

VBAR 270

User Manual

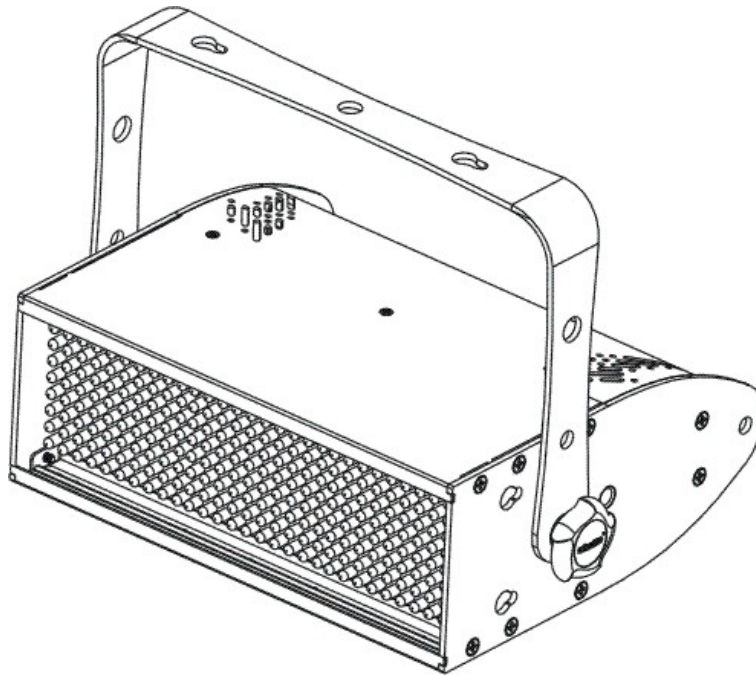


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Introduction

Thank you for purchasing VBAR 270.

VBAR 270 is a LED light fixture for professional use. Using the RGB color mixing technology provide up to 16.5 million colors for use in stage production and fixed installation. Its optional mounting kits offering many different ways to use this light fixture. This light fixture can be operating stand-alone or using advance control via external DMX controller.

WHAT IS INCLUDED

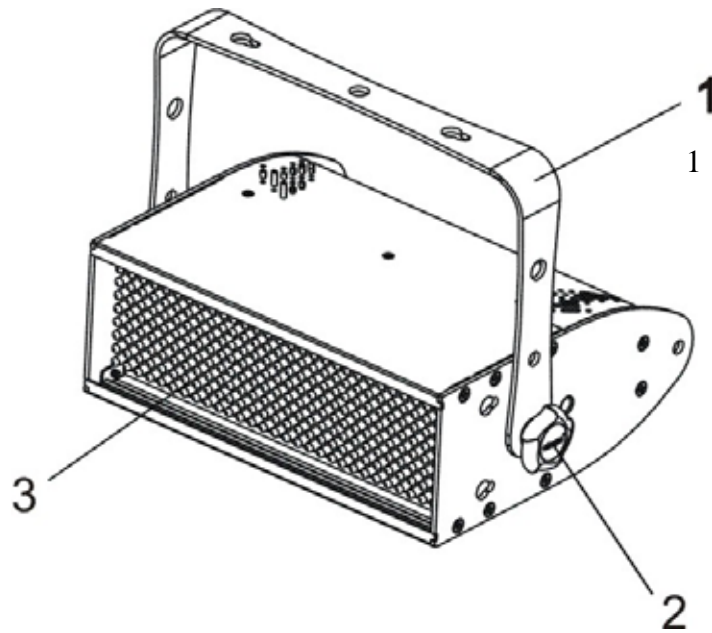
- 1 x VBAR 270
- 1 x Hanging bracket
- Power Cord
- User manual

Carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. If any parts appear damaged or missing, notify the shipper immediately and retain packing material for inspection. In the event that the fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

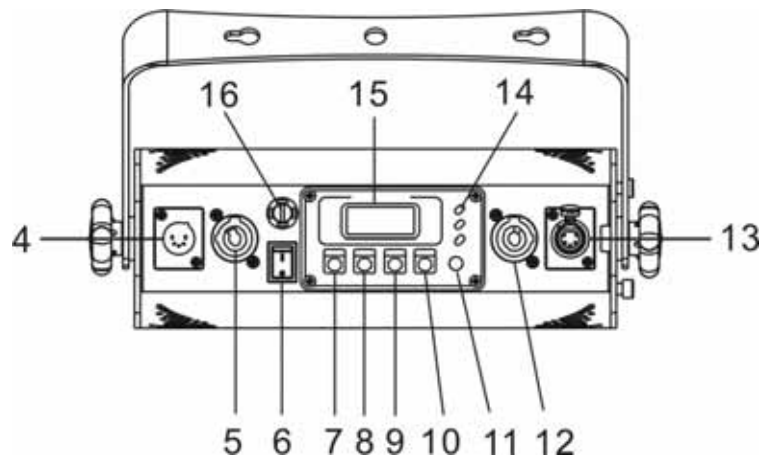
1.1 Features

- DMX 512.
- Standard 5 channels and full function 8 channels DMX control.
- Stand – alone operation:
 - Master/Slave.
 - Dimmable Manual color mixing and preset colors.
 - Dimmable auto-chases with adjustable speed and fade.
 - 19 auto chases.
- Special functions:
 - Check software version.
 - Test sequence for testing and demo purpose.
 - Factory reset.
 - DMX off setting.
- Optional bracket to make batten, blinder, light tube and multilateral shaping.

1.2 Overview



- 1. Mounting Bracket
- 2. Gear Screw
- 3. LED Module



- 4. 5-PIN DMX Input
- 5. Power Input
- 6. Power Switch
- 7. Mode Button
- 8. F/S Button
- 9. Up Button
- 10. Down Button
- 11. Update Button
- 12. Power Output
- 13. 5-PIN DMX Output
- 14. LED Status Indicator
- 15. LCD Screen
- 16. Fuse Holder

1.3 Safety Instructions



CAUTION

UNPLUG MAINS BEFORE INSTALLING OR WIRING THE FIXTURE

User must be qualified to be involved with installation and maintenance of this product. User must follow the safety instruction and warning notes written in this manual.



CAUTION

NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE

IMPORTANT

- For indoor use only
- Keep dry
- Install only in well ventilated areas
- Do not attempt to open the controller or fixture, no user serviceable parts inside.
- Before attaching the device, make sure the installation surface can hold a minimum point load of ten times the device's weight.

Installation


2.1 Connection to the mains

i. AC Power

VBAR 270 is available in AC100-240V 50-60Hz and is supplied to match your local voltage and frequency.

ii. Replacing Plug

The power cable must be fitted with a grounding-type cord cap (earthed type mains plug) that fits your power distribution system.

Wire (EU)	Wire (US)	Pin	Marking
Brown	Black	Live	L
Blue	White	Neutral	N
Yellow	Green	GND	

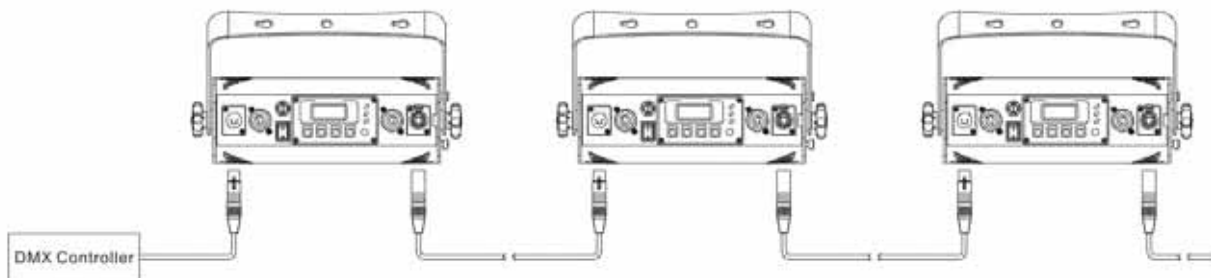
2.2 Connection between fixtures

The fixture is equipped with 5 PIN XLR sockets for DMX input and output. Only use a shielded twisted pair cable designed for 3 or 5 PIN XLR plugs and connectors in order to connect the controller with fixture or one fixture with another.



i. DMX Serial Data Link

If you are using the standard DMX controller, you can connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX-chain. Connect the DMX output of first fixture in the chain with DMX input of next fixture. Always connect one output with input of next fixture until all fixtures are connected.



ii. Master/Slave Data Link

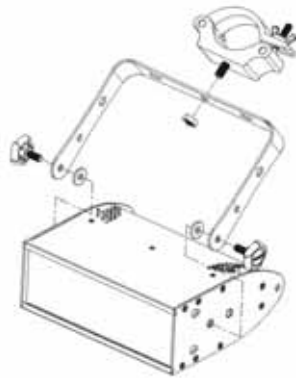
Connect the DMX output of the master fixture in the data chain with the DMX input of first slave fixture. Always connect output with the input of next slave fixture until all slave fixtures are connected.



2.3 Mounting the fixture

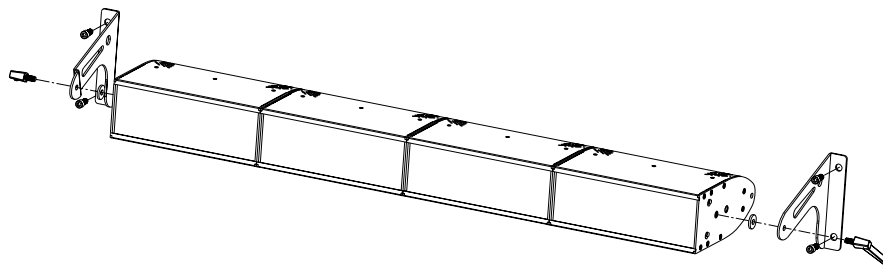
i. Truss Mount

Fixture should be hung on truss structure using a mounting clamp. Always secure the fixture with a secondary safety attachment.



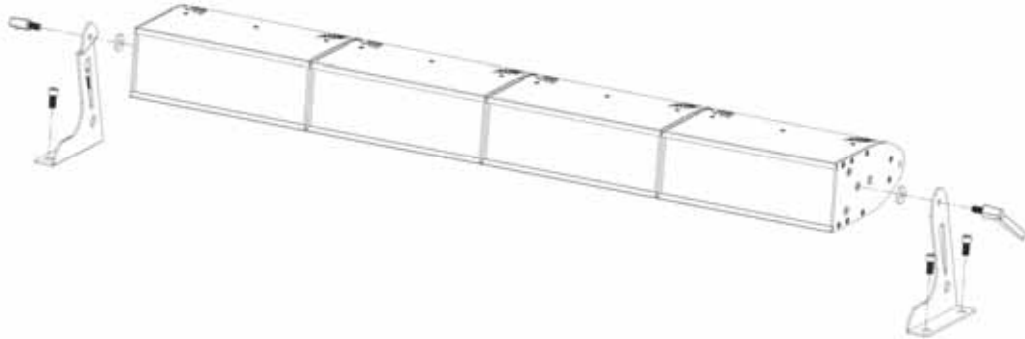
ii. Wall Mount

Refer to below diagram for wall mounting instruction. Before attaching the device, make sure the installation surface can hold a minimum point load of 10 times the device's weight.



iii. Floor Mount

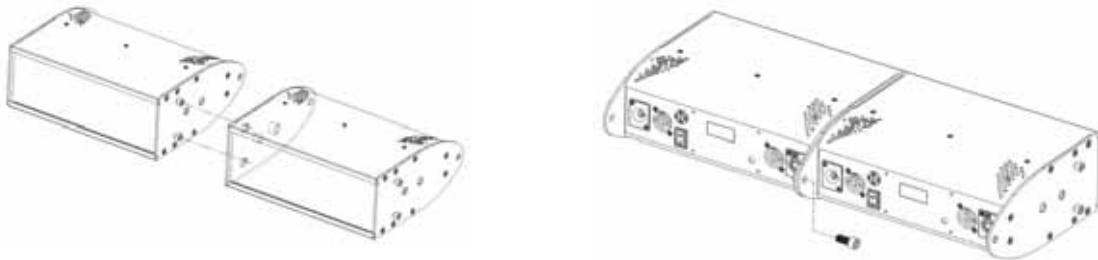
Refer to below diagram for floor mounting instruction.



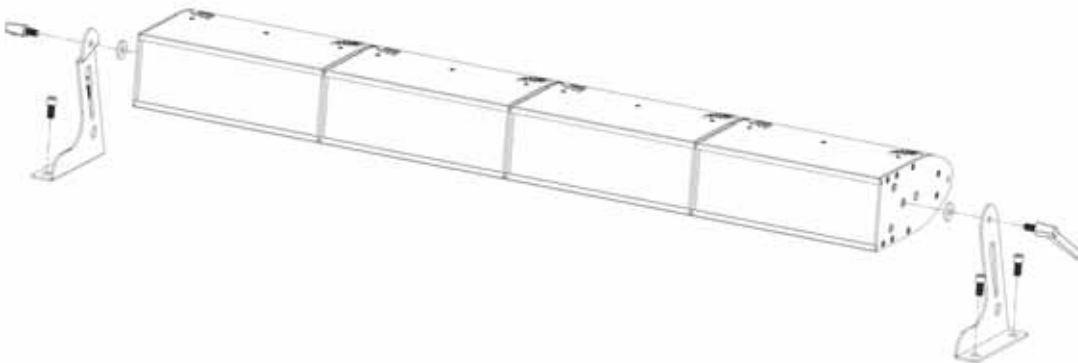
2.4 Fixing

i. Batten Bracket

First attach fixtures together refer to instruction below, the structure design can combine maximum of 5 fixtures together.

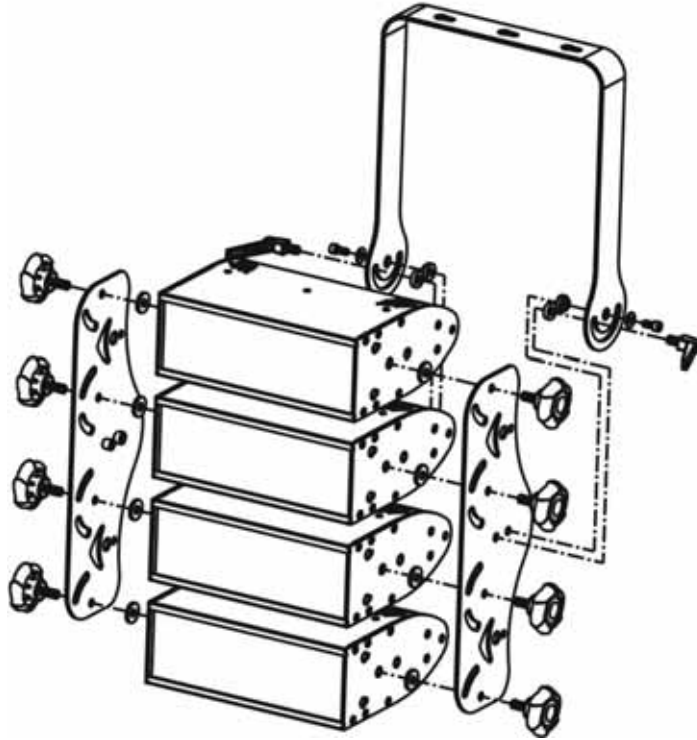


Then put on the batten stand on the end sides of fixtures.



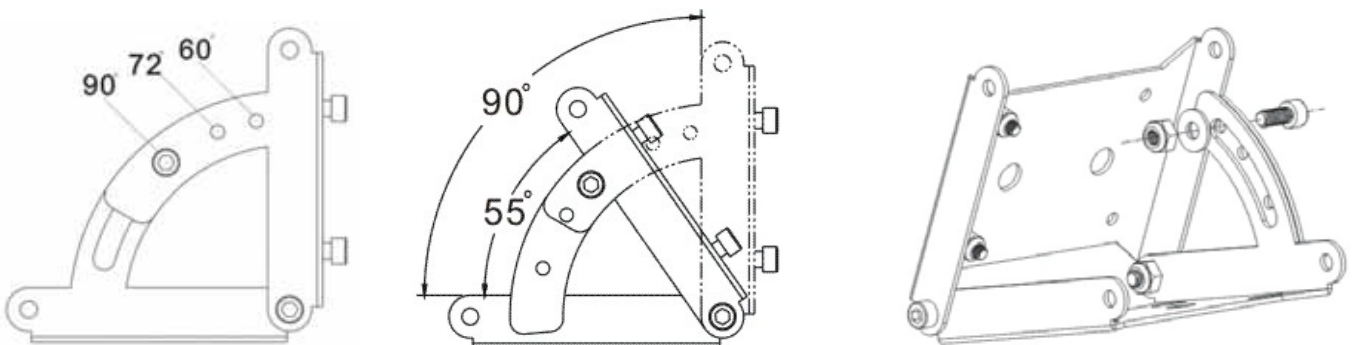
ii. Blinder Frame

Refer to diagram below to install blinder frame. First install the side plate with light fixture then carefully install the hanging bracket.

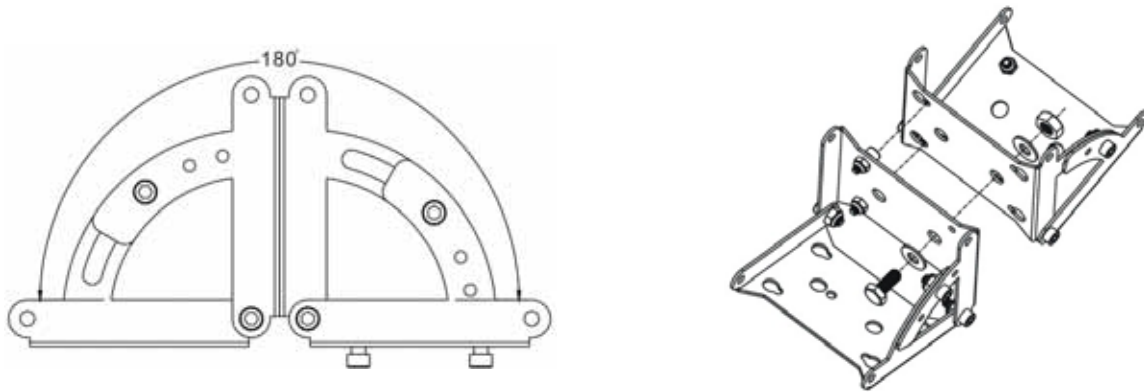


iii. Hinge Kit

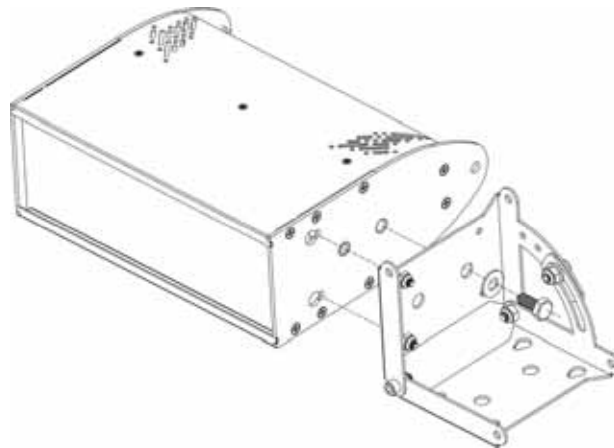
The hinge kit has 3 standard angles (60°, 72°, and 90°). It can also be adjusted manually from minimum 55° up to maximum 90°. Follow diagram below to adjust angle.



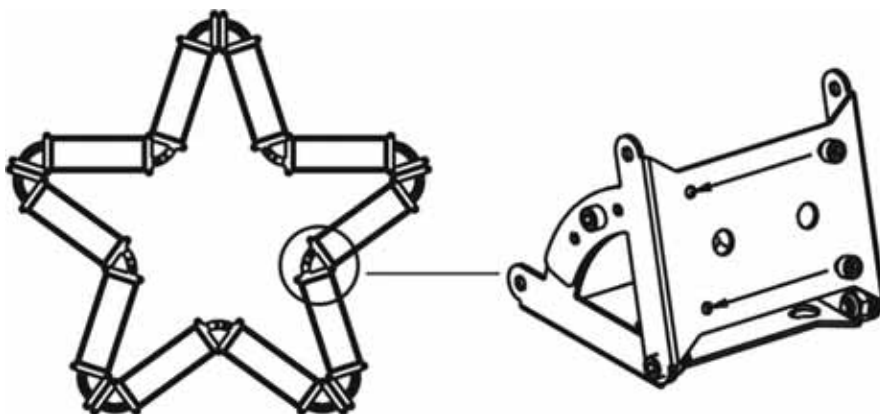
For extended use simply attach two hinge kits together to gain larger angle from 110° to 180°. Refer to below instruction to attach two hinge kits together.



To make multilateral shaping first attach hinge kit to the fixture follow below diagram.

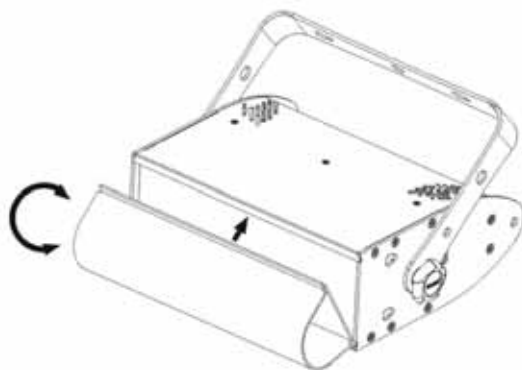


Link all the fixtures together using the hinge kit until it is finished. The hinge kit can also use as internal angle, simply remove the locking screw and install on the other side.



iv. U-Shape Acrylic

To make a light tube simply attached the U shape acrylic to the front of fixture.



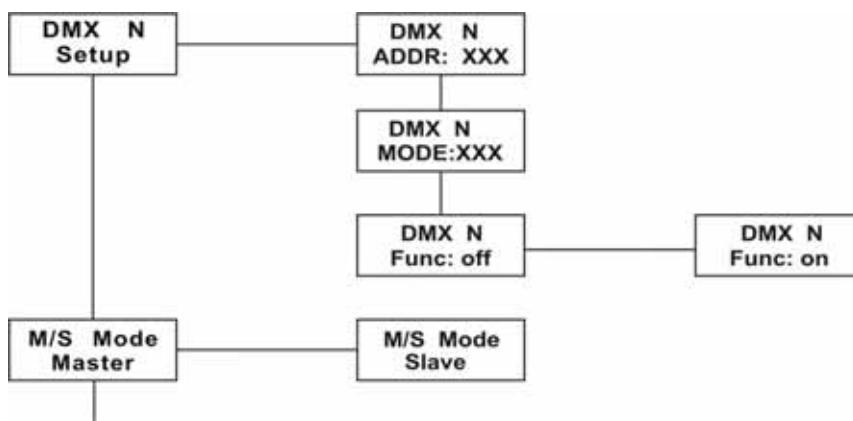
Operation

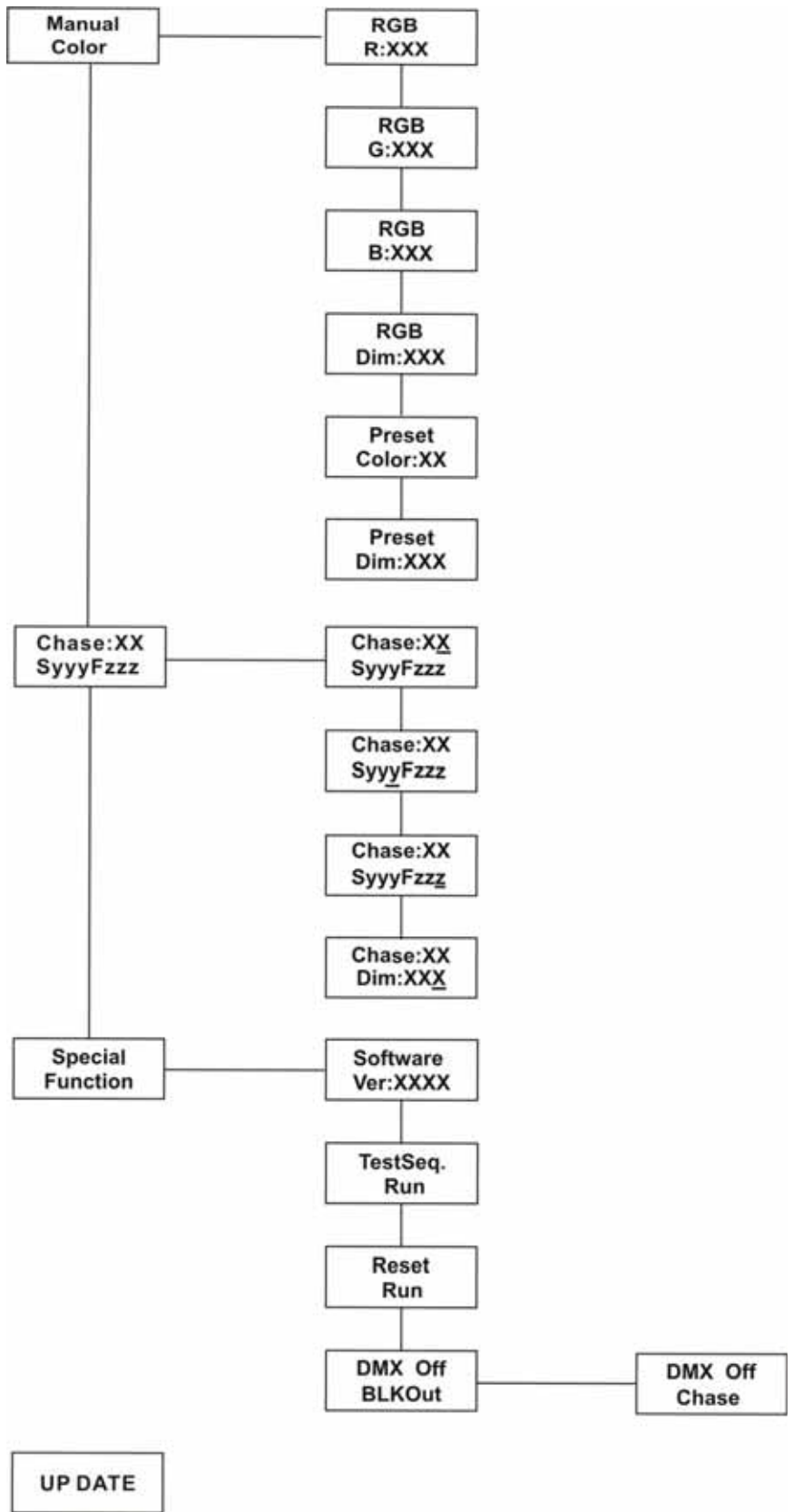
The control panel is located at the back of VBAR 270, allows setting DMX address, calling auto-chase, and setting fixtures personality.

Using the Control Panel:

- [MODE] Browse through main menu or esc from current view.
- [F/S] Browse through sub-menu.
- [UP] [DOWN] Make adjustment or activate function.
- [UPDATE] Set fixture at update mode.

3.1 Control menu map





3.2 DMX Operation

i. Addressing the Fixture

1. Press [MODE] button to find

DMX N Setup

 menu then press [F/S] button to find submenu

DMX N ADDR: XXX

.
2. Use [UP] [DOWN] button to select desire DMX address from

DMX ADDR: 001

 –

DMX ADDR: 512

.
3. Press [F/S] button to store setting.

ii. Using Standard or Full Function DMX Control Channel

1. Press [F/S] button to find

DMX N Func: off

.
2. Use [UP] [DOWN] button to switch between standard or full function.

Note: Factory default setting is full function.

iii. DMX Protocols (Standard Function with 5 Channels)

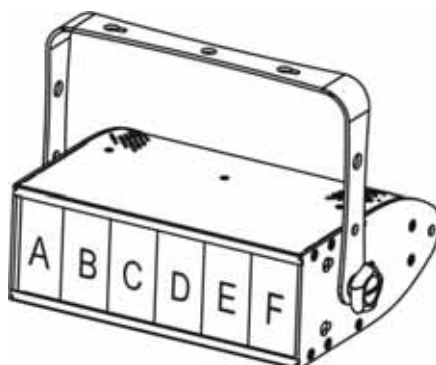
Channel	Function	Value
Channel 1	Red	0-255
Channel 2	Green	0-255
Channel 3	Blue	0-255
Channel 4	Master Dimmer	0-255
Channel 5	Strobe	0-255

iv. **DMX Protocols (Full Function with 8 Channels)**

Channel	Function	Value
Channel 1	Red	0-255
Channel 2	Green	0-255
Channel 3	Blue	0-255
Channel 4	Master Dimmer	0-255
Channel 5	Strobe	0-255
Channel 6	Chase 1	0-11
	Chase 2	12-23
	Chase 3	24-35
	Chase 4	36-47
	Chase 5	48-59
	Chase 6	60-71
	Chase 7	72-83
	Chase 8	84-95
	Chase 9	96-107
	Chase 10	108-119
	Chase 11	120-131
	Chase 12	132-143
	Chase 13	144-155
	Chase 14	156-167
	Chase 15	168-179
	Chase 16	180-191
	Chase 17	192-203
	Chase 18	204-215
	Chase 19	216-255
Channel 7	Speed	0-255
Channel 8	Fade Time	0-255

v. Setting the DMX Control Channel

There are total of 6 LED cells on VBAR 270 light fixture. The LED cell can be set to control as 1, 2, 3 or 6 cells. Total of 8 DMX control channel mode are available.



1. Press [F/S] button to find

DMX N MODE:XXX

.
2. Use [UP] [DOWN] button to select from 1 out of 8 available DMX control channel mode.
3. Press [F/S] to store setting.

Mode	No. of LED Cell	Standard/Full Function	
<table border="1" style="display: inline-table;"><tr><td>DMX N MODE:005</td></tr></table>	DMX N MODE:005	1	Standard
DMX N MODE:005			
<table border="1" style="display: inline-table;"><tr><td>DMX N MODE:008</td></tr></table>	DMX N MODE:008	2	Standard
DMX N MODE:008			
<table border="1" style="display: inline-table;"><tr><td>DMX N MODE:011</td></tr></table>	DMX N MODE:011	3	Standard
DMX N MODE:011			
<table border="1" style="display: inline-table;"><tr><td>DMX N MODE:020</td></tr></table>	DMX N MODE:020	6	Standard
DMX N MODE:020			
<table border="1" style="display: inline-table;"><tr><td>DMX N MODE:008</td></tr></table>	DMX N MODE:008	1	Full
DMX N MODE:008			
<table border="1" style="display: inline-table;"><tr><td>DMX N MODE:011</td></tr></table>	DMX N MODE:011	2	Full
DMX N MODE:011			
<table border="1" style="display: inline-table;"><tr><td>DMX N MODE:014</td></tr></table>	DMX N MODE:014	3	Full
DMX N MODE:014			
<table border="1" style="display: inline-table;"><tr><td>DMX N MODE:023</td></tr></table>	DMX N MODE:023	6	Full
DMX N MODE:023			

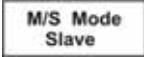
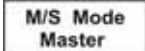
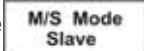
3.3 Stand – Alone Operation

i. Using Master/Slave Mode

When making synchronous operation for multiple fixtures requires that they be connected on a data link and one for the fixture set as master unit and rest set as slave unit. Only one fixture can be set as master unit and rest of slave unit mimic behavior of master.

IMPORTANT


Before using Master/Slave mode, fixtures must be disconnected from DMX controller. Data collision may occur if not disconnected.

1. Press [MODE] button to find  menu.
2. Use [UP] [DOWN] button to set fixture as master  or slave  unit.

Note: Unit set as master blue LED will light up as indication on control panel.

ii. Manual Color Mixing

Make color adjustment manually using this mode. It provides control for red, green, blue and 7 preset colors are available with dimming control.

1. Use [MODE] button to find  menu.
2. Press [F/S] button to scroll through submenu and make adjustment using [UP] [DOWN] button.
3. Press [F/S] button again to store setting.

	–		– Red saturation from value 000 – 255.
	–		– Green saturation from value 000 – 255.
	–		– Blue saturation from value 000 – 255.
	–		– RGB master dimming from value 000-255.
	–		– Preset color from 01 – 07. (Red, Green, Blue, White, Yellow, Cyan, Magenta)
	–		– Master dimming for preset color from value 000 – 255.

iii. Auto Chase Mode

1. Press [MODE] button to find

Chase:XX SyyyFzzz

 menu.
2. Press [F/S] button to scroll through

Chase:XX SyyyFzzz

,

Chase:XX SyyyFzzz

,

Chase:XX SyyyFzzz

,

Chase:XX Dim:XX

 submenus.
3. Use [UP] [DOWN] button to set chase, speed, fade time and dimming.

Chase:01 SyyyFzzz

 –

Chase:19 SyyyFzzz

 – Select chase from 01 – 19.

Chase:XX S000Fzzz

 –

Chase:XX S255Fzzz

 – Set chase running speed from 000 – 255.

Chase:XX SyyyF000

 –

Chase:XX SyyyF100

 – Set chase fade time from 000 – 100.

Chase:XX Dim:000

 –

Chase:XX Dim:255

 – Set chase saturation from 000 – 255.

3.4 Special Functions

i. Check Software Version

1. Press [MODE] button to find

Special Function

 menu.
2. Press [F/S] to view current software version on the fixture.

Software Ver:XXXX

 – XXXX indicates the software version number. eg. 1.2c

ii. Test Sequence

Use this function to run demo-test sequence. It will automatically go through all preprogrammed chase without external controller.


1. Press [F/S] to find submenu

TestSeq. Run

.
2. Press [UP] [DOWN] button to start.

iii. Resetting the Fixture

Use this function to clear all setting and memory of the fixture. Once this function is triggered it will automatically restore all factory default setting.

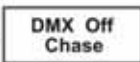
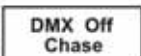

1. Press [F/S] to find submenu  .
2. Press [UP] [DOWN] button to start.

iv. DMX Signal-Off Setting

This setting use to set the unit to run chase or complete black out during course of DMX signal lost.

IMPORTANT

When unit is set to black out all stand-alone function output will be disabled except controlling the fixture using DMX signal.

1. Press [F/S] to find submenu  .
2. Press [UP] [DOWN] button to select  or  .

v. Updating the Software

Using this function allows you to update the software in the fixture via PC using a serial link.

IMPORTANT

Software update must be executed through qualified personnel. Please do not attempt update if lack of qualification and contact your local dealer or distributor for help.

1. Turn off power on the fixture.
2. Press the [UPDATE] button located on the rear end of fixture.
3. Make connection between PC and fixture.
4. Open the software update program on your PC and follow the instruction to setup.
(Software update program is available from your dealer or distributor)
5. Turn on the power of the fixture. Software update program will automatically start to re-write the software on fixture.
6. Check the software version number to confirm the update successful.

Technical Specification

Power

Input Voltage: AC 100 – 240V 50-60Hz
Power Consumption: 30 W
Fuse: T 1.0A

Light Source

LED: 270 RGB LED (90 Red, 90 Green, 90 Blue)
Beam angle: 15°

Performance

2024 LUX @ 1M
570 LUX @ 2M

Control and Programming

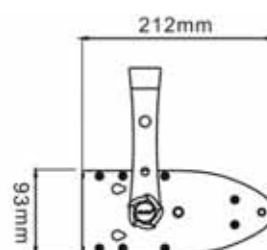
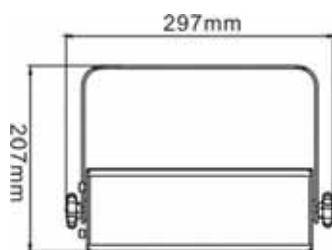
Protocol: USITT DMX 512
DMX Channels: 5, 8, 11, 14, 20, 23
Control Options: DMX, Master/Slave, Manual color mix, Auto-chase

Connections

Power: Neutrik Powercon
Data: XLR 5-PIN
Software update: XLR 5-PIN

Dimensions and Weight

Length: 297mm
Width: 212mm
Height: 207mm
Weight: 3.5 KG



Maintenance

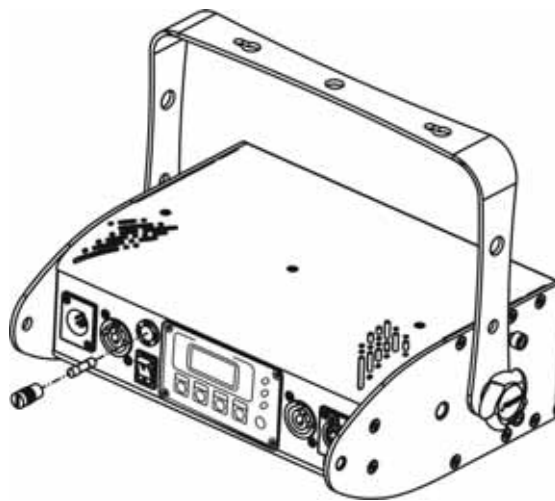
Keep the fixture dry and only install in well-ventilated areas.

Clean the fixture with a moist, lint-free cloth. Never use alcohol or solvents.

To maintaining adequate cooling, clean the dust from air vent regularly.

Fuse Replacement

1. Unplug mains before replacing fuse.
2. Unscrew the fuse holder using a flat head screwdriver (anti-clockwise).
3. Remove the damaged fuse from its holder and replace with exact same type fuse.
4. Insert the fuse holder back in its place then reconnect power.





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