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› GAN 251 V2 Speed Cube Instruction Manual

GAN GAN2x2

GAN 251 V2 Speed Cube Instruction Manual

Model: GAN2x2

1. INTRODUCTION

This manual provides essential information for the use and maintenance of your GAN 251 V2 Speed Cube. The GAN 251 V2 is a 2x2x2 puzzle cube designed for speedcubing, featuring a lightweight construction, smooth turning, and an adjustable tension system. It is suitable for beginners and experienced cubers alike.



Figure 1: The GAN 251 V2 Speed Cube, showing its stickerless design with blue, orange, and white faces visible. The GAN logo is present on one of the white faces.

2. KEY FEATURES

- **Lightweight Design:** Weighs approximately 47 grams, contributing to a comfortable and fast turning experience.
- **GES+ Tension System:** Features an adjustable Numerical Tension System (GES+) for fine-tuning the cube's feel and performance.
- **Smooth Cornering:** Engineered with improved anti-pop technology and structure for fluid and stable rotations.
- **Stickerless Bright Colors:** Utilizes a vibrant stickerless color scheme for enhanced visibility and durability.
- **Compact Size:** Measures 51mm, making it a convenient size for handling.

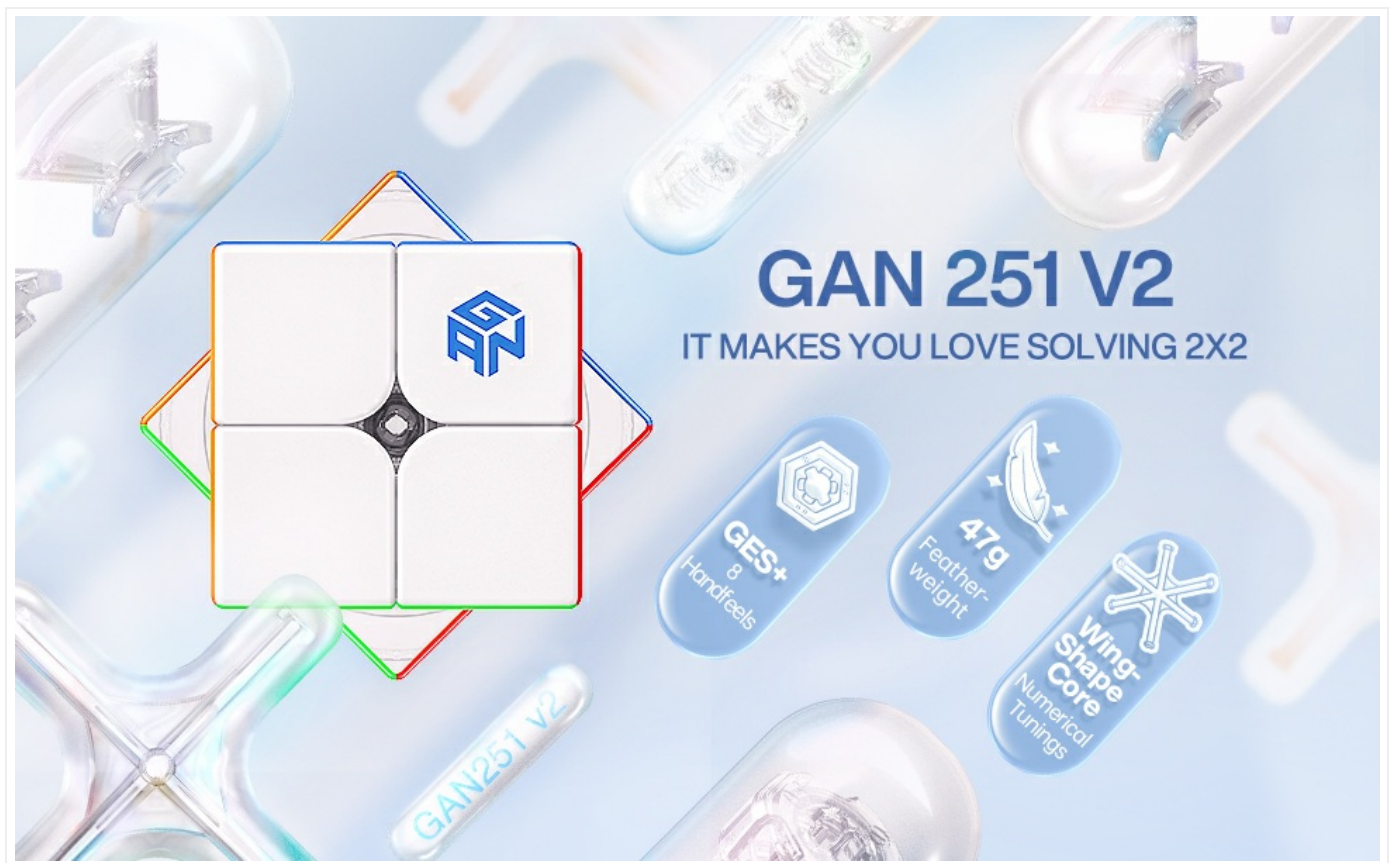


Figure 2: An overview highlighting the key features of the GAN 251 V2, including GES+ Handfeels, 47g Featherweight, Wing-Shape Core, and Numerical Tunings.

3. SETUP AND ADJUSTMENT

The GAN 251 V2 comes pre-assembled and ready for use. However, you can adjust the tension to match your preferred turning feel.

3.1. Adjusting Tension with GES+

The cube features a GES+ (GAN Elastic System) Numerical Tension System, allowing for precise adjustments.

1. Locate the center caps on each face of the cube.
2. Carefully remove a center cap to reveal the tension screw and the GES+ nut.
3. Use the provided tuning tool to rotate the GES+ nut.
 - Turning towards "Loose" (e.g., 0.8) will make the cube looser and faster.
 - Turning towards "Tight" (e.g., 0.6) will make the cube tighter and more stable.
4. Adjust each of the six faces to your desired tension. Ensure all faces are set to the same tension for balanced performance.
5. Replace the center caps after adjustment.

Numerical Tension Nuts

Special design for all levels speed cube player.
To find your perfect hand feeling.



Figure 3: Illustration of the Numerical Tension Nuts (GES+) system, showing how to adjust the cube's tension from loose to tight using the included tuning tool.

4. OPERATING THE SPEED CUBE

The GAN 251 V2 operates like any standard 2x2x2 puzzle cube. The objective is to scramble the cube and then return each face to a single, solid color.

4.1. Basic Movements

The cube consists of 8 corner pieces. Each face can be rotated 90, 180, or 270 degrees (quarter, half, or three-quarter turns) clockwise or counter-clockwise.

- **Face Turns:** Rotate any of the six faces (Up, Down, Front, Back, Left, Right).
- **Corner Cutting:** The GAN 251 V2 is designed for advanced corner cutting, allowing for turns even when faces are not perfectly aligned. This feature enhances speed and fluidity during solves.

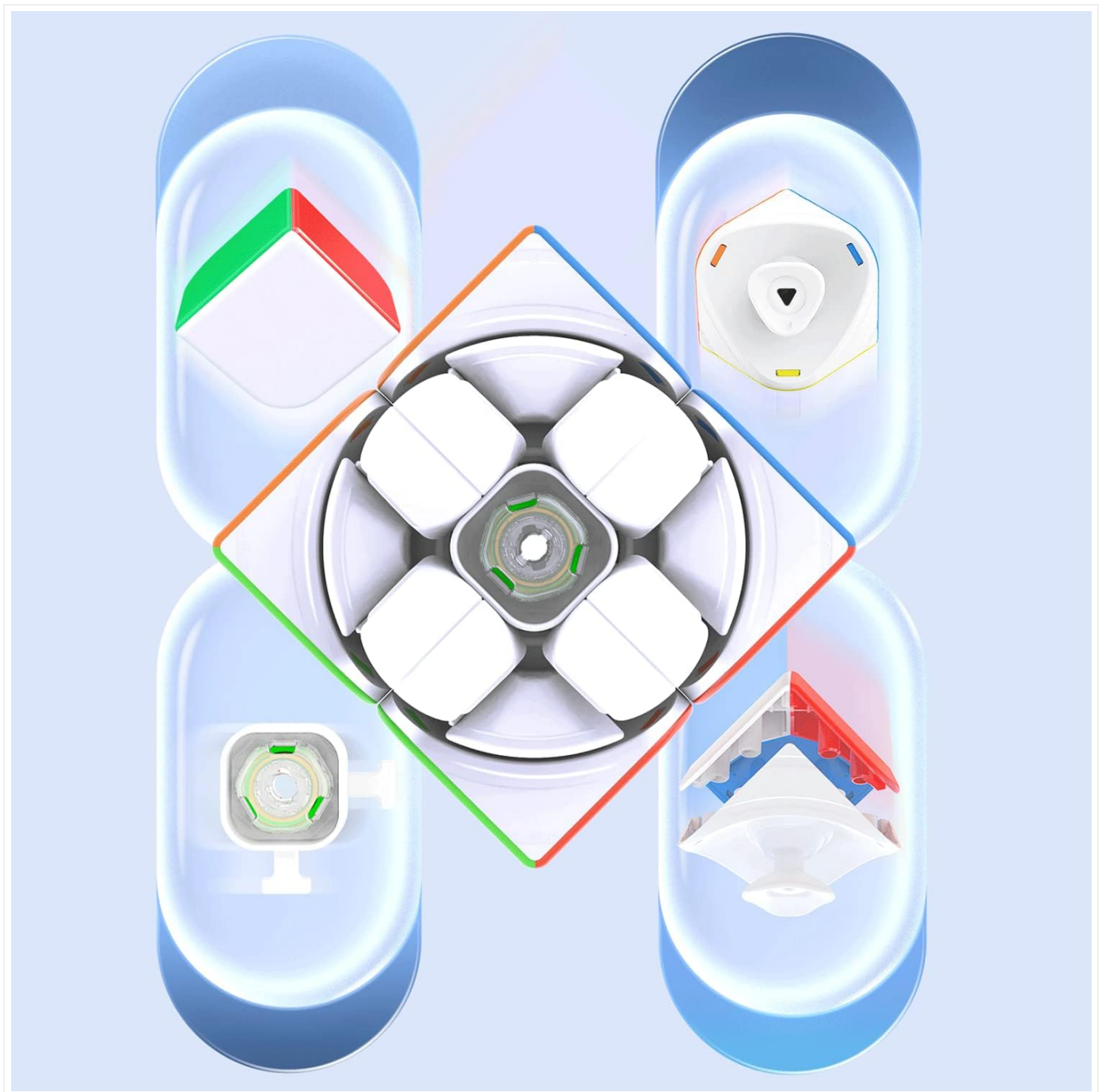


Figure 4: An exploded view of the GAN 251 V2, illustrating its internal mechanism, including the core, corner pieces, and the design that facilitates 90-degree corner cutting (60 degrees forward, 30 degrees reverse).

4.2. Solving Techniques

This manual does not cover specific solving algorithms. Numerous resources are available online for learning 2x2x2 solving methods, from beginner-friendly approaches to advanced speedcubing techniques.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your speed cube.

5.1. Cleaning

- Wipe the exterior of the cube with a soft, dry cloth to remove dust and fingerprints.
- Avoid using harsh chemicals or abrasive materials, as these can damage the plastic and stickerless finish.
- If dust or debris accumulates inside the cube, carefully disassemble a few pieces (refer to online guides if unsure)

and clean the internal surfaces with a soft brush or compressed air.

5.2. Lubrication

- For optimal performance, apply a small amount of speed cube lubricant to the internal contact surfaces of the pieces.
- Apply a few drops, then turn the cube thoroughly to distribute the lubricant evenly.
- Do not over-lubricate, as this can make the cube feel sluggish.

6. TROUBLESHOOTING

Here are solutions to common issues you might encounter with your speed cube.

6.1. Cube Feels Too Loose or Too Tight

- Adjust the GES+ Numerical Tension System as described in Section 3.1. Increase tension to make it tighter, decrease to make it looser.

6.2. Pieces Pop Out (Popping)

- This often indicates the cube is too loose. Increase the tension using the GES+ system.
- Ensure all pieces are correctly assembled. If a piece pops out, carefully reinsert it.

6.3. Grinding or Catching During Turns

- The cube may need lubrication. Refer to Section 5.2 for lubrication instructions.
- Check for any debris inside the cube that might be obstructing movement.
- Ensure the tension is not excessively tight, which can cause friction.

7. SPECIFICATIONS

Feature	Detail
Product Dimensions	2.01 x 2.01 x 0.04 inches (51mm x 51mm x 51mm approx.)
Item Weight	1.6 ounces (47 grams)
Model Number	GAN2x2
Manufacturer Recommended Age	6 years and up
Tension System	GES+ Numerical Tension System
Core Type	Wing-Shape Core
Color Scheme	Stickerless

Full Upgrade

Version	Size	Weight	Mag. Adjustment	Core	GES	Corner Cutting
GAN 251 v2	51mm	47g	Not applicable	Wing-Shape	GES+ Numerical	60° + 30° -
GAN 249 v2	49mm	52g	Not applicable	IPG v2	Screw + Spring	50° + 25° -

Figure 5: A comparison table detailing the specifications of the GAN 251 V2 against its predecessor, the GAN 249 V2, highlighting upgrades in size, weight, core, GES system, and corner cutting capabilities.

8. WARRANTY AND SUPPORT

For information regarding product warranty, returns, or technical support, please contact GAN Cube customer service. You can visit the official GAN store on Amazon for more details and contact options:[GAN Cube Store](#).