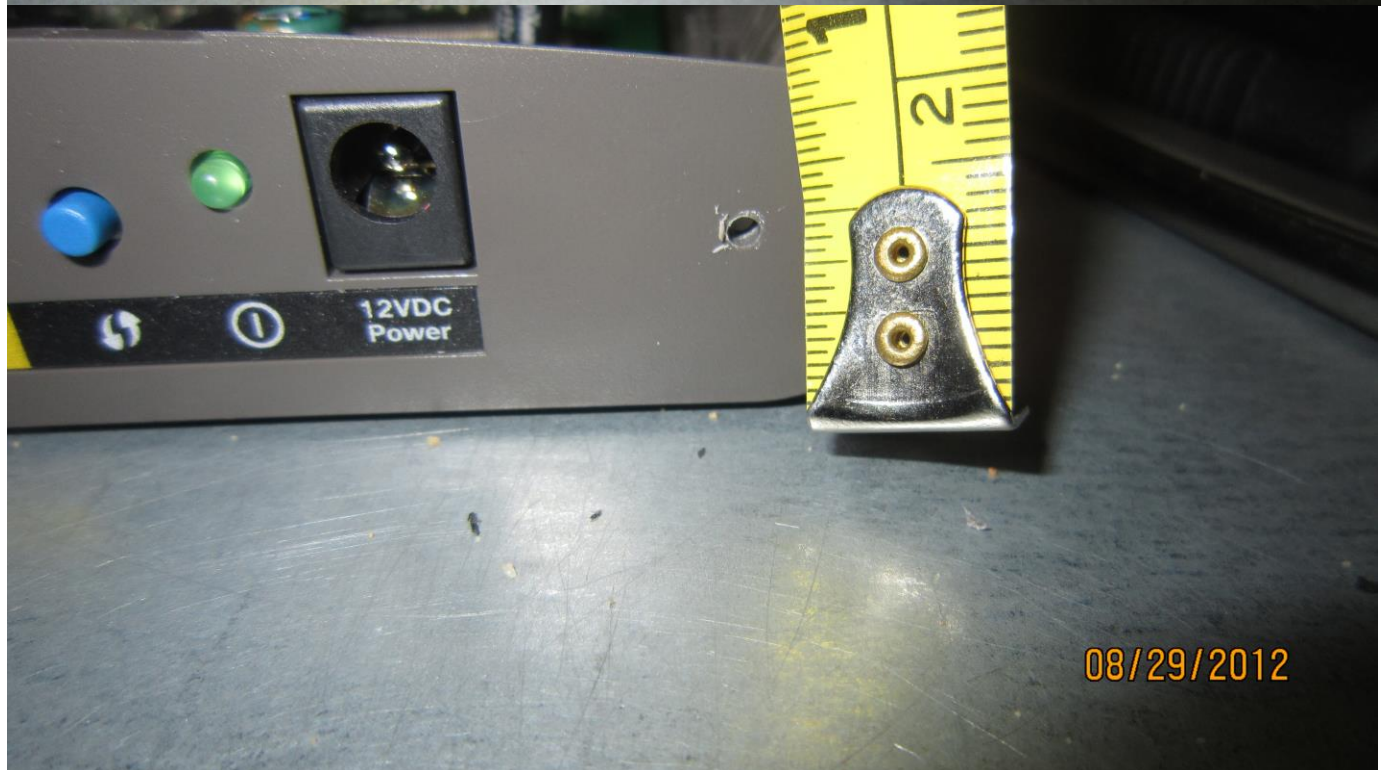
10. Mark on the unit with a pen or whatever you want to use, where you want to drill (see image bellow where the antenna is mounted). Make sure measure it with main board in place to see how much space you need to clear it. If you drill too low you won't be able to insert the U.FI cables!

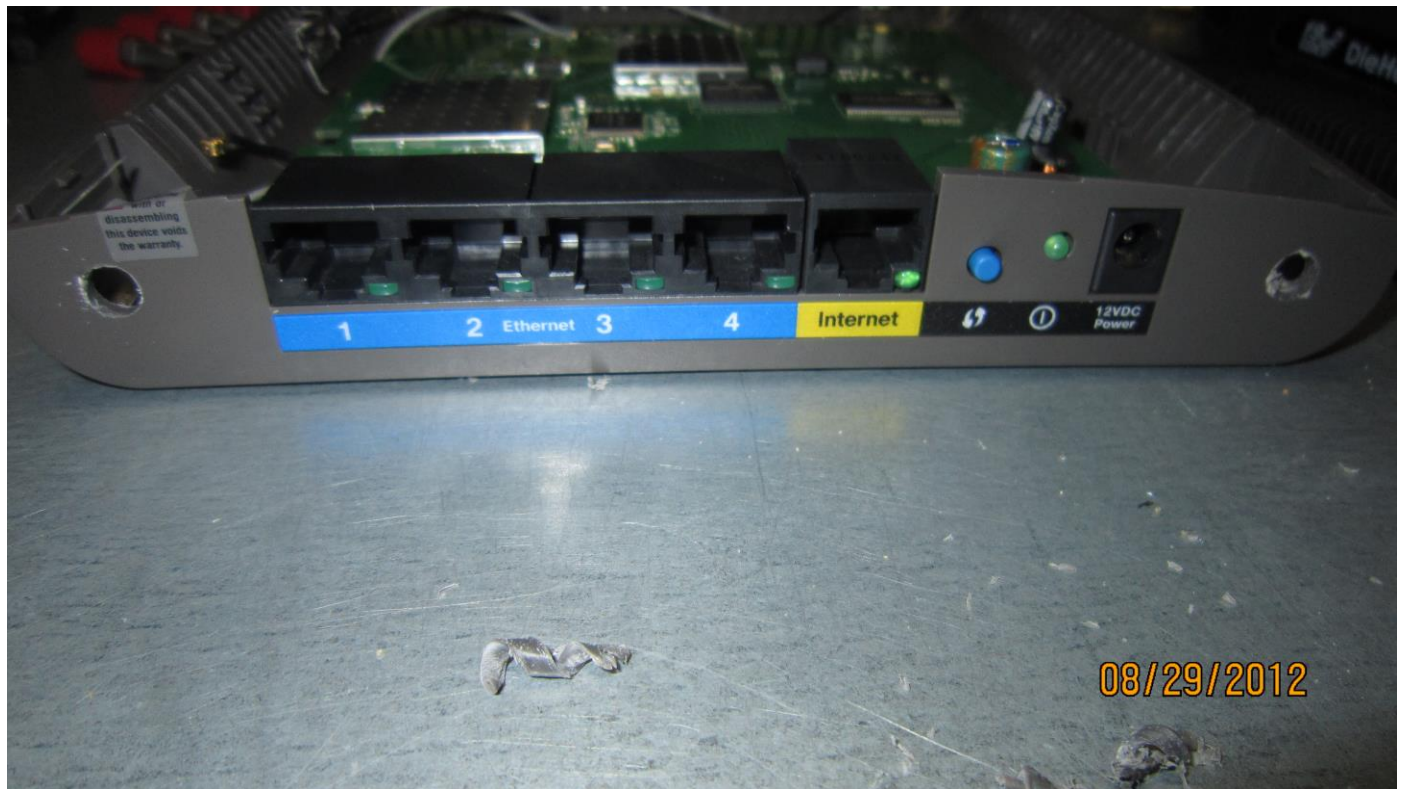


11. Your mark should be just a fraction above center point so the RP-SMA adapter will clear the board.
12. Drill a smaller hole first with a smaller bit and then go ahead and finish the drilling with the 1/4" drill bit.

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.

To mount antennas drill 2 more wholes on top:



If you want to use 2.4ghz band or all 4 antennas externally you will need to solder the other 2 connectors:

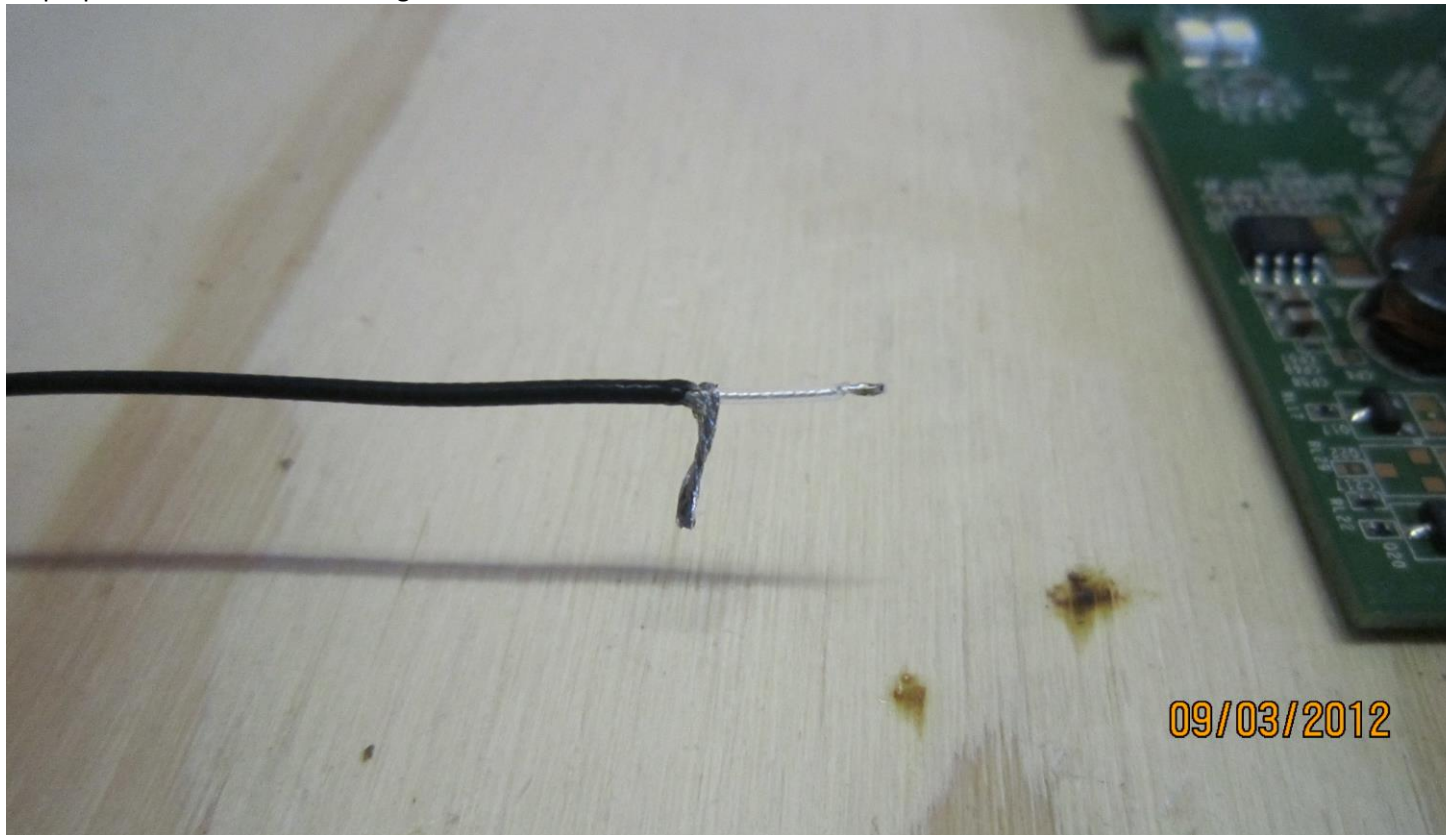


Above is the anatomy of the U.FL cable minus the foil (this is actually coax cable which is almost the same)

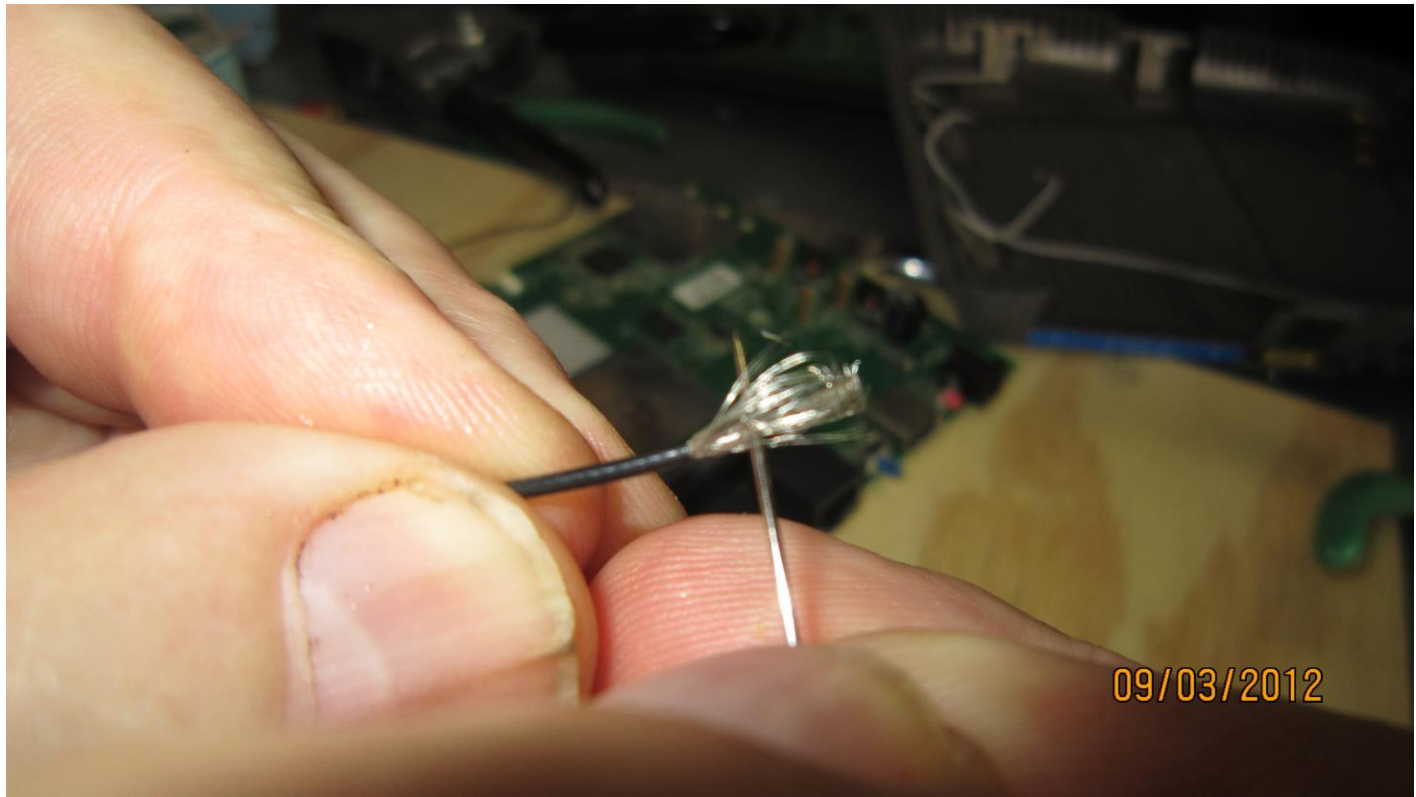
When soldering cable to the board you have 2 contact points, first point is for the outer conductor and 2nd is for inner conductor. Make sure the insulation is not broken (you can use the volt meter after completing the solder to confirm that)

Here is the image of cable preparation:

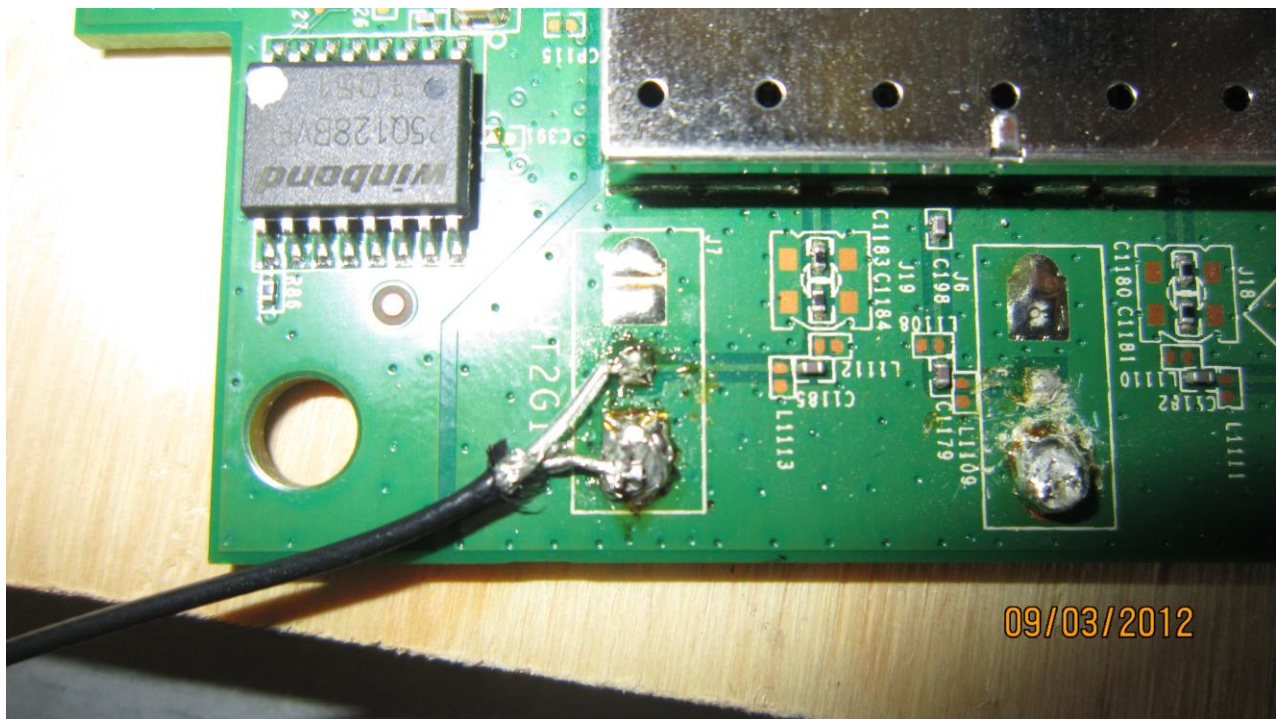
To prepare the cable for soldering:

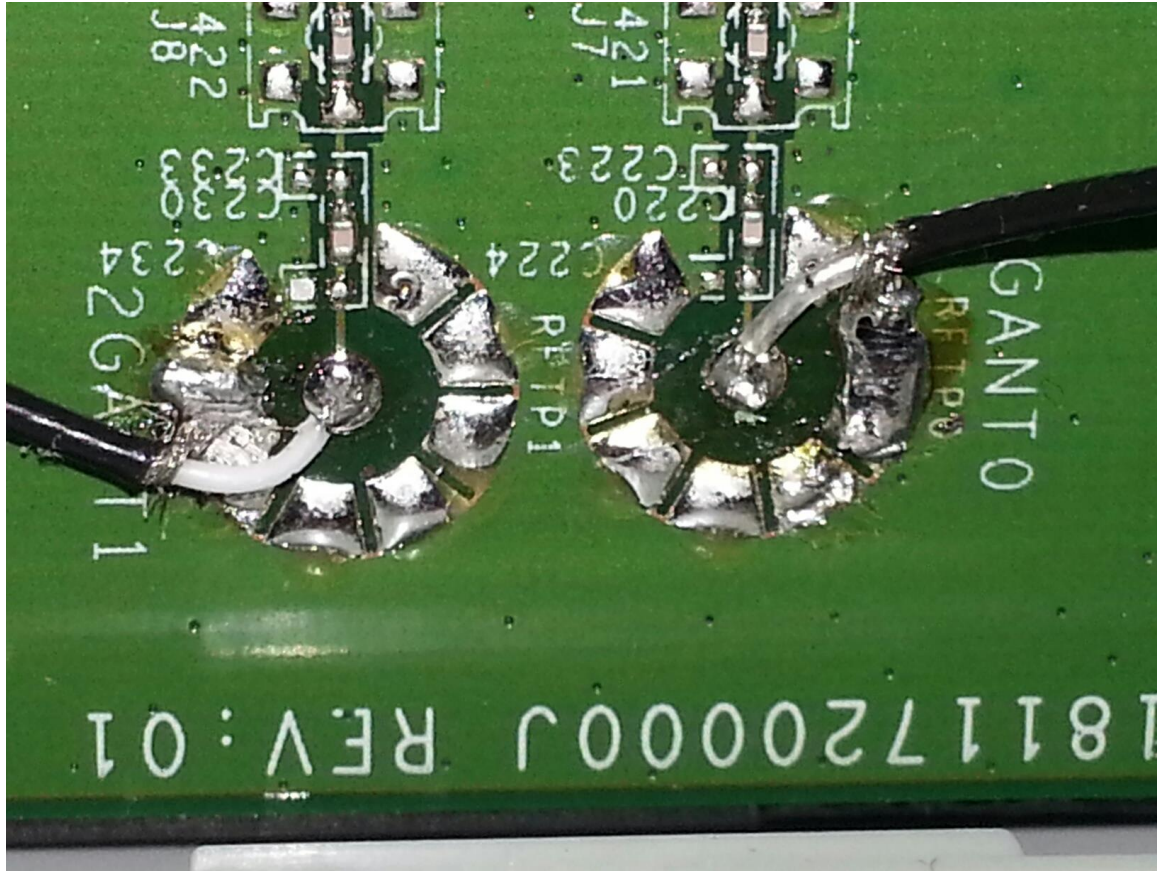


Use a needle to separate the outer portion of cable see below:



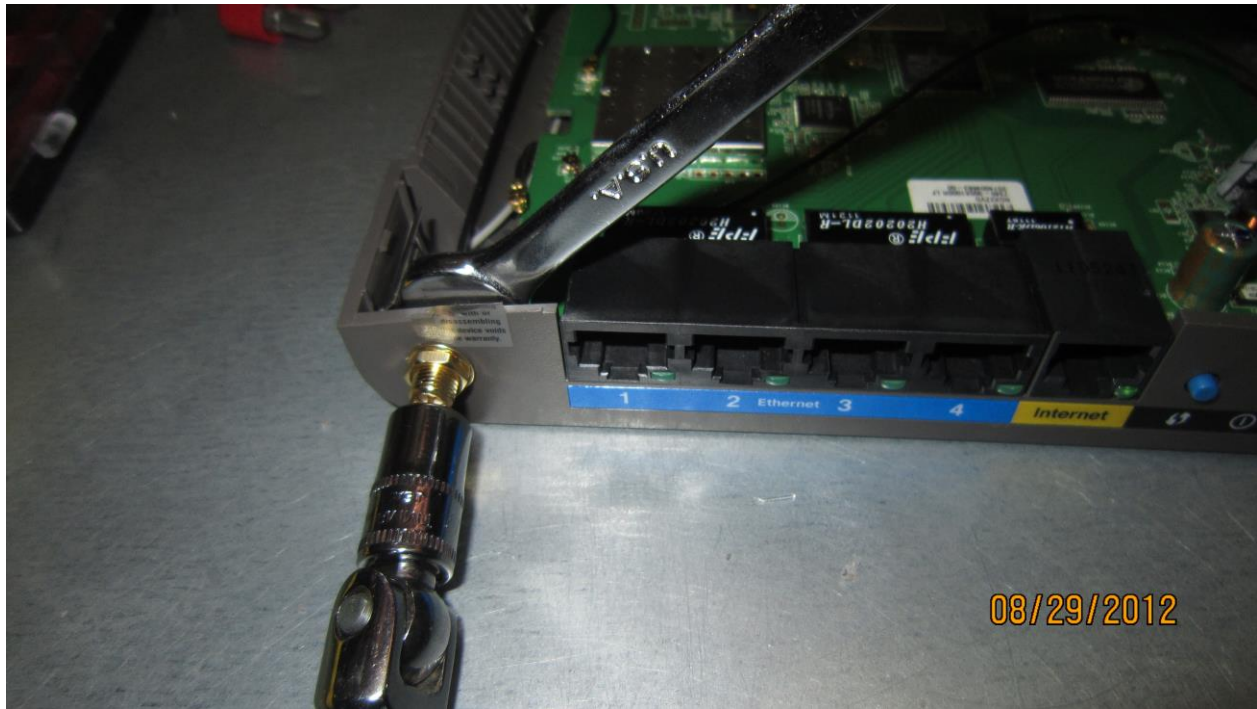
Here are some examples of how to solder the cable properly:





Take your time and make sure each solder is done properly, use the volt meter on each end of the wire to test the contact.

17. Attach the UFL cables and the RP-SMA Plugs and of course the Antennas and you are set to go. Do not remove any built in antennas.



Be sure the nut on the RP-SMA plug is nice and tight (use 8mm wrench and socket here), otherwise your antennas will flop.



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

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.

Please note only works for 2.4 Ghz MODE

http://www.dd-wrt.com/wiki/index.php/Linksys_E2500

This is for advance users only.

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.

