

## ABOUT THE RADIO SYSTEM

### CTX-2000 2.4GHz FHSS Technology System

The following is an overview of the various functions and adjustments found on CTX-2000 radio system. It is important to read and understand about all of these functions and adjustments before driving.

#### FUNCTIONS

##### TRANSMITTER CTX-2000

**Steering Wheel**: Control direction (Left/Right) of the RC model.

**Throttle Trigger**: Control speed and direction (Forward/Brake/Backward) of the driving model.

**ON / OFF Switch**: Power ON / OFF the transmitter.

**SW1 Key**: Is used to synchronize the connection between the transmitter and the receiver. It also serves as additional function on different model.

**LED Indicator**: For indicating battery low, pairing in progress and normal operation.

**ATV**: Adjust the maximum steering angle on both sides when model turns Left / Right.

**ST. Trim Dial**: Adjust the neutral position of steering servo when model wheels are straight ahead.

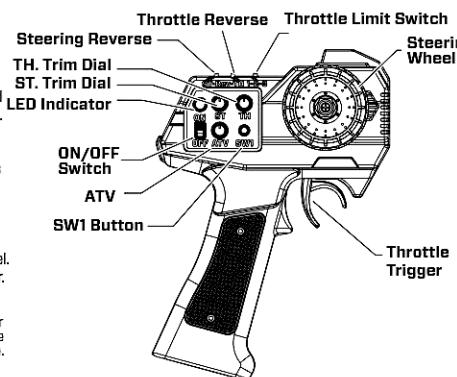
**TH. Trim Dial**: To adjust the throttle position

**Steering Reverse**: Reverse the response direction when operating Steering Wheel.

**Throttle Reverse**: Reverse the response direction when operating Throttle Trigger.

**Throttle Limit Switch**: Set the max Forward Speed of the model.

\* In general, user will experience under steer when making a wide turn at high speed or over steer when making sharp turn at high speed (easy to spin out). User should practice the Throttle and steering approach for different cornering at different speed or road surface.



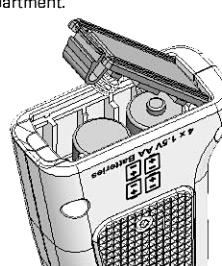
#### Battery Installation

1. Supplied with 4x1.5V AA

Batteries, radio can be operated a few hours.

Installation: Remove the battery compartment cover as shown below.

2. Install the batteries observing the polarity marked on battery compartment.



3. Then reinstall the battery compartment cover as the Picture shown below.

**Warning :**  
Never disassemble batteries or put the batteries in fire, chemical agents, otherwise they may cause personal injuries or property damages.

**Battery Disposal :**  
Observe corresponding regulations about wasted battery treatment regulations.  
1. After running out of power, dispose of wasted batteries in designated areas far away from water supply, household areas and planted areas.  
2. Submit the wasted batteries to specific recycling stations.

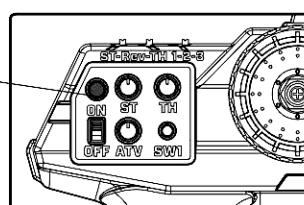
#### Battery LED Indicator

The LED solid on indicating that the batteries have sufficient power.

When batteries voltage drops below 4 volts, LED will Flashing, batteries power is low and should be replaced.

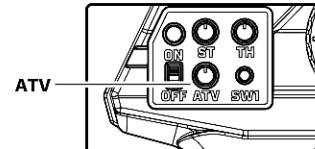
Solid ON : Sufficient Power supply

Flashing ON : Time to replace batteries

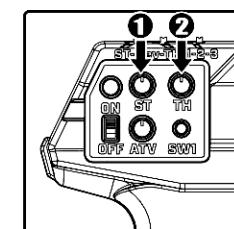


#### ATV

ATV enables to adjust the maximum steering angle of servo on both sides (Left and Right) when model makes steering. The ATV affects the sensitivity of servo. Reducing dual rate value can lower the sensitivity of servo and reduce the same maximum steering angle on both sides. Remember to adjust the ATV within the adjustment range.



#### Pre-Run Check



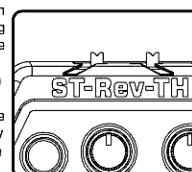
1. Steering : Adjust the steering trim to keep the front wheels in straight line when steering wheel remains in NEUTRAL position.  
2. Throttle : Adjust the throttle trim to make the motor stop while throttle trigger at NEUTRAL position.

\* Always turn on the transmitter first. If the LED is not solid on, you need to check whether the batteries are good or incorrectly installed.

#### Reversing

**Steering Reverse**: Reverse the response direction when operating steering wheel. Turning left steering wheel, the model turns right while turning right the model turns left.

**Throttle Reverse**: Reverse the response direction when operating throttle trigger. Pushing forward throttle trigger the model moves backward while pulling back, the model moves forward. If necessary you can just use a small screwdriver to adjust the responding switches.



#### Throttle Limit Switch

The slide switch to select the max forward speed:

- 1: Slowest
- 2: Intermediate
- 3: Fastest



#### NCC Warning Statement

##### Article 12

Without permission, any company, firm or user shall not alter the frequency, increase the power, or change the characteristic and functions of the original design of the certified lower power frequency electric machinery.

##### Article 14

The application of lower power frequency electric machineries shall not affect the navigation safety nor interfere a legal communication, if an interference is found, the service will be suspended until improvement is made and the interference no longer exists.

#### FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide residential 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and the receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

#### FCC Warning:

The equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. Modifications not authorized by the manufacturer may void the user's authority to operate this device. This device complies with part 15 of the FCC Rules. 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.

#### Limited Warranty

**Warranty Period:** Carisma R/C warrants that the CTX-2000 ("Product") will be free from original factory defects in materials and workmanship upon purchase ("Warranty Period"). **What is Not Covered -** This warranty is not transferable and does not cover (a) cosmetic damage, (b) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (c) modification to any part of the Product, (d) attempted service by anyone other than a Carisma R/C authorized service center, or (e) Product not purchased from an authorized Carisma RC dealer.

**OTHER THAN THE EXPRESS WARRANTY ABOVE**, Carisma RC MAKES NO OTHER WARRANTY OR REPRESENTATION, AND THEREFORE DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND SUITABILITY FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL MEET THE REQUIREMENTS OF THEIR INTENDED USE.

**Purchaser's Remedy** - Carisma RC's sole obligation and purchaser's sole and exclusive remedy shall be that Carisma RC will, at its option, either (a) service, or (b) replace, any Product determined by Carisma RC to be defective. Carisma RC reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Carisma RC. Proof of purchase is required for all warranty claims. **SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.**

#### Limitation of Liability

CARISMA RC SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF CARISMA RC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Further, in no event shall the liability of Carisma RC exceed the individual price of the Product on which liability is asserted. As Carisma RC has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you see the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country, or state to state. Carisma RC reserves the right to change or modify this warranty at any time without notice.

#### Muh Ah Plastic Electronic Toys Co. LTD.

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Phase 2, 173 - 175 Wo Yi Hop Road,  
Kwai Chung, N.T., Hong Kong.

**Note:** For official Carisma RC spare parts, see your local hobby shop or place of purchase first. If unavailable, parts can be ordered direct at: <http://www.carisma-shop.com>

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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. 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.

The device has been evaluated to meet general RF exposure requirement.