





USING THE AAT30/AAT15 SIDE
MOUNT ON SMALL-DIAMETER
OMNI ANTENNAS

AAT models AAT-15 and AAT-30


Safety


The AAT should be handled using the following considerations:


 There are no user-serviceable parts within the AAT. All internal repairs must be performed by Sunsight Instruments.

 Use only the Sunsight supplied smart charger to recharge the LiFePO4 battery pack. Use of a non-approved battery charger will void the battery warranty and can damage the battery pack.

 Never attempt to recharge the batteries outdoors in inclement conditions.

 Never short the battery terminals, attempt to disassemble the battery pack, or dispose of the pack in a fire. Any exhausted battery packs must be disposed of properly. CONTACT SUNSIGHT INSTRUMENTS IF YOU ARE UNSURE OF HOW TO PROPERLY DISPOSE OF THE BATTERY.

 The AAT is water resistant, but not waterproof. Do not submerge or leave the unit in standing water. All sealing caps and doors must be secured while in use, particularly during inclement weather.

 Avoid impacting, dropping or rough handling of the AAT. The AAT contains sensitive electronic components. Rough handling may result in internal component damage.

 Care should be taken to avoid impact to the black GPS antennas on the top of the AAT.

If you suspect the AAT is operating incorrectly, contact Sunsight Instruments or an authorized Sunsight Instruments distributor for support.

www.sunsight.com support@sunsight.com +1 321-244-9443

Before attempting to mount the AAT or use any accessories, please review all training materials and familiarize yourself with the AAT and its functions. The **AAT30, AAT15 Quick Start Guide** and **AAT30, AAT15 User's Manual** are available for download [here](#).

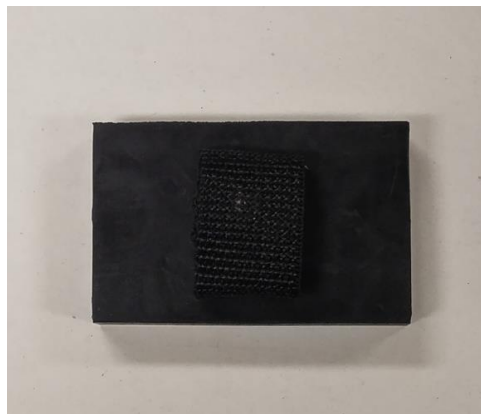
This document assumes that the user has read and understands all AAT training and safety materials.

This document assumes that the AAT and mount have been prepared and maintained with all mount pads present. If you have not yet installed the graduation markings strip on the side mount or the rubber grip pads, click [here](#) for installation instructions.

Side mount graduation markings and rubber grip pads for alignment of small omni antennas are available from SunSight at no charge beyond shipping costs. Contact sales@sunsight.com to place an order.



AAT-XX side mount with graduation markings installed



Rubber grip pad for use on small-diameter antennas

This document will provide an overview for using the standard AAT30/AAT15 side mount with omni antennas of an external diameter of 2 – 6 inches. For antennas of an external diameter exceeding 6 inches, contact support@sunsight.com to discuss the appropriate mount for your application. The AAT30 & AAT15 are not recommended for use on antennas with an external diameter of less than 2 inches.

1. Secure the mount to the antenna

- 1) Pull excess nylon strap through plastic strap end, thus shortening the side mount strap length.
- 2) If available, slide rubber grip pad nylon loop over plastic strap end with rubber pad surface facing antenna to be measured.



AAT30, AAT15 side mount with strap adjusted to shortest length and grip pad attached

- 3) Note location of alignment reference mark in antenna housing, if equipped.
 - a. True omnidirectional antennas will not be equipped with an alignment reference, as azimuthal orientation is not relevant in this instance. True omnidirectional antennas will be adjusted for tilt and roll only.
 - b. Quasi-omnidirectional antennas will have an alignment reference mark. Use this mark to correctly orient the side mount for azimuthal alignment.
- 4) Align side mount to antenna alignment mark at the rad center, then press side mount firmly to the antenna.



- 5) Feed the side mount's plastic strap end under mount body crossbar and into ratcheting buckle.
- 6) If equipped, align side mount graduation mark with antenna alignment mark.
 - a. Side mount graduation mark equaling 50% of antenna diameter should align with antenna mark.
 - b. **Example:** If the antenna is 4" O.D., the alignment mark should align with the 2" mark on the AAT-XX side mount.
- 7) Adjust strap length as necessary, then tighten strap such that the AAT side mount is secure to the antenna, usually a couple of clicks on the ratcheting buckle. The rubber grip pad attached to the side mount strap should make contact with the antenna.

2. Secure the AAT to mount

- 1) Secure AAT to mount by positioning upper lip of mounting rail on back of AAT into mount grip, then rotate AAT into to security latch. User should feel AAT "click" into position. Tighten both mount thumbscrews.
- 2) Secure AAT and mount to structure with the included safety lanyard. Attach lanyard to AAT handle and through provided loop in mount strap.



3. Power on and connect to the AAT

- 1) Power on AAT.
- 2) Power on and enable Wi-Fi on the device being used to communicate with the AAT. Connect to the Wi-Fi hotspot **AAT 901xxx**. See User's Manual for device-specific instructions. For most Android devices:
 - a) Click "Settings"
 - b) Click "Wi-Fi"
 - c) Enable Wi-Fi, if necessary.
 - d) Select Wi-Fi hotspot AAT 901xxxx
 - e) Once connected, the green Link LED on the AAT keypad will illuminate.
- 3) Log in to the AAT by clicking the AAT shortcut on the Android's (if purchased with AAT) homepage, or by opening a web browser and navigating to **192.168.0.50**

4. Capture alignment data

The user may perform as many captures to a specific profile (antenna) as desired. The reports generated by the AAT will always display *only* the **First** - "As you found it" - and **Final** - "As you left it" - captures stored to a profile.

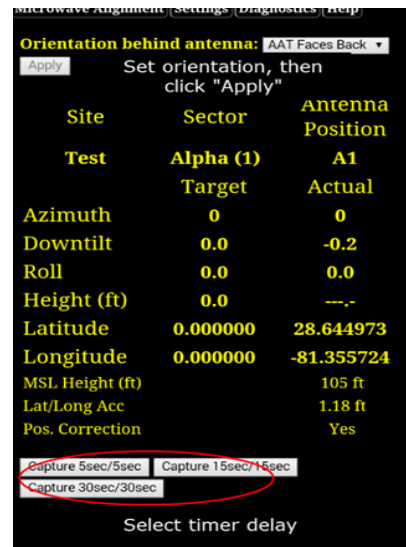
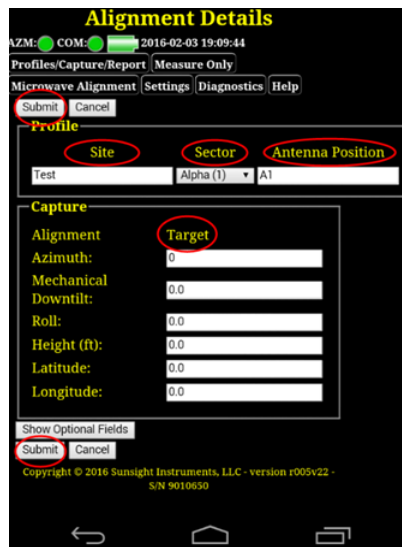
To capture data to a previously created profile:

Click the **Profiles/Capture/Report** link.

- 1) Click the jobsite button to be captured.
- 2) Use the **Prev Profile** and **Next Profile** buttons to scroll through available antenna

positions stored under the jobsite.

- 3) Click the **Full Capture** button to capture all alignment data or **Scope Capture** to capture azimuth only.
 - a. NOTE: Selecting Scope Capture will not allow tilt, roll or height measurements to be saved, although these measurements will still be displayed on-screen!
- 4) At the top of the page, ensure **Orientation** is correct. Click the Apply button to save any change to Orientation.
 - a. Orientation is denoted as viewed from behind the antenna. Use the handle of the AAT for reference – the handle is the front of the tool.

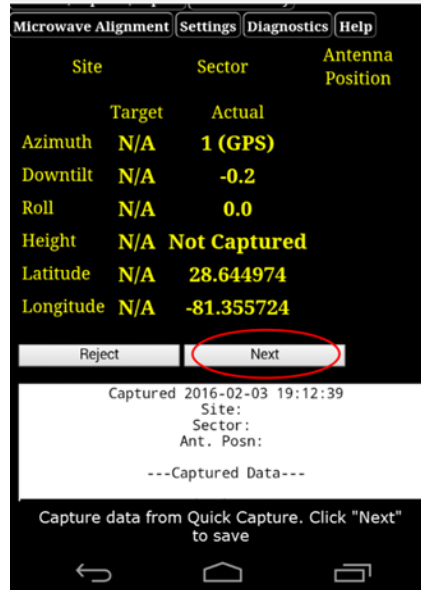


- 5) Align "Actual" measurements on-screen to displayed target values.
 - a. If recording AGL height, connect Laser Rangefinder to AAT and capture AGL height now.
 - b. If no target values were input during profile creation, refer to RFDS for targets.
 - c. Select the required capture delay time by clicking appropriate button.
 - d. Review captured data displayed on-screen.
 - e. Click the **Save** button to save captured data to the AAT.
 - f. Repeat *Steps 2 – 5* for all antennas to be aligned under selected jobsite.
 - g. Power down AAT prior to descent.

5. Using the "Quick Capture" feature

- 1) Click the **Measure Only** link.
- 2) If capturing AGL height, connect Laser Rangefinder to AAT and capture AGL height now.
- 3) On the live measurements page click the **Quick Capture** button.
- 4) After the timer countdown, captured information will be displayed.

- 5) Click the **Next** button to input site information and store to AAT or click the **Reject** button to return to the live measurements page to begin again.
- 6) Input **Site**, **Sector** and **Antenna Position**.
- 7) Click either **Submit** button available at the top and bottom of page to save the data.
- 8) Power down AAT prior to descent.

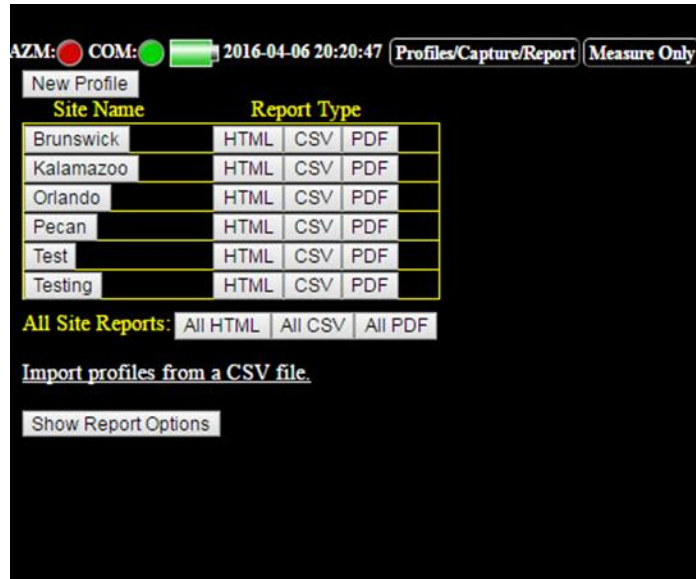


6. Generate reports

Note: Reports may be generated and emailed directly from the field prior to departure from the jobsite.

- 1) Power on AAT
- 2) Power on and enable Wi-Fi on the device being used to communicate with the AAT. See User's Manual for device-specific instructions.
 - a. For most Android devices:
 - i. Click "**Settings**"
 - ii. Click "**Wi-Fi**"
 - iii. Enable Wi-Fi, if necessary.
 - iv. Select Wi-Fi hotspot **AAT 901xxxx**
 - v. Once connected, the green Link LED on the AAT keypad will illuminate.
 - b. For Windows operating systems:
 - i. Ensure Wi-Fi is enabled.
 - ii. Click the Wi-Fi icon in lower right computer screen.
 - iii. Select Wi-Fi hotspot **AAT 901xxxx**
 - iv. Click "Connect"
- 3) Log in to the AAT by clicking the **AAT** shortcut on the Android's (if purchased with AAT) homepage, or by opening a web browser and navigating to **192.168.0.50**
- 4) Click the **Profiles/Capture/Report** link near the top of the web page.

- 5) Locate the site name for the report to be generated.
- 6) Click the **PDF** button next to the jobsite button to download a PDF report to your hand-held device.
 - a. Reports remain on the AAT for later retrieval until the user manually deletes the profile or erases the internal SD card.



Installing Graduated Marker and Rubber Grip on AAT-XX Side Mount

For use of the AAT-XX side mount on small-diameter omni antennas

Adhering the graduated marker (ruler) to the side mount

1. Clean any dirt or debris from adhesion area on side mount.
2. Remove protective cover from adhesive strips on back of graduated marker.
3. Carefully align left edge of graduated marker with AAT-XX side mount back plane rubber pads and align bottom edge of marker with the grip assembly– see photo



4. Ensure both edges of marker are aligned and that it sits straight on mount, then firmly press onto mount.
5. Do not attempt to remove or reposition marker once adhesive has been set.

Installing the rubber grip pad

1. Slide nylon grip pad loop over plastic AAT-XX side mount strap so that the rubber pad will make contact with antenna housing when secured.



2. Feed plastic strap end through side mount ratcheting buckle to engage ratchet mechanism.
3. Adjust strap length as necessary.
4. Tighten mount to antenna housing using the ratcheting mechanism.

The mount is now ready to use on small omni antennas. Please return to the use instructions by clicking [here](#).