BSW 550 PLUS



USER MANUAL

KEEP THIS USER MANUAL FOR FUTURE NEEDS

DIRECYORY

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1. SAFETY

1.1 Declaration

Thank you for choosing our products! This product at the factory, the performance is intact, the package is complete. For your safe and effective use of this product, please read this instruction carefully and completely before you use this product. This instruction manual contains important information for installation and use. Please install and operate according to the instruction manual. Meanwhile, please keep this instruction manual properly for use at any time. Our company is not responsible for any damage to luminaires or other performance caused by individuals who do not follow the instructions during installation, use or maintenance.

1.2 Maintenance

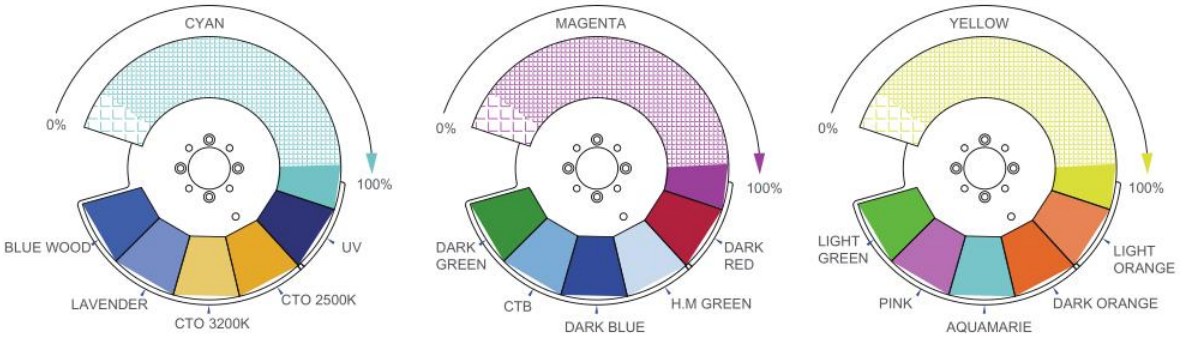
- Please power off before moving to the maintenance.
- The light and lanterns should keep dry, avoid in wet environment.
- Intermittent use can effectively prolong the life of the lamps and lanterns
- In order to obtain good ventilation and lighting effects, to pay attention to often clean fan and fan nets and lens。
- Don't use alcohol and other organic solvents to wipe test lamps shell, lest cause damage.

1.3 Product Precautions

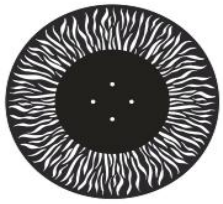
- The Light for professional use only
- Don't place this product where easy to loose or easy to vibrate。
- If the lamp is abnormal, stop using the lamp in time。
- Don't place this product in damp or leaking places, and do not work in the environment where the temperature exceeds 60 degrees.
- After power off, it takes 20 minutes for the lamp to be fully cooled before it can be powered on again.
- To ensure the normal use of this product, please read the instructions carefully.
- **SPECIFICATIONS**
- Voltage: AC 100V~240V/50~60Hz;
- Power: 750W
- Fuse: T10A,250V
- Lamp:OSRAM SIRIUS HRI 482W XS
- Lamp power：482W
- Color temperature：6500K±400K
- BEAM Angle： 2.1°～29° (BEAM MODEL)
- 2.2°～41.5° (SPOT MODEL)
- 2.5°～31.6° (WASH MODEL)
- Lamp life：1500H
- Pan：540°（16bit）
- Tilt：270°（16bit）
- Dimmer：0-100%
- Strobe：0-12Hz

- Color system：CMY +15 color
- Frost：10°Frost，soft and natural light spot
- Gobo：1 Metal gobo：1 white light +18 gobo
- 1 Glass gobo：white +8 Glass gobo（Can change by yourself）
- 1 Animation effect gobo
- Prism：BI-directional,indexable 4-prism and 8-prism
- DMX channel：31CH
- Size：395*293*800mm（L*W*H）
- Weight：28KG
- Light color：Black
- Overheating protection;;
- Protocol：DMX512、RDM;
- IP20

Color



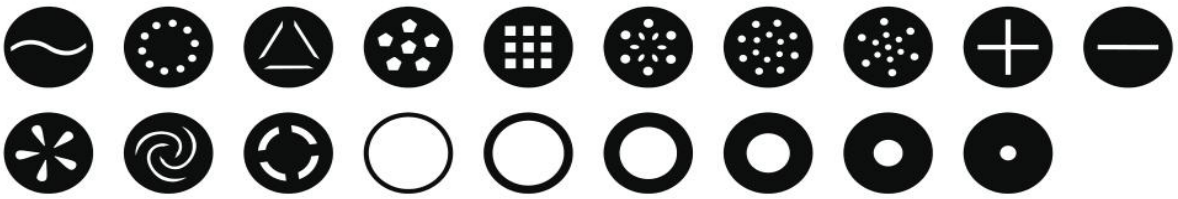
Animation



Rotating Gobos



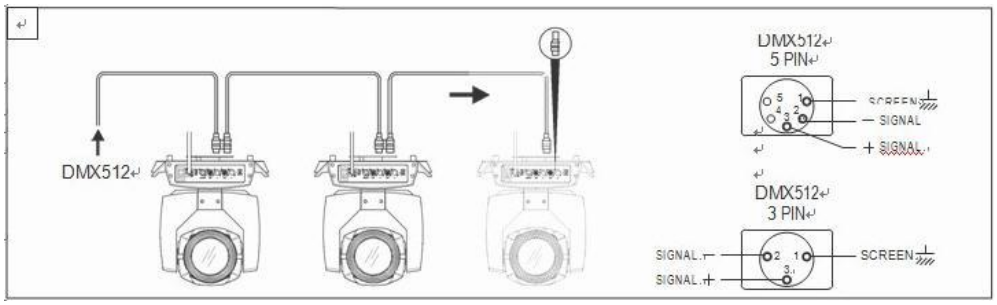
Static Gobos



1.4 Signal link

Light feature standard DMX input and output 3-core or 5-core XLR sockets. Please use DMX 512 shielded twisted-pair signal cable; Signal line is generally connected in 150 meters, long distance signal transmission, DMX512 signal amplifier must be added. Connect a shielded twisted-pair signal wire from the DMX outlet of the controller to the DMX input of the first device, and from the DMX outlet of the first device to the DMX input of the second device, and so on, until all lights have been connected. A terminal plug is then installed on the last 3-core jack connecting the lamp output on each successive circuit. (Weld a 4/1W, 120Ω resistance between pins 2 and 3 of the 3-core pin cannon plug).

Important: Wires should not touch each other or the metal case.



PICTURE 1 DMX SIGNAL LINK

➢ DMX Address calculation method

The initial address code of the current lamp is equal to (the initial address code of the previous lamp)+(the number of channels of the lamp) description:

1: The initial address code of the first light is A001.

2: The basic channel number of the controller shall be greater than or equal to the total number of channels used by the luminaire。

3: Note: When using any controller, each lamp should have its own initial address code. If the initial address code of the first lamp is set A001, the channel pass number of the lamp is 16CH; Then the initial address code of the second lamp is set to A017; The starting address code of the third lamp is set to A033; And so on,(This setting also needs to be determined according to the different console)

1.5 Lighting installation

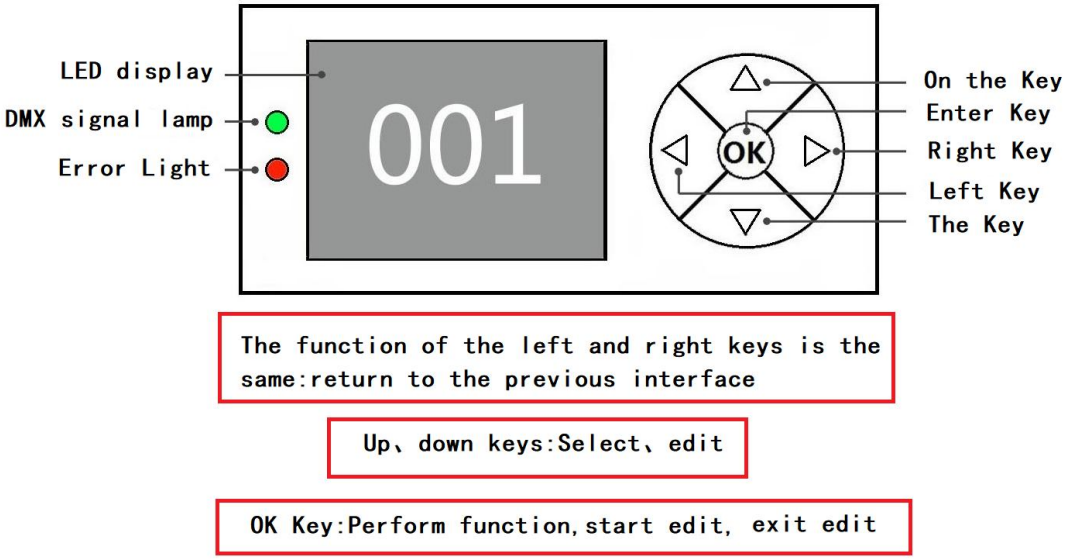
Luminaires can be placed horizontally, slanted and hung upside down. Pay attention to the installation method when hanging slanting or upside down.

Before the positioning of the lamp, to ensure the stability of the installation site, in the reverse hanging installation, must ensure that the lamp does not fall down on the support frame, need to use the safety rope through the support frame and the lamp handle for auxiliary hanging, to ensure safety. Prevent luminaire from falling and sliding.

During the installation and debugging of the lamp, pedestrians are forbidden to pass under it. Periodically check whether the safety rope is worn and whether the hook screws are loose.

2. DISPLAY

2.1 Key description



Picutre 2　Description of panel keys

“Left”：Return；

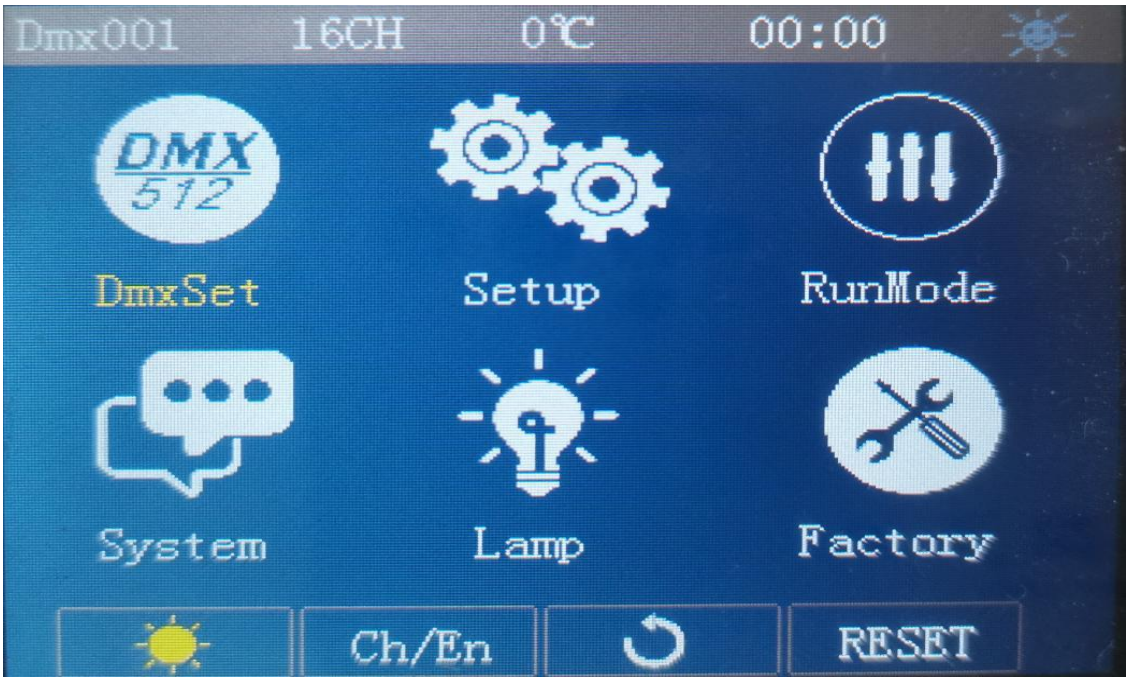
“Right”：It only works on the home screen. Press the "right" button on the home screen to flip the screen. The "Right" button on other screens does not work；

“Up”、**“Down”**：　Select and edit；

“OK”：　Perform the function, start editing, exit editing

(Note: After resetting bits, press "OK" to enter the menu interface, press "Left" to enter the address code adjustment interface;)

2.2　Menu description



Home	Description
Menu	Main menu Settings
Address	DMX address set

Lamp	Lamp on/off
Calibration	Motor calibration
.081 ↑	Screen flip
EN/中	Switch between Chinese and English

Language change

Option	Description
English/中	Press "OK" twice to switch between Chinese and English

Screen rotation

Option	Description
180° Rotation	Press the "OK" button twice to rotate the screen 180 degrees

DMX Address

Option		Description
DMX Address	001~512	►Press the "up" and "down" keys to change the address code (only add or subtract one value); ►Press the right key to automatically switch to the address code of the next device (For example, when the channel mode is 31CH and address code is 031, press the Right key to change address code to 062).; ►To switch to the desired address code, press the OK key again to save the address code and exit the address code editing screen.

Main menu	I Menu	II Menu	Description
DMX Setting	DMX Channel	31CH	(See channel table for details)
	DMX Signal	Keep	Keep in state
		Clear	Status clearing
	RDM	ON	Open the RDM function
		OFF	Close the RDM function
	DMX Check		Viewing channel values
Light test	self-walking	Off	(Slave state: Receive DMX signals from console or host)
		On	(Host state: self-drive and send DMX signal to slave machine)
	Manual control	1. Color 000-255	Manual control interface is used to control the current lamp and automatically enter the host state (does not receive DMX signal, sends DMX signal to the bus to slave
		2. Strobe 000-255	
		……	

		18.XY speed 000-255	machine). Press "OK" to enter the editing state.
	Light reset		Press "OK" twice to reset
	XY reset		
	MT reset		
System information	Temperature information	Display temperature	Display motherboard temperature
		MT temperature	
	Fan information	Blower speed	Show the blower speed
	System version		The software version number is displayed
	System time	Total service time	Cumulative service time
		Time of use	The usage time since this startup
		Total Light up time	Cumulative brightening time
		The Light up time of this time	The brightening time of this time
	Sensor monitoring	X-axis hall	0 when magnetic is detected, 1 otherwise
		Y-axis hall	
		Color hall	
		Gobo hall	
		Effect hall	
		GIF Hall	
		Focus hall	
		Zoom hall	
		Prism 1 hall	
		Prism 2 hall	
		Xcoding status	Two digits, each corresponding to a photoelectric switch in the code disk
		Xcoding status	Two digits, each corresponding to a photoelectric switch in the code disk
		The X-axis codes the step value	The step value should be increased in the forward direction and decreased in the back direction. Every time you go to a certain point, the value is normal
		The Y-axis encodes the step value	The step value should be increased in the forward direction and decreased in the back direction. Every time you go to a certain point, the value
	System error		If the red ERR indicator lights up, it indicates that the lamp is running

			incorrectly. You can enter the sub-interface to check the details. After viewing, you can press the "Clear" key to clear the error record
Setting	Language	English	Switch between Chinese and English
		Chinese	
	Screen flip	OFF	
		ON	Reverse the interface
	screensaver	ON	Turn off the backlight after 30 seconds
		OFF	The backlight is always bright
	X reversal	OFF	Open switches start and end points and defaults to off
		ON	
	Y reversal	OFF	Open switches start and end points and defaults to off
		ON	
	XY exchange	OFF	
		ON	The channel that switches the XY axis
	XY encoder	ON	Use an encoder (optocoupler) to determine the out-of-step and automatically correct the position
		OFF	No encoder (photocoupler) is used to correct the position
	Color wheel changes linearly	ON	The color wheel changes linearly
		OFF	Color wheel nonlinear change, half color change
	Restore default		After you press "OK", the confirmation dialog box is displayed. Press "OK" again to restore the default Settings

3. Channel function

3.1 Channel list

Channel	31
1	Cyan
2	Magenta
3	Yellow
4	Color 1
5	Color 2
6	Color 3
7	Strobe
8	Dimmer
9	Dimmer Fine
10	Static Gobo Change
11	Animation Disk Insertion
12	Animation Disk Rotation
13	Rotating Gobo Select
14	Gobo Rotation
15	Gobo Rotation Fine
16	4 Prism Insertion
17	4 Prism Rotation
18	8 Prism Insertion
19	8 Prism Rotation
20	Frost
21	Zoom
22	Focus
23	Focus Fine
24	Beam Model
25	Pan
26	Pan Fine
27	Tilt
28	Tilt Fine
29	X/Y Speed
30	Reset
31	Lamp Control

DMX CHANNEL LIST：

31CH MODEL：

Number	Function	DXM Value	Function parameter
1	Cyan	000-255	Linear Cyan movement
2	Magenta	000-255	Linear Magenta movement
3	Yellow	000-255	Linear Yellow movement
4	Color 1	000-023	Open
		024-046	Open + Color1
		047-069	Color 1
		070-092	Color 1 + Color 2
		093-115	Color 2
		116-139	Color 2 + Color 3
		140-162	Color 3
		163-185	Color 3 + Color 4
		186-208	Color 4
		209-231	Color 4 + Color 5
		232-255	Color 5
5	Color 2	000-023	Open
		024-046	Open + Color1
		047-069	Color 1
		070-092	Color 1 + Color 2
		093-115	Color 2
		116-139	Color 2 + Color 3
		140-162	Color 3
		163-185	Color 3 + Color 4
		186-208	Color 4
		209-231	Color 4 + Color 5
		232-255	Color 5
6	Color 3	000-023	Open
		024-046	Open + Color1
		047-069	Color 1
		070-092	Color 1 + Color 2
		093-115	Color 2
		116-139	Color 2 + Color 3
		140-162	Color 3
		163-185	Color 3 + Color 4
		186-208	Color 4
		209-231	Color 4 + Color 5
		232-255	Color 5
7	Strobe	000-003	Light off
		004-103	Strobe slow to fast
		104-107	Light on
		108-207	Open and close by arrive slow to fast
		208-212	Light on
		213-251	Random Strobe

		252-255	Light on
8	Dimmer	000-255	Dimmer 0-100%
9	Dimmer Fine	000-255	Dimmer Fine
10	Static Gobo Change	000-003	Open
		004-007	Gobo1
		008-010	Gobo2
		011-014	Gobo3
		015-017	Gobo4
		018-021	Gobo5
		022-024	Gobo6
		025-028	Gobo7
		029-031	Gobo8
		032-035	Gobo9
		035-039	Gobo10
		040-042	Gobo11
		043-046	Gobo12
		047-049	Gobo13
		050-053	Gobo14
		054-056	Gobo15
		057-060	Gobo16
		061-063	Gobo17
		054-067	Gobo18
		068-071	Gobo19
		072-113	Fast to Slow(Revers Spin)
		114-117	Stop(Stop Rotation)
		118-159	Slow to Fast(Forward Spin)
		160-165	Gobo1 Shaking Slow to Fast
		166-170	Gobo2 Shaking Slow to Fast
		171-175	Gobo3 Shaking Slow to Fast
		176-180	Gobo4 Shaking Slow to Fast
		181-185	Gobo5 Shaking Slow to Fast
		186-190	Gobo6 Shaking Slow to Fast
		191-195	Gobo7 Shaking Slow to Fast
		196-200	Gobo8 Shaking Slow to Fast
		201-205	Gobo9 Shaking Slow to Fast
		206-210	Gobo10 Shaking Slow to Fast
		211-215	Gobo11 Shaking Slow to Fast
		216-220	Gobo12 Shaking Slow to Fast
		221-225	Gobo13 Shaking Slow to Fast
		226-230	Gobo14 Shaking Slow to Fast
		231-235	Gobo15 Shaking Slow to Fast
		236-240	Gobo16 Shaking Slow to Fast
		241-245	Gobo17 Shaking Slow to Fast
		246-250	Gobo18 Shaking Slow to Fast

		251-255	Gobo19 Shaking Slow to Fast
11	Animation Disk Insertion	000-127 000-128	Empty position Animation Disk In
12	Animation Disk Rotation	000-004 005-127 128-132 133-255	Stop (Stop Rotation) Slow to Fast(Forward Spin) Stop (Stop Rotation) Slow to Fast(Revers Spin)
13	Rotating Gobo Select	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-063 064-071 072-113 114-117 118-159 160-171 172-183 184-195 196-207 208-219 220-231 232-243 244-255	White Gobo1 Gobo2 Gobo3 Gobo4 Gobo5 Gobo6 Gobo7 Gobo8 Fast to Slow(Revers Spin) Stop(Stop Rotation) Slow to Fast(Forward Spin) Gobo1 Shaking Slow to Fast Gobo2 Shaking Slow to Fast Gobo3 Shaking Slow to Fast Gobo4 Shaking Slow to Fast Gobo5 Shaking Slow to Fast Gobo6 Shaking Slow to Fast Gobo7 Shaking Slow to Fast Gobo8 Shaking Slow to Fast
14	Gobo Rotation	000-127 128-190 191-192 193-255	Gobo indexing CW：0°to 540°range Fast to Slow(Revers Spin) Stop Slow to Fast(Forward Spin)
15	Gobo Rotation Fine	000-255	Fine Gobo Indexing CW
16	4 Prism Insertion	000-127 128-255	Prism out 4 Prism into the light beam
17	4 Prism Rotation	000-127 128-190 191-192 193-255	0°to 540°Position Fast to Slow(Revers Spin) Stop Slow to Fast(Forward Spin)
18	8 Prism Insertion	000-127 128-255	Prism out 8 Prism into the light beam
19	8 Prism Rotation	000-127 128-190 191-192 193-255	0°to 540°Position Fast to Slow(Revers Spin) Stop Slow to Fast(Forward Spin)

20	Frost	000-255	Frost moves linearly into the light beam
21	Zoom	000-255	Zoom linearly moves from narrow to wide beam
22	Focus	000-255	Focus moves linearly from far to near position
23	Focus Fine	000-255	Fine Focus position
24	Beam Model	000-127 128-255	Spot model Beam model
25	Pan	000-255	Pan movement/positioning CCW
26	Pan Fine	000-255	Fine Pan positioning CCW
27	Tilt	000-255	Tilt movement/positioning CCW
28	Tilt Fine	000-255	Fine Tilt positioning
29	XY Speed	000-255	Pan/ Tilt fast to slow
30	Reset	000-025 026-076 077-127 128-255	Free Effect Reset Pan/ Tilt Reset Complete Reset
31	Lamp control	000-025 026-100 101-255	Free Lamp off Lmap on

4. Common faults

According to some common faults, the corresponding solutions are put forward. Any unsolvable problems should be dealt with by professionals. Disconnect the light fixture before maintaining it.

1. Light bulb is not on

- Check that the voltage that matches the light fixture is installed;
- Check whether the lamp supply power connection or control switch is in bad contact;
- Check if the power supply is insufficient;
- Check that the DMX512 controller is sending instructions.

2. The lamp will not be controlled by the console after normal reset

- Check luminaire digital start address value and function options are correct;
- Check whether the connection of communication control line is correct, the communication line is too long or has been interrupted;
- Check whether the control equipment is invalid, check whether the serial access signal amplifier is invalid;
- Check whether the communication line is too long or other equipment interferes with each other;
- Optimize wiring, shorten the length of control signal lines, high voltage and low

voltage lines separate wiring;

- Add signal amplifiers;
- Signal line using high-quality shielded twisted pair wire;
- Connect the signal terminal resistor (120 ohm) at the end of the lamp.

3. Luminaire does not start

- Check that the power supply parameters are consistent with the lamp;
- Check the poor contact caused by extrusion deformation, vibration and moisture of internal parts in the long distance transportation process

  Or fall off.
- Please check whether the internal wire integration connector of the lamp has fallen off or loosened.
- Check whether the electronic components of the lamp (such as electronic transformer, PCB board, motor control board, etc.) are loose, short circuit and burned out.

4. When working, the action of the X or Y axis of the lamp is not normal

- Follow the previous step to check one by one;
- Check whether the transmission belt corresponding to the X and Y axis directions in the lamp falls off and breaks;
- Check whether the data feedback receiver (optocoupler) corresponding to the X and Y directions in the lamp is damaged;
- Restart the machine and reset it once.

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.

Thank you again for your patronage!
We will be offering sincere service as always,
Wish you have a good lighting journey!