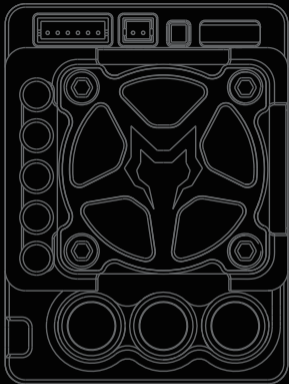


# CREST 8

User Manual



CAYOTE TEAM



# Contents

01-Warnings	04
02-Product features	04
03-Specifications	05
04-Sensor less brushless motor, sensed brushless motor	06
05-Setting up the ESC	07
05-1.Set the throttle travel	07
05-2.Instructions for switching on and off and beeping	08
05-3.Programming options	09
05-4.Default mode	17
05-5.Methods	18
05-6.Restore factory parameter settings	18
06-Description of the ESC Status Indicator (LED)	19
07-Troubleshoot guide	20





1. Before connecting the ESC to the relevant connection parts, please make sure that all the wires and connection parts are well insulated. A short circuit will damage the ESC.
2. Please be sure to connect all parts carefully. If the connection is not good, you may not be able to control the car normally, or unpredictable situations such as equipment damage may occur.
3. Before using the ESC, please carefully review the power equipment and the manual of the chassis to ensure that the power configuration is reasonable, this to avoid overloading the motor due to wrong power configuration and eventually damage the ESC.
4. If you need to weld the input and output wires and plugs of the ESC, to ensure reliable welding, please use welding equipment with a power of at least 60W.
5. During high-speed operation, the tires of the car will "inflate" to the extreme, so please do not drive the car unnecessarily to full speed, the tires may burst and cause serious injury.
6. Do not place the ESC or motor where the external temperature exceeds 90°C/194°F. High temperature will damage the ESC and motor.
7. After use, remember to cut off the connection between the battery and the ESC. If the battery is not disconnected, the ESC will continue to consume power even if the switch of the ESC is turned off. If the battery is connected for a long time, the left-over energy will eventually be completely consumed, which will cause the battery or the ESC to malfunction. We are not responsible for any damage caused thereby.

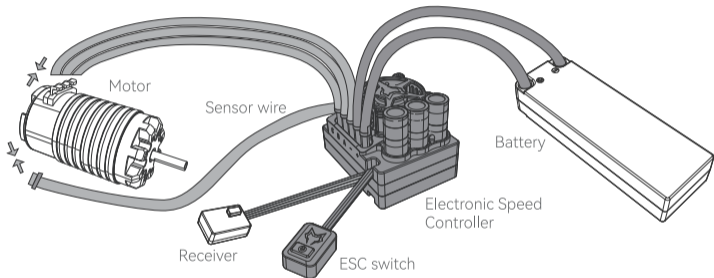
1. Dedicated to the top competition levels: three built-in commonly used modes, suitable for all 1/8 competitions, ready to use.
2. The ESC has built-in 33 adjustable parameters, which are convenient for setting various power requirements; the setting parameters can be imported and exported, which is convenient for drivers to communicate with each other and learn from each other's settings.
3. Support super large 48-degree boost and turbo timing
4. Multiple protection functions: low voltage protection, ESC and motor overheat protection.
5. Built-in super switching mode BEC, the continuous current reaches 8A, and the instantaneous current reaches 12A, And support 6V/7.4V adjustable, easy to set various high power servo and high-voltage/speed servo, The reached temperature of motor and/or ESC can be read through either the LCD program box or via mobile APP.
6. With the offline data recording function, you can save the recorded operational value data such as the maximum temperature and maximum speed of the ESC and motor through the LCD setting box.
7. Built-in professional reversing shutdown function, which is only enabled in the mode of forward with brake and forward and reverse with brake. The method of use is: when reversing the first time, press the full throttle and hold for 6s, then the machine can be turned off.

Model	CREST 8
Continuous/Peak Current	200A/1080A
Support motor type	Sensored and sensorless brushless motor
Suggested application	1/8 electric buggy / truck (truggy) professional competition
Number of battery cells	2-4S Lipo
BEC output	Ultra-stable switch V regulation 6V/7.4V; cont. current 8A/12A peak
Fan power	6V/7.4V from the built-in BEC
Size / Weight	56.8 (L) * 41.60 (W) * 40 (H) mm / 122g
Parameter setting method	Xlink program box, BTune App

# 04

## Sensor less brushless motor, sensed brushless motor

Please refer to the instructions and wiring diagram for correct wiring::



### 1. Connect the motor:

There are differences in the way to connect the sensor brushless motor and the sensorless motor, please be sure to follow the wiring method as follows:

#### Option 1. When connecting a sensor brushless motor:

The ESC and the motor have strict wire sequence requirements. The #A/#B/#C/ of the ESC must be in strict one-to-one correspondence with the #A/#B/#C/ of the motor. Use a six-pin sensor wire to connect the ESC sensor connector with the sensor interface of the motor.

**Remarks: If the car moves forward and backward after the motor is installed, please change the parameter "rotation direction of the motor" to adjust the direction of the motor.**

**Option 2. When connecting a sensorless brushless motor:**

There is no strict wire sequence requirement for connecting the ESC to the motor. The #A/#B/#C of the ESC can be freely connected to the three wires of the motor. If the direction of rotation is reversed, just exchange position of two of the three motor wires (AB to BA, AC to CA, BC to CB)

**2.Connect the receiver:**

Insert the throttle control cable of the ESC into the throttle channel of the receiver. Because the red wire in the cable outputs 6V/7.4V voltage to the receiver and steering gear, please do not provide additional power to the receiver, otherwise it may damage the ESC.

**3.Connect the battery**

The input wire of the ESC has polarity. When inserting the battery, please make sure that the (+) pole of the ESC is connected to the (+) pole of the battery, and the (-) pole is connected with the (-) pole. If the ESC is connected to the battery cross connected, the ESC will not be able to power on.

# 05

## Setting up the ESC

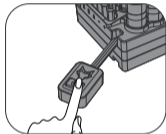


The power of this system is very high. For the safety of you and others around you, we strongly recommend that you remove the small gear of the motor before calibrating and setting the system, and turn on the ESC switch with the wheels suspended!

# 1 Calibration

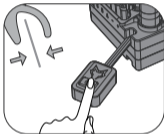
Switch on ESC: Push button short time and release = 2 beeps; ESC is switched on and ready Calibrate ESC in 4 steps:

**Throttle calibration steps are shown in the figures below:**



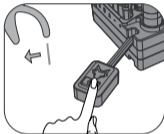
**Step 1**

Push button more than 5 seconds and release = one large beep followed by multiple short beeps; ESC is ready to start calibration.



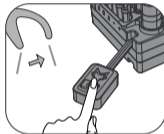
**Step 2**

Neutral Point calibration = short press the power on button; esc confirms with 1 short beep.



**Step 3**

Throttle High point calibration = pull and hold the throttle lever on full power, then short press power on button; esc confirms with 2 short beeps.



**Step 4**

Brake High point full calibration = push and hold the brake lever on full brake, then short press power on button; esc confirms with 3 short beeps, and 2 normal beeps.

With the ESC turned off, press and hold the power button until there is a beep and release it. At this time, the ESC is in the state of remote control waiting to be set. Put the throttle trigger in the middle position of the throttle, short press the power button, and the ESC beeps. 1 beep, put the trigger at full throttle in the forward direction, short press the power button, the ESC beeps 2 times, put the trigger at full throttle in the reverse direction, short press the power button, and the ESC beeps 3 times.

## 2 Instructions for switching on and off and beeping

### 1) Instructions switch on and off:

Short press the ON/OFF button to turn it on when it is off; press and hold the ON/OFF button to turn it off when it is on.

### 2) Instructions for beeps when starting up:

When starting up under normal conditions, the motor will emit a few beeps to indicate the number of lithium battery cells (S) For example: "beep beep" means 2S lithium cells, "beep beep beep" means 3S lithium cell.

## 3 Programming options

Type	Items	Setting Options		
<b>General Settings</b>	Running Mode	Fwd/Brk	Fwd/Rev/Brk	Fwd/Rev
	Max.Reverse Force	25%-100% (Adjust Step 1%)		
	Cutoff Voltage	Disable	Auto (3.5V/cell)	Customized 5.0V-9.6V (Adjust Step 0.1V)
	ESC Thermal Protection	Disable	Enable	
	Motor Thermal Protection	Disable	Enable	
	BEC Voltage	6.0V	7.4V	
	Remote Off	Disable	Enable	
	Sensor Mode	Full Sensored	Hybrid	
	Motor Rotation	CCW	CW	
	Phase-AC Swap	Disable	Enable	
	Punch Sw Point	30%-70% (Adjust Step 1%)		
	Punch Rate1 Start	1-30 (Adjust Step 1)		
	Punch Rate2 End	1-30 (Adjust Step 1)		



## Throttle Control

Throttle Curve	Linear	Undetermined			
Neutral Range	6%	8%	10%		
Init Throttle Force	1%-15% (Adjust Step 1%)				
Coast	0%-30% (Adjust Step 1%)				
Softening Value	0-30° (Adjust Step 1°)				
Softening Range	0%-75% (Adjust Step 1%)				

PWM Drive Freq	1K	2K	4K	8K	16K
----------------	----	----	----	----	-----

## Brake Setting

Brake Control	Slowly	Heavy			
Drag Brake	0%-100% (Adjust Step 1%)				
Max. Brake Force	0%-100% (Adjust Step 1%)				
Init Brake Force	0%-50% (Adjust Step 1%)	Drag Brake			
Brake add Rate	0-20 (Adjust Step 1)				
Brake Frequency	0.5K	1K	2K		

## Timing Setting

Boost Timing	0-48° (Adjust Step 1°)
--------------	------------------------

Boost Start RPM	1K-20K (Adjust Step 1K)
-----------------	-------------------------

Boost End RPM	8K-50K (Adjust Step 1K)
---------------	-------------------------

Boost Control	RPM	Automatic
---------------	-----	-----------

Turbo Timing	0-48° (Adjust Step 1°)
--------------	------------------------

Turbo Delay	0-1s (Adjust Step 0.05s)	Instant
-------------	--------------------------	---------

Turbo Increase Rate	0-48° (Adjust Step 1deg/0.1s)	Instant
---------------------	-------------------------------	---------

Turbo Decrease Rate	0-48° (Adjust Step 1deg/0.1s)	Instant
---------------------	-------------------------------	---------

## Restore Default

### 1、Running Mode:

**Option 1: Forward with Brake** Racing mode. It has only forward and brake functions, as used in professional competition racing. Reverse mode is disabled.

**Option 2: Forward/ Reverse with Brake** This mode provides a reverse function and is usually used for training. The "forward and reverse with brake" mode adopts the intelligent reverse mode. When the accelerator trigger is pushed from the midpoint area to the reverse area for the first time, the motor will brake. When the

accelerator trigger returns to the midpoint area and is pushed to the In the reverse zone, if the motor has stopped at this time, a reverse action will occur. If the motor has not stopped, it is still braking, and the accelerator trigger needs to be returned to the midpoint and pushed to the reverse zone. The purpose of doing this is to prevent accidental reversing due to multiple point brakes during vehicle driving.

**Option 3: Direct forward and reverse** This mode adopts single-click reverse mode, that is, when the throttle stick is pushed from the midpoint area to the reverse area, the motor will immediately generate a reverse action. This mode is generally used for special vehicles like crawler.

## 2、 Max. Reverse Force:

It refers to the maximum reverse force that can be produced when the throttle stick is pushed to the maximum reverse position. Different parameter values can be selected to produce different reverse speeds (generally, it is recommended to use a relatively small reverse speed to avoid mistakes due to too fast reverse).

## 3、 Cutoff Voltage:

This function is mainly to prevent irreversible damage caused by excessive discharge of lithium batteries. The ESC will monitor the battery voltage at all times, once the voltage is lower than the set threshold, the ESC will immediately reduce the power to 20%. After entering the voltage protection, the red LED will continue to flash with "☆, ☆, ☆, ☆...". If you use NiMH batteries, please set it to "no protection" or customize the protection threshold.

**Option 1: No protection** When set to no protection, the ESC will not cut off the power due to low voltage. When using a lithium battery, it is not recommended to set it to "Unprotected", otherwise the battery may be damaged due to excessive discharge. In order to avoid the power drop caused by entering the protection state during the competition, it is recommended to set it to "no protection" (but the battery may be damaged due to over-discharge, which will lead to cell inflation).

**Option 2: Auto detection** The ESC automatically calculates the corresponding low-voltage protection threshold according to 3.5V/Cell according to the detected number of lithium cells. For example, when the detection uses 2S, the low-voltage protection threshold is  $3.5 \times 2 = 7.0V$ .

**Option 3: Custom** When customizing Settings, the low voltage protection threshold of CREST 8 ranges from 5V to 9.6V (adjusted value 0.1V), where the voltage value is for the entire battery pack, that is, the total input voltage.

Please calculate the low voltage protection threshold you need according to the number of batteries used. The custom value can be set at will. The minimum value can be set to 5V, the maximum value can be set to 9.6V.

#### 4、ESC Thermal Protection:

When the temperature rise of the ESC reaches a specific value preset by the factory, the output will be automatically turned off, and the red light will flash, and the output will not resume until the temperature drops. When the ESC is under overheating protection, the red light flashes three times: ☆☆☆, ☆☆☆, ... Warning! Do not turn off the overheating protection of the ESC unless it is a competition occasion, otherwise the ESC may be damaged due to overheating, and the motor may be damaged.

#### 5、Motor Thermal Protection:

When the motor temperature rises to a certain value preset by the factory, the ESC will automatically turn off the output, and the red light will flash, and the output will not resume until the motor temperature drops. When the motor is overheated, the red light flashes in quads flashes: ☆☆☆☆, ☆☆☆☆, ... Warning! Do not turn off the motor overheating protection unless it is a competition occasion, otherwise the motor may be damaged and the ESC may be damage.

#### 6、BEC Voltage:

BEC voltage support 6.0V/7.4V adjustable, generally 6.0V is suitable for ordinary steering gear; If the high voltage steering gear is used, it can be set to a higher voltage. For details, please refer to the steering gear voltage label; Warning! The BEC voltage set should not exceed the maximum operating voltage of the steering gear, or it may damage the steering gear and even damage the electrical regulation!

#### 7、Remote shutdown:

The radio throttle can shut down the ESC, by holding the throttle stick at full brake for approximately 6 seconds. This function can be enabled/disabled in the APP.

#### 8、Sensor Mode:

**Option 1:** Pure sensor mode. If you use the matching CREST 8 motor, you can set it as a pure sensor drive mode. The entire power system works in the sensor mode throughout the whole process, with better control feel and better operating efficiency. And you can use the Boost and Turbo timing functions to get more explosive power when needed.

**Option 2:** Sensor and sensorless Hybrid Mode. This is an alternative drive mode for the 1:10 powertrain. When

the car is running at a low speed, the ESC uses the sensor mode to start the motor. When the motor speed increases, the electric regulator switches to the sensorless mode to drive the motor.

#### **9、 Motor Rotation:**

The front of the motor shaft is facing the face (that is, the tail of the motor is away from the face). When the remote controller increases the throttle in the forward direction, if it is set to CCW, the motor shaft will rotate counterclockwise; if it is set to CW, the motor shaft will rotate clockwise. Generally, the motor rotates counterclockwise and the car moves forward, but it may be because the frame manufacturer designed that it rotates clockwise to move forward. When this happens, just set it to CW.

#### **10、 Phase-AC Swap:**

Due to the wiring requirements of the frame, when the A/C line of the ESC is connected with the A/C line of the motor (that is, the A line of the ESC is connected with the C line of the motor, and the C line of the ESC is connected with the A line of the motor), set this item to ON (Enabled) will do; WARNING! When the #A/#B/#C of the ESC is connected to the #A/#B/#C of the motor in one-to-one correspondence, do not set it to Enabled, otherwise the ESC and the motor will be damaged.

#### **11、 Punch Sw Point:**

This parameter adjusts the distinction point between the forward acceleration and the rear acceleration of the forward throttle. When the throttle range is less than the segment point, the system uses the acceleration of the front segment; When the throttle range is greater than the segment point, the system automatically switches to the rear acceleration.

#### **12、 Punch Rate1 Start:**

This parameter is used to control the output speed of the front throttle. Setting a suitable front throttle acceleration can assist the driver to control the throttle when the vehicle is started, and avoid tire slippage when the vehicle is refueled quickly, and the start is too violent to cause poor control in the corner and instant start. If the current is too large, it will be unfavorable to the motor/ESC/battery. The acceleration is divided into 30 gears and can be adjusted. When it is set to 1, the acceleration of the front throttle will be slower, and there will be more restrictions on the output when the accelerator is fast; the larger the value is, the faster the acceleration will be. The output is less restricted. In general, for a driver who can control the throttle proficiently, a higher acceleration can be set to reduce the limitation of the ESC on the throttle response.

#### **13、 Punch Rate2 End:**

This parameter is used to control the output speed of the rear throttle. Setting a suitable rear throttle acceleration can assist the driver to control the throttle when the vehicle is started, and avoid tire slippage when the vehicle is refueled quickly, and the start is too violent to cause poor control in the corner. The current is too large at the moment of starting, which is unfavorable to the motor/ESC/battery. The acceleration is divided into 30 sectors and can be adjusted. When it is set to 1, the acceleration of the rear throttle will be slower, and there will be more restrictions on the output when the accelerator is fast; the larger the value is, the faster the acceleration will be. The lower the limit of throttle output is. Generally, for drivers who can skillfully control the accelerator, a higher acceleration can be set to reduce the ESC's restriction on throttle response.

#### 14、Throttle Curve:

This parameter adjusts the correspondence between the forward throttle movement and the actual output throttle value. The default is linear, in which case the power output follows the throttle.

#### 15、Neutral Range:

This parameter adjusts the range of the midpoint of the throttle to suit different remote controllers and drivers' control habits. Some poor-quality remote controllers tend to drift in the midpoint position, causing the car to move forward or backward slowly. When this phenomenon occurs, please set the area width to a larger value.

#### 16、Initial Throttle Force:

Also called the minimum starting force, it refers to the starting force acting on the motor at the initial position of the accelerator. The required starting force can be set according to the grip of the tires and the ground; if the ground is too slippery, please set a smaller starting force to avoid slipping.

#### 17、Coast:

When the throttle trigger is released from the full throttle or near the full throttle, this feature allows the motor to reduce speed naturally and smoothly without sudden deceleration during the trigger release. The higher the value of the "auto throttle" setting, the stronger the "coasting" feeling. For example, when set to 0%, there is no auto-throttle or coasting function; When the setting is set to 20%, the sliding feeling is most intense. Advantages of auto-throttle/coasting: When using a motor with a strong slotting effect, the car is prone to autonomously produce a sense of braking, which is known as the "GEAR BRAKE or automatic brake", which reduces the sense of handling of the vehicle. **Note: If the "drag brake force" parameter value is not 0%, the auto throttle/coasting function is turned off.**

#### **18、Softening Value:**

During the race, if you feel that the power of the first section of the throttle is too violent, a little power from the accelerator is already too strong, and it is difficult to control when cornering. For this reason, the softening value can be set to a higher value, which softens the initial stage. It can greatly improve the driver's controllability. "Softening value" refers to the intensity of softening processing. The larger the value is set, the more obvious the softening effect will be.

#### **19、Softening Range:**

It refers to the size of the throttle stroke that produces the softening effect. For example, if it is set to 30%, it means that the throttle stroke from 0% to 30% will produce a softening effect.

#### **20、PWM Drive Frequency:**

Lowering the driving frequency can provide more powerful explosive force at the initial stage of the throttle: increasing the driving frequency can make the motor drive smoother and the driving noise smaller, but at the same time, it will also increase the switching loss of the ESC and increase the heat generation. For the specific use rate, please refer to the actual test results of the car in the parking lot.

#### **21、Brake Control:**

There are two braking modes: slow braking for hobby and heavy braking for competition.

#### **22、Drag Brake Force:**

Drag brake, also known as automatic brake, refers to the braking force generated by the ESC on the motor when the throttle stick is in the midpoint area after the oil is collected. This can assist fingers to control the brake and effectively reduce the difficulty of brake control. It is often used in Flat sports cars decelerate into and out of corners and other occasions.

#### **23、Max. Brake Force:**

This ESC provides a proportional braking function. The braking force is related to the position of the throttle stick. The maximum braking force refers to the braking force generated when the throttle stick is at the brake limit position. Please select the appropriate maximum braking force parameter according to the specific conditions of the vehicle and the track and your personal habits.

#### **24、 Initial Brake Force:**

Also known as the minimum braking force, refers to the braking force acting on the motor at the initial position of the brake. If the initial braking force is set to a larger, you can achieve a similar effect of the spot brake.

#### **25、 Brake Rate Control:**

This parameter is used to control the brake accelerator output speed. Setting an appropriate brake accelerator acceleration can assist the driver to control the brake force and avoid excessive braking. The acceleration is divided into 20 gears and can be adjusted. When it is set to 1, there are more restrictions on the braking response. The larger the setting value, the less restriction on the brake throttle. In general, for drivers who can control the brakes proficiently, a higher acceleration can be set to reduce the limitation of the ESC on the response of the brake and accelerator.

#### **26、 Brake Frequency:**

Decreasing the braking frequency can make the motor output stronger braking force: increasing the braking frequency can make the motor output more slippery braking force. The specific frequency of use is subject to the measured effect of the car in the garage.

#### **27、 Boost Timing:**

This timing is valid within the entire range of throttle travel, and directly affects the speed on curved roads and straight roads. When this value is set, the actual timing of the ESC during operation is dynamically changed according to the throttle, not a fixed constant.

#### **28、 Boost Start RPM:**

This item is used to set the starting speed required to turn on the Boost timing. For example, when it is set to 8000, the corresponding boost timing will be turned on when the speed reaches above 8000, and the specific opening size will be dynamically allocated according to the set Boost timing and the end speed.

#### **29、 Boost End RPM:**

This item is used to manually set the end speed required to open the currently set Boost timing. For example, Boost timing is set to 10 degrees, when the end speed is set to 15000, when the speed reaches above 15000, Boost will be turned on by 10 degrees, and when the speed is lower than 15000 rpm. The Boost timing is dynamically allocated according to the rotational speed.



### 30、Boost Control:

**Option 1: speed** When set to "speed" mode, the Boost timing value is dynamically allocated according to the current speed. When the rotational speed is lower than the initial rotational speed, the Boost actual opening value is 0; when the rotational speed is higher than the initial rotational speed, the Boost actual opening value is set.

**Option 2: Auto** When it is set to "Auto", the Boost timing value is dynamically distributed according to the current throttle amount. Only when the throttle is full, the actual opening value of Boost is the setting value of Boost.

### 31、Turbo Timing:

Turbo Timing. This is an item to adjust the timing, it will only be turned on when the throttle is full, and it is usually used on a long straight road to release the maximum power of the motor. Its optimal functionality can be achieved in combination with Turbo delay settings.

### 32、Turbo Delay:

It refers to the continuous full throttle duration required to trigger Turbo. When the continuous full throttle time reaches this set value, Turbo can be triggered to start.

### 33、Turbo Increase Rate (deg/0.1sec):

When the conditions for triggering a Turbo are met, the Turbo starts to release at the specified speed. For example, 6 degrees /0.1 seconds indicates the Turbo advance Angle of 6 degrees in 0.1 seconds. The more degrees released within 0.1 seconds, the faster the Turbo is released, the faster the car acceleration, of course, the higher the heat of the motor.

### 34、Turbo Decrease Rate (deg/0.1sec):

When the Turbo is turned on, if the trigger conditions are not met, such as the straight end deceleration into a corner, then from full throttle to non-full throttle, Turbo opening conditions are not met, if the Turbo is turned off all at once, it will produce a very obvious slowdown, just like the brake, resulting in poor car handling. If the Turbo is turned off at a certain speed, the deceleration becomes more linear and the car's handling improves.

**Warning! Turning on the Boost Angle of advance and the Turbo Angle of advance can effectively increase the output power of the motor and is usually used for racing. Please carefully check the manual and**

reference Settings in advance, and monitor the temperature of the motor and electric regulator during the test, adjust the appropriate Angle setting and final gear ratio, Excessive timing settings and final gear ratios will cause the ESC or motor to burn out.

**Notice!** The setting items related to turbo timing are only valid when the drive mode is set to "pure sensory mode" and Hall is connected.

## 4 Default mode

The ESC can be quickly preset to minimum 3 different drive/default modes. The driver only needs to set the appropriate mode while adjusting motor/gear ratios to quickly reach the desired results. Any modes can also be fine-tuned by the driver via either the Team Cayote BT-Link or X-link program setting box.

### Preset Mode Applicable Occasions:

No	Items	Applications
1	Custom Timing	Applicable to all kinds of STOCK competitions that require ESCs to use flash programs without timing
2	1/8 Off-Road	Suitable for 1/8 off-road/truck racing
3	1/8 On-Road	Suitable for 1/8 on-road racing

## 5 Programming method



Notice! The ESC programming interface is an independent programming port; do not use the throttle control cable on the ESC to connect the programming box, otherwise the programming box will not work.

LCD programming box for parameter setting: (For details, please refer to the manual of the LCD parameter programming box) This ESC supports using the LCD programming box to set parameters. After connecting the ESC and the programming box with a 3pin cable, and then connecting the power to the ESC, the LCD setting box will display the startup interface. Use the "ITEM" and "VALUE" buttons to change the setting parameters, and press the "OK" button to save the setting parameters into the ESC.

## 6 Restore factory parameter settings

After connecting the LCD box, select "Restore Default" through "ITEM", then press "OK" to save, and wait for 2 seconds to restore the factory settings.

## 06 Description of the ESC Status Indicator (LED)

### Start-up phase

No control signal, the green light flashes 1 time, and the whistle sounds 1 short time at the same time

## Itinerary stage

Low voltage, the red light flashes 2 times and beeps 2 times at the same time

ESC is overheated, the red light flashes 3 times and beeps 3 times at the same time

The motor is overheated, the red light flashes 4 times and beeps 4 times at the same time

The motor is over-current, the red light flashes 5 times and beeps 5 times at the same time

# 07

## Troubleshoot guide

### Symptom

### Possible cause

### Solution

After power on, the indicator light is off, the motor cannot be started, and the fan does not turn

1. The battery voltage is not input to the ESC
2. The ESC switch is damaged
3. The positive and negative poles of the ESC are reversed

1. Check whether the connecting wire is defective or not, and whether the solder joint is defective.
2. Replace the switch
3. Adjust the positive and negative poles

After power-on, lithium cell detection (after the green light flashes quickly, the green light flashes continuously, and the motor beeps once).

1. The ESC does not detect the throttle signal
2. The midpoint of the ESC throttle does not match the remote control

1. Check whether the BEC/throttle cable is inserted backwards, whether the channel is inserted incorrectly, and whether the controller is turned on.
2. Return the throttle stick to the neutral position and recalibrate the throttle stroke.

The remote control increases the accelerator, but the car reverses

The frame is inconsistent with the motor steering of the mainstream frame

Set the motor rotation setting to "CW clockwise".

During the rotation of the motor, it suddenly stops or the power output is significantly reduced

1. The receiver encounters interference
2. The ESC enters the battery low voltage protection state
3. The ESC enters the over-temperature protection state

1. Check the cause of interference in the receiver and check the battery power of the transmitting machine.
2. The red light blinks twice at intervals for voltage protection. Please replace the battery.
3. The red light flashes 3 times at intervals for temperature protection, please continue to use after the electric regulator \ motor temperature decreases.

The motor shakes and cannot be started

1. The plug of the electric harmonic motor connection has virtual welding or AC line interchange.
2. Electrical failure (part of the power tube MOSFET burned out)

1. Check each welding point, re-weld if necessary, and swap AC lines.
2. Contact the seller to deal with maintenance matters.

Moving forward normally, but unable to reverse

1. The midpoint of the accelerator channel of the remote control deviates from the braking area
2. The parameter item "Run Mode" is set incorrectly
3. The ESC is damaged

1. Readjust the midpoint of the throttle channel so that when the throttle stick of the remote controller is in the middle position, the indicator light on the ESC will not light up
2. The parameter item "running mode" needs to be set to "forward and reverse with brake"
3. Contact the buyer to deal with maintenance matters.

Connect the LCD parameter setting box, always display "CONNECTING ESC"

1. Improper use of ESC programming interface
2. ESC throttle is not reset to zero

1. Use the correct interface to connect the LCD setting box
2. Restart the ESC and reconnect the LCD parameter box

When setting the throttle range, when pressing the SET button to set the midpoint, the green light does not flash and there is no "beep" sound, or after the midpoint is set, the forward and reverse maximum points cannot be set

1. The ESC throttle cable is not inserted into the correct channel of the receiver
2. The ESC throttle cable is inserted backwards
3. The forward and reverse travel setting of the throttle is not set to 100%.

1. Insert the throttle cable into the TH channel marked on the receiver.
2. Check that the sequence of the receiver markings is inserted correctly.
3. Throttle forward and backward travel is set to 100%.



**CREST 8**

**CAYOTE TEAM**