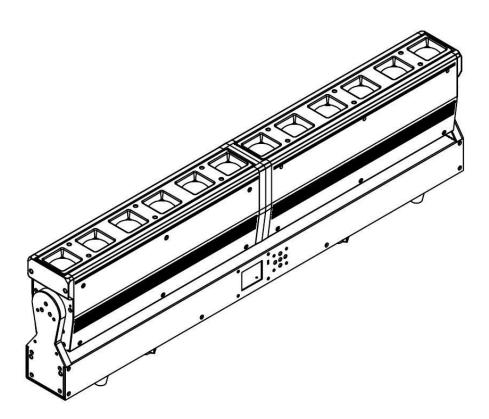


# **DOT LINE 4012** User Manual



# Guangzhou Mitek Light Co.,LTD

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# **TECHNICAL PARAMETERS**

## Light source

Voltage: AC110-240V 50/60Hz Max Power: 500 W Source: 12pcs 40W RGBW 4in1 led LED Lifetime: Average 50,000 hours Led: pixel control

## Optical

Beam degree: 1:7 zoom range from 5°-35

### Controls

Channel: 14/20/57 three channel mode Control mode: DMX-512,Auto-run, Sound activated Cooling system: fan forced cooling system Working environment: indoor

#### Effect

Strobe: 25 times per second Dimmer:0-100% linear dimmer

### Construction

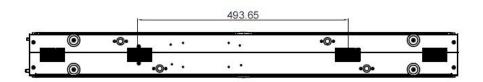
Tilt: 220 degree+ fine

#### Weight&Dimension

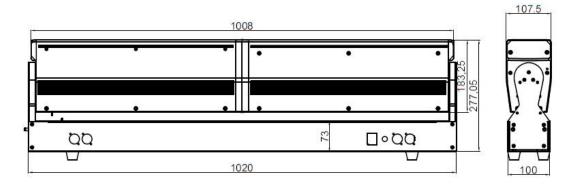
Net weight: 14.8 KG Fixture size: 102\*10.75\*27.7 cm Package size: 110\*19\*37cm Gross weight: 17 KG



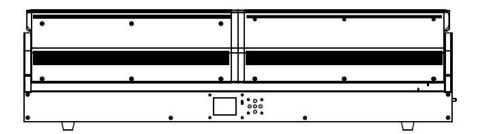
# SIZE DRAWING

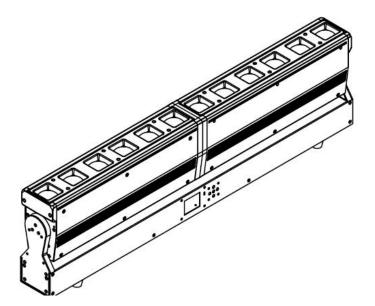














#### 1.Unpacking

Thank you for choosing our product. 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.

This fixture 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:

LED Pixel Zoom bar----One Power Cable----One 3-Pin Signa Cable----One Safety Cable----one Omega Bracket----Two User Manual----One

# 2. Safety Instructions



**CAUTION!** Be careful with your operations. With a dangerous voltage you can Suffer a dangerous electric shock when touching wires!

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.



#### Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

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.

Don't use the fixture in RGBW full on for more than 10 minutes incase of high temperature damage the fixtures.

# **3.Operation Instructions**

-The fixture is for beam effect 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 keep 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 are 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.

# 4. Mounting and Installation

Cautions: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were 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.

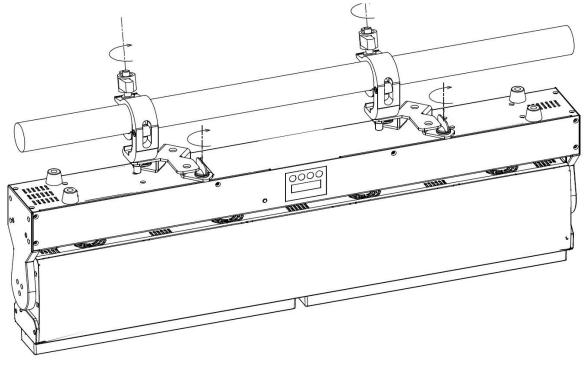


Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture from a periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Clamp Mounting: The LED Pixel Zoom bar provides a unique mounting bracket assembly that integrates the bottom of the base, 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 fitted 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.



Regardless of the rigging option you choose for your LED pixel Zoom par, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

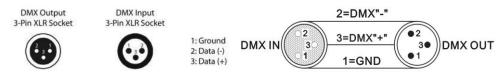
# **5.DMX-512 control connections**

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. (5-pin connect way is similar)

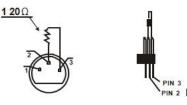


You can chain multiple Moving heads be connected together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

#### 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.



# 6.DMX Channels

#### 14CH

СН	Function	DMX Value	Details	
1	Tilt	0-255	Tilt	
2	Tilt Fine	0-255	Tilt fine	
3	Zoom All	0-255	Zoom	
4	Dimmer	0-255	0-100% dimmer	
5	Dimmer fine	0-255	Dimmer fine	
		0-31	No function	
		32-63	Open(LED on)	
		64-95	Strobe from fast to slow	
6	Strobe	96-127	Open(LED on)	
		128-159	Pulse-effect in sequences	
		160-191	Open(LED on)	
		192-223	Random strobe from slow to fast	
		224-255	Open(LED on)	
	Macro	0-8	No function	
		9-38	Macro 1 from fast to slow	
		39-68	Macro 2 from fast to slow	
7		69-98	Macro 3 from fast to slow	
		99-128	Macro 4 from fast to slow	
		129-158	Macro 5 from fast to slow	
		159-187	Macro 6 from fast to slow	



		188-255	Macro 7 from slow to fast
8	Foreground	0-255	Foreground Color macro effect
9	Background	0-255	Background Color macro effect
10	Red	0-255	Red 0-100% linear dimmer
11	Green	0-255	Green 0-100% linear dimmer
12	Blue	0-255	Blue 0-100% linear dimmer
13	White	0-255	White 0-100% linear dimmer
	Reset and function	0-60	No function
		61-80	LED off during Tilt movement
		81-100	LED on during Tilt movement
14		101-120	All motors reset
		121-140	Tilt motor reset
		141-160	Zoom motor reset
		161-180	Smooth dimmer mode
		181-200	Fast dimmer mode
		201-255	No function

# 20CH

СН	Function	DMX Value	Details	
1	Tilt	0-255	Tilt	
2	Tilt Fine	0-255	Tilt fine	
3	Tilt-Speed	0-255	Tilt speed from fast to slow	
4	Zoom All	0-255	Zoom	
5	Zoom1	0-255	Tilt 1 zoom	
6	Zoom2	0-255	Tilt 2 zoom	
7	Dimmer	0-255	0-100% dimmer	
8	Dimmer fine	0-255	Dimmer fine	
		0-4	No function	
9	Strobe	5 -200	Strobe from slow to fast	
		201-205	No function	
		206-255	Random strobe from slow to fast	
10	Red	0-255	Red dimmer	
11	Green	0-255	Green dimmer	
12	Blue	0-255	Blue dimmer	
13	White	0-255	White dimmer	
		0-10	No function	
		11-13	1th Static effect	
		14-67	Every 3 DMX value is one kind of static effect(2th to19th)	
		68-70	20th static effect	



		71-73	1th Dynamic effect
		74-187	Every 3 DMX value is one kind of dynamic effect(2th to 39th)
		188-190	40th Dynamic effect
		191-193	Colorful dynamic effect 1
		194-217	Every 3 DMX value is one kind of colorful dynamic effect(2th to 8th)
		218-220	Colorful dynamic effect 10
		221-255	Colorful dynamic effect 11
15	Effect Speed	0-255	Effect speed from slow to fast
16	Effect	0-127	Effect in positive direction
10	direction	128-255	Effect in reverse direction
17	Front Color	0-255	Front color macro effect
18	Back Color	0-255	Background color macro effect
19	Back Color Dimmer	0-255	Background color dimmer
	Reset	0-100	No function
20		101-120	Reset
		121-255	No function

# 57CH

СН	Function	DMX value	Details
1	Tilt	0-255	Tilt movement
2	Tilt Fine	0-255	Tilt fine adjustment
3	Tilt Speed	0-255	Tilt speed control
4	Zoom 1	0-255	Area 1 Zoom
5	Zoom 2	0-255	Area 2 Zoom
6	Dimmer	0-255	0-100% linear dimmer
7	Dimmer Fine	0-255	Dimmer fine
	Strobe	0-4	No function
8		5 -200	Strobe from slow to fast
		201-205	No function
		206-255	Random strobe from slow to fast
9	Red 1	0-255	LED 1 Red 0-100% linear dimmer
10	Green 1	0-255	LED 1 Green 0-100% linear dimmer
11	Blue 1	0-255	LED 1 Blue 0-100% linear dimmer
12	White 1	0-255	LED 1 White 0-100% linear dimmer
13	Red 2	0-255	LED 2 Red 0-100% linear dimmer
14	Green 2	0-255	LED 2 Green 0-100% linear dimmer
15	Blue 2	0-255	LED 2 Blue 0-100% linear dimmer
16	White 2	0-255	LED 2 White 0-100% linear dimmer



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49	Red 11	0-255	LED 11 Red 0-100% linear dimmer
50	Green 11	0-255	LED 11 Green 0-100% linear dimmer
51	Blue 11	0-255	LED 11 Blue 0-100% linear dimmer
52	White 11	0-255	LED 11 White 0-100% linear dimmer
53	Red 12	0-255	LED 12 Red 0-100% linear dimmer
54	Green 12	0-255	LED 12 Green 0-100% linear dimmer
55	Blue 12	0-255	LED 12 Blue 0-100% linear dimmer
56	White 12	0-255	LED 12 White 0-100% linear dimmer
	Function	0-100	No function
57	Fixture Reset	101-120	Reset
	Reserve	121-255	No function

# 7.Display instruction

Main menu	Submenu	Level 3	Description
DMX Address	001-512		DMX address setting
	510/14	14 CH	14 Channel mode
	DMX Mode	20 CH	20 Channel mode
Fixture		57 CH	57 Channel mode
		DMX	DMX mode
	Run Mode	Auto	Auto-Run mode
		Sound	Sound activated mode
	Tilt Inverse	Close/Open	Tilt reverse
Manual	Tilt	0-255	
	Tilt Fine	0-255	Manual control of each channel
		0-255	
		0-255	
	Reset	0-255	
Information	Time	Current Time	How long this time working
		Total Time	Total working time
		Power Count	Total power on time
	Sensor	Tilt	Tilt motor sensor status
		Zoom1	Zoom 1 motor sensor status
		Zoom2	Zoom 2 motor sensor status
		Temp	Temperature sensor status



	Temperature	Head Temp	Fixture current temperature
	Software	Panel	Display software version
	Version	Dimmer	LED driver board software version
	Password	0-255	Password
	Tilt	0-255	Tilt default position
Factory	Zoom1	0-255	Zoom 1 motor default position
Factory	Zoom2	0-255	Zoom 2 motor default position
	Red	0-255	Red color default data
	Green	0-255	Green color default data
	Blue	0-255	Blue color default data
	White	0-255	White color default data
Fixture Reset	Reset	Run/OFF	Reset all motor
T IXIUTE Reset	Factory	Run/OFF	Reset to factory mode
Disalar	Language	EN/CH	Language setting
Display	Display Flip	Normal/Reverse	Display reverse 180 degree
	Display Mode	Show/60s	Screen saver time

### 8.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

#### REMARK

The product has perfect performance and intergrity packing. All users should be strictly comply with the warning and operating instructions as stated. Or we aren 't in charge of any result by misusing. Any damage resulting by misuse is not within the Company 's warranty. Any fault or problem caused by neglecting the manual is also not in the charge of dealers. Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.

