



USING THE FLAT PANEL ANTENNA MOUNT

For AAT, AAT Max, and AAT Mini 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 AAT 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 [AAT/AAT Mini/AAT Max Quick Start Guide](#)

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

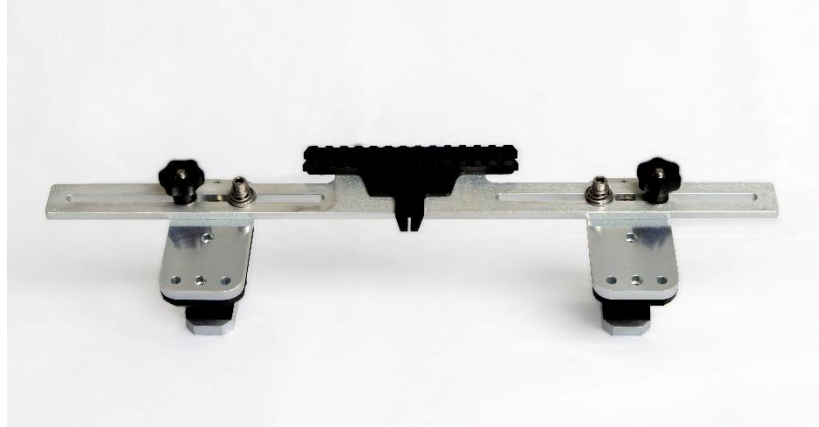
For the remainder of this documents, the term “AAT” will mean any of the AAT alignment systems.

This document assumes that the AAT, AAT Max, or AAT Mini and Flat Panel Antenna Mount have been prepared and maintained.

Overview

The Flat Panel Antenna Mount is for use 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 Mount can also be used on antennas mounted in the “diamond” configuration. This instruction will cover the various configurations.

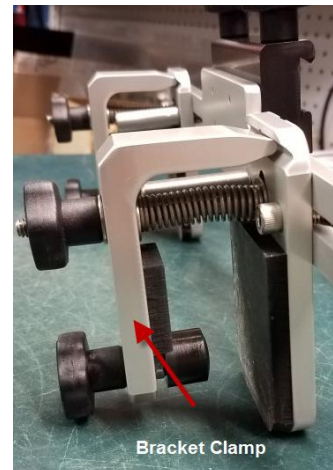
The mount can be configured to operate with various thicknesses and widths of antennas. One typical application is the Radwin JET antenna/radio system.



Flat Panel Antenna Mount



Flat Panel Antenna Mount on Antenna (with and without AAT)



Flat Panel Antenna Mount Rail and Bracket

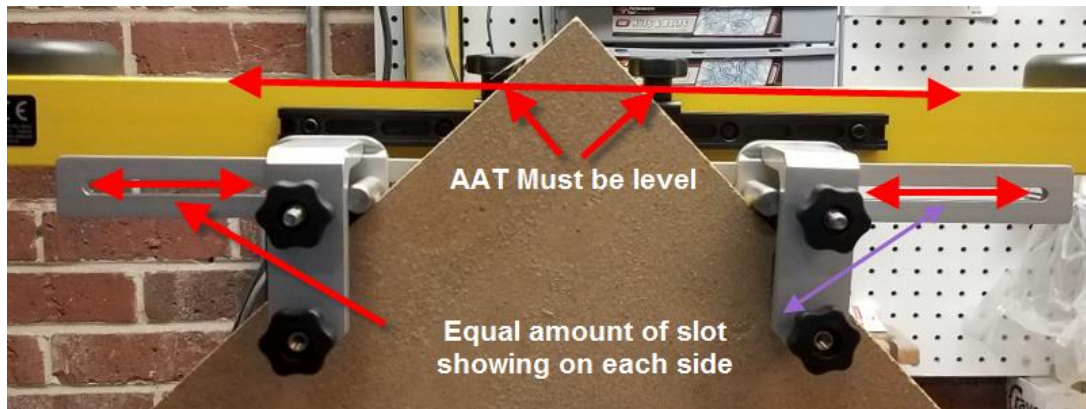
1. Choose Antenna Configuration (Mounted Horizontally or Mounted as a Diamond)

For Flat Panel Antennas Mounted Horizontally:



1. 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.
2. Open the Bracket Clamp as wide as possible by using the thumbscrews.
3. 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
4. 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.
5. Attempt to wiggle mount to make sure it is secure on the mount.
6. **Proceed to Step 2 below**

For Diamond Mounted Antennas:



- 1) 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.
- 2) Open the Bracket Clamp as wide as possible by using the thumbscrews.
- 3) Slide the mount over the antenna so that the mounting brackets straddle the antenna.
- 4) 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.
- 5) Attempt to wiggle mount to make sure it is secure on the mount.
- 6) **Proceed to Step 2 below.**

2. Secure the AAT to the Flat Panel Antenna Mount

- 1) Attach the AAT to the Flat Panel Antenna Mount mounting rail using the grip plate on the back of the AAT. User should feel AAT “click” into position. Tighten AAT thumbscrews to secure AAT.
- 2) Secure AAT and Air Mount to stable structure using safety lanyard to prevent potential falling hazard.

3. Measuring, Capturing and Reporting Alignment Data

- 1) Connect to the AAT in the standard way by powering on the AAT and connecting using WiFi or USB-C cable (see Quick Start Guide for detailed instructions). The WiFi connection can be made using the Android App (preferred) or by using WiFi and a browser.
- 2) On the AAT Measure Only page, set Orientation to **"Faces Front"** and click Apply.
- 3) Perform antenna adjustments to match desired alignment and save results.