



FOS Hydor BSW PRO

User Manual



This manual contains important information.
Please read before operating the fixture.

1 SECURITY TIPS

WARNING!!! To reduce the risk of fire, electric shock, or injury to people, follow these important safety instructions:

- Non-professionals, please do not disassemble the light or its lighting accessories arbitrarily.
- Rated voltage range: AC110V-120V/60Hz or AC200V-240V / 50Hz (to be selected).
- Do not beam irradiate flammable materials; maintain a distance of at least 1 meter between the flammable materials and the lamp.
- Lamps used in ambient temperature: -15 °C -40 °C, the highest temperature of the surface of the lamp: 60 °C.
- To keep away from the liquid substance and humid environment.
- Before using the lights, ensure good grounding, do not install charging and remove any parts.
- The installation of lights must be fixed with screw fasteners with an additional security cable and regular inspection.
- Lamps' consecutive working hours are not recommended for more than 10 hours.
- You should stop using the lights in time when unusual conditions occur during the process.
- Lamp parts of the rotation, external accessories and paste parts should be regularly inspected, such as the signs of looseness and moving should be reinforced promptly to prevent accidents.
- Lamps adopt strong winds to refrigerate, it easy to accumulate dust, so you have to clean it weekly, especially the cooling air opening, otherwise the dust will plug, leading to poor light output.

2 TECHNOLOGY DETAILS

Input: AC100v-240V 50/60HZ

Power Consumption:650w

Light source: 500W LED module

Led life:20000Hrs

Zoom angle:3°-45°

CTC:7000K, CRI: 69.5

Illuminance: 6013 lx @20m(beam);161 lx @20m(wash)

Working temperature: -10-40°C

Control mode: DMX512, Master-slave, Auto, RDM, Wireless

Channel: 29ch

Colour wheel: 12 fixed colours + blank, with half colour and linear adjustment.

CMY: Independent CMY wheel

CTO: Independent CTO wheel

Static gobos wheel :12 gobos+blank, with shake and bilateral rotation

Rotating gobos wheel : 7 gobos+blank, with shake and bilateral rotation

Dynamic wheel: One dynamic effect wheel.

4facet linear and circular combinable rotating prisms.

Frost filter

Dimmer:0-100% linear dimmer, 16bit

Strobe:1-20 flashes per second, variable speed.

IP rate: IP65 suitable for temporary outdoor events.

Movement: Pan: 540degree 16bit; Tilt 270 degree 16bit

Display: LCD display with 4touch buttons

Cooling fan: Silent fan, speed changeable

Body: Magnesium alloy, Plastic

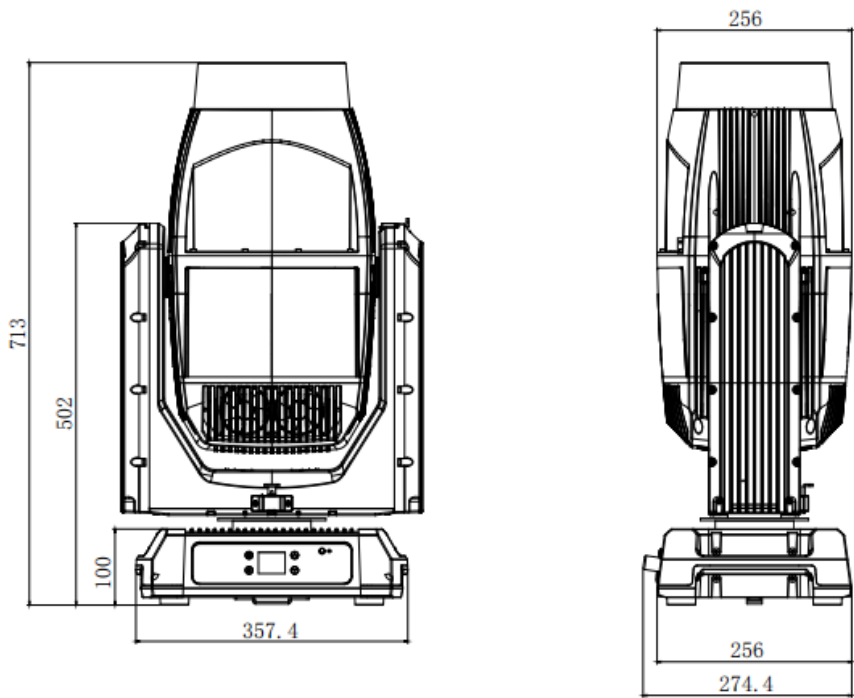
Signal data: XLR 3pin in/out

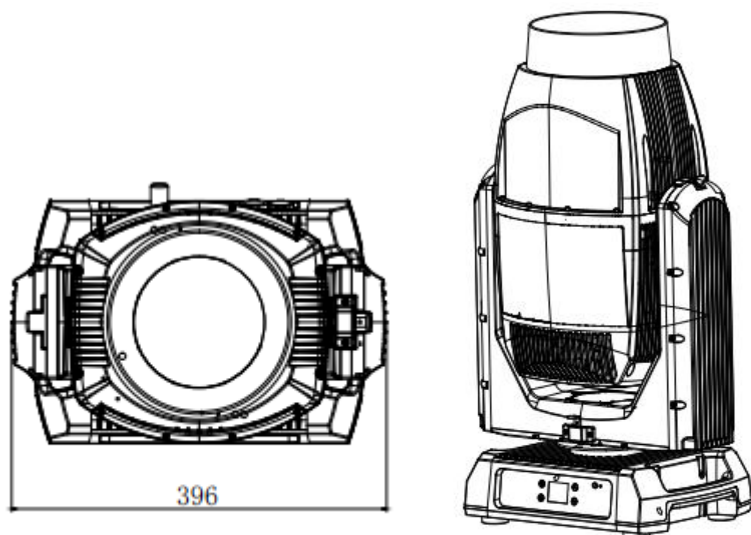
Power connector: TRUE1 Powercon in/out

Product size: 357.4 x 274.4 x 713mm

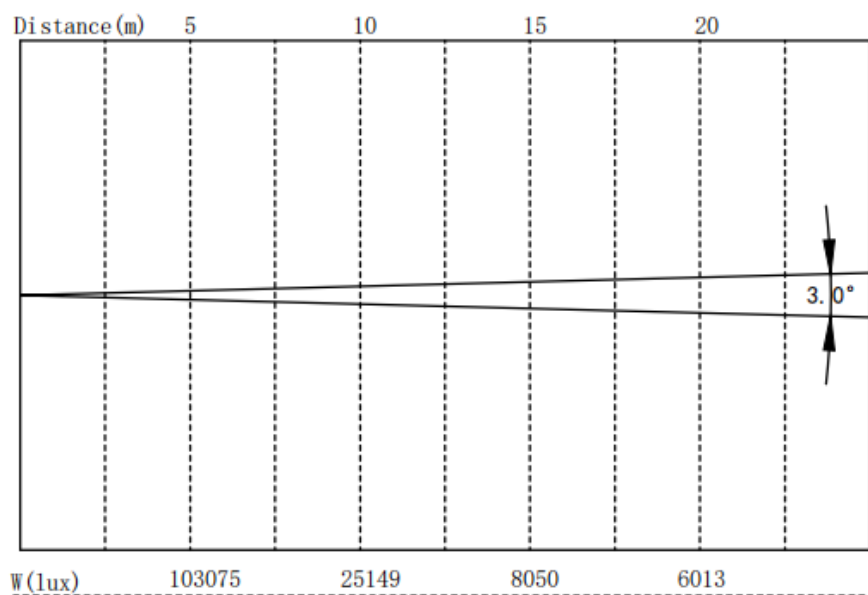
Net weight: 28.7kg

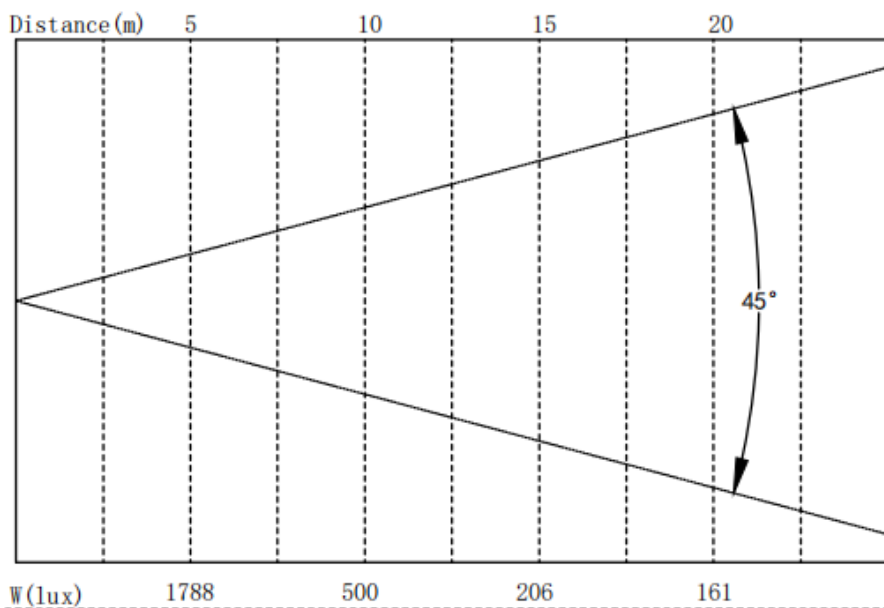
Product dimension:





Illuminance:





3 Board Instruction

| | | |
|--------------|--------------|---------|
| DMX Settings | DMX Address | 001-512 |
| Channel mode | CH | 29 |
| Reset | Reset All | |
| | XY Reset | |
| | Effect Reset | |
| Manual | Manual Lock | Yes/No |
| | Pan | 000-255 |
| | Tilt | 000-255 |
| | P/T Speed | 000-255 |
| | Dim | 000-255 |
| | Strobe | 000-255 |
| | Color | 000-255 |

| | | | | | |
|--------|--------------|---------------|--------|-------|---------|
| | C | 000-255 | | | |
| | M | 000-255 | | | |
| | Y | 000-255 | | | |
| | CTO | 000-255 | | | |
| | CMY Macro | 000-255 | | | |
| | Gobo | 000-255 | | | |
| | Effect | 000-255 | | | |
| | Gobo wheel | 000-255 | | | |
| | Rot Gobo | 000-255 | | | |
| | Prism1 | 000-255 | | | |
| | Prism1 Rot | 000-255 | | | |
| | Prism2 | 000-255 | | | |
| | Prism2 Rot | 000-255 | | | |
| | Frost | 000-255 | | | |
| | Zoom | 000-255 | | | |
| | Focus | 000-255 | | | |
| Option | Run | DMX | | | |
| | | Auto | | | |
| | | User | | | |
| | M/S mode | Master/Slave | | | |
| | Pan/Tilt | XY correction | On/Off | | |
| | | Invert Pan | On/Off | | |
| | | Invert Tilt | On/Off | | |
| | | XY Speed RT | Yes/No | | |
| | Dim Curve | S-Curve | | | |
| | | Square Root | | | |
| | | Square | | | |
| | | Linear | | | |
| | | Log | | | |
| | Fan Mode | Normal/Silent | | | |
| | User Program | Manual | Step01 | Time | 000-255 |
| | | | | Chn01 | 000-255 |

| | | | | | |
|--|-------------|-----------|--------------------|-------|---------|
| | | | | | |
| | | | | Chn29 | 000-255 |
| | | | | | |
| | | | Step12 | Time | 000-255 |
| | | | | Chn01 | 000-255 |
| | | | | | |
| | | | | Chn29 | 000-255 |
| | | Record | Select step | | 01-12 |
| | | | Time | | 000-255 |
| | | | Record | | |
| | | Clear All | Input PSW:11-Enter | | |
| | Auto Master | Yes/No | | | |
| | DMX Error | Hold | | | |
| | | Black out | | | |
| | Boot No DMX | Middle | | | |
| | | No Effect | | | |
| | | User | | | |
| | | Auto | | | |

| | | | | |
|----------|-------------------|-----------------------|--|--|
| Advanced | Calibrate | Input PSW:260-Enter | | |
| | Display | Auto Lock | On/Off(Password:Up-Down-Up-Down-Enter) | |
| | | Sleep | 30sec/60sec/180sec/No | |
| | | Invert | On/Off | |
| | Language | English/中文 | | |
| | Factory Setting | Input PSW: 2600-Enter | | |
| | Calibrate Recover | Input PSW: 260-Enter | | |

| | | | | |
|-------------|---------------|----------------------|--|--|
| Information | DMX data | Chn01-Chn29: 000-255 | | |
| | System Errors | | | |
| | LED | Usage Times | | |
| Clear Times | | | | |

| | | |
|--|--------------|----------------|
| | Factory Test | Input PSW:2320 |
| | Product Code | |

4 DMX CHANNEL SHEET

| 29CH | Function | DMX value | Description |
|------|----------------|-----------|--|
| 1 | Pan | 0-255 | Pan movement range 540° |
| 2 | Pan fine | 0-255 | Pan fine 16bit |
| 3 | Tilt | 0-255 | Tilt movement range 270° |
| 4 | Tilt fine | 0-255 | Tilt fine 16bit |
| 5 | Pan/Tilt speed | 0-255 | Pan/Tilt speed from fast to slow |
| 6 | Dimmer | 0-255 | 0-100% linear dimmer |
| 7 | Dimmer fine | 0-255 | Dimmer fine 16bit |
| 8 | Strobe | 0-3 | Close |
| | | 4-103 | Strobe from slow to fast |
| | | 104-107 | Open |
| | | 108-157 | Strobe slow close fast open, from fast to slow |
| | | 158-207 | Strobe fast close slow open, from fast to slow |
| | | 208-212 | Open |
| | | 213-251 | Random strobe, from slow to fast |
| | | 252-255 | Open |
| 9 | Color wheel | 0-2 | Open |
| | | 3-7 | Open+Color1 |
| | | 8-12 | Color1 |
| | | 13-17 | Color1+Color2 |
| | | 18-22 | Color2 |
| | | 23-27 | Color2+Color3 |
| | | 28-32 | Color3 |

| | | | |
|----|-----------|---------|--|
| | | 33-37 | Color3+Color4 |
| | | 38-42 | Color4 |
| | | 43-47 | Color4+Color5 |
| | | 48-52 | Color5 |
| | | 53-57 | Color5+Color6 |
| | | 58-62 | Color6 |
| | | 63-67 | Color6+Color7 |
| | | 68-72 | Color7 |
| | | 73-77 | Color7+Color8 |
| | | 78-82 | Color8 |
| | | 83-87 | Color8+Color9 |
| | | 88-92 | Color9 |
| | | 93-97 | Color9+Color10 |
| | | 98-102 | Color10 |
| | | 103-107 | Color10+Color11 |
| | | 108-112 | Color11 |
| | | 113-117 | Color11+Color12 |
| | | 118-122 | Color12 |
| | | 123-127 | Color12+Blank |
| | | 128-190 | Rainbow effects forward from fast to slow |
| | | 191-192 | Rainbow effects stop |
| | | 193-255 | Rainbow effects backward from slow to fast |
| 10 | CMY-C | 0-255 | Cyan Linear dimmer 0-100% |
| 11 | CMY-M | 0-255 | Magenta Linear dimmer 0-100% |
| 12 | CMY-Y | 0-255 | Yellow Linear dimmer 0-100% |
| 13 | CTO | 0-255 | Cold white to Warm white |
| 14 | CMY Macro | 0-9 | No function |
| | | 10-19 | Color1 |
| | | 20-29 | Color2 |
| | | 30-39 | Color3 |

| | | | |
|----|-------------------|---------|--|
| | | | |
| | | 240-249 | Color24 |
| | | 250-255 | Color25 |
| 15 | Static Gobo wheel | 0-4 | Open |
| | | 5-12 | Gobo1 |
| | | 13-20 | Gobo2 |
| | | 21-28 | Gobo3 |
| | | 29-36 | Gobo4 |
| | | 37-44 | Gobo5 |
| | | 45-52 | Gobo6 |
| | | 53-60 | Gobo7 |
| | | 61-68 | Gobo8 |
| | | 69-76 | Gobo9 |
| | | 77-84 | Gobo10 |
| | | 85-92 | Gobo11 |
| | | 93-102 | Gobo12 |
| | | 103-110 | Gobo1 shake from slow to fast |
| | | 111-118 | Gobo2 shake from slow to fast |
| | | 119-126 | Gobo3 shake from slow to fast |
| | | 127-134 | Gobo4 shake from slow to fast |
| | | 135-142 | Gobo5 shake from slow to fast |
| | | 143-150 | Gobo6 shake from slow to fast |
| | | 151-158 | Gobo7 shake from slow to fast |
| | | 159-166 | Gobo8 shake from slow to fast |
| | | 167-174 | Gobo9 shake from slow to fast |
| | | 175-182 | Gobo10 shake from slow to fast |
| | | 183-190 | Gobo11 shake from slow to fast |
| | | 191-199 | Gobo12 shake from slow to fast |
| | | 200-201 | Open |
| | | 202-227 | Gobo backward change from fast to slow |
| | | 228-229 | Stop |
| | | 230-255 | Gobo forward change from slow to fast |

| | | | |
|----|---------------------------|---------|---|
| 16 | Dynamic effect Wheel | 0-4 | No function |
| | | 5-127 | Dynamic effect Step movement |
| | | 128-255 | Dynamic effect movement from slow to fast |
| 17 | Rotate gobo | 0-5 | Open |
| | | 6-15 | Gobo1 |
| | | 16-25 | Gobo2 |
| | | 26-35 | Gobo3 |
| | | 36-45 | Gobo4 |
| | | 46-55 | Gobo5 |
| | | 56-65 | Gobo6 |
| | | 66-75 | Gobo7 |
| | | 76-92 | Gobo1 shake from slow to fast |
| | | 93-109 | Gobo2 shake from slow to fast |
| | | 110-126 | Gobo3 shake from slow to fast |
| | | 127-143 | Gobo4 shake from slow to fast |
| | | 144-160 | Gobo5 shake from slow to fast |
| | | 161-177 | Gobo6 shake from slow to fast |
| | | 178-199 | Gobo7 shake from slow to fast |
| | | 200-201 | Open |
| | | 202-227 | Gobo forward change from fast to slow |
| | | 228-229 | Stop |
| | | 230-255 | Gobo backward change from slow to fast |
| 18 | Rotate gobo rotation | 0 | No function |
| | | 1-127 | Rotate gobo Step rotation |
| | | 128-190 | Gobo Clockwise rotate from fast to slow |
| | | 191-192 | Stop |
| | | 193-255 | Gobo Anticlockwise rotate from slow to fast |
| 19 | Rotate gobo rotation fine | 0-255 | Rotate gobo rotation 16bit |

| | | | |
|----|-----------------|---------|--|
| 20 | Prism1 | 0-63 | No prism |
| | | 64-255 | Prism 1 Open |
| 21 | Prism1 rotation | 0 | No function |
| | | 1-127 | Prism 1 Step rotation |
| | | 128-190 | Prism 1 anticlockwise rotate from fast to slow |
| | | 191-192 | Prism 1 stop rotation |
| | | 193-255 | Prism 1 clockwise rotate from slow to fast |
| 22 | Prism2 | 0-63 | No prism |
| | | 64-255 | Prism2 Open |
| 23 | Prism2 rotation | 0 | No function |
| | | 1-127 | Prism 2 Step rotation |
| | | 128-190 | Prism 2 anticlockwise rotate from fast to slow |
| | | 191-192 | Prism 2 stop rotation |
| | | 193-255 | Prism 2 clockwise rotate from slow to fast |
| 24 | Frost | 0-63 | No function |
| | | 64-255 | Frost effect |
| 25 | Zoom | 0-255 | Zoom range from small to large |
| 26 | Zoom Fine | 0-255 | Zoom fine |
| 27 | Focus | 0-255 | Focus |
| 28 | Focus fine | 0-255 | Focus fine |
| 29 | Reset | 0-199 | No function |
| | | 200-209 | Effect reset |
| | | 210-219 | Pan/Tilt reset |
| | | 220-229 | All motor reset |
| | | 230-255 | No function |

5 FIXED EQUIPMENT

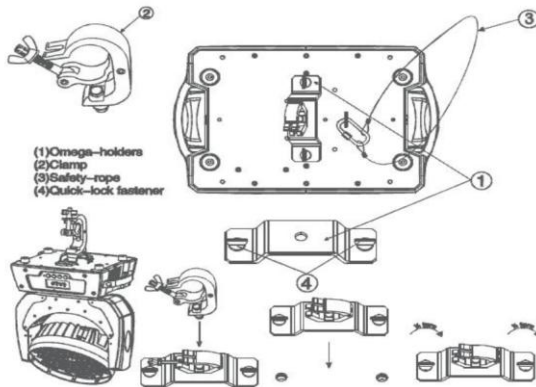
Please keep the equipment far away from flammable objects like finishing material, etc. Keep at least 0.5m distance from the flammable objects.

Warning: using two lamp clamps to fix the equipment on the bottom of the lamp holder according to the instructions. to make sure the place of installing the lamp is safe and suitable, and the installation point that has been chosen is safe and reliable.

The place of installing the lamp must support 10 times the weight of the lamp itself.

Must install the second protection when fixing the equipment, like proper protective screening. Wire protection is used to prevent the drop off and loss of the lamp and components.

The fixture can be installed with clamps, as shown in the figure:



6 MAIN MACHINE CONNECTION

Please check the power equipment supported.

Please plug the power source wire into the main power source.

| (EU)Wire | Wire(America) | Direction of wire | General marks |
|--------------|---------------|-------------------|---|
| Brown | Black | Live | L |
| Light blue | White | Neutral | N |
| Yellow/Green | Green | Earth |  |



Warranty Card

| | | | |
|------------|--|----------|--|
| Name | | Model | |
| Production | | Purchase | |

| | |
|---|--|
| End User Company Name: Add: | Sale Store Link man: Tel: Stamp |
|---|--|

Description: These must be truthfully fill, seal by the end-user and point-of-sale, or else the warranty will not work (warranty period and terms, see the following)

warranty period: one year since purchase warranty terms: 1、 If fail when using the product in normal state, you can made under the provisions of the warranty, show the warranty card and purchase bills(copy), and enjoy free maintenance service in a specific service center or the manufacturer.

2. The following will be the implementation of paid service:

- (1)Without the effective warranty card
- (2)There's blank, alter and no point-of-sale name
- (3)Fail caused by short circuit
- (4)Fail caused by transportation or unloading
- (5)Fail caused by not operate by manual
- (6)Fail caused by disassemble without unauthorized
- (7)Fail caused by using the unauthorized control system

Note:

Based on our company continuing to improve the product, we hold the right to change the functionality/data, without any prior notice. The manufacturer retains its right to change specifications when the product is improved.

Thank you for your understanding.