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sidebar\_position: 1

sidebar\_label: 产品介绍

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# jacdac智能探索套件

## 简介

以micro:bit V2为主控的jacdac智能探索套装，配备了多种jacdac系列传感器，包括jacdac扩展板、按钮传感器、光敏传感器、人体红外传感器、磁力传感器、旋钮编码器、灯环模块等。Jacdac支持即插即用功能，能够自动识别传感器类型，并在编程makecode的仿真区中实时反馈传感器的数值，从而帮助用户迅速构建智能创意项目。此外，套装内含10个基础案例，旨在帮助初学者快速入门，同时激发他们对编程和电子元件的兴趣。

## 产品清单

|项目|图示|数量|

|:-----:|:-----:|:-----:|

|jacdac扩展板|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit--jacdac-bit.png)|1)

|按钮传感器|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/Jacdac-smart-exploration-kit-button-sensor.png)|2|

|旋转编码器|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit-rotary-encoder-sensor.png)|1|

|人体红外传感器|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit-motion-sensor.png)|1|

|光敏传感器|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit-light-sensor.png)|1|

|磁力传感器|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit-magnet-sensor.png)|1|

|灯环|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/Jacdac-smart-exploration-kit-LED-ring.png)|1|

|jacdac-10cm连接线|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/Jacdac-smart-exploration-kit-10cm-cable.png)|5|

|jacdac-25cm连接线|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/Jacdac-smart-exploration-kit-25cm-cable.png)|1|

## 产品特性

1.支持即插即用功能，允许在运行过程中随时添加或移除模块，无需重启主控设备。系统能够自动识别传感器类型，并实时反馈传感器信息。

1.jacda的各类传感器、执行器和其他的电子模块，通过统一的软硬件设计标准，灵活组合帮助用户快速搭建项目。

2.兼容积木拓展设计，实现自由拼搭。

3.提供10个有趣的入门级案例，帮助用户轻松快速上手。

## 硬件介绍

## jacdac传感器介绍

|图片|名称|简介|

|:-----:|:-----:|:-----:|

|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit--jacdac-bit.png)|jacdac扩展板|用于连接micro:bit主板。|

|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/Jacdac-smart-exploration-kit-button-sensor.png)|按钮传感器|用于检测按钮状态的传感器，输出携带有“0”和“1”的信号。|

|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit-rotary-encoder-sensor.png)|旋转编码器|用于检测旋转运动方向和值的传感器。|

|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit-motion-sensor.png)|人体红外传感器|感知人体移动的传感器。|

|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit-light-sensor.png)|光敏传感器|用于检测环境光照强度的传感器。|

|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/jacdac-smart-exploration-kit-magnet-sensor.png)|磁力传感器|用于测量磁场强度、方向的传感器。|

|![](https://wiki-media-ef.oss-cn-hongkong.aliyuncs.com/docs/microbit/getting-started/microbit-jacdac-smartexploration-kit/images/sensor/Jacdac-smart-exploration-kit-LED-ring.png)|灯环|由8个RGB灯组成的光环。|

## 案例目录

\*\*案例一：比一比\*\*

\*\*案例二：可视化声音\*\*

\*\*案例三：磁场特工小分队\*\*

\*\*案例四：智能小夜灯\*\*

\*\*案例五：可调节台灯\*\*

\*\*案例六：好友密语\*\*

\*\*案例七：人体检测报警器\*\*

\*\*案例八：眼疾手快\*\*

\*\*案例九：黑夜里的小夜灯\*\*

\*\*案例十：密码锁\*\*