Wizard X220HV
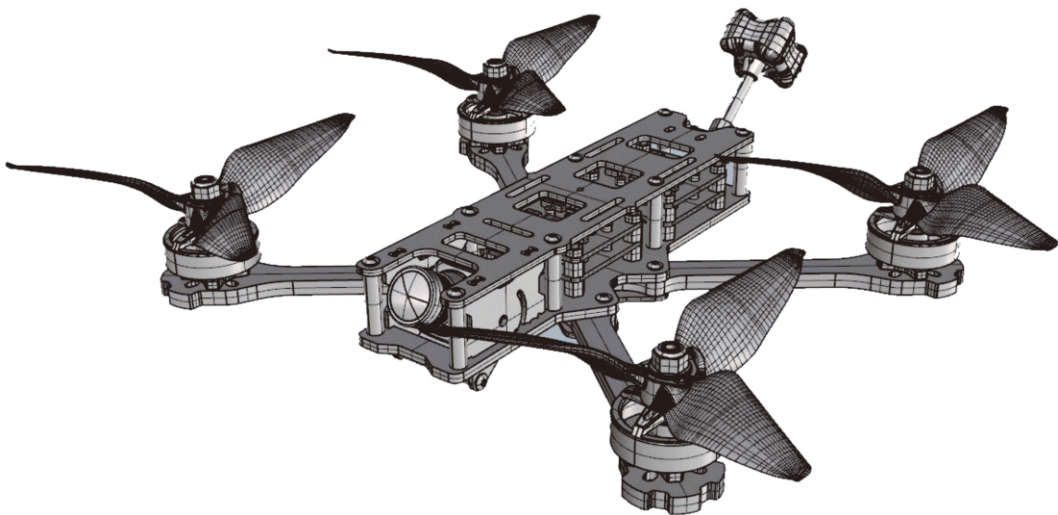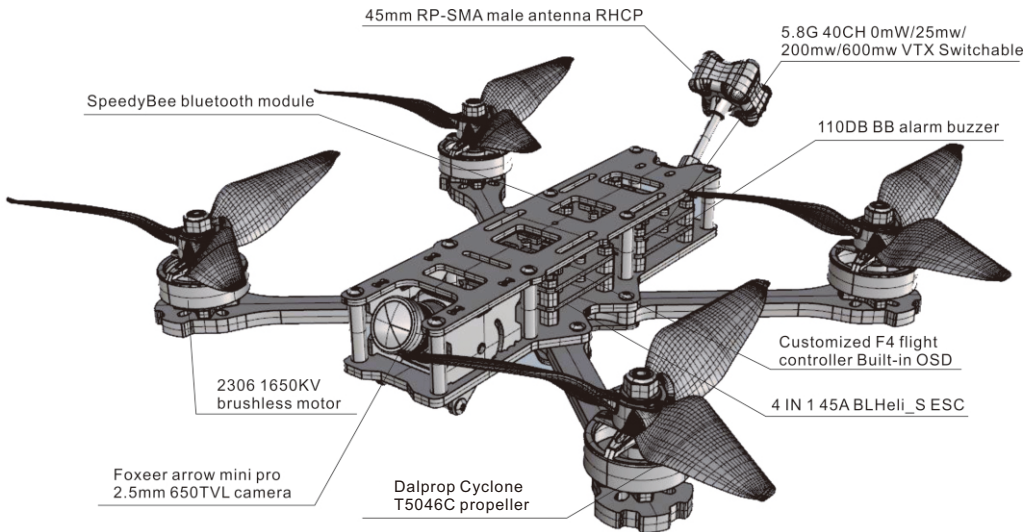
QUICK START GUIDE

Package included:

1 x X220HV frame kit
2 x 2306 1650KV brushless motor CW
2 x 2306 1650KV brushless motor CCW
1 x 4 IN 1 45A BLHeli_S ESC
1 x Customized F4 flight controller Built-in OSD
1 x Foxeer arrow mini pro 2.5mm 650TVL camera
1 x 5.8G 40CH 0mW/25mw/200mw/600mw VTX Switchable
1 x 110DB BB alarm buzzer
1 x SpeedyBee bluetooth module
1 x 45mm RP-SMA male antenna RHCP
2 x 200*20mm battery strap
1 x 30° camera mount compatible with Runcam 3 3S Gopro session
2 x Dalprop cyclone T5046C transparent white CW
2 x Dalprop cyclone T5046C transparent white CCW
2 x Dalprop cyclone T5046C transparent purple CW
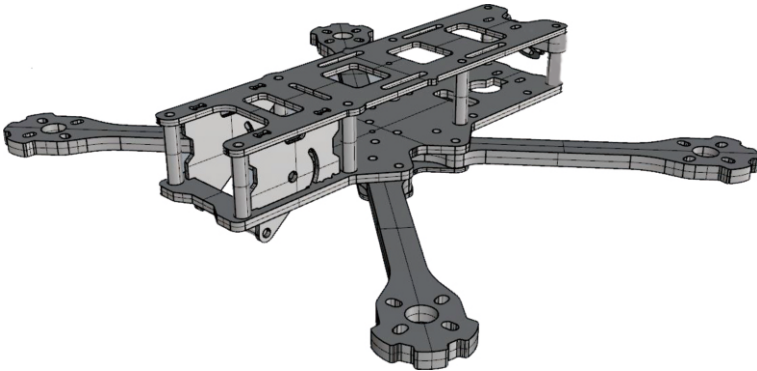2 x Dalprop cyclone T5046C transparent purple CCW
10 x 2.5*100mm nylon strap black

Contents

1.0 Frame kit
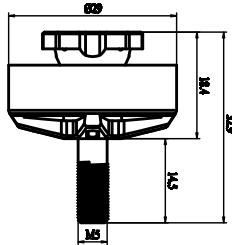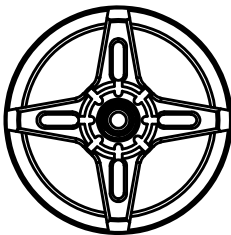
Wheel base: 220mm
Upper plate thickness: 2.0mm
Frame arm thickness: 5.0mm
Bottom plate thickness: 3.0mm
X plate thickness: 1.5mm
Camera side plate thickness: 1.5mm
Camera standoffs: M3*28mm 1 PC
Frame standoffs: M3*20mm 8 PCS

2.0 Motor

Motor KV: 1650 RPM/V
Idle current(Io/10V): 1.05A
Lipo cell: 3-6S
Weight: 35g
Max continuous current: 36A
Max continuous power: 860W
Max thrust: 2350g
Configu-ration: 12N/14P
Stator diameter: 23mm

Stator thickness: 6mm
Motor diameter: 29mm
Motor body length: 18.4mm
Overall shaft length: 32.9mm
Prop adapter shaft: M5
Bolt holes spacing: 16mm
Bolt thread: M3
Propeller: 5-6 inch

3.0 ESC

Integrated PDB
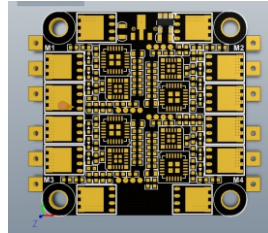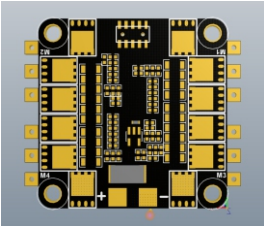Working voltage: 2-6S Lipo
Continuous working current: 4*45A
Peak current: 4*50A (6S)
Main control chip: 48Mhz EFM8BB2
Firmware: BLHeli_S Supports Dshot600
MOS: 5*6

4.0 Flight controller
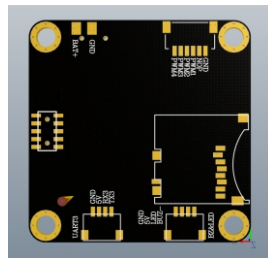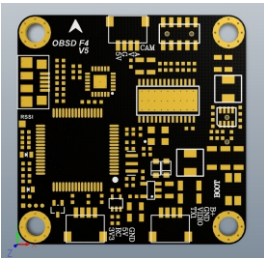
Main control chip: STM32F405
Sensor: MPU6000 6 axes
Power supply: 5V
Integrated OSD
LC filter on board
Supports BetaFlight / inva running firmware

5.0 Antenna

Brand name: Eachine
Item name: antenna
Quantity: 1 PC
Conncetor: RP-SMA Male

6.0 Switchable VTX

Output power and transmission distance: ≥0.5km@25mW, ≥1km to 200mW, ≥2km to 600mW
Transmission power: 0mW / 25mW / 200mW / 600mW
Full video format: NTSC / PAL
Input voltage and power dissipation: 7V ~ 24V, + 12V / 260mA @ 600mW
Size: 36*36*6mm
Weight: ≤ 7g (excluding antenna)
With output power self-check function.
Nixie tube SCAN: frequency point (1-8), frequency band (AE), power (1-3, 0=0mw, 1=25mw, 2=200mw, 3=600mw)

7.0 Camera

Solution: 1/3" Sony SUPER HAD II CCD + Nextchip 2040 DSP
Pixel: PAL: 976(H)x494(V)
TV system: PAL
Resolution: 600TVL(color) 650TVL(B&W)
Synchronization: internal
Min.illumination: 0.01Lux
WDR: support
OSD programming board: support
White Dot repair: support
DNR: 2D DNR
Camera title: support
Image adjustment: support
OSD: Edit name, power, flying time
Input power: 5-40V
Storage temperature: -40℃~60℃
Working temperature: -10℃~50℃
Power consumption: 70mA
Low voltage alarm: support
Preset mode: DEF, VIVID, SUNNY, CLOUDY, LED TR, USR1
Size: 21.8x21.8mm
Weight: 8.7g(excluding bracket)

1.8mm M12 (FOV-D 150°)
2.5mm M12 (FOV-D 130°)

8.0 SpeedyBee bluetooth module

Support Betaflight configurator
Speedybee App: iOS 10.0+; iPhone 4S, iPad3;
Android 4.3+
Output power: 0dBM
Sensitivity: -94dBM
External interface: BROADCAST SWITCH, TX, RX,
3-5V DC Input, GND
Transmission speed: Bidirectional 1K/S
Bluetooth protocol: Bluetooth Specification V4.0 BLE
Transmission distance: 30 meters
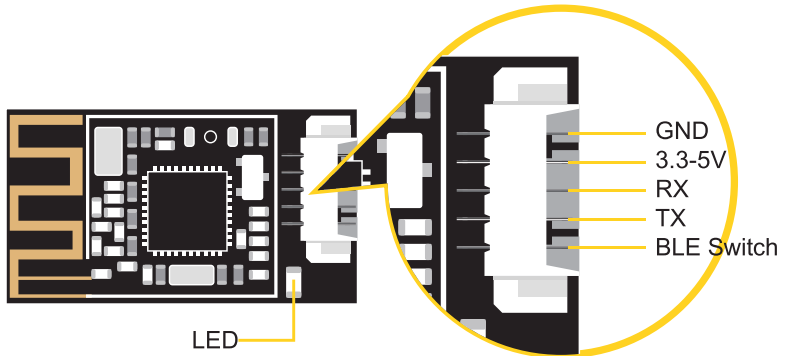Frequency range: 2400MHz-2483.5MHz (2.4G ISM
Band)
Baud rate: 2400, 4800, 9600, 14400, 19200(default),
28800, 38400, 57600, 76800, 115200, 230400
Working voltage: 3.3V-5.0V
Working current: 8.3mA-10mA
Weight: 1.4g
Size: 27*15*4.5mm

GND
3.3-5V
RX
TX
BLE Switch

LED

LED: Blue and constantly on when being connected.
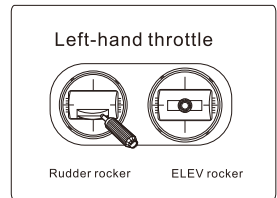LED does not light means it is not connected.

9.0 110DB BB alarm buzzer

Working voltage: 5V
Standby battery: lipo 4.2V 100mah
Loudness: 110DB
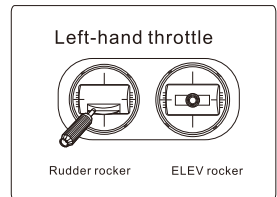Size: 36 * 36mm
Weight: 8g

10.0 Motor Unlock/lock

Motor Unlock

Put the throttle rocker at the lowest point, move the rudder rockerto the right and keep it for more than 2 seconds. The blue state indicator is always on, that is unlock the motor.

Left-hand throttle

Rudder rocker   ELEV rocker

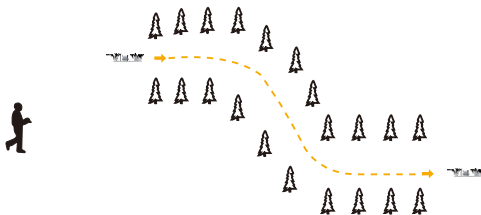### Motor lock

Put the throttle rocker at the lowest point, move the rudder rocker tothe leftmost side, and the red state indicator is always turned on to lock the motor. At this time, pushing the throttle rocker motor upward will not rotate.

Left-hand throttle

Rudder rocker   ELEV rocker

11.0 Traversing flight

1).Flying is more suitable for experienced pilots.
2).During the flight, please keep the flight within the video receiving range (the actual range depends on the flight environment and weather conditions).
3).During flight, please avoid crowd, animals and High voltage wires and other obstacles