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# Instructions for installing and using the High Power USB WiFi adapter for Optional Wireless Access to the AntennAlign Alignment Tool (AAT)

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#### General

The AAT can be fitted with 802.11g wireless capability to allow access to the embedded software in the AAT. Using this interface, the AAT can be programmed with alignment data, reports can be generated, and the AAT can be operated remotely from Windows laptops (XP, Vista, Windows 7) or other wireless enabled devices that support ad hoc connections and common web browsers (Internet Explorer, Firefox, Safari). The AAT can be accessed using standard 802.11G wireless built into most laptops. However, the built-in WiFi typically has marginal power and range. If it is found that the built-in WiFi is not sufficient, use the high power WiFi adapter that comes standard in every AAT optioned with wireless capability.

With proper installation of the high power WiFi adapter, laptops can increase their wireless range making the AAT accessible up to several hundred feet (350-400). On completion of this procedure, a laptop should be able to connect to the AAT in under a minute.



### **Preparation**

Determine what laptop will be used for connecting to the AAT wirelessly.
Note: installation can be performed on multiple laptops, as there is no license for the software supporting the WiFi adapter. However, the laptop must have the adapter hardware installed to achieve the increase in range.

### AAT HIGH POWER WIFI ADAPTER INSTALLATION INSTRUCTIONS

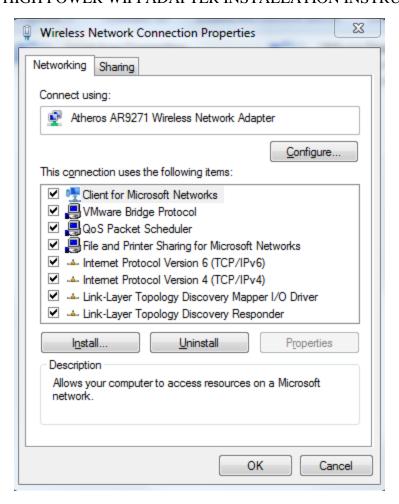
 Determine the operating system of the laptop by selecting "Start" and then right click on "Computer" and then selecting "Properties". Determine if the laptop is using Windows XP, Vista, or Windows 7.

### For Windows 7 operating systems (both 32 and 64 bit)

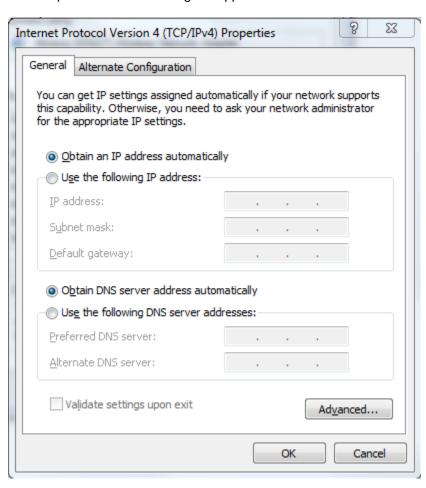
- 1) WiFi adapter typically installs automatically when it is cabled to the laptop's USB ports. This takes a minute or two. If the adapter installs correctly, go to Step 6. If the adapter does not install or asks for a CD or driver, go to step 2
- 2) The installation of the adapter requires 1) an internet connection, or 2) the CD for the adapter. If you are using the CD method, insert the CD into the laptop. Exit any installation program that starts from inserting the CD.
- 3) Insert the WiFi adapter into an available USB port on the laptop.
- 4) Windows 7 will automatically install the adapter by getting the driver from the internet or from the CD (takes a minute or two).
- 5) You should be notified that the installation was successful
- 6) Click on the network icon
  - or and choose "Open Network and Sharing Center".
- 7) Click "Change Adapter Settings"
- 8) Right Click on the icon for the new WiFi adapter and click "Rename". Rename the connection to "AAT Wireless Adapter" and press "Enter". The wireless adapter icon should look similar to this:



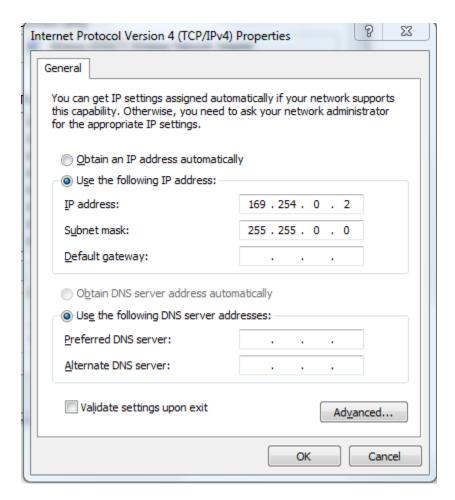
- 9) Right Click on the "AAT Wireless Adapter" and choose "Properties".
- 10) Once "Properties" has been clicked, the following will be displayed:



11) Click <u>once</u> on Internet Protocol Version 4 (TCP/IPv4) to highlight it and then click "Properties". The following will appear:



### 12) Configure the pop-up as follows



- 13) Click "OK" and then "Close"
- 14) Close "Network Connections"

Go to Making the Connection Between the Laptop and the AAT later in this document

## For Windows XP and Vista operating systems:

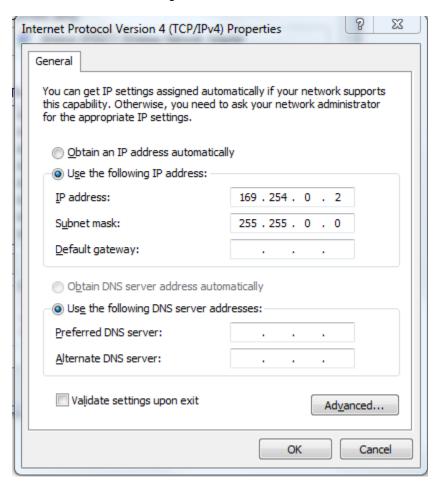
- 1) Insert the installation CD into the laptop. If the installation automatically starts, please exit the installation program but leave the CD in the laptop drive.
- 2) Insert the WiFi adapter in an available USB slot.
- 3) The "Found New Hardware" wizard should run. Choose to install the software automatically.
- 4) Complete the wizard and your adapter should install successfully.
- 5) Once the adapter has been successfully installed, remove the CD.
- 6) For XP On the laptop select "Start", "Control Panel", then "Network Connections" For Vista select "Start", "Network and Sharing".
- 7) Select "Manage Network Connections" (Vista only).
- 8) Right Click on the icon for the new WiFi adapter and click "Rename". Rename the connection to "AAT Wireless Adapter" and press "Enter". The icon should look similar to this:



- 9) Right click on "AAT Wireless Adapter" and select "Properties".
- 10) **For Windows XP** Under "this connection uses the following items:", click <u>once</u> on "Internet Protocol (TCP/IP)" to highlight it, then click "Properties"

**For Vista** – Under "this connection uses the following items:", click <u>once</u> on Internet Protocol Version 4 (TCP/IP) to highlight it, then click "Properties"

11) Set the "Internet Protocol (TCP/IP) Properties" pop-up to the following settings and click "OK" and then "OK" again



- 12) Close the Network Connections pop-up
- 13) Move to **Making the Connection Between the Laptop and the AAT** later in this document.

### Making the Connection Between the Laptop and the AAT

- 1) Turn on the AAT and enable WiFi from the Main Menu. "WiFi" appears in the vertical screen of the AAT near the bottom.
- 2) On the lower right of your computer screen, find the network icon.

For XP: Right click on the network icon. The available wireless networks will be displayed. After several seconds, the wireless network for the AAT should appear. It will be labeled "AAT 8010xxx" where 8010xxx is the serial number of your AAT.

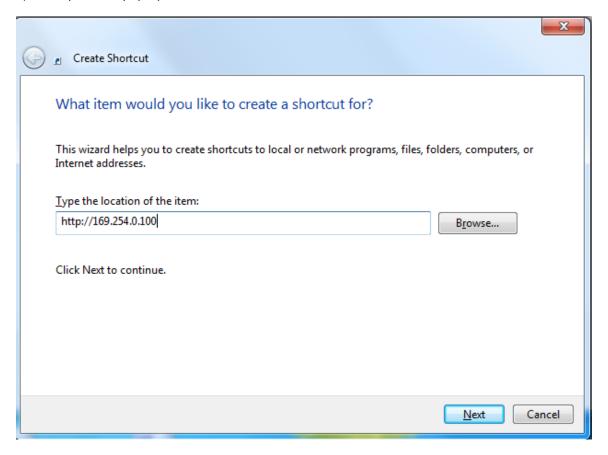
For Vista: Click on the network icon. Choose "connect or disconnect". After several seconds, the wireless network for the AAT should appear. It will be labeled "AAT 8010xxx" where 8010xxx is the serial number of your AAT.

For Windows 7: Click on the network icon. After several seconds, the wireless network for the AAT should appear. It will be labeled "AAT 8010xxx" where 8010xxx is the serial number of your AAT.

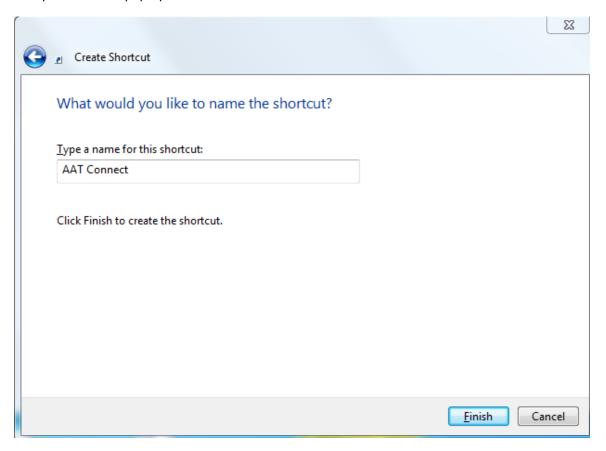
- Click the AAT connection and select "Connect". The laptop and the AAT will be connected after a few moments.
- 4) Open an internet browser and type in: 169.254.0.100. After a few seconds the AntennAlign web page should appear.
- 5) Login normally and use the AAT website to perform your work. Be sure to logout when finished with the AAT. Turn off the AAT when not in use to extend battery life.

### Creating a shortcut to the AAT

- 1) To create a shortcut to the AAT web site, right click on the laptop desktop in an open area and choose "New" then "Shortcut".
- 2) Complete the pop-up as shown below and click "Next":



3) Complete the new pop-up as shown below and then click "Finish"



The shortcut is now complete for the laptop to AAT connection

### AAT HIGH POWER WIFI ADAPTER INSTALLATION INSTRUCTIONS

### **Using the WiFi Adapter and shortcut**

- 1) To connect to the AAT, turn the AAT on and then Enable WiFi from the Main Menu. "WiFi" will appear in the bottom of the vertical display.
- 2) Plug the WiFi adapter into the laptop and wait about 1 minute for the adapter to activate.
- 3) Click the network icon on the laptop and connect to the AAT (AAT 8010xxx). After a few seconds it should show "connected".



4) Once the laptop displays "connected", click the "AAT Connect" shortcut on the desktop. The AAT web site should appear. Use AAT normally. Remember to log out.

The adapter should be used with the directional panel antenna. For best signal strength, aim the panel antenna directly at the AAT. When the AAT is mounted on the tower, orient the antenna as shown below:



When using the adapter on the ground, orient the antenna as shown below:

