EXPOLITE

User Manual

TourLED City

TABLE OF CONTENTS

1 PRODUCT SPECIFICATIONS

1.1 PRODUCT FEATURES

LED FIXTURE

* Setting:LED display
* Operation:DMX512/Static Play/Custion/Wireless
* Function:RGBW 0-100%dimming;Linear/Nonlinear dimming;RGBW Calibration;
* Installation:Bracket
* Power:3 core in
* Data :5 core in/out cable

1.2 TECHNICAL SPECIFICATIONS

LED MODULE

LED MODULE:	
Voltage	100~240V…50/60Hz
Power	650W
RED	3W x 44
GREEN	3W x 44
BLUE	3W x 44
WHITE	3W x 24
AMBER	3W x 24
IP RATING	IP 67
Operation Temperature	-40℃~45℃(operating)
	-20℃~45℃(startup)
Dimensions	808x252x567mm
Weight	40Kg

1.3 DIMENSIONS

* 1 *
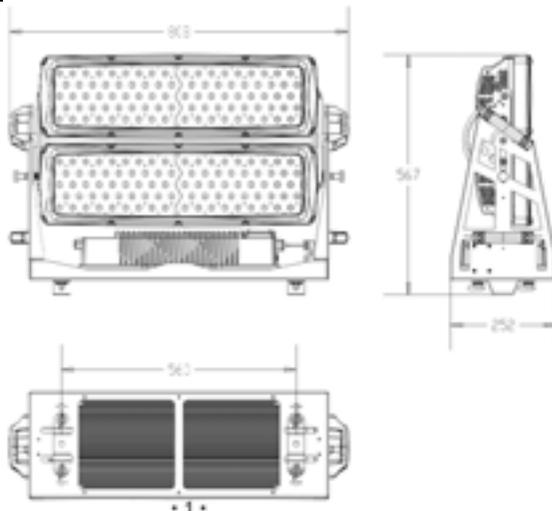
1.4 SAFETY WARNING

【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.
● It is important that the power cable is frequently inspected to ensure that there is no damage in any position. If the power cable is damaged in any way, it should be replaced by a qualified electrical technician.
● 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:

◆Ensure that fixture is mounted to a structure that is correct and suitable for hanging this kind of lighting fixture
◆Mounting structure should withhold load of ten times fixture weight
◆Fixture is mounted using mounting bracket and clamps (see diagram)
◆A safety cable should always be used with this lighting fixture (safety cable should withstand ten times lighting fixture weight)a

2.1-1

2.1-2

2.2 POWER CONNECTIONS

```
        E3 ─────── GND E

                   Data N
Data L ──▶

              ◀── AC Power IN
```
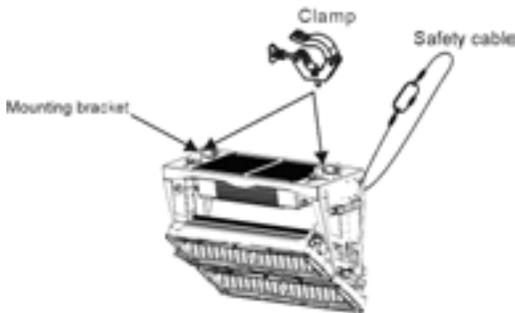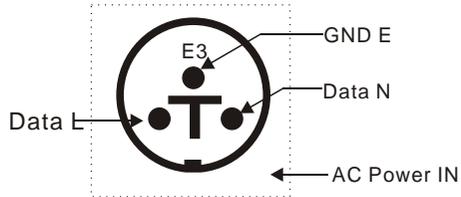
2.3 SIGNAL CONNECTIONS
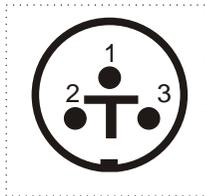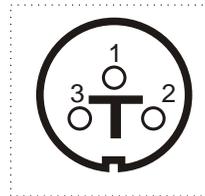
```
      1                    1
   2     3              3     2

   DMX  IN             DMX  OUT
```

1 -GND
2 -Data（-）
3 -Data（+）

3 **USING CODER**

3.1 BASIC

The LED fixture is mounted with a LCD display and 4 control buttons.
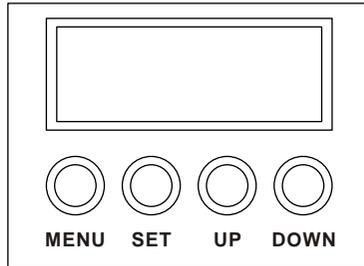
【 MENU】 scroll through the main menu or return to the main menu
【ENTER】 enter the currently selected menu or confirm the current function value
【 UP 】 scroll 'UP' through the menu list or increase the value of the current function
【 DOWN 】 scroll 'DOWN' through the menu list or decrease the value of the current function

3.2 **MENU**

```
MENU ──▶ STAT ──▶ RED  ──▶ R.(0~255)
                  GREN ──▶ G.(0~255)
                  BLUE ──▶ B.(0~255)
                  WHIT ──▶ W.(0~255)
                  AMBE ──▶ A.(0~255)
                  STRB ──▶ S.(0~20)

         AUTO ──▶ AT.01
                  AT.02
                   ⋮
                  AT.10
                  PR.01
                  PR.02
                   ⋮
                  PR.10

         ADDR ──▶ D.(001~512)
         RUN  ──▶ DMX
                  SLAV
         PERS ──▶ TOUR
                  ARC.1
                  AR1.D
                  ARC.3
                  AR3.D
                  AR3.S
                  HSV
                  BLOC

         ID   ──▶ I.(01~66)
         SET  ──▶ UPLD ──▶ PASS ──▶ **** ──▶ SEND ──▶ END
                  REST ──▶ PASS ──▶ **** ──▶ REST ──▶ END
                  ID.ON ──▶ ON
                           OFF
                  DIM  ──▶ DIM4
                           DIM1
                           DIM2
                           DIM3
                           OFF
                  COLOR ──▶ OFF
                            RGBW
                            UC

                  EDIT ──▶ PR.01 ──▶ SC.01 ──▶ RED  ──▶ R.(0~255)
                           PR.02    SC.02      GREN ──▶ G.(0~255)
                            ⋮        ⋮         BLUE ──▶ B.(0~255)
                           PR.10    SC.30      WHIT ──▶ W.(0~255)
                                               AMBE ──▶ A.(0~255)
                                               STRB ──▶ S.(0~20)
                                               TIME ──▶ T.(0~255)
                                               FADE ──▶ F.(0~255)

                  CAL1 ──▶ WH.01 ──▶ RED  ──▶ R.(0~255)
                           WH.02    GREN ──▶ G.(0~255)
                            ⋮        BLUE ──▶ B.(0~255)
                           WH.11    WHIT ──▶ W.(0~255)
                                    AMBE ──▶ A.(0~255)

                  CAL2 ──▶ RGB.W ──▶ RED  ──▶ R.(0~255)
                                    GREN ──▶ G.(0~255)
                                    BLUE ──▶ B.(0~255)

                  WDMX ──▶ ACTI ──▶ ON
                                    OFF
                           REST ──▶ NO
                                    YES

                  KEY  ──▶ ON
                           OFF
```
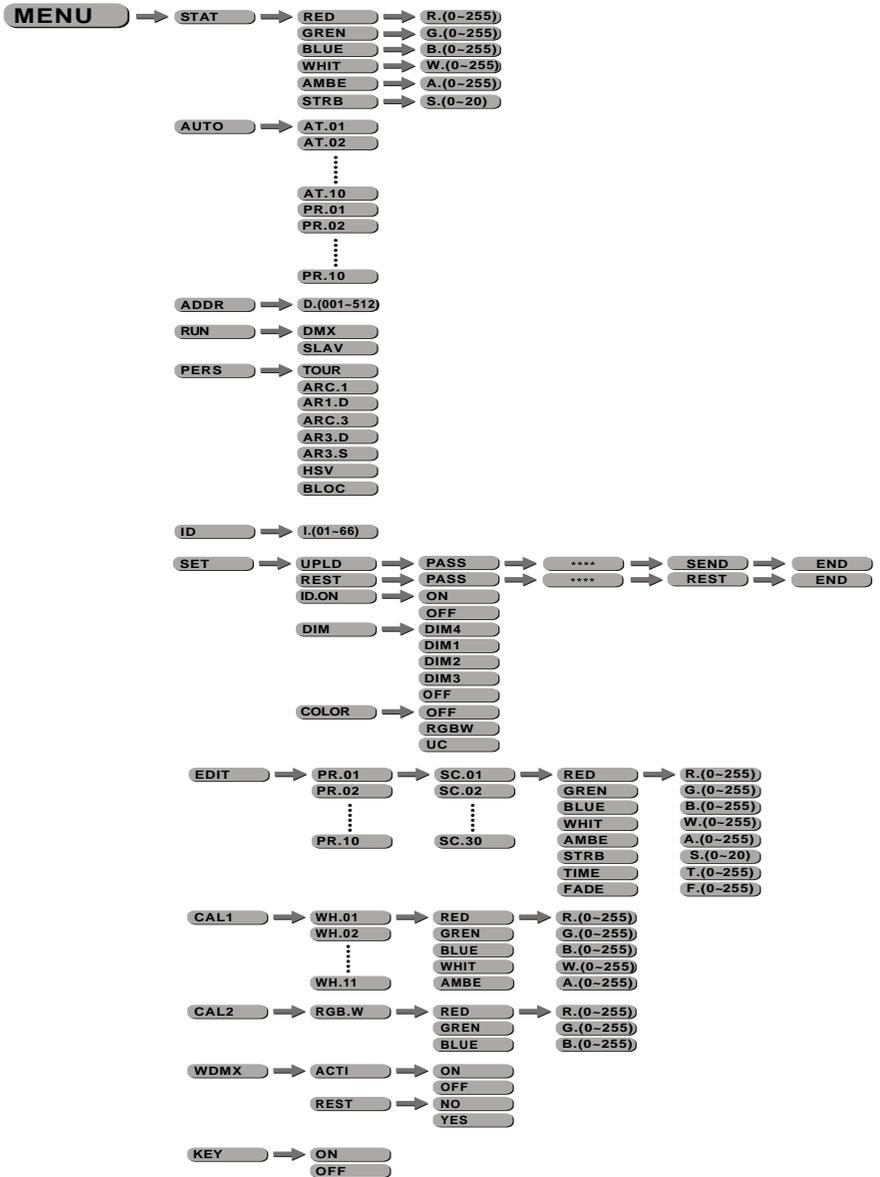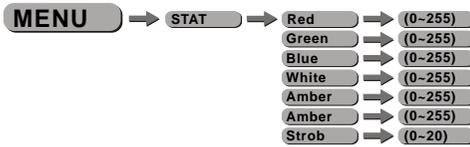
3.3 EDIT STATIC COLOUR

MENU → STAT → Red → (0~255)
Green → (0~255)
Blue → (0~255)
White → (0~255)
Amber → (0~255)
Amber → (0~255)
Strob → (0~20)

【*STATIC COLOUR*】

- Combine 【*Red*】, 【*Green*】, 【*Blue*】, 【*White*】, 【Amber】 and 【*Amber*】 to create an infinite range of colors (0-255)
- Set the value of the 【*Strobe*】 (0-20Hz)

3.4 ACTIVATING AUTO PROGRAMS

MENU → AUTO → AT.01
AT.02
⋮
AT.10
PR.01
PR.02
⋮
PR.10
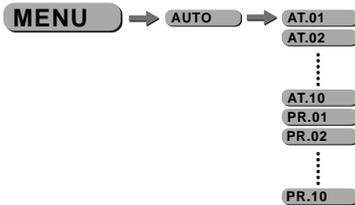
【*AUTO*】

- Select the target 【*AUTO*】 program and press 【*ENTER*】.
- Programs 【*AT.01*】 to 【*AT.10*】 are fully pre-programmed and will not be altered by changes in 【*EDIT*】 mode.
- Programs 【*PR.01*】 to 【*PR.10*】 are fully pre-programmed and can be edited in 【*EDIT*】 mode.

3.5 DMX512 SETTINGS

MENU → DMX → D(001~512)

【*DMX*】

- Enter the 【*DMX*】 mode to set the DMX ADDRESS.

3.6 RUN MODE

【*MENU*】 ➡ RUN ➡ DMX
                              SLAV
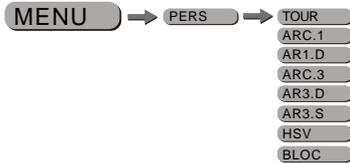
【*RUN*】

● Enter the【*RUN*】mode to set working mode.
●【*DMX*】 mode is for using the DMX512 controller to control the fixtures.
●【*SLAV*】 mode is for Master -- Slave operation.

3.7 PERSONALITY

MENU ➡ PERS ➡ TOUR
                        ARC.1
                        AR1.D
                        ARC.3
                        AR3.D
                        AR3.S
                        HSV
                        BLOC

【*PERSONALITY*】

● Enter the【*PERSONALITY*】mode to select DMX mode:【*TOUR*】,【*ARC.1*】,
【*AR1.D*】,【*ARC.3*】,【*AR3.D*】,【*AR3.S*】,【*HSV*】or【*BLOC*】.

3.8 ID ADDRESS

【*MENU*】 ➡ ID ➡ ID(01~66)

【*ID*】

● Enter the【*ID*】mode to set the ID ADDRESS.

3.9 SPECIAL SETTINGS

MENU ➡ SET ➡ UPLD ➡ PASS ➡ **** ➡ SEND ➡ END
                      REST ➡ PASS ➡ **** ➡ REST ➡ END
                      ID.ON ➡ ON
                              OFF
                      DIM ➡ DIM4
                            DIM1
                            DIM2
                            DIM3
                            OFF
                      COLOR ➡ OFF
                              RGBW
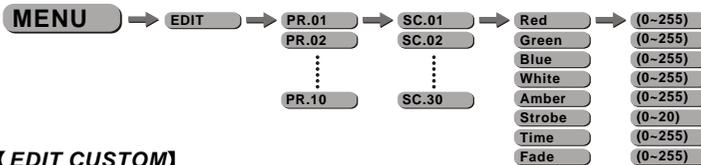   UC
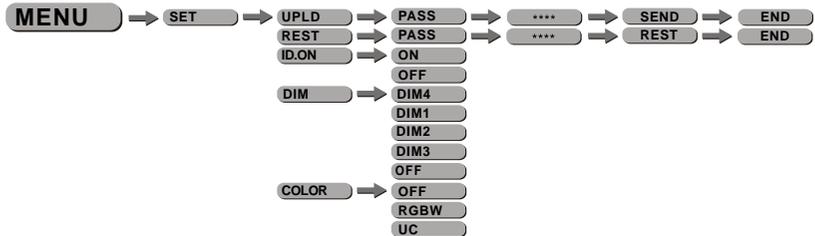
【*SETTING*】

● Select 【*UPLD*】 to upload the custom programs from the current MASTER unit to the SLAVE units.
● In order to activate the upload function the password must be entered.
● Password is the same as the main access password.
● When uploading the MASTER and SLAVE units will display YELLOW.
● If an error occurs when uploading the MASTER and/or SLAVE units will display RED.
● On successful uploading of the custom programs the MASTER and SLAVE units will display GREEN.
● In order to reset custom modes to default values select 【*REST*】 .
● Enter 【*ID*】 in order to allow/disallow ID address function from the DMX512 controller.
● 【*COLOR*】 is for activate/unactivate the color calibration functions.

When 【*RGBW*】 is selected, on RGB = 255,255,255, the color is displayed as calibrated in CAL2 -- RGBW. When 【*COLOR*】 is set 【*OFF*】 , on RGB = 255,255,255, the RGB values are not adjusted and the output is most powerful.

When [*UC*] is selected, the RGB output are adjusted to a standard preset universal color which balances fixtures from different generations..
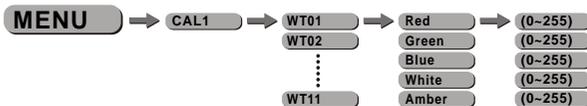
3.10 EDITING CUSTOM PROGRAMS

MENU → EDIT → PR.01 → SC.01 → Red → (0~255)
PR.02 SC.02 Green (0~255)
Blue (0~255)
White (0~255)
PR.10 SC.30 Amber (0~255)
Strobe (0~20)
Time (0~255)
Fade (0~255)

【*EDIT CUSTOM*】

● Enter the 【*EDIT*】 mode to edit the custom programs 【*PR.01*】 to 【*PR.10*】 .
● Each custom program has 30 steps that can be edited.
● Each step allows the creation of a scene using RED 【*Red*】 , GREEN 【*Green*】 , BLUE 【*Blue*】 , WHITE 【*White*】 ,AMBER 【*Amber*】 *,* STROBE 【*Strobe*】 , TIME 【*Time*】 & FADE 【*Fade*】 .

3.11 WHITES CALIBRATION

MENU → CAL1 → WT01 → Red → (0~255)
WT02 Green (0~255)
Blue (0~255)
White (0~255)
WT11 Amber (0~255)

【*CAL1*】

● Enter the 【*CAL1*】 to select white color of different color temperature.
● There are 11 pre-programmed White colors can be edited by using 【*Red*】 , 【*Green*】 , 【*Blue*】 , 【*White*】 & 【*Amber*】 .

3.12 RGB CALIBRATION

```
MENU ➡ CAL2 ➡ RGBW ➡ Red   ➡ (0~255)
                       Green    (0~255)
                       Blue     (0~255)
```
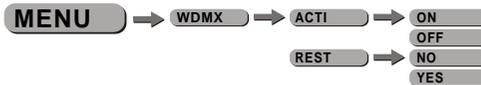
【*CAL2*】

● Enter the 【*CAL2*】 to adjust the RGB parameter to make different whites.
● When the new setting is activated, the DMX controller choose
  RGB = 255,255,255, the white color will be made by the actual RGB values on
  the 【*CAL2*】 .

3.13 WDMX SETTINGS

```
MENU ➡ WDMX ➡ ACTI ➡ ON
                      OFF
              REST ➡ NO
                      YES
```

【*WDMX*】

● Enter 【*WDMX*】 menu to change WDMX settings
● Enter the 【*ACTI*】 menu to turn ON/OFF WDMX functionality
● Enter the 【*REST*】 menu to reset the WDMX pairing (note that only when
  the WDMX receiver card is reset can it be paired with a new WDMX
  transmitter card)

3.14 ACTIVATE THE PASSWORD

```
MENU ➡ KEY ➡ ON
              OFF
```

【*KEY*】

● Enter the 【*KEY*】 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.

4 USING A DMX512 CONTROLLER

4.1 BASIC ADDRESSING

● Set the DMX512 address in the【*DMX*】menu.
● It is possible to have the same DMX address or independent addresses for each fixture.

4.2 CHANNEL ASSIGNMENT

● Note:This product has eight DMX512 channel configurations:【*TOUR*】,【*ARC.1*】,【*AR1.D*】,【*ARC.3*】,【*AR3.D*】,【*AR3.S*】,【*HSV*】and【*BLOC*】.

TOUR

CHANNEL	VALUE	FUNCTION
1	0⟺255	**MASTER DIMMER**
2	0⟺255	**MODULE1 RED** (or STEP TIME when CUS.01-CUS.10 in Ch14 is activated)
3	0⟺255	**MODULE1 GREEN** (or FADE TIME when CUS.01-CUS.10 in Ch14 is activated)
4	0⟺255	**MODULE1 BLUE**
5	0⟺255	**MODULE1 WHITE**
6	0⟺255	**MODULE1 AMBER**
7	0⟺255	**MODULE2 RED**
8	0⟺255	**MODULE2 GREEN**
9	0⟺255	**MODULE2 BLUE**
10	0⟺255	**MODULE2 WHITE**
11	0⟺255	**MODULE2 AMBER**
12	0⟺5	**NO FUNCTION**
	11⟺30	**RED100%/GREEN UP/BLUE0%**
	31⟺50	**RED DOWN/GREEN 100%/BLUE0%**
	51⟺70	**RED 0%/GREEN 100%/BLUE UP**
	71⟺90	**RED 0%/GREEN DOWN/BLUE100%**

CHANNEL	VALUE	FUNCTION
12	91 ⟺ 110	RED UP/GREEN 0%/BLUE100%
	111 ⟺ 130	RED100%/GREEN 0%/BLU EDOWN
	131 ⟺ 150	RED100%/GREEN UP/BLUE UP
	151 ⟺ 170	RED DOWN/GREEN DOWN/BLUE 100%
	171 ⟺ 200	RED100%/GREEN 100%P/BLUE100%/WHITE 100%/AMBER 100%
	201 ⟺ 205	WHITE1：3200K
	206 ⟺ 210	WHITE2：3400K
	211 ⟺ 215	WHITE3：4200K
	216 ⟺ 220	WHITE4：4900K
	221 ⟺ 225	WHITE5：5600K
	226 ⟺ 230	WHITE6：5900K
	231 ⟺ 235	WHITE7：6500K
	236 ⟺ 240	WHITE8：7200K
	241 ⟺ 245	WHITE9：8000K
	246 ⟺ 250	WHITE10：8500K
	251 ⟺ 255	WHITE11：10000K
13		**STROBE**
	0 ⟺ 10	NO FUNCTION
	11 ⟺ 255	1~20Hz
14		**AUTO**
	0 ⟺ 40	NO FUNCTION
	41 ⟺ 50	AUTO 1
	51 ⟺ 60	AUTO 2
	61 ⟺ 70	AUTO 3
	71 ⟺ 80	AUTO 4
	81 ⟺ 90	AUTO 5
	91 ⟺ 100	AUTO 6
	101 ⟺ 110	AUTO 7
	111 ⟺ 120	AUTO 8
	121 ⟺ 130	AUTO 9
	131 ⟺ 140	AUTO 10
	141 ⟺ 150	PR.01
	151 ⟺ 160	PR.02
	161 ⟺ 170	PR.03
	171 ⟺ 180	PR.04
	181 ⟺ 190	PR.05
	191 ⟺ 200	PR.06
	201 ⟺ 210	PR.07
	211 ⟺ 220	PR.08
	221 ⟺ 230	PR.09
	231 ⟺ 255	PR.10
15		**AUTO SPEED ADJUSTMENT**
	0 ⟺ 255	When using CH14,AUTO01-AUTO10, this function activated

CHANNEL	VALUE	FUNCTION
16		**DIMMING SPEED**
	0⟺9	PRESET DIMMER SPEED FROM DISPLAY MENU
	10⟺29	LINEAR DIMMER
	30⟺69	NON LINEAR DIMMER 1（fastest）
	70⟺129	NON LINEAR DIMMER 2
	130⟺189	NON LINEAR DIMMER 3
	190⟺255	NON LINEAR DIMMER 4（slowest）
17		**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
	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
	200⟺209	ID20
	210	ID21
	211	ID22
	⋮	⋮
	254	ID65
	255	ID66

ARC.1

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

AR1.D

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

ARC.3

CHANNEL	VALUE	FUNCTION
1	0⟺255	RED
2	0⟺255	GREEN
3	0⟺255	BLUE
4	0⟺255	WHITE
5	0⟺255	AMBER

AR3.D

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

AR3.S

CHANNEL	VALUE	FUNCTION
1	0⟺255	MASTER DIMMER
2	0⟺255	RED
3	0⟺255	GREEN
4	0⟺255	BLUE
5	0⟺255	WHITE
6	0⟺255	AMBER
7	0⟺255	STROBE

HSV

CHANNEL	VALUE	FUNCTION
1	0⟺255	HUE(0~100%)
2	0⟺255	SATURATION(0~100%)
3	0⟺255	VALUE(0~100%)

BLOCK

| CHANNEL	VALUE	FUNCTION
1	0⟺255	MODULE1 RED
2	0⟺255	MODULE1 GREEN
3	0⟺255	MODULE1 BLUE
4	0⟺255	MODULE1 WHITE
5	0⟺255	MODULE1 AMBER
6	0⟺255	MODULE2 RED
7	0⟺255	MODULE2 GREEN
8	0⟺255	MODULE2 BLUE
9	0⟺255	MODULE2 WHITE
10	0⟺255	MODULE2 AMBER

5 OPERATION WITH WIRELESS DMX
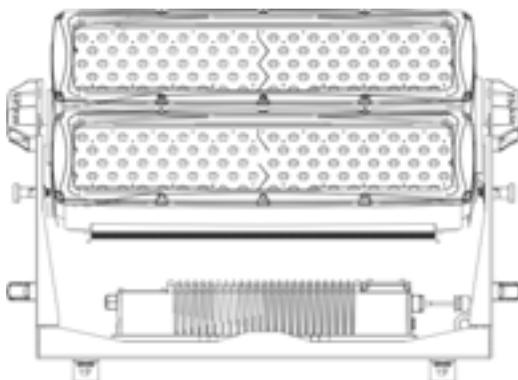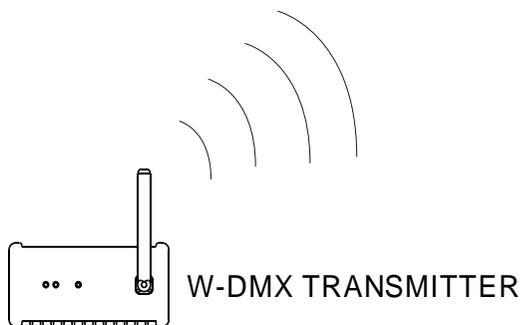
W-DMX TRANSMITTER

LED325XWAT

5.1   When using this lighting fixture with W-DMX receiver installed inside,
      the fixture may be placed at a range of 300m from W-DMX transmitter

5.2 Select DMX from the <RUN> menu.

5.3 Select ACTI from the <WDMX> menu and proceed to turn ON the WDMX.
     If the WDMX receiver card is already paired with a WDMX transmitter then
     the fixture is ready for receiving DMX signal. If the WDMX receiver card needs
     to be paired with a new WDMX transmitter, select YES from the <WDMX>/<REST>
     menu. The green signal indicator LED will not show which confirms that WDMX receiver
     card is unpaired and ready for new pairing.。

5.4 By pressing the RESET button on W-DMX transmitter, transmitter will search for RESET
lighting fixtures. During search transmitter green SIGNAL indicator will flash. After
pairing with lighting fixture green SIGNAL indicator will display.
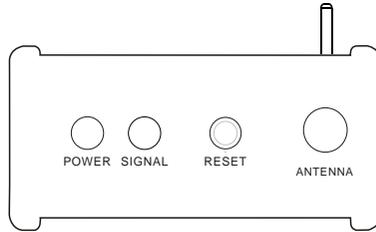
5.5 Once a lighting fixture has been paired with a W-DMX transmitter, the green SIGNAL indicator
will display. Once a lighting fixture has been paired with a W-DMX transmitter, the lighting
fixture cannot be paired with another W-DMX transmitter. If a lighting fixture requires pairing
with a new W-DMX transmitter, steps 5.3 and 5.4 must be repeated.

WDMX green signal indicator LED
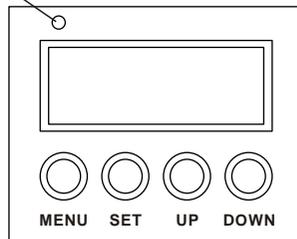
6 APPENDIX

6.1 MAINTENANCE
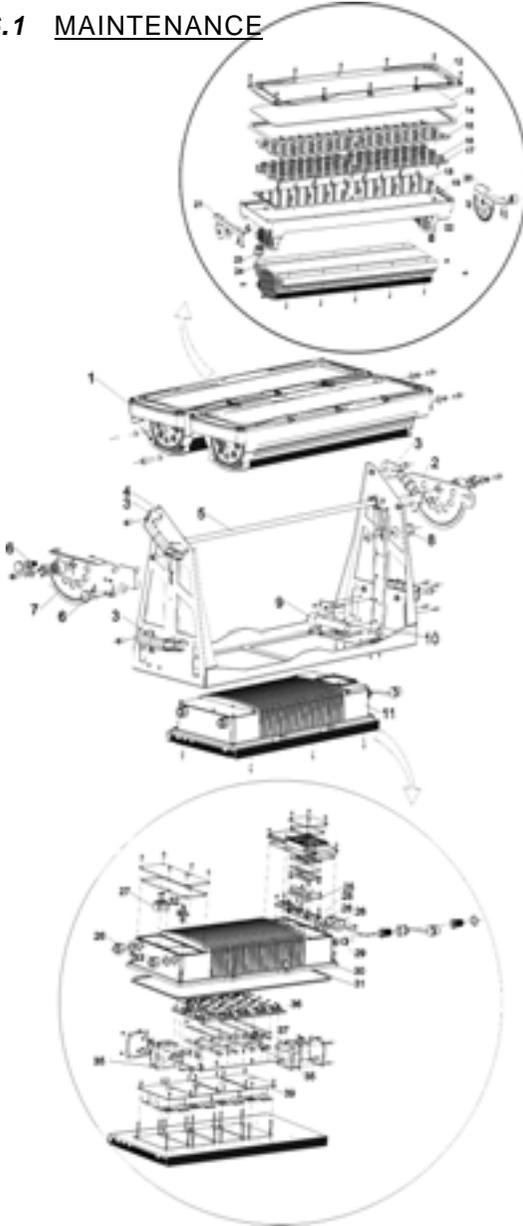
NO	ITEM
1	Head casing set
2	Mounting bracket 1
3	Base handle
4	Mounting frame set
5	Mounting rod
6	Mounting rod
7	Mounting bracket 2
8	Adjusting screw
9	W-DMX antenna (optional)
10	Quick-lock
11	Power supply casing set
12	Head casing front section
13	Tempered glass
14	Head casing gasket
15	Lens board 2
16	Lens
17	Lens board 1
18	LED board
19	Head casing main section
20	Rotating bracket 2
21	Rotating bracket 1
22	Pressure valve
23	Watertight strain relief
24	Head extrusion
25	Display PCB
26	Watertight strain relief
27	Connection board
28	Isolator sheet
29	Pressure valve
30	Power supply casing main section
31	Power supply casing gasket
32	Signal connection board
33	Watertight strain relief
34	Power supply connection board
35	Fan
36	LED driver
38	Thermal protection device
39	Power supply