Spider Farmer

Spider Farmer Mobie APP

Operating Guide

SPIDER FARMER APP

The GGS system is accompanied by the Spider Farmer App, which can intelligently control the brand's clip fans, blowers, grow lights, heaters and other equipment. Users can quickly connect to the controller via Bluetooth or Wi-Fi to remotely adjust the operating parameters, support timer switch, automatic temperature and humidity control, planting schedule management and firmware upgrades, helping to create an efficient and intelligent growing environment.

Note: The App only supports select Spider Farmer devices with RJ ports and is not compatible with third-party brands.

Scan the QR codes below to download the latest version of the app:

Android

IOS

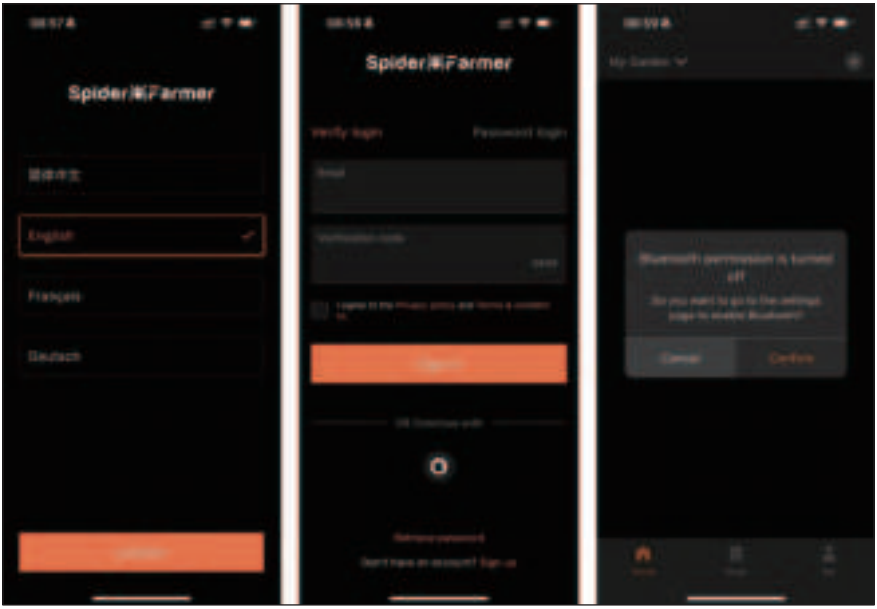
Important Notes

- If you are unable to update the app yourself or experience abnormal behavior, please contact our customer service to receive the latest version manually.

- If you see abnormal readings in the app (e.g., CO_2 showing 64536), please ensure you have installed the latest version.

- If soil moisture reads 0% or shows erratic values, the sensor port may be blocked by water mist. Let it rest for 30 minutes or blow gently with cool air from a hair dryer for 10 minutes.

Language, Registration & Bluetooth/WiFi Setup

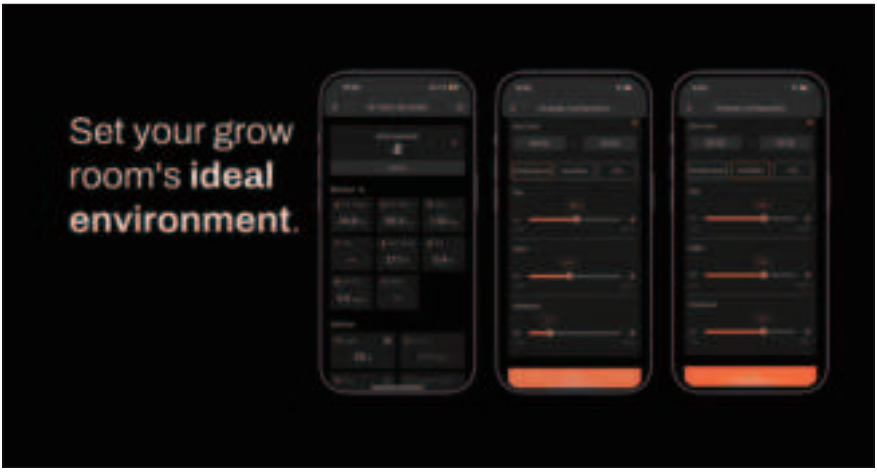


After launching the app, select your preferred language and register with your email address. The app will then prompt you to enable Bluetooth.

Once Bluetooth is enabled, nearby GGS devices can be detected and connected. After a successful connection, you'll be prompted to connect to WiFi for remote control. Please note: only 2.4GHz WiFi is supported.

Note: Each controller can only be paired with one phone at a time. If the device cannot be recognized during reconnection, please perform a factory reset on the controller.

1. What Data Can You See on the Controller?



1.1 Time Display:

Quickly check the current date and time in your grow room with ease.

1.2 Day/Night Icon:

See at a glance if your grow tent is in its light or dark cycle. A sun icon appears when light is detected, and a moon icon shows during dark periods. This feature allows you to monitor light conditions without opening the tent. Plus, the controller can be managed remotely through the Spider Farmer app, so you can keep tabs on your grow tent even when you're away. (Requires the temperature, humidity, and light sensor included in this GGS controller kit)

1.3 VPD and Temperature/Humidity Display:

Get precise readings for temperature, humidity, and Vapor Pressure Deficit (VPD). (Requires the temperature, humidity, and light sensor included in this GGS controller kit; if the sensor is not properly connected, two dashes will appear on the display.Tip: Place the sensor at canopy level in the center of your growing area for the most accurate readings.)

1.4 CO_2 Display:

(This kit doesn't include the sensor required to measure that data. Please purchase the GGS Sensor Pro Kit separately.)

With an optional CO_2 sensor, you can directly monitor CO_2 levels, enabling you to optimize CO_2 concentration for faster growth. (Note: This sensor is sold separately)

1.5 Soil Data Display:

(This kit doesn’t include the sensor needed to measure that data. Only the GGS AC5 Power Strip Kits or GGS AC10 Power Strip Kits includes the relevant sensor.)

Ideal for soil growers, this display shows real-time soil temperature, moisture, and Electrical Conductivity (EC). (Note: This sensor is not included in the GGS controller kit but is part of the GGS power strip kit and is not yet available as a standalone product.)

1.6 PPFD Display:

(This kit doesn't include the sensor required to measure that data. Please purchase the GGS Sensor Pro Kit separately.)

Please note: To see PPFD data, you'll need an extra PPFD sensor, which isn’t included in this kit.

2. Preparations Before Configuring Device Operations

2.1 Environmental Conditions Settings

- **Day/Night Cycle Optimization:**

Define the time range for day and night periods. The day starts from the day start time and ends at the night start time, while night starts from the night start time and ends at the day start time. If both start times are set the same, the system defaults to 24 hours of day mode.

- **Environmental Conditions Settings:**

Set target values for temperature, humidity, and CO_2 levels for both day and night, along with the deadband range.

- **Deadband Control:**

Maintain stability. For example, if the daytime temperature is set to 70°F with a deadband of 3°F, there is an upper and lower threshold. Cooling will activate at 73°F and stop once it reaches 70°F, while heating will activate at 67°F and stop at 70°F.

2.2 Local Time Settings

Set your local time on the controller. This is necessary when setting operating times, such as for lights.

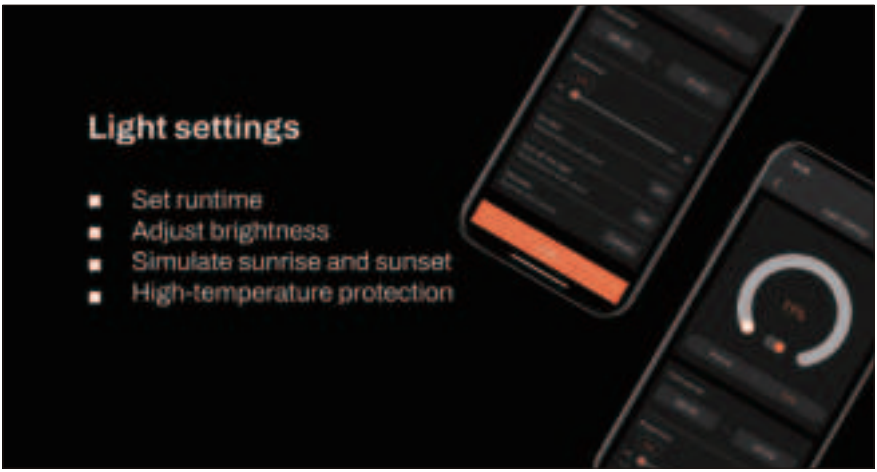
2.3 Multi-Language Support

Our system offers multiple language options to ensure ease of use, including English, German, French, Spanish, Italian, and Chinese.

3. How to Control LED Grow Lights

(G Series/ SE Series/ SF Series except for SF1000D, SF300, SF600.)

(Note: A GGS 2-in-1 Adapter is required to control LED grow lights through the GGS Controller. This adapter is included in the kit.)



3.1 Manually Adjust Brightness for Precise Light Control:

Set the brightness anywhere from 10% to 100%, giving you full control over light intensity at any time. For quick shut-off, setting the brightness to 0% will turn the lights off. Any setting between 0% and 10% automatically operates at 10% brightness.

3.2 Automate Your Lighting Schedule:

- **Start and End Times:**

Easily set specific on and off times for your lights, so your plants get consistent light cycles without manual adjustments.

- **Brightness Levels:**

Define the exact brightness level for each cycle, ensuring your plants receive optimal light intensity.

3.3 High-Temperature Protection for Your Plants and Equipment:

- **Go Dark:**

Set a high-temperature threshold for dimming. When the ambient temperature reaches this threshold, the lights will automatically reduce brightness to 11% to prevent overheating.

- **Turn Off:**

Set a higher temperature threshold for complete shutdown. When this threshold is reached, the lights will automatically turn off to protect your plants and equipment.

3.4 Sunrise/Sunset Simulation:

Activate this feature to simulate natural light changes, with the brightness gradually increasing at sunrise and gradually decreasing at sunset.

Example: If you set the light schedule from 8:00 AM to 8:00 PM with brightness at 100% and a 30-minute sunrise/sunset setting, the lights will gradually increase from 0% to 100% brightness between 8:00 AM and 8:30 AM. In the evening, starting at 7:30 PM, the brightness will gradually decrease from 100% until the lights turn off completely at 8:00 PM.

3.5 PPFD Mode

This mode requires an additional purchase of the SensorPro sensor. After connecting the sensor, set your Target PPFD, and the light will automatically adjust its intensity to maintain the target value.

4. How to Control Clip Fans and Inline Fans

How to Check if Your Clip Fan or Inline Fan Has an RJ12 Port

If you previously purchased a Clip Fan or Inline Fan, check the device body to see if it includes an RJ12 port. Currently, Some fans and inline fans sold as part of grow kits may not include the RJ12 port. Please look for labels or documentation indicating whether the fan is RJ12-compatible.

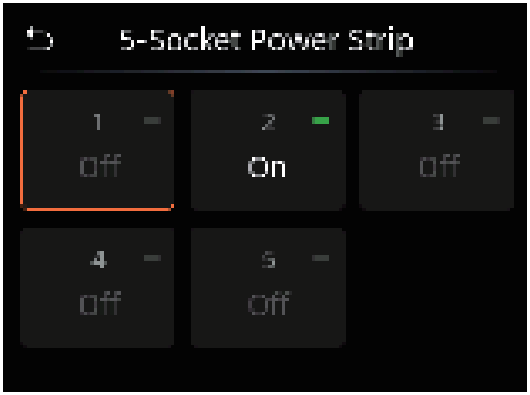
If your Clip Fan or Inline Fan has an RJ12 port, it will be compatible with both the Spider Farmer GGS controller and the GGS Power Strip. You can manage your Clip Fan and Inline Fan through the 'Fan (Clip Fan)' and 'Blower (Inline Fan)' options in the 'Device' section of the controller.

Key Steps in the Process:

If your Inline Fan or Clip Fan does not have an RJ12 port (non-latest version), the GGS series can be compatible with these Clip Fans and Inline Fans without an RJ12 port. However, only the GGS Power Strip can be used. You can plug them into the GGS Power Strip and control them separately through the outlet section in the app. (At this time, the 'Fan (Clip Fan)' and 'Blower (Inline Fan)' options under the 'Device' section will be unavailable.)

5. About using the GGS AC5 Power Strip or GGS AC10 Power Strip in combination with the GGS Controller

Why Use the GGS AC5 Power Strip Along with the Controller?



For Those Who Prefer Traditional Control:
The controller has physical buttons and knobs, making it easy for customers who prefer hands-on control without needing to rely on a smartphone. You can operate lights and the power strip just like traditional equipment, ensuring simple and reliable use.

Multi-User Control:
The controller allows multiple users to operate the setup without each person needing their own smartphone. In a household setup, for example, anyone can quickly operate the controller, making it convenient and efficient.

Local Control:
When the network is unstable, there's a delay, or a phone isn't convenient to use, the controller offers instant, local control. This option ensures smooth operation without relying on external connections.

Using the GGS AC5 Power Strip/GGS AC10 Power Strip for Full Control and AutomationPlug your devices into the GGS Power Strip, and with sensors installed on the power strip, you can control and automate each device as needed. The GGS AC5 Power Strip has 5 outlets, GGS AC10 Power Strip has 10 outlets, each of which can be controlled through the controller and app with specific settings for time and mode:

5.1 Time Period Mode:
Set specific on/off schedules for each outlet. Choose exact times for each day of the week or create recurring daily schedules. This allows you to provide consistent light, air circulation, or other resources precisely when your plants need them.

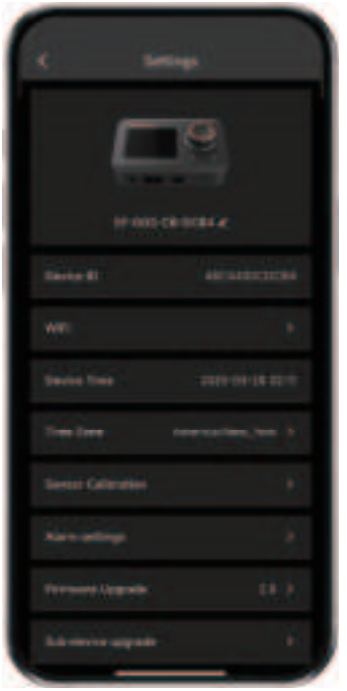
5.2 Time Cycle Mode:
Set power cycles to control when your devices turn on and off throughout the day. For example, you could set a fan to run for 1 hour, turn off for another hour, and repeat the cycle as needed. This is ideal for managing airflow, lighting intervals, or other timed needs in your grow room.

5.3 Temperature Mode:
Control devices based on temperature. For example, if you plug a Clip Fan into an outlet set to Temperature Mode and specify it as a cooling device, the fan will automatically turn on when the temperature exceeds your target—keeping the environment stable without manual adjustments.

5.4 Humidity Mode:
Easily manage humidity levels. If you connect a humidifier, set the outlet to Humidity Mode, and specify it as a humidifying device, the outlet will power on to increase humidity when levels drop below your desired range. This way, you can maintain optimal humidity for your plants without constant monitoring.

5.5 CO_2 Mode:
Manage CO_2 levels by connecting a CO_2 device. Set the outlet to CO_2 Mode and specify whether it should add or vent CO_2. The outlet will activate based on your target CO_2 levels, giving you precise control over your grow room environment.

6. Other Settings



6.1 Sensor Calibration

- **Temperature Calibration:**

Adjust the temperature offset from -10°C to +10°C in 0.1°C increments.

- **Humidity Calibration:**

Adjust the humidity offset from -20% to +20% in 0.1% increments.

- **CO_2 Calibration:**

Adjust the CO_2 concentration offset from -200 ppm to +200 ppm in 10 ppm increments.

6.2 Screen Timeout

Set the controller screen to turn off after 1-10 minutes of inactivity, or select “Never” to keep it continuously on.

7. Keytone

Enable or disable button sounds.

8. Firmware Update

Upgrade firmware via SD card or over the network.

9. Factory Data Reset

Restore the device to its original factory settings.

Controller Connection Schematic

AC5 Connection Schematic

Controller + AC5 Connection Schematic

FAQs

Q1: Why is automatic control delayed or unresponsive?

A: The app uses a "deadband" (e.g., ±3°F), so if the environment stays within the target range, the device won't trigger immediately. Also, the system follows a priority mode (temperature or humidity), depending on your setting. Please review your configuration.

Q2: Can I control each fan or light separately?

A: Currently, the GGS system does not support individual control for each fan or light. All devices of the same type will follow the same settings.

Q3: What if CO_2 or humidity readings are inaccurate?

A: If CO_2 shows values like 64536, update your firmware to fix the error. For incorrect humidity readings, the sensor port may be blocked by mist—let it rest for 30 minutes or blow it with cool air to recover.

Q4: Why is the VPD reading inaccurate?

A: VPD is calculated from temperature and humidity. Make sure the probe is placed correctly and away from heat or strong airflow. At high temperatures, the difference between leaf and air temperature may distort results.

Q5: What if the app shows "Firmware update failed" or can't recognize my account?

A: Try restarting the app in a stable network environment. Do not power off the controller during updates. If issues persist, contact support to request a manual firmware package.