DX-625
DMX 6CH. Dimmer Pack
【User Manual】

Lite-Puter Enterprise Co., Ltd.

Website: www.liteputer.com.tw
E-mail: litecom@ms2.hinet.net

INDEX

The regulations of safe usage:

To ensure the normal and perfect working of DX-625,
as to the load capacity, please refer to our suggestions as
below:

(1). Maximum output of individual channel is 20A：
   For the moments testing.   (About 10 minutes.)

(2). Output of individual channel ≦16A：
   For several hours.   (It's used for a theater or a stage.)

(3). Output of individual channel ≦12A
   Continue working for the whole years.
   (It's used for hotels or restaurants.)

(4). Individual channel must be set dimming or switching
   function before the load switch (circuit breaker) turns on.
   The non-dimming lamp may be damaged in dimming function.
   Please refer section 3-3.

Chapter 1.   Introduction

1-1   Features of DX-625

■ Each channel auto-detected the phase of electric power individually.
■ It's not necessary to consider the phase of electric power.:
No matter 1Ø1W, 1Ø3W, 3Ø3W, 3Ø4W, each phase can be applied to any channel without the problem if connecting phases. Please note that the voltage through the loads must be the same to the AC voltage.
■ Auto-tracking of electric power frequency: from 45 to 63 Hz.
■ SSR (Solid State Relay) inside: easy for maintenance.
■ All channels or individual channel can be set as on/ off or dimming function.
■ Warm-up set: the warm-up level 0-10% can be set to all channels or individual channel.
■ Can choose C2 (Square) or C3 (Linear) dimming curve.
■ Self-test function: fade-in/ fade-out test and bright level output test for all channels or individual channel.
■ LED indicators: it displays the working situation of each channel and inner temperature, ..etc.
■ Temperature control and heat-sink system: the power will be switched off automatically when over heat.

1-2   Notice before using

Make sure that ch.1—ch.6 is connected with AC power, especially the channel 1 because it is not only the inspective point of power phrase and also the power source of the main control board.

1-3   Specification

■ Power   AC100-240V, 45-63Hz, 1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W
■ Output Maximal   20A for each channel
                                         (Please refer to the user manual)
■ DMX signal input/ output   DMX512/ 1990
■ DMX signal connector   XLR 5PIN
■ Analog signal input   DC 0-10V
■ Analog connector   DIN 8PIN
■ Dimension   482(W) x 88(H) x 300(D) mm
■ Rack size   19" 2U rack mountable
■ Weight   7.2Kg

SIGNAL
PIN1~6 : 0~10VDC INPUT
V+12VDC(OUTPUT) ,200mA

DIN 8 PIN CONNECTOR START ADDRESS:
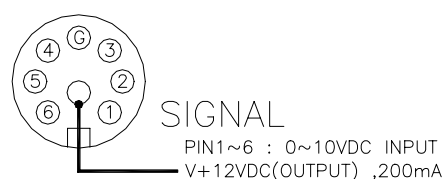
Chapter 2. Installation

2-1 FRONT PANEL:
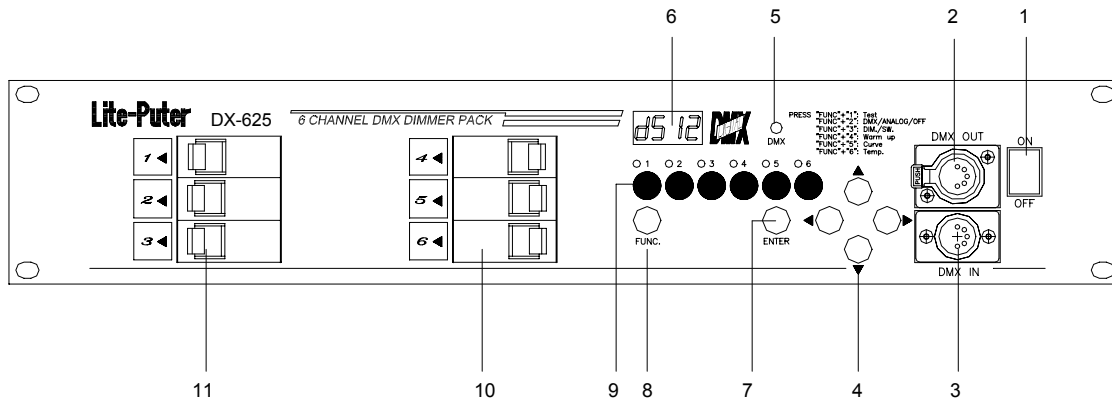
(1) ON/OFF SWITCH	(7) CONFIRMATION KEY
(2) DMX SIGNAL OUT	(8) FUNCTION KEY.
(3) DMX SIGNAL IN	(9) FUNCTION KEY.
(4) ADJUSTABLE KEY.	(10) HIGH SPEED BREAKER(CH4-CH6)
(5) INDICATOR	(11) HIGH SPEED BREAKER(CH1-CH3)
(6) LED DISPLAY	

2-2 REAR PANEL:

CH-1 must be given AC power because it provides the working electric power to the DX-625
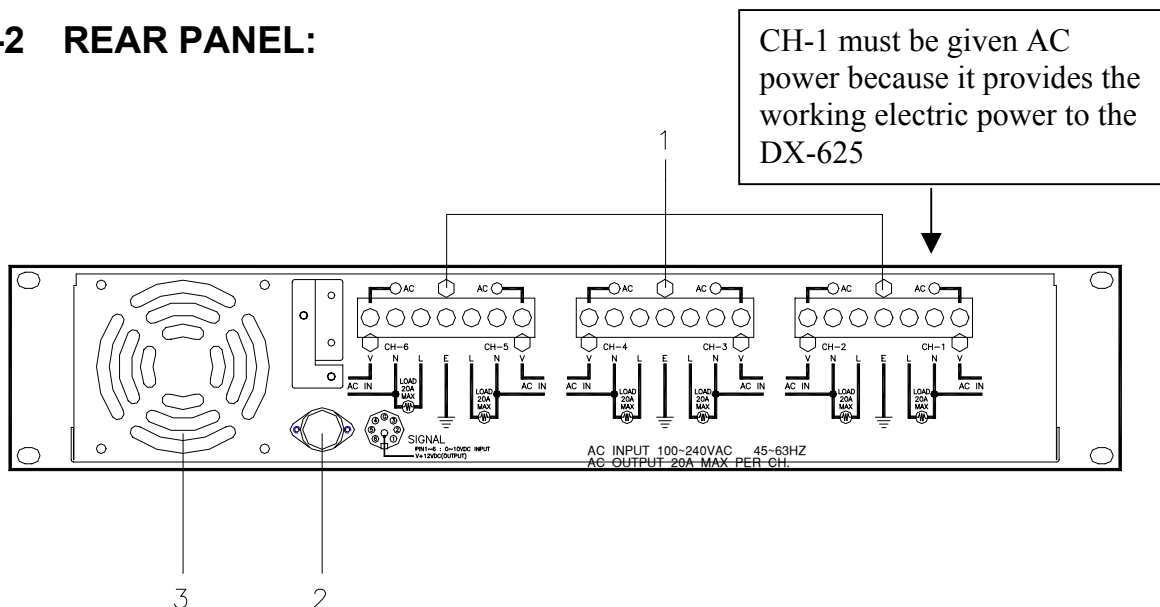
(1) AC POWER INPUT/OUTPUT TERMINAL	(3) FAN
(2) ANALOG SIGNAL INPUT 0-10VDC	

Chapter 3 . Function

FUNC + 1 ：(1)FADE IN/ OUT TESTING.

(2)DIMMING LEVEL TESTING.

(3)DIMMING LEVEL MONITOR

FUNC + 2 ：TO SET ANALOG / DMX / OFF SIGNAL IN FOR EACH CHANNEL.

FUNC + 3 ：TO SET DIMMING /SWITCH FOR EACH CHANNEL.

FUNC + 4 ：TO SET WARM UP 1—10% FOR EACH CHANNEL.

FUNC + 5 ：TO SET C2 / C3 DIMMING CURVE.

FUNC + 6 ：TO MONITOR THE INTERNAL TEMPATURE OF DX-625.

REMARK:

" FUNC + 1 " means holding the "FUNC" key and press "number 1" key.

3-1   DMX /ANALOG / OFF mode setting   【FUNC + 2】

3-1-1   TO SET DMX MODE:

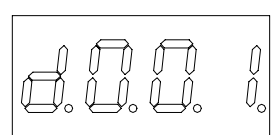※ *Under ANALOG mode：*
   DMX 512 dimming signal is acceptable

Eg: Set Ch .7 to be the start address for DMX IN.

Operation:
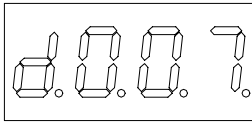
Press 【FUNC + 2】each time， LED will display as follows：

d.0.0.1. ➞ *A.E.0.6.* ➞ *.0.F.F.*
DMX mode   ANALOG mode   OFF mode

STEP 1 ：**Press【FUNC + 2】**and LED displays：

4 gree glimmering points are waiting for being set.

STEP 2：**Press【▲】**，and LED displays：

STEP 3：**Press【ENTER】**to confirm，and Ch .7 will be set the start address for DMX IN. (start address of DMX signal)。
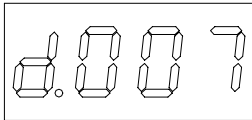
1 green point will glimmer when setting is finished.

Assist key：

Press【 ▶ 】: Increase 1 channel
    eg: Led display from d 0 0 1 to d 0 0 2.

Press【 ◀ 】: Decrease 1 channel
    eg: Led display from d 0 0 2 to d 0 0 1.

Press【 ▲ 】: Increase 6 channels.
    eg: Led display from d 0 0 1 to d 0 07.

Press【 ▼ 】: Restore back to d 0 0 1.

Press【ENTER】: To confirm.

You can press【▶】【◀】【▲】【▼】 to modify DMX Address directly under DMX mode.

> **PS.**
> **(1):There are 512 start addresses to be set under DMX mode.**
> (There are series 6 ch. output to each DX-625).
>
> Eg: start address d001: DMX CH.1-6 output.
>   start address d0013: DMX CH.13-19 output.
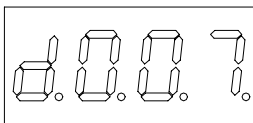> **(2):Users can set the same address for over 2pcs of DX-625.**

3-1-2 TO SET ANALOG MODE:

 ※ *Under ANALOG mode：*
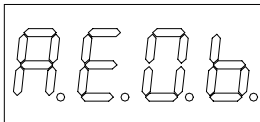 *Only ANALOG signal is acceptable and DMX output does not work.*

take the example of 3-1-1：
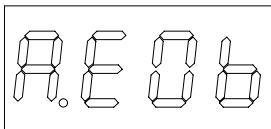
Eg: Set ANALOG IN mode to DX-625.

STEP 1：**Press【FUNC + 2】**，and LED displays：

```
d.0.0.7.
```

STEP 2：**Press【FUNC + 2】**，and LED displays：

```
A.E.0.6.
```

STEP 3：**Press【ENTER】**to confirm and LED displays:
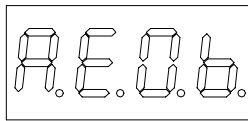
```
A.E 0 6
```

3-1-3　TO SET OFF MODE:

※ *Under OFF mode：*
DX-625 will not accept any signal.
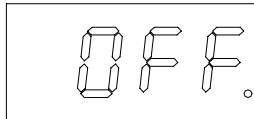
take the example of 3-1-2：

Eg: Set OFF mode to DX-625.

STEP 1：**Press【FUNC + 2】** and LED displays：

```
A.E.0.b.
```

STEP 2：**Press【FUNC + 2】** and LED displays：

```
.0.F.F.
```

STEP 3：**Press【ENTER】** to confirm and LED dispalys：

```
0 F F.
```
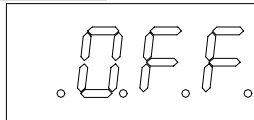
PS. DX-625 will show the mode chosen before turning off.
　　For example, if "DMX" mode was selected, then "DMX" mode continues when
　　system is turned on.

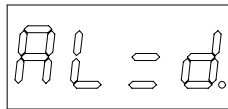## 3-2   How to connect over 2 pcs of DX-625
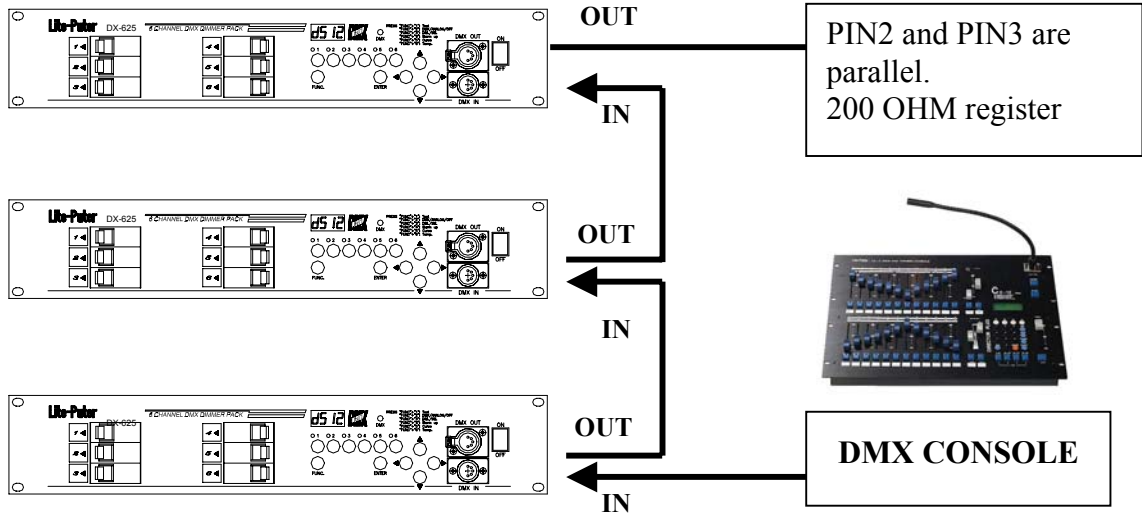
In order to make sure the realiability of long distance signal transfer (over 100 meter)，please connect with 200 OHM terminal resistor (PIN2, PIN3) ON the last DX-625 output.
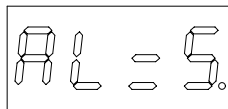
3-3　Dimming/ switch mode setting 　　　　　　【FUNC + 3】

Operation:

Press【**FUNC + 3**】and press the 【▲】、【▼】key to change dimming / switch mode. Then press 【**ENTER**】 to confirm .

$AL = d$	⟶	AL: means all channels. d:　means dimming mode.

$AL = S$	⟶	AL: means all channels. d:　means switching mode.

Under SWITCHING mode: there are no dimming/ warm up functions and it shows OFF (dimming level 0 %) / FL(100 %) only.

For FL status： **the dimming level given must over 51% to light it up.**

For OFF status： **the dimming level given must under 20% to turn it off.**

Assist key：

Press 【 ▶ 】 : Increase 1 channel ------ Set individual channel

Press 【 ◀ 】 : Decrease 1 channel ----- Set individual channel
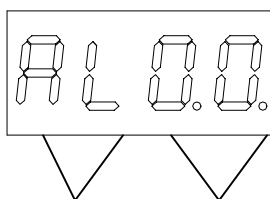
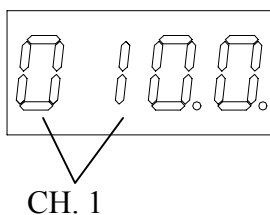## 3-4　　Warm up 0-10%　　　　　　　　　　　　　　【FUNC + 4】

EG: Warm up 6.0% for channel 1.

Operation:

Press【FUNC + 4】and press【◂】、【▸】to channel，then press【▴】、【▾】
to adjust the warm up value.　Press【ENTER】to confirm.
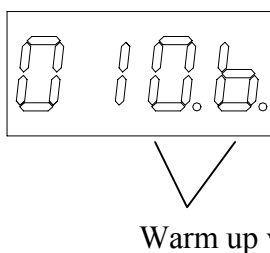
STEP 1：Press【FUNC + 4】and LED displays：

All channles　　**Dimmer-warm up value(0 ~ 10.0%)**

STEP 2：Press【▸】and LED display：

CH. 1

STEP 3：Press【▴】to adjust the warm up value to 6%.

Warm up value

Assist key：

Press【 ▸ 】: Increase 1 channel

Press【 ◂ 】: Decrease 1 channel

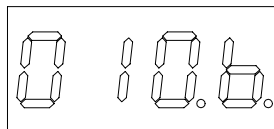**Press【 ▴ 】: Increase warm up value**

Press【 ▾ 】: Decrease warm up value

3-5　How to supervise the dimming level for each channel 　【FUNC + 1】

EG.: To supervise CH.1 dimming level

Operation:

Press【**FUNC + 1】**,and press【 ◂ 】or【 ▸ 】to CH.1, then it will show what you set in section 3-4.

　　CH.1　　warm up dimming level 6.0% (max.10.0%)

Assist key：
If one of channels' dimming level is tested.

Press【 ▸ 】: Increase 1 channel
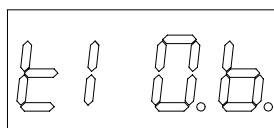　　　　Eg. From 0 1.0.0 to 0 2.0.0

Press【 ◂ 】: Decrease 1 channel
　　　　Eg. From 0 2.0.0 to 0 1.0.0

3-6　Dimming level testing for each channel or all channels.【FUNC + 1】

EG.：*Test CH.1 dimming level.*

Operation:

Press【**FUNC + 1】**and press【 ◂ 】or【 ▸ 】to Ch.1, then it will show what you set in section 3-4.

Test ch.1　　　Dimming level output

> **Please turn off DMX signal input before executing this function.**

Assist key：

Press【 ▶ 】: Increase 1 channel
Eg. Led displays from 0 1.0.0 to 0 2.0.0

Press【 ◀ 】: Decrease 1 channel
Eg. Led displays from 0 2.0.0 to 0 1.0.0

Press【 ▲ 】: Increase dimming level.

Press【 ▼ 】: Decrease dimming level.

3-7	**Fade in and Fade out automatical testing**
	for each channel or all channels 【FUNC + 1】

Operation:
Press【**FUNC + 1**】and press【 ◀ 】、【 ▶ 】to choose the channel number and execute
test function. The machine will restore the previous situation
automatically after one minute.

> This function will be cancelled automatically
> when DMX / ANALOG input.
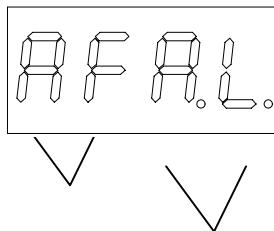
Automatic
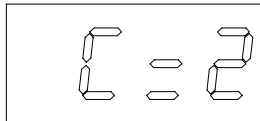Fade in
and Fade out   **A**ll channels

Assist key：

Press【 ▶ 】: Increase 1 channel.   *1 → 2 → 3 → 4 → 5 → 6 → AL*
Press【 ◀ 】: Decrease 1 channel.   *AL → 6 → 5 → 4 → 3 → 2 → 1*
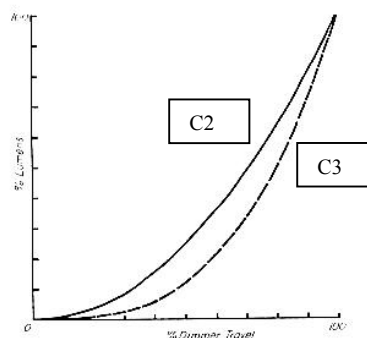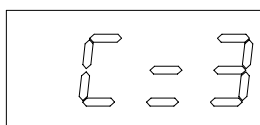**The function will be stopped when you choose another function.**

3-8 How to set C2 / C3 dimming level 【FUNC + 5】

"C2 curve"： To show the exact linear relation between dimming and output
, please check the diagram below.

```
[ = 2
```

"C3 curve"： It is suitable for stage lighting, the voltage is in linear proportion to the corol level.
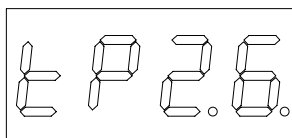
```
[ = 3
```


Operation:
Press 【**FUNC + 5**】 and press 【 ◂ 】 or 【 ▸ 】 to choose C2 / C3dimming curve, then press 【**ENTER**】 to confirm.

3-9 Display internal temperature 【FUNC + 6】

```
t P 2.6.
```

> **DX-625 can display internal temperature to prevent from overheat to control the operation.**

Operation:
Press 【**FUNC + 6**】 to display internal temperature.

(1) When the internal temperature is over 37℃,the fans start to work 1 minute and stop 1 minute in turn.

(2) When the internel temperature is over 41℃,the fans turn continously.

(3) When the internal temperature is over 75℃, all outputs will be stopped. Please check if it is overloaded and the dimmer rack is stuffy.

Quality certification

- **Each DX-625 must be detailed specificated before shipping. LITE PUTER offers 2 years guaranty for repairment free of charge under normal usage.**
- **Transportation fee will be charged for repairment by engerineer service in your place.**
- **Spare parts cost will be charged for the machine over 2 years.**
- **The repaired machine sent back must keep everything complete, the change of its CPU or PCB inside is prohibited.**

DX-625 [EUM-B]