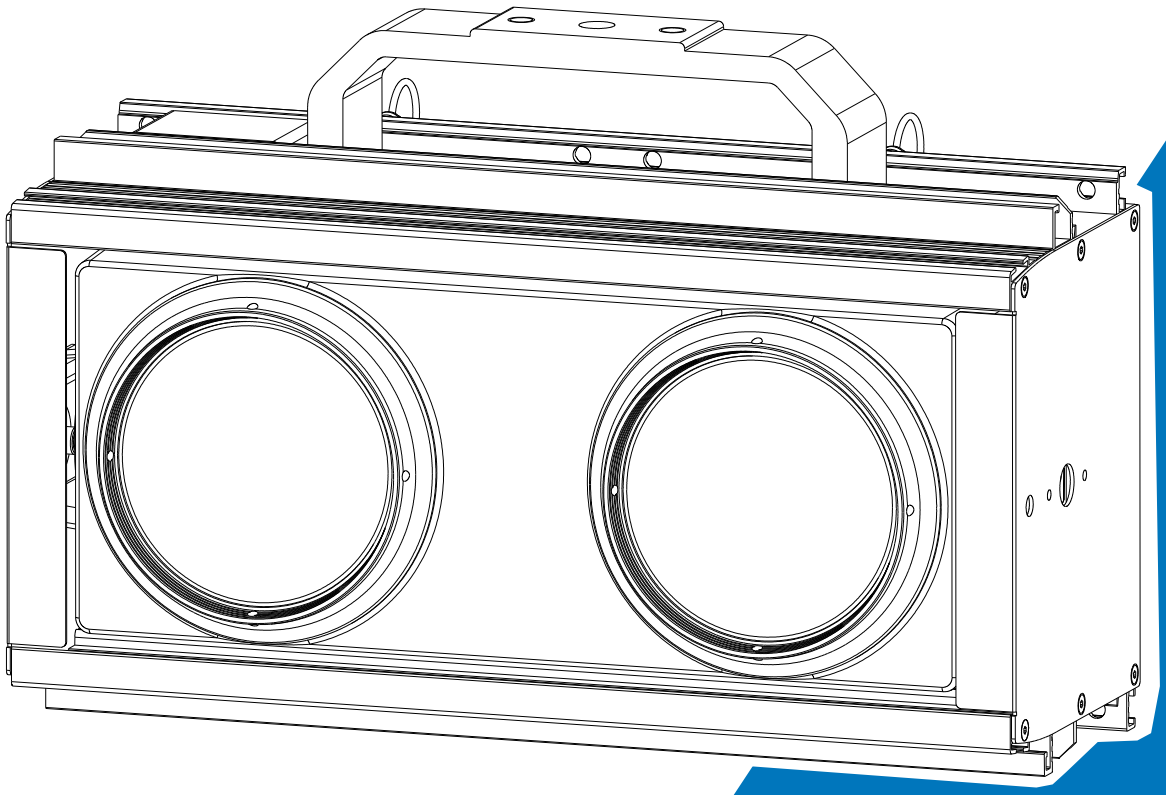
ULTRA BLINDER IP



User Manual

Please read the instruction carefully before use

CONTENTS

01/ Safety Information

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

WARNING

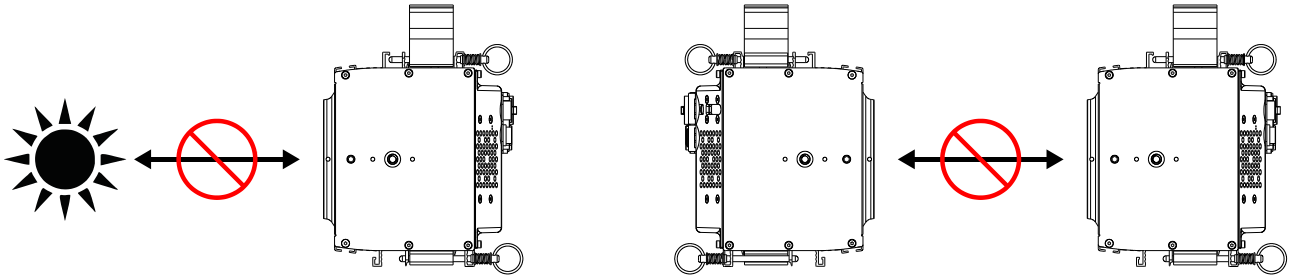
Please keep this User Manual for future consultation. If you sell the fixture to another user, be sure that they also receive this instruction manual.

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 fixture.
- 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 cable when fixing the fixture. Handle the fixture by carrying its base instead of the head only.
- The fixture 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 fixture 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.
- Fixture'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 fixture. 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 a serious operating problem, stop using the fixture immediately.
- Never turn the fixture 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 fixture 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/ Informations de sécurité

AVERTISSEMENT

Veuillez lire attentivement les instructions, car elles contiennent des informations importantes concernant l'installation, l'utilisation et la maintenance.

Veuillez conserver ce manuel d'utilisation pour 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 résulteraient.

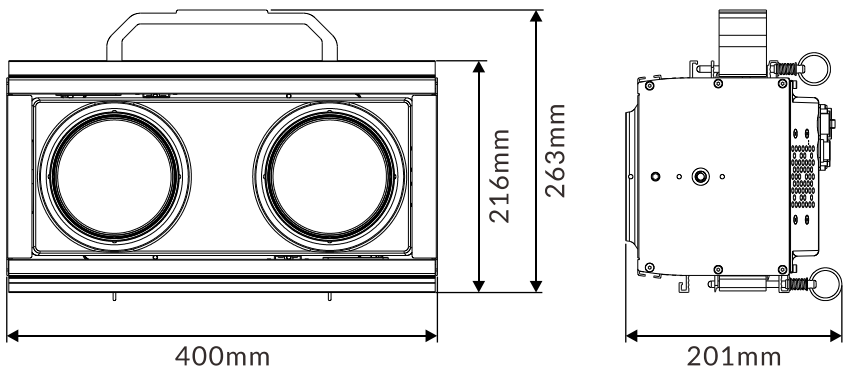
- Déballer et vérifier soigneusement qu'il n'y a pas de dommages dus au transport avant d'utiliser l'appareil.
- Ce produit est adapté aux endroits humides. Ne pas immerger dans l'eau.
- FAIRE installer et utiliser par un opérateur qualifié.
- NE PAS laisser les enfants manipuler l'appareil.
- Utiliser une chaîne de sécurité lors de la fixation de l'appareil. Manipuler l'appareil en portant sa base et non uniquement par la tête.
- L'appareil doit être installé dans un endroit bien ventilé, à au moins 50 cm des surfaces adjacentes.
- Assurez-vous qu'aucune fente de ventilation n'est obstruée, sinon l'appareil surchauffera.
- Avant utilisation, assurez-vous de connecter ce produit à la tension appropriée conformément aux spécifications de ce manuel ou à l'étiquette des spécifications du produit.
- Il est important de mettre le conducteur jaune/vert à la terre pour éviter tout risque de choc électrique.
- Temp é rature ambiante minimale (TA): -10˚C. Temp é rature ambiante maximale (TA): 40˚C. Ne pas utiliser ce produit à une temp é rature inf é rieure ou sup é rieure.
- NE PAS connecter l'appareil à un gradateur (dimmer pack).
- Éloigner les matériaux inflammables de l'appareil pendant son fonctionnement pour éviter tout risque d'incendie.

- Vérifier que le cordon d'alimentation n'est ni écrasé ni endommagé; le remplacer immédiatement s'il est endommagé.
- La température de surface de l'appareil peut atteindre jusqu'à 65℃. NE PAS toucher le boîtier à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau ou des objets métalliques ne pénètrent dans l'appareil. Si cela se produit, coupez immédiatement l'alimentation électrique.
- NE PAS utiliser l'appareil dans un environnement sale ou poussiéreux. Nettoyez régulièrement l'appareil.
- NE PAS toucher de fils pendant le fonctionnement, car cela pourrait présenter un risque de choc électrique.
- Évitez que le cordon d'alimentation ne s'emmêle avec d'autres fils.
- La distance minimale par rapport aux objets/surfaces doit être de plus de 0.5 mètres.
- En cas de problème de fonctionnement grave, cessez immédiatement d'utiliser l'appareil.
- Ne jamais allumer et éteindre l'appareil à plusieurs 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 pouvant être réparée par l'utilisateur.
- NE PAS tenter d'utiliser cet appareil s'il est endommagé. NE PAS tenter de réparations vous-même. Les réparations effectuées par des personnes non qualifiées peuvent entraîner des dommages ou un dysfonctionnement. Veuillez contacter le centre d'assistance technique agréé le plus proche si nécessaire.
- Débranchez l'appareil de sa source d'alimentation avant toute maintenance.
- UTILISEZ l'emballage d'origine si l'appareil doit être transporté.
- Évitez une exposition directe des yeux à la source lumineuse lorsque l'appareil est allumé.
- NE PAS utiliser ce produit si vous constatez des dommages sur le boîtier, les protections ou les câbles. Faites remplacer les pièces endommagées par un technicien agréé immédiatement.

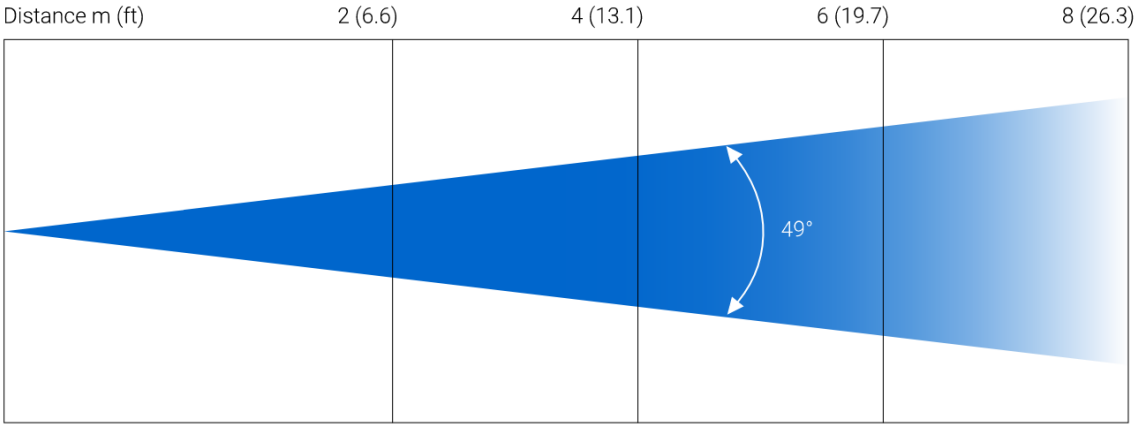
- L'appareil NE DOIT PAS être allumé immédiatement s'il a été exposé à de fortes variations de température (par exemple après un transport), car de la condensation pourrait se former à l'intérieur. Veuillez laisser l'appareil éteint jusqu'à ce qu'il ait atteint la température ambiante.
- Les sources externes de rayons lumineux, comme la lumière directe du soleil ou toute autre source lumineuse intense, qui pénètrent à travers la lentille frontale des appareils d'éclairage, peuvent causer des dommages internes graves. NE PAS exposer la lentille frontale de l'appareil à des rayons lumineux provenant de la lumière directe du soleil ou de toute autre source lumineuse intense, sous quelque angle que ce soit, lors du déballage, de l'installation, de l'utilisation ou de périodes d'inactivité prolongées à l'extérieur. NE PAS diriger un faisceau lumineux d'un appareil d'éclairage directement vers un autre.

02/ Technical Specifications

AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	235W	
Light Source	2x260W RGBA+WW LED	
Color Temperature	2500K-8000K	
Beam Angle	49°	
Field Angle	82°	
Control and Programming	DMX Channels	9/11/14/16/1/2/4/6/6/7/10
	Protocols	DMX512
		RDM
	Firmware Update	via DMX
Construction	Display	LCD display
	DMX and RDM Data In/Out	5-pin IP XLR (optional with 3-pin IP XLR)
	Power In/Out	Waterproof Power Connector in/out
	Protection Rating	IP66
Dynamic Effects	2 x LEDs with individual controlled	
	0-100% continuous dimming and strobe effects	
	Choice of four dimming curves	
	Outstanding color mixing	
	Variable color temperature control	
Included Items	Power Cable	
	One small hanging bracket	
	User Manual (this document)	
Dimensions	400x201x263mm	15.7"x7.9"x10.4"
Weight	8.2 kg	18 lbs

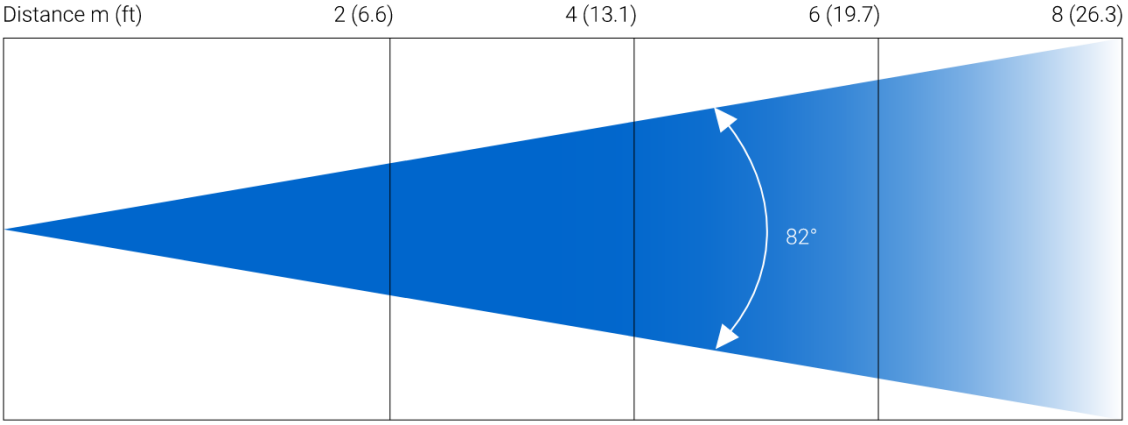


Photometric Diagram (Beam Angle):



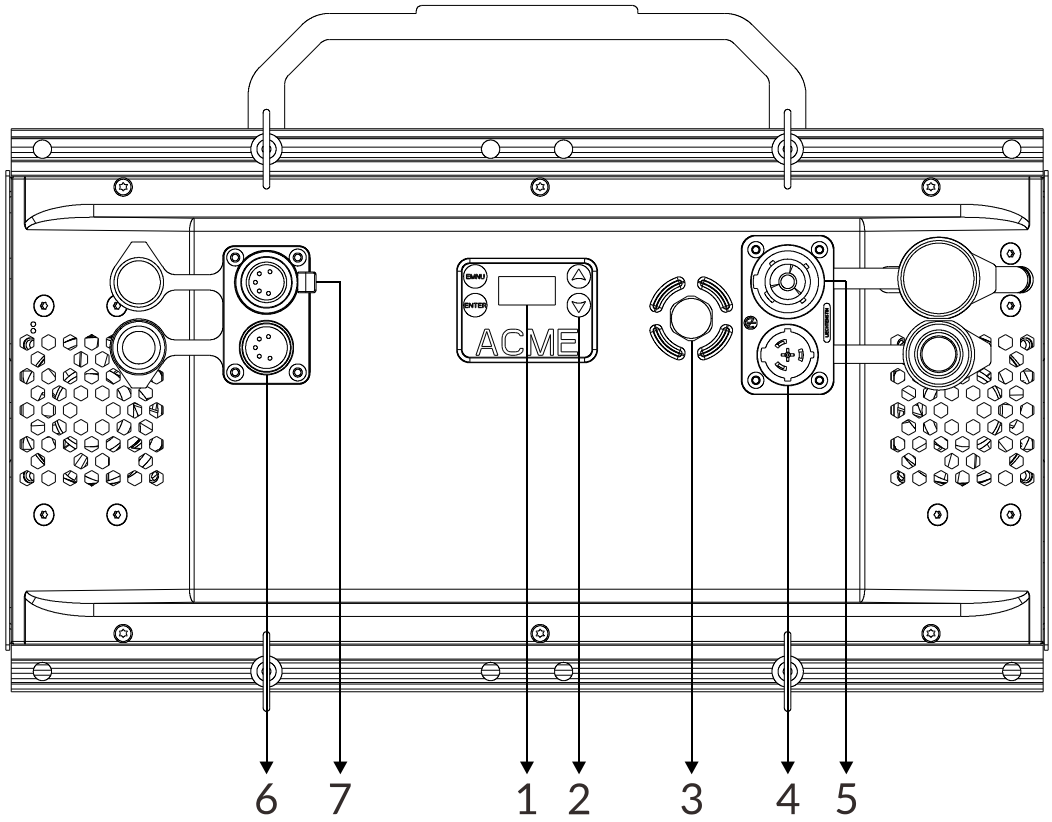
49° RGBA Lux	2,700	675	300	169
49° WW Lux	5,650	1,413	628	353
Diameter m (ft)	1.8 (5.9)	3.6 (11.8)	5.5 (18)	7.3 (24)

Photometric Diagram (Field Angle):



82° RGBA Lux	2,700	675	300	169
82° WW Lux	5,650	1,413	628	353
Diameter m (ft)	3.5 (11.5)	6.9 (22.6)	10.4 (34.1)	13.8 (45.3)

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. RELEASE VALVE		
4. POWER IN	To connect to supply power	
5. POWER OUT	To connect to the next fixture	
6. 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 IP XLR)	
7. DMX OUT	For DMX512 link, use 5-pin XLR cable to link the next units to output DMX signal (optional with 3-pin IP XLR)	

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 235W.

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	⏚ or ⏚	ground (earth)

Power cord set that should be used: Listed SJOW flexible cord with rating: 300V, 105°C, VW-1, 16AWG x 3C, molded with 5-15P attachment plug and terminated with cord connector model RCAC3F-X-000-01 with rating 250V, 16A by Neutrik Technology (Ningbo) 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).

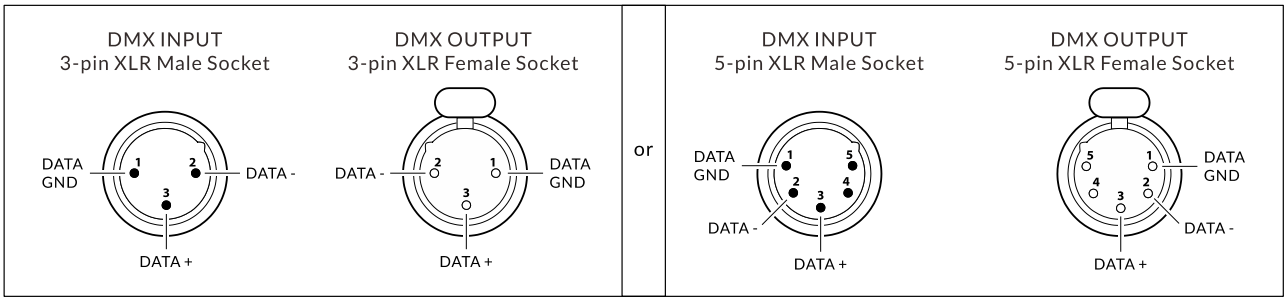
CAUTION!

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 5-pin (or 3-pin) XLR sockets for DMX input and output. Use shielded twisted-pair high-quality DMX cable designed for RS-485 fixtures in order to connect the controller with the fixture and one fixture with another. For outdoor installations, use only waterproof DMX cables suitable for outdoor use.

The default pin-out on XLR sockets is as the following diagram:



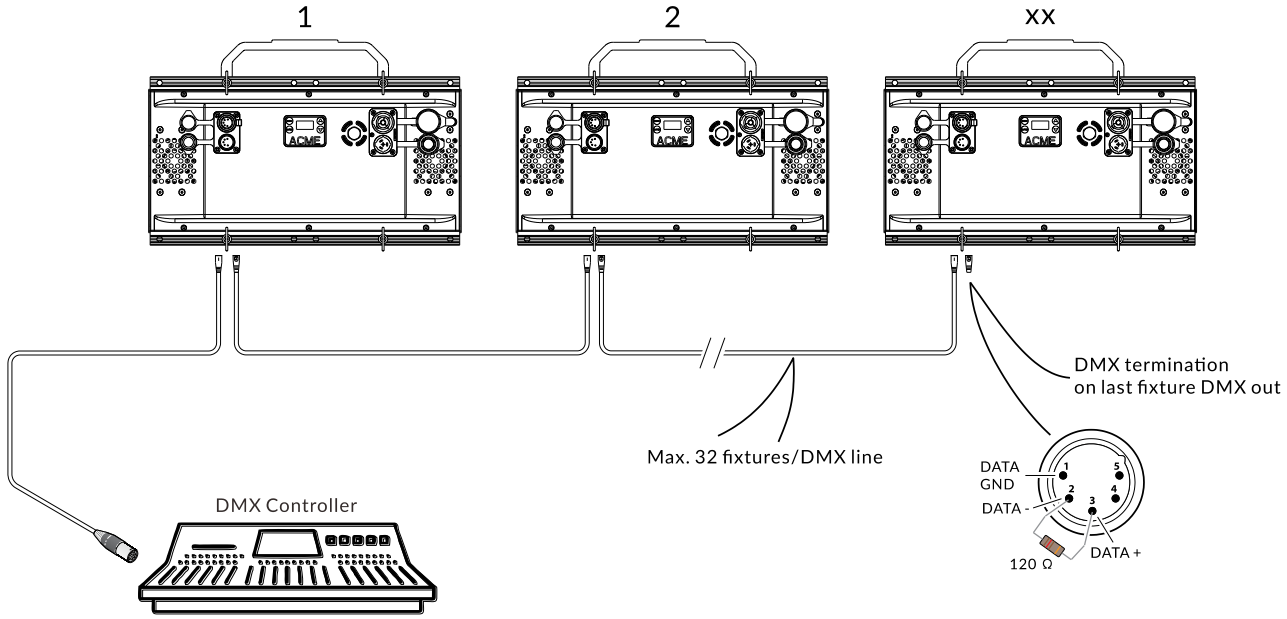
Building a serial DMX chain:

1. Connect the DMX data output from the controller to the fixture's data input socket.

2. 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.

Note: Up to 32 fixtures can be connected to the same DMX link.

3. Terminate the DMX output of the last fixture in the data link with a DMX terminator which is an XLR plug with a 120 Ω, 1/4 watt resistor connected between pins 2 and 3.



05/ Fixture Installation

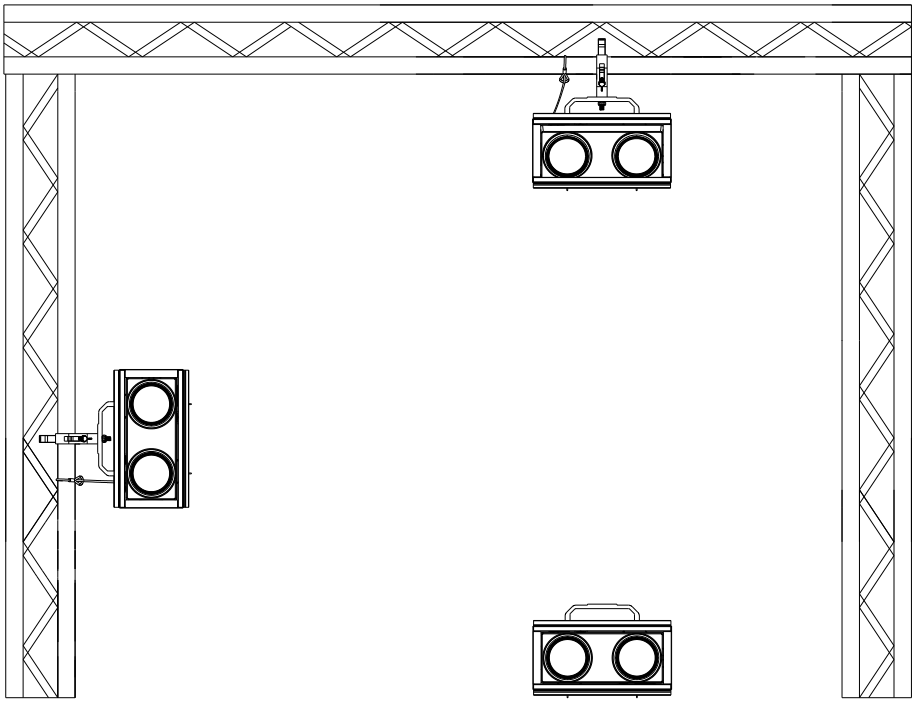
The fixture is IP66-rated and designed for both indoor and outdoor events. This means that it is protected from:

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

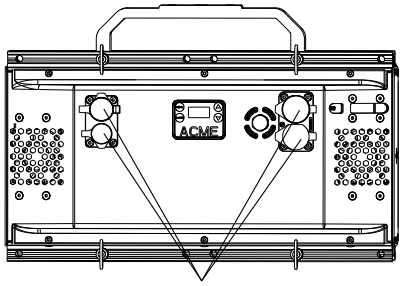
DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.

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 (by others) 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 trussing, mounted sideways on trussing, or standing on the floor. Always use and install a safety cable (by others) as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

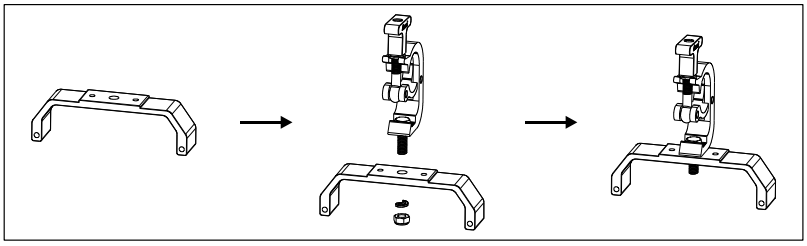


- Use only IP-rated power cords and connectors suitable for outdoor use.
- Visually check panel connectors on accidental water leaks and dust before connecting related cable connectors.
  If some water appears in panel connectors, do not connect cable connectors, especially power!
- Fixtures require 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.

Steps for installing the small hanging bracket (supplied):



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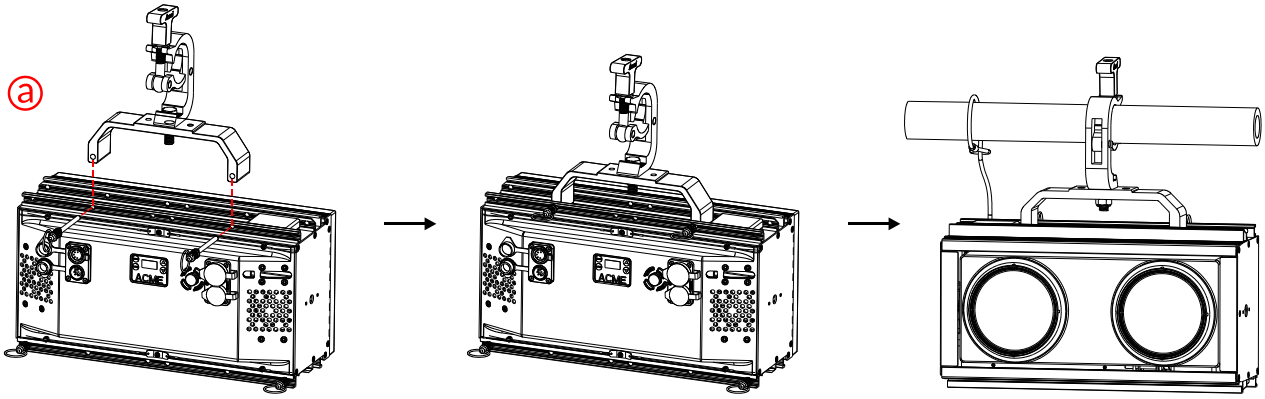

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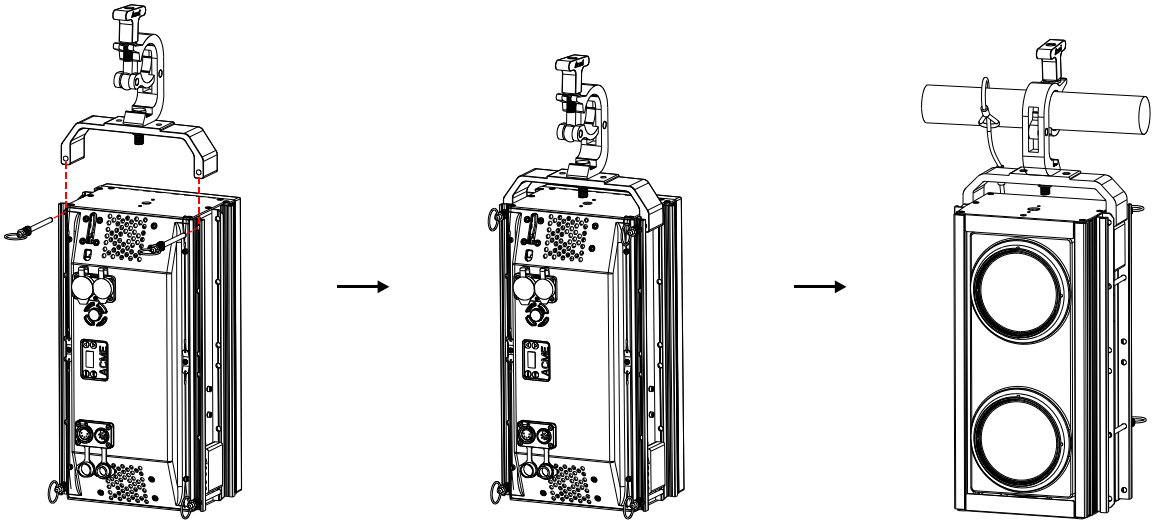
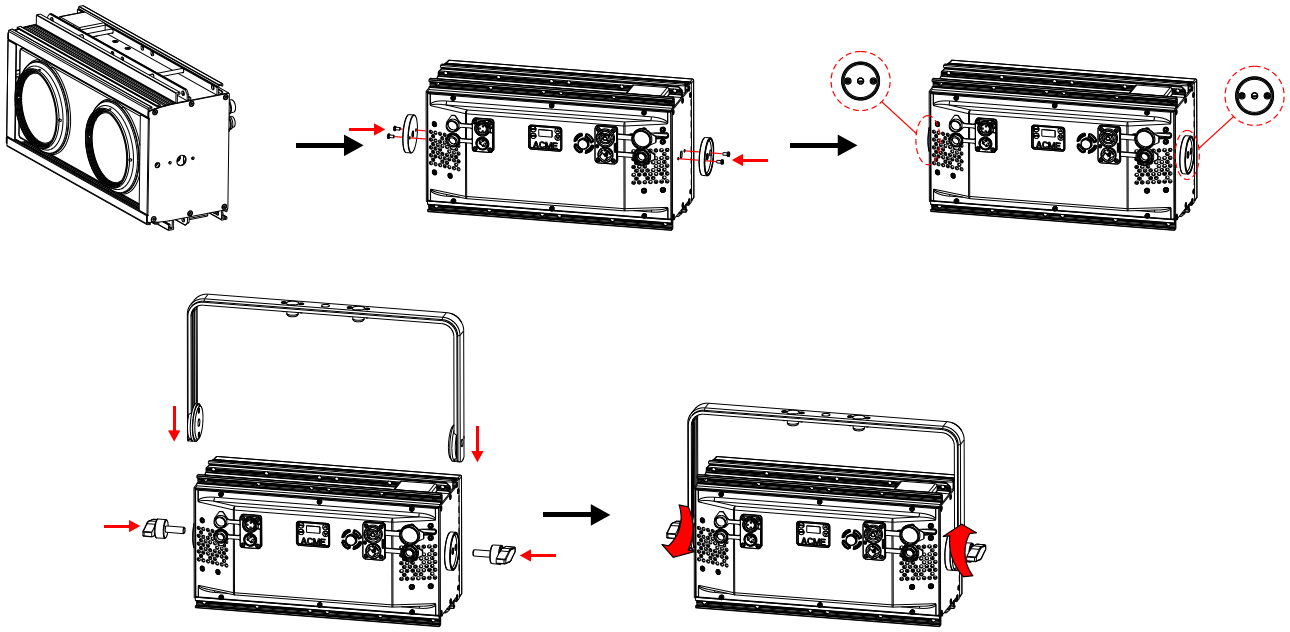


Install the large hanging bracket (sold separately):

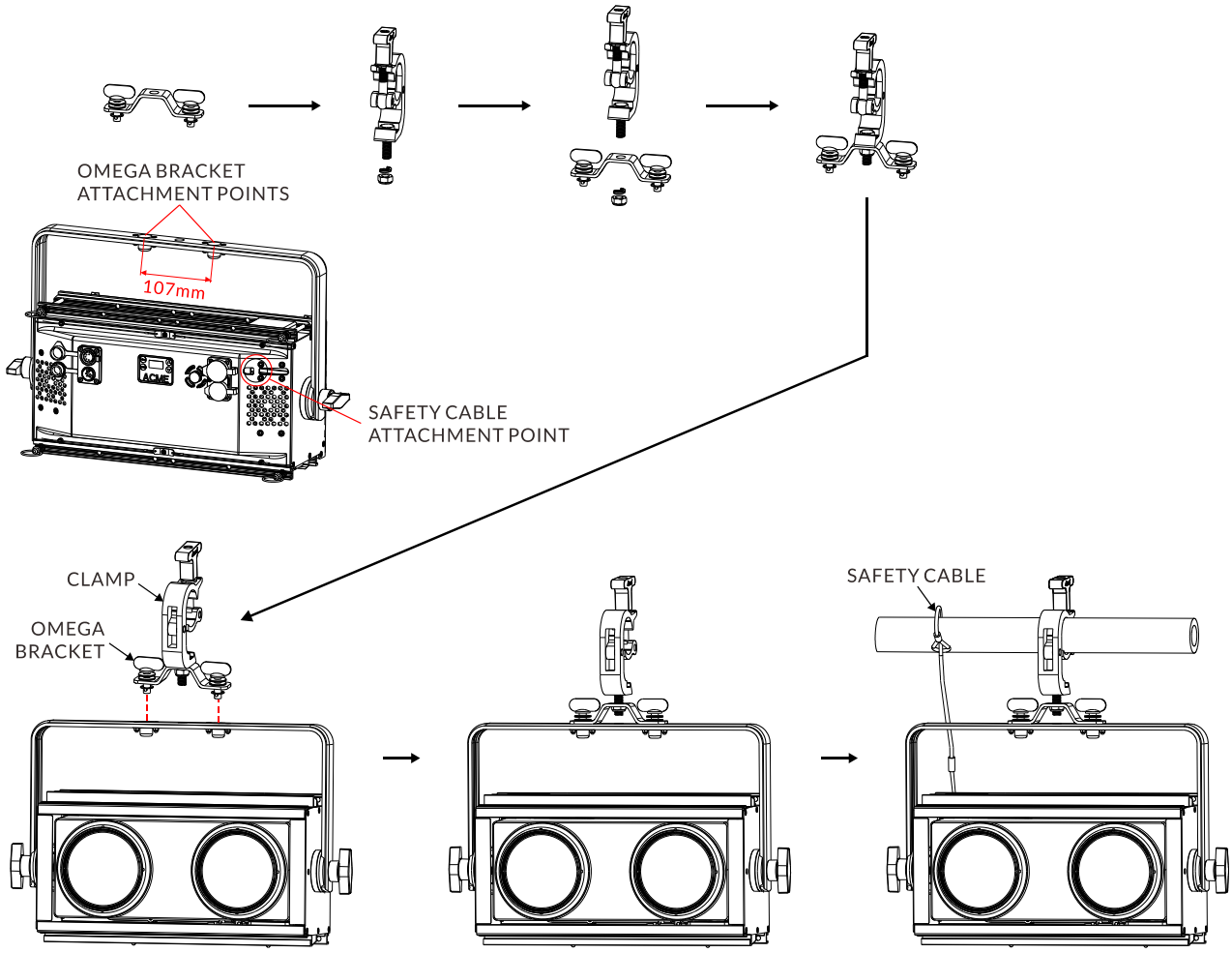
a. Place the pivot cups against the holes on both sides of the fixture in line and tighten four screws.

b. Place the large hanging bracket against the holes on both sides of the fixture in line, insert and tighten the knobs. The large hanging bracket is now assembled.

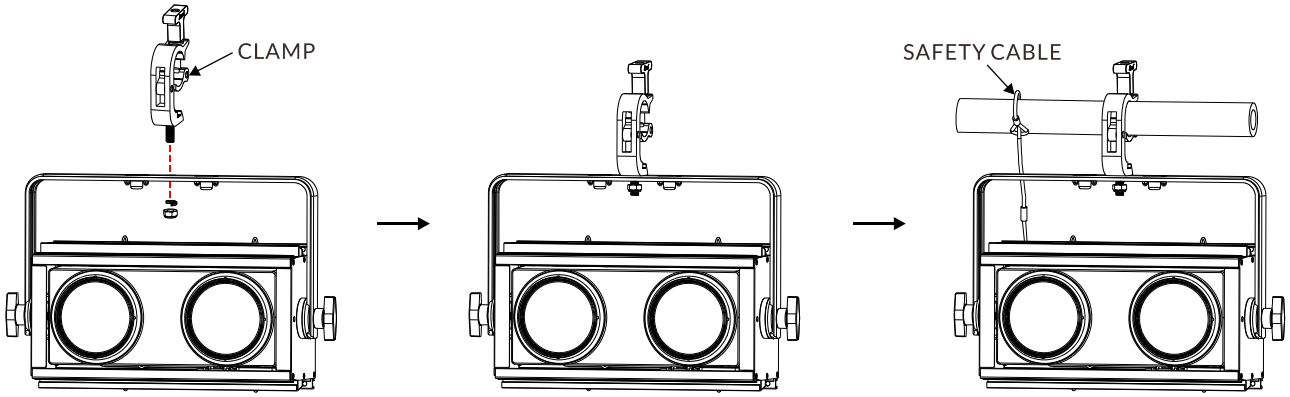
c. To disassemble the large hanging bracket, follow the above steps in reverse order.



Steps for installing omega bracket (sold separately) and clamp (by others):



Steps for installing clamp (by others):

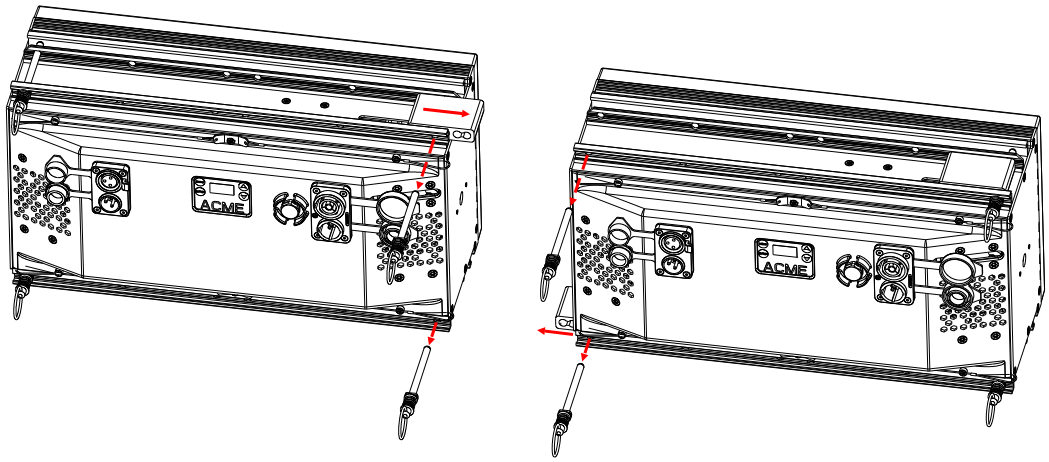


Connecting and Aligning Multiple Fixtures:

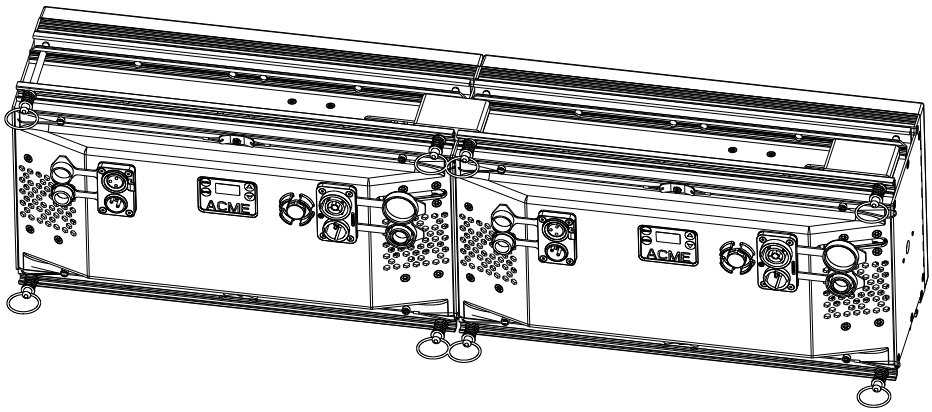
1. Connecting and aligning fixtures horizontally:

Note: All locking pins are fixed to fixture by a short retaining cable.

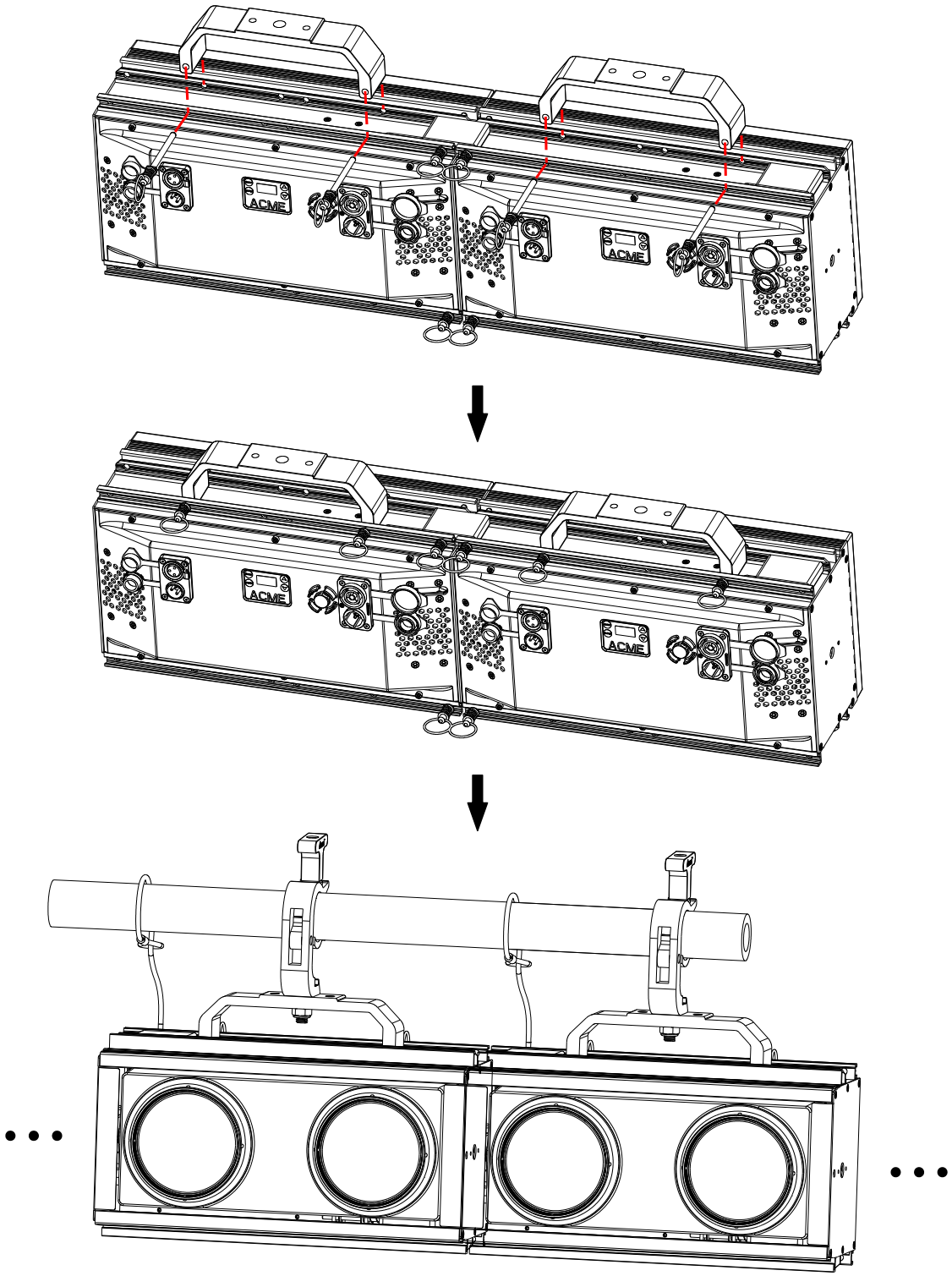
a. Remove the four locking pins from the fixtures and press the two sliders to pop them out.



b. Align and fit the fixtures together. Insert and lock the locking pins.



c. Install the small hanging brackets to the fixtures. Hang the fixtures by attaching and securing the hanging clamps to truss.



d. If you need to align more fixtures, repeat the steps above.

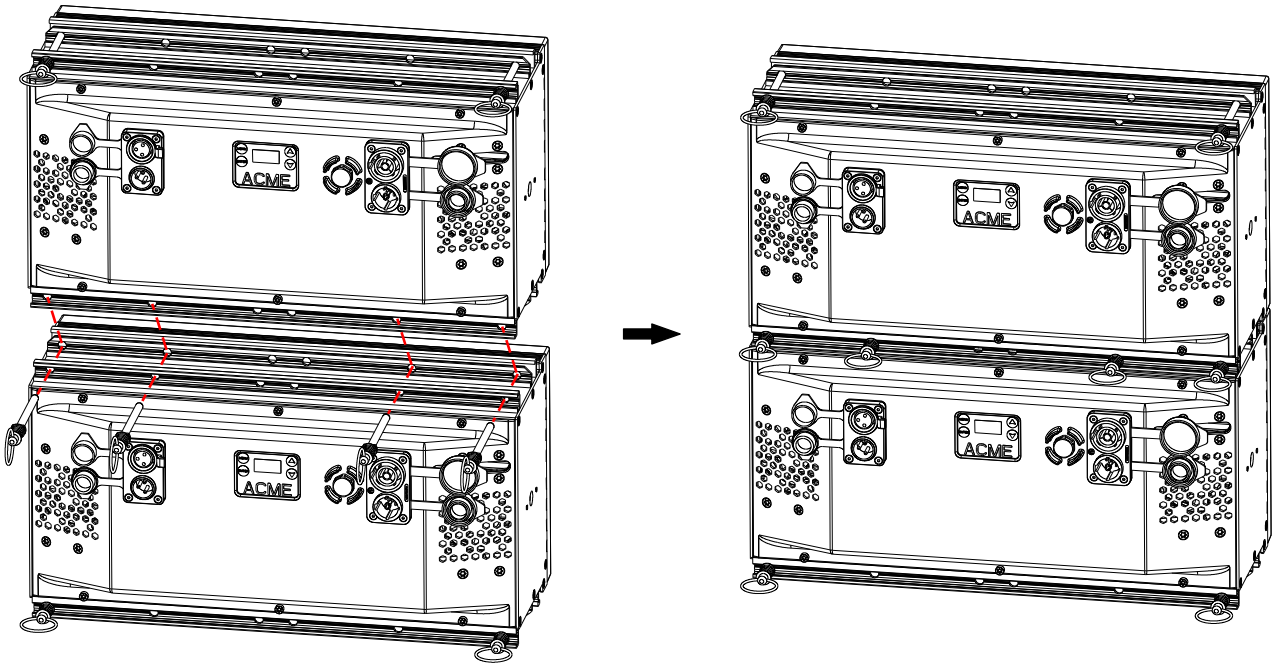
e. To detach the fixtures, simply reverse the steps mentioned above.

2. Connecting and aligning fixtures vertically:

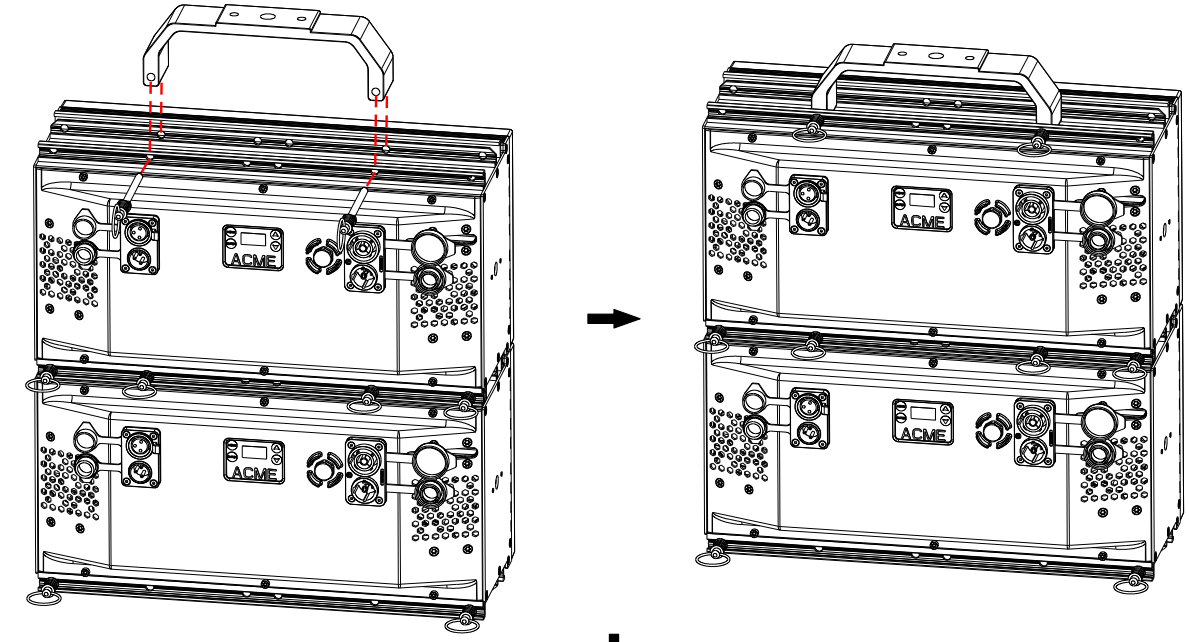
Note: All locking pins are fixed to fixture by a short retaining cable.

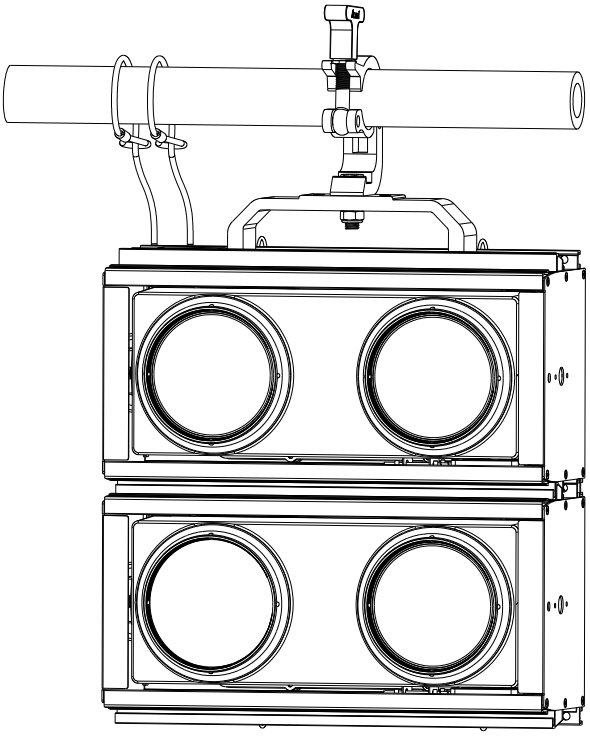
a. Remove the four locking pins from the fixtures.

b. Align and fit the fixtures together. Insert and lock the locking pins.

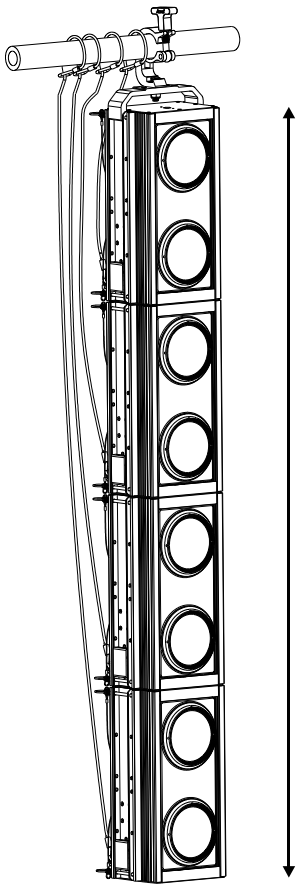


c. Install the small hanging bracket to the fixture. Hang the fixtures by attaching and securing the hanging clamps to truss.





Max. 4 fixtures



Max. 4 fixtures

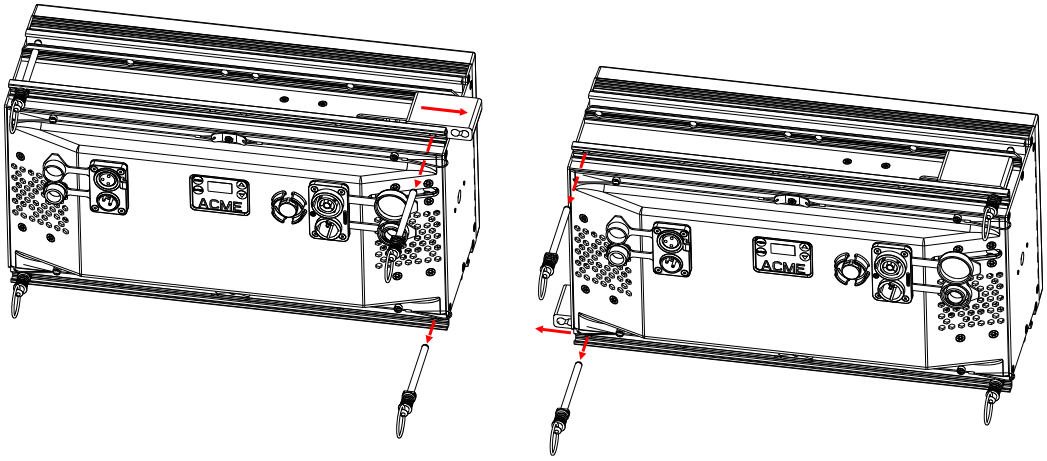
d. If you need to align more fixtures, repeat the steps above.

e. To detach the fixtures, simply reverse the steps mentioned above.

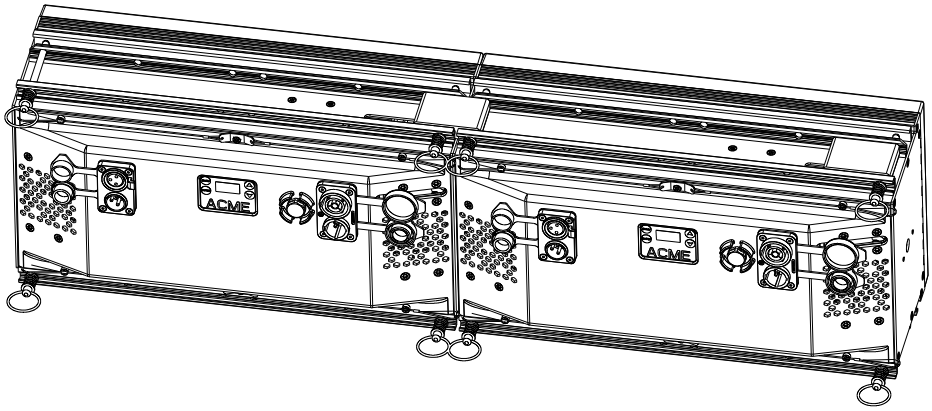
3. Connecting and aligning fixtures into the following shapes:

Note: All locking pins are fixed to fixture by a short retaining cable.

a. Remove the four locking pins from the fixtures and press the two sliders to pop them out.

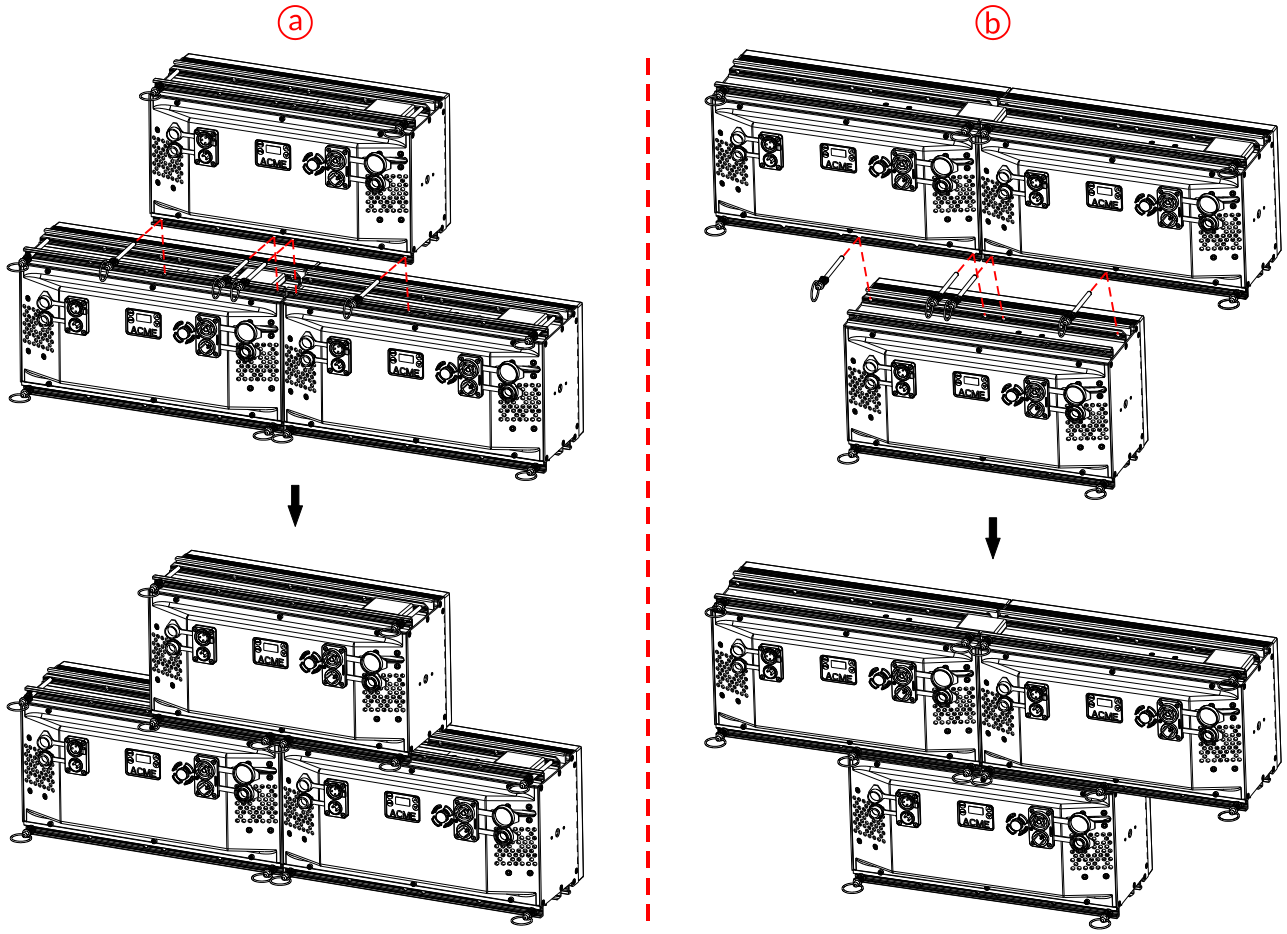


b. Align and fit the fixtures together. Insert and lock the locking pins.

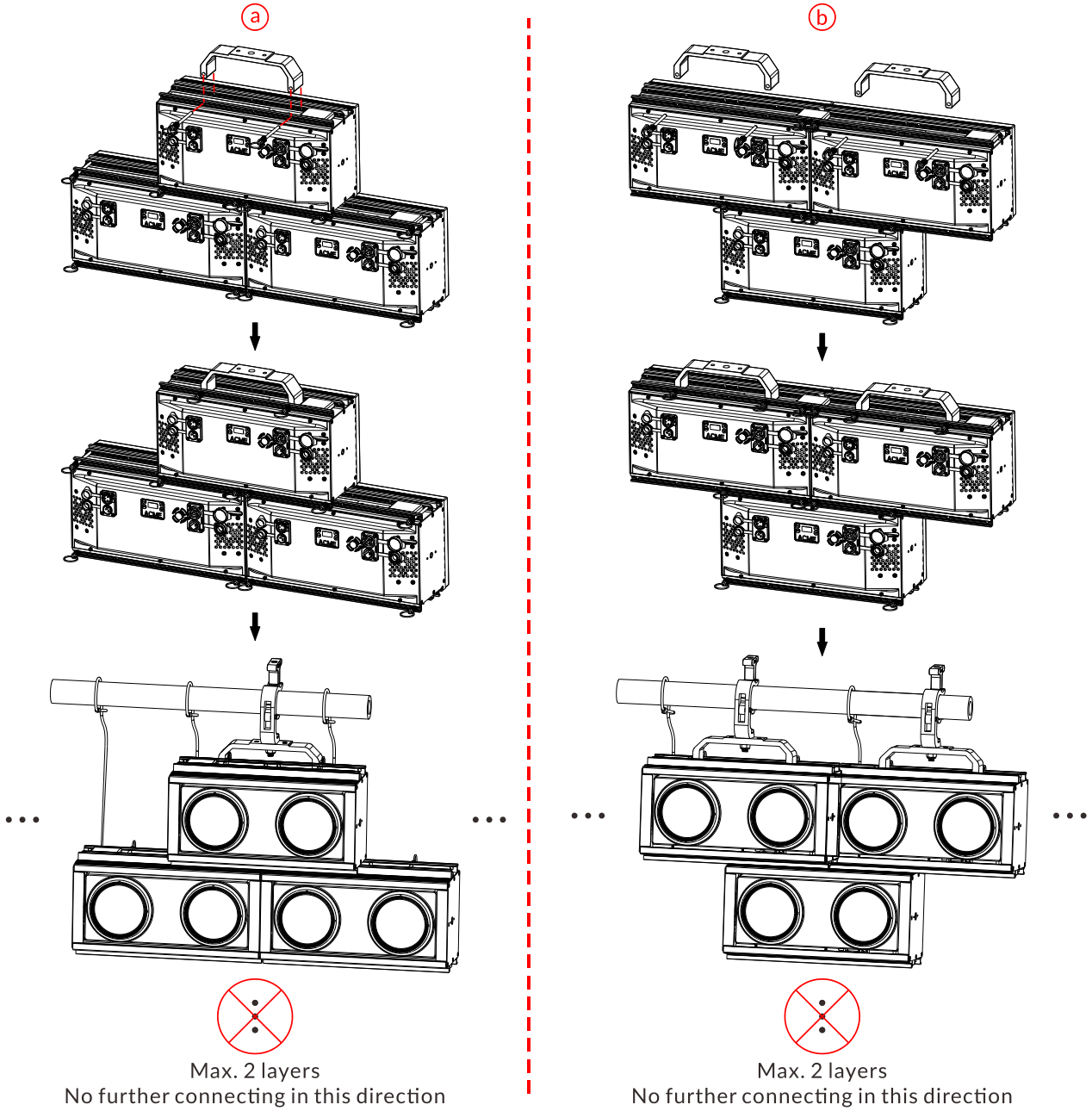


c. Prepare another fixture and remove the four locking pins from the fixtures.

d. Center, align and fit the third fixture with the two previously connected fixtures together. Insert and lock the locking pins.



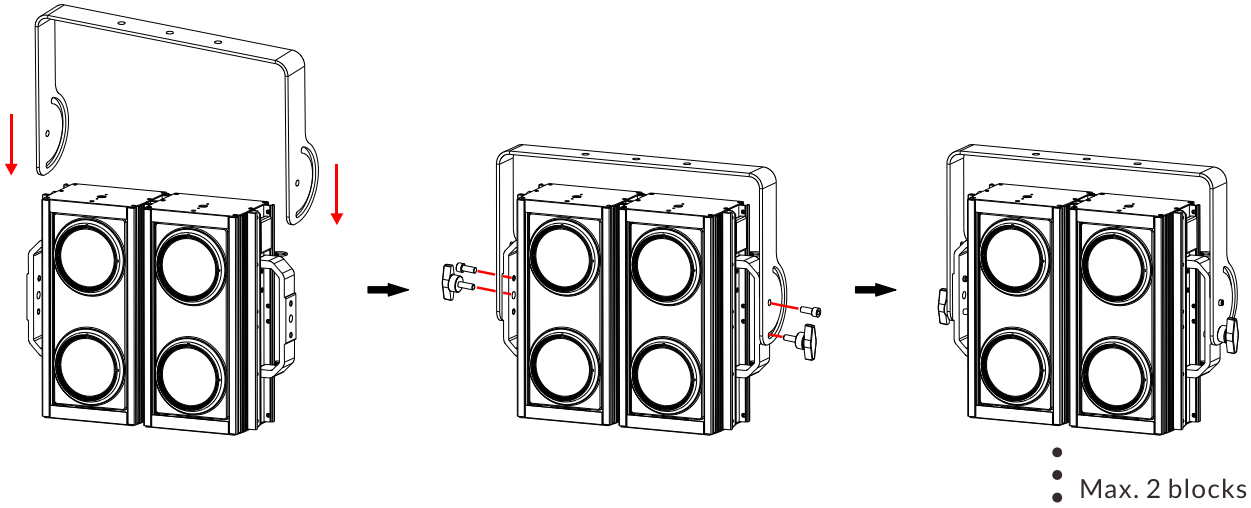
e. Install the small hanging bracket(s) to the fixture(s). Hang the fixtures by attaching and securing the hanging clamps to truss.



f. If you need to align more fixtures, repeat the steps above.

g. To detach the fixtures, simply reverse the steps mentioned above.

The large double vertical hanging bracket installation:



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	1-504 (9 CH)	
		1-502 (11 CH)	
		1-499 (14 CH)	
		1-497 (16 CH)	
		1-512 (1 CH WW)	
		1-511 (2 CH WW)	(Default=1)
		1-509 (4 CH WW)	
		1-507 (6 CH WW)	
		1-507 (6 CH RGBW)	
		1-506 (7 CH RGBW)	
		1-503 (10 CH RGBW)	
	Channel Mode	9 CH	
		11 CH	
		14 CH	
		16 CH	
		1 CH (WW)	
		2 CH (WW)	
		4 CH (WW)	
		6 CH (WW)	
		6 CH (RGBW)	
		7 CH (RGBW)	
		10 CH (RGBW)	

MAIN MENU	SUBMENU	CHOICES/VALUES	
	No DMX Status	Blackout	
		Hold	
		Manual	
	View DMX Value		
Fixture Settings	Dimmer Curve	Linear	
		Square Law	
		Inv SQ Law	
		S Curve	
	Dimmer Speed	Fast	
		Smooth	
		Tungsten	
		All Tungsten	
	White Balance	Red	125-255
		Green	125-255
		Blue	125-255
		Amber	125-255
		Red 1	125-255
		Green 1	125-255
		Blue 1	125-255
		Amber 1	125-255
		Red 2	125-255
		Green 2	125-255
		Blue 2	125-255
		Amber 2	125-255
	LED Refresh Rate	900Hz	
		1000Hz	
		1100Hz	
		1200Hz	
		1300Hz	
		1400Hz	
		1500Hz	
		2500Hz	
		4000Hz	
		5000Hz	
		6000Hz	
		10KHz	
		15KHz	
		20KHz	
		25KHz	

MAIN MENU	SUBMENU	CHOICES/VALUES			
Display Settings	Display Invert	No			
		Yes			
	Temperature Unit	°C			
		°F			
	Language	English			
		Chinese			
Fixture Test	Auto Test	Single			
		Cycle			
	Manual Test	Mode 1		Mode 2	
		Clear	No/Yes	Clear	No/Yes
		Red	0-255	Red 1	0-255
		Green	0-255	Green 1	0-255
		Blue	0-255	Blue 1	0-255
		Amber	0-255	Amber 1	0-255
		White	0-255	White 1	0-255
		Total Dim.	0-255	Red 2	0-255
		Strobe	0-255	Green 2	0-255
				Blue 2	0-255
				Amber 2	0-255
				White 2	0-255
				Color	0-255
				CTO	0-255
				Total Dim.	0-255
				Strobe	0-255
Information	Fixture Use Hour				
	LED Use Hour	Total LED Hour			
		LED On Hour			
		LED Hours Reset	Password=50		
	Temperature		Current	Max	
		LED 1			
		LED 2			
	Fan State	Fan 1			
		Fan 2			
	Firmware Version				
	RDM UID				
	Error Logs	Fixture Errors			
		Reset Error Log	No		
			Yes	Password=50	

MAIN MENU	SUBMENU	CHOICES/VALUES
Special Function	Send Upgrade	No
		Yes
	Firmware Restore	No
		Yes
	Factory Settings	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	ADDRESS
9 CH	1-504
11 CH	1-502
14 CH	1-499
16 CH	1-497
1 CH (WW)	1-512
2 CH (WW)	1-511
4 CH (WW)	1-509
6 CH (WW)	1-507
6 CH (RGBW)	1-507
7 CH (RGBW)	1-506
10 CH (RGBW)	1-503

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

Channel Mode

Select **Channel Mode,** press ENTER.
Use UP/DOWN button to select between **9 CH, 11 CH, 14 CH, 16 CH, 1 CH (WW), 2 CH (WW), 4 CH (WW), 6 CH (WW), 6 CH (RGBW), 7 CH (RGBW)** and **10 CH (RGBW)**, 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:
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 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.

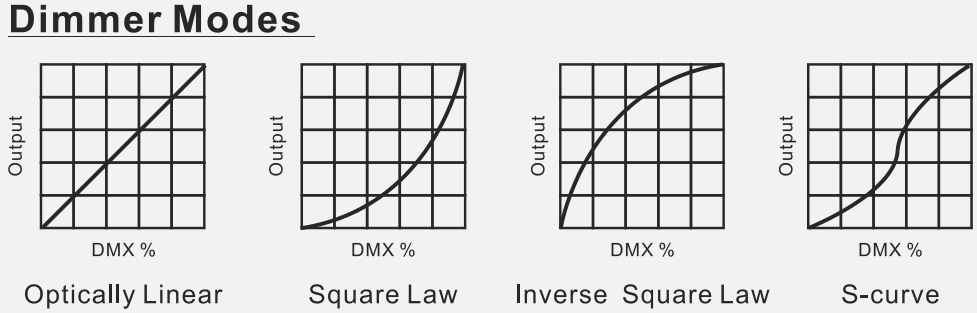
Fixture Settings

Enter the control menu and select **Fixture Settings**, press ENTER. Use the UP/DOWN button to select **Dimmer Curve, Dimmer Speed, White Balance** 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.



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

Dimmer Speed

Select **Dimmer Speed,** press ENTER.

Use UP/DOWN button to select **Fast, Smooth, Tungsten** or **All Tungsten**, 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, Amber, Red 1, Green 1, Blue 1, Amber 1** or **Red 2, Green 2, Blue 2, Amber 2**, confirm your selection with ENTER.

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

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, 10KHz, 15KHz, 20KHz** or **25KHz**, 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.

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, Fan State, 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.
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.

Fan State

Select **Fan State,** press ENTER.
The fan status 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.

Special Function

Enter the control menu and select **Special Function**, press ENTER. Use the UP/DOWN button to select **Send Upgrade, Firmware Restore** or **Factory Settings.**

Send Upgrade

Select **Send Upgrade,** press ENTER.
If you wish to send upgrade files from this fixture to next fixtures to upgrade their firmware, select **Yes**. Once Yes is selected, the display of this fixture will show "**Sending Packet, Please Wait...**" while the display of next fixtures will show "**Upgrading, Please Wait...**". A percentage bar will also be displayed. After the update is complete, fixtures will perform a reset (this can take some time).
If you do not wish to send anything, select **No**. Confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Firmware Restore

Select **Firmware Restore,** press ENTER.

If you wish to restore fixture's firmware, select **Yes**. Once Yes is selected, the display will show "**Upgrading, Please Wait...**". A percentage bar will also be displayed. After the update is complete, the fixture will perform a reset (this can take some time).

If you do not wish to restore anything, select **No**. Confirm your selection with ENTER.

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

Factory Settings

Select **Factory Settings,** 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			√
RESET_DEVICE		√	
CURVE		√	√
DMX_STATE		√	√
DIMMER_SPEED		√	√
WHITE_BALANCE		√	√

√ -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	1072~1327
Red	0~255
Green	0~255
Blue	0~255
Amber	0~255
White	0~255
Red 1	0~255
Green 1	0~255
Blue 1	0~255
Amber 1	0~255
White 1	0~255
Red 2	0~255
Green 2	0~255
Blue 2	0~255
Amber 2	0~255
White 2	0~255

Frequency

Select **Frequency,** 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

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.

Amber

Select **Amber,** 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.

White

Select **White,** 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.

Red 1

Select **Red 1,** 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 1

Select **Green 1,** 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 1

Select **Blue 1,** 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.

Amber 1

Select **Amber 1,** 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.

White 1

Select **White 1,** 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.

Red 2

Select **Red 2,** 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 2

Select **Green 2,** 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 2

Select **Blue 2,** 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.

Amber 2

Select **Amber 2,** 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.

White 2

Select **White 2,** 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 9 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 10. As the first fixture uses all the first 9 DMX channels, the next available channel is 10 (9+1=10 >> 10).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
9 channels	1	10	19	28	.....
11 channels	1	12	23	34	.....
14 channels	1	15	29	43	.....
16 channels	1	17	33	49	.....
1 channel	1	2	3	4	.....
2 channels	1	3	5	7	.....
4 channels	1	5	9	13	.....
6 channels	1	7	13	19	.....
6 channels	1	7	13	19	.....
7 channels	1	8	15	22	.....
10 channels	1	11	21	31	.....

7.2 DMX Protocol

Valid from firmware version: V1.0

9 CH / 11 CH:

CHANNEL		VALUE	FUNCTION
9ch	11ch		
1	1	000-255	RED 0%→100%
2	2	000-255	GREEN 0%→100%
3	3	000-255	BLUE 0%→100%
4	4	000-255	AMBER 0%→100%
5	5	000-255	WARM WHITE 0%→100%
	6	000-009 010-016 017-023 024-030 031-037 038-044 045-051 052-058 059-065 066-072 073-079 080-086 087-093 094-100 101-107 108-114 115-121 122-128 129-135 136-142 143-149 150-156 157-163 164-170 171-177 178-184 185-191	COLOR MACRO Null Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color 8 Color 9 Color 10 Color 11 Color 12 Color 13 Color 14 Color 15 Color 16 Color 17 Color 18 Color 19 Color 20 Color 21 Color 22 Color 23 Color 24 Color 25 Color 26

		192-198	Color 27
		199-205	Color 28
		206-212	Color 29
		213-219	Color 30
		220-226	Color 31
		227-233	Color 32
		234-255	Color 33
	7		CTO
		000	Null
		001-004	8000K
		005-009	7900K
		010-013	7800K
		014-018	7700K
		019-022	7600K
		023-027	7500K
		028-031	7400K
		032-036	7300K
		037-040	7200K
		041-045	7100K
		046-049	7000K
		050-054	6900K
		055-058	6800K
		059-063	6700K
		064-067	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

		172-175 176-180 181-184 185-189 190-193 194-198 199-202 203-207 208-211 212-216 217-220 221-225 226-229 230-234 235-238 239-243 244-247 248-255	4200K 4100K 4000K 3900K 3800K 3700K 3600K 3500K 3400K 3300K 3200K 3100K 3000K 2900K 2800K 2700K 2600K 2500K
6	8	000-255	DIMMER 0%→100%
7	9	000-255	DIMMER FINE
8	10	000-005 006-123 124-127 128-185 186-190 191-249 250-255	STROBE Open Flash Rate, Slow to Fast Open 2 LEDs Random Strobe at the same time, Slow to Fast Open 2 LEDs Random Strobe respectively, Slow to Fast Open
9	11	000-029 030-039 040-049 050-059 060-069 070-099 100-109 110-119 120-122 123 124 125 126	SPECIAL 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 Null 900Hz 1000Hz 1100Hz 1200Hz

		127	1300Hz
		128	1400Hz
		129	1500Hz
		130	2500Hz
		131	4000Hz
		132	5000Hz
		133	6000Hz
		134	10KHz
		135	15KHz
		136	20KHz
		137	25KHz
		138-139	Null
		140-209	Null
		210-219	Dimmer Speed: Fast
		220-229	Dimmer Speed: Smooth
		230-239	Dimmer Speed: Tungsten
		240-249	Dimmer Speed: All Tungsten
		250-255	Null

14 CH / 16 CH:

CHANNEL		VALUE	FUNCTION
14ch	16ch		
1	1	000-255	RED 1 0%→100%
2	2	000-255	GREEN 1 0%→100%
3	3	000-255	BLUE 1 0%→100%
4	4	000-255	AMBER 1 0%→100%
5	5	000-255	WARM WHITE 1 0%→100%
6	6	000-255	RED 2 0%→100%
7	7	000-255	GREEN 2 0%→100%
8	8	000-255	BLUE 2 0%→100%
9	9	000-255	AMBER 2 0%→100%
10	10	000-255	WARM WHITE 2 0%→100%
	11		COLOR MACRO

		000-009	Null
		010-016	Color 1
		017-023	Color 2
		024-030	Color 3
		031-037	Color 4
		038-044	Color 5
		045-051	Color 6
		052-058	Color 7
		059-065	Color 8
		066-072	Color 9
		073-079	Color 10
		080-086	Color 11
		087-093	Color 12
		094-100	Color 13
		101-107	Color 14
		108-114	Color 15
		115-121	Color 16
		122-128	Color 17
		129-135	Color 18
		136-142	Color 19
		143-149	Color 20
		150-156	Color 21
		157-163	Color 22
		164-170	Color 23
		171-177	Color 24
		178-184	Color 25
		185-191	Color 26
		192-198	Color 27
		199-205	Color 28
		206-212	Color 29
		213-219	Color 30
		220-226	Color 31
		227-233	Color 32
		234-255	Color 33
			CTO
		000	Null
		001-004	8000K
		005-009	7900K
		010-013	7800K
		014-018	7700K
	12	019-022	7600K
		023-027	7500K
		028-031	7400K
		032-036	7300K
		037-040	7200K
		041-045	7100K
		046-049	7000K

		050-054	6900K
		055-058	6800K
		059-063	6700K
		064-067	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
11	**13**	000-255	**DIMMER** 0%→100%

12	**14**	000-255	**DIMMER FINE**
13	**15**		**STROBE**
		000-005	Open
		006-123	Flash Rate, Slow to Fast
		124-127	Open
		128-185	2 LEDs Random Strobe at the same time, Slow to Fast
		186-190	Open
		191-249	2 LEDs Random Strobe respectively, Slow to Fast
		250-255	Open
14	**16**		**SPECIAL 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	10KHz
		135	15KHz
		136	20KHz
		137	25KHz
		138-139	Null
		140-209	Null
		210-219	Dimmer Speed: Fast
		220-229	Dimmer Speed: Smooth
		230-239	Dimmer Speed: Tungsten
		240-249	Dimmer Speed: All Tungsten
		250-255	Null

(WW) 1 CH / 2 CH / 4 CH / 6 CH:

CHANNEL				VALUE	FUNCTION
1ch	2ch	4ch	6ch		
	1	1	1	000-255	 **LED 1 DIMMER** 0%→100%
			2	000-255	 **LED 1 DIMMER FINE** 0%→100%
	2	2	3	000-255	 **LED 2 DIMMER** 0%→100%
			4	000-255	 **LED 2 DIMMER FINE** 0%→100%
1		3	5	000-255	 **DIMMER** 0%→100%
		4	6	000-005 006-123 124-127 128-185 186-190 191-249 250-255	**STROBE** Open Flash Rate, Slow to Fast Open 2 LEDs Random Strobe at the same time, Slow to Fast Open 2 LEDs Random Strobe respectively, Slow to Fast Open

(RGBW) 6 CH / 7 CH / 10 CH:

CHANNEL			VALUE	FUNCTION
6ch	7ch	10ch		
1	1		000-255	**RED** 0%→100%
2	2		000-255	**GREEN** 0%→100%
3	3		000-255	**BLUE** 0%→100%
4	4		000-255	**WHITE** 0%→100%
		1	000-255	**RED 1** 0%→100%
		2	000-255	**GREEN 1** 0%→100%
		3	000-255	**BLUE 1** 0%→100%
		4	000-255	**WHITE 1** 0%→100%
		5	000-255	**RED 2** 0%→100%
		6	000-255	**GREEN 2** 0%→100%
		7	000-255	**BLUE 2** 0%→100%
		8	000-255	**WHITE 2** 0%→100%
5	6	9	000-255	**DIMMER** 0%→100%
6	7	10	000-005 006-123 124-127 128-185 186-190 191-249 250-255	**STROBE** Open Flash Rate, Slow to Fast Open 2 LEDs Random Strobe at the same time, Slow to Fast Open 2 LEDs Random Strobe respectively, Slow to Fast Open
	5		000-007 008-015 016-023 024-031	**COLOR MACRO** Null Color 1 Color 2 Color 3

			032-039	Color 4
			040-047	Color 5
			048-055	Color 6
			056-063	Color 7
			064-071	Color 8
			072-079	Color 9
			080-087	Color 10
			088-095	Color 11
			096-103	Color 12
			104-111	Color 13
			112-119	Color 14
			120-127	Color 15
			128-135	Color 16
			136-143	Color 17
			144-151	Color 18
			152-159	Color 19
			160-167	Color 20
			168-175	Color 21
			176-183	Color 22
			184-191	Color 23
			192-199	Color 24
			200-207	Color 25
			208-213	Color 26
			214-219	Color 27
			220-225	Color 28
			226-231	Color 29
			232-237	Color 30
			238-243	Color 31
			244-249	Color 32
			250-255	Color 33

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 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.

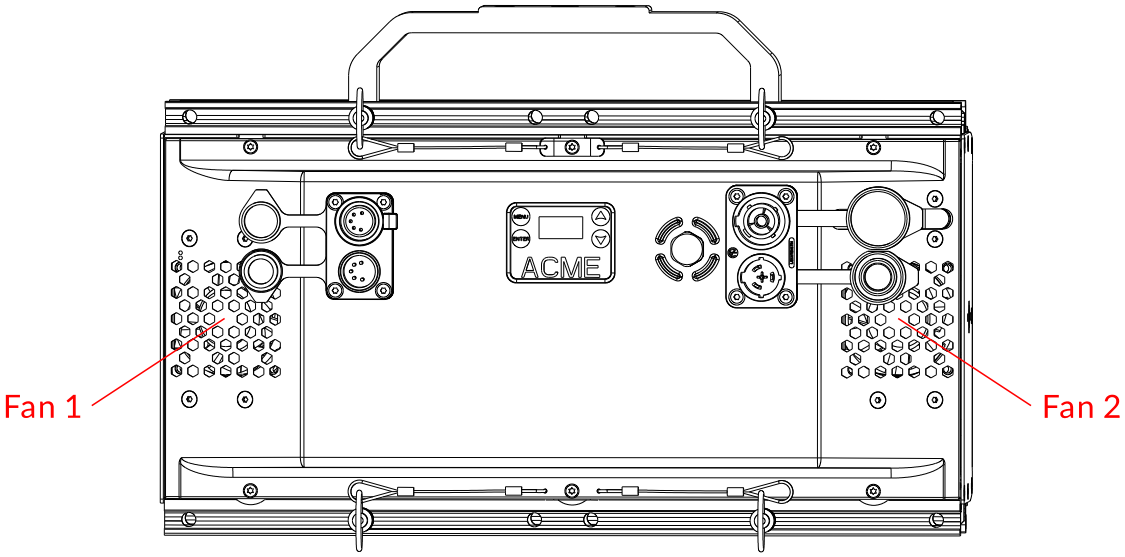
LED Temp. Error

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.

Fan1/2 Error

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.

Position of cooling fans:



Cooling Fans	Part Number	V	W	Position
Fan 1	3014003021	DC 12V	0.9W	Main Board
Fan 2				

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

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

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