



Building Wash Series

User Manual

Please read the instructions carefully before use

This user manual is used for

BW-54-3, BW-108-3, BW-216-3, BW-14-10FC, BW-27-10FC, BW-54-10FC. Including all colors, beam angles, W or W/O wireless DMX version.

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Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 89/336/EEC.

EN55103-1: 2009; EN55103-2: 2009; EN62471: 2008; EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.

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Harmonized Standard

EN60598-2-17:1989 + A2:1991; EN60598-1:2008+ A11: 2009 EN 62471:2008; EN 62493: 2010 Safety of household and similar electrical appliances Part 1: General requirements

- 3. Connect the unit together in a `daisy chain` by XLR plug from the output of the unit to the input of the next unit. The cable can not branched or split to a `Y` cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
- 4. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
- 5. Each lighting unit needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).
- 6. The end of the DMX 512 system should be terminated to reduce signal errors.
- 7. 3 pin XLR connectors are more popular than 5 pin XLR.

3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin 4/Pin 5: Not used.

5. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

- 1. Check the connection of power and main fuse.
- 2. Measure the mains voltage on the main connector.

B. Not responding to DMX controller

- 1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
- If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
- 3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
- 4. Try to use another DMX controller.
- Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

6. Fixture Cleaning

The cleaning of internal must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the fixture's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- · Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

1. Safety Instruction



WARNING

Please read the instructions carefully which includes important information about the installation, operation

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that
they also receive this instruction booklet.

Caution:

- All fixtures are intact from the manufacturer, please operate follow up the user manual, artificial fault
 are not under guarantee repair.
- Unpack and check carefully there is no transportation damage before using the unit.
- Do install and operate by operator.
- Use safety chain when fixes the unit.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots are blocked, otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Maximum ambient temperature TA: 40°C. Don't operate it where the temperature is higher than this.
- Don't connect the device to any dimmer pack.
- First run, there will be smoke or smells, and all disappearing a few minutes later.
- Make sure there are no flammable materials close to the unit while operating, as it is fire hazard.
- Look over power wires carefully, replace immediately if there is any damage.
- Unit surface temperature may reach up to 60℃. Don't touch the housing bare-hand during its
 operation.
- Never run on for a long time lest shortening lifespan.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happen, cut off the mains power immediately.
- Do not operate in dirty and dusty environment, also cleaning fixtures regularly.
- Do not allow children to operate the fixture.
- Do not touch any wire during operation as there might be a hazard of electric shock.
- · Avoid power wires together arounding other cables.
- Replace fuse only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

- Do not open the unit as there are no user serviceable parts inside. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.
- Disconnect the mains power if the fixture is not used for a long time.
- Do use original packing materials once transport it again.
- Do not look directly at the LED light beam while the fixture is on.

For BW-54-3 series, when the power supply is 110V, do not connect in series much more than 7 units, use another mains supply for next 7 units. When the power supply is 230V, do not connect in series much more than 14 units, use another mains supply for next 14 units.

Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

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Fittings:

User Manual

2. Techical Specfications

BW-54-3:

• Light source: 3W LED x 54pcs

Voltage: AC 100-240V/50Hz~60Hz

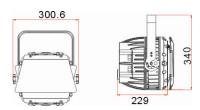
• Power consumption: 120W

• Lens Option:D15、D25、D38

• IP:66

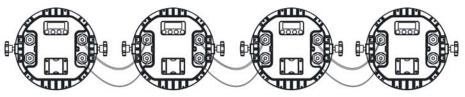
• **Dimension:** 300x 229 x 340 mm

• Weight: 9.2 kg



4.4 DMX512connections

For BW-54-3/ BW-14-10FC series:

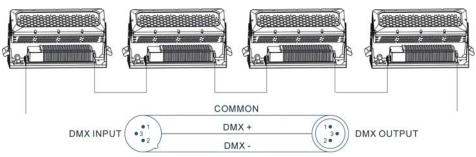


		COMMON		
DMX INPUT	1	DMX +	10	DMX OUTPUT
DIMX INT OT	2	DMX -	2.	DIVIX COTT OT

Termination reduces signal errors and voids signal transmission problems and interference. It is always advisable to connect a DMX terminal. (Resistance 120 ohm 1/4W)between pin2(DMX-)and pin3(DMX+) of the last fixture.



For BW-108/216-3RGBW,BW-108/216-3RGBW WT, BW-27/54-10FC, BW-27/54-10FC WT:



Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal. (Resistance 120 ohm 1/4W)between pin2(DMX-)and pin3(DMX+) of the last fixture.



- 1. If you using a controller with 5 pins DMX output, you need to use a 5 to 3 pin adapter-cable.
- At last unit, the DMX cable has to be terminated with a terminator. Solder a 120 ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.

BW-54-3W:

2 Chann	el mode	2d Channel mode			
CH 1	CH2	CH 1	CH2		
ww	cw	White	Dimmer		
255 - 100%	255 T 100%	255	255 T 100%		

BW-14-10FC:

• Light source: 10W LED x14pcs

• **Voltage:** AC 100-240V/50Hz~60Hz

• Power consumption: 140W

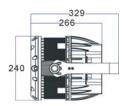
• Lens Option:D20、D30、D40、D60

IP:66

• **Dimension:** 311 x240x 329 mm

• Weight: 9.2 kg





BW-108-3:

• Light source: 3W LED x 108pcs

• **Voltage:** AC 100-240V/50Hz~60Hz

• Power consumption: 300W

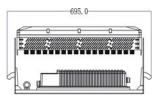
• Lens Option:D6、D25、D40、D60、D80、D25x45

• **IP:**66

• **Dimension:** 695 x 208x 325 mm

• Weight: 24.1 kg





BW-27-10FC:

• Light source: 10W LED x 27pcs

• Voltage: AC 100-240V/50Hz~60Hz

Power consumption: 301W

• Lens Option: D20, D30, D40, D60

• IP:66

• **Dimension:** 695X208X325 mm

• Weight: 24.1 kg

BW-216-3:

Light source: 3W LED x 216pcs(R48, G60. B60, W48)

• Voltage: AC

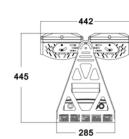
100-240V/50Hz~60Hz

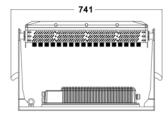
• Power consumption: 600W

• Lens Option: D25、D40、D60、

D80、D25x45、

• **IP**:66





• Dimension: 741X442X445 mm

• Weight: 43.1 kg

BW-54-10FC:

Light source: 10W LED x 54pcs
 Voltage: AC 100-240V/50Hz~60Hz

Power consumption: 600W • **Lens Option:** 20°, 30°, 40°, 60°

• IP:66

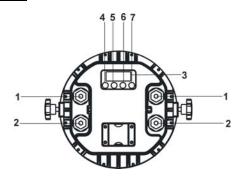
• **Dimension:** 741X442X445 mm

• Weight: 43.1kg

3. How To Set The Fixture

BW-54-3/ BW-14-10FC Series

3.1 Control Panel



1: Power

Water proof connectors for power input/output

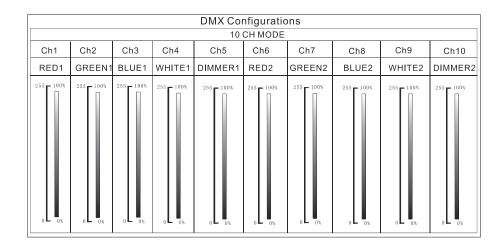
2: DMX input/output

Water proof connectors for DMX 512 operation, 3-pin XLR cable to link the unit together

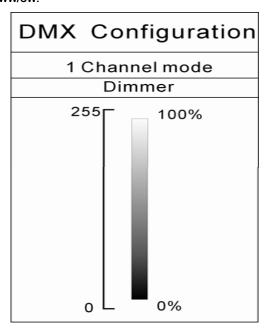
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3: Display

To show the menu and the selected functions



BW-54-3WW/CW:



DMX Configuration							
7 CH MODE							
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	
RED	GREEN	BLUE	WHITE	COLOR	DIMMER	STROBE	
255 100%	255 100%	255	255 100%	255 Open 248-254 Preset color32 240-247 Preset color31 232-239 Preset color30 224-231 Preset color29 217-223 Preset color29 217-223 Preset color22 209-216 Preset color27 201-208 Preset color26 186-193 Preset color25 186-193 Preset color25 186-193 Preset color23 170-177 Preset color22 163-169 Preset color21 147-154 Preset color21 147-154 Preset color19 140-146 Preset color19 132-139 Preset color16 116-123 Preset color16 116-123 Preset color16 116-123 Preset color17 24-131 Preset color10 071-078-094 Preset color10 078-094 Preset color10 070-077 Preset color3 030-046 Preset color6 031-038 Preset color6 031-039 Preset color6 031-038 Preset color6	255 - 100%	248-255 OPEN 240-247 RANDOM STROBE 232-239 OPEN 190-231 FAST OPEN 182-188 OPEN 140-181 FAST CLOSE 132-139 OPEN 16-131 ### 8-15 OPEN 0-7 OPEN	

	DMX Configurations								
	8 CH MODE								
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Ch8		
RED1	GREEN1	BLUE1	WHITE1	RED2	GREEN2	BLUE2	WHITE2		
255 - 100%	255 100%	255 100%	255 100%	255 - 100%	255 100%	255 - 100%	255 - 100%		

Button:

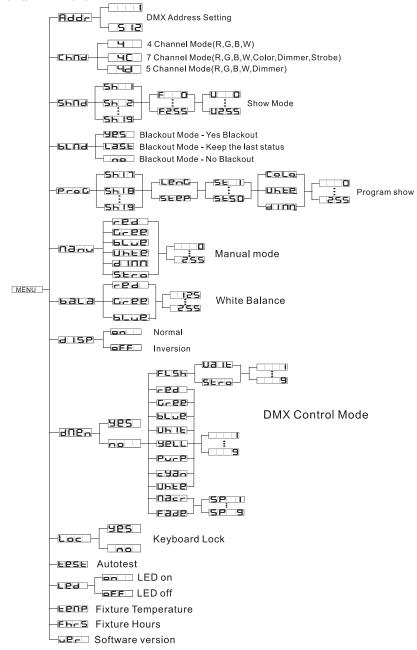
4	MENU	To select the programming functions
5	DOWN	To go backward in the selected functions
6	UP	To go forward in the selected functions
7	ENTER	To confirm the selected functions

3.2. Main Functions

To select any functions, press **MENU** button until the required one is shown on the display. Select the function by **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press **ENTER** button to setup or it will automatically return to the main functions without any change after idling one minute. Back to the functions without any change press **MENU** button. The main functions are shown below:

	1
Once you set Local to 1985, after running in show mode for 5 minutes	
without any change or restarting the unit, the key board become locked.	
Press ENTER button to enable the menu, the display will show \Box	
press UP and DOWN button until it shows ., then press ENTER to	
unlock.	

BW-54-3/ BW-14-10FC:



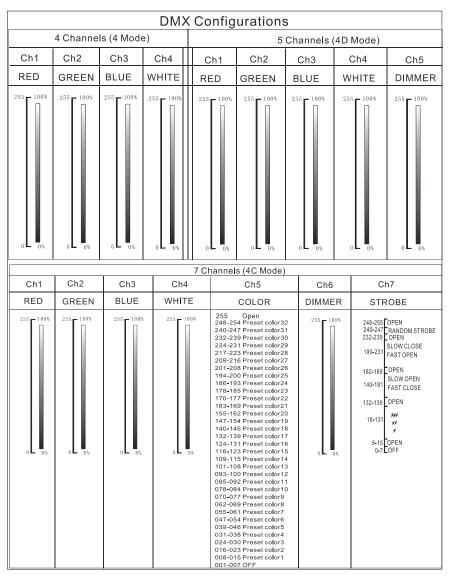
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For BW-216-3RGBW, BW-216-3RGBW WT, BW-54-10FC, BW-54-10FC WT:

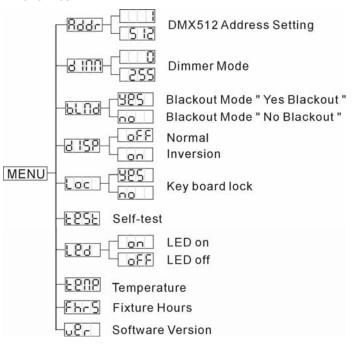
	DMX Configurations								
	4 CH MO	DE				5	CH MODE		
Ch1	Ch2	Ch3	Ch4		Ch1	Ch2	Ch3	Ch4	Ch5
RED	GREEN	BLUE	WHITE		RED	GREEN	BLUE	WHITE	DIMMER
255 100%	255	255 100%	255 100%		255 7 100%	255 - 100%	255 100%	255 100%	255 - 100%

4.3 DMX 512 Configuration

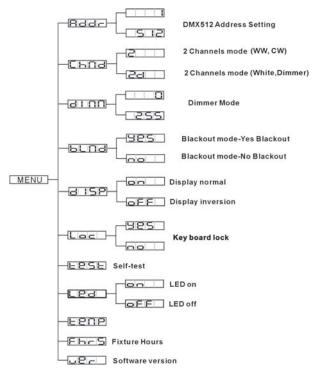
For BW-54-3RGBW, BW-14-10FC, BW-108-3RGBW, BW-108-3RGBW WT, BW-27-10FC, BW-27-10FC WT:8



BW-54-3WW/CW:



BW-54-3W:



8886	DMX 512 Address Setting
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Press the **MENU** button up to when the **Proof** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX 512 address. Once the address has been selected, press **ENTER** button to setup or automatically exit menu mode without any change after one minute. Back to the previous functions without any change press **MENU** button.

Channel mode (For BW-54-3RGBW/BW-14-10FC)

Press the **MENU** button up to when the **Lhod** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **Lhod** (4channels, **Lhod**)

(7channels) of Lac (5channels), Once select, press **ENTER** button to setup or automatically exit menu mode without any change after one minute. To go back to the functions without any change press the **MENU** button.

4.2 DMX Controller

Use universal DMX controller to control the units, you have to set DMX address from 1 to 512 channel so that the units can receive DMX signal.

Press the **MENU** button up to when the **Bdd-** is showing on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and keep **ENTER** button pressed up to when the display stops blinking or storing automatically 8 seconds later. To go back to the functions without any change press the **MENU** button again.

For BW-54-3RGBW, BW-14-10FC, BW-108-3RGBW,BW-108-3RGBW WT,BW-27-10FC and BW-27-10FC WT, Please refer to the following diagram to address your DMX512 channel for the first 4 units:

units:	
4 Channels:	
4C Channels:	
4D Channels:	1 8 11 18
	BW, BW-216-3RGBW WT, BW-54-10FC and BW-54-10FC WT, Please refer to the to address your DMX512 channel for the first 4 units:
4 Channels:	
5 Channels:	
7 Channels :	
8 Channels:	
10Channels:	
	CW , Please refer to the following diagram to address your DMX512 channel for the
first 4 units: 1Channel:	
For BW-54-3W , P	lease refer to the following diagram to address your DMX512 channel for the first 4
units 2 Channels:	
2D Channels:	

4. How TO Control The Unit

For BW-54-3/ BW-14-10FC Series:

You can operate the unit in two ways:

- 1. By master/slave built-in preprogram function
- 2. By DMX controller

No need to turn the unit off when you change the DMX address, as new DMX address setting will be affected at once. Every time you turn the unit on, it will show **busyles** on the display and move all the motors to their 'home' position. After that the unit will be ready to receive DMX signal or run the built in programs.

For BW-108-3,BW-216-3,BW-27-10FC, BW-54-10FC Series:

You can operate the unit in four ways:

- 1. By master/slave built-in preprogram function
- 2. By DMX controller
- 3. BY VD-T
- 4. BY XP-W512 RX (Only for BW-108/216-3RGBW WT and BW-27/54-10FC WT)

VD-T is a specially designed handy setup tool for all Visio integral fixtures and Controllers. By connecting VD-T to any fixture via XLR, you can easily setup DMX Address, Channel Modes, White Balance, Manual Colors, and Fade Speed functions. If you use VD-T to controll the unit, you can following User Manual of VD-T

If you use XP-W512 RX controlled the unit you can following User Manual of XP-W512 RX

4.1 Master/Slave Built In Preprogrammed Function

For **BW-54-3RGBW**, By linking the units in master/slave connection, the first unit will control the other units to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. You have to select (show 1) or (show 2)or (show 2)or (show 19, show17~19 have to be edited by the user) show for the first unit. Its DMX input jack will have nothing plugged into. The other units will be slave mode automatic.

For **BW-54-3WW/CW/W**, By linking the units in master/slave connection, the first unit will control the other units to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. In Master/Slave mode, the first fixture whose DMX input jack has with nothing connect will be master automatically, set other units to slave mode.

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Channel mode (For BW-54-3W)
Press the MENU button up to when the Inc. is shown on the display. Pressing ENTER button and the display will blink. Use DOWN and UP button to select the (2channels), Once select, press ENTER button to setup or automatically exit menu mode without any change after one minute. To go back to the functions without any change press the MENU button
Show mode (For BW-54-3RGBW/BW-14-10FC)
Press the MENU button up to when the shown on the display. Pressing ENTER button and the display will blink. Use DOWN and UP button to select the shown 1) shown 19), Once select, press ENTER button to setup. press the ENTER button, will blinking on the display, use DOWN and UP button adjust the fade time (0~255), press ENTER button to store and will blinking on the display, use DOWN and UP button adjust the white time (0~255), press ENTER button to store or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the MENU button.
BLAG Blackout mode
Press the MENU button up to when the LTD is showing on the display. Pressing ENTER button and the display will blink. Use DOWN and UP button to select the LDD (blackout), LDD (keep the last status) or LODD (normal). Once select, press ENTER button to setup or automatically exit menu mode without any change after one minute. To go back to the functions without any change press the MENU button.
Note: The Lase function is just for BW-54-3RGBW and BW-14-10FC.
Program Shows (For BW-54-3RGBW/BW-14-10FC)
Press the MENU button up to when the Proc is showing on the display. Pressing ENTER button and the display will blink. Use DOWN and UP button to select the Show 17), Show 18) or Show 19), Once the show has been selected, press the ENTER button to enter setting program. Use DOWN and UP button to select Proc length, the steps, you choose from the total amount of steps, you want to run, for example, if the total amount of steps you set is 50, you can choose only first 1-10 steps to run). Sheep (step), select Sheep to set Colo (color) and The (white) and The (dimmer) for every step. Automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the MENU button.
Manual Mode (For BW-54-3RGBW/BW-14-10FC)
Press the MENU button up to when the is showing on the display. Pressing ENTER button and

the display will blink. Use **DOWN** and **UP** button to select the [23] (Red), [3] (Green), [4] (Blue), [4] (White), [4] (Dimmer) or [5] (Shutter), Once select, press **ENTER** button to setup or automatically exit menu mode without any change after one minute. To go

back to the functions without any change press the **MENU** button.

White Balance Press the MENU button up to when the Bala is showing on the display. Pressing ENTER butto and the display will blink. Use DOWN and UP button to select the Red), Green (Green) or Blue (Blue) mode. Once the mode has been selected, press the ENTER button to setup automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the MENU button.	or
Press the MENU button up to when the 15P is showing on the display. Pressing ENTER butto and the display will blink. Use DOWN and UP button to select the (normal) or FE (inverse),	
Press the MENU button up to when the block is shown on the display. Pressing ENTER button and the display we blink. Use DOWN and UP button to select the block is selected, press the ENTER button to setup. If selected, use DOWN and UP button to selected, press the ENTER button to setup. If selected, use DOWN and UP button to selected, press the ENTER button to setup. If selected, use DOWN and UP button to selected, use DOWN and UP button to selected, use DOWN and UP button to selected, yellow), press ENTER button to confirm, then use DOWN and UP button to adjust the dimmer(19).	ct (,
Notice: 1. If (flash mode) is selected, press ENTER button to confirm, then use DOWN and UP button to select the (wait time) or (strobe), Once select, press ENTER button to confirm. then use DOWN and UP button to adjust the the wait time or strobe speed (solw ,middle, fast) (19). Once select, press ENTER button to store or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the MENU button. 2. If (flash mode) is selected, press ENTER button to confirm, then use DOWN and UP button to adjust the type of the rotation(19). Once select ,press ENTER button to store or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the MENU button. 3. If (fade) is selected, press ENTER button to confirm, then use DOWN and UP button to adjust rotation time(19). Once select ,press ENTER button to store or automatically return to the main functions without any change after one minute. To go back to the previous functions without	το
any change press the MENU button. Key Board Lock Press the MENU button up to when the Local is showing on the display. Pressing ENTER button	on

and the display will blink. Use **DOWN** and **UP** button to select the **出巴5** (lock the key board) 或 (normal), Once select, press the **ENTER** button to setup or automatically return to the main

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functions without any change after one minute. Back to the previous functions press **MENU** button.

<u> </u>	Self-Tes
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Press the **MENU** button up to when the, **EPBE** is blinking on the display. Pressing **ENTER** button and the unit will run self-test by built-in program. To go back to the functions press the **MENU** button again.

LOS LED

Press the **MENU** button up to when the Led is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to selection (display on) or Lef (display off 20 seconds after exit menu) mode. Once select, press **ENTER** button to setup or exit menu mode without any change after one minute. Back to the functions without any change press **MENU** button again.

EPRP Temperature Test

Press the **MENU** button up to when the EPDP is blinking on the display. Pressing **ENTER** button and the display will show the temperature of the unit. To go back to the functions press the **MENU** button again.

두뉴트의 Fixture Hours

Press the **MENU** button up to when the First is blinking on the display. Pressing **ENTER** button and the display will show the number of working hours of the unit. To go back to the functions press the **MENU** button.

Software version

Press the **MENU** button up to when the is blinking on the display. Pressing **ENTER** button and the display will show the version of software of the unit. To go back to the functions press the **MENU** button again.

Dimmer mode (For BW-54-3CW/WW and BW-54-3W)

Press the **MENU** button up to when the **IIII** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to adjust the value 0~255, Once selected, press **ENTER** button to setup or automatically exit menu mode without any change after one minute. Back to the previous functions without any change press **MENU** button.