Snap Circuits TTC-895

Snap Circuits Teach Tech Mech 5 Mechanical Coding Robot User Manual

Model: TTC-895

Introduction

The Snap Circuits Teach Tech Mech 5 is a mission-based, entry-level STEM coding robot designed to introduce users to mechanical engineering principles and coding basics. This manual provides detailed instructions for assembly, operation, and maintenance of your Mech 5 robot.

Image: Front view of the Teach Tech Mech 5 Mechanical Coding Robot product box, displaying the robot and its key features.

Safety Information

Please read and understand all safety warnings before assembly and operation.

- **Small Parts Warning:** This product contains small parts and is not suitable for children under 3 years of age due to choking hazards.
- Recommended age for assembly and use is 10 years and up.
- Adult supervision is recommended during assembly, especially when cutting parts from frames.
- Ensure batteries are inserted with correct polarity. Do not mix old and new batteries, or different types of batteries.

What's in the Box

Verify that all components are present before beginning assembly.

- Assembly Parts (over 220 pieces)
- Instruction Manual in English

Note: 2 AAA batteries are required for operation and are not included. Tools such as diagonal cutters, a small screwdriver, and sandpaper may be helpful for assembly but are not included.

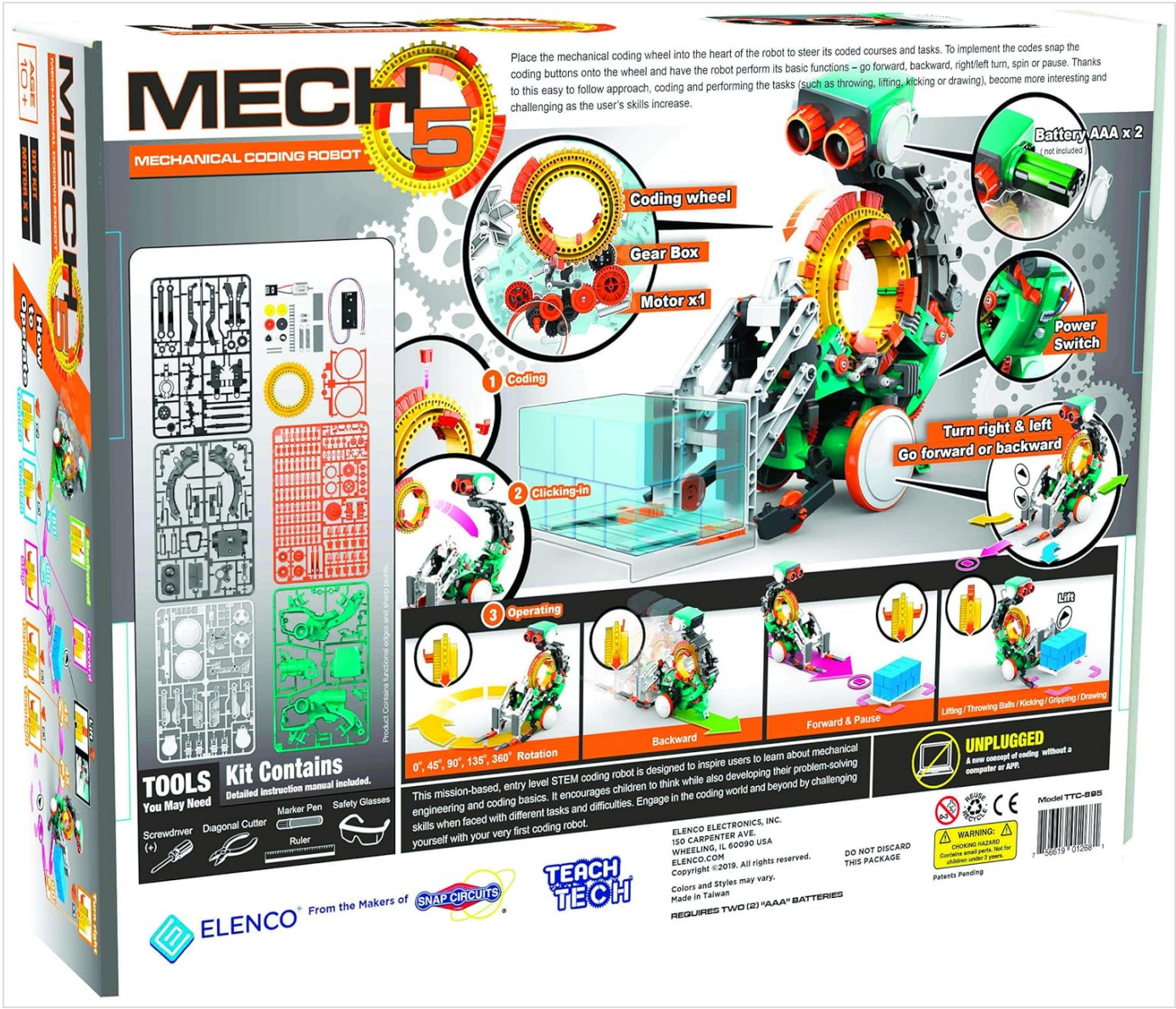


Image: Back view of the product box, detailing the kit contents and a visual overview of the assembly and coding process.

Assembly Instructions

The Mech 5 robot requires assembly. Follow the detailed instructions provided in the included physical manual for step-by-step guidance. The assembly process involves cutting parts from frames and securing them with screws.

1. **Preparation:** Lay out all parts and identify them according to the manual's diagrams. Have necessary tools (diagonal cutters, small screwdriver, sandpaper) ready.
2. **Part Removal:** Carefully cut each part from its plastic frame. Use sandpaper to smooth any rough edges or "barbs" to ensure gears and moving parts operate smoothly.
3. **Structural Assembly:** Follow the manual's sequence to build the robot's main body, chassis, and movable components. Pay close attention to gear placement and alignment.
4. **Motor and Battery Installation:** Install the motor as directed. Insert 2 AAA batteries into the battery compartment, ensuring correct polarity.
5. **Attachment Assembly:** Assemble the desired attachment (e.g., soccer-bot, forklift-bot, drawing-bot) according to the manual.

Tip: *Patience is key during assembly. Double-check each step to ensure proper function. If parts are stiff, ensure all excess plastic has been removed.*

Operating Instructions

The Mech 5 robot is programmed using a mechanical coding wheel. This allows for various movements and actions without the need for a computer or app.

1. Understanding the Coding Wheel

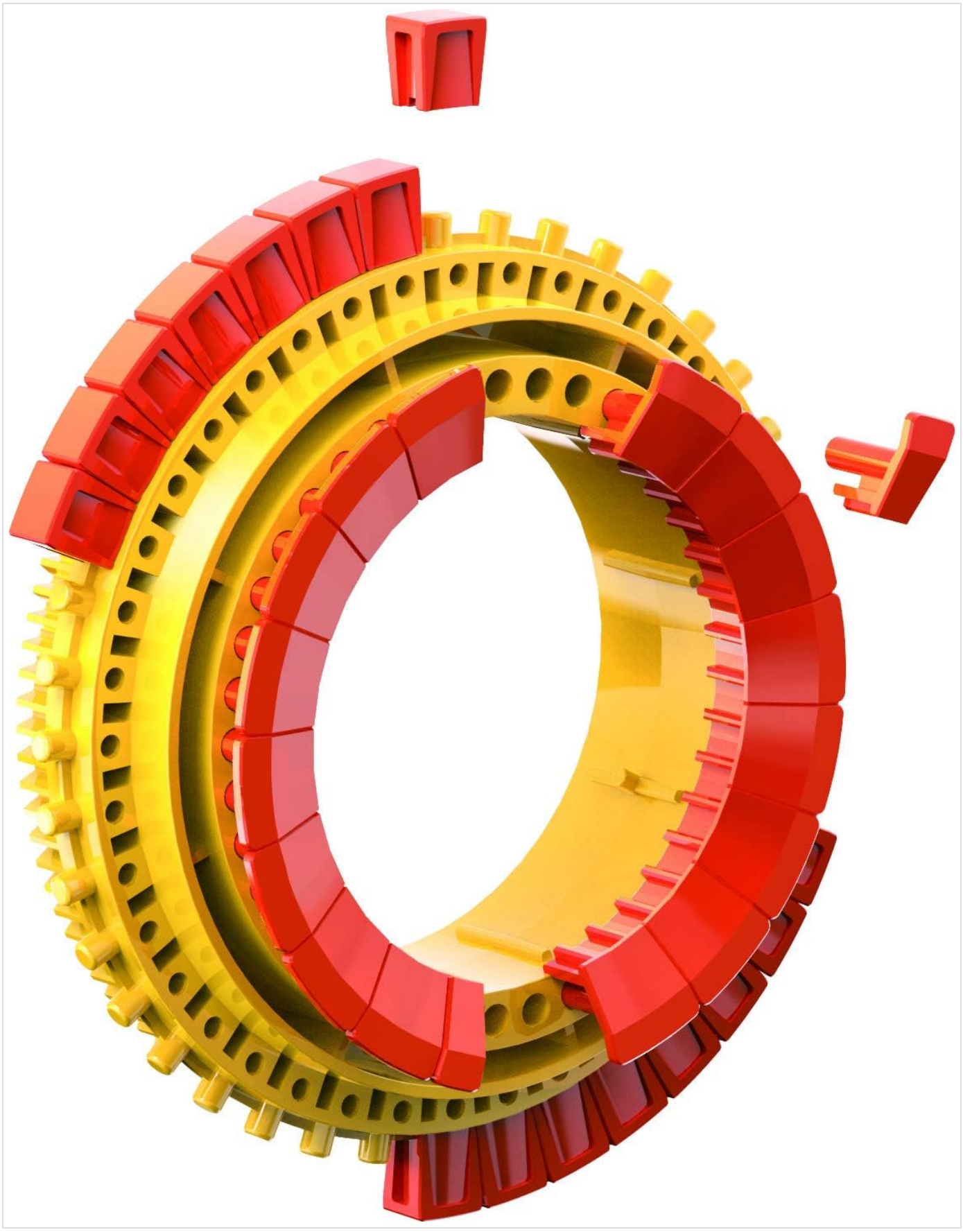


Image: A detailed view of the mechanical coding wheel, showing how coding buttons snap into place.

The coding wheel has slots where coding buttons are inserted. Each button corresponds to a specific command (e.g., forward, backward, turn, action). The sequence of these buttons dictates the robot's program.

Image: A child demonstrating how to program tasks by placing coding buttons onto the mechanical coding wheel, with the robot configured for drawing.

2. Basic Movements

- **Forward/Backward:** Insert coding buttons that instruct the robot to move straight.
- **360° Rotation:** Use specific coding buttons to make the robot rotate in place.
- **Turning:** Combine forward/backward movements with rotation commands to execute turns.

Image: Visual representation of the robot's basic movements: moving forward and backward, rotating 360 degrees, and performing an action.

3. Performing Tasks with Attachments

The Mech 5 can perform various tasks by changing its attachments and programming the coding wheel accordingly.

- **Soccer-Bot:** Attach the kicking mechanism. Program the robot to move towards a ball and execute a kick

command.

Image: The Mech 5 robot in Soccer-Bot configuration, ready to kick a ball.

- **Forklift-Bot:** Attach the forklift. Program the robot to approach an object, lower the forklift, lift the object, and transport it.

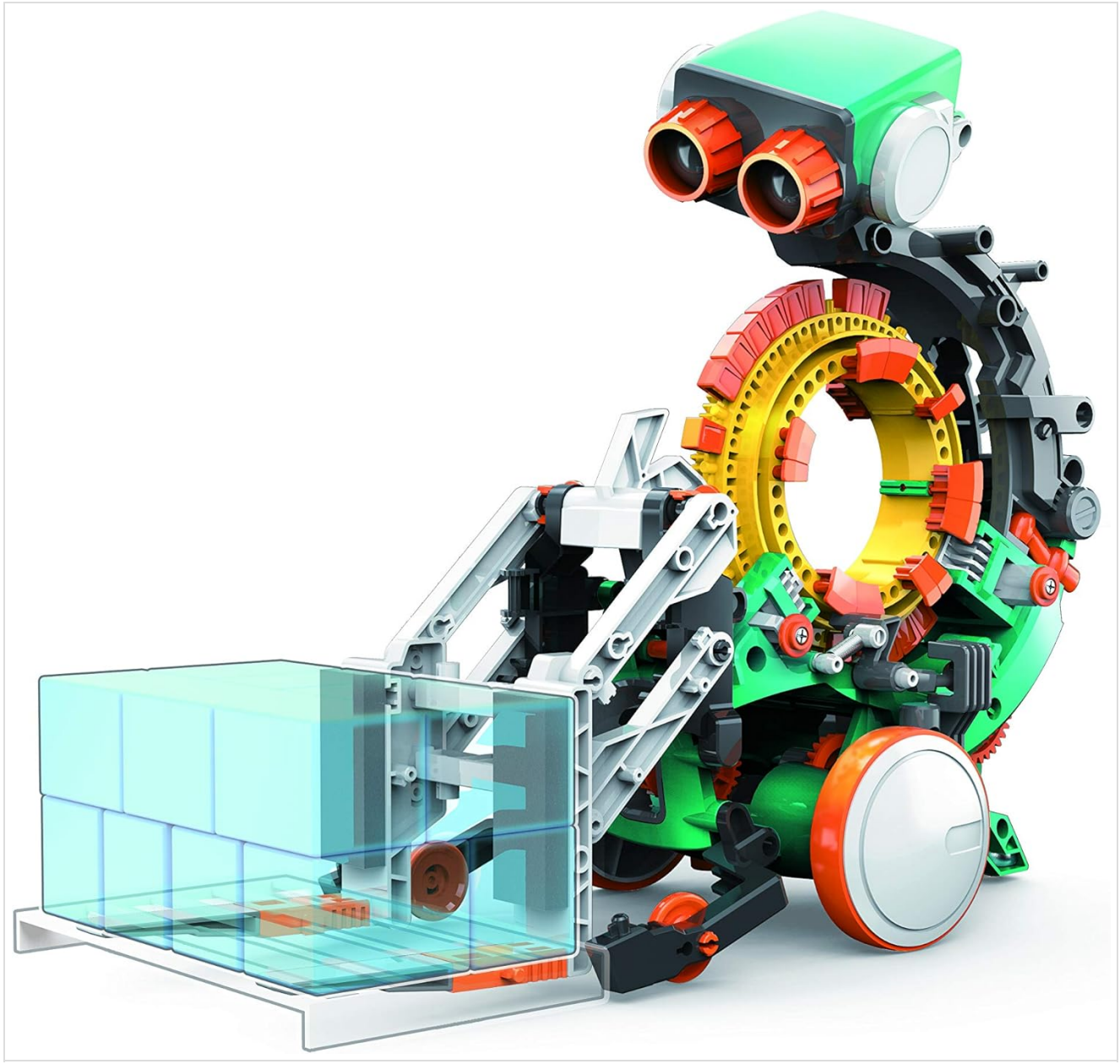


Image: The Mech 5 robot in Forklift-Bot configuration, lifting a transparent blue block.

- **Drawing-Bot:** Attach a marker pen (not included). Program the robot to move in patterns to draw shapes or lines.

Image: The Mech 5 robot in Drawing-Bot configuration, holding a marker pen.

- Other tasks include throwing and lifting, depending on the configured attachment.

Image: Visual examples of the robot performing kick, draw, and lift functions.

Maintenance

- **Cleaning:** Wipe the robot with a dry, soft cloth. Avoid using water or cleaning solutions directly on electronic components.
- **Battery Replacement:** Replace AAA batteries when the robot's movements become sluggish or stop. Always replace both batteries at the same time.
- **Gear Inspection:** Periodically check gears for any debris or wear. Ensure they rotate freely.
- **Storage:** Store the robot and its components in a dry, cool place away from direct sunlight. If storing for extended periods, remove the batteries.

Troubleshooting

Problem	Possible Cause	Solution
Robot does not move or moves erratically.	• Batteries are low or incorrectly installed. • Gears are jammed or not properly aligned. • Coding buttons are incorrectly placed.	• Replace batteries with fresh AAA batteries, ensuring correct polarity. • Check all gear connections and ensure no debris is obstructing movement. • Review the coding wheel setup against the desired program.
Attachments do not function correctly.	• Attachment not securely connected. • Coding for the attachment is incorrect.	• Ensure the attachment is firmly snapped into place. • Verify the coding buttons for the specific attachment's action.
Robot makes loud noises during operation.	• Friction in gears due to rough edges or misalignment. • Normal operation sound (plastic gears and exposed motor).	• Inspect gears for rough edges from assembly; smooth with sandpaper if necessary. Realign gears if loose. • Some operational noise is expected due to the mechanical nature of the robot.

Specifications

Feature	Detail
Product Model Number	TTC-895
ASIN	B07NVD43MD
Brand	Snap Circuits
Manufacturer	Elenco Electronics LLC
Recommended Age	10 years and up
Power Source	2 AAA batteries (not included)
Product Dimensions	12.4 x 2.5 x 9.1 inches
Item Weight	1 pound
Number of Parts	Over 220

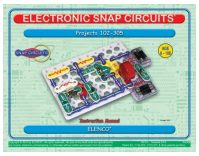
Warranty and Support

Specific warranty information for the Snap Circuits Teach Tech Mech 5 is typically provided with the product packaging or can be obtained directly from the manufacturer, Elenco Electronics LLC. Please refer to the documentation included in your product box for warranty details.

For further assistance, technical support, or to explore other products, please visit the official Snap Circuits store:

Visit the Snap Circuits Store

Related Documents - TTC-895

	Elenco Snap Circuits SC-100: Experiments 1-101 Instruction Manual Discover the fundamentals of electronics with the Elenco Snap Circuits SC-100 kit. This comprehensive instruction manual guides users through 101 engaging projects, fostering STEM skills through safe, snap-together circuit building. Ideal for beginners and educational settings.
	Electronic Snap Circuits Projects 512-692 Instruction Manual Elenco's Electronic Snap Circuits instruction manual for projects 512-692 provides a comprehensive guide to building electronic circuits. Learn fundamental principles, experiment with components, and develop STEM skills through hands-on activities.
	Snap Circuits Classic: A Comprehensive Guide to Electronic Projects Explore the fundamentals of electricity with Snap Circuits Classic. This manual from Elenco provides step-by-step instructions for building over 300 electronic projects, making learning accessible and fun for ages 8 and up.
	Snap Circuits Jr. Select Instruction Manual - Learn Electronics Explore the fundamentals of electricity and electronics with the Snap Circuits Jr. Select kit. This comprehensive instruction manual guides users through building over 133 exciting projects, fostering learning and creativity for ages 8-108.
	Snap Circuits Explore Coding: Hands-On Electronics and Programming Guide Discover the world of electronics and coding with Elenco's Snap Circuits Explore Coding kit. This guide provides hands-on projects, app-driven learning, and STEM skill development for ages 8 and up.
	Elenco Snap Circuits: Comprehensive Electronics Project Manuals Explore the exciting world of electronics with Elenco's Snap Circuits. This collection of comprehensive manuals guides users through hundreds of projects, from simple circuits like 'Batteries in Series' to complex creations like the 'AM Radio'. Covering projects from 102-305 and 306-511, these guides offer a hands-on, engaging way to learn fundamental electronic principles. Ideal for students, educators, and hobbyists, Snap Circuits transforms learning into an interactive adventure.

[pdf] Catalog

Elenco Electronics ToyCatalog2023 WEB elenco 2018 01 |||

TOY CATALOG 2023 100 TO BE PRECISE Introducing: SNAP CIRCUITS STEM Classroom Activity Kit For Gr ... H 4 Different Builds UPC: 756619012711 Over 60 Parts TEACH TECH ROBOT KITS 16 MECH-5 Model **TTC-895** Truly innovative-screenless coding A mission-based STEM coding robot with a mechanical codi...

lang:en score:11 filesize: 63.82 M page_count: 32 document date: 2023-05-24

[pdf] Catalog

Toy Catalog 2022 elenco 09 |||

TOY CATALOG 2022 Our mission over the last 50 YEARS has been to provide quality, innovative toys ... lltdipsle TEACH TECH CODING KIT 22 Screenless Coding 23 TEACH TECH CODING KIT MECH-5 Model **TTC-895** Truly innovative-screenless coding. A mission-based STEM coding robot with a mechanical codi...

lang:en score:10 filesize: 119.08 M page_count: 52 document date: 2022-09-19

Elenco Snap Circuits & STEM Educational Kits Catalog

Explore Elenco's comprehensive catalog featuring Snap Circuits, Teach Tech, Engino, and more. Discover educational STEM kits, robotics, electronics, and science projects designed for hands-on learning and creativity.

lang:en score:9 filesize: 13.23 M page_count: 64 document date: 2019-05-06