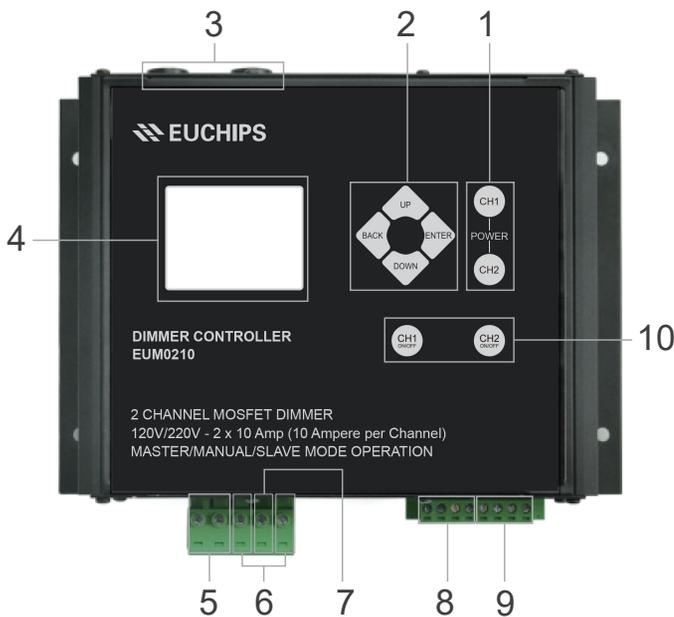# EUM0210

Product Features

· Dual output zones can run independent lighting schedules; Maximum load for each channel is 1200 watts (at 120V) / 10 Amperes.
· 3 Programs- Master, Manual and Slave mode for quick and easy programming
   Master mode with programmable auto lighting control
   Manual Mode with Keypad control
   Slave mode with 0-10V DC analog voltage control
· Supports memory function
· Supports ISP function and Comply with EU-BUS protocol
· Integrated 1.3" OLED Display
· Fully integrated digital control system for precise and consistent dimming
· 4KV Surge Protection, Over Voltage Protection, Short Circuit Protection
· Replaceable output Fuses
· MOSFET Control

Product Functional Details

#		#	
1	Power Keypad CH1 ,CH2	6	Input for AC (Hot & Ground Wire)
2	Edit Keypads	7	Neutral Wire
3	Replaceable fuses	8	EU-BUS Interface for ISP
4	OLED display	9	0-10V DC Analog Input
5	2 Channels Phase cut Output to LED Lamps Load （Hot Wire）	10	After 10 minutes, the brightness will be restored to the previous setting

Factory Reset

System Set
Time Edit
LCD Sleep
▶ Factory Reset

Factory Reset
▶ NO
YES

Factory Reset
NO
▶ YES

Factory Reset is used to backup original setting. The previous set program will be deleted and LCD sleep will be OFF.

Electricals Specifications:

Operating Voltage and Frequency	120/220V Volts 50/60Hz
Output Current	10 Amperes max per zone / Channel
Output Power at 120V Inpu t	2400 Watts (1200 Watts max per zone / Channel) at 120V input supply
Analog Input Voltage in slave mode	0-10V DC
Product Dimensions	9.4"x 8.3"x 2.3" inches (239x210x58)mm
Working Temperature	-4° F ~ 113° F

System Set

If user wants to reset program, please enter Reset Program. All settings will be deleted; now user can set a new program.

Time Edit

Main Menu	
System mode	
Scene Edit	
▶ System Set	

System Set	
▶	Time Edit
	LCD Sleep
	Factory Reset

Time Edit	
⬍	09:22:05
	07/03 2023

In system set menu, current time can be set. After you enter Time Edit, user can edit Current time.

LCD Sleep

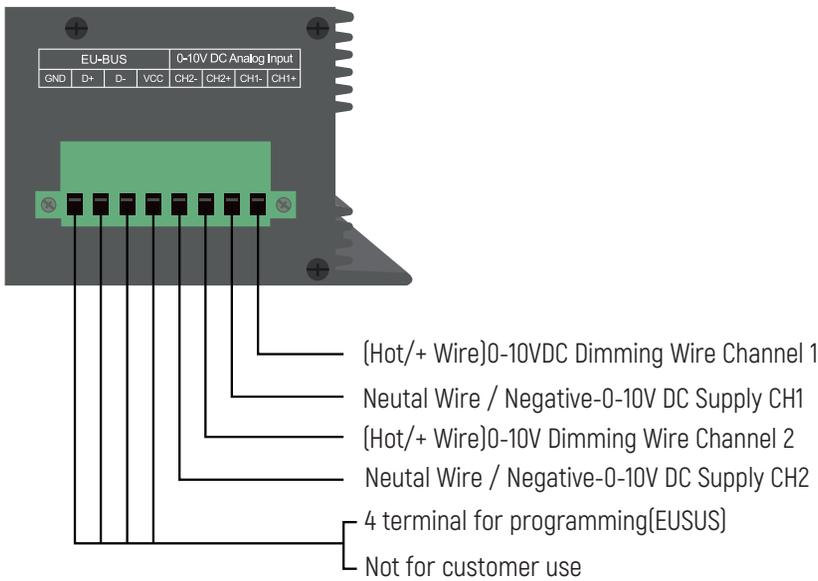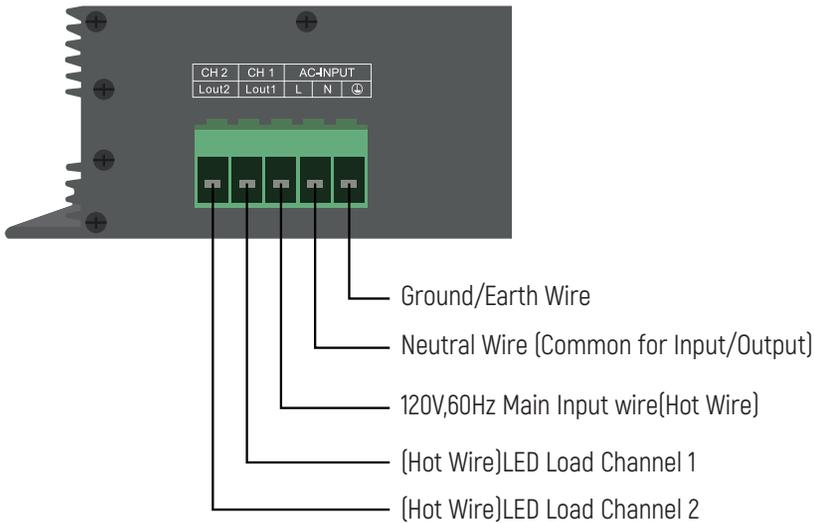| System Set	
	Time Edit
▶	LCD Sleep
	Factory Reset

LCP Sleep		
▶	ON	✓
	OFF	

LCP Sleep		
	ON	
▶	OFF	✓

LCD can be set to go to sleep or not during power on time. If sleep ON is selected, LCD will go OFF after 2 minutes, without any operation. If selecting sleep OFF, LCD will always stay ON.
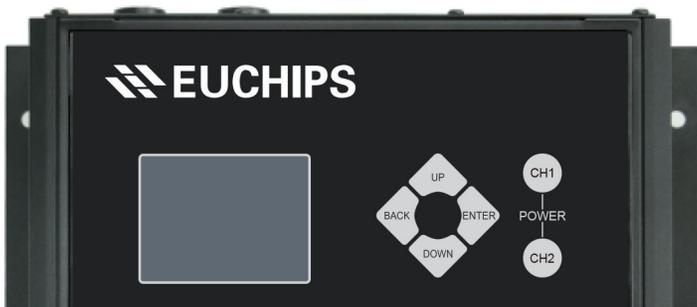
Note: LCD will be OFF during Power OFF time; this setting is only available during power on time.

CAUTION:

1 DO NOT SHORT OUTPUT CH1 AND CH2
2 ENSURE TO USE A DEDICATED NEUTRAL
3 CHECK THE VOLTAGE BETWEEN NEUTRAL AND GROUND AND IF ANY
POSITIVE READING, CORRECT IT BEFORE USING DIMMER.
4 POWER THE LIGHT AND DIMMER ON SAME 120V PHASE OF THE BREAKER PANEL.
5 ENSURE TO HAVE PROPER GROUND ROD ON BREAKER PANEL
6 Please observe the # of Overdrive LED's that this dimmer can safely and properly control listed in this installation document. Also, if other branded LED's may have in-rush currents which may differ significantly from the Overdrive currents. This should be confirmed prior to installing. The maximum In-rush current per channel should not exceed 120 Amp.
7 For 0-10V DC Control Please connect hot DC input to CH+ for proper functioning.

EUCHIPS

| CH 2 | CH 1 | AC-INPUT | | |
| Lout2 | Lout1 | L | N | ⏚ |

———— Ground/Earth Wire

———— Neutral Wire (Common for Input/Output)

———— 120V,60Hz Main Input wire(Hot Wire)

———— (Hot Wire)LED Load Channel 1

———— (Hot Wire)LED Load Channel 2

| EU-BUS | | | | 0-10V DC Analog Input | | | |
| GND | D+ | D- | VCC | CH2- | CH2+ | CH1- | CH1+ |

———— (Hot/+ Wire)0-10VDC Dimming Wire Channel 1

———— Neutal Wire / Negative-0-10V DC Supply CH1

———— (Hot/+ Wire)0-10V Dimming Wire Channel 2

———— Neutal Wire / Negative-0-10V DC Supply CH2

———— 4 terminal for programming(EUSUS)

———— Not for customer use

Display and Keypad introduction

EUCHIPS

UP
BACK   ENTER
DOWN

CH1
POWER
CH2

4 Keypads for Programming and 2 Keypads for power ON/OFF

▶ OLED Display for quick and easy programming
▶ POWER CH1 CH2 to ON and OFF the Dimmer Output channel
▶ ENTER to select or go to next sub menu
▶ UP for up operation
▶ DOWN for down operation
▶ BACK to unselect or go back to previous menu

Dayxxx Period3
CH1: XX
CH2: XX
▶ Fade Time: XXXXS

Dayxxx Period3
CH1: XX
CH2: XX
⬍ Fade Time: XXXXS

Fade Time can be set from 0-9999 second. When period 1 finishes and period2 begins, Channel output may be different. Fade time is the time it takes to reach the new output level. For example: If in new period, CH1 output will be from 10% to 20% with fade time is 10 second. Then CH1 output will increase 1% each second until output level reaches 20%.

If fade time is set too long, then output will change slowly and the brightness of bulbs will also increase slowly. This provides a soft feel, without brightness changing suddenly.

Add New

Dayxxx Period
Period3
Period4
▶ Add New

Dayxxx Period
Period3
▶ Period4
Add New

When user wants to add a new period, put cursor on the line Add New. After you press Enter, new period will be added.

Reset Program

Scene Edit
Day Edit
Period Edit
▶ Reset Program

Dayxxxx Period3
Del Period
Begin:15:20
▶ End:20:00

Dayxxxx Period3
Del Period
⬍ Begin:15:20
End:20:00

Period begin time can be edited, after selecting Begin: xx:xx, when Enter keypad is first pressed, Hours will blink, user can use UP/DOWN keys to select hour, If user wants to adjust minutes, Press Enter Key for the second time.

Dayxxxx Period3
Del Period
Begin:15:20
▶ End:20:00

Dayxxxx Period3
Del Period
Begin:15:20
⬍ End:20:00

Period end time can be edited, just as begin time.

Dayxxxx Period3
▶ CH1: XX
CH2: XX
Fade Time: xxS

Dayxxxx Period3
⬍ CH1: XX
CH2: XX
Fade Time: xxS

Dayxxxx Period3
CH1: XX
▶ CH2: XX
Fade Time: xxS

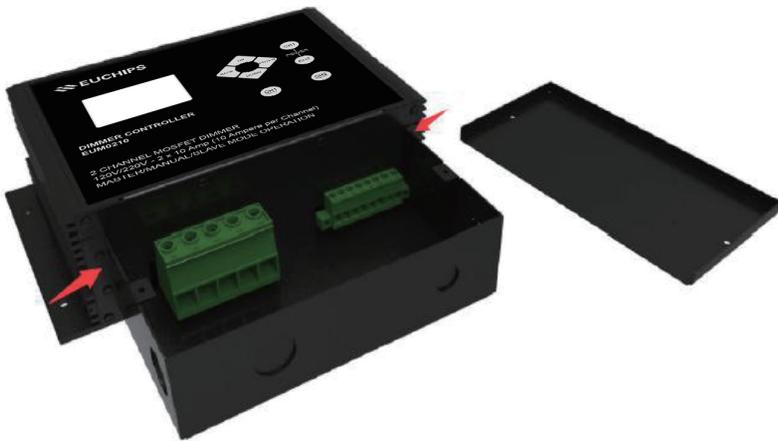| Dayxxxx Period3 |
|---|
| CH1: XX |
| ⬍ CH2: XX |
| Fade Time: xxS |

CH1 and CH2 output can be edited separately in one Period.

Assembly

Remove the screws which are marked below, then take down the top cover.
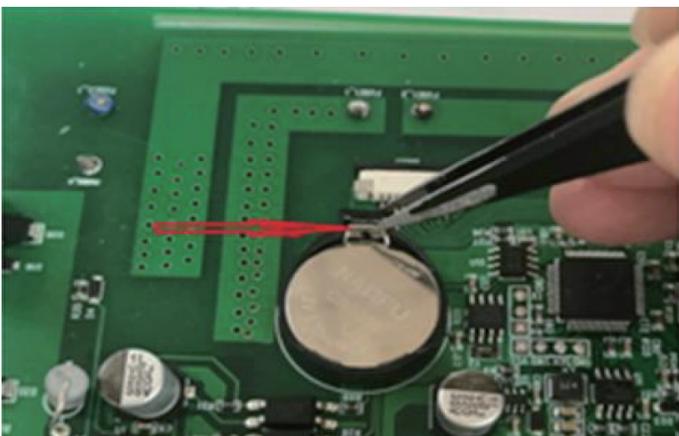

Knock-outs can be removed easily by pressing the round mark to connect Conduit of either "1/2" or "3/4" inch size. Remove the screws from the sides to remove electrical cover as per need.

Following these steps to replace the battery,

1. Open the case
2. Locate the position of the battery
3. Take note of the polarity of the battery, so the new one can be installed in the same position.
4. Pull up on the battery to remove it.
5. Place a new battery in the socket, make sure it is inserted in the same position as the one just removed.
6. Close the case.

Assembly

For example, if we edit Day1 and Day4 only, then the outputs of Day 2 and Day 3 will be 0%.

Period Edit

In Period edit, user can edit program in details.

Dayxxxx Period
▶ Keep Pre Day Pro
Perinod 1
Add New

Scene Edit
Day Edit
▶ Period Edit
Reset Program

After select day, period can be edited. There is an easy way to copy previous day program setting, just select keep pre day pro.
The program will be same as previous day, without setting again.

Period x

Dayxxxx Period
▶ Period3
Period4
Add New

Dayxxxx Period3
▶ Del Period
Begin:15:20
End:20:00

Dayxxxx Period
▶ Period3
Add New

Each period can be edited and can also be deleted. For example, if you want to delete period3, select period3, then select Del period. Period3 will be deleted. Period4 will be renamed to period3 to continue.

After selecting the start date, you can run the current program. Run cursor to the line and press enter. Current program information will be displayed on the screen.

Scene Edit

Main Denu
System Mode
▶ Scene Edit
System Set

Scene Edit
Day Edit : xxx
▶ Period Edit
Reset Program

In Master Mode, dimmer will run program automatically. The programs can be edited in Scene Edit menu. First select the day you want to edit, then divide the day into different periods.

In each period, you can select each channel output level and fade time.

NOTE: Time mode is military time. 00:00 = 12 Midnight, 01:00 = 1:00AM,13:00 = 01:00AM, 23:00= 11:00PM

Day Edit

Scene Edit
↕ Day Edit:xx
Period Edit
Reset Program

Scene Edit
▶ Day Edit : xxx
Period Edit
Reset Program

Run cursor to Day Edit line, press Enter, cursor will change, then select the day you want to edit. The days which are not edited, the digital output will stay in 0%.

Programming Methods

Initial startup

When input power is supplied, previous operating state (One of :Manual, Slave and Master Modes) will be loaded. Choose the channel, which you want to use. Turn on CH1 or CH2 or both.
The LED display will show the channel, the LED display will show 1x or 2x to show that channel in ON.

Main Menu		Main Menu 1x 2x		Main Menu 1x	
	System Mode	▶	System Mode	▶	System Mode
▶	Scene Edit		Scene Edit		Scene Edit
	System Set		System Set		System Set

The top menu is the main menu, including System Mode/Scene Edit/System Set.

System Mode: User can select from Manual, Slave and Master Mode.

Scene Edit: User can edit and save programs under master mode.

System Set: This is to correct system time, LCD Backlight on/off and reset to factory setting

System Mode

Main Menu		Main Menu	
▶	System Mode	▶	Manual Mode
	Scene Edit		Slave Mode
	System Set		Master Mode

In the main menu, run cursor to system mode and press enter. You will be in the System Mode. You have an option to select one of 3 modes: Manual Mode/Slave Mode/Master Mode.

Manual Mode

Manual mode		Manual mode	
▶	CH1:XX	↕	CH1:XX
	CH1:XX		CH1:XX

Manual mode		Manual mode	
	CH1:XX		CH1:XX
▶	CH1:XX	↕	CH1:XX

In Manual Mode, user can control the output by keypads. Just run cursor to CH1 or CH2 by up or down keypad, press Enter, the cursor changes into . The dimming level can now be adjusted by UP/Down button within a range from 0% to 100%.

Slave Mode

Slave mode
CH1:XX
CH1:XX

In Slave Mode, There is a 0-10V DC input for the user choose to operate the dimmer by a controller. The output percent will be displayed on LCD. If there is no 0-10V signal detected, then dimmer will shut down the output.

Master Mode

Manual Mode
▶ Goto Day:xxx
Run Curprog
Prog Preview

Manual Mode
▲▼ Goto Day:xxx
Run Curprog
Prog Preview

In Master Mode, we can select the start date.

Manual Mode
Goto Day:xxx
▶ Run Curprog
Prog Preview

Manual Mode
Ch1:xx CH2:xx
07/03 14:35
Day:1, P:0

Manual Mode
Goto Day:xxx
Run Curprog
▶ Prog Preview

Day7 Prog0
Time:xx-xx
CH1:xx CH2:xxx
Fade time:0S