

STRATUS

by APPAREO

Stratus 2i Installation Guide

Revision 2.0

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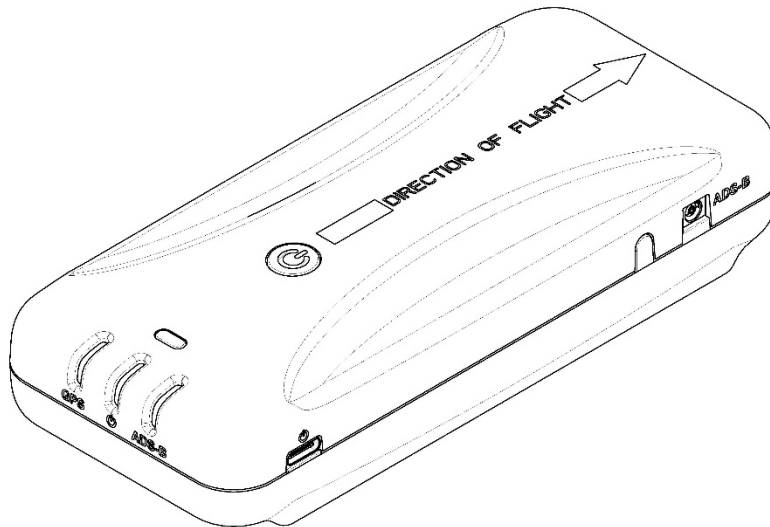
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Record of Revision			
Revision Number	Change Description	Revision Date	Inserted By
1.0	Initial release	05/20/16	CJW
1.1	CM 20415	07/17/16	AAL
1.2	Added BNC jack to blind mate adapter to parts list and Section 3 install instructions	10/12/16	AAL
2.0	Updated to include Stratus ES	9/05/17	AAL

1. Preparing for install

This document is intended to help you determine the best method for installing Stratus 2i interface cables in an aircraft and connecting them to a Stratus ES or Stratus ESG.



NOTE: For instructions for how to install Stratus ES/ESG, refer to the documentation provided with the transponder or in the Aviation Dealer Portal.

Supplied components:

- Stratus 2i ADS-B In portable receiver
- Cradle
- Stratus 2i Pilot's Guide
- Power serial interface cable
- RF interface cable
- 9-pin D-Sub connector with mounting hardware
- BNC jack to blind mate adapter

2. Placing Stratus 2i in the aircraft

Choose an installation location that provides for the best line-of-sight between the Stratus 2i and the iPad for optimal Wi-Fi communication.

It is important for Stratus 2i to be installed in the orientation indicated by the “Direction of Flight” arrow on the receiver. Stratus 2i can be placed upside down or sideways, as long as the “Direction of Flight” arrow points in the correct direction.

The provided cradle is an optional accessory to help secure Stratus 2i during flight. Mounting methods and locations can be determined by the installer or pilot.

NOTE: The mounting holes in the Stratus 2i cradle are compatible with many RAM mounts.

3. Installing the interface cables

NOTE: For instructions on installing Stratus ES/ESG, reference the Stratus ES/ESG Installation Instructions (Appareo document number 600840-000031 for TSO installations and 600840-000032 for STC installations). These documents can be found on the Aviation Dealer Portal.

1. Wire the 9 pin D-Sub connector to the transponder following the wiring diagram on Page 5, allowing for a maximum harness length of 3 feet. Use 20 gauge wire for this harness.
2. Mate this 9-pin D-Sub connector with the Stratus 2i power serial interface cable and secure using the thumb screws.
3. Attach the BNC blind mate adapter to the ADSB AUX hole on the transponder backplate.
4. Attach the BNC connector of the Stratus 2i RF interface cable to Stratus ES/ESG's ADSB AUX port.
5. Connect the remaining end of the power serial cable into the power port of Stratus 2i (marked by the power symbol).
6. Connect the remaining end of the Stratus 2i RF interface cable into the ADS-B port of Stratus 2i. Secure cables as necessary.
7. Power on the aircraft to ensure that Stratus 2i is receiving power. Refer to the LED indicator statuses on Page 7.

4. Configuring the transponder

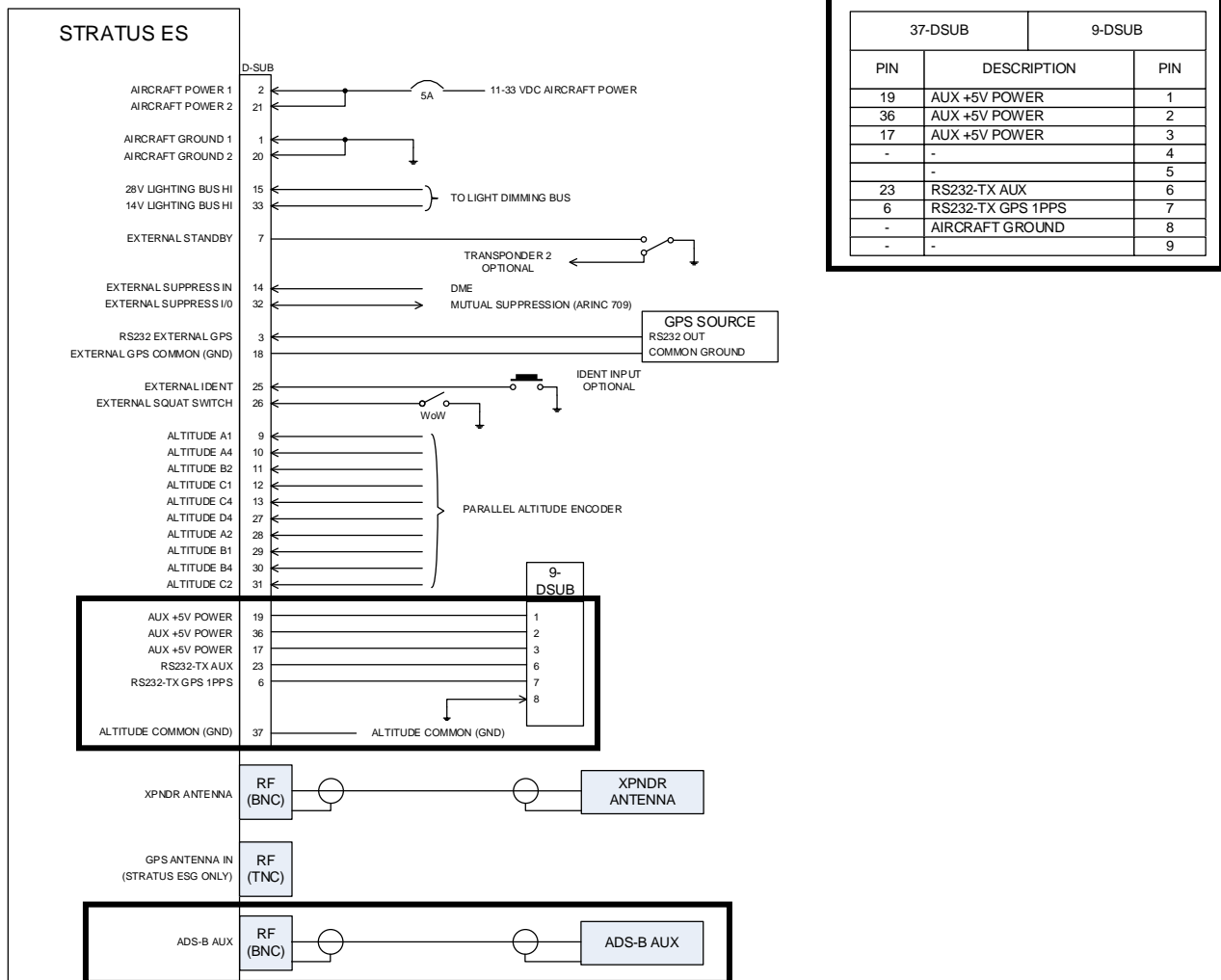
The transponder must be configured to allow for ADS-B In receiver information from the cockpit after Stratus 2i has been placed in the aircraft.

1. Enter into configuration mode on the transponder (while holding the **FUNC** key, press and release the **PWR** key).
2. Press **FUNC** or the arrow keys to navigate to the "ADS-B Capability" screen and press **ENT**.
3. Use the arrow keys to set the capability to **UAT** and **1090 ES** (the frequencies Stratus 2i is capable of).
4. Press **ENT**.

5. Powering receiver on and off

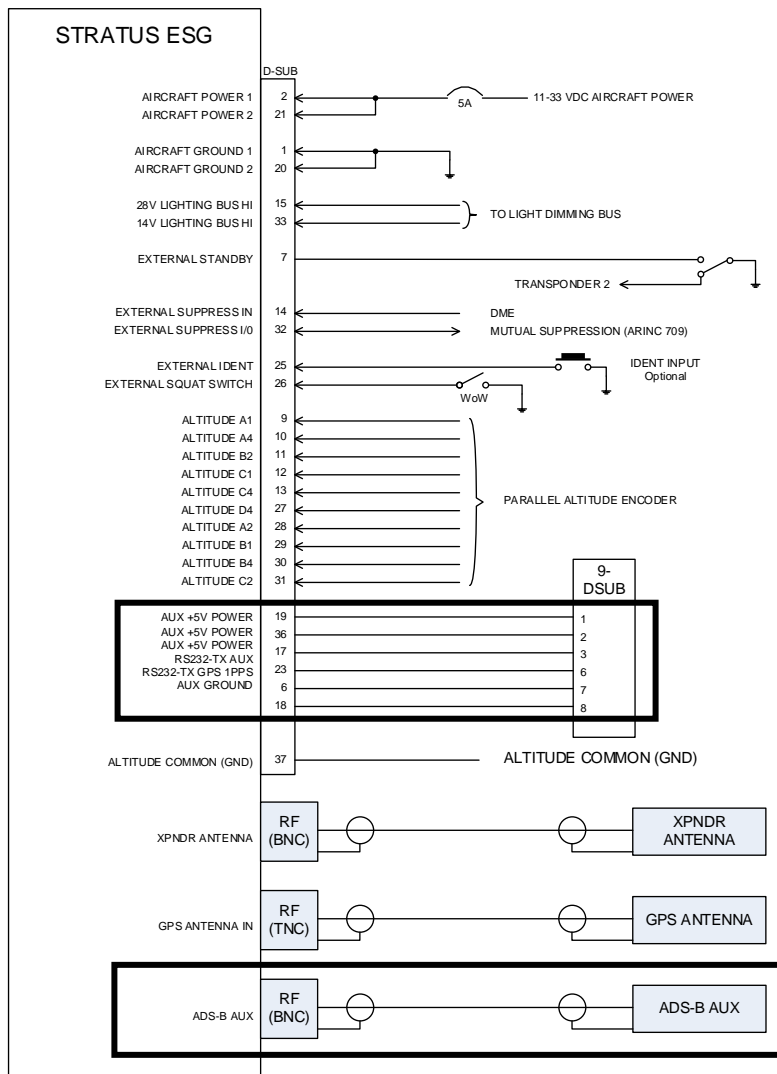
Once it is receiving aircraft power, Stratus 2i will automatically turn on. All LED indicators will briefly illuminate red and then green as the receiver powers on and auto-calibrates. If Stratus 2i is moved after being turned on, it must be re-calibrated in ForeFlight Mobile.

6. Stratus ES to Stratus 2i Wiring Diagram



Guide: Black outline = applicable to Stratus 2i installation

7. Stratus ESG to Stratus 2i Wiring Diagram



37-DSUB		9-DSUB	
PIN	DESCRIPTION	PIN	
19	AUX +5V POWER	1	
36	AUX +5V POWER	2	
17	AUX +5V POWER	3	
-	-	4	
-	-	5	
23	RS232-TX AUX	6	
6	RS232-TX GPS 1PPS	7	
18	AUX GROUND	8	
-	-	9	

Guide: Black outline = applicable to Stratus 2i installation

8. LED indicator status

Label	Color	Condition Indicated
GPS Signal	Green	3-D Lock
	Off	Receiver is powered off.
Power (indicated by power symbol)	Green (pulsing)	Receiver is powered on and operational.
	Off	No power is being received; receiver is powered off.
ADS-B Signal	Green	ADS-B FIS-B signal has been received from <i>multiple</i> towers in the past three seconds.
	Yellow	ADS-B FIS-B signal has been received from <i>one</i> tower in the past three seconds.
	Off	ADS-B FIS-B signal has not been received in the past three seconds.
All indicators	Briefly red and then green	Receiver is powering on and calibrating.
	Red (flashing)	Built-in-test failure. Contact support for assistance.
	Yellow (flashing)	Installing firmware update.
	Yellow (solid)	Applying firmware update.
	Green for two seconds	Firmware update complete.
	Off for five seconds, then flashing green	Power button is depressed. After 30 seconds, factory reset process will begin.
	Green to yellow to green	Factory reset process is complete.

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