

LIGHTMAN 2500/4000 EB

USER MENU

LMEB-025 / LMGP-025

4Kws



Contents

CONTENTS

1.	Safety instruction and notification -----	01
2.	Overview-----	01
2.1	Product feature-----	01
2.2	Panel instruction-----	02
3.	Technical feature-----	02
4.	Start-up procedure-----	03
4.1	Energizing system-----	03
4.2	Adjusting system-----	03
5.	LCD display control-----	03
5.1	Function instruction-----	03
5.2	Fine Tuning for 1000Hz-----	04
5.3	Fault Code Checking-----	04
5.4	Working Parameters Reference-----	05
5.5	DMX Setup-----	05
6.	Troubleshooting and Service -----	07

1. Safety instruction and notification

- Disconnected EB from power supply before the power supply prepared (pull out the cable plug). Do not pull the connection cable with force. Any repair or change of the EB must be carried out by qualified maintenance personnel and under the supervision of LIGHTSTAR, or be directly carried out by technical engineer of LIGHTSTAR. The user can not open the EB without consultation from LIGHTSTAR, otherwise LIGHTSTAR have right to refuse any repairing.
- Before connecting the EB to the power supply ensure that the socket is correctly wired.
- Lamphead must be disconnected from EB or EB must be disconnected from mains before fitting or replacing a lamp.
- The EB must be switched off before connecting or disconnecting the lamphead or supply cable. To avoid any danger to the user and EB, we highly recommend using original LIGHTSTAR cables and connector.
- The EB satisfies the recognized state standards and industry safety standards that DIN EN60598/1 and DIN EN 60065.
- Supply voltage should not exceed the limit which be given in the "Technical Features" (see content 3). Checking the supply voltage and wiring if correct before start the EB. Over or under the rated voltage both may cause injury to the user and damage to the EB.
- The EB working temperature range must be guaranteed between $-20^{\circ}\text{C}\sim+50^{\circ}\text{C}$.
- Do not operate the EB in high humidity or explosive gas environment.
- Within 3 minutes after the EB startup, the EB is locked, and all operations are INVALID (default output frequency is 75Hz, brightness is 100%).

2. Overview

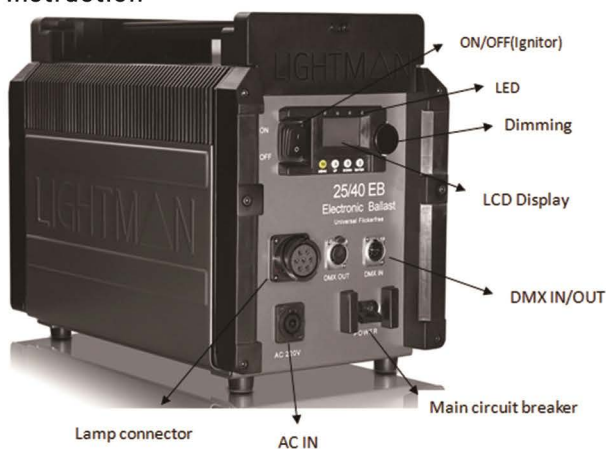
2.1 Product feature

The Lightman 25/40 EB own one-piece structure for driving the 2500W/4000W Halide lamp, it can automatic identify two different power (2500W and 4000W) lamphead, high power density, high efficiency and automatic trouble diagnosis.

1) Flicker-free, 10.000fps (frame per second), perfectly handle high-speed shooting.

- 2) The fluctuation of output light less than 3%
- 3) Compared with inductance EB, Light intensity increased by at least 5%
- 4) Constant power output
- 5) Constant color temperature
- 6) 50% ~ 100% power output adjustment
- 7) At least 20% increase of service life of lamp
- 8) LCD display (adjustment of dimming, output frequency, and lamp power)
- 9) Output frequency: 1000Hz, Fine Tuning range: 800-1200Hz.
- 10) DMX 512 control

2.2 Panel instruction



3. Technical feature

- 1) Supply Voltage: 180–250VAC, 50/60Hz, L, N, PE
- 2) Nominal Current: 24–19A
- 3) Line Power: 4650VA
- 4) Power Factor: 0.98
- 5) Lamp Power: 2500W/4000W constant control
- 6) Current characteristic: Square wave
- 7) Output frequency: 50/60/75/300/1000Hz (Fine Tuning 800–1200Hz)
- 8) Dimming: 50–100%
- 9) Function display: LCD
- 10) DMX control: DMX512–1998 standard
- 11) Starting: Cold start and hot restrike
- 12) Protective Rate: IP22
- 13) Dimensions: W255 * H330 * D450mm
- 14) N.W: 22Kg

4. Start-up procedure

4.1 Energizing system

- 1) Check the EB is disconnected with power supply before energizing, and make sure the power supply is meet the standard of requirement.
- 2) Check the trigger switch and power switch of EB to be at "OFF"-position.
- 3) Confirm the lamphhead meet the requirements of installation.
- 4) After Checked the cable is intact, connect the lamphhead to EB with extension cable properly.
- 5) Connect the EB to the power supply source with appropriate cable.

4.2 Adjusting system

- 1) After preparing for power on, in turn to close (make the switch at "ON" position) the Power supply switch and EB switch.
- 2) The LCD display is on and LED indicator L3 (green) is on.
- 3) Check ground protection: if correct, the green LED indicator light "L4" is on. If not, disconnect the EB from mains line (pull out cable plug), and check power supply and socket.
- 4) After the ground protection is normal, turn on the EB switch, the lamp will be light in 3 seconds. At the same time, the LED indicator L1 is on (yellow).
- 5) After three minutes, the user could adjust the brightness and frequency as required.

5. LCD display control

5.1 Function instruction

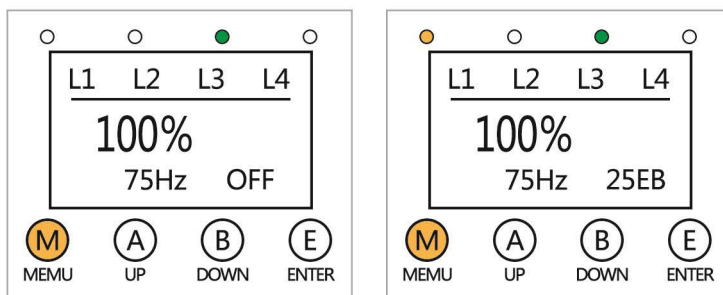


Fig.2 LCD display

When power on, the EB shows as the picture of Fig.2. After startup, the EB is locked within 3 minutes, and all operations are invalid

(default output frequency is 75Hz, brightness is 100%). The percentage in the screen indicates the current output brightness value, user could adjust the Dimming to adjust, the adjustment range of 50-100%.

2) "75Hz" at the underneath of the LCD is the setting value of current frequency, user can modify it by themselves, press "A" or "B" to change the frequency in demand, quick setting item such as 50/60/75/300/1000Hz, the Fine Tuning range for 1000Hz is 800-1200Hz.

3) The "25 EB" at the underneath of the LCD shows the lamp is 2.5KW; when use 4000W lamp, it shows "40EB".

4) If trouble happened, it shows trouble code (5.3 Trouble shooting).

5) Data shortcut: press "E" in the LCD main screen (Fig.2) to go to check the current working data; press "A" and "B" scroll to check working data. Press "E" scroll up and down, and back to main menu.

5.2 Fine Tuning for 1000Hz

Fine Tuning for 1000Hz frequency: press "A" on Fig 2 to go to "1000Hz" Fine Tuning interface. Adjust Dimming knob to adjust frequency between 800-1000HZ. Press Button B to back to main menu.

5.3 Fault code checking

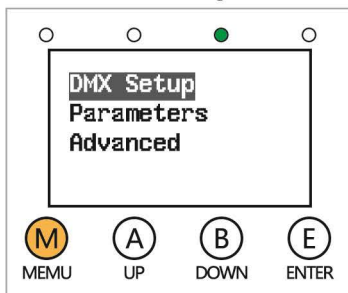


Fig.3 Menu setting screen

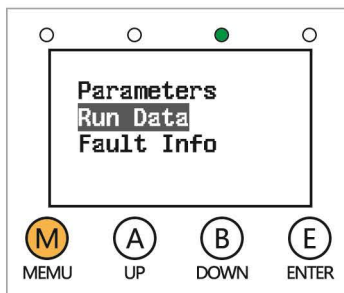


Fig.4 Checking screen

Press button "M" enter Menu setting screen (Fig. 3); then press B to select "Parameters", press button "E" to enter checking screen (Fig. 4) , select "Fault Info" and press the button "E". Press Button "A" and "B" to scroll down the screen to check fault code. Press Button "M" continuously to return the main screen. The Fault code info is as follow.

- 1) "LE" code: system error
- 2) "TEMP" code: temperature protective, it means that the temperature of EB is higher than the normal value.
- 3) "PFC" code, it means that the EB PFC control has current fault.
- 4) "BUCK" code, it means that the voltage control of EB has trouble.
- 5) UVLO" code, it means that the input voltage is lower than 170V.
- 6) LAMP" code, it means the lamphead has trouble.

5.4 Working Parameters Reference

In Checking display (Fig. 4), select "Run Data", press button "E" enter "Working Parameters" item and press "B" to scroll down the screen. Press Button "M" continuously to return to the main menu.

The fault codes are as follows:

- 1) Supply Voltage: 170—250V
- 2) Output voltage: 4000W luminaires: 180—200V;
2500W luminaires: 100—110V.
- 3) Output current: 4000W luminaires: 22—20 A.
2500W luminaires: 25—22A.
- 4) Input current: 13—24A.
- 5) PFC Voltage: 350—370V.
- 6) Working temperature: 40—80°C.

5.5 DMX setup

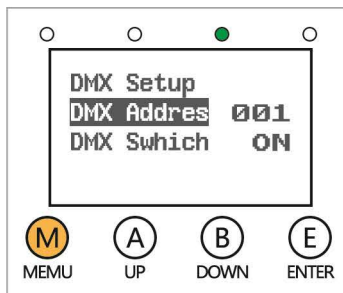


Fig 5 DMX Setup

1)DMX initial address setup

In Menu setting display (Fig.3), press "B" and choose "DMX Setup", then press "E" into the DMX setup(Fig.5). Adjust Dimming key to select "DMX Address". Press Button "M" continuously to return to the main menu.

2)DMX ON/OFF

In Menu setting display, press “B” and choose “DMX Switch”, press “E” into the DMX Switch (Fig.5). Adjust Dimming key to turn ON/OFF DMX. Press Button “M” continuously to return to the main menu.

3)DMX Channel

①The current DMX channel as is power output on-off option, DMX value more than 100 value is "turn on", opposite is "turn off".

②“DMX Channel + 1” is used for brightness adjustment, the adjust value of 50%-100% brightness.

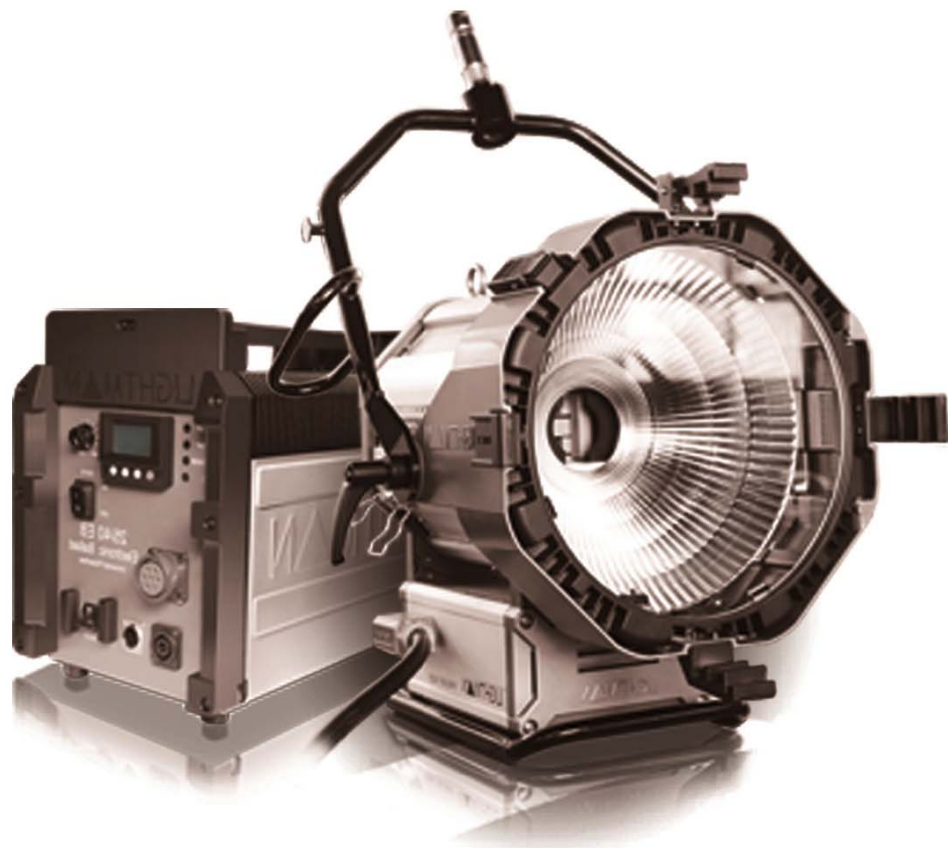
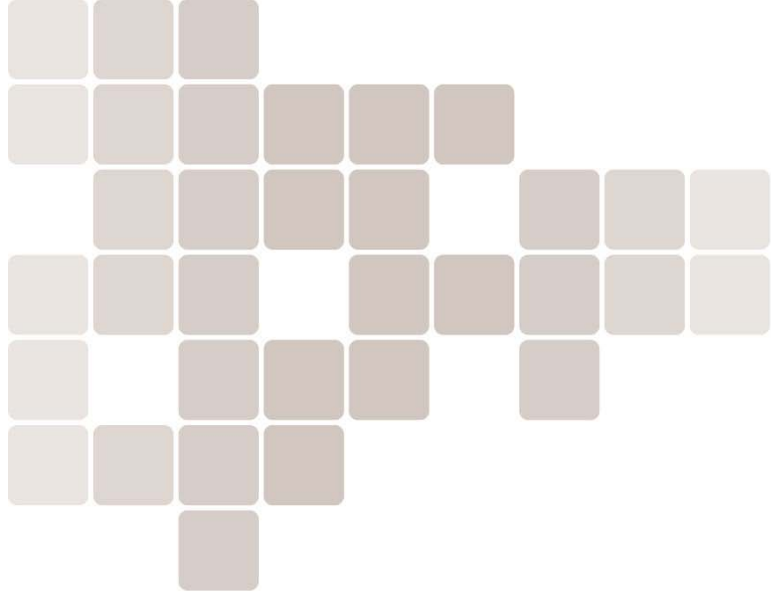
③“DMX Channel + 2” is used for control EB output frequency. The relationship between DMX and outpur frequency is:

DMX Data	Output frequency (HZ)
0-50	50
51-100	60
101-150	75
151-200	300
201-255	1000

④“DMX Channel + 3” is used for 1000Hz Fine tuning, DMX data 0-255, the adjustment value is 800-1200HZ.

6. Troubleshooting and Service

When any fault happened on the EB, the user can confirm the fault through checking the fault code and Working Parameters, then contact with LIGHTSTAR, we will offer a quick solution to solve the problem. To be safety, do not open the EB without any consultation of LIGHSTAR. Repairing and any replacement for the component of EB must be carried out with guidance of LIGHTSTAR or directly send back to LIGHTSTAR for Repairing. For safety reasons, users cannot disassemble the EB by themselves.



2014/35/EU Low Voltage Directive
2014/30/EU Electromagnetic Compatibility Directive
EN 60598-2-23:1997;EN 62493:2015
EN 60335-1:2012+A11:2014;EN 55014-1:2006+A1:2009+A2:2011



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