

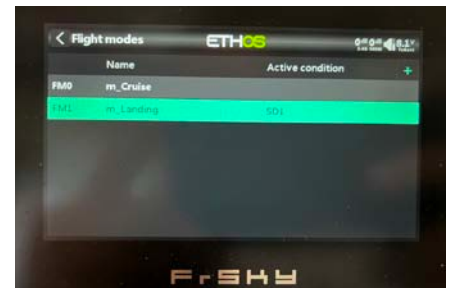
Programming the FrSky for Pattern

It is my understanding that the FrSky is becoming a very popular system. I have the X20S transmitter with the TD R10 receiver and it is a very capable for pattern flying. My home field has a know RF problem and this system has both 2.4g and 900 mhz in a single receiver for redundant operation.

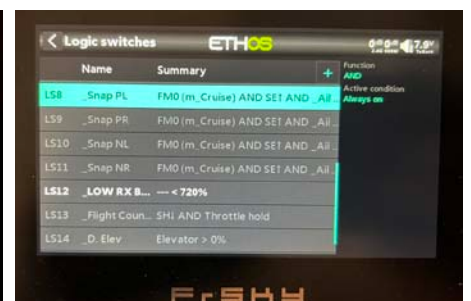
Coming from a Futaba and Spektrum transmitter made programming seem a little intimidating at first but after learning a little about how it is done on this system it is not difficult. The advantage is that you can do almost anything you want using ETHOS.

Programming for Snaps

This method is going to use an arming switch that prevent snap inputs unless it is activated. Many pilots do not use this precaution and rely on not moving both the aileron and elevator to extreme position during normal flight. I do use two flight modes, cruise and landing, in my setup and landing does prevents activation of the snap condition. To avoid confusion if I use the same name in several places, I use m_ to begin naming all flight modes, _ to begin logic switches, and a center line symbol for curves.

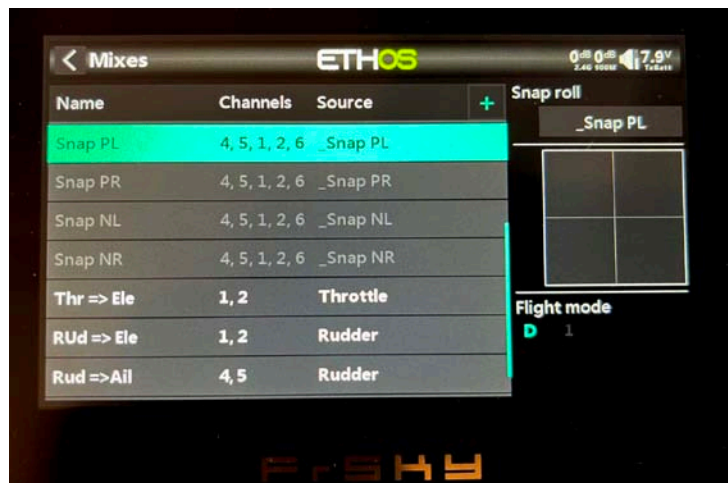


This setup only uses the aileron and elevator stick to activate the snap. I've always moved both aileron, elevator, and rudder to manually snap and if you want to do that, simply remove the rudder output in the description below. Four snaps, positive left and right, negative left and right will be setup. To do this you will need to know when the aileron is at extreme left and right and when the elevator is extreme up and down. This will take 4 logic switches. I use four additional logic swithes for the PL (positive left), PR, NL, NR snap. I do this to prevent activation in normal flying. To snap, my transmitter must be in "cruise mode", have the snap arming switch (SE) set for snap, and both the aileron and elevator more than 90% over.



These photos are guides for setting up the logic switches.

Once the transmitter knows when you want to activate the snap all it needs to know is the inputs it needs to make. I'm going to set the throw for the ailerons (channels 4, 5), elevators (1, 2), and rudder (6). This is done in the mixer section. Activate the mixer and set new functions for all your snaps. As you can see in the photo below, the source is the logic switch for each snap and the output channels are for the controls you want to move.



After adding the snaps, your mixer screen will have all the snaps similar to the photo here.

Caution: if you have rudder input when the snap is initiated it will modify the amount of rudder in the snap.