

STECHNICS

User Manual

LEADER 330S

LED Moving Head BSW



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1. SAFETY GUIDE



Please read this manual carefully, it includes Important information such as installation, use and maintenance.

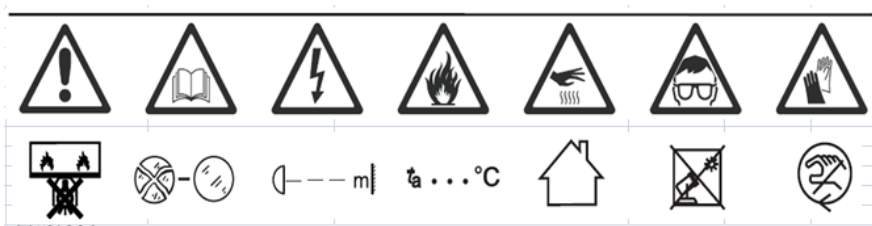
PAY ATTENTION

Please save this manual as a basis for future consultation, if you sell this product to other users, please make sure they also get this manual.

Notice:

The equipment is well-packaged when shipped from the factory. Please follow the user manual for operation. Human failures are not covered by the warranty.

- Before using, please open it and check carefully to ensure that there is no damage caused by transportation.
- This fixture is only suitable for indoor dry place.
- The installation and operation of fixtures should be carried out by professionals.
- Do not let children operate the machine.
- Use safety ropes when fixing the device, and hold the bottom when moving the fixture.
- The equipment must be installed in a well-ventilated place, at least 50 cm from the adjacent surface.
- Make sure the ventilation holes are unobstructed to avoid overheating when the fixture is running.
- Before operation, ensure that the power supply voltage matches the equipment.
- Please ground the conductor to prevent electric shock.
- Do not operate the fixture in an environment above 40°C.
- It is forbidden to connect the fixture directly to the dimming equipment.
- A small amount of smoke or odor may appear when the new fixture works, and it will disappear after 15 minutes of operation.
- Do not place combustible objects beside the fixtures during operation.
- Please carefully check whether the power cord is damaged before turning on the fixture, and replace it immediately if it is damaged.
- The surface temperature can reach 85°C when the fixture is in operation, please do not touch it with bare hands.
- Avoid conductive objects such as flammable liquid, water or metal to enter the fixture to avoid electric shock or fire. If some objects enter the fixture, please cut off the power immediately
- Avoid operating in dirty and dusty environments. and clean , maintain the fixtures regularly.
- It is forbidden to touch the wire when the fixture is running to prevent electric shock.
- Avoid entanglement of the power cord and other wires.
- The distance between the fixture and the illuminated surface should be greater than 5 meters.
- Disconnect the power before replacing the fuse or bulb.
- Use the same model when replacing fuses or bulbs.
- There is a serious operation failure, please stop using it immediately.
- Please do not turn on the fixture frequently, and turn on the fixture at least every 30 seconds.
- Please replace the fixture housing, lens or ultraviolet filter in time when there is obvious damage.
- There are no available parts inside the fixture, please do not open the fixture shell without permission.
- Do not operate the machine by yourself. Operation by non-professionals will cause damage to the device or malfunction of the device. For repairs, please contact the nearest authorized service center.
- Please cut off the power when the fixture is not used for a long time or maintenance.
- When you need to transport again, please use the original packaging material.
- To avoid fire or electric shock, do not expose the fixture to rain or wet areas.
- Do not look directly when the fixture is running .



2. Technical Specifications

Electrical

Power supply: electronic auto-ranging
Input voltage range: supply 90-250V, 50/60Hz
Fuse: 5 A@220V
Power consumption: 450W@230V

Optic

Light source: LED Apportronics 1pc *330W White LED
LED lifespan: 6,000 hours
Dimmer: Smooth dimmer from 0-100%
Fixed gobo wheel: 9gobos+Open
Rotating gobo wheel: 7gobos+Open
Color system: 9 different colors+CMY
8-facet prism
3.5-35deg electronic zoom
Focus+Frost +Iris
Beam+Spot+Wash

Motorized

Pan/Tilt
Pan movement range: 540°
Tilt movement range: 270°
16 bit movement resolution
Automatic Pan/Tilt position correction
Pan movement 0°-540° at max Speed: 2.2 sec.
Tilt movement 0°-270° at max Speed: 1.2 sec.

LCD operation

Built-in demo sequences
Silent fans cooling
Strong two-phase motors
Stand-alone operation
Supported protocols: DMX512
2 DMX modes (21/26 control channels)

Connection

DMX data in/out: Locking 3-pin and 5-pin XLR
AC power input: 1.5m power cord with plug

Rigging

Mounting points: 2 pairs of 1/4-turn locks
Mounting horizontally or vertically via 2 Omega brackets

Temperatures

Maximum ambient temperature: 45°C

Maximum housing temperature: 75°C

Minimum distances

Min. distance from flammable surfaces: 3.0m

Min. distance to lighted object: 2.0m

Total heat dissipation: 1200 BTU/h (calculated)

Net dimension: 393(L) x 260(W) x 668(H) mm

Weight (net): 24.50kg

Warranty: 2 Year

3. Set Up:


3.1 Power Supply: Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your XS4 CMY LED, The model is Auto power supply, It is workable in 90-250V/50~60Hz. Please make sure your unit voltage matches the wall outlet voltage before attempting to operate you fixture.

3.2 Connection to the mains

For protection from electric shock, the fixture must be earthed!

Install a suitable plug on the power cord, note that the cores in the power cord are colored according to the following table. The earth has to be connected!

If you have any doubts about proper installation, consult a qualified electrician.

Core (EU)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	

3.3 DMX512 connection

The fixture is equipped with 3-pin or 5-pin XLR sockets for DMX input and output. The sockets are wired in parallel.

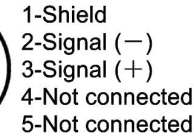
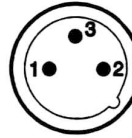
Only use a shielded twisted-pair cable designed for RS-485 and 3-pin or 5-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

DMX-output

XLR mounting-sockets (rear view):

DMX-input

XLR mounting-plugs (rear view):



3.4 DMX Linking: To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

3.5 Operating Modes: You can use the LED BSW330 CMY in 3 ways:

- Auto Mode - The unit will automatically chase through the different colors and built-in programs.
- Slave Mode – The unit will run under slave mode.
- DMX control mode - This function will allow you to control each individual fixtures traits with a standard DMX 512 controller.

3.6 DMX Mode: Operating through a DMX controller give the user the freedom to create their own programs tailored to their own individual needs. This function also allows you to use your fixtures as spot lights.

1. This function will allow you to control each individual fixture's traits with a standard DMX 512 controller.
2. The LED BSW330 CMY uses 21/26 DMX channels modes to operate. Please see "DMX Values and Functions" for the DMX traits.
3. To run your fixture in DMX mode, plug in the fixture via the XLR connections to any standard DMX controller. Set your desired DMX address following the setup specifications that come with your DMX controller.

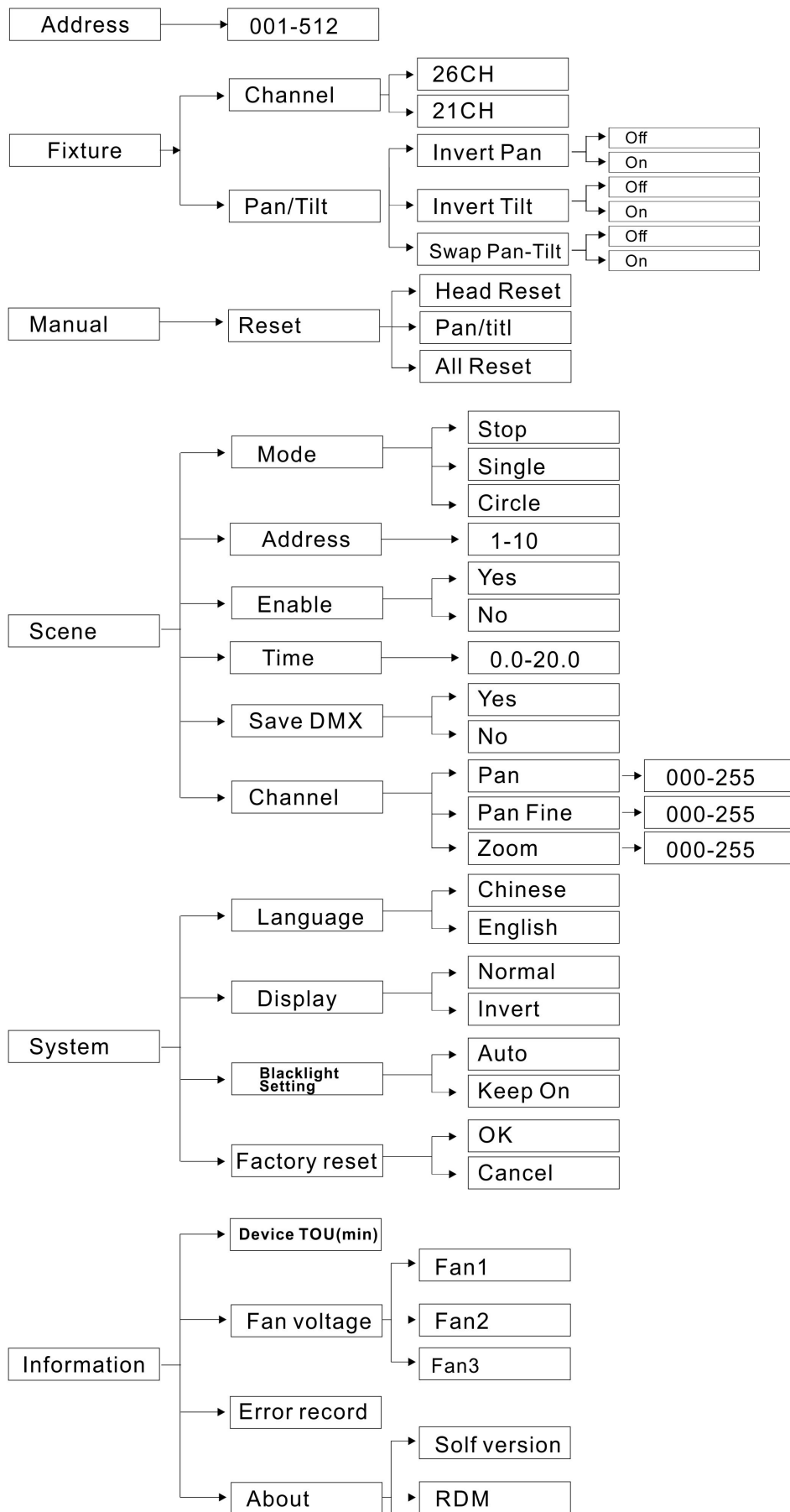
3.7 Touch Buttons: :

There are Five touch buttons nearby the LED display: Menu, Up, Down, Enter and Invert, the LED will display the current DMX address code of the fixture. At this time, presses up and down to choose the functions you want.



3.8 LCD Operation Menu: LCD screen with Five touch buttons: **MENU, UP, DOWN ENTER and INVERT.**

3.9 LCD display operation:



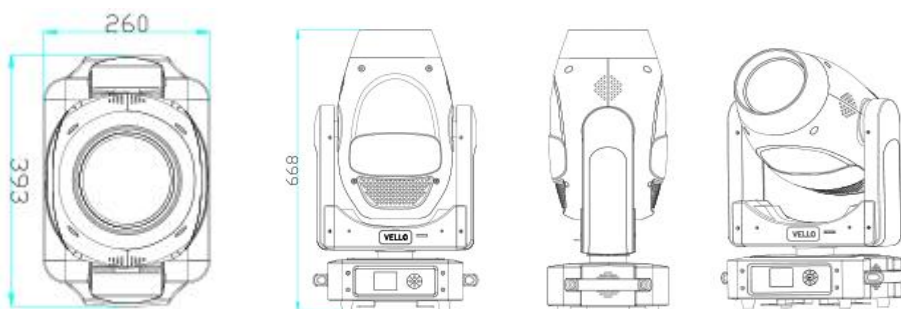
4. DMX Chart:

Mode/Channel		Value	Function
Standard	Reduced		
1	1	0-255	Pan 0-100%
2	*	0-255	Pan fine 0-100%
3	2	0-255	Tilt 0-100%
4	*	0-255	Tilt fine 0-100%
5	3	0-255	Pan/Fine Speed Fast -> Slow
6	4	0-255	Dimmer 0 -> 100%
7	5	252-255 239-251 226-238 213-225 208-212 108-207 104-107 4-103 0-3	Strobe/Shutter Open Random Strobe(Fast) Random Strobe(Medium) Random Strobe(Slow) Open Pulse:Slow -> Fast Open Strobe:Slow -> Fast Close
8	6	0-255	Cyan 0 -> 100%
9	7	0-255	Magenta 0 -> 100%
10	8	0-255	Yellow 0 -> 100%
11	9	0-255	Color1 0 -> 100%
12	10	0-255	Color2 0 -> 100%
13	11	0-255	Color3 0 -> 100%

14	12	192-255 128-191 120-127 112-119 104-111 96-103 88-95 80-87 72-79 64-71 56-63 50-55 45-49 40-44 35-39 30-34 25-29 20-24 15-19 10-14 5-9 0-4	Static Gobo Rotation(CCW): Slow -> Fast Rotation(CW): Fast-> Slow Gobo9 Shake: Slow -> Fast Gobo8 Shake: Slow -> Fast Gobo7 Shake: Slow -> Fast Gobo6 Shake: Slow -> Fast Gobo5 Shake: Slow -> Fast Gobo4 Shake: Slow -> Fast Gobo3 Shake: Slow -> Fast Gobo2 Shake: Slow -> Fast Gobo1 Shake: Slow -> Fast Open Gobo9 Gobo8 Gobo7 Gobo6 Gobo5 Gobo4 Gobo3 Gobo2 Gobo1 Open
15	13	188-255 120-187 112-119 104-111 96-103 88-95 80-87 72-79 64-71 56-63 48-55 40-47 32-39 24-31 16-23 8-15 0-7	Rotating Gobo Rotation(CCW): Slow -> Fast Rotation(CW): Fast -> Slow Gobo7 Shake: Slow -> Fast Gobo6 Shake: Slow -> Fast Gobo5 Shake: Slow -> Fast Gobo4 Shake: Slow -> Fast Gobo3 Shake: Slow -> Fast Gobo2 Shake: Slow -> Fast Gobo1 Shake: Slow -> Fast Gobo7 Gobo6 Gobo5 Gobo4 Gobo3 Gobo2 Gobo1 Open
16	14	193-255 191-192 128-190 0-127	Gobo Rotation Gobo Rotation(CCW): Slow -> Fast Stop Gobo Rotation(CW): Fast -> Slow Gobo Position

17	15	192-255 128-191 0-127	Iris Iris Pulse Closing: Slow -> Fast Iris Pulse Opening: Slow -> Fast Iris Index
18	16	128-255 0-127	Prism Prism Open
19	17	193-255 191-192 128-190 0-127	Prism Rotation Prism Rotation(CCW): Slow -> Fast Prism Static Prism Rotation(CW): Fast -> Slow Gobo Position
20	18	0-255	Frost
21	19	0-255	Focus 0 -> 100%
22	*	0-255	Focus Fine 0 -> 100%r
23	20	0-255	Zoom 0 -> 100%
24	*	0-255	Zoom Fine 0 -> 100%
25	21	216-255 176-215 136-175 96-135 56-95 0-55	Auto Focus Auto Focus 13m Auto Focus 11m Auto Focus 8m Auto Focus 5m Auto Focus 3m Auto Focus Disable
26	22	200-255 150-199 100-149 0-99	System Control All reset Head reset Pan and tilt reset Unused

5. Fixture dimension (mm):



6. Rigging the fixture

6.1 Caution: Fixture may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the moving head!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the fixture's weight.

When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 1.0 m.

CAUTION!

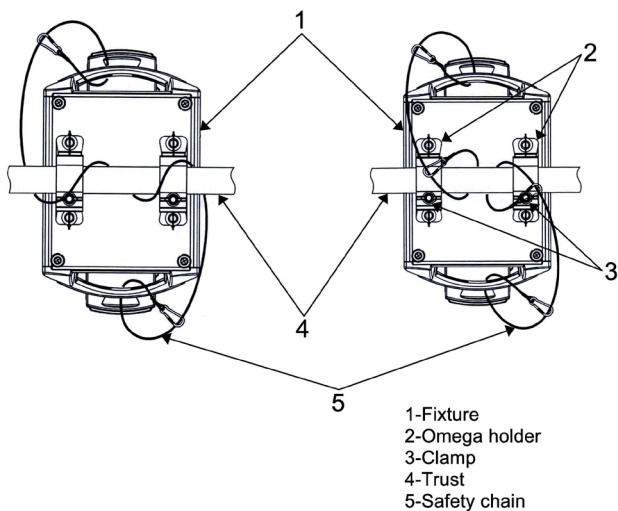
Use an appropriate clamp to ring the fixture on the truss.

Follow the instructions mentioned at the bottom of the base.

Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixtures is secure.

Securing the fixture via one safety wire

Securing the fixture via two safety wires



6.2 Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

TROUBLE SHOOTING: Listed below are a few common problems the user may encounter, with solutions.

Unit not respond to DMX:

1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is “hot”; on some other DMX devices pin 5 may be ‘hot’). Also, check that all cables are connected to the right connectors; it does matter which way the inputs and outputs are connected.

Note: All information is subject to change without prior notice.