LDARC®

FPVEGG PRO

Instruction Manual

Feature

* FPVEGG PRO used CCD600 camera(1/3 SONY CCD)
* The structure uses 4.0mm thick carbon fiber and 7075 aviation aluminum alloy material, light weight, high strength.
* Product performance and wheelbase for indoor through the special design.
* BLheliS 4in1 20A ESC ,support MULTISHOT,ONESHOT and DSHOT provedes a better user experience.
* Modular design, KK TOWER FC(F4+OSD), with the betaflight firmware.

FPVEGG PRO Configuration /////

FPVEGG PRO(with buzzer and LED)

Wheelbase:138mm

Input voltage:3~4S Lipo

KK TOWER(2 Layer) 20*20:

   F4+OSD

   4in1 20A BLheliS

VTX:Q100 VTX(25mW/100mW 16CH)

Camera:CCD600 (600TVL CCD 160° NTSC)

Motor:XT1406-3600KV

Prop:3050

Battery:11.1V 850mAh 45C
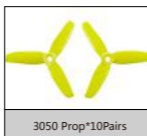
Weight:129.5g(without receiver and battery)

The package includes 3S lipo,If you want to fly more powerful, you need buy 4S lipo (650-850mAh) on your own.

The package not includes receiver,you need buy high quality receiver(S.BUS/PPM/DSM2) on your own.

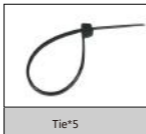# FPVEGG PRO Package list /////

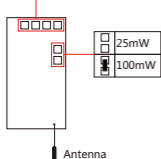| PNP*1 | 3050 Prop*10Pairs | Battery*1 | Instruction manual*1 |

| Rubber*2 | mackintosh*4 | Tie*5 |

VTX /////

4.0V	VIN	GND	VIDEO

□ 25mW
□ 100mW

Antenna

Click the key change frequency point

LED Frequency table			
🟥 5658MHZ	🟩 5806MHZ	🟦 5705MHZ	⬜ 5790MHZ
🟥 5695MHZ	🟩 5843MHZ	🟦 5740MHZ	🟩 5820MHZ
🟥 5732MHZ	🟩 5880MHZ	🟦 5760MHZ	🟦 5860MHZ
⬜ 5769MHZ	⬜ 5917MHZ	⬜ 5780MHZ	⬜ 5945MHZ

+	VIN	2S-4S Lipo
–	GND	7V-18V

Q100-Mini 25mW/100mW 16CH VTX (2S-4S Lipo 7V-18V)
L=28mm,W=11mm,Weight=2.5g(Without camera and wire)

Please attention ventilation cooling

FC /////

Front

Camera			
5V+	GND	VIDEO	AUDIO

USB

BOOT

Back

USB

VTX		
VIDEO	5V+	GND

Connect these 3 pads to VTX when use 2L tower(FC+ESC)

Receiver			
3V3	RC IN	5V+	GND
DSMX 3V3	RC IN	☒	GND
S.BUS/PPM ☒	RC IN	5V+	GND

LED+Buzzer			
5V(BUZZER+)	LED(S)	BUZZER-	GND

ESC /////

M4

M3

M2

M1

Power 2~4S
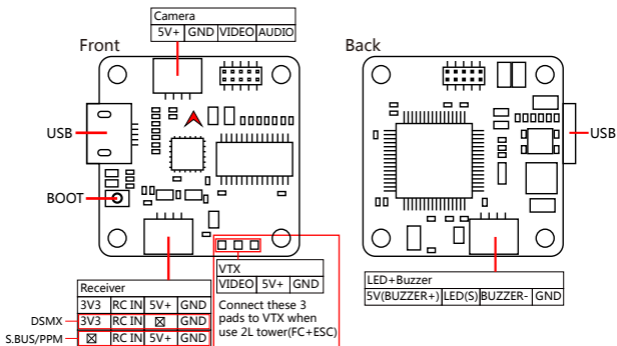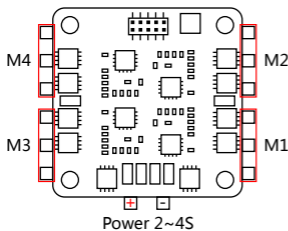
Motor /////
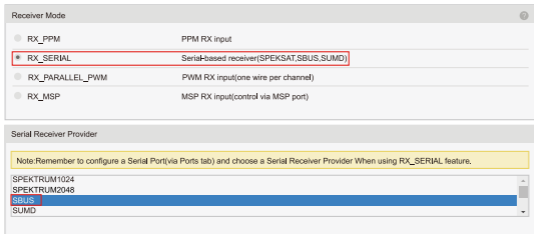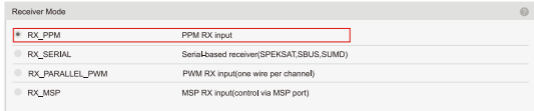
M4(CW)

M2(CCW)

M3(CCW)

M1(CW)

Note:pay attention to the direction of rotation of the motor when installing the prop

XM Receiver example

XM bind (default S.BUS),example(FRSKY X9D)

1. Open remote control, set D16 mode.
2. Hold receiver bind button to power, loosen until red and green light constant lighting.
3. Open remote control Bind, press "Enter" and wait a few seconds, then stop Bind when red light flash and green light constant lighting.
4. Disconnect receiver power and power-on again, green light constant lighting means bind success.

Receiver Mode	
○ RX_PPM	PPM RX input
● RX_SERIAL	Serial-based receiver(SPEKSAT,SBUS,SUMD)
○ RX_PARALLEL_PWM	PWM RX input(one wire per channel)
○ RX_MSP	MSP RX input(control via MSP port)

Serial Receiver Provider

Note:Remember to configure a Serial Port(via Ports tab) and choose a Serial Receiver Provider When using RX_SERIAL feature.

SPEKTRUM1024
SPEKTRUM2048
SBUS
SUMD

FS-RX2A Receiver example

FS-RX2A bind (default PPM), example (FLYSKY FS-i6)

1. Hold receiver bind button to power, loosen until LED fast blink
2. Hold remote control Bind button and open the power supply
3. Remote control enter bind mode, close the power supply
4. Open the remote control power supply, LED light constant lighting means bind success

Receiver Mode

● RX_PPM	PPM RX input
○ RX_SERIAL	Serial-based receiver(SPEKSAT,SBUS,SUMD)
○ RX_PARALLEL_PWM	PWM RX input(one wire per channel)
○ RX_MSP	MSP RX input(control via MSP port)

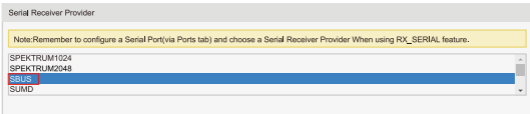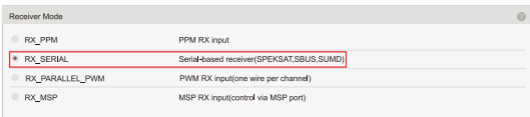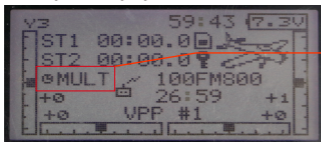## PPM mode to S.BUS mode
Note:
1. Remote control and receiver switch output mode under normal communication, long press bind button 2S to SBUS mode
2. Indicator light quick flashing twice and then put out 1S means success switch to SBUS mode

FM800 Receiver example

FM800 bind (default S.BUS), example (FUTABA T8FG)
1. Open remote control, hold receiver bind button to power
2. Green light constant lighting means bind success

Please select MULT

Receiver Mode

○ RX_PPM	PPM RX input
● RX_SERIAL	Serial-based receiver(SPEKSAT,SBUS,SUMD)
○ RX_PARALLEL_PWM	PWM RX input(one wire per channel)
○ RX_MSP	MSP RX input(control via MSP port)

Serial Receiver Provider

Note:Remember to configure a Serial Port(via Ports tab) and choose a Serial Receiver Provider When using RX_SERIAL feature.

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SPEKTRUM1024
SPEKTRUM2048
SBUS
SUMD
```

S.BUS mode to PPM mode
Note:
Close remote control, press bind button 6S when red light flash, loosen until enter S.BUS and PPM mode switch
1. Green light quick flashing, press bind button and disconnect power, power-on again, enter S.BUS mode
2. Green light slow flash, press bind button and disconnect power, power-on again, enter PPM mode
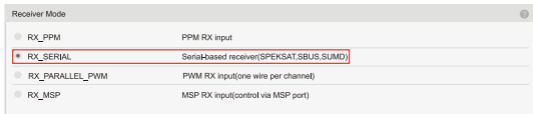
DSM2 Receiver example

DSM bind, example (T-SIX)
1. Remote control in off state, hold on the bind button to power
2. Loosen until indicator light fast blink, enter to bind mode
3. Open remote control bind mode, indicator light constant lighting means bind success
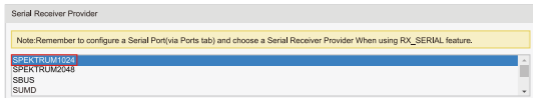
Note 2:
DSMX remote control bind to DSM2 and DSMX receiver, but DSM2 remote control only bind to DSM2 receiver.
DSM2: Old SPEKTRUM and JR remote control protocol, widely-used with good compatibility.
DSMX: Newest SPEKTRUM remote control protocol, DSMX backwards compatible DSM2.

Receiver Mode	
RX_PPM	PPM RX input
RX_SERIAL	Serial-based receiver(SPEKSAT,SBUS,SUMD)
RX_PARALLEL_PWM	PWM RX input(one wire per channel)
RX_MSP	MSP RX input(control via MSP port)

Note 1:
DSM2 uses SPEKTRUM1024 or SPEKTRUM2048 protocol, according to the remote control model to choose corresponding serial port protocol (example T-SIX, set protocol as SPEKTRUM1024)
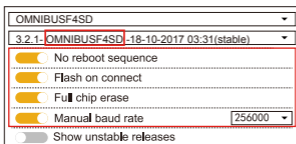
Serial Receiver Provider
Note:Remember to configure a Serial Port(via Ports tab) and choose a Serial Receiver Provider When using RX_SERIAL feature.
SPEKTRUM1024
SPEKTRUM2048
SBUS
SUMD

Product and Part code /////

Name	Factory Code	Name	Factory Code
FPVEGG PRO PNP	PNP.FPVEGG PRO	XT1406-3600KV	MOTOR.XT1406-3600KV
FPVEGG PRO KIT	KIT.FPVEGG PRO	KK TOWER(2 LAYER) 20A	FLYTOWER.KK TOWER(2 LAYER) 20A
3050 Prop	PROP.3050.3	KK TOWER ESC(20A)	ESC.KK TOWER 20A
Battery 11.1V 850mAh 45C	BAT.11.1V 850MAH 45C	KK TOWER FC(F4+OSD)	FC.KK TOWER(F4+OSD)
Carbon fiber plate(FPVEGG PRO part)	PART.BOTTOM PLATE.FPVEGG PRO	FPV EGG 7075 Aluminum frame	PART.FPV EGG 7075 ALUMINUM FRAME
Q100 VTX	VTX.Q100	CCD600 Camera	CAM.CCD600
PLASTIC CARRYING CASE	PART.PLASTIC CARRYING CASE	KK TOWER SCREW(2 LAYER)	PART.KK TOWER SCREW(2 LAYER)
KK TOWER WIRE	PART.KK TOWER WIRE		

Firmware update/////

BETAFLIGHT firmware allready flash before leave the factory,user just need connect PC to adjust the parameter.

1.Open betaflight configurator [BETAFLIGHT] ,then click [Firmware Flasher] ,select FW version

```
OMNIBUSF4SD                                    ▼
3.2.1- OMNIBUSF4SD -18-10-2017 03:31(stable)   ▼
    No reboot sequence
    Flash on connect
    Full chip erase
    Manual baud rate              256000    ▼
    Show unstable releases
```

2.Click [Load Firmware[Online]] , then click [Flash Firmware] to download FW to FC,
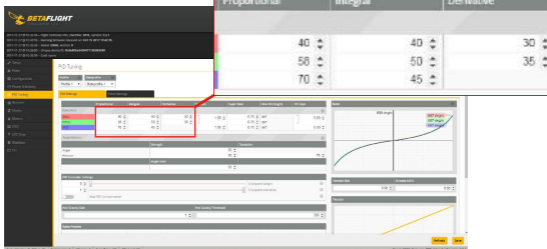
click [ ] after FW updating finish into settings menu.

3.Setting,select ⚙ Configuration, select ESC/Motor Feature,then select DSHT600 , then open

[ ] (LED_STRIP, OSD,DYNAMIC_FILTER).

4.Buzzer setting,select ⚙ Configuration , then open [ ] VBAT

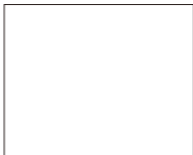5.Default setting of receiver is 5th channel ARM,6th channel mode switching.
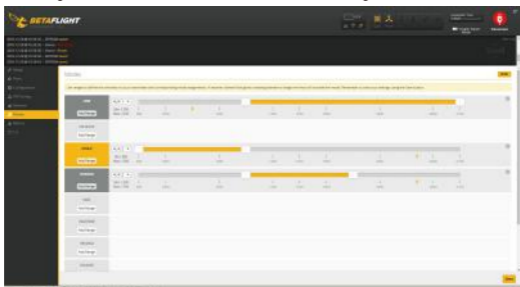
6.PID Default setting

	Proportional	Integral	Derivative
	40	40	30
	58	50	35
	70	45	

After sale service /////

1.Provide free reparation service when find the product defect after purchase.

2.Provide pay-needed reparation service when product damage because improper operation.

3.China customers please contact with the after-sales service,overseas client please contact the dealer.

PNP/RTF Test report   ID :

Flight test
- ☐ Transmitter functions properly
- ☐ Flying in good condition
- ☐ Camera OK
- ☐ VTX OK

QC: _____

Package check
- ☐ PNP
- ☐ RTF
- ☐ Frame
- ☐ Transmitter
- ☐ ID is the same
- ☐ All parts of the installation
- ☐ Insulating sleeves have been installed manual
- ☐ Complete accessories,total _____ packages

QC: _____