

STRATUS HORIZON PRO


Pilot's Guide

Getting Started

The Stratus Horizon Pro app works with Stratus portable ADS-B receivers to show real-time AHRS (attitude, heading, and reference system) data of your aircraft on your iOS device.

When connected to a Stratus audio cable, the Stratus Horizon Pro app will record and transcribe ATC audio (transcription subscription required). The Radio Playback and Radio Transcription features allow you to read and replay ATC audio while monitoring AHRS.

To purchase a Stratus audio cable, visit [appareo.com/store/product/stratus-audio-cable](https://www.appareo.com/store/product/stratus-audio-cable).

To activate a transcription subscription, tap the settings  button, then tap **Transcriptions**. Tap **Manage Subscriptions** and choose a subscription plan.

Compatible Devices


Visit [appareo.com/stratus-horizon-pro-compatibility](https://www.appareo.com/stratus-horizon-pro-compatibility) for a list of compatible devices.

Connecting to a Stratus Portable Receiver

Your iOS device must be connected to the Stratus Wi-Fi network (not Bluetooth) for the receiver to communicate with the app.

1. Turn on the Stratus portable receiver by pressing the power button or turning on the aircraft if it's configured to power on with aircraft power.
2. Tap the **Settings** button on your iOS device's home screen.
3. Tap **Wi-Fi**.
4. Make sure that Wi-Fi is enabled. Tap the Stratus wireless network, displayed under **Choose a Network**, to connect. Your Wi-Fi network name is on the label on the back of your receiver.

When your device is connected to the Stratus wireless network, a checkmark appears next to the network name.

5. Tap the settings  button in Stratus Horizon Pro, then tap **Stratus Information**. Confirm that the receiver is connected.

NOTE: Because ADS-B signals are broadcast by ground stations, your receiver will not receive weather and traffic information while it is on the ground.

Using AHRS

WARNING Stratus Horizon Pro is intended for situational awareness use only and is not certified for use as a primary flight instrument.

For the most accurate AHRS information, ensure that the receiver is mounted parallel with the centerline of the aircraft and so the logo and LEDs on the device are facing toward the back of the plane. Refer to the receiver's pilot's guide and the graphic on the bottom of the receiver for correct mounting alignment with the aircraft. If the receiver is positioned incorrectly in your aircraft, AHRS data may display incorrectly.

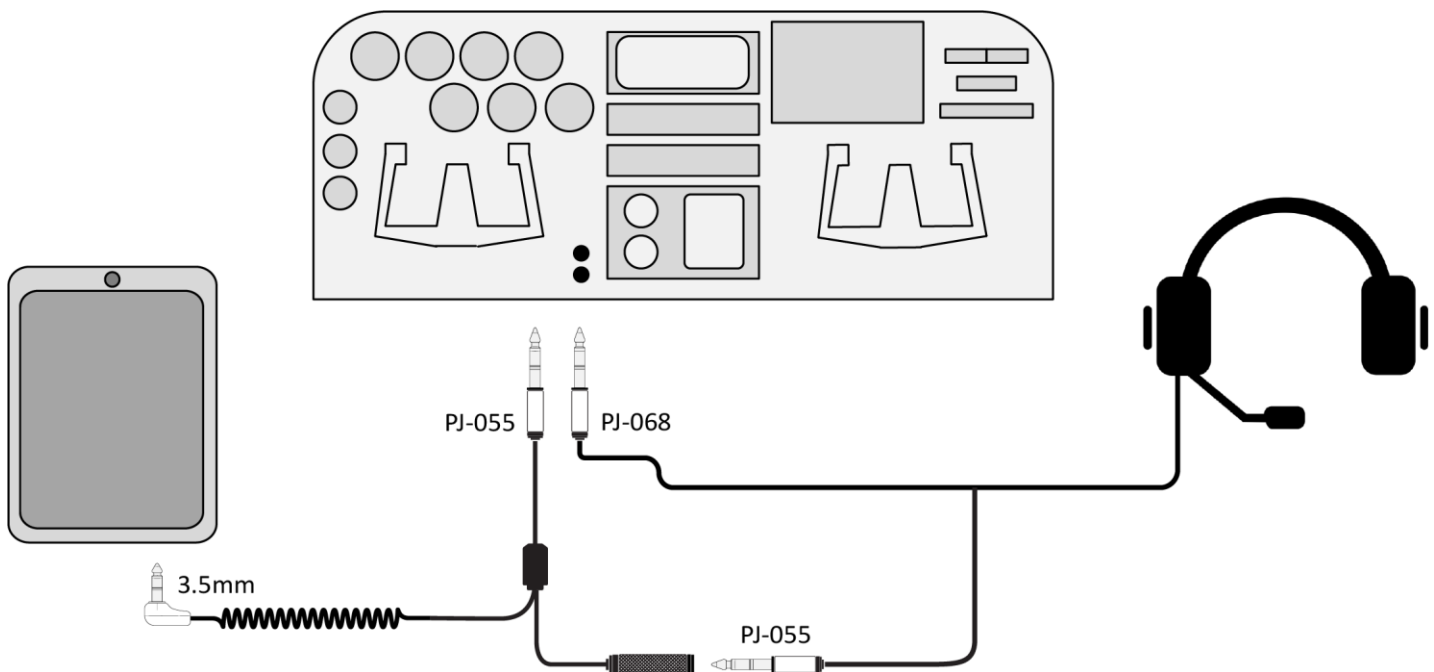
An error (red X's over a section of the screen) will display if your receiver does not have GPS lock. An error will also temporarily display if your receiver senses movement that is not typical in a general aviation aircraft.

Connecting to the Stratus Audio Cable

To use the Radio Playback or Radio Transcription feature, connect the Stratus audio cable to your headset, iOS device, and audio panel.

NOTE: If your headset does not have standard GA twin plugs, you need an adapter to convert your headset jack to twin plugs. When using an adapter, noise cancelling headphones will not be powered by the panel.

1. Connect the 3.5 mm end of the Stratus audio cable into the audio jack of the iOS device.
2. Connect the PJ-055 end of the Stratus audio cable into the aircraft audio panel.
3. Connect the PJ-055 end of the headset into the receptacle of the Stratus audio cable.
4. Connect the PJ-068 end of the headset into the aircraft audio panel.




Using Radio Playback and Radio Transcription

The Radio Playback feature allows you to replay ATC audio clips. The Radio Transcription feature transcribes ATC audio and displays it on the iPad screen to help locate specific audio clips (transcription subscription required).



NOTE: The Radio Transcription feature is specifically designed to transcribe ATC audio. Due to its specialized dictionary for aviation terms and phrases, it is not intended to transcribe audio other than ATC audio.

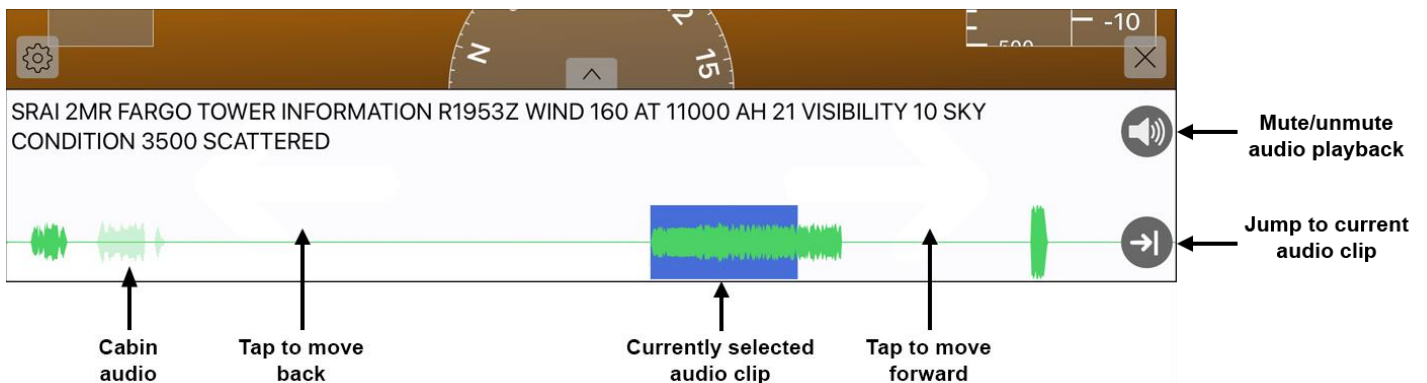
Other audio in the cockpit, such as music, may interfere with Radio Transcription.

Replaying Recent Audio Clips

Tap the up arrow  on the AHRS screen to view the transcription pane.

Use the light-colored arrows at the bottom of the screen to replay an audio clip from the last 2 minutes.

- Tap the left side of the waveform to navigate back to previous audio clips.
- Tap the right side of the waveform to navigate forward to more recent audio clips.
- Tap the speaker  button to mute or unmute playback audio.
- Tap the arrow  button to jump to the most recent audio clip.



*Cabin audio clips are not transcribed on the recent audio clips page. To replay cabin audio clips, tap the drop-down arrow at the top of the Recent Recordings screen, then tap **Cabin Recordings**.*

Changing Transcription Timing

By default, transcriptions are not displayed until the end of an audio clip. To enable transcriptions to appear as the audio is spoken, enable the **Enable Streaming** switch on the Transcriptions settings screen.



NOTE: Partial transcriptions are initially less accurate, but the transcription will update within a few seconds. Partial transcriptions are marked with an asterisk (*).

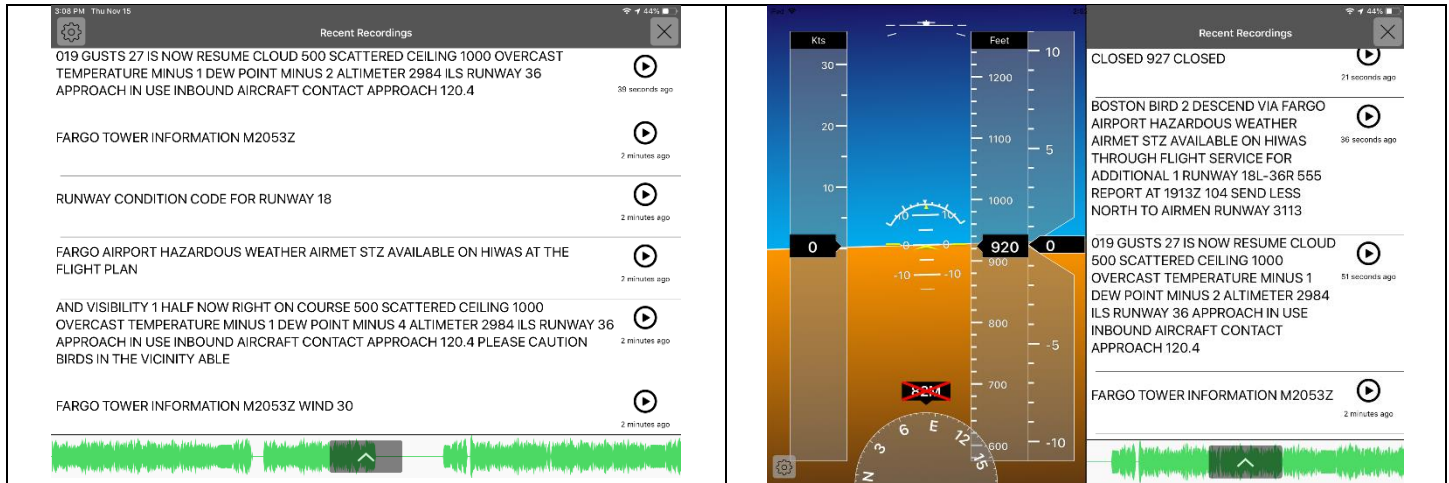
NOTE: Due to increased processing time, this setting is not recommended for older devices.

Replaying Older Audio Clips

To play an audio clip from longer than two minutes ago, view transcriptions in split screen or full screen transcription view.


Two hours of active radio audio (not including silence) and 30 minutes of cabin audio is stored before the oldest audio clips automatically delete.

1. Tap the up arrow  on the AHRS screen. Select full screen  or split screen  view.




Full screen transcription

Split screen transcription and AHRS

2. Tap the play  button next to a transcription to replay the audio clip.


TIP: Tap the up arrow  on the Recent Recordings screen to jump to the most recent audio clip.

Configuring Settings

Tap the settings  button to navigate to the settings page. Here you can view receiver statistics and edit receiver and display settings.

Receiver Settings


Changing LED Brightness

Tap the settings  button, then tap **Stratus Settings**. Use the slider to adjust the day LED brightness and the night LED brightness (based on the receiver's ambient light sensor).

Changing Power Settings (Stratus 3 only)

Auto Power-On

By default, battery-powered Stratus receivers only turn on when the power button is pushed.


To automatically turn on the Stratus receiver when it receives external power, tap the settings  button, then tap **Stratus Settings**. Enable the **Turn on When Plugged In** switch.

Auto Power-Off

By default, battery-powered Stratus receivers automatically power off if no GPS lock has been achieved in 30 minutes or the aircraft is moving at less than 5 knots for 30 minutes.

To disable this, tap the settings  button, then tap **Stratus Settings**. Disable the **Auto Power Off** switch.

Enabling Stratus 3 Use with Other Apps

To enable Stratus 3 to work with other apps that use the GDL 90 protocol, tap the settings  button, then tap **Stratus Settings**. Enable the **Open ADS-B Mode** switch.

For a list of tested apps, visit appareo.com/stratus-3-compatible-apps.

Calibrating AHRS

Stratus portable receivers automatically calibrate to the position they are installed in when powered on. However, you can re-calibrate it to straight and level or manually adjust the calibration.

To re-calibrate, tap the settings  button, then tap **AHRS**. Adjust the calibration according to your preference.


- **Straight and Level:** Tap **Straight & Level** to indicate the aircraft is currently straight and level and set the position in the app. It is automatically saved.
- **Manual calibration:** Tap **Manual Calibration**. Use the left and right arrows to adjust the roll angle of the receiver. Use the up and down arrows to adjust the pitch angle of the receiver. Tap **Accept** to save.

TIP: To disable automatic AHRS calibration, disable the **Auto AHRS Calibration** switch in the **Stratus Settings** page.

To show true north instead of magnetic north, enable the **Use True Course** switch in the **AHRS** settings page.


Adding Wi-Fi Network Security

Hiding Receiver Network Name

To hide your receiver's network name from other devices, tap the settings  button, then tap **Wi-Fi**. Disable the **Wi-Fi SSID Broadcast** switch.

NOTE: To connect to your receiver, tap **Other...** on the iPad's Wi-Fi settings page and type in the receiver network name.


Adding Receiver Network Password

To require a password to connect to your receiver, tap the settings  button, then tap **Wi-Fi**. Enable the **WPA2 Security** switch. Enter a password, and tap **Set WPA2 Security**.

Transcription Settings


Saving and Deleting Audio Clips

About 636 MB of active audio (not including silence) is stored before the oldest audio clips are automatically deleted.

- To save an audio clip and prevent it from being automatically deleted, swipe right on the recording and tap the star ★ button.
*To replay starred audio clips, tap the drop-down arrow at the top of the Recent Recordings screen, then tap **Starred Recordings**.*
- To delete a single audio clip, swipe left on the clip and tap **Delete**.
- To delete all audio clips, tap the settings  button, then tap **Transcriptions**. Tap **Clear All** next to **Stored Audio Data**.

Using Call Sign Callouts

When the app hears your call sign, it will bold it in the transcription for easy identification. To use this feature, enter your information in the Aircraft Information settings page.

1. Tap the settings  button, then tap **Aircraft Information**.
2. Type your aircraft type. To get the best call sign match, enter multiple keywords (separated by spaces).


EXAMPLE: *Piper Archer*

3. Type your tail number.

To replay all audio clips with your call sign, tap the drop-down arrow at the top of the Recent Recordings screen, then tap **My Recordings**.

Display Options

You can configure your app for optimal display in various setups and conditions.

To change these options, tap the settings  button, then tap **Display Options**. Configure the options according to your preference.

- **Night Mode:** Enable the **Night Mode** switch to change the app background to black for easier use in dark conditions.
- **HUD Mode:** Enable the **HUD Mode** switch to use a high-contrast display for use with glass cockpits.
- **Mirror Display:** Enable the **Mirror Display** switch to mirror all text on the AHRS screen for use with glass cockpits.

Updating Stratus Receiver Firmware



WARNING: Do not attempt to apply firmware updates while in flight.

Receiver firmware updates will be released through Stratus Horizon Pro in-app updates. These updates may enable new capabilities or address known issues.

Downloading Firmware Updates

Unless you disable the **Auto-Download** switch on the Firmware Update screen, the app will automatically check for firmware updates and download them when it is connected to the internet.

To manually download firmware updates, follow the steps below.

1. Connect to an internet network.
2. Open the Stratus Horizon Pro app and tap the settings  button.
3. Tap **Stratus Settings**, then tap **Firmware Update**.
4. Click the download  button next to your receiver model to download the update. *Latest firmware has been downloaded* will appear if there is no firmware update available.

Applying Firmware Updates

After you download the firmware update, apply the update to the receiver.


NOTE: If an update fails, close any other flight apps that are open on the iPad and try the update again.

1. Connect to the Stratus Wi-Fi network.
2. Open the Stratus Horizon Pro app. A message will alert you that there is a firmware update available. Tap **Yes**.

It may take several minutes to update the receiver's firmware. During the update, do not power off your receiver or device running the app, and do not close the app.

3. When the firmware update is complete, power off and power on the receiver.

To manually apply a firmware update from the settings page, follow the steps below.



1. Ensure that you are connected to the Stratus Wi-Fi network. Open the Stratus Horizon Pro app and tap the settings  button.
2. Tap **Stratus Settings**, then tap **Firmware Update**.
3. Tap the **Update** tab at the bottom of the screen.
4. Tap the **Update** button in the bottom right of the screen.

It may take several minutes to update the receiver's firmware. During the update, do not power off your receiver or device running the app, and do not close the app.

5. When the firmware update is complete, power off and power on the receiver.

Improving Transcription Quality

The more data Appareo has, the more accurate future transcriptions will be. You can help Appareo improve transcriptions by flagging inaccurate transcriptions.

1. While in split screen or full screen transcription view, swipe right on the audio clip and tap the flag  button.
2. Tap the settings  button, then tap **Transcriptions**. Tap **Upload** next to **Flagged Transcriptions** to submit them to Appareo.

The app must be open and be connected to a Wi-Fi network or cellular network to upload the data to Appareo.

To view our privacy policy, go to stratusbyappareo.com/privacy-policy.