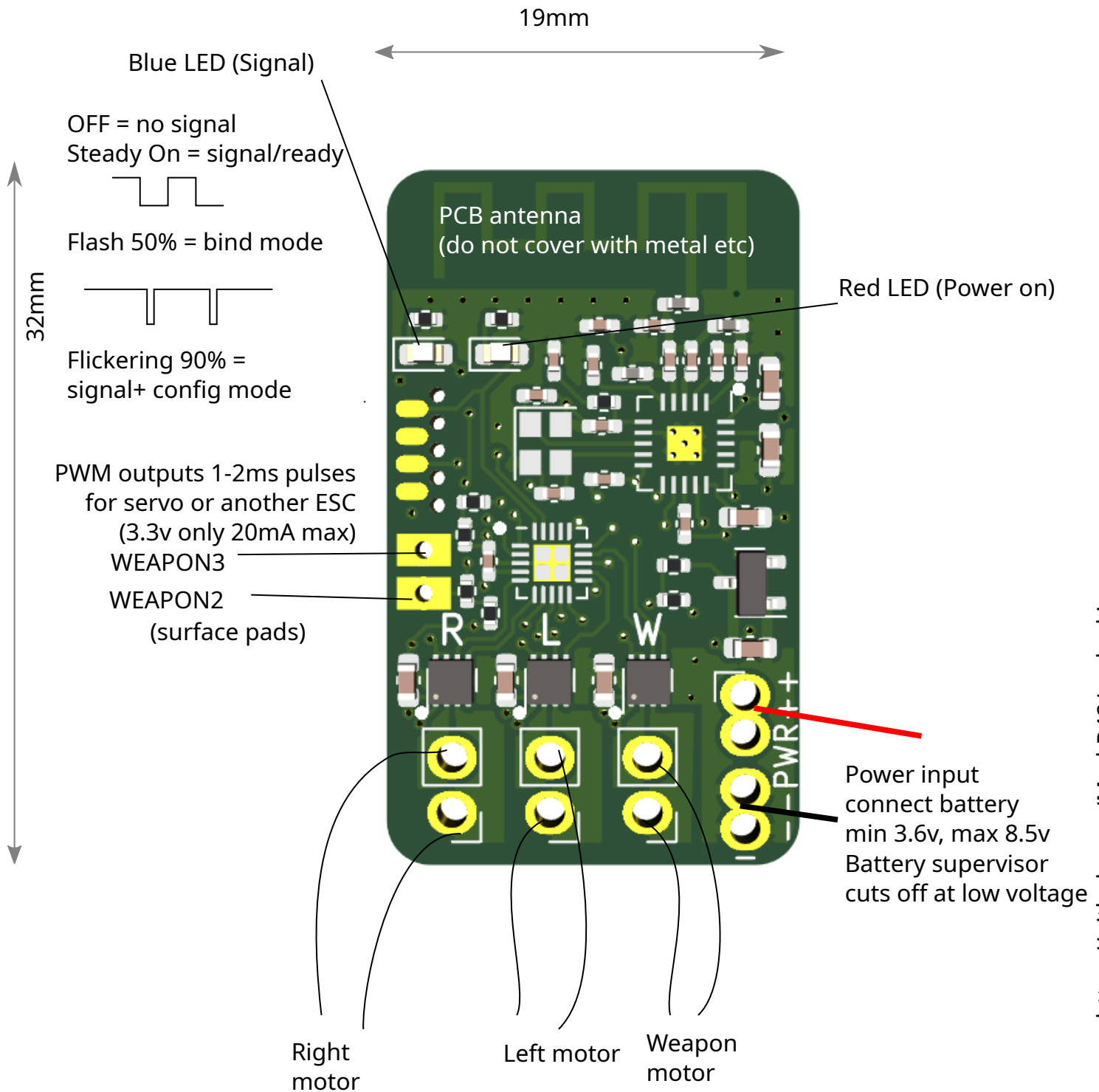# Malenki-Nano speed controller & receiver

Designed for 150g UK Antweight Robots

Radio protocol: AFHDS 2A

Compatible transmitters: Turnigy / Flysky FS i6, i4, Evolution etc

19mm

32mm

Blue LED (Signal)

OFF = no signal
Steady On = signal/ready

Flash 50% = bind mode

Flickering 90% =
signal+ config mode

PWM outputs 1-2ms pulses
for servo or another ESC
(3.3v only 20mA max)
WEAPON3

WEAPON2
(surface pads)

PCB antenna
(do not cover with metal etc)

Red LED (Power on)

R L W

Power input
connect battery
min 3.6v, max 8.5v
Battery supervisor
cuts off at low voltage

Right motor

Left motor

Weapon motor

Brushed motor outputs: full battery voltage,
1.8A max current per channel

Open Source hardware and firmware, https://github.com/MarkR42/malenki-nano

Channel mappings

1 = Steering
2 = Throttle
3 = WEAPON
4 = WEAPON2 (PWM)
5 = Invert / Configuration
6 = WEAPON3 (PWM)

Configuration commands
  - Assign a switch to channel 5.
  - Press a number of times while in config mode.

2 = Invert left output
3 = Invert right output
4 = Invert weapon output
5 = Reset control settings (keep bind)
6 = Enable / disable mixing (default enabled)
7 = Factory reset (unbind)