



Application Note

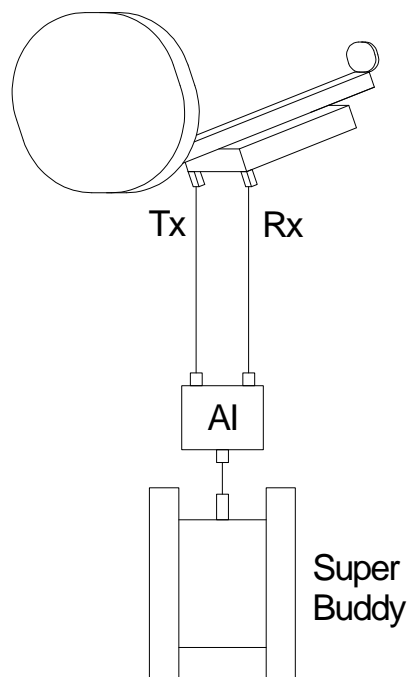
How to install Wild Blue with a Super Buddy™

04/24/2007

The Wild Blue antenna system is powered by 26 volts DC on the TX port of the antenna module. Applied Instruments offers the Blue Bunny™ voltage converter box to power the antenna from the meter but you may also power the antenna from the Wild Blue modem.

With The Applied Instruments Blue Bunny™ Voltage Converter Box

Connect the TX side of the converter box to the TX port on the Wild Blue antenna.
Connect the RX side of the converter box to the RX port on the Wild Blue antenna.
Connect the remaining port on the converter box to the Super Buddy meter's Signal In port (top).



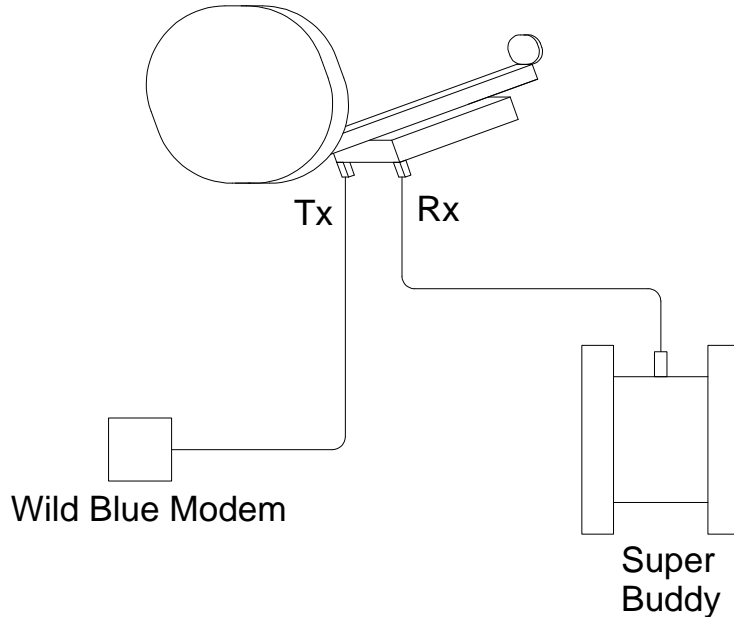
This method allows pointing the antenna before running the cable to the modem.

Note: the Blue Bunny™ converter box should be connected to the Super Buddy with a short cable. The cables from the Blue Bunny™ converter box to the antenna should also be fairly short but can be up to 150 feet long. Longer cables may result in an over-current error or simply fail to turn the antenna on.

To prevent sparking and to protect components, connect all cable before turning the LNB power on. Turn off the LNB power before disconnecting the cables.

Without The Applied Instruments Blue Bunny™ Voltage Converter Box

Connect the TX port on the Wild Blue antenna to the TX port of the Wild Blue modem.
Connect the RX port on the Wild Blue antenna to the Super Buddy meter's Signal In port (top).
Turn the Wild Blue modem on.



Wild Blue Satellites

Wild Blue provides Service from two satellites that are both located at 111 West. Anik F2 was in service first and uses left-hand circularly polarized signals. The Wild Blue 1 satellite began providing service in 2007 and uses right-hand circularly polarized signals. The polarization difference allows the two satellites to use the same frequency range without interference. The LNBS for these systems are either right or left-handed. You must use the correct LNB for the system you are installing.

Wild Blue Spot Beams

The Wild Blue system uses spot beams for different areas. The Super Buddy will look up the beam number for your area given the zip code. Each spot beam has two or three signals on each spot beam. The spot beam numbers are NOT the same as the pointing aid settings given by Wild Blue although they are related.

Meter Setup

Push the **SYST** System soft-key to select the following:

- REGION your geographic region
- SERVICE **Other Providers**
- SYSTEM **Wild Blue**
- LNB MODEL WB Anik – if you are installing for the Anik satellite, OR
Wild Blue 1 – if you are installing for the Wild Blue 1 satellite
- SWITCH TYPE none

To make selections, arrow up or down to the item to change and press **Enter**, then arrow up or down to the desired option and press **Enter**.

Press **EXIT** or **DONE** to return to Run Mode

Zip Code Lookup

Push the **ZIP** soft-key and enter the zip code where you are installing the system. *The Super Buddy will look up the zip code and the Wild Blue beam number for your area.* The beam number will be displayed at the bottom of the screen and utilized when you return to the Run Mode.

```
Wild Blue 1
111.0W      ◀E  W▶
Zip/Postal  46203
Latitude    39.5
Longitude   -85.7
Azimuth     216.6
Magnetic    220.8
Elevation   37.3
Polar off   27.4
SPOT BEAM
Beam        115
Arm angle   19.7
Skew        62.6
APA         2
EXIT
```

The arm angle, skew setting and APA number are also calculated and displayed at the bottom of the screen.

Press **EXIT** or **DONE** to return to Run Mode

Run Mode

When you return to the Run screen, Anik F2 or Wild Blue 1 at 111 West will automatically be selected and the available transponders will be limited to spot beam used in your area. The up and down arrows will scroll through the 2 or 3 carriers on the beam. Any of these should work.

- Press the LNB button to power up the LNB (not needed if using power from the modem)
- Align the antenna to obtain a strong signal level
- If you receive a LOCK indicator, peak up the dish, you found it
- Disconnect the Super Buddy from the system before using the Wild Blue SVT tool to obtain an accurate SVT reporting of the down stream channel power.

Note: the ID function does not work with Wild Blue as it does for other installations. If you receive a LOCK status, you can be sure you are pointed correctly.

Over-riding the Beam Number

If for some reason you want to view the signals on beams other than the one assigned to your zip code, you can override the assigned beam. Go to the ZIP screen, arrow down to the Wild Blue beam number and enter the desired beam number. When you return to the Run screen, the entered beam will be displayed but may not be visible in your area. If you enter a beam number of 0 (zero), you can scroll through all of the beams.

Modem Provisioning

After the dish is peaked using the Super Buddy, you should remove the Super Buddy and connect the Wild Blue APA device. Set the APA device to the proper setting for your area, this is shown on the Super Buddy zip code screen and is provided by Wild Blue on the work order. Then connect the modem and allow the modem to find and lock onto the correct beam.

NOTE: You must have the APA device connected to ensure the modem will lock to the correct signal.

Without the APA, it is possible that the modem will latch onto the wrong beam and never obtain the necessary provisioning signals from the satellite.

Follow Wild Blue's instructions for provisioning and final testing.

NOTE: The Blue Bunny Voltage Step Up cannot be used with the Super Buddy and Sat Buddy line (Sat Buddy, Sat Buddy 2, and Dual Buddy) to power the WildBlue TRIAs manufactured by Ko Space in Korea. This is due to the extremely high current level required. For the Ko Space applications, use power from the WildBlue modem during dish alignment. Refer to the section on page 2 of this application note titled "Without the Applied Instruments Blue Bunny Voltage Converter Box" for detailed instructions.

The Blue Bunny Voltage Step Up can be used with the Super Buddy and Sat Buddy line (Sat Buddy, Sat Buddy 2, and Dual Buddy) to power the more popular WildBlue TRIA manufactured by UMA in Taiwan.

Please refer to the tag on the bottom of your TRIA to see if it's compatible with the Blue Bunny Voltage Step Up. If it says "Made in Taiwan by UMA", then it is compatible. If it says "Made in Korea by Ko Space", then it is NOT compatible.

Updates

Applied Instruments will make changes as we learn of them and post them on our web site in our Field Guide updates. (www.appliedin.com/sbdownmenu.html)

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