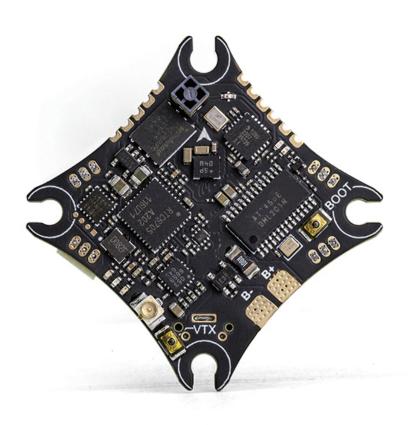


ZEUS5 ES24 15 AIO Manual



ZEUS5 ES24 15 AIO user's guidance



Product parameters

Product name: ZEUS5 ES24 1S AIO

MCU: STM32F411

MPU: BMI270

BEC: 5V1.5A

Black box: 16M

OSD: support

LED: support

Buzzer: support

UARTS: 1 VTX OSDAdjustment parameters/2 CRSF protocol receiver

Built-in receiver: SPI ExpressLRS 2.4G

Built-in receiver frequency: 2.4GHZ

Built-in VTX: 25-100-200mw (adjustable)

Built-in VTX Frequency: 48CH-5.8Ghz

Continuous current: 5A

MAX current: 7A(10s)

ESC protocol: Dshot600, Oneshot, Multishot

FC firmware: HGLRCF411SX1280 (requires BF4.4 and above firmware)

ESC Firmware: O-H-5 (Bluejay)

Input voltage: 1S 2.9-4.35v (Lipo)

Size: 32x32mm

Mounting hole: 25.5X25.5mm.M2

Weight: 6.2g

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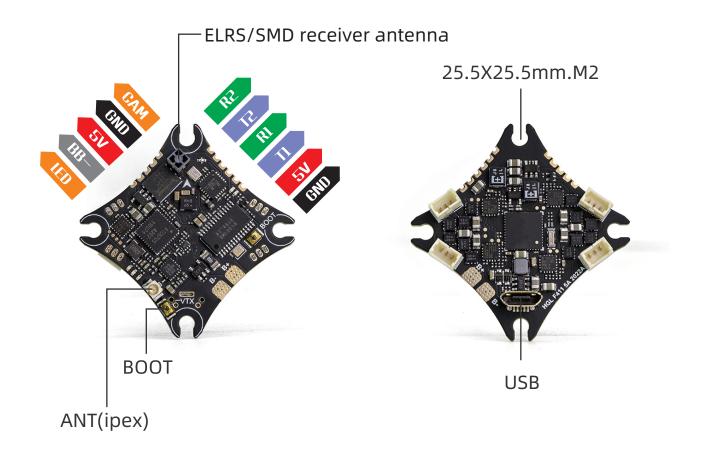


Shipping list

1X ZEUS5 ES24 1S AIO 1x XT30U-M 22AWG 70mm male power cord 1x PH2.0-2P 22AWG 35mm male power cord 1x MX1.25-3P 30AWG 75mm camera cable 4x M2*6.6 Shock-absorbing column

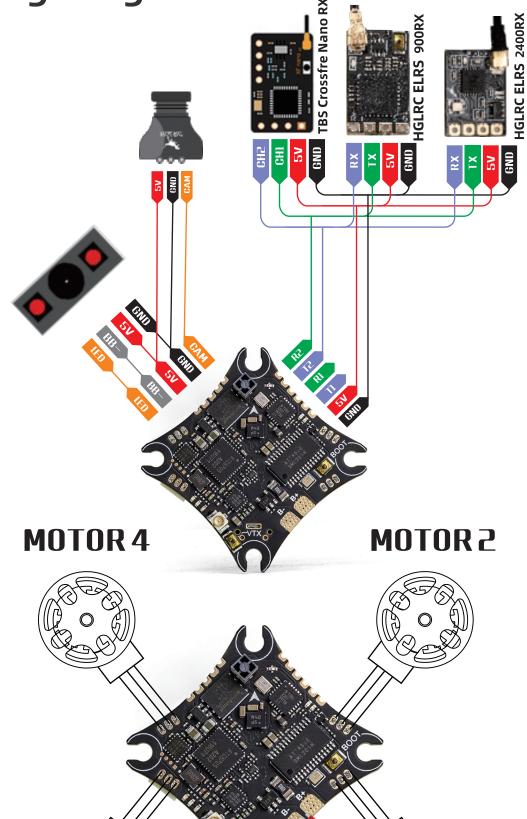
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Interface definition



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Wiring diagram





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Receiver Binding Steps

1. Power the flight control by connecting the USB, please make sure the computer has correctly installed the port driver of the flight control

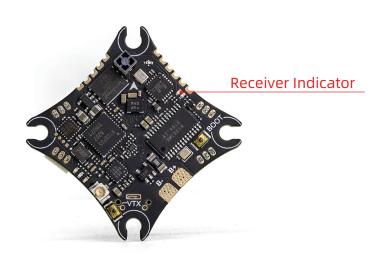
Open the Betaflight adjustment parameter software to connect and enter the receiver interface

Click "Receiver Binding", the green LED on the right side of the flight controller will flash quickly, which means that the SPI ELRS receiver enters the frequency binding mode



Another way to make the receiver enter the binding mode is:

After connecting to the assistant software, click on the CLI interface and enter "bind rx"



2.Open the remote control to find the LUA adjustment parameter script of the ELRS tune

Find the parameter adjustment script and enter Bind frequency mode, the default is ELRS 3.0 without password



3.After the binding is successful, the LED on the receiver will become always on, and the telemetry signal can also be received at the same time

4. Meaning of LED status of flight control SPI receiver

The LED is always on, indicating that the frequency binding is successful or the connection and communication are normal

The LED flashes quickly to indicate that the receiver is in the state of frequency binding

The LED flashes slowly to indicate that the transmitter signal cannot be received

5. How to set the refresh rate pck.rate of the built-in SPI receiver

Connect to betaflight and go to the CLI command prompt and enter the following command :

Set expresslrs_rate_index = 3

Save

Allowed range: 0 - 4

Default value: 0

The refresh rate represented by the value is 0=500Hz, 1=250Hz, 2=150Hz, 3=50Hz, 4=25Hz.

Select the corresponding refresh rate according to your needs or the pck.rate of the tuner

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Function and application description

1. The VTX parameter setting method is flight control OSD control and button control

2. The protocol used for FC OSD control is: IRC tramp

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200 🗸		Disabled V AUTO V	Disabled V AUTO V	Disabled V AUTO V
UART1	115200 🗸		Disabled V AUTO V	Disabled V AUTO V	VTX (IRC Tran 🗸 AUTO 🗸
UART2	115200 🗸		Disabled V AUTO V	Disabled V AUTO V	Disabled V AUTO V

The corresponding power parameter table value is "TR PIT/25/100/200"

3 🌲	Number of power levels										
1		2		3							
25	\$	100	\$	200	÷	Value					
25		100		200		Label					

3. Definition of button control

Press and hold for more than 3 seconds to enter the adjustment mode, press and hold again for more than 3 seconds to jump to the next level (keep it still for more than 5 seconds to automatically save

Level 1 CH (red light frequency point 1) Short press to change the frequency point $"1 \rightarrow 2 \rightarrow 3 \rightarrow ... \rightarrow 8 \rightarrow 1"$ cycle

Secondary BAND (green light channel A) short press to change the channel $"A \rightarrow B \rightarrow E \rightarrow F \rightarrow R \rightarrow A"$ cycle

Three-level Power (blue light frequency 25mw) Short press to change the frequency "PIT→25→...200→PIT" cycle

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Power Indicator Status

Indicator light: green	Flash 1 t	ime	Fl	ash 2 time		Flash	3 time	Flash 4 time		Flash 5 time	
Channel	BOSCAM_A1		BOSCAM_B			BOSCAM_E		FATSHARK		RACEBAND	
Indicator light: red	Flash 1 time	Fla 2 ti		Flash 3 time	-	Flash 4 time	Flash 5 time	Flash 6 time	Fla: 7 tii		Flash 8 time
Frequency	1	2		3		4 5		6	7	7	8
Indicator light: blue	Flash 1 t	ime	Fl	ash 2 time		Flash	3 time	Flash 4 ti	me	e Flash 5 time	
Frequency	25	25		100		200		/		/	

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Frequency table

channel	Frequency band (red light)											
(green light)	1	2	3	4	5	6	7	8				
A	5865	5845	5825	5805	5785	5765	5745	5725				
В	5733	5752	5771	5790	5809	5825	5847	5866				
E	5705	5685	5665	5665	5885	5905	5905	5905				
F	5740	5760	5780	5800	5820	5840	5860	5880				
R	5658	5695	5732	5769	5806	5843	5880	5917				

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Attention:

- 1. Make sure that the antenna is installed at the output end before powering on, so as not to damage the internal components.
- 2. Note that the input voltage is within the specified range and correct, so as not to damage the internal components
- 3. The temperature of the flight controller is high, so it is strictly forbidden to touch it directly with hands to avoid injury.

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