

Stratux

Serial Output Guide

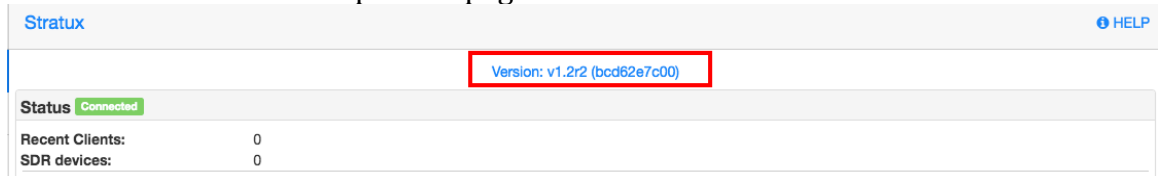
Overview

Stratux is software written to enable pilots to build their own ADS-B receiver. This serial adapter outputs the same GDL90 traffic/weather stream (that is usually sent over Wi-Fi) over an RS-232/RS-485/TTL connection. When set up this way, Stratux can still be used as usual, creating a Wi-Fi network that you can connect to with your tablet/EFB.

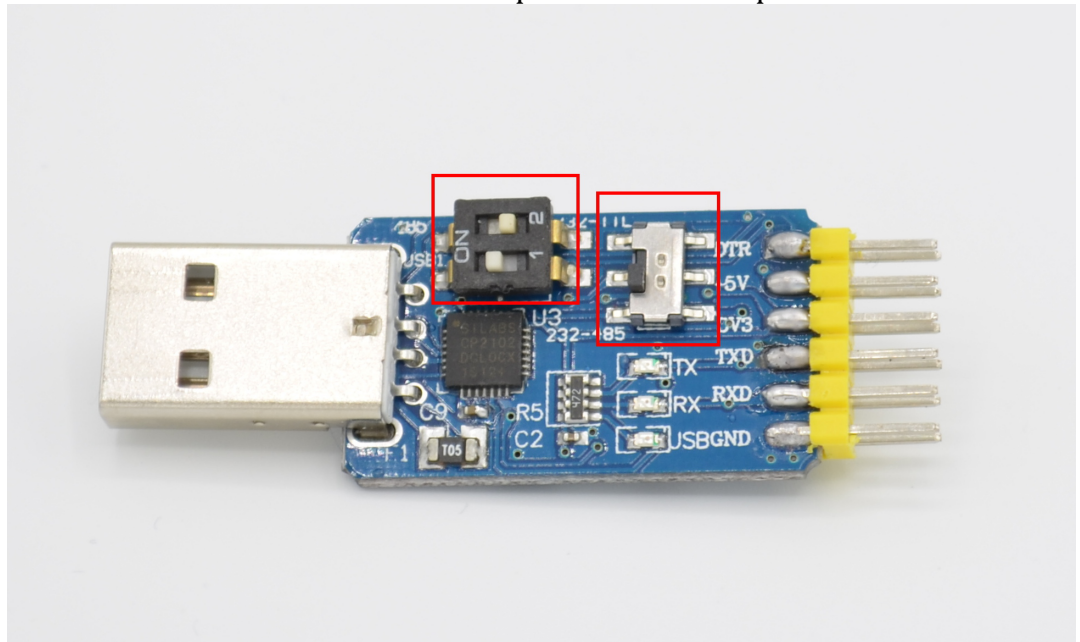
Please follow the steps below to make use of the serial output adapter with Stratux.

Instructions

1. Check the version of Stratux your build is running. Connect to the “stratux” Wi-Fi network and navigate to <http://192.168.10.1/>. The version is at the top of the page.

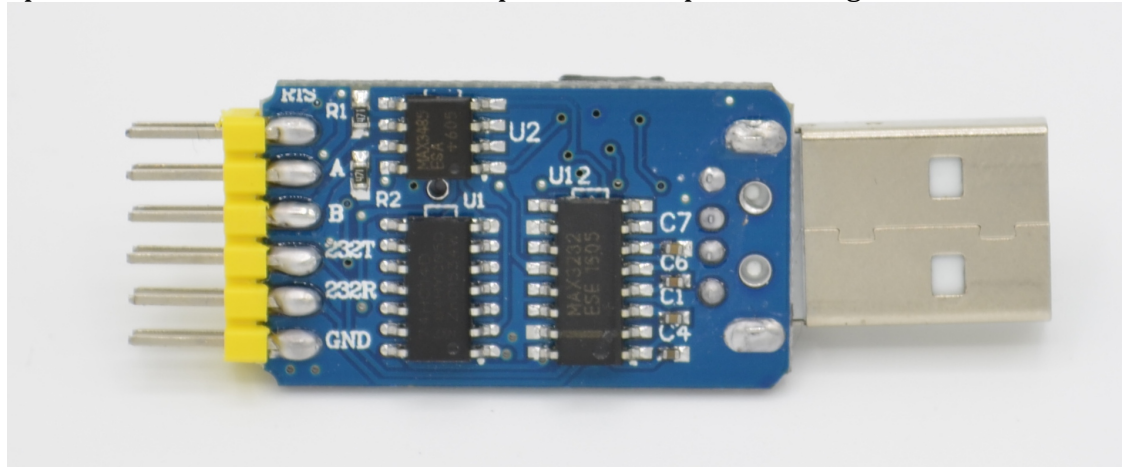


2. If you have any version older than v1.2r1, please update Stratux to the latest release available at <http://stratux.me/>. See instructions on the page to update your SD card, if needed.
3. Ensure that the three switches are in position as in the picture below.



4. Connect your device’s ground to GND, device RX to the “232T” pin, and device TX to the “232R” pin for RS-232 operation. For TTL

operation, use the “TXD” and “RXD” pins on the top of the dongle.



5. Connect the dongle to a USB port in Stratux. Wait 30 seconds, then go to “Settings” in the web interface.

The screenshot shows the Stratux web interface. On the left is a navigation menu with the following items: Status, Weather, Traffic, GPS/AHRS, Towers, Logs, and Settings. The Settings item is highlighted with a red box. The main content area shows the 'Status' page, which includes a 'Connected' indicator, version information (v1.2r2), and various system statistics such as Recent Clients, SDR devices, Messages, UAT Statistics, and GPS hardware status.

6. The new “Serial Output Baudrate” option will appear after Stratux detects the serial dongle. You may need to refresh the page.

The screenshot shows the Stratux web interface's Configuration section. The 'Serial Output Baudrate' field is highlighted with a red box and contains the value '38400'. Other configuration options include Mode S Code (Hex) set to 'F00000', Watch List set to 'space-delimited identifiers', and PPM Correction set to '0'. The Hardware section shows toggles for 978 MHz, 1090 MHz, Ping ADS-B, and GPS. The Diagnostics section has toggles for Show Traffic Source in Callsign, Verbose Message Log, and Record Replay Logs. The Commands section includes buttons for Reboot and Shutdown.

7. Change the default baud rate (38400) to the desired output baud rate. After 60 seconds, Stratux should be streaming any traffic and weather received over the serial interface. Verify with a tablet for the web interface that your device is receiving traffic.

That's it. If you encounter any issue in getting set up, please send us a message at products@stratux.me.