Accessible Remote Control Toy Car User Manual

To see the how-to video and the latest version of this user guide, please visit

canassist.ca/cdc

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NOTE

Your Accessible Remote Control Toy Car does not contain any user-serviceable parts. If repairs are necessary, the device must be returned to CanAssist.

Do not expose any parts of your Accessible Remote Control Toy Car to water or extreme temperature.

Like many electronic devices, the RC Car and its controller both contain a lithium-ion battery, which can rupture, ignite or explode when exposed to high temperatures. Short-circuiting a lithium-ion battery can also cause it to ignite or explode. Any attempt to open or modify this device's casing or circuitry is dangerous.

Model: RC Car Controller AND **RC Car Receiver**

Contain IC ID: 8017A-MDBT42Q
Contains FCC ID: SH6MDBT42Q

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device

ACCESSIBLE REMOTE CONTROL TOY CAR

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WHAT'S INCLUDED

Remote-controlled car

4 x Accessibility switches

Controller

Joystick

Charger for car

Charger for controller

Joystick cable

ABOUT

OVERVIEW

The Remote Control Toy Car gives children who cannot operate a standard remote control the chance to play with a cool toy independently, using a joystick, accessibility switch or other input device. In its typical set up, the RC Car operates using two joysticks – one that controls forward-backward movement, the other that steers the car left and right. In addition to being fun, this device helps children with challenging disabilities to learn important skills for controlling a power wheelchair.

FEATURES

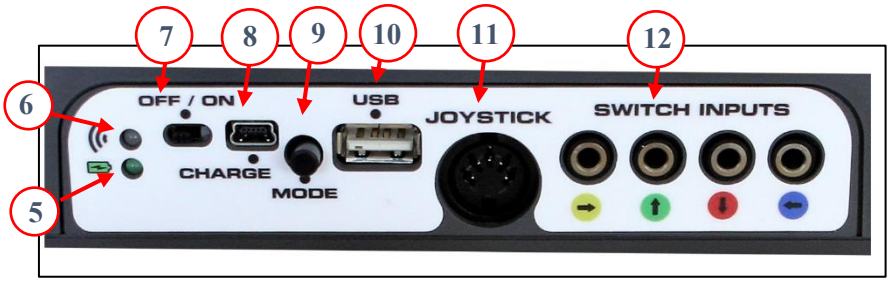
- a configurable controller – the RC Car can be driven with 2, 3 or 4 buttons
- an analog and digital joystick, which simulates power wheelchair driving controls
- a reduced speed option – 3 speed selections allow the car to be driven at a slow speed
- long-range Bluetooth radio frequency with multi channels, allowing more than one car to operate in same area
- rechargeable batteries for both the controller and RC Car

SPECIFICATIONS

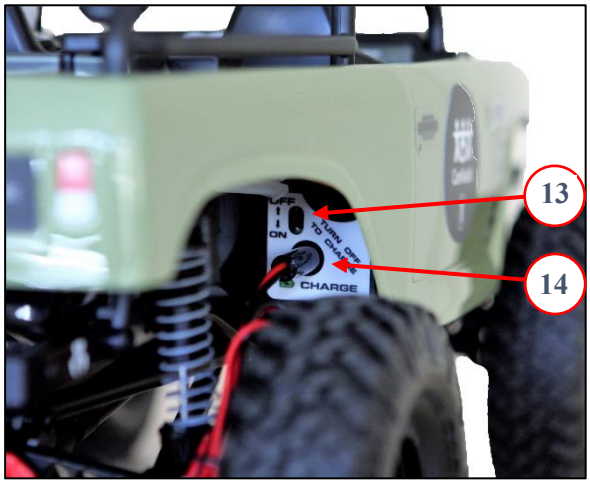
- approximately 2-hour battery life for the RC Car
- approximately 20-hour battery life for the controller
- approximately 3 hours to charge the controller and RC Car
- 3 speed settings:
  - LOW – 1.2 km per hour
  - MED – 2.2 km per hour
  - HIGH – 3.2 km per hour
- compatible with many USB joysticks

GETTING TO KNOW YOUR NEW DEVICE

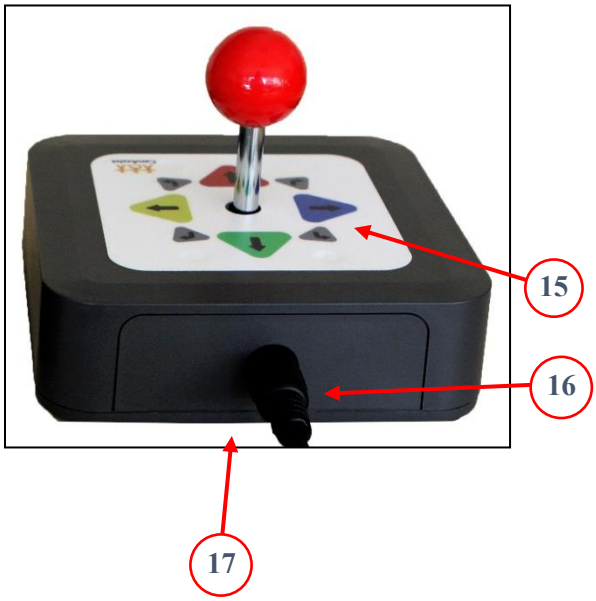
	Controller
1	Mode display
2	Thumb-stick
3	Speed switch
4	Direction buttons



	Controller inputs
5	Charge light
6	Controller status light
7	OFF/ON switch
8	Charge port
9	Mode button
10	USB port
11	Joystick connection
12	Accessibility switch inputs



	RC Car
13	OFF/ON switch
14	Charger port



	Joystick
15	Directional arrows
16	Joystick cable
17	Mounting hole, located on bottom (¼ -20 thread)

SETUP AND USE

POWERING ON THE CAR AND CONTROLLER

Before using the RC Car, make sure both the car and controller are fully charged.

Note that each car must be paired with a matching controller. Match the number on the bottom of the controller to the number on the side of the car before powering up.

1) First, turn on the **controller**, by sliding the "OFF/ON" switch located on the back of the controller to the ON position.

   The "Controller status light" on the back of the controller will start blinking.

2) Turn on the **RC Car**, by sliding the "OFF/ON" switch located under the car near the right rear wheel to the ON position.

   You will hear three short beeps followed by a long beep.

When the "Controller status light" on the controller changes from blinking to steady, the car is ready to drive.

CONNECTING THE ACCESSIBILITY SWITCHES AND JOYSTICK

The RC Car can be controlled with up to 4 accessibility switches, depending on the mode of operation selected. (Modes are covered in the next section.)

The inputs for the accessibility switches are located on the back of the controller.

Connect each accessibility switch **matching its colour** to the labeled accessibility switch input.

You can also use the joystick to drive the car in Modes 2, 3 and 4. Connect the joystick to the controller using the supplied joystick cable and selecting the mode you want to use. The coloured arrows on the joystick match the function of each accessibility switch.

Note the orientation of the joystick cable when plugging it into the controller and joystick connections – it will only fit in one position.

MODES OF OPERATION

The Accessible Remote Control Toy Car has 4 different modes that can be used to control the car, using the thumb-stick, accessibility switches or using the joystick. A mode cannot be selected until the "Controller status light" is on. Press the "Mode" button until the light turns on for the mode you wish to use.

MODE 1

Mode 1 uses the thumb-stick built into the controller to drive the car in any direction. Mode 1 also works with a USB joystick. To set up the USB joystick refer to the section called "Connecting accessibility switches and joystick."

1) Use the MODE button to select MODE 1. The green light indicates that this mode has been selected.
2) To drive the car, use the thumb-stick on the controller to move the car in any direction.

MODE 2

Mode 2 uses four accessibility switches to drive the car. To turn the car, the user will need to press two accessibility switches at the same time.

1) Connect the 4 accessibility switches to the controller, matching the colour of each switch to the appropriate switch input.
2) Use the MODE button to select MODE 2. The amber light indicates that this mode has een selected.
3) Driving the car:
    - Press and hold the green accessibility switch to drive forward.
    - Press and hold the red accessibility switch to drive in reverse.
    - Press and hold the yellow accessibility switch to turn the wheels to the right in conjunction with either the green or red accessibility switch, depending on whether you want the car to move forward or in reverse as it turns.
    - Press and hold the blue accessibility switch to turn the wheels to the left in conjunction with the green or red accessibility switch, depending on whether you want the car to move forward or reverse as it turns.

MODE 3

Like the previous mode, Mode 3 uses four accessibility switches to drive the car. However, in this case, the user needs to press only one accessibility switch to turn the car. But, unlike the previous mode, the user cannot turn the car while reversing it.

1) Connect 4 accessibility switches to the controller, matching the colour of the switch to the colour of the switch input.
2) Use the MODE button to select MODE 3. The blue light indicates that this mode has been selected.
3) Driving the car:
    - Press and hold the green accessibility switch to drive forward.
    - Press and hold the red accessibility switch to drive in reverse.
    - Press and hold the yellow accessibility switch to drive forward and turn right.
    - Press and hold the blue accessibility switch to drive forward and turn left.

MODE 4

Mode 4 uses two accessibility switches to drive the car. The user only needs to press one accessibility switch at a time.

1) Connect both the red and green accessibility switches to the controller.
2) Use the MODE button to select MODE 4. The red light indicates this mode has been selected.
3) Driving the car:
    - Press and hold the green accessibility switch to drive forward.
    - Press and hold the red accessibility switch to drive in reverse while turning to the right.

CHANGING SPEEDS

The RC Car can be operated at 3 difference speeds. Use the "speed switch" on the controller and select one of the following speeds:

1 = 1.2 km/h
2 = 2.2 km/h
3 = 3.2 km/h.

Note: You can change the speed of the car at any time.

INACTIVITY ALERT

The car will make a long, single beep after 10 minutes of not being used. If the car is not being used, it should be turned off to conserve battery power.

CHARGING THE RC CAR AND CONTROLLER

To **charge the controller**, follow these steps:

1. Plug the charger into a wall outlet.
2. Connect the MINI USB end of the charger to the charge port on the back of the controller (see a photo of the controller's charger on page 5).
3. The green charging light will come on to indicate it is charging.

Note: The controller will be charged in approximately 3 hours.

To **charge the car**, follow these steps:

1. Connect the jack to the port on the underside of the car near the right rear wheel (see a photo of the car's charger on page 5).
2. Plug the cord into a wall outlet.
3. The red light on the charger will illuminate.
4. When the car is fully charged, the light on the charger will change from red to green.

Note: The RC Car will be charged in approximately 3 hours.

LOW BATTERY INDICATOR

When the **RC Car** requires charging, the car will beep in two different tones after it has been turned on.

When the **controller** requires charging, the mode lights along the mode display will blink.

ADVANCED FEATURES

A USB computer joystick (not included in the kit) can be used to control the car.

To calibrate a USB joystick for use with the controller, follow these steps:

1. Select Mode 1 on the controller.
2. Plug the USB joystick into the USB port on the back of the controller.
3. The green light (Mode 1) will begin to flash.
4. Rotate the USB joystick in a circular motion 3 to 5 times around.
5. Press the green button on the controller. The green light (Mode 1) will change from blinking to solid.
6. The USB joystick will now control the car – just like the thumb-stick.

CONTACT US

Please visit **www.canassist.ca/cdc** for the latest Accessible Remote Control Toy Car instruction manuals, for how-to videos, to submit a help request and to provide feedback.

ABOUT CANASSIST

CanAssist at the University of Victoria is dedicated to helping people with disabilities improve their quality of life, with a focus on promoting independence and inclusion.

Our talented team develops innovative technologies and programs where there are gaps in existing services. We work with the exceptional students and faculty at UVic, along with partners in the wider community.