Manuals+ — User Manuals Simplified.

Learning Resources LER2831 Code & Go Robot Mouse User Manual

Contents

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So, what is coding?

Coding means the transformation of data into a form understandable by a computer— basically, telling a computer what you want it to do. Coding also factors into some everyday tasks that people perform without a second thought: for instance, programming a microwave to heat yesterday's leftovers, or entering numbers into a calculator in a specific order. Coding today may not always look like the routine programming of the past. It can be active, visual, engaging, and most importantly, fun! Educators agree that an early introduction to basic programming concepts can help children build problem-solving and critical-thinking skills. This set provides that very introduction, giving early learners a fun, real-world application of these essential 21st-century skills.

What can using a programmable robot teach?

- Problem-solving
- Self-correcting errors
- Critical thinking
- Analytical thinking
- If-then logic
- Working collaboratively with others
- Discussion and communication skills
- Calculating distance
- Spatial concepts

Pieces included:

- 30 Coding cards
- 22 Maze walls
- 16 Maze grid pieces that connect to form a large board
- 10 Double-sided Activity Cards
- 3 Tunnels
- 1 Robot mouse (Colby)
- 1 Cheese wedge

Introducing Code & Go: Tips for Beginning Programmers

Start by providing a simple, guided introduction to the mouse: identify the color and function of each of the mouse's buttons (see Basic Operation). Reinforce that the green button means go—it tells the mouse to act. Set the mouse on the floor or a table. Let the child try moving the mouse forward, by pressing the blue arrow once and then the green button. Point out that the mouse moves forward in the direction its nose is pointing. Let the child explore the other directional arrows, one at a time. The right and left arrows make the mouse rotate, in place, 90 degrees in either direction.

Remember to press and hold the yellow button to clear the mouse's memory after each command.
Otherwise, the mouse will remember previous commands and perform them along with new commands. Children need to see each movement in isolation. Pressing Clear before entering new steps will ensure that the mouse moves exactly as programmed.
Set up a maze and complete a programming sequence, as follows:

- Snap together the maze pieces to form a 4 x 4 grid.
- Select the first activity card; position the mouse, cheese, and maze walls as shown.
- Help the child count the number of spaces between mouse and cheese.
- Lay out the coding cards. Explain that these cards help map the mouse's path. Work together with the child to find the correct cards (two forward) and place them side by side.
- Ask the child to program the mouse to reach the cheese. Does the child tap forward twice?

If the child easily grasps this concept (i.e., programs the mouse to match the coding string), try adding 1–2 more spaces between mouse and cheese, placing additional maze walls on the grid, or even integrating a turn for the mouse to make before reaching the cheese. At this age, multistep sequences can be very difficult for young learners to remember, although the coding cards help. Begin with a short series of moves, before gradually adding in turns and building different maze configurations. Most of all, keep it fun!
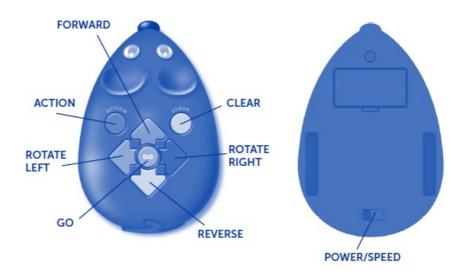
Basic Operation

- **POWER**: Slide to turn the power ON. Colby is ready to program!
- **SPEED**:Choose between Normal and Hyper. Normal is best for regular use on the maze board, while Hyper is best for play on the ground or other surfaces.
- **FORWARD:** For each FORWARD step, Colby moves forward a set amount (5") (12.5 cm).
- **REVERSE:** For each REVERSE step, Colby moves backward a set amount (5") (12.5 cm).
- **ROTATE RIGHT**: For each ROTATE RIGHT step, Colby will rotate to the right 90 degrees.
- **ROTATE LEFT:** For each ROTATE LEFT step, Colby will rotate to the left 90 degrees.
- **ACTION**: For each ACTION step, Colby will perform one of 3 RANDOM actions:
    - Move forward and back
    - Loud "SQUEAAKK"
    - CHIRP-CHIRP-CHIRP (and light-up eyes!)
- **GO:** Press to execute or perform your programmed sequence, up to 40 steps!
- **CLEAR:** To clear all programmed steps, press and hold until you hear a confirmation tone.
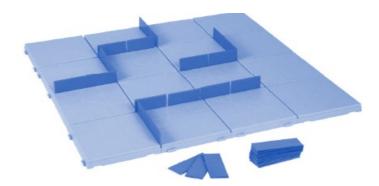
Important notes:

if the mouse begins to move on the programmed course, or if it fails to turn a full 90 degrees, this could be a sign of low battery power. When the batteries are very low, the mouse will begin to beep and flash its eyes, and the GO button will be disabled. Replace the old batteries as soon as possible to restore complete functionality.

Please do not push the robot mouse forward or back with force. This can damage the wheels and break the axles inside.

Assembling the Grid:

Connect all 16 grid pieces to form one large square maze board—or make any configuration you can imagine! Pictured below are several mazes you can build:
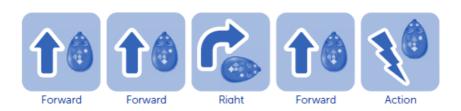

Using the Maze Walls

Create a maze by inserting the walls into the lines on the board. Follow the patterns on the activity cards to re-create each maze. Then, program Colby to maneuver through the maze and to the cheese! Because the maze is customizable, children can build their maze, try their hand at programming Colby from start to finish, or invite a friend to try the maze they created. For those aspiring engineers who want to build their maze using items from home, Colby can also maneuver on most surfaces, independent of the maze.

Coding cards

Colorful coding cards help children keep track of each step in a sequence. Each card features a direction or "step" to program into Colby. Cards are color-coordinated to match the buttons on the mouse (see Basic Operation, on the second page, for details about each command). For ease of use, we recommend lining up each card, in sequence, to mirror each step in a program. For example, if a programmed sequence includes the steps FORWARD, FORWARD, TURN RIGHT, FORWARD, and ACTION, place those cards to help follow and remember the sequence.

| Forward | Forward | Right | Forward | Action |

Activity Cards

This set also includes 10 double-sided Activity Cards featuring 20 mazes. These cards can be used as an educational tool to help young programmers "ramp up" their skills. Start with card 1 to teach the very basics, and follow in number sequence as logic and critical thinking skills improve. For all the mazes on the activity cards, the goal is to program your robot mouse to reach the cheese. Each of these mazes should be completed in the fewest steps possible. For mazes with tunnels, be sure to have Colby pass under each tunnel before reaching the cheese.
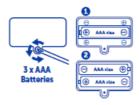
Battery Information
Installing or Replacing Batteries

WARNING

To avoid battery leakage, please follow these instructions carefully.
Failure to follow these instructions can result in battery acid leakage that may cause burns, personal injury, and property damage.

Requires: 3 x 1.5V AAA batteries and a Phillips screwdriver

- Batteries should be installed or replaced by an adult.
- The Robot Mouse requires (3) three AAA batteries.
- The battery compartment is located on the bottom of the unit.
- To install the battery, first undo the screw with a Phillips screwdriverand remove the battery compartment door. Install batteries as indicated inside the compartment.
- Replace the compartment door and secure it with a screw.

Battery Care and Maintenance Tips

- Use (3) three AAA batteries.
- Be sure to insert batteries correctly (with adult supervision) and always follow the toy and battery manufacturer's instructions.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries.
- Do not mix new and used batteries.
- Insert the battery with the correct polarity. Positive (+) and negative (-) ends must be inserted in the correct directions as indicated inside the battery compartment.

- Do not recharge non-rechargeable batteries.
- Only charge rechargeable batteries under adult supervision.
- Remove rechargeable batteries from the toy before charging.
- Only use batteries of the same or equivalent type.
- Do not short-circuit the supply terminals.
- Always remove weak or dead batteries from the product.
- Remove batteries if the product will be stored for an extended period.
- Store at room temperature.
- To clean, wipe the surface of the unit with a dry cloth.

Please retain these instructions for future reference.

FAQs

What is the Learning Resources LER2831 Code & Go Robot Mouse?

The Learning Resources LER2831 Code & Go Robot Mouse is an educational toy designed to introduce young children to the basics of coding through interactive play. The robot mouse can be programmed to navigate a customizable maze, helping children develop problem-solving and sequencing skills.

How does the Learning Resources LER2831 Code & Go Robot Mouse teach coding?

The Learning Resources LER2831 Code & Go Robot Mouse teaches coding by allowing children to input simple commands to control the mouse's movements. This helps kids understand basic coding concepts such as sequencing, logic, and if-then statements.

What age group is the Learning Resources LER2831 Code & Go Robot Mouse suitable for?

The Learning Resources LER2831 Code & Go Robot Mouse is suitable for children aged 4 and up. It is designed to make coding accessible and fun for young learners.

What is included in the Learning Resources LER2831 Code & Go Robot Mouse set?

The Learning Resources LER2831 Code & Go Robot Mouse set includes a programmable robot mouse, 30 double-sided coding cards, 16 maze grids, 22 maze walls, 3 tunnels, and a cheese wedge. These components allow children to create and navigate different mazes.

How does the Learning Resources LER2831 Code & Go Robot Mouse encourage problem-solving?

The Learning Resources LER2831 Code & Go Robot Mouse encourages problem-solving by challenging children to design a maze and then figure out the correct sequence of commands to navigate the mouse through it. This process helps develop critical thinking and planning skills.

How does the Learning Resources LER2831 Code & Go Robot Mouse improve a child's cognitive skills?

The Learning Resources LER2831 Code & Go Robot Mouse improves cognitive skills by engaging children in activities that require them to think critically, sequence events, and troubleshoot errors. This hands-on approach to learning enhances memory, concentration, and logical reasoning.

What educational benefits does the Learning Resources LER2831 Code & Go Robot Mouse offer?

The Learning Resources LER2831 Code & Go Robot Mouse offers numerous educational benefits, including the development of early coding skills, enhanced problem-solving abilities, and an introduction to STEM concepts in a fun and interactive way.

How customizable is the Learning Resources LER2831 Code & Go Robot Mouse maze?

The maze for the Learning Resources LER2831 Code & Go Robot Mouse is highly customizable. The set includes various grids, walls, and tunnels that children can arrange in countless configurations, allowing for endless maze designs and coding challenges.

What makes the Learning Resources LER2831 Code & Go Robot Mouse a good gift for kids?

The Learning Resources LER2831 Code & Go Robot Mouse makes a great gift because it combines fun and education. It introduces children to coding in an engaging way, making it an excellent choice for parents who want to encourage their child's interest in STEM.

What is included in the Learning Resources LER2831 Code & Go Robot Mouse set?

The Learning Resources LER2831 Code & Go Robot Mouse set includes 16 maze grids, 22 maze walls, 3 tunnels, 30 double-sided coding cards, 10 double-sided activity cards, a cheese wedge, and an activity guide.

How big is the maze that can be created with the Learning Resources LER2831 Code & Go Robot Mouse set?

The 16 maze grids included in the Learning Resources LER2831 Code & Go Robot Mouse set can be used to create a 20

How does the Learning Resources LER2831 Code & Go Robot Mouse introduce coding concepts?

The Learning Resources LER2831 Code & Go Robot Mouse introduces coding concepts through hands-on activities, such as creating a step-by-step path for the robot mouse using coding cards.

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Reference Link:

[Learning Resources LER2831 Code & Go Robot Mouse-device report](#)

References

- [User Manual](#)