EXPOLITE
AkkuLED

USER MANUAL

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7 APPENDIX

7.1   MAINTENANCE

NO	ITEM
1	Bolt(cross/sink)
2	Plastic sheath
3	Front cover
4	Clear glass
5	Head waterproof cover
6	Heat sink
7	Double lens support plate
8	Housing B
9	ValveRegulated Lead Acid Battery
10	Driver board
11	Display board
12	Adaptor PCB
13	Base
14	Backplane
15	Display screen lens
16	Power connector reds (male)
17	Power PCB
18	Display board heat sink
19	Isolator sheet
20	Housing A
21	Aluminum plate pad
22	LED board
23	3 $ 1 Lens frame B
24	3 $ 1 Lens
25	3 $ 1 Lens frame A
26	Waterproof antenna
27	Take indicator light waterproof button switch

6.3 CHARGER SPECIFICATIONS

Voltage: AC100-240V, 50/60Hz
Output: DC12V, 3A

N、Charger ve
L、Charger +ve
⏚、Not-used

L ⏚ N
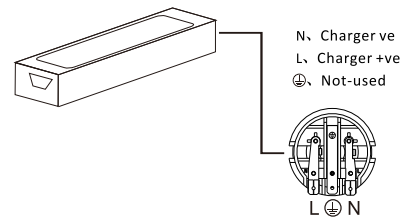
6.4 FLIGHTCASE SPECIFICATIONS

Voltage: AC100-240V, 50,60Hz
Rated Power: 300W
Weight: 33.5KG
Dimensions: 800 x 490 x 605mm
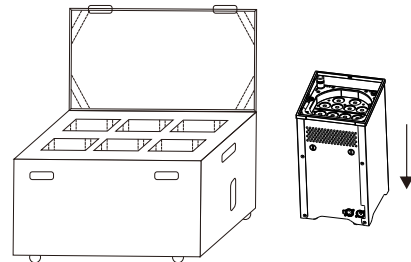
6.5 IMPORTANT FACTS:

HOW TO CARE FOR YOUR BATTERY!

CHARGING
● DO NOT CHARGE FOR MORE THAN 24HRS
● RECHARGE WITHIN 3 DAYS OF USE
● CHARGE WITH FLIGHTCASE OPEN

STORING
● STORE WITH FULL LOAD
● TURN OFF AT BASE WHEN STORING FOR MORE THAN 7 DAYS
● STORE IN AN UPRIGHT POSITION

1 PRODUCT SPECIFICATIONS

1.1 TECHNICAL SPECIFICATIONS

LED MODULE

Voltage	12VDC
Power	45W
IP RATING	IP 44
Operation Temperature	0℃~35℃(operating)
	0℃~35℃(startup)
Dimensions	202x202x364mm
Weight	14.2Kg

1.2 DIMENSIONS

202.4

364

202.4

1.3 SAFETY WARNING

2 GETTING STARTED

2.1 OPERATING POSITION

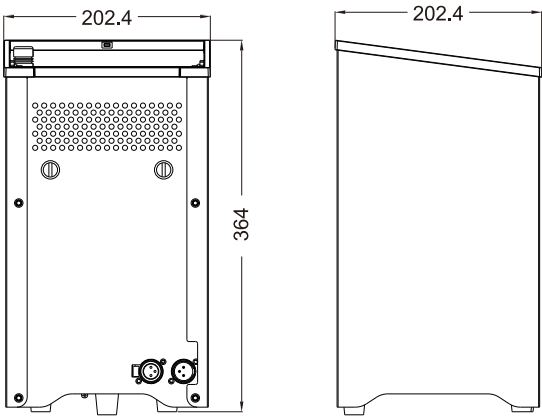● This lighting fixture is powered using a sealed lead acid battery which requires that the correct product orientation is always maintained for operation, storage and charging.
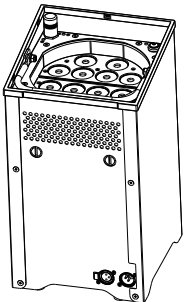
Upright operation　　Adjust light direction　　Adjust operating angle：10°
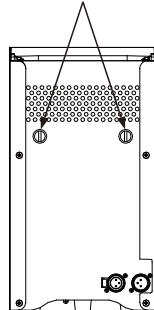
10°

10°
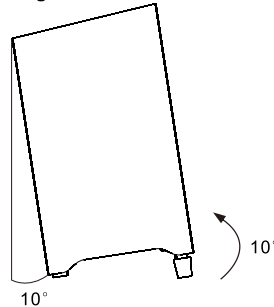
6 BATTERY CHARGING

6.1 BATTERY SPECIFICATIONS:

Voltage: 12V

Storage Capacity: 24Ahrs

Charge Time: 12hrs

Discharge Time: 10hrs (in fixture at full output)

Charging Life: 680 cycles (50% power discharge)

Weight: 8Kg

Dimensions: 175 x 166 x 125mm

TERMINAL:
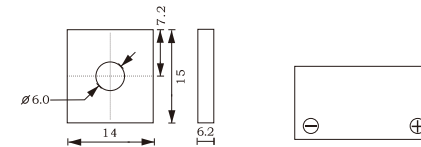
6.2 SPECIAL CONSIDERATIONS:

Charging
● Do not charge for more than 24 hours
● Always charge with flightcase open
● It is recommended to charge at a temperature between 0℃ to 35℃
● Always recharge within 3 days of use
● Always charge with supplied charger

Operation
● Recommended ambient temperature is between 0℃ to 35℃
● Always use fixture in a vertical or near-vertical position (<30deg. from vertical)
● Do not operate in a sealed enclosure with insufficient air flow

Storage
● Always store at a temperature below 35℃ (below 25℃ is best)
● Always store in a vertical position
● Always store fully charged
● It is important to carry out one full discharge and charge cycle every 3 months
● Always use the battery storage switch when storing for longer than 7 days
● Store in a dry environment away from direct sunlight

Maintenance
● Always switch off the battery storage switch when carrying out maintenance
● Do not allow battery contacts come into contact with fixture housing
● Do not link the positive and negative terminals in any way

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.

POWER   SIGNAL   RESET   ANTENNA
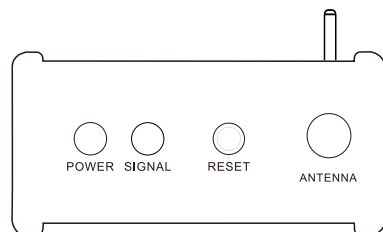
5.5   Once a lighting fixture has been paired with a W-DMX transmitter, the green SIGNAL indicator
       will display. Once a lighting fixture has been paired with a W-DMX transmitter, the lighting
       fixture cannot be paired with another W-DMX transmitter. If a lighting fixture requires pairing
       with a new W-DMX transmitter, steps 5.3 and 5.4 must be repeated.

WDMX green signal indicator LED

MENU   SET   UP   DOWN
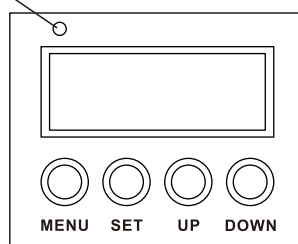
Incorrect operating angle

>10°

>10°

2.2 BATTERY CHARGING INPUT

Charger +ve

Charger -ve

L   N

Not-used

Battery charging input
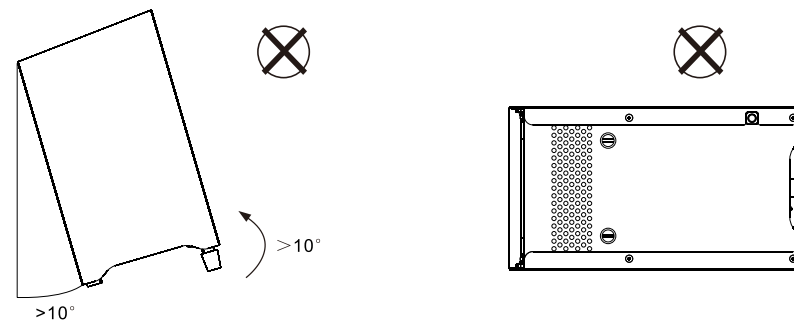
BATTERY CHARGING INPUT
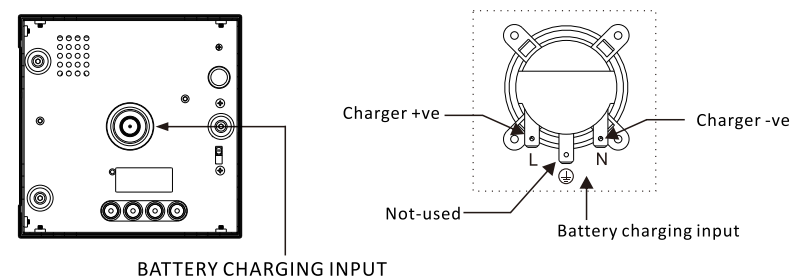
● DO NOT connect DMX
● Only for specified charger(in flight case or single charger)
● DO NOT connect any other data cables

2.3 DATA INPUT & OUTPUT

1
3
2

DMX Data Input

1
3
2

DMX Data Output

1、GND
2、Data(-)
3、Data(+)

DATA INPUT & OUTPUT
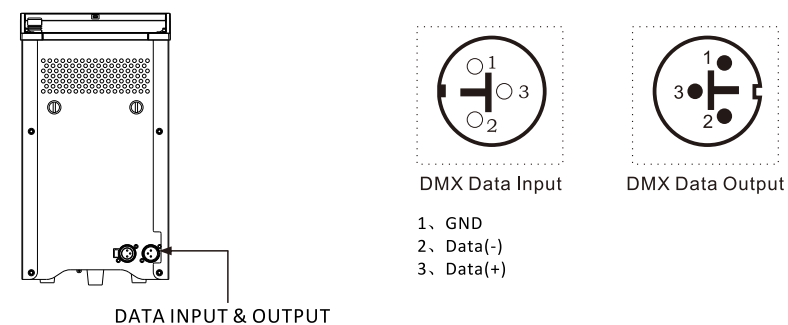
● DO NOT connect power
● Only for DMX data connection
● Data input cannot be used at the same time as the wireless data receiver

2.4 GENERAL OPERATION

← EVENT ON/OFF

GREEN: >70%
YELLOW: >20%
RED: EMPTY

← POWER STATUS
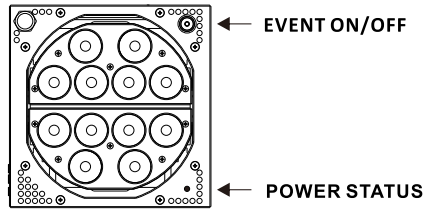
2.4.1 ON/OFF switch
● Press the EVENT ON/OFF button for 3 seconds to turn on/off lighting fixture (when BATTERY STORAGE SWITCH is ON)
● EVENT ON/OFF button indicator LED when showing constant RED indicates lighting fixture is power ON (when slowly flashing indicates that DMX data is successfully received)

2.4.2 POWER STATUS
● POWER STATUS indicator is only accurate during operation. The indicator will show the amount of battery power that is remaining. The battery should be recharged when RED is shown.
● During charging the POWER STATUS indicates GREEN/YELLOW/RED to show that the battery is charging. Please note that GREEN does not indicate that the battery is fully charged. When the battery is fully charged, the POWER STATUS indicator will turn off when the battery is fully charged.
● In the event that the battery storage switch is OFF, it is not possible to charge the battery. In this case, when the mains power is connected to the fixture, the POWER STATUS indicator will show GREEN for 30 seconds and then fade out. This shows that electrical contact has been made between the lighting fixture and the battery charging system. The BATTERY STORAGE SWITCH must be ON in order to charge the battery.
● In order to check the current status of the battery, the battery charging system should be turned OFF. The fixture can then be turned ON using the EVENT ON/OFF button and the POWER STATUS can be checked.

2.5 OTHER OPERATIONS

① BATTERY STORAGE SWITCH

② BATTERY CHARGING INPUT

③ FOOT RELEASE

④ DISPLAY
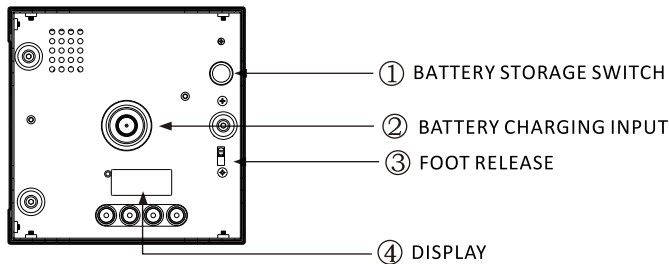
2.5.1 ANTENNA RELEASE
● When releasing support antenna with hand

2.5.2 BATTERY STORAGE SWITCH
● ON FOR OPERATION/CHARGING
● OFF FOR STORAGE (>7 DAYS)
● OFF FOR MAINTENANCE
● Always use the BATTERY STORAGE SWITCH when storing for more than 7 days
● BATTERY STORAGE SWITCH must be ON for operation and charging

### 2.5.3 FOOT RELEASE
● Foot release allows for up to 10° of tilt
● Foot position must be up for mounting in flight case

5 OPERATION WITH WIRELESS DMX

W-DMX TRANSMITTER

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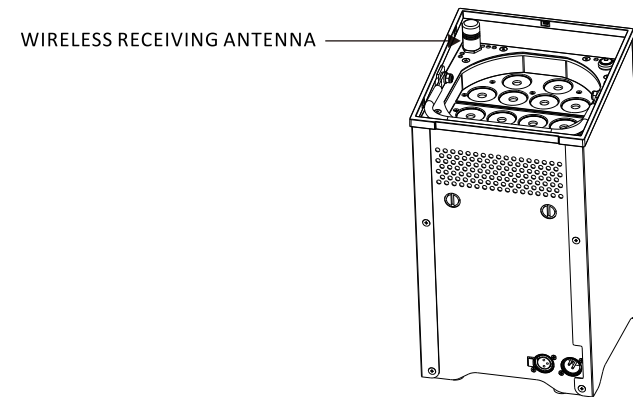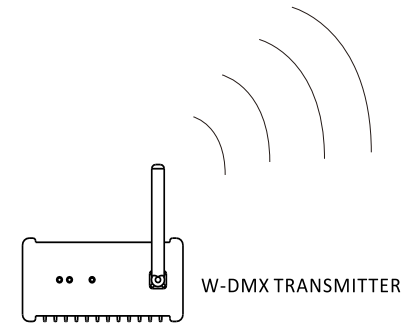
5.1   When using this lighting fixture with W-DMX receiver installed inside, the fixture may be placed at a range of 300m from W-DMX transmitter

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.。

BLOCK

CHANNEL	VALUE	FUNCTION
1	0 ⟺ 255	MODULE1 RED
2	0 ⟺ 255	MODULE1 GREEN
3	0 ⟺ 255	MODULE1 BLUE
4	0 ⟺ 255	MODULE2 RED
5	0 ⟺ 255	MODULE2 GREEN
6	0 ⟺ 255	MODULE2 BLUE

3 USING THE MENU

3.1 BASIC

The LED fixture is mounted with a LCD display
And 4 control buttons.

MENU ENTER UP DOWN
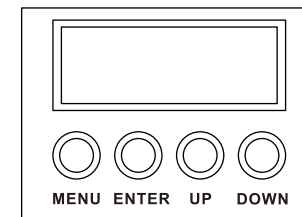
【MENU】 scroll through the main menu or return to the main menu
【ENTER】 enter the currently selected menu or confirm the current function value
【 UP 】 scroll 'UP' through the menu list or increase the value of the current function
【 DOWN 】 scroll 'DOWN' through the menu list or decrease the value of the current function

3.2 MENU

MENU → STAT → RED → R.(0~255))
              GREN → G.(0~255))
              BLUE → B.(0~255))
              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
       AR1.S
       HSV
       BLOC

SET → UPLD → PASS → **** → SEND → END
      REST → PASS → **** → REST → END
      DIM → DIM4
            DIM1
            DIM2
            DIM3
            OFF
      COLOR → OFF
              RGBW
              UC
      LIFE → LONG
             NORM

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   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

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)
　　　　　　　　　　 Strob ⟹ (0~20)

【STATIC COLOUR】

● Combine 【Red】, 【Green】 and 【Blue】 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
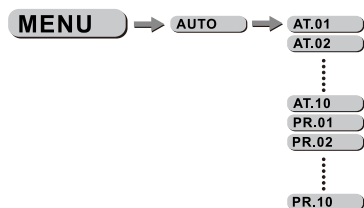
【AUTO】

● 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.

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

AR1.S

CHANNEL	VALUE	FUNCTION
1	0⟺255	MASTER DIMMER
2	0⟺255	RED
3	0⟺255	GREEN
4	0⟺255	BLUE
5	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%)

CHANNEL	VALUE	FUNCTION
8	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
9	0⟺10	**STROBE** NO FUNCTION
	11⟺255	1~20Hz
10	0⟺40	**AUTO** 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
11	0⟺255	**AUTO SPEED ADJUSTMENT** When using CH10,AUTO01-AUTO10, this function activated
12	0⟺9	**DIMMER SPEED** 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）

3.7 PERSONALITY

【MENU】 ⟹ PERS ⟹ TOUR / ARC.1 / AR1.D / HSV / BLOC

【PERSONALITY】

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

3.8 SPECIAL SETTINGS

【MENU】 ⟹ SET ⟹ UPLD ⟹ PASS ⟹ **** ⟹ SEND ⟹ END
REST ⟹ PASS ⟹ **** ⟹ REST ⟹ END
DIM ⟹ DIM4 / DIM1 / DIM2 / DIM3 / OFF
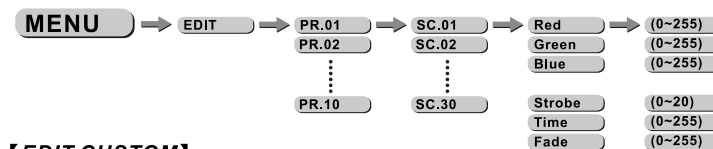COLOR ⟹ OFF / RGBW / UC
LIFE ⟹ LONG / NORM
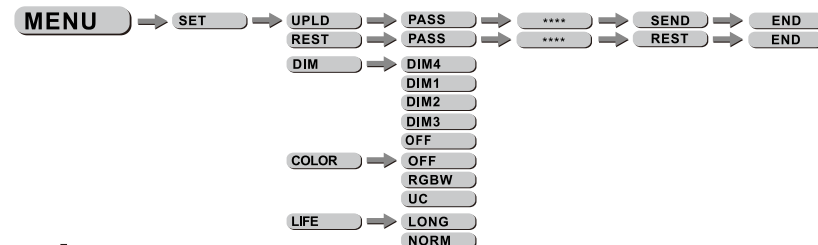
【SETTING】

● 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】.
● 【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..

● 【LIFE】 BATTERY LIFE ; LONG for extended battery operation (approx. 12hrs), NORM for standard battery operation (approx. 10hrs).

3.9 EDITING CUSTOM PROGRAMS

【MENU】 ⟹ EDIT ⟹ PR.01 / PR.02 ... PR.10 ⟹ SC.01 / SC.02 ... SC.30 ⟹ Red / Green / Blue ⟹ (0~255) / (0~255) / (0~255)
Strobe / Time / Fade ⟹ (0~20) / (0~255) / (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】, STROBE 【Strobe】, TIME 【Time】 & FADE 【Fade】.

3.10 WHITES CALIBRATION

【MENU】→ CAL1 → WT01 / WT02 ⋮ WT11 → Red / Green / Blue → (0~255) / (0~255) / (0~255)
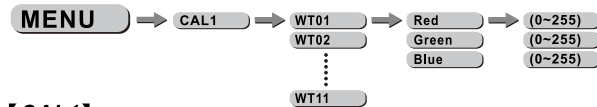
【CAL1】

● 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】.

3.11 RGB CALIBRATION

【MENU】→ CAL2 → RGBW → Red / Green / Blue → (0~255) / (0~255) / (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】.

3.12 WDMX SETTINGS

【MENU】→ WDMX → ACTI → ON / OFF
                    REST → NO / YES
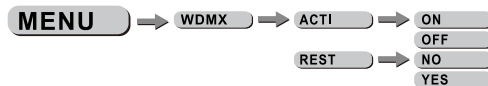
【WDMX】

● 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)

3.13 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 six DMX512 channel configurations:【TOUR】, 【ARC.1】, 【AR1.D】, 【AR1.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 CH10 is activated)
3	0⇔255	**MODULE1 GREEN** (or FADE TIME when CUS.01-CUS.10 in CH10 is activated)
4	0⇔255	**MODULE1 BLUE**
5	0⇔255	**MODULE2 RED**
6	0⇔255	**MODULE2 GREEN**
7	0⇔255	**MODULE2 BLUE**
8	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/BLUE 100%
	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%
	201⇔205	WHITE1: 3200K
	206⇔210	WHITE2: 3400K
	211⇔215	WHITE3: 4200K
	216⇔220	WHITE4: 4900K