

LiGHT SKY
FLY DRAGON LIGHTING EQUIPMENT CO.,LTD

AURORA AQUA User Manual

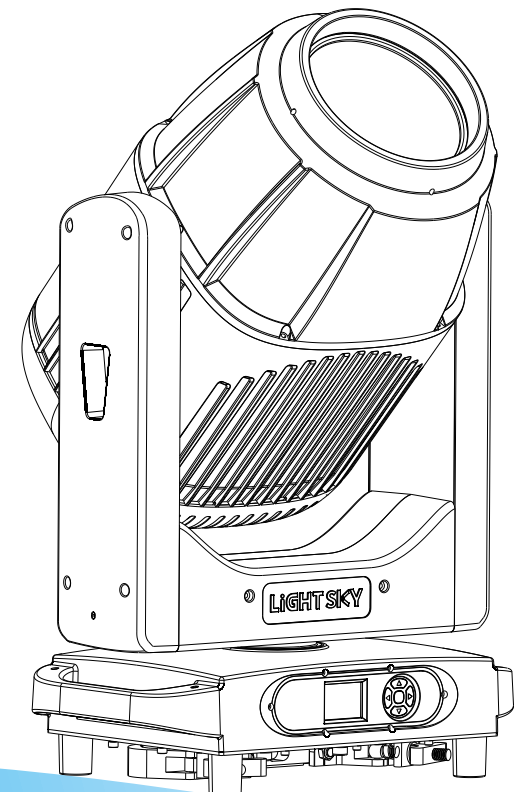
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LiGHT SKY



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Please read the instruction carefully bef!

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Congratulations on choosing our company product! We thank you for your custom.

- ◆ Please keep in mind that this product, like other products of the company, adheres to the concept of people-oriented design and manufacture, and takes product quality as the foundation.
- ◆ We put the interests of customers first, and do our best to meet customer requirements.
- ◆ Please read this instruction manual carefully and keep it for future reference. In the case of fully understanding the product information, strictly abide by theUse the instruction manual to ensure that the product is installed, used and serviced correctly and safely.
- ◆ Our company is not responsible for any damage to lamps or other performance due to personal failure to follow the instructions during installation, use and maintenance.responsibility.
- ◆ Our company reserves the right to modify the manual at any time and without prior notice.

1.Safety Instructions



Please read the instruction carefully which includes important information about the installation, usage and maintenance.

WARNING

Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this manual.

The following symbols are used to identify important safety information on the product and in this manual:

DANGER! Safety hazard. Risk of severe injury or death.	DANGER! Refer to manual before installing, powering or servicing.	DANGER! Hazardous voltage.Risk of severe or lethal electric shock.	Warning! Fire hazard.	Warning! Burn hazard. Hot surface. not touch. Do not touch	Warning! Risk of eye injury.Safety glasses must be worn.	Warning! Risk of hand injury. Safety gloves must be worn.	Avoid direct eye contact	
Applies only to luminaires directly mounted on surfaces of non-combustible materials	Do not discard Trash can	Mark of ground	Replace all shatter shields	Take a short distance from the object to be photographed (meters)	Rated maximum ambient temperature	Do not point the lens towards the sun or strong light	Operation not allowed during runtime	

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.

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- Do install and operate by qualified operator.
- The light source in this luminaire should be replaced by the manufacturer or its service agent or a similarly qualified person, always cut off the power supply before replacing he light source.
- Do not allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.

- The unit must be installed in a location with adequate ventilation, at least 20cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature Ta: -20°C. Maximum ambient temperature Ta: 45°C. Do not operate this product at a lower or higher temperature.
- Do not connect the device to any dimmer pack.
- When the lamp is running, do not place combustible objects next to it. The shortest distance between the device and inflammable and explosive objects or materials is 0.5m.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 80°C. do not touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
- Do not operate in a dirty or dusty environment. do clean the fixture regularly.
- Do not touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 3 meters.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- Do not open the housing as there are no user serviceable parts inside.

— Do not attempt to operate this unit if it becomes damaged. do not attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.

— Disconnect this product from its power source before servicing.

— Do use the original packaging if the device is to be transported.

— Avoid direct eye exposure to the light source while the product is on.

— Do not operate this product if you see damage on the housing, shields, or cables.

Have the damaged parts replaced by an authorized technician at once.

Installation:

The fixture should be fixed on the clamp. Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always install a safety cable that can hold at least 12 times the weight of the fixture when installing.do install and operate by qualified operator. It must be installed in a place where there is out of the reach of people.

2. Technical Specifications

OPTICS

- Light source: USHIO NSL U8
- Lamp angle: Beam mode 1.8°-24°, Spot mode 3°-45°, Spot mode 2.6°-43°
- Optical lens: ϕ 160mm
- Color temperature: 7000 K
- Luminous flux: 16000 lm
- Color rendering index: $R_{a} \geq 80$ (Cut into the indicator piece $R_{a} \geq 88$)
- Illuminance: 620000 @10 meters
- Light source lifespan: 4000 hours

COLOR

- Linear CMY color mixing system
- Linear CTO
- 14 color chips + white light, can achieve two-way color rainbow, two-color step gradient (linear movement), two-way rotation of color wheel, random color mode

PATTERN

- 1 fixed pattern plate: 13 patterns + white circles, which can achieve flowing water and shaking effects
- 1 rotating pattern plate: 9 kinds of glass patterns + white circles, pluggable and replaceable, can achieve rotation, running water and shaking effects, the outer diameter of the pattern piece is 14.0mm, the inner diameter of the pattern piece is 9.5mm
- Dynamic effects wheel

EFFECT

- 5 prisms: 2 beam prisms, 3 pattern prisms, rotatable in both directions, switchable independently, and stackable.
- 2 atomizer sheets: adjustable independent soft light effect
- Focus: High-precision electric focus
- Strobe: 0.5-12 times/second adjustable pulse strobe and random strobe
- Dimming: 0-100% linear adjustment

CONTROL AND PROGRAMMING

- Control channel: 33CH、35CH
- Protocol: Standard DMX512 protocol, RDM protocol, ArtNet protocol
- Data connection: three-core or five-core signal input/output、Network input
- Display: LCD screen

SOFTWARE

- Upgrade software through DMX interface

X/Y AXIS MOVEMENT ANGLE

- X-axis: 540°8bit/16bit precision scanning
- Y-axis: 270°8bit/16bit precision scanning
- Reset function with automatic error correction
- Fixed lock: X-axis/Y-axis lock

POWER AND POWER

- Input voltage: AC 100-240V 50/60Hz
- Maximum power: 700W
- Power factor: 0.98
- Maximum current of lamps: 3.18A/220V, 7A/110V

SIZE AND WEIGHT

- Product size: 401×272×691mm
- Net weight:31.1 kg
- Carton packaging (default): 515mm×360mm×825mm
- Gross weight: 36.6 kg

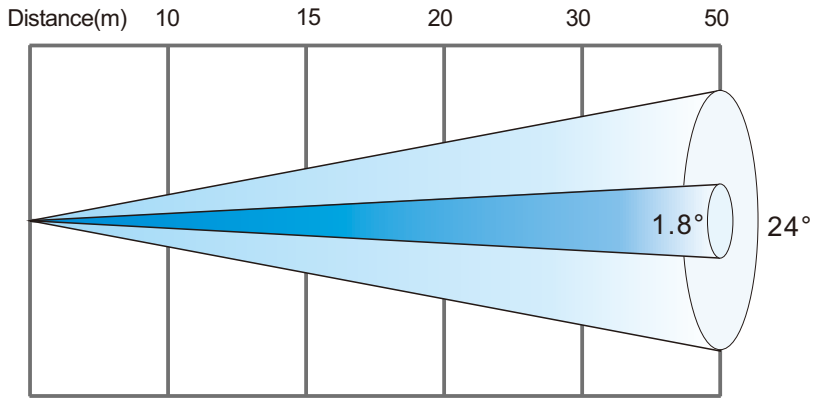
OTHER

- Protection level: IP66
- Working environment: -20°C~ 45°C
- Maximum temperature of lamp body surface: 80°C

APPROVALS

- The product implementation standard: GB/T 7000.1-2023 、 GB/T 7000.217-2023
- Approved certifications: CE、RoHs
- The product complies with the following EU directives:
- Low Voltage Directive 2014/35/EU . EMC Directive 2014/30/EU

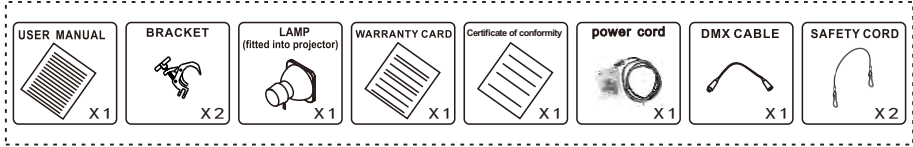
illumination diagram



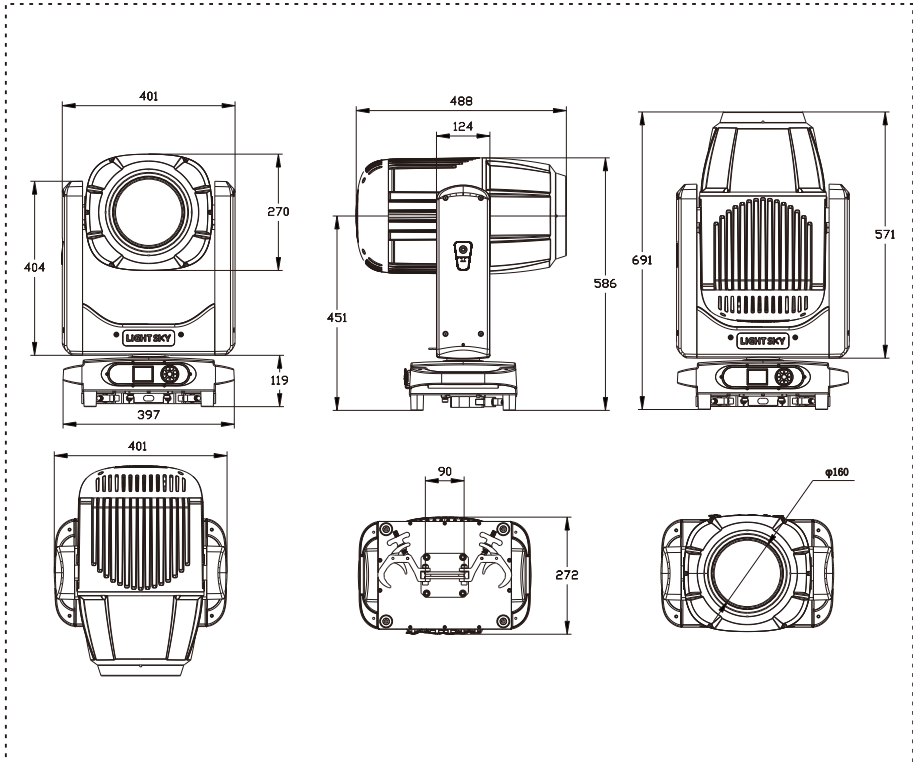
1.3° Lux	620000	275556	155000	68889	24800
Diameter (m)	0.3	0.45	0.6	0.9	1.5
23° Lux	3900	2000	1125	500	180
Diameter (m)	4.04	6.06	8.08	12.12	20.20

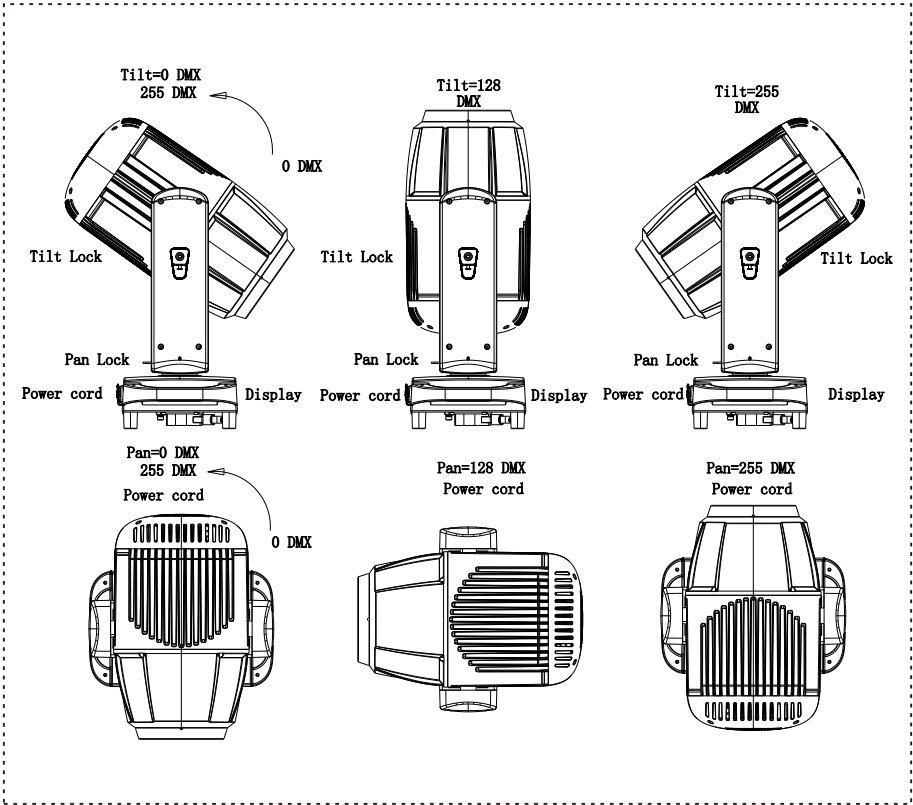
2.1.Attachment And Size

Attachment contents-Fig.1



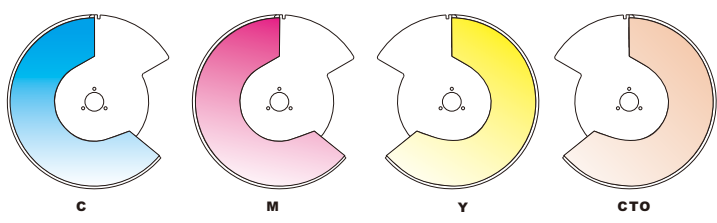
Size-Fig.2 (Unit:mm)





3. Color/Gobo/Prism

Color/Effect

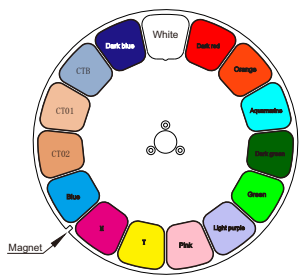


C

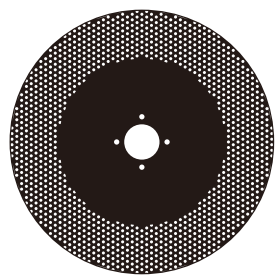
M

Y

CTO

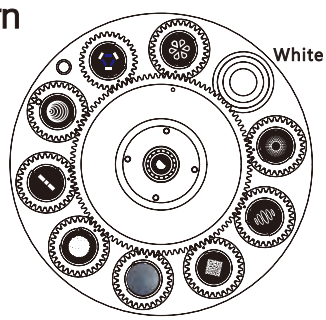


Color wheel

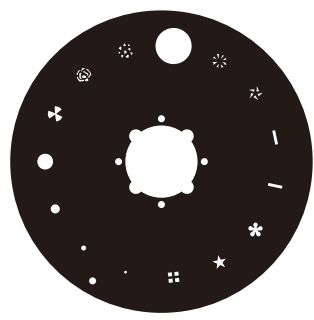


Effect disk

Pattern

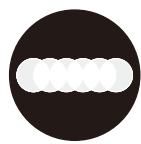


Rotating gobo wheel



Static gobo wheel

Prism



6 Prism



8 Prism



4 Prism

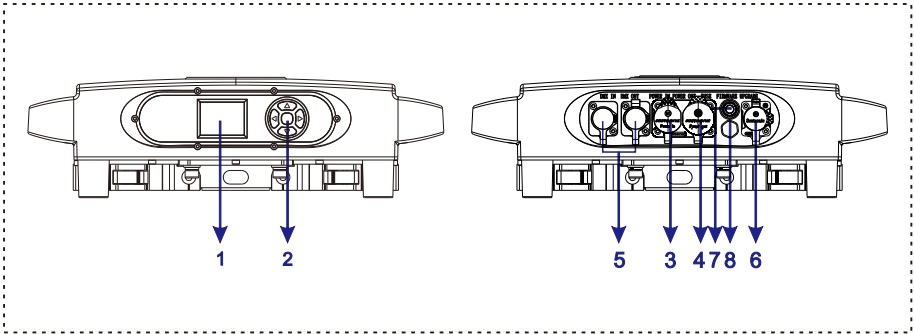


8 Prism



24 Prism

4.Control Panel



1. Display: To show the various menus and the selected function.

2. Button:

●	OK confirmation key
▲	UP
▼	DOWN
◀	To the left
▶	To the right

3.Socket version power input: connect the power supply.

4.Power output: Connect the lamp power output adapter.

5.DMX input/output: Used for DMX512 connection, use 3/5 core XLR signal cable to connect console and lamps,And input/output DMX signal.

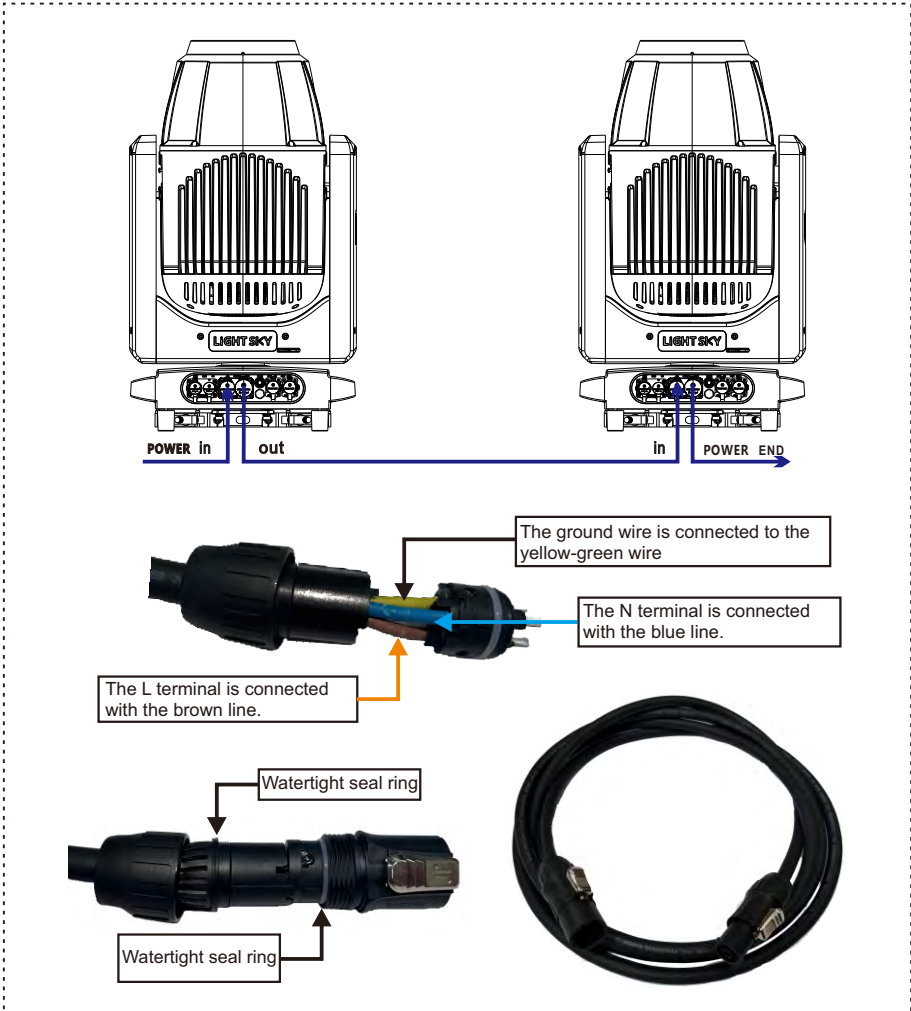
6/7.Art-net input/output: The information of the lamp can be transmitted to the main controller through the network cable, and the lamp can be controlled through RJ45(USB optional).

8.Fuse holder: Used for the bottom box battery pack power supply display board when not powered on.(Note: In the case of air transportation, the lighting fixtures will require disassembly of fuses for shipment, and they must be installed by themselves upon receipt.)

9.Breathable valve.

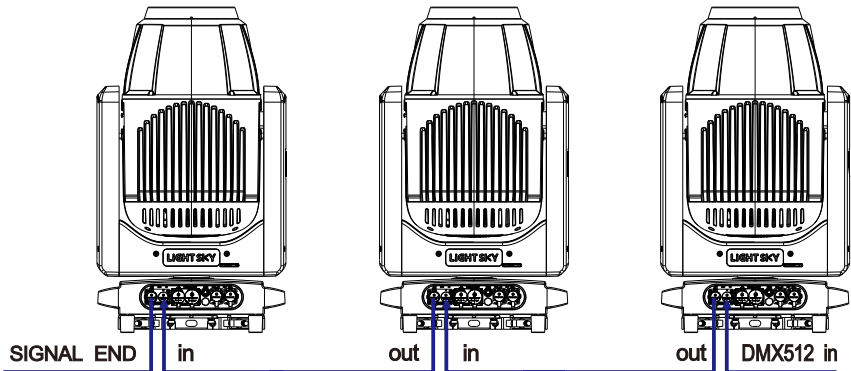
5.Connection and control

5.1.Power supply connection

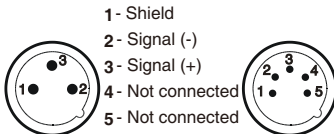


- The bus connecting the power supply must be installed by a qualified professional technician.
- After completing all the above operations and ensuring that it is installed, you can power on the lamp to operate.

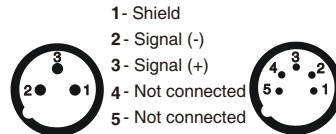
5.2.DMX 512 Connection



DMX-input



DMX - output



1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 1200hm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
 2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a "Y" cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
 3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
 4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
 5. The end of the DMX 512 system should be terminated to reduce signal errors.
 6. 3 pin XLR connectors are more popular than 5 pins XLR.
- 3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

6.How To Set The Unit

6.1.Main Function

The lamp is powered on. When the system initialization and lamp reset are completed, and the standby interface is displayed on the display screen, press OK to enter the preset menu interface.

The main functions are as follows:

Main menu	I menu	II menu	III menu	
DMX Address	Address	1-512		
	Channel	33CH 35CH		
	State	Black Hold		
Information	Time	Total Power Time		
		Power Time		
		Total Light Time		
		Light time		
	Fan Info.	Temperature	PVE TEM	
			Head Temp	
			CMVFanVol	
			CMVFan1Sp	
			CMVFan2Sp	
			BigFanVol	
			LampFanVol	
			OutFanVol	
			BigFan1Sp	
			BigFan2Sp	
			OutFan1Sp	
			FocusFan1Vol	
			FocusFan2Vol	
FocusFan1Sp				
FocusFan2Sp				
FocusFan3Sp				
BaseFanVol				
BaseFan1Sp				
BaseFan2Sp				
Fixture state	MCU(XY)...			
RDM UID	3888: xxxxxxxx			
DMX Live	DMX			
Software	Disp. Ver...			
Personal	Auto Lamp On	Off/On		
	PanTilt Setting	Pan Invert	OFF / ON	
		Tilt Invert	OFF / ON	
		P/T Rectify	OFF / ON	
	Display Setting	Language	EN /ZH	
Disp. Backlight		OFF / ON		
	Disp. Direction	Forward / Reverse		
Manual Control	Channel control			
	Reset	PanTilt Color Module Gobo Module Zoom Module All		
Service	Calibration	Pan ...		
	Factory Reset	NO / YES		
	Reset Timers	Total Power Time		
		Total Light Time		
		Power Time		
	Developer	Light Time		
1. Logo Se				
2. Up Logo				
3. Language				
	4. Fixture Type			
	Firmware update			
Lamp Control	Off/On			
Test	Test PanTilt			
	Test Head Module			
	Test All			
Rotate Display				

6.2.Address Setting

Enter MENU, select the DMA setting function, select the address code setting, press the OK button to confirm, and the current DMA address will be displayed in the On screen display. Use the up/down buttons to select addresses 001-512, press the OK button to save the

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
33 CH	1	34	67	100
35 CH	1	36	71	106

6.3.DMX 512 Configuration

Please control the fixture by referring to the configurations below

35 Channel	DMX	Function	Note
1	0-255	Pan positioning	
2	0-255	Fine Pan positioning	
3	0-255	Tilt positioning	
4	0-255	Fine Tilt positioning	
5	0-255	PTSpeed	
6	0-129	Function Unused Range	
	130-139	Lamp ON	
	140-149	PAN/TITL Reset	
	150-159	Color Reset	
	160-169	Gobo Reset	
	170-179	Unused Range	
	180-189	Zoom Reset	
	190-199	Unused Range	
	200-209	Complete Reset	
	210-229	Unused Range	
230-239	Lamp OFF		
240-255	Unused Range		
7	0-255	Dimmer	
8	0-255	DimmerFine	
9	0-31	Strobe Closed	
	32-63	Open	
	64-95	Slow-Fast Strobe	
	96-127	Open	
	128-143	Plus-Fast Close	
	144-159	Plus-Fast Open	
	160-191	Open	
	192-223	Random Slow-Fast Strobe	
	224-255	Open	
10	0-255	Cyan	
11	0-255	Magenta	
12	0-255	Yellow	
13	0-255	CTO	
14	0	ColorWheel White	
	1-127	Continual positioning	
	128-131	CTB 8000	
	130-134	Red	
	135-138	Orange	
	139-143	Aquamarine	
	144-147	Green	
	148-152	Light Green	
	153-157	Lavender	
	158-161	Pink	
	162-166	Yellow	
	167-171	Magenta	
	172-176	Cyan	
	177-180	CTO 260/CTO2	
	181-185	CTO 190	
	186-189	Blue	
	190-215	CCW, Fast→Slow Rotation	

35 Channel	DMX	Function	Note
	216-217	Stop	
	218-243	CW, Slow→Fast Rotation	
	244-249	random colour selection	
	250-255	Auto random colour selection from fast to slow	
15	0-255	Colour fine positioning	
		FixgoboWheel	
	0-3	Open	
	4-9	FixGobo 1(Open)	
	10-15	FixGobo 2	
	16-21	FixGobo 3	
	22-27	FixGobo 4	
	28-33	FixGobo 5	
	34-39	FixGobo 6	
	40-45	FixGobo 7	
	46-51	FixGobo 8	
	52-57	FixGobo 9	
	58-63	FixGobo 10	
	64-69	FixGobo 11	
	70-75	FixGobo 12	
	76-81	FixGobo 13	
	82-87	FixGobo 14	
	88-95	FixGobo1shake,slow to fast	
	96-103	FixGobo2shake,slow to fast	
	104-111	FixGobo3shake,slow to fast	
	112-119	FixGobo4shake,slow to fast	
	120-127	FixGobo5shake,slow to fast	
	128-135	FixGobo6shake,slow to fast	
	136-143	FixGobo7shake,slow to fast	
	144-151	FixGobo8shake,slow to fast	
	152-159	FixGobo9shake,slow to fast	
	160-167	FixGobo10shake,slow to fast	
	168-175	FixGobo11shake,slow to fast	
	176-183	FixGobo12shake,slow to fast	
	184-191	FixGobo13shake,slow to fast	
	192-199	FixGobo14shake,slow to fast	
	200-201	Open/hole	
	202-222	FixGoboWheel CW fast to slow	
	223-228	Stop	
	229-249	FixGoboWheel CCW slow to fast	
	250-255	Auto random gobo selection from fast to slow	
		RotgoboWheel	
	0	Open	
	1-10	WhiteOpen	
	11-16	RotGobo1	
	17-22	RotGobo 2	
	23-28	RotGobo 3	
	29-34	RotGobo 4	
	35-40	RotGobo 5	
	41-46	RotGobo 6	
	47-52	RotGobo 7	
	53-58	RotGobo 8	
	59-64	RotGobo 9	
	65-71	RotGobo1shake,slow to fast	
	72-78	RotGobo2shake,slow to fast	
	79-85	RotGobo3shake,slow to fast	
16			
17			

35 Channel	DMX	Function	Note
	86-92 93-99 100-106 107-113 114-120 121-127 128-190 191-192 193-255	RotGobo4shake,slow to fast RotGobo5shake,slow to fast RotGobo6shake,slow to fast RotGobo7shake,slow to fast RotGobo8shake,slow to fast RotGobo9shake,slow to fast RotGoboWheel CW fast to slow Stop RotGoboWheel CCW slow to fast	
18	0-127 128-187 188-195 196-255	GoboRot GoboRot indexing 0°- 360° RotGobo CW fast to slow Stop RotGobo CCW slow to fast	
19	0-19 20-127 128-255	Animation Open Proportional indexing Animation	
20	0 1-127 128 129-255	AnimationRot AnimationRot indexing 0° AnimationRot CW fast to slow Stop AnimationRot CCW slow to fast	
21	0-3 4-15 16-27 28-39 40-51 52-63 64-75 76-255	GoboPrism Prism out Index - set indexing on channel GoboPrismRot PrismPos1 PrismPos2 PrismPos3 Rotation - set rotation on channel GoboPrismRot PrismPos1 PrismPos2 PrismPos3 PrismPos3	
22	0-255 0 1-127 128 129-255	GoboPrismRot Prism indexing Prism indexing Prism rotation Prism indexing Forwards prism rotation from fast to slow Stop Backwards prism rotation from slow to fast	
23	0-3 4-15 16-27 28-255	BeamPrism1 Prism out Index - set indexing on channel BeamPrismRot1 Prism In Rotation - set rotation on channel BeamPrismRot1 Prism In Prism In	
	0-255	BeamPrismRot1 Prism indexing Prism indexing	

35 Channel	DMX	Function	Note
24	0	Prism rotation	
	1-127	Prism indexing	
	128	Forwards prism rotation from fast to slow	
	129-255	Stop Backwards prism rotation from slow to fast	
25	0-3	BeamPrism2 Prism out	
	4-15	Index - set indexing on channel BeamPrismRot2 Prism In	
	16-27	Rotation - set rotation on channel BeamPrismRot2	
	28-255	Prism In Prism In	
26	0-255	BeamPrismRot2 Prism indexing	
	0	Prism indexing	
	1-127	Prism rotation	
	128	Prism indexing	
	129-255	Forwards prism rotation from fast to slow Stop Backwards prism rotation from slow to fast	
27	0-255	Frost	
28	0-255	Frost2	
29	0-255	Zoom	
30	0-255	ZoomFine	
31	0-255	Focus	
32	0-255	FocusFine	
33	0-15	AutoFocus Autofocus Off	
	16-55	10 metres	
	56-95	15 metres	
	96-135	20 metres	
	136-175	30 metres	
	176-215	40 metres	
	216-255	50 metres	
34	0-255	AutoFocusFine	
35	0-255	Hotspot control	

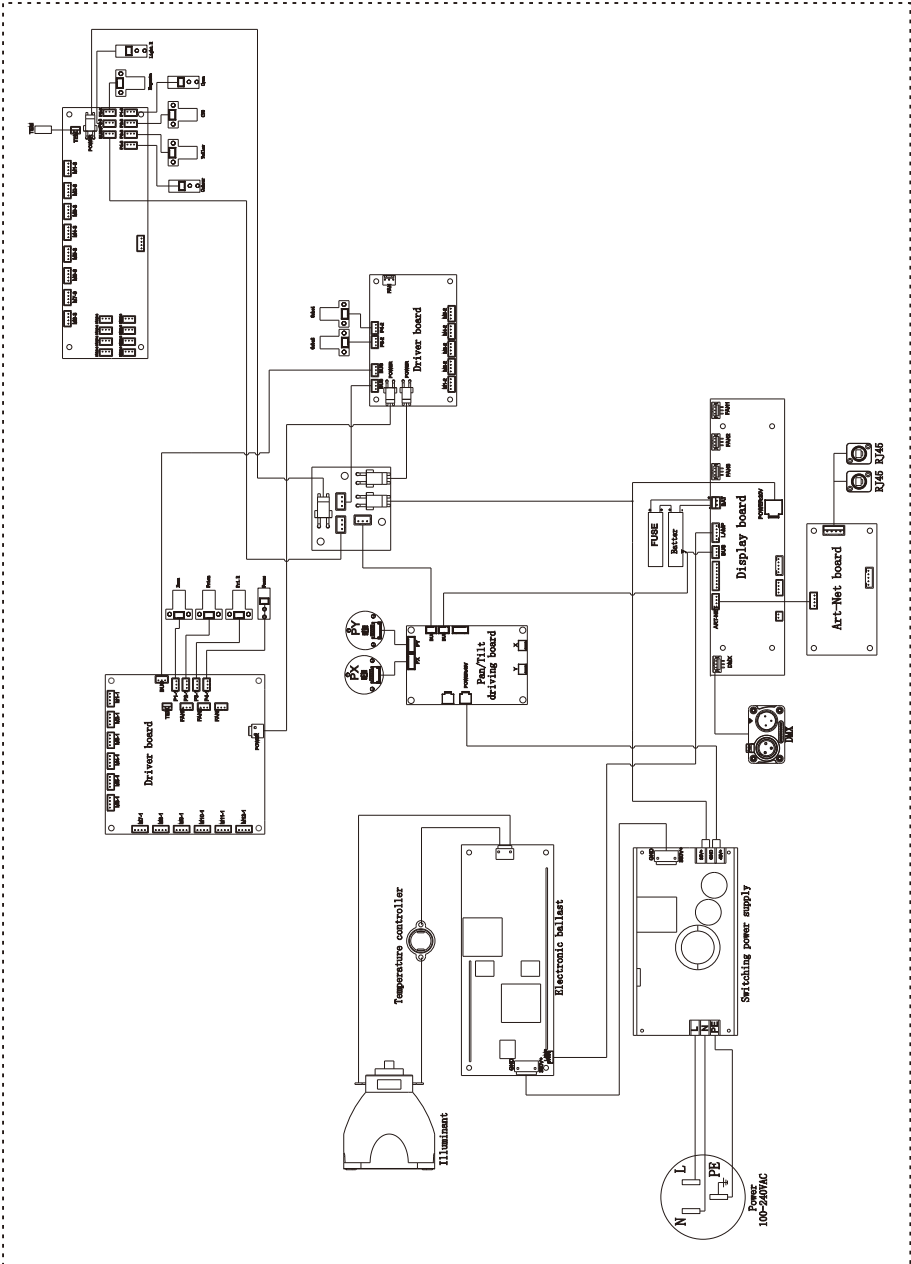
33 Channel	DMX	Function	Note
1	0-255	Pan positioning	
2	0-255	Fine Pan positioning	
3	0-255	Tilt positioning	
4	0-255	Fine Tilt positioning	
5	0-255	PTSpeed	
6	0-129	Unused Range	
	130-139	Lamp ON	
	140-149	PAN/TITL Reset	
	150-159	Color Reset	
	160-169	Gobo Reset	
	170-179	Unused Range	
	180-189	Zoom Reset	
	190-199	Unused Range	
	200-209	Complete Reset	
	210-229	Unused Range	
230-239	Lamp OFF		
240-255	Unused Range		
7	0-255	Cyan	
8	0-255	Magenta	
9	0-255	Yellow	
10	0	ColorWheel White	
	1-127	Continual positioning	
	128-131	CTB 8000	
	130-134	Red	
	135-138	Orange	
	139-143	Aquamarine	
	144-147	Green	
	148-152	Light Green	
	153-157	Lavender	
	158-161	Pink	
	162-166	Yellow	
	167-171	Magenta	
	172-176	Cyan	
	177-180	CTO 260/CTO2	
	181-185	CTO 190	
	186-189	Blue	
	190-215	CCW, Fast→Slow Rotation	
216-217	Stop		
218-243	CW, Slow→Fast Rotation		
244-249	random colour selection		
250-255	Auto random colour selection from fast to slow		
11	0-255	Colour fine positioning	
12	0-19	Animation Open	
	20-127	Proportional indexing	
	128-255	Animation	
13	0	AnimationRot AnimationRot indexing 0°	
	1-127	AnimationRot CW fast to slow	
	128	Stop	

33 Channel	DMX	Function	Note
	129-255	AnimationRot CCW slow to fast	
14		FixgoboWheel	
	0-3	Open	
	4-9	FixGobo 1(Open)	
	10-15	FixGobo 2	
	16-21	FixGobo 3	
	22-27	FixGobo 4	
	28-33	FixGobo 5	
	34-39	FixGobo 6	
	40-45	FixGobo 7	
	46-51	FixGobo 8	
	52-57	FixGobo 9	
	58-63	FixGobo 10	
	64-69	FixGobo 11	
	70-75	FixGobo 12	
	76-81	FixGobo 13	
	82-87	FixGobo 14	
	88-95	FixGobo1shake,slow to fast	
	96-103	FixGobo2shake,slow to fast	
	104-111	FixGobo3shake,slow to fast	
	112-119	FixGobo4shake,slow to fast	
	120-127	FixGobo5shake,slow to fast	
	128-135	FixGobo6shake,slow to fast	
	136-143	FixGobo7shake,slow to fast	
	144-151	FixGobo8shake,slow to fast	
	152-159	FixGobo9shake,slow to fast	
	160-167	FixGobo10shake,slow to fast	
	168-175	FixGobo11shake,slow to fast	
176-183	FixGobo12shake,slow to fast		
184-191	FixGobo13shake,slow to fast		
192-199	FixGobo14shake,slow to fast		
200-201	Open/hole		
202-222	FixGoboWheel CW fast to slow		
223-228	Stop		
229-249	FixGoboWheel CCW slow to fast		
250-255	Auto random gobo selection from fast to slow		
15		RotgoboWheel	
	0	Open	
	1-4	WhiteOpen	
	5-16	RotGobo1	
	17-28	RotGobo 2	
	29-40	RotGobo 3	
	41-52	RotGobo 4	
	53-64	RotGobo 5	
	65-76	RotGobo 6	
	77-88	RotGobo 7	
	89-100	RotGobo 8	
	101-112	RotGobo 9	
	113-124	RotGobo1shake,slow to fast	
	125-136	RotGobo2shake,slow to fast	
137-148	RotGobo3shake,slow to fast		
149-160	RotGobo4shake,slow to fast		

33 Channel	DMX	Function	Note
	161-172 173-184 185-196 197-208 209-220 221-249 250-255	RotGobo5shake,slow to fast RotGobo6shake,slow to fast RotGobo7shake,slow to fast RotGobo8shake,slow to fast RotGobo9shake,slow to fast WhiteOpen Auto random gobo selection from fast to slow	
16	0-127 128-187 188-195 196-255	GoboRot GoboRot indexing 0° - 360° RotGobo CW fast to slow Stop RotGobo CCW slow to fast	
17	0-3 4-15 16-27 28-39 40-51 52-63 64-75 76-255	GoboPrism Prism out Index - set indexing on channel GoboPrismRot PrismPos1 PrismPos2 PrismPos3 Rotation - set rotation on channel GoboPrismRot PrismPos1 PrismPos2 PrismPos3 PrismPos3	
18	0-255 0 1-127 128 129-255	GoboPrismRot Prism indexing Prism indexing Prism rotation Prism indexing Forwards prism rotation from fast to slow Stop Backwards prism rotation from slow to fast	
19	0-3 4-15 16-27 28-255	BeamPrism1 Prism out Index - set indexing on channel BeamPrismRot1 Prism In Rotation - set rotation on channel BeamPrismRot1 Prism In Prism In	
20	0-255 0 1-127 128 129-255	BeamPrismRot1 Prism indexing Prism indexing Prism rotation Prism indexing Forwards prism rotation from fast to slow Stop Backwards prism rotation from slow to fast	
21	0-3 4-15 16-27 28-255	BeamPrism2 Prism out Index - set indexing on channel BeamPrismRot2 Prism In Rotation - set rotation on channel BeamPrismRot2 Prism In Prism In	

33 Channel	DMX	Function	Note
22	0-255	BeamPrismRot2 Prism indexing	
	0	Prism indexing	
	1-127	Prism rotation	
	128	Prism indexing	
	129-255	Forwards prism rotation from fast to slow Stop Backwards prism rotation from slow to fast	
23	0	Frost Frost Out	
	1-50	Frost1 indexing	
	51-83	Frost1 In	
	84-86	Frost Out	
	87-136	Frost2 indexing	
	137-169	Frost2 In	
	170-172	Frost Out	
173-255	Frost In		
24	0-255	Zoom	
25	0-255	ZoomFine	
26	0-255	Focus	
27	0-255	FocusFine	
28	0-255	AutoFocusFine	
29	0-15	AutoFocus Autofocus Off	
	16-55	10 metres	
	56-95	15 metres	
	96-135	20 metres	
	136-175	30 metres	
	176-215	40 metres	
	216-255	50 metres	
30	0-31	Strobe Closed	
	32-63	Open	
	64-95	Slow-Fast Strobe	
	96-127	Open	
	128-143	Plus-Fast Close	
	144-159	Plus-Fast Open	
	160-191	Open	
	192-223	Random Slow-Fast Strobe	
	224-255	Open	
31	0-255	Dimmer	
32	0-255	DimmerFine	
33	0-255	Hotspot control	

7. Electrical Connection Diagram



8. Troubleshooting

The following are common faults of lamps and corresponding solutions. Faults that cannot be repaired by yourself should be handled by professionally qualified personnel. Disconnect the power supply to the lamp during maintenance!

● The light source is not bright

- Check that a suitable light source is installed for the luminaire.
- Check whether the power supply connection of the lamp or the control switch is in poor contact.
- Check whether the light source has reached the end of its service life or is damaged, and replace it with a high-quality light source of the same specification.
- Measure whether the power supply is insufficient.
- Check whether the light source has not cooled down completely due to abnormal operation. Let the lamp cool down for more than 15 minutes to allow the light source to cool down. After returning to the normal start-up range, turn the power on again and it can be used normally.
- Check whether the DMX512 controller sends a command to turn on the light source.
- Check whether the light source and trigger circuit are disconnected or defective.
- Check whether the wiring terminals on the internal trigger are in poor contact and tighten the plug.
- Check the "Fan Speed and Voltage" in the "Basic Information" menu to see if the speed of FAN1/FAN2/FAN3 is above 500RPN. If it is below 500RPM, the light source will not light up. Replace the fan with the same specification.
- Check whether the over-temperature protection temperature switch inside the lamp is damaged. Go to the menu "Basic Information" and select "Equipment Temperature" to check - whether the temperature measuring plate shows that the temperature is too high or there is no temperature display.

● The beam appears dim and uneven

- The light source may have reached the end of its service life and does not emit enough light. Replace it with a light source of the same specification.
- Check whether there is dust accumulated in the optical part and clean it.
- Measure whether the power supply is insufficient.
- Finely adjust the screw device used to change the height of the lamp until the ideal light is achieved. Enter the menu "Service Options" and select "Calibration" to enter color and pattern adjustment, which can be adjusted to the center.

● The projected image is blurry

- Check whether the DMX512 controller channel value corresponding to the electronic focus system is suitable for the current projection distance.
- Check whether the mechanical part of the focusing system is stuck, remove the dust and add antifreeze and temperature-resistant lubricating oil.

● The light source of the lamp works intermittently

- Check whether the fan is running normally or is blocked by dust and paper debris.
- Check whether the inlet and outlet cooling air vents are blocked by dust.
- Check whether the lamp has reached the end of its service life.

- Check whether the power supply is insufficient, and whether the power switch and wiring are in poor contact or aging.

- Check whether the over-temperature protection temperature switch inside the lamp is damaged.

- **Although it emits light, the lamp does not accept instructions from the controller**

- Check whether the digital start address value and function options of the lamp are correct.

- Check whether the connection of the communication control line is correct. The communication line is too long or has been interrupted.

- Check whether the control equipment fails and whether the signal amplifier connected in series fails.

- Check whether the communication line is too long or if other devices interfere with each other.

- Optimize wiring, shorten the length of control signal lines, and route high-voltage and low-voltage lines separately

- Add signal amplifier isolator.

- The signal line is made of high-quality shielded twisted pair (impedance characteristic is 75Ω), and the signal terminal resistor is connected at the end of the lamp.

- Check that the circuit board communication IC or CPU is burned out because the bulb performs an abnormal operation when it is not completely cooled, causing the instantaneous ultra-high voltage leakage generated by the trigger, and replace the PCB board.

- **The lamp cannot be started**

- Check whether the power supply parameters match the lamps.

- Check whether the fuse at the light fixture's power input is blown.

- Check that the lamp has poor contact or falls off due to extrusion deformation, vibration of internal parts, moisture, etc. during long-distance transportation.

- Check whether the internal wires and connectors of the lamp are desoldered or loose.

- Check whether the electrical components of the lamp (such as power switch, transformer, ballast, capacitor, varistor, filter, power supply PCB board, motor control PCB board, etc.) are loose, short-circuited, burned out, etc.

- **Some functions of the lamp cannot accept controller instructions**

- Check whether the control device sends correct action instructions for these functions.

- Check whether the mechanical parts corresponding to these functions are loose or deformed.

- Check whether the motor sockets corresponding to these functions are loose or the corresponding driver chips are burned out.

- Check whether the motor wires corresponding to these functions are broken at the corners.

- Check whether the motors corresponding to these functions are damaged.

- **During operation, the X or Y direction of the lamp does not move normally**

- Click the previous step to check one by one.

- Check whether the corresponding drive belts in the X and Y directions of the lamp are detached or broken.

- Check whether the data feedback receiver (photoelectric sensor) corresponding to the X and Y directions in the lamp is damaged.

- Restart the computer and reset it once.

9. Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- * A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- * Always dry the parts carefully.
- * Clean the external optical lens at least every 20 days and the internal optical lens every 30 days.

CAUTION ! ! !

Disconnect from mains before starting maintenance operation.

10. Duty exonerative and copyright protectio

- * Light source belongs to consumption products, not within the scope of warranty.
- * The manufacturer shall not bear any responsibility for any damage caused by failure to operate in accordance with this instruction.
- * All the information in this manual shall be interpreted by the manufacturer.
- * All the information in this manual shall not be copied without permission.
- * The data contained in this statement are subject to change in the future without prior notice.