

Thank you for purchasing the Antenna Mod Kit for your Linksys router. 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.



WRT160N-E1000 (All Versions) Antenna Installation Instructions:

1. 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).

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. Unsolder the 2 u.fl cables. Please note you need to be patient with this as Factory soldering is very strong and takes time to un solder. Heat up your soldering gun to 750 degrees and apply some additional solder on top to melt it faster. Be careful not to overheat the board when removing factory solder. It can damage your router permanently!



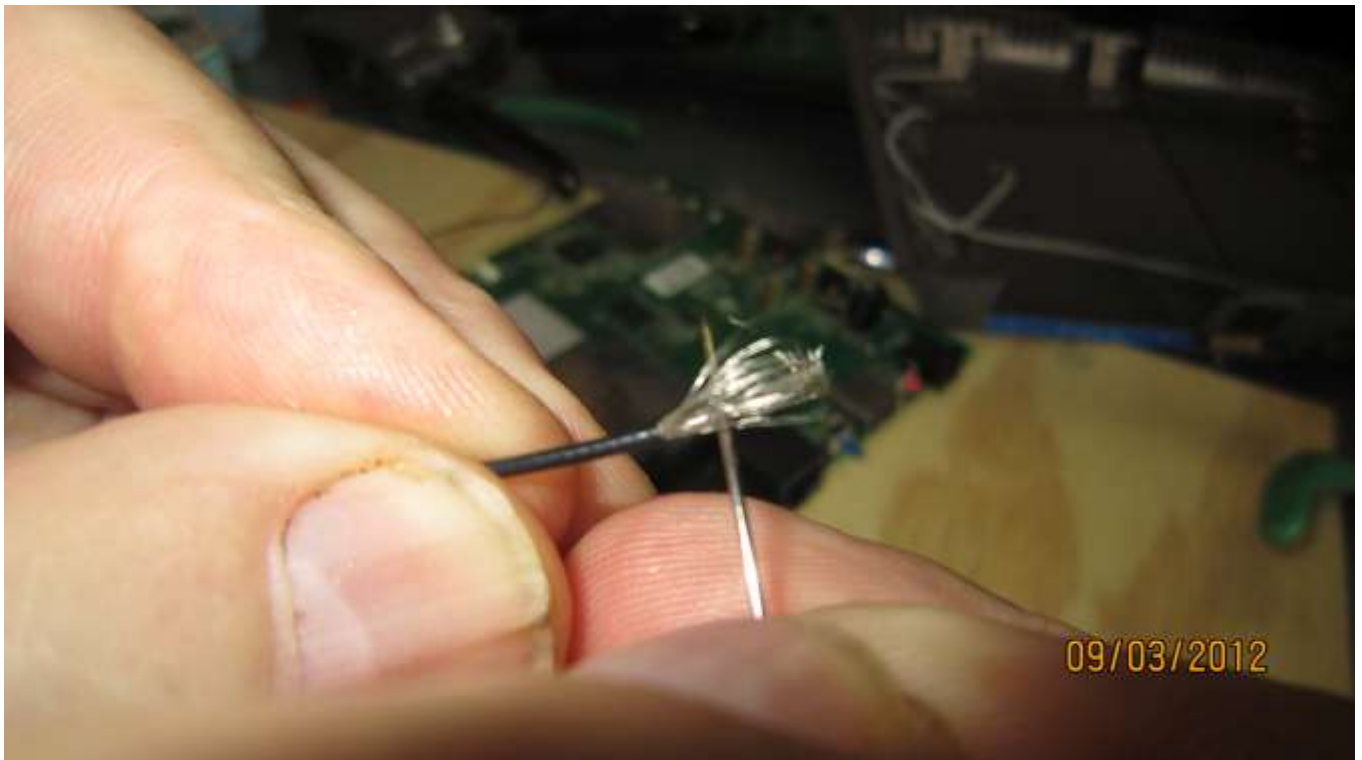
Above is the anatomy of the U.FL cable minus the foil (this is actually coax cable which is almost the same)

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:



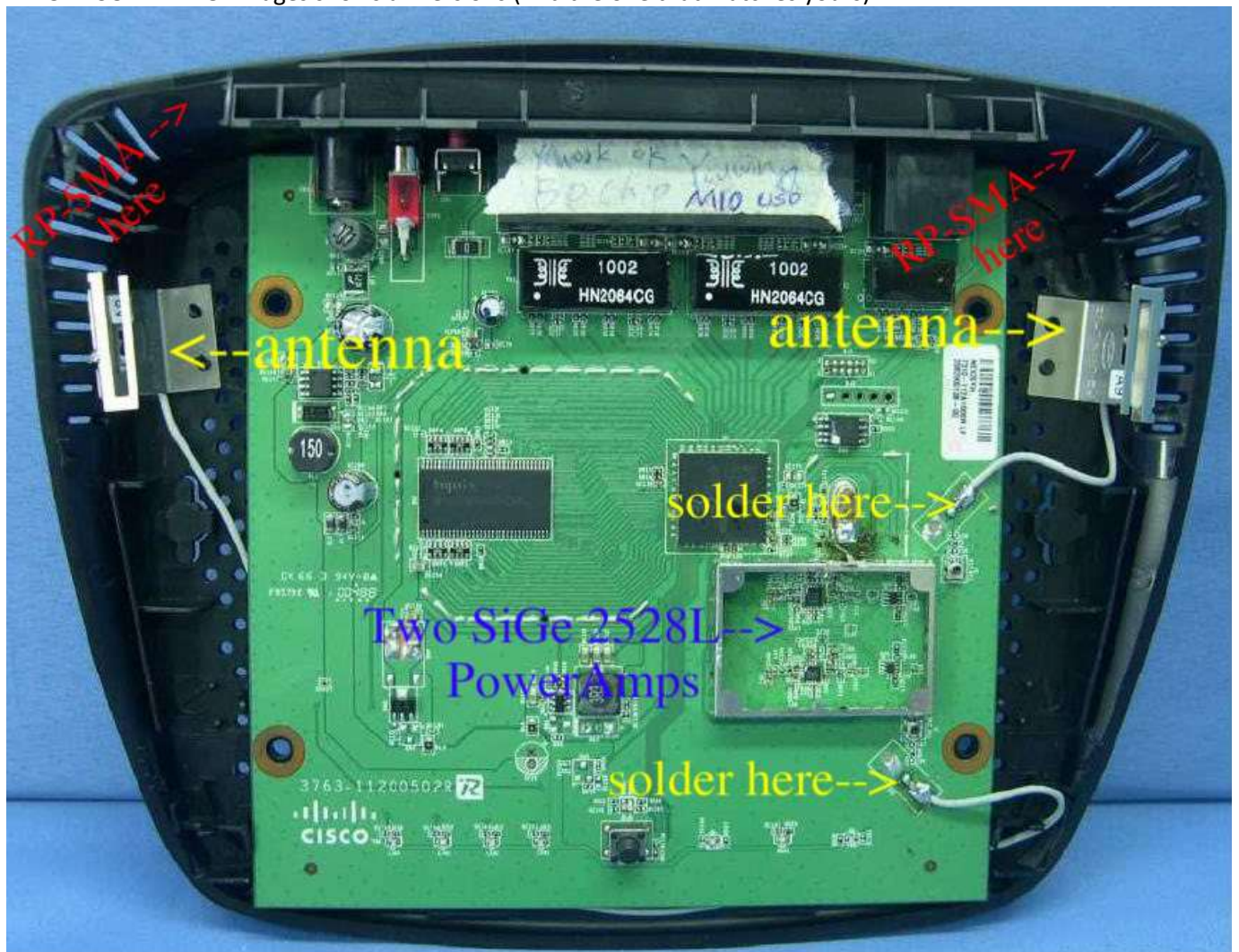
Use a needle to separate the outer portion of cable see below:

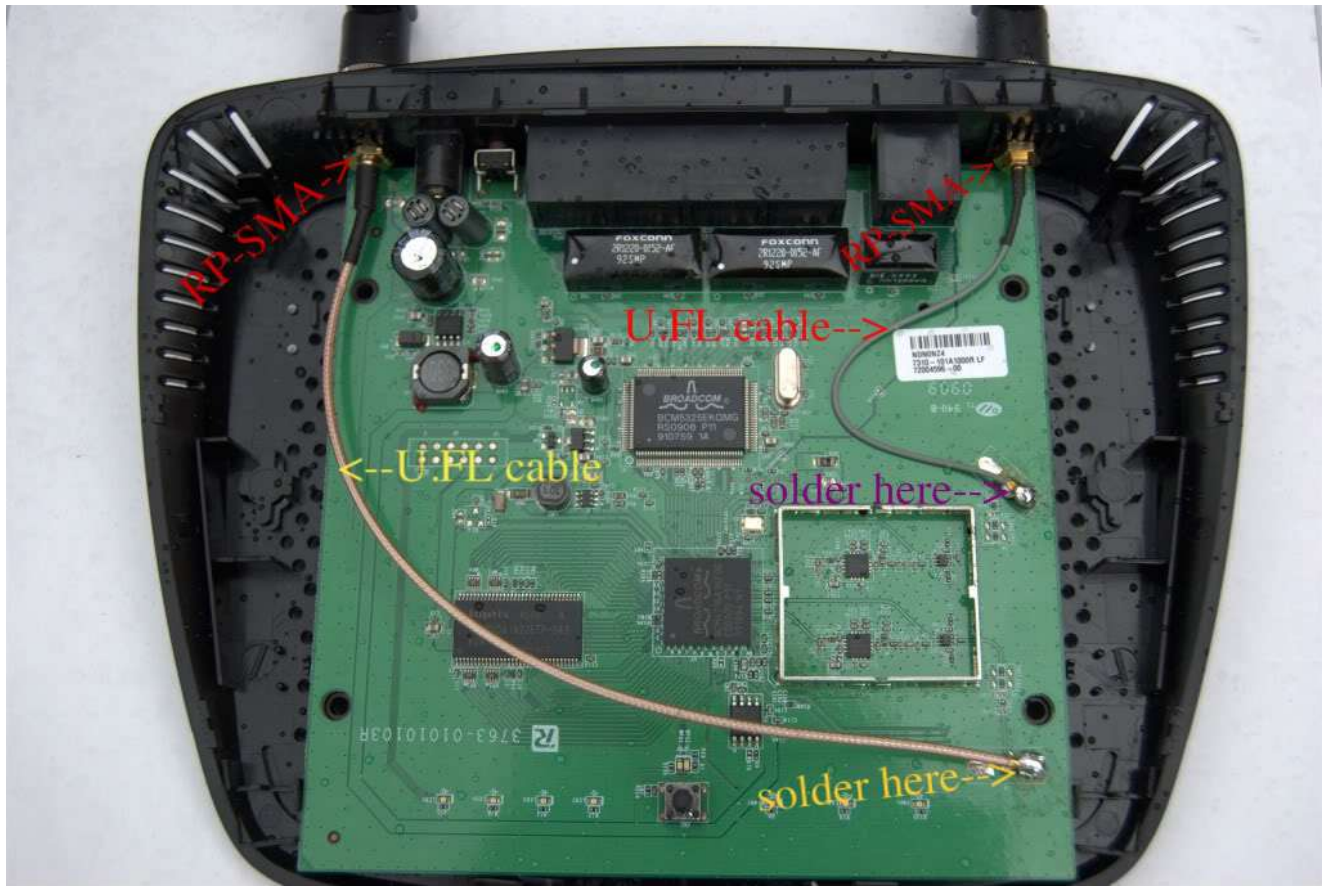


4. Before drilling mark the points where you want to drill. **Your mark should be just a fraction above center point so the RP-SMA adapter will clear the board.** <<Very important IF YOU DRILL TOO LOW THE BOARD WON'T CLEAR
5. Drill a smaller hole first with a smaller bit and then go ahead and finish the drilling with the 1/4" drill bit.
6. 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!
7. 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.
8. Now comes the hard part, soldering the wires.

Prepare the wires as shown in the pictures above.

BEFORE SOLDERING: Images shows all versions (find the one that matches yours)





AP-SMA ->

AP-SMA ->

U.FL cable-->

<--U.FL cable

solder here-->

solder here-->

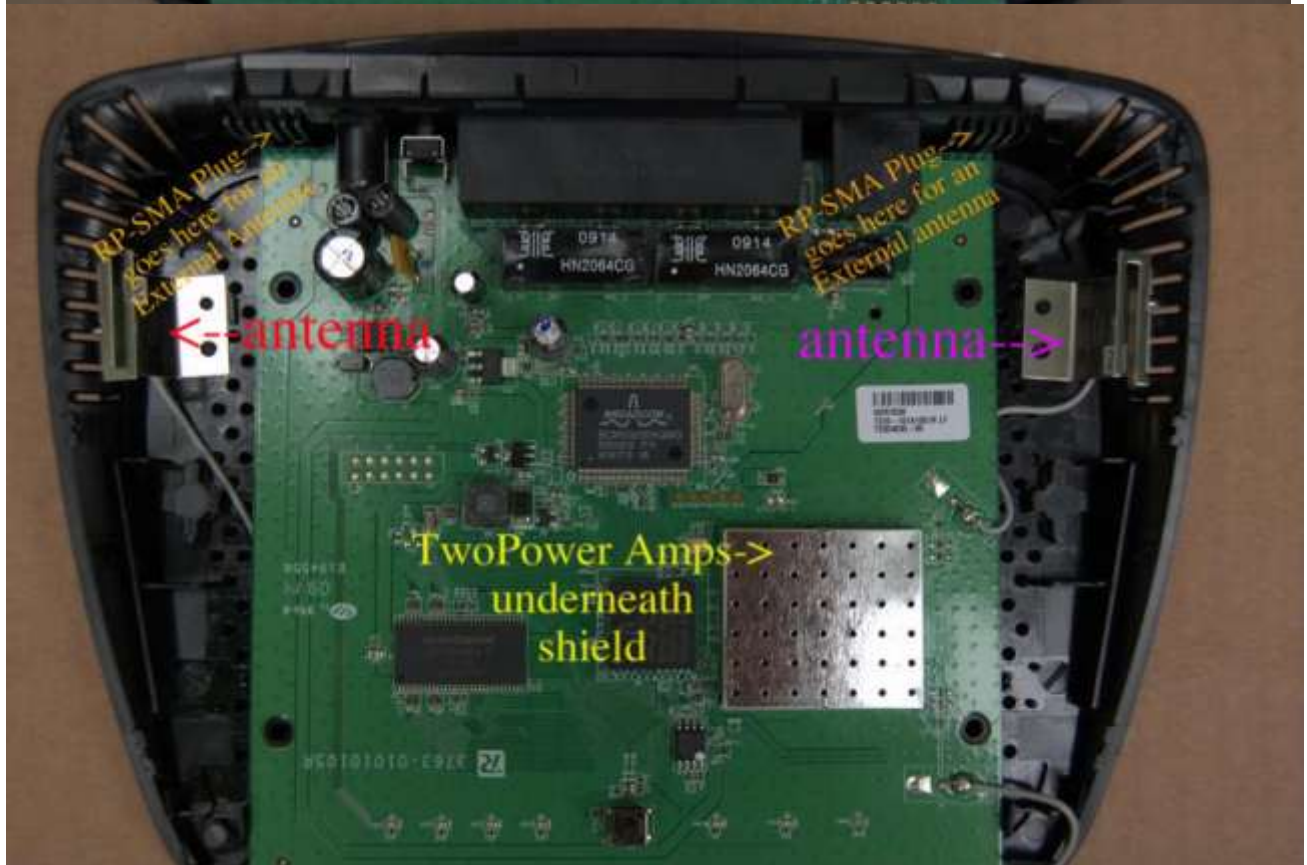


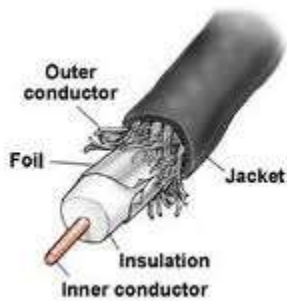
HE0101010-97C

BROADCOM
BCM4329W.DMG
R20908.P11
R30259.3A

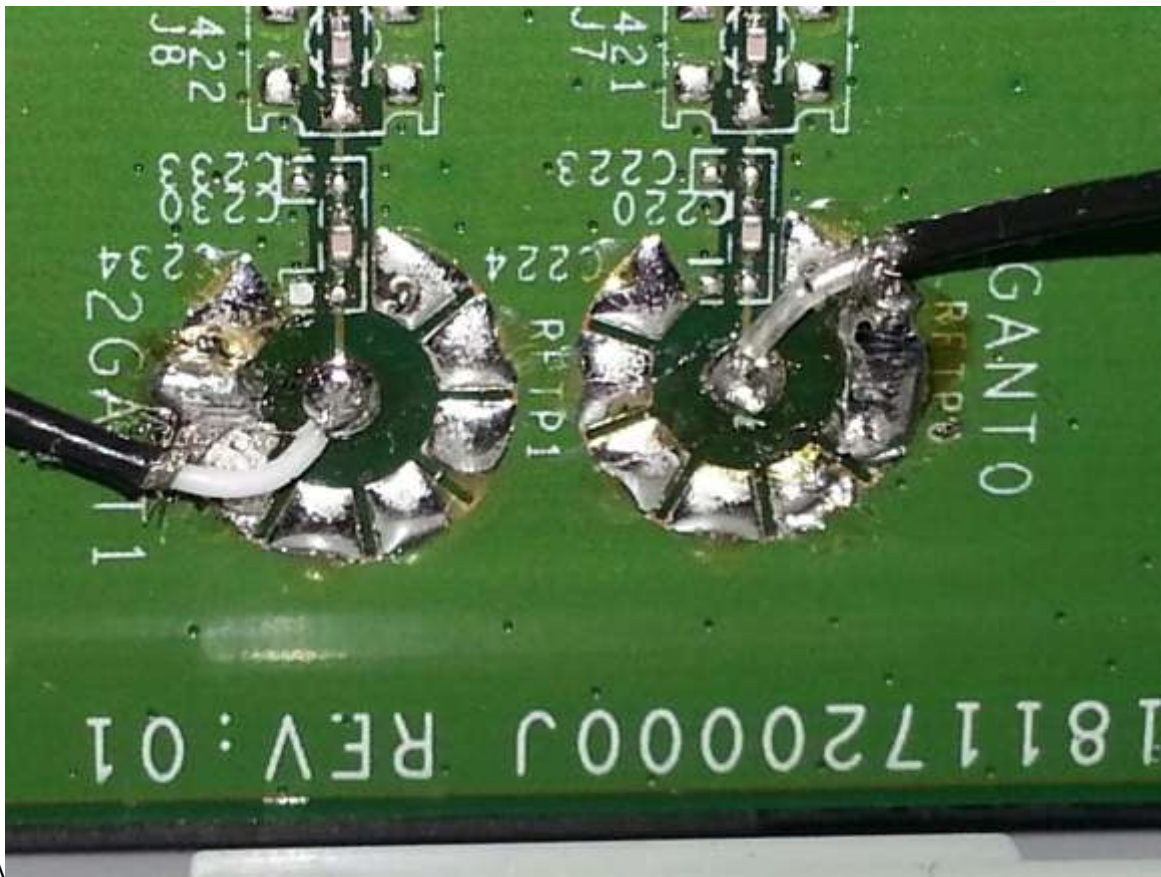
FOXCONN
28228-852-M
922MP

FOXCONN
28228-852-M
922MP





Here is a good example of proper soldering (First image is e3000 and 2nd is a belkin)
Note how insulation is left on all the way until 2nd solder (this is very important) Also note how the cable is split into 2.



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.

9. 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, 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

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.

