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› Ravensburger GraviTrax PRO Giant Set Instruction Manual

Ravensburger 27023

Ravensburger GraviTrax PRO Giant Set Instruction Manual

Model: 27023

1. INTRODUCTION

The Ravensburger GraviTrax PRO Giant Set is an interactive track system designed to explore the principles of gravity, magnetism, and kinetics. This STEM educational toy encourages critical thinking, problem-solving, and engineering skills through hands-on construction of marble runs. It is suitable for users aged 8 and up, offering extensive possibilities for creative and complex track designs.



Image 1.1: The GraviTrax PRO Giant Set, showcasing the product box and a partially assembled track.

2. WHAT'S INCLUDED

The GraviTrax PRO Giant Set contains 409 unique components to build elaborate three-dimensional structures. The comprehensive contents are listed below:

- 18 Gravispheres (steel balls: 9 silver, 3 red, 3 green, 3 blue)
- 8 Base Plates
- 2 Transparent Bases
- 2 Small Transparent Bases
- 4 Double Balconies
- 16 Balconies
- 2 Long Walls
- 2 Medium Walls
- 1 Short Wall
- 70 Curve Tiles
- 10 Junction Tiles (X)

- 2 3-in-1 Tiles
- 4 Y-Intersections/Switch Tiles
- 2 Vortex Tiles
- 16 Base Tiles (8 for tunnels, 8 with other inserts)
- 2 Straight Tunnels
- 4 Curved Tunnels
- 2 Y-Junction Tunnels
- 2 Free-Fall Inserts
- 4 Catcher Inserts
- 2 Splash Inserts
- 2 Landing Inserts
- 2 Vertical U-Turn Tunnels
- 100 Large Height Tiles
- 32 Small Height Tiles
- 8 Pillars
- 4 Tunnel Pillars
- 9 Long Rails
- 18 Medium Rails
- 27 Short Rails
- 3 Curved Rails (left)
- 3 Curved Rails (right)
- 2 Dipped Rails
- 2 Drop Rails
- 2 Bent/Bernoulli Rails with Supports
- 2 Long Thin Rails
- 2 Long Slow Rails
- 2 Finish Lines
- 1 3-Way Starter
- 1 Spinner
- 2 Magnetic Cannons
- 1 Loop
- 1 Scoop
- 1 Hammer
- 1 Vertical Splitter (PRO)
- 1 Vertical Mixer (PRO)
- 1 Helix (PRO)
- 1 Turntable (PRO)



Image 2.1: Detailed illustration of all 409 components included in the GraviTrax PRO Giant Set.

3. SETUP AND ASSEMBLY

The GraviTrax PRO Giant Set is a modular system that allows for endless construction possibilities. Follow these general guidelines for setup:

1. **Unpack Components:** Carefully remove all pieces from the packaging. The set includes a storage box for organization.
2. **Lay Out Base Plates:** Begin by arranging the hexagonal base plates on a flat, stable surface. These form the foundation of your track.
3. **Build Vertical Structures:** Use the height tiles, pillars, and walls to create multi-level structures. These

elevate the tracks and allow for complex designs.

4. **Connect Tracks:** Place curve tiles, straight rails, and special action tiles (like the Mixer, Splitter, Loop, etc.) to form pathways for the marbles. Ensure all connections are secure to prevent marbles from falling off the track prematurely.
5. **Integrate Special Elements:** Incorporate kinetic elements such as the Magnetic Cannons, Spinner, Scoop, and Hammer to add dynamic action to your marble run.
6. **Utilize the App:** For guided building, download the official GraviTrax app. It allows you to design tracks digitally and provides step-by-step building instructions for your creations.

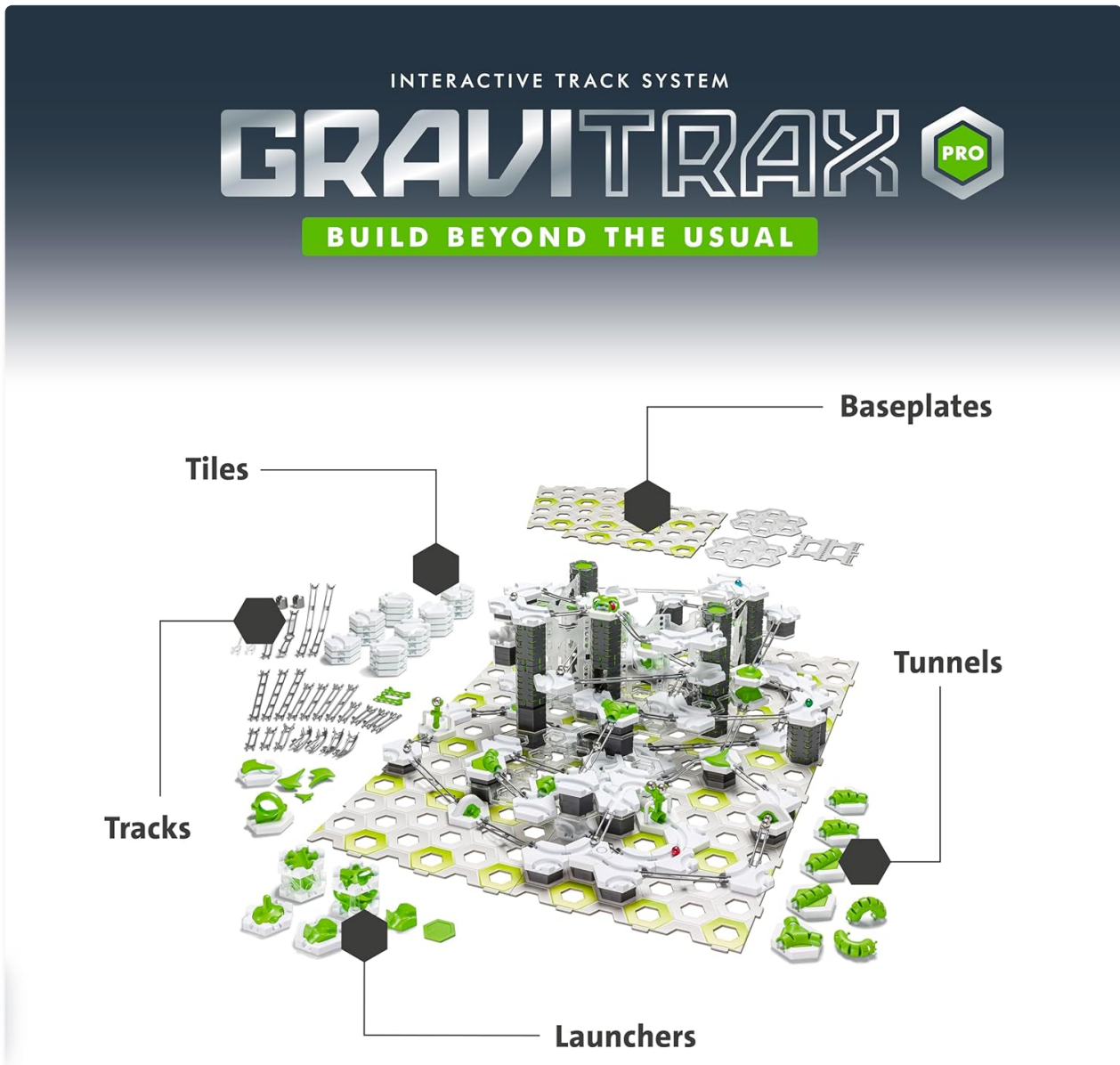


Image 3.1: Key GraviTrax components and their general placement in a track system.

Endless Adventure in Every Build!

All GraviTrax PRO products are compatible with other GraviTrax products



Image 3.2: Examples of expanded GraviTrax PRO setups, illustrating compatibility and potential for combining multiple sets.

4. OPERATING INSTRUCTIONS

Once your GraviTrax track is assembled, operating it is straightforward:

1. **Place Marbles:** Begin by placing one or more Gravispheres (marbles) at the designated starting point of your track.
2. **Observe Gravity and Motion:** Release the marbles and observe how gravity propels them through the track. Pay attention to how different track elements and kinetic components influence the marbles' speed and direction.
3. **Experiment and Adjust:** The core of GraviTrax play is experimentation. If a marble gets stuck or doesn't follow the intended path, analyze the design and make adjustments. This iterative process enhances problem-solving skills.
4. **Utilize Action Elements:** Activate special action elements like the Magnetic Cannons or the Spinner at the appropriate times to give marbles an extra boost or change their trajectory.



Build Stronger Bonds Through Play!

Image 4.1: Children and an adult engaging in collaborative play with the GraviTrax PRO Giant Set.



**The Perfect Gift
for Curious Minds!**



Image 4.2: A child observing the marble run, highlighting the engaging nature of the toy for a wide age range.

Official Product Video

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Video 4.1: An official Ravensburger video demonstrating the dynamic movement of marbles through various GraviTrax PRO components and track designs.

5. MAINTENANCE

Proper care and maintenance will ensure the longevity of your GraviTrax PRO Giant Set:

- **Cleaning:** Wipe components with a soft, dry cloth. For stubborn dirt, a slightly damp cloth can be used, followed by immediate drying. Avoid harsh chemicals or abrasive cleaners.
- **Storage:** Store all components in the provided box or a similar container to prevent loss and damage. Keep the set away from direct sunlight and extreme temperatures.
- **Handling:** Handle all pieces with care. Avoid bending or forcing connections, as this can cause breakage.

6. TROUBLESHOOTING

If you encounter issues with your GraviTrax PRO Giant Set, consider the following troubleshooting steps:

- **Marbles Getting Stuck:** Check for any misaligned track pieces or blockages. Ensure there is sufficient height difference for gravity to propel the marble. Sometimes, a slight adjustment to a tile's angle can resolve the issue.
- **Unstable Structures:** Ensure all height tiles and pillars are firmly seated on the base plates and that connections are secure. Distribute weight evenly if building tall structures.
- **Marbles Falling Off Track:** Verify that all track pieces are correctly connected and that the marbles are not moving too fast for a particular curve or element. Adjust the starting height or path if necessary.
- **Kinetic Elements Not Functioning:** Ensure any moving parts are free from obstruction and correctly assembled according to the visual instructions provided with the set.

7. SPECIFICATIONS

Attribute	Detail
Product Dimensions	13.7 x 13.7 x 13.7 inches
Item Weight	5.51 pounds
ASIN	B094JXQMCS
Item Model Number	27023
Manufacturer Recommended Age	8 years and up
Release Date	November 18, 2021
Language	Dutch, English, French, German
Manufacturer	Ravensburger

8. SAFETY INFORMATION

No specific safety warnings are required for this product beyond general toy safety practices. Always ensure small parts are kept away from very young children to prevent choking hazards.

9. WARRANTY AND SUPPORT

For detailed warranty information and customer support, please refer to the official Ravensburger website or contact their customer service directly. You can visit the [Ravensburger Store on Amazon](#) for more product information and contact options.

