

Fdit Fdityioaznsr3g

DIY Reptile Robot Kit Instruction Manual

Model: Fdityioaznsr3g

1. INTRODUCTION

This DIY Reptile Robot Kit is an educational electric toy designed for children aged 7-14. It offers a fun and engaging way to learn about physics and develop practical skills through hands-on assembly.

The kit effectively cultivates children's interest in learning, providing an intuitive and easy-to-understand educational experience. It combines fun and learning, enhancing children's enthusiasm and practical abilities.

The design features round and smooth edges without burrs, ensuring safety and preventing scratches during play.

During the assembly process, children will exercise finger flexibility, problem-solving skills, and practical abilities. The simple assembly process, with included instructions, allows for step-by-step construction, providing the satisfaction of DIY.

The assembled robot operates by converting electrical energy into kinesthetic energy, allowing the "worm" to crawl once the circuit is connected.



Image 1.1: The fully assembled DIY Reptile Robot Kit, showcasing its unique design with large eyes and a compact body.

2. PACKAGE CONTENTS

Please verify that all the following components are included in your kit:

- 1 x Set of Plastic Parts (main body, wheels, etc.)
- 2 x Plastic Foam Balls (for eyes)
- 1 x Motor
- 2 x Z Shafts
- 1 x Battery Box (requires 2 x AA batteries, not included)
- 1 x Bracket
- 1 x Window Panel
- 1 x Axle
- 1 x Wool Strip (for antennae/eyelashes)
- 1 x U Iron
- 4 x Wheels
- 4 x Wheel Covers



Image 2.1: All individual components of the DIY Reptile Robot Kit, neatly arranged for inspection.

3. ASSEMBLY INSTRUCTIONS

Follow these steps carefully to assemble your DIY Reptile Robot Kit. Ensure you have a clear workspace and all components listed above.

1. **Prepare the Base:** Identify the main plastic body part. This will serve as the chassis for your robot.
2. **Install the Motor:** Securely attach the motor to the designated slot on the main body. Ensure it is firmly in place.
3. **Connect the Battery Box:** Attach the battery box to the main body. Connect the motor wires to the battery box terminals. Pay attention to polarity (red to positive, black to negative). *Note: AA batteries are not included and must be inserted into the battery box before operation.*
4. **Attach the Wheels:** Insert the axle through the designated holes on the main body. Attach the wheels to the ends of the axle, securing them with the wheel covers.
5. **Assemble the Eyes:** Take the two plastic foam balls. Attach the wool strips to them to create antennae or eyelashes, as desired. Secure these "eyes" to the front of the robot using the provided bracket or adhesive if necessary.
6. **Add Remaining Parts:** Attach the Z shafts, U iron, and window panel to their respective positions on the robot's body as indicated in the visual guides.



Image 3.1: Detailed view of the robot's internal components, including the battery box and motor, during assembly.



Image 3.2: A closer look at the robot's front section, highlighting the attachment of the eyes and front wheels.

4. OPERATING INSTRUCTIONS

Once fully assembled and with 2 AA batteries inserted into the battery box, your DIY Reptile Robot is ready for operation.

1. **Power On:** Locate the switch on the battery box. Flip the switch to the "ON" position.
2. **Movement:** The robot will begin to move forward, mimicking a crawling motion. This movement is achieved by the motor converting electrical energy from the batteries into mechanical energy, driving the wheels.
3. **Observation:** Observe how the robot moves and the principles of physics at play.
4. **Power Off:** To stop the robot, flip the switch on the battery box to the "OFF" position.

Important Safety Note:

- Always supervise children during operation.
- Do not attempt to modify the electrical components.
- Remove batteries if the robot will not be used for an extended period.

5. MAINTENANCE

To ensure the longevity and proper functioning of your DIY Reptile Robot Kit, follow these simple maintenance guidelines:

- **Cleaning:** Wipe the robot with a dry, soft cloth to remove dust and dirt. Do not use water or cleaning solutions directly on the electronic components.
- **Battery Care:** Always remove depleted batteries promptly. If the robot is not in use for an extended period, remove the batteries to prevent leakage and corrosion.
- **Storage:** Store the robot in a cool, dry place away from direct sunlight and extreme temperatures.
- **Inspection:** Periodically check all connections and moving parts to ensure they are secure and free from obstruction.

6. TROUBLESHOOTING

If your DIY Reptile Robot is not functioning as expected, refer to the following common issues and their solutions:

Problem	Possible Cause	Solution
Robot does not move.	Batteries are dead or incorrectly inserted.	Replace with new AA batteries, ensuring correct polarity (+/-).
Robot moves slowly or erratically.	Low battery power. Obstruction in wheels or motor.	Replace batteries. Check wheels and motor for any debris or hair.
Wires are disconnected.	Loose connection between motor and battery box.	Carefully re-connect the wires, ensuring a secure fit.
Parts are loose after assembly.	Components not fully secured during assembly.	Re-check all connections and ensure parts are snapped or pushed firmly into place.

7. SPECIFICATIONS

Item Type	DIY Model
Material	PP Plastic
Color	As shown in pictures
Power Source	2 x AA Batteries (not included)
Scientific/Educational Toy Type	Physics
Ability Training	Mind and Hand
Applicable Age	Junior (7-14 years old)
Product Dimensions (L x W x H)	17 x 11 x 3 cm
Product Weight	67 grams

Model Number	Fdityioaznsr3g
Brand	Fdit

8. WARRANTY AND SUPPORT

Information regarding specific warranty details or direct customer support for this product is not provided in the available documentation. For any issues or inquiries, please refer to the retailer or point of purchase for assistance.