

# BSD-RACING

## *1/8 4WD ELECTRIC-POWERED WATERPROOF BUGGY BS221T / BS221R*

### *FEATURES:*

*Length: 495mm*

*Width: 305mm*

*Height: 190mm*

*BS221T*

*ESC: 40A ESC*

*Motor: RC 550*

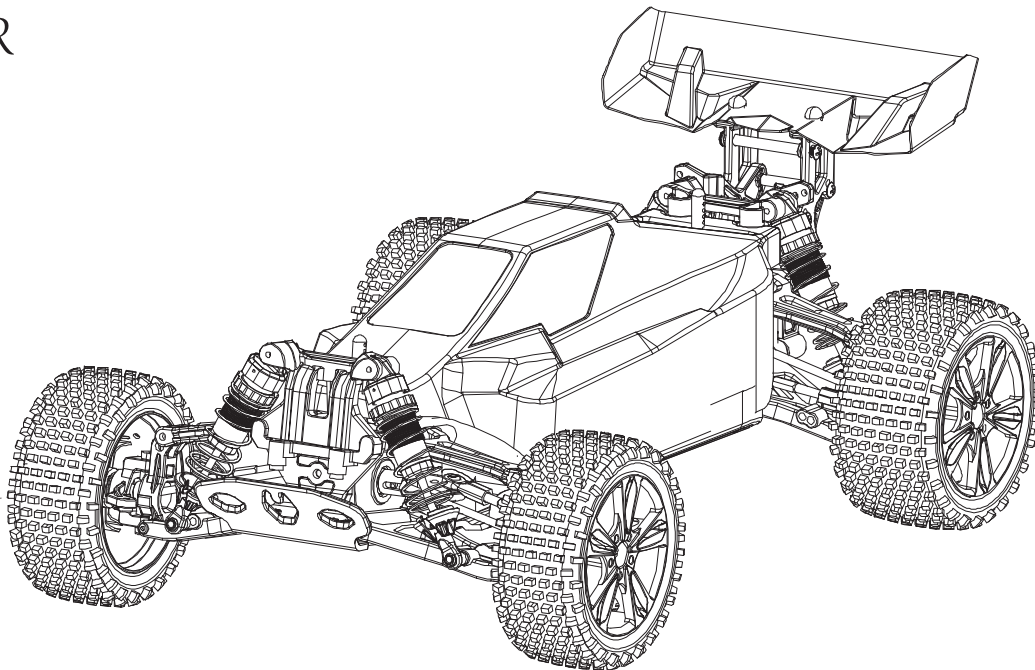
*Battery: 1800mAh NI-MH*

*BS221R*

*ESC: 45A ESC*

*Motor: RC 540 KV3421*

*Battery: 3200mAh Li-po*



## Instruction Manual

## *1/8 4WD ELECTRIC-POWERED WATERPROOF TRUCK BS222T / BS222R*

### *FEATURES:*

*Length: 488mm*

*Width: 295mm*

*Height: 185mm*

*BS222T*

*ESC: 40A ESC*

*Motor: RC 550*

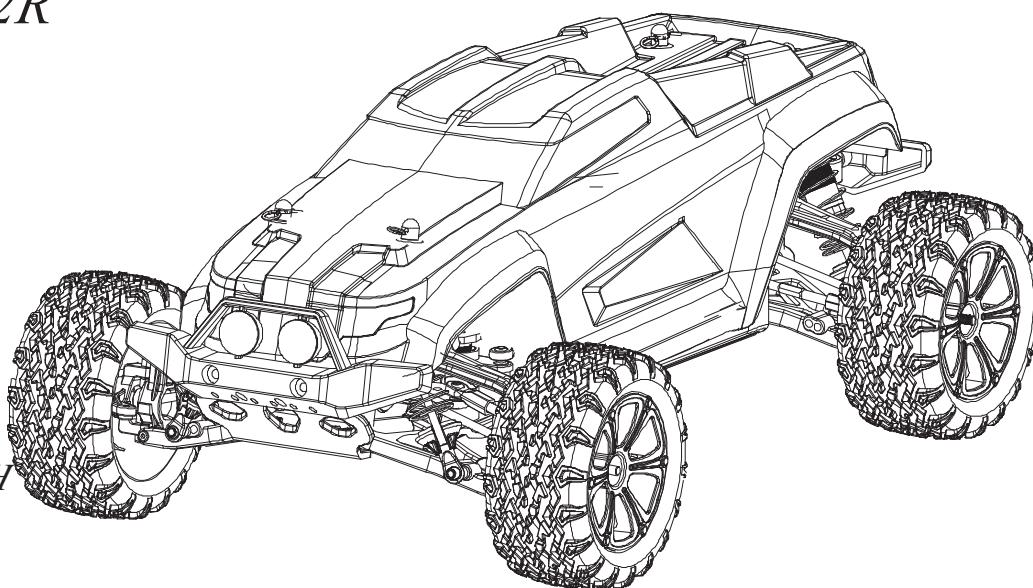
*Battery: 1800mAh NI-MH*

*BS222R*

*ESC: 45A ESC*

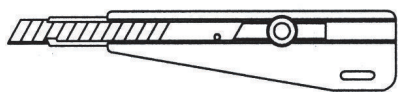
*Motor: RC 540 KV3421*

*Battery: 3200mAh Li-po*



# Required equipment for operation

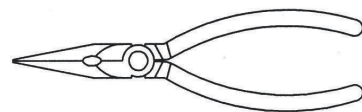
## 1. Tools required for building and maintenance:



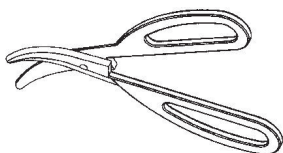
● Hobby knife



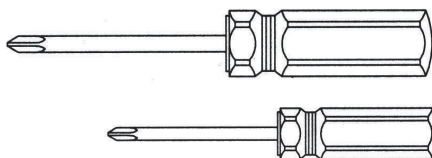
● Precision ruler



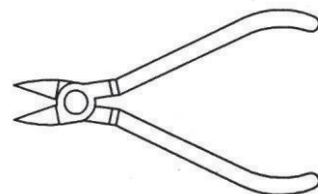
● Needle nose pliers



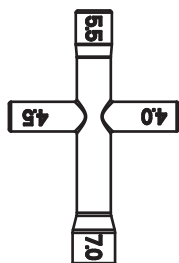
● Lexan scissors



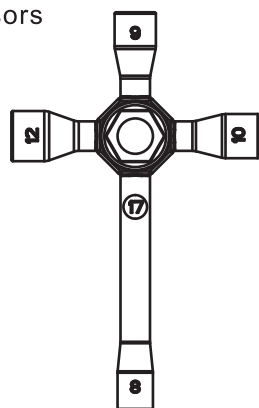
● Flat and Philips screwdriver



● Wire cutters



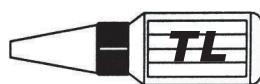
● Cross wrench



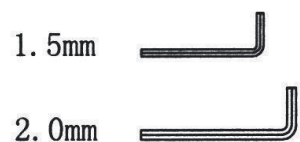
● Cross wrench



● CA glue & rubber cement



● Thread locking compound



1.5mm



2.0mm



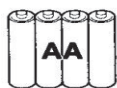
2.5mm

● Hex wrench

## WARNING!

Do not use a power screw driver to install screws into nylon or plastic materials. The fast locking may heat up the screws being installed that may break the molded parts or strip the threads during installation.

## 2. Additional items needed for operation:



4 pcs AA alkaline batteries for transmitter

## IMPORTANT!

Check all the screws are tight before playing the vehicle!  
Use thread lock on all screws that work loose.

# Please read the instruction carefully before starting the assembly.

1. Please assemble and install this car without children's reach. As it includes small and sharp parts.
2. Do not run the car on public streets or highways. As it might cause serious accidents, personal injuries and property damage etc.
3. During the middle of racing and after operation, the engine and exhaust will become HOT. Therefore please do not touch them before cooling down.
4. Please make sure everyone is using different frequencies while racing the car in the same area.

## 2.4GHz radio instructions

### Special symbols

Please pay attention to the following symbols, and read them carefully.



**Danger:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger.



**Warning:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger.



**Attention:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger. but generally it will not cause serious injuries to the operator.

### Safety guidelines

Don't drive the truck at night, bad weather such as rainy or thundering days. It will interfere the transmitter signal. Thereby it will cause out of control and unexpected accident.

Before you drive, please make sure the movement of servo corresponds with the direction of joysticks. If inconsistent, please adjust before drive.

You need to turn the throttle channel(ch2) and inching switch to the lowest before use. Then switch on the transmitter power, finally connect the receiver.

The sequence to shutdown is to turn off the receiver power first, and then the transmitter power.

If the above operations are reversed, it might lead to out of control and cause accident.

### Battery charging



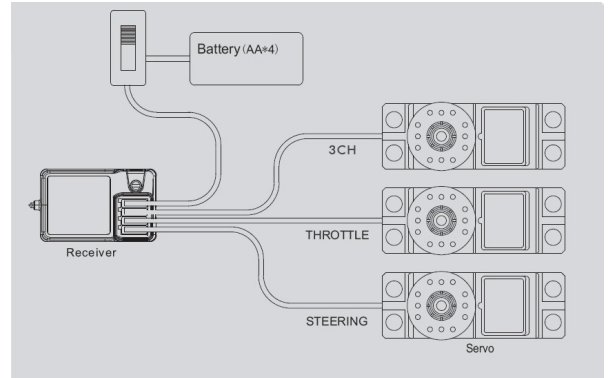
If your transmitter, receiver use a nickel-cadmium, nickel-metal hydride rechargeable battery, you have to check it before use. If lack of electricity, it could cause inadequate control or out of control, resulting in accident. So please charge it immediately when the battery power is low.

# TRANSMITTER SPECIFICATIONS

TR TYPE: MADGEAR-TRV1  
Channel: 3CH  
Frequency: 2.4GHz  
Use DC: (4.0V-8.6V); ≤110mA  
N.W.: 320g

RX TYPE: MADGEAR-RXV1  
Channel: 3CH  
Frequency: 2.4GHz  
DC: (4.0V-8.6V); ≤20mA  
N.W.: 8g

R/F Power: <20dBm; Sensitivity: 1024  
Modulation: 2-FSK; Frequency Signal: FHSS  
Specifications: One Set(200\*165\*105mm)



## NOTE:

1. Install the batteries in correct polarity.
2. Using 4\*AA batteries.

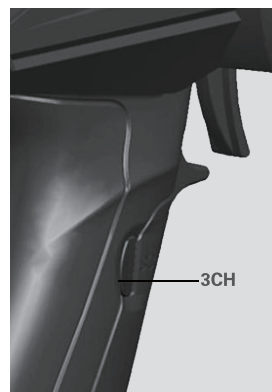
## BINDING PROCESS:

1. Turn on the transmitter, press and hold the CH3 button, the LED on the transmitter should flash in blue color, beeper should sounds B-B-B. Release the CH3 button. The transmitter is ready for the binding process.
2. Connect power to the receiver, the receiver LED should flash slowly in green color.
3. Place the receiver near the transmitter and press and hold the BIND button on the receiver until the receiver LED flashes rapidly for several times then flash slowly again. This indicates the binding process is completed successfully. Release the BIND button.
4. Turn off and turn on the transmitter, the receiver's LED should stay solid in green color. This indicates the transmitter and receiver are bonded.

## SERVO DIRECTION:

Reverse the throttle servo direction by pressing the TH R/N button for 2 seconds until the beeper beeps once.

Reverse the steering servo direction by pressing the ST R/N button for 2 seconds until the beeper beeps once.

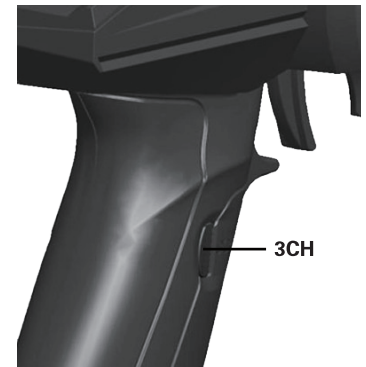


## AUX CHANNEL(3CH)

Press the CH3 button once, servo turns 90 degrees, press again, servo turns back 90 degrees.

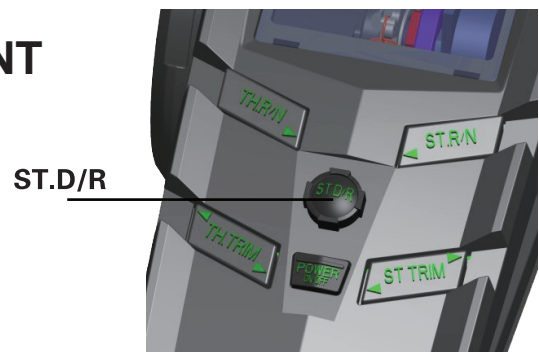
### NOTE:

During the binding process, the CH3 button functions as a bind button and does not provide channel 3 functionality.



## STEERING DUAL RATES ADJUSTMENT (ST.D/R)

Adjust the dual rate for steering by turning the ST D/R knob.



## FAIL SAFE SETUP(S/F)

The fail safe function set the throttle to the lowest position automatically when the radio signal is weak or lost.

1. Receiver should memorize the setting once it is setup.
2. For electrical powered model, the F/S functions is setup by default.
3. For gas powered model, put the throttle trigger at the brake position, press and hold the F/S button on the receiver until the LED flashes rapidly in green color for several times, then turns solid. release the F/S button. the F/S setup is completed.
4. Redo the F/S setup after each binding process.

Caution: Verify the F/S setup before operation.

## TH.TRIM AND ST.TRIM ADJUSTMENT

Adjust the throttle trim with the TH TRIM button, adjust the steering trim with the ST TRIM button.

Caution: after each binding process, need to manually adjust the TH TRIM to the lowest position.

