

## **THANK YOU**

FOR PURCHASING THE OCL DIGITAL LIGHTING CONTROLLER.

The OCL Digital Lighting Controller brings precision temperature monitoring to a higher echelon in the commercial cultivation industry. After extensive testing, the OCL Controller is ready to control dual environments with a maximum of 250 ballasts per environment.

### **OCL FEATURES:**

- Easy Programming
- · Simple Feel and Use
- Data Logging of Changes and Events
- Accurate Temperature Monitoring
- · Customized Cycle Options
- · Auto Save Temp/Shutdown Temp
- Incredible Simplicity











Selected ballasts Fixtures



Current Set Schedule



Current room temperature



FOLLOW: ballast opened, "AUX" output opened; ballast closed, "AUX" output closed. INVERSE: ballast opened, closed "AUX" output; ballast closed, "AUX" output opened.



The OCL Digital Lighting Controller simulates natural growing conditions with the "RISE/FALL" option, allowing plants to gradually warm up and cool down.





"A burning blue light indicates the "AUTO SAVE TEMP" has been exceeded in the past" Press the button "AUTO SAVE TEMP" for 3 seconds to reset the Blue light. Press the button "AUTO SAVE TEMP" go direct to the auto save temp setting menu.



"A blinking blue light indicates the "SHUTDOWN TEMP" has been exceeded. All output channels have been shut down" Press the "SHUTDOWN TEMP" button for 3 seconds to reset." Press the button "SHUTDOWN TEMP" go direct to the shutdown temp setting menu.



Press the button "OUTPUT POWER" go direct to the output power setting menu.

### **MENU 1**



### **SYSTEM DATA TIME**

Press the setting key and choose "SYSTEM DATA/TIME", you can now change the setting "SYSTEM DATA/TIME" with the up and down key. After confirmation, press the "OK" key and return to the main menu. If not, please press "CANCEL key.

### **TEMP UNITS**

Press the setting key and choose "TEMP UNITS", you now can change the setting "TEMP UNITS" with the "C" and "F" key. After confirmation, press the "OK" key and return to the main menu. If not, please press "CANCEL key.

# **TEMPERATURE CALIBRATION**

The temperature sensor should be protected against the radiation heat of the lamp. A simple piece of paper board is sufficient. It is recommended that the OCL temperature sensor is close to the (if present) temperature sensor of the climate control system.

Press the setting key and choose "TEMPERATURE CALIBRATION", you can now change the setting "TEMPERATURE CALIBRATION" with the up and down key. After confirmation, press the "OK" key and return to the main menu. If not, please press "CANCEL key.





### **DISPLAY SELECT**

Press the setting key and choose "DISPLAY SELECT", you can now change the setting "DISPLAY SELECT" with the "600w / "750w / 1000w ballast and "%" (mixed ballasts) key. After confirmation, press the "OK" key and return to the main menu. If not, please press "CANCEL key.

600W BALLAST 750W BALLAST 1000W BALLAST

## **OUTPUT POWER**

Press the setting key and choose "OUTPUT POWER", you can now change the "OUTPUT POWER" by the up and down key. Power setting rate: 50%-115% After confirmation, press the "OK" key and return to the main menu. If not, please press "CANCEL key.

### **MENU 1**



## LIGHT CYCLE "MAIN" ENVIRONMENT (ROOM 1)

The Light Cycle "MAIN" tab is the timer programming screen for the MAIN Environment (R1). "STANDARD" timer enables you to setup a standard cycle based on a 24H day. "Time ON" is selected for when the lights turn on and "Time OFF" is selected for when the lights turn off. This schedule repeats daily and can be easily used to programme a bloom or vegetation cycle.

"OPTIMUM" Timer is used to setup a non-standard light schedule against a 24h day. By selecting this option and setting a "Time ON" and "Time OFF" duration in advance, a light cycle can be programmed that is not aligned with a normal 24H day setting. i.e. A Bloom schedule which runs a 10H on and 10H off light cycle.

## LIGHT CYCLE "AUX" ENVIRONMENT (ROOM 2)

The Light Cycle "AUX" tab is the timer programming screen for the Aux Environment (R2). Light Cycle "AUX" can duplicate the Light Cycle schedule that is programmed for the MAIN Environment (R1) by using the "FOLLOW" MAIN Environment option. The option "INVERSE" on Light Cycle "AUX", flips the light cycle that is used for MAIN Environment and applies it to the AUX Environment (R2). The "INVERSE" schedule can only be applied when Light Cycle MAIN





runs a standard cycle that is programmed for a 12H on/12H off schedule. i.e. AUX Environment (R2) turns on after MAIN Environment (R1) turns off and the other way around. AUX Environment (R2) can run a customized schedule autonomous from MAIN Environment (R1) with a Standard 24H Timer or Optimum Time Schedule.

### **AUTO SAVE TEMP**

The "AUTO-SAVE TEMP" option can sense when indoor temperatures are getting too high and by responding automatically, dimming the connected lamps it, will reduce or even avoid environmental stress and crop damage.

Press the setting key and choose "AUTO-SAVE TEMP", press the setting key, you can now change the setting "AUTO-SAVE TEMP" with the up and down key. Then, press the "OK" key, this will confirm the function and return to the main menu. If not, please press "CANCEL" key.

- 1. Dimming Temp.: "1"/time
- 2. When the sensor temp. is over the setting temp., output power will decrease graduall

### **MENU 2**



### **SHUTDOWN TEMP**

The "SHUTDOWN-TEMP" is an extra safety feature that will shut down all lighting in the room when the temperature is not reducing after the "Auto-Save Temp" has set in. Causes could be a malfunctioning in the extraction or climate control unit. A manual resetting of the "SHUTDOWN TEMP" is then required to restart the system.

Press the setting key and choose "SHUTDOWN TEMP.", press the setting key, you can now change the "SHUTDOWN TEMP" with the up and down key. Then, press "OK" key again, this will confirm the function and return to the main menu. If not, please press "CANCEL" key.

- 1. Dimming Temp.: "1"/time
- 2. Dimming setting rate: the max temp. of dimming temp. 50F-120F,10-50°C
- 3. When sensor temp. is over the setting SHUTDOWN TEMP, the output will be closed. If you want to reopen the output, you need to reset the SHUTDOWN TEMP.





# RISE/FALL

The OCL-TCH 1.1 simulates natural growing conditions with the "RISE/FALL" option, allowing plants to warm up and cool down gradually.

Press the setting key and choose "RISE/FALL", press setting key, you can now change the setting "RISE/FALL" with the up and down key. After confirmation, press the "OK" key and return to the main menu. If not, please press "CANCEL" key.

## **OUTPUT SELECT**

In the main menu, press the setting key, set the "OUTPUT SELECT", press set key again, you now can change the "OUTPUT SELECT" to the "AUTO", "OFF" or "ON" function by pressing the key. Then press the "OK" key, this will confirm the function and return to the main menu. If not, please press "CANCEL" key.

AUTO Auto save dimming function
OFF Closed output
ON Opened output

#### **MENU<sub>2</sub>**



### **AUX**

With the "AUX" option one can choose what piece of equipment will be connected. In the "INVERSE" setting equipment will be switched on when the lights are switched off. It is recommended to use this setting because it allows the connection of a heater, dehumidifier or extra ventilator. When growing with CO2, plants will evaporate more and this could require extra dehumidification of the room.

Press setting key, choose "AUX", you can change the setting "AUX" by the "FOLLOW" and "INVERSE" key. Then, press setting key OK, this will confirm the function and return to the main menu. If not, please press CANCEL key.

#### OFF

FOLLOW: ballast opened, "AUX" output opened; ballast closed, "AUX" output closed. INVERSE: ballast opened, closed "AUX" output; ballast closed, "AUX" output opened.





### **DATA LOG**

The Data Log Tab, records all events and changes in the Environments. Changes in light, temperature, faults, etcetera are all recorded. Daily temperatures, highs and lows, are also recorded daily. The user can use the log to check if any issues have occurred.

### **FACTORY RESET**

Press the setting key and choose "FACTORY RESET", then choose "YES". Press "OK" key to confirm and return to the main menu, if not, please choose NO. If not, please press "CANCEL" key.

