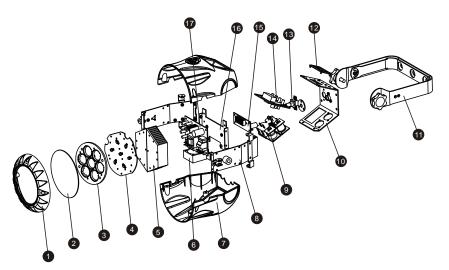
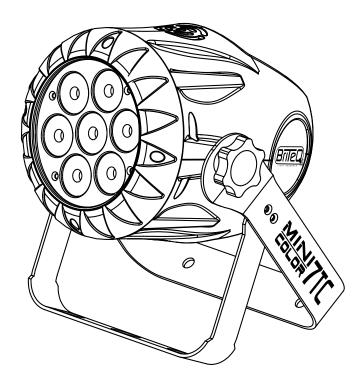
#### **5.2** MAINTENANCE



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		

# HOR 7TC







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## 5 APPENDIX

#### **5.1** TROUBLE SHOOTING

#### **LED MODULE**

SITUATION	CAUSE	ACTION	PART ORDER NUMBER
	1) Power connection error	1) Check all power connections	
	2) Power switch damaged	2) Replace power switch	16-03-0030-04
No display	3) Display board damaged	3) Replace display board	26-2A-LED307DI-00
	4) Fuse damaged	4)Replace the Fuse	
LED MODULE on,	1) Keyboard damaged	1) Replace keyboard	26-2A-LED307DI-00
but no control from display	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 PCBboard	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	Check and replace signal cable	
	2) DMX Addresserror	2) Check and reset DMX address	
	3) Master & slavemode error	3) Check and reset the working mode	
	4) ID error	4) Check and reset ID address	

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## **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 upto 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

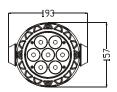
- \* RGB Dimmer 0-100%
- \* Strobe
- \* Automatic programs
- \* LCD display
- \* Display control lock-out
- \* Direct DMX512input
- \* Independant ID address
- \* Stand-alone/ Slave

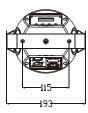
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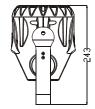
#### 1.3 TECHNICAL SPECIFICATIONS

#### LED MODULE

LED MODULE:	I
Voltage	100~240V50/60Hz
Rated Power	35W
LED/Unit	7 X 3WTri-RGB
Environment Temperature	-20℃~40℃
Cooling	Forced air convection
Dimensions	240 x 210 x160mm
Weight	2.5Kg







VALUE	FUNCTION	
200⇔209	ID20	
210	ID21	
211	ID22	
253	ID64	
254	ID65	
255	ID66	
	200 ←⇒ 209 210 211         	200 ⇔209 ID20 210 ID21 211 ID22 253 ID64 254 ID65

#### 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

#### RGB+D

CHANNEL	VALUE	FUNCTION
1	0⇔255	RED
2	0⇔255	GREEN
3	0⇔255	BLUE
4	0 ↔ 7 8 ↔ 189 190 ↔ 255 201 ↔ 247 248 ↔ 255	MASTER DIMMER 0% MASTER DIMMER 0-100% DIMMER 100% STROBE 1-20HZ DIMMER 100%

#### RGB+DS

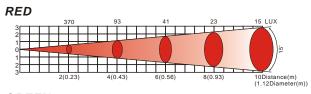
СН	ANNEL	VALUE	FUNCTION
	1	0⇔255	RED
	2	0⇔255	GREEN
	3	0⇔255	BLUE
	4	0⇔255	MASTER DIMMER
	5	0⇔7 8⇔255	NO function 0-20Hz

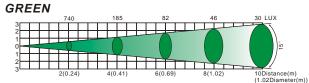
1 PRODUCT(GENERAL) 2 2009.12.9 4 USING ADMX512 CONTROLLER 15 2009.12.9

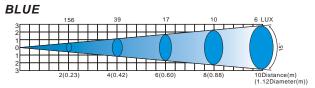
CHANNEL	VALUE	FUNCTION
		AUTO
	0⇔20	No function
	21≪⇒30	AUTO 1
	31<⇒⇒40	AUTO 2
	41≪⇒50	AUTO 3
	51≪⇒60	AUTO 4
	61⇔70	AUTO 5
	71⇔80	AUTO 6
	81⇔90	AUTO 7
	91⇔100	AUTO 8
	101⇐⇒110	AUTO 9
7	111<⇒>120	AUTO 10
	121⇐⇒130	CUSTOM 1
	131<⇒>140	CUSTOM 2
	141⇔150	CUSTOM 3
	151<⇒160	CUSTOM 4
	161<⇒170	CUSTOM 5
	171<⇒>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
9	70⇔79 80⇔89	ID8
9		
9	80⇔89	ID8
9	80⇔89 90⇔99	ID8
9	80⇔89 90⇔99 100⇔109	ID8 ID9
9	80 ⇔89 90 ⇔99 100 ⇔109 110 ⇔119	ID8 ID9 ID10
9	80 ⇔89 90 ⇔99 100 ⇔109 110 ⇔119 120 ⇔129	ID8 ID9 ID10 ID11 ID12
9	80 ⇔89 90 ⇔99 100 ⇔109 110 ⇔119 120 ⇔129 130 ⇔139	ID8 ID9 ID10 ID11 ID12 ID13
9	80 ⇔89 90 ⇔99 100 ⇔109 110 ⇔119 120 ⇔129 130 ⇔139 140 ⇔149	ID8 ID9 ID10 ID11 ID12 ID13 ID14
9	80 ⇔ 89 90 ⇔ 99 100 ⇔ 109 110 ⇔ 119 120 ⇔ 129 130 ⇔ 139 140 ⇔ 149 150 ⇔ 159	ID8 ID9 ID10 ID11 ID12 ID13 ID14 ID15
9	80 \iff 89 90 \iff 99 100 \iff 109 110 \iff 119 120 \iff 129 130 \iff 139 140 \iff 149 150 \iff 159 160 \iff 169	ID8 ID9 ID10 ID11 ID12 ID13 ID14 ID15 ID16
9	80 \iff 89 90 \iff 99 100 \iff 109 110 \iff 119 120 \iff 129 130 \iff 139 140 \iff 149 150 \iff 159 160 \iff 169 170 \iff 179	ID8 ID9 ID10 ID11 ID12 ID13 ID14 ID15 ID16 ID17

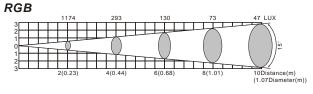
#### 1.4 PHOTOMETRIC DATA

#### PHOTOMETRIC DATA









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#### 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

#### **A**ATTENTION**A**

- This product left the place of manufacture in perfect condition. In order to maintain this condition and forsafe 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.

### 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

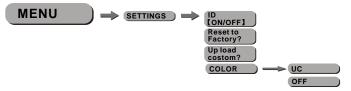
 Note: This product have three DMX512 channel configuration: (STAGE 1) , [ARC 1] , [ARC 1+D] , [RGB+D] and (RGB+DS)

#### STAGE 1

CHANNEL	VALUE	FUNCTION
1		DIMMER
	0⇔255	
		RED
2	0⇔255	Ch2 will control the TIME if Ch7 choose custom01-10
3		GREEN
3	0⇔255	Ch3 will control the FADE if Ch7 choose CUSTOM01-10
		BLUE
4	0⇔255	
		MARCO
	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 / 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%
5	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
		STROBE
6	0⇔10	No function
	11⇐⇒255	Strobe speed

1 PRODUCT(GENERAL) 4 2009.12.9 4 USING ADMX512 CONTROLLER 13 2009.12.9

#### 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 fora ctivate/unactivate thec olorc alibration 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 displaymenu 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 backto 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.





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.

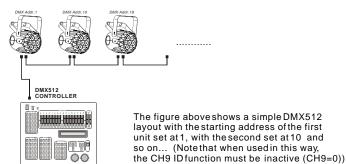
3 DISPLAYPANEL OPERATION 12 2009.12.9 2 INSTALLATION 5 2009.12.9

## 2.3 SETTING UP WITH A DMX512 CONTROLLER

#### 2.3-1 DMX512ADDRESSING WITHOUT IDADDRESSING (STAGE1 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:



#### 2.3-2 DMX512ADDRESSING WITH IDADDRESS (STAGE 1 MODE)

- Connect the DMX512 controller to the units in series
- Each unit has 9DMX 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



#### [RUN]

● Enter [RUN] to choose [SLAVE] or [DMX] working mode

#### 3.7 PERSON



#### [PERSON]

• Enter [PERSON] and select [STAGE1] / [ARC1] / [ARC1+D] / [RGB+D] / [RGB+DS] DMX mode

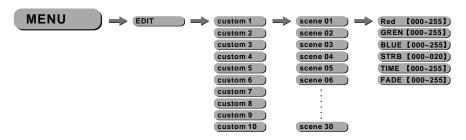
#### **3.8** ID



#### [ID]

● Enter [ID] and set the ID address [001~066]

#### **3.9** EDIT



#### [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

2 INSTALLATION 6 2009.12.9 3 DISPLAYPANEL OPERATION 11 2009.12.9

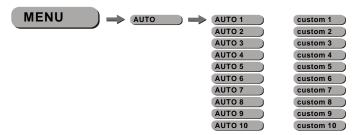
#### 3.3 STATIC



#### [STATIC]

• Select [RED] / [GREN] / [BLUE] / [STRB] to set the value

#### **3.4** AUTO



#### [AUTO]

- Select the target [AUTO] program and press [ENTER]
- Programs [AŬTO 1] to [AÛTO 10] are fully pre-programmed and will not be altered
- Programs [Custom 1] to [Custom 10] are fully pre-programmed and can be edited

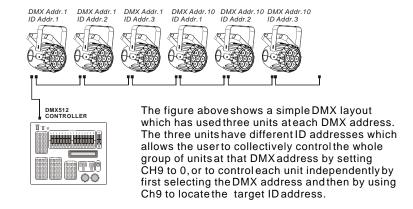
#### 3.5 ADDRESS



#### [ADDRESS]

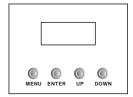
● Enter 【ADDRESS】 and set the DMX address 【001~512】

#### Example:



3 DISPLAYPANEL OPERATION 10 2009.12.9 2 INSTALLATION 7 2009.12.9

## 3 DISPLAY PANEL OPERATION 3.1 BASIC



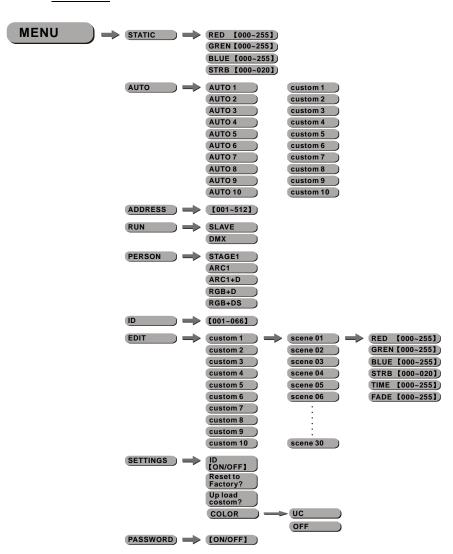
[ MENU ] scroll through the main menu or exit from the current menu or function

**[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



3 DISPLAYPANEL OPERATION 8 2009.12.9 3 DISPLAYPANEL OPERATION 9 2009.12.9