UAS Radio Systems Guide

Setting and verifying telemetry radio connection

- Connect one of the radios to your computer using the micro-USB cable.
- Power the radio attached to the UAS by plugging in the UAS battery.
- Open the Mission Planner and go to the **Optional Hardware | SiK Radio** page.
- Select the correct COM port and set the baud rate to 57600. Ensure the "Connect" button is in a disconnected state as shown in the image below
- Press the **Load Settings** button and both the *Local* and *Remote* areas should fill in with values including the firmware Version
- If the *Remote* area does not fill in then it means that the radios are not talking to each other and likely means the NET ID is different (default is 25)
- If net ID's do not match for both radios physically plug into both radios and load the settings. Change both IDs to match and save the settings. Retry loading both settings and see that both local and remote areas fill in.

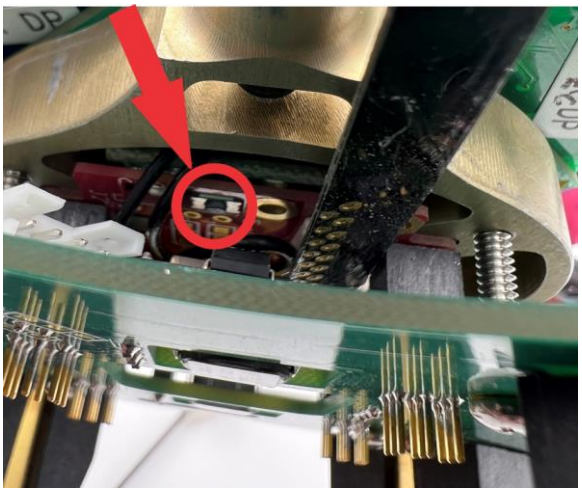
Binding a Controller to a Drone:

Turn on the controller by pressing and holding the power button in the middle of the controller. Press the big circular knob on the bottom right to move past any pop ups

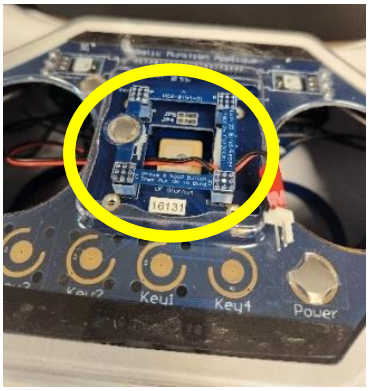
With the Taranis powered on and already on the home screen

1. Briefly press the 3 horizontal line button once. In the top right of the screen “1/12” should be displayed
2. Next, briefly press the “page” button. The top right should now display “2/12”
3. Spin the circular button and find the row labeled “RxNum”. Move the selection reticle (Black Blinking Rectangle) until it is covering “[BND]” and press the circular button down once.
4. Scroll down on the newly appeared menu and select the current setting shown and select it by pushing the circular button down.
5. Verify that the menu disappears and the controller begins to beep.

6. On the Drone resides the SBUS receiver board. This should be a red board with 2 antennae sticking out on opposite sides. Find the bind button on the board as shown. This button will need to be held down the entire time the drone is being powered up to pair successfully.



7. Optionally if you have a UxV/35 bind tool board, attach the **Bind** Tool on top of the stack then press and hold down the **Bind Tool** button and the drone's **Power** button at the same time for at least 10 seconds.



8. Power on the drone using the power button while holding the bind button on the receiver board. A successful binding will have a flashing red light with a solid green light. If this does not happen then power cycle the drone and try again.

Green LED	Red LED	Status
ON	Flashing	Binding
Flashing	OFF	Normal
OFF	Flashing	Signal Lost
Flash Twice	OFF	Failsafe Set

9. When you see the correct lights, you may release the button and power cycle the drone without holding the bind button on the receiver board.
10. Press the exit button on the Taranis 3 times and you should now see a signal strength indicator next to the battery level like shown.
11. The drone is now successfully paired to the Taranis and is ready for flight