

## Installing a WiFi Outside Omni antenna on our 2005 24RB BornFree

We decided to install an outside **WiFi** antenna on our motorhome as the signal we received on our Dell laptop in RV parks was usually not strong enough to connect to the parks AP (access point). We decided on the following product, **Marine Kit with USB Adapter, Antenna, Mount and Cable** purchased from [www.netgate.com](http://www.netgate.com).

A friend had purchased one and I was impressed with the number of WiFi signals he was able to receive compared to mine. We wanted to be able to remove the unit and take it with us for other trips when not camping in our BF.

I installed the antenna on the Winegard Sensor III antenna (Batwing\_TV) so when it is raised, it is above all other obstacles on the roof. I had to fabricate some mounting plates to attach to the antenna. I used stainless steel bolts and Blue Loctite (threadlock) to secure the nuts from vibration.

<http://www.loctiteproducts.com/products/detail.asp?catid=10&subid=48&plid=153>

All nuts and bolts are stainless steel.

I ran the antenna cable down the refrigerator vent and thru the same hole I had drilled for the Moto-Sat dish installation. I mounted the USB adapter up inside one of the overhead storage bins with industrial strength Velcro. All outside connectors are filled with dielectric grease. I let the USB cable hang down from the cabinet when in use, but I think in the future I will modify it and install it on a plate designed for a USB connector. Here is a link for the plate.

<http://www.datapro.net/products/usb-wall-plate-single.html>

It seems to work well on our home wireless but an actual trip will be the real test.

Here is some information on the product.

[http://www.netgate.com/product\\_info.php?products\\_id=328](http://www.netgate.com/product_info.php?products_id=328)

Marine Kit with USB Adapter, Antenna, Mount and Cable

The **NUB-362-EXT** / EUB-362-EXT is the first high power **200mW** USB 2.0 wireless adapter with a detachable antenna that can be installed easily onto any desktop or laptop with an available USB port.

Designed with the boater in mind who would like to use their laptop on board and ashore, this kit provides the power and flexibility to beautifully perform both jobs with a minimum of fuss.

A simple plug of the EUB-362 into the USB port and you can experience the freedom and convenience of high power, high sensitivity wireless networking. A small 2 dBi indoor antenna (**RP-SMA**) is included to use whenever you go ashore or wish to 'turn down' your radio. The addition of the **8.5 dBi** Marine Antenna will easily extend your distance and performance.

Here are some pictures of the installation.

1: This shows what the antenna looks like in the raised position, I wanted an omni-directional antenna so we could get a signal no matter what direction the TV antenna was pointed.



2: Closer view of antenna









5: Close up of antenna mounting, fully adjustable.



6: Top and side view.









8: Below: view from outside with antenna in stowed position.



9: Inside view of cable run, inside 1/2" pvc and behind dividers.



10: View of Wireless USB adapter affixed with Velcro for easy removal. This is actually near the ceiling in one of the upper storage cabinets, passenger side.



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