

# **MAINFORCE 1240**

# 12 x 40W led moving head zoom



# **User Manual**

**KEEP THIS MANUAL FOR FUTURE NEEDS** 

### Unpacking

Thank you for choosing Mainforce 1240. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

Mainforce 1240 is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

4-IN-1 LEDs(RGBW) which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:

Moving Head Hanging Bracket Power Cable User Manual

### Specifications

Input voltage :100-240 V, 50/60 HzLamp:12pcs 40W 4in1 LEDs Power consumption: 600W Color temperature: 2800K-8500KBeam angle: 8 -60degree Dimmer: 0-100% dimming Strobe: 0~20HZ Control mode: DMX512, Auto and Master/Sound/ slave mode/ Display: color LCD display. Housing: Flame-retardant plastic DMX channel: 11CH/17/18CH/58CH Efficient cooling system, temperature monitoring, over temperature automatic adjustment protection, less lamp damageof risk. Intelligent speed control fan, real-time display speed Pan: 540° Tilt: 270° Pan/Tilt Resolution: 16 bit Data in/out:3&5-pin XLR in out Power in/out: powerCon in outN.W.:14.5kgs G.W.:16kgs IP rate: IP20

## **Key Features**

40W high power Leds installed. High efficient optical lens systerm. 8 - 60degree wide zoom range. Strong beam effect & Nice wash effect. Color: RGBW infinite mixture Dimmer: 0-100% linear dimming system Display: LCD color display with Chinese and English language. Protection: Auto temperature control system with big cooling fan. Quiet, smooth and fast PAN/TILT movement Low noise and efficient FAN cooling system Built-in pre-programs with macro effects. POWERCON power connector 45<sup>°</sup>C max ambient temperature IP20 protection rating 3&5-Pin XLR DMX input/output Function: With LED shutter, scan position memory and auto reposition. LED rainbow effect. Perfectly suitable for stage, theatre, TV studio, rental, DISCO and more

## Maintenance and Cleaning

The following points have to be considered during the inspection:

1. All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded. 2. There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing). 3. Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances. 4. The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



## CAUTION!

Disconnect from mains before starting maintenance operation.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

- 1) Clean the inside and outside lens each week to avoid the weakneness of the lights due to accumulation of dust.
- 2) Clean the fan each week.
- 3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents. There are no serviceable parts inside the device. Please refer to the

instructions under "Installation instructions". Should you need any spare parts, please order genuine parts from your local dealer.

## Safety Instructions

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual. If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore, it is essential that the device be

earthed. The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case,

replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

## **Operation Instructions**

-The moving head is for wash & Beam effect for on-site decoration purpose.

-Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.

-This light should be kept away from strong shaking during any transportation or movement.

-Don't pull up the light by only the head, or it might cause damages to the mechanical parts.

-Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronic shock to the people.

-Make sure the installation place is in good safety condition before installing the fixture.

-Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.

-Make sure the lens is in good condition. It's recommended to replace the units if there are any damages or severe scratch.

-Make sure the fixture is operated by qualified personnel who knows the fixture before using.

-Keep the original packages if any second shipment is needed.

-Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.

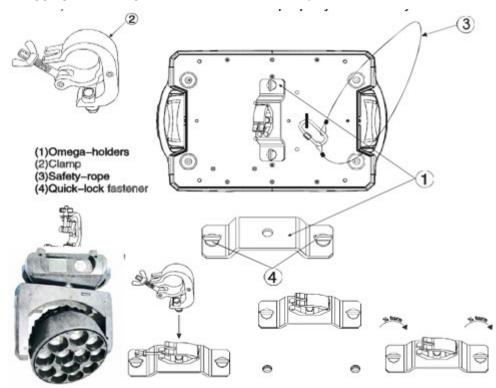
-It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

## Mounting and Installation

**Cautions:** For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable. **Clamp Mounting:** The mover provides a unique mounting bracket assembly that integrates the bottom of the base, the included "Omega Bracket," and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fi tted through the center hole of the "omega bracket". As an added safety measure, be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly.

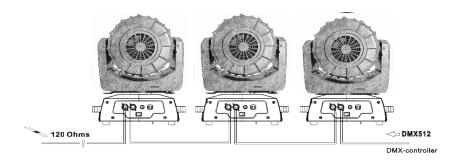


#### DMX-512 control connections

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 chain multiple

Moving heads be connected together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

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, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120  $\Omega$  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.



## **Display Menu**

DMX Address	001 - 512				
Fixture	DMX Mode	HSI(11CH)/ STD(17CH)/GUI(18CH)/EXT(58CH)			
	Run Mode	DMX/Host/Sound			
	Pan Inv	Close/Open			
	Tilt Inv	Close/Open			
	Pan	0 - 255			
	Pan Fine	0 - 255			
Manual	Tilt	0 - 255			
	Tilt Fine	0 - 255			
		0 - 255			
	Reset	0 - 255			
		Current Time			
	Time	Total Time			
		Power Count			
		Pan			
		Tilt			
	Sensor	Zoom			
Information		Тетр			
		Fan			
	Temp Info	Head Temp			
		Fan Speed			
		Panel			
	Software Version	Motor			
		Dimmer			
		Network			
Factory	Password	0 - 255			

	Pan	0 - 255	
	Tilt	0 - 255	
	Zoom	0 - 255	
	Red	0 - 255	
	Green	0 - 255	
	Blue	0 - 255	
	White	0 - 255	
Fixture Reset	Moto Reset	Cance/Run	
Fixiule Reset	Factory	Cance/Run	
	Language	EN/CH	
Display	DispFlip	Open/Close	
	DispMode	Show/60s	
	Protocol	ArtNet/sCan	
	KlingNet	Disable/Enable	
Network (Optional function)	Universe	000-255	
	IP Address	XXX.XXX.XXX	
	Subnet Mask	XXX.XXX.XXX	

## DMX channel

Stardard Mode 17CH	Extended mode 58CH	Shapes(gui) mode 18CH	HSI Mode 11CH	Function	Value
1	1	1	1	Pan	0 - 255
2	2	2	2	Pan Fine	0 - 255
3	3	3	3	Tilt	0 - 255
4	4	4	4	Tilt Fine	0 - 255
5	5	5	5	Pan & Tilt Speed	0 - 255
6	6	6	1	Dim	0 - 255
7	7	/	/	Dim Fine	0 - 255
					0 - 3
					4 - 103
8	8	7	6 Strobe	104 - 107	
				108 - 207	
					208 - 212

					213 - 225
					226 - 238
					239 - 251
					252 - 255
9	/	8	1	Red	0 - 255
10	/	9	1	Green	0 - 255
11	/	10	1	Blue	0 - 255
12	/	11	1	White	0 - 255
/	/	/	7	Hue	0 - 255
/	/	1	8	Saturation	0 - 255
/	/	1	9	Intensity	0 - 255
1	9	1	1	R1	0 - 255
/	10	1	1	G1	0 - 255
/	11	1	1	B1	0 - 255
/	12	1	1	W1	0 - 255
/	13	/	1	R2	0 - 255
/	14	/	1	G2	0 - 255
/	15	/	/	B2	0 - 255
/	16	/	1	W2	0 - 255
/	17	/	1	R3	0 - 255
/	18	/	1	G3	0 - 255
/	19	/	1	B3	0 - 255
/	20	/	1	W3	0 - 255
/	21	/	1	R4	0 - 255
/	22	/	1	G4	0 - 255
/	23	1	1	B4	0 - 255
/	24	/	1	W4	0 - 255
1	25	1	1	R5	0 - 255
1	26	1	1	G5	0 - 255
1	27	1	1	B5	0 - 255
1	28	1	1	W5	0 - 255
1	29	1	1	R6	0 - 255
1	30	1	1	G6	0 - 255

			1	1	
/	31	/	/	B6	0 - 255
/	32	/	/	W6	0 - 255
/	33	/	/	R7	0 - 255
/	34	/	/	G7	0 - 255
/	35	/	/	B7	0 - 255
/	36	/	/	W7	0 - 255
/	37	/	/	R8	0 - 255
/	38	/	/	G8	0 - 255
/	39	/	/	B8	0 - 255
/	40	/	/	W8	0 - 255
/	41	/	/	R9	0 - 255
1	42	/	/	G9	0 - 255
/	43	/	/	B9	0 - 255
/	44	/	/	W9	0 - 255
/	45	/	/	R10	0 - 255
/	46	/	/	G10	0 - 255
/	47	/	/	B10	0 - 255
/	48	/	/	W10	0 - 255
/	49	/	/	R11	0 - 255
/	50	1	/	G11	0 - 255
/	51	/	/	B11	0 - 255
/	52	/	/	W11	0 - 255
/	53	/	/	R12	0 - 255
/	54	/	/	G12	0 - 255
/	55	/	/	B12	0 - 255
/	56	/	/	W12	0 - 255
13	/	/	/	ССТ	0 - 255
14	/	12	1	Macro	0 - 255
					0
					1 - 6
					7 13
					14 - 20
					21 -27

					28 - 34
					35 - 41
					42 - 48
					49 - 55
					56 -62
					63 - 69
					70 - 76
					77 - 83
/	/	13	1	Shape	84 - 90
				•	91 - 97
					98 - 104
					105 - 111
					112 - 118
					119 - 125
					126 - 132
					133 - 139
					140- 146
					147 -153
					154 -160
					161 - 167
					168 -174
					175 - 181
					182- 188
					189 - 195
					196 -202
					203 - 209
					210 - 216
					217 -223
					224 - 230
					231 - 237
					238 - 244
					245 - 251
					252 - 255

1	/	14	/	Speed	0 - 255
					0
					1 - 100
15	/	/	/	Effect	101 - 200
					201 - 255
/	/	15	/	ShapeBack	0 - 255
/	/	16	/	BackDim	0 - 255
16	57	17	10	Zoom	0 - 255
					0 - 59
					60 - 99
17	58	18	11	Reset/Prog	100 - 200
					201 - 255