Welcome to Silverware wiki

This Wiki should introduce and help in and on a project, RCGroups user silverxxx has started in september 2015

Features:

- Acro mode
- Level mode (switchable via TX channel or gestures, using stock TX)
- Telemetry via Bluetooth using SilverVISE
- Telemetry using a DEVO and Bayang Telemetry Protocol (Telemetry support since the December '16 nightly builds of Deviation)
- Telemetry using Taranis/9X/TH9X
- Brushless motor Driver supporting PWM, PPM, Oneshot and DShot
- Inverted flight possibility on Floureon H101 / Eachine H8**S**
- Well suitable for custom builds, such as different frames, larger motors, Hexas, Brushless. Most compatible boards are known to drive 8520 coreless motors without issues
- Switchable output to switch 'something' on and off during flight via TX (e.g. FPV gear)
- Buzzer support (watch the mod section) for lost quad detection
- 2S support for the green and blue H8 boards (don't use 1S brushed motors! For brushless only recommended, you might fry the FETs otherwise!

The quads everything started with

Compatibility list

Quad	H8 acro/dual	H101 acro/dual	CG023	Other	Notes																												
Eachine/JJRC H8, green board	yes																																
Eachine H8 3D mini				yes 3D(code)																													
Floureon H101		yes																															
Eachine H8S		yes																															
Eachine CG023			yes																														
Eachine/JJRC H8, blue board			yes	[1]	Keil Bug, solve it that way. CLK/DAT swapped																												
GW008 Skull Quad				yes, forum post																													
DHD D1			info	acro only																													
Bayang X9, GD F130 mcu board	yes (post)				motor order changed, 16k flash																												
Eachine 3D X4, CG027R board			yes																														
FQ777-124	yes (post)				bikemike's fork																												
CX Model CX023	yes (post) and following		bikemike's fork hardware_cx023.h..zip	</sortable> See the OpenMicro (CG023) Hardware compatibility charts for more detailed list of possible and work in progress compatibility. ==== Common info links, including how to start ====	Flashing guide video	Changing config settings.	Changing the target device.	Guide to installing required software.	Download the GigaDevice GD32F130 support pack.	Flashing guide video / Blue Board	Gallery of awesome pictures with few ways on how to do the flashing port.	Silverware H8/H101 thread.	Github H8 dual source	Github H8 acro source	Github Floureon H101 dual source	Hexa using H101 FC (Circular Style)	Hexa using H101 FC (H Style)	Tricopter using H8 FC+	H101 "Rattitude" Version	**Silverware CG023 thread**	Github CG023 dual source	Github DHD D1 source acro only(beta)	CG023 firmware-wiki page	==== Beginner's Guide ==== Differences between Level and Acro - why does the quad what it does? ==== Transmitter config ==== Stock Transmitter Config Devo Config ==== FAQ ==== ==== Flashing ====	**Question**	**Answer**	"Error, Flash download failed - Could not load file '/.axf"	Project not compiled, go to 'Project → Build Target (or press F7). Errors in code may be causing compilation to fail. Check that the number of errors is zero when compiling.	"No target connected"	Quad not powered on, you need to supply power to the board; either plug the battery, or the serial cable. If powered, check your clk and data connections. This message indicates the computer can't communicate to the quadcopter.	"Unknown target connected"	Wrong chip selected, go to "Project → Options For Target (Alt + F7)". New window opens, switch to 'Debug' tab and on top right, press "ST-Link Debugger" Settings button. New window opens, switch to 'Flash Download' tab, select the proper chip family, press Remove, then Add, and then select the proper chip.
Internal Command Error. Error: Flash Erase failed - Target DLL has been cancelled"	Your programming wires might be too long. Try to keep them as short as possible.																																
ST-link USB communication error or similar popup	Disconnect/reconnect st-link or Restart computer. This may also be a special blue board problem. read here																																
Select device menu grayed out	This is from video, use text instructions from post, or skip the related steps																																

Firmware settings

Question	Answer
What PWM frequency is the best?	The pwm frequency changes the linearity of the motors (due to their inductance) and as such it can have an effect on flight. For 720 motors 8Khz seems to result in linear thrust. Some 6mm motors are similar. Increasing frequency reduces thrust at low throttle, so it can help with wobbles that occur while descending. 820 motors are still somewhat nonlinear even at 32Khz

Flight

Question	Answer
My quad is drifting in flight	Try the accelerometer calibration: Place the copter on a level surface, throttle low, roll&yaw center, and pitch down three (3) times in quick succession. The LEDs will blink alternating while the calibration is in process.
How do I fly acro without crashing all the time?	*“There is an art to flying, or rather a knack. Its knack lies in learning to throw yourself at the ground and miss. … Clearly, it is this second part, the missing, that presents the difficulties.”*

PID tuning

PID Tuning GuidePID Sample Settings

Where to buy stuff?

STlink, spare props, good quality motors, batteries and so on.

ST-Link V2 Emulator for firmware flashing (banggood)
Silverxxx's rcgroups st-link post

We all no doubt know the joys of the slow boat from China but hey they are cheap and available at Banggood

Mods

quadcopter mods

Changing firmware settings

Settings information

Debug mode

using debug mode

Brushless setups

brushless setupdriving esc's - firmware settingsbrushless setup - general build infobrushless builds - pics/specs/settings

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