EXPOLITE

TourSpot 21 CM

- Manual -
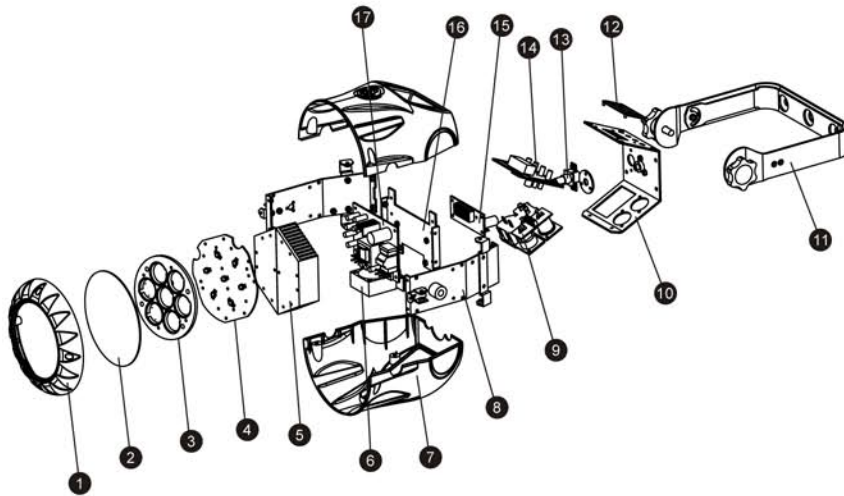
No	ITEM
1	Plastic cover
2	dustproof glass
3	Lens wheel
4	Led board
5	Cooling
6	Fans
7	Plastic side cover
8	Side board
9	DMX board
10	Display support
11	Holder
12	LCD plastic cover
13	Fuse socket
14	Main board
15	Driver board
16	Power board
17	Switch

TABLE OF CONTENTS

5 APPENDIX

5.1 TROUBLE SHOOTING

LED MODULE

SITUATION	CAUSE	ACTION	PART ORDER NUMBER
No display	1) Power connection error	1) Check all power connections	
	2) Power switch damaged	2) Replace power switch	16-03-0030-04
	3) Display board damaged	3) Replace display board	26-2A-LED307DI-00
	4) Fuse damaged	4)Replace the Fuse	
LED MODULE on, but no control from display	1) Keyboard damaged	1) Replace keyboard	26-2A-LED307DI-00
	2) Display board damaged	2) Replace display board	26-2A-LED307DI-00
LEDs of the same color are not lit	LED PCB damaged	Check and Replace PCB board	26-2A-307LED-00
LED module on, LEDs of all colors are not lit	1) MAIN PCB damaged	1) Replace main PCB board	26-2A-LED307DI-00
	2) LED PCB damaged	2) Replace PCB board	26-2A-307LED-00
Display normal, but no response to DMX 512 controller	1) Signal connection error	1) Check and replace signal cable	
	2) DMX Address error	2) Check and reset DMX address	
	3) Master & slave mode error	3) Check and reset the working mode	
	4) ID error	4) Check and reset ID address	

4.3 BASIC INSTRUCTIONS FOR DMX512 OPERATION (STAGE 1)

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, CH4 and CH6
● CH1 is used to control the intensity of the COLOR MACRO

STROBE
● CH 6 controls the strobe of CH1 to Ch5

ID ADDRESS SELECTION
● CH9 is used to select the target ID address.
● Each independent DMX address may have up to 66 independent ID addresses.
● An ID address of 0 will activate all ID address locations.

AUTO
● CH7 selects the preset AUTO programs AT.01-AT10 or the custom AUTO programs PR.C1-PR.10
● When activating the custom AUTO programs PR.C1 to PR.10 then it is possible to control the
   Step time and fade time using Ch2 and Ch3 respectively.

1 PRODUCT (GENERAL)

1.1 PRODUCT INTRODUCTION

This product is designed for indoor use. Suitable applications include wash or effect lighting for architectural, stage or nightclub applications. This product can also be installed for use in signage and advertising using the dynamic functions available with DMX512 control. Direct input of DMX512 signal allows the units to be controlled from any DMX512 controller. This product can be operated as a single unit or in multiple units for large applications.

The specially developed controller that allows the product to be controlled independent of the DMX512 controller enables the user to create and edit a wide range of custom programs. All programs can be touch-button displayed or scheduled to START and END at scheduled times. When programs have been created or edited in the controller, it is also possible to trigger these programs using the DMX IN function when connected to a DMX512 controller.

1.2 PRODUCT FEATURES

LED FIXTURE

* RGB Dimmer 0-100%
* Strobe
* Automatic programs
* LCD display
* Display control 'lock-out'
* Direct DMX512 input
* Independant ID address
* Stand-alone/ Slave

1.3 TECHNICAL SPECIFICATIONS

LED MODULE

LED MODULE:	
Voltage	100~240V...50/60Hz
Rated Power	35W
LED/Unit	7 X 3W Tri-RGB
Environment Temperature	-20℃~40℃
Cooling	Forced air convection
Dimensions	240 x 210 x160mm
Weight	2.5Kg
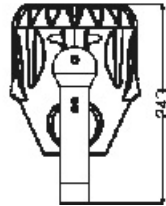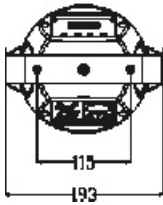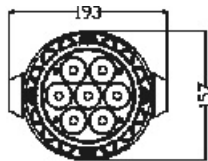
CHANNEL	VALUE	FUNCTION
	200⟷209	ID20
	210	ID21
	211	ID22
9	⋮	⋮
	253	ID64
	254	ID65
	255	ID66

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

CHANNEL	VALUE	FUNCTION
		AUTO
	0⟺20	No function
	21⟺30	AUTO 1
	31⟺40	AUTO 2
	41⟺50	AUTO 3
	51⟺60	AUTO 4
	61⟺70	AUTO 5
	71⟺80	AUTO 6
	81⟺90	AUTO 7
	91⟺100	AUTO 8
	101⟺110	AUTO 9
7	111⟺120	AUTO 10
	121⟺130	CUSTOM 1
	131⟺140	CUSTOM 2
	141⟺150	CUSTOM 3
	151⟺160	CUSTOM 4
	161⟺170	CUSTOM 5
	171⟺180	CUSTOM 6
	181⟺190	CUSTOM 7
	191⟺200	CUSTOM 8
	201⟺210	CUSTOM 9
	211⟺220	CUSTOM 10
	221⟺255	No function
8		**AUTO SPEED ADJUSTMENT**
	0⟺255	When using CH7,AUTO01-AUTO9, this function activated
		ID ADDRESS
	0⟺9	ID1~ID66
	10⟺19	ID1
	20⟺29	ID2
	30⟺39	ID3
	40⟺49	ID4
	50⟺59	ID5
	60⟺69	ID6
	70⟺79	ID7
	80⟺89	ID8
	90⟺99	ID9
9	100⟺109	ID10
	110⟺119	ID11
	120⟺129	ID12
	130⟺139	ID13
	140⟺149	ID14
	150⟺159	ID15
	160⟺169	ID16
	170⟺179	ID17
	180⟺189	ID18
	190⟺199	ID19

1.4 PHOTOMETRIC DATA

PHOTOMETRIC DATA

RED
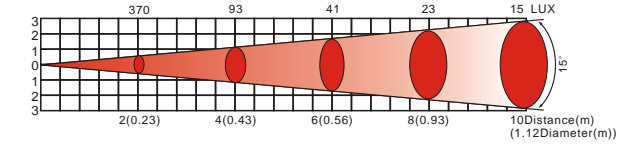
GREEN
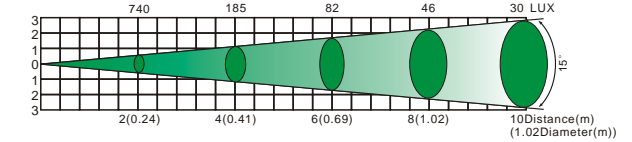
BLUE

RGB

1.5 SAFETY WARNING

4 USING A DMX512 CONTROLLER

4.1 BASIC ADDRESSING

● Connect all of the units in series using standard DMX512 signal
  cable or the IP65 rated cable   provided.
● Set the DMX512 address in the 【DMX】 menu.

4.2 CHANNEL ASSIGNMENT

● Note: This product have three DMX512 channel configuration:
  【STAGE 1】 , 【ARC 1】 and 【ARC 1+D】

STAGE 1

CHANNEL	VALUE	FUNCTION
1		DIMMER
	0⇔255	
2		RED
	0⇔255	Ch2 will control the TIME if Ch7 choose custom01-10
3		GREEN
	0⇔255	Ch3 will control the FADE if Ch7 choose CUSTOM01-10
4		BLUE
	0⇔255	
5		MARCO
	0⇔10	No function
	11⇔35	RED 100% / GREEN UP / BLUE 0%
	36⇔60	RED DOWN / GREEN100% / BLUE 0%
	61⇔85	RED 0% / GREEN100% / BLUE UP
	86⇔110	RED 0% / GREEN DOWN / BLUE 100%
	111⇔135	RED UP / GREEN0% / 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: 5600K
	236⇔240	WHITE 6: 5900K
	241⇔245	WHITE 7: 6500K
	246⇔250	WHITE 8: 7200K
	251⇔255	WHITE 9: 8500K
6		STROBE
	0⇔10	No function
	11⇔255	Strobe speed

3.10 SETTINGS
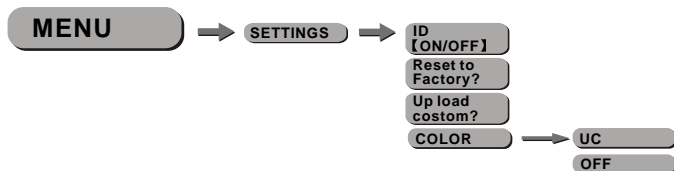
【ID】

● Choose **【ON】** / **【OFF】** to open or close ID

【Reset to Factory?】

● This function will reset all setting to the original factory setting

【Up load custom?】

● Select **【Up load custom?】** to upload the custom programs from the current MASTER unit to the SLAVE units

● **【COLOR】** is for activate/unactivate the color calibration functions. When [**UC**] is selected, the RGB output are adjusted to a standard preset universal color which balances fixtures from different generations..
The factory default setting is [**UC**] on.

3.11 PASSWORD

【PASSWORD】

● Enter the **【PASSWORD】** mode to select whether the access password is on or off.
● When the fixture is set as PASS **【ON】** , after 30 seconds or turn on the fixture next time, the fixture will need an access password to enter the display menu control.

Note: The factory access password is **【UP】** + **【DOWN】** + **【UP】** + **【DOWN】** , then press **【ENTER】** to confirm the access.

3.12 SAVE

● Only the main menu and the Auto-programs submenu can be protected
● Repower the unit, it will back to the main menu

2 INSTALLATION

2.1 MOUNTING

___
HANGING
___

The LED PAR 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.

___
UPRIGHT
___

The LED PAR can be mounted in an upright or sitting position using the supporting brackets.
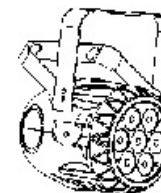
> ⚠ **NOTE** The LED MODULE can be mounted at any angle and in any position. It is possible to further adjust the angle of the LED MODULE using the two adjustment knobs located on the side of the fixture.

2.2 POWER CONNECTIONS

@ 220V: 40 units may be connected in series

@120V: 20 units may be connected in series

Note: As this fixture's DMX signal cable connection had been changed to Parallel connection, so if over 30 units to be connected, then a DMX signal amplifier is needed.

2.3 SETTING UP WITH A DMX512 CONTROLLER

2.3-1 DMX512 ADDRESSING WITHOUT ID ADDRESSING (*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...)
● The ID address has not been set so therefore when using the controller Ch9 must be inactive (CH9=0).
● Each DMX Address may be used as many times as required.
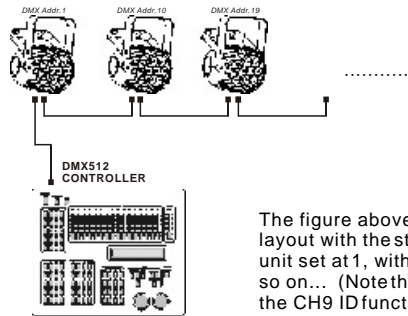● Any DMX address in the range from 001 to 512 may be used.

Example:

DMX Addr.1   DMX Addr.10   DMX Addr.19

....

DMX512 CONTROLLER

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... (Note that when used in this way, the CH9 ID function must be inactive (CH9=0))

2.3-2 DMX512 ADDRESSING WITH ID ADDRESS (*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.
● Each DMX address may carry up to 66 separate ID addresses.
● 【*ID*】 should be set in the menu on each unit in ascending values (i.e. 1,2,3...)
● ID addresses are accessible from Ch9 on the DMX512 controller.

3.6 RUN

MENU ➡ RUN ➡ SLAVE / DMX

【*RUN*】

● Enter 【*RUN*】 to choose 【*SLAVE*】 or 【*DMX*】 working mode

3.7 PERSON

MENU ➡ PERSON ➡ STAGE1 / ARC1 / ARC1+D
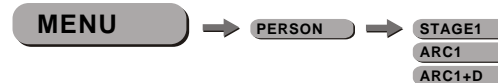
【*PERSON*】

● Enter 【*PERSON*】 and select 【*STAGE1*】 / 【*ARC1*】 / 【*ARC1+D*】 DMX mode

3.8 ID

MENU ➡ ID ➡ 【001~066】

【*ID*】

● Enter 【*ID*】 and set the ID address 【*001~066*】

3.9 EDIT

MENU ➡ EDIT ➡ custom 1 / custom 2 / custom 3 / custom 4 / custom 5 / custom 6 / custom 7 / custom 8 / custom 9 / custom 10 ➡ scene 01 / scene 02 / scene 03 / scene 04 / scene 05 / scene 06 / ... / scene 30 ➡ Red 【000~255】 / GREN 【000~255】 / BLUE 【000~255】 / STRB 【000~020】 / TIME 【000~255】 / FADE 【000~255】
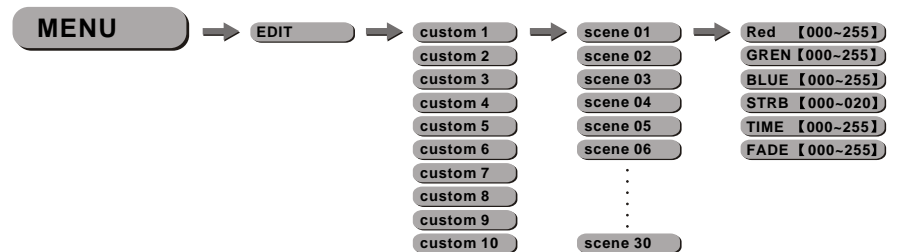
【*EDIT*】

● Enter 【*EDIT*】 to edit the custom programs 【*custom 1*】 to 【*custom 10*】
● Each program has 30 steps to edit
● Each step allows a creation of a scene using RED,GREEN,BLUE,STRUBE,TIME, FADE

3.3 STATIC

MENU ➡️ STATIC ➡️ RED 【000~255】
GREN 【000~255】
BLUE 【000~255】
STRB 【000~020】

【*STATIC*】

● Select 【RED】/【GREN】/【BLUE】/【STRB】to set the value

3.4 AUTO

MENU ➡️ AUTO ➡️

AUTO 1	custom 1
AUTO 2	custom 2
AUTO 3	custom 3
AUTO 4	custom 4
AUTO 5	custom 5
AUTO 6	custom 6
AUTO 7	custom 7
AUTO 8	custom 8
AUTO 9	custom 9
AUTO 10	custom 10

【*AUTO*】

● Select the target【*AUTO*】program and press【*ENTER*】
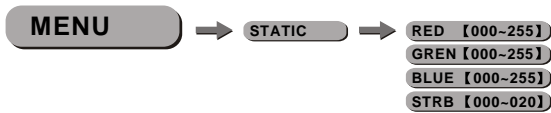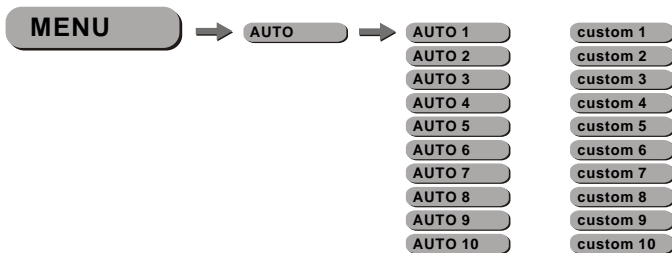● Programs【*AUTO 1*】to【*AUTO 10*】are fully pre-programmed and will not be altered
● Programs 【*Custom 1*】to【*Custom 10*】are fully pre-programmed and can be edited

3.5 ADDRESS

MENU ➡️ ADDRESS ➡️ 【001~512】

【*ADDRESS*】

● Enter【*ADDRESS*】and set the DMX address 【*001~512*】

Example:

DMX Addr.1 DMX Addr.1 DMX Addr.1 DMX Addr.10 DMX Addr.10 DMX Addr.10
ID Addr.1 ID Addr.2 ID Addr.3 ID Addr.1 ID Addr.2 ID Addr.3

DMX512 CONTROLLER
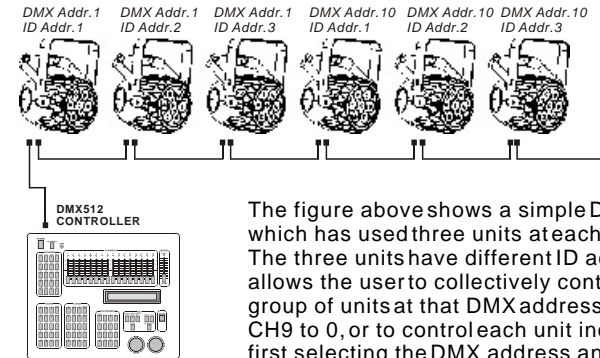
The figure above shows a simple DMX layout which has used three units at each DMX address. The three units have different ID addresses which allows the user to collectively control the whole group of units at that DMX address by setting CH9 to 0, or to control each unit independently by first selecting the DMX address and then by using Ch9 to locate the target ID address.

3 DISPLAY PANEL OPERATION

3.1 BASIC

【 **MENU** 】 scroll through the main menu or exit from the current menu or function

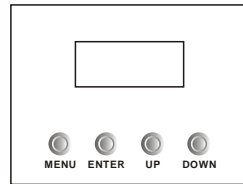【ENTER】 Enter the currently selected menu or confirm the current function value

【 **UP** 】 scroll 'UP' through the menu list or increase the value of the current function

【 **DOWN** 】 scroll 'DOWN' through the menu list or decrease the value of the current function

3.2 MENU

MENU → **STATIC** → RED 【000~255】
GREN【000~255】
BLUE 【000~255】
STRB 【000~020】

AUTO → AUTO 1 / custom 1
AUTO 2 / custom 2
AUTO 3 / custom 3
AUTO 4 / custom 4
AUTO 5 / custom 5
AUTO 6 / custom 6
AUTO 7 / custom 7
AUTO 8 / custom 8
AUTO 9 / custom 9
AUTO 10 / custom 10

ADDRESS → 【001~512】

RUN → SLAVE
DMX

PERSON → STAGE1
ARC1
ARC1+D

ID → 【001~066】

EDIT → custom 1 → scene 01 → RED 【000~255】
custom 2 / scene 02 / GREN【000~255】
custom 3 / scene 03 / BLUE 【000~255】
custom 4 / scene 04 / STRB 【000~020】
custom 5 / scene 05 / TIME 【000~255】
custom 6 / scene 06 / FADE 【000~255】
custom 7
custom 8
custom 9
custom 10 / scene 30

SETTINGS → ID 【ON/OFF】
Reset to Factory?
Up load costom?
COLOR → UC
OFF

PASSWORD → 【ON/OFF】