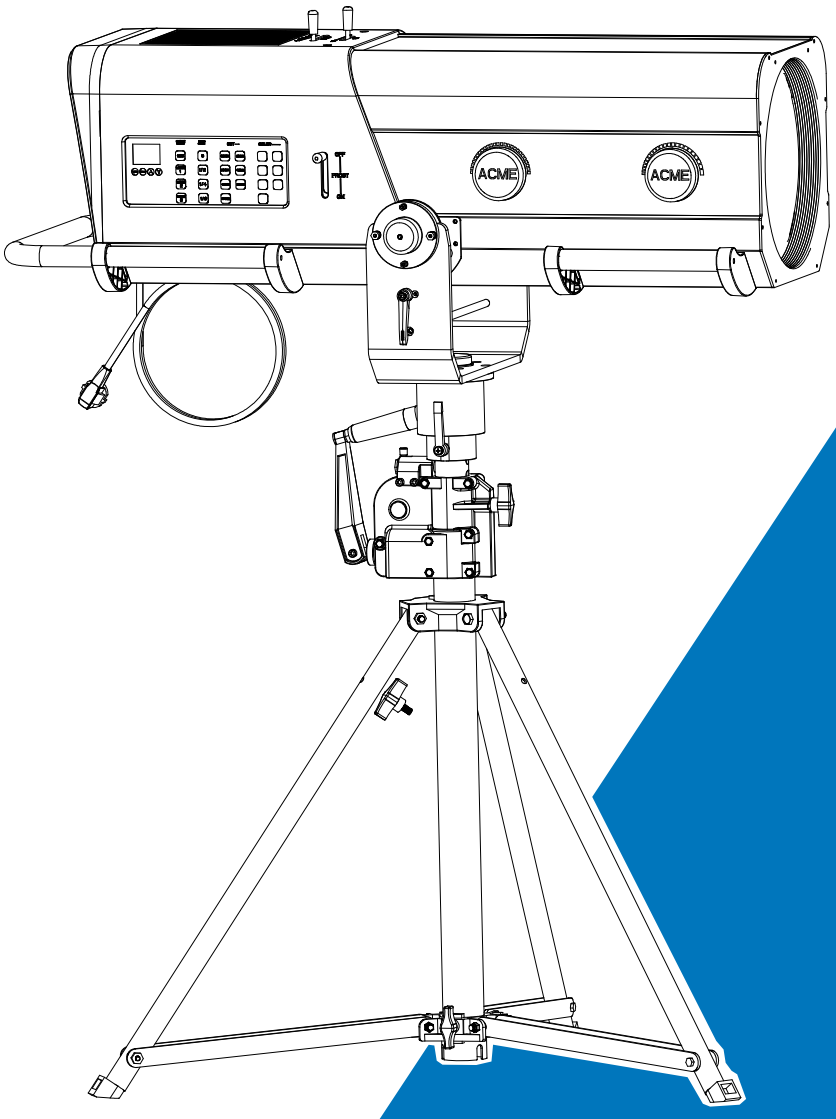
ACME®

COMET



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

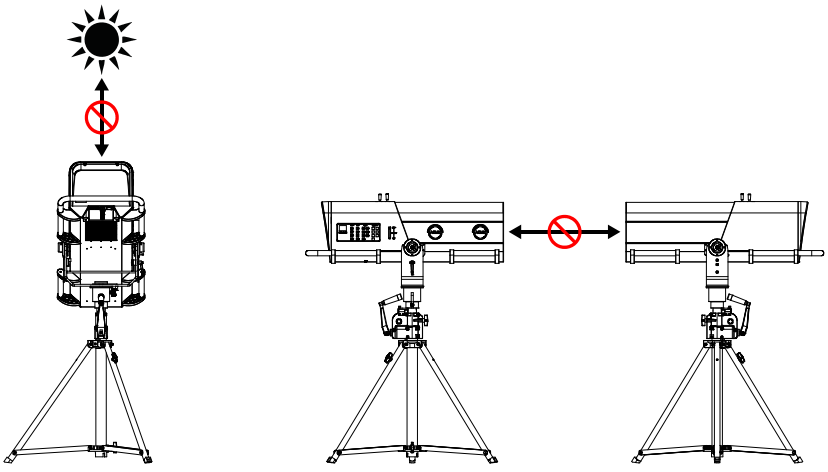
Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

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.

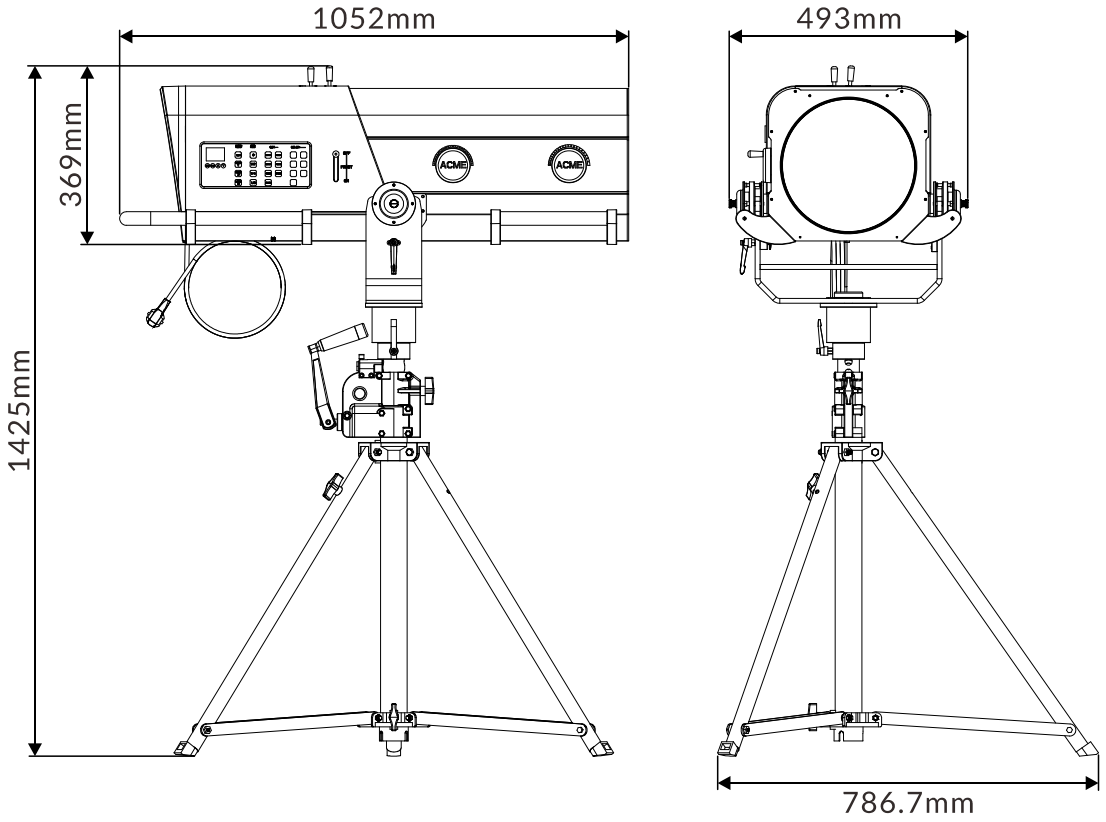
- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. 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˚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 75 ˚C . 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 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.
- 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.

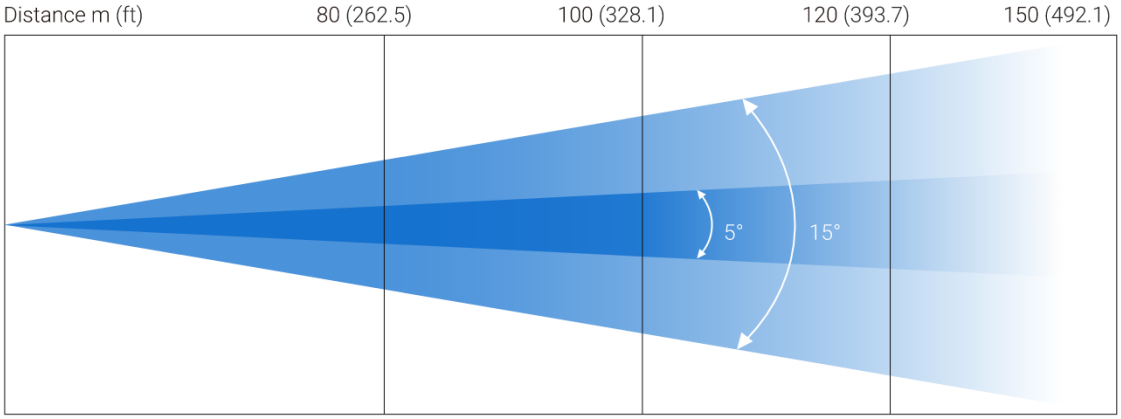


02/ Technical Specifications

AC Power	180-240Vac; 50/60Hz		
Max. Power Consumption	2180W		
Light Source	SCL1800-65-R95		
Color Temperature	6000K		
Zoom Range	5°-15°		
Control and Programming	DMX Channels	7	
	Protocols	DMX512	
		RDM	
	Operational Modes	DMX Control	
		Manual Control	
		Touch Screen	
	Firmware Update	via DMX	
Construction	Display	LCD display	
	DMX and RDM Data In/Out	3-pin XLR (optional with 5-pin XLR)	
	Power In/Out	Power Cord in	
	Protection Rating	IP20	
Dynamic Effects	Color Rendering: Ra≥95, R9≥90, R15≥95, TLCI≥95, CCI: 0-1.2G		
	0-100% continuous dimming and strobe effects		
	Choice of four dimming curves		
	1 x color temperature wheel: 6 color temperature plates		
	1 x color wheel: 6 colors		
	1 x minus green wheel: 3 minus-green plates		
	Power Mode: three power modes		
	Manually adjust dimmer		
	Manually adjust frost, focus, zoom and iris		
Dimensions	786.7x1052x1425mm		31"x41.4"x56.1"
Weight	74.5 kg		164.2 lbs

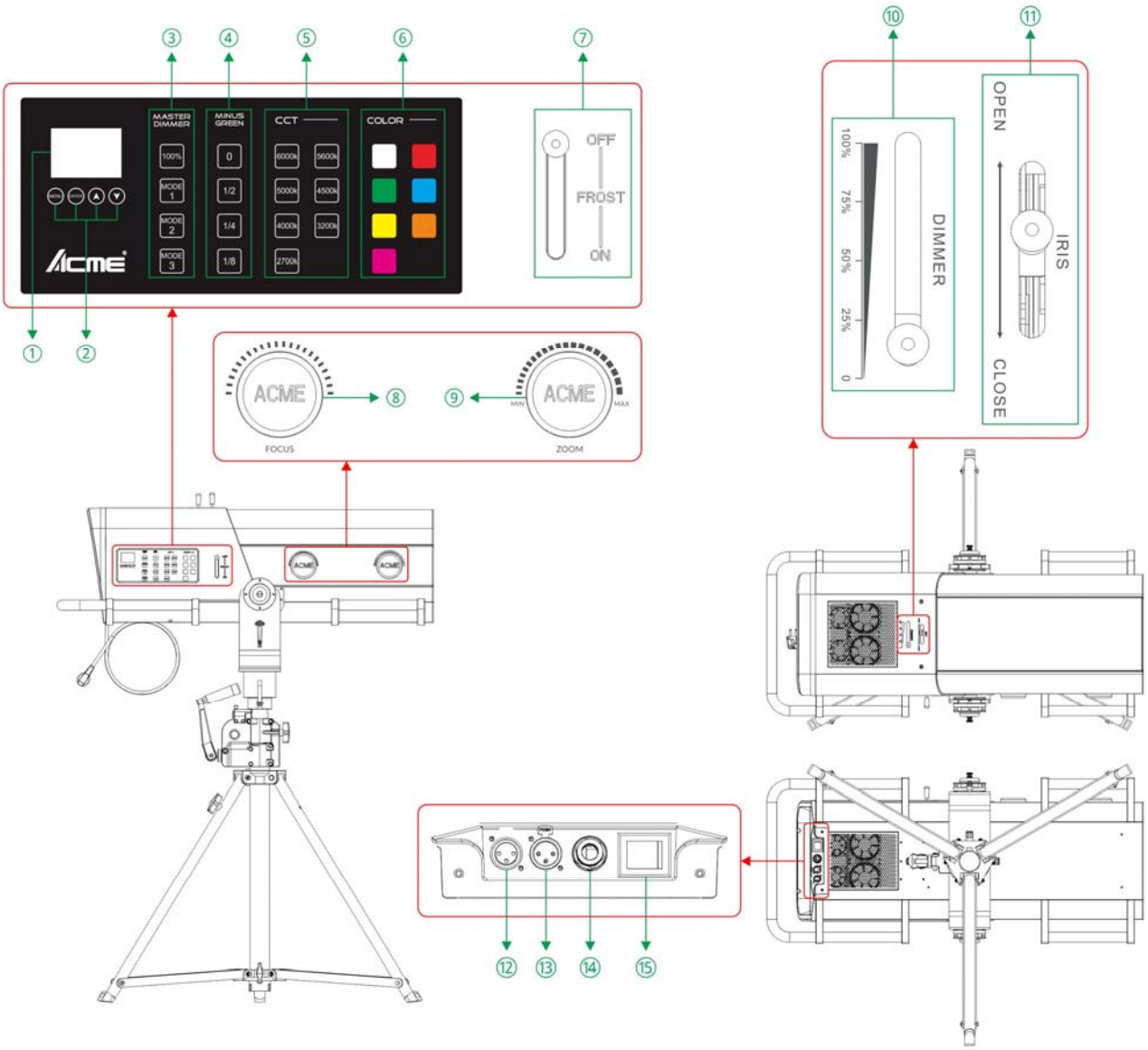


Photometric Diagram:



5° Lux	978	626	435	278
Diameter m (ft)	7.0 (23)	8.7 (28.5)	10.5 (34.4)	13.1 (43)
15° Lux	111	71	49	32
Diameter m (ft)	21.4 (70.2)	26.3 (86.3)	31.6 (103.7)	39.5 (129.6)

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. MASTER DIMMER	100%	Full power
	MODE 1	Power mode 1
	MODE 2	Power mode 2

	MODE 3	Power mode 3
4. MINUS GREEN	3 minus-green modes	
5. CCT	7 color temperatures are available.	
6. COLOR	6 colors and white are available.	
7. FROST	Manually adjust the frost value	
8. FOCUS	Manually adjust the focus value	
9. ZOOM	Manually adjust the zoom value	
10. DIMMER	Manually adjust the dimmer value	
11. IRIS	Manually adjust the iris value	
12. 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 XLR)	
13. DMX OUT	For DMX512 link, use 3-pin XLR cable to link the next units to output DMX signal (optional with 5-pin XLR)	
14. POWER	To connect to supply power	
15. POWER SWITCH	Turns on/off the power	

04/ Connecting Power and Data

4.1 Connecting Power

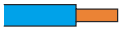
This fixture can operate on any 180-240Vac; 50/60Hz AC mains power supply.

The maximum power consumption is 2180W.

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)

CAUTION!

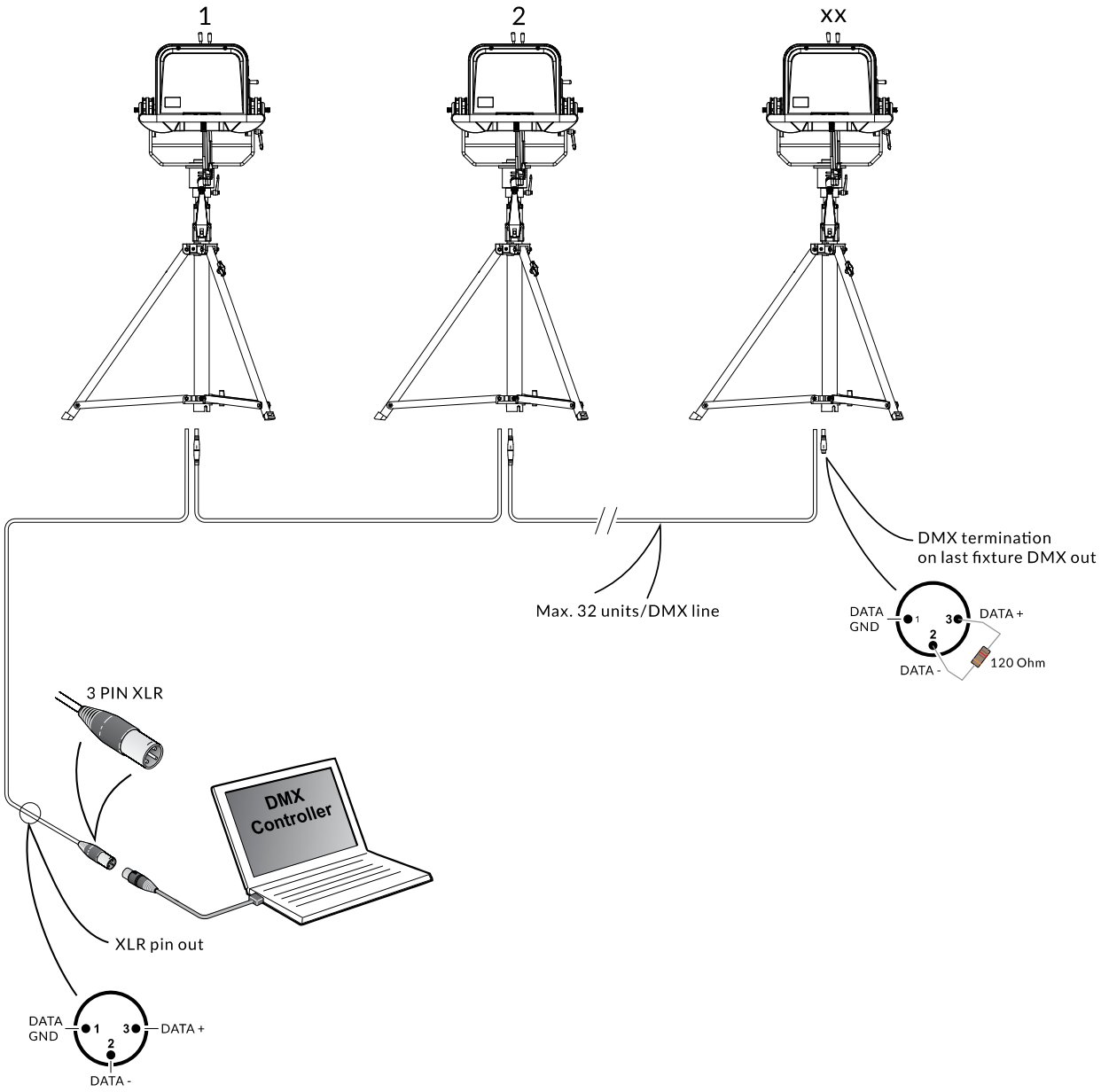
DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.

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.

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.

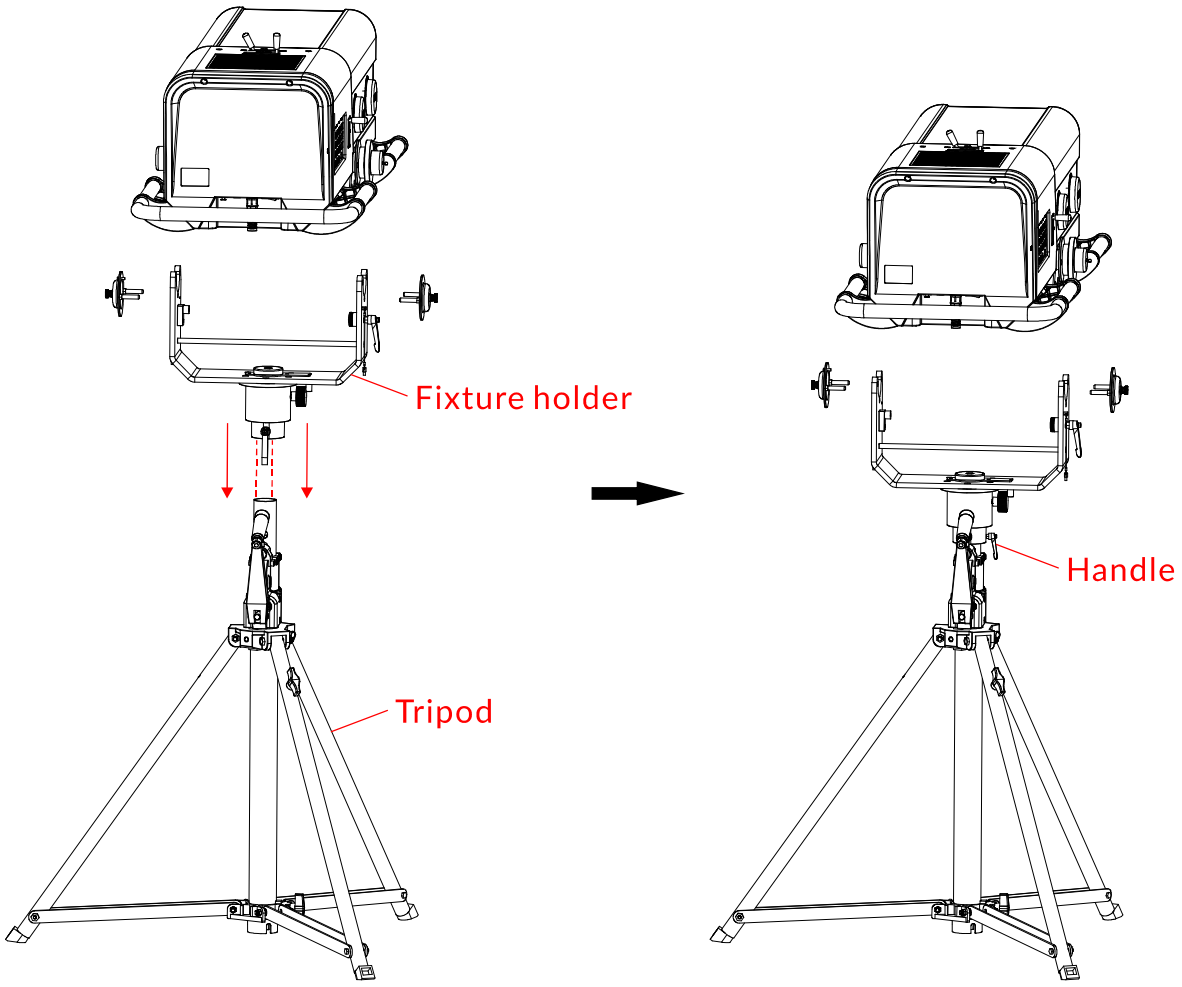


05/ Fixture Installation

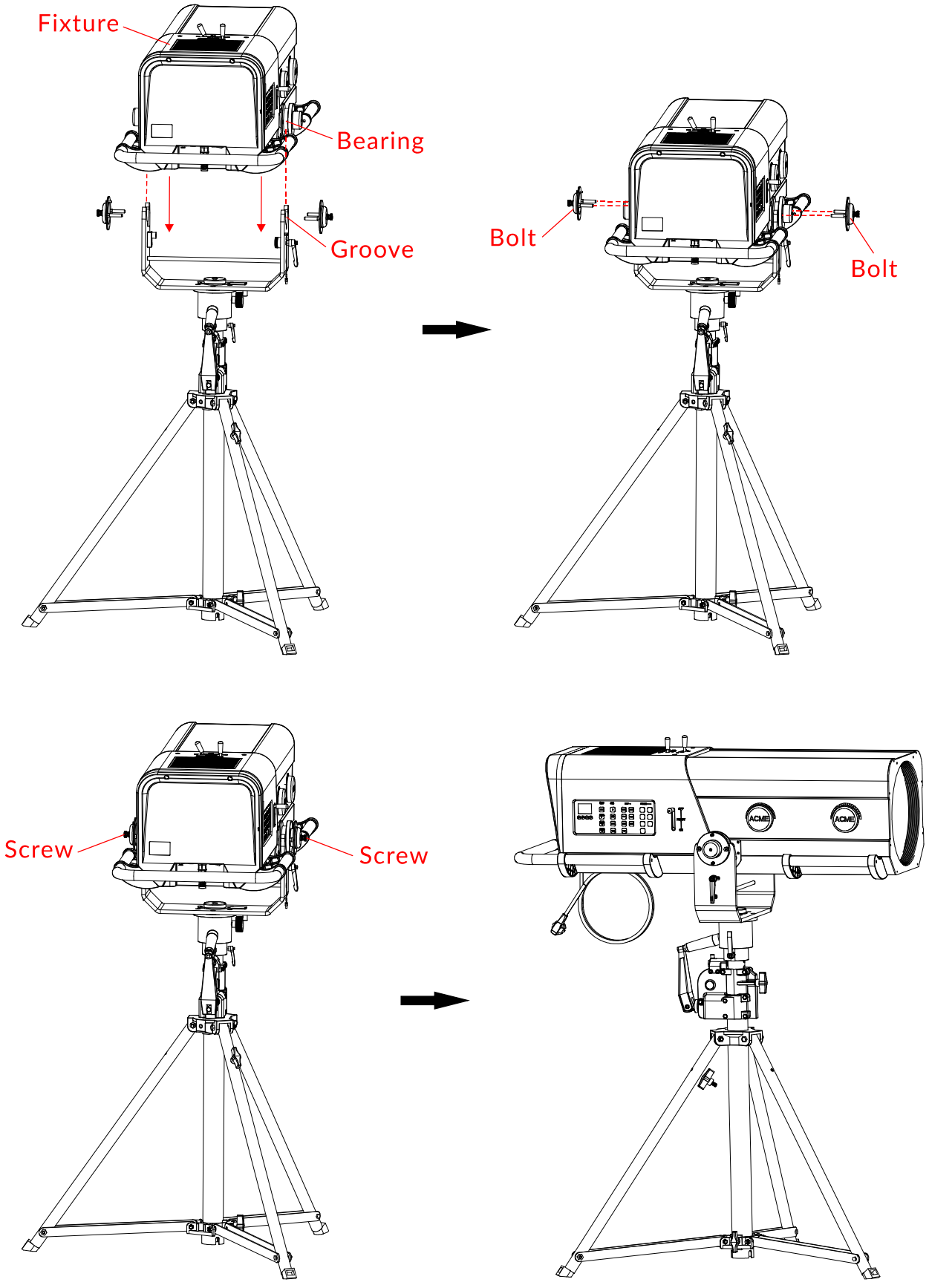
- DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.
- Always ensure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

Fixture Installation:

1. Align the column of the fixture holder with the column of the tripod and insert it, then lock the handle.



2. Align the bearing of the fixture with the groove of the fixture holder, then align the bolts with the bolt holes and insert them, and lock two screws. The tripod is installed.



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.

When the 'Auto Lock Screen' menu is set to 'Yes', the screen will be locked automatically after 30 seconds of no operation, and can be unlocked by long-pressing the [MENU] button.

The main functions are shown below:

MAIN MENU	SUBMENU	CHOICES/VALUES	
DMX Settings	DMX Address	001-512	(Default=1)
	Mode* Artnet Addr	001-512	(Default=1)
	DMX Channel Mode	Mode 1 (7)	
	No DMX Status	Blackout	
		Hold	
		Manual	
	View DMX Value		
Fixture Settings	Dimmer Speed	Fast	
		Smooth	
	Dimmer Curve	Linear	
		Square Law	
		Inv SQ Law	
		S Curve	
	Button Setting	Button 1 Button 2 Button 3	10%
			20%
			30%
			40%
			50%
			60%
			70%
			80%
			90%

MAIN MENU	SUBMENU	CHOICES/VALUES		
	Iris Small Light Off	No		
		Yes	10%	
	Auto Lock Screen	No		
		Yes		
	Refresh Rate	900Hz		
		1000Hz		
		1100Hz		
		1200Hz		
		1300Hz		
		1400Hz		
		1500Hz		
		2500Hz		
		4000Hz		
		5000Hz		
		6000Hz		
		10KHz		
		15KHz		
		20KHz		
		25KHz		
Display Settings	Display Invert	No		
		Yes		
	Backlight Intensity	1-10	(Default=10)	
	Temperature Unit	℃		
		℉		
	Language	English		
		Chinese		
Fixture Test	Auto Test			
	Manual Mode	Clear	NO	
			Yes	
		CTO	0-255	
		Color	0-255	
		Zoom	0-255	
		Focus	0-255	
		Strobe	0-255	
		Dimmer	0-255	
Fixture Information	Use Hour	Fixture		
		Light Source	Total	
			Light On	

MAIN MENU	SUBMENU	CHOICES/VALUES		
			Reset	Password=050
	Temperature		Current	Max temp
		Light Source		
	Fan State	Head Fan 1		
		Head Fan 2		
		Head Fan 3		
		Head Fan 4		
		Head Fan 5		
		Head Fan 6		
		Head Fan 7		
		Head Fan 8		
		Head Fan 9		
		Head Fan 10		
		Head Fan 11		
	Firmware Version			
	RDM UID			
	Error Logs	Fixture Errors		
		Reset Error Logs	No	
			Yes	Password=050
Reset Function	All Reset	No		
		Yes		
Special Function	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, Mode* Artnet Addr, DMX 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 (7)	001-512

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

Mode* Artnet Addr

Select **Mode* Artnet Addr,** press ENTER.

Use UP/DOWN button to select **001-512**, confirm your selection with ENTER.

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

DMX Channel Mode

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

Use UP/DOWN button to select **Mode 1 (7)**, 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.

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 Speed, Dimmer Curve, Button Setting, Iris Small Light Off, Auto Lock Screen** or **Refresh Rate.**

Dimmer Speed

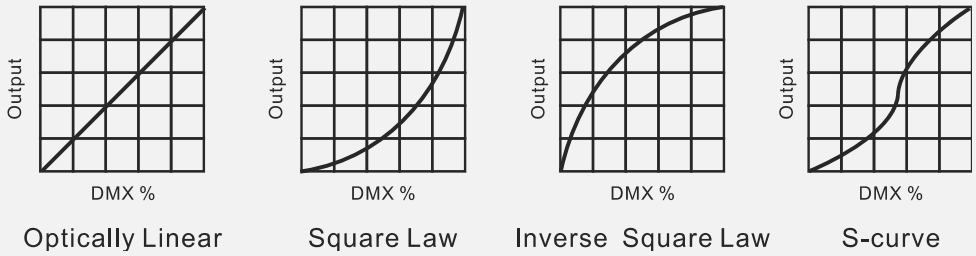
Select **Dimmer Speed,** press ENTER.
Use UP/DOWN button to select **Fast** or **Smooth**, confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

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



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

Button Setting

Select **Button Setting,** press ENTER.

Use UP/DOWN button to select **Button 1, Button 2** or **Button 3**, confirm your selection with ENTER.

Use UP/DOWN button to select **10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%** or **90%**, confirm your selection with ENTER.

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

Iris Small Light Off

Select **Iris Small Light Off,** press ENTER.

Use UP/DOWN button to select **No** (when iris shrinks to the minimum, the led stays on) or **Yes** (when iris shrinks to the minimum, the led turns off), confirm your selection with ENTER.

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

Auto Lock Screen

Select **Auto Lock Screen,** press ENTER.

Use UP/DOWN button to select **No** (the screen and control panel will not be locked) or **Yes** (the screen and control panel will be locked automatically after 30 seconds of no operation), confirm your selection with ENTER.

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

Refresh Rate

Select **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, Backlight Intensity, 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.

Backlight Intensity

Select **Backlight Intensity,** press ENTER.
Use UP/DOWN button to select a value between **1** (dark) and **10** (bright), 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 Mode.**

Auto Test

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

Manual Mode

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

Fixture Information

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

Use Hour

Select Use Hour, press ENTER.
Use UP/DOWN button to select **Total (total time)** or **Light On (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 **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 Logs**, 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 Function

Enter the control menu and select **Reset Function**, 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.

Special Function

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

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	Discovery command	SET command	GET command
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		√	

√ -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 [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
Minus Green	-128~127
Cto	-128~127
Color	-128~127
Focus	-128~127
Zoom	-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

Minus Green

Select **Minus 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.

Cto

Select **Cto,** 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.

Color

Select **Color,** 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.

Focus

Select **Focus,** 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.

Zoom

Select **Zoom,** 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.

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 7 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 8. As the first fixture uses all the first 7 DMX channels, the next available channel is 8 (7+1=8 >> 8).

See the chart below for more details:

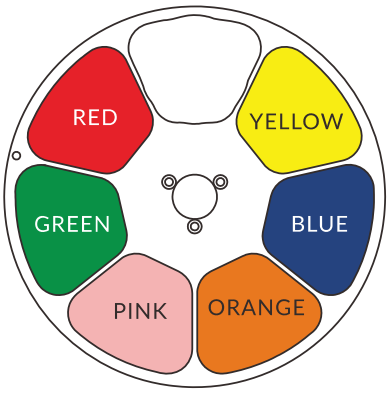
Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
7 channels	1	8	15	22	.....

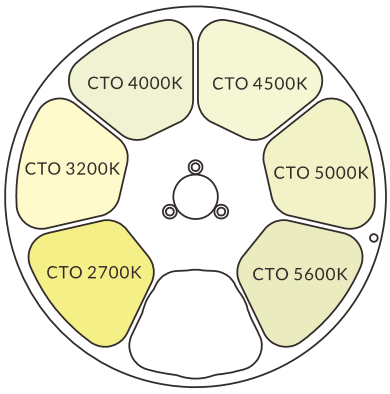
7.2 DMX Protocol

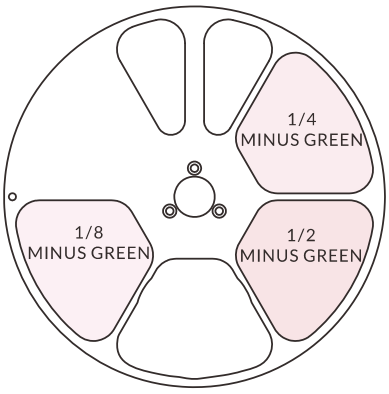
Valid from firmware version: V1.7

CHANNEL 7ch	VALUE	FUNCTION
1		**CCT**
	000-007	6000K
	008-048	5600K
	049-089	5000K
	090-130	4500K
	131-171	4000K
	172-212	3200K
	213-255	2700K
2		**COLOR WHEEL**
	000-007	Open
	008-016	Color 1
	017-025	Color 2
	026-034	Color 3
	035-043	Color 4
	044-052	Color 5
	053-063	Color 6
	064-127	Open
	128-189	Clockwise Rotation, Fast to Slow
	190-193	Stop

	194-255	Counter-Clockwise Rotation, Slow to Fast
3		**MINUS GREEN**
	000-015	0
	016-031	1/2
	032-047	1/4
	048-063	1/8
	064-255	Null
4		**ZOOM**
	000-255	Narrow→Wide
5		**FOCUS**
	000-255	0%→100%
6		**STROBE**
	000-007	Close
	008-015	Open
	016-131	Strobe from Slow to Fast
	132-139	Open
	140-181	Fast Open Slow Close from Slow to Fast
	182-189	Open
	190-231	Slow Open Fast Close from Slow to Fast
	232-239	Open
	240-247	Random Strobe from Slow to Fast
	248-255	Open
7		**DIMMER**
	000-255	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.

CPU-B/C/D/E 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.

Light Source 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.

Light Source Timeout Use

Light Source Too Hot Off

When the fixture temperature reaches 87℃, it will automatically turn off to protect the fixture.

Minus Green Reset Err

Check whether the position of the minus green wheel where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the minus green wheel operating range.
Check whether the Hall element on the minus green wheel is damaged.
Check whether the lead connecting the Hall element on the minus green wheel and the PCB board is in poor contact or disconnected.
Check whether the motor on the minus green wheel is damaged.
Check whether the related circuit of the motor drive board on the minus green wheel is damage.

Cto Reset Error

Check whether the position of the cto wheel where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the cto wheel operating range.
Check whether the Hall element on the cto wheel is damaged.
Check whether the lead connecting the Hall element on the cto wheel and the PCB board is in poor contact or disconnected.
Check whether the motor on the cto wheel is damaged.
Check whether the related circuit of the motor drive board on the cto wheel is damage.

Color Reset Fail

Check whether the position of the color wheel where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the color wheel operating range.
Check whether the Hall element on the color wheel is damaged.
Check whether the lead connecting the Hall element on the color wheel and the PCB board is in poor contact or disconnected.
Check whether the motor on the color wheel is damaged.
Check whether the related circuit of the motor drive board on the color wheel is damage.

Focus Reset Fail

Check whether the position of the focus where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the focus operating range.
Check whether the Hall element on the focus is damaged.
Check whether the lead connecting the Hall element on the focus and the PCB board is in poor contact or disconnected.
Check whether the motor on the focus is damaged.
Check whether the related circuit of the motor drive board on the focus is damage.

Zoom Reset Fail

Check whether the position of the zoom where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the zoom operating range.
Check whether the Hall element on the zoom is damaged.
Check whether the lead connecting the Hall element on the zoom and the PCB board is in poor contact or disconnected.
Check whether the motor on the zoom is damaged.
Check whether the related circuit of the motor drive board on the zoom is damage.

Head Fan 1/2/3/4/5/6/7/8/9/10/11 Start Err

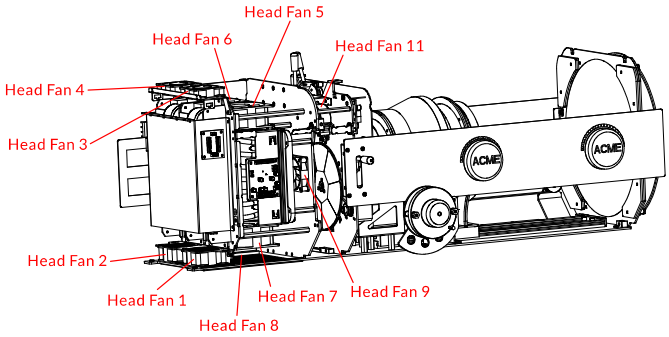
Check whether the fan is not running.

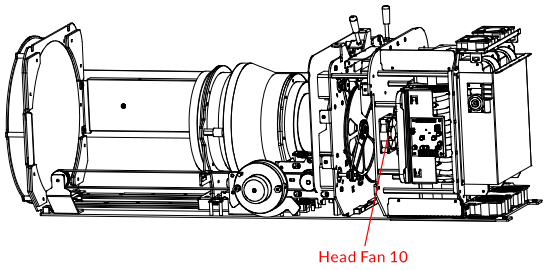
Check whether the fan leads are installed in place or disconnected.

Check whether the fan is damaged.

Check whether there are obstacles in the fan operating range.

Position of cooling fans:





Cooling Fans	Part Number	V	W	Position
Head Fan 1	3014001293	DC 24V	4.8W	D Board
Head Fan 2				E Board
Head Fan 3	3014001305	DC 24V	1.4W	D Board
Head Fan 4				E Board
Head Fan 5	3014001247	DC 24V	8.4W	D Board
Head Fan 6				
Head Fan 7				
Head Fan 8				
Head Fan 9	3014001305	DC 24V	1.4W	E Board
Head Fan 10				
Head Fan 11	3014001259	DC 24V	2.4W	B Board

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/ Cleaning and Maintenance

- To ensure the normal and stable operation of the luminaire, the fixture should be kept clean. Acetone may be used to clean the lens. It is recommended to clean the body, fan, and air intake vents every 15 days. The lens and dichroic filters should also be cleaned regularly to maintain optimal lighting effects. When cleaning the dichroic filters, do not use any solvent-based cleaners to avoid damage to the luminaire.
- When the luminaire is used continuously, it is recommended not to exceed 4 hours per session, otherwise the service life of the luminaire will be significantly shortened. This issue can be addressed by using a rotation/rest method.
- Before performing maintenance or disassembly on the luminaire, always disconnect the power supply and never operate with live electricity. After disconnecting the power, all components of the luminaire must cool down for approximately 10 minutes before disassembly or assembly. If the bulb needs to be replaced, wait an additional 20 minutes or more for the bulb to cool completely to avoid burns.
- The lenses, optics, and other rotating parts of the luminaire must be inspected regularly to ensure they remain clean and stable. If any obvious damage or looseness is found, they must be replaced or reinforced promptly to prevent accidents.
- This luminaire product employs forced-air cooling and tends to accumulate dust. It must be cleaned at least once every two weeks, especially at the air intake and exhaust vents for heat dissipation.
- After performances using color gels, check whether any paper debris is stuck in or has been drawn into the air intake and exhaust vents. Such debris must be removed completely; otherwise, it may damage the fan and cause a fire hazard.

12/ 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)
- 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.

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