

# IntelliClimate

## Installation and User Guide

IntelliClimate 智能温室气候控制器 安装和用户指南



- Monitors temperature, relative humidity, CO<sub>2</sub> and light levels  
监控温度，相对湿度，CO<sub>2</sub> 和与光照水平
- Controls fans, air conditioners, heaters, dehumidifiers, humidifiers, CO<sub>2</sub> injection/extraction, two light banks  
控制风扇，空调，加热器，除湿机，加湿器，CO<sub>2</sub> 注入/萃取与两个模组阵列植物生长灯
- Additional sensor available for larger growing areas  
附加传感器可用于在面积更大的种植区
- Extensive fail-safe features  
广泛的失效安全功能
- Settings can be scheduled to automatically change to match plant growth stage  
可安排设置以自动更改以匹配植物生长阶段
- Auto-learn – self learning automatically adjust CO<sub>2</sub> cycle times to minimise wastage.  
自动学习-自我学习功能可自动调整 CO<sub>2</sub> 循环时间，以减少浪费
- Connect to the cloud via IntelliGrow (subscription required)  
可通过 IntelliGrow 连接到云端服务（需要订阅）



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### Disclaimer: 免责声明

Suggested settings are made in good faith, care and consideration. However, Autogrow can accept no responsibility for the accuracy or appropriateness of suggestions or the outcome resulting from their use.

建议设置是出于真诚与谨慎的考量。但 Autogrow 对该等建议设置的准确性，适当性或其使用后的结果均不承担任何责任或义务。

## Quick start 快速入门

**This is not a substitute** for reading the relevant sections of the manual but is included to emphasize some important and useful points.

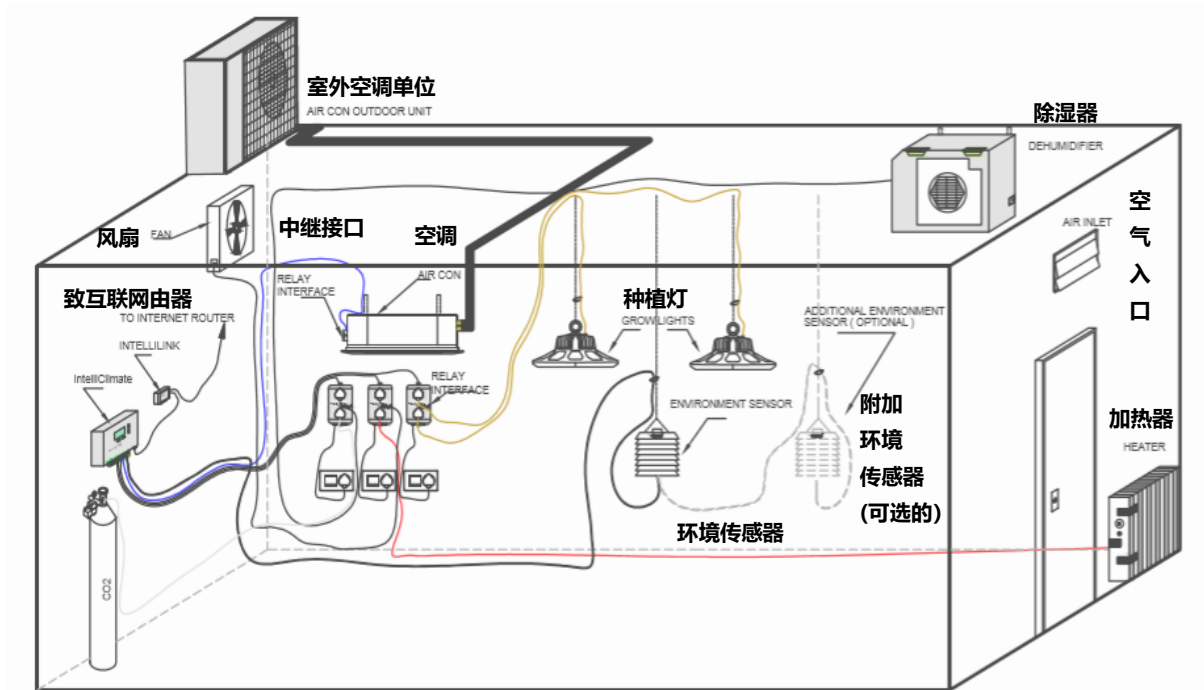
本部分不能代替阅读本手册的相关部分，而是强调某些重要以及有用的要点。

If the growroom is to be operated at high humidity for long periods (e.g. during cutting/rooting stage) it is preferable to mount the controller outside the growroom. This is easily done as the growroom sensors are supplied with a long 5m (15ft) cable. If required, this can be replaced with a longer cable. Data cable such as **CAT5** computer network cable should be used in this situation. This should be **Stranded** cable to avoid breakages.

如需在高湿度下长时间（例如在插枝/生根阶段）操作种植室，则最好将控制器安装在种植室之中。由于种植室传感器已配有 5m（15 英尺）长的电缆，因此安装很容易。如需，可用更长的电缆代替。在这种情况下，应使用数据电缆，例如 **CAT5** 计算机网络电缆。为了避免传感器破损，应当采用**多股**电缆。

The IntelliClimate Kit comes with one EnviroSensor unit (measuring temperature, relative humidity, light and CO<sub>2</sub>). A second optional EnviroSensor unit may be connected which is useful in larger growrooms (> 10m x 10m). Control will normally be based on the average readings from the two sensors, but should one sensor fail, control will automatically revert to the working sensor.

IntelliClimate 智能温室气候控制器 套件随附一个 EnviroSensor 装置（测量温度，相对湿度，光照度和二氧化碳 (CO<sub>2</sub>) 浓度）。在较大的种植室中（>10 米 x10 米），可选择连接第二个 EnviroSensor 单位。控制系统通常基于两个传感器的平均读数，但如果一个传感器发生了故障，控制权将自动转换到另一个正常操作的传感器上。



### IMPORTANT: 重要提示:

If you intend to inject CO<sub>2</sub> an air conditioner and dehumidifier should also be considered. Together, these will allow longer periods of CO<sub>2</sub> injection to occur without the need to vent the room. This will lead to significant improvement in growth rates with lower use of expensive CO<sub>2</sub>.

如需注入二氧化碳，应考虑安装空调和除湿机。若两者一起使用，二氧化碳(CO<sub>2</sub>)注入的时间将延长而无需排空种植室。这将明显提高植物的生长率，同时也可降低使用昂贵的二氧化碳 (CO<sub>2</sub>)

### **SAFETY NOTE**

### **安全注意事项**

If you do inject CO<sub>2</sub> into the growroom always do the following before entering.  
在二氧化碳 (CO<sub>2</sub>)被注入种植室内时, 请务必在进入前进行以下操作。

- 1) Disable CO<sub>2</sub>  
关闭二氧化碳 (CO<sub>2</sub>)
- 2) Force on fans  
务必打开风扇
- 3) Leave door open whilst  
inside

## IntelliGrow

With IntelliGrow, your Intelli devices are accessible via your web browser so you can control your growing operation remotely from your phone, tablet, or computer. IntelliGrow gives you complete visibility 24 hours a day and enables you to manage multiple locations from the comfort of your office, using a single sign on.

有了 IntelliGrow 智能温室气候控制器，您可以透过网页浏览器使用 Intelli 装置。因此您可以从手机，平板电脑或电脑远程控制您的种植运营。IntelliGrow 可为您提供每日 24 小时的完整监控，也可让您在舒适的办公室内只需通过单点登录就可管理多个种植室。

Automatically manage your environment settings, set remote alarms and data log your progress with this one simple solution.

通过这简单的解决方案，您可以自动管理环境设置，设置远程警报和记录您的进度数据。

**Though you can set most everything on the controller itself via the keypad, the below features are only available on IntelliGrow.**

**尽管您可以通过控制器上的键盘设置大多数的功能，但以下功能只能在 IntelliGrow 上使用。**

- **Scheduling 调程**
- **Advanced Settings 高级设置**
- **History 历史**

To access the latest version of your IntelliGrow Quick Start Guide, please head to:

以获取最新版本的 IntelliGrow 快速入门指南，请游览：

<https://knowledge.autogrow.com/articles/intellilink-quick-start-guide>

Please visit <https://autogrow.com/our-products-solutions/intelligrow> for more information.

请游览 <https://autogrow.com/our-products-solutions/intelligrow> 以获取更多的资料。





## Section A - IntelliClimate™ Growroom Controller

### A 章节 - IntelliClimate™ 种植室控制器

The IntelliClimate is the most advanced and user-friendly growroom environment controller on the market. It has a wide range of possible applications which will be discussed briefly in this section. To keep the user interface as simple as possible, only the readings and settings relevant to the selected features are displayed on the controller's LCD and on IntelliGrow. To add extra features, enter "Configure" menus on the controller or "Functions" on IntelliGrow.

IntelliClimate 智能温室气候控制器 是最先进且方便使用的种植室环境控制器。它广泛的应用程序将在此部分简要地说明。为了让用户界面 (UI) 更加简易, 相关功能的读数和设置将会显示在控制器的液晶屏与 IntelliGrow 上。如需添加其他功能, 您可以进入控制器上的“配置” (Configure) 菜单或 IntelliGrow 上的“功能”系统 (Functions)。

#### Functions 功能

The controller can operate in a number of modes ranging from a simple cycle-timed mode to a sophisticated system making optimal use of a range of attached equipment. After installing the unit, tell the IntelliClimate what you have connected by entering "Configure" menus on the controller or "Functions" on IntelliGrow. Once the controller knows what you have attached to it, it will automatically select the most appropriate mode of operation. When the controller is supplied, it is pre-set as a simple fan cooled environment controller with CO<sub>2</sub> injection disabled.

该控制器可以在多种模式下运行, 从简单的循环定时模式到精密的系统, 都可以最佳地利用各种附属设备。在安装控制器单位后, 您可以进入控制器上的“配置” (Configure) 菜单或者在 IntelliGrow 上的“功能” (Functions) 系统以告知 IntelliClimate 您已连接的设备。一旦控制器知道您已附加的内容, 它将自动选择最合适的操作模式。控制器被提供后, 它将预先被设定为简单的环境冷却风扇控制器, 并且禁止二氧化碳 (CO<sub>2</sub>) 的注入。

#### Lighting 光照度

The IntelliClimate can control two light banks. It is a good idea to split your lights into two groups. Firstly, when using both banks together, it allows the controller to stagger the switch on times, so the power surge from the first bank has subsided by the time the second bank comes on. Secondly, during the vegetative phase of growth, the lights are on for longer periods (18 hours) but a lower intensity may be used.

IntelliClimate 智能温室气候控制器 可以同时控制两个模组阵列植物生长灯。最好的构想是把光照分为两组。首先，当两个模组阵列植物生长灯被同时使用时，IntelliClimate 将允许控制器错开输出通道的开关时间。如此一来，第一组的电涌在第二组接通的时候就已经平息。其次，生长灯，会以较低的光照度，在植物的营养生长期内开启较长的时间（18 小时）。

The controller has the ability to switch on one bank and alternate the banks each day. This ensures that the plants receive light from both sides. If one bank is turned on and the light sensor detects a low light level, the controller assumes that the bank is out of action (bulb blown) and automatically switches on the other bank. If alarms are enabled, it will alert you to the fact that a light has failed. Similarly, if a power failure occurs, the controller has a programmable cool-down delay timer before bringing the lights back on in stages. This has a significant impact on lamp life.

控制器能够每日交替存储电能以确保植物可从两侧接收光照。如果其中一个模组阵列植物生长灯已打开，但光照传感器检测到光照度偏低，控制器则会假定该阵列的生长灯无法运作（灯泡烧坏），并会自动打开另一个模组阵列的植物生长灯。如果警报铃启动了，控制器将会提醒您其中一盏灯已停止运作。同样的，如果发生了电源故障，控制器则具有可编程的冷却延迟计时器，然后分阶段重新亮灯，但这对灯泡寿命会产生具大的影响。

**光照度**  
*Lighting*

Lamp cool-down time **生长灯冷却时间** < **15 分钟** >  
15 mins

\*在 Intelligrow 上 \*On IntelliGrow

For those using air cooled lights, fit the cooling fan to blow air through the light fittings rather than suck out the hot air. This way the fans run cooler and last longer.

对于使用风冷式灯具的用户者，您可以将灯具连接到冷却风扇，通过灯具吹出冷空气，而不是抽出热空气。这可让风扇的运行的温度更低并持续得更久。

## Fans 风扇

The fans may be used for cooling, humidity reduction, air changes and to bring in ambient CO<sub>2</sub> (if CO<sub>2</sub> injection is not used). During the day when CO<sub>2</sub> is being injected, other means to control temperature or humidity will be used in preference to the fans which will only be used to force an occasional air change and provide a fail-safe if the air conditioner or dehumidifier fails.

风扇可用于降温，降低湿度，换气及引入周围环境的二氧化碳（CO<sub>2</sub>）（如果未使用二氧化碳（CO<sub>2</sub>）注入系统）。在注入二氧化碳的时刻，与其使用其他控制温度和湿度的模式，风扇将会被优先使用以临时强制性换气，并在空调或除湿机出现故障时提供防故障安全装置。

### Minimum periodic air change rules 最低定时换气模式

Force Fan ON for 强制开启风扇

Day 白天	< 00h > < 01m > < 00s > <b>00 小时 01 分 00 秒</b>	Every 每	< 02h > < 00m > <b>02 小时 00</b>
Night 夜晚	< 00h > < 00m > < 30s > <b>00 小时 01 分 30 秒</b>	Every 每	< 04h > < 00m > <b>04 小时 00</b>

\*在 Intelligrow 上 \*On IntelliGrow

For simple systems that have CO<sub>2</sub> injection but do not have air conditioning or dehumidification, the controller will operate as a cycle timer system with three timed phases:

对于具有二氧化碳（CO<sub>2</sub>）注入功能但没有空调或除湿功能的简单系统，控制器将会运作成为一个具有三个定时阶段的循环计时器系统：

- Phase 1) Fans on
- 阶段 1) 开启风扇
- Phase 2) Fans off, inject CO<sub>2</sub>
- 阶段 2) 关闭风扇，注入二氧化碳（CO<sub>2</sub>）
- Phase 3) Fans off, CO<sub>2</sub> off, wait while plants absorb CO<sub>2</sub>
- 阶段 3) 关闭风扇，停止注入二氧化碳（CO<sub>2</sub>），等候植物吸收二氧化碳（CO<sub>2</sub>）

In this mode, the controller will self-adjust the timings if it finds that CO<sub>2</sub> is being wasted due to the fans being forced on by heat or humidity build up before the plants have time to use the CO<sub>2</sub>. If this situation is not controlled, it will stop injecting CO<sub>2</sub> and will revert to maximum venting (within temperature limits) to bring in as much ambient CO<sub>2</sub> as possible. This will reset every new day period.

在这种模式下，如果控制器发现二氧化碳被浪费了，因为在植物有时间使用二氧化碳之前，风扇就被热量或湿度的增加所强制开启，控制器将自我调整时间。如果这种情况没有得到控制，它将停止注入二氧化碳，并将恢复到最大通风量（在温度限制内），以尽可能多地引入环境中的二氧化碳。这将在每个新的一天期间重置。

## 二氧化碳规则

### CO<sub>2</sub> Rules

CO<sub>2</sub> injection is allowed when not venting. Also allow injection when only F1 is running?

不排气时可以注入二氧化碳（CO<sub>2</sub>）。只有 F1 运行时，可否注入二氧化碳（CO<sub>2</sub>）？

Inject only if measured light greater than

只在测量后光照度大于

If hot and frequent venting is required then reduce CO<sub>2</sub> injection to avoid wastage

如果需要高温且频繁的排气，应减少注入二氧化碳（CO<sub>2</sub>），以避免浪费

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Inject time Min  Max

注入时间 最低值 <2 分钟> 最高值 <10 分钟>

Allow for CO<sub>2</sub> cycling by allowing temperature to

可通过温度来循环二氧化碳（CO<sub>2</sub>）

fall below the current vent temp target by no more than

下降到当前排气温度目标以下而不超过

rise above the current vent temp target by no more than

上升到当前排气温度目标以上而不超过

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Wait time Min  Max

等候时间 最低值 <5 分钟> 最高值 <15 分钟>

\*On IntelliGrow

## Humidifier or fogger 加湿器或烟雾机

This output can drive either a standard fan-based fogger or ultrasonic humidifier or alternatively a nozzle-type fogger. When a humidifier is selected, the function is very simple with the humidifier coming on when the humidity is too low and going off when the offset is reached. When fogger is selected, the operation is similar except when it is calling for humidification the output is pulsed on and off producing a small amount of fog and allowing time for each amount to dissipate before the next.

该输出设置可以驱动标准的风扇型烟雾机或超声波加湿器，也可驱动喷嘴式的烟雾机。如果您选择的是加湿器，它的运作非常简单。当湿度降低的时候，它将会启动；当湿度达到所设定的偏移量时，加湿器将会停止操作。

\*在 Intelligrow 上 \*On IntelliGrow

### 喷雾规则

Fogging rules

Only fog to cool during day if RH lower than  Fog pulse ON every

Only fog to achieve RH (VPD) setpoint if temperature greater than  Min

Fog pulse ON for a

只可在白天进行喷雾的相对湿度 (RH) 低于	< 70 % >	每开启雾脉冲	<00 小时> <05 分钟> <00 秒>
喷雾只可以进行以达到 RH (水汽压亏缺, VPD) 的设置点, 如果温度高于	< 68° F >	每开启雾脉冲	最低值 <1 秒> 最高值 <30 秒>

## Heater, Dehumidifier and CO<sub>2</sub> 加热器, 除湿器及二氧化碳 (CO<sub>2</sub>)

The purpose and function of these devices is self-explanatory, and they all work to keep the temperature, humidity and CO<sub>2</sub> close to the set points. In the advanced settings of IntelliGrow, you will see switching offsets for each device. This allows you to set the offset from the main set point at which it will turn on and another offset at which it will turn off. Although these come preset to typical values that will avoid excessive overshoot or rapid cycling in most growrooms, it is possible for the user to customise them to achieve optimal performance.

这些设备的目的和功能是不言自明的, 它们的工作原理就是为了保持温度, 湿度和二氧化碳 (CO<sub>2</sub>) 浓度都接近设定值。在 IntelliGrow 的高级设置中, 您将看到每个装置的切换偏移量。这可让您从主要装置的设置点中设置其他装置的开关偏移量。虽然这些设备已配有预先设定的典型值以避免过分超调或快速循环, 用户还是可以自定义设置, 以达到最佳性能。

### Selection of units 单元选择

The grower can determine the temperature units they are familiar with, C° or F° and they can set the proper date format (DD/MM/YY or MM/DD/YY).

种植者可以决定自身熟悉的温度单位, 摄氏度 (C°) 或华氏度 (F°)。除此之外, 他们也可以设置正确的日期格式 (天天/月月/年年 或者 月月/天天/年年)。

### Advanced settings and rules 高级设置和规则

These settings and rules are pre-set to typical values that suit the majority of growrooms, however, expert users may wish to alter them to achieve optimal performance. **Note:** the advanced settings are only accessible via IntelliGrow and are not available from the controller LCD menu system.

这些设置和规则已预先设定为符合大多数种植室的典型值。但专业用户们可以对其进行更改以达到最佳性能。**注意：**高级设置只能通过 IntelliGrow 设置，而不能从控制器的 LCD 菜单系统中设置。

## Fail safe operation 故障安全操作

Fail safes ensure that your growroom will try to maintain your set points in the event of equipment failure. For example, if an air conditioner fails, the system will automatically switch to cooling by fans.

故障安全操作可确保种植室在设备发生故障时，尽可能地维持在设置点。举例来说，当某个空调发生故障时，系统将会自动开启风扇来降温。

## Power Supply & Outputs 电源供应和输出

The outputs voltages are all dependent on the power supply adapter used. The IntelliClimate is supplied with a 24VDC power supply. **Note:** The outputs are limited to a current of 1.2A inductive load and 3A resistive load. The power supply should be sized according to the maximum load that can be applied at any one time. The maximum total draw at any one time should not exceed 4A.

所有的输出电压都是取决于所使用的电源适配器。IntelliClimate 智能温室气候控制器配有 24VDC 的电源供应。**注意：**电流输出限制为 1.2A 的感性负载和 3A 的阻性负载。电源供应的大小应根据每一次可施加的最大负载来确定。在任何时刻，最大的电源总消耗不应该超过 4A。

## Getting Started 入门指南

Follow the installation instructions in **Section C** and when everything is installed and connected do the following:

请遵循 **C 章节** 中的安装说明，并在安装和连接所有组件后执行以下操作：

- Connect power to the IntelliClimate  
将电源连接到 IntelliClimate 智能温室气候控制器
- Check that the power light on the front panel is on  
检查前板上的电源指示灯，确保它是亮着的
- Check that the LCD display has some information on it  
检查液晶显示屏，确保上面有显示信息  
Navigate to the Overrides menu and Force ON each piece of equipment to confirm your wiring is correct  
浏览覆盖菜单，并强制打开每一件设备以确保接线正确

## Connect IntelliClimate to the cloud 将 IntelliClimate 连接至云端服务

Connecting your IntelliClimate to IntelliGrow will allow for remote access, data logging, text/email alerts and remote tech support. In addition, you will have access to the Advanced Settings.

将 IntelliClimate 智能温室气候控制器 连接至 IntelliGrow 智能线上种植控制系统 可让您进行远程访问，记录数据，接收文本或电子邮件警报及获取远程技术支持。另外，您也将拥有可访问高级设置的权限。

We recommend you use the Autogrow IntelliLink gateway device to connect your controller directly to your network.

我们建议您使用 Autogrow IntelliLink 网关设备，以便您可以直接将控制器连接至您的网络。

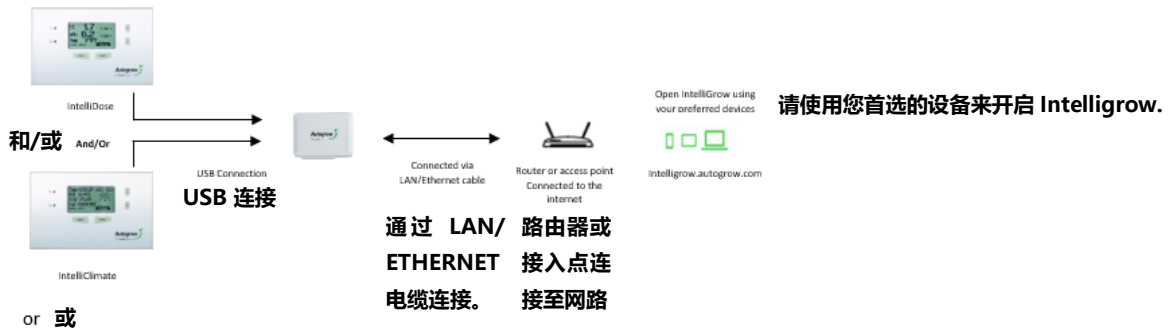


## Connect your devices as per the picture below 请跟随以下图表来连接您的设备

IntelliLink with LAN/Ethernet: 将 LAN/Ethernet 连接至 IntelliLink:

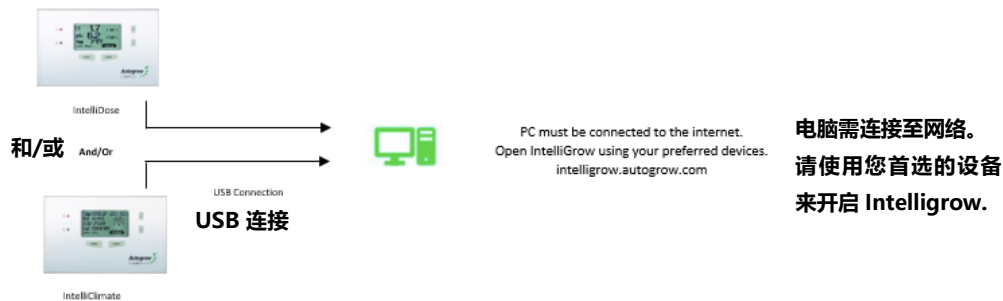
Connecting controller to IntelliGrow account using IntelliLink (via LAN/Ethernet cable)

请使用 IntelliLink (通过 LAN/Ethernet) 以连接控制器至您的 IntelliGrow 用户户口



Direct Connection with PC: 与电脑直接连接

Installing IntelliGrow Gateway Software on PC 在电脑里安装 IntelliGrow 网关软件



## Connect via IntelliLink (recommended): 建议通过 IntelliLink 智能链接 来进行连接:

Please visit this page for the IntelliLink Quick Start Guide:

请浏览以下网页以索取 IntelliLink 智能链接 快速入门指南

<https://knowledge.autogrow.com/articles/intellilink-quick-start-guide>

## Connect via PC: 通过电脑连接

Please visit this page <https://knowledge.autogrow.com/articles/connecting-with-windows> to download the IntelliGrow gateway software. Confirm your IntelliClimate is connected to your PC via USB cable. If you experience any issues, please contact [support@autogrow.com](mailto:support@autogrow.com).

请浏览这网页 <https://knowledge.autogrow.com/articles/connecting-with-windows> 以下载 Intelligrow 智能线上种植控制系统 网关软件。请确保您的 IntelliClimate 智能温室气候控制器 已通过 USB 电缆连接至电脑。如果您有任何疑问，请联络 [support@autogrow.com](mailto:support@autogrow.com)。

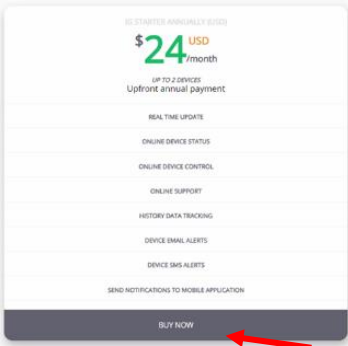
## Here are the instructions to activate your IntelliGrow Subscription

### 以下是用于激活 Intelligrow 智能线上种植控制系统 订阅的指示

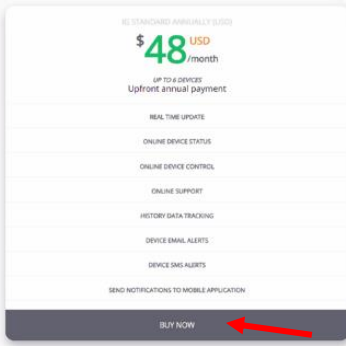
- You will need to first register for a new account here <https://intelligrow.autogrow.com/>  
首先您必须在 <https://intelligrow.autogrow.com/> 登记一个新的用户账号。
- Login using your account details  
请使用您的用户资料登录。
- Click your profile in the top right of the page and select “Payments” from the menu.  
请在网页的右上角点击您的个人资料。然后，请从菜单中点击 “付款” 。
- Click on IG Starter/Standard Manual “Buy Now” button.  
请点击 IG 入门/标准手册 “立即购买 ” 按键。
- Fill in your details in the Order Summary and click subscribe  
请在订单摘要填写您的个人资料，并点击订阅。

用户的电子邮件地址	
User Email Address	
Account Settings	户口设定
Language	语言
Payment	付款
Choose devices	选择设备
Notification	通知
Help	帮助
Logout	登出



**立即购买**



**立即购买**

or

**订单摘要**

**户口资料**

**账单资料**

**付款方式资料**

### Order Summary

IntelliGrow-Pro-NZ \$79.00

应用 Total 总额 \$79.00

优惠码  Apply

电子邮件

### Account Information

Email \*

### Billing Information

First Name \* 名字  Last Name \* 姓

Company 公司  Address Line1 \* 地址第一行

Address Line2 地址第二行  City \* 市


Zip 邮政编码  Country \* 国家


State 州

取消


### Payment Method Information

First Name \* 名字  Last Name \* 姓

Card Number \* 卡号  

Expiry \* 满期  /  CVV \*  

Card address country \* 卡地址国家

**订阅** Subscribe Cancel 

Chargebee Secure Payment



## Section B – Settings using IntelliGrow website

# B 章节 – 以 IntelliGrow 智能线上种植控制系统 网站进行设置

### ORDER OF SETTING UP A NEW CONTROLLER

以下是设置新控制器的步骤：

- 1) Visit <https://intelligrow.autogrow.com/> to create account  
请浏览 <https://intelligrow.autogrow.com/> 以登记新户口。
- 2) Connect your IntelliClimate to your gateway (computer or IntelliLink)  
请连接您的 IntelliClimate 智能温室气候控制器 至您的网关（电脑或 IntelliLink）
- 3) Ensure your IntelliClimate 智能温室气候控制器 shows as connected to your IntelliGrow account  
请确保您的 IntelliClimate 智能温室气候控制器 已连接至您的 IntelliGrow 账号。
- 4) Set the configuration of the controller to match the physical equipment  
请设置控制器的配置以匹配物理设备。
- 5) Check the time/date on the controller  
请检查控制器上的时间/日期。

### Configuration 配置

#### General 常用设定

First, select your temperature units, date format and name your device. You can also import/export settings and save your current settings to your computer.

**首先，选择您的温度单位，日期格式及为您的设备命名。您还可以导入/导出设置并将当前设置保存到电脑中。**

单位	FUNCTIONS	功能	GENERAL	常用	常用	ADVANCED	高级
UNITS			GENERAL				
Temperature		温度	Growroom	种植室	<1>	< 1 >	
Date Format		日期格式	Device name	设备名称	IClimate		
IMPORT/EXPORT SETTINGS			导入/ 导出设				
Read settings from disk		从磁盘读取设置					
Save current settings to disk							

## Functions 功能

\*在 Intelligrow 上

Second, check each device you have installed. Some devices share one output, so you can only select one device or the other. The software enforces this when one is selected the other is automatically “greyed out”. If you want to select the greyed device, you must de-select the other one first. After changing any settings, click the 'Save' button at the bottom-right of IntelliGrow.

其次，请检查每件您已安装的设备。某些设备共享一个输出，因此您只能选择其中一件设备，而且此软件将会强制性使另一个不被选择的设备自动失效。如果您想要选择

已失效的设备，你必须先取消对其他设备的选择。在更改了任何一项设置后，请在 Intelligrow 的右下角点击 ‘保存’ 按键。

**统计** STATISTICS

82.6 w/m<sup>2</sup>  
累积光照度

82.6 w/m<sup>2</sup>  
Accumulated light

00h 00m  
CO2 Injection duration

☾  
Day/Night

---

Functions 功能      General 常用      Advanced 高级

- 风扇 1  Fan 1
- <空调>  < Air conditioner >
- 加热器  Heater
- 二氧化碳传感器  CO2 sensor
- <二氧化碳注入>  < CO2 injection >
- 除湿器  Dehumidifier
- <加湿器>  < Humidifier >

CO2 Sensor range      二氧化碳传感器范围

0 - 2000 ppm     0 - 5000 ppm      0-2000 ppm    0-5000 ppm

- Light bank 1      模组阵列植物生长灯 1
- Light bank 2      模组阵列植物生长灯 2
- Second enviro sensor      第二环境传感器
- Mute buzzer      蜂鸣器静音
- Include VPD on status display      包括 VPD 状态显示
- Use scheduled settings      利用预定的设置

\*在 Intelligrow 上    \*On IntelliGrow

## Advanced settings and rules 高级设置与规则

These settings and rules are pre-set to typical values suiting the majority of growrooms. However, expert users may wish to alter them to achieve optimal performance.

此设置与规则已预先设置为适合大多数种植室的典型值。但专业用户可对其设置进行更改以达到最佳性能。

### Switching offsets 切换偏移量

This group of advanced settings refers to the exact point at which a device is switched on or off. The idea is to have a small differential between the ON point and OFF point to avoid device switching on/off too rapidly as this could cause unnecessary wear. The switching offsets are also useful to avoid overshoots when a heater or CO<sub>2</sub> is switched off.

这组高级设置指的是设备开关的准确点。此设置的目的是想让开关点之间保持很小的差异，以免设备开关过快而导致不必要的磨损。当关闭加热器或停止注入二氧化碳时，切换偏移量也可用于避免超调的问题。

The IntelliClimate has standard offsets as a default, but after observing your growroom, you can alter these offsets to achieve your perfect environment conditions.

IntelliClimate 智能温室气候控制器 已将默认值设定为标准的偏移量。但在观察种植室后，您可以对这些偏移量进行更改，以达成您想要的理想环境条件。

#### 从计算目标切换偏移量

\*在 Intelligrow 上 \*On IntelliGrow

#### SWITCHING OFFSETS FROM CALCULATED TARGETS

<b>风扇</b>	<b>开</b>	<b>关</b>
Fans	On < 0.9°F >	Off < -0.9°F >
<b>加热器</b>	<b>开</b>	<b>关</b>
Heater	On < -0.9°F >	Off < 0.9°F >
<b>空调</b>	<b>开</b>	<b>关</b>
Air conditioner	On < 0.9°F >	Off < -0.9°F >

<b>二氧化碳</b>	<b>开</b>	<b>关</b>
CO2	On < -200 ppm >	Off < -100 ppm >
<b>除湿机</b>	<b>开</b>	<b>关</b>
Dehumidifier	On < 8% >	Off < 2% >
<b>加湿器</b>	<b>开</b>	<b>关</b>
Humidifier	On < -5% >	Off < 5% >



## Rules 规则

Each rule is listed below with a brief description and a suggested initial value.

以下列出了每个规则，并附有简要说明及建议的初始值。

### Humidify/temperature control rules 加湿/温度控制规则

When changing from night to day, prevent the heater from switching on for XX minutes prior to lights turning on to prevent exceeding your temperature set point.

当夜晚变换成白天时，请在打开种植灯之前，防止加热器开启 XX 分钟，以避免温度超过设定值。

*Humidify/temperature control rules* 加湿/温度控制规则

When changing from night to day prevent heater from switching on for < 5 mins >

当夜晚变换成白天时，防止开启加热器 <5 分钟>

\*在 Intelligrow 上 \*On IntelliGrow

Set the heating offset to ensure the fans and heaters do not run simultaneously. This is especially useful in colder environments where outside air could cool the room down very quickly.

设置加热偏移量以确保风扇和加热器不会同时操作。这在较冷的环境中尤其有用因为室外空气会使种植室冷却得比较快。

Heating offset from temperature set point (used to ensure heater and fans do not operate simultaneously) < -7.2 °F >

从温度设定值设置加热偏移量 (以确保加热器及风扇不会同时操作) <-7.2 °F>

\*在 Intelligrow 上 \*On IntelliGrow

### Minimum periodic air change rules 最低定期换气规则

This will force an air change if the fans have not been operating for other reasons. This will expel humid, stale air and bring in ambient CO<sub>2</sub>. It is good practice to allow minimum air change when air conditioning is active to expel methane and other stale air. You may want to change these settings between winter and summer.

如果风扇因其他原因而不能操作，该系统将迫使换气。这将排出潮湿，污浊的空气并引进周围的二氧化碳。这是一个好做法因为它可以在空调启用后以排出甲烷和其他污浊的空气时，尽量减少换气。您可能需要在冬季和夏季之间更改这些设置。

Most growers would not want an air change to occur when the air conditioner is running, to avoid expelling the cool air. If you would like to allow for air change while the air conditioner is running, please tick the box.

大多数种植者不希望在空调运行时换气，以免排出冷空气。如果您想在空调运行时进行换气，请在方框中打勾。

\*在 Intelligrow 上    \*On IntelliGrow

**最低定期换气规则**

*Minimum periodic air change rules*

Force Fan ON for **强制性开启风扇**

Day	< 00h > < 05m > < 00s >	Every	< 01h > < 00m >
<b>白天</b>	<00 小时> <05 分钟> <00 秒>	<b>每</b>	<01 小时> <00 分钟>
Night	< 00h > < 03m > < 00s >	Every	< 02h > < 00m >
<b>夜晚</b>	<00 小时> <03 分钟> <00 秒>	<b>每</b>	<02 小时> <00 分钟>

Allow minimum periodic air change while air con active

**当空调启动时，允许最低定期换气**

## Setpoint ramping 斜坡设置点

When changing between day and night, this rule defines a period of time for the set points to gradually change (or ramp) from one value to the other. If the environment changes too quickly, you can shock your plants. Usually, 15-30 minutes is an appropriate ramping time.

在昼夜更换时，此规则定义了在一个时间段内，设置点可从一个值逐渐更改（或渐变）到另一个值。如果环境变化太快，植物会受到惊吓而因此影响到生长期。15-30 分钟是通常最合适的斜坡时间。

## 斜坡设置点

### Setpoint Ramping

Ramp setpoints at day/night transition for  **30 分钟** \*在 Intelligrow 上 \*On IntelliGrow

在昼夜更换期间设定斜坡点

## Air Con 空调

If the air-con is forced on for the day period you can also force it on before the day period starts, typically 2-10 minutes. This cools the room down in anticipation of the lights coming on.

如果空调在白天会被强制性开启，那您也可以在白天开始前就强制开启空调，通常是 2-10 分钟。这样就可以在天亮前让种植室降温。

### 空调

Air Con

**在白天期间，强制性开启空调**  
Force on air-con during day period

Start air-con (before day period)

**开启空调 (在天亮前)**

**<2 分钟>**

**2 mins**

\*在 Intelligrow 上 \*On IntelliGrow

## CO<sub>2</sub> rules 二氧化碳规则

CO<sub>2</sub> injection is allowed when not venting. You can choose to allow CO<sub>2</sub> to inject when the Fan 1 is running. This is useful if your Fan 1 is an HAF (air flow) fan. If your Fan 1 is an exhaust fan, tick the box to allow the IntelliClimate to reduce CO<sub>2</sub> injection to avoid wastage.

您可在不排气的情況下注入二氧化碳。您也可选择在风扇 1 运行时注入二氧化碳，这尤其有用，若您的风扇 1 是 HAF（气流）风扇，请在复选框上打勾，以允许 IntelliClimate 智能温室气候控制器 减少注入二氧化碳从而避免浪费。

**IMPORTANT:** The IntelliClimate has a factory default to only allow CO<sub>2</sub> injection when the light readings are above 10w/m<sup>2</sup>

**重要提示:** IntelliClimate 具有出厂默认设置。因此，当光线读数高于 10w / m<sup>2</sup> 时，二氧化碳才可被注入。

If your light levels are below this number, your CO<sub>2</sub> will not inject. Please adjust your EnviroSensor so it gets a light reading or login to IntelliGrow and change this setting. For further assistance, please contact [support@autogrow.com](mailto:support@autogrow.com).

如果您的光照度低于此读数，二氧化碳将会停止注入。请调整您的 EnviroSensor 环境检测仪，以便它可读取光照读数或登录 IntelliGrow 智能线上种植控制系统 并更改此设置。如需进一步的协助，请联系 [support@autogrow.com](mailto:support@autogrow.com)。

### 通过调整温度而达到二氧化碳循环

Allow for CO<sub>2</sub> cycling by allowing temperature to

fall below the current vent temp target by no more than

< 3.6 °F >

低于当前通风系统目标温度，不超过

rise above the current vent temp target by no more than

< 5.4 °F >

高于当前通风系统目标温度，不超过

\*在 IntelliGrow 上  
On IntelliGrow

Most growers will want to minimize wastage of CO<sub>2</sub>, so you have a few options to choose from. You can choose to allow the temperature set points to rise or fall to cycle CO<sub>2</sub> most efficiently.

大多数种植者都希望尽量减少二氧化碳的浪费。因此，有几种模式可以供你选择。您可以选择允许温度设定值上升或下降以最有效地循环二氧化碳。

## 二氧化碳规则

### CO2 Rules

- CO2 injection is allowed when not venting. Also allow injection when only F1 is running?

在不排气时可注入二氧化碳。可否在 F1 启动时允许

Inject only if measured light greater than < 10 w/m<sup>2</sup> >

只注入 CO2 当光照度高于

\*在 Intelligrow 上  
\*On IntelliGrow

If it is hot and the room is frequently venting, you can reduce CO<sub>2</sub> injections. You can override these settings and control your CO<sub>2</sub> by setting inject, wait and vent times to work for your specific growroom.

如果天气炎热且种植室的通风系统经常运作，您可以减少注入二氧化碳。您可以覆盖这些设置，并通过设置注入，等待和排气的时间以便您可以在您特定的种植室里控制二氧化碳的流量。

如果环境炎热且需经常排气，需减少注入二氧化碳以避免浪费

- If hot and frequent venting is required then reduce CO<sub>2</sub> injection to avoid wastage

注入时间      最低值 <2 分钟>      最大值 <10 分钟>  
Inject time      Min < 2mins >      Max < 10mins >

等候时间      最低值 <5 分钟>      最大值 <15 分钟>  
Wait time      Min < 5mins >      Max < 15mins >

排气时间      最低值 <2 分钟>      最大值 <20 分钟>  
Vent time      Min < 2mins >      Max < 20mins >

\*在 Intelligrow 上  
\*On IntelliGrow

## CO<sub>2</sub> Extraction 二氧化碳萃取

Certain growing environments may require that CO<sub>2</sub> is extracted from the growroom. You can choose CO<sub>2</sub> Extraction under the Functions tab. The IntelliClimate will run fans to bring CO<sub>2</sub> levels to your desired set point.

某些生长环境可能需要从种植室中提取二氧化碳。您可以在“功能”选项下选择“提取二氧化碳”。IntelliClimate 将运行风扇，将二氧化碳的水平带到您想要的设定值。

## Humidification 加湿

As the room cools down the RH will automatically rise. You can choose to allow humidification during the night period, or have it disabled. When changing from day to night, you can inhibit

humidification for 30 mins prior to the change. The purpose is to ensure the room and crop are left dry for the night.

随着房间降温，相对湿度将自动上升。您可以选择在夜间加湿，或禁止加湿。从白天变换至夜晚时，您可以在变换前 30 分钟禁止加湿。此目的是为了确保种植室和农作物在夜间保持干燥。

### 加湿 Humidification

Allow humidification during night time period

在夜间允许加湿

When changing from day to night inhibit humidification for

当白天变换至夜晚时，禁止加湿

< 30 mins >

< 30 分钟 >

\*在 Intelligrow 上 \*On IntelliGrow

## Fogging 喷射烟雾

Fogging is an effective way to cool your room down while helping to control relative humidity. You can choose to use fogging to cool your room when the humidity is low enough that fogging will not cause an adverse reaction. If the room is too cool, the fogging will hold off. Fogging will pulse on and off to maintain your desired set point.

喷射烟雾可有效地使房间降温，同时有助于控制相对湿度。当湿度降低至不会对植物造成不良反应时，您可选择喷射烟雾为种植室降温。如果种植室太冷，起雾的时间会被推迟。喷射烟雾的时间会不停地跳动，以维持在您想要的设定值。

### 雾化规则 Fogging rules

Only fog to cool during day if RH lower than < 70 % >

当相对湿度低于 70%，在白天喷射烟雾以降温

Only fog to achieve RH (VPD) setpoint if temperature greater than < 68 °F >

当温度高于 68 °F，喷射烟雾以达到相对湿度（蒸汽压差）设置点。

Fog pulse ON every < 00h > < 05m > < 00s >

喷雾脉冲启动，每 < 00 小时 > < 05 分钟 > < 00 秒 >

Fog pulse ON for a

喷雾脉冲启动

Min < 1 sec >

最低值 < 1 秒 >

Max < 30secs >

最高值 < 30 秒 >

\*在 Intelligrow 上

\*On IntelliGrow

## Lighting 光照度

Metal halide and high-pressure sodium bulbs need to cool down after switching off to preserve the life of the bulb. In the event of a power outage, the lamp cool-down time is important to ensure this happens. LED lights do not require a cool-down period.

金属卤化物和高压钠灯泡在关闭后需要冷却，以保持灯泡寿命。在断电的情况下，灯泡的冷却时间是非常重要的。LED 灯不需要冷却时间。

To avoid a power surge, there should be a minimum gap between light bank 1 switching on and light bank 2. Normally, 6 minutes is sufficient. If electronic ballasts are used it may be possible to reduce this time.

为了避免电涌，模组阵列植物生长灯 1 和 2 之间应有一个最小的时间间隔。通常，6 分钟的间隔就足够了。如果使用电子镇流器，则可以减少此时间。

### Lighting

Lamp cool-down time  
灯泡冷却时间

< 15 mins >  
< 15 分钟 >

After switching on first light bank, switch on next light bank after < 6 mins >

打开第一组生长灯后，6 分钟后再打开另一组生长灯 < 6 分钟 >

\*On IntelliGrow  
\*在 Intelligrow 上

## Fail Safe Settings 故障安全设置

You can customize your fail safe settings to levels appropriate for your growroom.  
您可以将故障安全设置定制为适合您的种植室需求。

- **Aircon override** - If the temperature becomes excessive when in aircon mode, the fan will switch ON.  
**空调覆盖系统**-如果在空调模式下温度过高，风扇将被开启。
- **CO<sub>2</sub> fail safe** - Switch on all fans if CO<sub>2</sub> exceeds 1950ppm. Although CO<sub>2</sub> is not poisonous, it can cause suffocation.  
**二氧化碳失效安全**-如果二氧化碳超过 1950ppm，所有风扇将被启动。尽管二氧化碳无毒，但它可导致窒息。
- **CO<sub>2</sub> injection override** - If you run out of CO<sub>2</sub> gas and the CO<sub>2</sub> level falls below 300ppm, the system will revert to using the fans to bring in ambient CO<sub>2</sub>.  
**二氧化碳注入覆盖系统**-如果您用完了二氧化碳且二氧化碳浓度低至 300ppm 以下，该超控系统 will 恢复使用风扇并引入周围的二氧化碳。

- Fan fail override** - If in fan mode and temperature continues to rise the lights will progressively shut down  
**风扇故障覆盖系统**-如果处于风扇模式但温度仍持续升高，植物生长灯将逐渐关闭。
- Lighting override** - If a bank of lights fails, the light level will fall below your minimum value (in Alarm Settings) and the controller will switch to the alternative bank of lights.  
**光照覆盖系统**-如果一排植物生长灯失效，光照度将低于您的最低值（在“警报设置”中）。因此，控制器将切换至备用灯。
- Dehumidifier override** - If the RH becomes excessive, the AC will come ON. If the RH continues to rise, the fans will come ON.  
**除湿机覆盖系统**-如果相对湿度过高，交流电源将被启动。如果相对湿度继续升高，风扇将被启动。

#### 故障安全设置 FAIL SAFE SETTINGS

<p><b>Air con override</b>    空调覆盖系统</p> <p>Switch on all exhaust fans if temp exceeds    &lt; 87.8 °F &gt;</p> <p>启动所有排气风扇温度超于    &lt; 87 °C &gt;</p> <p><b>CO2 Injection override</b>    二氧化碳注入覆盖系统</p> <p>Revert to fan(s) for this session if CO2 falls while injecting</p> <p>若注入二氧化碳时浓度下降，恢复使用风扇</p>	<p><b>CO2 fail safe</b>    二氧化碳故障安全系统</p> <p>Switch on all fans if CO2 exceeds    &lt; 750 ppm &gt;</p> <p>当二氧化碳超过 &lt;750 ppm&gt;，启动所有风扇</p> <p><b>Fan fail override</b>    风扇故障覆盖系统</p> <p>Switch off one light bank if temp exceeds    &lt; 91.4 °F &gt;</p> <p>若温度超于 &lt;91.4 °F&gt;，开启一盏植物生长灯</p> <p>Switch off all lights if temp exceeds    &lt; 95 °F &gt;</p> <p>若温度超于 &lt;95 °F&gt;，关闭所有植物生长灯</p> <p><b>Lighting override</b>    光照覆盖系统</p> <p><input checked="" type="checkbox"/> If light level falls below alarm minimum for more than 5 minutes, switch on other light bank. (Note: will not retry until next day)</p> <p>如果光照度低于警报最低值 5 分钟以上，请打开其他植物生长灯。（注意：系统会在第二天再次启动）</p>
<p><b>Power failure</b>    电源故障</p> <p>After cool-down, switch lights on after    &lt; 0 mins &gt;</p> <p>冷却之后，在 &lt;0 分钟&gt; 打开植物生长灯</p> <p><b>Dehumidifier override</b>    除湿机覆盖系统</p> <p>Switch to AC if RH exceeds setpoint plus    &lt; 15% &gt;</p> <p>如果相对湿度超过设定值，切换去交流电源电</p> <p>Switch on fans if RH exceeds 93% or setpoint plus    &lt; 20% &gt;</p> <p>如果相对湿度超过 93%或设定值，风扇将被启动</p>	

\*On IntelliGrow

\*在 Intelligrow 上



## Readings 读数

This screen allows you to view readings and set points for functions that have been enabled under the function's menu.

在此界面，您可查看功能菜单下已启用的功能的读数以及设置点。

The interface displays four main readings at the top:

- Air temp >**: 70.2°F
- RH >**: 57%
- Light >**: 0w/m<sup>2</sup>
- CO<sub>2</sub> >**: 371 ppm

Below the readings are two main sections:

- Controls (控制)**:
  - 空气温度 (Air temp)**: Fan 1 (风扇 1), Air conditioner (空调), CO<sub>2</sub> injection (二氧化碳注入), Heater (加热器).
  - 相对湿度 (RH)**: Force On (强制启动) and Enable (启动) toggles for each function.
- Alarms (警报)**:
  - 光照度 (Light)**: Light Bank 1 (模组阵列植物生长灯 1), Light Bank 2 (模组阵列植物生长灯 2).
  - 二氧化碳浓度 (CO<sub>2</sub>)**: Dehumidifier (除湿机), Humidifier (加湿器).
  - Force On (强制启动) and Enable (启动) toggles for each function.

\*在 Intelligrow 上

\*On IntelliGrow

Enabling a function will allow the controller to automatically manage the equipment to maintain your set points. All functions (except CO<sub>2</sub>) can be “forced on” to activate the equipment, overriding your set points. Forcing on a function is an easy way to test your outputs. Functions with a green icon are currently running, while those greyed out are not.

启动一项功能将允许控制器自动管理设备以维持您的设置点。您可以“强制”启动所有功能（二氧化碳除外）以激活设备，从而覆盖您的设置点。强制启动功能是测试输出的一种简单的方法。带有绿色图标的功能当前正在运作，而呈灰色图标的功能则不在运作。

## Scheduling 调度功能

The scheduling feature allows you to preload a typical growing sequence, so the environment automatically changes to match the requirements of the crop. Each line in the table is specified by a day number (and date) and specifies the settings required. These settings stay in effect until the date of the next line. New lines are easily added using the + button and lines are deleted by clicking the X button.

调度功能使您可以预先加载常用的生长程序，因此环境会自动改变，以匹配农作物的需求。表中的每一行均由日数（和日期）以及所需的设置指定。此设置在下一行的日期之前一直有效。您可使用+按键以轻松添加新行列或单击 X 按键以删除行列。

The scheduling feature is only available while using IntelliGrow. If the IntelliClimate loses connection to IntelliGrow, it will continue with the current set points until it is reconnected to the cloud.

调度功能仅在使用 IntelliGrow 智能线上种植控制系统 时可用。如果 IntelliClimate 智能温室气候控制器 与 IntelliGrow 智能线上种植控制系统的连接失效，此功能将继续使用当前设置点，直到将其重新连接至云端服务为止。

Once you have entered your schedule, you can save it to your local computer to be used again in the future. The dates in the table are relative to the specified start date. A schedule created for a start date of 15 January can be reused starting from any other date.

输入时间表后，您可将其保存至电脑，以便将来可以再次使用。表中的日期相对于指定的开始日期。尽管时间表已设置 1 月 15 日为开始日期，您还是可以从其他任何一个日期开始再次使用此时间表。

开始日期 Start Date 附加 07/23/20 模组阵列植物 生长灯

ADD +

天 Day	日期 Date	Light Bank	Light On	Light Duration	Day Temp	Night Drop	RH Day	RH Night	RH Max	CO2
		两者	h-小时	m-分钟	°F	°F	%	%	%	ppm
1	07/23/20	Both	06h 00m	18h 00m	77	5	75	65	95	400
8	07/30/20	Both	06h 00m	18h 00m	77	5	75	65	95	500
15	08/06/20	Both	06h 00m	12h 00m	77	5	75	65	95	600
22	08/13/20	Both	06h 00m	12h 00m	77	5	75	65	95	800

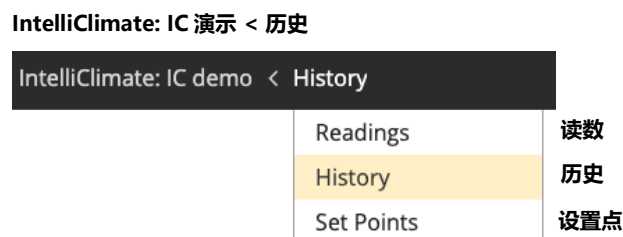
+

## History 历史

The history screen on IntelliGrow is very helpful for growers to see not only their historic data, but also when their equipment is running and how effective it is. The history screen will show you the temperature, relative humidity, CO2 and light levels over any length of time. You can set up the history graph to show information specific to your interests.

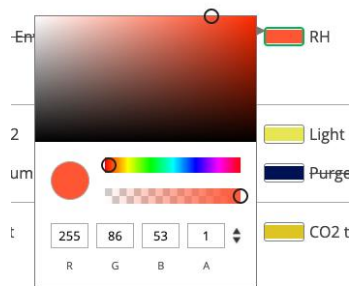
IntelliGrow 上的历史记录屏幕不仅可以帮助种植者查看历史数据,而且还有助于他们查看设备何时运行以及其运行效率如何。历史记录屏幕将显示任何时间内的室温,相对湿度,二氧化碳浓度和光照度。您可以设置历史记录图以显示特定于您感兴趣的资料信息。

To access history, simply click on History in the drop down menu:  
只需在以下菜单中单击历史记录以查看历史记录:



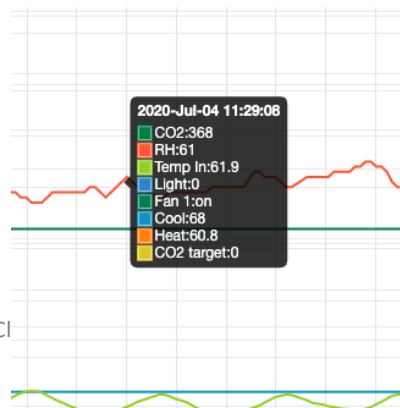
Click “Options” at the bottom of the screen to choose your readings, peripherals and targets. If two of the colors are too similar, click on the color box to change the color of the line. You can save these settings to your local computer for future use. You can have multiple presets saved.

单击屏幕底部的“选项”以选择您的读数，外围设备和目标。如果**两种**颜色太相似，请单击颜色框以更改线条的颜色。您可以将这些设置保存到本地计算机上，以备将来使用。您可以保存多个预设。



Hovering your mouse over any point on the history graph will give you exact details about that single moment:

把鼠标悬停在历史记录图表的任何点上，将为您提供有关那一刻的**准确**详情：



If there is a perimeter you do not want to see displayed, simply click it off on the left hand side:

如果有一个您不希望看到的参数，只需在左侧单击关闭即可：



You can also export the data into a .csv file:

您也可以将数据导出为.csv 文件：

**导出到文件**



Date	Time	CO2	CO2 Env 1	CO2 Env 2	RH	VPD	Temp In
7/1/20	0:29:07	337	337	0	59	0.801	63.5
7/1/20	1:29:17	339	339	0	60	0.783	63
7/1/20	2:29:26	339	339	0	60	0.765	62.5
7/1/20	3:29:34	342	342	0	60	0.75	62
7/1/20	4:29:42	343	343	0	60	0.735	61.6

## Alarm Settings and Targets 警报设置和目标

Set points are user-defined. You can set your desired temperature, humidity & CO<sub>2</sub> to maintain an ideal growing environment. The IntelliClimate will “learn” how to use your installed equipment to be the most effective. The targets you see displayed on the controller

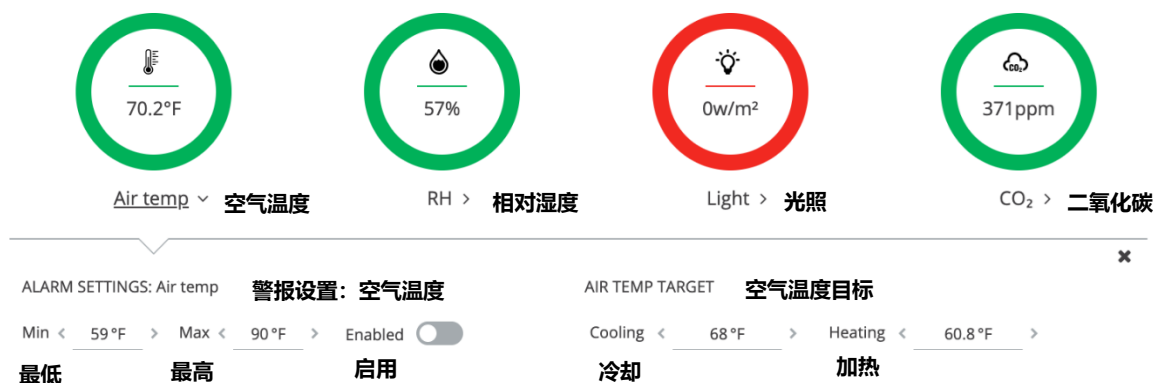
are constantly changing as the IntelliClimate evaluates the most efficient way to control your room.

设置点是用户自定义的。您可以设置您想要的温度，湿度和二氧化碳浓度以维持理想的生长环境。IntelliClimate 将“学习”如何最有效地使用您已安装的设备。当 IntelliClimate 评估着控制种植室最有效的方法时，您在控制器上看到的目标会不断地变化。

## Air Temp 空气温度

You can set your minimum and maximum temperature values allowed in your growroom. If the temperature goes above or below, it will trigger an alarm, sending you a text and/or email alert. This feature can be enabled or disabled. Temperature targets are continually adjusting to meet the demands of the growroom. This is done automatically as the IntelliClimate adjusts set points. You can set the target to a desired value and it will force the setting one time and then revert back to original set point.

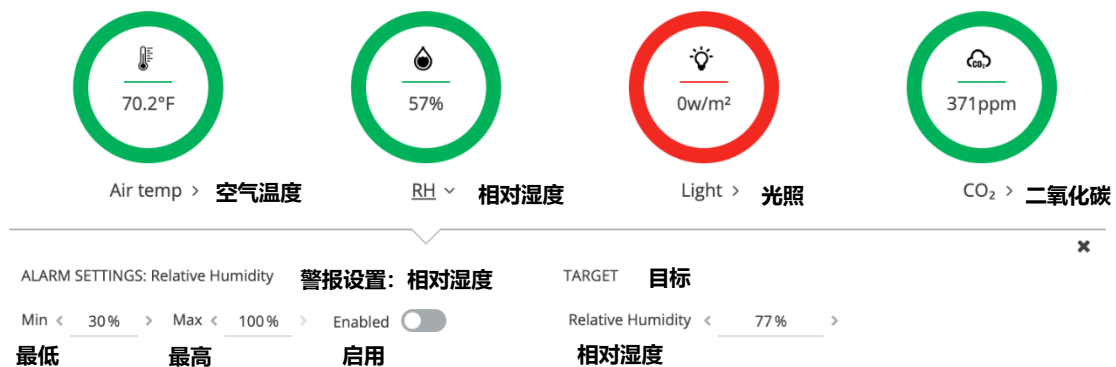
您可以设置种植室中允许的最低和最高温度值。如果温度高于或低于所设置的温度，它将触发警报，并向您发送文本和/或电子邮件警报。此功能可以被启用或禁用。温度目标会不断调整以满足种植室的需求。这是在 IntelliClimate 智能温室气候控制器 调整设置点时自动完成的。您可以将目标设置为所需的值数，它将强制设置一次，然后返回原始设置点。



## RH (Relative Humidity) 相对湿度

You can set your minimum and maximum humidity values allowed in your growroom. If the humidity goes above or below, it will trigger an alarm, sending you a text and/or email alert. This feature can be enabled or disabled. Humidity targets are continually adjusting to meet the demands of the growroom. This is done automatically as the IntelliClimate adjusts set points. You can set the target to a desired set point and it will force the setting one time and then revert back to original set point.

您可以设置种植室中允许的最低和最高湿度值。如果湿度高于或低于所设置的湿度，它将触发警报，并向您发送文本和/或电子邮件警报。此功能可以被启用或禁用。湿度目标会不断调整以满足种植室的需求。这是在 IntelliClimate 智能温室气候控制器 调整设置定点时自动完成的。您可以将目标设置为所需的值，它将强制设置一次，然后返回到原始设置点。



## Light 光照

You can set your minimum light value allowed in your growroom. If the light level falls below, it will trigger an alarm, sending you a text and/or email alert. This feature can be enabled or disabled

您可以设置种植室中允许的最低光照值。如果光照度低于所设置的最低光照值，它将触发警报，并向您发送文本和/或电子邮件警报。此功能可以被启用或禁用。

Air temp > 空气温度      RH > 相对湿度      Light > 光照      CO<sub>2</sub> > 二氧化碳

---

ALARM SETTINGS: Light      警报设置: 光照

Minimum value: < 10w/m<sup>2</sup> > Enabled

最低值      启用

\*在 Intelligrow 上  
\*On IntelliGrow

## CO<sub>2</sub> 二氧化碳

You can set your minimum and maximum CO<sub>2</sub> values allowed in your growroom. If the CO<sub>2</sub> goes above or below, it will trigger an alarm, sending you a text and/or email alert. This feature can be enabled or disabled. CO<sub>2</sub> targets are continually adjusting to meet the demands of the growroom. This is done automatically as the IntelliClimate adjusts set points.

您可以设置种植室中允许的最低和最高二氧化碳值。如果二氧化碳高于或低于所设置的二氧化碳值，它将触发警报，并向您发送文本和/或电子邮件警报。此功能可以被启用或禁用。二氧化碳目标会不断调整以满足种植室的需求。这会在 IntelliClimate 智能温室气候控制器 调整设置点时自动完成。

Air temp > 空气温度      RH > 相对湿度      Light > 光照      CO<sub>2</sub> > 二氧化碳

---

ALARM SETTINGS: CO<sub>2</sub>      警报设置: 二氧化碳

Min < 250 ppm > Max < 1950 ppm > Enabled

最低      最高      启用

TARGET      目标

CO<sub>2</sub> active target      0 ppm

二氧化碳活跃目标



## Alarms 警报

The alarms can be enabled to operate on the controller (buzzer) or via IntelliGrow to send text/email alerts. Each of these can be enabled or disabled. When connected to IntelliGrow, any enabled alarm will send an alert when a relevant reading deviates outside user set limits.

警报可以控制器（蜂鸣器）上运行或通过 IntelliGrow 智能线上种植控制系统发送文本/电子邮件警报。这些都可以被启用或禁用。连接到 IntelliGrow 智能线上种植控制系统时，当相关读数超出用户设置的限制时，任何启用的警报都会发送警报。

ALARM SETTINGS: Air temp 警报设置：空气温度

Min < 59°F > Max < 90°F > Enabled

最低 最高 启用

## Section B2 – Settings using IntelliClimate Keypad

### B2 章节 - 使用 IntelliClimate 键盘进行设置

Though you can set most everything on the controller itself via the keypad, the Scheduling, Advanced Settings and History features are only available on IntelliGrow.

尽管您可以通过键盘在控制器本身进行大多数的设置，但调度，高级设置和历史记录功能仅在 **IntelliGrow 智能线上种植控制系统** 上可用。

The two keys at the bottom of the display are “soft keys”. This means their function at any time is shown on the screen above them. After switching on, you will see the right-hand key has the label “menu” on the LCD above it and the left-hand key is unused at this point. To the right of the LCD screen are two arrow keys. Arrow keys are used for moving up or down through the menus, and when in a screen which allows you to edit a numeric value, they are used for increasing or decreasing the values. They are also used to select between different options.

显示屏底部的两个键是“软键”。这意味着它们上方的屏幕会随时显示其功能。打开电源后，您会看到右手按键上方的液晶屏上带有标签“菜单”，而此时的左手按键是尚未使用。液晶屏幕右侧是两个箭头键。箭头键用于在菜单中向上或向下移动以及在允许您编辑数值的屏幕中，它们用于增加或减少数值。它们还可以用于在不同选项之间进行选择。

On first pressing the “menu” button, you will see yourself in the main menu. Use the down arrow to move down and you see the following items

首先按下“菜单”按钮，您将进入主菜单中。使用向下箭头向下移动，您会看到以下项目。

<b>SETTINGS</b>	设置
<b>TARGETS</b>	目标
<b>OVERRIDES</b>	覆盖系统
<b>ALARMS</b>	警报
<b>CLOCK</b>	时钟
<b>CONFIGURE</b>	配置

- **INSTALLED PERIPHERALS**    已安装的外围设备
- **CO<sub>2</sub>**                    二氧化碳

For example, to change a set point, move down to Settings and then press “enter” to enter the Settings menu. Now by pressing the down and/or up arrows move through this sub-menu to see the item that you wish to change, and press enter. After making any changes the soft keys will allow you to either save the new setting or to cancel and exit out of that screen.

例如，若要更改设置点，请移至“设置”，然后按“回车键”进入设置菜单。现在，通过按向下和/或向上箭头在子菜单中移动，以查看要更改的项目，然后按回车键。进行任何更改后，软键将允许您保存新的设置或取消并退出该屏幕。

We suggest you use **Section B (pages 11-16)** on IntelliGrow 智能线上种植控制系统 settings to guide you through the setting procedure.

我们建议您使用 IntelliGrow 智能线上种植控制系统 设置的 **B 部分（第 11-16 页）** 来指导您完成设置过程。



## Section C - Installation

### C 章节 - 安装

The IntelliClimate controller should be installed in a cool, dry place out of direct sunlight. Remove the screws holding the back, fit the mounting feet, then screw to the wall. If using the dry wall (plaster board) anchors, use the longer screws supplied. If fixing to a plywood back board use the shorter screws

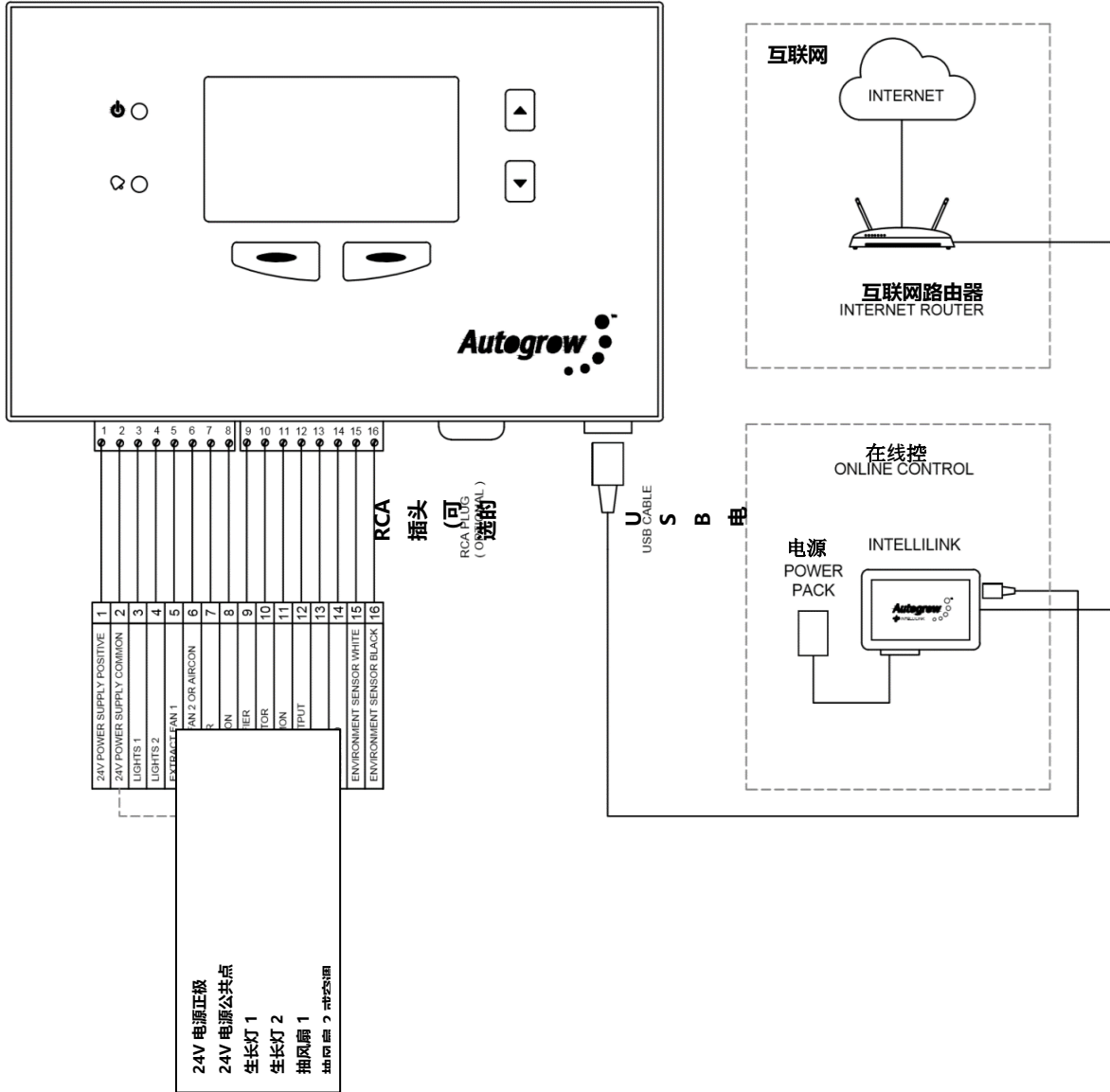
IntelliClimate 智能温室气候控制器 控制器应安装在阴凉干燥的地方，避免阳光直射。拧下固定背面的螺丝钉，安装固定脚，然后将其拧到墙上。如果是干墙（石膏板）锚，请使用所提供的较长的螺丝钉。如果是要固定到胶合板背板上，请使用较短的螺丝钉。

The low voltage power from the adapter is connected to the two-left connection terminals on the left-hand connector. With many power supplies, the cable is a screened “co-axial” type. In this case the screen should be connected to the “Common” and the center wire to the 24V line connection on the controller.

来自适配器的低压电源会连接到左侧连接器上的两个左侧连接端子。在许多电源供应时，电缆是屏蔽的“同轴”型。在这种情况下，屏幕应连接至“公共端”，中心线应连接至控制器上的 24V 线路连接上。

A 24V DC power supply adapter is supplied.

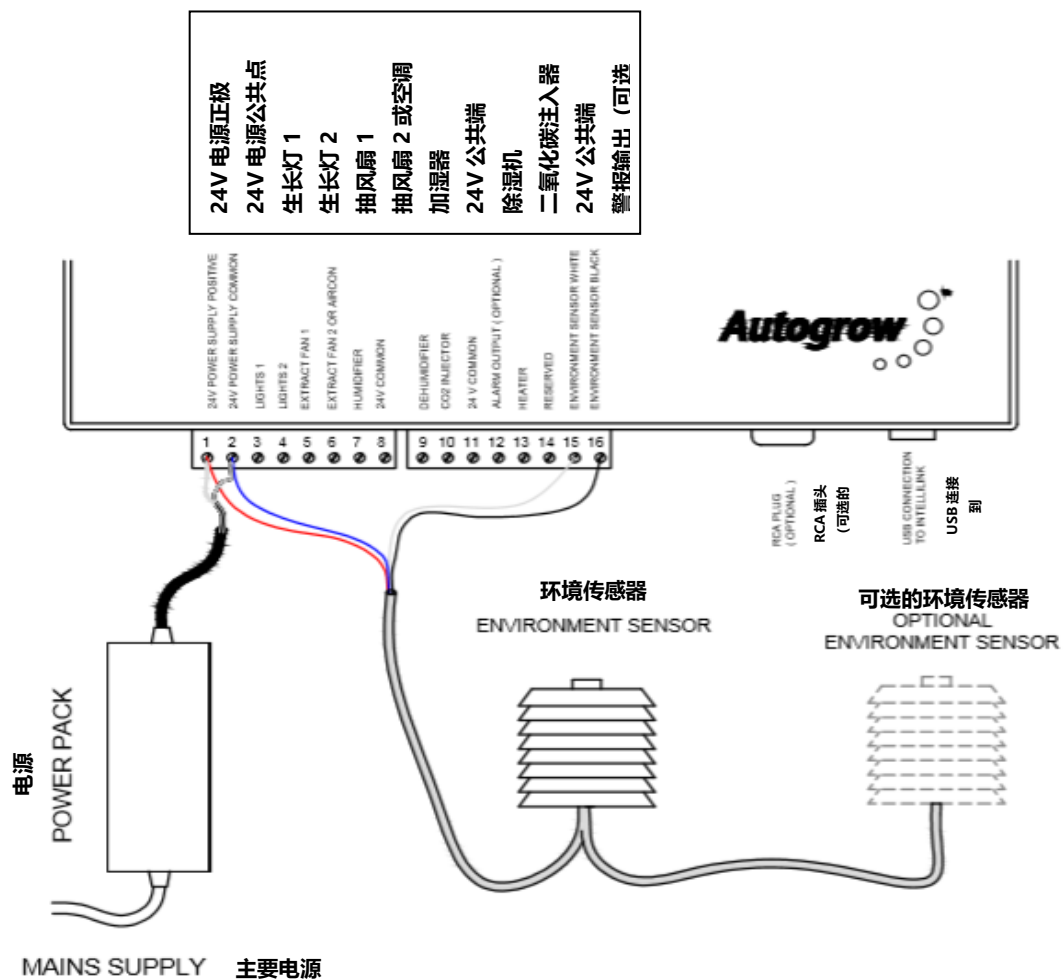
已随附一个 24V 直流电源适配器。

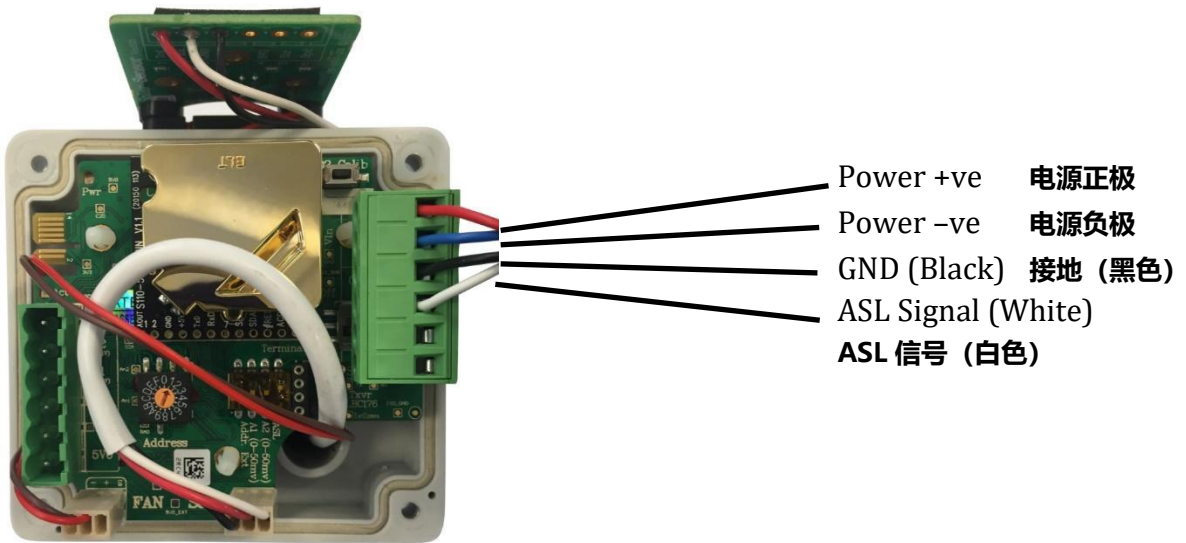


## Connection to EnviroSensor 连接至 EnviroSensor

A single cable is run from the IntelliClimate to the first enviro sensor which loops from the first enviro sensor to the second sensor (if fitted).

一条电缆从 IntelliClimate 智能温室气候控制器 链接到第一个环境传感器，然后从第一个环境传感器回路到第二个传感器（如果已安装）。





IntelliClimate Environment Sensor  
 IntelliClimate 环境传感器



ES Intelli “Ultra” wiring at Controller  
 控制器上的 ES Intelli“ Ultra”接线



## Setting the address of the EnviroSensors 设置环境传感器的地址

The first EnviroSensor should have the rotary switch set to 1 with the second EnviroSensor set to 2.

第一个环境传感器的旋转开关应设置为 1，而第二个环境传感器则设置为 2。



## Relay Boxes 继电器盒

To drive mains powered equipment, the 24V DC outputs must be connected to relays or contactors that have 24V DC coils. We normally supply twin relay boxes that provide a convenient method of achieving this. The **total** mains current draw from a relay box should not exceed the rating as printed on its label.

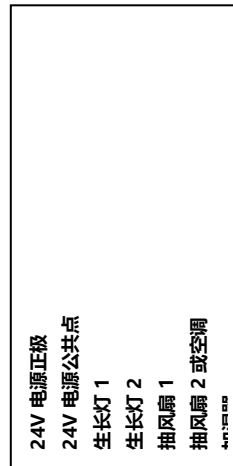
若要驱动主电源设备，您必须将 24V 直流输出连接到具有 24V 直流线圈的继电器盒或接触器。通常我们会供应双继电器盒以提供一个便捷的方法来实现这一点。从继电器盒引出的**总电源电流**不应超过其标签上标明的额定值。

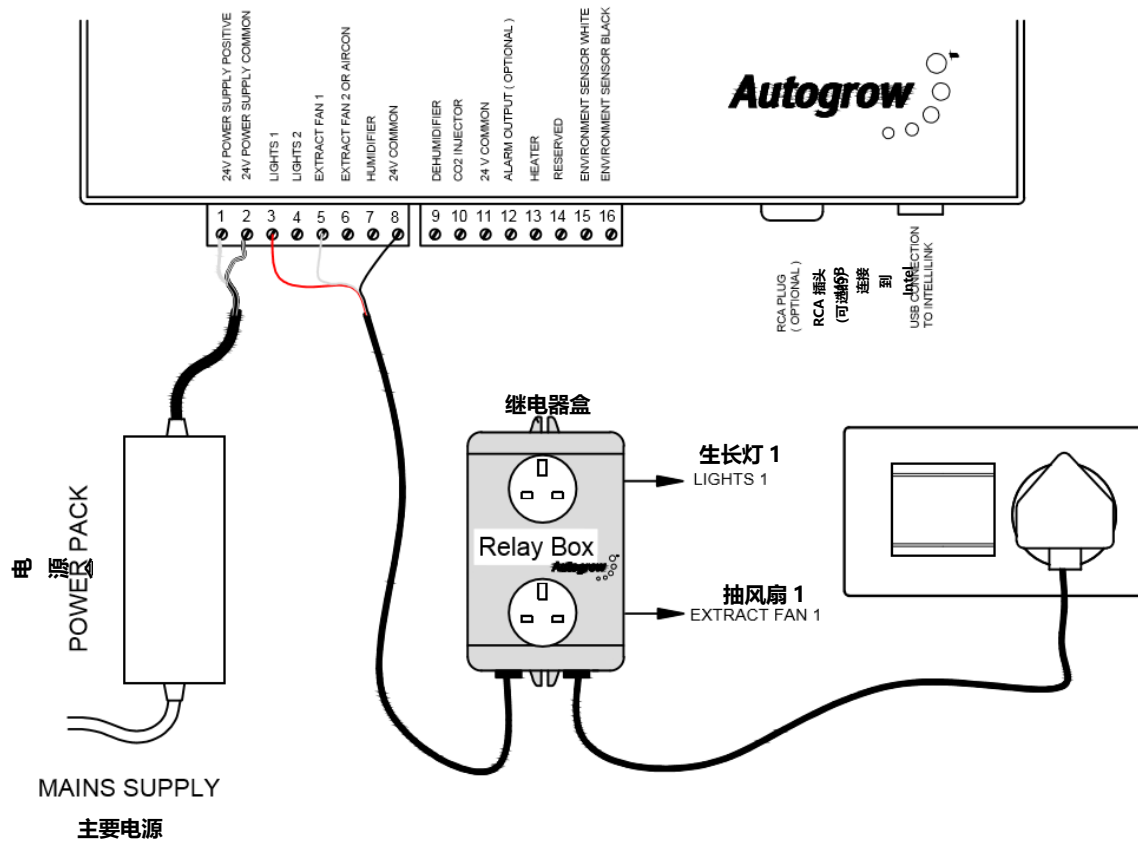
The black wire is the common, the red is for the upper socket outlet and the white is for the lower socket outlet.

黑色电线是公共端，红色是上插座，而白色是下插座。

### Example connection of a relay box to operate Light1 and Fan1

继电器盒的连接示例,用于操作“生长灯 1”和“风扇 1”





## Section D – Maintenance

### D 章节 – 维修

Very little maintenance is required and is really limited to keeping all equipment clean, dry and cool. Observe and double check all readings from time to time to ensure that sensors are still accurate. This is particularly important for the CO<sub>2</sub> sensor.

几乎不需要维修，实际上仅限于保持所有设备的清洁，干燥和凉爽，并不时观察并仔细检查所有读数，以确保传感器仍然准确。这对于二氧化碳传感器尤其重要。

## Calibration of CO<sub>2</sub> sensor 二氧化碳传感器的校准

**SOFT CALIBRATION** – allows calibration against an accurate CO<sub>2</sub> sensor or known CO<sub>2</sub> level.

软件校准 - 可以根据准确的二氧化碳传感器或已知的二氧化碳水平来进行校准。

On the IntelliClimate:

在 IntelliClimate 上:

**Menu > Configure > CO<sub>2</sub> > Enviro 1 (or 2) > CO<sub>2</sub> Scale Factor**

**菜单 > 配置 > 二氧化碳 > 环境传感器 1 (或 2) > 二氧化碳比例因子**

Use the up or down arrows to change the scaling away from the normal 100% until the scaled or calibrated CO<sub>2</sub> reading below the box is correct, press “Save” to store the new calibration. When doing this, the percentage change needed is displayed on the screen. The normal percentage is 100%. If this ever needs to be set below 50% or above 150% this may indicate some deterioration of the sensor. In this case first try the hard calibration below to see if that corrects the reading. If not, you may require a new CO<sub>2</sub> module.

使用向上或向下箭头将缩放比例从正常的 100%更改，直到框下方的缩放或校准的二氧化碳读数正确，然后按“保存”以存储新的校准。这样做时，所需的百分比变化会显示在屏幕上。正常百分比为 100%。如果需要将其设置为低于 50%或高于 150%，这可能表明传感器有一些退化。在这种情况下，请先尝试以下的硬件校准，看看是否可以纠正读数。如果不可以，您可能需要一个新的二氧化碳模块。

**HARD CALIBRATION** – Allows the sensor to self-calibrate when placed in fresh air at ambient CO<sub>2</sub> levels. As this is less convenient than the SOFT calibration mentioned above, it is suggested that this is carried out only once per year.

硬件校准 - 当传感器置于周围环境二氧化碳水平的新鲜空气中时，允许传感器进行自我校准。由于这不如上述软件校准方便，所以建议每年仅进行一次。Place the sensor box outside in fresh air and connect to an IntelliClimate controller. On the IntelliClimate:

将传感器盒放在室外的新鲜空气中并连接到 IntelliClimate 控制器。在 IntelliClimate 上:

**Menu > Configure > CO<sub>2</sub> > Enviro 1 (or 2) > Open-Air Calibration**

**菜单 > 配置 > 二氧化碳 > 环境传感器 1 (或 2) > 露天校准**

On pressing start a new screen with a timer counting down from 11 minutes will appear. During this time leave the EnviroSensor in fresh air and avoid breathing near it. It will self-calibrate to the ambient CO<sub>2</sub> level. At the end, navigate back to the software calibration screen “CO<sub>2</sub> scale factor” and set this to 100%.

按下“开始”时，将出现一个新的屏幕，其中的计时器从 11 分钟开始倒计时。在这段时间内，将“环境传感器”放在新鲜空气中，并避免在其附近呼吸。它将自我校准到周围环境二氧化碳水平，最后导回到软件校准屏幕“二氧化碳比例因子”并将其设置为 100%。

## Section E - Fault finding

### E 章节 - 故障诊断

- **Unit is completely dead** – i.e. no display, no power light, no outputs.  
装置完全没电了 - 即无显示，无电源指示灯，无输出。
  - Check the power pack is functioning (by measuring with a voltmeter if possible), is plugged into an active outlet and properly connected to the controller.  
  
检查电源盒是否正常运行（如果可能通过电压表进行测量），是否已插入有电源的插座并正确连接到控制器。
  - If unit still fails to function, the probability is the internal 4A fuse (20mm x 5mm miniature glass fuse) may have blown. Most likely cause is that wires connecting to the relays have touched together and shorted out. To fix this it is important to clear the fault first. Inspect all wiring and ensure all wires are well insulated right to the point where they enter the terminal block. Then replace the fuse with a genuine 4A fuse. DO NOT ATTACH WIRE OR ALUMINIUM FOIL ACROSS IT.

如果装置仍然无法运作，可能是内部 4A 保险丝（20 毫米 x 5 毫米微型玻璃管保险丝）已经熔断了。最有可能的原因是连接到继电器盒的电线接触在一起导致短路。要解决此问题，首先清除故障是很重要的。检查所有接线并确保所有电线绝缘良好，直到进入接线端子为止。然后更换原装的 4A 保险丝。请勿将电线或铝箔穿过它。



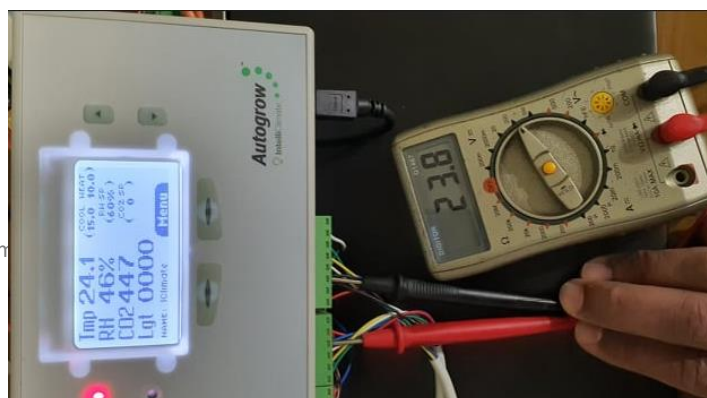
- **Lights or other equipment do not come on when expected**  
生长灯或其他设备没有在预期中启动

- Test the relevant output using a voltmeter set on a range suitable for measuring 24V DC while the output is active. You can force on an output via the Override menu. Measure between the output pin in question and one of the common connections. If the pin has 24V on it then the fault lies with the peripheral or relay driving it. If there is not 24V on the relevant pin, then recheck all settings starting with configuration.

在输出激活时，使用设定在 24V 直流测量范围的电压表来测试相关输出。您可以通过“覆盖”菜单强制输出。在所涉及的输出引脚和其中一个公共端连接之间进行测量。如果引脚上有 24V，这表示故障出现在外围设备或驱动引脚的继电器。如果相关引脚上没有 24V，请从配置开始重新检查所有设置。

- Double check all other settings and readings to be sure that the peripheral in question should be ON.

仔细检查所有其他设置和读数，以确保所涉及的外围设备处于打开状态。



- **System not showing Temperature & Humidity readings**

**系统未显示温度和湿度读数**

- Confirm there is power to the EnviroSensor by visually checking to see the internal fan is running

通过肉眼检查内部风扇是否运行，以确认环境传感器已通电。

- If the fan is not running, please check all wiring.

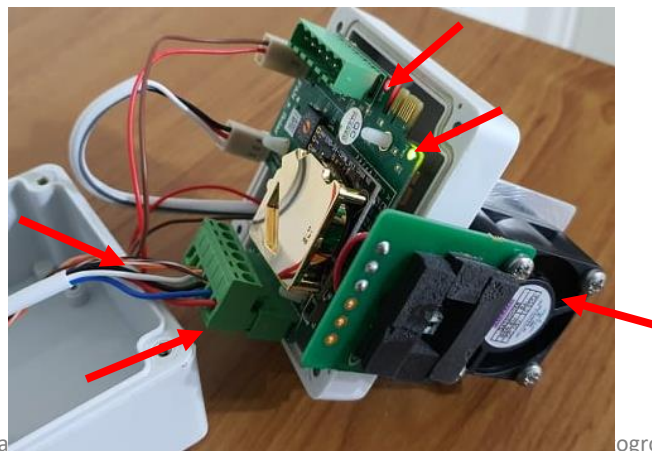
如果风扇没有运行，请检查所有接线。

- If the fan is running, please power cycle the sensor by unplugging it from the green terminal block on the left.

如果风扇正在运行，请从左侧的绿色接线端子上拔下电源，并重新启动传感器。

- After you plug it back in, if there are still no readings, open the EnviroSensor and check that there is a green power light and a flashing red communications light.

如果在重新插入电源后仍旧没有读数，请打开环境传感器并检查是否有一个绿色电源指示灯和一个闪烁的红色通信指示灯。





- **System not showing CO<sub>2</sub> readings**

**系统未显示二氧化碳读数**

- Confirm there is power to the EnviroSensor by visually checking to see the internal fan is running.

通过目视检查内部风扇是否运行，以确认环境传感器已通电。

- If the fan is not running, please check all wiring.

如果风扇没有运转，请检查所有接线。

- If the fan is running, please power cycle the sensor by unplugging it from the green terminal block on the left.

如果风扇正在运转，请从左侧的绿色接线端子上拔下电源，并重新启动传感器。

- After you plug it back in, if there are still no readings, open the EnviroSensor and check that there is a green power light and a flashing red communications light.

如果在重新插入电源后仍旧没有读数，请打开环境传感器并检查是否有一个绿色电源指示灯和一个闪烁的红色通信指示灯。

- If the lights are functioning, gently remove the gold CO<sub>2</sub> sensor from the PCB and reseal it, ensuring all the pins are aligned correctly.

如果指示灯正常操作，请从印刷电路板上轻轻移开金色的二氧化碳传感器，然后重新安装，并确保所有引脚正确对齐。



- **System not showing Light readings**  
系统未显示光照读数

- The light sensor is on the top of the EnviroSensor, with the louvers pointed down

灯光传感器安装在 EnviroSensor 环境检测仪 顶端，百叶窗朝下。

- Make sure this sensor is under your lights, not upside down or mounted above the lights.

确保此传感器安装在灯光下，而不是颠倒或安装在灯光上方。

- LED lights will read low by nature, so place the sensor as close to the fixture as possible.

LED 灯的读数本来就偏低，因此请将传感器尽可能地放置在靠近灯具的地方。



- **CO<sub>2</sub> not injecting or CO<sub>2</sub> active target displaying 0ppm**  
未注入二氧化碳或二氧化碳活性目标显示为 0ppm

- Confirm your light readings are over the factory default of 10 w/m<sup>2</sup>.

确保您的光照读数是超过出厂默认值 10 w / m<sup>2</sup>。

- Confirm the system is in Day mode.

确保系统处于白天模式。

- You must have at least one light bank enabled for CO<sub>2</sub> to function (even if a light is not connected)

您必须至少启用一排生长灯才能使二氧化碳发挥作用（即使灯并未被连接）

- By default, CO<sub>2</sub> will not inject if Fan 1 is running. You can tick this box on IntelliGrow to allow CO<sub>2</sub> to inject while Fan 1 is running:

在默认的情况下，如果“风扇 1”正在运行，则不会注入二氧化碳。您可以在 IntelliGrow 上的此框上打勾，以允许在“风扇 1”运转时注入二氧化碳：

#### CO<sub>2</sub> Rules 二氧化碳规则

- CO<sub>2</sub> injection is allowed when not venting. Also allow injection when only F1 is running?  
不排气时允许注入二氧化碳。仅在 F1 运转时也允许注入？

\*在 Intelligrow 上

## Section F – Specification

### F 章节 - 产品规范

#### IntelliClimate

- 9 outputs 24VDC  
9 个输出 24V 直流
- Ratings of individual outputs are 3Amps but the total draw from all 9 outputs must not exceed the rating of the supply adapter  
单个输出的额定值为 3Amps，但全部 9 个输出的总消耗不得超过电源适配器的额定值
- RH resolution ± 2% and accuracy

相对湿度分辨率±2%和准确度

- Temperature resolution and accuracy 0.5°C/32.9°F  
温度分辨率和准确度 0.5°C/32.9°F
- Temperature sensor range 0-50°C/32-125°F  
温度传感器范围 0-50°C/32-125°F
- Operating temperature range 0-50°C/32-125°F (not in direct sunlight)  
工作温度范围 0-50°C/32-125°F (不在阳光直射下)
- CO<sub>2</sub> resolution and accuracy 50ppm  
二氧化碳分辨率和准确度 50ppm
- Power source – 120V/240V into 24VDC plug pack (supplied)  
电源 - 120V / 240V 到 24V 直流插头组 (提供)
- Outputs will have the same voltage as the supplied voltage from the power pack  
输出的电压应与电源盒提供的电压相同
- Supplied with 3m USB cable  
随附 3 米 USB 电缆

#### **Twin Relay Boxes 双继电器盒**

- USA 110V 15A total draw 美国 110V 15A 总消耗
- UK 240V 13A total draw 英国 240V 13A 总消耗
- AUS/NZ 240V 10A total draw 澳洲/纽西兰 240V 10A 总消耗

Thank you for your purchase.

感谢您的购买

Get the most out of your IntelliDose or IntelliClimate control systems with IntelliGrow. IntelliGrow is a cloud-based solution allowing you to access, set, monitor and manage your growing operation - anywhere, anytime.

借助 IntelliGrow 智能线上种植控制系统 充分利用您的 IntelliDose 智能施肥器 或 IntelliClimate 智能温室气候控制器。IntelliGrow 智能线上种植控制系统 是基于云的解决方案，使您可以随时随地访问，设置，监视和管理您的种植运营。

IntelliGrow Apps are available for download from both [Google Play App Store](#) and [Apple App Store](#)

可以从 [Google Play App Store](#) 和 [Apple App Store](#)  
下载 IntelliGrow Apps

了解更多在 [autogrow.com/intelligrow](http://autogrow.com/intelligrow)



## In the box: 包装盒内随附

### HCTR-IC-001-01

1 x IntelliClimate controller	1 x IntelliClimate 控制器
1 x Mounting hardware	1 x 安装硬件
1 x Instruction manual	1 x 使用手册

### HKIT-IC-001-01

1 x IntelliClimate controller
1 x IntelliClimate 控制器
1 x 24V DC 2.5A power supply with universal plug
1 x 24V DC 2.5A 电源与通用插头
1 x EnviroSensor (temperature, humidity, light, CO <sub>2</sub> )
1 x 环境传感器 (温度, 湿度, 光照, 二氧化碳)
1 x 3m USB cable
1 x 3 米 USB 电缆
1 x Mounting hardware
1 x 安装硬件
1 x Instruction manual
1 x 使用手册

### HKIT-IC-002-01

1 x IntelliClimate controller
1 x IntelliClimate 控制器
1 x 24V DC 2.5A power supply with universal plug
1 x 24V DC 2.5A 电源与通用插头
1 x EnviroSensor (temperature, humidity, light, CO <sub>2</sub> )
1 x 环境传感器 (温度, 湿度, 光照, 二氧化碳)
1 x 3m USB cable
1 x 3 米 USB 电缆
1 x Mounting hardware
1 x 安装硬件
1 x Instruction manual
1 x 使用手册
3 x Twin Relay Box
3 x 双继电器盒

## Warranty and Replacements 保修和更换

If you have equipment purchased from Autogrow and it has developed a fault, please complete this form so that our support staff can diagnose the problem.

如果您从 Autogrow 购买了设备，但出现故障，请填写此表格，以便我们的支持人员可以诊断问题。

- Visit this page for Terms and Conditions <https://autogrow.com/terms-conditions>  
访问此网页以了解条款和条件 <https://autogrow.com/terms-conditions>
- Visit this page for the RMA Form <https://autogrow.com/support-and-rma-form>  
访问此网页以获得 RMA 表格 <https://autogrow.com/support-and-rma-form>
- Contact the distributor you bought the product from.  
联系您购买产品的分销商。
- Contact [support@autogrow.com](mailto:support@autogrow.com)  
联系 [support@autogrow.com](mailto:support@autogrow.com)

[www.autogrow.com](http://www.autogrow.com)

[sales@autogrow.com](mailto:sales@autogrow.com)

North America 北美洲 (+1) 707 206 2220

Global 全球(+64) 9 415 2380





## Section G – Compliance Declaration

### G 章节 - 合规声明

#### Compliance Declaration - International regulations and codes

#### 合规声明 - 国际法规和守则



**This equipment is designed for commercial use and complies with the following regulatory codes.**

本设备设计用于商业用途，并符合以下法规。

#### USA 美国

##### Compliance with FCC Part 15 Class A

##### 符合 FCC 第 15 部分 A 级

This equipment has been tested and complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operating this equipment in a residential area is likely to cause harmful interference, which the user will be required to correct the interference at his own expense. The end user of this product should be aware that any changes or modifications made to this equipment without the express approval of Autogrow Systems Ltd, could result in the product not meeting the Class A limits, in which the FCC could void the user's authority to operate the equipment.

本设备已经过测试，符合 FCC 规则第 15 部分中关于 A 级数码设备的限制。当设备在商业环境中操作，这些限制旨在提供合理的保护，以防止有害干扰。本设备会产生，使用并辐射射频能量，如果未按照使用手册进行安装和使用，可能会对无线电通信造成有害干扰。在住宅区操作此设备可能会造成有害干扰，用户需要自费纠正这些干扰。本产品的最终用户应注意，未经 Autogrow Systems Ltd 的明确批准而对本设备进行任何改或修改，都可能导致该产品不符合 A 级限制，FCC 可能会使用户丧失操作设备的权限。

## Europe 欧洲

**This product has been tested and found to comply with EC requirements for commercial equipment and carries the CE mark**

本产品已经过测试，符合 EC 对商用设备的要求，并带有 CE 标志。

辐射发射	Radiated Emissions	EN55022 Class A
传导发射	Conducted Emissions	EN55022 Class A
静电放电	ESD	EN61000-4-2 (IEC 801-2)
辐射发射	Radiated Immunity	EN61000-4-3 ENV50204 (IEC 801-3) EN55024

## Australasia 澳大拉西亚

**This product has been tested and complies with C-tick requirements for commercial equipment EN55022 (CISPR 22) Class A**

本产品已经过测试，符合商用设备 EN55022 (CISPR 22) A 级的 C-tick 要求

## RoHS 电器电子产品有害物质限制

**This product is free from lead and other heavy metals**

本产品不含铅和其他重金属

Although this product is exempt from the RoHS regulations as it is classified as Category 9 Monitoring and control Instrument, it is nevertheless made with RoHS compliant components and assembled using lead free solder. It should be recycled at the end of its life. It may be returned to the distributors in your region for recycling or safe disposal

虽然此产品不受 RoHS 法规的约束，因它被归类为第 9 类监视和控制仪器，尽管如此，它还是由符合 RoHS 的组件制成，并使用无铅焊料组装。它应在其使用寿命结束时回收。它可以被归还至您所在地区的分销商以进行回收或安全处置。