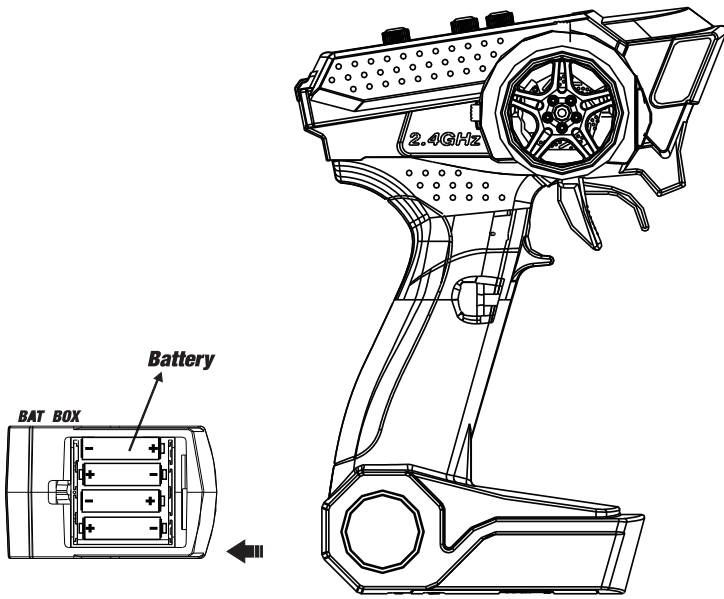# INSTRUCTION MANUAL

For Maxam 10 Series - Radio model cars

www.maxam.dk

INSTRUCTION MANUAL

MAXAM XT12 - 2.4GHz - 2 channel Radio set
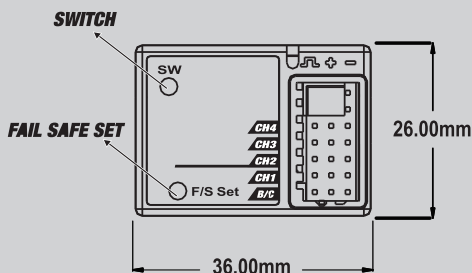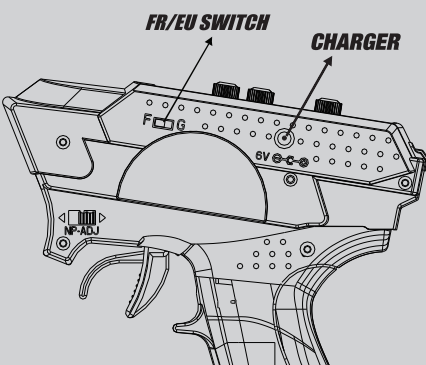
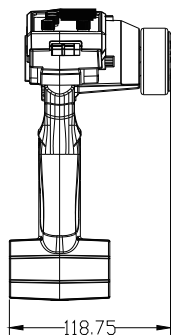### Install the batteries

(1) Remove the battery compartment cover.
(2) Replace the used batteries with new AA size batteries.

> Please replace batteries when the power indicator blinks or the buzzer beeps.

Battery

BAT BOX

Function

E0102

ST REV
TH DR
ST DR
LED
TH TRIM
POWER
GRIP HANDLE
BAT BOX

TH REV
STEERING WHEEL
ST TRIM
THROTTLE TRIGGER

158.23

214.52

118.75

FR/EU SWITCH
CHARGER
SWITCH

F □ G

6V ⊖-C-⊕

NP-ADJ

FAIL SAFE SET

SW

CH4
CH3
CH2
CH1
B/C

F/S Set

26.00mm

36.00mm
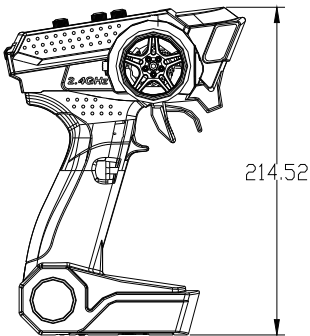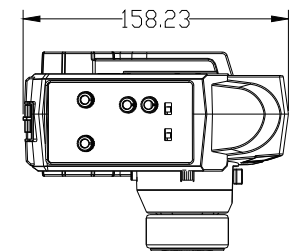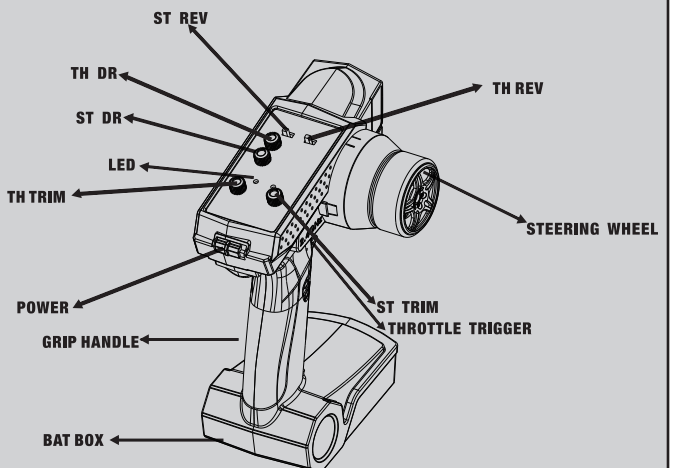
Connectors
1:Steering servo(CH1)
2:Throttle servo(CH2)
3:CH3 servo(CH3)
B/C:Power connector

Transmitter Adjustment

A. Throttle Trigger

Brake /Speed down

Forward /Speed up

Neutral

1. Push the trigger forward to slow down or brake.
2. Pull the trigger backward to accelerate.

B. Steering Wheel

Neutral

Left   Right

ST TRIM

TH TRIM
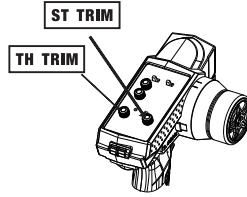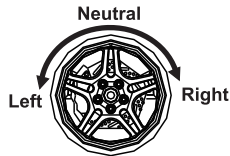
⚠ **Keep the transmitter and receiver 40cm apart when operating.**

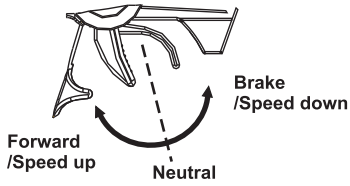**Use the REV switches to reverse the steering or throttle operating direction.**
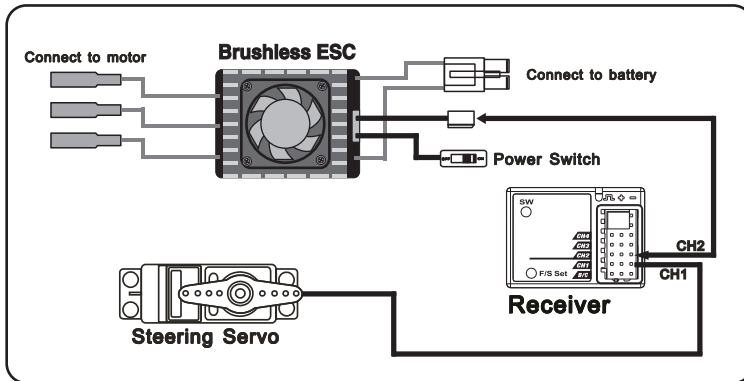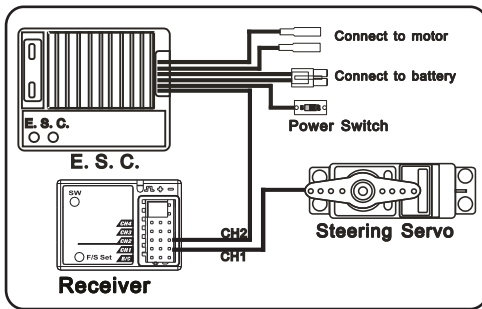
Throttle Trim: Trim the throttle servo slightly when the trigger is at the neutral position.

Steering Trim: If the front wheels do not align straight, use the steering trim to adjust.

Low battery alarm

Do not operate the radio system when the battery power is low.

Electrical powered model

Connect to motor
Connect to battery
Power Switch
E. S. C.
Steering Servo
CH2
CH1
Receiver

Fail Safe Function Setting

1. Set the TH, ST switches to the normal position.
2. Turn on the transmitter and receiver.
3. Press the F/S SET button, the LED on the receiver should start flashing rapidly.
4. Put the throttle trigger at the brake position, press the F/S SET button, the LED should become solid.
5. For electric model, put the throttle trigger at the stop position when you are making the setting.

Binding the transmitter and receiver

❶

❷ ON

❸ LED
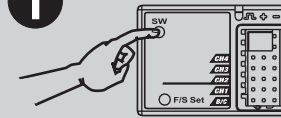
1. turn on the receiver power. Press the SW switch. The receiver's LED should start flashing.
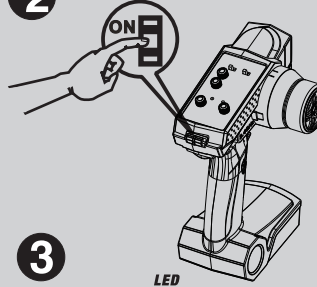
2. Turn on the transmitter.
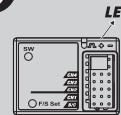
3. When the LED on the receiver becomes solid, the binding process is completed.

Connect to motor
Brushless ESC
Connect to battery
Power Switch
Steering Servo
CH2
CH1
Receiver

Receiver and servo connection

Gas powered model

(Red line)
(Red line)
(Red line)
OFF ON
(black line)
(black line)
(black line)

Antenna

SW

Servo

Connect to battery
Red line<+> black line<->

INSTRUCTION MANUAL

MAXAM XS 451

SENSORLESS BRUSHLESS

SPEED CONTROLLER

FOR

CAR AND TRUCK

【DECLARATION】

Thanks for purchasing "MAXAM" series Electronic Speed Controller (ESC). High power system for RC model can be very dangerous, so please read this manual carefully. In that we have no control over the correct use, installation, application, or maintenance of our products, no liability shall be assumed nor accepted for any damages, losses or costs resulting from the use of the product.

【FEATURES】

1. Specially designed for RC car and truck, with excellent start-up, acceleration and linearity features.
2. Compatible with sensorless brushless motor.
3. 3 running modes suitable for different applications ("Forward with brake" mode, "Forward/Backward with brake" mode and "Rock crawler" mode).
4. 4 steps of maximum reverse force adjustment.
5. Proportional ABS brake function with 4 steps of maximum brake force adjustment, 8 steps of drag-brake force adjustment and 4 steps of initial brake force adjustment.
6. 9 start modes ("Punch") from "Soft" to "Very aggressive" to be suitable for different chassis, tires and tracks.
7. Multiple protection features: Low voltage cut-off protection for lithium or nickel battery / Over-heat protection / Throttle signal loss protection / Motor blocked protection.
8. 8 steps of timing adjustment.
9. User programmable. Several program methods are supported, such as: The "SET" button on the ESC, the digital LED program card, the advanced LCD program box, the PC software, etc. The program card and program box are pocket-sized and they have friendly user interface to be easily used.
10. The firmware of ESC can be online updated through an USB adapter on the advanced LCD program box.
11. Dustproof.

【SPECIFICATIONS】

Model			MAXAM XS 451	
Cont. Current			45A	
Burst Current			190A	
Resistance			0.0010 ohm	
Suitable Car			1/10 car	
Suitable Brushless Motor			On-road: 8T Off-road: 10T 3650 size motor	
			On-road: 10T Off-road: 16T 3650 size motor	
Battery			4-9 Cells NiMH or 2-3 Cells Li-Po 1) For 4-6 cells NiMH or 2 cells Lipo: You needn't change the fan combined with the ESC; 2) For 7-9 cell NiMH or 3 cells Lipo: You must change the fan combined with the controller because it cannot work with such a high voltage, so please choose a high voltage fan or supply the fan from the receiver (+5V); (*Note1*)	
BEC Output		6V/1.5A		
Motor Type		Sensorless Brushless Motor		
Dimension			31.5* 27.5* 24 (The height of fan is not included)	
Weight			30g (W/O wires)	

Note1:   For information about the high voltage cooling fan, please refer to the brief introduction on page 2.

【BEGIN TO USE THE NEW ESC】

1. Connect the ESC, motor, receiver, battery and servo according to the following diagram

"+" and "-" wires of the ESC are connected with the battery pack, and #A, #B and #C are connected with the motor wires. The "SET" button is used for programming the ESC.

The control cable of the ESC (trio wires with black, red and white color) is connected with the throttle channel of the receiver (Usually CH2).

The #A, #B, #C wires of the ESC can be connected with the motor wires freely (without any order). If the motor runs in the opposite direction, please swap any two wire connections.

Note: You can use the transmitter to set the throttle channel to the "Reverse" direction, and then the motor will run oppositely. Please calibrate the throttle range again after changing the direction of throttle channel.

Brushless Motor

Input TH channel (Ch.2)

Black power wire (battery negative)

ON OFF Switch

Red power wire (battery positive)

Receiver

Servo plugged into steering ch. (#1)
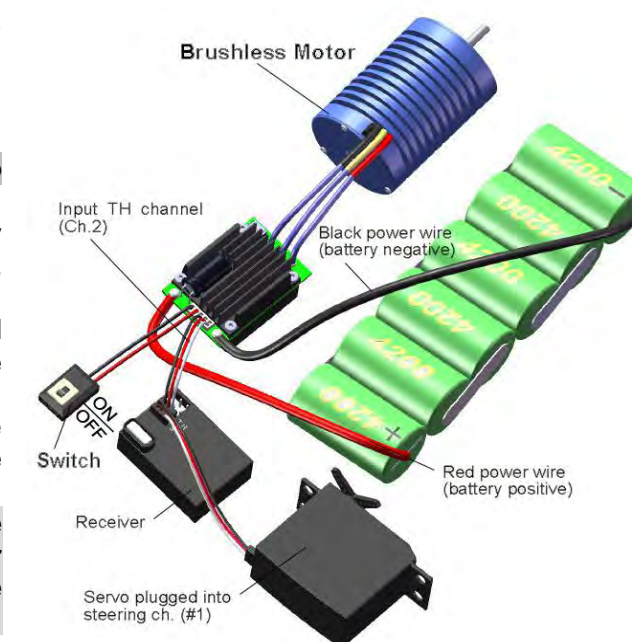
2. Throttle Range Setting (Throttle Range Calibration)

In order to make the ESC fit the throttle range, you must calibrate it for the following cases; otherwise the ESC cannot work properly.

1) Begin to use a new ESC;
2) Begin to use a new transmitter;
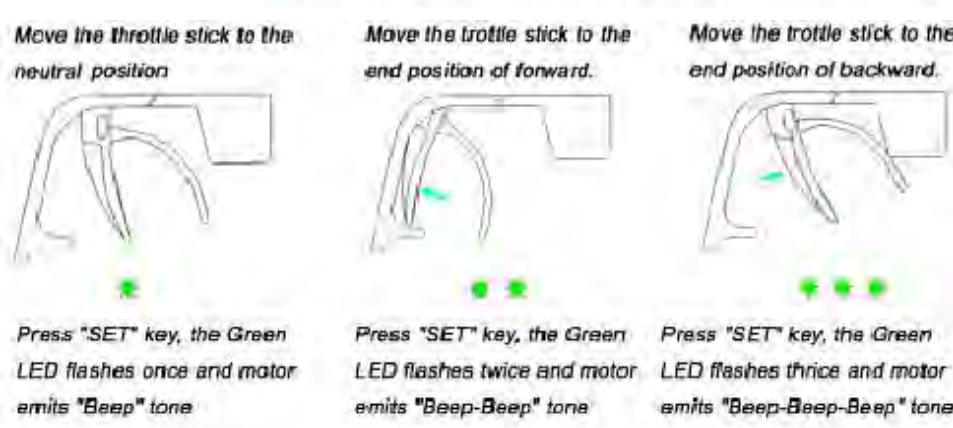3) Change the settings of neutral position of the throttle stick, ATV or EPA parameters, etc.

There are 3 points need to be set, they are the top point of "forward","backward" and the neutral point.
The following pictures show how to set the throttle range with a **Futaba**[TM] transmitter.

A) Switch off the ESC, turn on the transmitter, set the direction of throttle channel to "REV", set the "EPA/ATV" value of throttle channel to "100%", and underline the "ABS" brake function of your transmitter. (*Note2*)
B) Hold the "SET" key and then switch on the ESC, when the red LED begins to flash, release the key immediately. (*Note3*)
(Please refer to the picture on the right side)
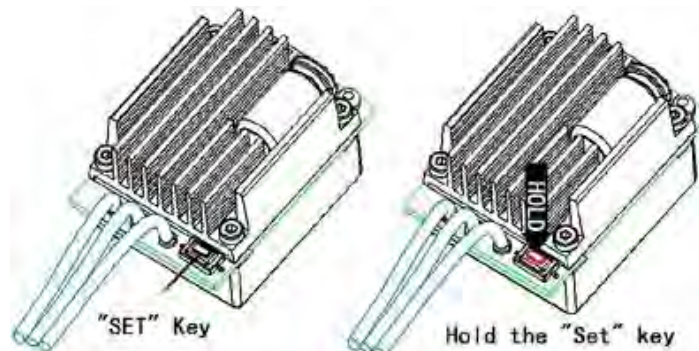
C) Set the THREE points according to the steps shown in the picture on the right side.
1) Neutral point
2) End point of forward direction
3) End point of backward direction
D) When the process of calibration is finished, the motor can be started after 3 seconds.

"SET" Key   Hold the "Set" key

Move the throttle stick to the neutral position
Move the trottle stick to the end position of forward.
Move the trottle stick to the end position of backward.

Press "SET" key, the Green LED flashes once and motor emits "Beep" tone
Press "SET" key, the Green LED flashes twice and motor emits "Beep-Beep" tone
Press "SET" key, the Green LED flashes thrice and motor emits "Beep-Beep-Beep" tone

Note2: If you don't release the "SET" key after the red LED begins to flash, the ESC will enter the program mode, in such a case, please switch off the ESC and re-calibrate the throttle range again from step A to step D.

3. The LED Status in Normal Running

a) In normal use, if the throttle stick is in the neutral range, neither the red LED nor the green LED lights.
b) The red LED lights when the car is run forward or backward and it will flash quickly when the car is braking.
c) The green LED lights when the throttle stick is moved to the top point of the forward zone.

【ALERT TONES】

1. Input voltage abnormal alert tone: The ESC begins to check the input voltage when power on, if it is out of the normal range, such an alert tone will be emitted: "beep-beep-, beep-beep-, beep-beep-" (There is 1 second time interval between every "beep-beep-" tone).
2. Throttle signal abnormal alert tone: When the ESC can't detect the normal throttle signal, such an alert tone will be emitted: "beep-, beep-, beep-" (There is 2 seconds time interval between every "beep-" tone).

【PROTECTION FUNCTION】

1. Low voltage cut-off protection: If the voltage of a lithium battery pack is lower than the threshold for 2 seconds, the ESC will cut of the output power. Please note that the ESC cannot be restarted if the voltage of each lithium cell is lower than 3.5V.
   For NiMH battery packs, if the voltage of the whole NiMH battery pack is higher than 9.0V but lower than 12V, it will be considered as a 3 cell lithium battery pack; If it is lower than 9.0V, it will be considered as a 2 cell lithium battery pack. For example, if the NiMH battery pack is 8.0V, and the threshold is set to 2.6V/Cell, so it will be considered as a 2 cell lithium battery pack, and the low-voltage cut-off threshold for this NiMH battery pack is 2.6*2=5.2V.
2. Over-heat protection: When the temperature of the ESC is over a factory preset threshold for 5 seconds, the ESC will cut off the output power. You can disable the over-heat protection function for competition race.
3. Throttle signal loss protection: The ESC will cut off the output power if the throttle signal is lost for 0.2 second.

【TROUBLE SHOOTING】

Trouble	Possible Reason	Solution
After power on, motor can't work, no sound is emitted	The connections between battery pack and ESC are not correct	Check the power connections Replace the connectors
After power on, motor can't work, but emits "beep-beep-, beep-beep-" alert tone. (Every "beep-beep-" has a time interval of 1 second)	Input voltage is abnormal, too high or too low.	Check the voltage of the battery pack
After power on, motor can't work, but emits "beep-, beep-, beep-" alert tone. (Every "beep-" has a time interval of about 2 seconds)	Throttle signal is abnormal	Check the transmitter and the receiver Check the wire of the throttle channel
The motor runs in the opposite direction	The wire connections between ESC and the motor need to be changed	Swap any two wire connections between the ESC and the motor.
The motor suddenly stops running while in working state	The throttle signal is lost	Check the transmitter and the receiver Check the wire of the throttle channel
	The ESC has entered the Low Voltage Protection Mode	Replace the battery pack
Random stop or restart or irregular working state	Some connections are not reliable	Check all the connections: battery pack connections, throttle signal wire, and motor connections, etc.
	There is strong Electro - Magnetic interference in flying field.	Reset the ESC to resume normal operation. If the function could not resume, you might need to move to another area to run the car.

【OPTIONAL ACCESSORIES FOR UPGRADE】

We provide the following optional accessories for upgrade your power system:

1. **Cooling fan (12V):** The high voltage fan is necessary when you are using battery pack more than 6 cells of NiMH. It is located on the heat sink of the ESC, it helps to cool the ESC with downward airflow. The picture on the right side shows the installation.
WARNING! Please note the original fan (5V) combined with the ESC can ONLY work with a 2 cells lithium battery pack or 4-6 cells NiMH battery pack. Please NEVER use it with a 3 cells lithium battery pack or NiMH battery pack more than 6 cells, otherwise it may be destroyed. Please check the label of the fan carefully to confirm its working voltage before using it.

Mark: Direction of the airflow and the impeller
Fan
Heat Sink
Speed Controller
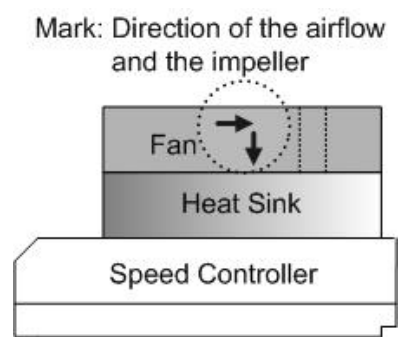
2. **Program card (Digital LED Display).**
Program card is an optional accessory which needs to be purchased separately. It has a friendly user interface. The process of programming the ESC becomes quite easy and fast with this pocket sized device. When the programmable value needs to be changed, please just plug the control wires of the ESC (trio wires with black, red and white color) into the socket of the program card (The socket is on the right corner, and marked with ⊕⊖𝖀), and then connect the main battery pack to the ESC, each item's value will be shown on the program card. Use "ITEM" and "VALUE" buttons to select the programmable items and new values, and then press "OK" button to store the new settings into the ESC.

3. **Advanced program box (LCD Display).**
Advanced program box is an optional accessory which needs to be purchased separately. It has LCD display to show the programmable items, so it can work as an individual device to set the ESC. And it can also work as an USB adapter to connect the ESC with a PC to update the ESC firmware online.

【PROGRAM THE ESC】

1. Program Method
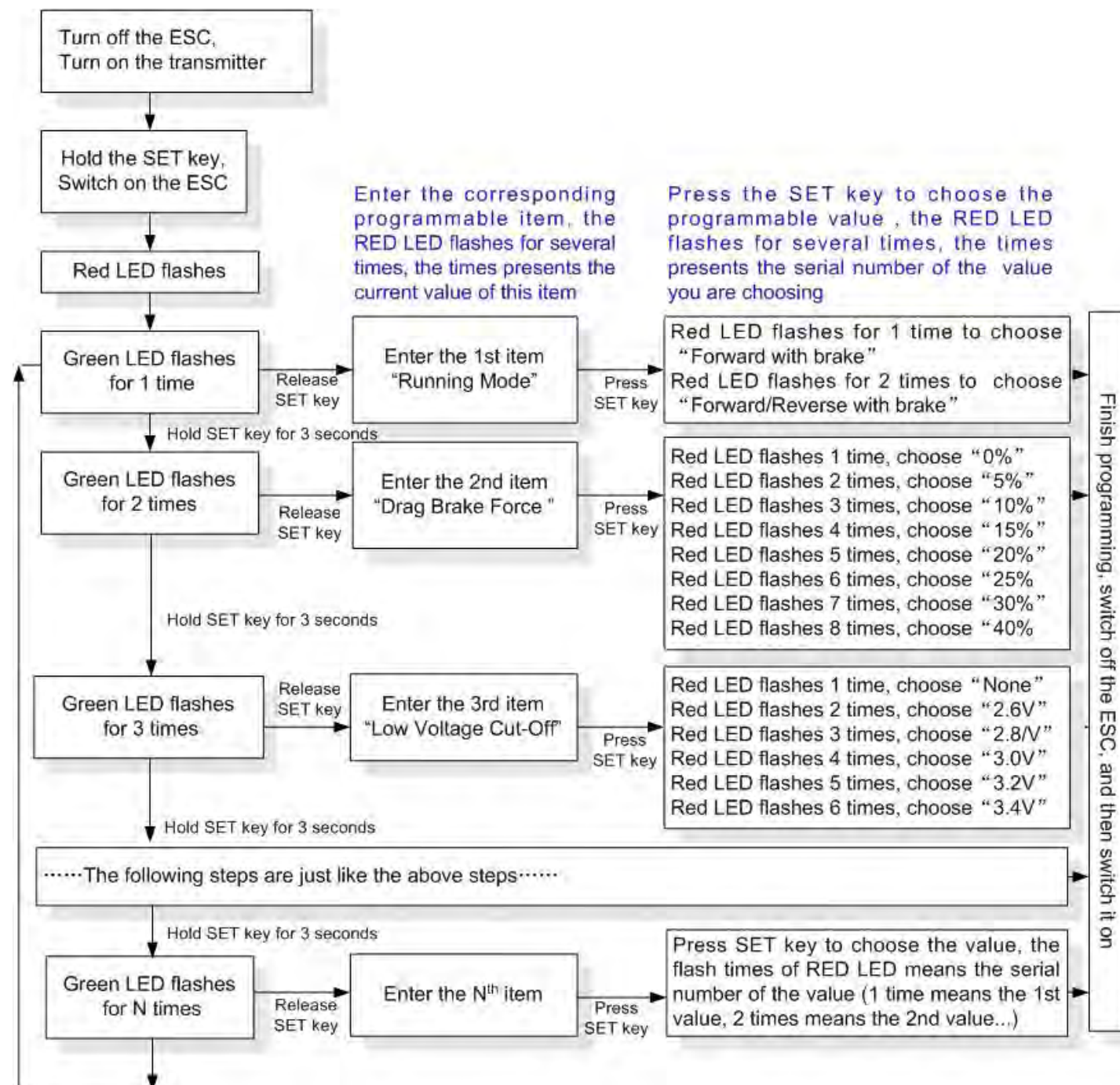
Note:

In the program process, the motor will emit "Beep" tone at the same time when the LED is flashing.

If the "N" is bigger than the number "5", we use a long time flash and long "Beep---" tone to represent "5", so it is easy to identify the items of the big number.

For example, if the LED flashes as the following:

"A long time flash + a short time flash" (Motor sounds "Beep---Beep")　＝　the No. 6 item

"A long time flash + 2 short time flash" (Motor sounds "Beep---BeepBeep")　＝　the No. 7 item

"A long time flash + 3 short time flash" (Motor sounds "Beep---BeepBeepBeep")　＝　the No. 8 item

……

And so on.

2. Programmable Items list

Programmable	Programmable Value								
	1	2	3	4	5	6	7	8	9
Basic Items									
1.Running Mode	Forward with Brake	*Forward/Reverse with Brake*	Rock Crawler						
2.Drag Brake Force	0%	5%	*10%*	20%	40%	60%	80%	100%	
3.Low Voltage Cut-Off Threshold	Non-Protection	2.6V /Cell	2.8V /Cell	*3.0V /Cell*	3.2V /Cell	3.4V /Cell			
4.Start Mode (Punch)	Level1 (Soft)	Level2	L3	L4	L5	L6	*L7*	L8	L9 (Very Aggressive)
Advanced Items									
5.Maximum Brake Force	25%	50%	75%	*100%*					
6.Maximum Reverse Force	25%	*50%*	75%	100%					
7.Initial Brake Force	*= Drag Brake Force*	0%	20%	40%					
8.Neutral Range	6% (Narrow)	*9% (Normal)*	12% (Wide)						
9.Timing	0.00 °	3.75 °	7.50 °	11.25 °	*15.00 °*	18.75 °	22.50°	26.25°	
10.Over-heat Protection	*Enable*	Disable							

Attention:　The italics texts in the above form are the default settings.

3. Programmable Values

3.1.**Running Mode:** With "Forward with Brake" mode, the car can go forward and brake, but cannot go backward, this mode is suitable for competition; "Forward/Reverse with Brake" mode provides backward function, which is suitable for training. The "Rock Crawler" mode is only used for rock crawler.
Note: "**Forward/Reverse with Brake**" **mode uses** "**Double-Click**" **method to make the car go backward**. When you move the throttle stick from forward zone to backward zone for the first time, the ESC begins to brake the motor, the motor speeds down but it is still running, not completely stopped, so the backward action is NOT happened now. When the throttle stick is moved to the backward zone again (The 2nd "click"), if the motor speed is slowed down to zero (i.e. stopped), the backward action will be occurred. The "Double-Click" method can prevent mistakenly reverse when the brake function is frequently used in steering.
With "Rock Crawler" mode, the reverse action will be happened immediately when the throttle stick is moved to backward zone. Please set the "Drag Brake Force" to 100% if you choose the "Rock Crawler" mode.

3.2.**Drag Brake Force:** Set the amount of drag brake applied at neutral throttle to simulate the slight braking effect of a neutral brushed motor while coasting.

3.3.**Low Voltage Cut-Off:** The function is mainly to prevent the lithium battery pack from over discharging. When using lithium battery pack, please set the suitable value for low-voltage protection as your like. The ESC monitors the battery's voltage at any time, if the voltage is lower than the threshold, the output power will be reduced to 50% in 2 seconds. Please drive and stop the car at the side of the racing track as soon as possible, the ESC will completely cut off the output power in 10 seconds.

3.4.**Start Mode (Also called** "**Punch**"**):**　Select from "Level1 (Soft)" to "Level 9 (Very aggressive)" start mode as your like. Please note that if you choose "Level 7" to "Level 9", you'd better use good quality battery pack with powerful discharge ability, otherwise these modes cannot get the bursting start effect as you want. If the motor cannot run smoothly (the motor is trembling), it may caused by the weak discharge ability of the battery pack, please choose a better battery or increase the gear rate.

3.5.**Maximum Brake Force:** The ESC provides proportional brake function. The brake force is related to the position of the throttle stick. Maximum brake force refers to the force when the throttle stick is located at the top point of the backward zone. A very large brake force can shorten the brake time, but it may damage the gears.

3.6.**Maximum Reverse Force:** Sets how much power will be applied in the reverse direction. Different value makes different reverse speed.

3.7.**Initial Brake Force:** It is also called "minimum brake force", and it refers to the force when the throttle stick is located at the initial position of the backward zone. The default value is equal to the drag brake force, so the brake effect can be very smooth.

3.8.**Throttle Neutral Range:** Please see the following illustrations to adjust the neutral range as your like.
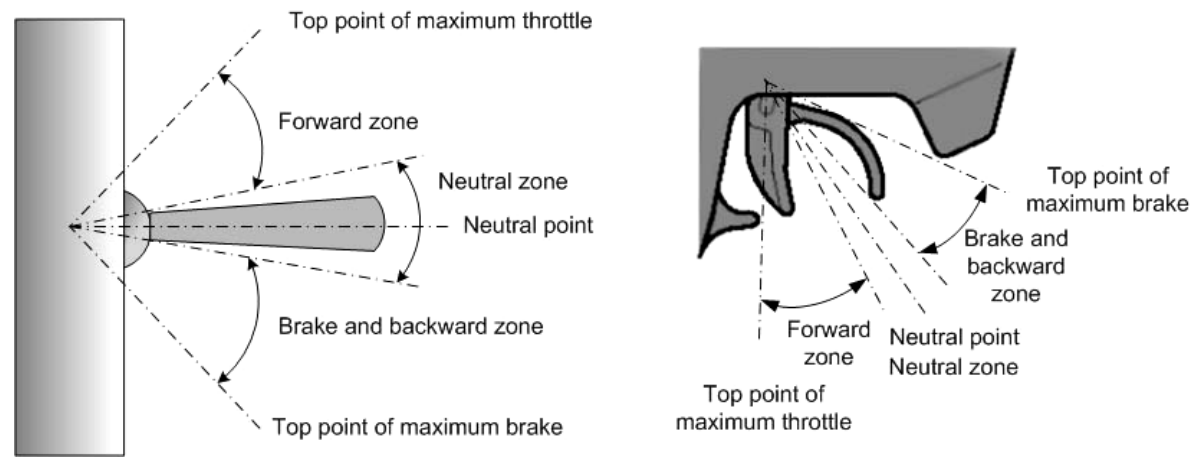
3.9.**Timing:** There are many differences among structures and parameters of different brushless motors, so a fixed timing ESC is difficult to compatible with all brushless motors. It is necessary to make the timing value programmable. Please select the most suitable timing value according to the motor you are just using. Generally, higher timing value brings out higher power output, but the whole efficiency of the system will be slightly lower down.

3.10. **Over-Heat Protection:** If the function is activated, the output power will be cut-off when the temperature of the ESC is up to a factory preset threshold for more than 5 seconds. When the protection happens, the Green LED will flash.

4. Reset All Items To Default Values

At any time when the throttle is located in neutral zone (except in the throttle calibration or parameters program process), hold the "SET" key for over 3 seconds, the red LED and green LED will flash at the same time , which means each programmable item has be reset to its default value.

1/10th 4WD Electric Power R/C Off-Road

Specifications:

Styles	Motor	KV (Brushless Motor)	Motor RPM range	Battery Specification	ESC Specification	ESC Temperature protection	Under Voltage Protection	Speed
Brush Version	Rc540		20000rpm	NiMH-7.2V-1800 mAh	Continue Forward150A/ Continue outward100A	98°(+/-3-5 centigrade)	below 5V1A	28KM
Brushless Version	3650 (RC540)	3300KV	24420rpm	LiPO-7.4V-3300 mAh 35C	Brushless 45A			60KM

All spare parts starts with: C0300-XXXXX

(page 11)

- 06011-Front Lower Suspension Arm (Buggy)
- 06012-Rear Lower Suspension Arm (Buggy)
- 02014-Steering Hub (L/R)
- 02015-Front Hub Carrier (L/R)
- 02013-Rear Upright+Set Screws4*4mm
- 02033-Wheel Axle
- 02016-Universal Joint Cup B/Set Screws4*4
- 02032-Universal Joint Cup C
- 02021-Rear Suspension Arm Holder
- 02022-Front Suspension Arm Holder
- 06003-Front Bumper (Buggy - Truggy)
- 02005-Rear Bumper
- 06013-Front Shock Tower(Buggy)
- 06014-Rear Shock Tower(Buggy)
- 06002-Shock Absorber (M10 Buggy)
- 10391-Servo Link
- 08027-Pin 2*10
- 02372-Servo Arm
- 02036-3*44mm Front Suspension Arm Pin A
- 02063-3*54mm Rear Suspension Arm Pin A
- 06018-Front Lower Arm Pin B 3*27.5mm
- 06019-Rear Lower Arm Round Pin B 3*24.5mm
- 06022-Front/Rear Dogbone 88mm (Buggy)
- 06007- Body Post
- 08029- Front/Rear Dogbone 89.5mm (Truck-Truggy)

All spare part starts with: C0300-XXXXX

(page 12)

- 03011-Motor(Rc540) (M10 only)
- 02500-Motor Line (M10 only)
- 03007-Motor Mount
- 03601-Chassis
- 04003-Centre Drive Joint
- 03013-Upper plate
- 03610-Battery Cover
- Sp3001-Servo(3Kg)
- 04004-Battery Holder
- 03009-Battery Cover Post
- 02074-Steering Ackerman Joint
- 02025E-Steering Assembly A
- 02075-Steering Assembly B
- 03401-Gear Shelter
- 03300-Motor Heat Proof Cover
- 11164-Diff.Main Gear (64T) (M10 only)
- 11153-Motor Gear (23T) (M10 only)
- 02029-Crown Gear (38T)
- 02030-Drive Gear
- 02024-Diff.Main Gear Complete
- 03015-Drive Gear Shaft+E-Clips
- 02066-Diff.Pinions+Pin
- 02039-Differential Box+Seals+Washers
- 02051-Gear Box
- 06016-Front/Rear Link
- 08008N-Wheel Rim Black (Truck)
- 08009N-Tyre+Insert Sponge (Truck)
- 08010B-Wheel Black Complete (Truck)
- 17777C - Wheel chrom Complete (Street Hotrod)
- 08071 - Wheel Black Complete
- 17701- Wheel Rim Black (Truggy)
- 17702-Tyre+Insert Spronge (Truggy)
- 17703-Wheel Black Complete (Truggy)
- 08043 - Tire Black
- 08008B - Rim Black

All spare part starts with:C0300-XXXXX

(page 15)

- 12001-Front Lower Arm (Thunder)
- 12002-Rear Lower Arm (Thunder)
- 12005-Front/Rear Link 50mm (Thunder)
- 12006-Steering Link 44mm (Thunder)
- 12007-Front/Rear Dogbone 100mm (Thunder)
- 17704 - Shock absorber
- 31107-Long Body post

All spare part starts with:C0300-XXXXX

- 03271- Body Orange Monster
- 13003- Body Green Thunder
- 03272- Body clear body Monster
- 03171- Body Orange Truggy
- 03172- Body clear body Truggy
- 03173- Body Red Truggy
- 03371- Body Orange Beetly
- 03372- Body clear body Beetly
- 03373- Body Red Beetly
- 03071- Body Orange Buggy
- 03072- Body clear body Buggy
- 03571- Body painted Pickup
- 03572- Body clear Pickup
- 03471- Body painted Hot Rod
- 03472- Body clear body Hot Rod

Gear Box Assembly View-Common parts

(page 16)

All spare parts start with:C0300-XXXXX

(page 13)
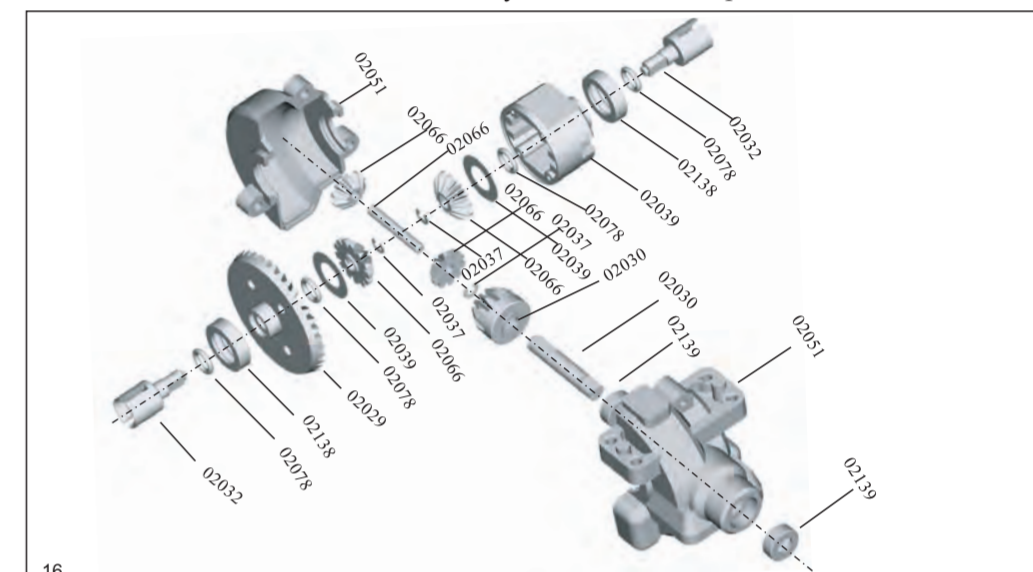
- 02057-Antenna Pipe
- 03006-Antenna Mount
- 02017-Suspension Reinforcement Brace
- 03018-Electronic Speed Controller (M10 only)
- 03008-Switch Cover
- 06005-Wing Post
- 06017-Wing Brace
- 06021-Wing (Black)
- 06020-Wing Mount
- 06004-Front Body Mount
- 06008-Front Wheel Rim (Black)
- 06024-Rear Wheel Rim (Black)
- 06009-Front Tyre
- 06025-Rear Tyre
- 06010-Front Wheel Complete (Black rim)
- 06026-Rear Wheel Complete(Black Rim)
- 02127-M3*14 Grub Hex. Screw 10P
- 02053-R- Clip
- 02101- Steering Bushing
- 02103- Zip Tie
- 02100-Wheel Hex.
- 02037-E-Clip (Φ 7Φ 4Φ 2.5Φ 2.3)
- 02102-Nylon Lock Nut M3
- 02079-Oil Bearing Φ15*Φ 10*4
- 02080-Oil Bearing Φ 5*Φ10*4
- 02078-O-Ring
- 02138-Ball Bearing Φ15*Φ10*4
- 02139-Ball Bearing Φ10*Φ 5*4
- 06007-Shock Ball Head C
- E0103 XR12 Reciever 2ch. 2.4GHZ
- 02055-Nylon Locknut M4
- 06023-Shock Ball Stud
- 02038-Ball Head Screw
- 02099- Grub Screw M4*4
- E0102 XT12 Transmitter 2ch. 2.4G

All spare parts start with:C0300-XXXXX

(page 14)

- 02092-ISO 3*10 Screw 8P
- 02096-3*10 Cap Head Machine Screw 6P
- 02081-Cap Head Self-Tapping Screw 3*8 6P
- 02082-Cap Head Self-Tapping Screw 3*10 10P
- 02083-Cap Head Self-Tapping Screw3*12 6P
- 02093-Column Head Screw M3*10 10P
- 08024-Discal Screw M3*11 8P
- 02087-Countersunk Cross Head Self-Tapping Screw 3*10 15P
- 02085-Round Head Self-Tapping Screw 2*8 8P
- 02086-Round Head Self-Tapping Screw 2*10 10P
- 02088-Countersunk Cross Head Self-Tapping Screw 3*14 13P
- 02089-Countersunk Cross Head Self-Tapping Screw 3*15 9P
- 08005- Front Lower Suspension Arm (Truck-Truggy)
- 08006- Rear Lower Suspension Arm (Truck-Truggy)
- 08002- Front Bumper (Truck)
- 08003-Rear Bumper (Truck)
- 08012- Fron/Rear Shock Tower (Truck-Truggy)
- 08001-Shock Absorber (M10)
- 08032-Bumper Spring
- 08028- Bump Post
- 106004-Aluminum Shock Absorber (Short) (R10)
- 03302-Brushless Motor KV:3300 (R10 only)
- E0301 XS451 Competition ESC 45AMP-Brushless (R10 only)
- 11184-Diff. Main Gear (64T) Metal (R10)
- 11176-Motor Gear(26T) Metal / 11179-Motor Gear(19T) Metal
- 102210-Aluminum Front Hub Carrier(L/R) (AL.)+Cap Head Mechical Screws 3*15mm*2P
- 102211-Steering Hub(L/R) (AL.)+Cap Head Mechical Screws 3*12mm*2P/3*11mm *2P
- 102212-Aluminum Rear Hub Carrier(L/R)+Flat Head Mechnical Screws 3*15mm*2P+M4*4 Grub Hex. Screw 2P
- 102042-Aluminum Wheel Hex. Mount (Thunder)
- 106015-Universal Drive Joint
- 107022-Carbon Fibre Billet Front Shock Tower
- 107023-Carbon Fibre Billet Rear Shock Tower
- 108837-Aluminum Body Post
- 108004-Aluminum Shock Absorber (Long)
- E0302 - ESC Waterproof (Thunder)
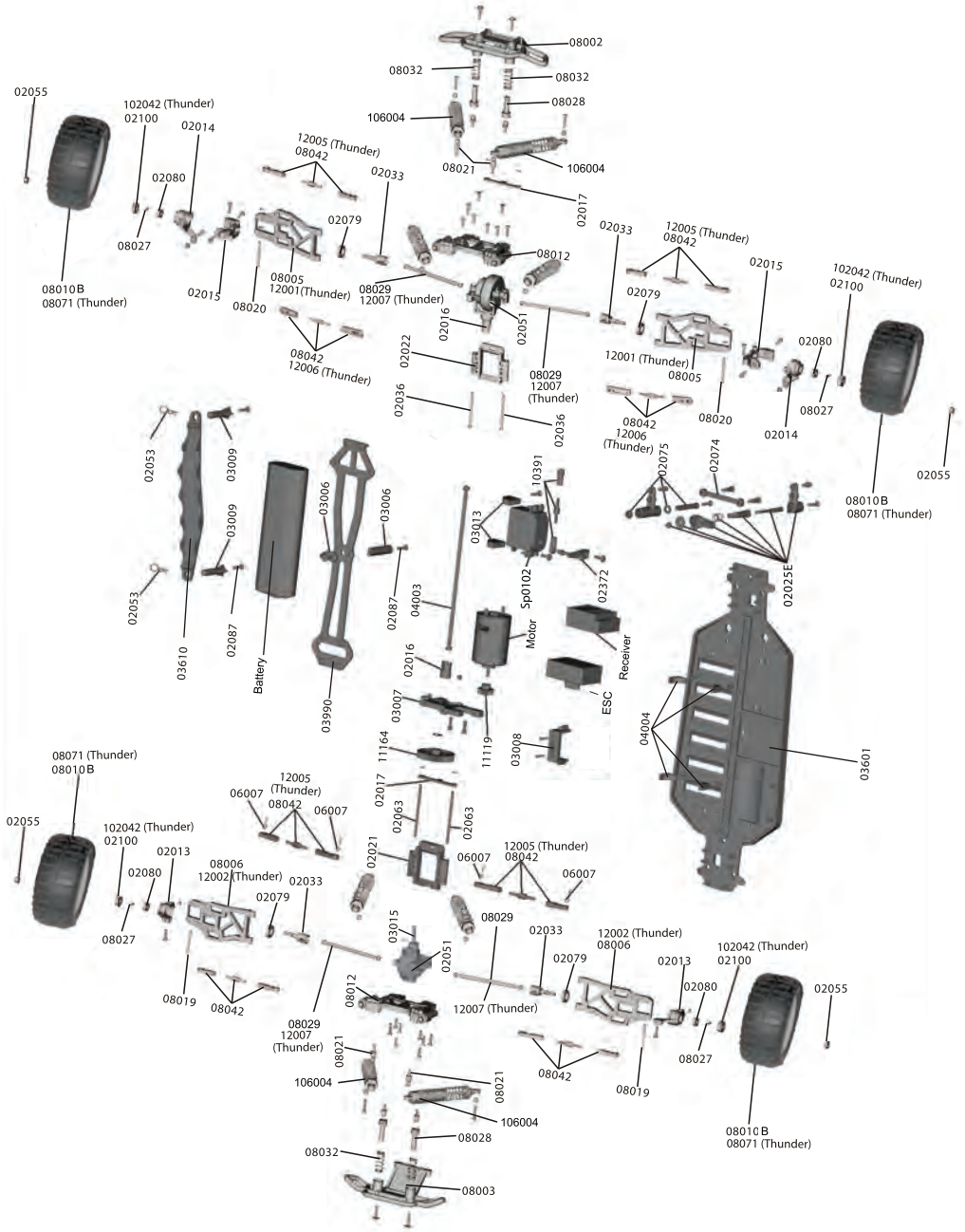
Off-Road Buggy Full Assembly View R10


(page 17)
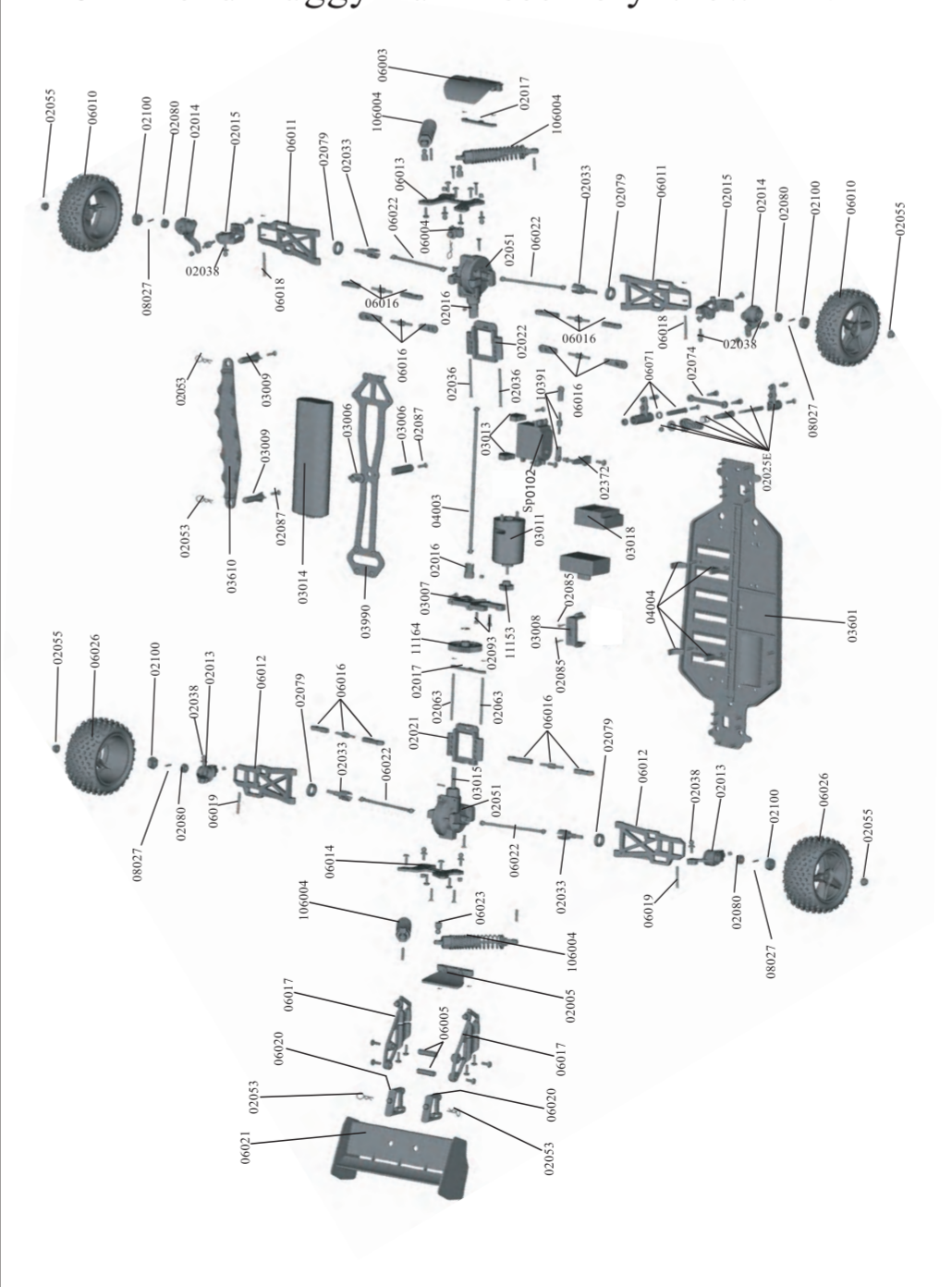
O-Road Truggy Full Assembly View

(page 18)
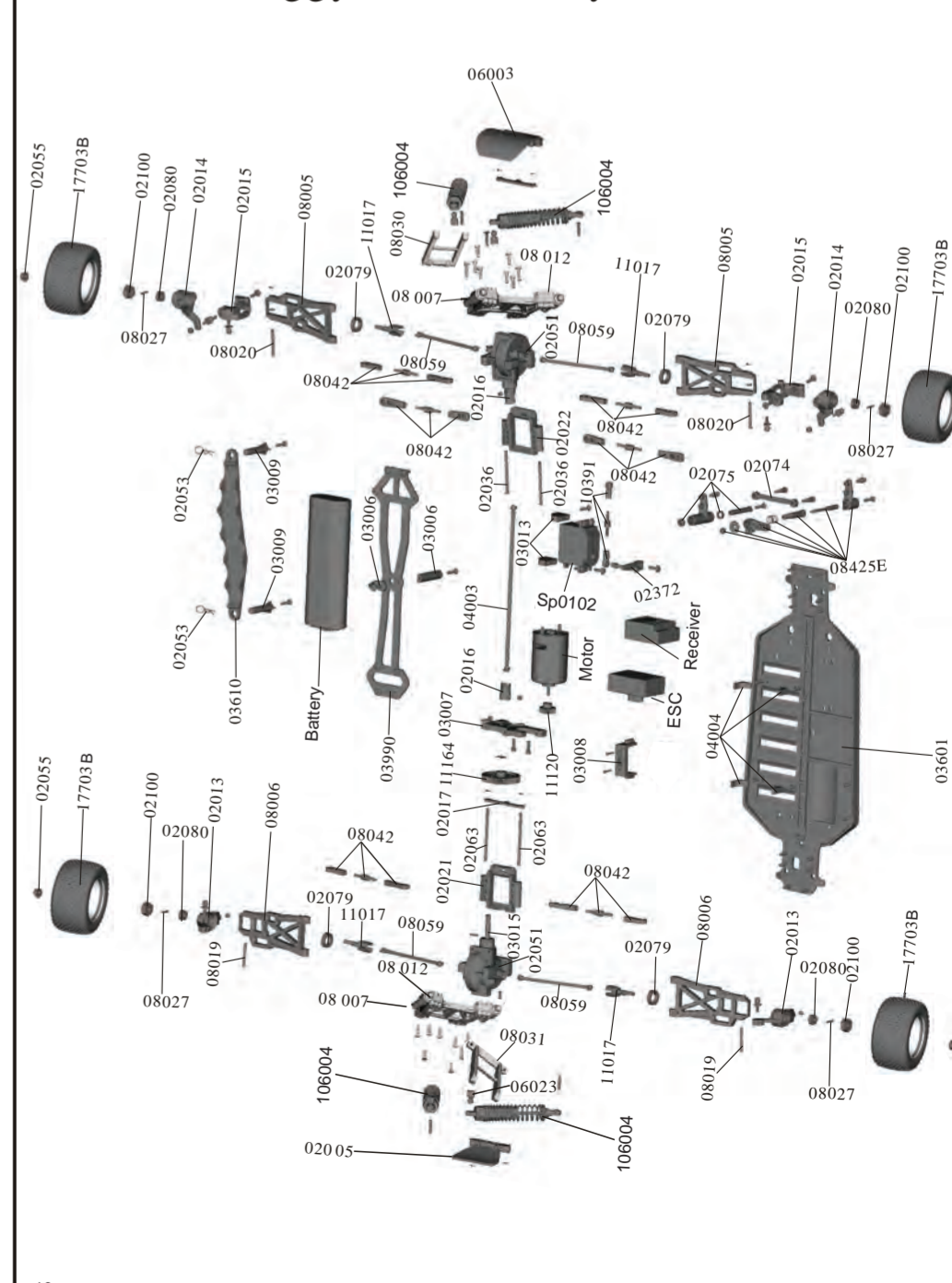
Off-Road Monster/Thunder/Beetly Full Assembly View

INSTRUCTION MANUAL

MAXAM XS3201 SPORT

WATER-PROOF

SPEED CONTROLLER

Basic Parameter

TYPE	ESC
ITEM NO.	XS3201 Sport
STANDARD	1:10 waterproof ESC
INPUT VOLTAGE （V）	6V-7.4V DC
BEC OUTPUT VOL（V）— CURRENT （A）	6V—1A

ESC SIZE	MAX LENGTH（mm）	46.51
	MAX HEIGHT（mm）	32.36
	MAX WIDTH（mm）	37.10

OUTPUT CURRENT	Continuous working current is **20A**, Instant maximum current is **320A**，back instantaneous electric current is **160A**
CORRESPONDING MOTOR	540—23T
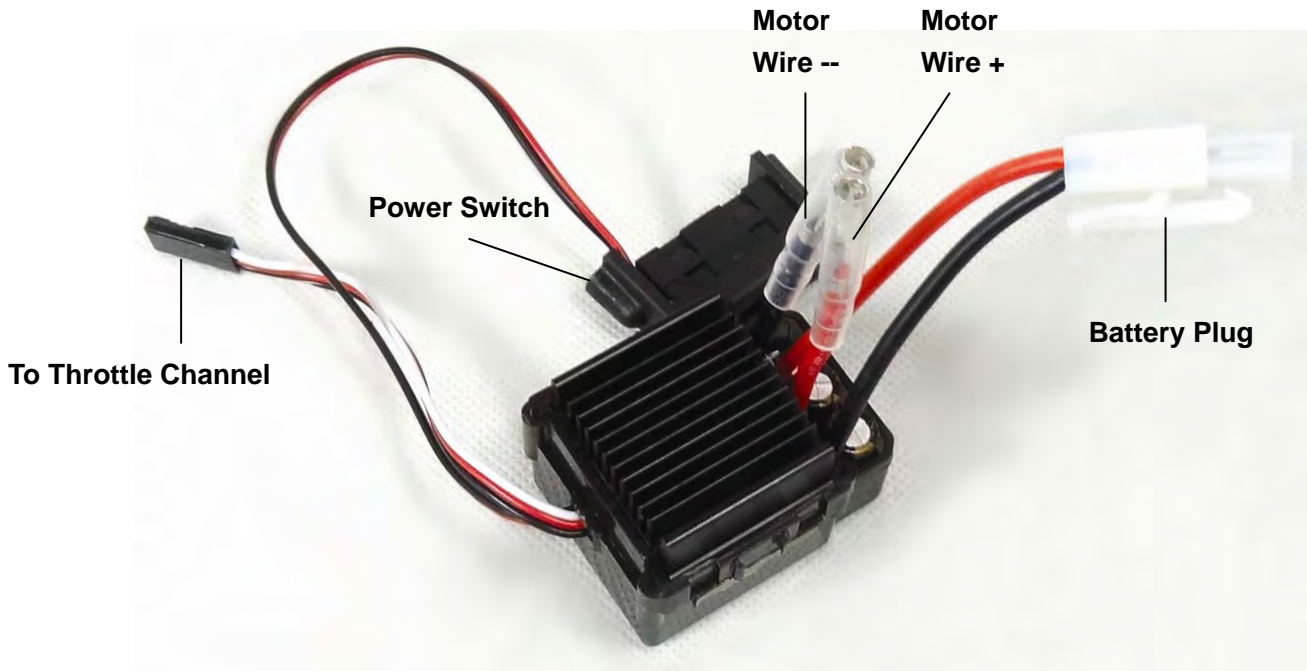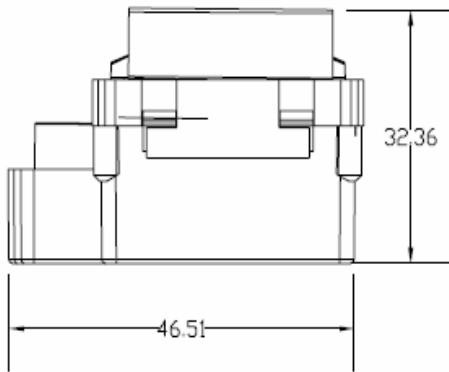
As picture showing，put lines connected，turn the OFF to ON of switch，red light shinning，you can hear sound from motor at the same time, it showed ESC has entered the work of the state.

For avoided get empyrosis, please don't touch , temperature of heat sink is very high when ESC working.

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