Building Wash

BW-54-10FC II RL
BW-54-10FC II RL WT

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1. Safety Instructions

⚠️

WARNING
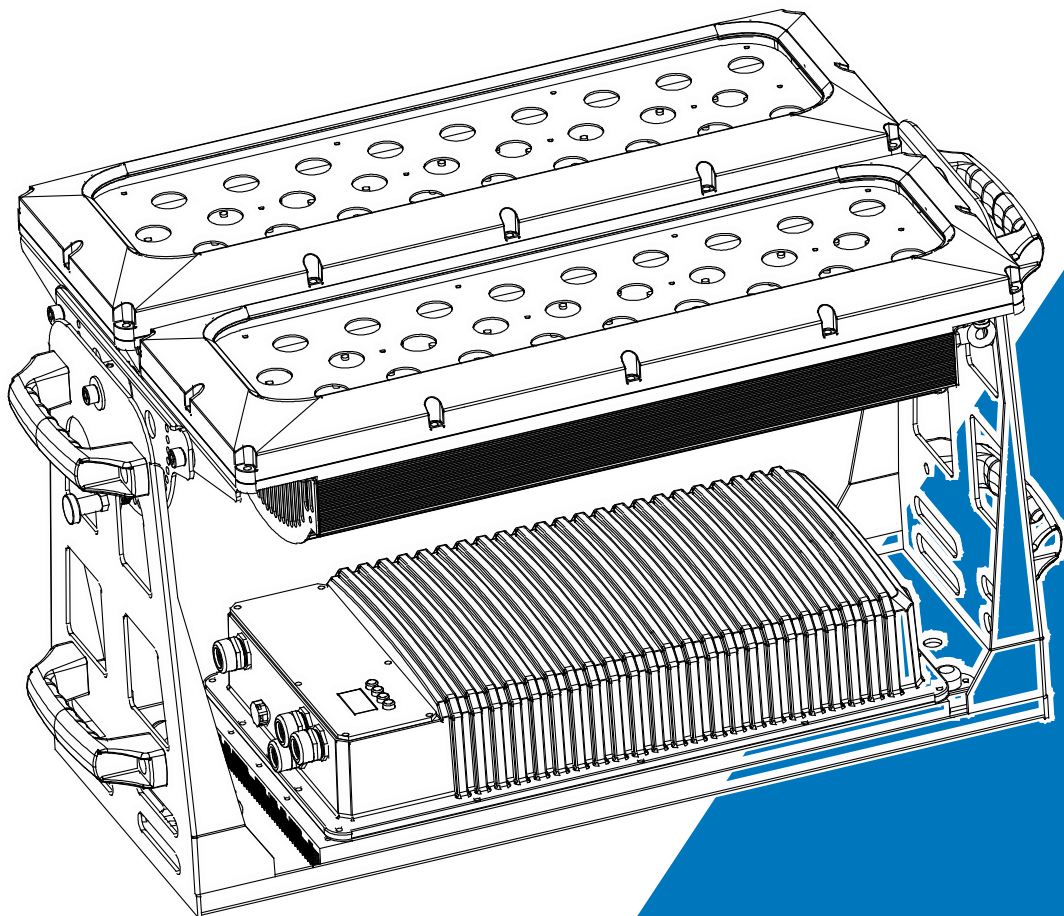
> **Please read the instructions carefully which includes important information about the installation, operation and maintenance.**

- 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 is Ta: 40℃. DO NOT 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 85℃. 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.
- To protect the machine, power off 10s rear can electrify.

2. Techical Specfications

BW-54-10FC II RL: 54pcs x10W CREE Quad Color Building Wash with Built-in LED Display for Rental Application.

BW-54-10FC II WT RL: with Built-in Wireless Receiver and LED Display for Rental Application.

- **Light source**：10W LED x 54pcs
- **Voltage**：AC 100-240V/50Hz~60Hz
- **Power consumption**：568W
- **Lens Option**：20°, 30°, 40°, 60°
- **IP**：66
- **Dimension**：748X446X422 mm
- **Weight**：43.1kg
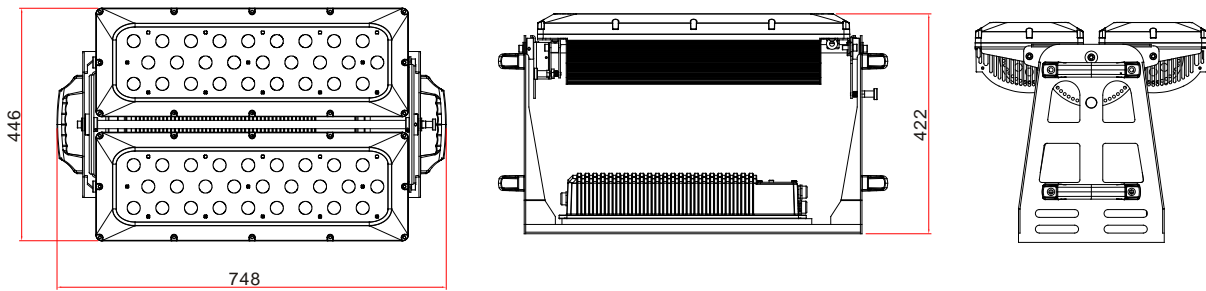
3. Installation

The fixture can be placed directly on the stage floor which can support 10 times of the fixture's weight or can be rigged on the structure via two omega clamps in the positions you want. Ensure that the structure (truss, wall) to which you are attaching the unit is secure. Mounting holes are intended for permanent installation on the flat surface, especially in the wall installation. Safety ropes that can hold 12 times of the weight of the fixture are needed when you want to hang the fixture. Enhanced care has to be considered during the installation.
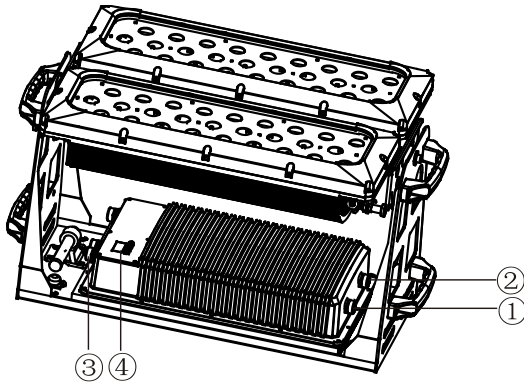
The equipment must be fixed by professionals.

Note： Range of mounting height is 0~30m.
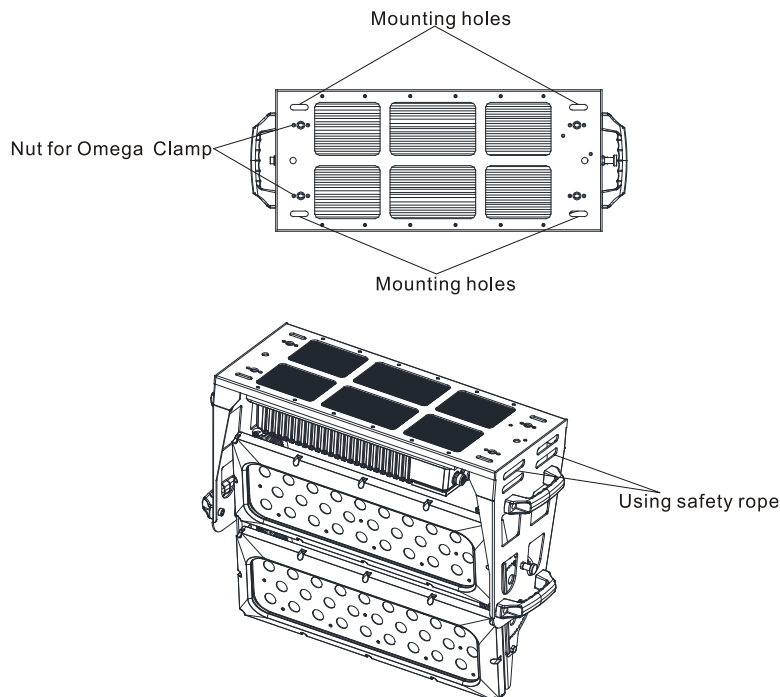
When using the fixture as fixed installation at outdoor place, please remove the Nut for Omega Clamp to avoid rusting.

4. How To Set The Fixture

4.1 Control Panel

①：**Power**
Water proof connectors for power input.
②：**DMX input**
Water proof connectors for DMX 512 operation,
3-pin XLR cable to input DMX signal.
③：**DMX output**
Water proof connectors for DMX 512 operation,
3-pin XLR cable to output DMX signal.

④：**Display and Button:**

Display: To show the menu and the selected functions.

Button:

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

Caution: If the unit is used for fixed installation outdoor, be sure to put the metal cover equipped on top of the LED display, failing to do it may cause the water infiltration problem after been used for more than 1 year outdoor.
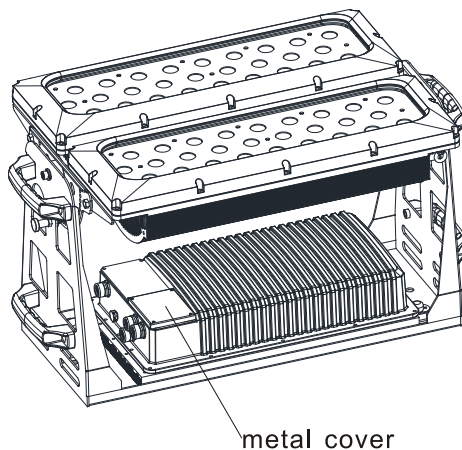
metal cover

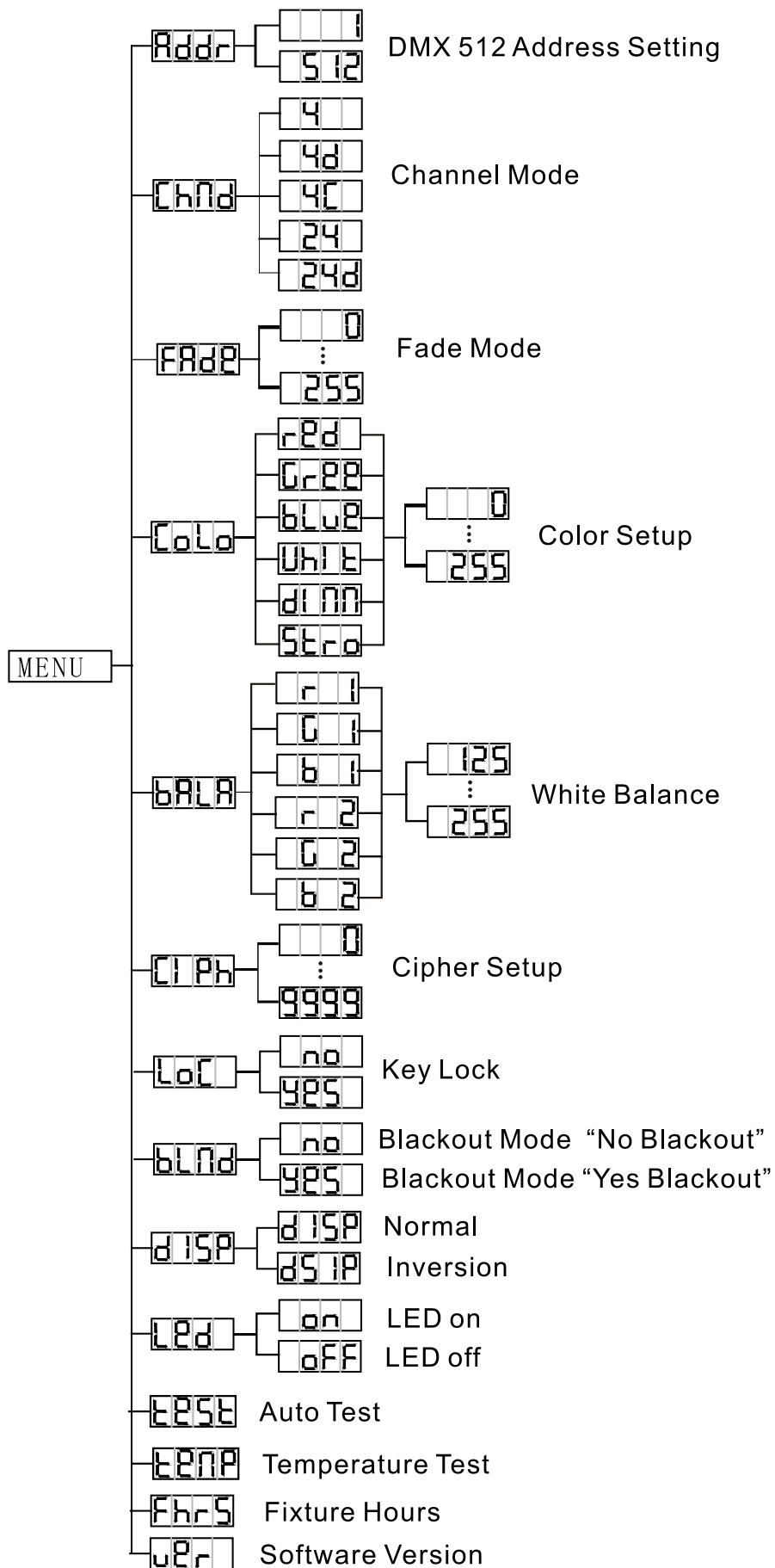## 4.2 Main Functions

Open the metal cover and remove it then you can set the menu manually. 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:

> Once you set ⌐Loc⌐ to ⌐YES⌐, after running in show mode for 1 minute without any change or restarting the unit, the key board become locked. Press ENTER button to enable the menu, the display will show 0, press UP and DOWN button until it shows password you have set before, then press ENTER to unlock. initial password is 123.

```
         ┌──────┐ ┌─────┐  DMX 512 Address Setting
     ┌────┤ Addr ├─┤  1  │
     │    └──────┘ ├─────┤
     │             │ 512 │
     │             └─────┘
     │             ┌─────┐
     │             │  4  │
     │    ┌──────┐ ├─────┤
     │    │ ChMd ├─┤ 4d  │  Channel Mode
     ├────┤      │ ├─────┤
     │    └──────┘ │ 4C  │
     │             ├─────┤
     │             │ 24  │
     │             ├─────┤
     │             │ 24d │
     │             └─────┘
     │    ┌──────┐ ┌─────┐  Fade Mode
     ├────┤ FAdE ├─┤  0  │
     │    └──────┘ │  :  │
     │             │ 255 │
     │             └─────┘
     │             ┌─────┐
     │             │ rEd │
     │             ├─────┤
     │             │ Gree│        ┌─────┐  Color Setup
     │    ┌──────┐ │ bLuE├────────┤  0  │
     ├────┤ CoLo ├─┤ Uhit│        │  :  │
     │    └──────┘ │ dimm│        │ 255 │
     │             │ Stro│        └─────┘
     │             └─────┘
MENU─┤             ┌─────┐
     │             │ r 1 │
     │             ├─────┤
     │             │ G 1 │        ┌─────┐  White Balance
     │    ┌──────┐ │ b 1 ├────────┤ 125 │
     ├────┤ bALA ├─┤ r 2 │        │  :  │
     │    └──────┘ │ G 2 │        │ 255 │
     │             │ b 2 │        └─────┘
     │             └─────┘
     │    ┌──────┐ ┌─────┐  Cipher Setup
     ├────┤ CIPh ├─┤  0  │
     │    └──────┘ │  :  │
     │             │9999 │
     │             └─────┘
     │    ┌──────┐ ┌─────┐  Key Lock
     ├────┤ LoC  ├─┤ no  │
     │    └──────┘ │ YES │
     │             └─────┘
     │    ┌──────┐ ┌─────┐  Blackout Mode "No Blackout"
     ├────┤ bLMd ├─┤ no  │
     │    └──────┘ │ YES │  Blackout Mode "Yes Blackout"
     │             └─────┘
     │    ┌──────┐ ┌─────┐  Normal
     ├────┤ dISP ├─┤dISP │
     │    └──────┘ │dSiP │  Inversion
     │             └─────┘
     │    ┌──────┐ ┌─────┐  LED on
     ├────┤ LEd  ├─┤ on  │
     │    └──────┘ │ oFF │  LED off
     │             └─────┘
     ├──┤ tESt │  Auto Test
     │
     ├──┤ tEMP │  Temperature Test
     │
     ├──┤ FhrS │  Fixture Hours
     │
     └──┤ uEr  │  Software Version
```

7B

Addr DMX 512 Address Setting

1. Press the MENU button until **Addr** is displayed. Press ENTER.
2. The current address will now be displayed and flashing. Press the UP or DOWN buttons to find your desired address. When you have found your desired DMX address press ENTER to confirm or automatically exit menu mode without any change after one minute. Back to the functions without any change press MENU button.

ChMd Channel Mode

1. Press the MENU button until **ChMd** is displayed. Press ENTER. Either **4** （4channel mode）or **4d** （5 channel mode）or **4C** (7 channel mode) or **24** (8 channel mode) or **24d** （10channel mode）will be displayed.
2. Press the UP or DOWN buttons to choose your desired DMX mode and press ENTER to confirm and exit. Or automatically exit menu mode without any change after one minute. Back to the functions without any change press the MENU button.

FAdE Fade Mode

1. Press the MENU button until **FAdE** is displayed. Press ENTER.
2. Press the UP or DOWN buttons to adjust the fade speed to your desire, 0 being the fastest fade and 255 being the slowest.
3. When you find your desired fade speed, press ENTER to confirm or automatically exit menu mode without any change after one minute, Back to the functions without any change press MENU button.

CoLo Color Setup

1. Press the MENU button until **CoLo** is displayed. Press ENTER. **rEd** will now be displayed, press ENTER, Use the UP or DOWN buttons to adjust to your desired intensity(0~255). Press ENTER after the intensity adjustment.
2. After you press ENTER then press UP and **GrEE** will be displayed, press ENTER, Use the UP or DOWN buttons to adjust the value from 0 to 255.
3. Follow these steps to make adjustments of **bLuE** and **UhIt** until your desired color is reached. After adjusting **UhIt**, press ENTER then press the UP button.
4. **diMM** （Dimmer）will be displayed, press ENTER, this is the master dimmer control. In this submenu you can adjust the intensity of your created color. Use the UP or DOWN buttons to adjust the intensity from 0 to 255.
5. Press ENTER once you have adjusted the master dimmer, Press the UP button and **Stro** （Strobe）will be displayed. This is the strobe function. If you choose to activate strobe, press ENTER. Use the UP or DOWN buttons to adjust the speed of the strobe, choose 0 to turn the strobe off and 255 being the fastest strobe. Press ENTER once

you have made your adjustments.
6. Once your desired color and settings are reached, press ENTER to confirm or automatically exit menu mode without any change after one minute, Back to the functions without any change press MENU button.

bALA Adjust White Balance

1. Press the MENU button until bALA is displayed. Press ENTER. Either ⌐1 (Red 1), G1 (Green 1), b1 (Blue 1), r2 (Red 2), G2 (Green 2) or b2 (Blue 2) will be displayed.
2. Press the UP or DOWN buttons to find your desired color and press ENTER to confirm.
3. Using the UP or DOWN buttons adjust the value (125~255) to your desire.
4. When you find your desired White Balance value, press ENTER to confirm or automatically exit menu mode without any change after one minute. Back to the functions without any change press MENU button.

CI Ph Cipher Setup

1. Press the MENU button until CI Ph is displayed. Press ENTER.
2. 123 will now be displayed and flashing. Press the UP or DOWN buttons to adjust the password (0~9999) to your desire.
3. When you find your desired password, press ENTER to confirm or automatically exit menu mode without any change after one minute. Back to the functions without any change press MENU button.

LoC Key Lock

1. Press the MENU button until LoC is displayed. Press ENTER. Either YES or no will be displayed.
2. Press the UP or DOWN buttons to select YES (lock the key board) or no (normal). Once select, press ENTER to confirm or automatically exit menu mode without any change after one minute, Back to the functions without any change press MENU button.

bLNd Blackout Mode

1. Press the MENU button until bLNd is displayed, Press ENTER. Either YES or no will be displayed.
2. To activate Blackout, press UP or DOWN buttons until YES is displayed, press ENTER to confirm and exit, the fixture will now be in Blackout mode. To deactivate Blackout mode, select no and press ENTER.

d ISP Display Inversion

1. Press the MENU button until **d ISP** is displayed, Press ENTER.
2. Press the UP button to select **dS IP**, the display will reverse 180°,or **d ISP** to change the display back. Press ENTER when you made your desired setup.

LEd LED Mode

1. Press the MENU button until **LEd** is displayed, Press ENTER.
2. The display will show either **on** or **oFF**. Select **on** to keep display on at all times, or **oFF** to switch to have the LED display switch off after 60 seconds. Once select, press ENTER to confirm or automatically exit menu mode without any change after one minute, Back to the functions without any change press MENU button.

tESt Self Test

Press the MENU button until **tESt** is displayed. Press ENTER and the fixture will now run a self test program. To stop the self test press the MENU button.

tEMP Temperature Test

Press the MENU button until **tEMP** is displayed. Press ENTER and the temperature of the fixture will be displayed. Press ENTER to exit.

FhrS Fixture Hours

Press the MENU button until **FhrS** is displayed. Press ENTER and the display will show the number of working hours of the unit. Press ENTER to exit.

uEr Software version

Press the MENU button until **uEr** is displayed. Press ENTER and the software version will now be displayed. Press ENTER to exit.

5. How To Control The Unit

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-54-10FC WT RL)**

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

control the unit, you can follow User Manual of VD-T.

5.1 **Master/Slave Built In Preprogrammed Function**

By linking the units in master/slave connection, the first unit will control the other units to give an automatic, 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.

5.2 **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 `Addr` is showing on the display. Press **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.

Please refer to the following diagram to address your DMX512 channel for the first 4 units：

4 Channels：	1	5	9	13
5 (4D) Channels:	1	6	11	16
7 (4C) Channels:	1	8	15	22
8 (24) Channels:	1	9	17	25
10 (24D) Channels:	1	11	21	31

5.3 DMX 512 Configuration

4CH(4 MODE)				5CH(4D MODE)				
Ch1	Ch2	Ch3	Ch4	Ch1	Ch2	Ch3	Ch4	Ch5
RED	GREEN	BLUE	WHITE	RED	GREEN	BLUE	WHITE	DIMMER

7CH(4C MODE)						
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7
RED	GREEN	BLUE	WHITE	COLOR	DIMMER	STROBE

Ch5 COLOR:

248-255 Preset color32
240-247 Preset color31
232-239 Preset color30
225-231 Preset color29
217-224 Preset color28
209-216 Preset color27
202-208 Preset color26
194-201 Preset color25
186-193 Preset color24
178-185 Preset color23
171-177 Preset color22
163-170 Preset color21
155-162 Preset color20
148-154 Preset color19
140-147 Preset color18
132-139 Preset color17
124-131 Preset color16
117-123 Preset color15
109-116 Preset color14
101-108 Preset color13
093-100 Preset color12
086-092 Preset color11
078-085 Preset color10
070-077 Preset color9
063-069 Preset color8
055-062 Preset color7
047-054 Preset color6
039-046 Preset color5
032-038 Preset color4
024-031 Preset color3
016-023 Preset color2
008-015 Preset color1
001-007 OFF

Ch7 STROBE:

248-255 OPEN
240-247 RANDOM STROBE
232-239 OPEN
190-231 SLOW CLOSE FAST OPEN
182-189 OPEN
140-181 SLOW OPEN FAST CLOSE
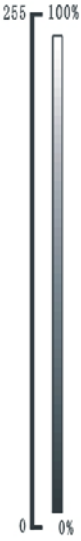132-139 OPEN
16-131 (strobe)
8-15 OPEN
0-7 OFF

DMX Configuration

8CH MODE

Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Ch8
RED1	GREEN1	BLUE1	WHITE1	RED2	GREEN2	BLUE2	WHITE2

DMX Configuration

10CH MODE

Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Ch8	Ch9	Ch10
RED1	GREEN1	BLUE1	WHITE1	DIMMER1	RED2	GREEN2	BLUE2	WHITE2	DIMMER2

5.4 DMX512 Connection
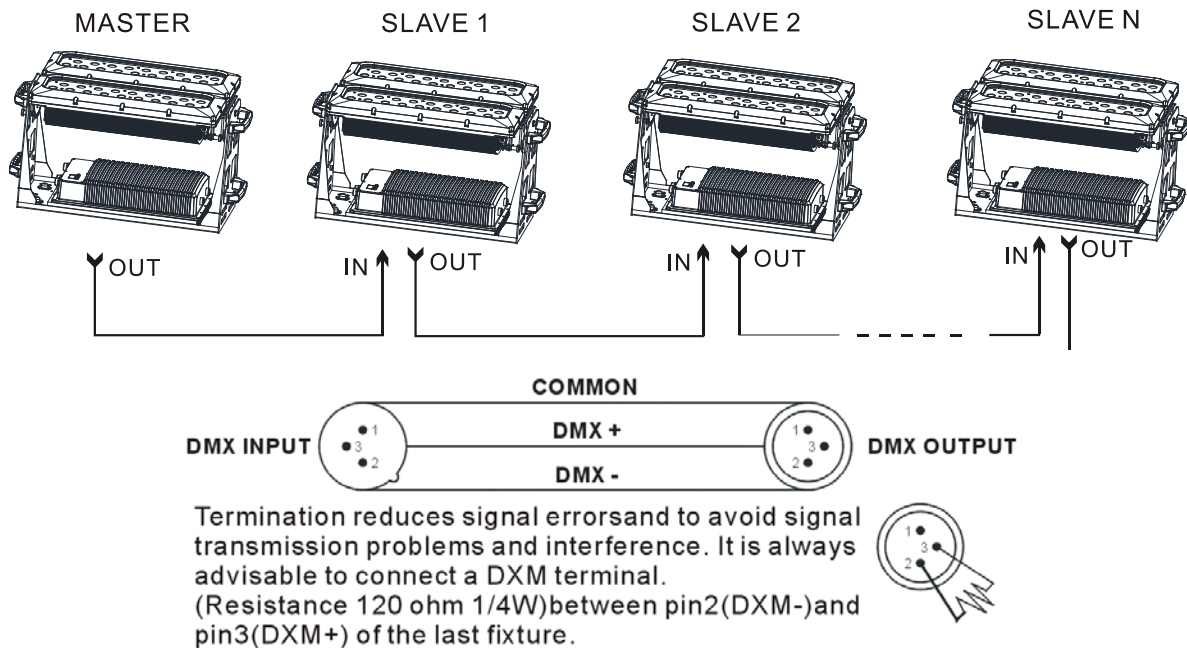
1. If you using a controller with 5 pins DMX output, you need to use a 5 to 3 pin adapter-cable.
2. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120 ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
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.

6. Troubleshooting

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

Problem	Possible Cause	Action
The unit does not work, no light.	Incorrect power cable connection.	Check the connection of power.
	Incorrect mains voltage.	Measure the mains voltage on the main connector.
The unit does not respond properly to the DMX control.	Incorrect DMX cable connection.	Check DMX connectors and cables to see if link properly. Repair or replace damaged wires.
	Incorrect address assignment to the units.	Check the addresses of the units and the protocol settings.
	Unfinished data connection.	Insert a terminal plug in the output jack of the last unit of the connection.
	It has been set up an operating mode different from the DMX mode used.	Check the operating mode set up.
		Try to use another DMX controller.

7. Cleaning and Maintenance

> *DANGER!*
> *Disconnect from the mains before starting any cleaning or maintenance work.*

The unit must be cleaned periodically to optimize light output. Cleaning frequency depends on the environment where the unit will operate: deposits of dust, smokes or other wastes will reduce the light output performances.

- Clean regularly the glass of the unit with soft cotton towel dampened with a glass-cleaning liquid or distilled water.
- Wash the housing with a soft brush or sponge and a mild, non-abrasive washing detergent.
- Remove smoke and other wastes by a cotton towel dampened with isopropyl alcohol.
- Be careful when cleaning the components.
- Always dry the parts carefully by a clean, soft, non-scratching towel or by compressed air.
- Maintenance and service operations are only to be carried out by a qualified perso

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.

&

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

Innovation, Quality, Performance