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 ATC audio. The Radio Playback feature allows you to replay ATC audio while monitoring AHRS.

To purchase a Stratus audio cable, visit appareo.com/store/product/stratus-audio-cable.

Compatible Devices

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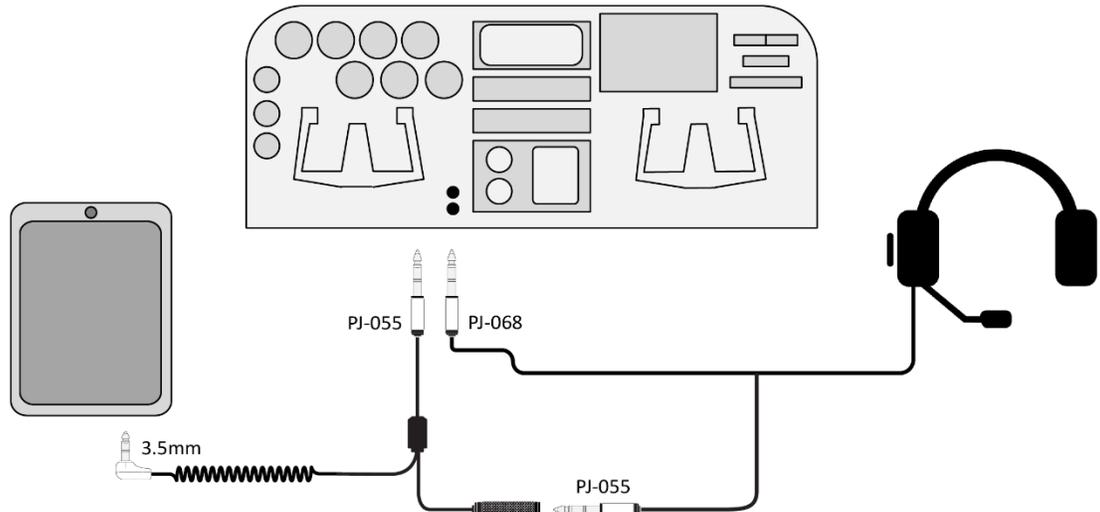
An error (red X's over a section of the screen) will display if your receiver does not have GPS lock. An error will also temporarily display if your receiver senses movement that is not typical in a general aviation aircraft.

Connecting to the Stratus Audio Cable

To use the Radio Playback 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.

Configuring Audio Settings

After connecting the Stratus Audio Cable, configure your audio settings.

NOTE: If you've already configured your audio settings, they are saved. If you have switched aircraft or headsets, we recommend reconfiguring your audio settings. To reconfigure, navigate to the settings ⚙ page and tap **Recalibrate Audio** in the Transcriptions settings.

1. Tap **Configure Audio Level**. Make sure that your cable setup matches the diagram and tap **Continue**.

2. Adjust COM audio settings to ensure the audio is at an acceptable volume.

    a. While you're receiving ATC audio, adjust your audio settings for COM 1 until the audio level falls in the acceptable range indicated on the screen. If you have a second COM, make sure that it is off.

       NOTE: You will not be able to proceed until the app receives enough acceptable audio.

    b. **If you have a second COM:** Turn off COM 1, and turn on COM 2. Tap **Set up COM 2** and repeat the process for COM 2.

       If you only have one COM: Tap **Next**.

3. Configure cabin filter levels to separate ATC audio from cabin audio.

    a. Make sure the engine is running and the COMs are off. Tap the microphone 🎤 button.

    b. Speak the phrase on the screen. Pronunciation doesn't matter; just speak naturally.

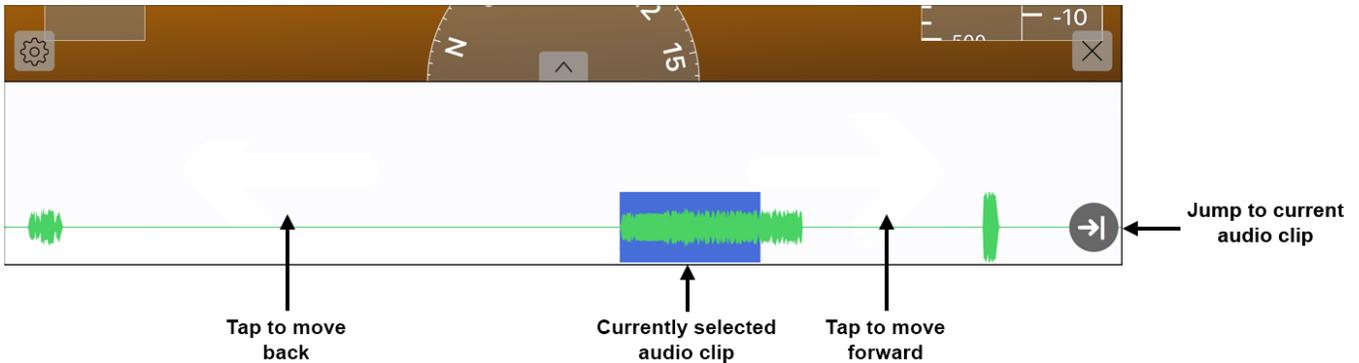   c. Repeat the phrase. Tap **Done**.

Using Radio Playback

The Radio Playback feature allows you to replay ATC audio clips.

Replaying Recent Audio Clips

On the AHRS screen, tap the 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 arrow ⊕ button to jump to the most recent audio clip.

Replaying Older Audio Clips

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

Two hours of active audio (not including silence) 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 Radio Playback   Split screen Radio Playback 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.

Adjusting Receiver Power Settings

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 www.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.

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

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 view 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**.

Configuring 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.

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**.

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

Stratus Horizon Pro will soon implement a Radio Transcription feature that shows transcriptions of audio clips. The more data Appareo has, the more accurate future transcriptions will be. You can help Appareo improve transcriptions by uploading your audio data.

To automatically upload all audio data to Appareo, enable the **Help Improve Transcriptions** switch on the Transcriptions settings screen.

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

To view our privacy policy, go to www.appareo.com/stratus-horizon-pro-privacy-policy.