

FlySky Radio Programming

Programming a radio for sailboats is new to many of you, and the FlySky manual doesn't seem to make it any easier. Because many of you now own one and likely might want to use it with your Soling as well, I thought it would be useful to provide a step by step set of instructions.

These radios are aircraft/helicopter radios, and we use only a very small percentage of their functions for our sailboats. The manual uses aircraft terms throughout making the process more difficult. So here are the steps.

These are 6 channel radios. Four channels are used by the joysticks (vertical and horizontal for each joystick). The other two channels are assigned, out of the box, to the two twist knobs at the top, but they may be assigned to any of the 4 toggle switches.

We use only 2 channels, right and left thumbs on the joysticks. Those are ch 1 (rudder for us, aileron in the manual) and ch 3 (sails for us, throttle in the manual). Some of you may want to use the dual rate function to reduce the rudder movement when sailing downwind. I'll cover this at the end.

Bind the Receiver:

The radios come with a receiver and a small plug that looks like the end of a servo or battery wire. First step is to bind the receiver to the radio. If purchased with the boat, the radio is already bound to the receiver that came with the boat. Nothing to do here. But if you want to run the Soling, continue with this step.

The receiver and the radio each have a unique code. Binding causes the radio to recognize that specific receiver as the only receiver it will talk to FOR THAT SPECIFIC MODEL OR BOAT. The radio will hold 20 different boats. Each boat will have its own receiver and each one will be "bound" to the radio. Two boats – two receivers, each one bound to the radio.

Binding is simple. Leave the radio off for a moment. Plug the little binding plug into the B/VCC slot in the receiver. There is no polarity. Either way will do. Plug a battery into any other slot – BLACK WIRE DOWN. Red light blinks. Press and hold the Bind Key on the radio (lower left corner), then turn on the radio. Message on the screen will say "Binding," then "Binding Complete," radio beeps and receiver red light goes constant on. Done. Unplug the battery from the receiver, remove the binding key. Turn off the radio.

You may have just experienced one of the radio's safety features. When turned on, the radio needs the left joystick down and all toggle switches up. Left joystick is the airplane throttle. They don't want the plane's engine to throttle up as soon as the radio is turned on.

Install the Receiver in the Boat:

Plug the rudder servo into Ch 1 slot, sail servo into ch 3 slot, battery into B/VCC slot. Black or dark brown wires go down for correct polarity. I tried to tuck the receiver's antenna wires out of the way and used a little tape to hold them to the underside of the deck.

We have to program two functions for the DF95s and very likely the same two for the Soling – amount of travel for the sheets, amount of travel for the rudder and possibly reverse direction for the rudder.

There are 4 buttons, two on each side of the screen that are used for programming – Up, Down, OK and Cancel. Cancel is a misnomer. Cancel in Chinese apparently translates to Save and/or Exit.

Set Rudder travel or Sheet travel: (recommend unhooking the sheets from the fisherman's hook but leave the elastic attached)

Turn on the radio (left joystick down), turn on the boat.

Press and hold OK. System is highlighted

Down to move to Setup, OK to open choices

Down to End Points, OK

Rudder (aileron) is ch 1

Sails (throttle) is ch 3

Each channel has two settings in %. These are the End Points. My rudder is set to 80% on both End Points. Use OK to move around, Up and Down to change the %s.

Use the same procedure to adjust the sail trim end points. This is ch 3

Press & Hold Cancel to save

Tap Cancel twice to exit.

Reverse

Check Rudder for correct direction. Use Reverse function to correct.

Radio on, Boat on

Press and hold OK. System is highlighted

Down to move to Setup, OK to open choices

Reverse is 1st on the list. OK to see the channels. Ch 1 is highlighted

Down to reverse the direction of channel 1

Press & Hold Cancel to save

Tap Cancel twice to exit

Set up Dual Rate for the Rudder

Radio on, Boat on, go to Setup as noted above.

Down to Assign Switches, OK

Fly Mode is 1st. Down to assign Switch D which is the toggle on the upper right. When the toggle is up, it will be "Normal;"; when down it will be "Sport"

Press & Hold Cancel to save

Scroll up to Dual Rate/Exp, OK

Screen shows Normal, Ch 1, Rate 100 (assuming the toggle is up. Screen will show Sport if toggle is down.). Move the toggle to the down position.

Tap OK to move to Rate. Sport should be showing on the screen.

Adjust the % next to Rate by using the Down key. Mine is set at 50%

Leave the Normal setting at 100

Press & Hold Cancel to save

Tap Cancel twice to exit.

The rudder will now move 50% of its usual travel when the toggle is flipped down. It will return to full rudder travel instantly when the toggle is up.