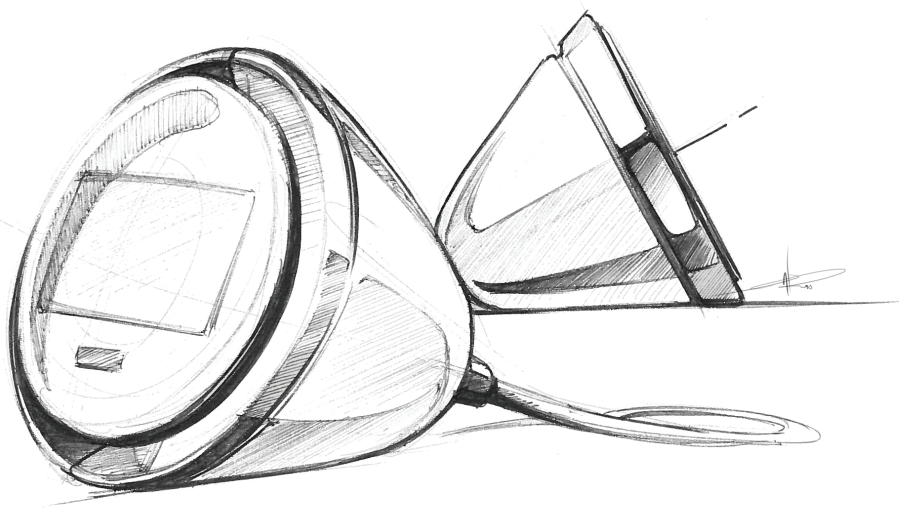


LASEREGG2+



Getting Started

说明书 – 說明書



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ABOUT YOUR LASER EGG 2+

The Laser Egg 2+ is a smart air quality monitor that measures both the total volatile organic compounds (TVOC) and particulate matter in the air. Laser-based light scattering is used to determine the particulate pollution, and a MOS sensor provides TVOC concentrations.

TVOC (TOTAL VOLATILE ORGANIC COMPOUNDS)

Volatile organic compounds (VOCs) are organic chemicals that easily evaporate at room temperature. VOCs include both human-made and naturally occurring compounds, and while many are harmless, certain VOCs present a danger to human health with long-term effects.

A common source of VOCs is emissions from building and furnishing materials, including paint, wood, and wood-based products such as fibreboard, particle board, and plywood, all of which contain phenol-formaldehyde or urea-formaldehyde resin glues.

The Laser Egg 2+ displays TVOC concentration in ppm and, to inform health decisions, as a TVOC Index based on the GB50325-2010 standard.

A metal-oxide-semiconductor (MOS) sensor is used to measure TVOC concentration. To ensure measurements remain accurate throughout the sensor's lifetime, the sensor is continually self-calibrating: the lowest reading is used as a baseline, and all given TVOC readings are relative to this baseline.

Helpful tip: after the five minute warm-up period, expose your Laser Egg 2+ to outdoor air to set a low baseline.

PM2.5

PM2.5 refers to particulate matter with an aerodynamic diameter of 2.5 micro-micrometers or less, which is small enough to enter even the body's smallest airways and cause long-term harm. Common sources of PM2.5 include various forms of combustion, vehicle exhaust, factory emissions, wildfires, tobacco smoke, and smoke from candles and oil lamps.

STEP 1

When you use your Laser Egg for the first time, plug it in to charge the battery. Any 5V 1A charger and micro-USB cable may be used. Hold the power button for two seconds to turn it on.

STEP 2



To connect your Laser Egg to Wi-Fi, download the Kaiterra app and follow the steps for adding a new Laser Egg. Download the app at: app.kaiterra.com

For iOS users who wish to connect first using the Home app in iOS, the Laser Egg's 8 digit pairing code can be displayed by holding the mode button for two seconds.

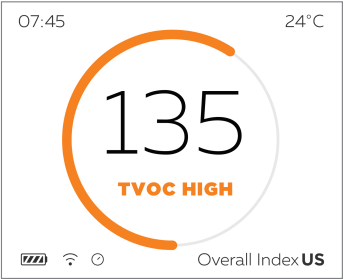
WHY CONNECT?

	Without app	With app
PM2.5 & TVOC readings	●	●
Temperature readings	●	●
Humidity readings	●	●
Weather forecast	●	●
Pollution alerts	●	●
Automatic calibration	●	●
Firmware updates	●	●

MODES

Use the mode button to cycle through the different screens on the Laser Egg. You can add or remove screens from the cycle by changing the Laser Egg's settings in the Kaiterra app.

Overall Index



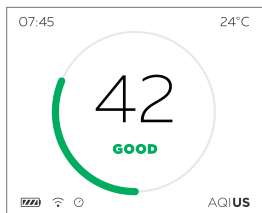
The overall index is a standard developed by Kaiterra to display combined readings of PM2.5 and TVOC. As the index increases, pollution levels and potential health risks increase. Individual indeces are calculated for both PM2.5 and relative TVOC, and the higher of the two is displayed.

The overall index can incorporate national AQI standards from a variety of countries in the PM2.5 calculation. You can use the Kaiterra app to select which standard to use.

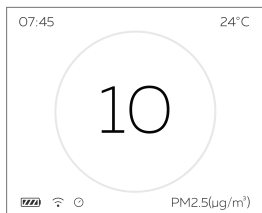
Overall Index

	Index range	Colour
Good	0-50	
Moderate	50-100	
High	100-150	
High	150-200	
Very high	200-300	
Very high	300-500	

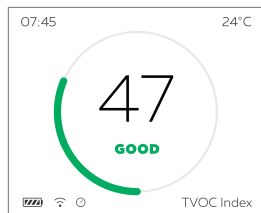
MODES



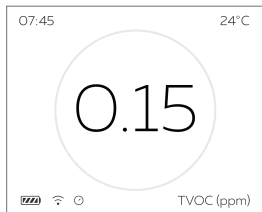
Air Quality Index, a scale based upon PM2.5 levels



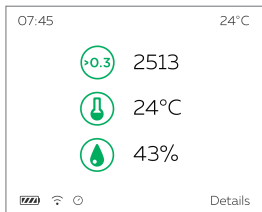
PM2.5 concentration, used to calculate the AQI



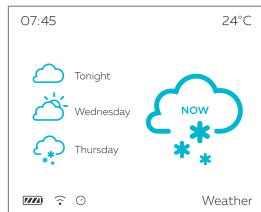
TVOC Index, based upon TVOC concentration



Relative TVOC concentration in ppm



Particle count, temperature, and humidity



Local weather forecast (requires Kaiterra app)

TO LEARN MORE

For more information about air pollution and your Laser Egg, and for more ways to connect your Laser Egg to other smart devices in your home, visit the resources section of our website:

www.kaiterra.com

关于您的镭豆2+

镭豆2+是一款智能空气质量检测仪器，它同时可以检测总挥发性有机物（TVOC）和空气中的细颗粒物。镭豆2+采用激光散射原理来检测颗粒物污染，并使用MOS传感器来检测TVOC浓度。

TVOC (总挥发性有机物)

挥发性有机物（VOC）是容易在室温下挥发的有机化学物。VOC包含人为和自然产生的混合物，其中大部分无害，但是有一类VOC长期威胁着人类的健康。

常见的VOC污染来自于建筑和装修材料，包括油漆、木料，纤维板、压缩板和胶合板一类的木制品，这些物质含有苯酚、甲醛胶水或者脲醛树脂胶水。

镭豆2+显示以ppm作为单位的TVOC浓度，TVOC指数的指导标准为国标GB50325-2010，来帮助人们做出有利健康的决定。

镭豆2+采用金属半导体氧化(MOS)传感器来检测TVOC浓度。为了保证传感器使用寿命内的准确性，传感器不断在进行自我标定，将最低的检测数据作为基线，基于该基线给出TVOC的相对值。

友情提示：在传感器预热五分钟之后，将传感器置于户外得到最低值的基线。

PM2.5

PM2.5是指环境空气动力学下直径小于等于 2.5 微米的颗粒物。它非常细微，以致可以进入身体最小的气道对人体造成长期的危害。常见的PM2.5污染来自包含各种形式的燃烧、汽车尾气、工业排放、自然灾害、烟草烟雾和来自蜡烛和油灯的烟灰等。

第一步

初次使用镭豆，请插上电源确保它充满电。您可使用任何 5V 1A 的适配器和 micro-USB 线为镭豆充电。然后，按住开机键两秒即可开机使用。

第二步



下载Kaiterra app, 依照app上的连网说明添加一台新镭豆, 将镭豆连网。
App下载地址: app.kaiterra.com

用户想要通过iOS设备上的家庭app添加镭豆，可长按模式键两秒，获取在屏幕上的镭豆8位配对码。

连网优势

	不使用app	使用app
PM2.5和TVOC测量	●	●
温度测量	●	●
湿度测量	●	●
更改镭豆语言	●	●
当地天气预报	●	●
空气污染报警	●	●
固件自动化升级	●	●

模式

使用模式键在镭豆上切换不同显示界面。您可以通过 Kaiterra app 上的设置来增加或者删去界面。

综合指数



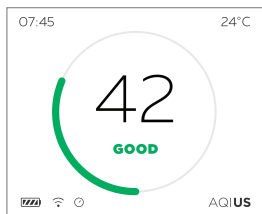
综合指数是由Kaiterra开发的一项标准，它综合了PM2.5和TVOC的测量值。当综合指数上升，意味着污染水平上升和潜在健康威胁的提高。在这里，PM2.5和TVOC的对应的指数都会独立计算，两者中的较高的一项将显示为综合指数值。

综合指数含有全球多个国家基于PM2.5计算的AQI标准。您可以使用Kaiterra app来选择适用的标准。

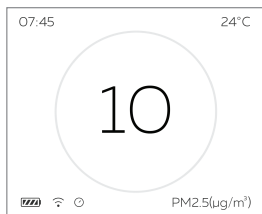
综合指数

	范围	颜色
优	0-50	
良	50-100	
指数高	100-150	
指数高	150-200	
指数高	200-300	
指数高	300-500	

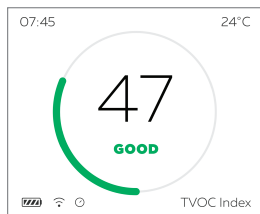
模式



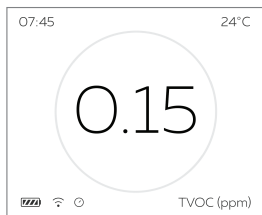
空气质量指数 (AQI)
基于PM2.5计算而来



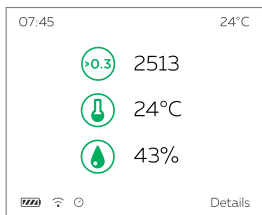
PM2.5浓度



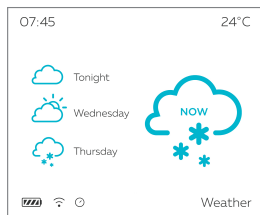
TVOC指数
基于TVOC浓度计算而来



TVOC浓度 (ppm)



颗粒物数量, 温度和湿度



当地天气预报
(需连接Wi-Fi显示)

了解更多

想要了解更多关于您的镭豆与空气污染的信息, 以及如何将您的镭豆与家中其它智能设备联动的方法, 请阅读官网的参考资料部分:

www.kaiterra.com

關於您的鑄豆2+

鑄豆2+是一款智能空氣質量檢測儀器，它同時可以檢測總揮發性有機物（TVOC）和空氣中的細顆粒物。鑄豆2+採用激光散射原理來檢測顆粒物污染，並使用MOS傳感器來檢測TVOC濃度。

TVOC (總揮發性有機物)

揮發性有機混合物（VOC）是容易在室溫下揮發的有機化學物。VOC包含人為和自然產生的混合物，其中大部分無害，但是有一類VOC長期威脅著人類的健康。

常見的VOC污染來自於建築和裝修材料，包括油漆、木料，纖維板、壓縮板和膠合板一類的木製品，這些物質含有苯酚、甲醛膠水或者脲醛樹脂膠水。

鑄豆2+顯示以ppm作為單位的VOC濃度，TVOC指數的指導標準為國標GB50325-2010，來幫助人們做出有利健康的決定。

鑄豆2+採用金屬半導體氧化（MOS）傳感器來檢測TVOC濃度。為了保證傳感器使用壽命內的準確性，傳感器不斷在進行自我標定，即：將最低的檢測數據作為基線，基於該基線給出TVOC的相對值。

友情提示：在傳感器預熱五分鐘之後，將傳感器置於戶外得到最低值的基線。

PM2.5

PM2.5是指環境空氣動力學下直徑小於等於2.5微米的顆粒物。它非常細微，以致可以進入身體最小的氣道對人體造成長期的危害。常見的PM2.5污染來自包含各種形式的燃燒、汽車尾氣、工業排放、自然火災、煙草煙霧和來自蠟燭和油燈的煙灰等。

第一步

初次使用鑄豆，請插上電源確保它充滿電。您可使用任何 5V 1A 的適配器和 micro-USB 線為鑄豆充電。然後，按住開機鍵兩秒即可開機使用。

第二步



下載 Kaiterra app，依照app上的連網說明添加一台新鑄豆，將鑄豆連網。
App 下載地址: app.kaiterra.com

用戶想要通過iOS設備上的家庭app添加鑄豆，可長按模式鍵兩秒，獲取在屏幕上的鑄豆8位配對碼。

連網優勢

	不使用app	使用app
PM2.5和TVOC測量	●	●
濕度測量	●	●
溫度測量	●	●
更改鑄豆語言	●	●
當地天氣預報	●	●
空氣污染報警	●	●
固件自動化升級	●	●

模式

使用模式鍵在鐳豆上切換不同顯示界面。您可以通過 Kaiterra app 上的設置來增加或者刪去界面。

綜合指數



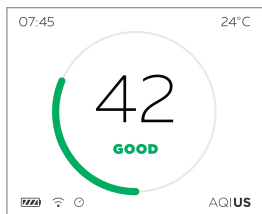
綜合指數是由Kaiterra開發的一項標準，它綜合了PM2.5和TVOC的測量值。當綜合指數上升，意味著污染水平上升和潛在健康威脅的提高。在這裡，PM2.5和TVOC的對應的指數都會獨立計算，兩者中的較高的一項將顯示為綜合指數值。

綜合指數含有全球多個國家基於PM2.5計算的AQI標準。您可以使用Kaiterra app來選擇適用的標準。

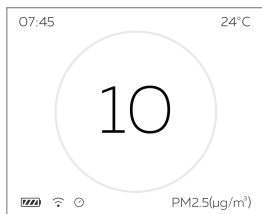
綜合指數

	範圍	顏色
優	0-50	
良	50-100	
指數高	100-150	
指數高	150-200	
指數高	200-300	
指數高	300-500	

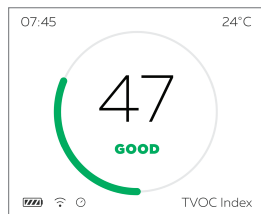
模式



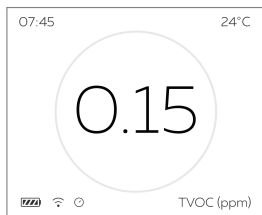
空氣質量指數 (AQI)
基於PM2.5計算而來



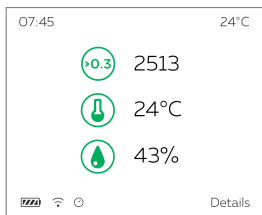
PM2.5濃度



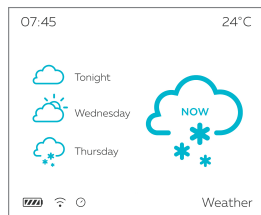
TVOC指數
基於TVOC濃度計算而來



TVOC濃度 (ppm)



顆粒物數量，溫度和濕度



當地天氣預報
(需連接Wi-Fi顯示)

了解更多

想要了解更多關於您的鐘豆與空氣污染的信息，以及如何將您的鐘豆與家中其它智能設備聯動的方法，請閱讀官網的參考資料部分：

www.kaiterra.com

CONTACT



www.kaiterra.com



info@kaiterra.com



(+86) 400 863 0600



Use of the Works with Apple HomeKit logo means that an electronic accessory has been designed to connect specifically to iPod touch, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

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