MH-200 LED HYBRID
USER MANUAL

CE

Operational Manual

Thank you for purchasing this product. To take full advantage of all possibilities and for your own safety, please read this operating instructions very carefully before you start using this fixture.

BEFORE USE

- Before you start using this unit, please check if there is no transportation damage. Should there be any, do not use the device and consult your dealer first.

- The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Please consider that damages caused by manual modifications to the device are not subject to warranty.

SAFETY INSTRUCTIONS

Caution: To reduce the risk of electric shock, do not remove the top cover. There are no user-serviceable parts inside. Refer servicing to qualified service personnel only.

Risk of electric shock!

Keep this device away from rain and moisture!

Read the manual

Unplug the mains power before remove the housing

Indoor use ONLY

- To protect the environment, please try to recycle the packing material as much as possible.
- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- This unit is for indoor use only.
- Don't place metal objects or spill liquid inside the unit. Electric shock or malfunction may result. If a foreign object enters the unit, immediately disconnect the mains power.
- Locate the fixture in a well ventilated environment, away from any flammable materials and/or liquids.
- Don't cover any ventilation openings as this may result in overheating.
- Prevent use in dusty environments and clean the unit regularly.
- Keep the unit away from children.
- Inexperienced persons should not operate this device.
- Maximum safe ambient temperature is 40℃.Don't use this unit at higher ambient temperatures.
- Allow the device about 10 minutes to cool down before servicing.
- The electrical installation should be carried out by qualified person only, according to the regulations for electric and mechanical safety in your country.
- Check that the available voltage is not higher than the one stated in the unit.
- The power cord should always be in perfect condition. Switch the unit immediately off when the power cord is squashed or damaged. It must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Don't connect the unit to any dimmer pack.
- In order to prevent electric shock, do not open the cover. There are no user serviceable parts inside.
- The housing and lenses must be replaced if they are invisibly damaged.
- Never repair a fuse or bypass the fuse holder. Always replace a damaged fuse with a fuse of the same type and electrical specifications!
- Due to safety reasons, it is prohibited to make unauthorized modifications to the unit.
- For installation, the fixture must be always secured with a safety wire that can bear at least 10 times the weight of the fixture.
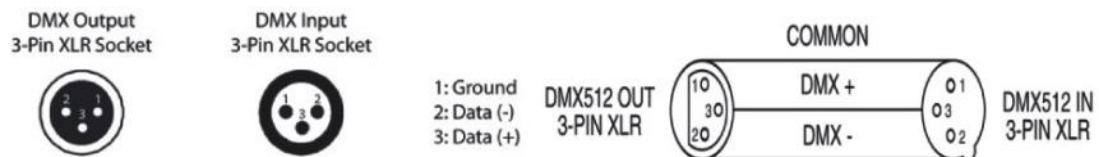
Clamp Mounting

The fixture can be mounted with the included omega bracket and safety cable. When mounting this fixture to truss, be sure to secure an appropriately rated clamp to the omega bracket using a M10 screw fitted through the center hole of the bracket. As an added safety, attach at least one properly rated safety cable to the fixture.

(1)Omega-holders
(2)Clamp
(3)Safety-rope
(4)Quick-lock fastene
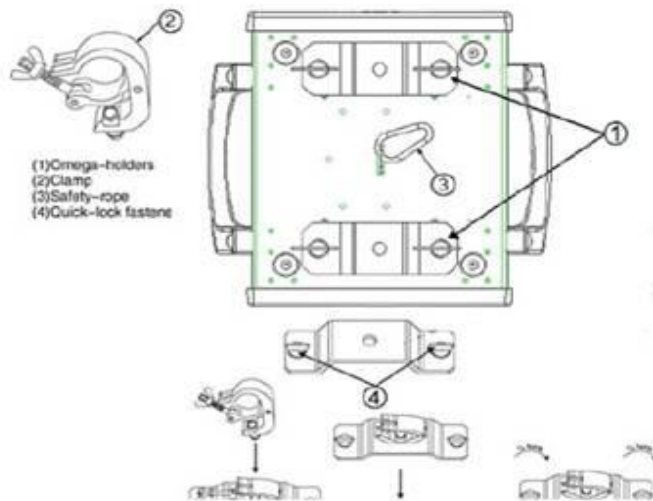
DMX-512 Control Connection

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can daisy chain multiple fixtures together through serial linking. The cable should be DMX cable with XLR in- and output connectors. Please refer to the diagram below.

DMX Output
3-Pin XLR Socket

DMX Input
3-Pin XLR Socket

1: Ground
2: Data (-)
3: Data (+)

DMX512 OUT
3-PIN XLR

COMMON

DMX +

DMX -

DMX512 IN
3-PIN XLR

DMX-512 Connection with DMX Terminator

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.
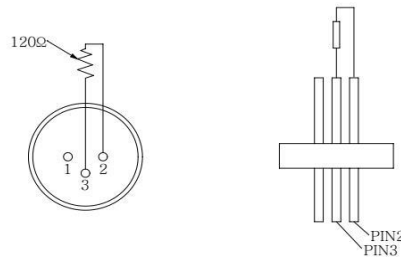
Technical Specifications

Input power: AC100-240V 50/60 Hz
Power consumption: 240W
LED: 200W high power LED
DMX channel: 6/18 channels
Pan scan：540° (16 bit)
Tilt scan：270° (16 bit)
Color wheel: one color wheel, 7 kinds of color chips in one color wheel

Static Gobo wheel: 8 gobo + open

Rotating Gobo Wheel: 6 gobo + open
Effect Wheel: Rotating 3 facet prism
Motorized focus
Beam angle: 5°/13° degrees
Control mode: DMX512/Master-Slave/Auto run
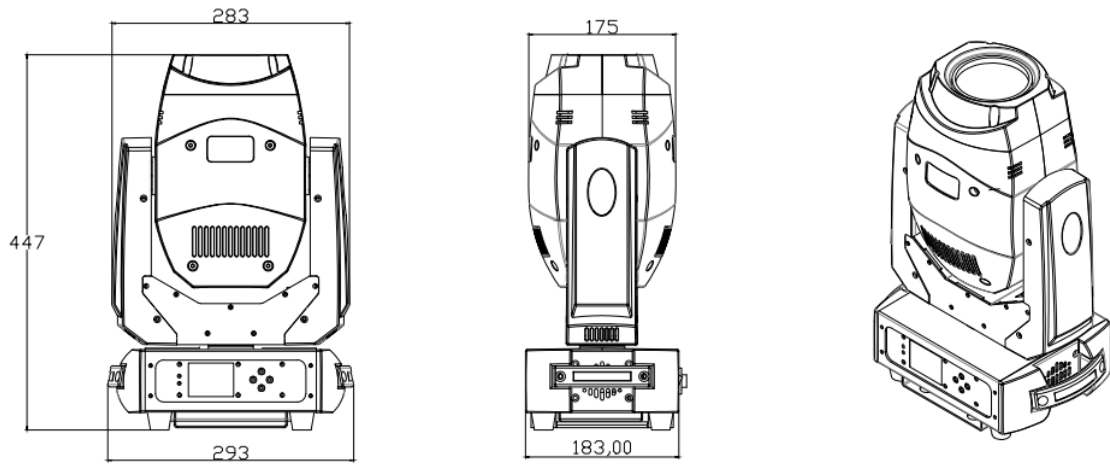Display: LCD display

WEIGHT&SIZE
Net weight: 11.25 KG
Gross weight: 13.25 KG
Packing size: 47.5*35.5*38cm

Dimensions

Lumen Chart
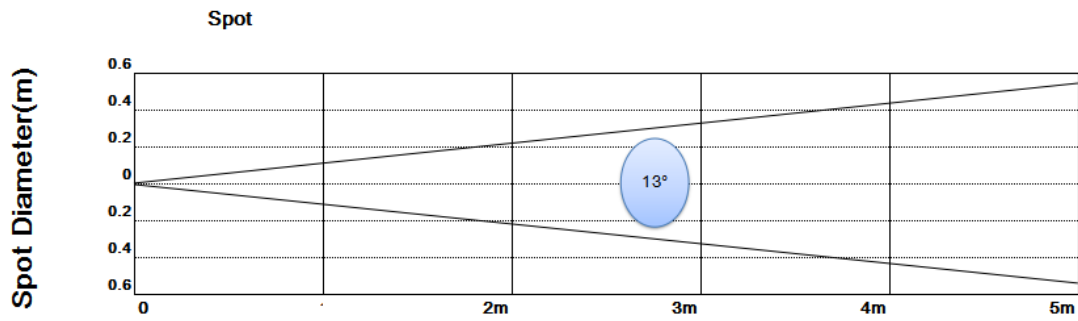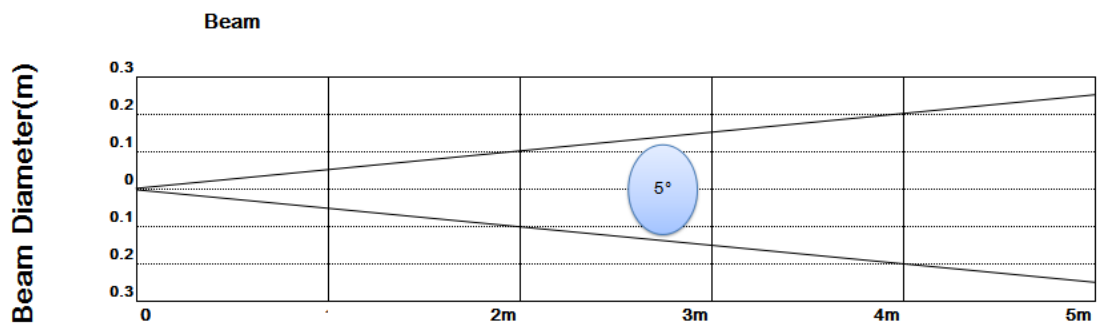
Spot

Lumen Chart

Distance (m)	2m	3m	5m
Spot White(Lux)	43900	17900	8490

Beam

Lumen Chart

Distance (m)	2m	3m	5m
Beam White(Lux)	86400	37400	13400

Menu Function

MENU			
DMX Address	001~512		
Operating Mode	DMX 6 Ch		
	DMX 18 Ch		
	Auto	Perform Mode 1	
		Perform Mode 2	
		Perform Mode 3	
		Perform Mode 4	
		Perform Mode 5	
		Perform Mode 6	
		Perform Mode 7	
		Perform Mode 8	
	Sound		
	Master Auto	Perform Mode 1	
		Perform Mode 2	
		Perform Mode 3	
		Perform Mode 4	
		Perform Mode 5	
		Perform Mode 6	
		Perform Mode 7	
		Perform Mode 8	
	Master Sound		
	Slave		
Language Setting	简体中文		
	English		
Advanced Setting	Pan Reverse		
	Tilt Reverse		
	Display Reverse		
	Mic Sensitive	= 000	
	Reset Motor		
	Factory Reset		
	Home Position	Password	Code =018
		PAN	. =000
		TILT	. =000
		Dimmer	. =255
		Color	. =000

		fixed Gobo	. =000	
		Rotation Gobo	. =000	
		Focus	. =000	
		Zoom	. =000	
		Pan/Tilt Speed	. =000	
System Info	Current Time			
	Total Time			
	Current Mode			
	Temperature			
	Software Version			
Manual Control	Pan	. =000	
	Pan-Fine	. =000	
	Tilt	. =000	
	Tilt-Fine	. =000	
	Pan/Tilt Speed	. =000	
	Dimmer	. =000	
	Strobe	. =000	
	Color	. =000	
	Fixed Gobo	. =000	
	Rotation Gobo	. =000	
	Rotation Gobo Wheel	. =000	
	Focus	. =000	
	Prism	. =000	
	Prism Wheel	. =000	
	Zoom	. =000	

DMX-Configuration

6 Channel Mode:

Channel	DMX Value	Function
1	000 - 255	X
2	000 - 255	Y
3	000-255	Dimmer (0-100%)
4	000-004	Shutter closed
	005-250	Strobe effect slow to fast
	251-255	Shutter open
5	000-007	Empty

	008-047	Auto Play 1
	048-087	Auto Play 2
	088-127	Auto Play 3
	128-167	Auto Play 4
	168-207	Auto Play 5
	208-247	Auto Play 6
	248-255	Color Gobo Sound Control
6	000-007	Empty
	008-032	X/Y auto run 1
	033-058	X/Y auto run 2
	059-084	X/Y auto run 3
	085-110	X/Y auto run 4
	111-136	X/Y auto run 5
	137-162	X/Y auto run 6
	163-188	X/Y auto run 7
	189-214	X/Y auto run 8
	215-240	X/Y auto run 9
	241-255	X/Y Sound Control

18 Channel Mode:

Channel	DMX Value	Function
1	000 - 255	X
2	000-255	X-Fine
3	000 - 255	Y
4	000-255	Y-Fine
5	000 - 255	XY SPEED
6	000-255	Dimmer (0-100%)
7	000-004	Shutter closed
	005-250	Strobe effect slow to fast
	251-255	Shutter open
8	000-004	Open(White)
	005-013	White/Color1
	014-022	Color1
	023-031	Color1/Color2
	032-040	Color2
	041-049	Color2/Color3
	050-058	Color3
	059-067	Color3/Color4
	068-076	Color4

	077-085	Color4/Color5
	086-094	Color5
	095-103	Color5/Color6
	104-112	Color6
	113-121	Color6/Color7
	122-130	Color7
	131-139	Open(White)
	140-195	Forward rainbow effect from fast to slow
	196-199	Rotation stop
	200-255	Backward rainbow effect from slow to fast
9	000-005	Open(White)
	006-014	Gobo1
	015-023	Gobo2
	024-032	Gobo3
	033-041	Gobo4
	042-050	Gobo5
	051-059	Gobo6
	060-068	Gobo7
	069-077	Gobo8
	078-084	Gobo1 Shake
	085-091	Gobo2 Shake
	092-098	Gobo3 Shake
	099-105	Gobo4 Shake
	106-112	Gobo5 Shake
	113-119	Gobo6 Shake
	120-126	Gobo7 Shake
	127-133	Gobo8 Shake
	134-194	Forward rainbow effect from fast to slow
	195-255	Backward rainbow effect from slow to fast
10	000-007	Open(White)
	008-019	Gobo1
	020-031	Gobo2
	032-043	Gobo3
	044-055	Gobo4
	056-067	Gobo5
	068-079	Gobo6
	080-088	Gobo1 Shake
	089-097	Gobo2 Shake
	098-106	Gobo3 Shake

	107-115	Gobo4 Shake
	116-124	Gobo5 Shake
	125-133	Gobo6 Shake
	134-194	Forward rainbow effect from fast to slow
	195-255	Backward rainbow effect from slow to fast
11	000-009	Stop
	010-129	Forward Gobo2 Rotation from fast to slow
	130-134	Stop
	135-255	Backward Gobo2 Rotation from slow to fast
12	000-255	Focus
13	000-015	Open(White)
	016-255	Prism
14	000-005	Stop
	006-129	Forward Prism Rotation from fast to slow
	130-134	Stop
	135-255	Backward Prism Rotation from slow to fast
15	000-127	Open
	128-255	Zoom
16	000-007	Empty
	008-047	Auto Play 1
	048-087	Auto Play 2
	088-127	Auto Play 3
	128-167	Auto Play 4
	168-207	Auto Play 5
	208-247	Auto Play 6
	248-255	Color Gobo Sound Control
17	000-007	Empty
	008-032	X/Y auto run 1
	033-058	X/Y auto run 2
	059-084	X/Y auto run 3
	085-110	X/Y auto run 4
	111-136	X/Y auto run 5
	137-162	X/Y auto run 6
	163-188	X/Y auto run 7
	189-214	X/Y auto run 8
	215-240	X/Y auto run 9
	241-255	X/Y Sound Control
18	250-255	RESET(10S)

Maintenance

> **DANGER!**
> **Disconnect from the mains before starting any maintenance work.**

- Switch off the unit, unplug the mains cable and wait until the unit is cool down.

During inspection the following points should be checked:

- All screws used for installing the device and any of its parts should be tightly fastened and may not be corroded.
- Housing, fixations and installations spots (ceiling, truss, suspensions) should be totally free from any deformation.
- When an optical lens is visibly damaged due to cracks or deep scratches, it must be replaced.
- The mains cables must be in impeccable condition and should be replaced when even a small problem is detected.
- In order to protect the device from overheat the cooling fans and ventilation opening should be cleaned monthly.
- The interior of the device should be cleaned annually using compressed air.
- The cleaning of in internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment which the fixture operates: damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics.
- Clean with a soft cloth using normal glass cleaning products.
- Always dry the parts carefully.
- Clean the external optics at least every 30 days.
- Clean the internal optics at least every 90 days.

> **Important: we strongly recommend internal cleaning to be carried out by qualified personnel!**