Rugged Robot

A Bluetooth enabled programmable floor robot designed to be used outdoors.

User Guide

www.tts-group.co.uk

Age 3+

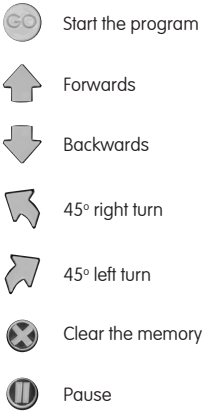
Important Information

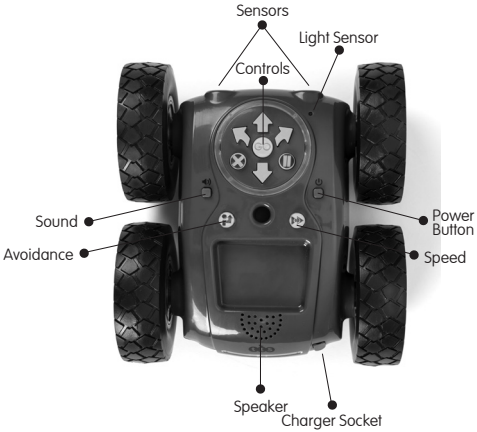
- Please retain the information in this User Guide for future reference.
- Please read all instructions fully before using.
- To clean, wipe the surface with a clean damp cloth.
- Do not allow the product to come into contact with water or any other liquids.
- Keep the product away from direct sunlight and heat.
- In the event of a static discharge, The Robot may malfunction. In this case, please switch it off and then back on again to reset it.

Pack Contents

- Rugged Robot.
- USB Charging Lead.
- User guide.

Know Your Product





Programming Rugged Robot

Rugged Robot has been designed as an outdoor floor robot.

- After initial switch-on, the eyes will light orange and the rear lights will light red, these will remain on until the Robot is turned off.
- If the Robot is not used for 5 minutes it will enter low power mode and turn off all lights. Press any button to wake the Robot up.
- The sequence memory is cleared on start-up, pressing <Go> at this point will simply cause a sound to be played and no motion to occur.
- The user can press a sequence of commands, which are stored in the sequence memory. A maximum of 200 commands can be stored; each command being either one forward/backward movement, left/right turn, or a pause.
- Each forward or backward command causes the unit to move approx. 20cm in the required direction.
- Each turn command causes the unit to rotate 1/8th of a turn.
- A pause command causes the unit to pause for 0.5 seconds.
- When the <Go> button is pressed, the unit will execute all the commands stored in order with a short pause between each command.
- When the command sequence completes, the unit will stop and play a sound. (The sound can be turned on/off using the sound switch on the top of the Robot.
- Pressing <Go> whilst a sequence is running will stop the sequence.
- Pressing the clear button <X> will clear the sequence memory.
- Pressing the avoidance button will cause the button to illuminate green, when this is activated the Robot will back up when it see's an obstacle in its path and attempt to find an alternative route around the obstacle. During this mode the front 3 lights will illuminate red and it will play a sound. To turn the avoidance mode off press the button once more and the green light will turn off.
- There are 3 speed modes. When first switched on the Robot will default to Mode 1
    - Mode 1 - Button not illuminated and Robot will pause between each sequence step.
    - Mode 2 - Button will illuminate and Robot will not pause between each sequence step when travelling in a straight line.

- Mode 3 - Button will flash and Robot will not pause between each sequence when travelling in a straight line, and additionally the turns will be faster for better performance on uneven surfaces.

- There is a light sensor which will automatically activate the headlights when the Robot enters a darker environment.

Status LED's

- There are 6 segments within the ring around the command buttons, during each step these will light green to indicate the command being carried out.
- When first turned on the segments will light to indicate the battery level, more segments indicate the Robot has more charge.
- When connected to Bluetooth the segments will light blue.
- In programming mode the lights will flash yellow to indicate the button has been pressed.

Recharging

- Turn off the Power to charge, the Robot will not work whilst charging.
- To recharge the Robot use the USB cable provided by inserting the DC Jack into the charging socket and the USB into a USB socket or a suitable 5V 1A power supply.
- During charging the segments will light green in turn to indicate the charge level.
- Charging will take approximately 1-2 hours to fully charge.
- Once fully charged your Robot will give 1-2 hours running time in normal use.

Compatibility

- Rugged Robot will operate with an iOS or Android device containing compatible Bluetooth hardware. Please download the App from either Google Play or the App store. Rugged Robot is compatible with the following operating systems:

  Android:

  - Android 5.0(Lollipop) Minimum
  - Android 5.1(Lollipop)
  - Android 6.0(Marshmallow)
  - Android 7.0(Nougat)
  - Android 7.1(Nougat)
  - Android 8.0(Oreo)
  - Android 8.1(Oreo)
  - Android 9.0(Pie) Latest

iOS:

- iOS 8.0 Minimum
- iOS 9.0
- iOS 10.0
- iOS 11.0
- iOS 12.0 Latest

Pairing

- Turn your Rugged Robot on to make it discoverable with your device.
- Locate the Bluetooth settings on your device.
- Switch Bluetooth on and search for nearby devices.
- The Rugged Robot will appear on the list of devices.
- Select the Rugged Robot on the list to pair with.
- Once paired it can be controlled from the app.

Battery Precautions

- Rugged Robot is fitted with a 3.7V 850mAh Lithium polymer battery.
- Non-rechargeable batteries are not to be recharged
- Rechargeable batteries are only to be charged under adult supervision.
- The supply terminals are not to be short circuited.
- Regularly examine for damage to the plug enclosure and other parts. In the event of any damage, the toy and charger must not be used until the damage has been repaired.
- Exhausted batteries are to be removed from the product.
- Only batteries of equal size and type should be used.

Important Information

- 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.

Warning:

- Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note:

- 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 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.
  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 off and on, the user is encouraged to try 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 receiver.
  Connect the equipment to 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.

Waste Electrical and Electronic Equipment (WEEE)

When this appliance is out of use, please remove all batteries and dispose of them separately. Bring electrical appliances to the local collecting points for waste electrical and electronic equipment. Other components can be disposed of in domestic refuse.

The crossed-out dustbin symbols indicates that batteries, rechargeable batteries, button cells, battery packs, etc. must not be put in the household waste. Batteries are harmful to health and the environment. Please help to protect the environment from health risks. If the toy is out of use, please use common household tool to break the product for built-in rechargeable battery operated toy or unscrew the battery door for replaceable battery operated toy, then take the battery out form the toy. Dispose of battery in accordance with your local battery recycling or disposal laws.

This product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

Rugged Robot

Specification	
Forward/Backward movement	Approx. 20cm
Left/Right turn	Approx. 45 degree turns
Obstacle Sensor	Approx. 20cm
Battery	3.7V 850mAh Lithium polymer
Battery Life	approx. 1-2 hours in normal use (depends mainly on amount of movement)
Frequency Band range	2.400-2.483GHz
Maximum Radio-Frequency power	<10mW
Speed of movement:	1 x speed = Approx. 0.15m/s 2 x speed = Approx. 0.27m/s

Troubleshooting

Problem	Solution
Product will not operate	Ensure that the power switch is pressed and the battery is sufficiently charged
Product will not move as expected	Check the ground is suitable and the wheels are free from dirt
Sound is not audible	Ensure the sound button is pressed and the battery is sufficiently charged
Lights have come on but no movement	Recharge by plugging in the USB cable
Product is working intermittently	Switch the product off and on again to reset.
Robot is not avoiding obstacles	Press the obstacle avoidance button - it should illuminate green when active. Ensure the obstacle is high enough to trigger the sensor - small objects may not be seen by the sensor.

Warranty & Support

This product is provided with a one-year warranty for problems found during normal usage. Mistreating the Rugged Robot, using the incorrect supply voltage, or opening the unit will invalidate this warranty.

Technical Support

Please visit www.tts-group.co.uk for the latest product information.

Email feedback@tts-group.co.uk for technical support.

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WARNING: Do not dispose of this product in household waste.

WARNING: Hand it over to a collection point for recycling electronic appliances.

WARNING: Not suitable for children under 36 months due to small parts- electric shock and choking hazard.

Made in China, on behalf of TTS Group Ltd.

TTS Product Code:
IT10000

TTS-Group
FCC ID: 2ADRE-IT10000

TTS is proud to be part of RM plc