



VTU-20

In-Cab Controller

Service Bulletin

Software Upgrade to ADS-B 1.0.5



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Patent uavionix.com/patents

1 Revision History

Revision	Date	Comments
A	12/18/2025	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.

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4 Planning Information

4.1 Applicability

This Service Bulletin applies to the uAvionix VTU-20 In-Cab Controller (ICC) UAV-1001834-() with ICCPOP software release 1.0.4 or earlier.

Use Table 4-1 Applicability to determine applicability of the software update.

P/N Marking	Applicability
UAV-1001834-() MOD 0	Verify by procedure

Table 4-1 Applicability

Parts identified above as “Verify by procedure” may have ICC software UAV-1002408-() release 1.0.4 or earlier installed. To determine what version of software is currently installed follow software identification steps in section 7.1.

4.2 Description

This Service Bulletin provides instructions for loading uAvionix VTU-20 ICC UAV-1001834-() with updated ICCPOP software release 1.0.5 (UAV-1002408-003).

4.3 Changes

The change(s) addressed below are considered minor per 14 CFR 21.619. In detail, the changes are as follows:

- Improved push-configuration efficiency to minimize flash write cycles.

The software described in this Service Bulletin continues to meet the previously authorized requirements.

4.4 Time Required

Approximately 10 minutes is required to perform this update procedure.

4.5 Electrical Load Data

No change.

4.6 Applicable Publications

The following documents are applicable to the ICCPOP software release 1.0.5.

Title	Part Number	Revision
VTU-20 User and Installation Guide	UAV-1002560-001	E

5 Required Items

5.1 Part Numbers

Item	P/N	Version
VTU-20 In-Cab Controller (ICC)	UAV-1001834-()	N/A
VTU-20 Configuration Harness	UAV-1002582-001	N/A
VTU-20 Installer Software	UAV-1002778-001	1.2.0
pingBootFlasher Utility	UAV-1002813-001	2.11
VTU-20 ICCPOP Software (binary)	UAV-1002408-003	1.0.5

Table 5-1 Required Parts

In addition to the items listed in Table 5-1 above, the following COTS items are required to perform the update:

1. A Windows PC (Windows 10 or higher).
2. USB/RS-232 Adapter

Item	Filename	SHA1 Hash	CRC
ICCPop	UAV-1002408-003-VTU20ICCQualified-1_0_5-9c91d59.uav	3f467d083cf0b38f45a2e10f0bc88fbd3a6ba3f3	0xd905b94d

Table 5-2 Software Update Files

All uAvionix software utilities and binaries are freely available for download from the uAvionix Support website:

<https://uavionix.com/support/vtu-20/>

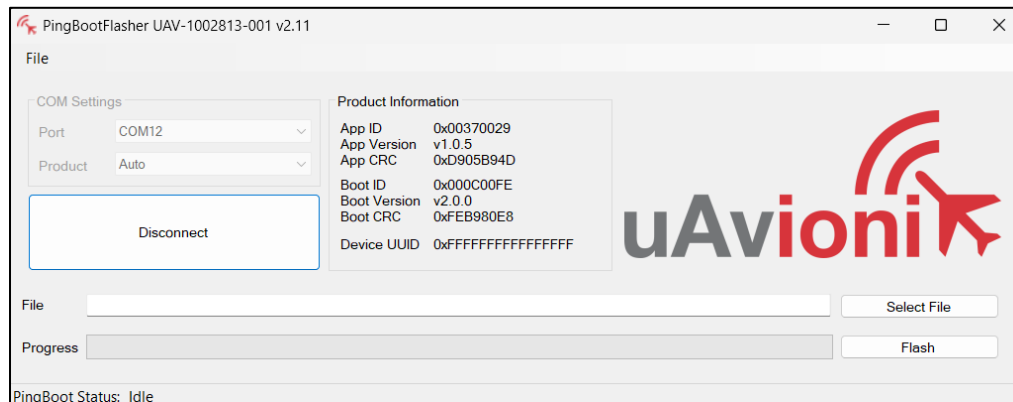
6 Update Notes

All VTU-20 ICC configuration settings will be preserved during this update procedure.

7 Procedure(s)

7.1 Software Version Identification

1. Connect ICC to the PC via the VTU-20 Configuration Harness (UAV-1002582-001) and USB/RS-232 adapter.
2. From the Windows PC, start the pingBootFlasher application.
3. From pingBootFlasher, select the appropriate COM port for your USB/RS-232 adapter under the “Port” dropdown.
4. From pingBootFlasher, click “Connect”.
5. Apply 12VDC power and ensure ICC power switch is ON (LEDs should illuminate).
6. Verify the App Version reads the current firmware version loaded on the ICC. Example: “v1.0.5” shown below.



ATTENTION: If the software version identified in Step 6 above is 1.0.4 or earlier, proceed to section 7.2 below.

7.2 Execute the Update Procedure

1. Perform steps 1-5 from Section 7.1 above.
2. From pingBootFlasher, click the “Select File” button and navigate to the uav file to be flashed. Example “UAV-1002408-003-VTU20ICCCQualified-1_0_5-9c91d59.uav”
3. From the pingBootFlasher, click the “Flash” button to update the software.
4. From the pingBootFlasher, observe the green status bar at the bottom of the screen to monitor flash status. Do not remove power from the ICC at this time.
5. Once flashing is complete, click “Connect” to re-connect to the ICC.

6. Momentarily power cycling of the ICC to connect ICC to pingBootFlasher.
7. Verify the new software version and CRC match values from Table 5-2.
8. Reloading of the squitter fence maps and ADS-B configuration parameters is NOT required. However, it is recommended to reverify configuration described in section 9.

8 Post-Accomplishment Verification

If any post-accomplishment check fails during the update procedure, please contact uAvionix support in Section 10.

9 System Checkout

Verify configuration as described in “VTU-20 User and Installation Guide” UAV-1002560-001 Section 9.

10 Support

For additional questions or support please visit:

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