MasterPro & Adapter NB15 & Data Acquisition NB16

USER MANUAL

HID & LED COMPATIBLE

1. Product Description

MasterPro Smart Lighting Controller is designed to control two light groups in any given area. The controller uses RS485 communication wire to control LED SN PRO, Adapter NB15 and Data acquisition NB16. The controller operates on a 24-hour time cycle. The controller also can simulate sunrise and sunset cycle from 10 to 60 minutes. Each of the two-lighting group channels has a room overheat protection function that can be set as needed. You can use the LCD touchscreen to easily view and modify the current settings for each channel. To protect plants from interruptions in the light cycle, the screen will turn off after 45 seconds of inactivity. Moreover, the MasterPro Smart Lighting Controller is portable, easily operated and installed.

2. Technical Specifications

Dimming Range	50%-110% for HID lamp 20%-100% for LED lamp
Controller Dimensions	222x162x32.5mm
Weight	0.7KG
Input	DC12V
Maximum control voltage	11V for HID/10V for LED
Maximum number of devices per group	60pcs--LED SN PRO & Adapter NB15 4pcs--Data Acquisition NB16

3. Environment

Temperature range	-20°C-40°C
Operating humidity	<90%

4. Components


MasterPro main controller


Adapter 12V/1A

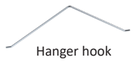

KA4x20 Self-drilling screw (2 sets)


Mounting bracket


Adapter NB15


Adapter 12V/1A


KA4x20 Self-drilling screw (2 sets)


Hanger hook


Mounting bracket


8M RS485 communication wire


Data Acquisition NB16


Adapter 12V/1A

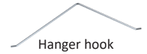

KA4x20 Self-drilling screw (2 sets)


8M RS485 communication wire


3M Light sensor


1M Temperature and humidity sensor


Mounting bracket


Hanger hook


Light sensor support


M4x16 screw (2)


M3x12 screw (2)

5. Product Installation

5.1 Fixed mounting installation

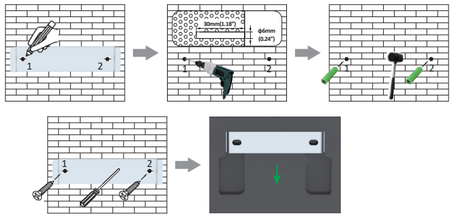
Step 1: Use the mounting bracket to determine the positions for drilling holes, and ensure the hole positions are level, then mark them using a marker pen.

Step 2: Use a ϕ6 (0.24") drill bit to drill two holes on the wall, and the hole depth shall not be less than 30mm (1.18").

Step 3: Knock the expansion tube into the drilled holes.

Step 4: Position the mounting bracket well, and rotate the screws (KA4x20) through the mounting bracket into the drilled holes, then fix them with a screwdriver.

Step 5: Slide the product down along the mounting bracket.



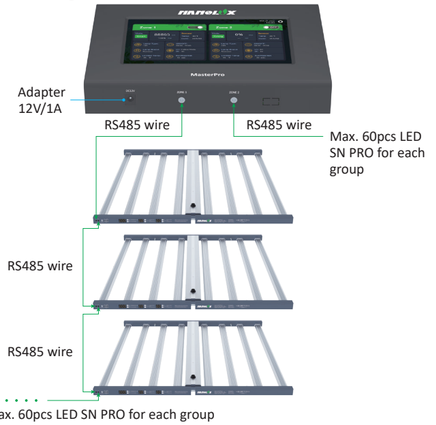
5.2 Hanging installation (except MasterPro)

Ensure all wires are secure. Install a nail or screw on a solid surface, and attach the hanger hook to the product, then hang the product to the nail or screw.

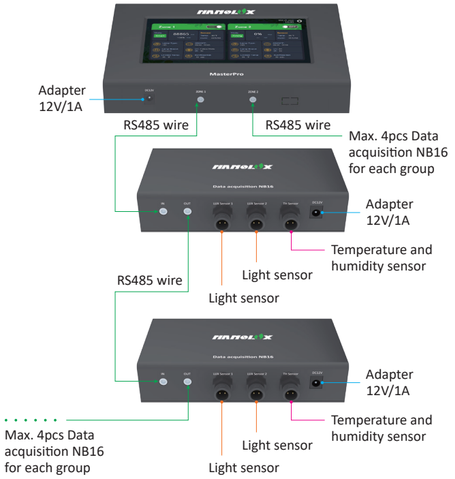
6. Connection Instructions

Note: Please secure the end of the RS485 wire before connecting to avoid the plug of the RS485 wire coming off the device.

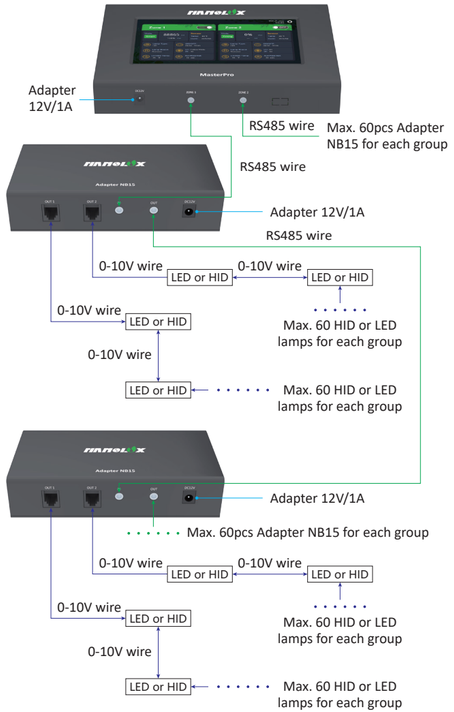
6.1 Connecting MasterPro to LED SN PRO



6.2 Connecting MasterPro to Data acquisition NB16

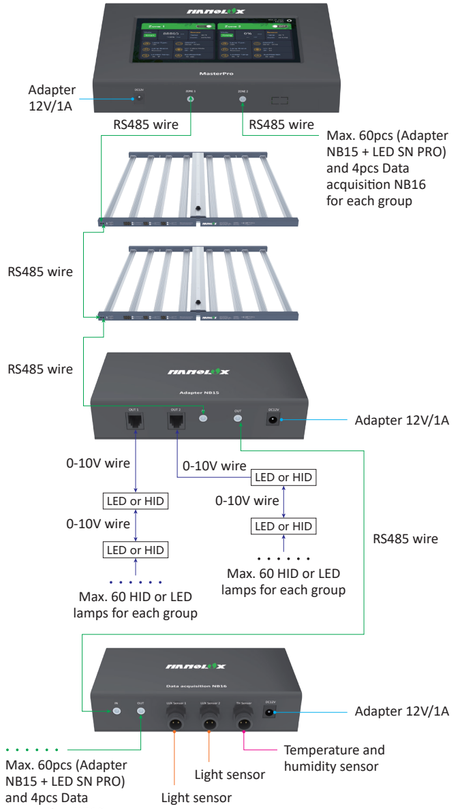


6.3 Connecting MasterPro to Adapter NB15



Note: Because HID and LED lamps have separate control modes, each group cannot control both HID and LED lamps at the same time, implying that, two types of lamps cannot be installed in one group.

6.4 Connecting MasterPro to LED SN PRO & Adapter NB15 & Data acquisition NB16



Note: Because HID and LED lamps have separate control modes, each group cannot control both HID and LED lamps at the same time, implying that, two types of lamps cannot be installed in one group.

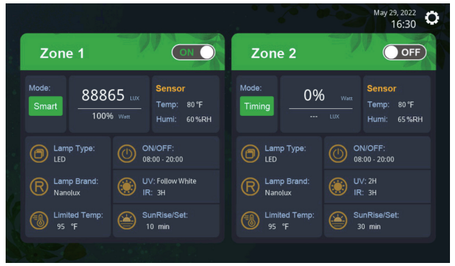
7. MasterPro Controller Interface Description

Note:
The MasterPro Smart Lighting Controller uses a touchscreen interface. Use a finger or stylus to change parameters, but be careful not to damage display.

7.1 Booting interface

Wait for 2 seconds or touch the screen and the main interface will turn on.

7.2 Main interface



A. Zone1 and Zone2 two group control channels. When ON is selected, the output is set according to the Mode; when OFF is selected, the output is turned off.

B. **Smart Mode:** The sampling value of light sensor is enlarged display and the percentage of dimming output power is reduced display. According to the set switching time and target illumination intensity, the illumination intensity collected by the illumination sensor will automatically adjust the output. In this mode, if there is no light sensor, the output is turned off. 20~100% for LED lamp and 50~110% for HID lamp.
Timing Mode: The percentage of dimming output power is enlarged display and the sampling value of light sensor is reduced display. Control the output according to the set switching time and dimming power percentage. 20~100% for LED lamp and 50~110% for HID lamp.

C. **Sensor:** Display the sampling value of temperature and humidity sensor on the current channel. When the sensor is pulled out, it will display "--".

D. **Lamp Type/Lamp Brand/Limited Temp:** Display the current lamp type (HID or LED), lamp brand (Nanolux or Other) and limited temp.

Note: The range of temperature protection value is 10°C -70°C/50°F-158°F, and the unit can be selected in the system.

E. **ON/OFF:** Timing switch.

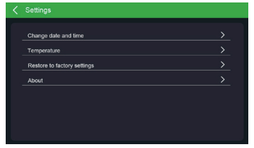
F. **UV/IR:** Display the current working mode of the UV/IR diodo.

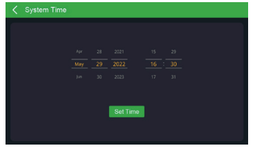
Note: 1-12H is the UV/IR diodo working time. The UV/IR diodo will turn on with the white light and turn off after the time is reached. If the white light is turn on all the time, UV/IR diodo will turn on again at the corresponding time on the next day in a 24-hour cycle.

G. **SunRise/Set:** The sunrise and sunset time range is 10-60 minutes.

7.3 System setting interface

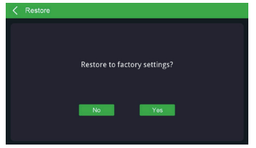
Touch the ⚙ icon in the upper right corner of the main interface to enter the system setting interface.



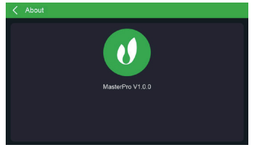


A. Change date and time

B. Select temperature unit



C. Restore to factory settings



D. About

8. Maintenance

- ⚠ The warranty will be voided if you disassemble, replace, or repair the product yourself. Refer to '10.Warranty' if you require the service.
- ⚠ Do not use detergents, acids or solvents to clean the LCD touchscreen.
- ⚠ Please use a dry soft cloth to clean the LCD touchscreen.
- ⚠ If the product stops operating, please contact the retailer where you purchased it.

9. Disposal

WARNING: THIS PRODUCT CONTAINS A BATTERY. DISPOSE OF PROPERLY.

The symbol indicates that this product cannot be discarded as household waste. Please obey the refuse classification system to deal with this product, which is helpful to prevent possible risks to the environment and public health. There is no doubt that recycling materials contributes to protecting our environment. Therefore, never dispose your older electrical appliances via household waste.

10. Warranty

For a period of 2 years following the date of purchase, Nanolux Technology promises that the mechanical and electrical components of the product will be free from flaws in materials and workmanship. The date shown on your purchase receipt serves as the basis for the time of purchase.
During this time, if the product develops any flaws not attributable to misuse or man-made damage, please return it to the retailer where you bought for repairs, with the original receipt. The choice of whether to fix the product as a whole part, a replacement component, or a refurbished part is up to the local distributor. If the distributor decides to replace the entire unit for you, the replacement product will still be covered by the original's warranty.
The warranty booklet can be found in the product packaging. If your issue has not been properly resolved, please refer to it, and Nanolux Technology Office will get back to you as soon as we can. Please keep your warranty card and purchase receipt safe.
Nanolux Technology is responsible for the ultimate interpretation and modification of the aforementioned terms.

11. Appendix

TROUBLESHOOTING:
After installation, please test your installation by cycling the lights on/off a few times, setting 'Over Temperature Shut Down' to a low value like 85°F and rubbing the temperature probe with your fingers, fooling the MasterPro Smart Lighting Controller into an over-temperature condition and checking if it shuts the lights off. Then leave the probe alone, after 10-15 minutes, the MasterPro Smart Lighting Controller should switch all the lights back on.

Designed by NANOLUX in California
Made in China