ACME®

DOTCHAIN 300

CONTENTS

01/ Safety Information

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

WARNING

Please keep this User Manual 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 55℃. 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.

- 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

AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	210W	
Light Source	10x20W RGBW LED	
Beam Angle	2°	
Inclination Angle	0°-220°	
Control and Programming	DMX Channels	47/15/11
	Protocols	DMX512
		RDM
	Firmware Update	via DMX
Construction	Display	OLED display
	DMX and RDM Data In/Out	5-pin XLR (optional with 3-pin XLR)
	Power In/Out	Power Connector in/out
	Protection Rating	IP20
Dynamic Effects	10 x RGBW LEDs with individual control	
	0-100% continuous dimming and strobe effects	
	Choice of four dimming curves	
	Outstanding color mixing	
Included Items	Power Cable	
	Two omega brackets with 1/4-turn fasteners	
	User Manual (this document)	
Dimensions	1000x117x233mm	39.4"x4.6"x9.2"
Weight	11.5 kg	25.4 lbs
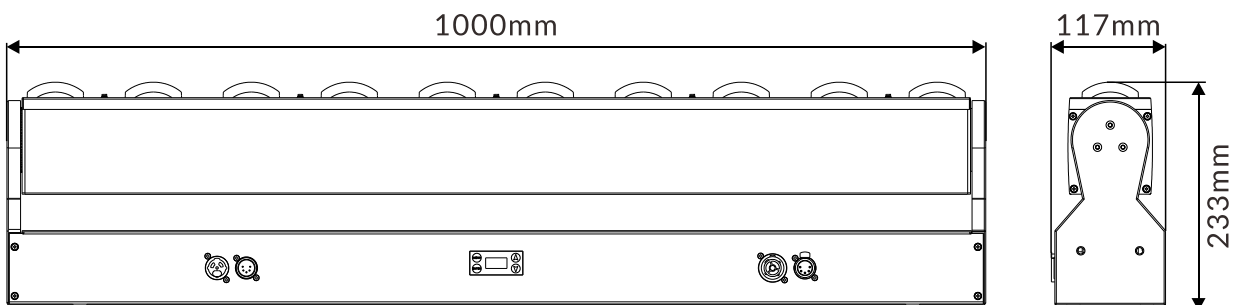
Photometric Diagram:
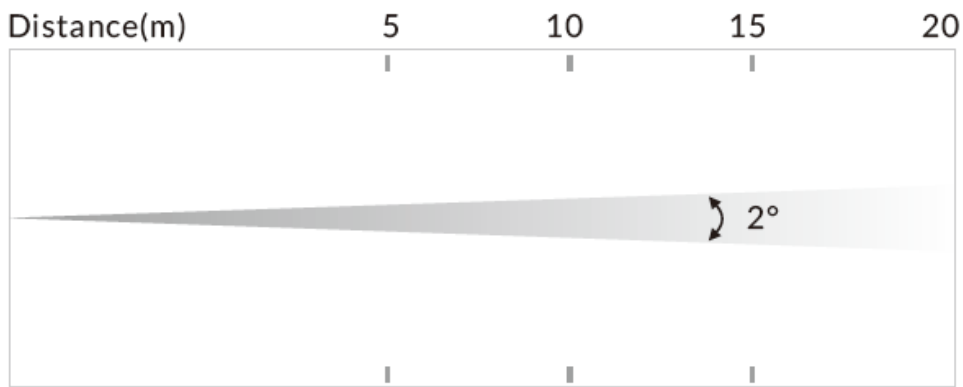
Distance(m)	5	10	15	20
2° R Lux	4,770	1,130	524	298
2° G Lux	11,200	2,620	1,100	700
2° B Lux	1,800	355	146	113
2° W Lux	12,571	3,143	1,397	786
Diameter(m)	0.16	0.35	0.52	0.7

03/ Overview
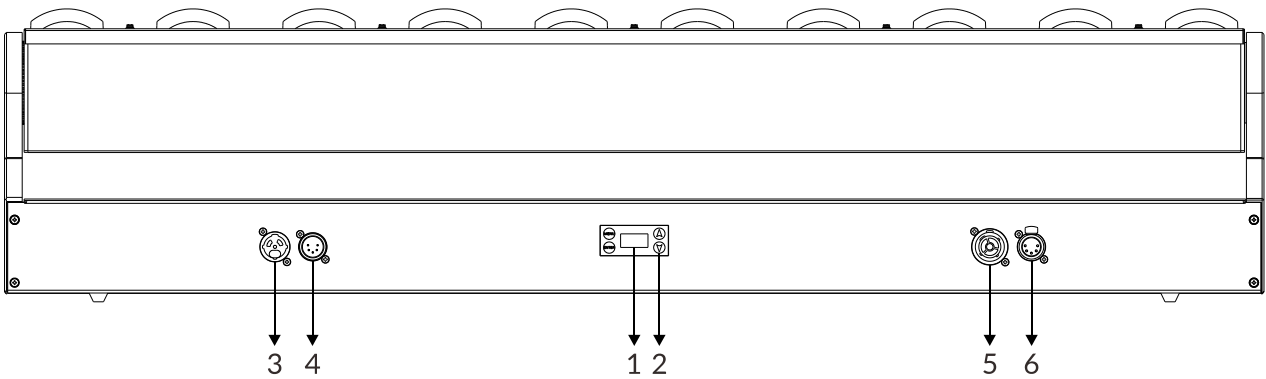
1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into move backward or leave the menu
	▲ UP	To go backward to move up in the menu
	▼ DOWN	To go forward to move down in the menu
	ENTER	To perform the desired functions
3. POWER IN	To connect to supply power	
4. DMX IN	For DMX512 link, use 5-pin XLR cable to link the unit and DMX controller to input DMX signal (optional with 3-pin XLR)	
5. POWER OUT	To connect to the next fixture	
6. DMX OUT	For DMX512 link, use 5-pin XLR cable to link the next units to output DMX signal (optional with 3-pin XLR)	

4.1 Connecting Power

This fixture can operate on any 100-240Vac; 50/60Hz AC mains power supply.

The maximum power consumption is 210W.

The fixture must be grounded/earthed and able to be isolated from AC power. The AC power supply must incorporate a fuse or circuit breaker for fault protection.

Wiring and connection work must be carried out by a qualified electrician.

The power cable color coding is given in the figure below:

Wire	Color (US)	Wire	Color (EU)	Symbol	Conductor
black	black	brown	brown	L	live
white	white	blue	blue	N	neutral
green	green	yellow/green	yellow/green	⏚ or ⏚	ground (earth)

CAUTION!

DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.

4.2 Connecting Data

The fixture is equipped with 5-pin (or 3-pin) XLR sockets for DMX input and output. Use a high-quality DMX cable designed for RS-485 and 5-pin (or 3-pin) XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

Building a serial DMX chain:

Connect the DMX data output from the controller to the fixture's data input socket. Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be connected to the same DMX link. Terminate the DMX out cable of the last fixture in the data link with a 120 ohm DMX terminator.
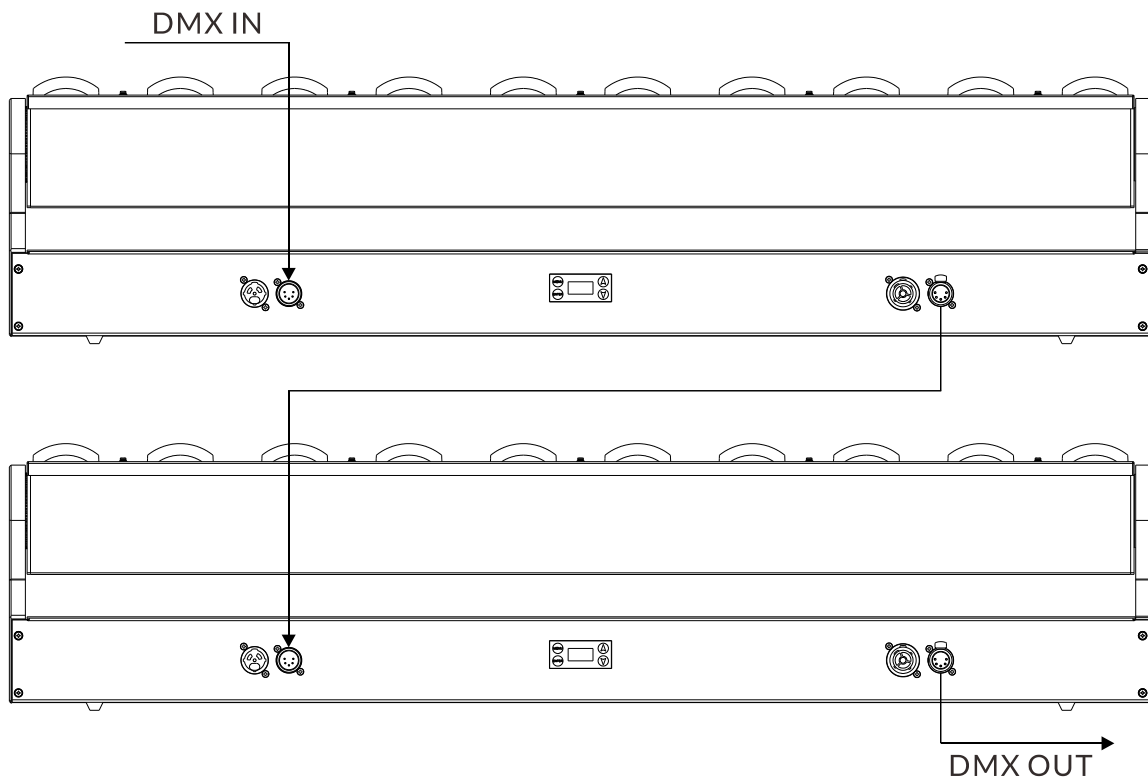
05/ Fixture Installation

▸ 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 a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

107mm 107mm

CLAMP

OMEGA BRACKET

SAFETY CABLE

06/ Operation
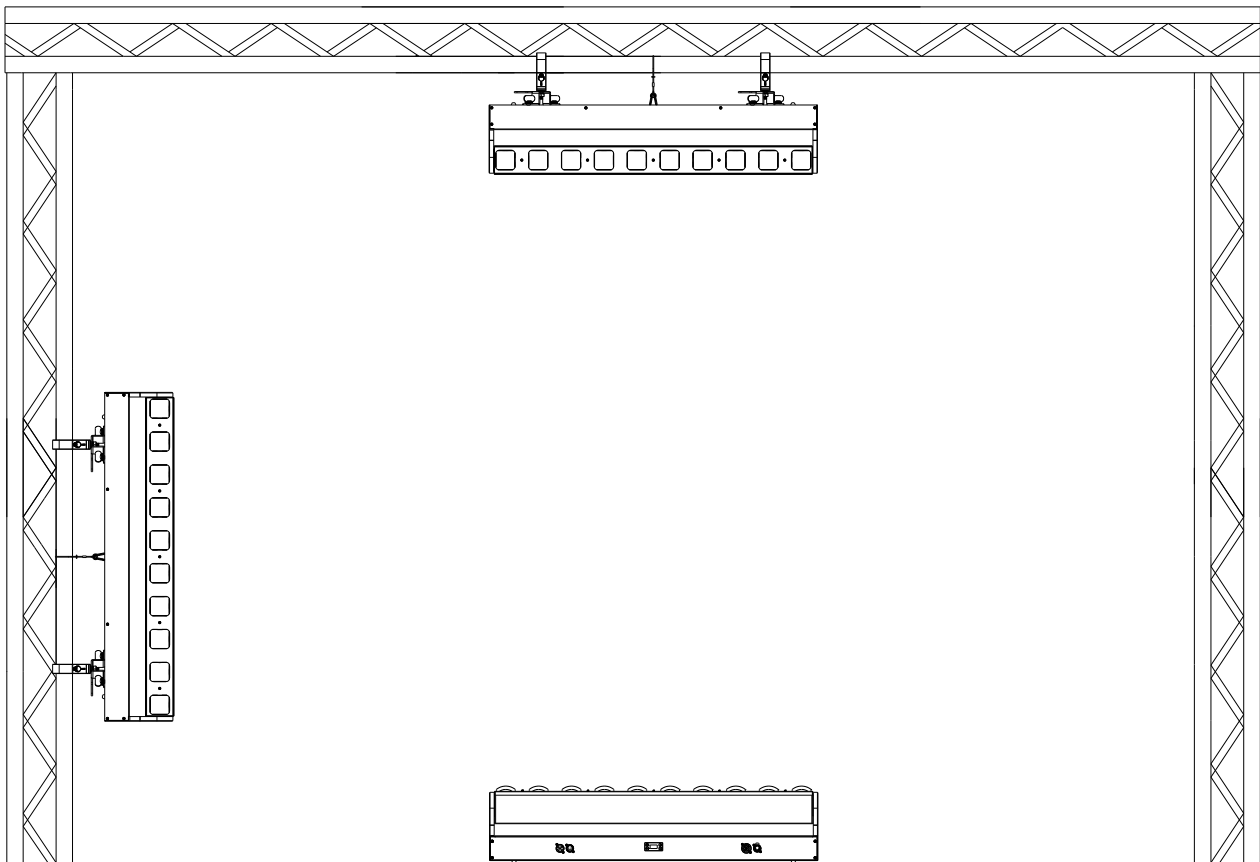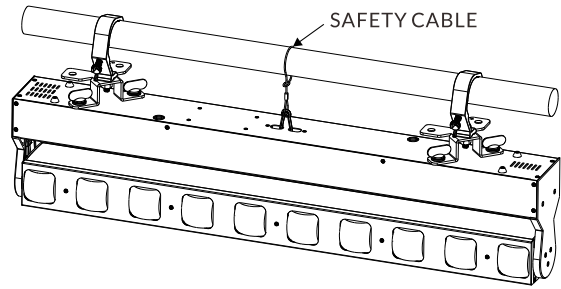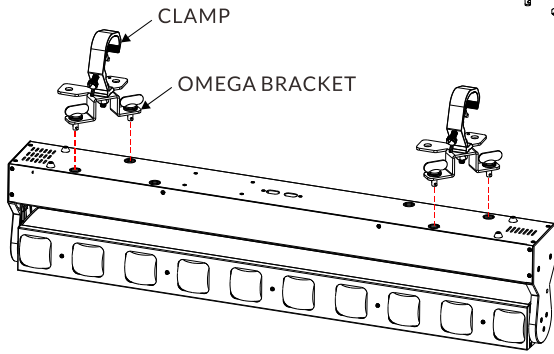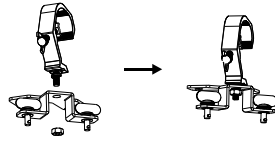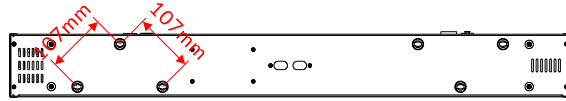
6.1 Control Menu

▸ 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:

MAIN MENU	SUBMENU	CHOICES/VALUES	
DMX Settings	DMX Address	1-466 (47 CH)	(Default=1)
		1-498 (15 CH)	
		1-502 (11 CH)	
	Channel Mode	Mode 1 (47)	
		Mode 2 (15)	
		Mode 3 (11)	
	No DMX Status	Hold	
		Blackout	
		Manual	
	View DMX Value		
Fixture Settings	Tilt Invert	No	
		Yes	
	Tilt Feedback	No	
		Yes	
	Dimmer Curve	Linear	
		Square Law	
		Inv SQ Law	
		S Curve	
	Dimmer Speed	Fast	
		Smooth	
	White Balance	Red	125-255
		Green	125-255
		Blue	125-255
		Red 1	125-255
		Green 1	125-255
		Blue 1	125-255

MAIN MENU	SUBMENU	CHOICES/VALUES	
		......	......
		Red 10	125-255
		Green 10	125-255
		Blue 10	125-255
	LED Refresh Rate	900Hz	
		1000Hz	
		1100Hz	
		1200Hz	
		1300Hz	
		1400Hz	
		1500Hz	
		2500Hz	
		4000Hz	
		5000Hz	
		6000Hz	
		10000Hz	
		15000Hz	
		20000Hz	
		25000Hz	
	Invert Pixel	No	
		Yes	
Display Settings	Display Invert	No	
		Yes	
	Temperature Unit	°C	
		°F	
	Language	English	
		Chinese	

MAIN MENU	SUBMENU	CHOICES/VALUES			
Fixture Test	Auto Test	Single			
		Cycle			
	Manual Test	Mode 1		Mode 2	
		Clear	No/Yes	Clear	No/Yes
		Tilt	0-255	Tilt	0-255
		Red 1	0-255	Red	0-255
		Green 1	0-255	Green	0-255
		Blue 1	0-255	Blue	0-255
		White 1	0-255	White	0-255
		……	……	Dimmer	0-255
		Red 10	0-255	Strobe	0-255
		Green 10	0-255	Pix Color	0-255
		Blue 10	0-255	Pix Select	0-255
		White 10	0-255	Pix Speed	0-255
		Dimmer	0-255		
		Strobe	0-255		
Information	Fixture Use Hour				
	LED Use Hour	Total LED Hour			
		LED On Hour			
		LED Hours Reset	No		
			Yes	Password=050	
	Temperature	LED's	Current	Max temp	
	Firmware Version				
	RDM UID				
	Error Logs	Fixture Errors			
		Reset Error Log	No		
			Yes	Password=050	
Reset Functions	All Reset	No			
		Yes			
Factory Restore	No				
	Yes				

DMX Settings

Enter the control menu and select **DMX Settings**, press ENTER. Use the UP/DOWN button to select **DMX Address, Channel Mode, No DMX Status** or **View DMX Value.**

DMX Address

Select **DMX Address,** press ENTER.

Use UP/DOWN button to select an address, confirm your selection with ENTER.

CHANNEL MODE	DMX ADDRESS
Mode 1 (47)	1-466
Mode 2 (15)	1-498
Mode 3 (11)	1-502

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

Channel Mode

Select **Channel Mode,** press ENTER.

Use UP/DOWN button to select between **Mode 1 (47), Mode 2 (15)** and **Mode 3 (11)**, confirm your selection with ENTER.

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

No DMX Status

Select **No DMX Status,** press ENTER.

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

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

Blackout (Fixture blacks out if DMX signal stops)

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

Confirm your selection with ENTER.

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

View DMX Value

> Select **View DMX Value,** press ENTER.
>
> Use UP/DOWN button to select the desired DMX channel, for which the value is to be displayed.
>
> To exit the menu, press MENU, or wait 30 seconds.

Fixture Settings

Enter the control menu and select **Fixture Settings**, press ENTER. Use the UP/DOWN button to select **Tilt Invert, Tilt Feedback, Dimmer Curve, Dimmer Speed, White Balance, LED Refresh Rate** or **Invert Pixel.**

Tilt Invert

> Select **Tilt Invert,** press ENTER.
>
> Use UP/DOWN button to select **No** (tilt invert deactivated) or **Yes** (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 **No** (tilt feedback deactivated) or **Yes** (tilt feedback activated), 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 **Linear, Square Law, Inv SQ Law** or **S Curve**, confirm your selection with ENTER.

Dimmer Modes
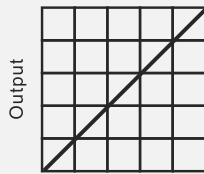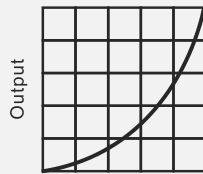
| Optically Linear | Square Law | Inverse Square Law | S-curve |
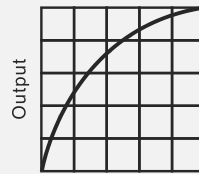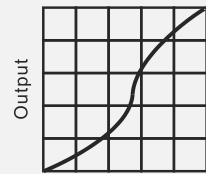
To exit the menu, press MENU, or wait 30 seconds.

Dimmer Speed

Select **Dimmer Speed,** press ENTER.

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

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

White Balance

Select **White Balance,** press ENTER.

Use UP/DOWN button to select **Red, Green, Blue, Red 1, Green 1, Blue 1......** or **Red 10, Green 10, Blue 10**, 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 menu, press MENU, or wait 30 seconds.

LED Refresh Rate

Select **LED Refresh Rate,** press ENTER.

Use UP/DOWN button to select **900Hz, 1000Hz, 1100Hz, 1200Hz, 1300Hz, 1400Hz, 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10000Hz, 15000Hz, 20000Hz** or **25000Hz**, confirm your selection with ENTER.

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

Invert Pixel

> Select **Invert Pixel,** press ENTER.
>
> Use UP/DOWN button to select **No** or **Yes**, confirm your selection with ENTER.
>
> To exit the menu, press MENU, or wait 30 seconds.

Display Settings

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

Display Invert

> Select **Display Invert,** 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 **℃** or **℉**, 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 Test

Enter the control menu and select **Fixture Test**, press ENTER. Use the UP/DOWN button to select **Auto Test** or **Manual Test.**

Auto Test

> Select **Auto Test,** press ENTER.
> Use UP/DOWN button to select **Single** (the device immediately performs a single automatic self-test) or **Cycle** (the device immediately performs a cyclic automatic self-test), confirm your selection with ENTER.
> To exit the menu, press MENU.

Manual Test

> Select **Manual Test,** 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.
> (The device returns to its original DMX state after the manual test. The test values are saved automatically when the device is switched off.)

Information

Enter the control menu and select **Information**, press ENTER. Use the UP/DOWN button to select **Fixture Use Hour, LED Use Hour, Temperature, Firmware Version, RDM UID** or **Error Logs.**

Fixture Use Hour

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

LED Use Hour

Select **LED Use Hour,** press ENTER.

Use UP/DOWN button to select **Total LED Hour** (total time) or **LED On Hour** (current switch-on time), confirm your selection with ENTER.

The total time or current switch-on time is displayed.

Use UP/DOWN button to select **LED Hours Reset**, confirm your selection with ENTER.

If you wish to reset the relevant LED operating hours, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The LED operating hours is reset.

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

Temperature

Select **Temperature,** press ENTER.

The device temperature 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.

RDM UID

Select **RDM UID,** press ENTER.

The RDM UID is displayed.

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

Error Logs

Select **Error Logs,** press ENTER.

Use UP/DOWN button to select **Fixture Errors**, confirm your selection with ENTER.

The error list is displayed.

Use UP/DOWN button to select **Reset Error Log**, confirm your selection with ENTER.

If you wish to reset the relevant error logs, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The relevant error logs are reset.

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

Reset Functions

Enter the control menu and select **Reset Functions**, press ENTER. Use the UP/DOWN button to select **All Reset.**

All Reset

Select **All Reset,** 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.

Factory Restore

Select **Factory Restore,** 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

6.2 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
Frequency(Hz)	1072~1327
Tilt	-128~127
Red	-128~127
Green	-128~127
Blue	-128~127
White	-128~127
Red 1	-128~127
Green 1	-128~127
Blue 1	-128~127
White 1	-128~127
......	......
Red 10	-128~127
Green 10	-128~127
Blue 10	-128~127
White 10	-128~127

Frequency(Hz)

Select **Frequency(Hz),** press ENTER.

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

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

Frequency	VALUES
900Hz	772~1027
1000Hz	872~1127
1100Hz	972~1227
1200Hz	1072~1327
1300Hz	1172~1427
1400Hz	1272~1527
1500Hz	1372~1627
2500Hz	2372~2627
4000Hz	3872~4127
5000Hz	4872~5127
6000Hz	5872~6127
10000Hz	9872~10127
15000Hz	14872~15127
20000Hz	19872~20127
25000Hz	24872~25127

Tilt

Select **Tilt,** press 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.

Red

Select **Red,** press 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.

Green

Select **Green,** press 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.

Blue

Select **Blue,** press 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

Select **White,** press 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.

Red 1

Select **Red 1,** press 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.

Green 1

Select **Green 1,** press 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.

Blue 1

Select **Blue 1,** press 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 1

Select **White 1,** press 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.

......

Red 10

Select **Red 10,** press 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.

Green 10

Select **Green 10,** press 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.

Blue 10

Select **Blue 10,** press 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 10

Select **White 10,** press 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.

7.1 Address Setting

All fixtures should be given a DMX starting address when operating with a DMX controller, in order to ensure that the correct fixture responds to the correct control signal. Incorrect settings will result in unpredictable responses from the lighting controller.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture.

Setting all fixtures to the same DMX address will cause all fixtures to react in the same way. In this case, please note that changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will "listen" starting at the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

For example, if the first fixture is set to 47 ch DMX mode with a start DMX address of 1, the following fixture in the DMX chain should then be set to a DMX address of 48. As the first fixture uses all the first 47 DMX channels, the next available channel is 48 (47+1=48 >> 48). See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
47 channels	1	48	95	142	......
15 channels	1	16	31	46	......
11 channels	1	12	23	34	......

7.2 DMX Protocol

CHANNEL			VALUE	FUNCTION
47ch	15ch	11ch		
1	1	1	000-255	**TILT** 0°→220°
2	2	2	000-255	**TILT FINE**
3	3	3	000-255	**TILT SPEED** Fast to Slow
	4	4	000-255	**RED** 0%→100%
	5	5	000-255	**GREEN** 0%→100%
	6	6	000-255	**BLUE** 0%→100%
	7	7	000-255	**WHITE** 0%→100%
4			000-255	**RED 1** 0%→100%
5			000-255	**GREEN 1** 0%→100%
6			000-255	**BLUE 1** 0%→100%
7			000-255	**WHITE 1** 0%→100%
8			000-255	**RED 2** 0%→100%
9			000-255	**GREEN 2** 0%→100%
10			000-255	**BLUE 2** 0%→100%
11			000-255	**WHITE 2** 0%→100%
12			000-255	**RED 3** 0%→100%
13			000-255	**GREEN 3** 0%→100%
14			000-255	**BLUE 3** 0%→100%
15			000-255	**WHITE 3** 0%→100%
16				**RED 4**

			000-255	0%→100%
17			000-255	GREEN 4 0%→100%
18			000-255	BLUE 4 0%→100%
19			000-255	WHITE 4 0%→100%
20			000-255	RED 5 0%→100%
21			000-255	GREEN 5 0%→100%
22			000-255	BLUE 5 0%→100%
23			000-255	WHITE 5 0%→100%
24			000-255	RED 6 0%→100%
25			000-255	GREEN 6 0%→100%
26			000-255	BLUE 6 0%→100%
27			000-255	WHITE 6 0%→100%
28			000-255	RED 7 0%→100%
29			000-255	GREEN 7 0%→100%
30			000-255	BLUE 7 0%→100%
31			000-255	WHITE 7 0%→100%
32			000-255	RED 8 0%→100%
33			000-255	GREEN 8 0%→100%
34			000-255	BLUE 8 0%→100%
35			000-255	WHITE 8 0%→100%
36			000-255	RED 9 0%→100%
37			000-255	GREEN 9 0%→100%

38			000-255	**BLUE 9** 0%→100%
39			000-255	**WHITE 9** 0%→100%
40			000-255	**RED 10** 0%→100%
41			000-255	**GREEN 10** 0%→100%
42			000-255	**BLUE 10** 0%→100%
43			000-255	**WHITE 10** 0%→100%
44	8	8	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	**STROBE** Close Open Strobe from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Random Strobe from Slow to Fast Open
45	9	9	000-255	**DIMMER** 0%→100%
46	10	10	000-255	**DIMMER FINE**
	11		000-255	**PIXEL EFFECT DIMMER** 0%→100%
	12		000-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064 065-069 070-074 075-079 080-084 085-089	**PIXEL EFFECT COLOR** Open LEE 790-Moroccan Pink LEE 157-Pink LEE 332-Special Rose Pink LEE 328-Follies Pink LEE 345-Fuchsia Pink LEE 194-Surprise Pink LEE 181-Congo Blue LEE 071-Tokyo Blue LEE 120-Deep Blue LEE 079-Just Blue LEE 132-Medium Blue LEE 200-Double CT Blue LEE 161-State Blue LEE 201-Full CT Blue LEE 202-Half CT Blue LEE 117-Steel Blue

			090-094	LEE 353-Lighter Blue
			095-099	LEE 118-Light Blue
			100-104	LEE 116-Medium Blue Green
			105-109	LEE 124-Dark Green
			110-114	LEE 139-Primary Green
			115-119	LEE 089-Moss Green
			120-124	LEE 122-Fern Green
			125-129	LEE 738-JAS Green
			130-134	LEE 088-Lime Green
			135-139	LEE 100-Spring Yellow
			140-144	LEE 104-Deep Amber
			145-149	LEE 179-Chrome Orange
			150-154	LEE 105-Orange
			155-159	LEE 021-Gold Amber
			160-164	LEE 778-Millennium Gold
			165-169	LEE 135-Deep Gold Amber
			170-174	LEE 164-Flame Red
			175-179	Open
			180-201	Clockwise Rotation, Fast to Slow
			202-207	Stop
			208-229	Counter-clockwise Rotation, Slow to Fast
			230-234	Open
			235-239	Random Color: Fast
			240-244	Random Color: Medium
			245-249	Random Color: Slow
			250-255	Open
13				**PIXEL EFFECT SELECT**
			000-003	Null
			004-007	Built-in Effect 1
			008-011	Built-in Effect 2
			012-015	Built-in Effect 3
			016-019	Built-in Effect 4
			020-023	Built-in Effect 5
			024-027	Built-in Effect 6
			028-031	Built-in Effect 7
			032-035	Built-in Effect 8
			036-039	Built-in Effect 9
			040-043	Built-in Effect 10
			044-047	Built-in Effect 11
			048-051	Built-in Effect 12
			052-055	Built-in Effect 13
			056-059	Built-in Effect 14
			060-063	Built-in Effect 15
			064-067	Built-in Effect 16
			068-071	Built-in Effect 17
			072-075	Built-in Effect 18
			076-079	Built-in Effect 19

			080-083	Built-in Effect 20
			084-087	Built-in Effect 21
			088-091	Built-in Effect 22
			092-095	Built-in Effect 23
			096-099	Built-in Effect 24
			100-103	Built-in Effect 25
			104-107	Built-in Effect 26
			108-111	Built-in Effect 27
			112-115	Built-in Effect 28
			116-119	Built-in Effect 29
			120-123	Built-in Effect 30
			124-127	Built-in Effect 31
			128-131	Built-in Effect 32
			132-135	Built-in Effect 33
			136-255	Null
	14			**PIXEL EFFECT SPEED**
			000	Null
			001-127	Slow to Fast without Fade
			128-255	Slow to Fast with Fade
47	15	11		**FUNCTION** (To activate following functions, stop in DMX value for at least 3 seconds.)
			000-029	Null
			030-039	Dimmer Curve: Linear
			040-049	Dimmer Curve: Square Law
			050-059	Dimmer Curve: Inv SQ Law
			060-069	Dimmer Curve: S Curve
			070-099	Null
			100-109	Led Frequency Setting Enable
			110-119	Led Frequency Setting Disable
			120-122	Null
			123	900Hz
			124	1000Hz
			125	1100Hz
			126	1200Hz
			127	1300Hz
			128	1400Hz
			129	1500Hz
			130	2500Hz
			131	4000Hz
			132	5000Hz
			133	6000Hz
			134	10000Hz
			135	15000Hz
			136	20000Hz
			137	25000Hz
			138-139	Null

			140-159	Null
			160-169	Invert Pixel Order: Yes
			170-179	Invert Pixel Order: No
			180-199	Null
			200-209	All Reset
			210-219	Dimmer Speed: Fast
			220-229	Dimmer Speed: Smooth
			230-255	Null

08/ Error Information

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 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 Encode 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.

Tilt Encode No Find

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

Tilt Encode Disable

Check whether the encoder on the tilt is damaged.

LED Timeout Use

LED Too Hot Off

When the fixture temperature reaches 75℃, it will automatically turn off to protect the fixture.

Problem	Potential cause(s)	Remedies
Fixture does not respond or appears to be off.	No power to the fixture.	Confirm that the power is switched on and cables are plugged in.
	No output from PSU.	Replace the PSU.
Fixture suddenly turned off.	Power was turned off.	Check the power supply, switches and breakers.
Light output cuts out intermittently.	Fixture is too hot.	Check fixture's stored error messages for more information. Allow fixture to cool. Clean fixture. Reduce ambient temperature.
Fixture suddenly stopped responding.	DMX cables were disconnected.	Inspect DMX cables.
Fixture operates irregularly / abnormal.	Incorrect DMX address or DMX mode.	Inspect and enter the correct DMX address or mode.
	DMX link is not terminated.	Install a XLR 120ohm DMX termination at the end of the DMX link.
	Bad data link.	Replace or repair defective cables and/or connections.
	One of the fixtures is defective and is disturbing data transmission on the link.	Track and isolate the corrupted fixture. Have the fixture serviced by a qualified technician.
Tilt is skipping / shuddering	Obstacles are within the required tilt clearance.	Inspect and remove any obstacles constraining free operation of the tilt.
	The Hall element is damaged.	Replace the Hall element.
	The magnetic steel fell out.	Replace the magnetic steel.

10/ Fixture Cleaning

Regular cleaning is very important for fixture life and performance. Buildup of dust, dirt, smoke particles, fog fluid residues, etc. degrades the fixture's light output and cooling ability. Cleaning schedules for lighting fixtures vary greatly depending on the operating environment. It is therefore impossible to specify precise cleaning intervals for the fixture. Environmental factors that may result in a need for frequent cleaning include:

▸ Use of smoke or fog machines.

▸ High airflow rates (near air conditioning vents, for example).

▸ Airborne dust (from stage effects, building structures and fittings or the natural environment at outdoor events, for example).

If one or more of these factors is present, inspect fixtures within their first few hours of operation to see whether cleaning is necessary. Check again at frequent intervals. This procedure will allow you to assess cleaning requirements in your particular situation.

Follow these precautions when cleaning the fixture:

▸ Work in a clean, dry, well-lit area.

▸ Use gentle pressure only. A soft lint-free cloth dampened with a solution of water and a mild detergent is recommended, under no circumstances should alcohol, solvents or abrasives be used! Use care when cleaning optical components: surfaces are fragile and easily scratched.

This product has been tested and found to comply with the following standards:

- 2014/30/EU - Electromagnetic Compatibility (EMC)

- 2014/35/EU - Low Voltage Directive (LVD)

The information in this document is subject to change without notice.

For the latest information, visit www.acmelighting.com.

www.acmelighting.com