Updating AAT30, AAT15, AAT08, MW15, MW08 Firmware

Note - This update procedure is the same for both the AAT and MW product families with one exception: the MW products require the Sunsight Android app for operation whereas it is optional with the AAT products. However, the Sunsight Android app is very highly recommended for AAT use as well due to the richer feature content.

This document covers the AAT firmware update as well as the optional Sunsight Android app installation.

For the remainder of this document the use of the term:

- **AAT** will include the AAT30, AAT15, AAT08, MW15 and MW08 products
- **Handheld controller** will mean the smartphone or tablet that will be used to connect to the AAT for the update process.

Periodically, Sunsight Instruments will issue new firmware for the AAT series of alignment products. **The AAT units are updated directly on the AAT tool using the handheld controller and the AAT's Firmware Update option on the AAT's Settings page accessible from the main menu.**

General

The AAT is accessed via Wi-Fi using a handheld controller.   There are two different methods for connection, 1) using the **Sunsight Android app** on a handheld controller (Android smartphone or Android tablet) or 2) **directly in a web browser** (non-Android device).

Sunsight Android App (preferred)
This method of connection requires a standard Android device running Android OS version 6.0 or higher as well as the Sunsight app. In addition, the AAT must have a firmware load of r005v45 or higher. The installation of the Sunsight app on the Android handheld controller does not interfere with any other operation of the Android device. The Sunsight Android app is available from the Sunsight support page and is included in the standard download for the firmware upgrade files.

Sunsight offers an optional relatively inexpensive, rugged Android tablet for this application, **but it is not required. The user can supply their own Android device if it meets the criteria above.**

In addition to allowing pictures to be added to AAT records, the Sunsight Android app also allows the creation of Google Earth files. The Google Earth files can be used to determine potential RF obstructions directly in Google Earth. The History feature can be used to determine if new obstacles have recently arisen using the **Virtual Reality Interference Reporting (VRIR)** feature (patent pending).

Follow this link to view a sample report with photos:
https://www.sunsight.com/samples/SunsightRFSample.pdf

Follow this link to learn more about the VRIR feature:
https://www.youtube.com/watch?time_continue=7&v=gbR0NaZ5N6g

Web Browser Access App
Accessing the AAT in a web browser access (no app) provides a more basic method to operate the AAT when using non–Android devices (IoS/Apple devices, Windows, or Linux). **If using an Apple device to upgrade the AAT**, you must install an unzip app (ex. UnZip) prior to downloading firmware files from Sunsight.

Preparation for Firmware Update
- All reports must be generated and downloaded from the AAT prior to firmware update. Reports stored on the tool will no longer be available upon completion of the update.
- Connect the AAT to its battery charger during the update process. Ensure the handheld controller has sufficient battery charge to run for a minimum of 30 minutes. Total update time should be less than 15 minutes.
- Download the appropriate (usually newest) version of the AAT firmware **to the handheld controller** if not done previously.

  Link to the support site for firmware and Android app download:
  https://www.sunsight.com/support/aat-xx-support/

- Unzip the files to a known location (ex. Desktop). If using an Apple device, you must have an unzip app (ex: UnZip) to unzip the files . The list of files typically contains a ***.s19** file where * contains the firmware release number, a **Release Notes** document and typically a ***.apk** file that is used to install the Sunsight Android app. If using the Sunsight Android app, it must be installed AFTER the AAT firmware is updated. If not using the Sunsight Android app, no action is required with *.apk file.
- Review the **Release Notes** text file that accompanies all firmware updates. The Release Notes describe the various new features, enhancements and fixes that are associated with the new firmware and Android app.

Update Process

After completing the preparation steps above, the user must determine which version of Firmware is currently installed on the AAT.

To determine your AAT's current firmware version:

- Power on the AAT and allow for boot sequence completion. Once the blue AZM light begins to flash, the AAT has completed boot-up.
- Connect a Wi-Fi enabled handheld controller (smartphone or tablet)
  a. If using the Sunsight Android app – launch app and follow steps to connect to AAT. The AAT's main page will be displayed.
  b. If using web browser access go to Wi-Fi hotspot AAT 901xxxx, where the x's represent the serial number of the AAT. Connect to hotspot (there will be no internet access on this hotspot).Open a web browser and navigate to 192.168.0.50. The AAT's main page will be displayed.
- In the footer (very bottom) of the AAT webpage, the user will see Sunsight's copyright information, firmware version number and the AAT serial number.
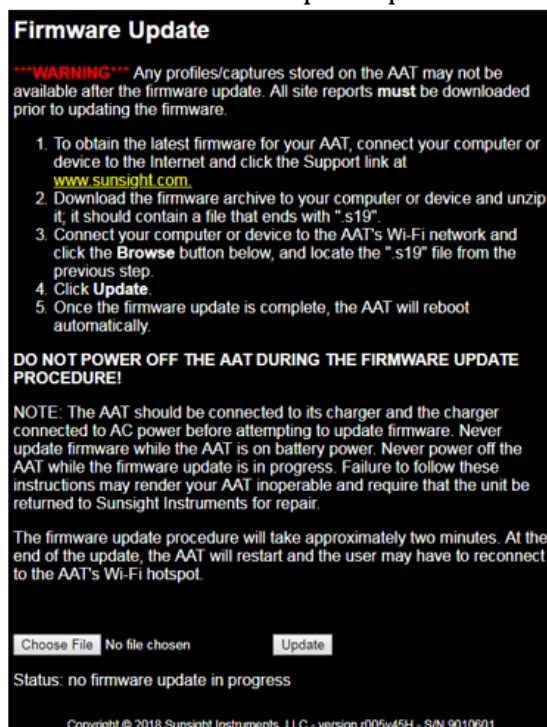

Firmware version for this AAT was r005v45

If the AAT is running on **r005v10** (uncommon), click here.

** If this is an MW unit running r005v43 or earlier, contact Sunsight Support at: 321.244.9443 x2

Otherwise, continue with the next section.

Updating from Firmware Version r005v16 and higher

- **Make sure to complete the Preparation for Update items above.**
- If not already connected to the AAT, power on the AAT and allow for boot sequence completion. Once the blue AZM light begins to flash, the AAT has completed boot-up.
  a. Connect a Wi-Fi enabled handheld controller (smartphone or tablet)
      i. If using the Sunsight Android app – launch app and follow steps to connect to AAT. The AAT's main page will be displayed.
      ii. If using web browser access go to Wi-Fi hotspot AAT 901xxxx, where the x's represent the serial number of the AAT. Connect to hotspot (there will be no internet access on this hotspot).Open a web browser and navigate to 192.168.0.50. The AAT's main page will be displayed.
- Click the **Menu** button and then click **Settings**
- Scroll down to the Firmware Update portion of the Settings page.

- Click **Choose File** and navigate to the previously downloaded *.s19 file on the handheld controller. The format should be similar to

AntennAlign_r00XvXX_APP.s19. This is the firmware file for the AAT firmware update.

- Click **Update** and follow the instructions on the screen. It will take a few minutes for the AAT to update and then reboot.
- Once the AAT has rebooted, the AAT firmware update is complete.

Optional Sunsight Android App Installation:

The Sunsight Android app is required for the MW products but is optional for the standard AAT, but allows many more features if used.

Installation of the optional Sunsight Android app allows the MW and AAT products to capture and record photographs as part of the alignment reports as well as create Google Earth files to support the Virtual Reality Interference Reporting (VRIR) feature.

The app can be installed on any Android tablet or smartphone running Android OS 6.0 or higher. Use of a tablet with a large display gives the best result.

The app must be updated AFTER the AAT firmware update is complete.

- Navigate to the previously downloaded *.apk file (Sunsight app file) on the handheld controller.
- Click on the *.apk file and follow the directions to install the app. App installation is complete and the handheld device is ready to use with the AAT.