AV-HSI EXP

Service Bulletin

Software Upgrade to 1.1.0

COPYRIGHT AND PRIVACY NOTICE

1. Revision History

Revision	Date	Comments
A	11/21/2025	Initial Release

2. Warnings / Disclaimers

uAvionix is not liable for damages arising from the use or misuse of this product.

This equipment is classified by the United States Department of Commerce's Bureau of Industry and Security (BIS) as Export Control Classification Number (ECCN) 7A994.

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

3. Table of Contents

Contents

4. Planning Information

4.1. Applicability

This Service Bulletin applies to uAvionix AV-HSI EXP with operating software release 1.0.0 or earlier.

Use Table 1 to determine applicability of the software update.

Hardware P/N Marking	Applicability
UAV-1007412-001	Verify by procedure

Table 1: Applicability

Parts identified above as "Verify by procedure" may have software release 1.0.0 or previous installed. To determine what version of software is installed:

1. With an AV-30-E running software version 3.0.1 or newer, push and hold center rotary knob while powering up unit until the uAvionix startup screen appears. Refer to the latest AV-30-E service bulletin at https://uavionix.com/support/av-30-e/ for instructions for verifying AV-30-E version and upgrading, if necessary.

2. Release the button once the uAvionix startup screen appears.

3. Push and release the left button under the MENU until the "INSTALL / ROT TO SEL" appears.

4. Rotate knob until you see "AVHSI SW VER"

5. If the version displayed is 1.0.0 or earlier proceed with this Service Bulletin.

4.2. Description

This Service Bulletin provides instructions for loading uAvionix AV-HSI EXP UAV-1007412-001 with updated software release 1.1.0.

This software release (1.1.0) has the following changes:

- Added ability to pass ForeFlight Flight Plans from AV-Link attached directly to AV-HSI EXP to attached AV-30-E

- Added support for ForeFlight autopilot mode

4.3. Time Required

For software only update in the field, up to 60 minutes is required to perform this update procedure.

4.4. Weight and Balance

No change

4.5. Electrical Load Data

No change

4.6. Applicable Publications

The following documents are applicable to the software release 1.1.0.

Title	Part Number	Revision
AV-30-E Installation Manual	UAV-1004234-001	M
AV-30-E Pilot's Guide	UAV-1004233-001	N

Table 2: Applicable documents

5. Required Items

There are two methods available to perform the update. The first involves a Windows PC and serial port, the second uses the optional AV-Link device over Wi-Fi.

Both methods require you to download the software update file below.

Filename	Version	SW Part Number	Checksum	SHA1 Hash
UAV-1007513-004-AV-HSI-E-1_1_0-8140a5b.uav	1.1.0	UAV-1007513-004	75FF90D5	bbbd189bf9a56250a9d24ef0fe946308a1ec4620

Table 3: Software Update Files

uAvionix software update files are available for download from the uAvionix Support website at no charge, at:

https://uavionix.com/support/av-hsi-e/

Ensure the software and any necessary update tools have been downloaded prior to visiting the aircraft. An internet connection is required to download the software and application. An internet connection is not required to perform the update.

5.1. Windows PC with Serial Port

The following items are required to perform the update when using a Windows PC with serial cable:

Quantity	Description
1	Windows PC running Windows 7 or later
1	Available serial port or appropriate USB to RS-232 converter Examples: FTDI, Parallax 28030, Sabrent SBT-USC6K or similar
1	Female DB-9 with solder or crimp terminals
2	Female terminals suitable for the installed DB-15
4'	22-24 AWG wire
1	uAvionix PingBootFlasher (UAV-1002813-001) v2.12 or greater
1	AV-HSI EXP Software as shown in Table 3

The uAvionix PingBootFlasher tool is available to download alongside the 1.1.0 Firmware, or is available to download directly at

https://uavionix.com/download/uav-1002813-001_pingbootflasher_v2-12.

Download it to your PC.

5.2. AV-Link

The following items are required to perform the update when using AV-Link over Wi-Fi:

Quantity	Description
1	PC or mobile device with 802.11 Wi-Fi interface
1	uAvionix AV-Link-E (UAV-1004413-001) or AV-Link-C (UAV-1004414-001) running software version 0.3.7 or later.
1	AV-HSI EXP Software as shown in Table 3

AV-Link-C (certified) or AV-Link-E (experimental) may be used to perform this service bulletin.

AV-Link software version 0.3.7 is required. If using an AV-Link with version 0.3.5 or earlier, please upgrade your AV-Link prior to performing this service bulletin.

Version 0.3.7 software update files are available for download from the uAvionix Support website at no charge.

For AV-Link-C, follow the instructions in *AV-Link-C Service Bulletin Upgrade to 0.3.7 UAV-1008457-002 Rev A.pdf*, available at: https://uavionix.com/service-bulletin/av-link-c-pma-service-bulletin-software-upgrade-0-3-7/

For AV-Link-E, follow the instructions in *AV-Link-E Service Bulletin Upgrade to 0.3.7 UAV-1006731-007 Rev A.pdf*, available at: https://uavionix.com/service-bulletin/av-link-e-service-bulletin-software-upgrade-0-3-7/)

6. Update Notes

All AV-HSI EXP configuration settings will be preserved during the update procedure. However, please take note of all settings before performing the update and verify settings are correct after the update has been applied.

Ensure you are running a previous version of AV-HSI EXP software. Specifically, your AV-HSI EXP should currently be running 1.0.0 or earlier. If updating from a version prior to 1.0.0 it is not necessary to apply all prior updates in sequence. This update can be used from any prior version.

There are two approved methods for update of the AV-HSI EXP. The AV-HSI EXP can be updated using either a direct serial connection or the AV-Link can be used to update the AV-HSI EXP via wireless interface. Either method is suitable, the choice is installer preference or equipment availability.

If performing the update using PC serial connection, proceed to Section 7.

If performing the update using the AV-Link, the AV-Link must be connected directly to the AV-HSI, not to the back of an AV-30. Verify that the AV-Link is running software version 0.3.7 or later then proceed to Section 8. If the AV-Link is running version 0.3.5 or earlier, update the AV-Link to version 0.3.7 before proceeding. Refer to Section 5.2 for links to AV-Link version 0.3.7 upgrade files.

7. PC Serial Update

The PingBootFlasher utility can be used to update an AV-HSI EXP over a wired serial connection.

## 7.1. Serial Update Preparation

COM4 of the AV-HSI EXP (pins 8 and 15) must be accessible and have a female DB9 connector attached. The ground on the female DB9 connector must also be attached to the AV-HSI EXP's ground. See the AV-30-E Installation manual for more details. If an AV-30-E is connected to COM4, disconnect it from the AV-HSI EXP harness before continuing.

## 7.2. Serial Update Procedure

1. Open the PingBootFlasher utility.
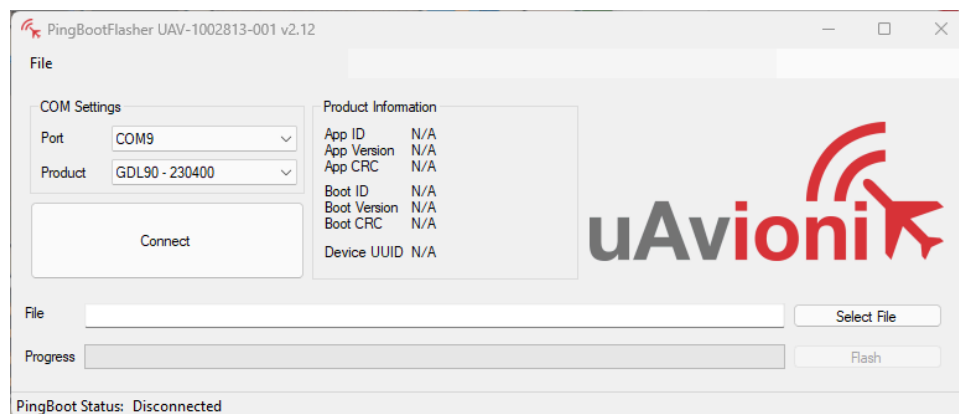
2. Connect the PC to Serial Port 4 of the AV-HSI EXP using the serial data cable.

3. Set the Port dropdown to the PC's COM port that is currently connected to the AV-HSI EXP. In the above example, this is COM9.

4. Set Product to "GDL90 - 230400." Note: if you have an AV-Link connected to the AV-HSI, but you're still choosing to use this serial update method, you may need to choose "GDL90 - 115200."

5. Click "Connect" and then wait for "Product Information" to populate and the "PingBoot Status" banner at the bottom to read "Idle."
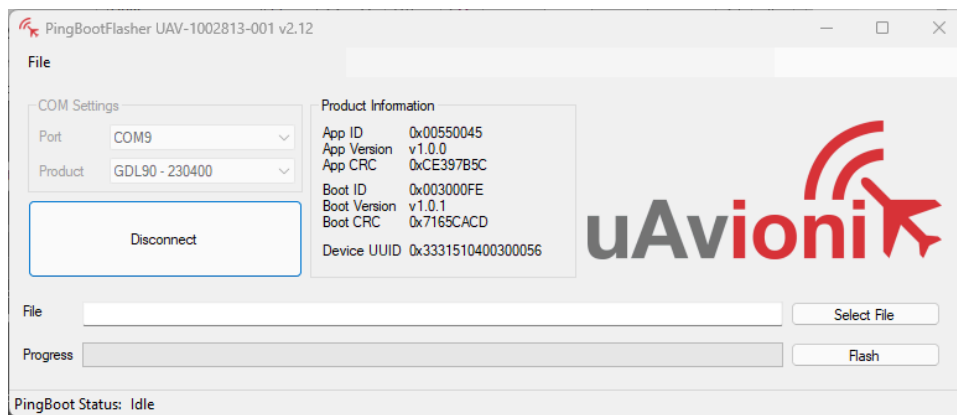
6. Select the previously downloaded .uav file, then click "Flash"
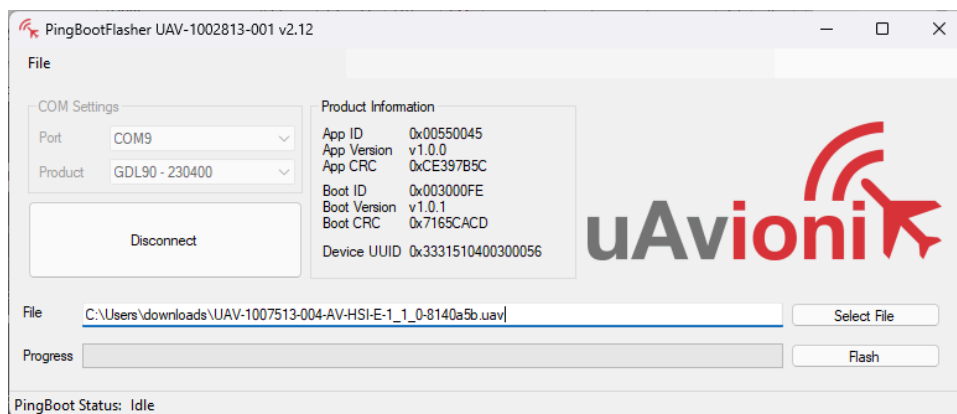
7. Wait for the progress bar to fill. The utility will automatically disconnect when complete.

8. Verify that update was successful by clicking "Connect" again and ensuring that the App Version and App CRC listed in the PingBootFlasher utility match those listed in Table 3.
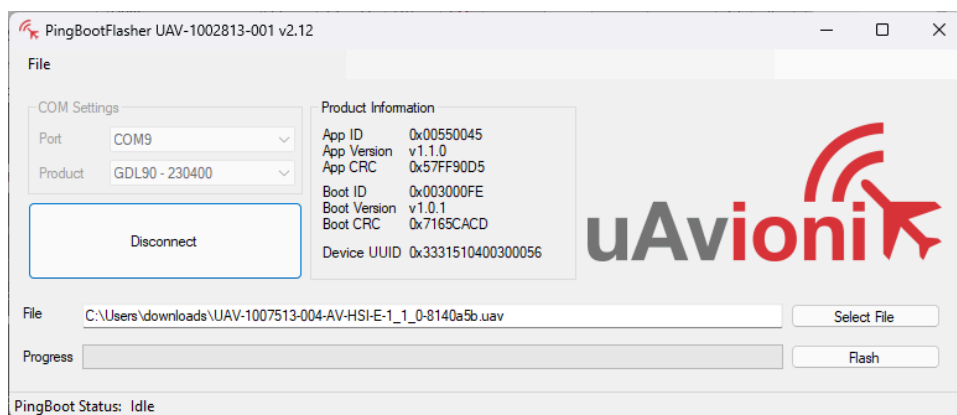
⚠️ DO NOT POWER OFF THE AV-HSI EXP OR CLOSE THE UPDATER TOOL UNTIL THE UPDATE IS COMPLETE

8. Update via AV-Link

If an AV-Link is connected directly to the AV-HSI EXP, it may be used to update the AV-HSI EXP wirelessly.

AV-Link software version 0.3.7 is required for this update. Before proceeding, verify that the AV-Link is running software version 0.3.7 or later. If the AV-Link is running version 0.3.5 or earlier, do not proceed. Update the AV-Link to version 0.3.7 according to the instruction links in Section 5.2.

8.1. Preparation for Update via AV-Link

If AV-Link is already installed in the aircraft, proceed to Section 8.2.

If AV-Link is available but not installed, follow the installation procedure as described in *AV-30-E Installation Manual UAV-1004234-001 Rev. M* (or newer), to install the AV-Link directly to the AV-HSI EXP.

8.2. Procedure for Update via AV-Link

After the AV-Link and AV-HSI EXP have been installed, AV-HSI EXP firmware updates can be performed using the AV-Link web interface. The web interface is accessible through any PC or mobile device. Ensure the PC or device has the AV-HSI EXP software listed in Table 3 are downloaded and available.

The following instructions show the update procedure when using a Windows PC. Apply the same procedures, modified as necessary, when using an alternate installation PC or device.

1. Apply power to the AV-HSI EXP and AV-Link. Do not interrupt power during the update process.

2. If using an Apple iPhone or iPad, you must put the device into Airplane Mode, then turn on Wi-Fi only.

3. Connect a PC to the AV-Link Wi-Fi Network. This will be displayed as AV_#### where #### will be 4 random characters ranging from 0-8 and A-F.

4. In a Web Browser (such as Google Chrome) navigate to the AV-Link home page via the following URL: 192.168.5.1

5. Verify that the version is at least 0.3.7. Click the "Wi-Fi Settings" button on the bottom left.

6. On the Wi-Fi Settings page, make sure the AV-HSI Settings Connected Devices field correctly specifies if the AV-HSI EXP has an AV-30-E connected to COM4. Save changes if necessary and return to the homepage.
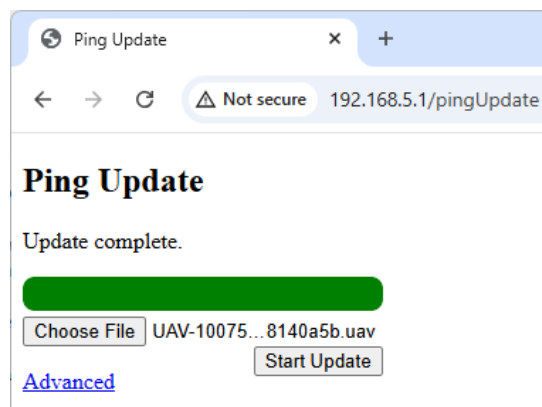
7. From the homepage, click either the AV-HSI version number or AV-HSI Update buttons to enter the AV-HSI programming page.

8. Select "Choose File" and select the previously downloaded software file: "UAV-1007513-004-AV-HSI-E-1_1_0-8140a5b.uav"
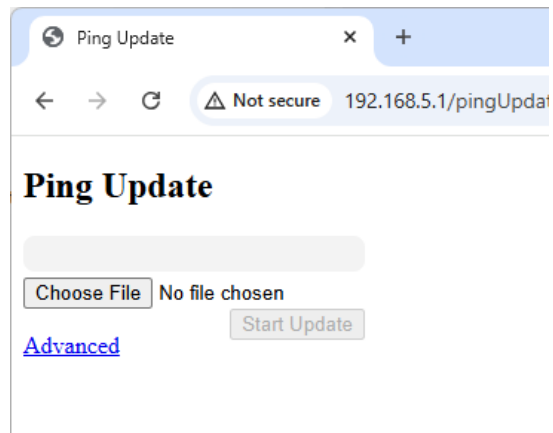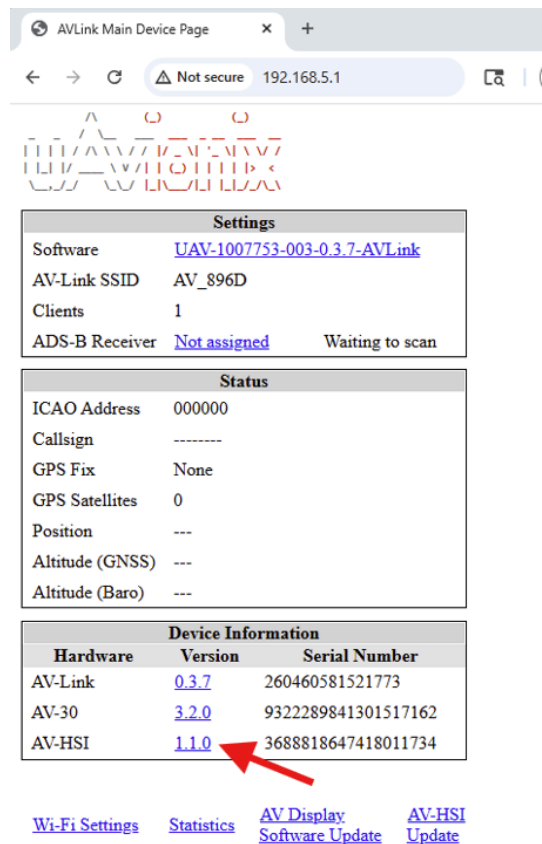
9. Click Start Update. The progress bar will fill. A message "Update Complete" will appear when the update finishes.

DO NOT power off the unit or close the web browser until the update is complete.

You should expect the update to take less than 2 minutes. If it takes longer, please call uAvionix technical support for assistance.

10. Navigate back to the homepage. Verify that the AV-HSI EXP version matches that specified in Table 3.

9. Post-Accomplishment Verification and Actions

9.1. Verify Update Versions

Verify installation by performing the following steps on the AV-30-E:

1. To enable access to the Installation Menu, ensure the unit is completely turned off. Push and hold the main control knob in while power is applied.

2. Keep the knob pushed until the startup screen displays, and then release.
3. Ensure the unit is in AI or DG mode; select the mode by pushing and holding the center knob until the mode display changes.
4. In AI or DG mode, push and release the left button under the MENU until the "INSTALL / ROT TO SEL" appears.

5. Rotate the knob until you see "AVHSI SW PN". Confirm part number matches that shown in Table 3.
6. Rotate the knob until you see "AVHSI SW VER". Confirm version matches that shown in Table 3.

If both software fields match, continue with these instructions. Otherwise, contact uAvionix Support.

10. System Checkout

Perform the System Checkout procedure as described in *AV-30-E Installation Manual UAV-1004234-001 Rev. M* (or latest available) Section 12.2 prior to returning to service.

11. Support

For additional questions or support please visit:

http://www.uavionix.com/support/

12. Maintenance Record

When post-accomplishment verification and system checkout is completed, make appropriate entries in the Aircraft Maintenance Log Book.

<p align="center">**Maintenance Record**</p>

Service Bulletin UAV-1008275-003 Rev A to install software v1.1.0 for AV-HSI EXP UAV-1007412-001, has been complied with.

⚠ A copy of this form must be submitted by visiting: https://uavionix.com/logbook/

Date:	By:
Aircraft Information	
Make:	Model:
Serial Number:	Registration Number:
AV-HSI EXP Information	
Serial Number:	
Hardware Part Number:	UAV-1007412-001
Customer Information	
Name:	
Email:	
Telephone:	