



LUMEN KING® MASTER CONTROLLER USER MANUAL

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SAFTY WARNING

Keep and mount master controller in a cool and dry environment away from dirt, dust, heat and moisture.

Make sure all RJ cables and power cords are safely routed away from excessive heat, moisture, mechanical movement or any thing that may damage cords

Do not attempt to disassemble or repair the master controller. This will void controller warranty.

Do not use abrasives, acids or solvents to clean master controller. Use a soft, dry cloth to clean controller.

The master Controller and fixtures are specifically designed to work in conjunction with each other. Using non-Lumen-King fixtures with Lumen-King controller may cause malfunctions and may void warranty. For best results use Lumen-King controller and fixtures together.

The Lumen-King controllers are designed to work with Lumen-King RJ14 data cords. Using other brand or non-RJ14 data cords could cause malfunctions and may void warranty

DISPOSAL: THIS PRODUCT CONTAINS A BATTERY AND OTHER MATERIALS, WHICH MUST BE DISPOSED OF PROPERLY AND IN A LAWFUL WAY, THROUGH AN ELECTRIC RECYCLING CENTER.

MASTER CONTROLLER INSTRUCTION

The Lumen-King master controller is a dual channel module, each channel is programmable, allowing the user to control two separate grow areas or rooms. This controller uses a LCD touchscreen for easy navigation. The controller timers operate on a standard 12-hour clock (standard time) or **24-hour clock (military time, hours 1:00-24:00)**.

Note: Controller clock may show am and pm time, the timers are set 1-24 hours, 1:00= 12:00am and hour 24:00=12pm.

Example, the clock would read 6:00pm coinciding with timers set at 18:00. There is no timer setting for am and pm.

The Lumen-King master controller has two cycle options to choose from. The Daily Cycle which operates within a 24-hour time frame (1-24 hours) and Custom Cycle which is operate within a 48-hour cycle (1-48 hours). Please, be aware of these setting when programming the timer. Sunrise/Sunset settings allow you to slowly dim on and off your lights mimicking the natural light cycle. The master controller also utilized safety features to dim or shut off lights, in the event the grow area experiences excessive heat that could harm the harvest such as HVAC failure.



INCLUDED IN THE PACKAGE

A LUMEN KING MASTER CONTROLLER

A1 LUMEN KING Sensor Cable

A2 LUMEN KING RJ45 Cord Cable

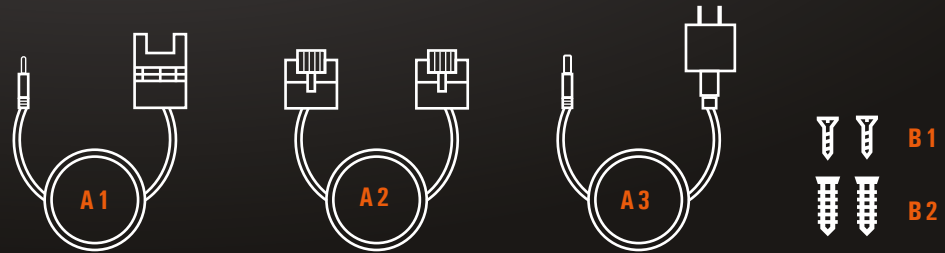
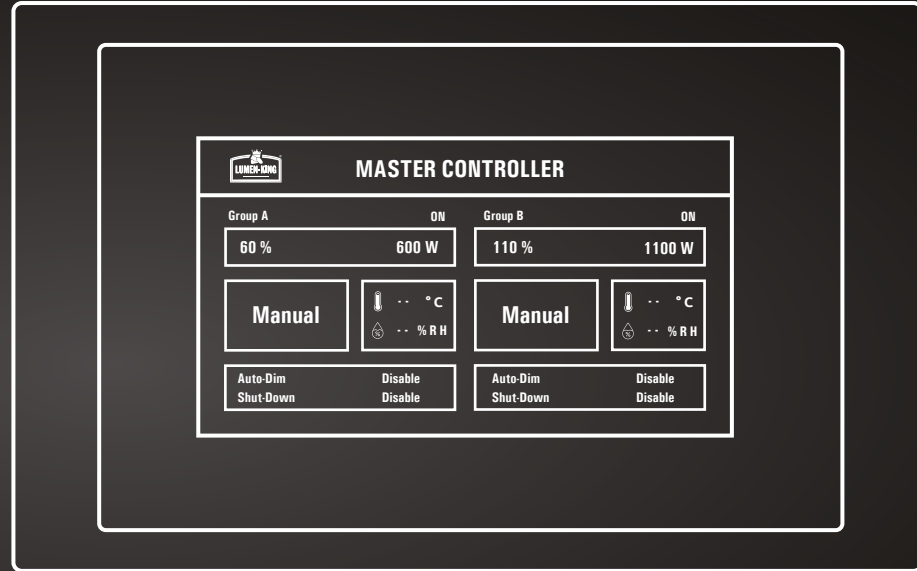
A3 LUMEN KING AC Power Supply Cable

B LUMEN KING Mounting Accessories

B1 LUMEN KING Screws 2pcs. (5x135mm)

B2 LUMEN KING Dowel 2pcs.

A



TECHNICAL SPECIFICATIONS

The Lumen-King master controller utilizes a 2-channel system allowing you to control two different cultivation areas, controlling up to 100 units. Both channels providing heat protection shutdown set by the user. This controller has dimming options and can simulate sunrise and sunset cycle from increments of 10-60 minutes. Use the LCD touchscreen to navigate, view and modify the current settings for each channel easily. Output voltage is 0-11.5v DC.E

Control voltage outputs	2 Groups, A/B
Numbers of ballasts per output	120 pcs Max
Max cable length per group	120 meters
Over heat protection	Yes
Sunrise/sunset period	Yes
Input voltage	DC5V/1000mA
Weight	1.0kg
Warranty	3 years

FOR DETAILED TECHNICAL INSTRUCTIONS AND SPECIFICATIONS,
PLEASE VISIT WWW.LUMEN-KING.COM/CONTROLLER



LUMEN KING MASTER CONTROLLER

INNOVATIVE

Connectable with Lumen King HPS-Fixtures
600W & 1000W.

Connectable with Lumen King LED Grow Lights.
465W, 630W & 1000W

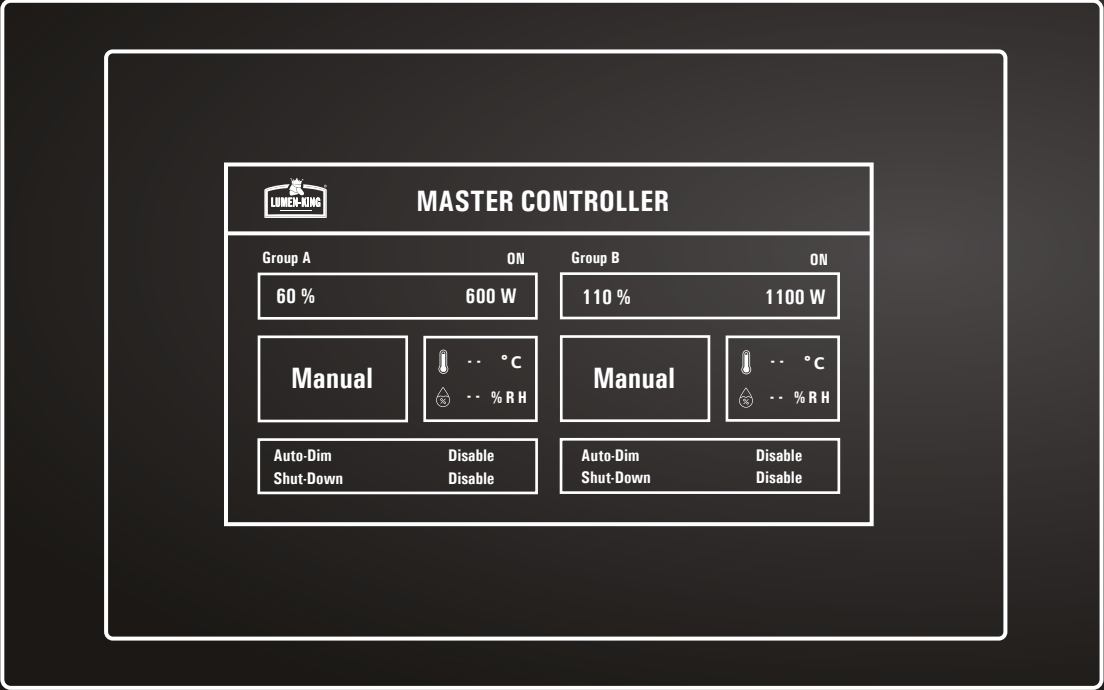
INTELLIGENCE

Make light control a breeze with automation! Set precise switching, timing and dimming cycles to suit your exact needs. Enjoy optimal temperature-controlled lighting for added safety assurance – you can even simulate sunrise and sunset periods for an impressively realistic effect. Automate the intensity of your lights as well as Photosynthetic Photon Flux Density (PPFD) levels – perfect lighting is just around the corner!



DIMENSIONS

17 CM



10,3 CM



POWER SUPPLY AND INITIALSET-UP

A Mount controller onto a secure surface using the screws supplied with the controller.

NOTE: Make sure the controller is mounted level and away from heat sources.

NOTE: The distance between the center of each mount hole is 12.5cm

B Connect the power cord into the master controller and power source.

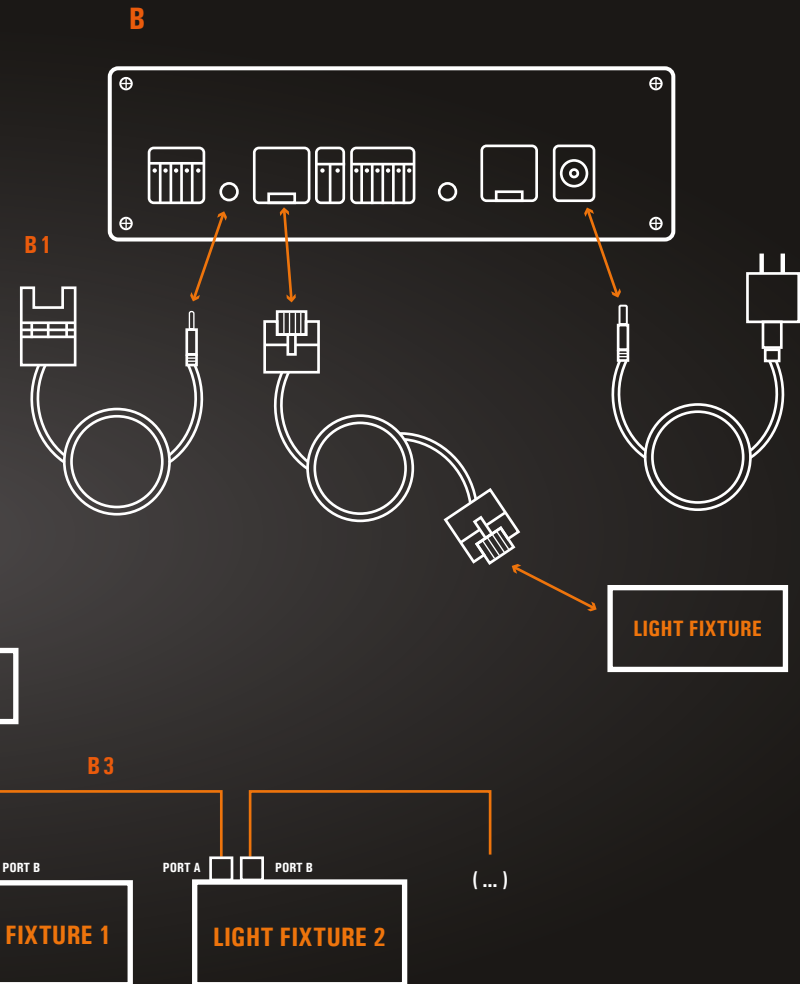
TEMP SENSOR INFORMATION AND INSTALLATION

B1 Connect the temperature sensor plug into the master controller temperature sensor port A. Hang the sensor at canopy height making sure the sensor and cord are hung and routed away from direct heat sources. Repeat install with port B, if necessary.

CONNECTING THE MASTER CONTROLLER TO LIGHT FIXTURES

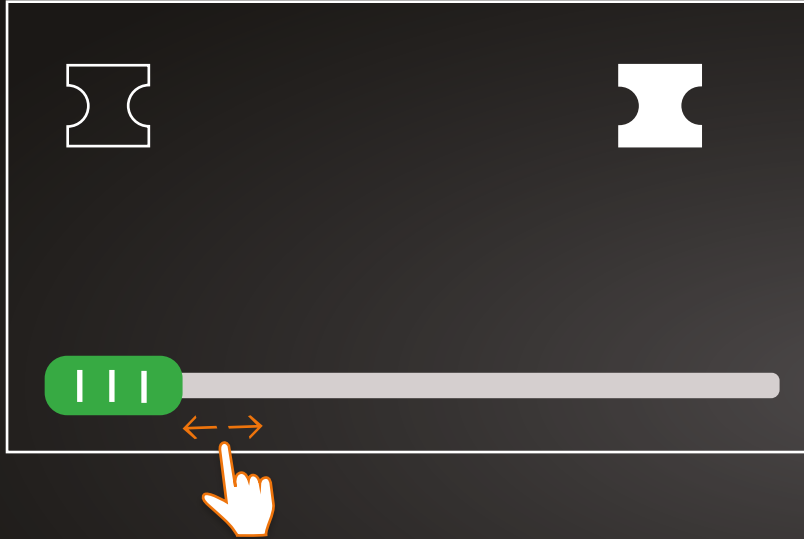
B2 Connect one end of the RJ14 cord to the master controller A port, the other end to the A port of the light fixture.

B3 For additional fixtures, connect one end of the RJ14 cord to the "B port" of the last light fixture and connect the other cord end to the "A port" of the added fixture.





CONTROLLER MENU DISPLAY



Touch the green tab and slide it right, to put the slide block in its place and unlock the screen.

NOTE: Fixtures with "EXT" settings must set fixture to "EXT" when using the master controller. When programming timers, "Dimming" should be in OFF mode.



ACCESS MAIN MENU

**MASTER CONTROLLER**

Mon 00:00:00
May 01, 2023

Group A	ON	Group B	ON
60 %	600 W	110 %	1100 W
Manual	 -- °C  -- % R H	Manual	 -- °C  -- % R H
Auto-Dim Shut-Down	Disable Disable	Auto-Dim Shut-Down	Disable Disable

MENU


Dimming


Auto Pilot


Sunrise/Sunset


Environment


System


About

Touch the **Master Controller** banner to access Main Menu



TIME AND DATE SETTINGS

**MASTER CONTROLLER**

Mon 00:00:00
May 01, 2023

Group A	ON	Group B	ON
60 %	600 W	110 %	1100 W
Manual	 -- °C  -- % R H	Manual	 -- °C  -- % R H
Auto-Dim Shut-Down	Disable Disable	Auto-Dim Shut-Down	Disable Disable

Touch the **date** and **time** for access to the controller clock calendar

**TIME SETTING**

The Current Time: 2023 - 03 - 01 00:00:00

☐ 12h

Date:

2023

 -

03

 -

01

Time:

00

 :

00

 :

00

Touch **Date** options to set master controller date

Touch **Time** options to set master controller clock



DIMMING MENUE

**MASTER CONTROLLER**Mon 00:00:00
May 01, 2023

Group A	ON	Group B	ON
60 %	600 W	110 %	1100 W
Manual	 -- °C  -- % R H	Manual	 -- °C  -- % R H
Auto-Dim Shut-Down	Disable Disable	Auto-Dim Shut-Down	Disable Disable

Displays power level in percent and watts. Touch this tab to access the "Dimming Menu"

Dimming 

Group A	Group B
DIMMING LEVEL 110%	FIXTURE TYPE 1000W 60 - 115%
AUTO-PILOT Enable	
MANUAL ON	
OFF	

Touch **Date** options to set master controller date



AUTO DIMMING

 **MASTER CONTROLLER** Mon 00:00:00
May 01, 2023

Group A	ON	Group B	ON
60 %	600 W	110 %	1100 W
Manual	 -- °C  -- % R H	Manual	 -- °C  -- % R H
Auto-Dim Shut-Down	Disable Disable	Auto-Dim Shut-Down	Disable Disable

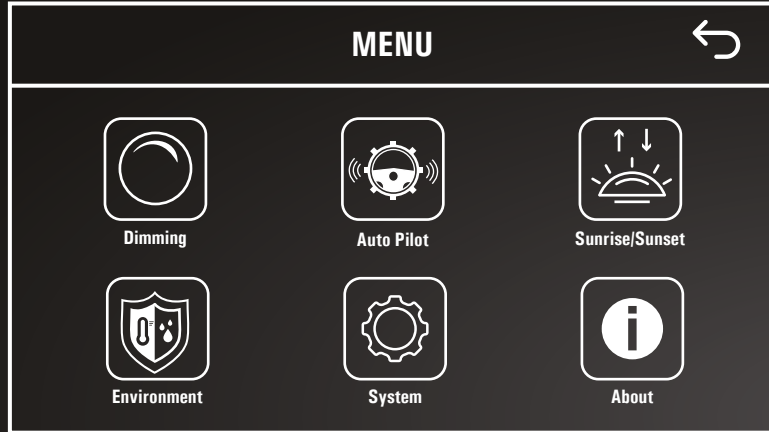
 **Environment** 

Group A	Group B								
<table><thead><tr><th>Light</th><th>Relay</th></tr></thead><tbody><tr><td>Status: Disable Range: 0 ~ 122°F Auto-Dim Ta 104 °F Active </td><td>Shut-Down Ta 122 °F Disable </td></tr></tbody></table>	Light	Relay	Status: Disable Range: 0 ~ 122°F Auto-Dim Ta 104 °F Active	Shut-Down Ta 122 °F Disable	<table><thead><tr><th>Light</th><th>Relay</th></tr></thead><tbody><tr><td>Status: Disable Range: 0 ~ 122°F Auto-Dim Ta 104 °F Active </td><td>Shut-Down Ta 122 °F Disable </td></tr></tbody></table>	Light	Relay	Status: Disable Range: 0 ~ 122°F Auto-Dim Ta 104 °F Active	Shut-Down Ta 122 °F Disable
Light	Relay								
Status: Disable Range: 0 ~ 122°F Auto-Dim Ta 104 °F Active	Shut-Down Ta 122 °F Disable								
Light	Relay								
Status: Disable Range: 0 ~ 122°F Auto-Dim Ta 104 °F Active	Shut-Down Ta 122 °F Disable								

Displays "Auto Dim" mode. Touch for access to temp and auto dim settings.
Shows ambient temperature and relative humidity readings.



AUTO DIMMING



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"** for access to emergency dim and shut off options that protect the crop from excessive heat in the event the environment exceeds selected a temp range.

Touch **"System"** for access to general settings and system options.



AUTO DIMMING



Dimming



Group A

Group B

DIMMING LEVEL

110%

AUTO-PILOT Enable

MANUAL ON

OFF

FIXTURE TYPE

1000W

60 - 115%

Touch to select **Group A** or **Group B** to adjust or view settings.

Touch **"Dimming Level"** to adjust dim settings from 50%-115% with HID and 15%-100% with LEDs.

Touch to enable **"Auto Pilot"** , select: OFF, ON or AUTO-Pilot Enable.

FIXTURE TYPE SETUP

Fixture Type Setup

←

Group A

Output: 110% 1100W

Min: 60%

Fixture Type: 1000W

Max: 115%

Dimming Range Setup

Select Fixture Type

1000W

750W

720W

680W

630W

500W

420W

375W

315W

Customized

- Touch **“Fixture Type”** to select fixture type and power levels.
- Touch and select fixture type or select **“Custom”** if wattage is not shown.
- Touch **“Dimming Range Setup”** to program min. and max. Power levels.

Fixture Type Setup

←

POP-UP

Recommended Dimming Range

HID(50-115%) LED(15-100%)

Minimum: 60 %

Maximum: 115 %

Cancel

Confirm

- Touch **“Minimum”** or **“Maximum”** to set dimming range.
- Once range is selected press **“Confirm”** to save settings.
- NOTE:** MINIMUM SETTINGS FOR HID MUST BE AT 50% OR HIGHER FOR LAMPS TO IGNITE AND MINIMUM SETTING FOR LED 15% OR HIGHER.



AUTO PILOT

 **Auto Pilot** 

Group A

Status: Manual

Daily Cycle ☒

Custom Cycle ☐

Range: 0 - 23 hour 0-59 hour

On: 10 : 13

Off: 04 : 23

Group A

Status: Daily Cycle

Daily Cycle ☒

Custom Cycle ☐

Range: 0 - 23 hour 0-59 hour

On: 12 : 21

Off: 03 : 10

Touch and choose **"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 setting when programming timers.

NOTE: CUSTOM CYCLE EXAMPLE SETTING 8:00 AND 18:00 WOULD MEAN THE LIGHT IS SET FOR 8 HOURS ON AND 18 HOURS OFF AND NOT ON AT 8:00 AND OFF 18:00 HOURS.

 **Sunrise/Sunset** 

Group A

Status: Disable

Ramp: 10min

Range: 1 ~ 60min

Setup: 10 min

Active Disable

Group B

Status: Disable

Ramp: 10min

Range: 1 ~ 60min

Setup: 10 min

Active Disable

Touch the minute value 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.

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ENVIRONMENT

 **Environment** 

Group A

Light	Relay
Status: Disable	
Range: 0 ~ 50 °C	
Auto-Dim Ta	Shut-Down Ta
0 °C	0 °C
Active	Disable

Group B

Light	Relay
Status: Disable	
Range: 0 ~ 50 °C	
Auto-Dim Ta	Shut-Down Ta
0 °C	0 °C
Active	Disable

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

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

SCREEN LOCK

 **Screen Lock** 

Screen Auto-Lock: Min ☒

Slide to unlock: ☒

Touch **"Screen Auto-Lock"** to activate or deactivate screen lock and enter time before screen locks using the "min" option.

Touch to select the **slide lock** to be on or off.



WARNING DISPLAY



Warning Display



Group A

Light	Relay
Status: Disable	
Range: 0 ~ 50 °C	
Warning	Urgent
23 °C	36 °C
Active	Disable

Group B

Light	Relay
Status: Disable	
Range: 0 ~ 50 °C	
Warning	Urgent
26 °C	40 °C
Active	Disable

Touch **"Active"** or **"Deactivate"** to turn Warning Display, On or Off.

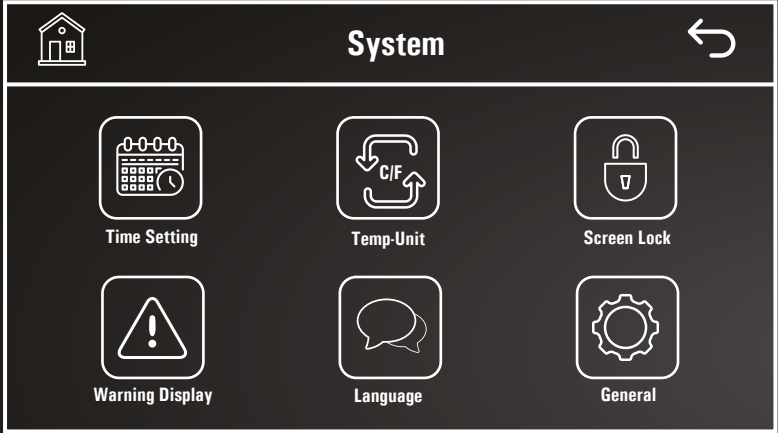
Touch to enter **"Warning"** level temperature value.

Touch to enter **"Urgent"** level temperature value.

NOTE: IN "WARNING DISPLAY MODE", THE SCREEN WILL DISPLAY IN YELLOW FOR "WARNINGS" AND WILL TURN RED FOR "URGENT".
IF THE ENVIRONMENT IS NOT CORRECTED, THE PROTECTIVE MEASURES ARE ACTIVATED AND THE LIGHTS WILL SHUT OFF.
WHEN THE ENVIRONMENT IS MANAGED WITHIN THE CHOSEN SETTINGS OF SAFE OPERATION THE SCREEN WITH RESET BACK TO A GREEN DISPLAY.



SYSTEM SETTINGS



Touch for access to **"Time Settings"**.

Touch for access to **Fahrenheit** or **Celsius** temperature selection.

Touch for access to **"Screen Lock"**.

Touch for access to **"Warning Display"**.

Touch for access to **"Language"** choice.

Touch for access to **"General"** settings.



NOTES



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LUMEN KING news and product releases through the channels below:



LUMEN KING

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