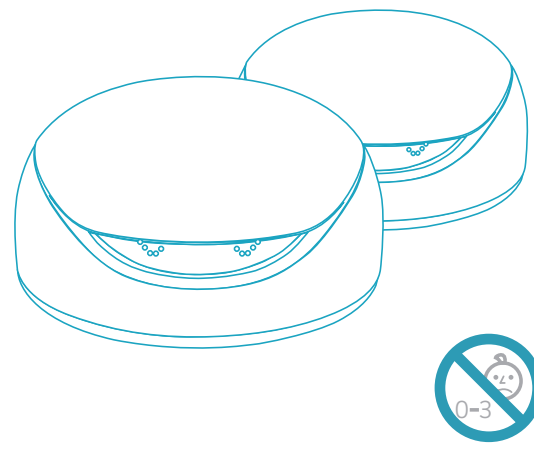


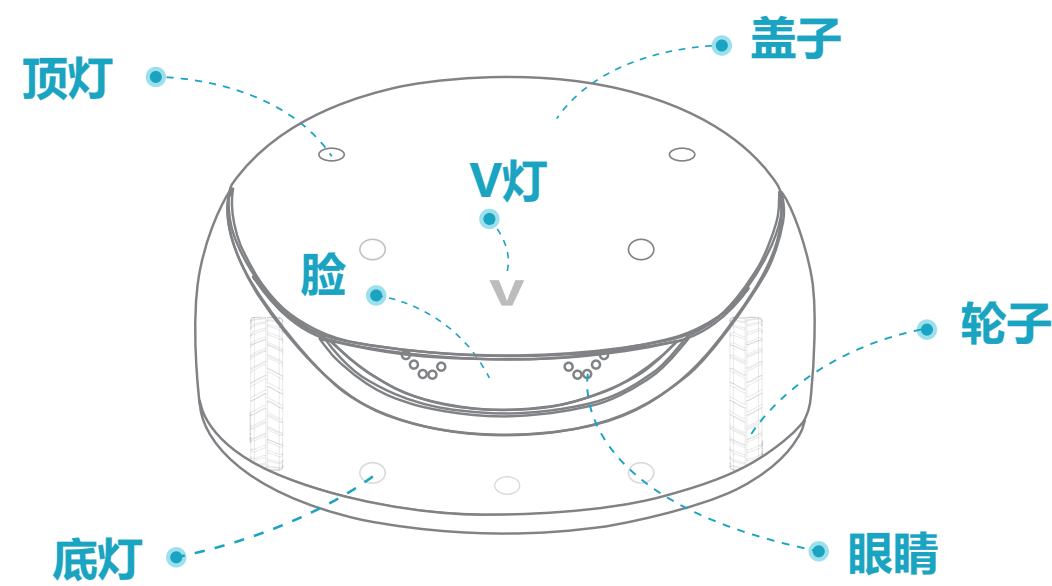
# Vortex

## 快速入门

适用儿童年龄：6+  
首次使用时，请家长在旁陪伴。



使用产品前请仔细阅读本说明书，并请妥善保管。



### 个性配置

Vortex预置了4个角色。用户还可以自己定义角色，设置各个灯光色彩，眼睛表情，配套音乐。

### 技术参数：

尺寸：直径120mm 高64mm  
质量：260g  
电源：1.5V碱性电池\*4  
通讯协议：蓝牙4.0

设计和规格如有变更，恕不另行通知。

### 保修

一年有限保修摘要：本产品（Vortex）由DFRobot供应和总经销，以全新状态交付给客户买主，DFRobot对其用料和工艺上的制造缺陷提供为期一年的质量保证。完整条款请参见使用手册。

**苹果：** Apple iPad, iPhone和iPod touch是苹果公司在美国和其他国家注册的商标。

**Bluetooth：** "Bluetooth"字标和徽标为Bluetooth SIG, Inc 所有。

DFRobot 保留所有权利。

### 联系我们：

周一至周五北京时间上午9点至下午6点  
致电：021-61620183  
访问：www.dfrobot.com.cn  
邮件：vortex@dfrobot.com



微信



微博

请扫描二维码关注我们：

制造商：上海智位机器人股份有限公司  
公司地址：上海浦东新区亮秀路112号Y1座615室 201203  
电话：021-61620183 传真：021-61001657  
原产地：中国 出版日期：2016年4月

### 最新说明

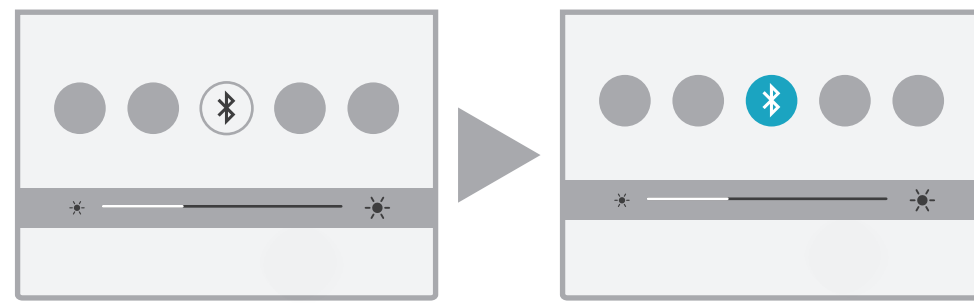
最新说明请前往www.dfrobot.com/vortex  
下载最新版本  
在我们的产品网站可以查询到本产品新增的信息和常见问题的解答。

## 目录

安装App	01
打开蓝牙设备	03
安装电池	04
打开电源开关	05
开机舞蹈	06
开机游戏	08
开始编程	13
注意事项	15

## 2 打开蓝牙设备

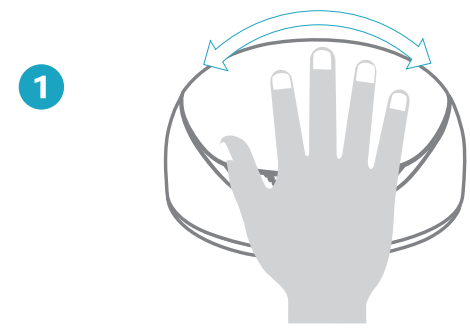
请打开手机的蓝牙设备，启动蓝牙功能。  
请勿在蓝牙设置中手动连接Vortex机器人，App会自动连接Vortex机器人。



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## 5 开机舞蹈

开机后可以和Vortex互动，Vortex能跳舞。



靠近Vortex的眼睛挥挥手，Vortex会变幻效果。  
Vortex跳舞巡线时，不能与App蓝牙连接。

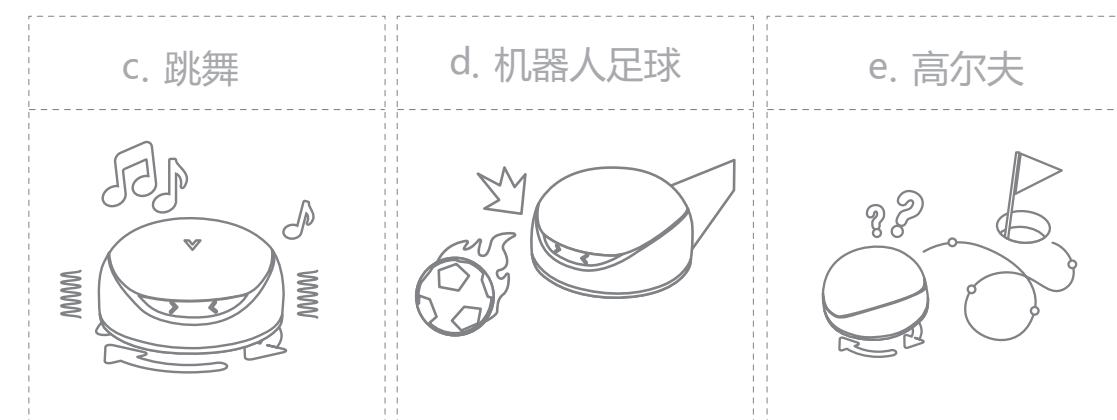
06

2 点击手机VortexBot App 进入菜单



3 手机靠近Vortex，自动蓝牙连接。  
VortexBot App连接上Vortex机器人后会自动检查固件版本，并自动更新到最新版；请在Vortex机器人固件自动更新时耐心等待，保持App打开状态。

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### ! 关于Vortex机器人的注意事项

- Vortex机器人属于精密电子产品，请勿使其受到强烈冲击，震动；避免粗暴使用，拆卸，捶击，跌落或踩踏产品等。
- Vortex机器人因连续使用可能变热，这是正常现象。
- Vortex机器人不防水，请勿将其置入水中或被水淋湿。
- 请勿在有强烈无线电波辐射及强磁场下使用Vortex机器人。
- 请在平坦干净的场地上使用Vortex机器人，如地图，地板，瓷砖等；不推荐在地毯上使用；请勿将其置于复杂的环境中。

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## 1 安装App

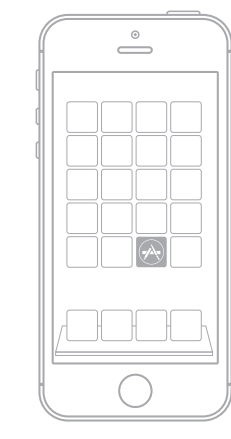
手机需支持蓝牙4.0



Available on the Android Market

安卓用户请扫描二维码  
或点击下载VortexBot App：  
www.dfrobot.com/vortex  
支持设备如下：  
Android 4.3及以上  
(并非兼容所有设备)

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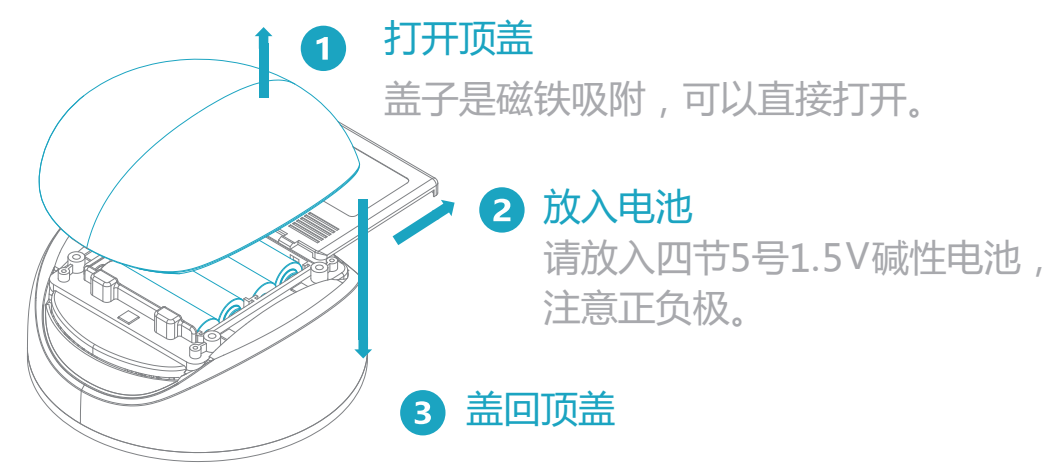
Available on the App Store

苹果用户请前往App Store 下载  
VortexBot  
支持设备如下：  
iPhone 4S及以上  
Ipad 3及以上  
Ipod touch 5/6

02

## 3 安装电池

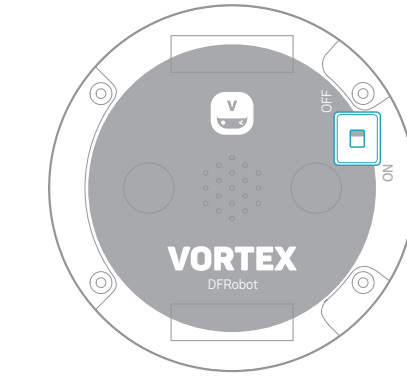
推荐使用大容量充电电池。



04

## 4 打开电源开关

开关位于Vortex机器人的底部

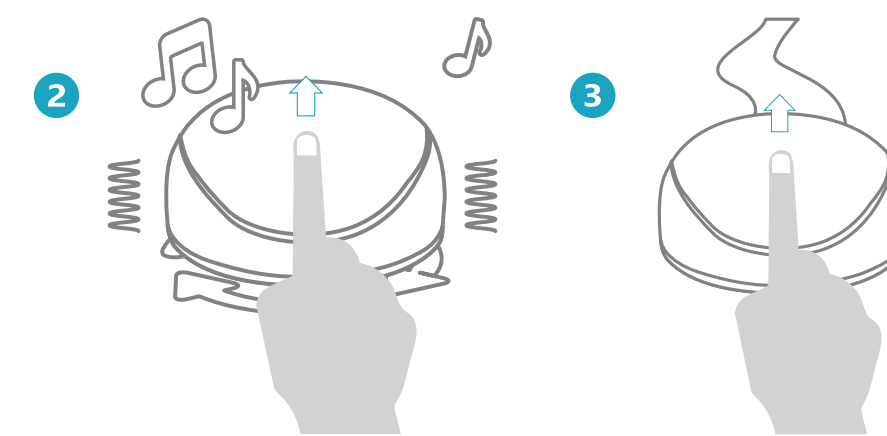


拨动开关从OFF到ON  
稍等几秒，Vortex机器人启动。  
关掉电源时，请将开关从ON拨到OFF。

1 请勿直视顶部和底部的LED灯。

Vortex机器人的底部

05



轻轻向前一推，Vortex会跳舞。

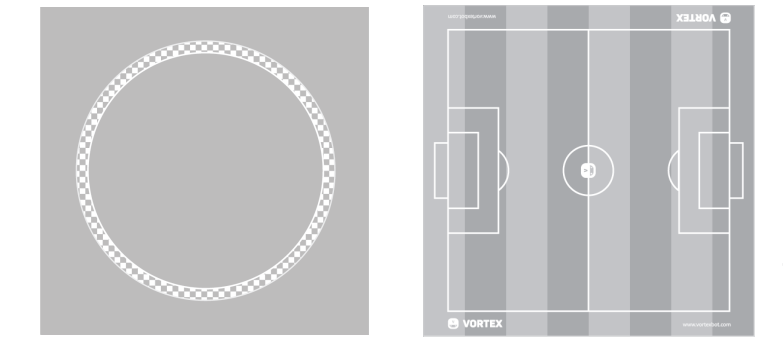
如果场地上有黑线，向前一推，Vortex会自动巡线，即沿线行走。  
如Vortex无法巡线，可尝试个性化->进阶设置->灰度校准。

07

## 6 开始游戏

用户也可以自己制作地图

1 双人及多人游戏请先打开游戏地图



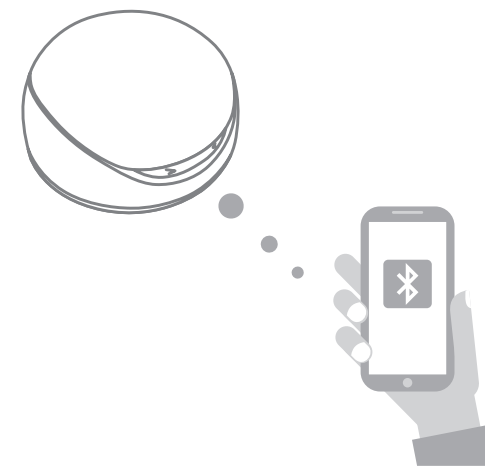
碰碰车

足球

请自备足球，多面体为佳

08

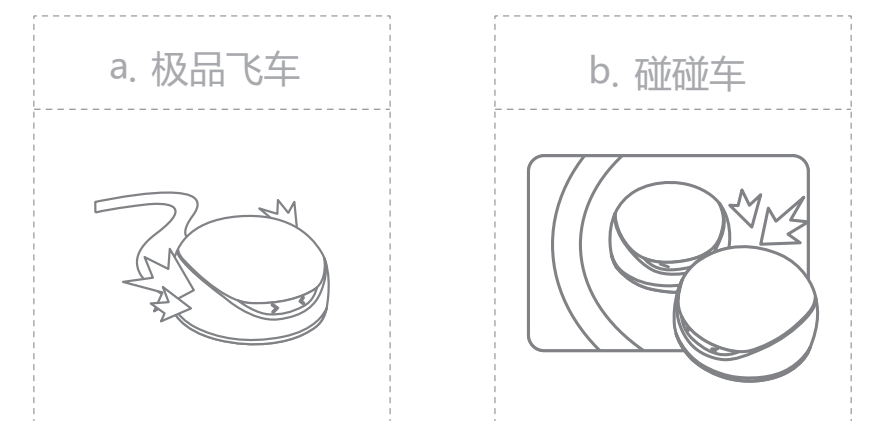
App会自动记录上次连接的Vortex机器人，以备下次优先连接；一个Vortex机器人只能同时与一个App连接；如需使用其他App，如WhenDo编程App，请先将VortexBot App彻底关闭，释放蓝牙。



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4 开始游戏

更多游戏请关注VortexBot App更新



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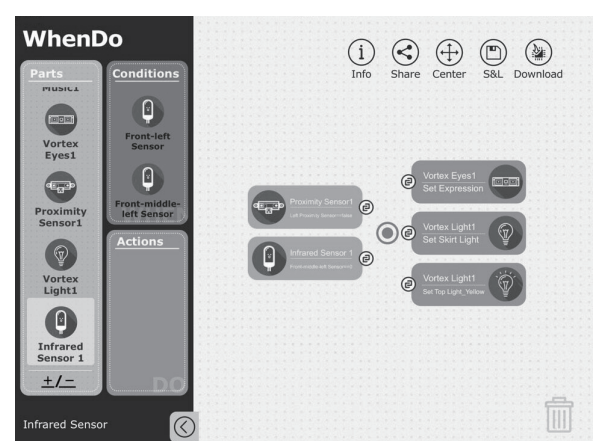
## 7 开始编程

Available on the App Store

iPad用户请前往App Store下载WhenDo App。  
iPad3以上设备支持

1 无线图形化编程App: WhenDo  
详细内容请参见WhenDo说明书

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2 高级编程：  
Vortex支持Arduino和Scratch编程。  
详细说明请前往www.dfrobot.com/vortex，  
下载《Vortex使用手册》。

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### ! 故障排除

- 如在游戏过程中遇到问题，请尝试按下面的方法解决。
- 请仔细阅读最新的Vortex使用手册（请从www.dfrobot.com/vortex下载）
- 请取出电池，等待大约一分钟后重新安上电池，重启。
- 如App有问题，请删除原有App，重新下载最新版本。

! 警告：为减少发生火灾或触电的危险，请勿让本装置淋雨或受潮。

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### ! 电池

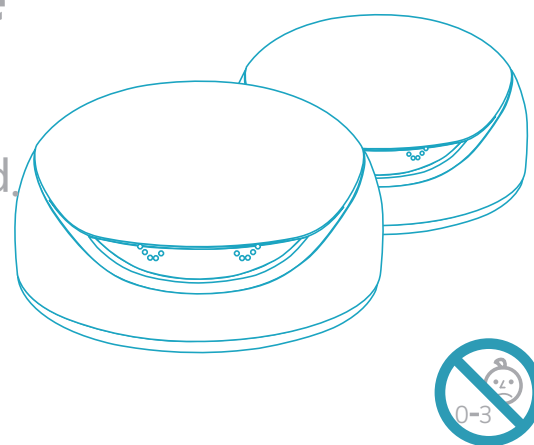
- 本产品使用4节1.5V 5号AA电池
- 不能连接多于推荐数量的电源
- 如何取出和放入电池：打开顶盖，移开电池盖，按正确电极放入或取出电池
- 不同类型的电池或新旧电池不能混用
- 请使用碱性电池
- 电池应以正确的极性放入
- 推荐使用5号AA大容量可充电电池
- 用尽的电池应及时取出
- 非充电电池不能充电
- 充电电池只能在成人监护下充电
- 电池请勿焚烧或丢入火中
- 充电电池在充电前应从玩具中取出
- 更换电池请在成人指导下进行
- 长期不使用，请将电池取出
- 仅型号相同或与推荐型号等同的电池可以使用
- 电源端子不得短路

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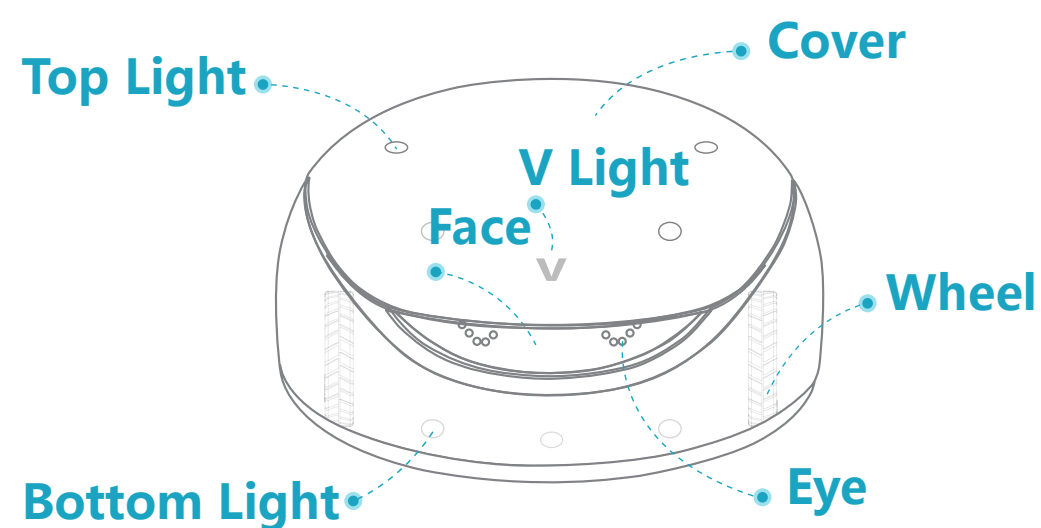
# Vortex

## Quick Start Guide

Ages 6 and up  
Adult Supervision Required



Please read these instructions carefully before using this product. Retain this manual for future reference.



### Personalization

Vortex includes four default profiles and one that you can customize yourself.

### Specification :

Size: Diameter 120mm Height 64mm  
Weight: 260g  
Power: 4 x AA batteries (1.5v alkaline)  
Bluetooth 4.0

DFRobot reserves the right to change the design and specifications of this product without prior notice.

### Customer Service

Retain proof of purchase for customer service support. For product feedback or enquiries email: vortex@dfrobot.com

### Vortex Limited Warranty

This Vortex product, as supplied and distributed by DFRobot and delivered new to the customer, is under warranty by DFRobot against manufacturing defects in materials and workmanship for the period of one (1) year. Full terms can be found in the Vortex User Manual.

**Apple** iPad, iPhone and iPod touch are trademarks of Apple Inc., registered in the US and other countries.  
**Google Play** Google Play is a trademark of Google Inc.  
**Bluetooth** The Bluetooth wordmark and logos are owned by Bluetooth SIG Inc.

DFRobot: All rights reserved.

### Contact Us:

Mon – Fri, 9am – 6pm (GMT+8)  
+8621 6162 0183  
www.dfrobot.com  
Email: vortex@dfrobot.com



Company: Zhiwei Robotics Corp.  
Address: Rm 615, Bld. Y1, No. 112, Liangxiu Road, Pudong, Shanghai (201203) CHINA  
Telephone: +8621 6162 0183  
Fax: +8621 6100 1657  
Date Publish: April 2016

Made in China

### Vortex User Guide

Visit [www.dfrobot.com/vortex](http://www.dfrobot.com/vortex)  
The explanations provided in this user manual are information purposes only and may be modified. The latest version of this user manual can be found at [www.dfrobot.com/vortex](http://www.dfrobot.com/vortex)

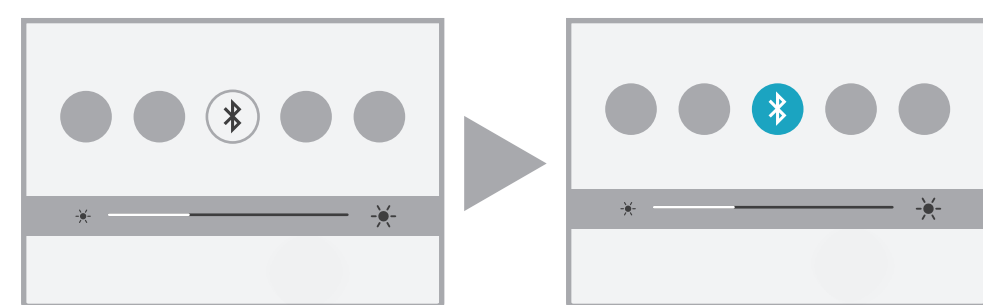


## Catalog

Download App	01
Turn Bluetooth On	03
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Dance	06
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## 2 Enable Bluetooth

The app will pair with Vortex automatically, avoid pairing Vortex with the app manually in Settings.



03

## 5 Dance

Gently push Vortex forwards and it will dance!



Wave to Vortex closely and its lights will change. Vortex can't dance or follow black lines when it is paired with the app.

06

### 2 Launch the App



Put your device close to Vortex and they will automatically pair. When VortexBot App connects to Vortex it will upgrade the firmware to the latest version (if available).

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## 7 Programming



iPad users can go to the App Store, and search and download the "WhenDo" App. iPad 3 and above

### 1 WhenDo: Program with your iPad

For more information please check the attached handbook "Getting Started with WhenDo" Uploading is managed wirelessly.

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### Battery

- Replace with alkaline batteries only.
- Ensure batteries are inserted with correct polarity.
- Only batteries of the same or equivalent type as recommended should be used.
- Do not mix old and new batteries.
- Battery installation should be performed by an adult.
- Dispose of batteries correctly.
- Always remove batteries and set power off when Vortex is not being used for a long period of time.

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## 1 Download the App

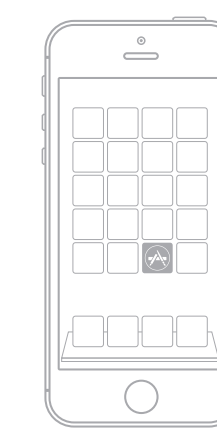
Your device needs to support Bluetooth 4.0



Android users can go to the Google Play store, search "VortexBot" and download the app.

Android 4.3 and above  
Not all devices are compatible

01



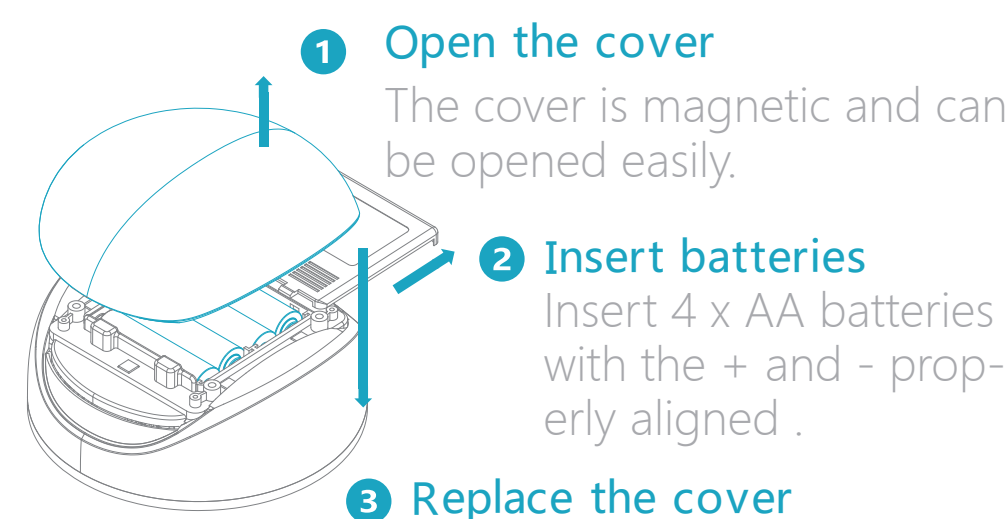
iOS users can go to the App Store, search "VortexBot" and download the app.

The following devices are compatible :  
iPhone 4S and above  
iPad 3 and above  
iPod Touch 5/6

02

## 3 Battery Installation

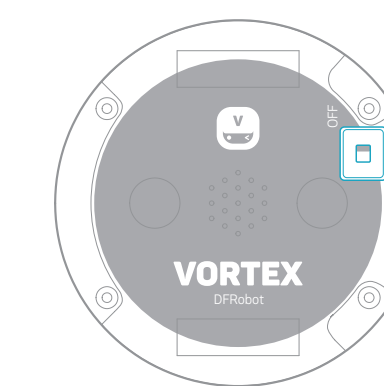
Large capacity rechargeable batteries are recommended.



04

## 4 Power On

The power switch is located on the underside of Vortex.

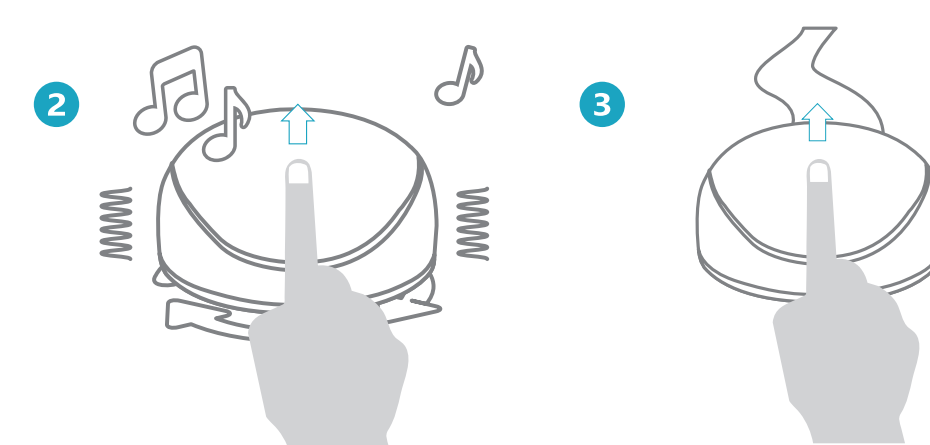


Use this switch to turn the Vortex's power on and off.

Don't stare directly at the power LED

Bottom of Vortex

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Gently push Vortex forwards and it will dance!

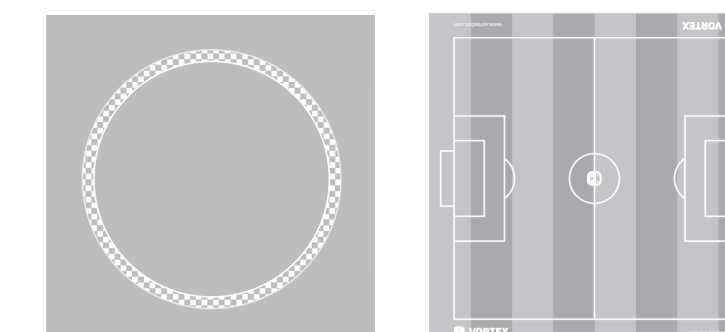
Put Vortex on a black line and it will follow it automatically. If Vortex can't follow black lines, please try Personalize/Advanced/Grayscale Calibration.

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## 6 Start Playing

Use the Map to play games with Vortex. You can create your own maps too!

Prepare the gaming map for bumping or soccer. Use it to have a game of soccer or bumping with another Vortex.



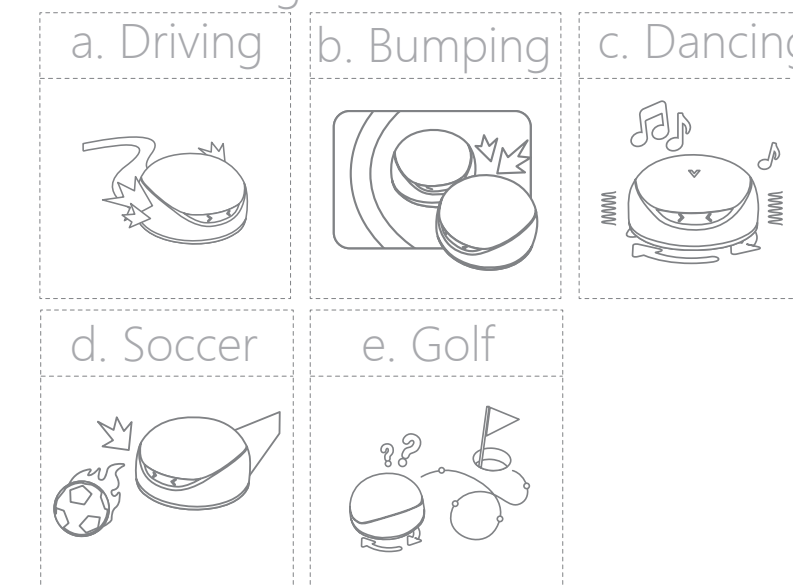
Bumping

Soccer

08

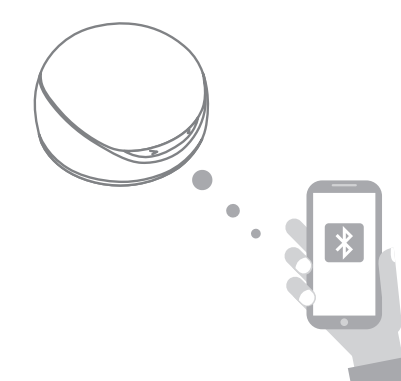
### 4 Start Playing

Keep your Vortexbot app updated to access new games.



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Please keep the app open and your device connected to the internet while the upgrade completes. The app will remember the previous connection and connect automatically next time. Vortex can only be connected to one app at a time. To use it with another app you must first close the active app completely.



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## Product Care & Usage

- Handle Vortex with care - excessive force may cause damage.
- Do not expose Vortex to extreme temperatures, fire, explosives, corrosives, toxic materials, rain, strong magnetic field or immerse in water.
- Vortex may become hot during operation.
- Vortex will run best on a clean, flat surface.
- Not recommended for use on carpet.
- Avoid using outdoors.

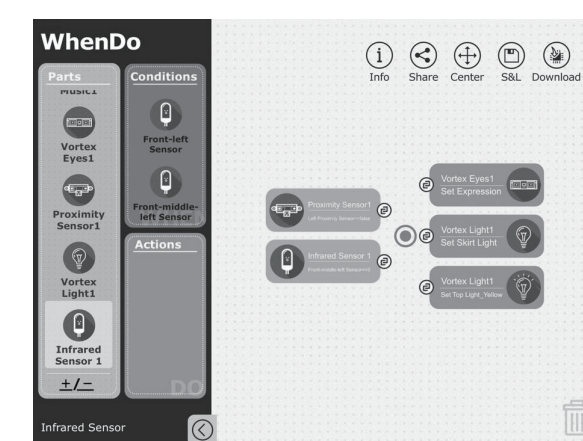
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## Troubleshooting

For troubleshooting, please follow these steps:

- Read the latest user manual available at [www.dfrobot.com/vortex](http://www.dfrobot.com/vortex)
- Remove the batteries, re-insert new batteries and reset after one minute.
- If the Vortexbot app does not work, try deleting it and downloading the latest version.
- You can find more information on the web at [www.dfrobot.com/vortex](http://www.dfrobot.com/vortex) or you can contact your retailer.

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### 2 Program with your PC/Mac:

Vortex is compatible with Arduino and Scratch, For more information please check the Vortex user manual ([www.dfrobot.com/vortex](http://www.dfrobot.com/vortex))

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To reduce fire risks, do not expose Vortex to rain or damp. Never drop Vortex on a hard surface.

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