

Radio set-ups/Tips



For our customers using the MC-24 Please call,

We can fax you the instructions for the throttle set-up.
352-371-3132 .

Futaba 9 Z throttle setup / by Don Desandre

This is the quick and easy way to set up The 9Z for the throttle on the Graupner PHT-3 system.

Plug your throttle lead into channel 7 of the RX. From the functions menu (FNC) of the 9Z select Channel 7, then select control (CTL) and scroll across the bottom and select the left slider (LS) Confirm the change you have made by going to the servo graph (SRV) You want to make sure that slider is operating in the correct direction pushing up on the slider should increase the function. If it does not reverse the channel.

Now go back to the FNC menu and move the T-2 throttle trim to channel 7 (AUX1) From the main screen select TRM, go to T-2 and increase the rates to 50 and 100 percent on the first and second steps. This will make you trim very fast acting, almost like a manual trim lever. From the ATV menu select NXT and set your servo delay to 5 seconds for AUX 1.

Your now ready to teach the ECU.



Pitch curves:

Please see instructions for pitch curve settings, we have found that those suggested numbers work best.

Also the tail rotor works perfectly first time if adjusted according to the instructions.

Servo lengths:

I found that the cyclic servo arm length, from center of servo horn screw to ball center is best at 18 mm, this produces the "Cadillac" feel with plenty of spunk! I tried 21 and thought it was a bit quick for a heli of this size.

Fail Safes:

If you are using the PCM or SPCM modulations, then you need to rely on your radio's fail safe system, and not the ECU, The ECU's fail safe system is best used with FM receivers. If you use the ECU fail safe you must program your radio's fail safe accordingly outside the limits of normal stick operation eg: 120%, so that there is no chance of conflicts between the two systems.

Most will opt to their radio's system, the throttle channel should be programmed to go to idle on your radio. Using the GSU check to see in the "limits menu" that there is a one second delay, that the idle goes to 33k rpm and the timeout setting is 20 seconds. (the 20 seconds is assuming after a loss of control the heli is down by that point and the turbine need not be running)

Gyro:

I found the suggested setting a good start, about 50% gain to start. I used the 401 gyro by Futaba so this needed an extra channel to work at all! I wasn't too thrilled about that, I hooked my lights to my gear (JR match box) and went on.

You have

start that gyro in heading hold mode, with a switch, that portion set to over 50%. anything over 50% is heading hold.

Then you can switch back to normal after start-up of radio. I thought this too was a bit of trouble, I like things simple.

The performance is excellent though and I am very happy with the system overall. I knocked the atv's down on the rudder channel to slow the tail a little, about 75% setting works well for me, firm but quick enough if need be.

This was tested and flown to our tastes, your flying styles and tastes may differ, so you may end up with slightly different numbers in your adjustments. Please feel free to contact us with additional questions.

A few more programming tips for the PH-T3 system on your JR 10X radio...



ADMENDUM FOR NH-90 JET

By: Zach de la Torre

4 Servo CCPM 10X programming steps

Step #1. In code 65 select the 1 servo swash plate mix.

Note: Steps 2 thru 4 are needed to synchronize the servo throw and to prevent over travel. Initial setup values are given below. During final setup and adjustments the pitch curves (code 68) and dual rates (code 13) will be used to achieve the desired pitch, aileron and elevator travel (do not use travel adjust).

Step #2. Code 12 travel adjust- Increase the aileron, elevator and pitch travel adjustments to 150% in each direction.

YOU MUST ALSO INCREASE AUX.2 TO 150% IN EACH DIRECTION TO OBTAIN LINEAR SERVO TRAVEL FOR ALL 4 SERVO'S

Step #3. Code 13 dual rate- adjust the dual rate values for aileron and elevator to 50% in all dual rate positions (0, 1,2).

Step #4. Code 68 pitch curve- Reduce the high pitch setting to 75% and the low pitch setting to 25% in all flight modes (0, 1,2, H).

Step #5. Code 51 mix 1- Mix pitch to aileron at 100% in each direction

Step #6. Code 52 mix 2- Mix aileron to pitch at 100% in each direction and turn on the trim.

Step #7. Code 53 mix 3- Mix pitch to elevator at 100% in each direction.

ONCE YOU HAVE SET THE VALUES TO +100% IN THIS STEP, YOU WILL NEED TO PRESS THE TURN BUTTON ON THE SCREEN TO GET -100% IN ORDER FOR THE PITCH TO TRAVEL CORRECTLY

Step #8. Code 54 mix 4- Mix elevator to aux 2 at 100% in each direction and turn on the trim.

Step #9. Code 55 mix 5- Mix Pitch to Aux 2 at 100% in each direction.

NOTE: YOU WILL HAVE REVERSE CHANNEL 3 (ELEVATOR) IN ORDER TO GET THE ELEVATOR SERVO'S TO MOVE IN OPPOSITE DIRECTIONS.

Servo assignment

Forward servo- elevator

Rearward servo- Aux. 2

Right servo – Aileron

Left aileron- Aux. 1