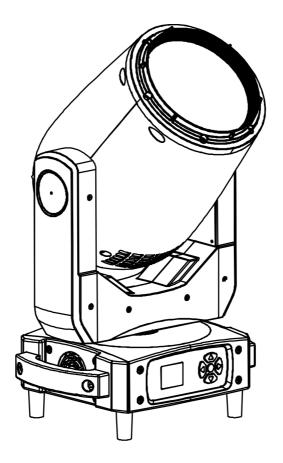
## F400

# 400W CW+WW 2in1 LED Wash Moving Light



**USER MANUAL** 

# **CONTENTS**

Safety Instructions	3-4
Technical Specification	4-5
Mounting	6-7
Display and Menu	8-10
LUX Data	11
DMX Set Up	11-12
DMX Channel List	13-15
Attention	16
Trouble Shooting	16
Products Size	17
Fixture Cleaning	17
Multiple Unit Power Linking	18
Fuse Replacement	18

#### **Statement**

Fixtures should be fastened on the hooks with screws. Make sure the installation is secure to prevent chattering and slipping during operation. Also make sure that the structure of the connected luminaire can support the luminaire 10 times the weight. At the same time, when installing the lamps, they also use a safety rope to support the weight of the lamps by 12 times.

The installation of the equipment should be carried out by professionals, and it should also be installed in places where people can't reach them casually or where no one is free to pass by.

### **Safety Instructions**

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

- Unpack and check carefully there is no transportation damage before using the unit.
- ➤ Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- > The unit is for indoor use.
- > The unit must be installed in a location with adequate ventilation, at least 50 cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect main power before replacement or servicing.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- ➤ Use safety cable when fixes this unit. Do not handle the unit by taking its head only, but always by taking its base.
- ➤ Maximum ambient temperature is Ta: 45 °C. Do not operate it where the temperature is higher than this Unit surface temperature may reach up to 85 °C. Do not touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- The event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact us for the technical support.
- Do not touch any wire during operation as high voltage might be causing electric shock.

### Warning:

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- Do not open the unit within five minutes after switching off.
- The housing, the lenses, must be replaced if they are visibly damaged.

#### Caution:

There are no user serviceable parts inside the unit. If the service breaks down, you can contact us directly to teach you how to repair it, or send it back to us and we will send it back to you after it is repaired.

#### Installation:

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.

### **Technical Specifications**

### **Light Sources:**

400W LED

Beam Angle: 7°~ 53°

Power Consumption:  $405W \pm 5\%$ 

Power Voltage: AC 100-240V, 50/60Hz

Color System: White light (Ra95) + CTO (linear color temperature)

Color temperature: 3200K-5800K

Dimension: 306\*230\*526mm

Net Weight: 10.2kg

Flight case packing 4in1 size:820\*710\*740mm

Gross weight: 85.5kg

Carton package 1in1 size: 610\*320\*380mm

Gross weight: 11.8 kg

#### Maximum number of connections:

8 units (220V, 50Hz) 2.5mm<sup>2</sup> power cable 4 units (90V, 60Hz) 2.5mm<sup>2</sup> power cable

#### **Control:**

DMX Channel: 11 /13CH

Control Modes: DMX512/Master-Slave/Auto Run/Music/RDM

#### Pan/Tilt:

Pan/Tilt: 540°/ 250°

0.3°/step, fine-tuning accuracy: 0.0034°;

Using magnetic coded reset system

#### **Construction:**

Display: 1.8 inch TFT color display with 180° reversible

Data In/Out socket: 3-pin XLR sockets

Power Socket: Power con in/out

Protection Rating: IP20

#### Features:

Menu or console control lamp reset

0-100% dimming; constant current drive mode

temperature sensor detection

intelligent adjustment of light source power

lamp information query

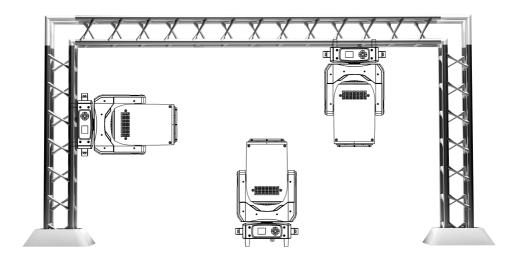
intelligent fan speed regulation

## **Mounting**

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. When installing the unit must be secured with a secondary safety attachment, e.g. and appropriate safety cable. Never stand directly below the unit when mounting, removing, or servicing the unit.

Overhead mounting requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and unit. If you lack these qualifications, do not attempt the installation yourself.

These installation should be checked by a skilled person once a year.

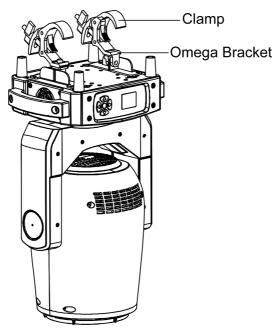


F400 is fully operational in three different mounting positions, hanging upside-down from a ceiling, sideways on trussing, or set on a flat level surface. Be sure this fixture is kept at least 12m (40ft) away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event because of clamp fails (see next page). Never use the carrying handles for secondary attachment.

## **Mounting**

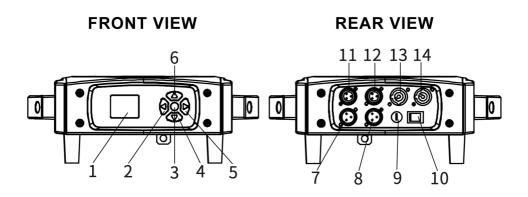
**NOTICE:** The suitable environmental temperature for this lighting fixture is between -25° C to 45° C. Do not place this lighting fixture in an environment where the temperatures are under or above the temperatures stated. This will allow the fixture to run at its best and help prolong the fixture life.

- 1. Bolt each clamp to the Omega holder with screw and lock nut through the hole in the holder.
- 2. Fasten the omega holders on the bottom of the base by inserting quick-lock fasteners into the holes of the base and tighten fully clockwise.
- 3. Hang the fixture to the support using the clamps and tighten the screws. Fasten a safety cable through the bottom of the base and over the support.



Screw one clamp each via a M12 screw and nut into the Omega holders. Insert the quick-lock fasteners of the Omega holder's into the respective holes on the bottom of the F400. Tighten the quick-lock fasteners fully clockwise. Install the second Omega holder. Pull the safety-cable through the openings located on the base plate and over the trussing system or a safe fixation spot. Insert and tighten the safety screw.

## **Display and Menu**



### Display:

- 1. MENU: To select the programming functions.
- 2. UP: To go forward in the selected functions.
- 3. DISPLAY: To show the various menus and the selected function.
- 4. DOWN: To go backward in the selected functions.
- 5. ENTER: To confirm the selected functions.

6. DMX OUT 7. DMX IN

8. FUSE

9. POWER IN

10. POWER OUT

11. ON/OFF

#### Set DMX Address Code:

- Press "Menu" to "Set DMX Address", and press "ENTER" keys to enter into.
- Show "Set DMX Address DMX Address:001", Press the "UP and DOWN" keys to amended.
- Press "ENTER" keys to save and Exit, Press the "MENU" Keys does not save and Exit.

1	Address	Address 001~512	Address setting 001-512

2	Mode	1.DMX512	Console control	
_	Widde	2.Auto	1.Master	
			2.Alone	
		3.Sound	1.Master	
			2.Alone	
		4.Manual	1.Pan:0-255	
		T.IVIGITIGAL	2.Tilt:0-255	
			3.Focus:0-255	
			4.Red:0-255	
			5.Green:0-255	
			6.Blue:0-255	
			7.White:0-255	
			8.Strobe:0-255	
3	Channel		1.17CH	
		2.22CH		
4	Invert	1.Pan Invert	1.NO,2.YES	
		2.Tilt Invert	1.NO 2.YES	

5	Sound	0-100	Sound sensitivity
6	Degree	1.540,2.360	
7	No signal	1.black out	2.hold
8	Fan set	1.auto	, 2. high, 3.low
9	Reset	1.NO	Reset
		2.YES	
10	Default	3.Yes	Factory setting
		4.No	
11	Inform	1.Soft V.XXX	Show the version number
		2.Temp /°C	Show the temperature of led board
12	Adjust	Pass word	***
12	Adjust	1.Pan	0-255Pan fine control
		2.Tilt	0-255Tilt fine control
		3.Focus	0-255 Zoom fine control
		4.Red	0-255
		5.Green	0-255
		6.Blue	0-255
		7.White	0-255

### **LUX Data**

Beam Angle = 7°				
All lux	760000	84444	30400	15510
ALL cut-in color chips lux	332500	36944	13300	6785
Beam Angle = 53°				
All lux	28750	3194	1150	586
ALL cut-in color chips lux	13450	1494	538	274
			7° 5	3°
Distance(m)	1	3	5	7

16CM

102CM

48CM

306CM

80CM

510CM

112CM 714CM

## **DMX Set Up**

Spot diameter (cm) 7°

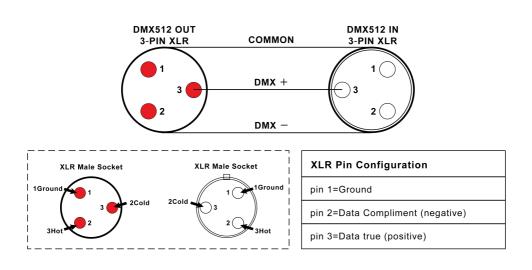
Spot diameter (cm) 53°

**Power Supply:** The F400 contains a automatic voltage switch, which will auto sense the voltage when it is plugged into the power source. With this switch there is no need to worry about the correct power voltage, this unit can be plugged in anywhere.

**Data Cable (DMX Cable) Requirements (For DMX Operation):** The F400 can be controlled via DMX-512 protocol. The F400 has 2 DMX channel modes.

Your unit and your DMX controller require a standard 3-pin or 5-pin XLR connector for data input and data output (Figure 1). If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all pro lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.

**Notice:** When making your own cable, be sure to carefully observe and follow the instructions shown in the diagram. Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behavior.



The DMX512 is widely used in intelligent lighting control, with a DMX 512 controller. connect several lights together, dmx in and dmx out,3 pin XLR connectors: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

## **DMX Channel List**

# DMX channel's functions and values (11 DMX channels):

Channel	annel Function Description		Value
Ch 1	Dimmer	from dark to bright	0255
Ch 2	Dimming fine adjustment	Dimming adjustment control	0255
		Turn on the light	03
Ch 3	Strobe	Synchro strobe speed slow to fast (1HZ-25HZ)	4203
		Random strobe	204255
Ch 4	W	from dark to bright	0255
Ch 5	Color temperature	Cold to warm	0255
Ch 6	pan adjustment	pan adjustment	0255
Ch 7	Pan fine adjustment	Pan fine adjustment	0255
Ch 8	Tilt adjustment	Tilt adjustment	0255
Ch 9	Tilt fine adjustment	Pan fine adjustment	0255
Ch 10	Zoom	From near to far	0255
Ch 11		No function	0149
Cn H	Functions	Faster dimming(remain 3s works)	150159

	Slow dimming (remain 3s works)	160169
Functions	No function	170250
	Reset (remain 3s works)	251255

# DMX channel's functions and values (13 DMX channels):

Channel	Function	Description	Value
Ch 1	pan adjustment	pan adjustment	0255
Ch 2	Pan fine adjustment	Pan fine adjustment	0255
Ch 3	Tilt adjustment	Tilt adjustment	0255
Ch 4	Pan fine adjustment	Pan fine adjustment	0255
Ch 6	Zoom	From near to far	0255
Ch 7	Dimmer	from dark to bright	0255
Ch 8	Dimming fine adjustment	Dimming adjustment control	0255
		No function	03
Ch 9	Ch 9 Strobe speed slow to fast (1HZ-25HZ)		4203
		Random strobe	204255
Ch 10	W	from dark to bright	0255
Ch 11	Color temperature	Cold to warm	0255
	Dimming curve	Linear dimming	049
Ch 12		Square rate dimming	5099
		Inverse Square Dimming	100149
		S curve dimming	150255

		No function	0149
Ch 18 Dimming n		Faster dimming(remain 3s works)	150159
	Dimming mode	Slow dimming (remain 3s works)	160169
		No function	170250
		Reset (remain 3s works)	251255

### **Attention**

- When the lamp is powered on and lit, try to avoid looking directly at the light emitted by the lamp beads.
- When loading or unloading the lamp, be sure to cut off the main power supply connected to the device before you can open the cover on which the lamp bead is installed.

## **Trouble Shooting**

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

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

- 1. Check the connection of power and main fuse.
- 2. Measure the mains voltage on the main connector.
- 3. Check the power on LED.

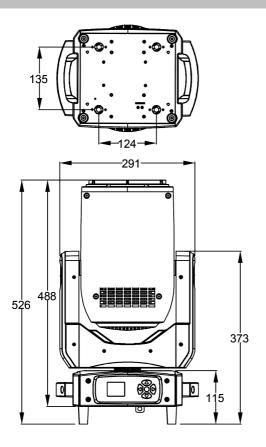
### B. Not responding to DMX controller

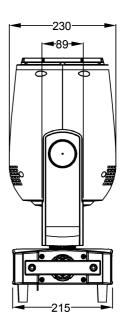
- 1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
- 2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
- 3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
- 4. Try to use another DMX controller.
- 5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

### C. One of the channels is not working well

- The stepper motor might be damaged or the cable connected to the PCB is broken.
- 2. The motor's drive IC on the PCB might be out of condition.

### **Products Size**





# **Fixture Cleaning**

The outside of the lens must always be wiped so that the lighting effect is better. Wipe frequency according to the environment. Humidity, excessive smoke, and a particularly dirty environment can make the lens dusty.

- Use a soft cloth and special glass cleaner.
- Wipe the exterior of the lens at least every 30 days.

- Use vacuum cleaners or air guns inside the luminaire and clean it at least twice a year.
- Always be sure to dry all parts completely before plugging the unit back in.

## **Multiple Unit Power Linking**

With this feature you can connect the fixtures to one another using the power-con input and output sockets. The maximum that can be connected is 3 fixtures @ 120V and 7 fixtures @ 240V. After the maximum connected fixtures you will need to use a new power outlet.

**NOTE:** USE WITH CAUTION WHEN POWER LINKING OTHER FIXTURES TO THE F400 AS THE POWER CONSUMPTION OF OTHER LIGHTING FIXTURES WILL VARY!

### **Fuse Replacement**

Unplug the unit from any power source it may be connected to. Once the power has been disconnected, use a Phillips head screw driver to unscrew the fuse holder located next to the power-con input.

Remove the bad fuse and replace with a new one, and screw the fuse holder back in.