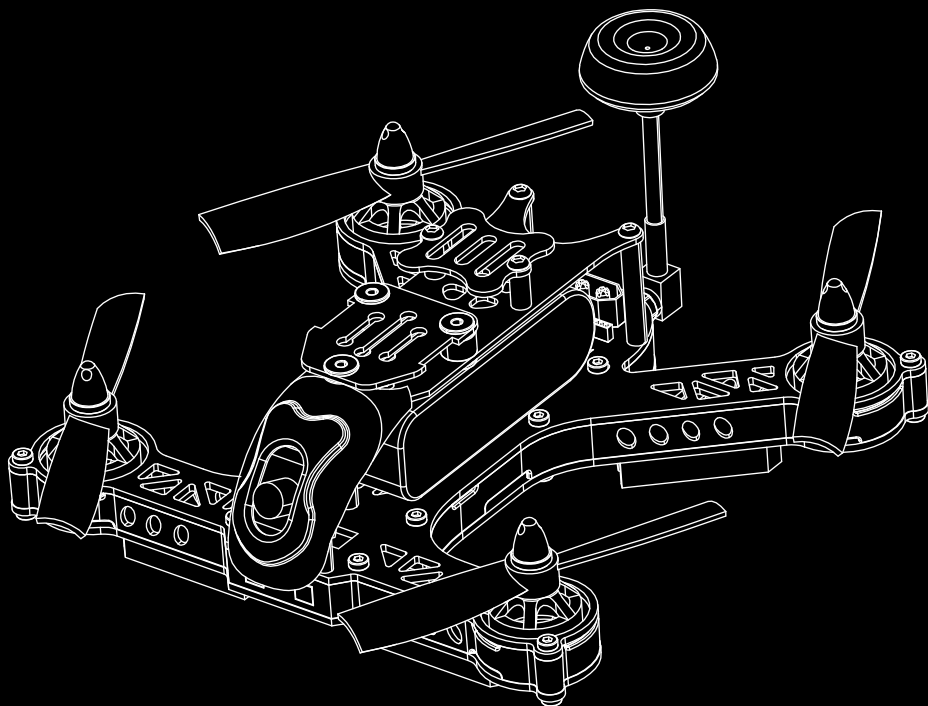




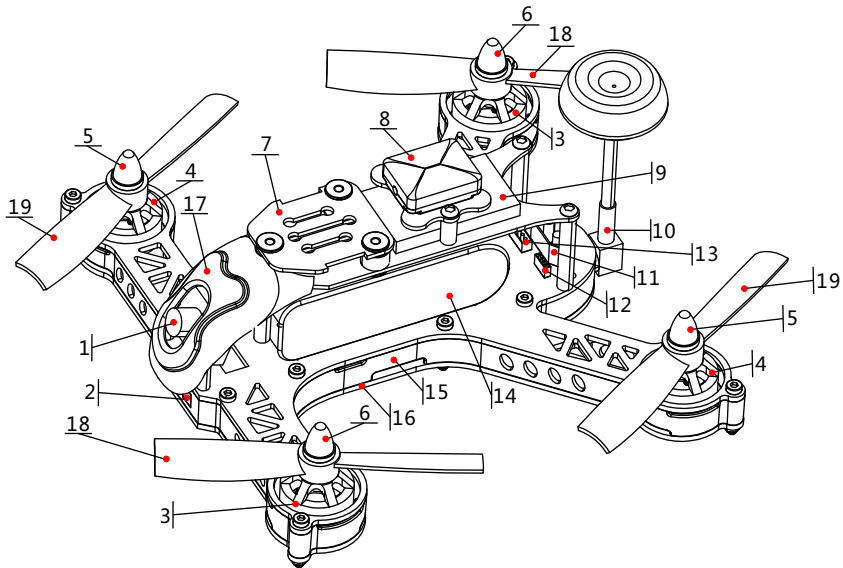
EB 185

QUICK START GUIDE



Get to know your aircraft

- EB 185 is a highly integrated design aircraft for FPV flight.
- The aircraft body is made of carbon fiber materials, plus a protective cover motor design, all makes the EB 185 solid.
- EB 185 employ the newest Naze32 rev6 flight controller with compass and barometer, it's a very popular flight controller for FPV.
- Advanced 5.8ghz live video and OSD system, for a unforgettable visual FPV experience.
- Built in Cleanflight black box, it can now log your flight data with Blackbox feature. This is a great tool for diagnosing problems, it's also great for tuning PID and other flight performance settings





- | | |
|---|------------------------------------|
| 1、120°CMOS 520TVL HD Camera | 2、Headlight |
| 3、B1806-CW KV2300 Motor | 4、B1806-CCW KV2300 Motor |
| 5、Propeller adapter Black | 6、Propeller adapter Red(LH-Thread) |
| 7、Shock absorption for Mobius/Runcam | 8、GPS (Optional) |
| 9、2.4G Receiver(Optional) | 10、Mushroom antenna |
| 11、power port(XT60) | 12、Receiver port |
| 13、GPS port | 14、Li-po battery |
| 15、AIO Plate fixing mount | |
| 16、AIO Plate (Internal Naze32 FC,ESC,5.8G TX,OSD,Buzzer,LC-Power) | |
| 17、Camera guard | 18、4045R Propeller |
| 19、4045 Propeller | |

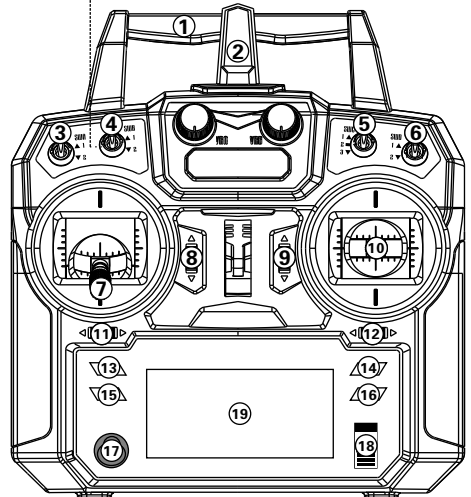
Get to know your Remote Controller (Optional)

- There is a Remote controller comes with the RTF set.
- The EB 185 feature 2 useful flight modes, STABILIZE / ADVANCED(Manual mode) Flight modes are selected by the MIX switch(SWB)
- * Select the appropriate mode according to your flight skills
- * For your first test flight with a new quad, always start with the STABILIZE mode

MODE 2 (Throttle stick on the left)	Left stick	THRO/RUDD stick
	Right stick	ELEV/AILE stick
	Left trim	THRO trim
	Right trim	ELEV trim
MODE 1 (Throttle stick on the right)	Left stick	ELEV/RUDD stick
	Right stick	THRO/AILE stick
	Left trim	ELEV trim
	Right trim	THRO trim

STABILIZE Flight Mode	ADVANCED Flight Mode
	
MIX Switch to "2"	MIX Switch to "1"

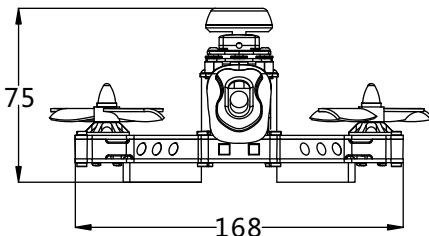
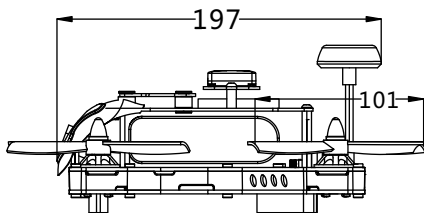
- 1、 Handle
- 2、 Antenna
- 3、 Switch A
- 4、 Switch B
- 5、 Switch C
- 6、 Switch D
- 7、 Left stick
- 8、 Left trim
- 9、 Right trim
- 10、 Right stick
- 11、 Left trim
- 12、 Right trim
- 13、 Up
- 14、 press the Enter key
- 15、 Down
- 16、 Short press the Cancel key
- 17、 Code keys
- 18、 Switch
- 19、 LCD Display



Specifications

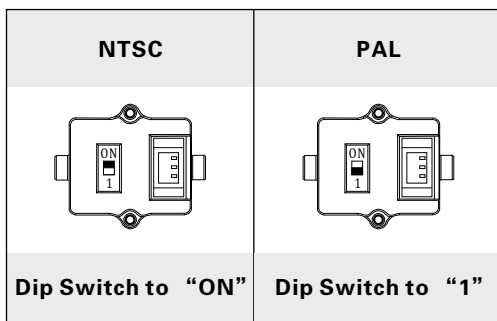
Aircraft

- Main Rotor Dia:101mm
- Overall(L x W x H):197 x168 x 75
- Weight:350g(include battery)
- Remote controller: Eachine I6 (Optional)
- Receiver: Eachine X6 (Optional)
- GPS: EB 7M GPS (Optional)
- OSD:EB 185 OSD
- Main Controller :NAZE32 REV6 FULL
- Transmitter: TX58200 40ch
- Brushless Motor: Eachine B1806-2300KV
- Brushless ESC: BLheli 12A
- Battery: 11.1V 1300mAh 30C 3S LiPo
- Flight time: 5-7mins



Camera

- Resolution : 520TVL
- System Committee: PAL/NTSC
- Video Out : 1.0Vp-p/75Ω
- Power Input: 5V

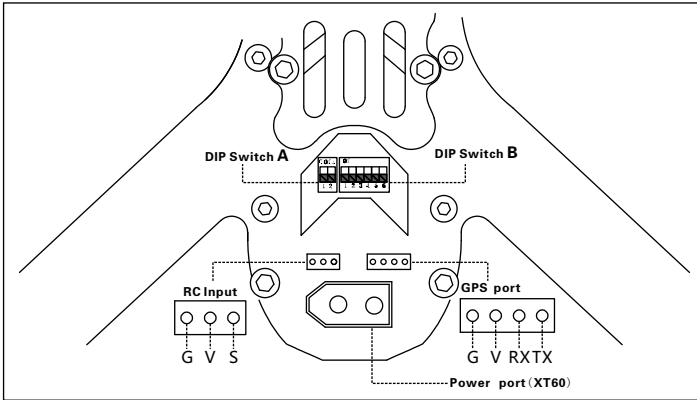


TX58200 transmitter

- 5.8G wireless video transmission
- 40 channels
- TX58200 output power $\leq 200\text{mw}$

FR \ CH		FR				
		A	B	E	F	R
CH	CH1	5725	5733	5705	5740	5658
	CH2	5745	5752	5685	5760	5695
	CH3	5765	5771	5665	5780	5732
	CH4	5785	5790	5645	5800	5769
	CH5	5805	5809	5885	5820	5806
	CH6	5825	5828	5905	5840	5843
	CH7	5845	5847	5925	5860	5880
	CH8	5865	5866	5945	5880	5917

Get to know the plug and DIP Switch



- The EB 185 support PPM/SBUS/DSM RC input, move the DIP Switch "A" to choose RC INPUT format (Note:You need a convertor for DSM INPUT)
- "EB 185 ARF Set" --- How to setup PPM/SBUS/SPEKSAT Receiver

PPM ①

1 OFF 2 ON

Dip Switch like this

Receiver Mode ②

<input checked="" type="radio"/> RX_PPM	PPM RX input
<input type="radio"/> RX_SERIAL	Serial-based receiver(SPEKSAT,SBUS,SUMD)
<input type="radio"/> RX_PARALLEL_PWM	PWM RX input(one wire per channel)
<input type="radio"/> RX_MSP	MSP RXinput(control via MSP port)

*Step2-set up in Cleanflight Cofigurator

SBUS/DSM ①

1 ON 2 OFF

Dip Switch like this

Receiver Mode ③

<input type="radio"/> RX_PPM	PPM RX input
<input checked="" type="radio"/> RX_SERIAL	Serial-based receiver(SPEKSAT,SBUS,SUMD)
<input type="radio"/> RX_PARALLEL_PWM	PWM RX input(one wire per channel)
<input type="radio"/> RX_MSP	MSP RXinput(control via MSP port)

Identifier RX ②

UART1	<input checked="" type="checkbox"/> Serial RX
UART2	<input checked="" type="checkbox"/> Serial RX

Enable Serial RX for UART2

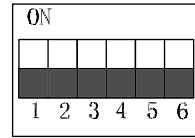
Serial Receiver Provider ④

SPEKTRUM1024
SPEKTRUM2048
SBUS
SUMD
SUMH
XBUS_MODE_B
XBUS_MODE_B_RJ01

*Step*2/3/4*-set up in Cleanflight ConfiguratorPlease select* Spektrum1024* or* Spektrum2048* or*sbus*in Step*4* Depending on your Receiver

- The EB 185 internal a 40ch TX58200 wireless video transmitter, move the DIP Switch "B" to choose frequency

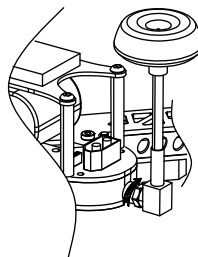
Frequency group A	CH1:5725	CH2:5745	CH3:5765	CH4:5785
	CH5:5805	CH6:5825	CH7:5845	CH8:5865
Frequency group B	CH1:5733	CH2:5752	CH3:5771	CH4:5790
	CH5:5809	CH6:5828	CH7:5847	CH8:5866
Frequency group E	CH1:5705	CH2:5685	CH3:5665	CH4:5645
	CH5:5885	CH6:5905	CH7:5925	CH8:5945
Frequency group F	CH1:5740	CH2:5760	CH3:5780	CH4:5800
	CH5:5820	CH6:5840	CH7:5860	CH8:5880
Frequency group R	CH1:5658	CH2:5695	CH3:5732	CH4:5769
	CH5:5806	CH6:5843	CH7:5880	CH8:5917



DIP Switch B

Install mushroom antenna

- Install mushroom to the mounting brackets as show
Please install the mushroom antenna of transmitter before power

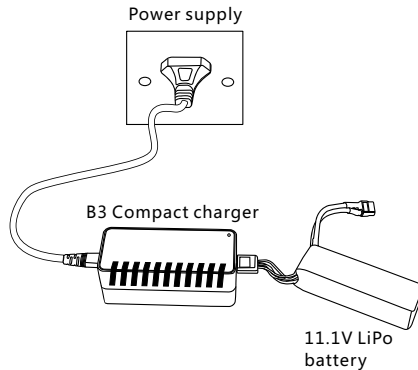


Attention before flight

- The EB 185 mini-quad is recommended for pilots, 14 years or older, with RC hobby experience.
- Only fly the EB 185 in dry weather, with low wind, please do not fly in rain or heavy foggy conditions.
- Always choose large open fields for flying. Check local LAW and ordinances for legal flying areas.
- Always keep at least 10 feet distance to the aircraft when armed, to avoid injury from high-speed.
- propellers on the ground or while flying. Always disarm before handling the aircraft.
- Do not fly close to high-voltage power lines, cell phone towers, or radio towers, as these may disrupt your control signal.
- ALWAYS check local laws BEFORE flying. NEVER fly over crowds, concerts or sports stadiums.

Charge the Battery

- First insert the LiPo battery balance plug into the B3 Compact charger.
- Connect the power-cable to the wall-outlet, the B3 Compact charger accept volage from 110v to 240v. When correctly powered the charger LED will be flashing orange
- During charging the LED will be solid RED. When charging is completed, the charger will display a solid 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 flammable 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 damaged battery, if the battery has cuts, swelling or bend, do NOT charge.

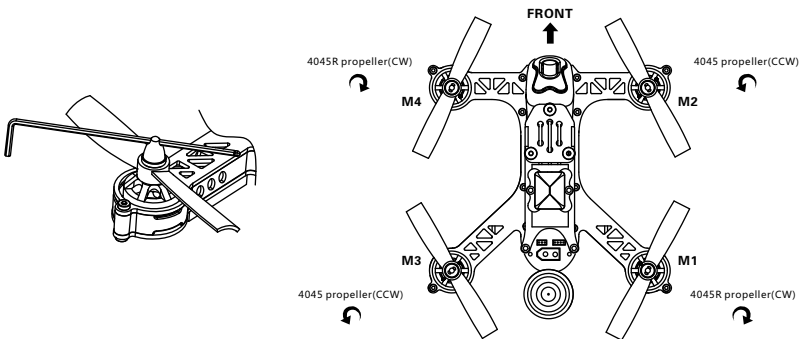
Prepare the EB 185

Install propeller

- Fix the 4045R propeller (Clockwise) onto the M1, M4 motor (CW motor) with the Red propeller adapter and fix the 4045 propeller (Counterclockwise) onto the M2, M3 motor (CCW motor) with the Black propeller adapter.
- Counterclockwise to tighten the Red propeller adapter and Clockwise to tighten the Black propeller adapter.
- Tighten the propeller adapter manually and make sure the propeller is installed in proper way and fastened.

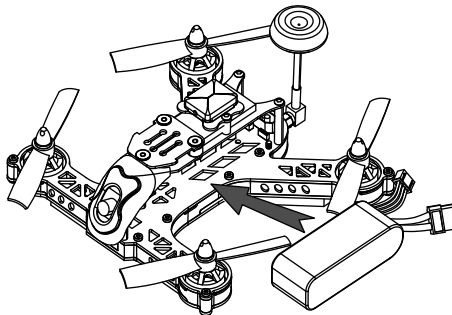
⚠ Attention:

Install prop by hand and tighten by holding the motor with the included wrench. You can also use the wrench to help remove broken props incase of a crash.



Battery installation

- First put the battery anti-slip mat into the battery compartment.
- Put the battery on top and move it forward-backwards as required for perfect balance, and No interference with other equipment then firmly secure the battery with the velcro strap.



Ready for flight

⚠ Attention:

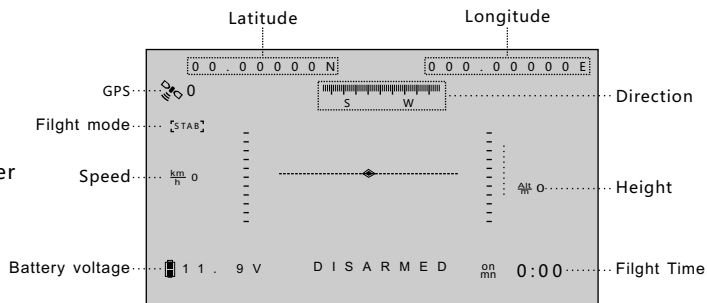
- (1) Place the aircraft in a wide open space, with the rear facing you. (This position is known as "TAIL IN")
- (2) Put SWB switch to the 2 position (Please set the flight model to stabilize if you use other remote controller) put all trims and dials to the Middle position, move the throttle to the lowest position, then turn on the Remote Controller.
- (3) A video receiving equipment is needed (such as FPV monitor with 5.8G wireless video receiver, Goggles glasses, etc.) to display an image and OSD information.
- (4) The EB 185 mini-quad has a low-voltage alarm beeper. And the OSD give you a visual reference for the remaining battery power, flight time, flight height, attitude line, flight speed, Coordinates, direction. When voltage reaches below 10.5 volts and the beeper will sound alarm. The EB 185 mini-quad is designed for FPV racing there is no "automatic landing mode".

⚠ WARNING:

Do not hesitate to land when you hear the beeper alarm or see the OSD indicating 10.5 volts.

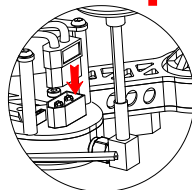
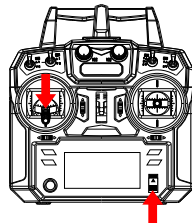
OSD information

The OSD information is visible on your video receiver
*Goggles, or screen with video receiver.



Binding of the EB 185

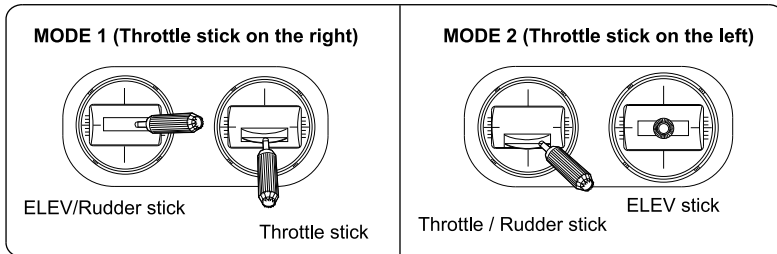
- Turn on the Remote Controller.
- Put the aircraft on a horizontal place and connect the aircraft power, then the LEFT red LED light turn on. (make sure the positive and negative connected correctly)



Motor Unlock/Lock

Motor Unlock

- After binding the Remote controller to the EB 185 , Check that all trims are neutral, the throttle stick is ALL the way Down with the display indicating 0%throttle.
Gently push the throttle stick down and move the rudder(YAW)stick to the right side and hold for more than 2 seconds.(on mode 2 radios throttle and rudder is the same stick).
You will see the two LED light keep on Blue colour and buzzer issues a long "B" sound ,indicating that motors are unlocked.
Be very careful at this point,as pushing the thottle up will start the motors.
You can test by pushing the stick up a little,the motors should start.

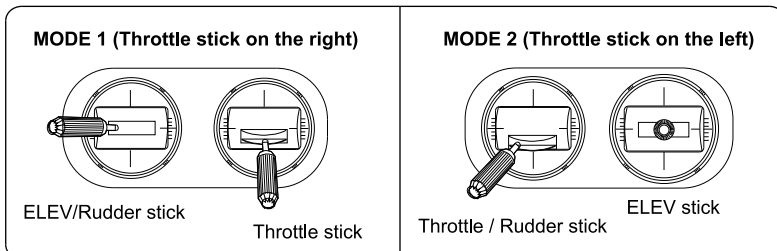


Motor Lock

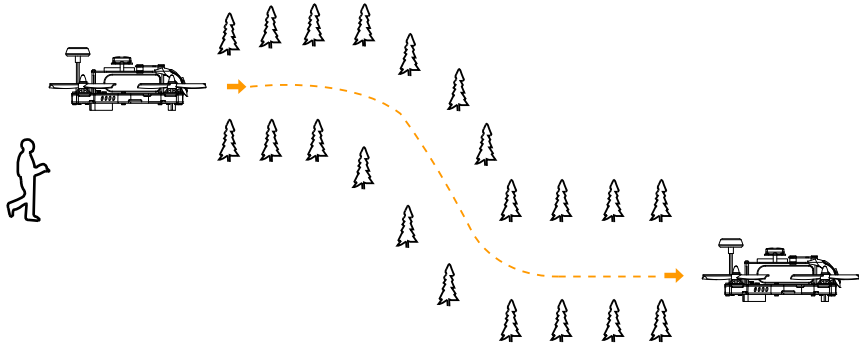
Lock the motors by moving the throttle stick all the way down and the rudder(YAW)stick all the way to the left
The two LED light keep on Green colour and buzzer issues a "B~B" sound when the motors are disarmed.

TEST : Push the throttle stick up a little,the motors will not start when locked.

NOTICE : The motors are LOCKED by default after successful binding.



Proximity FPV obstacle flying



Attention:

- (1) Proximity FPV obstacle flying is more suitable for experienced pilots, highspeed obstacle avoidance flights require advanced skills.
 - (2) Recommended FPV range 300m depending on environment.
 - (3) Avoid flying over people, animals, do not fly over crowds, concerts or sports stadiums. Avoid flying close to powerlines and cellphone towers as these may crash you.
-

End flight

Land the aircraft, disarm (lock) the aircraft.

First Power off the aircraft by unplugging the battery, then turn off the radio.

Finally, remove the battery from the aircraft.



www.eachine.com

*User manual is subject to change without prior notice.