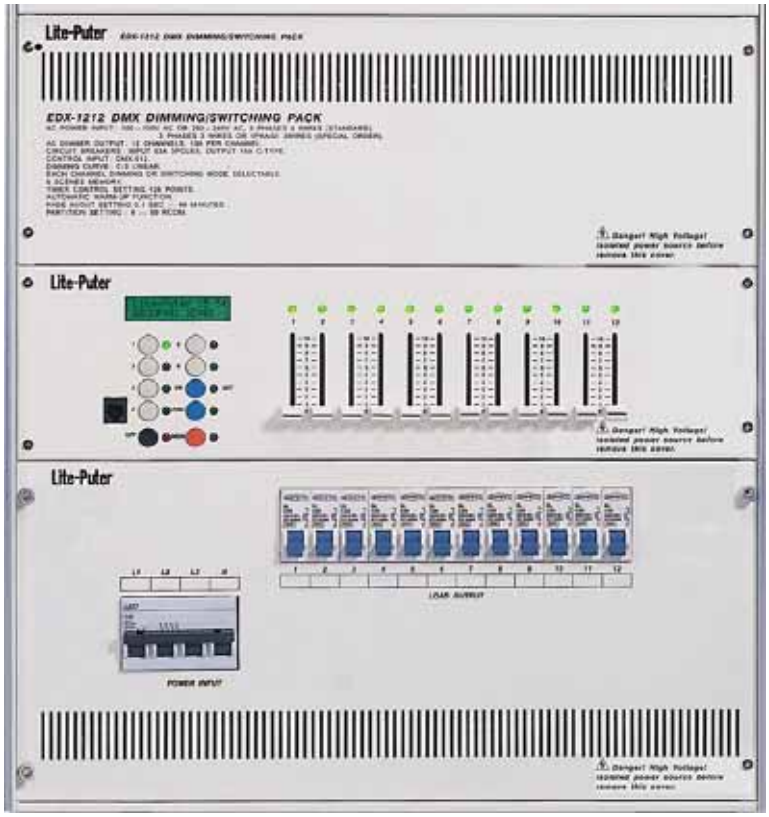
EDX-1212A/412/612/912

DMX Dimmer Pack

【USER MANUAL】



Lite-Puter Enterprise Co., Ltd.

www.liteputer.com.tw

sales@liteputer.com.tw

INDEX

Chapter 1. Introduction

Chapter 2. Operation

Chapter 1. Introduction

1-1 System introduction

Lite-Puter newest design EDX series environmental lighting control system:

Easy control and installation system, combined dimming and switching dual function pack at one complete unit lighting control system; EDX with dimmer control pad setting system and scenes memory data control by CPU. Wall hanger type and only 8.5 cm of thickness, 1/3 of space for wiring work, compressed space unit, available for any kind of ambiance, such as restaurant, hotel, museum, shopping mall and residential etc.

ECP-101 / ECP-102 6 scenes easy control panel

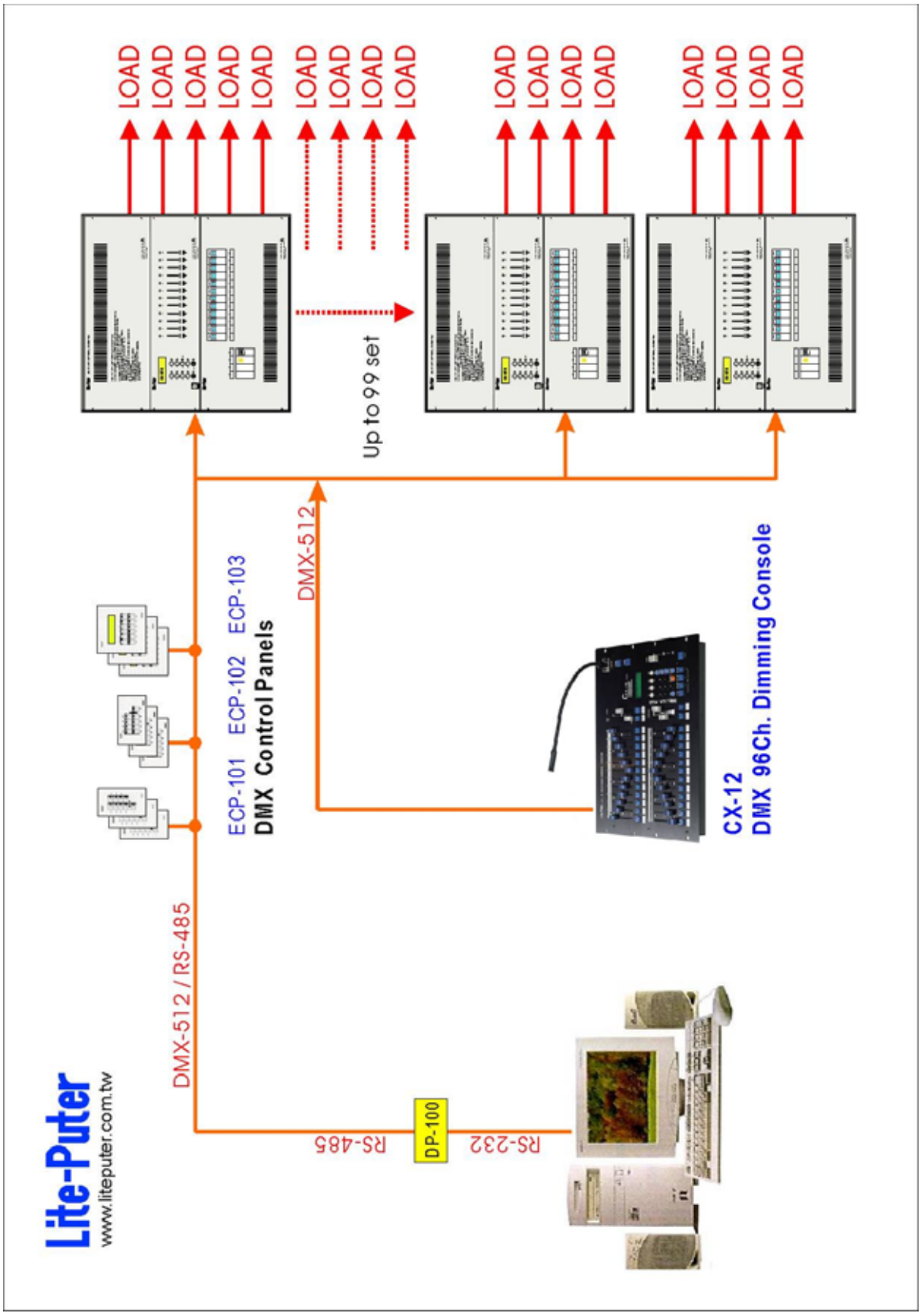
Lite-Puter also provide series of ECP control panel combine with EDX series system. ECP-101, 102 can easy control 6 set of scenes, and also can be connect with several EDX-128 by multiple connected control system, the control panel can be control by zones control or zones connected control. (up to 8 zones setting control available)

ECP-103 All function setting control panel

ECP-103 provide setting function control, all data change and setting control by signal cable connected to EDX.

DMX signal control

Provide standard DMX512 input, EDX received DMX-512 signal input, EDX will auto switch to DMX control.


LOAD
Up to 99 set
DMX-512
ECP-101 ECP-102 ECP-103
DMX Control Panels
CX-12
DMX 96Ch. Dimming Console
DMX-512 / RS-485
RS-485
DP-100
RS-232
Lite-Puter
www.liteputer.com.tw

1-2 Features

- **Channel output:** **EDX-412 is 4 Channel; EDX-612 is 6 Channel; EDX-912 is 9 Channel; EDX-1212 is 12 Channel;**
- **Standard DMX-512 signal output**
- **Linear dimming curve.**
- **Dimming control as console system.**
- **Editing & Loading of 6 scenes.**
- **Setting of the data of timing preset scenes and auto execute.**
- **Fade in / Fade out setting of scenes and timing preset scenes.**
- **Switching & Dimming setting of individual or all channel.**
- **Warm-up setting of individual or all channels.**
- **Control key Lock / Unlock setting.**
- **Up to 99 set of EDX system of zone setting function, available in any ambiance.**
- **ECP-101/102/103 etc. variety control pad connectable, individual or multiple setting control.**

1-3 Specification

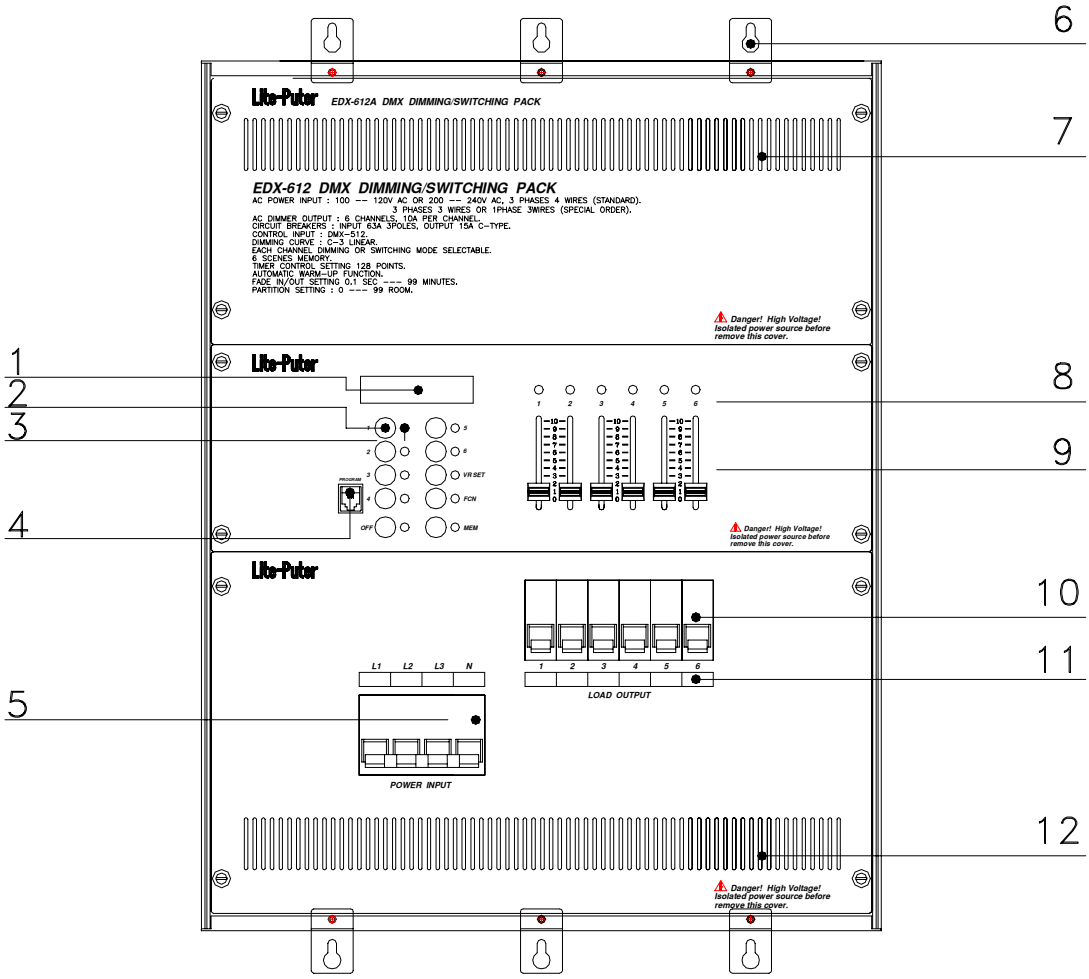
- **Power supply: AC 90---240V**
- **Load: 10A Max. output per channel.**
- **DMX signal in put: RS-485,DMX-512.**
- **Transmission: 250K BITS / Sec.**
- **DMX signal connector:**
  6P 4C Phone Jack connector. (external)
  4-PIN Connector (internal)
- **Dimension:**

EDX-412： **230(W) x 500(H) x 88(D)mm；**

EDX-612、EDX-912： **390(W) x 500(H) x 88(D)mm**

EDX-1212： **470(W) x 500(H) x 88(D)mm**

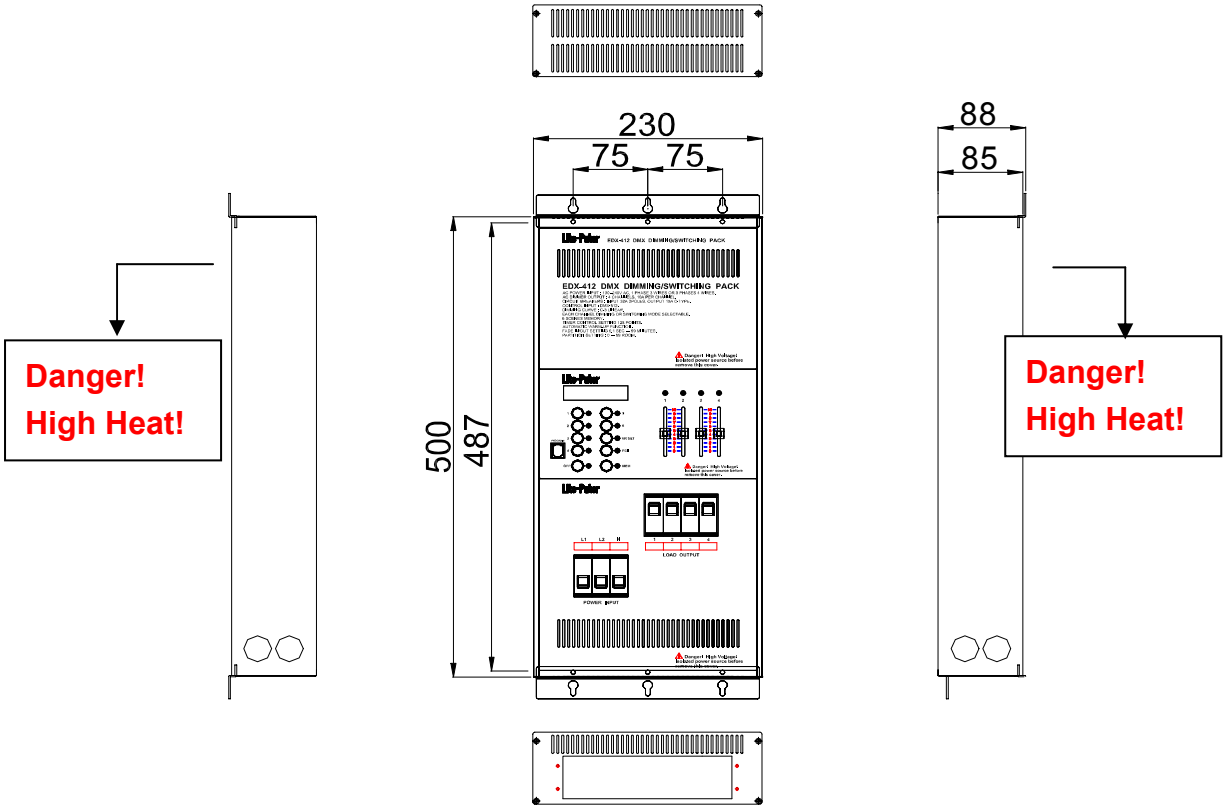
1-4 The feature of control pad



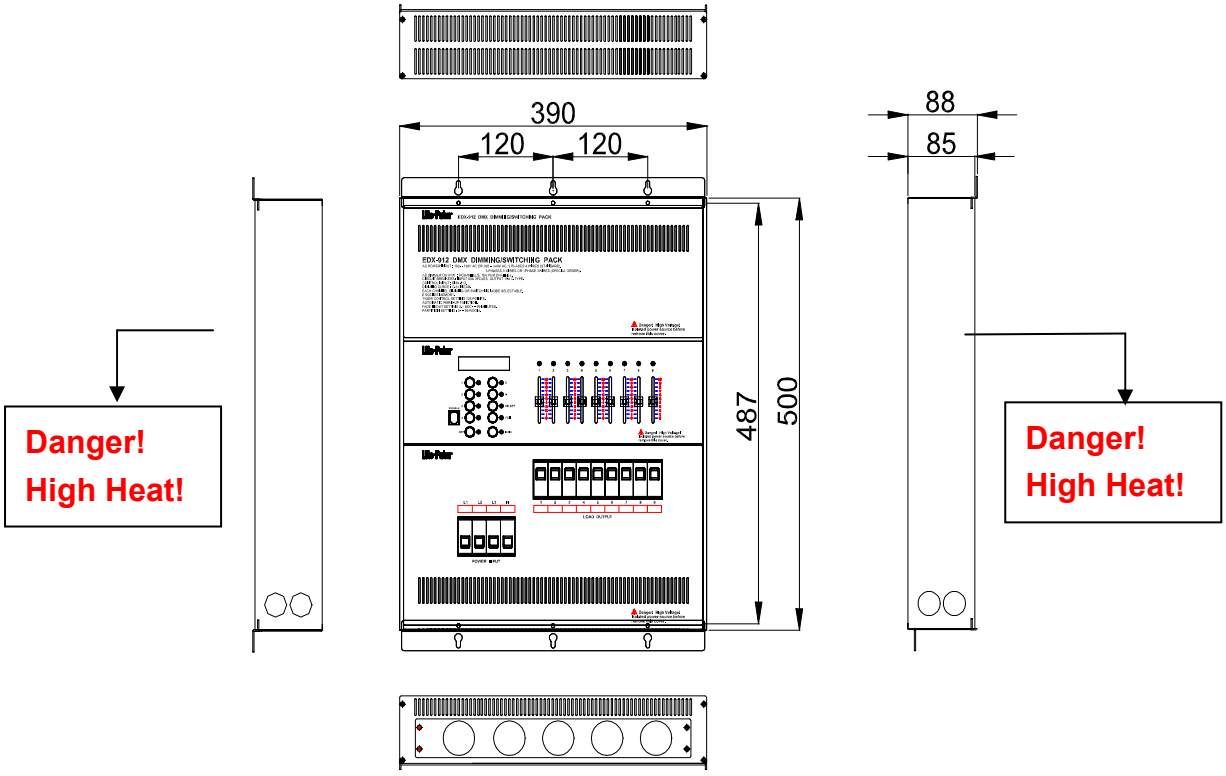
1	LCD Display	3	Function key LED indicator
2	Function key Ex. 【1】 SC1 , ▲ 【2】 SC2 , ▼ 【3】 SC3 【4】 SC4 【5】 SC5 , ▶ 【6】 SC6 , ◀	4	Control pad signal input (RJ11)---Connect ECP-101, ECP-102, ECP-103
		5	Power switch
		6	Stand
		7	Heat dispersion hole
		8	1-6 Channel LED indication
		9	1-6 Channel dimming VR
		10	NFB
		11	Channel indication area
		12	Heat dispersion hole

1-5 Dimensions

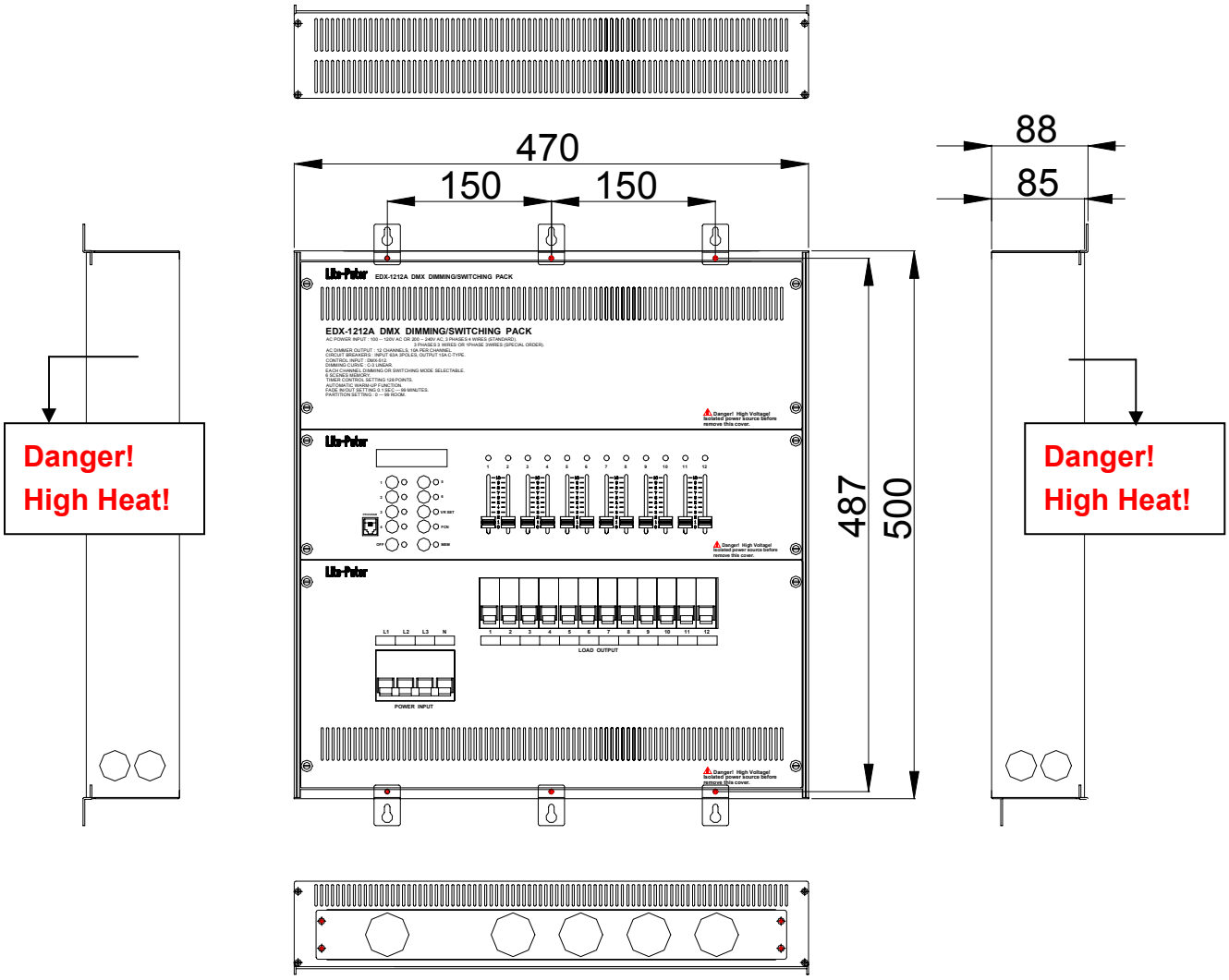
EDX-412:



EDX-612、912:

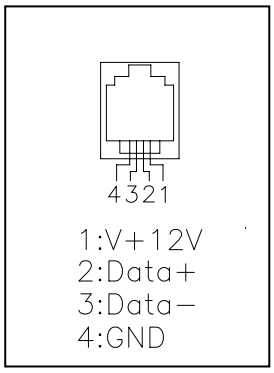


EDX-1212:



1-6 Definition of DMX signal connector

The definition of DMX signal connector of series of ECP control panel and series of EDX wall mounting dimming pack as below.



1-7 Installation instruction

EDX-412:

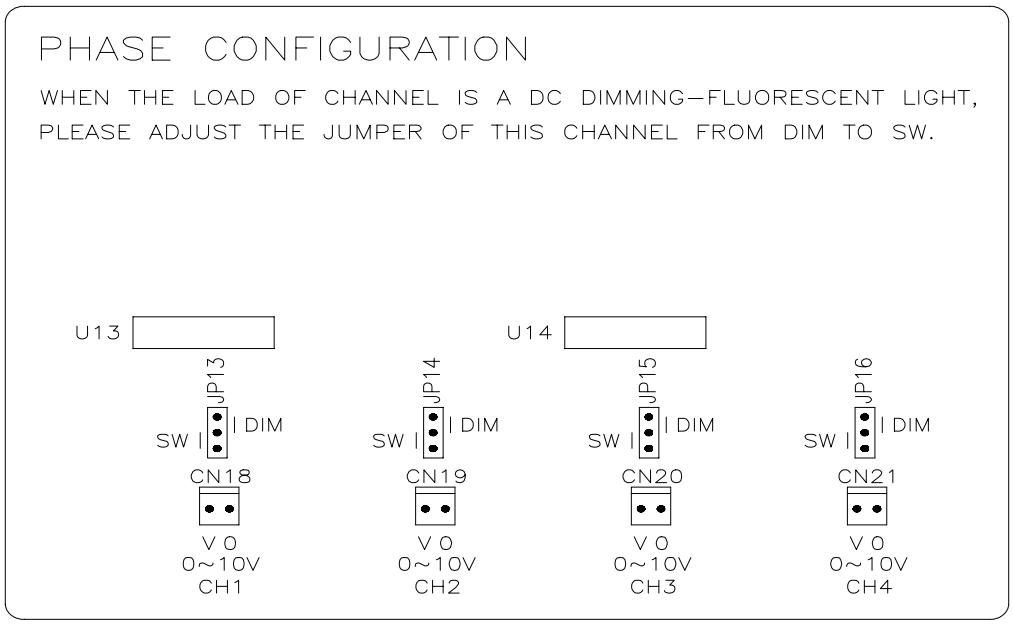
- **Auto Frequency tracking: 45 --- 63Hz can be adjusted automatically.**
- **100-120 VAC / 200-240 VAC can be changed automatically.**
- **The EDX-412 must be setting on "switch" from interior PCB (ACV) if user using the DC dimming- fluorescent lights.**

  Opening the front middle panel with operation key, and then you will find a PCB with 4 sets of JUMP, means CH1-CH4 which series number are JP 13~16.

  DIMMING SETTING: Jump connect with two pin (indicate the DIM position on PCB, please refer the drawing as below)
  SWITCHING SETTING: Jump connect with two pin (indicate the SW position on PCB, please refer the drawing as below)
- **To provide the DC 10V for 4 Channel, supply to DC dimming- fluorescent lights. Default setting: CH1-CH4, they could be revised by user. Each channel could be install 40 sets DC dimming- fluorescent lights at most.**

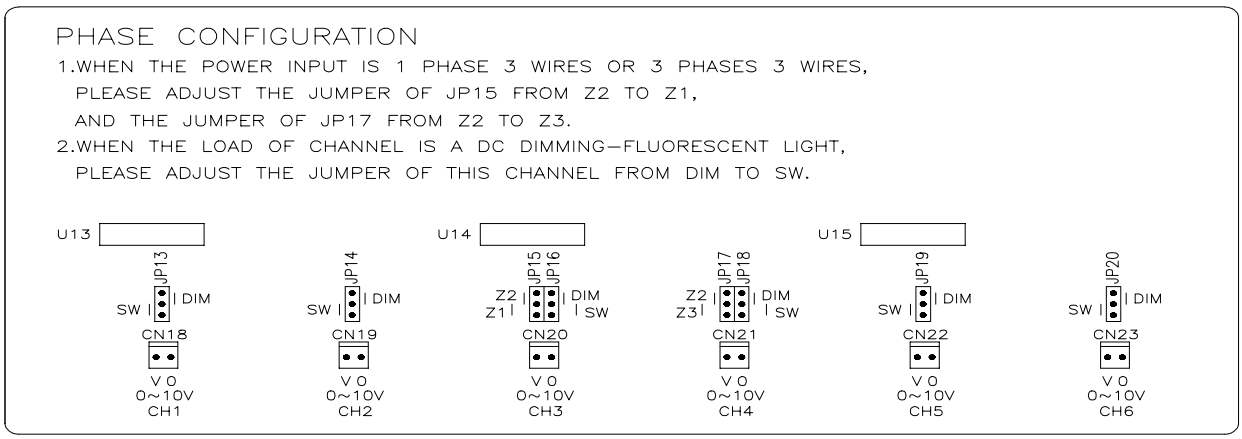
  The location of DC 10V output: to open the front of panel with NFB, and then you will find a PCB with 4 sets green color terminal board called A~D on the right side. They provide individually 4 sets of DC10V output.

- **The DC10V output has been changed DC 0V (ON) and 10V (OFF) when the channel output have been setting on" SWITCH" by software.**



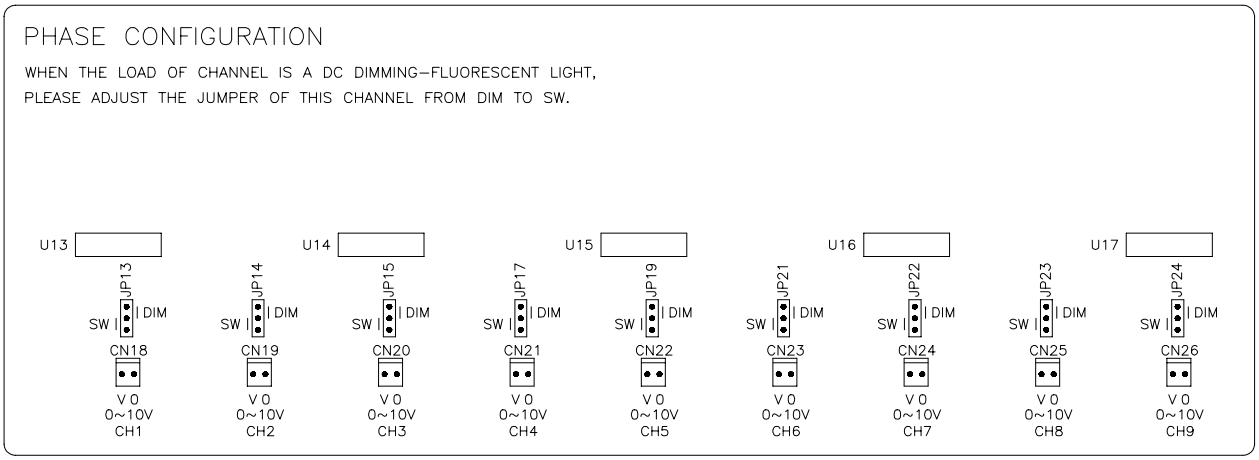
EDX-612:

- **45-63HZ，110-120 VAC / 200-240 VAC auto-switch is available . Interior wire distribution is 3 phases 4 wires .**
- **Power distribution by single phase 3 wires or 3 phases 3 wires can be required .**
- **When you use AC switch fluorescent lamps, it is necessary to set the fixture output (ACV) in the mode of SWITCH. (Setting manual : Open the control pad with buttons, you'll find a PCB. Below this circuit board, there are 6 parts with no. JP 13、14、16、18、19、20 against CH 1 ~ 6 respectively . Put the short circuit of the above mentioned parts around the upper pin, this fixture is in the mode of DIMMING ; put the short circuit around the lower pin, the fixture is in the mode of SWITCH.)**
- **This unit provides 4 CH DC 10V , it is available for DC dimming fluorescent lamps. The original installation is at CH1 ~ CH4 , it is allowed to change the output channel as required. Each channel is allowed to connect with MAX. 40 lamps .**
  1. **DC 10V output position : Open the control pad with N.F.B. , you'll find a PCB. A ~ D 4 sets of terminal board under the right bottom of this circuit board, which are against 4 sets of DC 10V output respectively**
  2. **Change DC 10V output channel ：Open the control pad with buttons, you'll find a PCB. Below this circuit board, there are 6 parts with no. CN 18, 19, 20, 21, 22, 23 against DC 10V of CH 1 ~ 6 respectively . Put the 2 pin wire of above mentioned A~D 4 sets of DC 10V output around the required channels against 6 parts with no. CN 18, 19, 20, 21, 22, 23.**
  3. **While the channel output is set in the mode of SWITCH , the DC 10V output of the relative channel is changed to the mode of DC 0 V and 10 V (in the mode of OFF & ON) .**



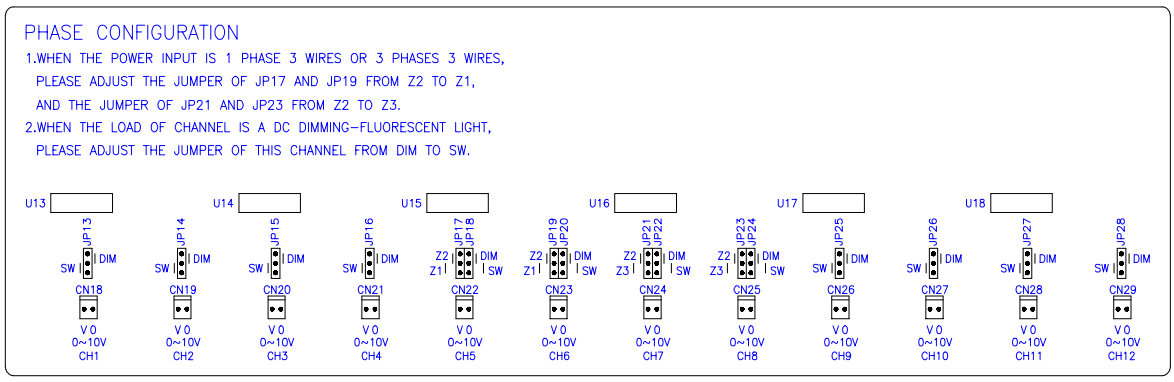
EDX-912:

- **Auto Frequency tracking: 45 --- 63Hz can be adjusted automatically.**
- **100-120 VAC / 200-240 VAC can be changed automatically.**
- **The EDX-912 must be setting on "switch" from interior PCB (ACV) if user using the DC dimming- fluorescent lights.**
  Opening the front middle panel with operation key, and then you will find a PCB with 9 sets of JUMP, means CH1-CH9 which series number are JP 13~15 / 17 / 19 / 21~24.
  DIMMING SETTING: Jump connect with two pin (indicate the DIM position on PCB, please refer the drawing as below)
  SWITCHING SETTING: Jump connect with two pin (indicate the SW position on PCB, please refer the drawing as below)
- **To provide the DC 10V for 4 Channel, supply to DC dimming- fluorescent lights. Default setting: CH1-CH4, they could be revised by user. Each channel could be install 40 sets DC dimming- fluorescent lights at most.**
  The location of DC 10V output: to open the front of panel with NFB, and then you will find a PCB with 4 sets green color terminal board called A~D on the right side. They provide individually 4 sets of DC10V output.
  To revised the DC 10V channel output: to open the front of panel with key function, and then you will find the PCB with 9 set of Jumper called CN18-CN26 (CH1-CH9), Pull out the 4 sets 2 pin signal line and reset them to another channel that the user demand. (please refer the drawing as below)
- **The DC10V output has been changed DC 0V (ON) and 10V (OFF) when the channel output have been setting on" SWITCH" by software.**



EDX-1212:

- **Auto Frequency tracking: 45 --- 63Hz can be adjusted automatically.**
- **100-120 VAC / 200-240 VAC can be changed automatically.**
- **3 phase 4 wires for standard; 1 phase 3 wires or 3 phases 3 wires for option.**
- **The EDX-1212A must be setting on "switch" from interior PCB (ACV) if user using the DC dimming- fluorescent lights.**
  Opening the front middle panel with operation key, and then you will find a PCB with 12 sets of JUMP, means CH1-CH12 which series number are JP 13~16/18/20/22/24/25~28.
  DIMMING SETTING: Jump connect with two pin (indicate the DIM position on PCB, please refer the drawing as below)
  SWITCHING SETTING: Jump connect with two pin (indicate the SW position on PCB, please refer the drawing as below)
- **To provide the DC 10V for 4 Channel, supply to DC dimming- fluorescent lights. Default setting: CH1-CH4, they could be revised by user. Each channel could be install 40 sets DC dimming- fluorescent lights at most.**
  The location of DC 10V output: to open the front of panel with NFB, and then you will find a PCB with 4 sets green color terminal board called A~D on the right side. They provide individually 4 sets of DC10V output.
  To revised the DC 10V channel output: to open the front of panel with key function, and then you will find the PCB with 12 set of Jumper called CN18-CN29 (CH1-CH12), Pull out the 4 sets 2 pin signal line and reset them to another channel that the user demand. (please refer the drawing as below)
- **The DC10V output has been changed DC 0V (ON) and 10V (OFF) when the channel output have been setting on" SWITCH" by software.**



Chapter 2. Operation

2-1 Function

EDX Systen setting function, after power on, press【FCN】key for main menu, and press【 ▲ 】or【 ▼ 】key for selection, see below:

F 1	→F1:DMX ADR:001 F2:ZONE: 01-00	**DMX starting channel setting**
F 2		**Zone setting**
F 3	F3:SET.ID:002 →F4:EDIT TIMER	**ID NO. setting**
F 4		**Time setting**
F 5	F5:MODIFY CLOCK →F6:WARMUP 0-6%	**System timing modify**
F 6		**Warm up setting**
F 7	F7:CH DIM/SWIT →F8:TIMER: OFF	**Dimming / switching setting**
F 8		**Timing preset**
F 9	F9:Temp= 25°c →F10:SC FADE TIM	**Internal temperature display**
F10		**Fade Time setting**
F11	F11:DMX BYPASS →F12:UNUSE FNC..	**Receiver signal setting**
F12		**Blank (updating use)**
F15	→F15:BACKUP DATA F16:UNUSE FNC..	**Data back up of scenes**
F16		**Blank (updating use)**
F19	F19:UNUSE FNC.. →F20:RELOAD DATA	**Blank (updating use)**
F20		**Data loading**

P.S. press【**MEM**】key into function setting, and press【**MEM**】key after function setting to save, or press【**FCN**】key to escape without save.

2-2. Reset 【MEM】+【OFF】+【VR】

STEP-1 Switch the power on, and press【**MEM**】key and hold, and press【**OFF**】and【**VR**】key to reset.

STEP-2 LCD will display the selection for reset function, select【**1**】to reset for default, and select【**2**】to escape.

STEP-3 LCD will back to timing status after reset.

2-3. DMX starting channel setting “ F1 ”

The standard DMX signal output 512 channel, And EDX-412 set up each 4 continuously channel; EDX-612 set up each 6 continuously channel; EDX-912 set up each 9 continuously channel; EDX-1212 have to set up each 6 continuously channel for output using, these 4、6、9 or 12 continuously channel, we call starting channel of EDX.

STEP-1 Press【**FCN**】key, and LCD will display the DMX channel address.

STEP-2 Press【**MEM**】key to reset.

STEP-3 Starting channel selection.

Press【 **5** ▶ 】key: to forward 1 address. EX: Start DMX ADR: **001 → 002**
Press【 **6** ◀ 】key: to back 1 address. EX: Start DMX ADR: **002 → 001**
Press【 **1** ▲ 】key:
EDX-412 to plus 4 address. EX: Start DMX ADR: **001 → 005**
EDX-612 to plus 6 address. EX: Start DMX ADR: **001 → 007**
EDX-912 to plus 9 address. EX: Start DMX ADR: **001 → 010**
EDX-1212 to plus 12 address. EX: Start DMX ADR: **001 → 013**
Press【 **2** ▼ 】key: back to Start DMX ADR: **001**

STEP-4 Press【**MEM**】key after setting to escape, LCD will back to timing status

1. **There are 512 starting channel setting available for DMX .**

(Each EDX-412 can be continuously output 4 channel)

EX：If starting address set as Start DMX ADR:001 can be output DMX from 1st ---4th channel

If starting address set as Start DMX ADR:005 can be output DMX from 5th ---8th channel.

(Each EDX-612 can be continuously output 6 channel)

EX：If starting address set as Start DMX ADR:001 can be output DMX from 1st ---6th channel

If starting address set as Start DMX ADR:007 can be output DMX from 7th ---12th channel.

(Each EDX-912 can be continuously output 9 channel)

EX：If starting address set as Start DMX ADR:001 can be output DMX from 1st ---9th channel

If starting address set as Start DMX ADR:010 can be output DMX from 10th ---18th channel.

(Each EDX-1212 can be continuously output 12 channel)

EX：If starting address set as Start DMX ADR:001 can be output DMX from 1st ---12th channel

If starting address set as Start DMX ADR:013 can be output DMX from 13th ---24th channel.

2. **Repeatable setting, 2 or more EDX System can be setting at**

2-4. Zone setting " F2 "

Zone: Before using the EDX system, number setting of each EDX system in control zone, 2 part to be number, first set of number showing zone and 2nd set number showing each series number of EDX system, EX : First zone with 4 set of EDX-612, with 24 channel in total, 01-01, 01-02, 01-03, 01-04. (01 * zone number – 01* first set of EDX-612), to setting as below :

STEP-1 Press【**FCN**】key and use【 **1** ▲ 】or【 **2** ▼ 】to select F2, LCD will display the status of EDX-612 in Zone.

STEP-2 Press【**MEM**】key to reset.

STEP-3 Press【 **1** ▲ 】or【 **2** ▼ 】key for zone number setting.

STEP-4 Press【 **5** ▶ 】key to next selection, press【 **1** ▲ 】key to select.

STEP-5 Press【**MEM**】key to confirmed the selection, and LCD will back to time status.

2-5. ID NO. setting " F3 "

Each EDX system own itself ID NO.(default setting: 001), it do not need adjust the ID NO when operating one EDX system, but connecting and operating many pieces of EDX system together, they all need to adjust different ID. NO.

STEP-1 press【**FCN**】and【 **1** ▲ 】or【 **2** ▼ 】to select "F3", and then the LCD will show the ID NO of EDX-612

STEP-2 press【**MEM**】to entry the ”ID NO. setting function”, and then press 【 **1** ▲ 】 or【 **2** ▼ 】to adjust the ID NO.。

STEP-3 press【MEM】for confirmation.

2-6. SC 1 ~ SC 6 Scenes storing 【 MEM 】+【 1…6 】

STEP-1 Back to time status mode.

STEP-2 Adjust【 **CH1…CH12** 】VR key to dimming .

STEP-3 Press【 **MEM** 】**+**【**1… 6 scene**】to store the memory .

2-7. SC 1 ~ SC 6 Scenes loading 【 1…6 】

Press【 **1** 】**~**【 **6** 】key to select the scenes memory.
LED will indicated the scenes key selection。

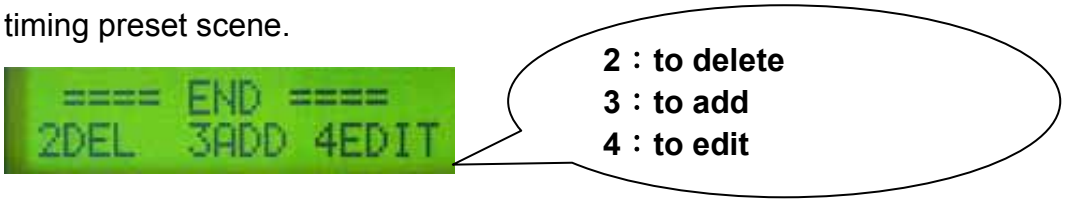
If SC1 ~ SC6 had preset of FADE function (refer to FADE setting), press once (sc-1) ~ (sc-6) , and internal dimming data will active by FADE function.
If press twice (sc1) ~ (sc6), and internal dimming data will active suddenly.

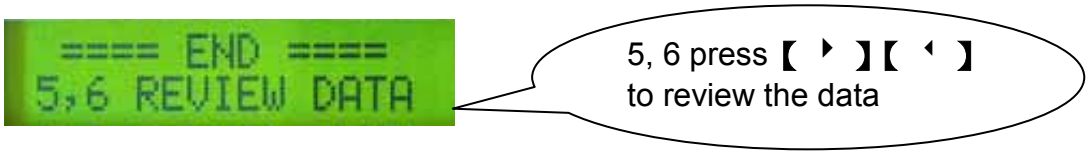
2-8. Setting of ”The data of timing preset scenes” “ F4 ”

We suggest the user to store the routine or continuously using SCENE store into “ Time preset scene” for auto executing.

STEP-1 Press【**FCN**】**,** and press【 **1** ▲ 】or【 **2** ▼ 】to select F4.

STEP-2 Press【**MEM**】key for ” Time preset scene”, LED will display the status of timing preset scene.





EX： To set first scene on auto execute at 06:30, and fade time at 2.0 sec, the operation as below ;

STEP-3 Press【 **3** 】to add.

STEP-4 Press【 **1** ▲ 】or【 **2** ▼ 】to adjust the hour.

STEP-5 Press【 **5** ▸ 】key for next selection, press【 **1** ▲ 】or【 **2** ▼ 】to adjust

STEP-6 Press【 **5** ▸ 】for scene selection.

STEP-7 Press【 **5** ▸ 】for scene selection, press【 **1** ▲ 】or【 **2** ▼ 】to adjust fade time.

STEP-8 Press【 **5** ▸ 】for date adjustment, press【 **1** ▲ 】or【 **2** ▼ 】for setting.

diary execution

Monday ~ Friday execution

Saturday ~ Sunday execution

Sunday execution

STEP-10 Press【**MEM**】to confirmed the selection and memory saved.

STEP-11 Please refer STEP-2 ~STEP-10 for further setting.

Note: If the user would like to know whether starting the function of auto timing execute of SCENE, the user can check the flash line from LCD display.

Flash: It means starting the function of auto timing execute of SCENE

2-9. System clock modify “ F5 ”

STEP-1 Press【**FCN**】key and press【 **1** ▲ 】or【 **2** ▼ 】key to select F5.

STEP-2 Press【**MEM**】key for clock modify.

STEP-3 Press【 **1** ▲ 】or【 **2** ▼ 】for selection, press【 **5** ▶ 】to confirmed and go to next selection【 **6** ◀ 】back to previous selection.

STEP-4 Press【**MEM**】key to confirmed the selection and saved.

2-10. Warm up setting 0%---6.0% “ F6 ”

Warning ：The warm up setting is not available on switching mode.

STEP-1 Press【**FCN**】key and【 **1** ▲ 】or【 **2** ▼ 】to select F6.

STEP-2 Press【**MEM**】to warm up setting.

When LCD display ”??” , It mean that the setting of each channel is different .

STEP-3 Press【 **5** ▶ 】**or**【 **6** ◀ 】to select the channel, press【 **1** ▲ 】or【 **2** ▼ 】to adjust the warm up.

STEP-4 Press【**MEM**】to confirmed and back to timing status.

2-11. Setting of dimming & switching “ F7 ”

Setting of Dimming & switching

Before power on, be sure and verify all equipment are correct settings, If some of lighting equipment is not dimmable, or it may caused some damage.

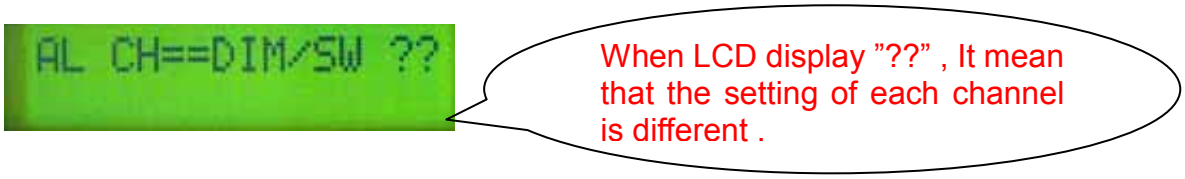
- **If any channel had preset as switching function, must set as least 51% to be full loading, less than 20% will be full off, this delay function setting it is**

prevent any unstable caused.

- **If any channel had preset to switching function, then the warm up and the voltage output limit function are not available in this setting function.**

STEP-1 Press【**FCN**】key and press 【 **1** ▲ 】or【 **2** ▼ 】to select F6.

STEP-2 Press【**MEM**】key.



STEP-3 Press【 **5** ▶ 】**or**【 **6** ◀ 】for channel setting, and press【 **1** ▲ 】or【 **2** ▼ 】to select switching or dimming.

STEP-4 Press【**MEM**】key to confirmed and back to timing status.

2-12. Switch ON/OFF of timing preset scenes “ F8 ”

STEP-1 Press【**FCN**】key and press【 **1** ▲ 】or【 **2** ▼ 】to select F8.

STEP-2 Press【**MEM**】key and press 【 **5** ▶ 】**or**【 **6** ◀ 】to select ON or OFF

STEP-4 Press【**MEM**】key to confirmed the selection.

Note: If the user would like to know whether starting the function of auto timing execute of SCENE , the user can check the flash line from LCD display .

Flash: It means starting the function of auto timing execute of SCENE .

2-13. Internal temperature display " F9 "

STEP-1 Press【**FCN**】key and press【 **1** ▲ 】or【 **2** ▼ 】to select F9.

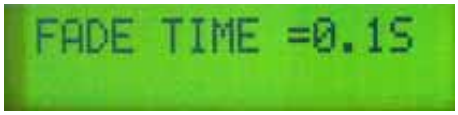
STEP-2 Press【**MEM**】key and press【 **FCN** 】to escape.

2-14. SC 1 ~ SC 6 Scene's fade setting " F10 "

Remark : please refer remark1 to the timing display of fade.

STEP-1 Loading the fade time willing to set up. EX：press【 **6** 】for selection.
STEP-2 Press【**FCN**】key and press【 **1** ▲ 】or【 **2** ▼ 】to select **F10**.

STEP-3 Press【**MEM**】



STEP-4 Press【 **1** ▲ 】or【 **2** ▼ 】to adjust the fade time.

STEP-5 Press【**MEM**】key to confirmed the setting and back to timing status.

2-15. Receiver signal setting by DMX512 signal or external signal " F11 "

STEP-1 Press【**FCN**】and【 **1** ▲ 】or【 **2** ▼ 】to select **F11** .

STEP-2 Press【**MEM**】and 【 **1** ▲ 】or【 **2** ▼ 】to select OFF (close) or ON(start) .

STEP-3 Press【**MEM**】for confirmation. The LCD will return to time dispay.

2-16. Data BACK UP “ F15 ”

SC1~SC6 of data save and back up function

STEP-1 Press【**FCN**】key and press【 **1** ▲ 】or【 **2** ▼ 】to select F15.

STEP-2 Press【**MEM**】key.

STEP-3 LCD display for backup selection, press【 **1** 】or【 **2** 】for selection

2-17. Data loading “ F20 ”

STEP-1 Press【**FCN**】key and press【 **1** ▲ 】or【 **2** ▼ 】to select F20.

STEP-2 LCD display for selection, press【 **1** 】or【 **2** 】for selection.

STEP-3 Press【**MEM**】key to confirmed the selection and escape to timing status.

2-18. Control key lock / unlock function 【MEM】+【FCN】

Function key memory function

STEP-1 Press 【**MEM**】+【**FCN**】at same time.

STEP-2 All function is lock.

STEP-3 Press【**MEM**】+【**FCN**】to unlock.

Remark 1 :

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
0.1s	0.2s	0.3s	0.4s	0.5s	0.6s	0.7s	0.8s	0.9s	1s
2	3	4	5	6	7	8	9	10	12
2s	3s	4s	5s	6s	7s	8s	9s	10s	12s
14	16	18	20	25	30	35	40	45	50
14s	16s	18s	20s	25s	30s	35s	40s	45s	50s
55	1 .	2 .	3 .	4 .	5 .	6 .	7 .	8 .	9 .
55s	1m	2m	3m	4m	5m	6m	7m	8m	9m
10 .	11 .	12 .	13 .	14 .	15 .	16 .	17 .	18 .	19 .
10m	11m	12m	13m	14m	15m	16m	17m	18m	19m
20 .	21 .	22 .	23 .	24 .	25 .	26 .	27 .	28 .	29 .
20m	21m	22m	23m	24m	25m	26m	27m	28m	29m
30 .	31 .	32 .	33 .	34 .	35 .	36 .	37 .	38 .	39 .
30m	31m	32m	33m	34m	35m	36m	37m	38m	39m
40 .	41 .	42 .	43 .	44 .	45 .	46 .	47 .	48 .	49 .
40m	41m	42m	43m	44m	45m	46m	47m	48m	49m
50 .	51 .	52 .	53 .	54 .	55 .	56 .	57 .	58 .	59 .
50m	51m	52m	53m	54m	55m	56m	57m	58m	59m
60 .	61 .	62 .	63 .	64 .	65 .	66 .	67 .	68 .	69 .
60m	61m	62m	63m	64m	65m	66m	67m	68m	69m
70 .	71 .	72 .	73 .	74 .	75 .	76 .	77 .	78 .	79 .
70m	71m	72m	73m	74m	75m	76m	77m	78m	79m
80 .	81 .	82 .	83 .	84 .	85 .	86 .	87 .	88 .	89 .
80m	81m	82m	83m	84m	85m	86m	87m	88m	89m
90 .	91 .	92 .	93 .	94 .	95 .	96 .	97 .	98 .	99 .
90m	91m	92m	93m	94m	95m	96m	97m	98m	99m