



USING THE AAT30/AAT15/MW15 FLAT PANEL ANTENNA MOUNT

For AAT30, AAT15, and MW15 Models


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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.

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This document will cover the correct usage of the Flat Panel Antenna Mount for the AAT30/AAT15/MW15 alignment products.

Before attempting to use the Flat Panel Antenna Mount or use any accessories, please review all training materials and familiarize yourself with the AAT30/AAT15/MW15 products and their functions.

The *AAT30, AAT15 Quick Start Guide* and *AAT30, AAT15 User's Manual* are available for download [here](#).

The [Quick Start Guide for using the MW15 for RF panel alignment](#) is 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 AAT30/AAT15/MW15 and Flat Panel Antenna Mount have been prepared and maintained.

For the remainder of this documents, the term “AAT” will mean any of the AAT30/AAT15/MW15 alignment systems.

Overview

The Flat Panel Antenna Mount is for using the AAT on “pizza box” style flat antennas. Using the AAT with this mount will allow for measurement of azimuth, tilt (aka elevation) and roll (plumb). These antennas are used in point-to-point as well as point-to-multipoint radio systems. RF flat panel antenna applications exists as well. The Flat Panel Antenna can also be used on antennas mounted in the “diamond” configuration. This instruction will cover the various configurations.

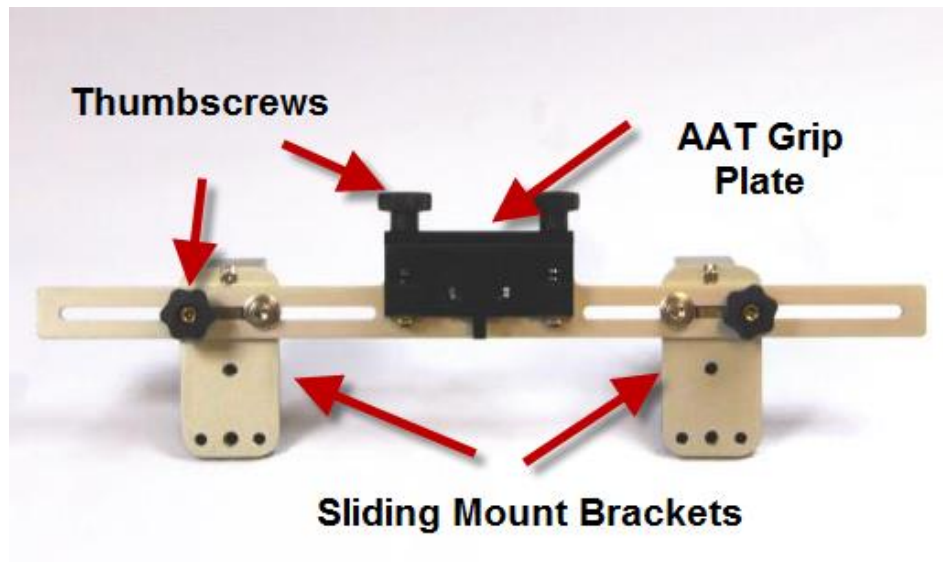
The mount can be configured to operate with various thicknesses and widths of antennas. One typical application is the Radwin JET antenna/radio system.



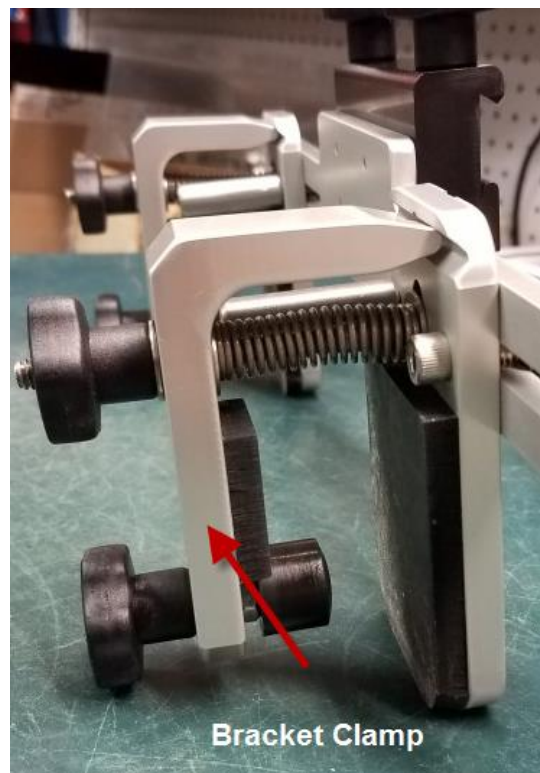
Flat Panel Antenna Mount on Radwin JET Antenna (without AAT)



Flat Panel Antenna Mount on Radwin JET Antenna (with AAT)



Flat Panel Antenna Mount Part Identification



Sliding Mount Bracket Side View

Using the Flat Panel Mount

1) Choose Antenna Configuration (Mounted Horizontally or Mounted as a Diamond)

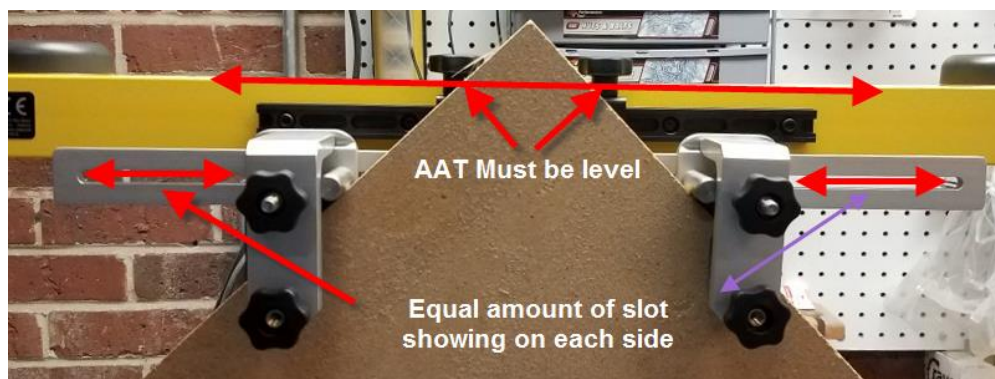
For Flat Panel Antennas Mounted Horizontally:



Determine the best location for the mount by examining the antenna to determine its flatness across the front as well as its thickness from front to back.

- Open the Bracket Clamp as wide as possible by using the thumbscrews.
- Determine the correct Sliding Mount bracket position by centering the mount on the front of the antenna so that the any error from curvature on the face of the antenna will be eliminated
- Slide the mount over the antenna so that the mounting brackets straddle the antenna. Make sure the antenna is centered on the front of the antenna and the antenna mount is level compared to the antenna housing. Tighten the mount brackets to secure the mount.
- Attempt to wiggle mount to make sure it is secure on the mount.
- **Proceed to Step 2 below**

For Diamond Mounted Antennas:



Diamond Mount Mock-up

- Determine the best location for the mount by examining the antenna to determine its flatness across the front as well as its thickness from front to back.
- Open the Bracket Clamp as wide as possible by using the thumbscrews.
- Slide the mount over the antenna so that the mounting brackets straddle the antenna.
- Determine the correct Sliding Mount bracket position by centering the antenna on the front of the antenna so that mount is level. Make sure the Sliding Bracket Clamps are in the same position on both sides of the mount (same amount of open slot is showing on both sides). Make sure the point of the diamond is equally spaced between the two mounting brackets. Tighten the mount bracket thumbscrews to secure the mount.
- Attempt to wiggle mount to make sure it is secure on the mount.
- **Proceed to Step 2 below.**

2. Secure the AAT to the Flat Panel Antenna Mount

- 1) Secure AAT to the AAT Grip Plate by positioning upper lip of mounting rail on back of AAT into grip plate, then rotate AAT down into the security latch. User should feel AAT “click” into position. Tighten both grip thumbscrews to fully secure the AAT in the mount.
- 2) Secure AAT and mount to structure with the included safety lanyard. Attach lanyard to AAT handle. If the lanyard can be used to only secure the AAT, use an additional lanyard to secure the mount.

3. Power On and Connect to the AAT

- 1) Power on AAT and the device being used to communicate to the AAT
- 2) If using the SunSight Android App on an Android device, click on app and follow the instructions to connect to the AAT. After connecting, proceed to Step 4 below.

If using an Apple device or Android device not equipped with the SunSight Android app, connect to the Wi-Fi hotspot **AAT 901xxx**. See User’s Manual for device-specific instructions. Once connected, the green Link LED on the AAT keypad will illuminate.

- 3) Access the AAT by opening a web browser and navigating to **192.168.0.50**. The AAT measuring page will be displayed.
- 4) After connecting, make sure to set the orientation of the AAT to **FRONT** on the measurement page. This sets the proper orientation offset for the AAT mounting location.

4. Measuring, Capturing and Reporting Alignment Data

Use the AAT in the standard way to view measurements, capture data and generate reports. Refer to the proper instructions for more details.

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The [Quick Start Guide for using the MW15 for RF panel alignment](#) is available for download [here](#)

5. Removing the AAT and Flat Panel Antenna Mount

- 1) Remove safety lanyard(s) from AAT and mount
- 2) Loosen the thumbscrews completely on the grip plate
- 3) On the mount, under the AAT, disengage the spring-loaded safety catch and remove AAT from Flat Panel Antenna Mount. Secure the AAT in a safe place
- 4) Loosen the mounting bracket thumbscrews and remove the remove mount. Secure and store the mount.