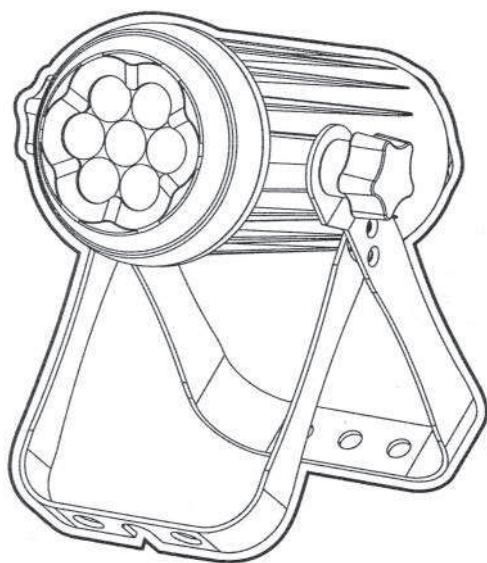


# Spectral

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## 260 RGB

USER MANUAL



**Showtec®**

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# 1 PRODUCT (GENERAL)

## 1.1 PRODUCT INTRODUCTION

This product is designed for indoor installation / bar / nightclub / theater applications. It can be operated both as a single unit and in multiple units for large applications.

## 1.2 PRODUCT FEATURES

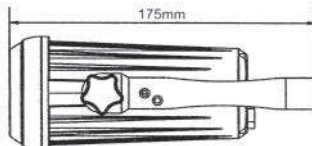
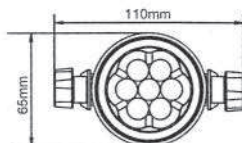
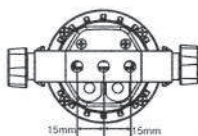
### LED FIXTURE

- \* RGBW dimmer 0-100%
- \* Color macro
- \* Strobe
- \* Automatic programs
- \* Direct DMX512 input
- \* Stand-alone/ Slave
- \* Compatible with the PIX Controller
- \* Lightweight aluminum casing

## 1.3 TECHNICAL SPECIFICATIONS

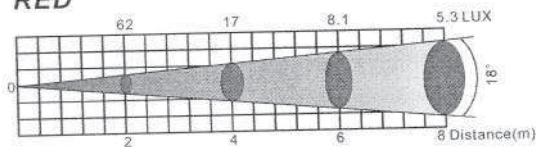
### LED MODULE

<i>LED MODULE:</i>	
<b>Voltage</b>	100~240V, 50/60Hz
<b>Rated Power</b>	10W
<b>LED/Unit</b>	7pcs (2 x RED/ 2 x GREEN/ 2 x BLUE/ 1 x WHITE)
<b>Output/LED</b>	1W
<b>Environment Temperature</b>	-20℃~40℃
<b>Cooling</b>	Direct air convection
<b>Dimensions</b>	110 x 65 x 175mm
<b>Weight</b>	0.8Kg

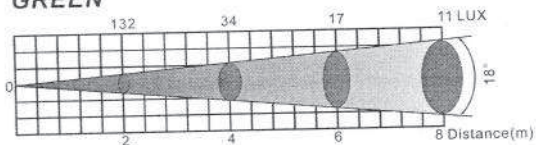


## 1.4 PHOTOMETRIC DATA

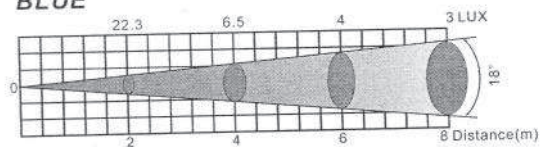
### RED



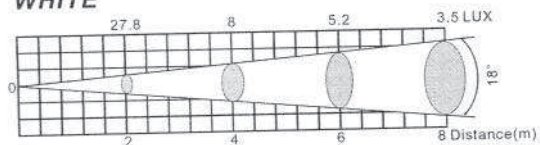
### GREEN



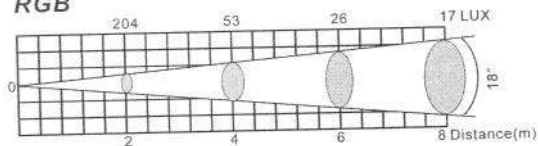
### BLUE



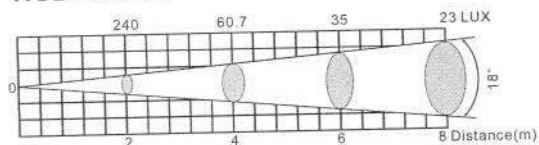
### WHITE



### RGB



### RGB+WHITE



## 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 and 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

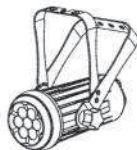
#### UPRIGHT

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.



#### HANGING

The LED fixture can be mounted in a hanging position using the supporting bracket. The bracket should be secured to the mounting truss or structure using a standard mounting clamp. Please note that when hanging the unit a safety cable should also be used.



**NOTE**

The LED MODULE can be mounted at any angle and in any position. It is possible to further adjust the angle of the LED MODULE using the two adjustment knobs located on the side of the fixture.

### 2.2 SIGNAL CONNECTIONS

**Note:**

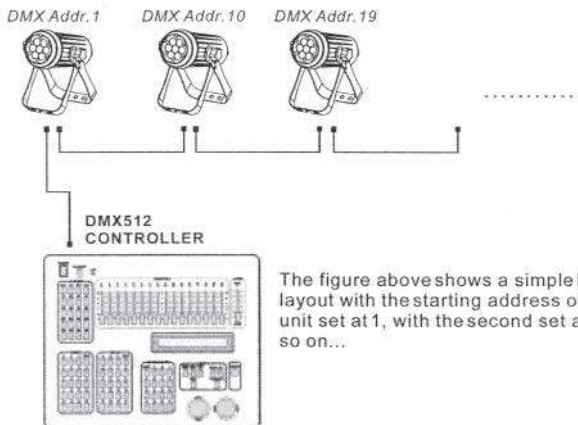
1. If over 25 units to be connected, then a DMX signal amplifier is needed.
2. If the signal cable is over 60m between the DMX512 controller and fixture or between two fixtures, then a DMX signal amplifier is needed as well.



## 2.3 SETTING UP WITH A DMX512 CONTROLLER(STAGE 1 MODE)

- Connect the DMX512 controller to the units in series.
- Each unit has 9 DMX channels so the DMX Addresses should increase by increments of 9 (e.g. 1, 10, 19, 28...)
- Each DMX Address may be used as many times as required.
- Any DMX address in the range from 001 to 512 may be used.

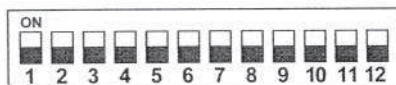
### Example:



The figure above shows a simple DMX512 layout with the starting address of the first unit set at 1, with the second set at 10 and so on...

## 3 DIP SWITCH OPERATION

### 3.1 DIP SWITCH SKETCH MAP



- DIP switch **【1~9】** is for functions value setting;
- DIP switch **【10~12】** are functions switch:

DIP 10	DIP 11	DIP 12	FUNCTIONS
ON	OFF	OFF	SLAVE/Pix controller mode
OFF	OFF	ON	AUTO
ON	OFF	ON	STATIC -- RGBW intensity
OFF	ON	OFF	<b>【ARC1】</b> -- RGB
ON	ON	OFF	<b>【ARC2】</b> -- RGBW
OFF	OFF	OFF	<b>【STAGE1】</b> -- 9 Chs mode
ON	ON	ON	Reserved
OFF	ON	ON	Reserved

### 3.2 SLAVE/PIX CONTROLLER MODE

- When activate this mode, the fixture is SLAVE fixture, and just receive signal from master fixture or Pix controller.

### 3.3 AUTO PROGRAMS SELECTION

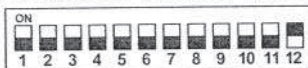
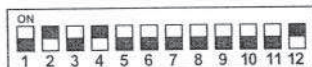
#### AUTO PROGRAM CHART:

DIP SW 【ON】	1	2	3	4	5
AUTO(0~31)	1	2	4	8	16

- In order to select the Auto programs, the DIP switch **【12】** must be set as **【ON】** ;
- Use DIP switches **【1~5】** to select 32 Auto programs **AUTO【0~31】** ;

**Note:** When the fixture is on Auto mode, it will be automatic set as master fixture, the rest linking fixtures should be set as slave mode, and all fixtures must be disconnect with the DMX controller.



**Example 1:**AUTO **[0]**The AUTO **[0]** setting is: **[12]** set as **[ON]** , the **[1, 2, 3, 4, 5]** set as **[OFF]****Example 2:**If user want to select AUTO **[10]** , please set the DIP switches **[2, 4, 12]** as **[ON]****Example 3:**If user want to select AUTO **[31]** , please set the DIP switches **[1, 2, 3, 4, 5, 12]** as **[ON]**

### 3.4 STATIC MODE

- This mode allow user to select different RGBW luminous intensity by activated the DIP switches (1-8).

LUMINOUS INTENSITY	RED		GREEN		BLUE		WHITE	
	DIP 1	DIP 2	DIP 3	DIP 4	DIP 5	DIP 6	DIP 7	DIP 8
0%	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
30%	ON	OFF	ON	OFF	ON	OFF	ON	OFF
60%	OFF	ON	OFF	ON	OFF	ON	OFF	ON
100%	ON	ON	ON	ON	ON	ON	ON	ON

### 3.5 DMX512 CHANNELS

- This fixture have three DMX channels assignment: **[ARC1]** , **[ARC2]** & **[STAGE1]** . Please refer to **[4.2 CHANNEL ASSIGNMENT]** section for detailed Channel functions.

### 3.6 DMX ADDRESS SETTING

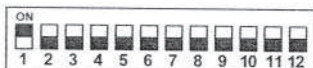
DIP Sw **【1】** is DMX address 1, **【2】** is DMX address 2.... **【9】** is DMX address 256;

DMX address chart:

DIP SW <b>【ON】</b>	1	2	3	4	5	6	7	8	9
DMX addr.	1	2	4	8	16	32	64	128	256

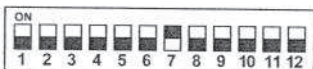
**Example 1:**

If user want to set DMX address as 1, please set the DIP switch **【1】** as **【ON】** :



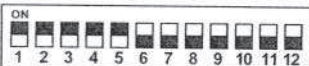
**Example 2:**

If user want to set DMX address as 64, please set the DIP switch **【7】** as **【ON】** :



**Example 3:**

If user want to set DMX address as 31, please set the DIP switches **【1, 2, 3, 4, 5】** as **【ON】** :



# 4 CONTROL WITH A DMX512 CONTROLLER

## 4.1 BASIC ADDRESSING

- Connect all of the units in series using standard DMX512 signal cable.
- Set the DMX512 address in the DIP switch PCB.
- It is possible to have the same DMX address or independent addresses for each fixture.

## 4.2 CHANNEL ASSIGNMENT

**Note:** This product has three DMX512 channel configurations: **[STAGE1]**, **[ARC1]** and **[ARC2]**.

### STAGE1

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	DIMMER
2	0 ↔ 255	RED
3	0 ↔ 255	GREEN
4	0 ↔ 255	BLUE
5	0 ↔ 255	WHITE
6		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	

CHANNEL	VALUE	FUNCTION
6	231 ↔ 235	WHITE 5: 5600K
	236 ↔ 240	WHITE 6: 5900K
	241 ↔ 245	WHITE 7: 6500K
	246 ↔ 250	WHITE 8: 7200K
	251 ↔ 255	WHITE 9: 8500K
7		<b>STROBE</b>
	0 ↔ 4	NO FUNCTION
	5 ↔ 255	FROM SLOW TOFAST
8		<b>AUTO</b>
	0 ↔ 20	NO FUNCTION
	21 ↔ 30	AUTO 0
	31 ↔ 40	AUTO 1
	41 ↔ 50	AUTO 2
	51 ↔ 60	AUTO 3
	61 ↔ 70	AUTO 4
	71 ↔ 80	AUTO 5
	81 ↔ 90	AUTO 6
	91 ↔ 100	AUTO 7
	101 ↔ 110	AUTO 8
	111 ↔ 120	AUTO 9
	121 ↔ 130	AUTO 10
	131 ↔ 140	AUTO 11
	141 ↔ 150	AUTO 12
	151 ↔ 160	AUTO 13
	161 ↔ 170	AUTO 14
	171 ↔ 180	AUTO 15
	181 ↔ 190	AUTO 16
	191 ↔ 200	AUTO 17
	201 ↔ 210	AUTO 18
	211 ↔ 220	AUTO 19
	221 ↔ 223	AUTO 20 RED
224 ↔ 226	AUTO 21 RED & GREEN	
227 ↔ 229	AUTO 22 RED & BLUE	

CHANNEL	VALUE	FUNCTION
8	230 ↔ 232	AUTO 23 RED & WHITE
	233 ↔ 235	AUTO 24 GREEN
	236 ↔ 238	AUTO 25 GREEN & BLUE
	239 ↔ 241	AUTO 26 GREEN & WHITE
	242 ↔ 244	AUTO 27 BLUE
	245 ↔ 247	AUTO 28 BLUE & WHITE
	248 ↔ 250	AUTO 29 WHITE
	251 ↔ 253	AUTO 30 RED & GREEN & BLUE
	254 ↔ 255	AUTO 31 RED & GREEN & BLUE & WHITE
9	0 ↔ 255	<b>AUTO SPEED ADJUSTMENT</b> When using CH8, AUTO 0-AUTO 19, this function activated

#### **ARC 1**

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

#### **ARC 2**

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

# 5 APPENDIX

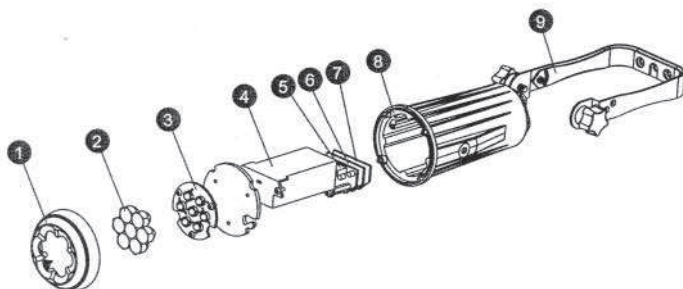
## 5.1 TROUBLE SHOOTING

### LED MODULE

SITUATION	CAUSE	ACTION
LED not lit	1) No power input 2) Power connection error 3) LED driver PCB damaged	1) Check power supply 2) Check power connection 3) Check the LED driver PCB
Fixture do not receive DMX signal	1) 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
Over-heat protection failed	1) The heat sensor resistance of LED board error	1) Replace the heat sensor resistance.
Color mixing uneven, with splash	1) LED not joining well 2) Lens not installing well	1) Check LEDs joining 2) Check lens installation
Partial color (partial red, partial green or partial blue)	1) The current of one of the color group LEDs is too strong or too weak.	1) Check driver current of the partial color LEDs on the Driver PCB
LEDs of the same color are not lit	1) LED damaged 2) Driver PCB error	1) Replace LEDs 2) Check Driver PCB



## 5.2 MAINTENANCE



No	ITEM
1	Front cover
2	Lens
3	LED PCB
4	Power supply
5	Driver PCB
6	Power PCB
7	Main PCB (dip switch)
8	Main case
9	Bracket