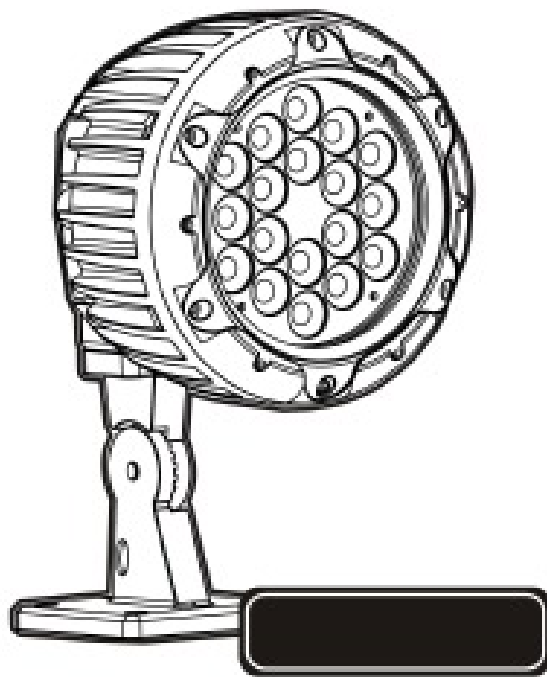

HALO



USER MANUAL

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1 PRODUCT (GENERAL)

1.1 PRODUCT INTRODUCTION

This product is designed for outdoor architectural applications. It can be operated both as a single unit and in multiple units for large applications.

1.2 PRODUCT FEATURES

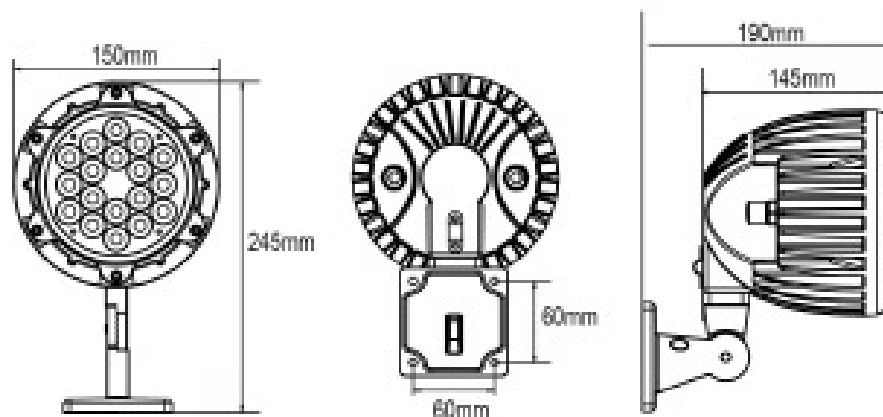
LED FIXTURE

- * RGB dimmer 0-100%
- * Color macro
- * RGB calibration
- * Strobe
- * Dimmer speed control
- * Static Function
- * DMX512 control
- * Compatible with the PIX Controller
- * Lightweight aluminum casing
- * IP67 protection rating

1.3 TECHNICAL SPECIFICATIONS

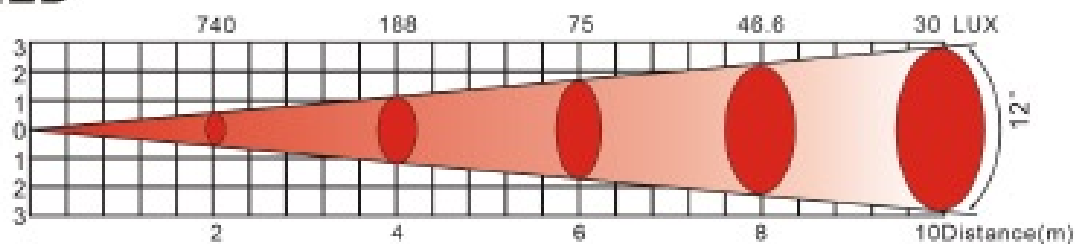
LED MODULE

LED MODULE:	
Voltage	100~240V...50/60Hz
Rated Power	26W
IP	IP67 PROTECTION RATING
LED/Unit	18pcs (6 x RED/ 6 x GREEN/ 6 x BLUE)
Output/LED	1W
Environment Temperature	-20°C~40°C
Cooling	Direct air convection
Dimensions	150 x 145 x 245mm
Weight	2.7Kg

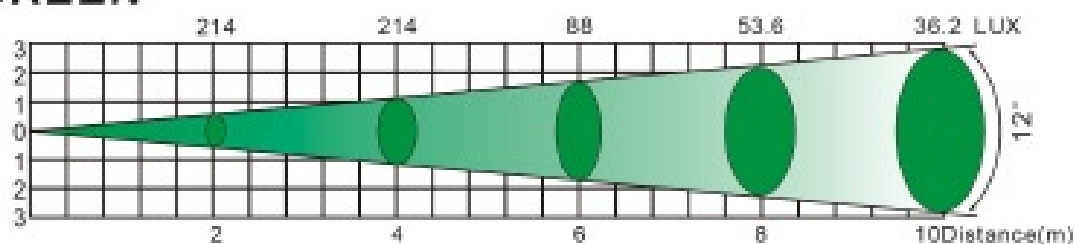


1.4 PHOTOMETRIC DATA

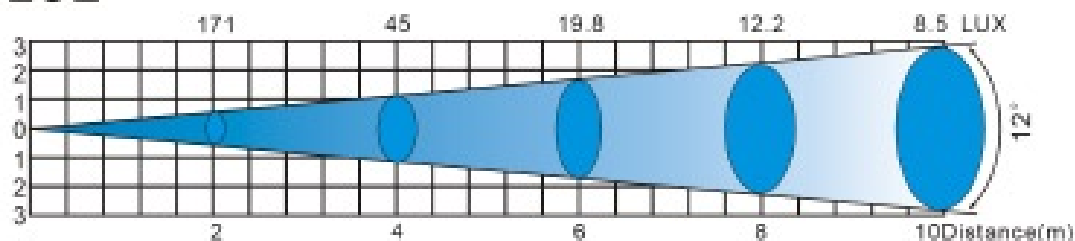
RED



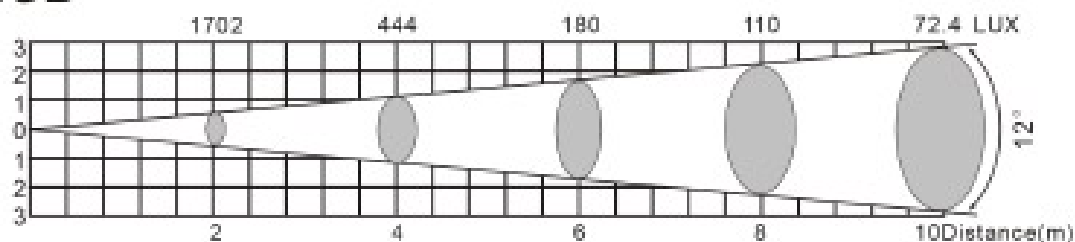
GREEN



BLUE



RGB



1.5 SAFETY WARNING

IMPORTANT

[ALWAYS READ THE USER MANUAL BEFORE OPERATION.]
[PLEASE CONFIRM THAT THE POWER SUPPLY STATED ON THE PRODUCT IS THE SAME AS THE MAINS POWER SUPPLY IN YOUR AREA.]

- This product must be installed by a qualified professional.
- Always operate the equipment as described in the user manual.
- A minimum distance of 0.5m must be maintained between the equipment and combustible surface.
- The product must always be placed in a well ventilated area.
- Always make sure that the equipment is installed securely.
- DO NOT stand close to the equipment and stare directly into the LED light source.
- Always disconnect the power supply before attempting maintenance.
- Always make sure that the supporting structure is solid and can support the combined weight of the products.
- The earth wire must always be connected to the ground.
- Do not touch the power cables if your hands are wet.

ATTENTION

⚠ ATTENTION ⚠

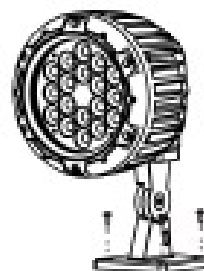
- This product left the place of manufacture in perfect condition. In order to maintain this condition and for safe operation, the user must always follow the instructions and safety warnings described in this user manual.
- Avoid shaking or strong impacts to any part of the equipment.
- Make sure that all parts of the equipment are kept clean and free of dust.
- Always make sure that the power connections are connected correct and secure.
- If there is any malfunction of the equipment, contact your distributor immediately.
- When transferring the product, it is advisable to use the original packaging in which the product left the factory.
- 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.

2 INSTALLATION

2.1 MOUNTING

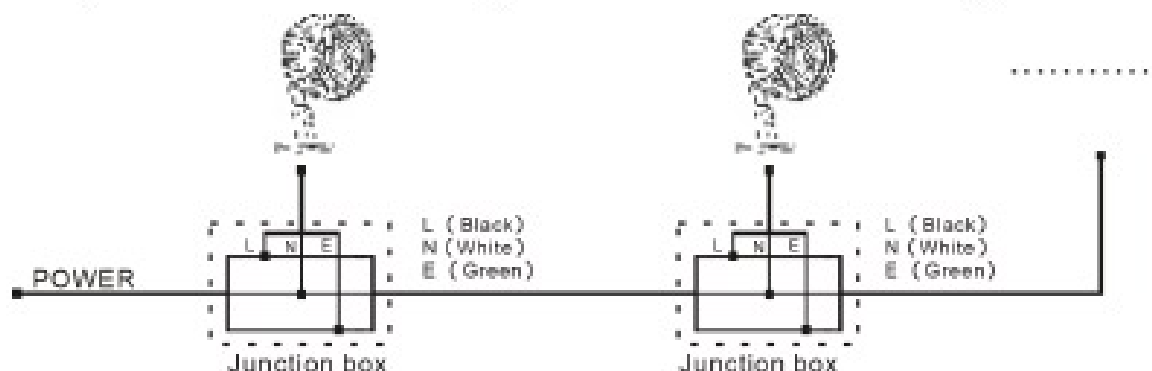
UPRIGHT

The LED Fixture can be mounted in a sitting or wall mounted position using the supporting brackets. The LED Fixture should be placed on a non-flammable flat surface in any orientation and fixed by screws. There are four holes into the supporting bracket.



2.2 POWER CONNECTIONS

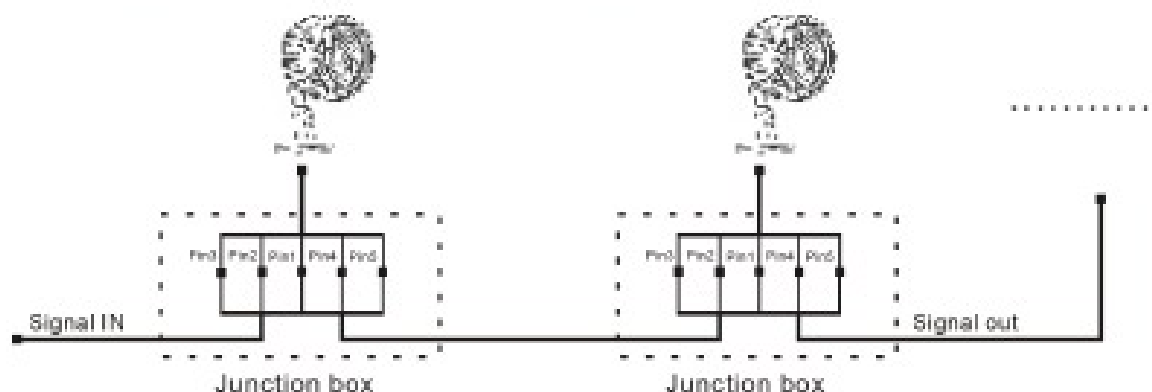
The power cable is 0.75mm² copper-core. See the connection diagram as follows :



2.3 SIGNAL CONNECTIONS

Pins and Functions :

It is advised for greater stability that if over 20 units to be connected, or the total signal cable length is over 60 meters, a DMX signal amplifier should be used.

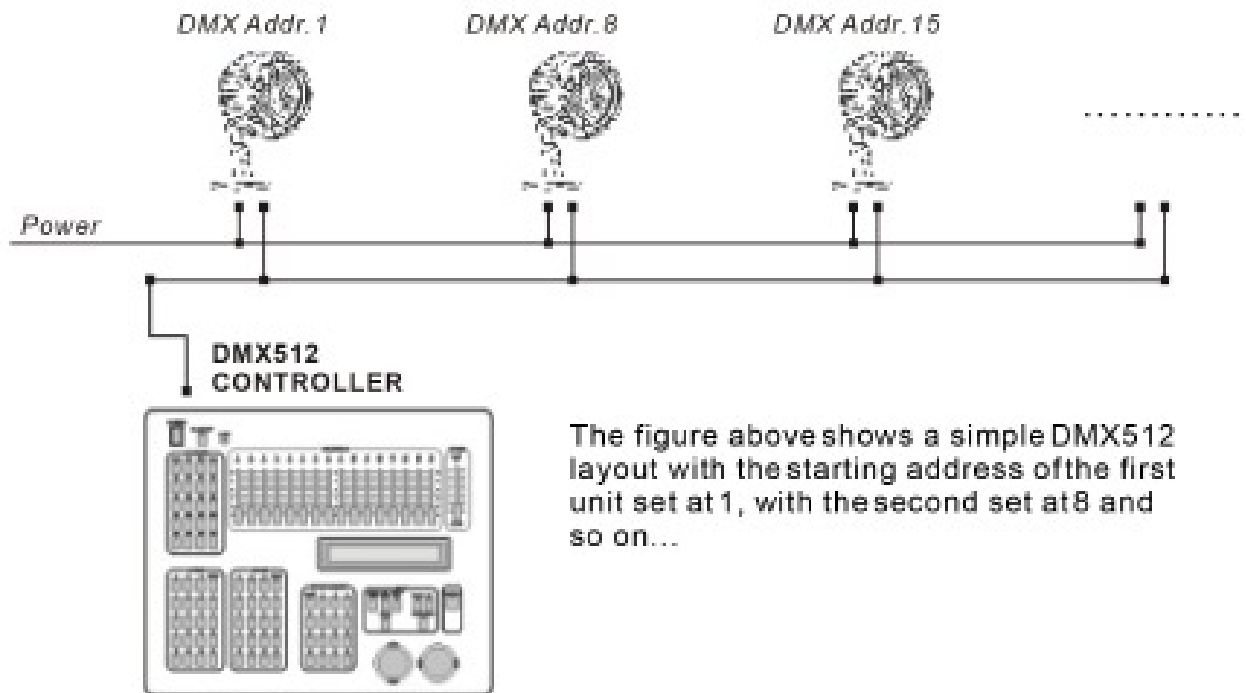


Pins	Functions
Pin1 Shield	Gnd/0
Pin2 (black)	Data input (-)
Pin3 (white)	Data input (+)
Pin4 (green)	Data output (-)
Pin5 (red)	Data output (+)

2.4 SETTING UP WITH A DMX512 CONTROLLER

- Connect the units in series, using standard DMX cable or IP 67 cable provided
- Set DMX address using a DMX coder
- Each DMX Address may be used as many times as required
- Any DMX address in the range from 001 to 512 may be used
- Connect the DMX512 controller to the units

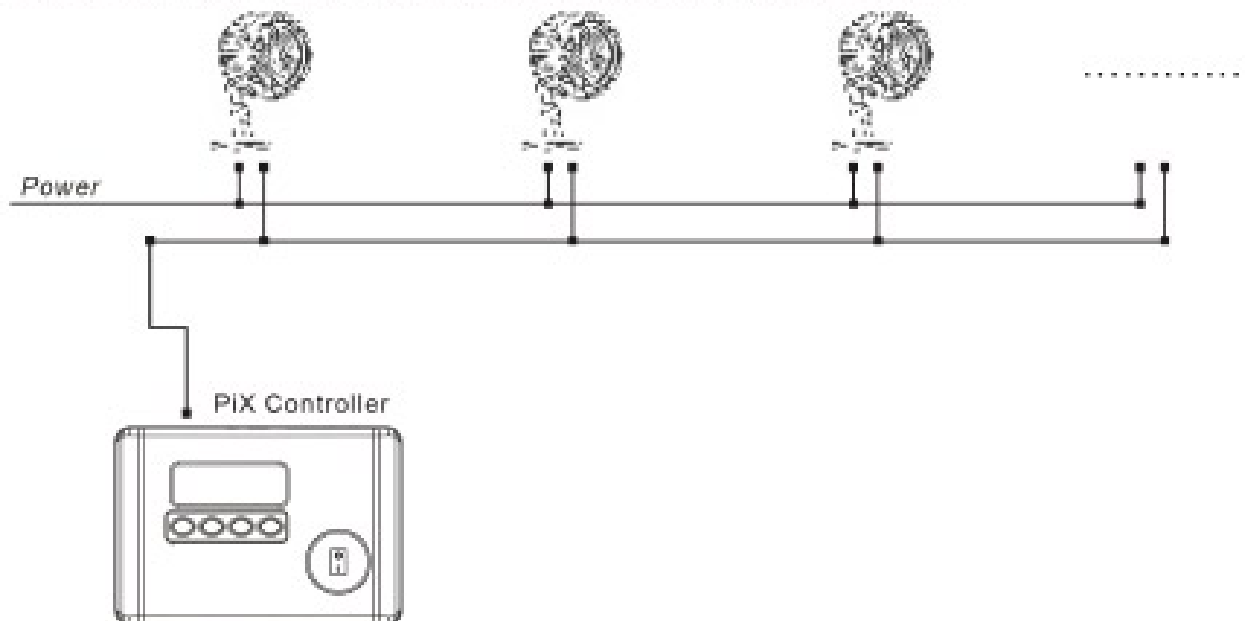
EXAMPLE (ARC FULL)



2.5 SETTING UP WITH THE PiX CONTROLLER

- The fixture can also be controlled by the PiX Controller, set the fixture as **[REMOTE]** via the DMX coder before using the PiX controller

Note: For details, please refer to the user manual of the PiX controller



3 CONTROL WITH A DMX512 CONTROLLER

3.1 CHANNEL ASSIGNMENT

- Note: This product has four DMX512 channel configurations: **[ARC 1]** , **[ARC 1+D]** , **[ARC FULL]** , **[SOLID]** .

ARC 1

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	RED
2	0 ↔ 255	GREEN
3	0 ↔ 255	BLUE

ARC 1+D

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	MASTER DIMMER
2	0 ↔ 255	RED
3	0 ↔ 255	GREEN
4	0 ↔ 255	BLUE

ARC FULL

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	MASTER DIMMER
2	0 ↔ 255	RED
3	0 ↔ 255	GREEN
4	0 ↔ 255	BLUE

CHANNEL	VALUE	FUNCTION
5		COLOR MACRO
	0 ↔ 10	NO FUNCTION
	11 ↔ 35	RED 100%/GREEN UP/BLUE 0%
	36 ↔ 60	RED DOWN/GREEN 100%/BLUE 0%
	61 ↔ 85	RED 0%/GREEN 100%/BLUE UP
	86 ↔ 110	RED 0%/GREEN DOWN/BLUE 100%
	111 ↔ 135	RED UP/GREEN 0%/BLUE 100%
	136 ↔ 160	RED 100%/GREEN 0%/BLUE DOWN
	161 ↔ 185	RED 100%/GREEN UP/BLUE UP
	186 ↔ 210	RED DOWN/GREEN DOWN/BLUE 100%
	211 ↔ 215	WHITE 1: 3200K
	216 ↔ 220	WHITE 2: 3400K
	221 ↔ 225	WHITE 3: 4200K
	226 ↔ 230	WHITE 4: 4900K
	231 ↔ 235	WHITE 5: 5800K
	236 ↔ 240	WHITE 6: 5900K
	241 ↔ 245	WHITE 7: 6500K
	246 ↔ 250	WHITE 8: 7200K
251 ↔ 255	WHITE 9: 8000K	
6	0 ↔ 5	STROBE NO FUNCTION
	6 ↔ 255	FROM SLOW TO FAST
7		DIMMING SPEED
	0 ↔ 9	OFF
	10 ↔ 69	SPEED1 (FASTEST)
	70 ↔ 129	SPEED2
	130 ↔ 189	SPEED3
	190 ↔ 255	SPEED4 (SLOWEST)

SOLID

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	RGB & MASTER DIMMER

3.2 BASIC INSTRUCTIONS FOR DMX512 OPERATION (ARC FULL)

MASTER DIMMER

- CH1 controls the intensity of the currently projected color
- When the slider is at the highest position (255) the intensity of the output is the maximum

RED, GREEN & BLUE COLOR SELECTION

- CH2, CH3 & CH4 control the intensity ratio of each of the RED, GREEN, BLUE LEDs
- When the slider is at the highest position (255) the intensity of the color is the maximum
- CH2, CH3, CH4 can be combined together to create over 16 million colors

COLOR MACROS

- CH5 selects the required COLOR MACRO
- CH5 has priority over CH2, CH3, CH 4
- CH1 is used to control the intensity of the COLOR MACRO

STROBE

- CH 6 controls the strobe of CH1 to CH5

DIMMER SPEED

- CH 7 is used to select the kind of dimmers curve required

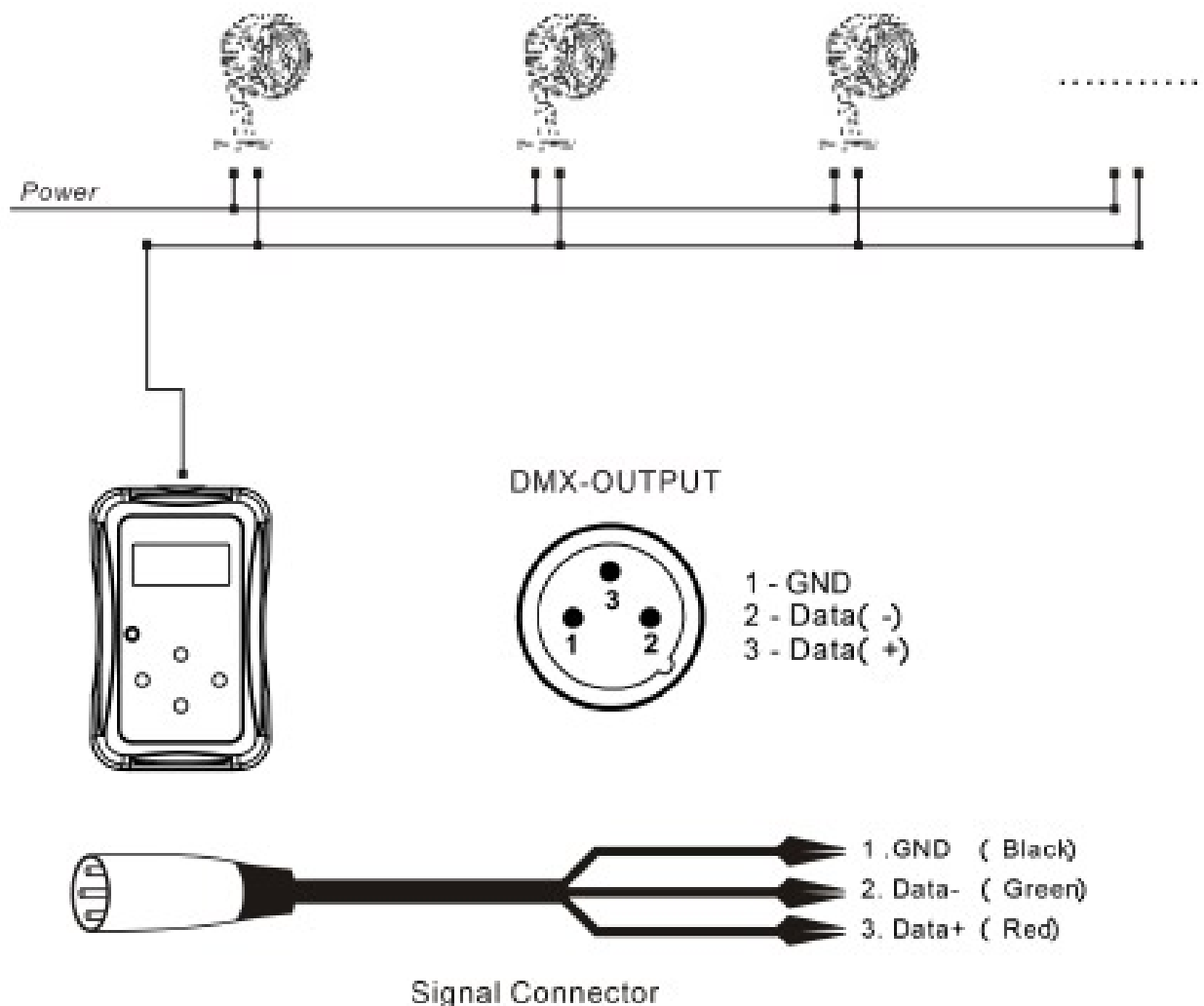
4 USING THE DMX CODER

4.1 TECHNICAL SPECIFICATIONS

LED MODULE:	
Battery	2 x 1.5V DC
Dimensions	110 x 70 x 28mm
Weight	0.2Kg

4.2 SETTING PARAMETERS

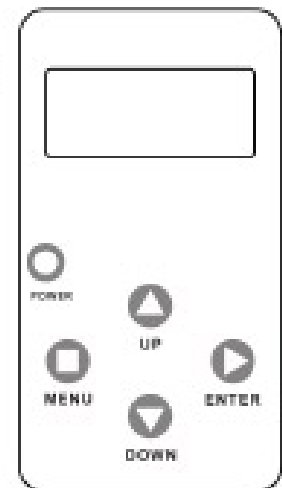
- Connect the DMX Coder to the units in series
- Set the DMX address, Personality, Calibration and Dimmer of fixtures through the DMX Coder
- A maximum of 20 units in series can be set by the DMX Coder at the same time
- All connected units will be set with the same information



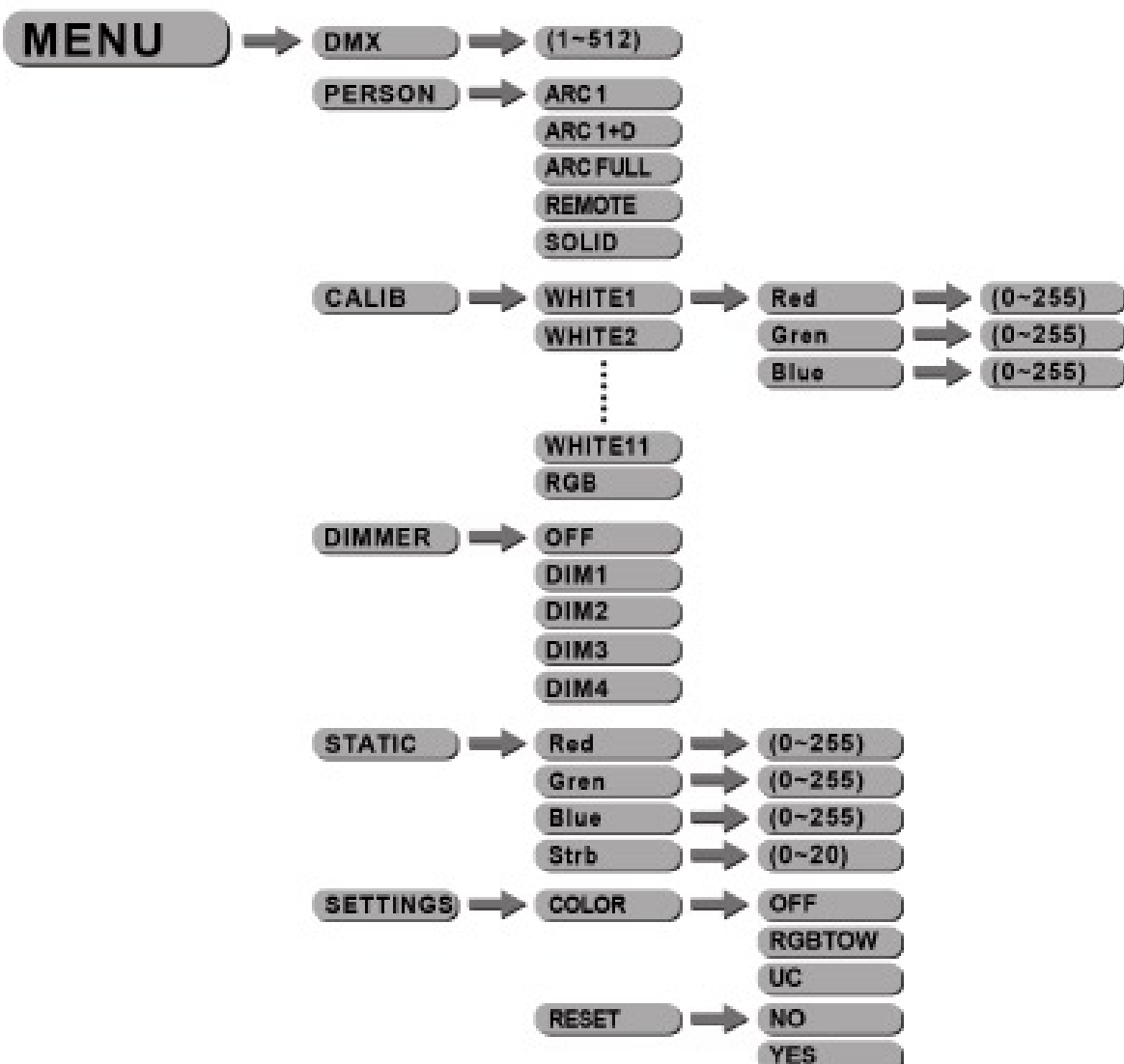
Note: The DMX Coder will automatically power off after extended periods of being idle (1 minute)

4.3 BASIC

- [POWER]** Power on
- [MENU]** Scroll through the main menu or exit from the current sub-menu (press and hold to turn off power)
- [ENTER]** Enter the currently selected menu or confirm the current function value
- [DOWN]** Scroll 'DOWN' through the menu list or decrease the value of the current function
- [UP]** Scroll 'UP' through the menu list or increase the value of the current function



4.4 MENU



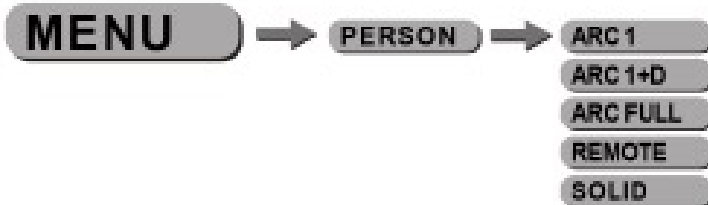
4.5 DMX ADDRESS



[DMX]

- Enter the **[DMX]** mode to set the DMX address, press **[Enter]**
- On successful setting, the fixtures will display Green and turn off after ten seconds
- If an error occurs when setting, the fixtures will display Red or no response

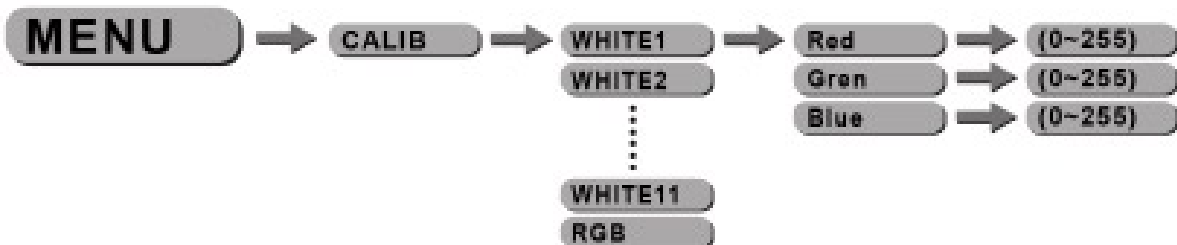
4.6 PERSONALITY



[PERSON]

- Enter **[PERSON]** and select **[ARC 1]** / **[ARC 1+D]** / **[ARC FULL]** / **[REMOTE]** / **[SOLID]** mode, press **[Enter]**
- When selecting **[ARC 1]** / **[ARC 1+D]** / **[ARC FULL]** / **[SOLID]**, the fixture is under the DMX work mode.
- When selecting **[REMOTE]**, the fixture is ready to receive signals from the PiX Controller

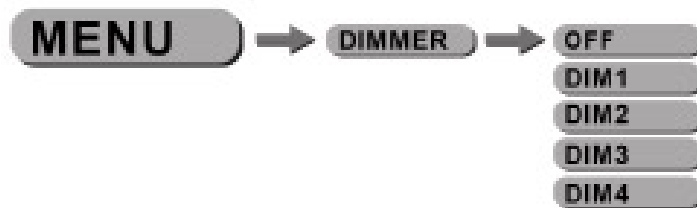
4.7 CALIBRATION



[CALIB]

- Enter the **[CALIB]** to select white colors of different color temperature
- There are 11 pre-programmed white colors plus RGB and can be edited by using **[Red]**, **[Gren]**, or **[Blue]**, press **[Enter]** to set the values
- While working under **[ARC FULL]**, **[WHITE 1-9]** means the different color temperature white 1 to white 9 of CH5
- Select **[RGB]** to set the ratio of **[Red]**, **[Gren]**, and **[Blue]** on DMX channels, achieving different white colors

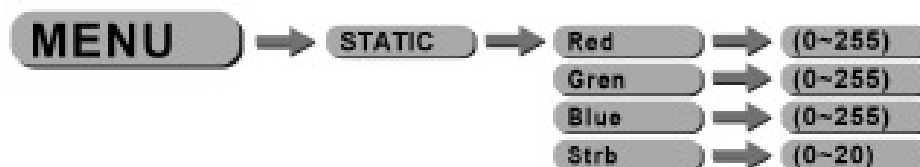
4.8 DIMMER



【DIMMER】

- Enter the **【DIMMER】** to select the dimmer work mode, press **【Enter】**
- When Dimmer is set to **【OFF】** the RGB and Master Dimmer are linear,
- When selecting **【DIM1】** , **【DIM2】** , **【DIM3】** or **【DIM4】** , the RGB and Master Dimmer are nonlinear
- These 4 dimming modes have different soft and smooth dimming effects from fast to slow

4.9 STATIC



【STATIC】

- Enter the **【STATIC】** mode to create the programs
- Combine **【RED】** , **【GREEN】** and **【BLUE】** to create an infinite range of colors
- Set the value of the **【STROBE】** **【0-20Hz】**
- The static setting will be valid when the fixture is powered again

4.10 SETTINGS



【COLOR】

- When **【RGB TO W】** is set to **【YES】** , the color is perfect white as the actual RGB values are adjusted to make white. When it is set to **【OFF】** , the RGB values are not adjusted and the output is most powerful. The **【RGB TO W】** 's parameter can be adjusted in **【CALIB】** .
- **【UC】** Function can be compatible with the older version **【RGB】** to make color consistency.

【RESET】

- Enter the **【RESET】** , pass **【YES】** to reset all settings to the original factory setting

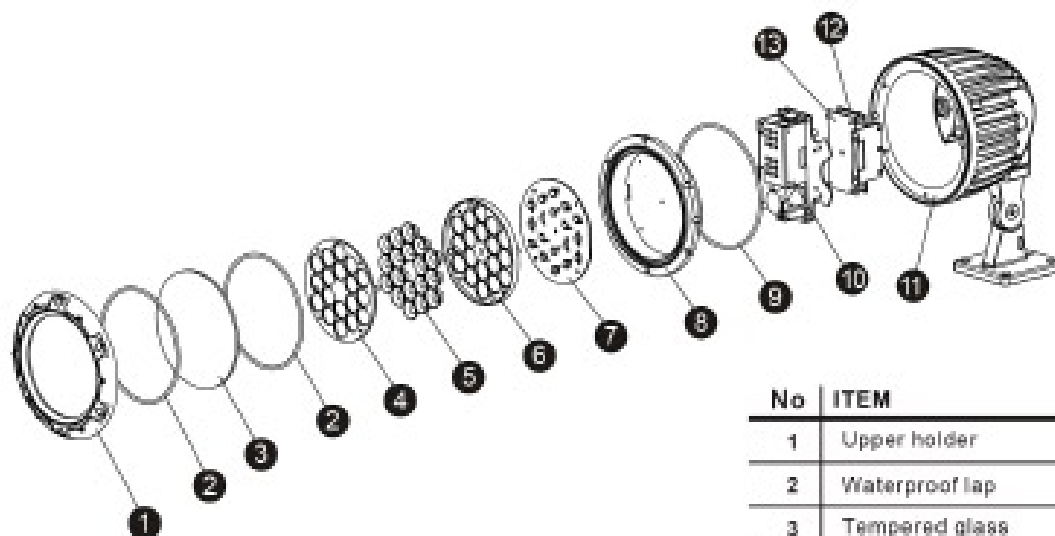
5 APPENDIX

5.1 TROUBLE SHOOTING

LED MODULE

SITUATION	CAUSE	ACTION
Can not receive DMX signal	1) DMX signal cable error 2) Signal connection error 3) The input signal IC damaged 4) DMX address error	1) Check all signal cables 2) Check all signal connections 3) Check the input signal IC 4) Check DMX address
Color mixing uneven, with splash	1) LED not joining well 2) Lens not installing well	1) Check LEDs joining 2) Check lens installing
Partial color (partial red, partial green or partial blue)	1) The current of one color LEDs is too strong or too weak 2) LEDs brightness not enough	1) Check drive current of each color in Main PCB 2) Check LED quality
LEDs of the same color are not lit	1) LED or Main PCB damaged	1) Replace damaged LED or Main PCB

5.2 MAINTENANCE



No	ITEM
1	Upper holder
2	Waterproof lap
3	Tempered glass
4	Lens front cover
5	Lens
6	Lens back cover
7	LED board
8	Led housing
9	Waterproof lap
10	Switch
11	Metal base
12	Driver board
13	Main PCB