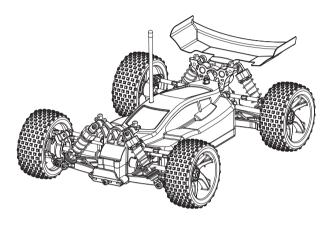
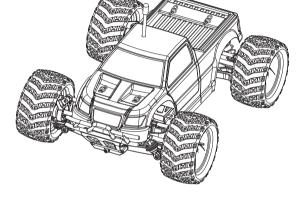
# 1/18TH SCALE ELECTRIC OFF-ROAD BUGGY/SHORT COURSE/ TRUGGY/MONSTER TRUCK DESERT BUGGY/ON ROAD CAR

BUGGY E18X8/E18X8L

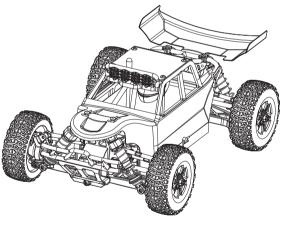


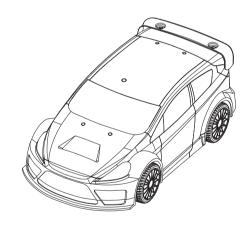




DESERT BUGGY E18D8/E18D8L

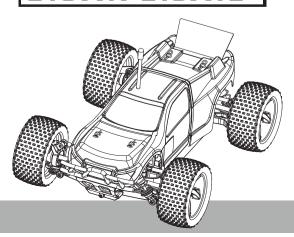
ON ROAD CAR E180R/E180RL

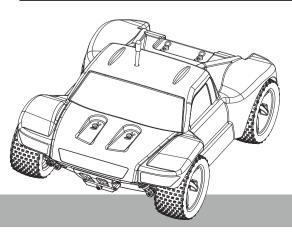




TRUGGY E18XT/E18XTL

SHORT COURSE E185C/E185CL



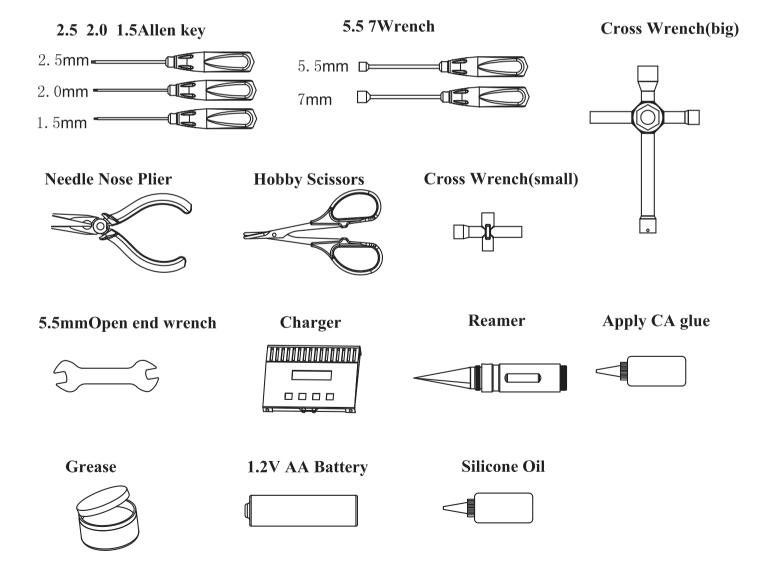


## Before You Start Assembling

Thank you for purchasing our Ready To Run 1/18 scale electric off-road vehicle. This manual contains the basic methods of operation, assembly details, and related accessories. Operators less than 14 years of age need to be supervised by an adult. Please read all information in this manual before operation to avoid any damage or danger.

All operating instructions should be read before the use of this product. It contains important information for future reference. In addition, because we constantly update our products, some small physical features may change. Check our website for any update on changes.

#### **Tools Needed**



## Safety Precautions

This is a high-quality radio control model. Pay attention at all times to insure careful operation. If care is not taken, loss of life and property may result. Children should not be allowed to operate in the absence of adult supervision. Operational errors, or the incorrect use of this product and important information included in this manual (which may result in the loss of life, severe injury or property damage), will be the responsibility of the owner.

——This model is controlled by radio signals, which may be subject to outside interference beyond the control of vehicles radio system.
Therefore, keep within a safe distance to avoid accidents and away from motor vehicles and people.
Do not place or run on wet grass or in puddles because electronic equipment (servers, receivers and power transfer) is not waterproof. If you want to run in these areas the electronics must be waterproofed.
Do not drive if battery power is low!
Do not drive in poor conditions or vehicle damage may occur.
Be careful to comply with the instructions and warnings of other equipment used (charger and battery, etc.).
Put chemicals, metals, and electronic equipment out of the reach of children.
Only careful and cautious use of remote control cars can protect life and property from harm.

#### Warranties

Ask retailers for replacement or return for manufacturing defective or missing parts. There is no warranty against wear and tear caused by incorrect operation or use of incorrect parts.

Retailers are to provide technical assistance free of charge for beginners.

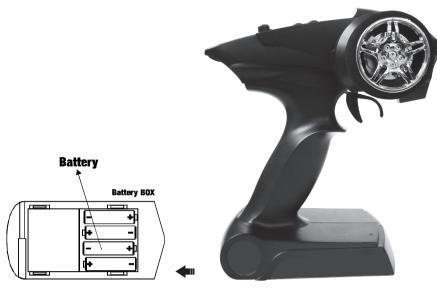
## **Operational Requirements**

First, make sure batteries are fully charged. Check all connections and settings.

Install 8AA batteries in the remote, ensure that the batteries have full power, pay attention to positive and negative polarity, and do not install in the wrong direction.

The remote control system has a variety of different functions and settings. Before initial use, ensure that all functions and settings have been fully understood.

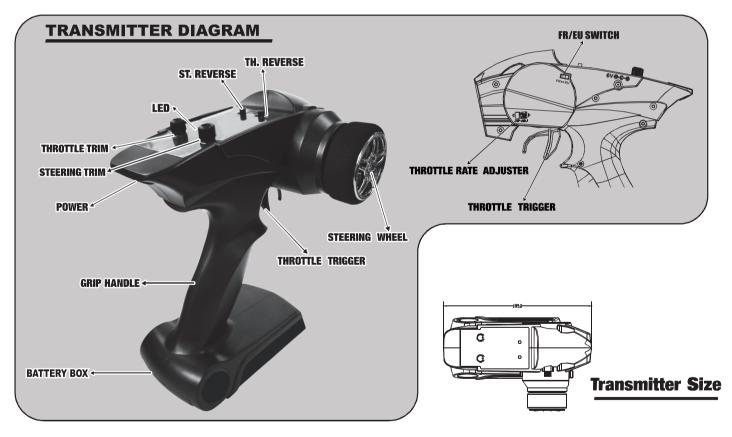
## PAGHZ RADIO SYSTEM HTX-243

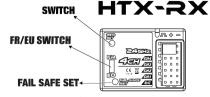


#### **Install the batteries**

- (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.

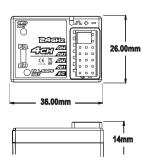


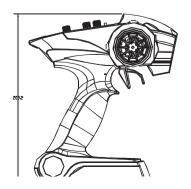


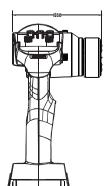
#### **Connectors**

- 1: Steering servo (CH1)
- 2: Throttle servo (CH2)
- 3: CH3 servo (CH3)
- 4: CH4 servo (CH4)
- B/C: Power connector

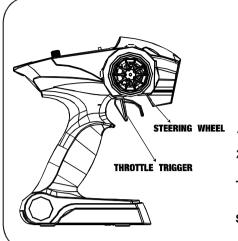
## **Receiver Size**



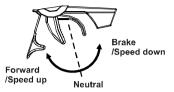




#### **Transmitter Adjustment**

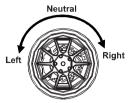


#### A. Throttle Trigger



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

#### B. Steering Wheel



Turn the steering wheel counterclockwise to turn left, turn the steering wheel clockwise to turn right.

Throttle Trim: Position the throttle trigger at the neutral position, adjust the throttle trim accordingly.

Steering Trim: If the front wheel does not align straight, use the steering trim to make adjustment.

## $\wedge$

Position the transmitter and receiver 40cm apart when operating.

#### **Low Battery Alarm**

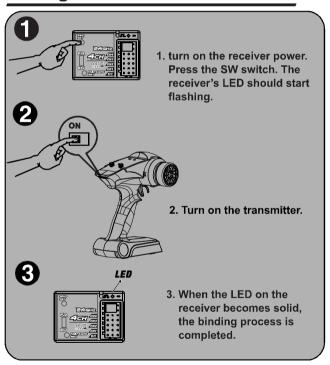
Do not operate the radio system when the battery power is low.

## **Fail Safe Function Setting**

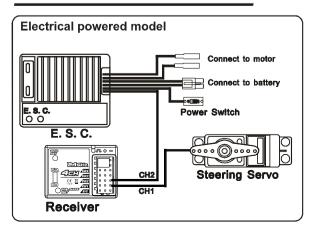
- 1. Set the TH, ST switches to the normal position.
- 2. Turn on the transmitter and receiver.
- 3. Press the F/S SET button, the LED on the receiver should start flashing rapidly.
- Put the throttle trigger at the brake position, press the F/S SET button, the LED should become solid.
- For electric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

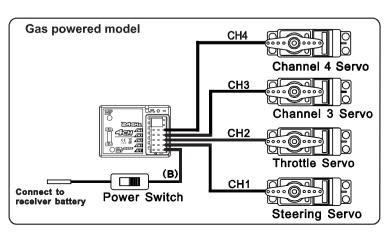
#### 2.4GHz

#### **Binding the transmitter and receiver**



#### **Receiver and servo connection**





## HTX-243RES

#### **Features**

2 in 1 Receiver/Esc Easy to operate

## **Specifications**

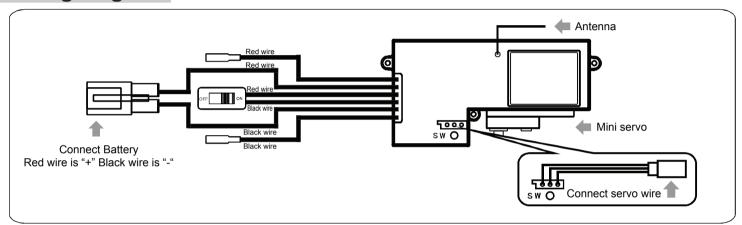
• Input voltage: 6V-8. 4V DC

BEC: 5V 1A

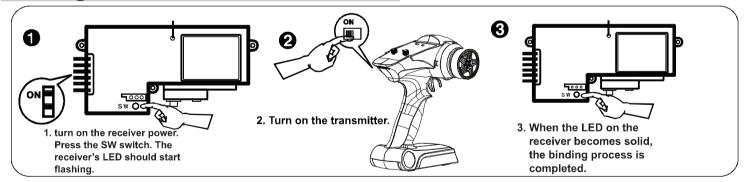
Output current : Continuously 20A, Instantly 150A

Size: L68.5mm \* W32.5mm \* H22mmMotor: High Power 370/20T motor

## **Wiring diagram**



## Binding the transmitter and receiver



## **Functional Description**

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

Throttle Trim: Position the throttle trigger at the neutral position, adjust the throttle trim accordingly.

Steering Trim: If the front wheel does not align straight, use the steering trim to make adjustment

## Throttle Trigger Brake /Speed down Forward /Speed up Neutral

#### Note

This product has a water resistance function

#### DIGITALE ROPORTIONAL SYSTEM

#### **BRUSHLESS VERSION ONLY**

## **EAGIZ**



#### **SYSTEM FEATURES**

Unique and functional pistol grip transmitter design Well balanced for precise control Non-slip foam steering wheel Well placed digital trim & D/R levers Optimum third channel switch location Low Battery warning Quick Binding and Fail Safe Setup High performance micro 3 channel receiver NiCd charger jack in transmitter Sound Beep

#### SYSTEM SPECIFICATIONS

<u>Transmitter</u> <u>Receiver</u>

Model: MT-300TX Model: MT-300RX

FHSS Output Power: <100mW Frequency: 2.4GHz FHSS
Operating Voltage: 4.2V~7V Operating Voltage: 3.6V~7V

Power Supply: 4 Cell Alkaline/Ni-Cd/Ni-MH Weight: 0.26 oz (7.4gr)

Weight: 13.9 oz (394 gr) with Alkalines Dimensions: 1.38 x 1 x 0.5 in (35.1 x 25.3 x 13 mm)

Frequency/Modulation Type: 2.4GHz FHSS Fail Safe: Yes (All Channels)

#### **FEATURES DESCRIPTIONS**

Receiver Antenna Wire: The antenna wire receives the transmitter signal. The antenna wire should be installed through a nylon tube (antenna tube) in the vertical position for the best reception.

**Auxiliary Channel 3 Switch:** Controls Auxiliary Channel 3 High and Low servo travel.

Battery Compartment: Houses the 4 'AA' Alkaline batteries that power the transmitter.

**Bind Button:** Used in the process of Binding the transmitter and receiver.

Bind LED: Displays the current status of the transmitter and receiver pair.

Steering Dual Rate (D/R): The Dual Rate Keys are used to adjust the Steering Dual Rate quickly and easily during use.

Grip: The Grip is molded in an ergonomic shape for increased comfort, control and feel.

Power Indicator: Indicates that there is Power to the transmitter.

Power Switch: Turns the transmitter ON and OFF.

**Steering Trim Lever** (CH1): Used to adjust the center Trim of the Steering servo.

Steering Wheel (CH1): Proportionally operates the model's right and left steering control. The Steering Wheel features a molded grip for increased comfort, control and feel.

Throttle Trigger(CH2): Controls the speed of the model, both forward and backward, or the model's brake.

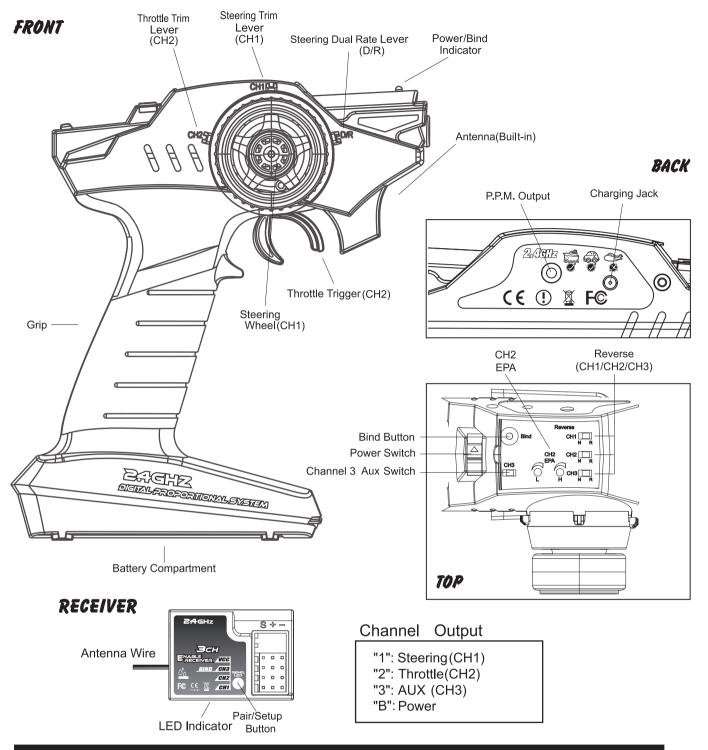
**Throttle Trim Lever (CH2):** Used to adjust the center Trim of the Throttle servo.

#### TRANSMITTER AND RECEIVER DIAGRAMS

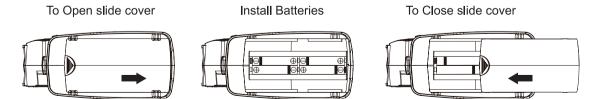
Use the diagram below to familiarize yourself with the different parts of your MT-300TX transmitter and MT-300RX receiver

Descriptions of these parts can be found in the transmitter and receiver layout.

The transmitter antenna is mounted internally and is located in the front portion of the transmitter. When you're driving your model, hold the transmitter so that it's orientated as close to vertical as possible at all times and try not to 'follow' your model with the transmitter. This provides the best RF signal between the transmitter and the receiver. Do NOT cover the front of the transmitter in any way during use! Doing so can block the RF signal, resulting in the loss of control of your model.



#### TRANSMITTER BATTERY INSTALLATION



- 1. Press down on the battery cover and slide in the direction of the arrow to remove.
- 2. Install 4 AA alkaline cells (or Ni-Cd, or Ni-MH) as indicated inside the battery compartment. Make sure to match the polarity (+ and -) as shown in the battery compartment or the transmitter will not function.
- 3. Install the battery cover in place and slide to close.

**WARNING:** Improper installation of transmitter batteries can cause serious damage to your system.

#### RECEIVER CONNECTIONS AND MOUNTING

Use the diagram below to familiarize yourself with how to connect the switch harness, servos (available separately), and the 4 cell battery holder to your **MT-300RX** 3-Channel receiver.

1) Install four fresh 'AA' Alkaline batteries into the battery holder, making sure that the polarity is correct. The direction that each battery should be installed is molded into the battery holder (+ Positive and - Negative).



The **MT-300RX** 3-Channel receiver's Nominal Input Voltage is **3.6v~**7v, therefore, the receiver can be powered using a 4 or 5 cell Ni-Cd or Ni-MH battery pack (available separately).

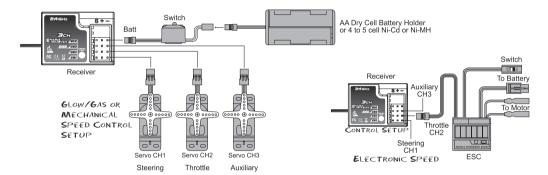
- We suggest Binding the transmitter and receiver and setting the Fail Safe position, prior to mounting the receiver in your model.
- The receiver should be mounted as far away from any electrical components as possible.
- Route the antenna wire up through a plastic tube so that it is in the vertical position.
- To protect the receiver from vibration and other damage, we recommend wrapping the receiver in shock absorbing foam rubber when installing it in your model.



Set your model on a stand so the wheels are off the ground before turning on your radio control system or connecting your motor for the first time.



The receiver does not feature BEC circuitry. If using an electronic speed control, verify that it features BEC circuitry to drop the receiver voltage between 3.6v~7v.

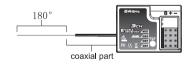


#### RECEIVER'S ANTENNA INSTALLATION

The wave length of the 2.4GHz is much shorter than that of the conventional frequencies, it is very susceptible to loss of signal which results in a receiving error.

To obtain the best results, please refer to the following instructions;

- 1. The antenna must be kept as straight as possible. Otherwise it will reduce the effective range.
- 2. The antenna should be perpendicular to the model. Larger models can have large metal objects that can attenuate the RF signal. In this case the antennas should be placed at sides of the model. Then the best RF signal condition is obtained at any attitude.
- 3. The antennas must be kept away from conductive materials, such as metal and carbon by at least a half inch. The coaxial part of the antennas does not need to follow these guidelines, but do not bend it in a small radius.
- 4. Keep the antennas away from the motor, ESC, and other noise sources as much as possible.
- \*The main purpose of the photo demonstrates how the antenna should be placed. For actual installation the receiver must be wrapped with a sponge or placed with floating material to protect it from vibration.



Antenna

Antenna Wire

Antenna Tube



The receiver contains precision electronic parts. It is the most delicate radio component on-board the model and should be protected from vibration, shock and temperature extremes. To protect the receiver, wrap it in R/C foam rubber or other vibration-absorbing material. If appropriate, waterproof the receiver by placing it in a plastic bag and closing the open end with a rubber band before wrapping it in foam. If moisture enters the receiver, intermittent operation or a failure may result. Wrapping the receiver in a plastic bag also protects it from fuel and exhaust residue which, in some models, can work its way into the model.

#### STEERING TRIM(CH1)

Steering neutral adjustments can be made by moving the steering trim lever to the left or right. When you install a servo, always check to be sure the servo is at its neutral position. Adjust the servo horn position and linkage so both are parallel. Be sure the steering trim on the transmitter is at the neutral position.

#### **Trim Operation And Maximum Travel**

Changing the trim can affect the overall settings. When adjustments are made with the trims, recheck your installation for maximum travel. (Steering D/R at 100%)

#### When Trim Usage Is Extreme

If it takes most of your trim movement to get a servo to the neutral position, reposition the servo horn on the servo and inspect your linkage installation.

## Steering Trim Lever L25 - 0 - R25 CH1

#### **THROTTLE TRIM(CH2)**

Throttle neutral adjustments can be made by moving the throttle trim lever to the up or down. When using an electronic speed control, set the throttle trim to neutral and make adjustment to the speed control. On a gas powered model, set the trim to neutral and adjust the linkage to the point where the carburetor is fully closed in accordance with the engine instruction manual.

#### **Trim Operation And Travel**

Trim adjustments will affect the overall servo travel. Check the brake side (backward) movement when changes are made.

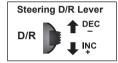
#### When Trim Movement Is Extreme

If you use most of the trim movement to get the servo to the neutral position, recenter the servo horn closer to the neutral position and inspect your throttle linkage.

## Throttle Trim Lever F25 0 CH2

#### STEERING DUAL RATES(D/R-CH1)

Use this function to adjust the steering travel of your model. If the model understeers while cornering, add steering by pressing the lower side of the D/R button. When the model oversteers, take away steering by pressing the upper side of the D/R button.



#### THROTTLE END POINT ADJUSTMENT(EPA-CH2)

This function is used to adjust the forward and brake side servo travel. Each direction can be adjusted independent of each other. Use this feature to set the throttle servo travel.

Be sure that your throttle linkage does not apply excessive force to the servo. If your linkage installation causes an unreasonable amount of force to be applied to the servo, the servo may be damaged and result in loss of control.

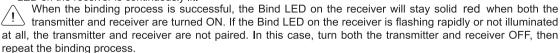


#### TRANSMITTER AND RECEIVER BINDING

The Binding function allows you to Bind the transmitter and receiver pair. When new, it is necessary to pair the transmitter and receiver to prevent interference from radio controllers operated by other users. This operation is referred to as 'binding'. Once the binding process is complete, the setting is remembered even when the transmitter and receiver are turned OFF. Therefore, this procedure usually only needs to be done once.

Before beginning the binding process, connect the switch harness, servos, and the receiver battery to your **MT-300RX** 3-Channel receiver, using the diagram on page 5. Make sure that both the transmitter and the receiver are turned OFF.

- 1) Turn the transmitter ON. The Power Indicator on the transmitter will illuminate solid red.
- Press and hold the receiver setup button, then turn the power switch on the ON position. The receiver LED will flash quickly. Release the setup button after 1 second.
- 3) Press and hold the binding button on the transmitter for 1 second until the LED on the receiver is continuously lit.



Under some circumstances, the receiver may not operate after turning the transmitter and receiver ON. If this occurs, perform the binding process again.

Please note the setup must based on pair procedure well.

- 1. Turn the power switch on the transmitter & receiver to the ON position, the LED on transmitter & receiver are continuously lit.
- 2. Move the steering wheel or throttle trigger to the position where you want the servo to move, press and hold the receiver setup button for 2 second until the red LED on the receiver flash slowly, then press and hold the receiver setup button again within 5 seconds (Note: after 5 seconds F/S setup will reset, you have to start over at step one above) until the receiver LED is continuously lit, that's mean the F/S function has been correctly set.
- 3. Verify if the failsafe function has been correctly set. Turn off the transmitter, then check if the servos moves to the position that you set.
- 4. Any new binding (pair procedure) will clear the preset Fail-Safe.



#### **BRUSHLESS VERSION ONLY**

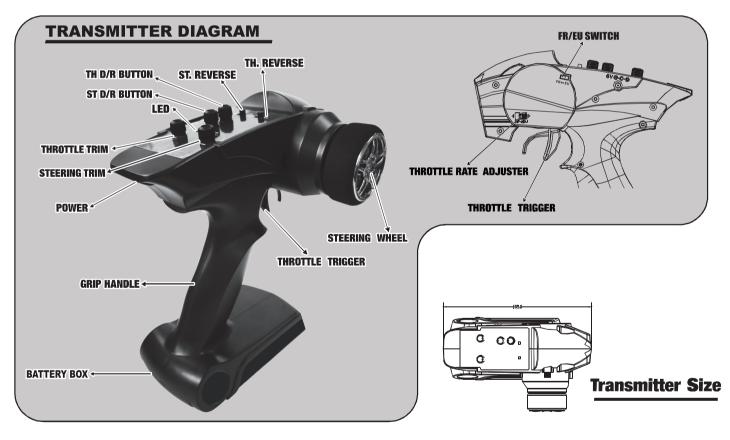
ZAGHZ RADIO SYSTEM

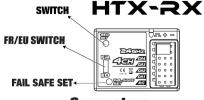


#### **Install the batteries**

- (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.

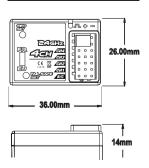


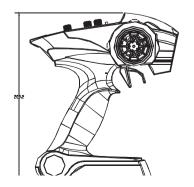


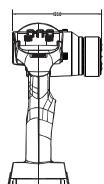
#### **Connectors**

- 1: Steering servo (CH1)
- 2: Throttle servo (CH2)
- 3: CH3 servo (CH3)
- 4: CH4 servo (CH4)
- **B/C: Power connector**

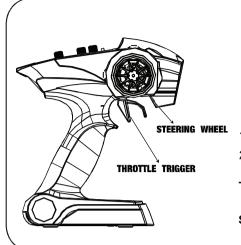
## **Receiver Size**



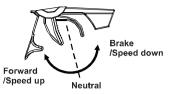




#### **Transmitter Adjustment**

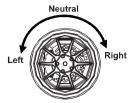


#### A. Throttle Trigger



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

#### B. Steering Wheel



Turn the steering wheel counterclockwise to turn left, turn the steering wheel clockwise to turn right.

Throttle Trim: Position the throttle trigger at the neutral position, adjust the throttle trim accordingly.

Steering Trim: If the front wheel does not align straight, use the steering trim to make adjustment.

## $\bigwedge$

Position the transmitter and receiver 40cm apart when operating.

#### **Low Battery Alarm**

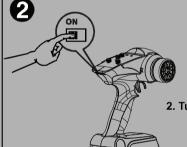
Do not operate the radio system when the battery power is low.

## 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.
- For electric model, put the throttle trigger at the stop position when you are making the setting.

#### 2.4GHz



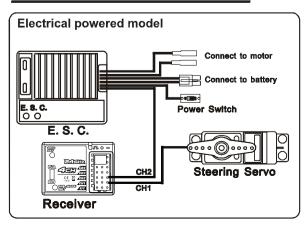


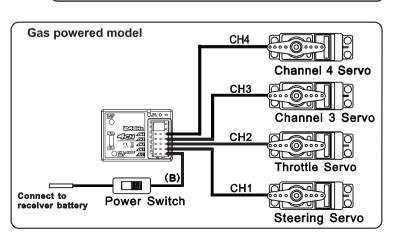
flashing.

2. Turn on the transmitter.

3. When the LED on the receiver becomes solid, the binding process is completed.

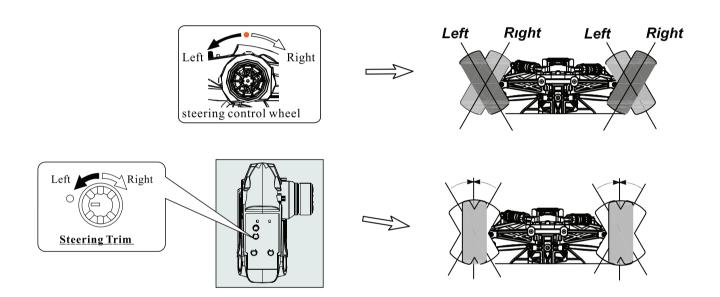
## **Receiver and servo connection**





## **Operation Check List**

- 1. Install fresh, new batteries into the transmitter and vehicle. Verify all the control functions are working properly.
- 2. Verify steering is set to the neutral position, the front wheels of the vehicle should point straight forward when the steering wheel on the transmitter is centered.
- 3. The ESC on the vehicle is pre-configured at the factory. When you turn on the transmitter and vehicle, you should hear a beep in 1-2 seconds and the indicator light should be lit.
- 4. With the battery fully changed, the run time for the vehicle is around 7 to 15 minutes depends on the condition of the running environment. Please stop operation when the battery show sign of low power.



## **Common Troubleshooting**

Problem: Motor is not working

Causes: A broken motor coil, battery capacity is inadequate or not charged, remote control not turned

on or esc switch not turned on.

Solution: Replace motor, change batteries, turn switches on

**Problem: Poor motor performance** 

Causes: Battery power is low, ESC (Electric speed control) is not adjusted properly, drive train loosened. Solution: Replace or recharge the battery. When you first turn on the car, don't touch throttle trigger until all noise stop. Check that the gear mesh is not too tight or loose.

Problem: Difficult to steer the car

Causes: Transmitter or receiver battery are low, steering servo trim not set correctly

Solution: Replace or recharge the battery; when car is not moving, manually set steering trim so that

the wheels are pointed forward.

#### Service and Maintenance

In order not to void car warranty, always keep your buggy clean. In areas of high dust and dirt, be sure to blow off dirt and dust with a compressor, soft bristle brush, or toothbrush.

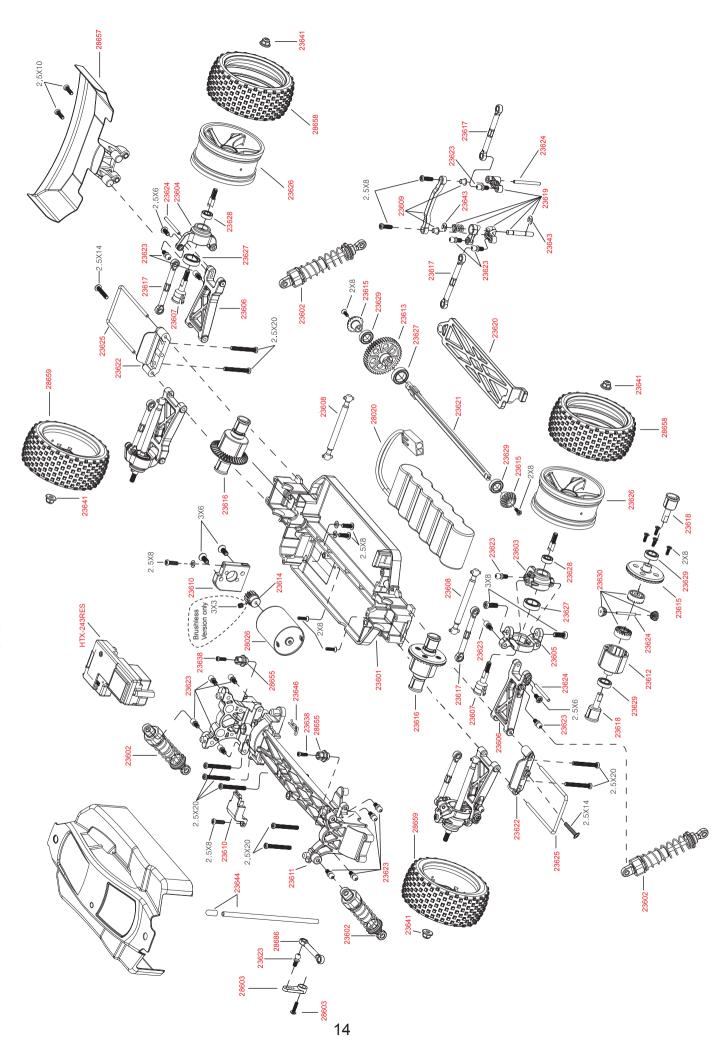
Always check car for loose or broken parts and replace before and after running.

Regularly check screws to make sure that they are tight.

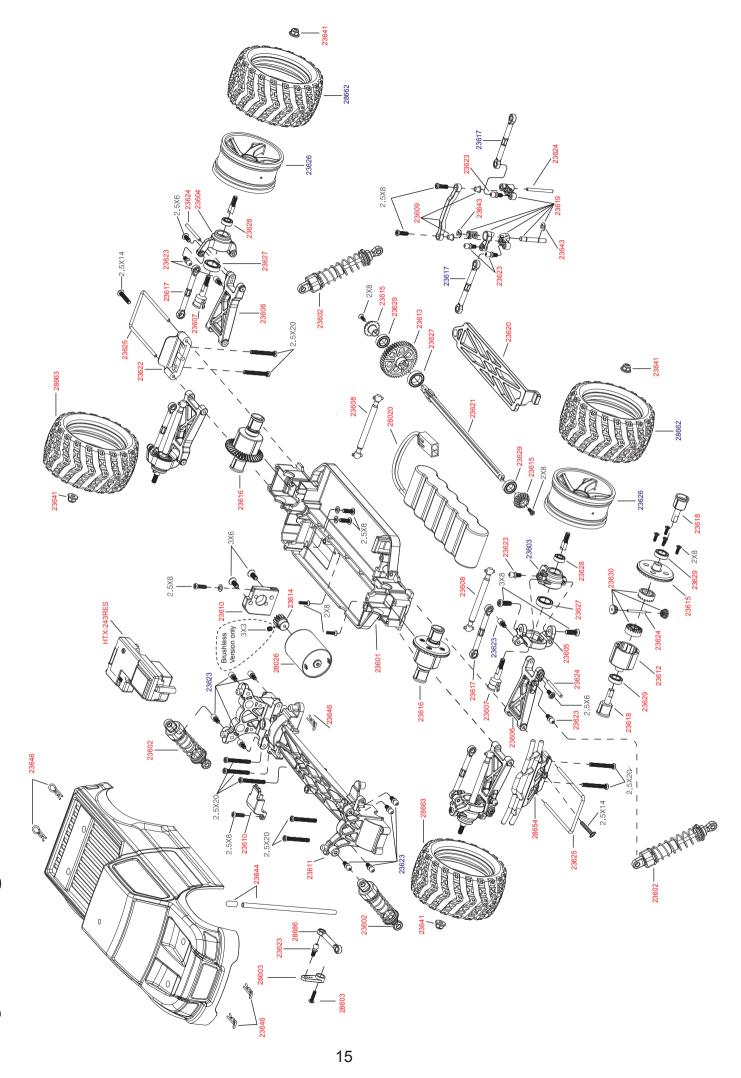
Replacement parts are available at many local retailers or online stores. Feel free to contact retailers for help in replacing parts.

#### **SPECIFICATIONS**

Model	Code	Length	Width	Height	Wheel Dia.	Wheel Width	Weight
BUGGY	E18XB/ E18XBL	225mm	180mm	72mm	61.5mm	26mm	516g
MONSTER TRUCK	E18MT/ E18MTL	240mm	190mm	96mm	68mm	35mm	575g
TRUGGY	E18XT/ E18XTL	255mm	187mm	88mm	66mm	33mm	552g
SHORT COURSE	E18SC/ E18SCL	258mm	182mm	100mm	61.5mm	26mm	550g
DESERT BUGGY	E18DB/ E18DBL	225mm	180mm	75mm	61.5mm	26mm	516g
ON ROAD CAR	E18OR/ E18ORL	310mm	143mm	108mm	54mm	22mm	602g



**Explode Diagram of the Truck** 

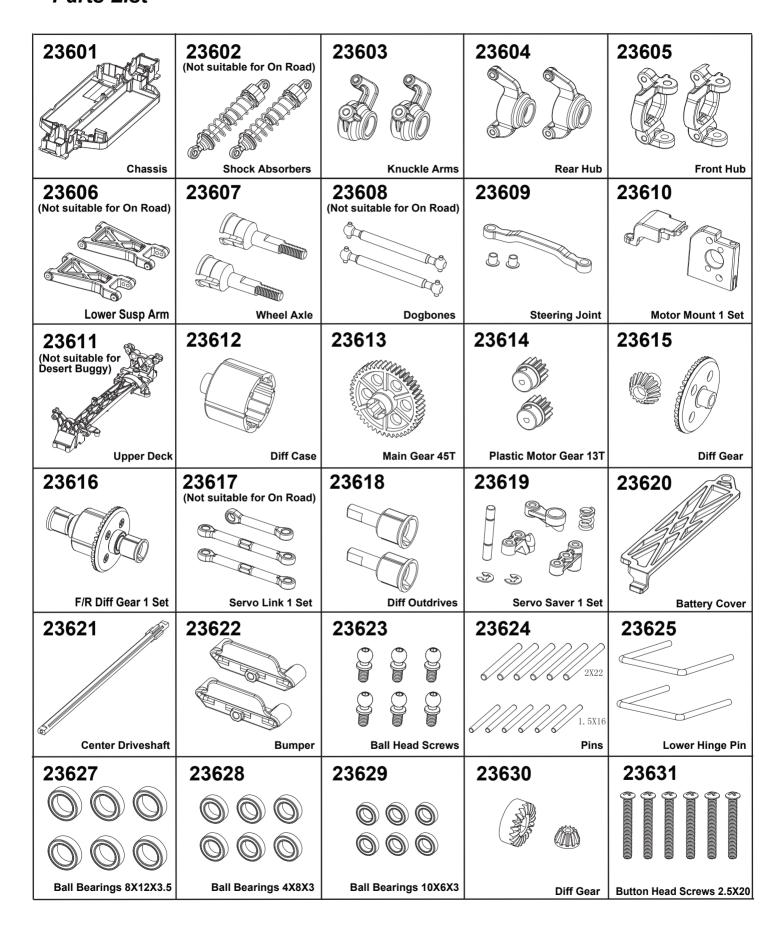


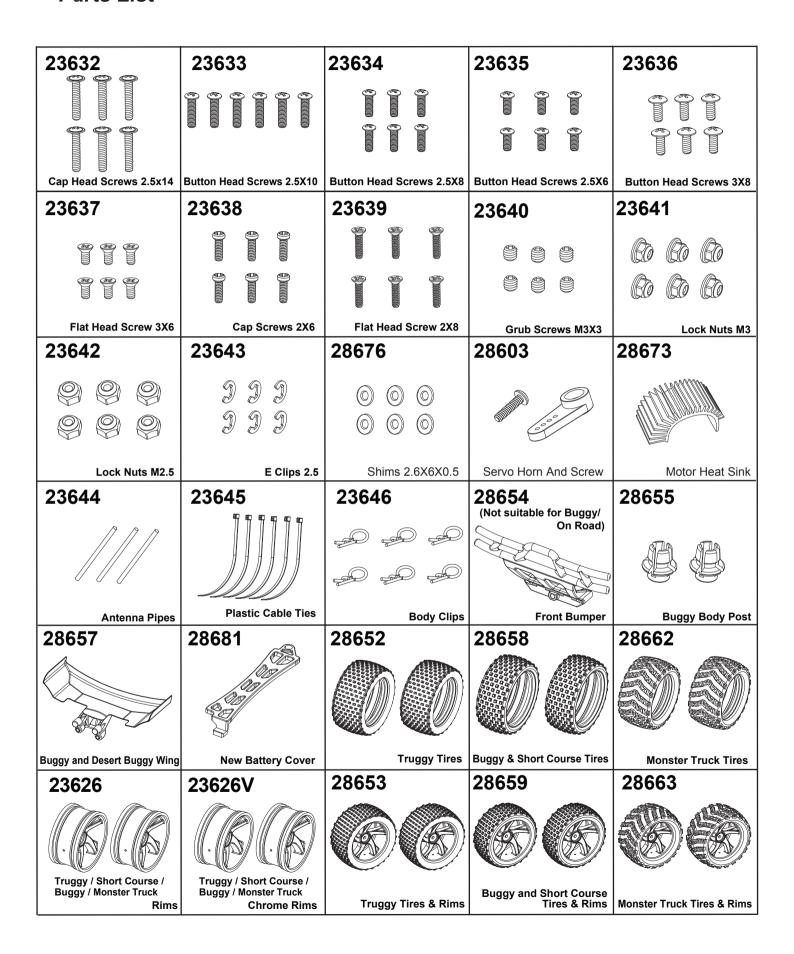
**Explode Diagram of the Truggy** 

**Explode Diagram of the Short Course** 17

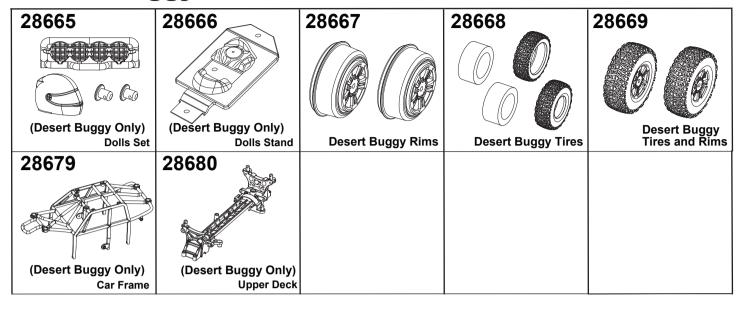
19

**Explode Diagram of the On Road Car** 

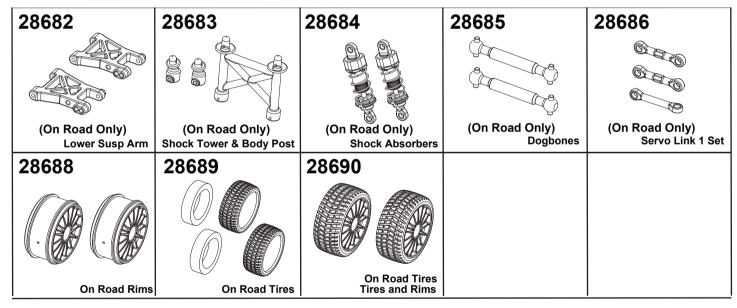




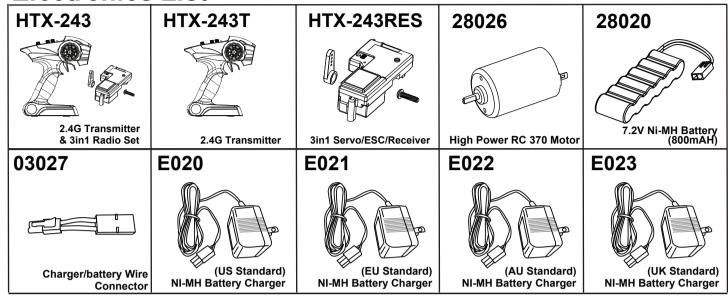
## **Desert Buggy**



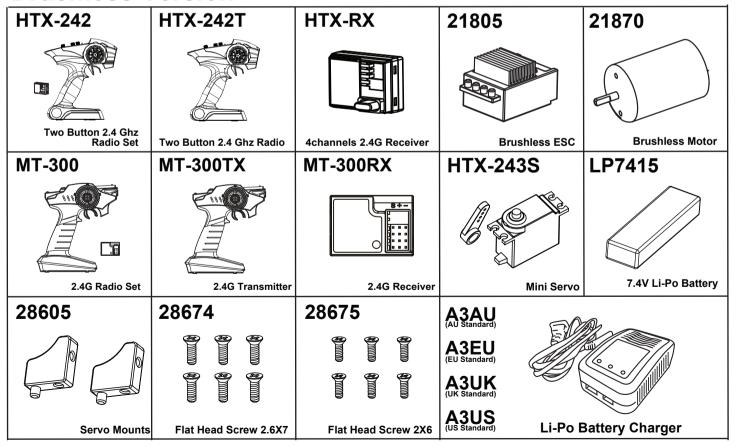
## **On Road**



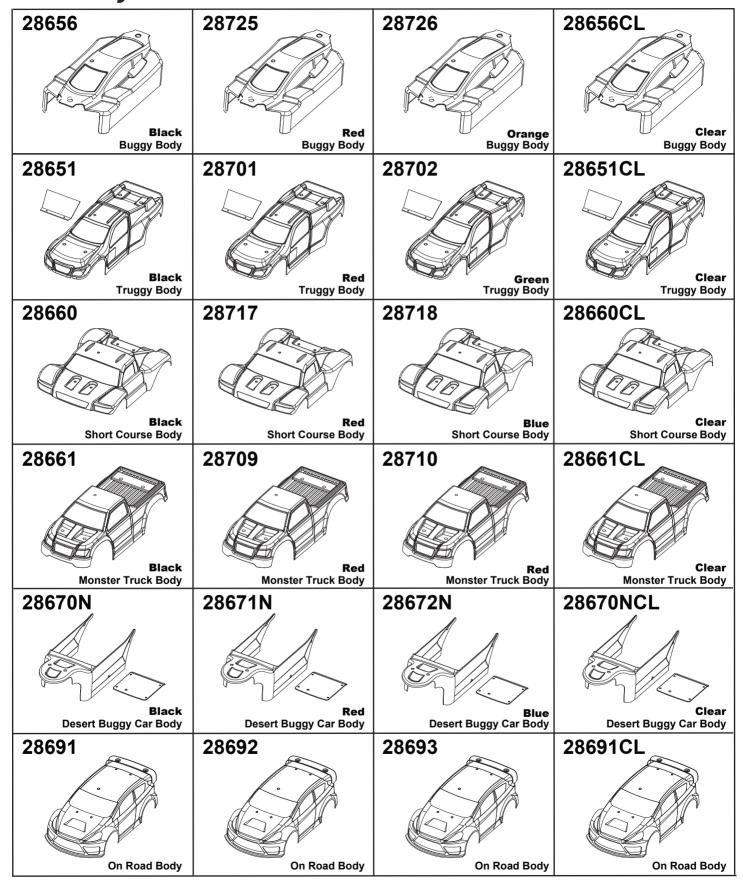
## **Electronics List**



## **Brushless Version**



## Car Body



## **Optional Parts List**

