# NOKATECH SMART Grow Light Controller User Manual

**SMART CONTROLLER
USER MANUAL**



**https://qrco.de/nokasupport**

**Contents**

## INTRODUCTION

Thank you for purchasing the SMART controller and joining the NOKATECH users club. This manual contains all the information needed to learn, install and use the product. Please read this manual carefully before trying to install and/or operate the SMART controller.

We highly recommend you to check for the latest version manual on our webpage **www.nokatechs.co.uk/support**. At the end of this manual, you will find the date of the last edit.

We hope to get your feedback no matter it is good or bad. Your valuable reviews help us take the products to the next level.

## PRODUCT DESCRIPTION

**SMART** controller is compatible with all horticultural light fixtures that support (O-10V) controllers and have connections for RJ cables. This product is for dry indoor use only, and any other use is considered unintended use. In this manual, the product SMART controller will be referred to as: 'the controller'.

The controller works as a replacement for switchboards with lots of more features, such as sunrise/sunset, dimming options, temperature sensors and etc.

**NOKATECH** can't be held responsible for any possible damage caused by incorrect, impropriate and/or inadvisable use of the controller.

This warning sign notes the possibility of injury to the user and/or damage to the

**WARNING** product if the user does not perform the procedures as described.

**ATTENTION** This attention sign notes the problems which may occur if the user does aul not perform the procedures as described.

## SAFETY RECOMMENDATIONS

Please carefully read recommendations and warnings before installing and using the controller!

The installation and use of the controller is the responsibility of the end user. Incorrect installation can cause damage to the product.

The warranty shall become void if the product and/or electronic components are damaged due fo incorrect installation.

**WARNING**

- Always adhere to the local building and electrical codes (local rules and regulations) when installing or using the controller with light fixtures.

- Do not use the product when either the controller or its power cable are damaged. Modifications to the cables can lead to unwanted electromagnetic effects which may damage the product.

- Protect power cables from being pinched, walked on, or otherwise damaged.

- Do not use the controller near flammable, explosive or reactive substances.

- Keep the controller in a cool and dry environment, away from dust, dust, heat and moisture.

- Make sure all RJ and power cords are safely routed away from heat, moisture, mechanical movement, or

anything that may damage cords.

- The controller is designed to work with GC RJ14 data cords. Using other brand or non-RJ14 data cords could cause malfunctions and may void the warranty.
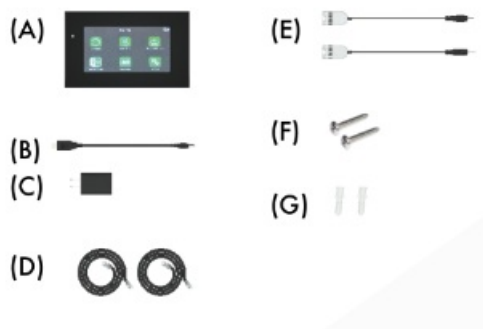
**ATTENTION**

- Do not use abrasives, acids, or solvents to clean the controller. Use a soft, dry cloth to clean the controller.
- Do not open and/or disassemble the controller as it contains no serviceable parts inside. Opening and/or modifying the controller can be dongerous and will void the warranty.
- The product may not be exposed to moisture, condensing humidity, contamination, or dust.

## PRODUCT INSTALLATION

Please carefully read recommendations and warnings before installing and using the controller! The installation and use of the controller is the responsibility of the end user. Incorrect installation can cause damage to the product. The warranty shall become void if the product and/or electronic components are damaged due to incorrect installation.

**What is included in the box?**

| (A) Touchscreen controller | 1 pc |
|---|---|
| (B) USB-DC power cord | 1 pc |
| (C) DC Power odoptor | 1 pc (15V; 1000mA) |
| (D) RJ cable | 1 pc |
| (E) Temperature/humidity | 2 pcs (5m/I a long) |
| (F) Countersunk screws | 2 pcs |
| (G) Plugs | 2 pcs |



**Connections**
A – DC 5V power input
B; E – 3.5mm jack aux temperature/ humidity sensor
C; F – RJ aux port for controlling up to 80pcs fixtures each
D; G – Relay switch controlled by temperature/ humidity
H – USB –
I eDALI/RS485 Signal Output

Press this button for lock screen, the indicator light blinking,
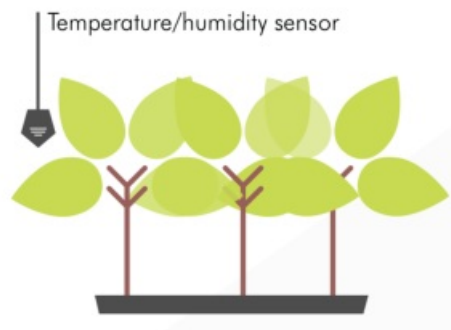press again for unlock screen, the indicator light off.

## 4.1 PRODUCT INSTALLATION
**Preparation & Installation**

1. Refer to your light plan. Arrange the place for the fixtures and/or ballasts to be mounted.
2. Ensure the rotary knob on all ballasts/fixtures is set to ' EXT" (external control).
3. Connect the ballasts and/or fixtures to the mains.
4. Mount the controller onto a secure surface using the screws supplied with the controller. The distance between the center of each mounting hole is 10cm.
5. Connect the power cord into the controller and power source.
6. Connect one end of the RJ cable to the controller A port, the other end to the RJ port on the fixture. From the current fixture second port connect to the next fixture until you daisy chain all your fixtures. Use the B port if needed, for example, to separate grow rooms.

**Connecting temperature and humidity sensor**

1. Connect the temperature and humidity sensor plug into the smart controller temperature and humidity sensor port in Group A (markes as B in our previous page).
2. Hang the sensor at canopy height making sure the sensor and cord are hung and routed away from direct heat sources.
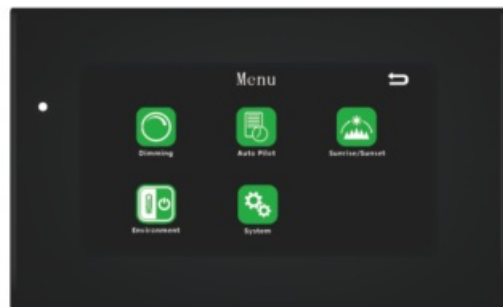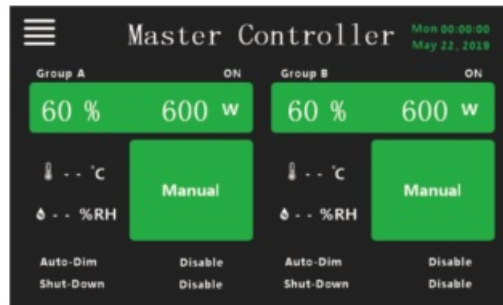3. Repeat install with the port in Group B, if necessary.



Temperature/humidity sensor

**WARNING**
– Make sure the controller is away from heat sources.
– Make sure the signal wires do not touch the reflectors. The reflectors get very hot.
+ The installer is responsible for correct and sofe installation.

## PRODUCT SETTINGS

**Main display window**

– Displays power level in % and watts. Touch this tab to access the "Dimming Menu"
+ Touch the date and time for access to the controller clock and calendar.
– Displays "Auto Dim" mode. Touch for access to temp and auto-dim settings. Shows ambient temperature and relative humidity data.
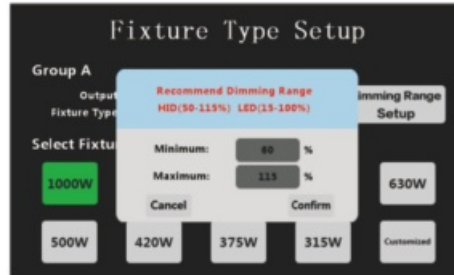




**Main menu**
+ Touch the top-left bution to access the main menu.
+ Touch "Dimming" to access power level settings.
– Touch "Auto Pilot to access "Daily or Custom Cycle" options and program timer settings.
– Touch "Sunrise/Sunset" options to set graduated timers activate and deactivate settings.
– Touch "Environment" to access emergency dim and shut off options that protect the crop from excessive heat in the event the environment exceeds the selected temp range.
– Touch "System" to access general settings and system options.



**Auto pilot**
– Touch and select "Daily Cycle" to run dimmer in conjunction with the clock.
– Touch and choose "Custom Cycle" to select the number of hours the clock fixture will be on or off.
+ Touch "On" and "Off" time settings to adjust Auto-pilot timers. Be aware of cycle settings when programming timers.
– Touch "Sunrise/Sunset" options to set graduated timers activate and deactivate settings.
**NOTE:** In Custom Cycle, setting 9:00 and 19:00 would mean the light is set for 9 hours on and 19 hours off. NOT on at 9:00 and off 19:00 hours.

### 5.1 PRODUCT SETTINGS

**Dimming menu**

– Touch to select Group A or Group B to adjust or view settings. Touch "Dimming" to adjust dim settings from 50%-115% with HID and 15%-100% with LEDs.

– Touch "Auto" to turn on or turn off the light according to the timer setting.

– Touch "Fixture Type Setup' to select fixture type and power levels. Touch and select fixture type or select "Customized" if wattage is not shown. Touch "Dimming Range Setup" to program min. and max. Power levels.

**NOTE:** Minimum settings for HID must be at 50% or higher for lamps to ignite and Minimum setting for LED 15% or higher.

**Sunrise/Sunset menu**

– Touch the minute valve to adjust "Sunrise/Sunset" settings from 10-60 minutes. Touch to Activate or Disable the Sunrise/Sunset settings.

**NOTE:** Sunset setting will dim lights before scheduled off time and lights will be off by scheduled time.





**Environment menu**

– Touch "Auto-Dim' to set the temperature at which the controller will dim the lights in case of excessive heating.

– Touch "Shut-Down" to set the temperature at which the controller will turn off lights in case excessive heat continues.

## STORAGE, DISPOSAL & WARRANTY

You can store the controller in a dry and clean environment, with an ambient temperature of 0°C to 45°C. The product must not be discarded as unsorted municipal waste. It must be collected separately for treatment,

recovery, and environmentally sound disposal.

**Warranty**

**NOKATECH** warrants the mechanical and electronic components of the product to be free of defects in material and workmanship if used under normal operating conditions for a period of three (3) years from the original date of purchase.

This Limited Product Warranty does not cover any damage due to: (a) transportation; (b) storage; (c) improper use; (d) failure to follow Product instructions; (e) modifications; (f) unauthorized repair; (g) normal wear and tear (including powder coat); (h) external causes such as accidents, abuse, or other actions or events beyond NOKATECH's reasonable control.

If the product shows any defects within this period and that defect is not due to user error or improper use we (if you bought from Noka Techs Ltd) or another reseller you bought from, shall, at its discretion, either replace or repair the product using suitable new or reconditioned products or parts. In case it is decided to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e. three (3) years from the date of purchase of the original product. For service, return the product to the reseller/shop you bought from with the original sales receipt. For more information visit **www.nokatechs.co.uk/warranty**

"Watching something grow is marvelous"



Always check for the latest user manuals on our webpage **www.nokatechs.co.uk/support**
Last edited: 12.09.2022





**https://qrco.de/nksocial**
• **For any information, don't hesitate to contact:** **support@nokatechs.co.uk**
+44 7984 917932
**www.nokatechs.co.uk**

**Documents / Resources**

**NOKATECH SMART Grow Light Controller** [pdf] User Manual
SMART, Grow Light Controller, SMART Grow Light Controller, Light Controller, Controller, SMART Controller