Plane	:	Walkera Furious 320 GPS version setup document
Transmitter	:	Devo 10, deviationtx 5
Optimized for	:	Mode 2

#### **IMPORTANT:**

The functions of switches differs from the original Walkera Lay out. Please test the functions and maken them familiar to yourselves before use with the quad to prevent damage.

#### **Safety issue:** Throttle Hold and RudderD/R switch:

By default this quad has no FOD protection in manual mode. This means that the quad may "fall out of the sky" (FlipOfDeath) because the motors might stop spinning in mid air.

1- RUDD DR1:

This is the start position. Arm your quad as usual. If armed, the max throttle applied is limited – so there will not be enough throttle to lift off.

The amount of throttle is enough for a short test run as pre-flight check.

## 2- RUDD DR0:

If you set this switch, a minimum throttle will be applied to all flight modes (Manual, LOITER, RTH) AFTER you give enough throttle in order to lift the quad. This will prevent the FOD event.

## 3- RUDD DR1:

End of flight/ after landing: Once back in this position you are able to disarm the quad, or rearm it.

If you switch from Rudd DR0 to Rudd DR1 (e.g. accidentally), the FOD protection will remain until:

In manual mode (MIX0): The qua will be disarmed

In GPS mode (MIX1 or MIX2): until throttle is set to the "zero" position.

This method will prevent an unexpected cut of the throttle, if the RuddD/R switch is changed in mid air.

#### Channel settings (transmitter menu -> channel monitor) :

- CH 1 Elevator/Pitch
- CH 2 Aileron/Roll
- CH 3 Throttle
- CH 4 Rudder/Yaw
- CH 5 Flight mode
- CH 6 FMod (channel 6: \*not tested\* auto PID tuning?) otherwise not used
- CH 7 Camera Toggle On/Off
- CH 8 Not used, works with toggle hold switch by default.
- Ltrim Virtual channel to switch camera (LTRIM button)
- Rtrim Adjust value channel 6 (RTRIM button)
- FODprot -100= FODprot OFF. 100 = FODprot ON (minimum throttle)
- MinTHR Adjust minimum throttle value (adjust with RIGHT\_V trim button).

#### Setup for the switches and sticks description:

- Rudd D/R Throttle hold (prevent FlipOfDeath)
  - 0- Normal flight position.
  - Minimum throttle enabled for manual and GPS modes.
  - 1- Throttle hold.
  - Disabled minimal throttle for GPS modes.

	<ul> <li>In Normal flight mode the minimum flight mode is disabled by the disarm command (rudder+throttle stick bottom right position)</li> </ul>
Elev D/R	Rudder Dual Rates
	0- Full rates
0545	1- 70% rate, 30% expo
GEAR	I rainer switch command.
	- Please note: PPIVIII has been programmed, but the gear switch is not
	- Simply change it in the setup: "MODEL MENU" -> "MODEL SETUP" -
	"">"PPMin <stick>" -&gt; "TRAINER Sw" from "NONE" to "GEAR1"</stick>
LTRIM	Camera switch.
	- Push upwards or downwards once to activate the camera.
	- Push again to stop the recording.
RTRIM	Correction to channel 6.
	- Channel 6 is preserved for automated PID tuning. With the RTRIM channel you can select WHAT to auto tune. For details please see Flyconfig. *not tested*
MIX 0/1/2	Flight mode
1011/2	0- Normal flight, no GPS, With FOD protection.
	1- GPS mode LOITER. With FOD protection (by GPS and Rudd D/R0)
	2- GPS mode RTH (ReturnToHome), With FOD protection (by GPS and
	Rudd D/R1)
AILE D/R	Aileron and Elevator Dual Rates (Roll/Pitch)
	0- Full rates
	1- 70% rate, 30% expo
FMOD 0/1/2	Channel 6, see also RTRIM. Default FMOD 0.
AUX 4	Not used
	Not used
	Trim button for Elevator/Ditch
RIGHT H	Trim button Rudder/Yaw
RIGHT V	Trim button as offset for the minimum throttle applied
	This means you may adjust it in order to have a higher idle speed or lower, as long the send value is above the flight controllers minimum throttle. See Flyconfig for details. Please check if the value is within specification: otherwise
	an uncontrolled hight might happen.

## The trim buttons of the opposite stick are used.

To change, goto: "MODEL MENU"-> "TRIMS" and change it there.

# Timers:

Two timers are shown.

Above: the time since THR >0. Not permanent. Reset every reboot of the transmitter (gives good indication of flight times)

Below: Permanent timer. Indication the total time the plane has flown. You can use this as a good indication for maintenance purposes (e.g. replacing props) or just for fun <sup>(i)</sup>