

PROPRIETARY INFORMATION
SUNSIGHT INSTRUMENTS, LLC

DOCUMENT IDENTIFICATION NUMBER: RD 5001

ISSUE: 5

DATE:

09/10/2013

TITLE

PRODUCT RELEASE HANDOVER REPORT FOR ANTENNALIGN RELEASE
R004V03

ABSTRACT

THIS REPORT WILL DESCRIBE RELEASE R004V03 FOR THE ANTENNALIGN
ALONG WITH THE ASSOCIATED IMPACTS FOR SOFTWARE, HARDWARE,
TRAINING, AND BACKWARDS COMPATIBILITY

AUTHOR(S):

James A. (Tony) Wattwood

ISSUING DEPARTMENT(S):

SYSTEMS

RESPONSIBLE DEPARTMENT(S):

MARKETING

PRODUCT LINE MANAGEMENT

This document is intended for the use of Sunsight Instruments, their distributors or customers only. Neither this document, nor the information contained herein is to be transmitted or otherwise disclosed to any party other than listed above except pursuant to a written agreement with the Sunsight Instruments LLC. The information contained in this document is advisory in nature and subject to change without notice and (unless specifically agreed to the contrary by Sunsight in writing) is not to form part of any order or contract or to be regarded as a representation related to the products or services considered. (Neither this document nor the information contained therein shall be transmitted outside the United States of America.).

SUNSIGHT INSTRUMENTS, LLC
PROPRIETARY INFORMATION

1.	Overview.....	2
2.	Release Number	3
3.	Availability Date	3
4.	Deliverables.....	3
5.	New Features List.....	4
6.	New Feature Description.....	5
i.	GLONASS	5
ii.	Simple Azimuth Diagnostic.....	5
iii.	Wireless Support for Android, iOS	5
iv.	Keypad-based Quick Capture.....	7
v.	AAT Calibration for Keypad	7
vi.	Fast Scrolling	7
vii.	Height Unit Selection.....	7
7.	Hardware Impacts.....	7
8.	Additional minor changes and enhancements.....	8
9.	Testing Performed.....	9
10.	Software Impacts	9
i.	Legacy Software Affected	9
ii.	Executable Software and Compatibility.....	9
iii.	Database Affected and Compatibility	9
11.	Training Impacts	10
12.	Updating Procedures.....	10
13.	Miscellaneous.....	10

1. Overview

The latest upgrade to the SunSight Instrument's AntennAlign Alignment Tool (AAT) will improve the usability of the AAT and expand the measuring and recording capabilities of the AAT as well. In addition this firmware release will support hardware for new AATs that will nearly double the amount of GNSS satellites available for determining location and azimuth by using the GLONASS constellation of satellites as well as the GPS constellation. Along with this expanded satellite capability, a simple azimuth diagnostic has been added to help users quickly diagnose and achieve azimuth under less than ideal conditions.

All new AATs (beginning at S/N 8010800) can be used with Android, iOS, and any other web enabled device. Users can also program the AAT for desired level of network security.

A Quick Capture feature has been added to streamline recording measurements. as well as a keypad-based full calibration of tilt and roll (GPS does not need calibrating) so that users can quickly and completely

calibrate the AAT in the field. Calibration dates are now reported on AAT reports also.

NOTE THAT THIS DOCUMENT IDENTIFIES ENHANCMENTS RELATED TO THIS SPECIFIC SOFTWARE AND HARDWARE RELEASE. IT IS NOT CUMULATIVE FOR CHANGES FROM PREVIOUS RELEASES. REFER TO EARLIER RELEASE HANDOVER DOCUMENTS FOR PREVIOUS PRODUCT CHANGE HISTORY.

2. Release Number

The number r004v03 will designate software changes for the AntennAlign as defined in the following sections. Hardware requirements are defined in the appropriate paragraphs and identified by serial number range.

3. Availability Date

The General Availability date for distribution of r004v03 is 09/10/2013.

4. Deliverables

The deliverables associated with this release are:

Release Handover Report for AAT Release r004v03 (this document)

AAT firmware version - r004v03

AAT Firmware Update Instructions 3.0 - CD 7005, ISSUE 3, 05/23/2013

5. New Features List

The following features and fixes have been added or modified for Release r004v03

- GLONASS implementation, Satellite Screen filtering on panel
- Azimuth Diagnostic screen on panel
- Quick Capture mode on Measure Only; limited to site, sector & antenna position (web & panel)
-
- Calibration option on panel, calibration time stamp included in capture detail rows on site report
-
- PO/Ref # field is now Job Reference
-
- Satellites and GPS Summary options moved to bottom of main menu on panel
- Removed "default", "default carrier", etc. from new or cloned profile fields when no value supplied by user
-
- Hold up/down for fast scrolling on panel site selection screen
- DHCP client is disabled in WiFi mode.
-
- GPS MSL and LRF height units can now be selected on the Settings page; measurements and reports will reflect the choice.
-
- Profile navigation now has beginning and end messages, consistent with captures.
- "New" is now "Full" capture, "Az Only" is now "Scope".
-
- "From Selected" -> "Clone" profiles on panel.
-
- Capture summary on website has been made larger and moved to the bottom of the page.
- Auto-gyro is off by default
- The flash erase function now logs the user out and reboots the tool when complete.
-
- Capture detail webpage now shows whether azimuth came from GPS or gyro.
-

Bug Fixes:

- Fixed a bug where azimuth wouldn't display on Measure Only web page
- Report headers fields are now read from the profile, not the capture; fixed a bug where a field edited post-capture wouldn't show correctly
-

- Buttons on alignment details page only show when the entire page is finished loading
-
- All editable fields are now shown on the profile and capture display panel screens
-
- When not in quick capture mode, duplicate profiles (same site, sector, antenna position) can no longer be created.
-
- Fixed a bug where the notes wouldn't copy when cloning a profile on the panel.
-
- Fixed a bug where the DHCP client wouldn't get an IP address when physically connected to a DHCP server.

6. New Feature Description

i. GLONASS

Beginning with S/N 8010800 of the AAT, the AAT will support GLONASS satellites as well as GPS satellites. The result to the customer will be much more robust performance of the AAT in tough conditions (interference, obstruction, etc). The user experience will be similar to previous AATs in operation, but the robustness will be much improved (time to azimuth for one). This feature requires specific hardware to support the GLONASS implementation. The GPS details displays have been updated to handle the additional satellite information.

If there is interest in retrofitting existing AATs for GLONASS, please contact SunSight Instruments at sales@sunsight.com.

ii. Simple Azimuth Diagnostic

A new feature to simplify the process of achieving azimuth under less than ideal conditions has been added to the AAT. Choosing the Az Diagnostic menu item will display the three primary contributors to achieving azimuth in a simple and intuitive way. Along with displaying the status, the AAT will now prompt the user on a suggested action to help them attain azimuth.

iii. Wireless Support for Android, iOS

As of AAT S/N 8010800, the AAT will support Android as well as the previously supported wireless implementations from iOS, Windows, etc.

The AAT has been equipped with a full wireless router that makes connection, administration and security of the connection quicker and connections more manageable.

The IP administration address of the AAT is 169.254.0.1.

The IP address for connecting to the AAT remains 169.254.0.100.

* NOTE THAT THE AAT CAN ONLY BE OPERATED WITH ONE WEB USER AT A TIME.

iv. Keypad-based Quick Capture

At customer request, a new feature was added to allow a user to operate the AAT in Measure Only mode and from there proceed directly to a capture. Once the capture is made, the user can add site name, sector, antennas position, etc as needed to document the captured data immediately.

v. AAT Calibration for Keypad

The AAT can now be fully calibrated from the keypad on the front of unit. Users select the Calibration menu option and follow the simple directions. The process takes less than 1 minute. The calibration date is now recorded in the AAT and appears on site reports.

vi. Fast Scrolling

Holding the up/down arrows will allow for fast scrolling on many of the menus and data entry screens when using the AAT keypad.

vii. Height Unit Selection

All heights (AGL or MSL) can be displayed in Feet or Meters based on a customer choice under the Settings menu.

7. Hardware Impacts

As of AAT S/N 8010800 and going forward, the AAT will support GLONASS satellites and Android wireless connections.

Legacy Hardware Affected

The new firmware will operate on legacy AATS with no issue, however, the hardware based features (GLONASS capability and Android support) require new hardware and are supported for S/N 8010800 and forward. Should a customer want to retrofit this hardware into an older unit, please contact sales@sunsight.com for details and cost.

8. Additional minor changes and enhancements

- PO/Ref # field is now Job Reference
- Satellites and GPS Summary options moved to bottom of main menu on panel
- Removed "default", "default carrier", etc. from new or cloned profile fields when no value supplied by user
- Hold up/down for fast scrolling on panel site selection screen
- DHCP client is disabled in WiFi mode.
- GPS MSL and LRF height units can now be selected on the Settings page; measurements and reports will reflect the choice.
- Profile navigation now has beginning and end messages, consistent with captures.
- "New" is now "Full" capture, "Az Only" is now "Scope".
- "From Selected" -> "Clone" profiles on panel.
- Capture summary on website has been made larger and moved to the bottom of the page.
- Auto-gyro is off by default
- The flash erase function now logs the user out and reboots the tool when complete.
- Capture detail webpage now shows whether azimuth came from GPS or gyro.

Bug Fixes:

- Fixed a bug where azimuth wouldn't display on Measure Only web page
- Report headers fields are now read from the profile, not the capture; fixed a bug where a field edited post-capture wouldn't show correctly
- Buttons on alignment details page only show when the entire page is finished loading
- All editable fields are now shown on the profile and capture display panel screens
- When not in quick capture mode, duplicate profiles (same site, sector, antenna position) can no longer be created.
- Fixed a bug where the notes wouldn't copy when cloning a profile on the panel.
- Fixed a bug where the DHCP client wouldn't get an IP address when physically connected to a DHCP server.

9. Testing Performed

The AAT for Release r004v03 has undergone significant testing of both hardware and software. Every menu option and associated function has been exercised multiple times by multiple test personnel.

10. Software Impacts

i. Legacy Software Affected

ii. Executable Software and Compatibility

No software functionality has been affected beyond items identified earlier in this document. r004v03 can be retrofit to any AAT from 8010200 forward. **

The AAT firmware update should be performed using the AAT Firmware Update Instructions 1.1 - CD 7005, ISSUE 2, 09/7/2012. This document can be found at www.sunsight.com and then clicking the Support button.

** Note that Release 4 and forward is not compatible with AntennAlign Profile (APM) PC-based software programs

iii. Database Affected and Compatibility

The AAT database file format has been changed for Release r004v03. This new database format was required to support additional and changed data fields. This change makes the AAT data file incompatible for the existing AntennAlign Profile Manager (APM) program. APM cannot be used with this software release.

The database upgrade process is automatic. When the AAT is firmware is upgraded to r004v03, the existing database will be archived automatically. A new, empty database of the new format will be created. No user interaction is required.

11. Training Impacts

The training program has been completed and updated to support the new interfaces on the AAT. Any web based or in person training scheduled after 09/10/2013 will pertain to r004V03.

In addition, there are comprehensive set of training videos available at:

www.sunsight.com – then click on “Training”

12. Updating Procedures

The standard procedures for updating the AAT software have not changed from previous releases. The process uses the AntennAlign AutoUpdate software version 1.0 that is available to all registered product owners via www.sunsight.com.

The AAT firmware update should be performed using the AAT Firmware Update Instructions 1.1 - CD 7005, ISSUE 3, 05/23/2013. This document can be found at www.sunsight.com and then clicking the Support button.

The r004v03 software will be available for download after 09/10/2013 for registered users.

13. Miscellaneous

N/A