LIGHT SKY[®] USER MANUAL PROFESSIONAL SHOW LIGHTING LED TX1810 BEAM

100~240V~ 50/60Hz



www.lightsky.com.cn/www.lightsky-china.com

FLY DRAGON LIGHTING EQUIPMENT CO., LTD

CONTENTS

1.	General information	2
2.	Safety instructions	3
3.	Trait and skill specifications	7
4.	Operation panel	8
5.	Dimensional drawings	9
6.	Mounting and Installation	9
7.	Power supply and Signal connection	11
8.	Display menu	13
9.]	DMX traits	21
10.	Circuit connecting diagram	26
11.	Trouble dispose	27
12.	Cleaning and Maintenance	28
13.	Duty exonerative and Copyright protection	28

1. GENERAL INFORMATION

INTRODUCTION: Congratulations, you have just purchased one of the most innovative and reliable LED fixtures on the market today. Our company has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

Notice: As part of our ongoing commitment to continuous products update, company will keep the right to improve this products, the information in this menu may be changed in the future, the company reserve the right to change the data without any advises.

UNPACKING: Thank you for purchasing our company products. Every product has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for damage and be sure all accessories necessary to operate the fixture have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Inside the box you should find: the fixture, a DMX XLR cable, a power cable, and this user manual.

Please do not discard the shipping carton in the trash. Please recycle whenever possible.

2. SAFETY INSTRUCTIONS

Notice



To guarantee proper and consistent operation, it is important to follow the guidelines in this manual. Our company will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. ■Mounting surfaces

It is permissible to mount the fitting on normally flammable surfaces.





Please do not install the fixture onto combustible surface. Ensure a minimum clearance of 0.2m around the cooling fans and ventilation.

■ Maximum ambient temperature

The fixture is intended for indoor application. t. 38°C



Do not operate the fixture if the ambient temperature (Ta) exceeds 38℃.

Temperature of the external surface

The maximum temperature that can be reached on the external

surface of the fitting, in a thermally steady state, is 60° C. www.lightsky.com.cn www.lightsky-china.com

■Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing(Class I appliance according to standard EN60598-1).

It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

Connection to mains supply

The double insulation between the LV power supply and the control conductor on the fixture.

Connection to the electricity mains must be carried out by a qualified electrical installer.

Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.

This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.

Don't use the power cable when the insulation is damaged.

It must be the manufacturer or distributor or the professional www.lightsky.com.cn 4 www.lightsky.china.com person to change the damaged power cable in order to avoid any dangerous.



Protection against explosion

The protection screen, lens or ultraviolet screen on the lamp can be damaged to the degree of failure if visible damage, such as a crack or deep mark, should be replaced.



Protection optical radiation

Never look directly into the light source. You risk injury to your retina, which may induce blindness.

■ Maintenance

Never open this fixture while in use.



Please disconnect the power supply when begin to maintenance take down the light.

Please disconnect the power supply when begin to maintenance take down the light. Please let the parts cool down 10 minute at least then begin to install.

The light source in this fixture shall be replaced by the manufacturer or its service agent or similar qualification..

Do not revise the fixture or install any parts not from our www.lightsky.com.cn 5 www.lightsky-china.com company. Please be aware that damages caused by modifications to the device are not subject to warranty.

■ The products referred to in this manual conform to the European Centre Community Directives to which they are subject::

Low Voltage 2014/35/EU

Electromagnetic Compatibility 2014/30/EU

3. PERFORMANCE TRAIT AND SKILL SPECIFICATIONS

- © Voltage : 100~240V~ 50/60Hz.
- ◎ Power : 264W.
- $\hfill \ensuremath{\mathbb{O}}$ LED chip : 10W , RGBW 4 in 1 LED chip.
- \bigcirc LED QTY : 18PCS.
- © LED life : 50000H.
- \bigcirc Lens degree : 1.5°.
- \bigcirc Beam angle : min.6°, max.60°.
- O Color: RGBW macro color system.
- \bigcirc Strobe : 1-30 times/ second electronic strobe and random strobe.
- O Dimmer : 65536 class dimmer.
- \bigcirc Pan/Tilt : Pan : 540° times /2.0 seconds Tilt: 180°/1.2 seconds.
- © Control Mode: DMX512, RDM, Stand-alone mode ,Voice Control mode , Mater-Slave mode , Wireless DMX512.
- © Channel: Simple(11CH), Standard(17CH), Extended1(21CH), Extended2(25CH)
- O Display Menu:

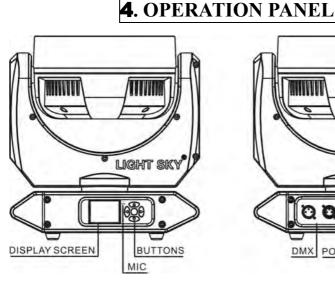
1. 2.4 inches TFT touch screen, Chinese and English two version language.

- 2, Display board can record device's using time , show device's temperature, channel data and software version .
- 3, Edit the procedure

Other feature :

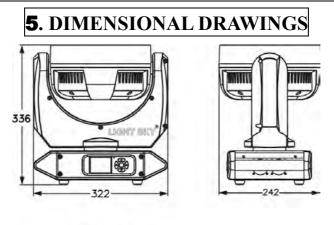
1.Extend IP address function , each IP address maximum can set 64 ID

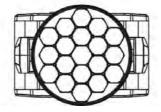
- 2.Support DMX signal priority identification, when lose the signal it would be turn into Black , default scene , Automatic function etc according to your set.
- 3.Remote control function: control the procedure, speed etc function by the remote controller when the product under the condition without signal.
- 4.Software upgrade : upgrade software by XRL cable.
- ◎ Outlooking: adopt ABS anti-fire plastic.
- \bigcirc Carton size : 412×287×525MM.
- © N.W.: 8.5KG G.W.: 11.1KG
- © Light size:322×242×336MM
- \bigcirc



LIGHT SKY

www.lightsky.com.cn www.lightsky-china.com





6. MOUNTING AND INSTALLATION

Cautions:

For added protection mount the fixtures in areas outside walking paths, seating areas, and away from areas were unauthorized personnel might reach the fixture. 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. To avoid injury, never stand directly below the device when mounting, removing, or servicing the fixture.

Mounting points:

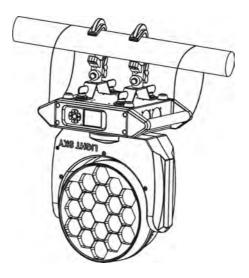
Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation 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.



Mounting

Our company is fully operational in any mounting position, hanging upside-down, side mounted, or set on a flat level surface, etc. Be sure this fixture is kept at least 0.5m (about 1.6feet) away from any flammable materials (decoration etc.).

When clamp mounting; always use and install the supplied safety cable as an added safety measure to prevent accidental damage in the event of a clamp failure. See the image below.



7. POWER SUPPLY AND SIGNAL CONNECTION

1. Power supply

Use the professional plug to connect the projector and main power supply. Please pay attention to the voltage, frequency the same as the mentioned on the projector. Suggest each light has separately switched of the power supply so that could turn on or turn off each projector desultorily.

2. Signal connection

Please use the round 3/5-pin XLR plugs &sockets offered by menu facture to connect the first projector's output to the second projector' input and connect the second projector's output to the third device's input. And in the same way for the rest, eventually connect the last device's output, all the devices are together as the following figure.

The devices' control signal output or input by using the 3/5-pin XLR pug and socket. If need to long then the communication cable, please make sure the both side of 3/5-pin plug is one to one. (one to one, two to two, three to three). Otherwise, the communication cable will be interrupted.



The communicate cable is 2-pin shielded cable 75Ω

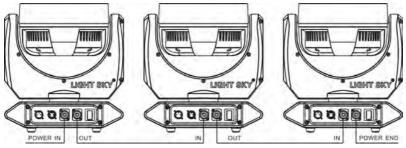
Resistance with each core is at least a 0.5mm diameter. (Caution: All the inside leading wire of 3/5-pin XLR plug couldn't touch each other or plinth).

Recommend to use the DMX signal terminator for the installation to avoid the electronic noise damage the digital control signal. Simply

speaking, DMX terminator is an XLR connector with a $120\Omega \ 1/2w$ resistor connected across pin 2 and 3. Which is then plugged into the output socket on the last projector in the chain. Refer to the connection as above: (Picture). We suggest using the DMX signal distributor when the distance of the lights over 15 meter, In case of effect the light communication because of the signal feeble.



3. Light power connection:



The L terminal is connected with the brown line



The N terminal is connected with the blue line

the items can't be more than 6pcs under series connection.

After doing the above operation and making sure all the devices had been installed with natural operate, press the power switch to check whether everything is working normally.

8. DISPLAY MENU

IMenu	IIMenu	III Menu	Remark
	DMX Address	001-512	
	Fixture ID	000-064	
		Simple(11CH)	
	Channel mode	Standard(17CH)	Default
		Extended1(21CH)	
		Extended2 (25CH)	
		Wired input	Default
	DMX input mode	Wireless input	
		Reset wireless	
		Hold	
	DMX function	Black	
		D. scene	
SETTING		Program 1	
		Program 2	
		Program 3	
		Program 4	
		Program 5	
		Program 6	
		Program 7	
		Program 8	
	Clave Meaton	Slave mode	
	Slave-Master	Master mode	
	Sound control	Close	
		Open	
	Exit		

I Menu	II Menu	III Menu		Remark
		Power on time ****H		
	Fixture times	Lamp on time ***	•*Н	
	Fixture temperatures	LAMP_TEM ***	°C	
	RDM UID	3888:******		
		1. Dimmer	0-255	
		2. Dimmer fine	0-255	
		3. Shutter	0-255	
		4. Red-1	0-255	
		5. Green-1	0-255	
	DMX live	6. Blue-1	0-255	
		7. White-1	0-255	
		8. Red-2	0-255	
INFO		9. Green-2	0-255	
		10.Blue-2	0-255	
		11.White-2	0-255	
		12.Red-3	0-255	
		13.Green-3	0-255	
		14.Blue-3	0-255	
		15.White-3	0-255	
		16.Macro colour	0-255	
		17.Pan	0-255	
		18.Pan fine	0-255	
		19.Tilt	0-255	
		20.Tilt fine	0-255	
		21.Lens Rota.	0-255	
		22.Rota.speed	0-255	

I Menu	II Menu	III Menu	Remark
		23.Fixture control 0-255	
	DMX live	24.Calibration 0-255	
INFO		25.Slave ID 0-255	
INFO	Version info	LED_XY_SOFT:V*.**	
	version into	LED_DPY_SOFT:V*.**	
	Exit		

I Menu	II Menu	III Menu	IV Menu	Remark
		P/T swap	Close	Default
			Open	
		Pan invert	Close	Default
	Pan/Tilt	Fail invert	Open	
		Tilt invert	Close	Default
			Open	
		Exit		
	Denet	System reset		
	Reset	Exit		
PERSON	Quick	Open		
FERSON	closedown	Close		
	P/T angle	Close		
	limit	Open		
	Program	Close		
	on/off	Open		
		Pan start		
	Set P/T	Pan end		
	angle	Tilt start		
		Tilt end		
		Exit		

I Menu	II Menu	III Menu	IV Menu	Remark
		Display	English(英文)	Default
		language	Chinese (中文)	
			Light always	
		Display cloop	2 minutes	Default
		Display sleep	4 minutes	
	Display		6 minutes	
PERSON	Display	Display	10-100	
		intensity 10-100		
		Display	Normal	Default
		rotation	Rotate 180	
		TFT calibration		
		Exit		
	Exit			

I Menu	II Menu		III Menu	Remark
	1. Dimmer	0-255		
	2. Dimmer fine	0-255		
	3. Shutter	0-255		
	4. Red-1	0-255		
	5. Green-1	0-255		
	6. Blue-1	0-255		
	7. White-1	0-255		
	8. Red-2	0-255		
	9. Green-2	0-255		
	10.Blue-2	0-255		
	11.White-2	0-255		
	12.Red-3	0-255		
MANUAL	13.Green-3	0-255		
MANUAL	14.Blue-3	0-255		
	15.White-3	0-255		
	16.Macro	0-255		
	17.Pan	0-255		
	18.Pan fine	0-255		
	19.Tilt	0-255		
	20.Tilt fine	0-255		
	21.Lens Rota.	0-255		
	22.Rota.SP	0-255		
	23.Fixture	0-255		
	24.CAL	0-255		
	25.Slave ID	0-255		
	Exit			

I Menu	II Menu	III Menu	IV Men	u
			Scene 0-100	
			1. Dimmer	0-255
			2. Dimmer fine	0-255
			3. Shutter	0-255
			4. Red-1	0-255
			5. Green-1	0-255
			6. Blue-1	0-255
			7. White-1	0-255
			8. Red-2	0-255
			9. Green-2	0-255
			10.Blue-2	0-255
		Edit program 1	11.White-2	0-255
			12.Red-3	0-255
PROGRAM	Edit program		13.Green-3	0-255
			14.Blue-3	0-255
			15.White-3	0-255
			16.Macro	0-255
			17.Pan	0-255
			18.Pan fine	0-255
			19.Tilt	0-255
			20.Tilt fine	0-255
			21.Lens Rota.	0-255
			22.Rota.SP	0-255
			23.Fixture	0-255
			24.CAL	0-255
			25.Slave ID	0-255
			Save scene	
			Exit	

I Menu	II Menu	III Menu	IV Menu
		Edit program 2	Same as Edit program1
		Edit program 3	Same as Edit program1
		Edit program 4	Same as Edit program1
	Edit	Edit program 5	Same as Edit program1
	program	Edit program 6	Same as Edit program1
		Edit program 7	Same as Edit program1
		Edit program 8	Same as Edit program1
		Exit	
			Start step 0-100
			End step 0-100
	Set program	Set program 1	Step time 0-255
			Save
			Exit
PROGRAM		Set program 2	Same as Set program 1
		Set program 3	Same as Set program 1
		Set program 4	Same as Set program 1
		Set program 5	Same as Set program 1
		Set program 6	Same as Set program 1
		Set program 7	Same as Set program 1
		Set program 8	Same as Set program 1
		Exit	
	Run	Running	
	Kull	program	
	Fixed	Scene 0-100	
	scene	Save scene	
		Exit	
	Exit		

I Menu	II Menu	III Menu	IV Menu
	Error list		
		Pan	±5.00%
	Calibration	Tilt	±5.00%
	Calibration	Lens	±5.00%
		Exit	
		Factory default	****
SERVICE		Calibration default	****
		Time clean	****
	Factory	Developer	****
		Machine sel.	****
		Exit	
	Updata	****	
	Exit		

9. DMX TRAITS

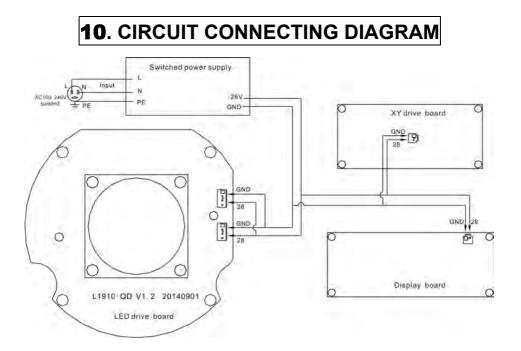
Channel	DMX	%	Effect
	values		
1. Dimmer	0-255	0-100	
2. Dimmer fine	0-255	0-100	
	0-9	0-3	No function
	10-49	4-19	Slow closing, Fast opening, slow \rightarrow fast
	50-89	20-34	Fast closing, Slow opening, Slow \rightarrow Fast
3. Shutter	90-119	35-46	Slow closing, Slow open, Slow \rightarrow Fast
	120-179	47-70	Random strobe, Slow \rightarrow Fast
	180-249	71-98	Synchronous strobe, slow \rightarrow fast
	250-255	99-100	No function
4. Red-1	0-255	0-100	
5.Green-1	0-255	0-100	
6. Blue-1	0-255	0-100	
7.White-1	0-255	0-100	
8.Red-2	0-255	0-100	
9.Green-2	0-255	0-100	
10. Blue-2	0-255	0-100	
11.White-2	0-255	0-100	
12.Red-3	0-255	0-100	
13.Green-3	0-255	0-100	
14. Blue-3	0-255	0-100	
15.White-3	0-255	0-100	

	DMX		
Channel	values	%	Effect
	0-1	0-1	No function
	2-225	1-88	Colour gradient change
	226-230	89-90	2700K
16. Macro	231-235	91-92	3200K
colour	236-240	93-94	4200K
	241-245	95-96	5600K
	246-250	97-98	6500K
	251-255	99-100	8000K
17. Pan	0-255	0-100	
18. Pan fine	0-255	0-100	
19. Tilt	0-255	0-100	
20. Tilt fine	0-255	0-100	
	0-127	0-49	
21 L	128-135	50-53	
21.Lens Rota.	136-231	54-91	
	232-255	92-100	
22.Rota.SP	0-255	0-100	
	0-9	0-3	No function
	10-14	4-5	System Reset
	15-19	5-7	Open
	20-24	7-9	Close
23. Fixture	25-29	10-11	Quick open
control	30-34	12-13	Quick close
	35-128	14-50	No function
	129-133	51-52	Simple(11CH)
	134-138	53-54	Standard(17CH)
	139-143	55-56	Extended1(21CH)
	144-148	57-58	Extended2(25CH)

Channel	DMX	%	Effect	
	values	/0		
	149-239	59-93	No function	
23.Fixture control	240-244	94-95	Pan Calibration	
	245-249	96-97	Tilt Calibration	
	250-255	98-100	No function	
24. Calibration	0-255	0-100		
	0-2	0	All IDs are efficient lighting its own	
			ID to 0, the channel set to any value	
			is valid	
	3-5	1-2	ID:1 effective	
	6-8	2-3	ID:2 effective	
25. Slave ID	192-194	75-76	ID:64 effective	
	195-197	76-77	ID is $(2*n)+1$ effective, $(n=0-31)$	
			1, 3, 5, 7, 963	
	198-200	77-78	ID is $(2*n)+2$ effective, $(n=0-31)$	
			2, 4, 6, 8, 1064	
	201-203	78-79	ID is(3*n)+1 effective,(n=0-21)	
			1, 4, 7, 10, 1364	
	204-206	80-81	ID is $(3*n)+2$ effective, $(n=0-20)$	
			2, 5, 8, 11, 1462	
	207-209	81-82	ID is $(3*n)+3$ effective, $(n=0-20)$	
			3, 6, 9, 12, 1563	
	210-212	82-83	ID is(4*n)+1 effective,(n=0-15)	
			1, 5, 9, 13, 1761	
	213-215	83-84	ID is(4*n)+2 effective,(n=0-15)	
			2, 6, 10, 14, 1862	
	216-218	84-85	ID is(4*n)+3 effective,(n=0-15)	
			3、7、11、15、1963	

Channel	DMX values	%	Effect	
25. Slave ID	219-221	85-86	ID is(4*n)+4 effective,(n=0-15) 4、8、12、16、2064	
	222-224	87-88	ID is(5*n)+1 effective,(n=0-12) 1、6、11、16、2161	
	225-227	88-89	ID is(5*n)+2 effective,(n=0-12) 2, 7, 12, 17, 2262	
	228-230	89-90	ID is(5*n)+3 effective,(n=0-12) 3、8、13、18、2363	
	231-233	90-91	ID is(5*n)+4 effective,(n=0-12) 4、9、14、19、2464	
	234-236	91-92	ID is(5*n)+5 effective,(n=0-11) 5, 10, 15, 20, 2560	
	237-239	93-94	ID is(6*n)+1 effective,(n=0-10) 1, 7, 13, 19, 2561	
	240-242	94-95	ID is(6*n)+2 effective,(n=0-10) 2, 8, 14, 20, 2662	
	243-245	95-96	ID is(6*n)+3 effective,(n=0-10) 3、9、15、21、2763	
	246-248	96-97	ID is(6*n)+4 effective,(n=0-10) 4、10、16、22、2864	
	249-251	97-98	ID is(6*n)+5 effective,(n=0-9) 5、11、17、23、2959	
	252-254	98-99	ID is(6*n)+6 effective,(n=0-9) 6, 12, 18, 24, 3060	
	255	100	All IDs are valid	

Simple	Standard	Extended1	Extended2	Function
1	1	1	1	Dimmer
	2	2	2	Dimmer fine
2	3	3	3	Shutter
3	4	4	4	Red /Red-1
4	5	5	5	Green /Green-1
5	6	6	6	Blue /Blue-1
6	7	7	7	White/White-1
_	—	8	8	Red-2
_		9	9	Green-2
_		10	10	Blue-2
—		11	11	White-2
			12	Red-3
			13	Green-3
			14	Blue-3
			15	White-3
	8	12	16	Macro colour
7	9	13	17	Pan
	10	14	18	Pan fine
8	11	15	19	Tilt
	12	16	20	Tilt fine
9	13	17	21	Lens Rota.
10	14	18	22	Rota.SP
11	15	19	23	Fixture control
	16	20	24	Calibration
	17	21	25	Slave ID



11. TROUBLE DISPOSE

It is recommended some solution for some normal trouble shooting. Any inextricability problems should always be handling by the professional person. Disconnect the power supply before maintenance the light.

•LED off:

- 1. Please check if install the suitable voltage
- 2. Please check whether the led will reach the end of their life can explode; please replace a same description led.
- 3. Please check if the power supply is enough.
- 4. Please check whether the DMX 512 controller pass the "turn on" order.
- Though the light is lighting, but it couldn't accept the control order:
 - 1. Please check the start code address and the function option are correct.
 - 2. Please check whether the communicate control cable is on good connection or the cable is too long or interrupt.
 - 3. Please check the control system is not valid, check the signal amplifier of chain connected is valid.
 - 4. Please check whether the communicate cable is too long or the other equipment is mutually conjugate.
 - 5. Please arrange the wire well, shorter the signal cable, put the high voltage cable and low voltage cable separately.
 - 6. Add the signal amplify isolator.
 - 7. Signal cable is used the excellent screening doublet (Resistance 75 OHM)
 - 8. The end of the light end and the end resistance.

• The light can't move:

- 1. Please check if the power supply is suitable for the light voltage data.
- 2. Please check the fuse of input voltage is defective.
- 3. Please check the light if they are deformation, inside parts is broken, become wet etc will lead the loose contact.

12. CLEANING AND MAINTENANCE

- 1. In order to ensure the projector could work normally. It should be kept clean always .The lens should also be regularly cleaned to maintain an optimum light output. Do not use any type of solvent on lens. It will damage the projector.
- 2. Suggestion: The continue usage of the light don't exceed 4 hours. Or it will shorter the usage of the lamp. Please use the alternative operation to solve this problem.
- 3. Please disconnect the power supply when begin to maintenance take down the light. Please let the parts cool down 10 minute at least then begin to install.
- 4. Please inspect the lens or other moving parts timing and keep them clear and static. If find anything damaged or looseness must change a lamp or fix the lamp in order to avoid the accident.

CAUTION!

Disconnect from mains before starting maintenance operation.

13. DUTY EXONERATIVE AND COPYRIGHT PROTECTION

- ◎Any products broken that didn't according to the instruction is not guarantee to keep it in good repair.
- [©]The commentary for all the instruction belongs to the supplier in final.
- ◎No authorize can't copy.

LIGHT SKY®

Tel:0086-20-61828288 Fax:0086-20-61828188 Pc:510800 Web:www.lightsky.com.cn E-mail: flydragon@lightsky.com.cn asia@lightsky.com.cn india@lightsky.com.cn europe@lightsky.com.cn latinamerica@lightsky.com.cn middle-east@lightsky.com.cn

Address: No. 43, Yunfeng Road, Xiuquan Street, Huadu District, Guangzhou, China