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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)

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).

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 well less than a minute.

Preparation

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

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

- 1) 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.
- 2) Insert the WiFi adapter into an available USB port on the laptop.
- 3) Windows 7 will automatically install the adapter by getting the driver from the internet or from the CD (takes a minute or two).
- 4) You should be notified that the installation was successful
- 5) Click on the network icon



or 📶 and choose "Open Network and Sharing Center".

- 6) Click "Change Adapter Settings"
- 7) 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:



AAT Wireless Adapter Identifying... Realtek RTL8187 Wireless 802.11b...

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

Wireless Network Connection Properties	23					
Networking Sharing						
Connect using:						
Atheros AR9271 Wireless Network Adapter						
Configure This connection uses the following items:						
 Client for Microsoft Networks VMware Bridge Protocol QoS Packet Scheduler File and Printer Sharing for Microsoft Networks Internet Protocol Version 6 (TCP/IPv6) Internet Protocol Version 4 (TCP/IPv4) Internet Protocol Version 4 (TCP/IPv4) Internet Protocol Version 9 (TCP/IPv4) 						
Install Uninstall Properties						
Description Allows your computer to access resources on a Microsoft network.						
ОК Са	ncel					

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

Internet Protocol Version 4 (TCP/IPv4)	Propert	ties		2	23
General Alternate Configuration					
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.	natically ask you	if your ur netw	networ ork adm	k suppo ninistrati	rts or
Obtain an IP address automatical	у				
OUse the following IP address:					
IP address:					
Sybnet mask:					
Default gateway:					
Obtain DNS server address autor	natically				
OUSe the following DNS server add	resses:				
Preferred DNS server:					
<u>A</u> lternate DNS server:					
Validate settings upon exit			Ad	l <u>v</u> anced	
L		Oł	<	Ca	ncel

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11) Configure the pop-up as follows

Internet Protocol Version 4 (TCP/IPv4)	Properties 🛛 🖗 🔀
General	
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.	natically if your network supports ask your network administrator
Obtain an IP address automatical	y
• Use the following IP address:	[]
IP address:	169.254.0.2
S <u>u</u> bnet mask:	255.255.0.0
Default gateway:	· · ·
Obtain DNS server address autom	natically
• Use the following DNS server add	resses:
Preferred DNS server:	
Alternate DNS server:	· · ·
Validate settings upon exit	Ad <u>v</u> anced
	OK Cancel

12) Click "OK" and then "Close"

13) Close "Network Connections"

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

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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". Then select "Manage Network Connections".
- 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:



AAT Wireless Adapter Identifying... Realtek RTL8187 Wireless 802.11b...

- 8) Right click on "AAT Wireless Adapter" and select "Properties".
- 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"

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

Internet Protocol Version 4 (TCP/IPv4) Properties						8	23		
General									
You can g this capab for the ap	et IP settings assign ility. Otherwise, you propriate IP settings	ed autom I need to S.	atically ask you	if you ur net	ır ne work	two adr	rk su minis	ipport trator	ts
	ain an IP address aut	tomatically	/						
- 🔍 U <u>s</u> e	the following IP addr	ess:							
<u>I</u> P addr	ess:		169.	254	. 0		2]	
Subnet	mask:		255 .	255	. 0		0]	
<u>D</u> efault	gateway:					•]	
⊙ O <u>b</u> ta	in DNS server addre	ss autom	atically						
O Use	the following DNS se	rver addr	esses:						$\neg \parallel$
Preferr	ed DNS server:]	
Alterna	te DNS server:					•]	
🗖 Vaļi	date settings upon e	xit			(A	d <u>v</u> ar	nced	
				C	ж			Can	cel

- 11) Close the Network Connections pop-up12) Move to Making the Connection Between the Laptop and the AAT later in this document.

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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) From the icons at the bottom of your laptop screen, find the network icon. Right click (XP and Vista) or click (Windows 7). The available wireless networks should 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.
- 3) 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":

Create Shortcut		x
What item would you like to create a shortcut for?		
This wizard helps you to create shortcuts to local or network programs, files, folders, compo Internet addresses.	uters, or	
<u>Type the location of the item:</u>		
http://169.254.0.100 Browse		
Click Next to continue.		
Next	Car	ncel

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

			23
0	🔊 Create Shortcut		
	What would you like to name the shortcut?		
	<u>Iype a name for this shortcut:</u>		
	AAT Connect		
	Click Finish to create the shortcut.		
		<u><u> </u></u>	ncel

The shortcut is now complete for the laptop to AAT connection

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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
- 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.