



SHOWPRO

LED FUSION WASH 27A






WARNING! Before carrying out any operations with the unit, carefully read this instruction manual and keep it with care for future reference. It contains important information about the installation, usage and maintenance of the unit.



SAFETY

General instruction

- The products referred to in this manual conform to the European Community Directives and are therefore marked with CE .
- The unit is supplied with hazardous network voltage (230V~). Leave servicing to skilled personnel only. Never make any modifications on the unit not described in this instruction manual, otherwise you will risk an electric shock.
- Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1). It is, moreover, recommended to protect the supply lines of the units from indirect contact and/or shorting to earth by using appropriately sized residual current devices.
- The connection to the main network of electric distribution must be carried out by a qualified electrical installer. Check that the main frequency and voltage correspond to those for which the unit is designed as given on the electrical data label.
- This unit is not for home use, only professional applications.
- Never use the fixture under the following conditions:
 - in places subject to vibrations or bumps;
 - in places with a temperature of over 40 °C.
- Make certain that no inflammable liquids, water or metal objects enter the fixture.
- Do not dismantle or modify the fixture.
- All work must always be carried out by qualified technical personnel. Contact the nearest sales point for an inspection or contact the manufacturer directly.
- If the unit is to be put out of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment. 

Warnings and installation precautions

- If this device will be operated in any way different to the one described in this manual, it may suffer damage and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short circuit, burns, electric shock, etc.
- Before starting any maintenance work or cleaning the projector, cut off power from the main supply.
- Always additionally secure the projector with the safety rope. When carrying out any work, always comply scrupulously with all the regulations (particularly regarding safety) currently in force in the country in which the fixture's being used.
- Install the fixture in a well ventilated place.
- Keep any inflammable material at a safe distance from the fixture.
- Shields, lenses or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is impaired.
- The lamp (LED) shall be changed if it has become damaged or thermally deformed.
- Never look directly at the light beam. Please note that fast changes in lighting, e. g. flashing light, may trigger epileptic seizures in photosensitive persons or persons with epilepsy.
- Do not touch the product's housing when operating because it may be very hot.

TABLE OF CONTENTS

Safety

General instructions
Warnings and installation precautions
General information

1 Introduction

1.1 Description and technical specifications
1.2 Maintenance
 Cleaning the unit
 Trouble shooting
1.3 Operating elements and connections

2 Installation

2.1 Mounting
2.2 Dimensions

3 Functions and settings

3.1 Operation
3.2 Basic
3.3 RDM mode
3.4 Menu structure
3.5 Linking
3.6 DMX addressing configuration
3.7 DMX mode configuration
3.8 DMX addressing
3.9 Connection of the DMX line
3.10 Construction of the DMX termination
3.11 DMX linking example
3.12 Photometrics
3.13 DMX chart
3.14 DMX mode

Packing content Color Ranger Q27A

- Power cable
 - User manual
-

INTRODUCTION

The COLOR RANGER Q27A is a compact RGBW IP65-rated wash light with snap-on beam shaping filters and advanced thermal (fanless) design.

FEATURES

- 27 x 10W RGBW LEDs deliver 12K lumens of perfectly blended color
- 3 zone independent control of horizontal sections
- Silent operation suitable for indoor studio as well as outdoor use
- Selectable LED modulation for flicker-free output from 600Hz ~ 25kHz
- Ultra-linear dimming technology for flawless color mixing
- Indestructible diecast body and tempered glass front panel
- Virtual color wheel and white presets from 2800 ~ 10000K
- Four selectable dimmer curve modes
- Optional barndoor available
- Available optics: 25° (standard), 15° or 45° (optional)
- RDM, DMX and W-DMX wireless control

SPECIFICATIONS

Light Source:	27 x 10W RGBW LEDs
Beam Angle:	25°
Field Angle:	41°
Output (lumens):	12000 lm
Color Mixing:	RGBW
Strobe:	0-30 Hz
Dimming:	4 dimming curve modes
Control:	RDM, DMX and W-DMX
DMX Channels:	4 / 6 / 10 / 12
Power linking:	up to 9 units @ 230V / up to 5 units @ 120V
Mains:	100 - 240 VAC, 50/60 Hz
Consumption:	268W/230V
Power connections:	IP65 In/Out
Data connections:	IP65 DMX In/Out
Housing:	Diecast aluminum, tempered glass
Tilt angle:	+/- 90° (manual)
Finish:	Matte gray
IP rating:	IP65
Cooling:	Passive (fanless)
Dimensions:	455 x 83 x 258 mm
Weight:	9 KG

- 1.2 - MAINTENANCE

MAINTENANCE AND CLEANING THE UNIT

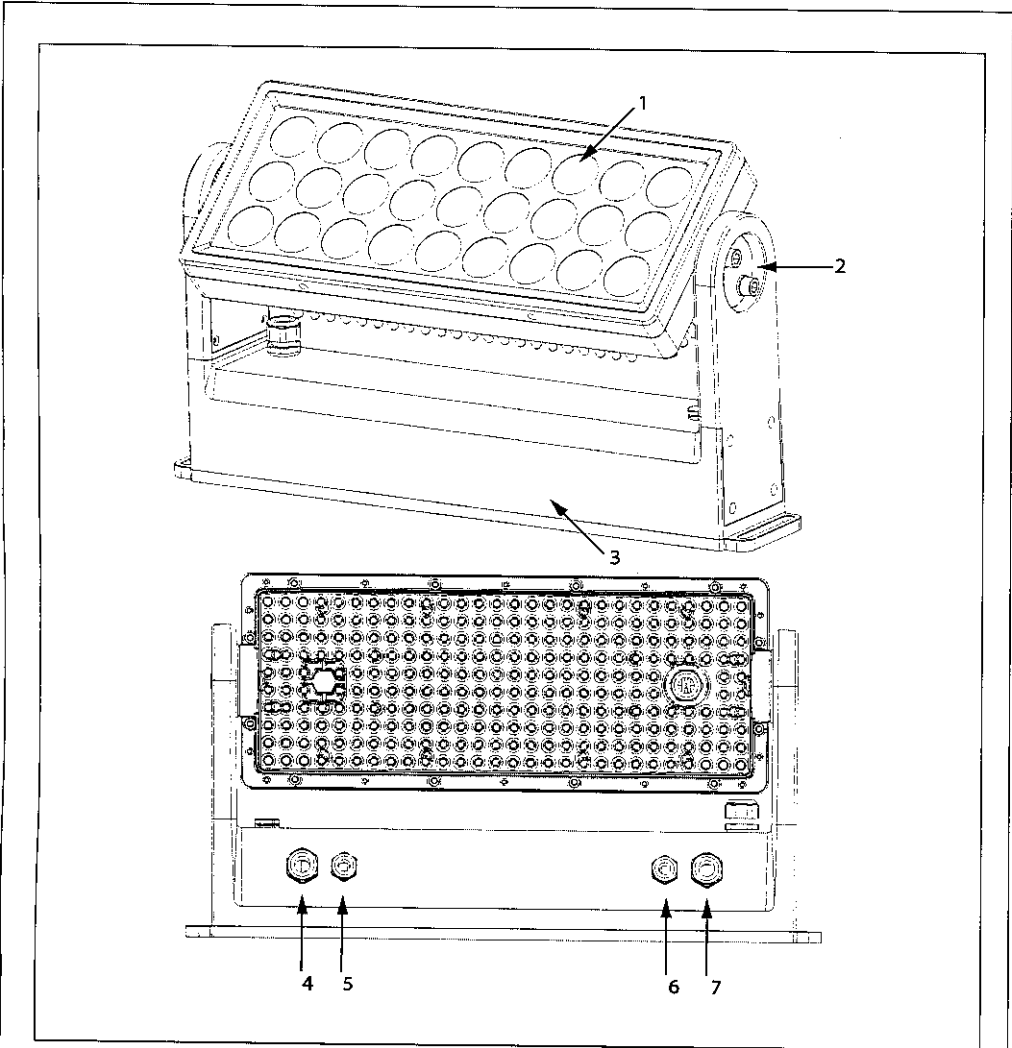
- Make sure the area below the installation place is free from unwanted persons during setup.
- Switch off the unit, unplug the main cable and wait until the unit has cooled down.
- All screws used for installing the device and any of its parts should be tightly fastened and should not be corroded.
- Housings, fixations and installation spots (ceiling, trusses, suspensions) should be totally free from any deformation.
- The main cables must be in impeccable condition and should be replaced immediately even when a small problem is detected.
- It is recommended to clean the front at regular intervals, from impurities caused by dust, smoke, or other particles to ensure that the light is radiated at maximum brightness. For cleaning, disconnect the main plug from the socket. Use a soft, clean cloth moistened with a mild detergent. Then carefully wipe the part dry. For cleaning other housing parts use only a soft, clean cloth. Never use a liquid, it might penetrate the unit and cause damage to it.

TROUBLESHOOTING

Problems	Possible causes	Checks and remedies
Fixture does not light up	<ul style="list-style-type: none"> • No mains supply • Dimmer fader set to 0 • All color faders set to 0 • Faulty LED • Faulty LED board 	<ul style="list-style-type: none"> • Check the power supply voltage • Increase the value of the dimmer channels • Increase the value of the color channels • Replace the LED board • Replace the LED board
General low light intensity	<ul style="list-style-type: none"> • Dirty lens assembly • Misaligned lens assembly 	<ul style="list-style-type: none"> • Clean the fixture regularly • Install lens assembly properly
Fixture does not power up	<ul style="list-style-type: none"> • No power • Loose or damaged power cord • Faulty internal power supply 	<ul style="list-style-type: none"> • Check for power on power outlet • Check power cord • Replace internal power supply
Fixture does not respond to DMX	<ul style="list-style-type: none"> • Wrong DMX addressing • Damaged DMX cables • Bouncing signals 	<ul style="list-style-type: none"> • Check control panel and unit addressing • Check DMX cables • Install terminator as suggested

In case of technical issues that cannot be resolved following about troubleshooting tips, contact your authorized dealer for service.

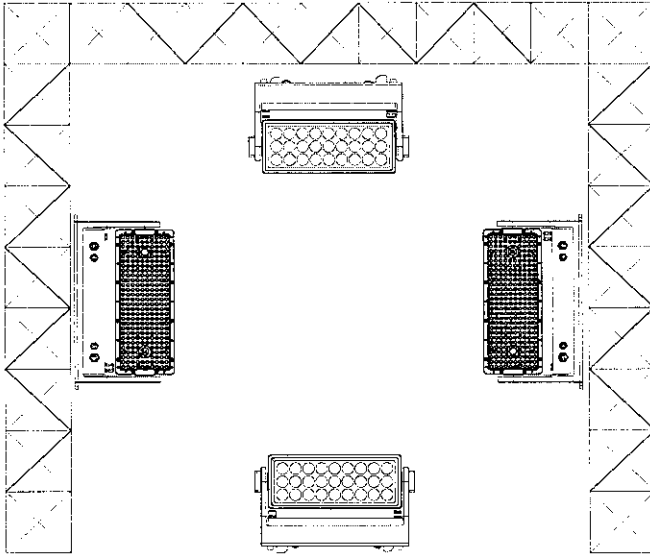
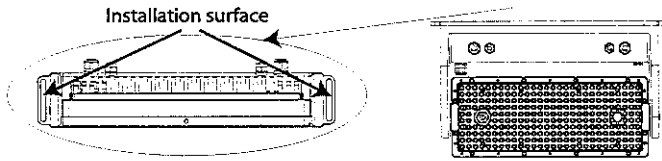
1.3 OPERATING ELEMENTS AND CONNECTIONS



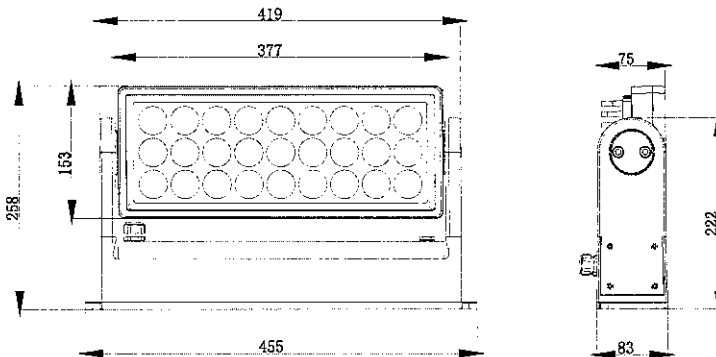
1. LED panel
2. KNOB for tilt movement
3. POWER SUPPLY CASING SET
4. POWER IN: for connection to a socket (100-240V~/50-60Hz) via the supplied mains cable
5. DMX IN
6. DMX OUT
7. POWER OUT: connect to supply power to the next unit.

- 2 - INSTALLATION

2.1 MOUNTING



2.2 DIMENSIONS



- 3 - FUNCTIONS AND SETTINGS

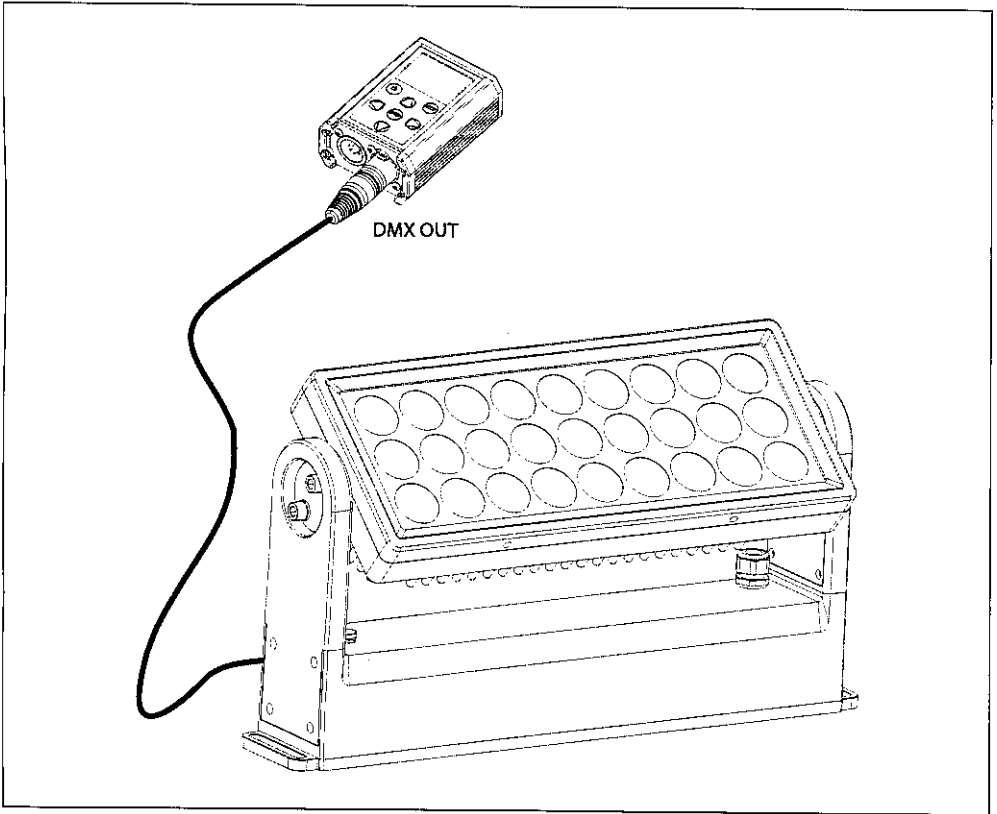
3.1 OPERATION

Connect the supplied main cable to a socket (100-240V~/50-60Hz). The unit will run built-in program to reset all motors to their home position. Shortly after that the ARCPD27Q is ready for operation. To switch off, disconnect the mains plug from the socket. For a more convenient operation it is recommended to connect the unit to a socket which can be switched on and off via light switch.

3.2 BASIC

To control the Color Ranger Q27A connect the device to a RDM Xpress Kit

RDM Xpress Kit is a powerful RDM-DMX tool that automatically detects connected RDM devices, allowing direct and fast monitoring and control. Information on the status of the connected fixture can be read from the RDM Xpress Kit display.



3.3 RDM MODE

To use the Color Ranger Q27A proceed as follows:

Connect the Color Ranger Q27A to a RDM Xpress Kit.

Turn on the RDM Xpress Kit using the dedicated button.

With the RDM Xpress Kit select **RDM** to show the following info about:

- Model;
- Manufacturer;
- Function;
- Temperature;
- Factory Default;
- Software Version;
- UID.

3.4 MENU STRUCTURE

RDM Function			
1	DMX address	1	Default: 1
2	DMX MODE	4CH	Default: 10CH
		6CH	
		10CH	
		12CH	
3	Dimmer Mode	Off	Default: Off
		Dimmer1	
		Dimmer2	
		Dimmer3	
4	LED Frequency	600Hz	Default: 1200Hz
		1200Hz	
		2000Hz	
		4000Hz	
		6000Hz	
5	Specific PIDS	8200 (RED)	White Balance
		8201 (Green)	
		8202 (Blue)	
		8203 (White)	

3.5 LINKING

Multiple units can be connected so that all secondary units have the same lighting effect as the main unit (Master).

1. Connect the DMX OUT output of the main unit to the DMX IN input of the first secondary unit using a 5 pole XLR cable.
2. Connect the DMX OUT output of the first secondary unit with the DMX IN input of the second secondary unit, etc.

3.6 DMX ADDRESSING CONFIGURATION

To enter the DMX mode proceed as follows:

- Press the ENTER button to access the main menu.
- Press the UP/DOWN button to scroll through the menu, select the **Start Address**, then press the ENTER button to access.
- Use the arrow buttons to set the desired value (**001-512**). Press the ENTER button to confirm.
- Press the MENU button repeatedly to exit the menu and to save the changes made.

3.7 DMX MODE CONFIGURATION

Color Ranger Q27A has 4 DMX channel configurations.

- In the main menu of the RDM Xpress Kit select **RDM**.
- Press the ENTER button to access the main menu.
- Press the UP/DOWN button to scroll through the menu, select the **Pers. Mode**, then press the ENTER button to enter the next menu.
- Use the UP/DOWN button to select the desired DMX channel configuration (**4CH, 6CH, 10CH, 12CH**), then press the ENTER button to confirm the selection.
- Press the MENU button repeatedly to exit the menu and to save the changes made.

The tables on page 13, 14 and 15 indicate the operating modes and related DMX values. As an interface DMX, the unit has 5-pin XLR contacts.

3.8 DMX ADDRESSING

For operation via a light console with DMX512 protocol, simply connect Color Ranger Q27 to the controller. The projector has a DMX channel configuration that can be accessed from the control panel. In order to control Color Ranger Q27 with a light control unit, the DMX start address must be set for the first DMX channel. If, for example, the address 33 is provided on the control unit to control the function of the first DMX channel, the start address 33 must be set on the Color Ranger Q27. The other panel functions will be automatically assigned to the following addresses.

Relation between DMX and Address

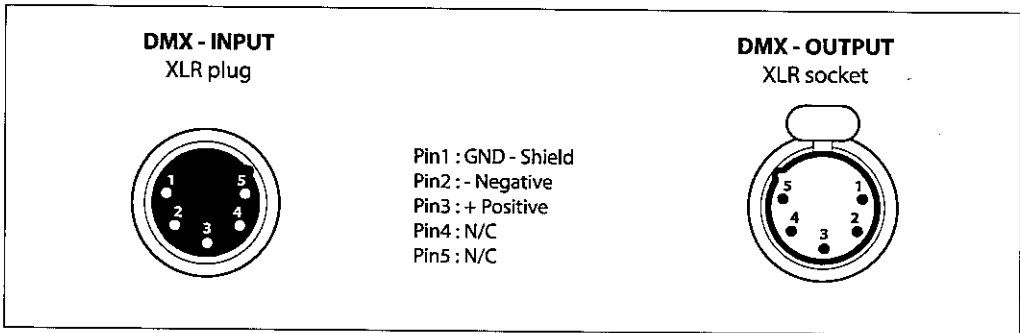
MODE	ALLOCATION	START ADDRESS 1ST FIXTURE	START ADDRESS 2ND FIXTURE	START ADDRESS 3RD FIXTURE	START ADDRESS 4TH FIXTURE
4CH	001-004	001	005	009	013
6CH	001-006	001	007	013	019
10CH	001-010	001	011	021	031
12CH	001-012	001	013	025	037

Follow above method for subsequent fixtures, calculating starting addressed as indicated.

3.9 CONNECTION OF THE DMX LINE

DMX connection employs standard XLR connectors. Use shielded pair-twisted cables with 120Ω impedance and low capacity.

The following diagram shows the connection mode:



ATTENTION

The screened parts of the cable (sleeve) must never be connected to the system's earth, as this would cause faulty fixture and controller operation.

Over long runs can be necessary to insert a DMX level matching amplifier.

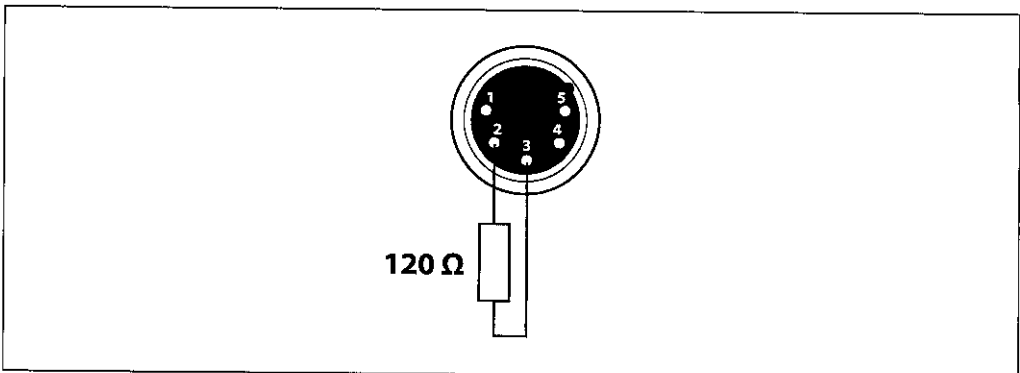
For those connections the use of balanced microphone cable is not recommended because it cannot transmit control DMX data reliably.

- Connect the controller DMX input to the DMX output of the first unit.
- Connect the DMX output to the DMX input of the following unit. Connect again the output to the input of the following unit until all the units are connected in chain.
- When the signal cable has to run longer distance is recommended to insert a DMX termination on the last unit.

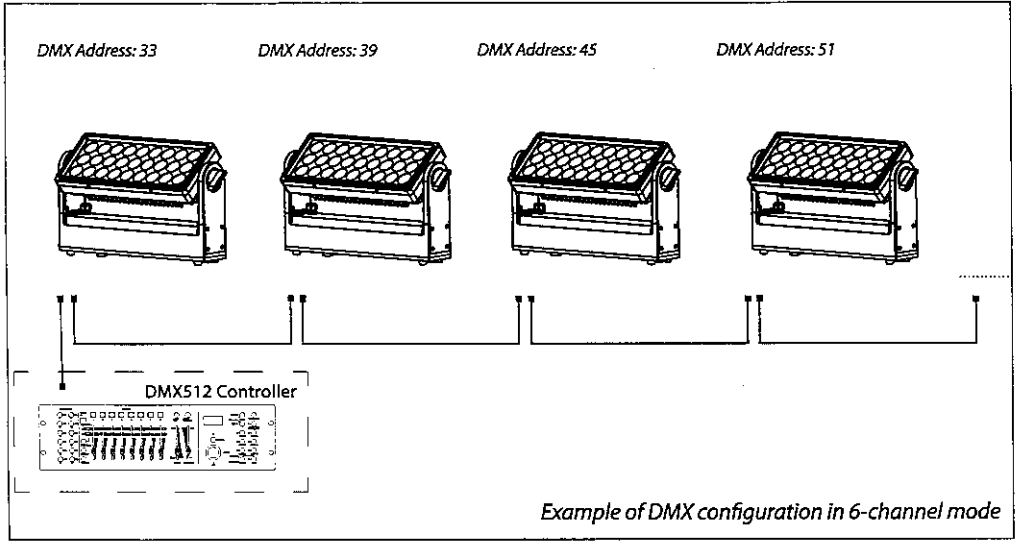
3.10 CONSTRUCTION OF THE DMX TERMINATION

The termination avoids the risk of DMX 512 signals being reflected back along the cable when they reach the end of the line: under certain conditions and with certain cable lengths, this could cause them to cancel the original signals.

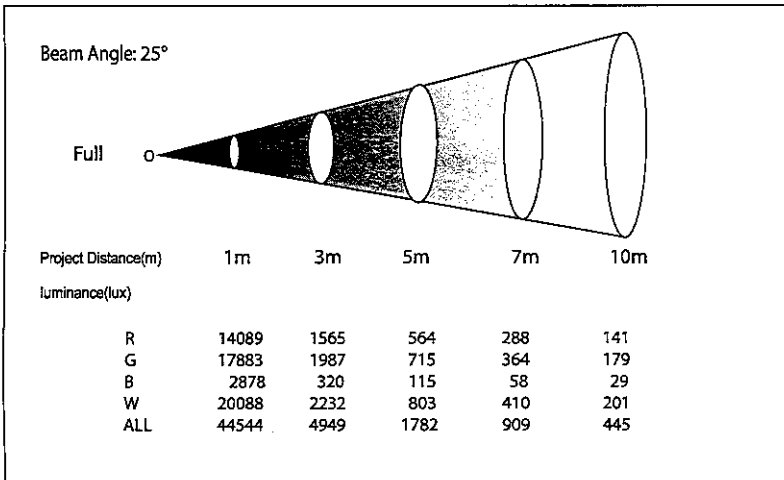
The termination is prepared by soldering a 120Ω 1/4 W resistor between pins 2 and 3 of the 5-pin male XLR connector, as shown in figure.



3.11 DMX LINKING EXAMPLE



3.12 PHOTOMETRICS



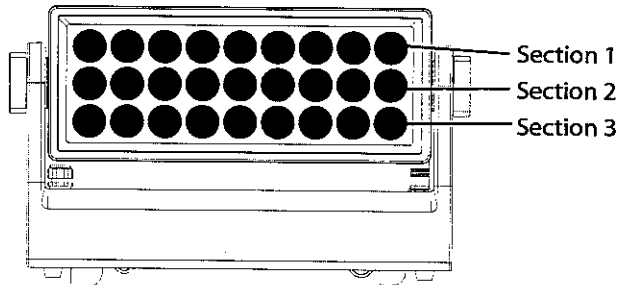
3.13 DMX Chart

DMX Channel(-)				
4CH	Function	Value	Percent/Setting	Remark
1	Red	000-255	0~100%	
2	Green	000-255	0~100%	
3	Blue	000-255	0~100%	
4	White	000-255	0~100%	

6CH	Function	Value	Percent/Setting	Remark
1	Dimmer	000-255	0~100%	
2	Red	000-255	0~100%	
3	Green	000-255	0~100%	
4	Blue	000-255	0~100%	
5	White	000-255	0~100%	
6	Strobe	000-010 011-255	NO Function Strobe Slow to Fast	

12CH	Function	Value	Percent/Setting	Remark
1	Red 1	000-255	0~100%	
2	Green 1	000-255	0~100%	
3	Blue 1	000-255	0~100%	
4	White 1	000-255	0~100%	
5	Red 2	000-255	0~100%	
6	Green 2	000-255	0~100%	
7	Blue 2	000-255	0~100%	
8	White 2	000-255	0~100%	
9	Red 3	000-255	0~100%	
10	Green 3	000-255	0~100%	
11	Blue 3	000-255	0~100%	
12	White 3	000-255	0~100%	

3 Independently Controllable Segments



3.13 DMX Chart

10CH	Function	Value	Percent/Setting
1	Dimmer	000-255	0~100%
2	Red	000-255	0~100%
3	Green	000-255	0~100%
4	Blue	000-255	0~100%
5	White	000-255	0~100%
6	Strobe	000-010 011-255	No function Strobe slow to fast
7	Color Macro	000-010 011-030 031-050 051-070 071-090 091-110 111-130 131-150 151-170 171-200 201-205 206-210 211-215 216-220 221-225 226-230 231-235 236-240 241-245 246-250 251-255	No Function R 100%, G 0~100%, B 0% R 100%~0%, G 100%, B 0% R 0%, G 100%, B 0~100% R 0%, G 100%~0%, B 100% R 0%~100%, G 0%, B 100% R 100%, G 0%, B 100%~0% R 100%, G 0%~100%, B 0%~100% R 100%~0%, G 100%~0%, B 100% R 100%, G 100%, B 100% W100% Color1 Color2 Color3 Color4 Color5 Color6 Color7 Color8 Color9 Color10 Color11
8	Effects	000-010 011-037 038-064 065-091 092-118 119-145 146-172 173-199 200-226 227-255	No Function Effect 1 Effect 2 Effect 3 Effect 4 Effect 5 (Effects1- 4) Effect 6 Effect 7 Effect 8 Effect 9 (Effects6- 8)
9	Effects speed	000-255	Effects speed slow to fast
10	Dimmer Speed Mode	000-051 052-101 102-152 153-203 204-255	Preset dimmer speed from display menu Dimmer speed mode off Dimmer speed mode1 (fast speed) Dimmer speed mode2 (middle speed) Dimmer speed mode3 (slow speed)

3.14 DMX MODE

4-channel mode: Basic RGBW dimming

6-channel mode: Basic RGBW dimming + master dimmer + strobe

10-channel mode: Offers color and effect macros + dimmer curve selection

12-channel mode: Allows for RGBW control off 3 independent horizontal rows