

Protocols summaries for smaller model plane

For a full listing please go to

<https://www.multi-module.org/basics/supported-protocols>

On that link you can click on the protocol name e.g. V761, to see additional information.

Summary list below

This summary list will expand very quickly; please send Rod any new ones that you find.

Conventional aircraft

Volantex Ranger 600, Trainstar and other 3 channel Volantex models

Protocol set up

Setting	Value
Protocol	Multi
Multi Radio Protocol	V761
Sub Type	3 Channel

Output Set up

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 - needs 3 position switch Beginner/Intermediate/Advanced

It is in addition possible to set up a calibrate channel/button but this is not recommended until you have a good understanding of how this protocol actually works. If you accidentally trigger that in flight it is definitely not a good thing!

Eachine Warbirds Mustang etc and some other 4 channel Eachine /Volantex models

Note: also the suitable for Volantex Sports Cub

Protocol set up

Setting	Value
Protocol	Multi
Multi Radio Protocol	V761
Sub Type	4 Channel

Output Set up

Channel Num	Order	Use
1	A	Aileron
2	E	Elevator
3	T	Throttle
4	R	Rudder
5	Stab Mode	Stabilization mode - needs 3 position switch Beginner/Intermediate/Advanced

- Can include Calibrate channel/button I BUT if you accidentally trigger that in flight it is definitely not a good thing!
- Can include Role/Loop channel/button but rarely used.
- The war birds are rather fast inside. A ribbon/streamer attached to the rear of fuselage helps. As does adding a small mix of Ail into the Rub mix.

DSM 3 channel models e.g. Night vapor etc

Protocol set up

Setting	Value
Protocol	Multi
Multi Radio Protocol	DSM
Sub Type	DSM2 1F or other variants

Output Set up

Channel Num	Order	Use
1	A	Aileron – no output
2	E	Elevator
3	T	Throttle
4	R	Rudder (allocated Aileron input in radio)

DSM 4 channel models e.g. Horizon hobby Sport Cub etc

Protocol set up

Setting	Value
Protocol	Multi
Multi Radio Protocol	DSM
Sub Type	DSMX 2F
Enable Max Throws	Tick this option.

Output Set up

Channel Num	Order	Use
1	A	Aileron
2	E	Elevator
3	T	Throttle
4	R	Rudder
5	Stab Mode	Stabilization mode - needs 3 position switch SAFE/Intermediate/Advanced
6	Panic	Panic button – momentary button. While presses activates SAFE mode to level the plane.

Output Set up values

CH	Name	SubTrim	Min	Max	Direction
1	AiO	0.0%	-65%	+65%	INV
2	EIO	0.0%	-65%	+65%	
3	ThO	0.0%	-100%	+65%	
4	RuO	0.0%	-65%	+65%	INV
5	MoO	0.0%	-65%	+65%	INV
6	Pan	0.0%	-65%	+65%	

VERY IMPORTANT - Model specific notes:

- Be careful to set all the Min and Max to -65% & 65% as per the pic above.
- The exception is the -100% for the throttle.
- The +/-65% will give you **full throws** on all the servos. For this particular receiver, if you leave it at the default -100% and 100%, then you are trying to push the servo further that it can physically go. The servo will keep trying to go beyond it limits but cannot. So, it can heat up and potentially get damaged if held at more than +/- 65% for any length of time.
- Set “direction” to INV (inverted) on the channels indicated above. Otherwise, the control surfaces will move in the wrong direction.

WLToys F949 3 channel - be aware there are several variants of this model.

Protocol set up

Setting	Value
Protocol	Multi
Multi Radio Protocol	MT99XX
Sub Type	A180

Output Set up

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 - IF FITTED details unclear.

Differential thrust Models

C17 transport differential thrust models and potentially others dif thrust models

Protocol set up

Setting	Value
Protocol	Multi
Multi Radio Protocol	GD00X
Sub Type	GD V2

Output Set up

Channel Num	Order	Use
1	A	Aileron – no output
2	E	Elevator – no output
3	T	Throttle
4	R	Rudder (allocated Aileron input in radio)

CH4 “Rudder” uses the Aileron INPUT. In fact, this output controls the relative speeds of the two motors as the plane has no ailerons or rudder for turning.

Other dif models set up as above, except for the protocol and subtype

Model	Protocol	Sub Type
SU35 FX620	FX	620
A120 V2 (Green Board)	MT99X	A180
P38 - Lightning	FX	816
FXB17	FX816	FX816
Dif board Brian E/Peter Mc	MTT99	Dragon

Cont'd over

Helicopters

Eachine E129/E130

Protocol set up

Setting	Value
Protocol	Multi
Multi Radio Protocol	Eachine E129
Sub Type	DEFAULT

Output Set up

Channel Num	Order	Use
1	A	Aileron – ???
2	E	Elevator – ???
3	T	Throttle
4	R	Rudder ???
5		Emergency Stop (push button switch)
6		One press take off (push button switch)

There is provision for sliders as trims on the E130.

Please let Rod know if you have more/updated information on this or any other models.

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