ACME®

Dotline 360

User Manual

CONTENTS

01/ Safety Instructions

⚠ Please read the instruction carefully which includes important information about the installation, usage and maintenance.

WARNING

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.
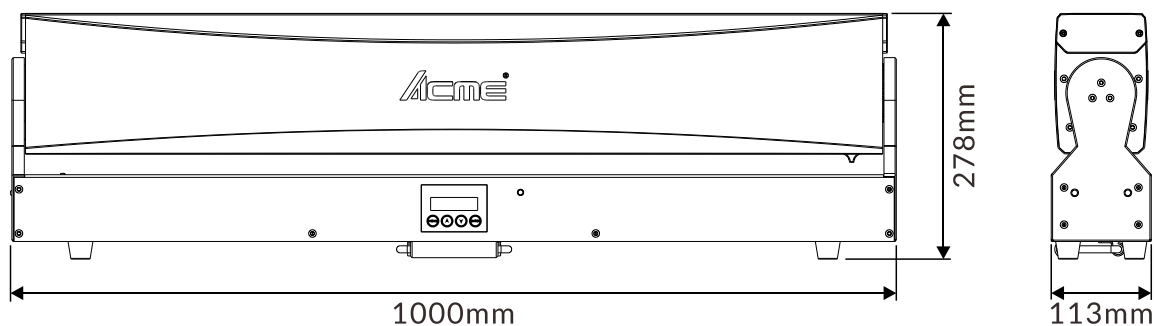
- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: 0℃. Maximum ambient temperature TA: 40℃. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 60℃. DO NOT touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut
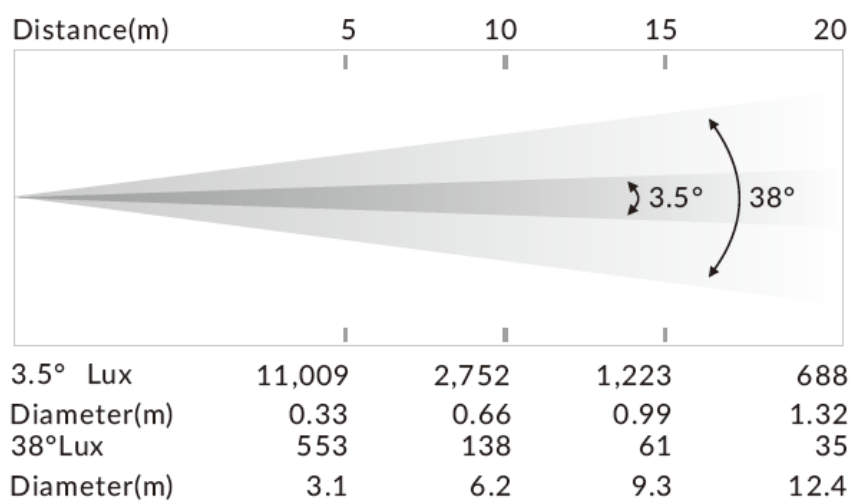
off the mains power immediately.

- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 0.5 meters.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

02/ Technical Specifications

Power Voltage	100-240V~ 50/60Hz	
Power Consumption	440W	
Light Source	12x30W RGBW LED	
Zoom Range	3.5°-38°	
Dimmer/Strobe	0-100% smooth dimming; outstanding strobe effect with variable speed	
Tilt Movement	220°	
Control	DMX Channel	57/14/9+ Channels
	Control Mode	DMX512
		RDM
		Art-Net
	Firmware Upgrade	Firmware Upgrade via DMX link
Construction	Display	OLED display
	Battery backup for user setup without mains connection	
	Data In/Out	5-pin XLR (3-pin XLR is optional)
		RJ45 Connector
	Power In/Out	Power Connector in/out
	Protection Rating	IP20
Features	Motorized zoom	
	Outstanding color mixing effect	
Dimensions	1000x113x278mm	39.4"x4.4"x10.9"in
Weight	18.5kgs	40.8lbs

Photometric Diagram:

Distance(m)	5	10	15	20
3.5° Lux	11,009	2,752	1,223	688
Diameter(m)	0.33	0.66	0.99	1.32
38°Lux	553	138	61	35
Diameter(m)	3.1	6.2	9.3	12.4

3.5° 38°

03/ Control Panel

1 2 3

4 5 6 7

6 8 9

11

10
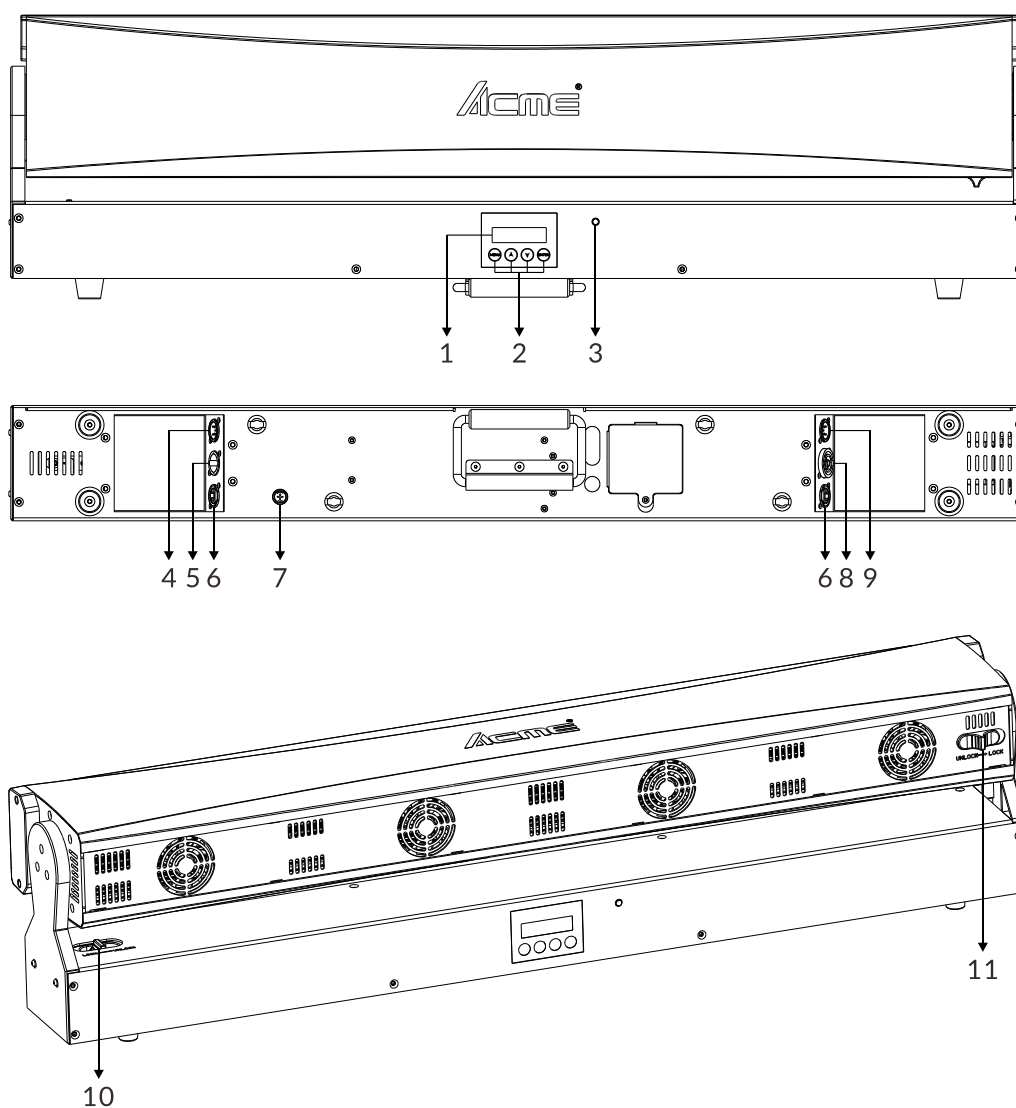
1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into move backward or leave the menu
	▲ UP	To go backward to move up in the menu
	▼ DOWN	To go forward to move down in the menu
	ENTER	To perform the desired functions
3. OFFLINE SETTING		
4. DMX IN	For DMX512 link, use 5-pin XLR cable to link the unit and DMX controller to input DMX signal (3-pin XLR cable is optional)	
5. POWER IN	To connect to supply power	
6. ETHERNET	Transfers fixture's information to a main controller	
7. FUSE(T 10A)	Protects the unit from damage of over current or short circuit	
8. POWER OUT	To connect to the next fixture	
9. DMX OUT	For DMX512 link, use 5-pin XLR cable to link the next units to output DMX signal (3-pin XLR cable is optional)	
10. BUTTON 1	When splicing the fixtures, push it to the "LOCK" position	
11. BUTTON 2	Tilt lock. Push it to the "UNLOCK" position before powering up the fixture	

▸ DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.

▸ Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.

▸ This fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on trussing, or standing on the floor. Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Steps for installing the omega brackets to the fixture:
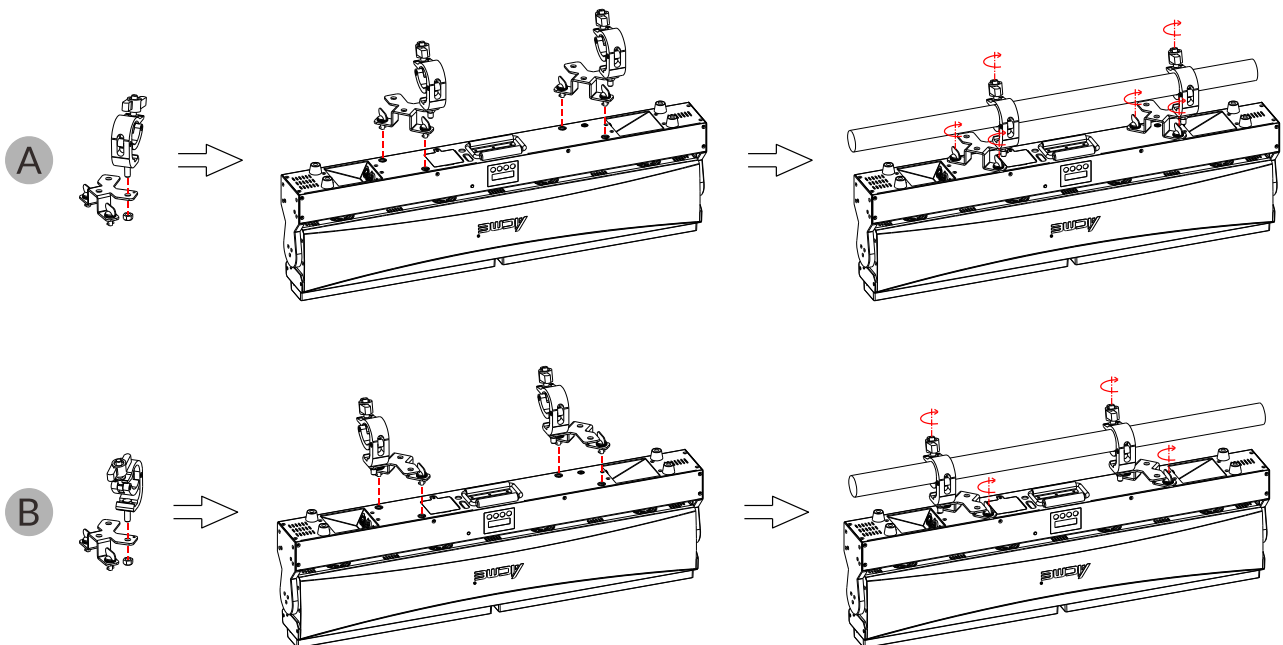
5.1 Main Functions

▸ To access the control menus, press the [MENU] button.

▸ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.

▸ To select a menu option or to confirm a selection, press the [ENTER] button.

▸ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

The main functions are shown below:

MENU	SUBMENU	OPTIONS		
DMX Setting	Art-Net Setup	Ethernet IP Setup	IP Address	
			Subnet Mask	
		Art-Net Port Setup	Net	0-127
			Subnet	0-15
			Universe	0-15
	DMX Address	1-456 (57 CH)	(Default=1)	
		1-499 (14 CH)		
		1-504 (9+ CH)		
	Channel Mode	57 CH		
		14 CH		
		9+		
	RDM Device ID			
	Mode 3 DMX Addr	1-504 (9+ CH)		
	Mode 3 ART Addr	1-465 (9+ CH)		
DMX Last State	Blackout			
	Hold			
	Manu			
Fixture Setting	Light Mode	Color Calibration	Disable	
			Enable	
		Max	White Balance	Red	125-255
				Green	125-255
				Blue	125-255
	Dimmer Curve	Optically Linear		
		Square Law		
		Inverse Square Law		
		S Curve		

MENU	SUBMENU	OPTIONS
	Dimmer Speed	Smooth
		Fast
	Invert Tilt	Disable
		Enable
	Tilt Feedback	Disable
		Enable
	Bl. O. Tilt Moving	Disable
		Enable
	Fan Mode	Silent
		Auto
	Invert Pixel Order	Disable
		Enable
	Artnet to DMX	Disable
		Enable
Auto Test		
Manual Mode	Tilt	0-255
	Zoom	0-255
	Dimmer	0-255
	Strobe	0-255
	Red	0-255
	Green	0-255
	Blue	0-255
	White	0-255
Display Setting	Inverse	No
		Yes
	Temperature Unit	°C
		°F
	Display Warning	Disable
		Enable
	Language	English
		Chinese
Fixture Information	LED Temperature	
	Fixture Usage Time	
	LED Light Time	
	Fan Speed	
	Firmware Version	

MENU	SUBMENU	OPTIONS
Reset Function	All	No
		Yes
	Tilt	No
		Yes
	Zoom	No
		Yes
Factory Setting		No
		Yes

DMX Setting

Enter the control menu and select **DMX Setting**, press ENTER. Use the UP/DOWN button to select **Art-Net Setup, DMX Address, Channel Mode, RDM Device ID, Mode 3 DMX Addr** or **Mode 3 ART Addr.**

Art-Net Setup

> Select **Art-Net Setup,** press ENTER.
> Use UP/DOWN button to select **Ethernet IP Setup** or **Artnet Port Setup**, confirm your selection with ENTER.
> To exit the menu, press MENU, or wait 30 seconds.

DMX Address

> Select **DMX Address,** press ENTER.
> Use UP/DOWN button to select an address, confirm your selection with ENTER.
>
> | CHANNEL MODE | ADDRESS |
> |--------------|---------|
> | 57 CH | 1-456 |
> | 14 CH | 1-499 |
> | 9+ | 1-504 |
>
> To exit the menu, press MENU, or wait 30 seconds.

Channel Mode

Select **DMX Channel Mode,** press ENTER.

Use UP/DOWN button to select between **57 CH, 14 CH** and **9+**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

RDM Device ID

Select **RDM Device ID,** press ENTER.

The RDM device ID is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Mode 3 DMX Addr

Select **Mode 3 DMX Addr,** press ENTER.

Use UP/DOWN button to select a DMX address from 1 to 504, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Mode 3 ART Addr

Select **Mode 3 ART Addr,** press ENTER.

Use UP/DOWN button to select a Artnet address from 1 to 465, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

DMX Last State

Select **DMX Last State,** press ENTER.

Use UP/DOWN button to select one of the following status:

Blackout (Fixture blacks out if DMX signal stops)

Hold (The device continues to operate in the current mode with the last active DMX values until the signal returns)

Manual (The device accepts the DMX value stored in the 'Manual Mode' menu)

Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Setting

Enter the control menu and select **Fixture Setting**, press ENTER. Use the UP/DOWN button to select **Light Mode, Dimmer Curve, Dimmer Speed, Invert Tilt, Tilt Feedback, Bl. O. Tilt Moving, Fan Mode, Invert Pixel Order** or **Artnet to DMX.**

Light Mode

> Select **Light Mode,** press ENTER.
>
> Use UP/DOWN button to select **Color Calibration** or **Max**, confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.

Dimmer Curve

> Select **Dimmer Curve,** press ENTER.
>
> Use UP/DOWN button to select **Optically Linear, Square Law, Inverse Square Law** or **S Curve**, confirm your selection with ENTER.
>
> ## Dimmer Modes
>
>
>
> Optically Linear   Square Law   Inverse Square Law   S-curve
>
> To exit the menu, press MENU, or wait 30 seconds.
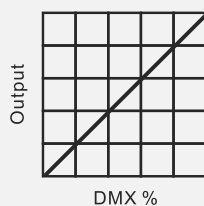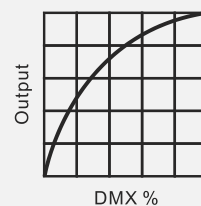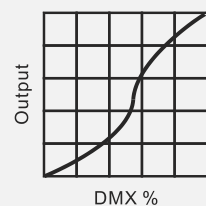
Dimmer Speed

> Select **Dimmer Speed,** press ENTER.
>
> Use UP/DOWN button to select **Smooth** or **Fast**, confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.

Invert Tilt

> Select **Invert Tilt,** press ENTER.
>
> Use UP/DOWN button to select **Disable** (tilt invert deactivated) or **Enable** (tilt invert activated), confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.

Tilt Feedback

Select **Tilt Feedback,** press ENTER.

Use UP/DOWN button to select **Disable** (tilt feedback deactivated) or **Enable** (tilt feedback activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Bl. O. Tilt Moving

Select **Bl. O. Tilt Moving,** press ENTER.

Use UP/DOWN button to select **Disable** (blacks out while tilt move deactivated) or **Enable** (blacks out while tilt move activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fan Mode

Select **Fan Mode,** press ENTER.

Use UP/DOWN button to select **Silent** or **Auto**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Invert Pixel Order

Select **Invert Pixel Order,** press ENTER.

Use UP/DOWN button to select **Disable** or **Enable**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Artnet to DMX

Select **Artnet to DMX,** press ENTER.

Use UP/DOWN button to select **Disable** or **Enable**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Auto Test

> Select **Auto Test,** press ENTER.
>
> The device immediately performs an automatic self-test.
>
> To end the automatic self-test and exit the menu, press MENU, or wait 30 seconds.

Manual Mode

> Select **Manual Mode,** press ENTER.
>
> Use UP/DOWN button to select the channel for which the manual test is to be performed, confirm your selection with ENTER.
>
> Use UP/DOWN button to select a value, confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.
>
> (The device returns to its original DMX state after the manual test. The test values are saved automatically when the device is switched off.)

Display Setting

Enter the control menu and select **Display Setting**, press ENTER. Use the UP/DOWN button to select **Inverse, Temperature Unit, Display Warning** or **Language.**

Inverse

> Select **Inverse,** press ENTER.
>
> Use UP/DOWN button to select **No** (display normal) or **Yes** (display inverted), confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.

Temperature Unit

> Select **Temperature Unit,** press ENTER.
>
> Use UP/DOWN button to select **°C** or **°F**, confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.

Display Warning

> Select **Display Warning,** press ENTER.
>
> Use UP/DOWN button to select **Disable** or **Enable**, confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.

Language

> Select **Language,** press ENTER.
>
> Use UP/DOWN button to select **English** or **Chinese**, confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.

Fixture Information

Enter the control menu and select **Fixture Information**, press ENTER. Use the UP/DOWN button to select **LED Temperature, Fixture Usage Time, LED Light Time, Fan Speed** or **Firmware Version.**

LED Temperature

> Select **LED Temperature,** press ENTER.
>
> The device temperature is displayed.
>
> To exit the menu, press MENU, or wait 30 seconds.

Fixture Usage Time

> Select **Fixture Usage Time,** press ENTER.
>
> The operating hours is displayed.
>
> To exit the menu, press MENU, or wait 30 seconds.

LED Light Time

> Select **LED Light Time,** press ENTER.
>
> The LED operating hours is displayed.
>
> To exit the menu, press MENU, or wait 30 seconds.

Fan Speed

Select **Fan Speed,** press ENTER.

The fan speed is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Firmware Version

Select **Firmware Version,** press ENTER.

The firmware version is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Reset Function

Enter the control menu and select **Reset Function**, press ENTER. Use the UP/DOWN button to select **All, Tilt** or **Zoom.**

All

Select **All,** press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset all to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Tilt

Select **Tilt,** press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset tilt to its home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Zoom

Select **Zoom,** press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset zoom to its home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Factory Setting

Select **Factory Setting,** press ENTER.

If you wish to reset the device to the factory settings, select **Yes**. If you do not wish to reset anything, select **No.** Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

RDM functions: Certain menus of the device and functions can be called up via the RDM protocol.

The parameter IDs are implemented as follows for different commands:

Parameter ID	Command 'Discovery'	Command 'Set'	Command 'Get'
DISC_UNIQUE_BRANCH	√		
DISC_MUTE	√		
DISC_UN_MUTE	√		
DEVICE_INFO			√
SUPPORTED_PARAMETERS			√
SOFTWARE_VERSION_LABEL			√
DMX_START_ADDRESS		√	√
IDENTIFY_DEVICE		√	√
DEVICE_MODEL_DESCRIPTION			√
PARAMETER_DESCRIPTION			√
MANUFACTURER_LABEL			√
DEVICE_LABEL		√	√
FACTORY_DEFAULTS		√	√
BOOT_SOFTWARE_VERSION_ID			√
BOOT_SOFTWARE_VERSION_LABEL			√
DMX_PERSONALITY		√	√
DMX_PERSONALITY_DESCRIPTION			√
SLOT_INFO			√
SLOT_DESCRIPTION			√
SENSOR_DEFINITION			√
SENSOR_VALUE			√
DEVICE_HOURS			√
LAMP_HOURS			√
TILT_INVERT		√	√
RESET_DEVICE		√	
CURVE		√	√
DMX_STATE		√	√
DIMMER_SPEED		√	√

√ -Command implemented for the respective parameter ID

5.2 Home Position Adjustment

▸ To access the control menus, press the [MENU] button.

▸ To access the offset menus, long-press the [ENTER] button.

▸ Navigate the offset menus, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.

▸ To select a menu option or to confirm a selection, press the [ENTER] button.

▸ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

OFFSET MENU			VALUES
Motor Offset	Tilt Offset		-128~127
	Zoom 1 Offset		-128~127
	Zoom 2 Offset		-128~127
White Balance	White Balance 1 ...... White Balance 12	Red	125~255
		Green	125~255
		Blue	125~255

Motor Offset

Select **Motor Offset,** press ENTER.

Use UP/DOWN button to select **Tilt Offset, Zoom 1 Offset** or **Zoom 2 Offset**, confirm your selection with ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

White Balance

Select **White Balance,** press ENTER.
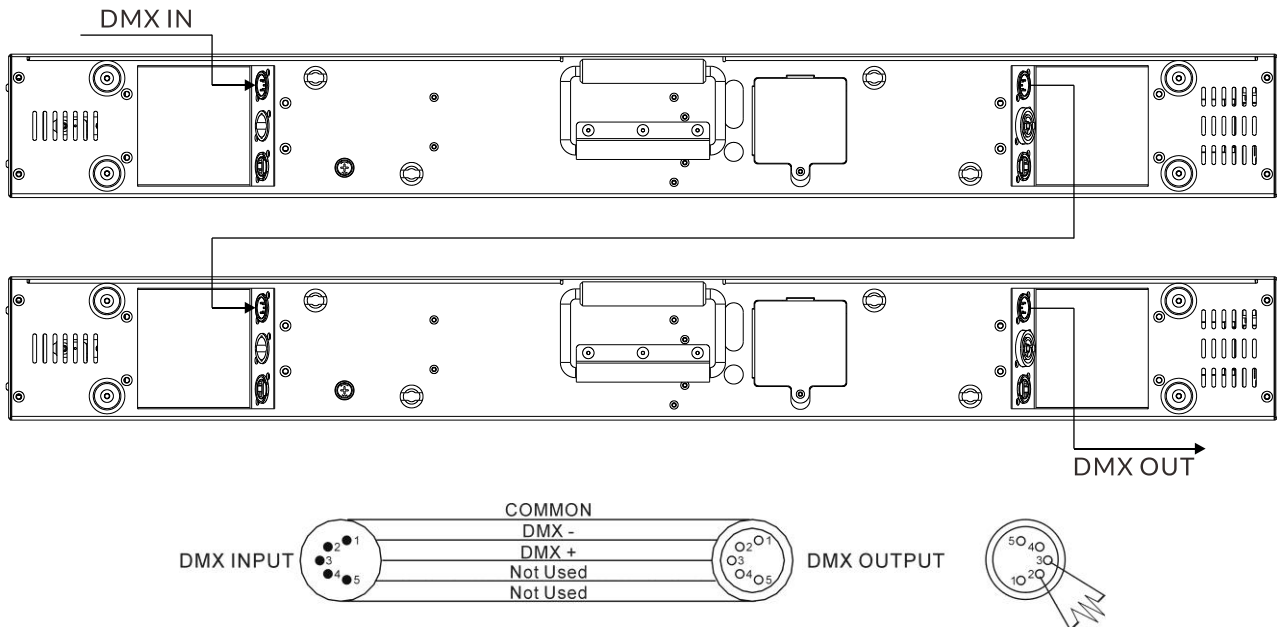
Use UP/DOWN button to select **White Balance 1, White Balance 2,......** or **White Balance 12**, confirm your selection with ENTER.

Use UP/DOWN button to select **Red, Green** or **Blue**, confirm your selection with ENTER.

Use UP/DOWN button to select a value between 125 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

6.1 DMX512 Connection

1.   At last unit, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.

2.   Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable can only be used in series and cannot be connected in parallel. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.

3.   The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.

4.   Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.

5.   The end of the DMX 512 system should be terminated to reduce signal errors.

6.   3 pin XLR connectors are more popular than 5 pins XLR.

   3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

   5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

6.2 Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address between 1 and 512 so that the units can receive DMX signal.

Press the MENU button to access the control menus, select DMX Setting, press the ENTER button to confirm. Use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will show on the display. Use the UP/DOWN button to adjust the address between 001 and 512, press the ENTER button to store. To exit the menu, press MENU, or wait 30 seconds.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
57 channels	1	58	105	162
14 channels	1	15	29	43
9+ channels (Controlled by DMX)	1	10	19	28
9+ channels (Controlled by Art-Net)	1	49	97	145

6.3 DMX512 Configuration

Please control the fixture by referring to the configurations below.

> Attentions:
> ▸ The unit will maintain the last condition until reset if you cut-off the DMX signal.
> ▸ For the channel Function, keep the value for about 3 seconds, then the corresponding function will take into effect.

57 Channels (Mode 1):

CHANNEL	VALUE	FUNCTION
1	000-255	**Tilt** 0°→220°
2	000-255	**Tilt Fine**
3	000-007 008-247 248-255	**Tilt Speed** auto speed slow to fast auto speed
4	000-255	**Zoom 1** 0%→100%
5	000-255	**Zoom 2** 0%→100%
6	000-255	**Dimmer** 0%→100%
7	000-255	**Dimmer Fine**
8	000-031 032-063 064-095 096-127 128-159 160-191 192-223 224-255	**Strobe** Closed Open Strobe from fast to slow Open Pulse-effect in sequences Open Random strobe from slow to fast Open
9	000-255	**LED1 RED** 0%→100%
10	000-255	**LED1 GREEN** 0%→100%
11	000-255	**LED1 BLUE** 0%→100%
12	000-255	**LED1 WHITE** 0%→100%
13	000-255	**LED2 RED** 0%→100%
14	000-255	**LED2 GREEN** 0%→100%
15	000-255	**LED2 BLUE** 0%→100%
16	000-255	**LED2 WHITE** 0%→100%
17	000-255	**LED3 RED** 0%→100%
18		**LED3 GREEN**

	000-255	0%→100%
19	000-255	LED3 BLUE 0%→100%
20	000-255	LED3 WHITE 0%→100%
21	000-255	LED 4RED 0%→100%
22	000-255	LED4 GREEN 0%→100%
23	000-255	LED4 BLUE 0%→100%
24	000-255	LED4 WHITE 0%→100%
25	000-255	LED5 RED 0%→100%
26	000-255	LED5 GREEN 0%→100%
27	000-255	LED5 BLUE 0%→100%
28	000-255	LED5 WHITE 0%→100%
29	000-255	LED6 RED 0%→100%
30	000-255	LED6 GREEN 0%→100%
31	000-255	LED6 BLUE 0%→100%
32	000-255	LED6 WHITE 0%→100%
33	000-255	LED7 RED 0%→100%
34	000-255	LED7 GREEN 0%→100%
35	000-255	LED7 BLUE 0%→100%
36	000-255	LED7 WHITE 0%→100%
37	000-255	LED8 RED 0%→100%
38	000-255	LED8 GREEN 0%→100%
39	000-255	LED8 BLUE 0%→100%
40		LED8 WHITE

	000-255	0%→100%
41	000-255	**LED9 RED** 0%→100%
42	000-255	**LED9 GREEN** 0%→100%
43	000-255	**LED9 BLUE** 0%→100%
44	000-255	**LED9 WHITE** 0%→100%
45	000-255	**LED10 RED** 0%→100%
46	000-255	**LED10 GREEN** 0%→100%
47	000-255	**LED10 BLUE** 0%→100%
48	000-255	**LED10WHITE** 0%→100%
49	000-255	**LED11 RED** 0%→100%
50	000-255	**LED11 GREEN** 0%→100%
51	000-255	**LED11 BLUE** 0%→100%
52	000-255	**LED11 WHITE** 0%→100%
53	000-255	**LED12 RED** 0%→100%
54	000-255	**LED12 GREEN** 0%→100%
55	000-255	**LED12 BLUE** 0%→100%
56	000-255	**LED12 WHITE** 0%→100%
57	000-060 061-080 081-100 101-120 121-140 141-160 161-180 181-200 201-220 221-240 241-255	**Special Function** No function Blackout when tilt moving enable Blackout when tilt moving disable Reset All Reset Tilt Reset Zoom Dimmer Speed: Smooth Dimmer Speed: Fast Invert Pixel Order: No Invert Pixel Order: Yes No Function

14 Channels (Mode 2):

CHANNEL	VALUE	FUNCTION
1	000-255	**Tilt** 0°→220°
2	000-255	**Tilt Fine**
3	000-255	**Zoom** 0%→100%
4	000-255	**Dimmer** 0%→100%
5	000-255	**Dimmer Fine**
6	000-031 032-063 064-095 096-127 128-159 160-191 192-223 224-255	**Strobe** Closed Open Strobe from fast to slow Open Pulse-effect in sequences Open Random strobe from slow to fast Open
7	000-008 009-038 039-068 069-098 099-128 129-158 159-187 188-255	**Macro** No function macro1 macro2 macro3 macro4 macro5 macro6 macro7
8	000-255	**Foreground Color** 0%→100%
9	000-255	**Background Color** 0%→100%
10	000-255	**RED** 0%→100%
11	000-255	**GREEN** 0%→100%
12	000-255	**BLUE** 0%→100%
13	000-255	**WHITE** 0%→100%
14	000-060 061-080 081-100	**Special Function** No function Blackout when tilt moving enable Blackout when tilt moving disable

	101-120	Reset All
	121-140	Reset Tilt
	141-160	Reset Zoom
	161-180	Dimmer Speed: Smooth
	181-200	Dimmer Speed: Fast
	201-220	Invert Pixel Order: No
	221-240	Invert Pixel Order: Yes
	241-255	No Function

9+ Channels (Mode 3):

CHANNEL	VALUE	FUNCTION
		Controlled by DMX
1	000-255	**Tilt** 0°→220°
2	000-255	**Tilt Fine**
3	000-007 008-247 248-255	**Tilt Speed** auto speed slow to fast auto speed
4	000-255	**Zoom 1** 0%→100%
5	000-255	**Zoom 2** 0%→100%
6	000-255	**Dimmer** 0%→100%
7	000-255	**Dimmer Fine**
8	000-031 032-063 064-095 096-127 128-159 160-191 192-223 224-255	**Strobe** Closed Open Strobe from fast to slow Open Pulse-effect in sequences Open Random strobe from slow to fast Open
9	000-060 061-080 081-100 101-120 121-140 141-160 161-180	**Special Function** No function Blackout when tilt moving enable Blackout when tilt moving disable Reset All Reset Tilt Reset Zoom Dimmer Speed: Smooth

	181-200 201-220 221-240 241-255	Dimmer Speed: Fast Invert Pixel Order: No Invert Pixel Order: Yes No Function
	Controlled by Art-Net	
1	000-255	**LED1 RED** 0%→100%
2	000-255	**LED1 GREEN** 0%→100%
3	000-255	**LED1 BLUE** 0%→100%
4	000-255	**LED1 WHITE** 0%→100%
5	000-255	**LED2 RED** 0%→100%
6	000-255	**LED2 GREEN** 0%→100%
7	000-255	**LED2 BLUE** 0%→100%
8	000-255	**LED2 WHITE** 0%→100%
9	000-255	**LED3 RED** 0%→100%
10	000-255	**LED3 GREEN** 0%→100%
11	000-255	**LED3 BLUE** 0%→100%
12	000-255	**LED3 WHITE** 0%→100%
13	000-255	**LED 4RED** 0%→100%
14	000-255	**LED4 GREEN** 0%→100%
15	000-255	**LED4 BLUE** 0%→100%
16	000-255	**LED4 WHITE** 0%→100%
17	000-255	**LED5 RED** 0%→100%
18	000-255	**LED5 GREEN** 0%→100%
19	000-255	**LED5 BLUE** 0%→100%

20	000-255	LED5 WHITE 0%→100%
21	000-255	LED6 RED 0%→100%
22	000-255	LED6 GREEN 0%→100%
23	000-255	LED6 BLUE 0%→100%
24	000-255	LED6 WHITE 0%→100%
25	000-255	LED7 RED 0%→100%
26	000-255	LED7 GREEN 0%→100%
27	000-255	LED7 BLUE 0%→100%
28	000-255	LED7 WHITE 0%→100%
29	000-255	LED8 RED 0%→100%
30	000-255	LED8 GREEN 0%→100%
31	000-255	LED8 BLUE 0%→100%
32	000-255	LED8 WHITE 0%→100%
33	000-255	LED9 RED 0%→100%
34	000-255	LED9 GREEN 0%→100%
35	000-255	LED9 BLUE 0%→100%
36	000-255	LED9 WHITE 0%→100%
37	000-255	LED10 RED 0%→100%
38	000-255	LED10 GREEN 0%→100%
39	000-255	LED10 BLUE 0%→100%
40	000-255	LED10WHITE 0%→100%
41	000-255	LED11 RED 0%→100%

42	000-255	LED11 GREEN 0%→100%
43	000-255	LED11 BLUE 0%→100%
44	000-255	LED11 WHITE 0%→100%
45	000-255	LED12 RED 0%→100%
46	000-255	LED12 GREEN 0%→100%
47	000-255	LED12 BLUE 0%→100%
48	000-255	LED12 WHITE 0%→100%

Error codes are shown continuously in the display when the fixture fails and they will not disappear until the fixture is repaired.

CPU-B/C/D/E/F Error

Check whether the 485 (DATA) leads on the PCB board are installed in place or disconnected.

Check whether the related 485 (DATA) signal circuit on the PCB board is damaged.

Tilt Reset Error

Check whether the position of the tilt where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the tilt operating range.

Check whether the Hall element on the tilt is damaged.

Check whether the lead connecting the Hall element on the tilt and the PCB board is in poor contact or disconnected.

Check whether the motor on the tilt is damaged.

Check whether the related circuit of the motor drive board on the tilt is damage.

Tilt Encoder Error

Check whether the encoder on the tilt is damaged.

Check whether the lead connecting the encoder on the tilt and the PCB board is in poor contact or disconnected.

Zoom 1/2 Reset Error

Check whether the position of the zoom where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the zoom operating range.

Check whether the Hall element on the zoom is damaged.

Check whether the lead connecting the Hall element on the zoom and the PCB board is in poor contact or disconnected.

Check whether the motor on the zoom is damaged.

Check whether the related circuit of the motor drive board on the zoom is damage.

Fan 1/2/3/4/5 Err

Check whether the fan is not running.

Check whether the fan leads are installed in place or disconnected.

Check whether the fan is damaged.

Check whether there are obstacles in the fan operating range.

Check whether the fan circuit on the motherboard breaks down.

Check whether the component is damaged.

Check whether the fan is out of order.

Temperature Error

Check whether the temperature detecting board is normal.

Check whether the components of the temperature detecting board are damaged.

Check whether the lead on the temperature detecting board is installed in place or disconnected.

Temp. is too High

Check if the fan is working properly.

Check if the fan speed is normal.

Check if the ambient temperature is abnormal.

08/ Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for troubleshooting:

A. The unit does not work, no light and the fan does not work

‣ Check the connected power and main fuse.

‣ Measure the voltage.

‣ Check the power indicator to see whether it can be lit up or not.

B. Not responding to the DMX controller

‣ Check whether the DMX connectors and the DMX cables are connected correctly.

‣ Check whether the DMX address is correctly set.

‣ If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.

‣ Try it with another DMX controller.

‣ Check whether the DMX cables run near or alongside to the high-voltage cables, which may damage or interfere with the signal circuit.

C. One of the channels is not working well

‣ The stepper motor might be damaged or the cable connected to the PCB might be broken.

‣ The motor's drive IC on the PCB might be out of condition.

09/ Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

‣ A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.

‣ Always dry the parts carefully.

‣ Clean the external optical lens at least every 20 days.

Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 2014/30/EU.

EN 55032: 2015+A1: 2020; EN 55035: 2017+A11: 2020;
EN IEC 61000-3-2: 2019+A1: 2021;
EN 61000-3-3: 2013+A1: 2019+A2: 2021.

&
Harmonized Standard

EN IEC 60598-2-17: 2018;
EN IEC 60598-1: 2021+A11: 2022.
Safety of household and similar electrical appliances
Part 1: General requirements and tests