

## Components and settings

*Recommended RC-components:*

RC-component suggestions for Freestyler 3, V-tail					
version	FLAPS	AILERONS	V-tail	receiver	battery
low-cost	HS85 MG	HS85 MG	HS81 MG	SMC 14	4 x AA NiMH 2100 mAh (Sanyo, GP)
normal	DS368, DS3068, S3150	DS368, DS3068, S3150	S3150	SMC 14, SMC 19	4 x 2/3 A 1400 mAh (GP, Intellect), 4 x AA NiMH 2100 mAh (Sanyo, GP)
high-end	DS3068	DS3068	DS3781	SMC 14, SMC 19, SMC 19 DS	4 x 2/3 A 1400 mAh (GP, Intellect), 4 x 4/5 A NiMH 2150 mAh

Note concerning cheap AA batteries – it seems possible that life time ends relatively abruptly. Don't save too much at the battery or replace upon slight doubt about capacity. Prepare new batteries by charging/discharging several times, checking capacity and voltage.

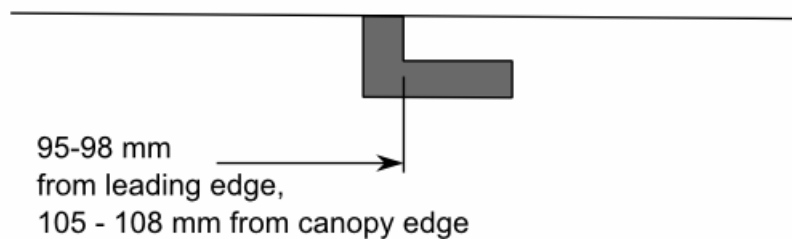
*Center of gravity:*

95-98 mm measured from leading edge at wing root.

*Tow hook:*

CG  $\pm 2$  mm, depending on desired launch safety.

Position measured from wing leading edge to rear edge of hook, see sketch below.



### Settings:

The following table gives some hints on possible rudder deflections and positions for general usage. Tweaking to individual preferences is required.

Settings Freestyler 3, V-tail					
trim positions	FLAPS	AILERONS	ELEVATOR	RUDDER	
CLIMB	2-3	-0.5 to flap	0	0	
NORMAL	0	flush to flap	0	0	
SPEED	-1.5	flush to flap	0.5	0	
WINCH LAUNCH	13	-1 to flap	0	0	
BUTTERFLY	35	-8	3	0	
deflections	FLAPS	AILERONS	ELEVATOR	RUDDER	
CLIMB	-7/5	-15.5/9	±7.5	±7.5	
NORMAL	-7/6	-15/10	±7.5	±7.5	
SPEED	-7/6.5	-15/10	±7	±7	
WINCH LAUNCH	0	-16/2	±7	±8	
wing mix	ELEVATOR > FLAPS & AILERONS		AILERONS > RUDDER		
CLIMB	-1.5/1.5		3		
NORMAL	-5/7		2		
SPEED	-5/7		1		
WINCH LAUNCH	0		5		
flap down = + , flap up = - , all measures in mm					

### Antenna routing:

Due to carbon fibre in the fuselage (electrically conducting) the antenna must be routed outside. It turned out to be practicable to use spring steel of 0.5 mm diameter soldered to the (extended) receiver antenna. See sketch below. Use shrink-tubing to isolate from the carbon fibres and glue to fuselage.

