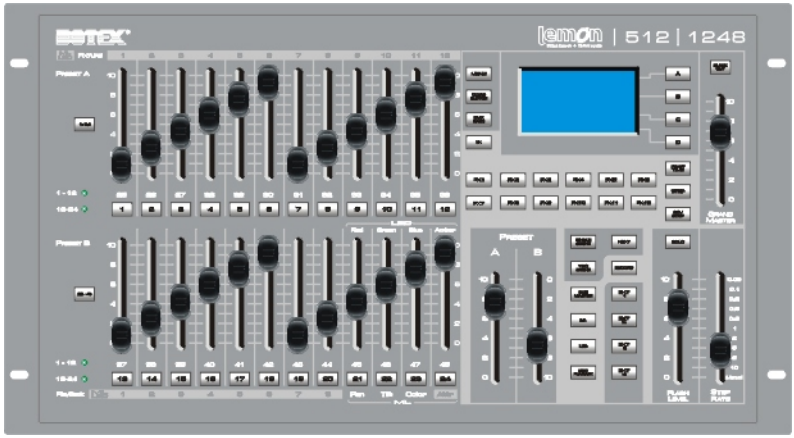
LEMON 512-1248/2496



USER MANUAL

It is important to read this instruction book prior using your new product for the first time.

Table of Contents

Introduction 1

For Your Safety 1
Notice Information 2

Specifications 3

Getting Acquainted .....4~8

Features 4
Basic Control Layout..... 5
Basic Control Parts.....6~7
Connection Ports..... 8

Normal Operation.....9~27

Single Scene Mode..... .....9~10
Next Function.....10
Two Scene Mode..... 10
SubMaster Mode..... .....11~16
Crossfade.....12~16
Record Function.....12
Record SubMaster.....13~14
Record Fx1~F12.....15~17
How to Edit a scene.....16
How to Trigger Fx.....17
How to Delete Fx.....17

ML(Moving Light)..... 18
LED Mode..... .....19~22

Table of Contents

Mem Playback Mode.....23~24

MENU..... .....25~28

ASL Patch.....25

DMX Patch.....26~27

1. Channel Patch.....26

2. DMX Ptach.....26~27

3. Default.....27

LCD Set.....27

Update Software.....28

Update Vga-P.....28

Rev1.00.....28

Introduction

Congratulations on your purchase of the Lemon control console. Lemon compact lighting control console, versatile, powerful, three in one control, from BOTEX. The following configuration of Lemon are available.

----**Lemon 512-1248,** 24 faders control conventional, moving light and LED fixture channels, control 8 ML fixtures up to 40 channels each and 8 LED fixtures.

----**Lemon 512-2496,** 48 faders control conventional, moving light and LED fixture channels, control 24 ML fixtures up to 40 channels each and 24 LED fixtures.

Every unit has been thoroughly tested and carefully packed before shipment. Unpack the shipping carton carefully, saving the carton and all packing materials for possible later use.

Check carefully for sure your product is not damaged and all accessories not missing. If your product appears to be damaged or missing, please do not use it and contact your local distributor immediately.

Please read this manual carefully and thoroughly, as it gives important information regarding safety, use and maintenance. Keep this manual with the unit for possible future reference.

For Your Safety

- To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- Do not spill water or other liquids into or on to your unit.
- Turn off immediately in the event of malfunction.
  Should you notice smoke or unusual smell coming from the equipment, please discontinue using it and disconnect from the power immediately.
- Do not open the unit - there are no user serviceable parts inside.
- Do not dismantle or modify the unit, as this voids all warranties.
- Do not attempt repairs. Repairs by unqualified people could cause damage or faulty operation. Contact your local authorized service center.

Introduction

Notice Information

Keep dry

This product is not waterproof, and may malfunction if exposed to high levels of humidity. Rusting of the internal mechanism can cause irreparable damage.

Do not drop

This product may malfunction if subjected to strong shocks or vibration.

Keep away from strong magnetic fields

Do not use or place this device in vicinity of equipment that generates strong electromagnetic radiation or magnetic fields. Strong static charges or the magnetic fields produces by equipment such as radio transmitters could interfere with the display or affect the product's internal circuitry.

Cleaning

Due to fog residue, smoke, and dust cleaning the exterior of the case may become necessary. Use normal glass cleaner and soft cloth to wipe down the outside casing.

Copyright Notice

No part of the manual included with this product may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without authorized written permission.

Specification

Model:	Lemon 512-1248/2496
Power Requirement:	DC 9~12V 2A Max
Housing:	Electrolytic Plate with powder finishing
LCD:	60x128 dot, TFT LCD with contrast adjustment
Inputs/Outputs	**DMX IN:** 3 pin Neutrik XLR Connector **DMX OUT:** 3 pin& 5-pin Neutrik XLR connector **POWER IN:** Connects External power source **USB:** USB connection for up/downloading data and updating software **Art-Net:** Art-Net connection for faster communication with the other compatible devices
Overall Dimensions:	71.8x26.5x6.5mm
Weight:	Approx. 6.5 Kg
Accessory:	1. An external AC~DC adaptor(Included) ; 2. 800 x 600 VGA monitor output (Optional) 3. Wireless DMX (Optional)

VGA Card
---optional, sold separately

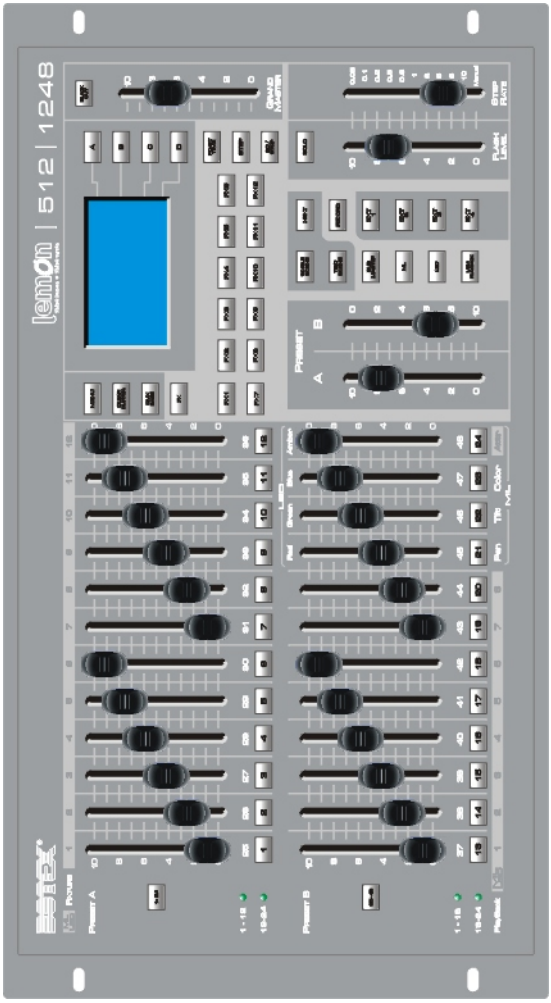
All rights reserved. Improvement and changes to specifications, design and this manual may be made at any time without prior notice.

Getting acquainted

Principle Features

- Professional DMX512 console, ideal for conventional lights, moving lights and LED fixtures
- Versatile, powerful, three in one control
- LCD display for easy operation with contrast adjustment
- USB port for uploading/downloading data or updating software
- Artnet port for faster communication with compatible device
- DMX IN allows 3 pin XLR connector to connect external console
- DMX output accepts two group DMX512 3 pin & 5 pin XLR connector from the dimmers or any other DMX device
- Back lighting buttons changes color depending on their state
- Grand Mater fader for total output control
- 1152 recordable scenes(24 pages x 48 scenes) in Sub Master mode for conventional lights
- 24 faders(48 faders for Lemon 512-2496) control conventional, moving light and LED fixture channels
- Controls 8 ML fixtures(24 ML fixtures for Lemon 512-2496) up to 40 channels each.20 playbacks x 99 steps in Moving Light mode
- Controls 8 LED(RGBA) fixtures(24 LED fixtures for Lemon 512-2496) .20 playbacks x 99 steps in LED mode
- 12 built-in FX just records contents in Single Scene, Two Scene, Sub Master modes to instead of contents in ML and LEDs. Each FX has his individual Fade Time and Step Time, max 99 steps for each FX.
- Available in six operation modes: Single Scene, Two Scene, Sub Master, Moving Light(ML), LED and Memory Playback modes.
- Blackout enables to shut all fixtures off
- Memory Playback mode allows a combination of Sub Master, LED and Moving Light playback
- Power requirement of DC 9~12V 2A power supply
- Wireless DMX (optional)
- VGA (optional) allows for 800 x 600 monitor output

Basic Control Layout



Basic Control Parts

- **Key 1-48 & Key 49-96:**
  Used to Page up/down for fader.To choose Key 1-48 to master fader 1-48, to choose Key 49-96 to master fader 49-96.
- **Key 1,Key 2, Key 3,...Key48 :**
  Means Bump 1,Bump 2,Bump 3,...Bump48.
- **SingleScene :**
  Tap this key, the unit will work in SingleScene Mode .
- **TwoScene :**
  Tap this key, the unit will work in TwoScene Mode .
- **SubMaster :**
  Tap this key, the unit will work in SubMaster Mode .
- **ML(Moving Light) :**
  Tap this key, the unit will work in ML Mode .
- **PlayBack :**
  ap this key, the unit will work in PlayBack Mode .
- **NEXT :**
  Tap this key to process CrossFade for Scene AB under SingleScene Mode.
- **Record :**
  Used to record Scene(SubMaster and Fx1-12).
- **EXT 1,EXT 2,...EXT 4 :**
  The key of on/off .
- **Key A,Key B ,Key C,Key D:**
  Soft key A,Soft key B,Soft key C, Soft key D.
- **Menu :**
  The key used to program each parameter .
- **FX :**
  Tap this key, the key Fx1-12 are available for FX mode.

Getting acquainted

Basic Control Parts

- **DmxBase :**
  Tap this key,the Chase 1-12 will be under the FX Mode .Maximum of 99steps per chase, 12 chases can be running synchronously.

- **FD/ST TIME:**
  The Fader Time is available when the indicator is red. The Step Time is available when the indicator is yellow.

- **STEP :**
  Manually run FX1-12.

- **GO/STOP :**
  Used to start or stop the running of FX1-12.

- **SOLO :**
  I t means bump 1-12 has Solo function or not.

- **FADERS**

1.Fader1,Fader 2, Fader 3,..Fader48:
Means channel 1,channel 2, Channel 3,..Chanel 48. If you choose Key 49-96, it means Channel 49-96.

2.Preset A and Preset B:
The control fader of scene Preset A and PresetB .

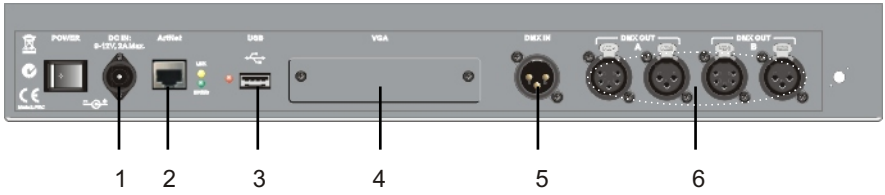
3.Flash Level:
The value of Bump key output.

4.Step Rate:
It is used to set the running time for FX.

5.GrandMaster:
the master controller of DMX output.

Getting acquainted

Connection Ports



1.DC IN Port:
Connects the power source with DC 9~12V,2A Max

2ArtNet Port:
Used to carry out the function of Art-Net.

3.USB Port:
Connects Disk U for posing file or download updated software.

4.VGA Port:
Displays the working status of the unit with the pixel of 800x600.

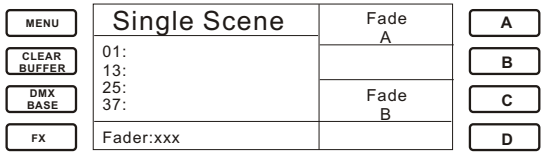
5.DMX IN Port:
Connects and receives DMX signal.

6.DMX OUT Port
Outputs DMX signal

Normal Operation

Single Scene Mode

Powered the unit on,the LCD shows you

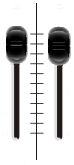


Tap the corresponding key to choose "Fade A" or "Fade B",eg.Tap key A to choose "Fade A" or tap key C to choose "Fade B", tap the corresponding key again,the selection will be erased.

Once Fader A or Fader B is selected which will be highlighted. You can push StepRate Fader to set the FaderTime for Preset A or Preset B at this time.

Use **"NEXT"** function

Tap "NEXT" key to activise "NEXT" function which indicator was lit. Use this function to carry out the CrossFade of Scene A & B. The following is the details.



1: Push preset A & Preset B Fader to topmost position, press "NEXT" to choose a scene(A)---Push the related feader of the bumps to set the value for the corresponding channels as scene(A).

2: Push preset A & Preset B Fader to bottom, press "NEXT" to choose another scene(B)----Push the relatedd feader of the bumps to set the value for the corresponding channels as scene(B).

3: Push preset A & Preset B Fader, you can alternate between Scene A and B.

4: Push preset A & Preset B to topmost position, press "NEXT" to exit NEXT function .

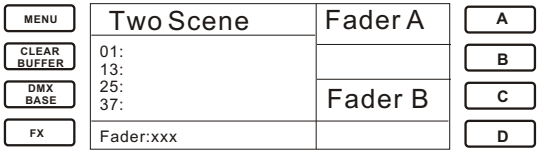
Normal Operation

Single Scene Mode

Note: In Singlescene Mode, if any bump (Channel) was programmed (push the fader of the bump to set the value), at this time to tap Submaster, the programmed bump will be available in SubMaster model. Tap Single Scene key to back to SinglScene mode, the indicator of Single Scene will light with yellow(when the indicator lights yellow, any other function keys will be void but GrandMaster) , tap it again, it's indicator will light with green, then the user can re-edit the settings.

Two Scene Mode

Tap TWO SCENE Key enter into TwoScene Mode, the LCD shows



The Fader on the front panel which consists of Preset A(Scene A) and Preset B(Scene B).The Scene A & B correspond the same channel.

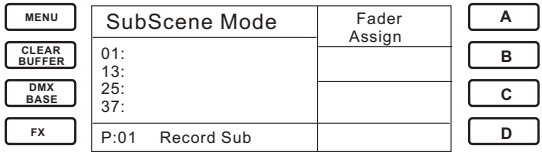
Push Preset A & Preset B Fader, you can alternate between Scene A and B.

SubMaster Mode

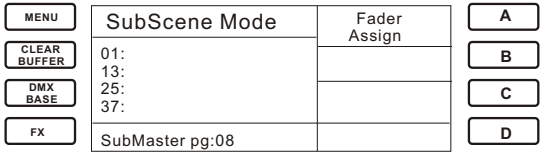
Press the SubMaster key to choose SubMaster Mode.

Total 1152 piece of SubMaster are available, 24 pages, 48 piece of SubMaster per page.

Press SubMaster key, the LCD will show you the current page.

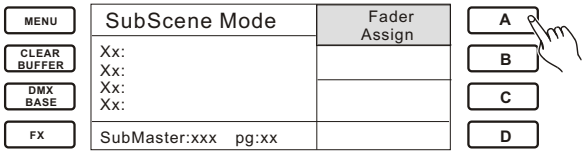


Hold on SubMaster Key and tap Bump 1-24 to select the page you want to operate. For example, we supposed we want to operate p age 8 :Hold on SubMaster key and tap key of bump 8, the bump 8 indicator was lit with red.



The recorded SubMaster will display red (Half intensity).

How to set the Fade Time for each SubMaste?.



Operation:

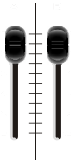
1: Press key A to highlight FadeAssign.

2: Hold down the button of the recorded SubMaster you want to configure and push StepRate Fader to modify the FadeTime for it.

Normal Operation

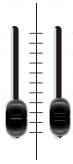
Crossfade

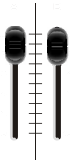
A crossfade allows one scene to fade out as another scene is fade in.



In Submaster mode, the user can crossfade in sequence. Make sure the Preset A & B fader are in the top position.

Move the preset A & B faders down (the first recorded bump's indicator will begin blink yellow).





Now move the preset A & B faders up to fade in the first scene(the first recorded fader indicator will stop blink and the scene will fade in) .

When the fade in is completed the second recorded bump indicator will begin blink yellow. Repeat down and up fader action to continue crossfading between scenes. This will crossfade the second scene with the first one. Repeat the process will crossfade all available scene until it reaches the last scene of page two and returns to the first recorded scene of page one again.

Additinal information for crossfading.

1)To stop the crossfade, move only preset A fader down and then up. This willfade out the last output scene .

2)Changing mode will also stop the crossfade immediately and take out the last fade out that is not recommended.

3)Any empty submasters, submasters with effects or submasters that already have a level, will ignored. For example, if any of the submasters are already in the up position(outputting a level), the sequential crossfade will start from the scene immediately after the highest outputting fader(i.e, if fader 1,3,5 are up, the crossfade will start from scene 6).

4)The LCD will show the fader percentage values for both the fader in and fade out as the fade occurring.

Record Function

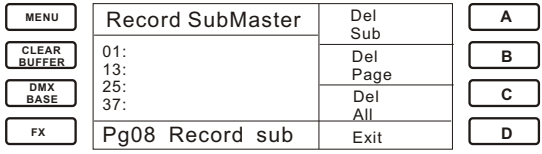
a)Record SubMaster

1: Tap Record Key to light Record indicator. Among Bump 1-48, the indicators of those blank bumps will flash, and the indicators of those recorded Bumps will black out.

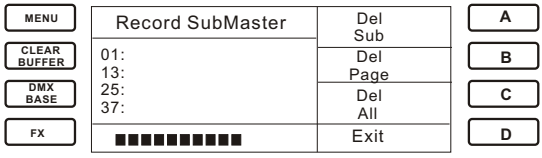
2: Push StepRate fader to set FadeTime for SubMaster.

3: To choose the one of the Bump1-48 to record the current output Scene and FadeTime into this Bump. For example, we take the Bump 34 as an instruction.

Tap Record key, the LCD shows you



Tap the key of bump 34, the unit records the current output Scene and FadeTime into bump 34 .



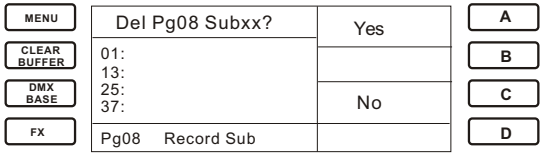
Repeat the above step for the next SubMaster Recording.

After recordation, the indicator of bump 34 will light red as well and the button Record will black out .

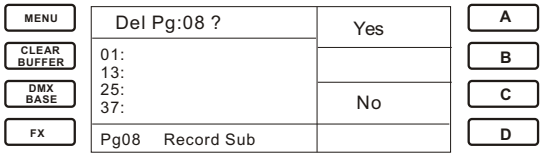
Also, in Record Submaster mode, the user can select the function of "Del Sub", "Del Page" and " Del All".

Record Function

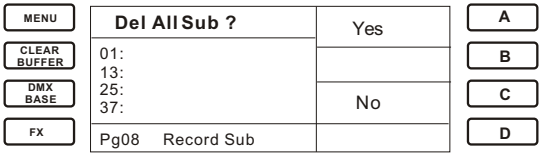
Press key A to choose "Del Sub", the LCD shows you as below. Press A to perform "Yes" or Press C to exit. **Note**: Before to Delete any SubMaster, the user should press the key of the bump first, thus the SubMaster will be selected, and then press A to delete it.



Press key B to choose "Del Page", the LCD shows you as below. Press A to perform "Yes" and Press C to exit.



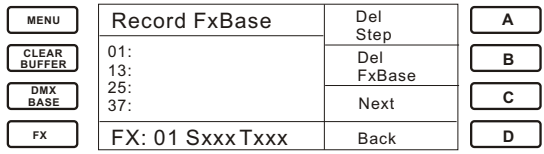
Press key C to choose "Del All", the LCD shows you as below. Press A to perform and Press C to exit.



Record Function

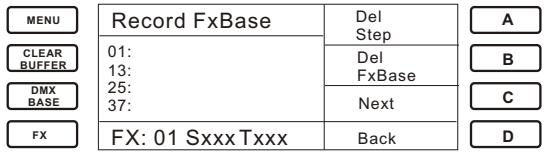
b)Record Fx1~Fx12

1. Tap Record ,the Record indicator was lit.
2. Tap the FX1-12 you want to record. For example, choose Fx1.
3. The LED will flash with blue on Fx1. The LCD will show you the information of Fx1.



Sxxx means the current step.
Txxx means the total steps.

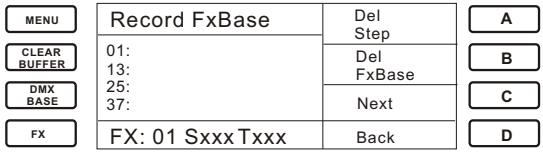
4. Press "STEP" key can record a scene and run Sxxx & Txxx, that is to say after a scene completed for FX1, press STEP key, the scene can be recorded to the current step.



5. If want to cancel any step, you can use the Next(Tap button "C") or Back(Tap button "D") to choose the step you want to cancel. Tap "A"(Del Step), the step can be cancelled.

Operation: Tap key "C" or "D" to choose the step, tap key "A" to perform "Del Step".

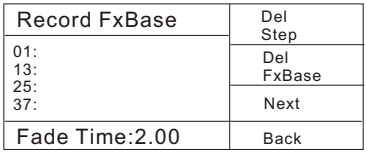
Record Function



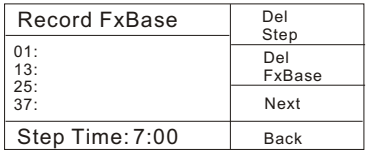
6.As the item 5 shows, if you want to insert a Scene before any step, you can use the Next or Back to select the step you want to insert a Scene before of it, tap STEP to insert the Scene before the step.

7. How to adjust FadeTime and StepTime for FX?

Operation: Tap FD/ST time key, the indicator will be lit, the red means FdTime and the yellow means StepTime. Push StepRate fader to adjust the Fade/Step time.



The SD/ST TIME key is red.



The SD/ST TIME key is yellow.

8:Tap Fx1 again to complete FX posting.

9. Exit Record

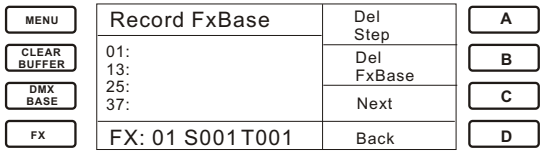
Tap Record key to quit from the recording status.

How to edit a scene?

In Record Fx Mode, tap the key of the Fx(1~12), eg, tap Fx1, the indicators of bump are flashing with red, push the fader of the bumps you desire to edit, tap "FD/ST" key and push it's fader or StepRate fader to set your value(Fade time and Step time), tap STEP key to record the value to current step(eg. Step001), to repeat the above process to set the value for the next step for

Record Function

Fx1. After setting complete, Tap Fx1 again to record the value. In terms of this method, the user can set the value for the other Fx.



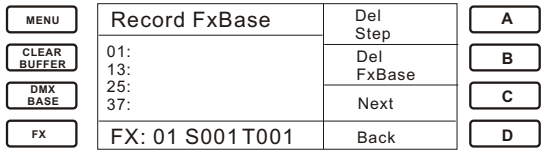
How to trigger FX?

After the recording complete for a Fx(1~12), press the key of it, it's indicator will be lit with red, tap it again, the indicator will flash with yellow, tap GO/STOP key, it's indicator will blink red and the unit will run as Runstep(sequence). To tap theisFx(1~12) key, it's indicator will flash yellow, tap GO/STOP key, the chasing will stop and the Fx(1-12) indicator will light with red.

Note: The total 12 chases can be running synchronously, max. 99 steps per chase.

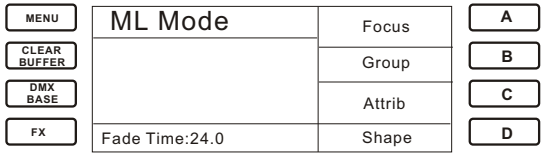
How to Delete FX?

In Record Fx mode ,as the following LCD shows, tap B to choose Del FxBase, and then tap the key of the programmed Fx1~12. The selected Fx can be deleted.

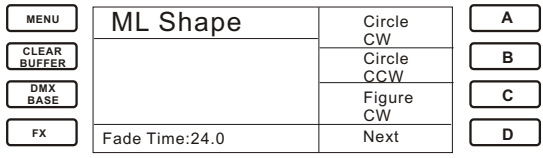


ML Mode

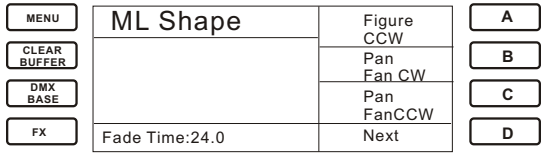
Press the ML key to choose ML Mode which consisting of Focus, Group, Attrib and Shape.

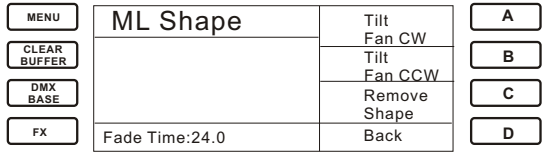


Press button D to enter into "Shape" sub-mode". The LCD shows you

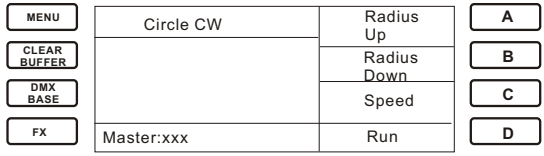


Press button D to enter into next page of "Shape" sub-mode. The LCD shows you



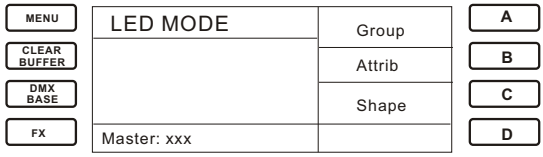


At this time, the user can tap the button(A,B, C) to perform the related function.

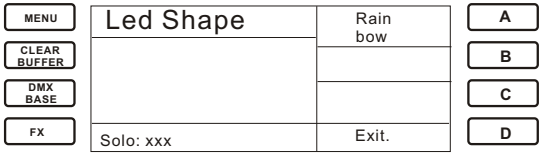


LED Mode

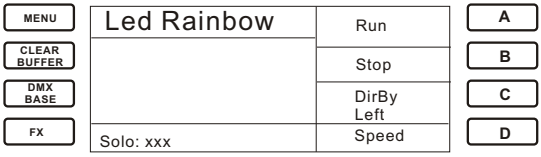
Press the LED key to choose LED Mode.



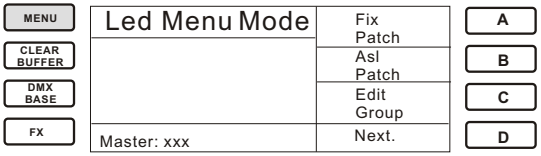
The user can choose the function want to perform.
Tap C to select the "Shape" function. The LCD shows

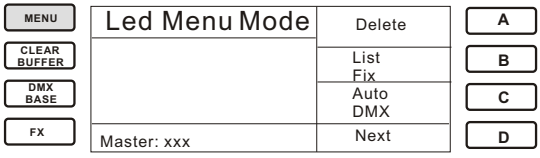


Tap A to choose Rain bow

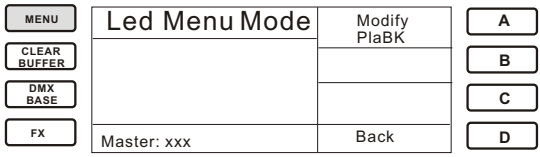


Tap MENU key, the LCD shows

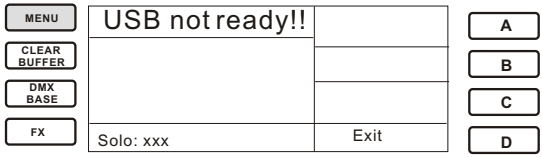




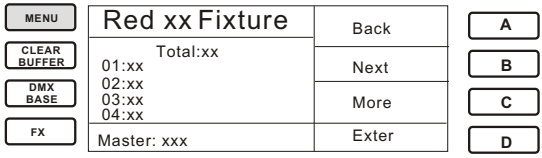
LED Mode



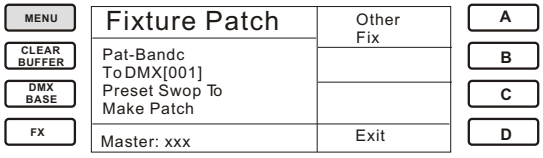
The function "Fix Patch" and "Asl Patch" are available only when a USB is insert into the unit. Otherwise the LCD will show you



Once a USB is insert into the unit, to select function" Fix Patch", the LCD will show you

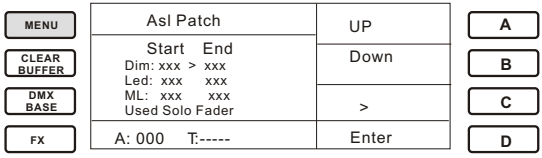


Press "A" to perform "Back"
Press "B" to perform "Next"
Press "C" to perform "more" to view the more fixture
Press "D" to perform "Exter", the LCD will enter into another page



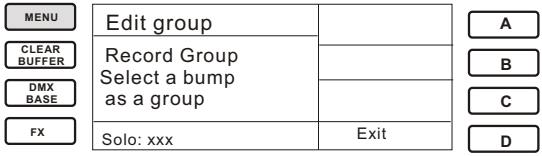
LED Mode

To choose the function "Asl Patch", the LCD will show you



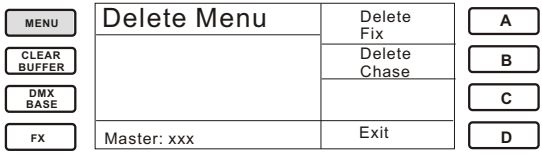
Press "A" to increase the figure
Press "B" to decrease the figure
Press "C" to move ">"
Press "D" to perform "Enter" for confirmation
Press "Menu" to cancel

If the user choose the function "Edit Group", at this time the bump 1~12 will blink and the LCD will show you

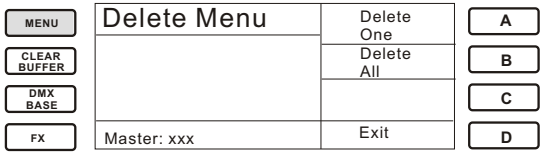


The user can press a bump from 1~12 to make it as a group. To repeat this step to set the more groups.

To choose the function "Delete", the LCD will show you

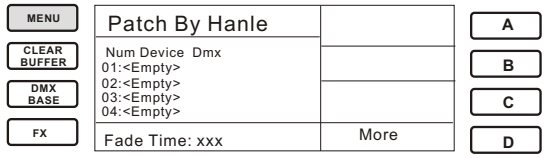


The user now can choose "Delete Fix" or "Delete Chase", and then to choose "Delete One" or "Delete All".



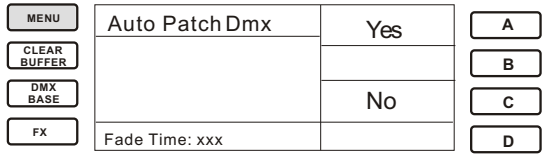
LED Mode

To choose the function "List Fix", the LCD will show you the devices status.

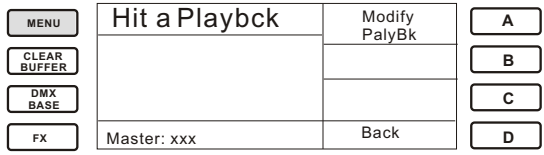


Tap D to learn more devices or tap MENU to exit.

To choose the function "Auto Dmx", the unit will auto patch DMX.

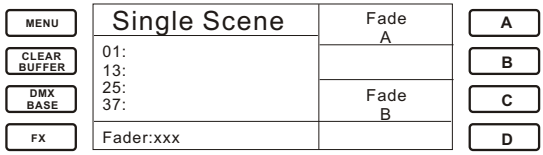


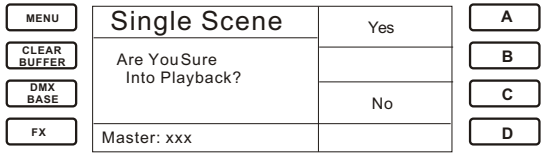
If the user choose the function "Modify PlayBK", the LCD will show you



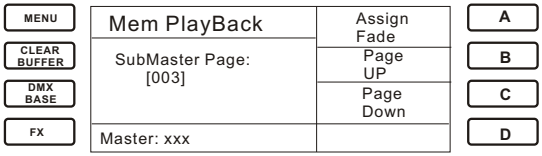
Mem Playback Mode

Press the MEM PLAYBACK Key, the unit will transfer to Mem Playback Mode from the current working mode such as Single Scene, Two Scene, Submastter Scene, ML and LED.



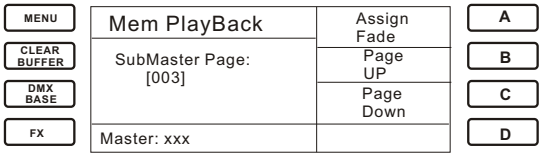


Tap A to choose "Yes", the unit will enter into Mem Playback Mode.



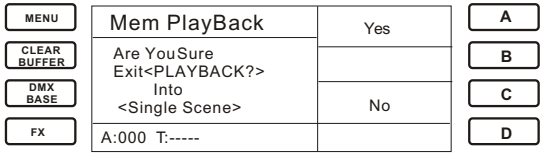
Tap C to choose "No", the unit will work as the current mode.

In Mem PlayBack mode, the user can tap A to highlight "Assign Fade", tap B or C to select "page Up" or "Page Down" ,and then adjust the related parameter.



Mem Playback Mode

At this time, the user choose the another mode with pressing the related button. The unit will indicate as below.



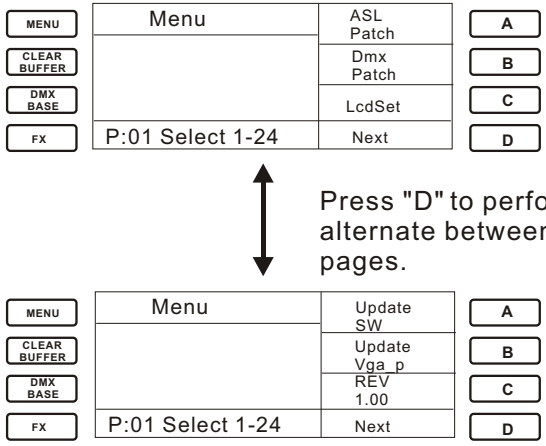
Tap A to choose "Yes", the unit will go into the mode you desire to enter.

Tap C to choose "No", the unit will work as the Mem Playback mode.

MENU

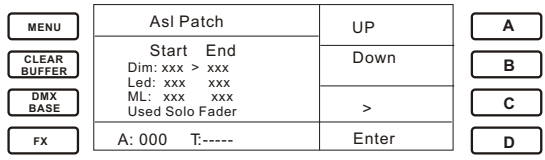
Menu mode consists of the following related parameter.

1: ASL Patch
2: DmxPatch
3: LcdSet
4: Update Sw
5: Update Vga_p
6: REV 1.00



ASL Patch:

Used to set the DMX channel of Dimmer, LED and MI. The "Up" , "Down" and ">" are used to set related parameters.



MENU

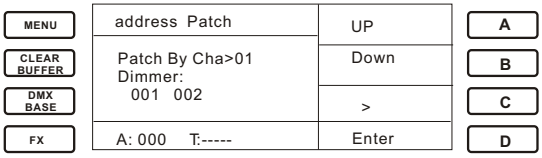
Press "A" to increase the value
Press "B" to decrease the value
Press "C" to move ">"
Press "D" to perform "Enter" for cofirmation
Press "Menu" to cancel

DmxPatch

Used to set the corresponding configuration of Channel to DMX and DMX to Channel.

1. ChanPatch

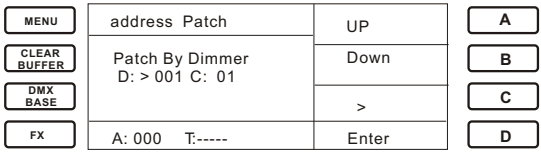
Used to set the setting of Channel to DMX. The SoftKey can be used to configure the DMX of each Channel.



Press "A" to increase the value
Press "B" to decrease the value
Press "C" to move ">"
Press "D" to perform "Enter" for cofirmation
Press "Menu" to cancel

2. DmxPatch

Used to set the setting of DMX to Channel. The SoftKey can be used to configure the Channel of each DMX .

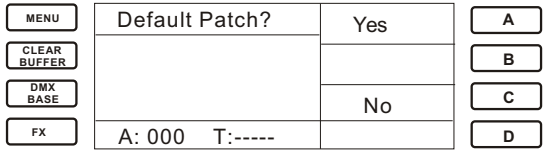


MENU

Press "A" to increase the value
Press "B" to decrease the value
Press "C" to move ">"
Press "D" to perform "Enter" for cofirmation
Press "Menu" to cancel

3. Default

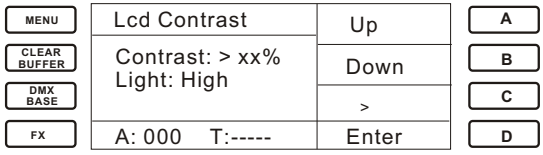
Used to resume the initial settings.



Press "A" to perform "Yes"
Press "C" to perform "No"

LcdSet

Used to set the contrast and backlight brightness of the LCD.



The contrast can be adjusted from 0~FL% and backlight brightness can be adjusted as "High", "Middle" and "Low"
.

Press "A" to perform "UP"
Press "B" to perform "Down"
Press "C" to move ">"
Press "D" to perform "Enter"
Press "Menu" to cancel

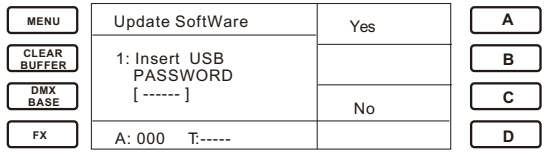
MENU

Update SoftWare

Used to update software.

The download file is saved in the path of \LM\BOOTLOAD.BIN
\LM\LEMON512.BIN

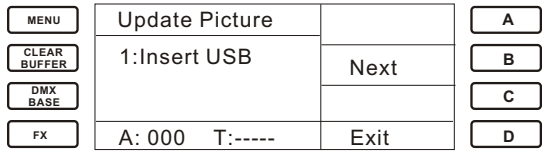
NOTICE: The path and name of file can not be changed.



1. Insert the disk U which saves the download files.
2. Input password:168168.
3. Press "A" to choose "yes".
4. After automatic updating, restart the unit.

Update Vga_p:

Used to update the vga and download the new pictures.



REV 1.00:

Shows the current soft ware version is 1.00.