# **STRATUS**

PILOT'S GUIDE





sporty's

## **STRATUS**

#### **OUICK START INSTRUCTIONS**

- 1. Charge Stratus battery to 100% using wall adapter.
- Place Stratus in aircraft.
- 3. Power on Stratus by pressing the power button.
- 4. Connect your iPhone® or iPad® to the Stratus WiFi network from the **Settings** menu.
- 5. Open ForeFlight Mobile and confirm connection to Stratus using the **Devices** tab.

**NOTE:** Because ADS-B signals are broadcast by ground towers, Stratus will not receive information while it is on the ground.

#### **PACKAGE CONTENTS**

- Stratus module
- 120VAC wall charger and USB cable
- Stratus Pilot's Guide

#### **OPTIONAL ACCESSORIES**

Visit www.sportys.com/stratus or www.appareo.com/stratus for compatible external ADS-B antennas, vehicle power adapters, and other Stratus accessories.

#### **ABOUT STRATUS**

Stratus is a portable, battery-operated receiver that works in harmony with ForeFlight Mobile. It provides pilots with free in-flight weather and is a source of accurate GPS WAAS position reports. Stratus receives Automatic Dependent Surveillance - Broadcast (ADS-B) weather information (FIS-B) and other related data and broadcasts it to ForeFlight Mobile via a WiFi network created by Stratus.



#### **CHARGE THE BATTERY**

Insert the USB plug into the wall charger's port and the micro USB plug into the Stratus USB port. Plug the wall charger into an electric wall outlet. Fully charge the battery prior to first use.

**NOTE:** Use only approved battery chargers. Do not lift or carry Stratus by a connected cable—doing so may cause permanent damage to the USB port.

#### **USING BATTERY POWER**

If Stratus is not connected to an external power adapter, it will automatically draw power from the internal battery.

#### **TURN STRATUS ON**

To turn Stratus on, press and hold the power button until all LED indicators are illuminated.

#### **CONNECT TO FOREFLIGHT MOBILE**

In order for Stratus to communicate with ForeFlight Mobile, you must first connect your iPhone or iPad to the Stratus wireless network.

- Tap the **Settings** icon on your iPhone or iPad's home screen.
- 2. Tap WiFi.
- Ensure that WiFi is enabled (the slider next to WiFi should be green or display "ON"). Tap the Stratus wireless network, displayed under "Choose a Network..." to connect.

**NOTE:** Stratus's wireless network name will be displayed as "StratusXXXXXX," where the X's represent your Stratus's unique six digit serial number.

Once your iPhone or iPad is connected to the Stratus wireless network, a checkmark will appear next to the network name.

**NOTE:** It is recommend that you disable the "Ask to Join Networks" feature on your iPhone or iPad while you are using Stratus and ForeFlight Mobile.

4. To confirm that Stratus is connected to ForeFlight Mobile, open the ForeFlight Mobile app on your iPhone or iPad and select **Devices**. A box will appear on this screen to notify you that Stratus is successfully connected. From this screen, you may interact with your Stratus.

**NOTE:** Please refer to the Pilot's Guide for ForeFlight Mobile for more information about interacting with Stratus via ForeFlight Mobile.

### **LED INDICATOR STATUS**

Symbol	Description	Color	Condition Indicated
Ф	External power	Green	External power is received, battery is fully charged
		Yellow	External power is received, battery is being charged
		Red flashing	Connected to an incompatible charger, or charger is unable to provide sufficient power
		Off	No external power is being received
Û	Battery power	Green	Battery is at 20% to 100% charge
		Yellow	Battery is at 5% to 19% charge
		Red	Battery is at 1% to 4% charge
		Red flashing	Stratus will shut down soon due to low battery charge

Symbol	Description	Color	Condition Indicated
(S	ADS-B signal	Green	Report from ground tower has been received in the past three seconds
		Off	No report from ground tower has been received in the past three seconds
	All indicators	Red flashing	Built-in-Test failure. Contact support for assistance
		Yellow flashing	Installing firmware update
		Green for two seconds	Firmware update complete
		Blue to white to blue, then off	Factory reset process is complete
		Purple	Powering down, configuration data is being saved
		Off	Powered off

#### POWER OPTION SETTING

You may select how Stratus is powered on: automatically whenever the device receives power, or only when the power button is pushed. This setting may be changed via ForeFlight Mobile. For more information about this feature and instructions on changing the power option setting, please refer to the Pilot's Guide for ForeFlight Mobile.

#### PLACE STRATUS IN AIRCRAFT

When choosing a location for Stratus in your aircraft, you must consider three things: 1) heat - direct sunlight or hot mounting surfaces may cause Stratus to overheat, 2) ADS-B reception is ground-based, and 3) GPS reception is satellite (sky) based. You must determine the ideal mounting location based on aircraft model and flying environment. Possible locations include the aircraft's back, copilot seat, or the side of a sloped glareshield.

**NOTE:** An optional RAM mount is available from your Stratus retailer. The mount may improve the internal antenna's ADS-B reception and provides more options for mounting Stratus off the glareshield.

#### LED AUTO-DIMMING

Stratus contains an ambient light sensor that will brighten or dim the LEDs in response to the ambient light level.

You may manually change the LED brightness settings via the LED Brightness slider in ForeFlight Mobile.

#### **RESET TO FACTORY SETTINGS**

To return Stratus to its default factory settings, press and hold the power button for 30 seconds while the device is on. Once the factory reset is complete, all of the LED indicators will cycle from blue to white to blue. The factory reset will change the LED dimming and power mode settings back to default.

#### CONNECT AN EXTERNAL ANTENNA\*

To connect an external ADS-B antenna to Stratus, insert the antenna's cable into the antenna port.

#### PLACE EXTERNAL ANTENNA IN AIRCRAFT\*

When placing an external ADS-B antenna in your aircraft, choose a location that provides an unobstructed view of ADS-B ground towers.

<sup>\*</sup>External antennas are optional accessories available from your Stratus retailer.

#### **FAQS**

What is the source of the information received by Stratus? Is there coverage in my region?

ADS-B is the source of the data received by Stratus. Go to www.appareo.com/stratus to view a map of current ADS-B coverage in the United States.

Are there any subscription fees associated with ADS-B weather?

No, there are no subscription fees and no registration required.

Can I connect to the internet from Stratus?

No, Stratus is a one-way, receive-only device.

Does Stratus satisfy the 2020 ADS-B Out requirement? No, this is an ADS-B In only product.

Can I receive satellite radio with Stratus?

No, Stratus is not equipped to receive satellite radio signals.

## What weather products are available? What is their range? How often are they updated?

See the FAA's Aeronautical Information Manual, Section 7.1.11.

Product	Range	Update intervals
NEXRAD composite reflectivity	Contiguous US 250 NM	15 minutes 2.5 minutes
AIRMETs	100 NM, airport surface 500 NM en route/ terminal	5 minutes
SIGMETs and Convective SIGMETs	100 NM airport surface 500 NM en route/ terminal	5 minutes
METARs	100 NM airport surface 500 NM en route/ terminal	5 minutes
NOTAM(D) and FDC NOTAM (including TFR)	100 NM	10 minutes
PIREPs	500 NM en route/ terminal	10 minutes
Special Use Airspace	500 NM en route/ terminal	10 minutes
TAF	100 NM airport surface 500 NM en route/ terminal	10 minutes
Wind/temperature aloft	1000 NM	10 minutes

At what altitude will I receive weather data?

The altitude Stratus begins to receive weather will vary depending on the number of nearby towers, terrain, and the obstacles that may be between Stratus and a tower.

Is an external GPS antenna available for Stratus?

No, there is no external GPS antenna available for Stratus. The optional Stratus external antenna receives ADS-B signals only.

Is there anything I do can to lengthen battery life?

To increase the time between battery charges, you may choose to lessen Stratus's WiFi network's range, and/or dim the LEDs. You may change these settings through the Stratus Status page in ForeFlight Mobile.

If the Stratus battery percentage displayed in ForeFlight is too high or too low, the battery needs to be recalibrated. To recalibrate your battery, first fully charge Stratus until the external power LED turns green. Then, turn Stratus on and allow it to run until the battery is fully discharged and turns off. Finally, fully recharge the battery again - until the external power LED turns green. Once this process has been completed, the battery should report an even discharge rate.

What can I do to prevent Stratus from overheating?

Avoid placing Stratus in direct sunlight, on a hot surface, or on a dark surface. Additionally, you should never store Stratus in a hot aircraft.

Can I connect more than one iPad to Stratus?

Yes. In fact, every iOS device running ForeFlight Mobile in the cockpit can connect to Stratus and see the same weather unfold.

#### For more FAQs, go to:

- www.appareo.com/stratus
- www.sportys.com/stratus
- www.foreflight.com/stratus

#### WARNINGS

#### Data

- Use of personal electronic devices while in-flight may pose a safety hazard. Use of Stratus on an in-flight aircraft is subject to approval by the Pilot in Command.
- ADS-B weather information is provided within the United States only.
- Position information provided by Stratus should be used for situational awareness only and should not be used as your primary navigation source.
- Weather information provided by Stratus is delayed, may not always be available and should be used for situational awareness and not for tactical decisions.

#### **Battery**

 Do not store Stratus in environments where temperatures exceed 45°C (113°F) or are lower than -20°C (-4°F). Do not operate Stratus in environments where temperatures exceed 35°C (95°F) or are lower than 0°C (32°F). Battery performance will be negatively affected if these temperature thresholds are exceeded.

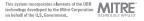
- Do not store Stratus in direct sunlight.
- Stratus contains a lithium battery. Do not disassemble the device. Do not incinerate or puncture the device or the battery.
- Ensure that disposal of Stratus is in accordance with local requirements for the recycling of electronic appliances and batteries.
- Check with current FAA rules before carrying the device in checked luggage.

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To view the warranty and the current Pilot's Guide for Stratus, go to www.appareo.com/stratus



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