



skyAlert User Guide



1 COPYRIGHT / DISCLAIMER

The following required statement from the Federal Communications Commission (FCC) applies to United States based entities with the exception of direct sales to the U.S. Government and units directly exported by uAvionix: This device has not been authorized as required by the rules of the Federal Communications Commission.

This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

uAvionix reserves the right to alter product, services offerings, specifications, and pricing at any time without notice.

© Copyright 2025 uAvionix, all rights reserved. www.uavionix.com

uAvionix Corporation Bigfork, MT

2 Revision History

Revision	Date	Comments
A	5/7/2025	Initial release.
B	918/2025	Revised part numbers. Updated LED color guide.

3 LIMITED WARRANTY

uAvionix skyAlert products are warranted to be free from defects in material and workmanship for two years from purchase. For the duration of the warranty period, uAvionix, at its sole option, will repair or replace any product which fails under normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost.

Restrictions: This warranty does not apply to cosmetic damage, consumable parts, damage caused by accident, abuse, misuse, water, fire or flood, damage caused by unauthorized servicing, or product that has been modified or altered.

Disclaimer of Warranty: IN NO EVENT, SHALL UAVIONIX BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Warranty Service: The warranty repair service shall be provided directly by uAvionix. Proof of purchase for the product from uAvionix or authorized reseller is required to obtain and better expedite warranty service.

Please email or call uAvionix Customer Support with a description of the problem you are experiencing. Please provide the model, serial number, shipping address, and a daytime contact number.

You will be promptly contacted with further troubleshooting steps or return instructions; it is recommended to use a shipping method with tracking and insurance. Directly contact customer support by visiting:

support@uavionix.com

4 Table of Contents

1	COPYRIGHT / DISCLAIMER	2
2	REVISION HISTORY	3
3	LIMITED WARRANTY	4
4	TABLE OF CONTENTS	5
5	TABLE OF FIGURES	7
6	LIST OF TABLES	8
7	INTRODUCTION TO SKYALERT	9
7.1	SYSTEM DESCRIPTION	9
8	WHAT'S IN THE BOX?	10
9	FEATURES	11
9.1	SKYALERT DEVICE FEATURES	11
9.2	RAM® UNIVERSAL BELT & VISOR CLIP.	11
10	TECHNICAL SPECIFICATIONS	12
11	MECHANICAL SPECIFICATIONS	13
12	USER INTERFACE	14
12.1	CONTROLS, LIGHTS AND ALERTS SPECIFICATIONS	14
13	EQUIPMENT ASSEMBLY AND CONFIGURATION	16
13.1	NO ASSEMBLY OR INSTALLATION REQUIRED	16
13.2	CONNECTING TO SKYALERT	16
13.3	ALRT CONFIGURATION	17
14	SKYALERT CONNECTION AND NETWORK SETTINGS	19
14.1	NETWORK NAME (SSID)	19
14.2	HOW TO CHANGE THE NETWORK NAME	19
14.3	HOW TO HIDE THE SSID BROADCAST	19
14.4	CONNECTING A NEW DEVICE WITH SSID BROADCAST DISABLE	19
15	SKYALERT REMOTE PILOT'S GUIDE	21
15.1	SKYALERT WPA2 SECURITY	21
15.2	TO RESTORE SKYALERT TO FACTORY SETTINGS	21
16	FIRMWARE UPDATE PROCEDURE	22
16.1	CONFIGURATION SETUP	22
16.1.1	Connecting to the skyAlert via Wi-Fi	22
16.2	UPDATE TRANSCEIVER SOFTWARE	23
16.3	Wi-Fi FIRMWARE	24
17	BATTERY	25

18	SUPPORT	26
----	---------------	----

5 Table of Figures

FIGURE 1: ILLUSTRATION OF SKYALERT DEVICE IN USE	9
FIGURE 3: RAM® MOUNT BASE ADAPTER	10
FIGURE 2: RAM® VISOR CLIP.....	10
FIGURE 5: USB TO USB-C CHARGING CABLE	10
FIGURE 4: SKYALERT DEVICE.....	10
FIGURE 6: SKYALERT MECHANICAL SPECIFICATIONS	13
FIGURE 7: USER INTERFACE COMPONENTS	14
FIGURE 8: SKYALERT LAUNCHING PAGE	17
FIGURE 9: SKYALERT DEVICE SETTINGS PAGE	18
FIGURE 10: AVAILABLE WI-FI NETWORK CONNECTIONS	22
FIGURE 11: SKYALERT LAUNCHING PAGE	23
FIGURE 12: UPDATING SKYALERT ADS-B.....	23
FIGURE 13: SELECTING FILE FOR PING UPDATE.....	23
FIGURE 14: SUCCESSFUL UPDATE MESSAGE.....	24
FIGURE 15: UPDATING SKYALERT WI-FI VERSION	24
FIGURE 16: SELECTING FILE FOR WI-FI FIRMWARE.....	24

6 List of Tables

TABLE 1: WHAT'S IN BOX - DESCRIPTION AND DETAILS 10

TABLE 2: SKYALERT FEATURES AND DESCRIPTIONS 11

TABLE 3: SKYALERT TECHNICAL SPECIFICATIONS..... 12

TABLE 4: SKYALERT USER INTERFACE SPECIFICATIONS 14

TABLE 5: SKYALERT LED INDICATION GUIDE 15

7 Introduction to skyAlert

7.1 System Description

skyAlert is a rugged, wearable ADS-B detection and alerting system that enhances airspace awareness for UAS pilots operating in the field. By detecting cooperative aircraft via ADS-B on both 978 and 1090 MHz frequencies, skyAlert provides real-time audible and visual alerts when crewed aircraft approach within a configurable proximity.

This added layer of situational awareness helps operators maintain safe separation and focus on mission objectives. Compact, lightweight, and built for demanding environments, skyAlert reduces setup time, eliminates the need for bulky ground equipment, and streamlines pre-flight operations. Its rechargeable battery life and intuitive LED indicators make it the ideal companion for utility and first responder drone teams working in complex or remote airspace.



Figure 1: Illustration of skyAlert Device in Use

8 What's in the box?

Item	Description	Qty	Part Number
1	skyAlert device	1	UAV-1008899-001
2	USB to USB-C charging cable (1ft, white)	1	UAV-1002158-001
3	skyAlert Getting Started Card	1	UAV-1005282-029
4	EVA Zipper Case with foam insert	1	UAV-1002157-002
5	RAM® Universal Belt & Visor Clip (RAP-17OU)		UAV-1008916-001
6	RAM® Mount Base Adapter (Installed)	1	UAV-1001974-001

Table 1: What's in Box - Description and Details



Figure 3: RAM® Visor Clip



Figure 2: RAM® Mount Base Adapter



Figure 4: USB to USB-C Charging Cable



Figure 5: skyAlert Device

9 Features

9.1 skyAlert Device Features

Transmission Detection	Receives 978 and 1090 MHz ADS-B transmissions, allowing detection of all cooperative air traffic.
Lightweight and Wearable	Small, lightweight device rugged and mobile, seamlessly facilitates field operations.
Convenience Features	Includes a silicon sleeve storage case and USB-C charging cable.
Audible Alerts	Audible alerts to air traffic posing a risk to UAS operations.
User Configurable	Alerts are configurable based on intruder aircraft range and altitude, to prevent operator distraction.
Long-lasting Battery	Rechargeable (USB-C cable provided), long-life battery to support a full day of UAS operations.
LED Light Indication	LED lights indicate fully operational status, changing level, intruder alerts, and GPS quality.
LED Brightness Control	LED brightness is controlled by ambient light sensor and is user configurable.

Table 2: skyAlert Features and Descriptions

9.2 RAM® Universal Belt & Visor Clip.

Along with your device, you will be receiving a RAM belt clip to ensure secure and mobile operations. The RAM composite belt clip holder consists of an octagon locking button socket and diamond plate with octagon button. The RAM universal Belt and Visor has a mount adapted attached, ready to use. The belt clip holder can hold any RAM cradle that utilizes the diamond plate hole pattern as an attachment point. Follow the steps below to attach the skyAlert device to the RAM mount clip:

- With the octagon button, you can slide the secured skyAlert device in and out of the clip holder.
- To attach, slip the clip over your belt or strap.

10 Technical Specifications

Name	Part Number
skyAlert	UAV-1008899-001
ADS-B Detection	
Frequencies	978 and 1090 MHz
Alerts	
Audible	Loud recurring beep
Visual	LED
Trigger	User configurable Default (1,000 ft, 1 mile)
Parameter	Value
Input Voltage	5V
Size	64.6 x 40.18 x 92.6 mm
Weight	161 grams
Operating Temp	-45 to 70 °C
Rechargeable Battery	
Operating time	Up to 12 hours
Charging time	Up to 12 hours from zero
Charger type	USB-C

Table 3: skyAlert Technical Specifications

11 Mechanical Specifications

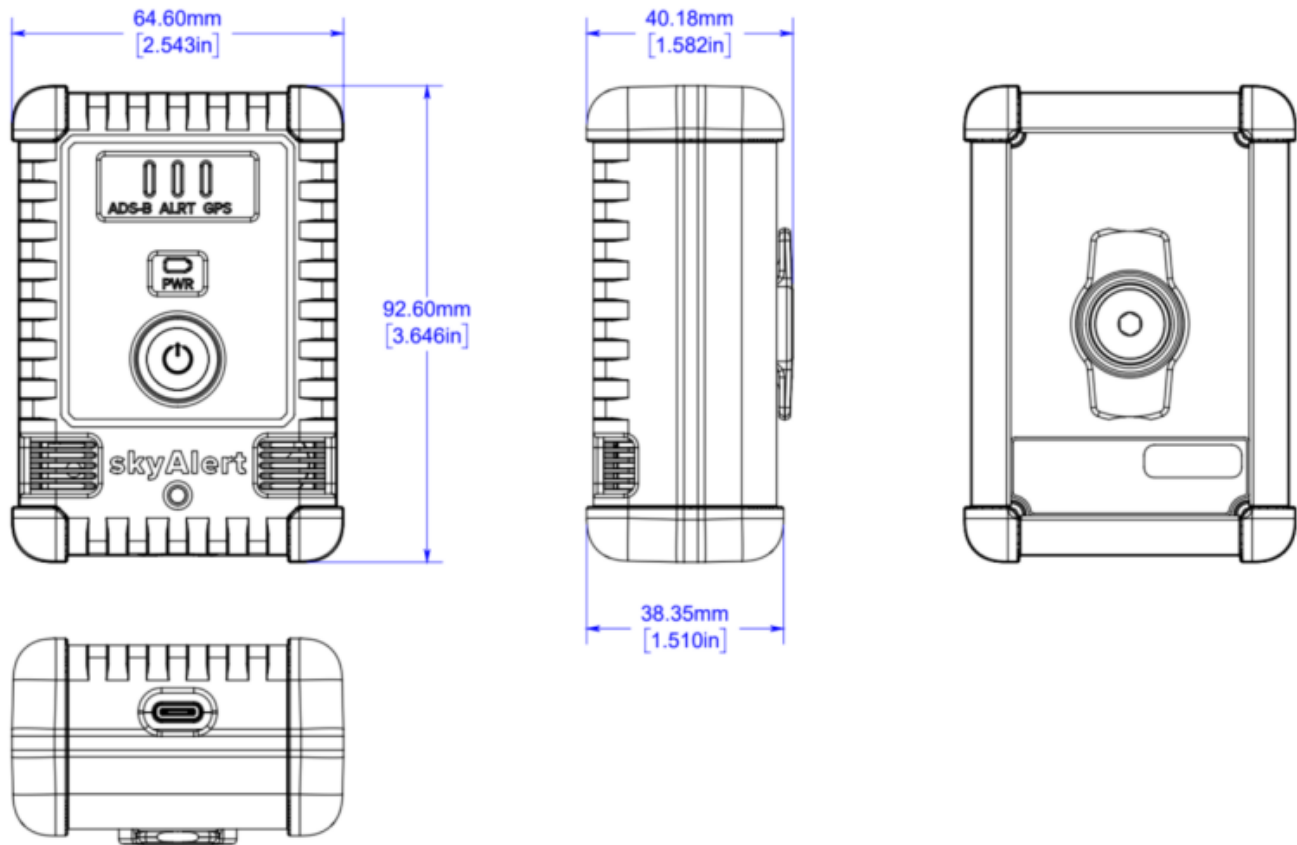


Figure 6: skyAlert Mechanical Specifications

12 User Interface

12.1 Controls, Lights and Alerts Specifications

Powering On	Press the power button for at least one second to turn it on and all LEDs will become illuminated.
Powering Off	Press the power button for at least one second to turn off and all LEDs will turn off.
Active Charging	The PWR light will illuminate blue and will go out once the device is fully charged.
Light Sensor Control	The light sensor controls LED brightness and can also be configured.
Traffic Detected	Alerts are configurable based on intruder aircraft range and altitude, to prevent operator distraction. The alarm can be silenced for 30 seconds at a time by pressing the power button.

Table 4: skyAlert User Interface Specifications

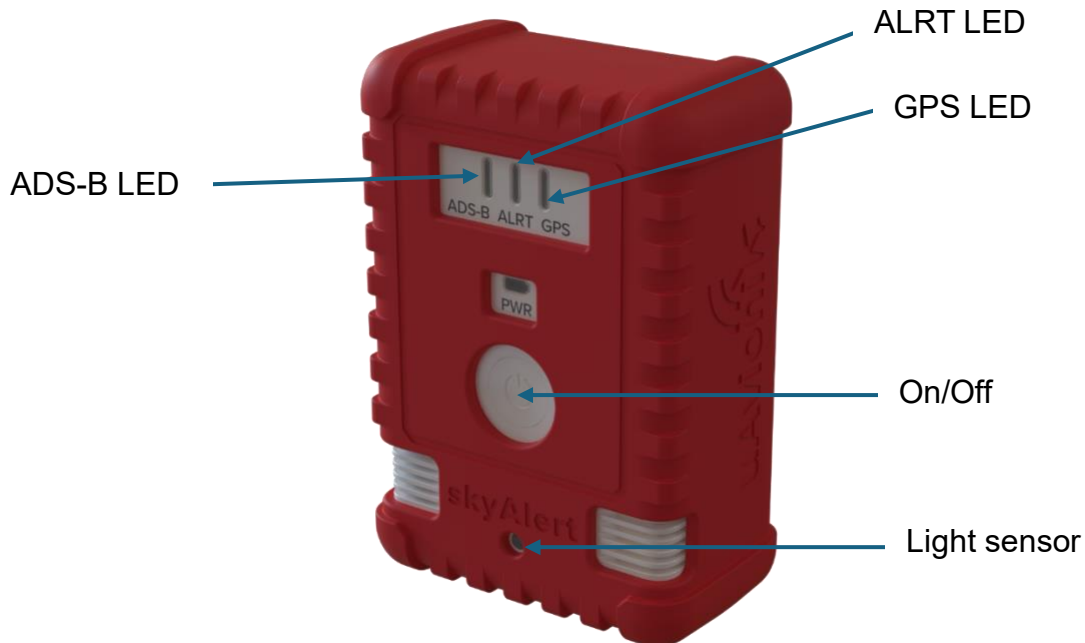


Figure 7: User Interface Components






LED Color	ADS-B	ALRT	GPS	PWR
	Flashing light indicates reception of traffic	---	---	---
	---	---	---	Battery Charging
	---	All Clear	Good Fix	Battery Good > 30%
	---	Warning (aircraft within double the altitude limit AND within range limit OR within double range limit and altitude limit)	Bad Fix	Battery Low < 30%
	Poor Coverage (no UAT uplink towers)	Alarm (aircraft within range and altitude limit)	No Fix	Battery Critical < 20%

Table 5: skyAlert LED Indication Guide

13 Equipment Assembly and Configuration

13.1 No Assembly or Installation Required

skyAlert is a wearable device that can be charged up and attached to your clothing with the provided RAM clip. No other assembly or installation is required.

13.2 Connecting to skyAlert

1. Power the device on by holding the power button for one second.
2. With skyAlert powered on, open the Settings app on your device (i.e. smartphone, tablet) and select Wi-Fi. Locate skyAlert's wireless network and tap to connect.
 - skyAlert's network name is "skyAlert_" followed by a sequence of letters and numbers (e.g. skyAlert_125A).
3. Once you connect to skyAlert, your device (i.e. smartphone, tablet) will automatically reconnect, provided the following conditions are met:
 - skyAlert is powered on.
 - The Wi-Fi device is enabled.
 - skyAlert network name and password have not changed.
 - The device is not already connected to another network.
 - Auto-Join is enabled in your device's (i.e. smartphone, tablet) Wi-Fi > skyAlert settings.

13.3 ALRT Configuration

To change the alert from the default range and altitude limits, follow these steps. First make sure your device (i.e. smartphone, tablet) is connected to the skyAlert_XXXX Wi-Fi network. Open a web browser to navigate the steps below:

1. The main page (<http://192.168.4.1/>) highlights skyAlert identification information along with a link to the settings page (<http://192.168.4.1/settings>). Click the "Settings" link.

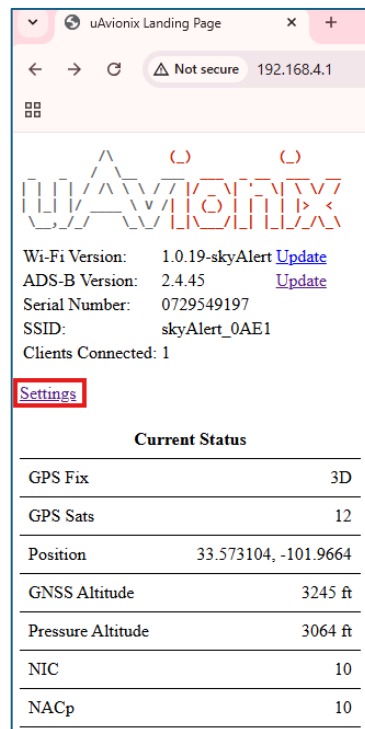


Figure 8: skyAlert Launching Page

2. The "Settings" page will load and there will be a note at the top stating "Settings loaded." On the settings page, you may change the traffic proximity alarm range, altitude, and volume, Wi-Fi network name settings, or the LED brightness.

Device Settings

Settings updated.

Traffic Proximity Alarm Settings

Altitude Limit (ft): 1000

Range Limit (ft): 5279

Volume: 10

WiFi Network Settings

SSID: skyAlert_OAE1 ☐ Hidden

Password: ☐ Enabled

Channel: 8 ☒ Auto

Pwr Level: 9

LED Control

Brightness: 50 ☒ Auto

Save

Reset to defaults Test Alarm Silence Alarm Test LEDs

[Main Page](#)

Figure 9: skyAlert Device Settings Page

3. Once the settings are configured, click the large "Save" button at the bottom of the page. Once saved, confirmation will be displayed.

NOTE: Below the "Save" button, you can reset to default settings.

14 skyAlert Connection and Network Settings

14.1 Network Name (SSID)

The default skyAlert network name is generic (e.g., skyAlert_123A). The network name can be changed if desired. Wireless network names must be unique and between 1 and 32 characters. The network name may contain only letters, numbers, spaces, and underscores.

14.2 How to change the network name

To change the wireless network name (SSID):

1. Go to the skyAlert settings webpage.
2. Tap the SSID field and enter a network name between 1 and 32 characters.
3. Tap “Save” when complete.
4. Once complete, reboot skyAlert for the changes to take effect.

14.3 How to hide the SSID broadcast

If you don’t want skyAlert to broadcast its network for all devices to see, you can disable the SSID broadcast. Disabling the SSID broadcast hides the network from devices that have not yet connected to skyAlert. To hide the skyAlert network:

1. Check the box labeled “Hidden” next to the Wi-Fi Network Settings > SSID box.
2. Once your iOS device has connected to skyAlert, it will automatically reconnect when the device is powered on, provided auto-join was enabled in Wi-Fi > skyAlert settings.

14.4 Connecting a New Device with SSID Broadcast Disable

To connect a new device to skyAlert with the SSID disabled, follow the steps below:

1. Open Wi-Fi settings on your device (i.e. smartphone, tablet).
2. Select Other... from the OTHER NETWORKS section.

3. Manually enter the skyAlert network name (SSID) and password (if applicable).

15 skyAlert Remote Pilot's Guide

15.1 skyAlert WPA2 Security

skyAlert does not have a passcode by default. A passcode can be assigned from the skyAlert settings page. To assign a passcode:

1. Go to the skyAlert "Settings" webpage.
2. Under "Wi-Fi Network Settings," next to the "Password" box, check the box labeled "Enabled."
3. Enter a new passcode in the "Password" box.
4. Enter a passcode between 8 and 63 characters. The WPA2 passcode may only contain letters, numbers, spaces, and underscores, and are case sensitive.
5. Tap "Save."
6. Restart skyAlert by holding the power button for one second to power it off.
7. Open your device (i.e. smartphone, tablet) settings app
8. Select Wi-Fi settings and connect to skyAlert using the new passcode. If you're unable to connect to skyAlert with WPA2 security enabled, perform a factory reset to remove the passcode.

15.2 To restore skyAlert to factory settings

1. Power skyAlert on.
2. Press and hold the power button until the LEDs flash white (approximately ten seconds).
3. Power skyAlert on.
4. Open the Wi-Fi settings on your device (i.e. smartphone, tablet) and connect to skyAlert.

16 Firmware Update Procedure

16.1 Configuration Setup

Configuration of skyAlert is accomplished by logging on to the device directly from a computer or mobile device using the skyAlert internal Wi-Fi hotspot. No additional application is necessary.

The following are procedures for updating the skyAlert firmware. You may be provided with one or two files to update, corresponding to the procedures below. The most recent firmware is always posted at www.uavionix.com/support.

NOTE: Save the provided firmware file(s) to an accessible location on your computer/tablet prior to joining the skyAlert Wi-Fi hotspot.

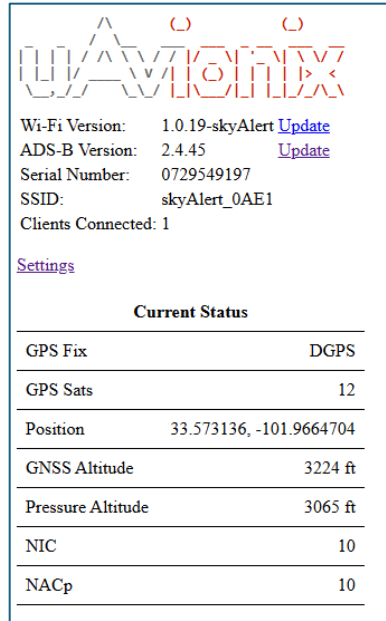
16.1.1 Connecting to the skyAlert via Wi-Fi

1. To connect, power on skyAlert and join the device to the wireless network SSID named skyAlert-XXXX using the procedure for your device (i.e. smartphone, desktop, tablet). This procedure is identical to joining any other public or private Wi-Fi on your chosen device.
 - a. **NOTE:** The No Internet Connection message is normal when connected to skyAlert.



Figure 10: Available Wi-Fi Network Connections

2. Open any browser on your computer/mobile device that is connected to your skyAlert via the Wi-Fi link and type in <http://192.168.4.1>
The following landing page should load and will display skyAlert status:



Wi-Fi Version: 1.0.19-skyAlert [Update](#)
 ADS-B Version: 2.4.45 [Update](#)
 Serial Number: 0729549197
 SSID: skyAlert_0AE1
 Clients Connected: 1
[Settings](#)

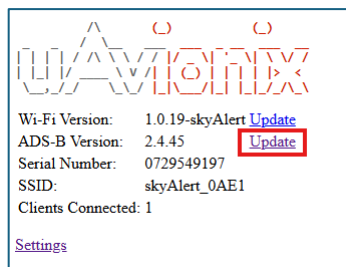
Current Status	
GPS Fix	DGPS
GPS Sats	12
Position	33.573136, -101.9664704
GNSS Altitude	3224 ft
Pressure Altitude	3065 ft
NIC	10
NACp	10

Figure 11: skyAlert Launching Page

16.2 Update Transceiver Software

Follow this procedure if you are given Transceiver Software (*.uav) update file.

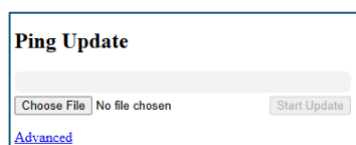
1. Click on the ADS-B Version” Update Link:



Wi-Fi Version: 1.0.19-skyAlert [Update](#)
 ADS-B Version: 2.4.45 [Update](#)
 Serial Number: 0729549197
 SSID: skyAlert_0AE1
 Clients Connected: 1
[Settings](#)

Figure 12: Updating skyAlert ADS-B

2. Click on “Choose File,” and navigate to the Transceiver Software file (.uav). Select it and click “Update.”
3. The system will update.
4. When complete, the following screen will appear:
5. Manually power off skyAlert, then power back on to reboot.



Ping Update
 No file chosen
[Advanced](#)

Figure 13: Selecting File for Ping Update

16.3 Wi-Fi Firmware

Follow these instructions if you are given Wi-Fi update firmware (*.bin).

1. Reconnect to the skyAlert hotspot as described above.
2. Open a web browser on your chosen device (i.e. desktop, mobile device) and navigate to 192.168.4.1



Figure 14: Successful Update Message

3. Click on the “Wi-Fi” Version Update Link:

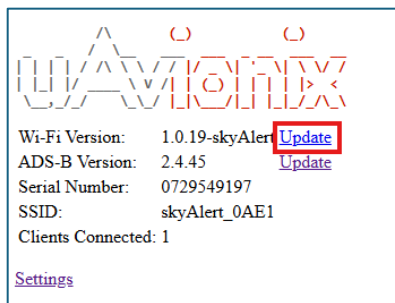


Figure 15: Updating skyAlert Wi-Fi Version

4. Click on “Choose File” and navigate to the Wi-Fi firmware file (.bin). Select it and click “Update.”



Figure 16: Selecting File for Wi-Fi Firmware

5. The system will update.
6. When complete, go back to the main page to confirm both ADS-B and Wi-Fi versions match the files delivered.
7. Manually power off skyAlert, then power back on to reboot.

17 Battery

skyAlert is equipped with a rechargeable battery. The battery is not designed to be removed or replaced. skyAlert exclusively supports USB 5V (volt) 2A (amp) chargers.

skyAlert will not charge if connected to a charger that delivers more power than it is designed to accept. When charging, the skyAlert power light is illuminated blue. It can take up to 12 hours to charge a depleted skyAlert battery.

18 Support

For skyAlert support, visit: <http://uavionix.com/support/>



uAvionix reserves the right to alter this document at any time without notice.

uAvionix, 300 Pine Needle Lane. Bigfork, MT. USA 59911

© 2025 uAvionix, Inc. All rights reserved.