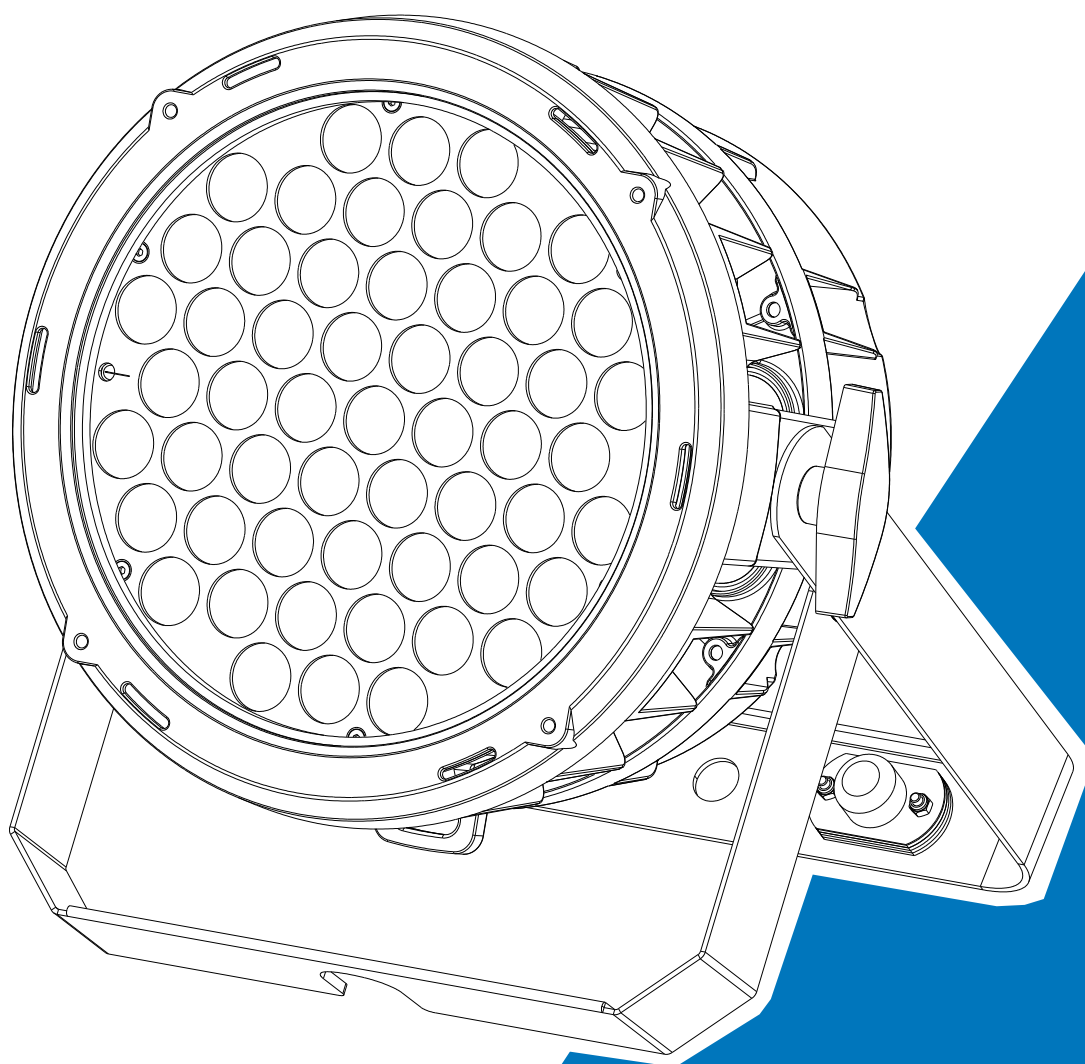




SANDANE FROST



User Manual

Please read the instruction carefully before use

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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.

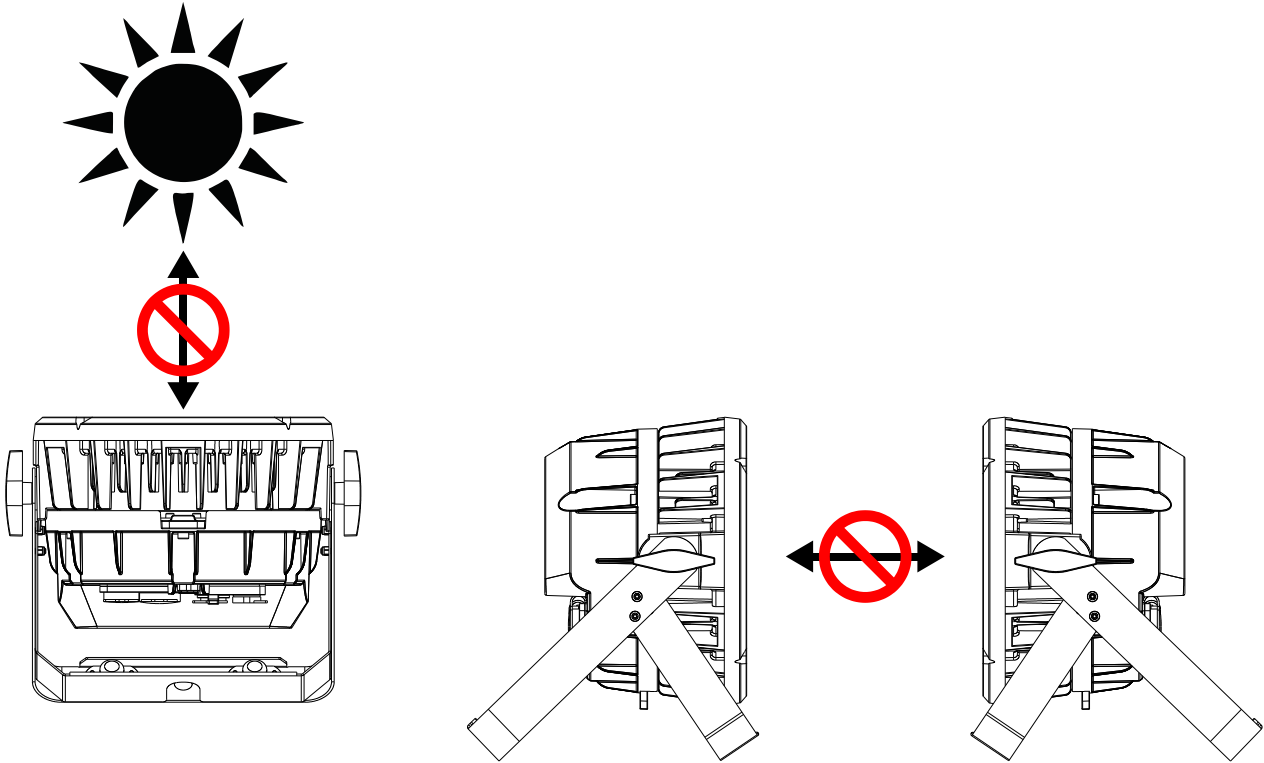
Important:

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 suitable for wet locations. Do not immerse in water.
- 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 the head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation holes are blocked, otherwise the unit could over heat.
- 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: -10°C. Maximum ambient temperature TA: 40°C. 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 65°C. DO NOT touch the housing bare-handed during its operation.

- Avoid any flammable liquids, water or metal from entering the unit. If 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 wiring 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 an operating problem, stop using the unit immediately.
- Never turn the unit off and on repeatedly.
- 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 or suitable road case 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.
- The device MUST NOT be switched on immediately if it has been exposed to strong temperature fluctuations (e.g. after transport) as condensation may occur inside. Please leave the device switched off until it has reached to ambient temperature.

- External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage. DO NOT expose the fixture front lens to light beams from direct sunlight or any other strong light source from any angle while unpacking, installation, use, and extended idle times outdoors. DO NOT focus a light beam from one lighting fixture directly towards another.



01/ Consignes de sécurité



Veuillez lire attentivement les instructions qui contiennent des informations importantes sur l'installation, l'utilisation et l'entretien.

ATTENTION

Veuillez conserver ce guide de l'utilisateur pour une consultation future. Si vous vendez l'appareil à un autre utilisateur, assurez-vous qu'il reçoive également ce manuel d'instructions.

Important:

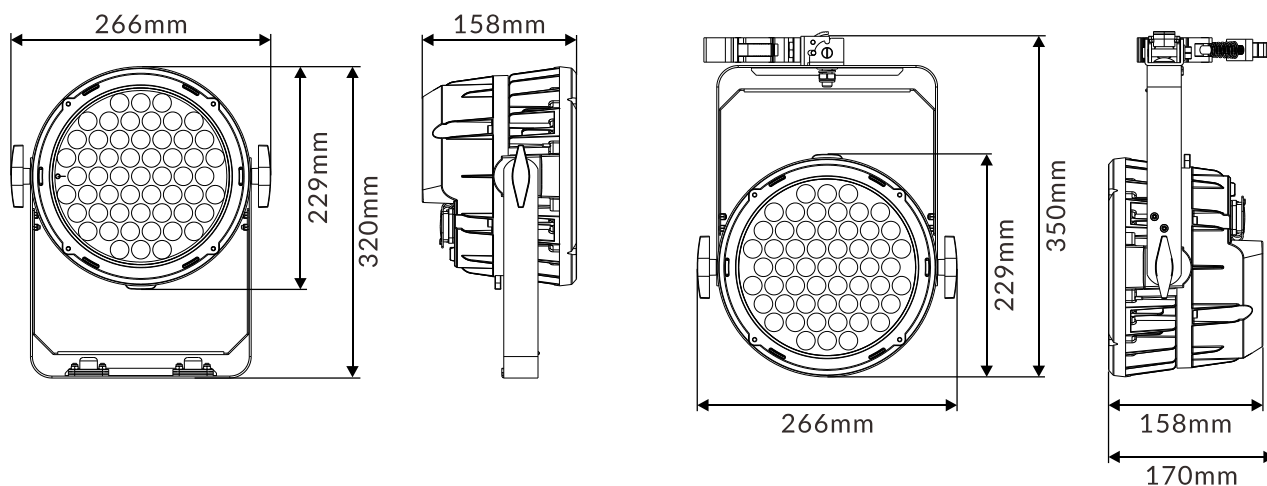
Les dommages causés par le non-respect de ce manuel d'utilisation ne sont pas couverts par la garantie. Le revendeur n'acceptera aucune responsabilité pour les défauts ou problèmes qui en résultent.

- Déballez et vérifiez soigneusement qu'il n'y a pas de dommages dus au transport avant d'utiliser l'appareil.
- Ce produit convient aux endroits humides. Ne pas immerger dans l'eau.
- L'installation et la mise en fonctionnement doit être effectué par un opérateur qualifié.
- NE PAS permettre aux enfants d'utiliser l'appareil.
- Utilisez une chaîne de sécurité lors de la fixation de l'unité. Manipulez l'appareil en portant sa base au lieu de la tête uniquement.
- L'unité doit être installée dans un endroit avec une ventilation adéquate, à au moins 50cm des surfaces adjacentes.
- Assurez-vous qu'aucune fente d'aération du luminaire n'est obstruée, sinon il risque de surchauffer.
- Avant toute utilisation, assurez-vous que vous connectez ce luminaire à la tension appropriée conformément aux spécifications que vous trouverez dans ce manuel ou sur l'étiquette des spécifications collée sur la base du luminaire.
- Il est important de relier le fil jaune/vert à la terre afin d'éviter tout choc électrique.
- Température ambiante minimale TA: 0°C. Température ambiante maximale TA: 40°C. N'utilisez pas ce luminaire à des températures inférieures ou supérieures.
- NE PAS connecter le luminaire à un pack de gradateurs.
- Gardez les matériaux inflammables à l'écart du luminaire pendant le fonctionnement pour éviter tout risque d'incendie.

- Assurez-vous que le cordon d'alimentation n'est pas pincé ou endommagé; remplacez-le immédiatement s'il est endommagé.
- La température de surface de l'unité peut atteindre 65°C. NE PAS toucher les capots à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau ou du métal ne pénètrent dans l'appareil. Si cela se produit, coupez immédiatement l'alimentation secteur.
- NE PAS utiliser le luminaire dans un environnement sale ou poussiéreux. Cette appareil doit être nettoyer régulièrement.
- NE touchez AUCUN file pendant le fonctionnement car il pourrait y avoir un risque de choc électrique.
- Évitez l'enchevêtrement du cordon d'alimentation avec d'autres fils.
- La distance minimale de projection sur des objets ou sur des surfaces doit être supérieure à 0.5 mètres.
- En cas de problème de fonctionnement grave, arrêtez immédiatement d'utiliser l'appareil.
- N'allumez et n'éteignez jamais ce luminaire à maintes reprises.
- Le boîtier, les lentilles ou le filtre ultraviolet doivent être remplacés s'ils sont visiblement endommagés.
- NE PAS ouvrir le boîtier car il ne contient aucune pièce réparable par l'utilisateur.
- NE PAS mettre ce luminaire en fonctionnement s'il est endommagé. N'effectuez pas de réparations vous-même. Les réparations ne doivent être effectuées par des personnes non qualifiées, cela peut entraîner des dommages ou des dysfonctionnements. Veuillez contacter le centre d'assistance technique agréé le plus proche si nécessaire.
- Débranchez ce produit du secteur avant de procéder à l'entretien.
- Utiliser l'emballage d'origine si l'appareil doit être transporté.
- Évitez une exposition directe des yeux à la source lumineuse lorsque le produit est allumé.
- N'utilisez PAS ce produit si vous constatez des dommages sur le boîtier, les blindages ou les câbles. Faites remplacer immédiatement les pièces endommagées par un technicien agréé.

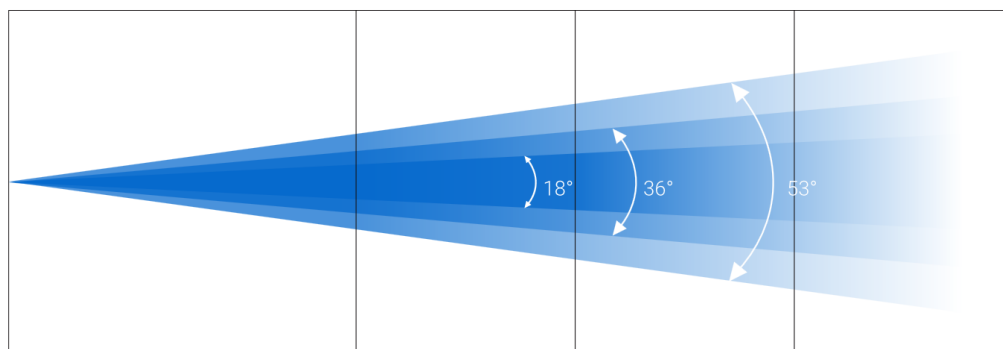
02/ Technical Specifications

AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	215W	
Light Source	55x6W RGBL LED	
Beam Angle	18°, 36°, 53°	
Field Angle	37°, 96°, 128°	
Control and Programming	DMX Channels	11/9/8/7/6/3
	Protocols	DMX512
		RDM
	Operational Modes	DMX Control
		Show Mode
	Firmware Update	via DMX
Construction	Display	OLED display
	DMX and RDM Data In/Out	3-pin IP XLR (optional with 5-pin IP XLR)
	Power In/Out	Waterproof Power Connector in/out
	Protection Rating	IP66
Dynamic Effects	Compact design, small size, light in weight	
	High output, low energy consumption	
	0-100% continuous dimming and strobe effects	
	Choice of four dimming curves	
	Variable CTO	
	Double hanging brackets	
	Optional half or full size anti-glare shield	
Dimensions	266x158x320mm (version with omega bracket holes)	10.5"x6.2"x12.6"
Dimensions	266x170x350mm (version with fixed foldable clamp)	10.5"x6.7"x13.8"
Weight	5 kg (version with omega bracket holes)	11 lbs
Weight	5.3 kg (version with fixed foldable clamp)	11.7 lbs



Photometric Diagram (Beam Angle):

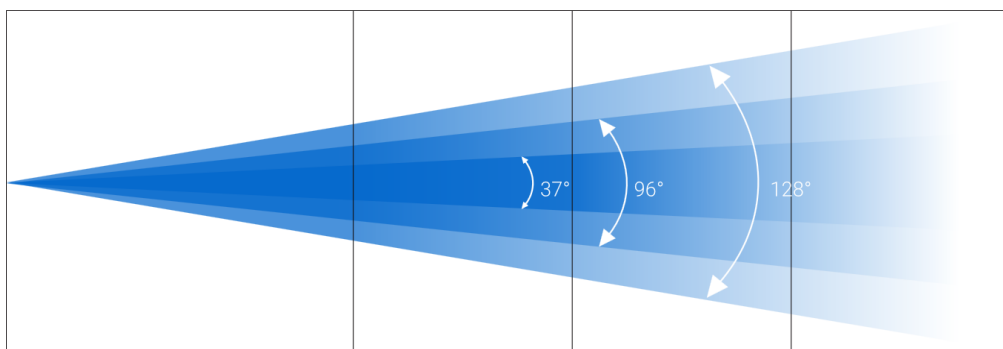
Distance m (ft) 5 (16.4) 10 (32.8) 15 (49.2) 20 (65.6)



18° RGBL Lux	1,514	379	168	95
Diameter m (ft)	1.6 (5.2)	3.2 (10.5)	4.9 (16.1)	6.5 (21.3)
36° RGBL Lux	215	54	24	13
Diameter m (ft)	3.3 (10.8)	6.5 (21.3)	9.8 (32.2)	13.0 (42.7)
53° RGBL Lux	125	31	19	8
Diameter m (ft)	5.0 (16.4)	9.9 (32.5)	15.0 (49.2)	19.8 (65)

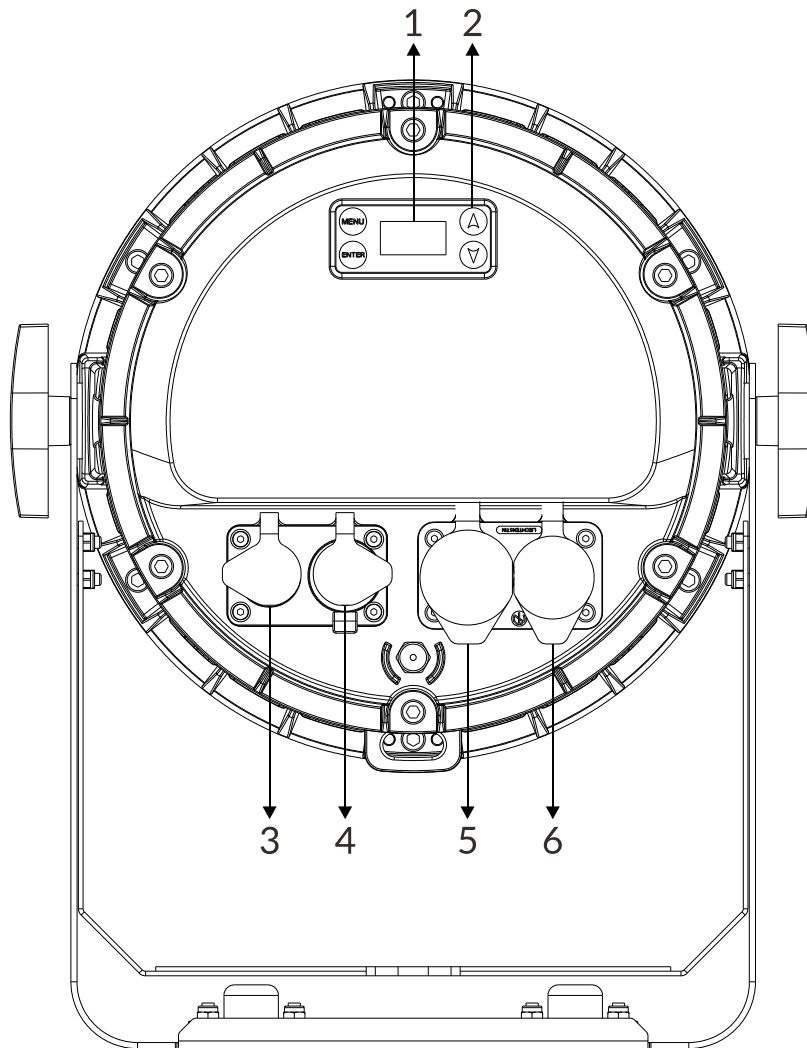
Photometric Diagram (Field Angle):

Distance m (ft) 5 (16.4) 10 (32.8) 15 (49.2) 20 (65.6)



37° RGBL Lux	1,514	379	168	95
Diameter m (ft)	3.4 (11.2)	6.7 (22)	10.1 (33.1)	13.5 (44.3)
96° RGBL Lux	215	54	24	13
Diameter m (ft)	11.1 (36.4)	22.2 (72.8)	33.2 (108.9)	44.3 (145.3)
128° RGBL Lux	125	31	19	8
Diameter m (ft)	20.4 (66.9)	40.7 (133.5)	61.1 (200.5)	81.4 (267.1)

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 or move up in the menu
	▼ DOWN	To go forward or move down in the menu
	ENTER	To perform the desired functions
3. DMX IN	For DMX512 link, use 3-pin XLR cable to link the unit and DMX controller to input DMX signal (optional with 5-pin IP XLR)	
4. DMX OUT	For DMX512 link, use 3-pin XLR cable to link the next units to output DMX signal (optional with 5-pin IP XLR)	
5. POWER OUT	To connect to the next fixture	
6. POWER IN	To connect to supply power	

04/ Connecting Power and Data

4.1 Connecting Power

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

The maximum power consumption is 215W.

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		brown	L	live
	white		blue	N	neutral
	green		yellow/green	$\perp$ or $\oplus$	ground (earth)

Power cord set should be used: Listed SJOW flexible cord with rating: 300V, 105°C, VW-1, 14AWG x 3C, molded with 5-15P attachment plug and terminated with cord connector model SAC3FX with rating 250V, 16A by NINGBO SEETRONIC ELECTRONIC CO., LTD. The power cord shall be at least 914mm (It is to be measured from the face of attachment plug to the face of connector).

CAUTION!

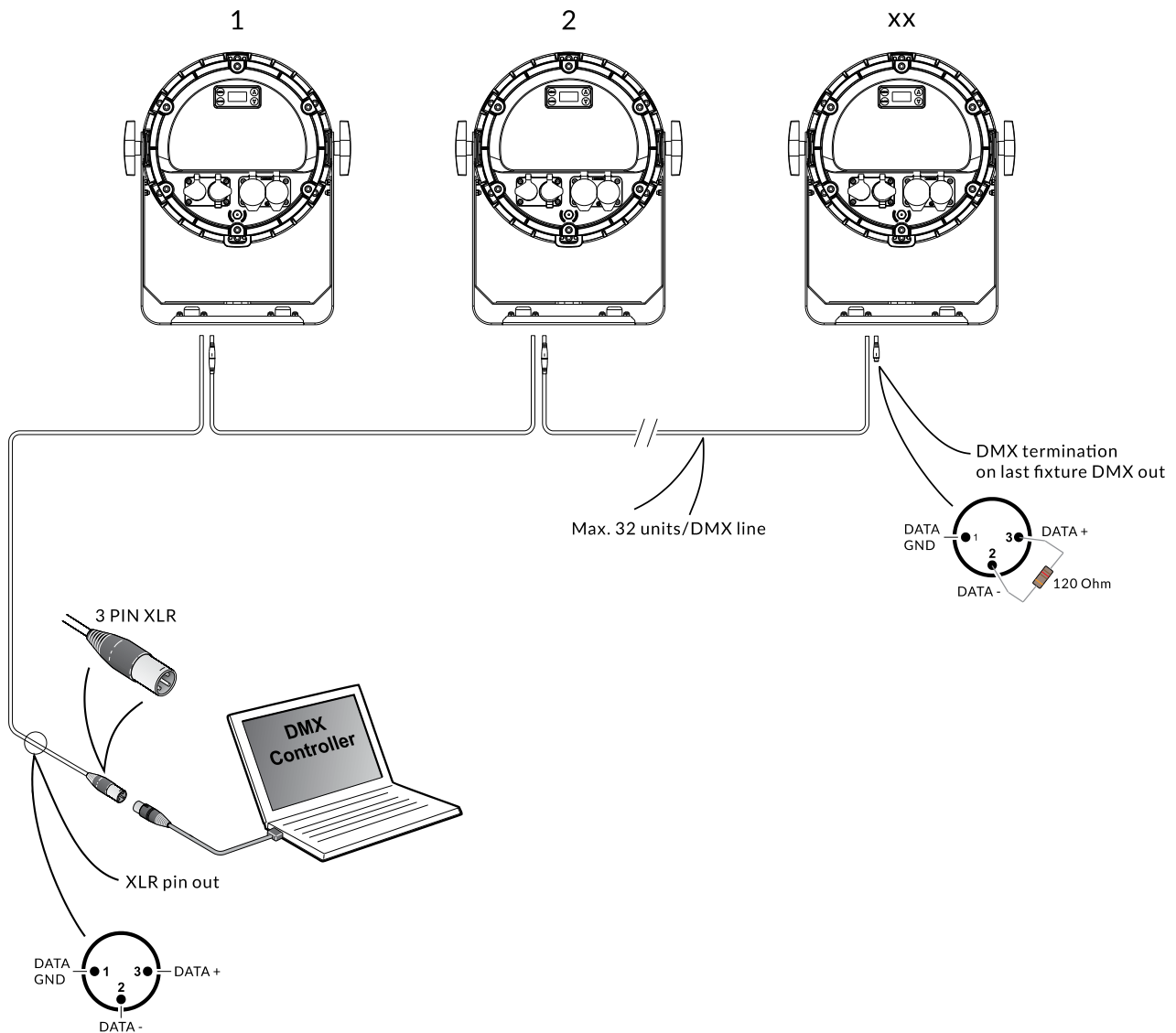
DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.

4.2 Connecting Data

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

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

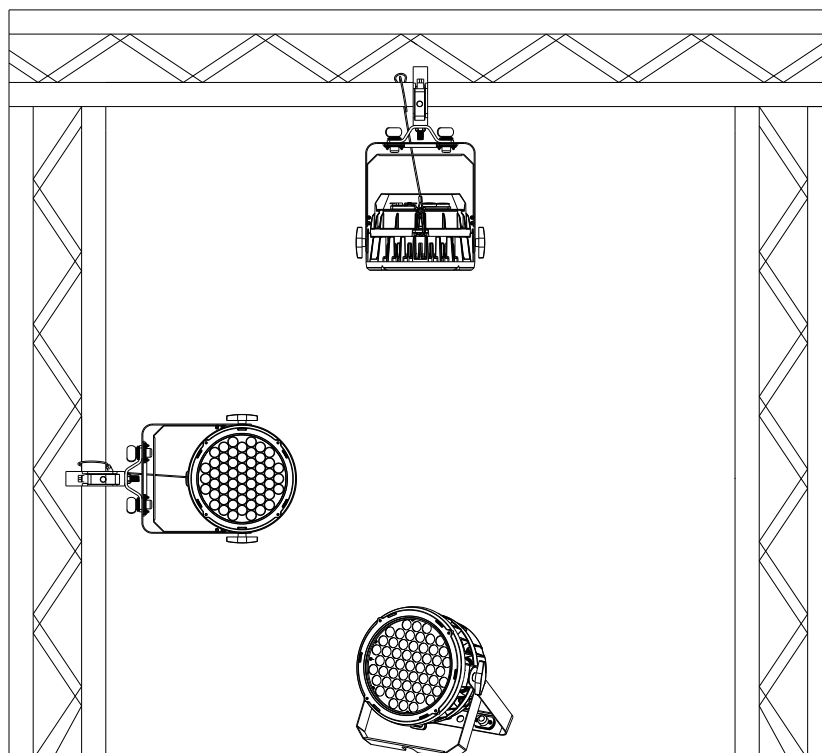
The fixture is IP66-rated and designed for both indoor and outdoor events. This means that it is protected from:

- ▶ Dust, to the degree that dust cannot enter the device in sufficient quantities as to interfere with its operation.
- ▶ Water jets from any direction.

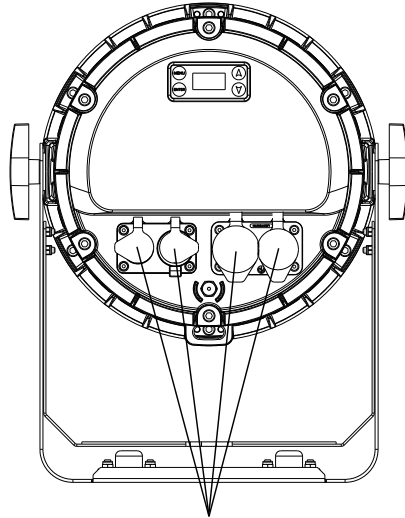
DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.

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 on truss, mounted sideways on truss, 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.

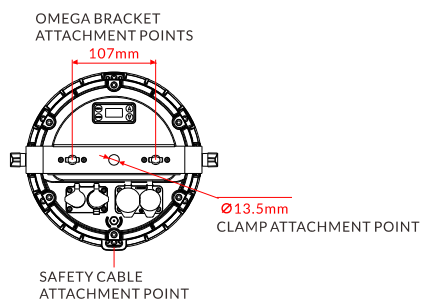


- Use only IP-rated power cords and connectors suitable for outdoor use.
- Visually check panel connectors on accidental water leaks and dust before connecting related cable connectors.
If some water appears in panel connectors, do not connect cable connectors, especially power!
- Fixtures require regular maintenance.
Carefully check panel connectors for corrosion and scorching, and replace them promptly if damaged.

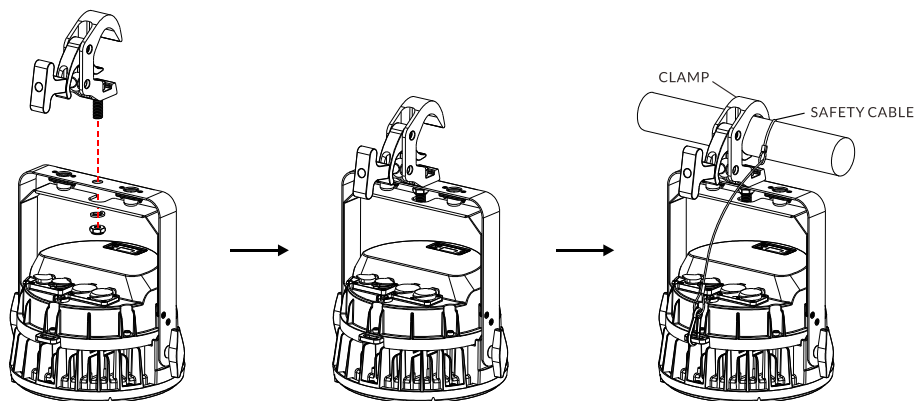


All unused panel connectors have to be sealed by the rubber caps to avoid contact with water, especially seawater.

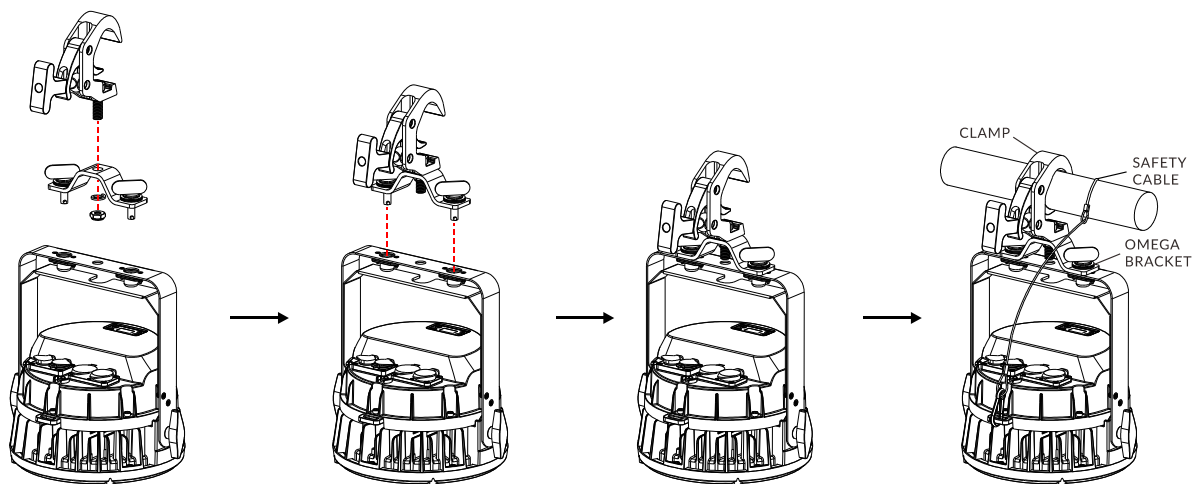
Version with omega bracket holes:



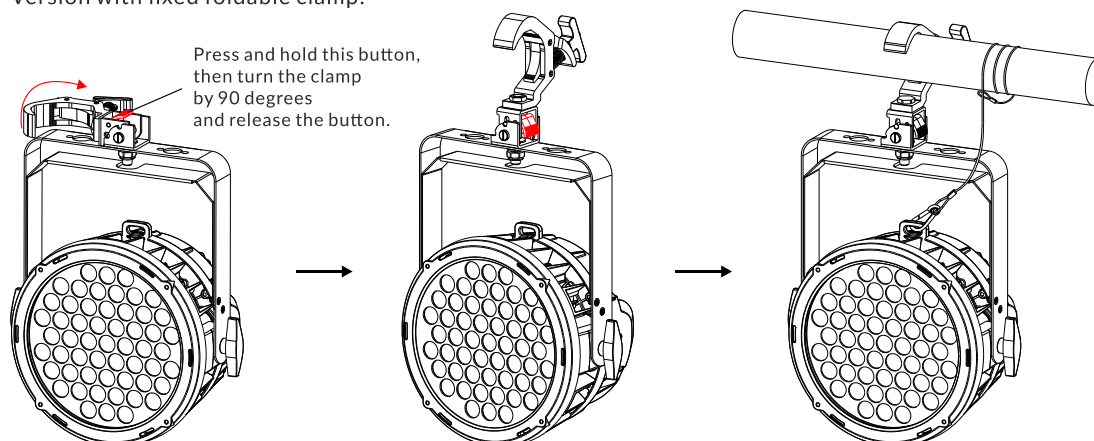
Steps for installing the clamp:



Steps for installing the omega bracket:



Version with fixed foldable clamp:



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 screen locks after 30 seconds of inactivity.
Press and hold the [MENU] button to unlock the screen.

The main functions are shown below:

MAIN MENU	SUBMENU	CHOICES/VALUES	
DMX Settings	DMX Address	1-502 (11 CH)	(Default=1)
		1-504 (9 CH)	
		1-505 (8 CH)	
		1-506 (7 CH)	
		1-507 (6 CH)	
		1-510 (3 CH)	
	Channel Mode	Mode 1 (11)	
		Mode 2 (9)	
		Mode 3 (8)	
		Mode 4 (7)	
		Mode 5 (6)	
		Mode 6 (3)	
	No DMX Status	Hold	
		Blackout	
		Program	
		Manual	
	View DMX Value		
Fixture Settings	Dimmer Curve	Linear	
		Square Law	
		Inv SQ Law	
		S Curve	
	Dimmer Speed	Fast	
		Smooth	

MAIN MENU	SUBMENU	CHOICES/VALUES	
	White Balance	Red	125-255
		Green	125-255
		Blue	125-255
	Pri/Sec Mode	Secondary	
		Primary	
	LED Refresh Rate	900Hz	
		1000Hz	
		1100Hz	
		1200Hz	
		1300Hz	
		1400Hz	
		1500Hz	
		2500Hz	
		4000Hz	
		5000Hz	
		6000Hz	
		10000Hz	
		15000Hz	
		20000Hz	
		25000Hz	
Display Settings	Display Invert	No	
		Yes	
	Temperature Unit	°C	
		°F	
	Language	English	
		Chinese	
Auto Test	Single		
	Cycle		
Manual Test	Clear	No/Yes	
	Red	0-255	
	Green	0-255	
	Blue	0-255	
	Lime	0-255	
	Strobe	0-255	
	Dimmer	0-255	
	CTO	Null	
		8000K~2500K	

MAIN MENU	SUBMENU	CHOICES/VALUES		
	Color	Null		
		Color 1~Color 32		
		Slow Speed		
		Medium Speed		
		Fast Speed		
	Frost	0-255		
Show Program	Set Scene Totals	0-50		
	Edit Scene Color	1-50	Red	0-255
			Green	0-255
			Blue	0-255
			Lime	0-255
	Fade Time	0-255		
Hold Time	0-255			
Information	Fixture Use Hour			
	LED Use Hour	Total LED Hour		
		LED On Hour		
		LED Hours Reset	No	
	Yes		Password=050	
	Temperature	LED	Current	
			Max temp	
	Firmware Version			
	RDM UID			
	Error Logs	Fixture Errors		
		Reset Error Log	No	
			Yes	Password=050
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 (11)	1-502
Mode 2 (9)	1-504
Mode 3 (8)	1-505
Mode 4 (7)	1-506
Mode 5 (6)	1-507
Mode 6 (3)	1-510

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 (11)**, **Mode 2 (9)**, **Mode 3 (8)**, **Mode 4 (7)**, **Mode 5 (6)** and **Mode 6 (3)**, 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)

Program (The device accepts the DMX value stored in the 'Show Program' menu)

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

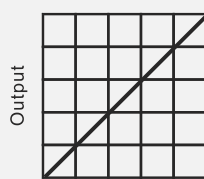
Enter the control menu and select **Fixture Settings**, press ENTER. Use the UP/DOWN button to select **Dimmer Curve**, **Dimmer Speed**, **White Balance**, **Pri/Sec Mode** or **LED Refresh Rate**.

Dimmer Curve

Select **Dimmer Curve**, press ENTER.

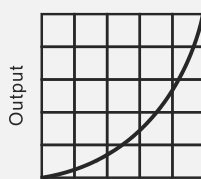
Use UP/DOWN button to select **Linear**, **Square Law**, **Inv SQ Law** or **S Curve**, confirm your selection with ENTER.

Dimmer Modes



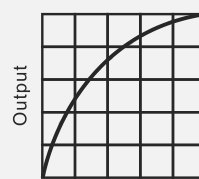
DMX %

Optically Linear



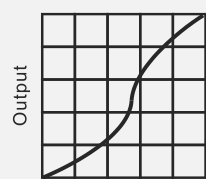
DMX %

Square Law



DMX %

Inverse Square Law



DMX %

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** 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 menu, press MENU, or wait 30 seconds.

Pri/Sec Mode

Select **Pri/Sec Mode**, press ENTER.

Use UP/DOWN button to select **Secondary** or **Primary**, 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.

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 **°C** or **°F**, 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.

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.)

Show Program

Enter the control menu and select **Show Program**, press ENTER. Use the UP/DOWN button to select **Set Scene Totals**, **Edit Scene Color**, **Fade Time** or **Hold Time**.

Set Scene Totals

Select **Set Scene Totals**, press ENTER.

Use UP/DOWN button to select a value between **0** and **50**, confirm your selection with ENTER.

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

Edit Scene Color

Select **Edit Scene Color**, press ENTER.

Use UP/DOWN button to select a value between **1** and **50**, confirm your selection with ENTER.

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

Use UP/DOWN button to select a value between **0** and **255**, confirm your selection with ENTER.

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

Fade Time

Select **Fade Time**, press ENTER.

Use UP/DOWN button to select a value between **0** and **255**, confirm your selection with ENTER.

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

Hold Time

Select **Hold Time**, press ENTER.

Use UP/DOWN button to select a value between **0** and **255**, confirm your selection with ENTER.

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

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 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.

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:

Standard RDM Parameter IDs

PID	Parameter IDs	Command 'Discovery'	Command 'Set'	Command 'Get'
0x0001	DISC_UNIQUE_BRANCH	✓		
0x0002	DISC_MUTE	✓		
0x0003	DISC_UN_MUTE	✓		
0x0050	SUPPORTED_PARAMETERS			✓
0x0051	PARAMETER_DESCRIPTION			✓
0x0060	DEVICE_INFO			✓
0x0080	DEVICE_MODEL_DESCRIPTION			✓
0x0081	MANUFACTURER_LABEL			✓
0x0082	DEVICE_LABEL		✓	✓
0x0090	FACTORY_DEFAULTS		✓	✓
0x00C0	SOFTWARE_VERSION_LABEL			✓
0x00C1	BOOT_SOFTWARE_VERSION_ID			✓
0x00C2	BOOT_SOFTWARE_VERSION_LABEL			✓
0x00E0	DMX_PERSONALITY		✓	✓
0x00E1	DMX_PERSONALITY_DESCRIPTION			✓
0x00F0	DMX_START_ADDRESS		✓	✓
0x0120	SLOT_INFO			✓
0x0121	SLOT_DESCRIPTION			✓
0x0200	SENSOR_DEFINITION			✓
0x0201	SENSOR_VALUE			✓
0x0343	CURVE		✓	✓
0x0344	CURVE_DESCRIPTION			✓
0x0400	DEVICE_HOURS			✓
0x0401	LAMP_HOURS			✓
0x1000	IDENTIFY_DEVICE		✓	✓
0x1001	RESET_DEVICE		✓	✓

✓ -Command implemented for the respective parameter ID

Manufacturer-specific RDM Parameter IDs

PID	Parameter IDs	Command 'Discovery'	Command 'Set'	Command 'Get'	Note
0xA003	PRIM_SEC		✓	✓	0:Primary 1:Secondary
0xA004	DMX_STATUS		✓	✓	0:Blackout 1:Hold 2:Program 3:Manual
0xA008	DIMMER_SPEED		✓	✓	0:Fast 1:Smooth
0xA018	ERROR_LOG			✓	
0xA020	OFFSET		✓	✓	
0xA025	DIMMER_CURVE		✓	✓	1:Linear 2:Square Law 3:Inv SQ Law 4:S Curve
0xA026	DIMMER_FREQUENCY		✓	✓	1:900Hz 2:1000Hz 3:1100Hz 4:1200Hz 5:1300Hz 6:1400Hz 7:1500Hz 8:2500Hz 9:4000Hz 10:5000Hz 11:6000Hz 12:10KHz 13:15KHz 14:20KHz 15:25KHz

✓ -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
Red	0~255
Green	0~255
Blue	0~255
Lime	0~255

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
10KHz	9872~10127
15KHz	14872~15127
20KHz	19872~20127
25KHz	24872~25127

Red

Select **Red**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, 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 0 and 255, 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 0 and 255, confirm your selection with ENTER.

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

Lime

Select **Lime**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

07/ Configuring the Device for DMX Control

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 11 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 12. As the first fixture uses all the first 11 DMX channels, the next available channel is 12 ($11+1=12 >> 12$).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
11 channels	1	12	23	34	
9 channels	1	10	19	28	
8 channels	1	9	17	25	
7 channels	1	8	15	22	
6 channels	1	7	13	19	
3 channels	1	4	7	10	

7.2 DMX Protocol

Valid from firmware version: V1.6

CHANNEL					VALUE	FUNCTION
11ch	9ch	8ch	7ch	6ch		
1	1	2	1	1	000-255	RED 0%→100%
2	2	3	2	2	000-255	GREEN 0%→100%
3	3	4	3	3	000-255	BLUE 0%→100%
4	4	5	4	4	000-255	LIME 0%→100%
5	5	6	5		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 Fast Open Slow Close from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Random Strobe from Slow to Fast Open
6	6	1			000-255	DIMMER 0%→100%
7	7				000-255	DIMMER FINE
8					000 001-004 005-009 010-013 014-018 019-022 023-027 028-031 032-036 037-040 041-045 046-049 050-054 055-058 059-063 064-067	CTO (8000K-2500K) Close 8000K 7900K 7800K 7700K 7600K 7500K 7400K 7300K 7200K 7100K 7000K 6900K 6800K 6700K 6600K

					068-072	6500K
					073-076	6400K
					077-081	6300K
					082-085	6200K
					086-090	6100K
					091-094	6000K
					095-099	5900K
					100-103	5800K
					104-108	5700K
					109-112	5600K
					113-117	5500K
					118-121	5400K
					122-126	5300K
					127-130	5200K
					131-135	5100K
					136-139	5000K
					140-144	4900K
					145-148	4800K
					149-153	4700K
					154-157	4600K
					158-162	4500K
					163-166	4400K
					167-171	4300K
					172-175	4200K
					176-180	4100K
					181-184	4000K
					185-189	3900K
					190-193	3800K
					194-198	3700K
					199-202	3600K
					203-207	3500K
					208-211	3400K
					212-216	3300K
					217-220	3200K
					221-225	3100K
					226-229	3000K
					230-234	2900K
					235-238	2800K
					239-243	2700K
					244-247	2600K
					248-255	2500K
9					000-005	COLOR MACRO
					006-008	Open
					009-011	LEE 790-Moroccan Pink
					012-014	LEE 157-Pink
					015-017	LEE 332-Special Rose Pink
						LEE 328-Follies Pink

					018-020 021-023 024-026 027-029 030-032 033-035 036-038 039-041 042-044 045-047 048-050 051-053 054-056 057-059 060-062 063-065 066-068 069-071 072-074 075-077 078-080 081-083 084-086 087-089 090-092 093-095 096-098 99 100-155 156-200 201-255	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 LEE 353-Lighter Blue LEE 118-Light Blue LEE 116-Medium Blue Green LEE 124-Dark Green LEE 139-Primary Green LEE 089-Moss Green LEE 122-Fern Green LEE 738-JAS Green LEE 088-Lime Green LEE 100-Spring Yellow LEE 104-Deep Amber LEE 179-Chrome Orange LEE 105-Orange LEE 021-Gold Amber LEE 778-Millennium Gold LEE 135-Deep Gold Amber Slow Medium Fast
10	8	7	6	5	000-041 042-083 084-127 128-255	FROST Frost 1 Frost 2 Frost 3 0%→100%
11	9	8	7	6	000-029 030-039 040-049 050-059 060-069 070-099 100-109 110-119	FUNCTION (To activate following functions, stop in DMX value for at least 3 seconds.) Null Dimmer Curve: Linear Dimmer Curve: Square Law Dimmer Curve: Inv SQ Law Dimmer Curve: S Curve Null Led Frequency Setting Enable 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
					140-209	Null
					210-219	Dimmer Speed: Fast
					220-229	Dimmer Speed: Smooth
					230-255	Null

3ch (Mode 6):

CHANNEL	VALUE	FUNCTION
1	000-255	WHITE 0%→100%
2	000-255	BLUE 0%→100%
3	000-255	FROST 0%→100%

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.

LED Temp. 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.

LED Too Hot Off

When the fixture temperature reaches 80°C, it will automatically turn off to protect the fixture.

LED Timeout Use

09/ Troubleshooting

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.

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.

11/ Approvals and Certifications

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)
- cETLus Approved (Control #5000057)
- UK SI 2016 No. 1091: Electromagnetic Compatibility Regulations 2016
- UK SI 2016 No. 1101: The Electric Equipment (Safety) Regulations 2016



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