

中文



GAN智能魔方 (ui Freeplay系列) 使用说明书

基本参数

产品型号	GAN12 ui FreePlay	GAN mini ui FreePlay
产品尺寸	56x56x56 mm	53x53x53 mm
产品重量	约 68.5±1g	约 63.5±1g
电池类型	3.7 V 锂电池	
充电时长	2.5 h	
续航时长	约 15 h*	
USB 电源适配器要求	≤5V2A	
连接方式	无线连接	
设备要求	支持 iOS9.0 及以上、Android4.4 及以上版本的设备	

*实验室测试数据，实际续航时长视使用而定。

产品配置



产品中有害物质的名称及含量

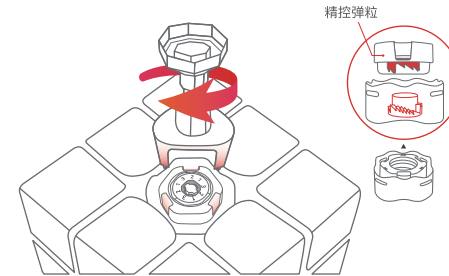
部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
魔方主体	○	○	○	○	○	○
电池	○	○	○	○	○	○
线缆	○	○	○	○	○	○
充电座	○	○	○	○	○	○

本表依据SJ/T11364的规定编制。
○：表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。
×：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求，且目前业界没有成熟的替代方案，符合欧盟ROHS指令环保要求。



第二步：弹力调试

将调试棒的弹力调试端对准弹粒三边槽口插入，顺时针旋转弹粒，每到一级均有明显卡顿。每转1级，弹力增加1级。从6级转到1级的卡顿声音最明显。



警告：请勿随意调换各面中心盖，以免影响 APP 识别魔方状态；调整轴距和弹力时请勿左右晃动轴心，以免损坏内部电路；调整轴距和弹力后需在 APP 上重置魔方。

使用前必读

- 本产品内置智能动态捕捉系统跟踪魔方动态，魔方各面的位置不可随意调换。
- 调试弹力时请勿左右晃动轴心，以免损坏内部电路。
- 充电时，魔方必须白色中心盖朝上置入充电盒。

*使用产品前请仔细阅读并妥善保存

上手步骤

- 充电**
 - 使用充电座充电方式：将魔方LOGO面朝上插入充电座，轻轻按压确保魔方插紧，连接标配的USB充电线进行充电。
 - 使用充电盒充电方式：将魔方LOGO面朝上插入充电盒，轻轻按压确保魔方插紧，按下充电盒电源按键进行充电。
- 唤醒**
 - 在魔方有电的前提下，转动魔方任意面可唤醒魔方。（白灯闪烁表示唤醒成功）。
 - 唤醒后可连接APP查看电量。
- 下载安装 APP “Cube Station”，打开手机蓝牙和APP，根据 APP 内提示连接魔方。



魔方状态/功能说明

魔方状态/功能	状态/功能说明	操作	指示灯状态 (指示灯位于魔方白面)
唤醒	唤醒状态下魔方可连接蓝牙设备	转动魔方任意面	白灯闪烁
休眠	休眠状态下魔方无法连接蓝牙设备	魔方超过5分钟未与设备连接或魔方在连接设备状态下，超过10分钟无任何操作，将自动休眠。	白灯熄灭
低电量	电量过低时魔方会自动休眠	使用配备的充电工具为魔方充电	红灯闪烁
断开 APP 账号	魔方同一时间仅能与一台设备连接，连接状态下无法被其他设备检测到	10秒内顺时针转动白面5圈或在APP内点击“断开”	白灯闪烁
绑定 APP 账号	魔方同一时间仅能绑定一个APP账号，绑定后其他账号无法与其连接	唤醒状态下，10秒内顺时针转动白面5圈，或在APP内点击“解除绑定”	/

调试步骤

调试棒使用说明

用于调试时，调试棒如图1所示，请按以下步骤进行调试棒形态转换：
①使 GAN logo 垂直对准凹槽处；
②捏住调试棒两端，轻轻用力往外拉，使调试棒两段连接处卡紧。

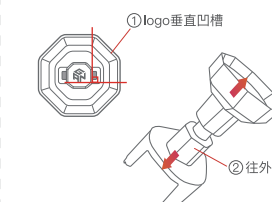
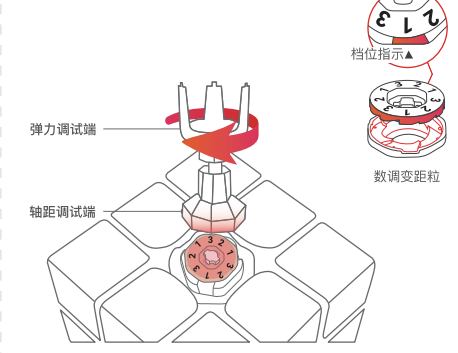


图1 调节模式

第一步：轴距调试

将调试棒的轴距调试端对准轴距变距粒插入并固定，顺时针旋转调试棒的弹力调试端，每到一档均有明显卡顿。每转1级，轴距减少1级。1/2/3：3档轴距，小轴距紧，大轴距松。



视频教程



官网

注意事项

- 使用限制**
- 智能魔方为精密电子产品，请勿拆解内核球轴，以免产品损坏。
 - 请勿在黄色面、转轴位加润滑油，否则可能导致无法充电。
 - 本产品不能遭受冲击、遇水或置于高于 60°C 的环境。
 - 本产品内含小零件，请勿给 3 岁以下儿童使用。
 - 请严格按照说明书提示使用产品，避免因操作不当导致设备损坏或人身伤害。

电池及充电

- 请仅使用标配的充电盒和 USB 线进行充电。充电前请确认充电设备完好无损。
- 魔方电量低时会自动进入休眠模式，请及时充电，以免数据丢失。
- 如果长时间不使用产品，请充满电后置于阴凉干燥处保存。长时间不充电会导致电池永久损坏，请确保至少每 3 个月充满电一次。

故障排除

- APP 无法检测到魔方？
 - 请确认魔方电量充足。
 - 请确认魔方处于唤醒状态。
 - 如魔方已被其他设备连接，则需断开后才能被另一台设备检测到。
 - 安卓设备请确认定位功能开启，并已授予 APP 定位权限。
- APP 显示的魔方状态不同步？
 - 请通过 APP 的重置功能重置魔方状态。
 - 魔方电量低时，会自动休眠导致魔方状态无法同步，请尽快充电。
 - 陀螺仪采集数据会累积偏差，导致 APP 显示的魔方状态不同步，此为原件物理特性，非产品质量问题。
- 无法充电？
 - 请确认白色中心盖的位置未经调换，并白色中心盖朝上插入充电盒压紧。
 - 当电量低时魔方会自动休眠，此时需要充电几分钟后才能再次唤醒。
 - 请尝试转动魔方整体朝向，再插入充电盒充电。

获取更多技术支持，请联系 support@gancube.com

English



GAN Smart Cube (ui FreePlay series) User Manual

SPECIFICATIONS

Model	GAN12 ui FreePlay	GAN mini ui FreePlay
Product size	56x56x56 mm	53x53x53 mm
Product weight	About 68.5±1g	About 63.5±1g
Battery type	3.7V lithium	
Charging time	2.5 h	
Battery life	About 15 h*	
USB adapter	≤5V2A	
Connection	Wireless	
Device requirement	IOS 9.0 Android 4.4 or above	

* Lab test data. Actual battery life subject to actual usage.

ACCESSORIES

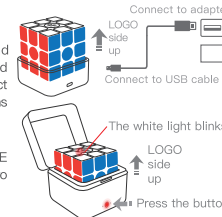


READ CAREFULLY BEFORE GETTING STARTED

- The product contains a built-in motion tracking system to record moves on each side. DO NOT swap the center caps of each side.
- DO NOT bend the core when adjusting tension, in case of damaging the internal circuit.
- To charge the cube, ensure that the LOGO side is facing upwards.

GETTING STARTED

- Charging methods**
 - Charging method of Charging stand: Put the cube into the charging stand and press it, LOGO SIDE UP ONLY. Connect the charging stand to a power source as shown.
 - Charging method of PowerPod: Put the cube into PowerPod (LOGO SIDE UP ONLY), and press the power button to start charging.
- Awaking method**
 - Turn any side of the cube to awake it. (The white light will blink when successful awakening.)
 - *Battery level will show in APP once connected.
- Download and install APP "Cube Station"**. Enable your smart phone's Bluetooth function and open the APP; Connect the cube per instructions in the APP.

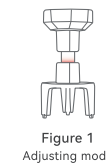
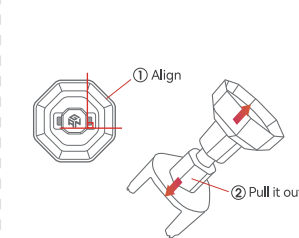


BASIC CUBE STATUS/FUNCTION

Cube Status/Function	Status/Function Instruction	Operation	Light Indicator (on the white side)
Awaken	The cube can connect to Bluetooth devices when in awaken mode.	Turn any side of the cube.	White light blinks.
Sleep	The cube can not connect to Bluetooth devices when in sleep mode.	Cube will automatically go off in situations below: 1. do not connect to any devices over 5 minutes. 2. no action over 10 minutes when connecting to the app.	White light off.
Low-battery	The cube will automatically enter sleep mode when battery is low.	Use the charger and USB cable provided for charging only.	Red light blinks.
Disconnect to APP	The cube can only connect to one device at a time. Once connected, the cube can not be detected by another device.	Rotate the white side clockwise for 5 rounds or using "disconnect" option in the APP can disconnect the cube.	White light blinks.
Bind to APP	The cube can only bind to one APP account at a time. Once binded, the cube can not be connected by any other APP accounts.	Rotate the orange side clockwise for 5 rounds or using "Unbind" option in the APP can unbind the cube.	/

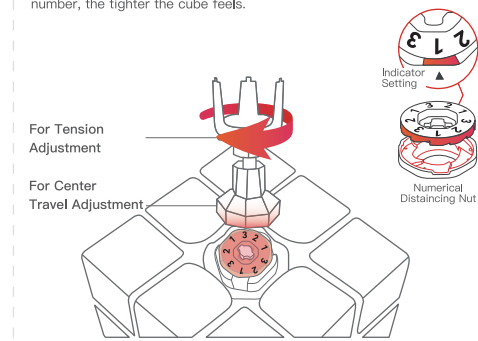
SET UP STEPS

Instructions for Adjusting Tool
When used for adjusting, the tool is shown as Figure 1.



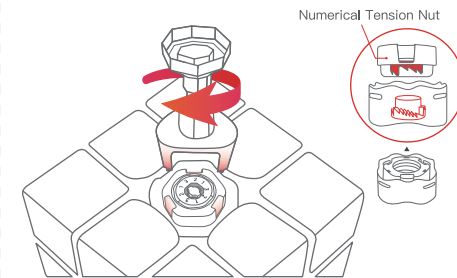
STEP 1 : CENTER TRAVEL ADJUSTMENT

Insert the tool into the numerical distancing nut. Then turn clockwise to adjust the center travel. Each turn counterclockwise decreases the center travel by one grade. You will feel a click with every turn as the nut moves. 1/2/3: 3 center travel options, the smaller the number, the tighter the cube feels.



STEP 2 : TENSION ADJUSTMENT

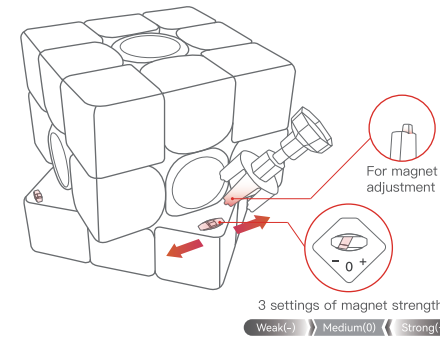
Insert the tool into the GES nut from the 3 matching slots. Then turn clockwise to increase the tension. You will feel a click with every turn as the nut moves downward. There will be the most obvious click when the tension turn to grade 1 from grade 6.



Warning: DO NOT alter the positions of center caps, this will lead to synchronization problems. DO NOT bend the core when adjusting center travel and tension, to prevent damage of the internal electrics. Resetting the cube is required after readjusting center travel and tension.

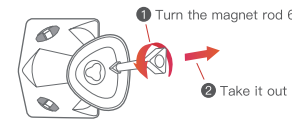
STEP 3 : MAGNET ADJUSTMENT

- Standard Adjustment (NO disassembling required)**
 - Turn the outer layer 45° to expose the magnet slots on the corner pieces. Use the adjusting tool to toggle the lever to the desired setting.

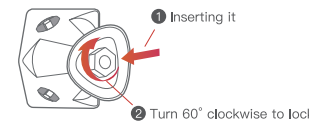


② Advanced adjustment (requires disassembling the cube)

- start from any one of the corner pieces. Take the corner piece out. Turn the magnet rod 60° counterclockwise to unlock and pull it out from the slot.



- insert the new rod and turn 60° clockwise to lock it. Then repeat the same operation to change the magnet rods on the other corners one by one.



VIDEO INSTRUCTION



MUST KNOWS

Usage restrictions

- The smart cube contains electronic components. To prevent damage, DO NOT dismantle the core.
- DO NOT lubricate on the yellow face and the core.
- DO NOT crash the product. Keep away from water or high temperature (≥60°C).
- Product contains small parts, NOT suitable for children under 36 months.
- Strictly follow manual to avoid product damage or bodily harm.

Battery and Charging

- Use the PowerPod and USB cable provided for charging only. Ensure they are in good condition before connecting to power.
- Product shuts down automatically when battery is low. Please charge the cube appropriately to avoid loss of data.
- Fully charge the cube at least once every 3 months to prevent permanent battery damage. Keep in dry and cool conditions if not in use.

TROUBLE-SHOOTING

1. Failure of detecting the cube by APP?

- Ensure the cube has been fully charged.
- Ensure the cube has been awakened.
- Ensure the cube's Bluetooth has been enabled. The red light in the white side will light up when cube's Bluetooth is off.
- Ensure the cube has not been connected already by another device.
- Android users please ensure location access has been authorized to the APP.

2. Cube position not synchronized in the APP?

- Reset the cube via "Reset Cube" functions in the APP.
- The cube will shut down when battery is low. Charge timely.
- Gyroscope will accumulate detection bias over time. This is not malfunction. Please adjust cube position in APP from time to time to ensure synchronization.

3. Failure of charging the cube?

- Ensure sides have not been altered from ex-factory positions and white side is facing upwards.
- When battery is too low it takes a few minutes to reach minimum wake-up battery level.
- Make a whole rotation and put the cube in the charging stand again.

More info & supports: support@gancube.com



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