


SPEKTRUM®

Spektrum™ AirWare™ Software Update

NEW FEATURES

► Multi Rotor

- Changed channel input names to ALT (Altitude), ROL (Roll), PIT (Pitch), and Yaw.
- Preflight Checklist, Warnings and Voice alerts have been updated to reflect Multi Rotor aircraft.
- Flight Mode Setup screen now allows you to easily specify servo output positions, using Channel Assign screens.

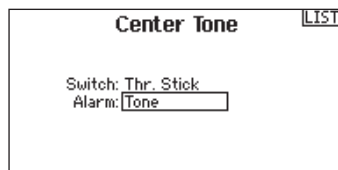
See Multi Rotor Section for more information.



► Center Tone

Allow any analog input (stick, knob, or lever/slider) to provide feedback when passing through center. In addition, this function allows you to disable the center tone that normally occurs on the knob and sliders. On voice-capable radios, a spoken alert can be made.

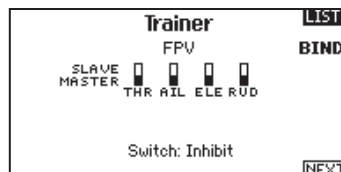
Tip: This will not provide telemetry-like data; only the specified sound will be played.



► Trainer FPV Mode

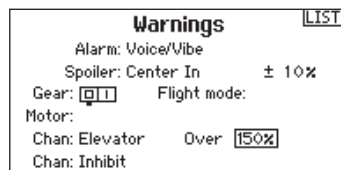
The Trainer FPV function enables you to control FPV head-tracking in either wired or wireless mode. You may assign incoming head-tracker channels to any available output channel in the transmitter. To use the FPV mode:

1. Select Wired Trainer or Wireless Trainer from the Trainer menu.
2. Change the trainer mode from Inhibit to FPV.
3. Select the switch you wish to use for the head tracker, then select NEXT.
4. Select the Output Channel where the head tracker servo is connected.
5. Change Mode: Master to Mode: Slave.
6. Select Input Channel.
7. Test the head tracker movement. Move the head tracker switch to the On position, then move your head. The camera should move accordingly.
8. Adjust the Scale value to change the amount of camera movement. If the camera moves in the wrong direction, change the Direction option from Normal to Reverse.



► Warnings

- Center In ± 10 and Center Out ± 10 have been added to the warnings menu option. These can be adjusted to any value between 1 and 99. An alarm can be put on a servo position that is within a certain range of center, or outside a certain range around center.
- When adding channel position warnings, you can now enter positions of up to 150% rather than the previous limit of 100%.



► Digital Trims

The Left and Right Digital Trims can now be programmed as either Common or F-Mode for Normal, 2-Pos, or 3-Pos operation.

Digital Switch Setup		LIST
Switch:	RTTrimD	
Pos 0:	0%	
Pos 1:	75%	
Pos 2:	-75%	
Channel: Inhibit		

► Timers

Timers can now be named. There is a prompt for the Timer Name on the Timer setup screen. This name will be shown on the main screen.

Timers		LIST
Timer 1		
Name:	[FLT~]	
Mode:	Count Down	
Time:	05:00	
Start:	Thr. Stick	
Over	25%	
One Time:	Inhibit	
NEXT		

► Extended Delay Functions

Extended servo/flap/sequencer delay functions to include delays of 33, 36, 40, 45, 52, 60, 72, 90, 120, 180, and 360 seconds.

IMPORTANT: These are for full travel, so you may need to use a longer delay value to get the time you want for a servo to travel a shorter distance.

		LIST
INH	0%	Camber Preset Launch Left Right Ail: 12.5 12.0 Elev: -2.5 Speed: 45s
RAL	-12%	
ELE	-2%	
RUD	0%	
GER	100%	
LAL	12%	
AX2	100%	
AX3	6%	
AX4	100%	

► Creating New Models

When adding a new model from the Model Select screen or Model Utilities, the new model created is the same type of model (Acro, Heli, or Sail) as the current model. The Model Type function can still be used to change the type of the current model.

► Screen Capture

1. Insert SD card into the card slot.
2. Navigate to the Transfer SD Card Menu.
3. Select Options and scroll to the right until Screen Print is selected.
4. Select desired switch (momentary switch recommended).
5. Images are saved on the SD card as .BMP files.

Screen Print		BACK
Switch: Switch I		

MULTI (Multirotor)

NOTICE: Refer to your multirotor manual for programming recommendations.



CAUTION: Always do a Control Test of your model with the transmitter after programming changes to make sure your model responds as desired.

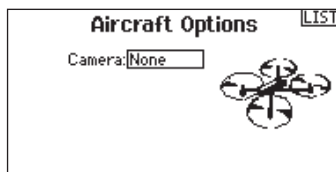


SYSTEM SETUP

► Aircraft Type

The Aircraft Options menu allows you to select a camera gimbal axis. Select None, 1–Axis, 2–Axis or 3–Axis from the Camera Options box.

The model icon can be changed by selecting the icon and scrolling left or right to select.



► F-Mode Setup

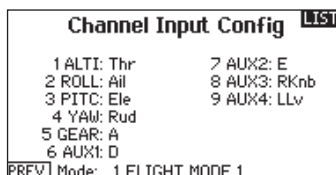
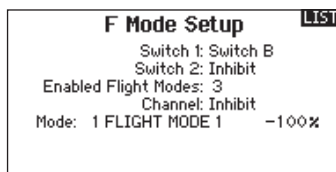
By default switch B is assigned 3 Flight Modes. You can assign up to five flight modes using any combination of up to two switches.

Channel Assign

Scroll and Select Channel to assign channel inputs and outputs for each Flight Mode. Each channel can be assigned any switch on the transmitter including but not limited to trim switches, gimbals and the Clear/Back buttons.

Example: Assign Flight Mode 1 to be your primary flight mode where your gimbals control primary flight axis. Switching to Flight Mode 2, you can have the gimbals control the camera axis and the trim buttons control primary flight axis.

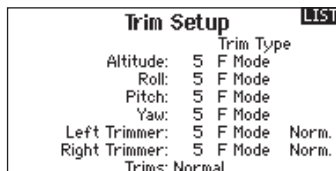
Tip: You can also access the Channel Assign from the Channel Assign Menu in System Setup.



► Trim Setup

By default Trims are setup for **F Mode**.

F Mode trim type enables you to save trim values for individual flight modes if you find, for example, the aircraft requires Roll trim in Flight Mode 1 but not in Flight Mode 2.



FUNCTION LIST

► Control Setup

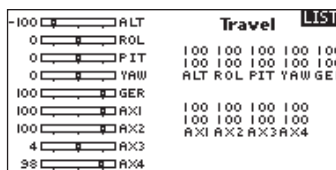
The Control Setup menu contains the following functions:

- Travel Adjust
- Sub-Trim
- Reverse
- Speed
- ABS. Travel
- Balance

Also known as Servo Setup in other aircraft types, this menu enables you to set control direction and limits of the control travel.

IMPORTANT: Confirm control direction, center point and travel with your multirotor aircraft's flight control system. Always check controls before committing to flight by starting the motors and keeping the power at a low setting, then check control direction and ensure the aircraft responds as expected.

IMPORTANT: ALT, ROL, PIT and YAW replaces THR, AIL, ELE and RUD channels in multirotor to more closely reflect the flight axis in the multirotor aircraft. This change is throughout the multirotor menu options.



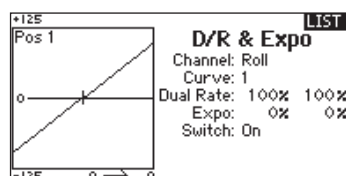
► D/R & Exponential

Dual Rates and Exponential are available on the PIT, ROL and YAW channels.

To adjust the Dual Rate and Exponential:

1. Scroll to the channel and press the scroll wheel once. Scroll left or right to select the channel you wish to change and press the scroll wheel again to save the selection.
2. Scroll to Switch and press the scroll wheel to select. Move the switch you want to assign to D/R.
3. Scroll to dual rate and press the scroll wheel. Scroll left or right to change the value and press the scroll wheel again to save the selection.

Exponential affects control response sensitivity around center but has no effect on overall travel. Positive exponential decreases the sensitivity around the center of gimbal movement.

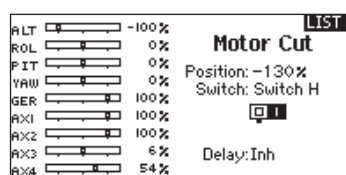


► Motor Cut

The Motor Cut menu option enables you to assign a switch position to stop the motor. Motor Cut activates regardless of Flight Mode.

When you activate Motor Cut, the ALT channel moves to the pre-programmed position (normally Off).

You may need to use a negative value to move the ALT channel to the off position.



CAUTION: Always test the model after making adjustments to make sure the model responds to controls as desired.

► Motor Curve

You can use the Motor Curve menu option to optimize the throttle response. A maximum of 7 points are available on the throttle curve.

To add points to a Motor Curve:

1. Move the throttle stick to the position where you wish to add the new point.
2. Scroll to Add Pt. and press the scroll wheel to add the point.

To remove points from a Motor Curve:

1. Move the Motor stick until the cursor is near the point you wish to remove.
2. Scroll to Remove Pt. and press the scroll wheel once to remove the point.

If you program multiple throttle curves and you wish to edit one of the curves, that curve must be active in the Motor Curve screen before you can make any changes.

