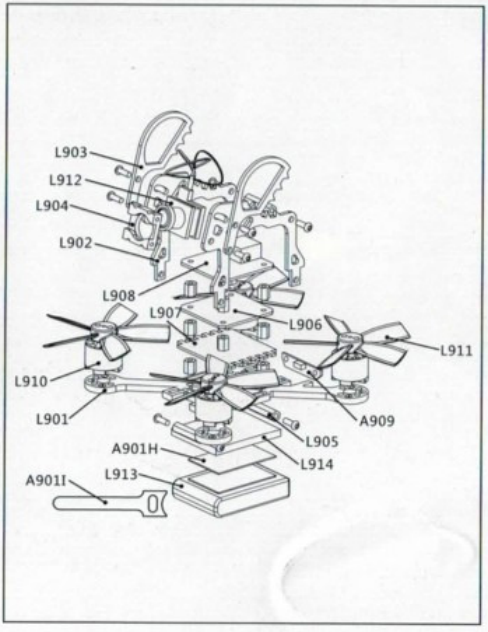
EACHINE

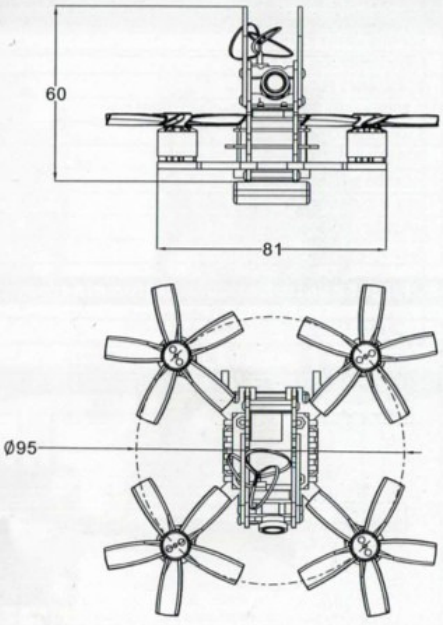
LIZARD 95

QUICK START GUIDE V1.0



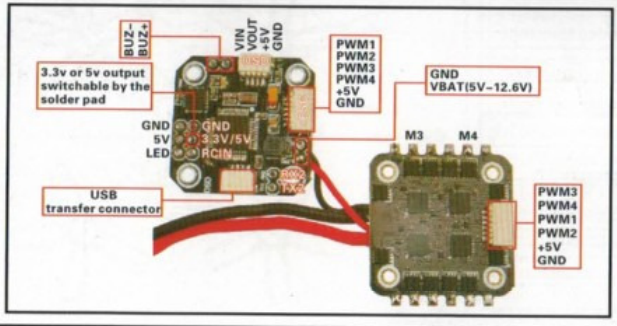
Item	Qty	Part No.	Option
3K Carbon Bottom plate	1	L901	
Camera Supports	1	L902	
Antenna Protector	1	L903	
Camera mount	1	L904	
M2 Hexgonal column	1	L905	
3M Sided adhesive	1	A901H	
Battery cable ties	1	A901I	
Flight controller	1	L906	
BS410 4IN1 ESC	1	L907	
2.4G Receiver	1	L908	L908FR: FRSKY
			L908FL: FLSKY
			L908DX: DXM2/X
1104 KV6000 Motor	4	L910	
2035R 5leaf propeller	4	L911	
HC48DS VTX(25mw/100mw adjustable) &Camera	1	L912	
11.1 V 550MAH 40C Lipo battery	1	L913	
WS2812 LED board	1	A909	
Battery anti-slip adhesive mat	1	L914	

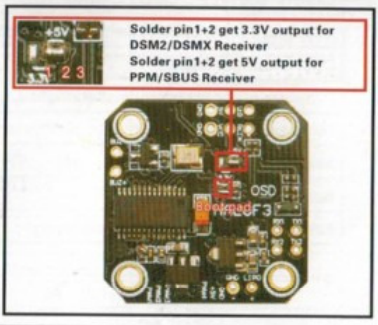
1. Specification
Brand Name: Eachine
wheelbase:95mm
Size:115mm*115mm*60mm
Weight: 66g(battery not include)
Flight controller: Betaflight F3 Flight controller built-in OSD
Motor: Eachine 1104 KV6000 brushless motor
ESC: 10A BLHELI_S 16.5 2-3S 4 IN 1Dshot600 ESC
Propeller: 50.8mm 5-blades propeller
Camera: 600TVL HD CMOS 1/4inch
VTX: 5.8g 25MW/100MW Switchable 48CH Video transmitter
OSD: Betaflight OSD
Firmware of Flight controller :Betaflight 3.1
Flight time : 4minutes
Rear LED Ready(LED_Strip function)
Buzzer Ready
Battery: 11.1V 550mah 40C lipo battery



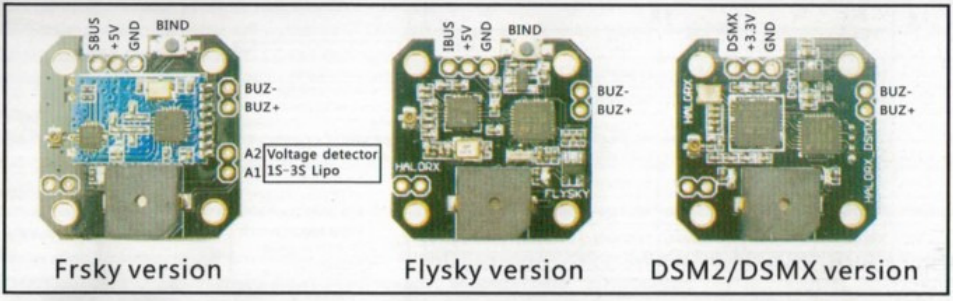
2. Components	QTY	Part NO.
Eachine Lizard 95 Frame	1	L90F
Flight controller	1	L906
BS410 4IN1 ESC	1	L907
2.4G Receiver (Option: Frsky/Flysky/DSMX)	1	L908(FR/FL/DX)
1104 KV6000 Motor	4	L910
2035R 5leaf propeller	4	L911(R/L)
HC48DS VTX	1	L912
11.1 V 550MAH 40C Lipo battery	1	L913
WS2812 LED board	1	A909
Battery anti-slip adhesive mat	1	L914

3. Flight controller connection diagram

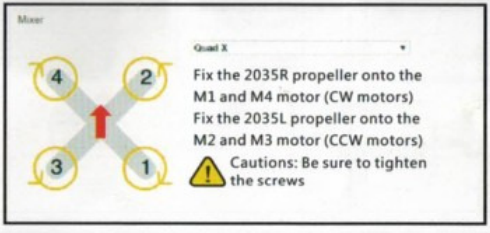


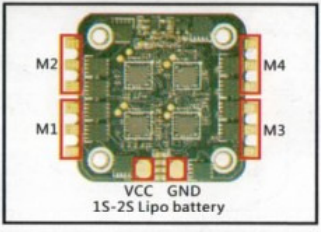


4. 2.4G receiver pins diagram



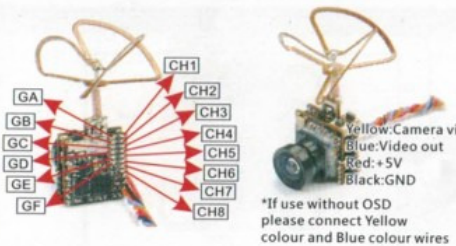
5. Frame type and ESC Connection diagram





6. 5.8G VTX channels list

CH \ FR		FR					
		GA	GB	GC	GD	GE	GF
CH	CH1	5740MHz	5705MHz	5865MHz	5658MHz	5733MHz	5362MHz
	CH2	5760MHz	5685MHz	5845MHz	5695MHz	5752MHz	5399MHz
	CH3	5780MHz	5665MHz	5825MHz	5732MHz	5771MHz	5436MHz
	CH4	5800MHz	5645MHz	5805MHz	5769MHz	5790MHz	5473MHz
	CH5	5820MHz	5885MHz	5785MHz	5806MHz	5809MHz	5510MHz
	CH6	5840MHz	5905MHz	5765MHz	5843MHz	5828MHz	5547MHz
	CH7	5860MHz	5925MHz	5745MHz	5880MHz	5847MHz	5584MHz
	CH8	5880MHz	5945MHz	5725MHz	5917MHz	5866MHz	5621MHz

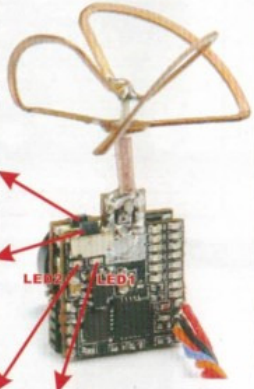


*If use without OSD
please connect Yellow
colour and Blue colour wires

Short both Switch 1 and Switch 2 at the same time for 1 second to change the VTX 25mw/100mw output

Switch 1
NTSC/PAL Switch still touch up 2S; Short touch switch to reverse video display

Switch 2
Frequency group A~F selected still touch up to 2S; Channel ch1~ch8 selected with short touch.



LED 1 on, LED 2 on 100mw
LED 1 on, LED 2 off 25mw

7. Charge the Battery

- First insert the LiPo battery balance plug into the B3 Compact charger (Not include, user supplied)
- Connect the power-cable to the wall-outlet,the B3 Compact charger accept volage from 110v to 240v. When correctly powred the charger LED will be flashing orange.
- During charging the LED will be solid RED. When charging is completed,the charger will display asolid GREEN LED.

⚠ Attention:

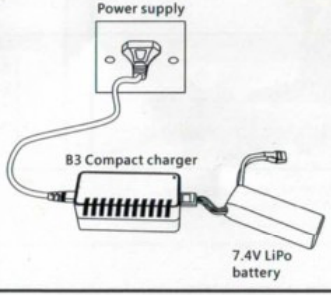
(1).When the Red LED light flashes,there may be something wrong with charger or battery,so please stop charging

(2). Can ONLY be used for charging 2S and 3S batteries.NEVER EVER attempt to charge more than ONE battery at any time, the charger may get damaged or catch fire

(3).During charging, the charger should be placed in a dry and ventilated place, far away from head sources and faraway from flamable or explosive substances.

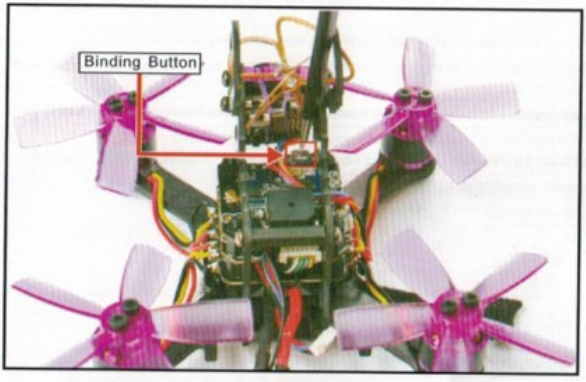
(4).Always allow the battery to cool down before charging, at least 10 minutes.Overheated batteries may swell or catch fire while charging.

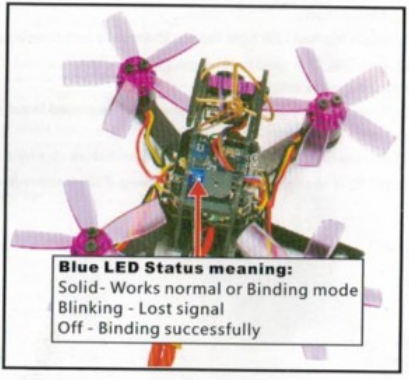
(5).DO NOT charge a dammaged battery, if the battery have cuts, swelling or bend, do NOT charge.



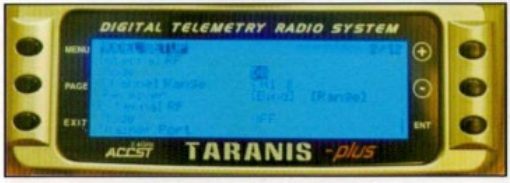
8. Eachine Lizard 95 Frsky BNF Version binding procedue

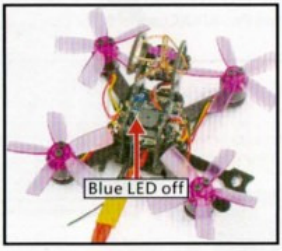
1. Power for the Eachine Lizard 95 while holding the Bind button, the blue LED on the receiver will getting to be solid, this means the Eachine Lizard 95 is in binding mode, then release the Bind button.



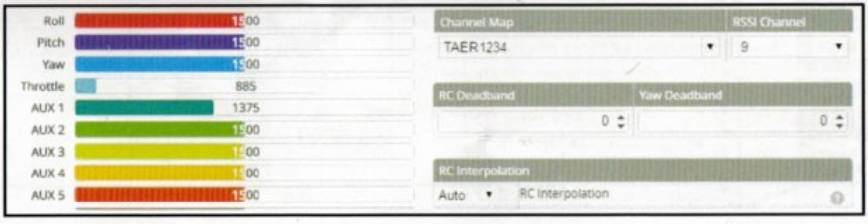


2. Turn on your Radio and select D8 mode for the Receiver. Then Go to the Receiver [Bind] option, and ENT to Binding with the Eachine Lizard 95. The Blue LED on the receiver will turning off, this indicates binding successfully.



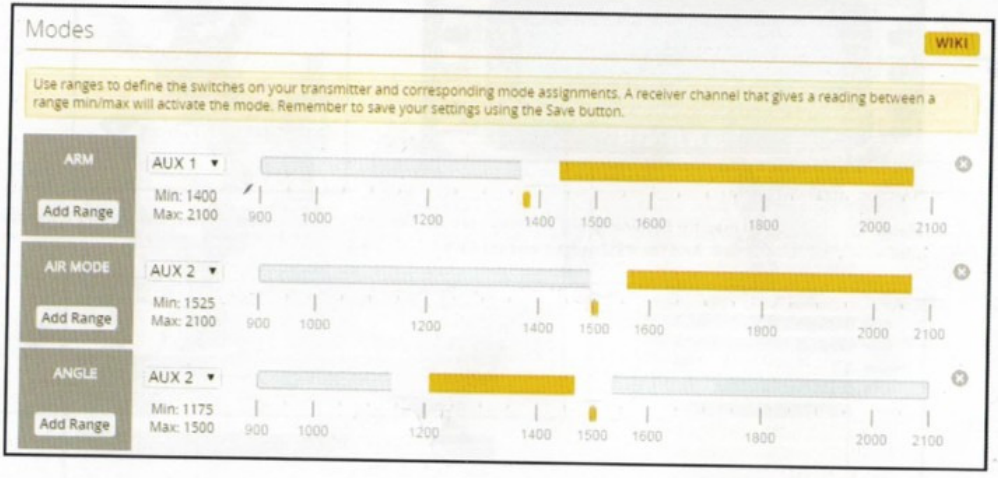


3. The default receiver channel map for Eachine Lizard 95 Frsky version is TAER1234, please ensure your transmitter is matched with it, otherwise it can't be armed. And the RSSI output was set CH9 . .

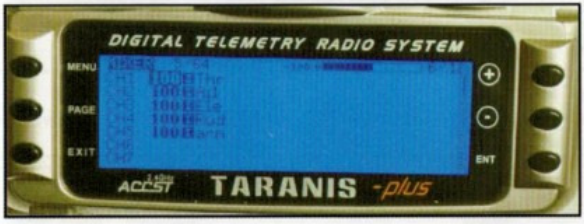


9. Arm/Disarm Eachine Lizard 95 Frsky BNF

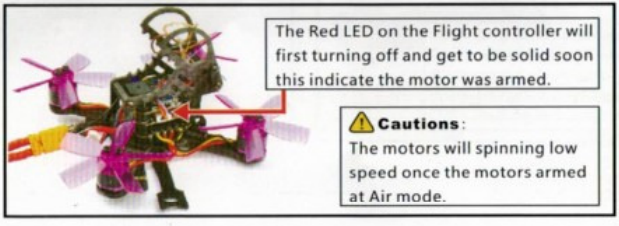
1. The Default Arm/Disarm switch for Eachine Lizard 95 is AUX1(Channel 5),and you can also customize it with Betaflight Configurator. We also set the AUX2(Channel 6) for change flight mode and AU3(Channel 7) for activate the buzzer which you can customize them too .



2. Set Arm/Disarm switch for your TARANIS X9D: Move to the MIXER interface, Set "SA" or "SB" switch etc. for Ch5 to ARM/DISARM the motor. Suggest use a 3-steps switch to change flight mode.



3. Toggle the AUX1 Switch, The buzzer starts beeps one time and the Red LED on the Flight controller will first turning off and get to be solid soon, this indicate the motor was armed. And also you can found "ARMED" shows on your FPV Goggles or the FPV Monitor. Be careful and enjoy your flight now!

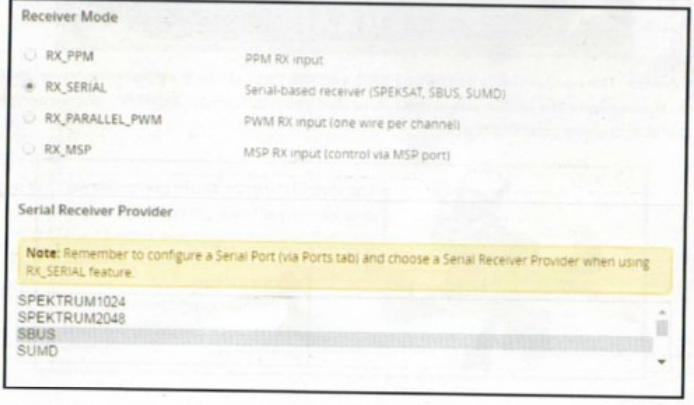


10. Eachine Lizard 95 Frsky BNF version receiver configuration

We have configured the frsky receiver for the Eachine Lizard 95 before shipping. If you flashed the firmware ,Please setup as the following steps: Enable Serial_RX for UART3, then select RX_SERIAL from the RECEIVER Mode and set the Serial Receiver Provider to be SBUS in Betaflight Configurator.

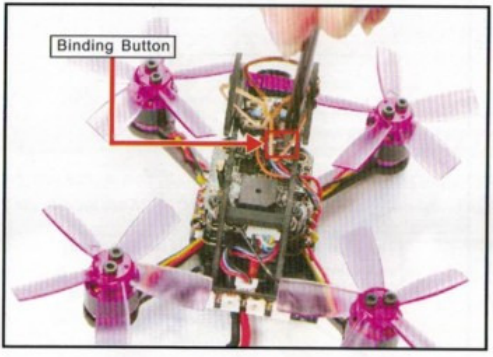
⚠ Cautions:

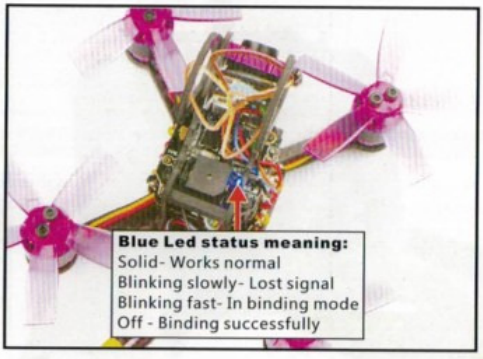
Because of the Dual way transmission, please keep the Eachine Lizard 95 away from the radio more than 50cm, otherwise it will lost telemetry signal



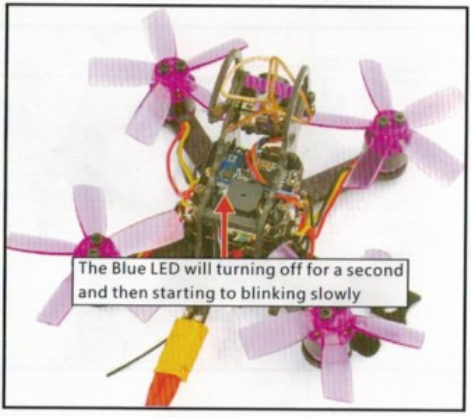
11. Eachine Lizard 95 Flysky BNF Version binding procedue

1. Power for the Eachine Lizard 95 while holding the Bind button, the blue LED on the receiver will getting to be blinking fast, this means the Eachine Lizard 95 is in binding mode, then release the Bind button.

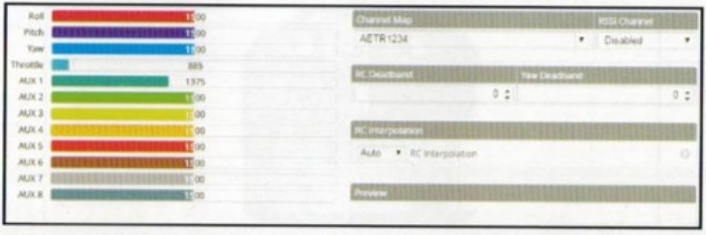




2. Please Ensure the RX setup of your Flysky Radio is in AFHDS 2A Mode. Then Turn on your radio while holding the binding button to Binding with the Eachine Lizard 95. The Blue LED will turning off for a second and then starting to blinking slowly, this indicates binding successfully. The Blue led is Solid when the connection was established between the Eachine Lizard 95 and your Flysky radio.

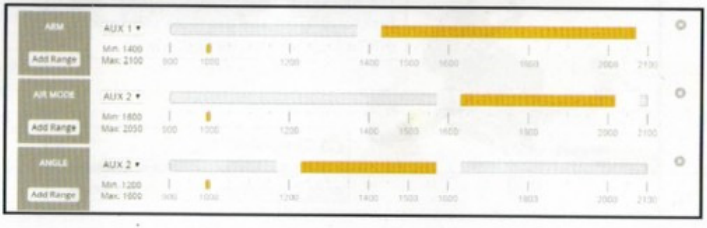


3. The default receiver channel map for Eachine Lizard 95 Flysky version is AETR1234, please ensure your transmitter is matched with it, otherwise it can't be armed.



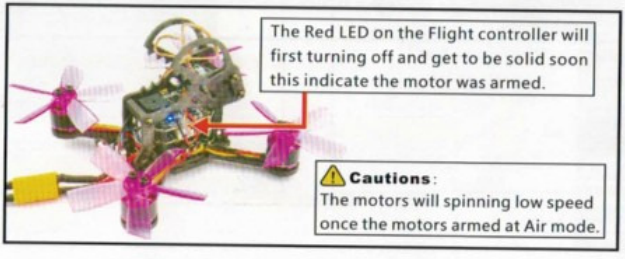
12. Arm/Disarm Eachine Lizard 95 Flysky BNF Version

1. The Default Arm/Disarm switch for Eachine Lizard 95 is AUX1(Channel 5),and you can also customize it with Betaflight Configurator. We also set the AUX2(Channel 6) for change flight mode and AU3(Channel 7) for activate the buzzer which you can customize them too .



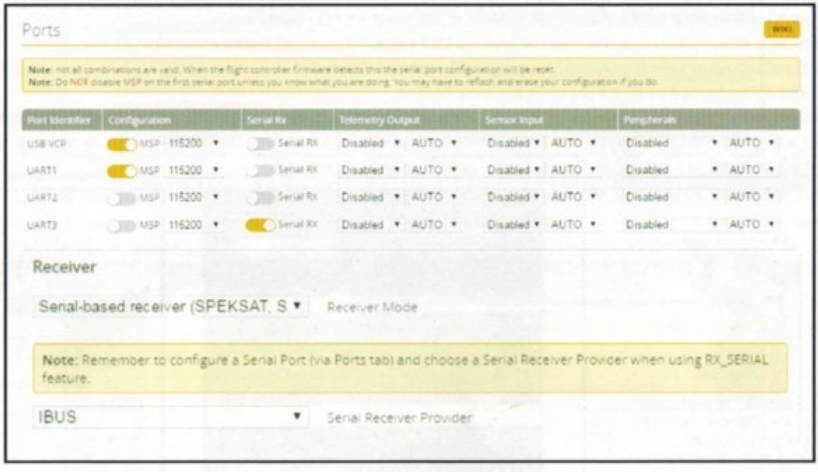
2. Set Arm/Disarm switch for your Flysky Radio: Move to the Aux.channels interface, Set "SWA" or "SWB" or "SWC" switch etc. for Ch5 to ARM/DISARM the motor. Suggest use a 3-steps switch (like "SWC" of the Flysky I6) to change flight mode .

3. Toggle the AUX1 Switch, The buzzer starts beeps one time and the Red LED on the Flight controller will first turning off and get to be solid soon, this indicate the motor was armed. And also you can found "ARMED" shows on your FPV Goggles or the FPV Monitor. Be careful and enjoy your flight now!



13. Eachine Lizard 95 Flysky version receiver configuration

We have configured the Flysky receiver for the Eachine Lizard 95 before shipping. If you flashed the firmware ,Please setup as the following steps: Enable Serial_RX for UART3 and set the Serial Receiver Provider to be IBUS in Betaflight Configurator.



14. Eachine Lizard 95 DSM2/DSMX BNF Version binding procedure and Satellite receiver setup

1.The Eachine Lizard 95 DSM2/DSMX BNF Version is integrate a DSM2/DSMX compatible Satellite receiver. The binding procedure is like following:

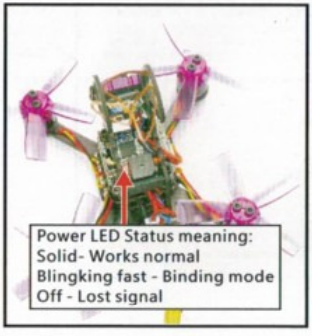
(1)Connect Eachine Lizard 95 DSM2/DSMX BNF Version to computer and open Betaflight configurator, From CLI tab type: "set spektrum_sat_bind = 9" for DSMX radio or "set spektrum_sat_bind = 5" for DSM2 radio

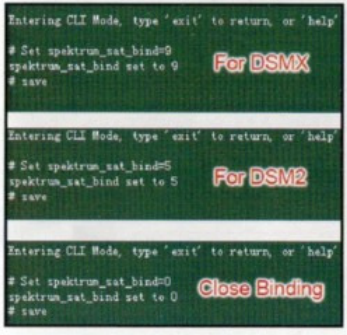
(2)Type "save" and after Flight controller reboot remove USB cable (=Power off the board)

(3)Wait a second and reconnect the USB cable. After cold start satellite led(Orange color LED) should start blinking and transmitter should be turned on while pressing the bind button

(4)After binding satellite led should be solid. Connect Betaflight and use receiver tab to test that satellite is working correctly.

(5)Final step is to go to CLI tab and type "set spektrum_sat_bind = 0" and then type "save". This must be done so that satellite doesn't go back to binding mode when the Eachine Lizard 95 is repowered again.

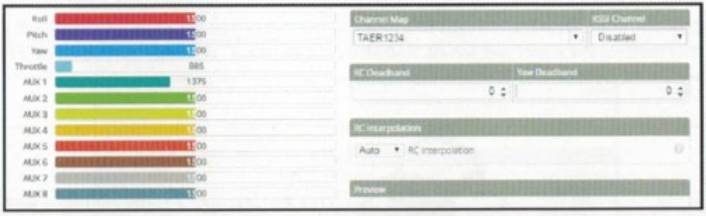




Cautions:

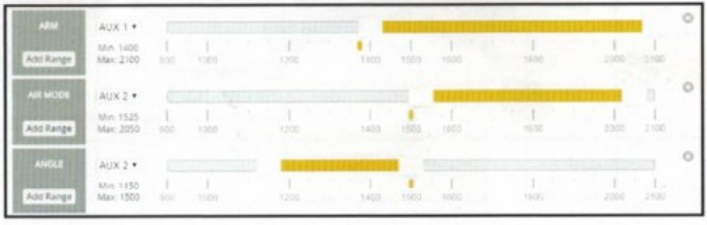
The orange LED is blinking slowly after binding successfully for some DSM2 Radio

2. The default receiver channel map for Eachine Lizard 95 DSM2/DSMX Version is TAER1234, please ensure your transmitter is matched with it, otherwise it can't be armed.



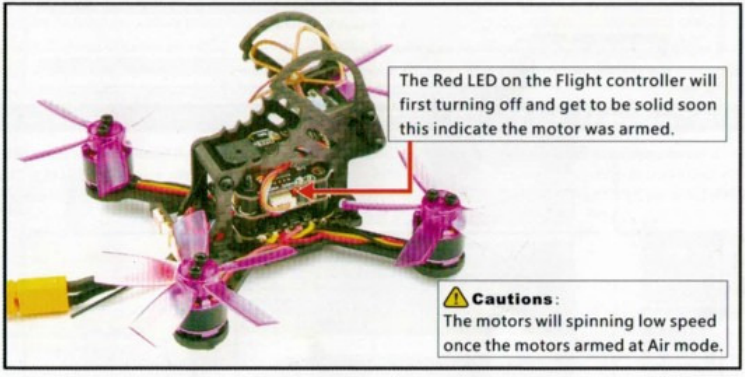
15. Arm/Disarm Eachine Lizard 95 DSM2/DSMX BNF version

1. The Default Arm/Disarm switch for Eachine Lizard 95 DSM2/DSMX BNF Version is AUX1(Channel 5), for most of Spektrum radio the default channel 5 is Gear switch and you can also customize it with Betaflight Configurator. We also set the AUX2(Channel 6) for change flight mode and AU3(Channel 7) for activate the buzzer which you can customize them too . Suggest use a 3-steps switch to change flight mode.



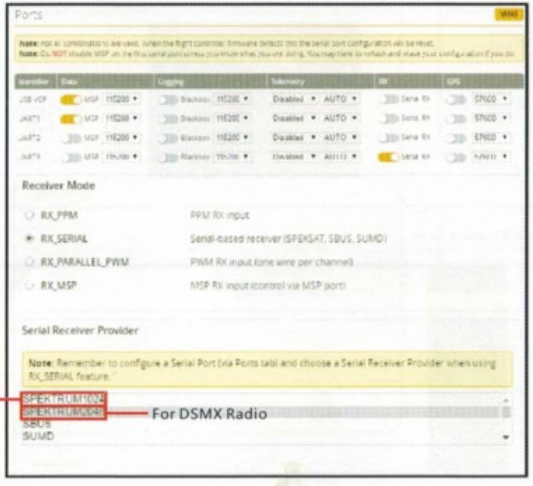
2. Turn on the transmitter and set a switch for CH5 to ARM/DISARM the motor, some transmitter like SPECKTRUM DX6/DX6I, the default CH5 is GEAR Switch.

3. Toggle the AUX1 Switch, The buzzer starts beeps one time and the Red LED on the flight controller will first turning off and get be solid soon, this indicate the motor was armed. And also you can found "ARMED" shows on your FPV Goggles or the FPV Monitor. Be careful and enjoy your flight now!



16. Eachine Lizard 95 DSM2/DSMX BNF version receiver configuration

We have configured the satellite receiver for the Eachine Lizard 95 before shipping. If you flashed the firmware ,Please setup as the following steps: Enable Serial_RX for UART3 and Set Receiver mode RX_SERIAL ,Select SPEKTRUM1024 for DSM2 Radio and Select SPEKTRUM2048 for DSMX Radio in Betaflight Configurator.



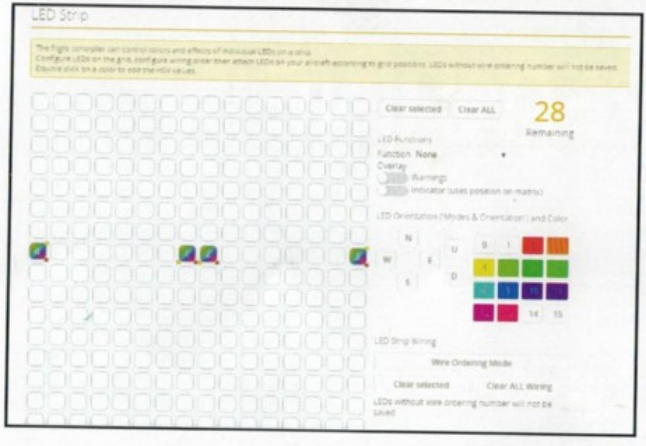
17. OSD configuration

1. Connect the Eachine Lizard 95 to the computer , open Betaflight Configurator , move to the OSD option, then you can configure the layout of the OSD.

2. Craft Name set is in configuration option

18. LED Strip function

The flight controller of Eachine Lizard 95 can control colors an effects of individual LEDS on a strip. The default setup is like this, you can also customize by yourself effects.



19. LED Strip status

	Disarmed
	Armed
4 LEDS Blinking Fast	Brake
	Throttle
2 LEDS Blinking Fast	Roll left
2 LEDS Blinking Fast	Roll right

www.eachine.com

*User manual is subject to change without prior notice.