MAVERICK

RM MTX-702 Manual

Thank you for selecting this Maverick RC product!

HAVE FUN! But please read this first !!

We know you will have great fun with your model, but to get the best from your purchase please read this information BEFORE you operate the model.

Additional Information

If your transmitter was bundled with a car, then information on the car operation can be found in the relevant manual.

QS *Quick Start Guide* + www

TG *Technical Guide* + www

SG *Startup Guide* www

RM *This Guide* www

i EM 1-1 *NOTE - This refers to the relevant guide (as above) and the relevant section. In this example, Section 1-1 of the ESC Manual.*

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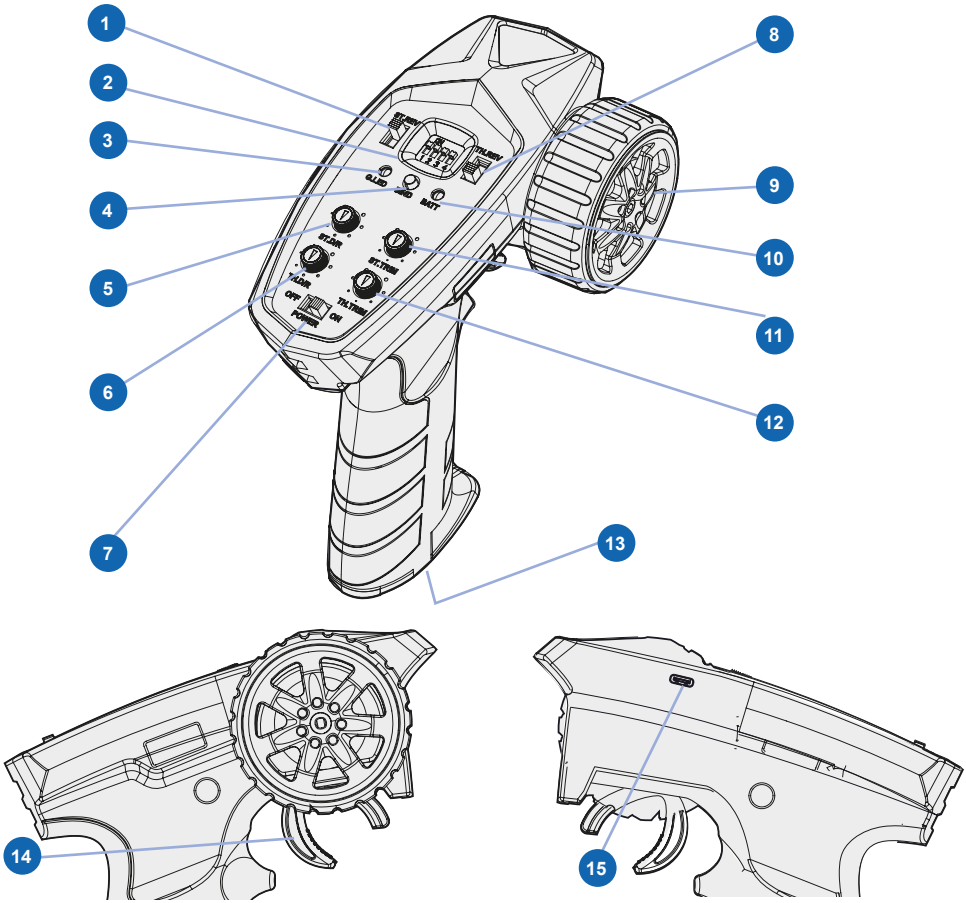
En Vol 1. 150846-006

1 OVERVIEW

1-1 *Transmitter Controls*



1. Steering Reverse
2. 4-bit DIP Switch
3. Status Indicator
4. BIND Button
5. Steering Dual Rate
6. Throttle Dual Rate
7. Power on/ off
8. Throttle Reverse
9. Steering Wheel (CH1)
10. Battery/Power Indicator
11. Steering Trim
12. Throttle Trim
13. Battery Compartment
14. Throttle Trigger
15. USB port

1-2 Transmitter Operation

1-2-1 Reverse Switches

This function reverses the motion direction of steering channel and throttle channel.

1-2-2 DIP Switches

4-1

The DIP Switches allow for the setting of three parameters can be set for the ESC, which are “Running Mode”, “Battery Type” and “Drag Brake”.

1-2-3 Status Indicator (G.LED: The green status indicator)

The battery power indicator for the Transmitter

1. Solid Green - Battery Power High

2. Solid Yellow - Battery Power Medium

3. Solid Red - Battery Power Low

4. Flashing Red - Battery Power very low

5. Rapid Flashing Green - Binding Mode

6. Slow Flashing Green - Idle mode

1-2-4 BIND Button

3-1

Used during the binding process

1-2-5 Dual Rate

2-4
2-6

Dual rate knobs allow for adjustment of the sensitivity of the steering and throttle channels.

1-2-6 BATT Indicator

The battery power indicator for the 2-in-1 receiver

1. Solid Green - Battery Power High

2. Solid Yellow - Battery Power Medium

3. Solid Red - Battery Power Low

4. Flashing Red - Battery Power very low

5. Slow flashing Green - Transmitter calibration mode

Note: In three seconds after the power-on of the transmitter, the BATT LED indicates the transmitter battery power status. When the transmitter is powered on for 3 seconds, the receiver battery power status is indicated.

When the transmitter does not receive the return message, the BATT LED will be off.

When the receiver is de-bound, the BATT LED will maintain in the state when the receiver is de-binding.

1-2-7 Trim Knobs

2-4
2-6

The trim knobs allow for adjustments to the steering and throttle channels.

1-2-8 Idle Alarm

The transmitter will go into idle alarm state when there is no operation over 10 minutes.

In this mode, BATT indicator will be in gradual light state.

Operate any of transmitter controls to exit the idle alarm state.

1-2-9 Sleep Mode

When the transmitter has been in idle alarm state over 2 minutes, it will enter the sleep mode.

In this mode, the BATT indicator will be in gradual light state, G.LED turns off, and RF is disabled.

To exit the sleep mode, power off the transmitter and restart it.

1-2-10 Low Voltage Alarm

When the system detects a low voltage, it will give an alarm.

Avoid accidents caused by long-term operation under low voltage.

When the voltage is detected below4.4V(AAA battery), there is an alarm due to low voltage.

At this time, the G.LED will flash slowly.

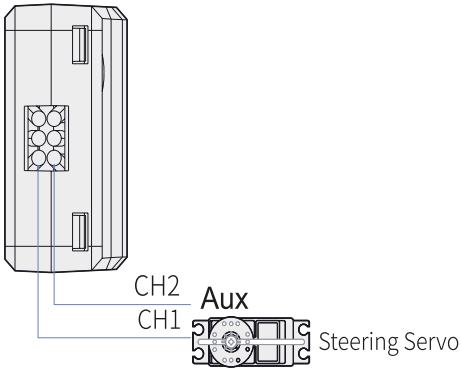
When the voltage is detected below 3.5V (ultra-low), the transmitting function is disabled. The G.LED will flash slowly.

1-3 *ESC Operation*

Make sure that the receiver is mounted in an appropriate location within the model, to ensure a stable signal, maximum range and to mitigate external interference, follow these guidelines:

Pay attention to the following when installing the receiver:

1. Make sure the receiver is not installed near motors or sources of electrical noise.
2. Keep the receiver's antenna away from conductive materials such as carbon or metal. To ensure normal function, make sure there is a gap of at least 1cm between the antenna and the conductive material.



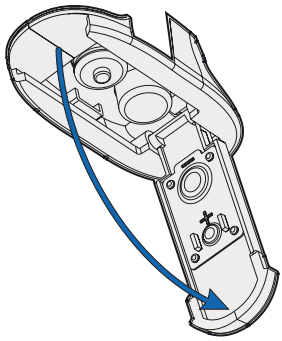
Caution **To prevent damage do not power on the receiver during installation.**

Channel	Assigned Control	Function
CH1	Steering wheel	Steering, to make the model car to turn right or left. Turn the steering wheel in clockwise or counterclockwise direction to control the left/right steering.
CH2	Throttle Trigger	Throttle, to control the model car to move forward, reverse or brake. Push or pull the throttle trigger to control the model car forward, brake or backward.
CH2 (AUX)	Throttle Trigger	CH2 (AUX) can be used to control external ESC or servo. When CH2 (AUX) is connected, the internal 2in1 ESC function is disabled and the unit acts as a standalone Receiver.

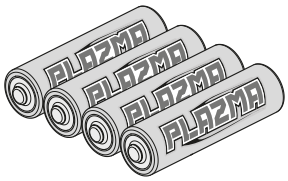
2 GETTING STARTED

2-1 Transmitter Battery Installation

1 *Open battery cover at the bottom of transmitter.*

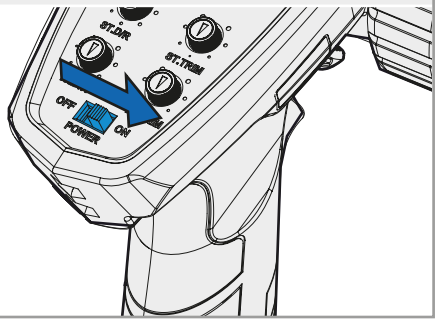


2 *Insert 4 fully-charged AAA batteries into the compartment checking the polarity.*

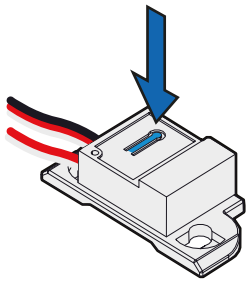


2-2 Switching on

1 *Switch on transmitter first*



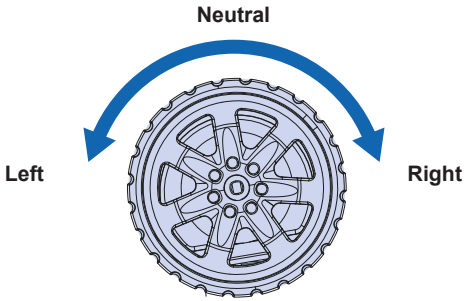
2 *Then switch on power on Car/Receiver/ESC*



Caution The USB Charger requires a USB Adaptor with an output of at least 2A

Caution Do not use NiCd/NiMH battery chargers for LiPo batteries. If you do not use a special charger for LiPo batteries, they will be damaged.

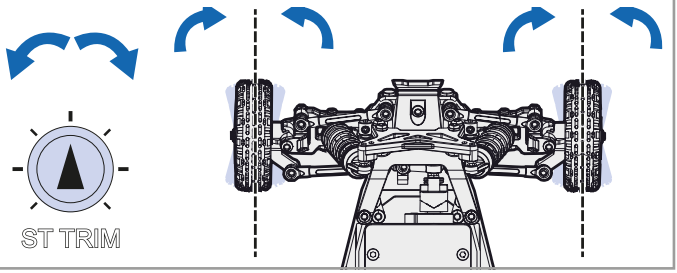
2-3 Steering



2-4 Steering Adjustments

2-4-1 Steering Trim Setup

Steering Trim: Trim adjustment allows you to finely tune the inputs from your transmitter. It's the dial you reach for when your RC car isn't tracking straight. The steering trim is what helps navigate the RC car in a straight line.

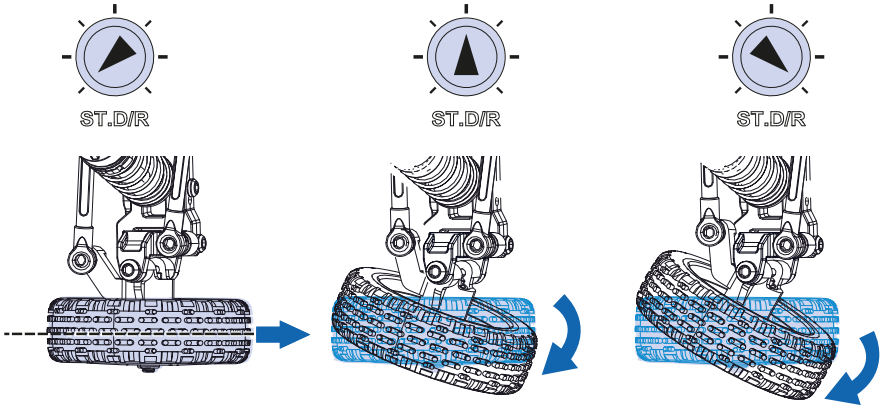


2-4-2 Steering Dual Rate Setup

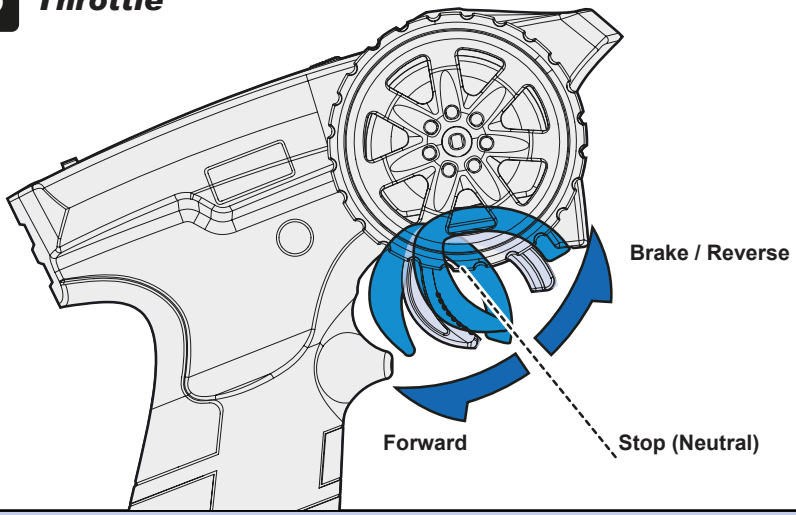
Steering Dual Rate: Steering Dual Rate knob can be set to control the steering throw: (l)Turning the knob clockwise to increase the steering throw.

Turning the knob anticlockwise to reduce the steering throw.

The steering rudder amount is recommended to be controlled within 75% to avoid excessive steering resulting in friction between the front wheel and the car shell, and the appropriate steering range can better maintain the body attitude and control comfort.



2-5 *Throttle*



2-6 *Throttle Adjustments*

2-6-1 Throttle Trim

The throttle trim adjusts the neutral (center) point of the electronic speed controller (ESC).

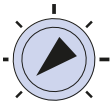
If your car creeps forward or backward when the throttle trigger is at neutral, you can use throttle trim to fine-tune it so the car stays still.

Set TH Trim to centre position for electric cars.

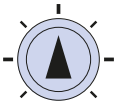
2-6-1 Throttle Dual Rate

The throttle dual rate (TH-D/R) setting controls how much of the full throttle range from your transmitter is actually used.

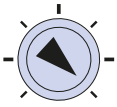
For an electric car, this can be used to limit top speed.



Low speed



Medium speed



Maximum Speed

3 SETUP/CUSTOMISATION

3-1 *Binding/Pairing*

Binding, or pairing, is the process of establishing a link between the transmitter, and the ESC/Receiver, so that the car will respond to one specific Transmitter.

To bind the Transmitter and the ESC, please follow the steps below:

1. Turn on the transmitter while holding the BIND button, to enter the binding mode. The G.LED will flash quickly once in bind mode.

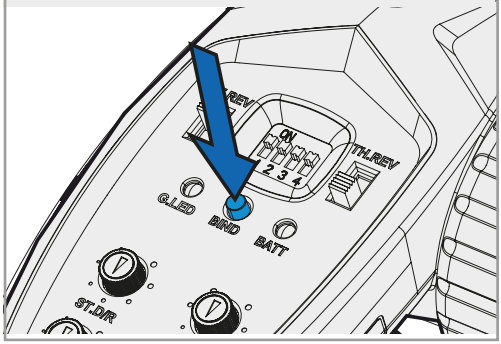
2. Once in bind mode release the BIND button.

3. Turn on the receiver, and it will attempt to connect for 1 second. If there is no connection, the receiver will enter the binding mode automatically. At this time, the receiver LED will be flashing fast.

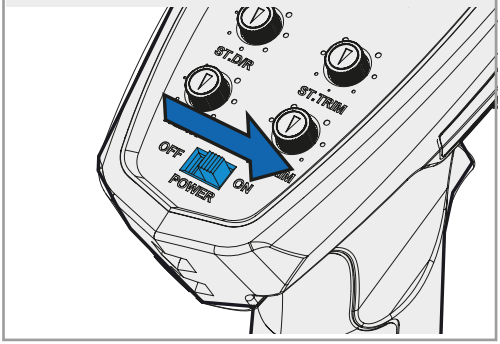
4. Once the binding is successful, the receiver LED and the G.LED of the transmitter will be solid on.

5. Verify that the transmitter and the receiver are working properly. If you need to re-bind, repeat the above steps.

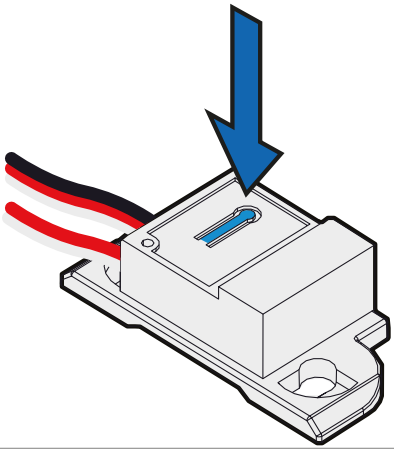
1 ***Place the transmitter and the receiver close to each other (within one meter). Press and hold the transmitter bind button***



2 ***Turn the power switch to the ON position. The Power LED will flash quickly. Release the setup button after 1 second.***



3 ***Turn the power switch on the Receiver to the ON position. Wait for 1 second. The LED will flash quickly until the connection is established.***



3-2 *Fail Safe Setup*

This car has a built-in fail safe system that will stop the car if the radio glitches, either because of interference or if the car goes out of range.

The fail safe system has been setup at the factory, but you should become familiar with the function of the fail safe and check the operation before running.

The failsafe can be set at the transmitter side. The setting steps are as following:

In the normal power-on state, set the control corresponding to the channel to be configured with failsafe to the preset position, meanwhile, press and hold the BIND button for 3 seconds to set the output value as the failsafe value. And the G.LED will flash rapidly three times to indicate successful configuration.

Notes: When a 2-in-l receiver has connected, the ESC will enter the brake state when the receiver is out-of-control

Caution **Any new binding of transmitter & receiver will clear the preset fail safe.**

Caution **The fail safe can not completely protect your car.**

3-3 *Stick Calibration*

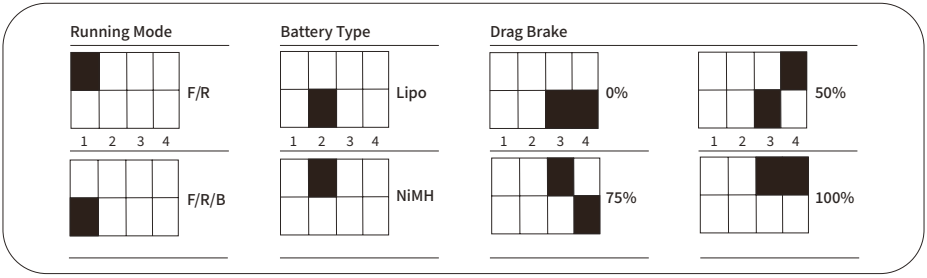
Use this function to correct for the mechanical deviation of the throttle trigger and steering wheel, for example, deviation occurring in the self-centering or maximum minimum travel. The steps are as following:

1. Turn and hold the steering wheel clockwise to the max travel and push the throttle trigger forwards as far as possible, and at the same time turn on the transmitter, the transmitter will be in calibration mode, meanwhile, the G.LED and BATT indicators enter a two-flash-one-off state.
2. Steering Wheel Calibration: Turn the steering wheel to the max and min travel clockwise/ counterclockwise respectively, and the G.LED is off.
3. Throttle Trigger Calibration: Push/pull the throttle trigger to forward/backward as far as it will go, and the BATT indicator is off.
   Note: The calibration sequence for the steering wheel and trigger can be swapped. The G.LED turns off after calibrating either channel, while the BATT indicator turns off only after completing all calibrations.
4. Press the BIND button to save and exit in case of the calibration is successful, and the G.LED is on. If the calibration fails, pressing the BIND button is invalid. Repeat the steps above.

4 ESC PARAMETERS SETTING

4-1 4-bit DIP Switch Sign

The ESC parameters can be set by the4-bit DIP Switch of the transmitter, that is, the DIP switch is located at different positions and the corresponding parameter values are different. There are three parameters can be set for the ESC, which are "Running Mode", "Battery Type" and "Drag Brake".



4-1-1 Running Mode

Forward/Reverse/Brake(F/B/R): When the throttle trigger is pulled back and then quickly pushed forward, the motor will only brake and will not reverse. When the throttle trigger is moved back to the neutral range and pushed to the reverse area, it will reverse. This mode is applicable to general models.

Forward/Reverse{F/R}: When the throttle trigger is pushed into the reverse zone, the motor will immediately reverse, which is generally applied to rock crawler.

The switch marked 1 of the4-bit DIP switch is used to set the ESC running mode. The switch on the upper side indicates that the running mode is Forward/Reverse; and the switch on the lower side indicates that the running mode is Forward/Reverse/Brake.

4-1-2 Battery Type

There are Li Po and NiMH cells. It can be set according to the actual use.

The switch 2 of the 4-bit DIP switch is used to set the battery type. The switch on the upper side indicates that the battery type is NiMH cells; and the switch on the lower side indicates that the battery type is LiPo.

4-1-3 Drag Brake

The drag brake means that when the throttle trigger moves from the forward or reverse area to neutral range, it will produce certain braking force to the motor, the larger the value is, the greater the drag brake force is. And this is applicable to decelerate into a turn and model crawler applications. Select proper braking force according to the actual situation.

The switches 3 and 4 of the 4-bit DIP switch are used to set the ESC drag brake force. The drag brake force can be set to 0%, 50%, 75% or 100%.

Setup:

Toggle both the switch 3 and 4 to the lower side, then the drag brake force is set to 0%.

Toggle the switch 3 to the lower side and switch 4 to the upper side, then the drag brake force is set to 50%. Toggle the switch 3 to the upper side and switch 4to the lower side, then the drag brake force is set to 75%. Toggle both the switch 3 and 4 to the upper side, then the drag brake force is set to 100%.

5 AFTER USE

5-1 *Switching Off*

IMPORTANT: Always power OFF the ESC/Receiver before the transmitter.

1. Remove the car body

2. Switch off the vehicle's ESC/Receiver (short press ≤ 1 second) power and disconnect the battery.

3. Turn off the transmitter power

4. Remove the battery when not using the car. See section ?

Attention — **Always power OFF the ESC/Receiver before the transmitter to prevent loss of control.**

Caution — **Disconnect the battery whenever the model is not in use.**

If left connected, the vehicle may start unexpectedly or the battery may overheat and cause a fire.

FCC COMPLIANCE STATEMENT

This device transmits in the range 2.4 to 2.4835 GHz and has been tested to comply with the limits for a Part 15 Class B device of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Any change or modification to the device not expressly approved by the manufacturer may void the user's authority to operate the equipment. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Canada Compliance Statement:

This Class B digital apparatus complies with Canadian ICES-003. (Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.) This equipment complies with the FCC/IC radiation exposure limits set forth for FCC and Industry Canada portable transmitting devices operation in an uncontrolled environment. The equipment should only be used or installed at locations where there is normally at least a 20cm separation between the antenna and all persons. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

CE Compliance statement

The radio equipment type in this product transmits in the frequency range 2.4 to 2.4835 GHz with a maximum power of 18dBm and is in compliance with EU Directive 2014/53/EU. The full text of the Declaration of Conformity is available at www.hpiracing.com/ce

Cet appareil transmet dans la gamme de fréquence de 2,4 à 2.4835 GHz avec une puissance de 18dBm et est conforme à la Directive UE 2014/53 / UE.
Le texte intégral de la Déclaration de conformité est disponible sur www.hpiracing.com/ce

El tipo de equipo de radio en este producto transmite en el rango de frecuencia de 2.4 a 2.4835 GHz con una potencia máxima de 18dBm y cumple con la Directiva de la UE 2014/53/UE. El texto completo de la Declaración de conformidad está disponible en www.hpiracing.com/ce