

## Volantex Ranger 600, Trainstar and other 3 channel Volantex models

1. 3 Channel (Elevator, Throttle, Rudder) *plus* a channel for stabilization mode
2. By convention the Aileron stick is set to control the Rudder for a 3 channel model. So that the primary “turning” stick, is consistent across 3 and 4 channel models.
3. Stabilizer
  - a. Beginner self-leveling and restricted turning angle/rate
  - b. Intermediate self-leveling and un-restricted turning angle/rate
  - c. Advanced NO self-leveling, no turn restrictions
4. **If** you use “Companion” on your computer, then set **your** radio type in Companion with Settings -> Radio profiles.

### IMPORTANT

1. The choice of switches and pots/sliders shown below, suits my radio and my style. *You need to allocate switches etc, to suit your radio and your style. BUT, this does **NOT** affect the basic model set up, nor affect output channel allocation on the pictures that follow. For example, choose a 2 position switch for Thr cut and a 3 position switch for the 3 stabilization options.*
2. My radio is a RadioMaster Zorro, Mode 2, again this does not alter basic model set up.

### Radio channel allocation (MUST be “AETR” for any multiprotocol transmitter).

Channel Num	Order	Use
1	A	Aileron – no output
2	E	Elevator
3	T	Throttle
4	R	Rudder (allocated Aileron input in radio)
5	Stab Mode	Stabilization mode (Beginner/Intermediate/Advanced) <b>Model specific.</b>

**Note** – The multiprotocol module automatically rearranges the transmitter output order, to suit the receiver protocol selected.

**Protocol** – settings. See “1- Setup” next page.

Setting	Value
<b>For an Internal Protocol Module</b>	Internal Radio System
<b>For an External Protocol Module</b>	External Radio System
<b>Protocol</b>	Multi
<b>Multi Radio Protocol</b>	V761
<b>Sub Type</b>	3 Channel

Cont’d over

## 1 - Setup – SET THIS FIRST

Model: Ranger 600

Timer 1: 00:00:00 OFF Countdown Silent Start 20s Minute Call Not persistent

Timer 2: 00:00:00 OFF Countdown Silent Start 20s Minute Call Not persistent

Timer 3: 00:00:00 OFF Countdown Silent Start 20s Minute Call Not persistent

Throttle Source: THR  Throttle Trim Idle Only  Throttle Warning  Reverse Throttle Throttle trim switch TrmT

Trim Step: Fine  Extended Limits  Extended Trims  Display Checklist Edit Checklist...

Trims Display: Never  Global Functions ADC filter Global

Center beep  Rud  Ele  Thr  Ail  S1  S2

Warnings: Switch Warnings SB SC SE SF Pot/Slider Warnings OFF S1 S2

Internal Radio System: Protocol Multi Start CH 1 Channels 16

Multi Radio Protocol Volantex V761 Receiver No. 35

Sub Type 3 Channel  Bind on channel  Low Power

Failsafe Mode Not set

Notes:

Set Internal Radio System **OR** External Radio System as above.

### **Important:**

1. Set the protocol sections as shown.
2. Set the Receiver Number to a UNIQUE number for each receiver that you use.
3. For the Volantex planes, they bind better when “Low Power” is selected as shown above. For indoor flying this should stay in this mode to lessen interference with the other close by radios & planes. But untick this if flying this model outdoors.

### Throttle Warning

Set this so you are warned if the throttle is not all the way down before the transmitter is activated.

### Switch Warning (above picture)

To ensure that the Thr Cut (Sw E) is active and Stabilizer (Sw B) is on “Beginner Mode”, the radio checks their position prior to activating the radio. If these switches are not set appropriately, you get a warning on the radio screen and cannot proceed until the error condition is corrected i.e. until you set the switches to the expected position. See **IMPORTANT** note re switch allocation at the start of this document.

## 2 - Inputs – BEST IF ORDER IS “AETR” for page consistency.

```
I1:Ail      Ail Weight(+100%) Expo(30%) Switch(SF↑) [Hi Rat]
            Ail Weight(+70%) Expo(30%) Switch(SF↓) [Lo Rat]
I2:Ele      Ele Weight(+100%) Expo(30%) Switch(SF↑) [Hi Rat]
            Ele Weight(+70%) Expo(30%) Switch(SF↓) [Lo Rat]
I3:Thr      Thr Weight(+100%)
T4
```

See **IMPORTANT** note re switch allocation at the start of this document.

See appendix 1.

Set this next.

### 3 - Outputs – ORDER MUST BE 'AETR'.

The multiprotocol unit will rearrange the order to suit the particular protocol/receiver selected.

#	Name		Subtrim		Min		Max	Direction
CH1		<input type="checkbox"/> GV	0.0%	<input type="checkbox"/> GV	-100.0%	<input type="checkbox"/> GV	100.0%	---
CH2	EIO	<input type="checkbox"/> GV	0.0%	<input type="checkbox"/> GV	-100.0%	<input type="checkbox"/> GV	100.0%	---
CH3	ThO	<input type="checkbox"/> GV	0.0%	<input type="checkbox"/> GV	-100.0%	<input type="checkbox"/> GV	100.0%	---
CH4	RuO	<input type="checkbox"/> GV	0.0%	<input type="checkbox"/> GV	-100.0%	<input type="checkbox"/> GV	100.0%	---
CH5	StO	<input type="checkbox"/> GV	0.0%	<input type="checkbox"/> GV	-100.0%	<input type="checkbox"/> GV	100.0%	---

Notes:

1. CH1 is left blank as this is a 3 channel model without Ailerons.
2. "EIO" is "Elevator Output" & the rest of the labels follow suit.
3. "StO" label is "Stabilizer Output" i.e. set Stabilizer/Gyro mode.
4. If any output goes the wrong way, e.g. elevator moves the wrong direction when you move the elevator stick, then change the **direction** on this screen.

Now set this

### 4 - Mixes

CH1	
CH2:EIO	I2:Ele Weight (+100%)
CH3:ThO	I3:Thr Weight (+100%) := MAX Weight (-100%) Switch (SE↑) [Cut]
CH4:RuO	I1:Ail Weight (+100%)
CH5:StO	SB Weight (+100%) [Stab]

See appendix 2 for an examples of a single line from the above.

Notes:

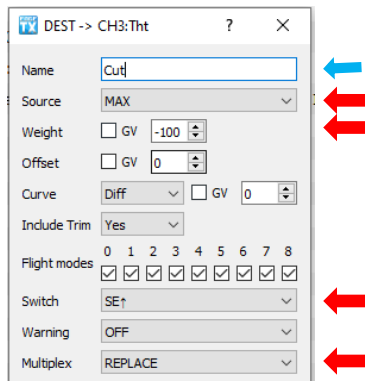
1. CH1 is left blank as there are no Ailerons on this model.
2. CH4 Rudder uses the Aileron INPUT.
3. ":=MAX Wt (-100%) Sw (SE^) [Cut]" - this is a simple Thr cut switch set up.

It is added as an extra line immediately below CH3 Throttle.

This is *not essential* but is a VERY desirable safety feature.

Cont'd over.

Make sure to set all 4 items marked below with red arrows. The blue one is optional.

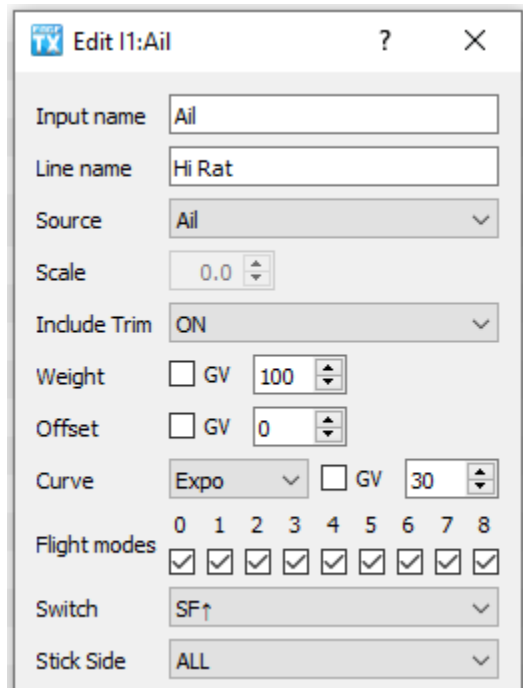


See **IMPORTANT** note re switch allocation at the start of this document.

### 5 - Logical Switches - Not used

### 6 - Special functions - Not Used

Appendix 1 – Sample aileron **INPUT** set up as used above.



Cont'd over

Appendix 2 – sample throttle and throttle cut MIX set ups used above.

DEST -> CH3:ThO

Name:

Source: I3:Thr

Weight:  GV 100

Offset:  GV 0

Curve: Diff  GV 0

Include Trim: Yes

Flight modes: 0 1 2 3 4 5 6 7 8

Switch: ----

Warning: OFF

Multiplex: ADD

Delay Slow

Up: 0.0 0.0

Down: 0.0 0.0

DEST -> CH3:ThO

Name: Cut

Source: MAX

Weight:  GV -100

Offset:  GV 0

Curve: Diff  GV 0

Include Trim: Yes

Flight modes: 0 1 2 3 4 5 6 7 8

Switch: SE↑

Warning: OFF

Multiplex: REPLACE

Delay Slow

Up: 0.0 0.0

Down: 0.0 0.0