

Led Beam Spot Wash

AL280LS



USER MANUAL

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Thank you very much for purchasing this product. Before you use our products, please read carefully and fully understand all the safety instructions recorded in this booklet to avoid potential dangers that may cause bodily injury, property damage or product damage. The company is not responsible for any direct losses and related losses caused by failure to follow the instructions in this manual

Fixture Introduction

Product: 200W Led Beam Spot Wash Moving Head

Parameter

Voltage: AC110V-240V/50-60Hz

Led Source: 200W white LED, 7500-8500K

Lifespan: 50K Hours

Power consumption: 450W

DMX control: 17CH

Pan/Tilt movement: 540°/270°, with 16 Bit resolution auto-reset function

Dimmer: 0-100% linear dimmer

Spot angle: 9~32°

Beam angle: 3~16°

Frost: 1 frost filter, soft spot

Strobe: 1-25Hz, variable strobe speed

Color: 9colors+open

Fixed gobo plate: 9colors+open

Rotation gobo: 7colors+open, gobo rotation

Prism: 3-facet prisms, prism rotation

Control mode: DMX512, Auto-Run, Master/slave

RMD controlled: Yes

DMX Channel: 16CH

Cooling: Intelligent fan cooling

Material: Fire-resistant plastic, Alluminium

Working environment: -20 degree~40 degree

Dimension: 300*205*543mm

Net Weight: 13.5kgs

IP grade:20

Safety Information

This product is for professional use only, not for home use

Before installing, powering on and maintaining this product, please read the Safety Information section of this chapter

electric shock protection

When opening the shell or replacing parts, or when the lamp is not in use, please disconnect the external power supply

Make sure the equipment is reliable and use an AC power supply with overload and grounding protection that matches the voltage and frequency of the lamp

Use a three-core power cable with a rated load above 5A

Before use, make sure the cable is in normal condition and suitable for the current capacity of the connected equipment

When you find that the power cable or plug is damaged, the lamp is wet or the power part is obviously overheated, please disconnect the power immediately

Do not expose this product to rain or humid air

Ensure that the equipment is reliably grounded

light source safety

Prolonged exposure to ultraviolet light generated by unshielded light sources can cause eye and skin burns. Do not look directly at the light outlet or the

Lamp Source

Do not use lamps with damaged shells, light baffles, lenses, protective screens or heat shields

If the protective screen, lens or UV screen on the lamp is visibly damaged, it is damaged to the point of failure, such as cracks or deep marks, it should be replaced

Lamps should only be used with a complete protective cover

Preventing Burns and Fires

The surface temperature of the lamp may be relatively high during use, avoid contact with the human body or other objects, and allow the lamp to cool down sufficiently before handling

Keep combustible materials (such as fabric, wood, paper, etc.) at least 0.2 meters away from lamps, and keep flammable items away from the device as much as possible, and ensure that there is at least 0.2 meters of air inlet and outlet space

Do not directly irradiate the surface within 2 meters

Cover the lens or turn the lens direction during the day to avoid direct sunlight on the lens, because the lens can focus sunlight and cause a potential fire hazard

When the ambient temperature exceeds 40° C (104° F). Do not turn on the power

Do not modify the lamp in any way, do not install non-original parts, do not paste any filter paper on the lens or other optical accessories, pictures

Do not attempt to short-circuit the fuse or temperature control switch

Avoid fall damage

Do not carry lamps alone when working at heights

Two evenly distributed light hooks should be used on the hanger instead of a single light hook

Ensure that the bracket and hanging system can support more than 10 times the weight of the lamp

The focus of lifting the lamp and hanging the safety rope must not be on the handle of the lamp

A safety rope must be installed, and the safety rope must be able to bear 10 times the weight of the lamp

Ensure that the external accessories and spreaders are completely fastened

There should be a stable platform when installing, maintaining and moving lamps, and there should be a safety fence directly below it

For related operations not described in this article, please consult the authorized after-sales department

Installation

Warning:



When hanging lamps, an additional safety rope must be installed to prevent the hazards caused by the failure of the lamp hook.

The safety rope must be tied to the installation position of the safety rope of the lamp, and must not be installed on the carrying handle

When the lamp is not placed stably, the movement of the lamp head may drive the movement of the base,

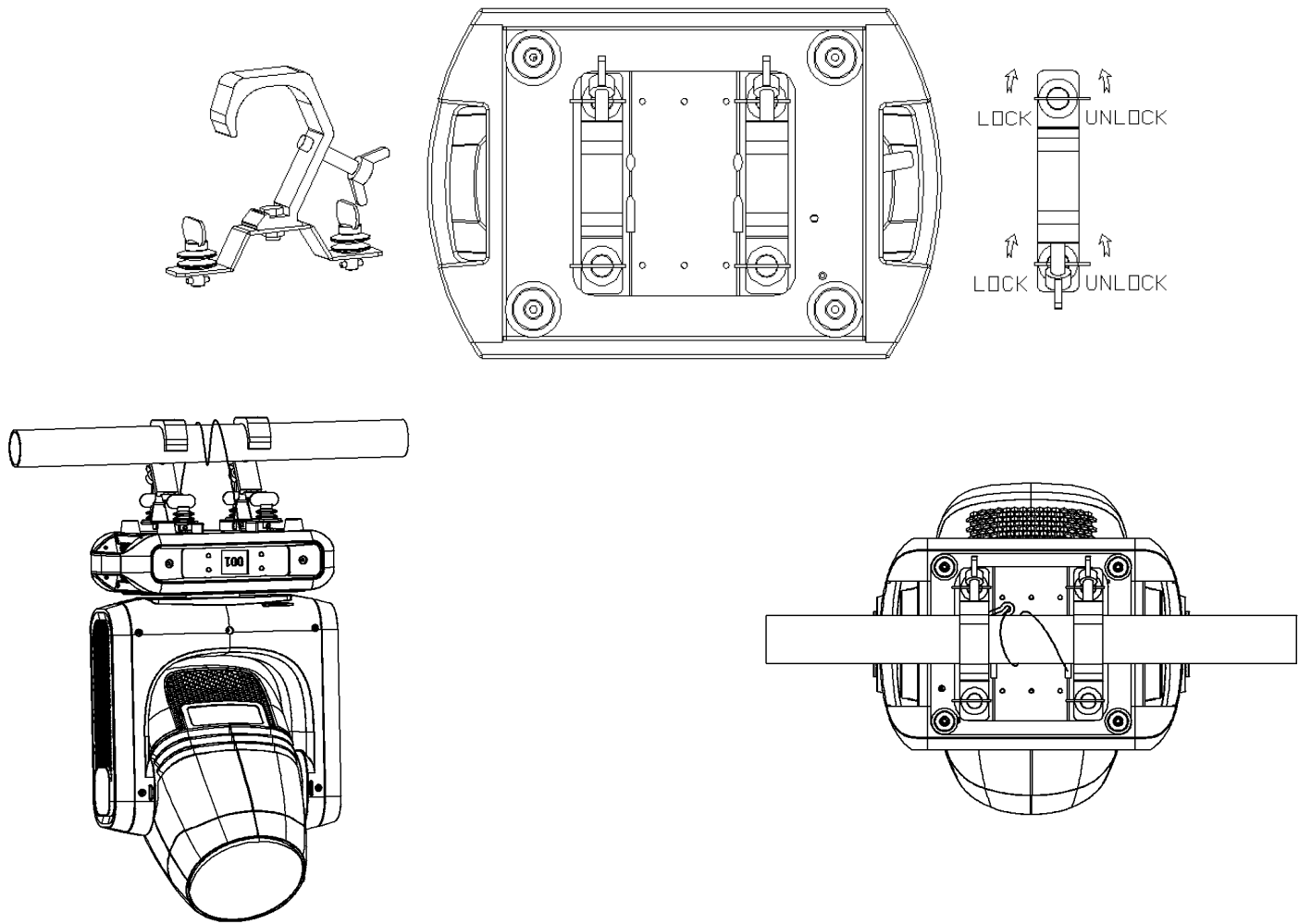
Therefore, do not turn on the device without confirming that the lamp is placed or hung stably.

It is strictly forbidden to install and use lamps on the side!

During the daytime, cover the lens or turn the lens direction to avoid direct sunlight on the lens,

Because the lens can focus sunlight creating a potential fire hazard.

Installation Instruction






1. Install the light hook on the OMEGA bracket and tighten the screws
2. Install the OMEGA bracket to the lamp base, and tighten the quick lock clockwise
3. One person on each side of the lamp, lift the lamp, snap the lamp hook into the lamp pole and lock it
4. Thread the safety cord through the hole in the base and tie it to the pole
5. Open the horizontal and vertical locks of the lamp

Installation Precautions::

1. Confirm that the hanging lamp hook and accessories are not damaged and can bear 10 times the total weight of lamps, cables and accessories
2. Pay attention to the direction of the front of the lamp marked on the bottom of the lamp body base
3. There should be a stable platform when installing, maintaining and moving lamps, and there should be a safety fence directly below it

4. Pass the safety rope through the safety rope hole at the base of the lamp. body, and tie it to the lamp stand, not to the handle
5. Check that there are no combustible materials within 0.2 meters of the. lamp housing, and that the direct light beam of the lamp is not blocked within 2 meters, and there are no flammable materials nearby
6. Check that lamps are not likely to collide with each other while in motion
7. Check that other lamps are not directly shining on this lamp, strong light. will damage the protective shell of the lamp
8. Make sure that the installation surface is level when installing upright, so as to avoid sliding when the lamp is running

Power:

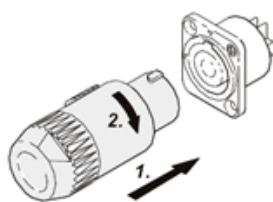
Warning:	
	In order to prevent electric shock, the lamp must be grounded, and the main power supply must be insured and disconnected
	Switch and grounding protection Please connect the lamp directly to the AC power supply, and do not connect the silicon box to avoid damage
	lamps When the lighting power supply is connected in series, the. maximum current of the cable cannot exceed 20A

Voltage There is a switching power supply with PFC inside the lamp, and the power supply voltage is AC100V-240V 50/60Hz

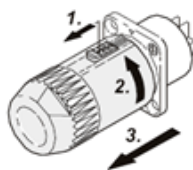
Fuse 3A 5×20

Power Connection

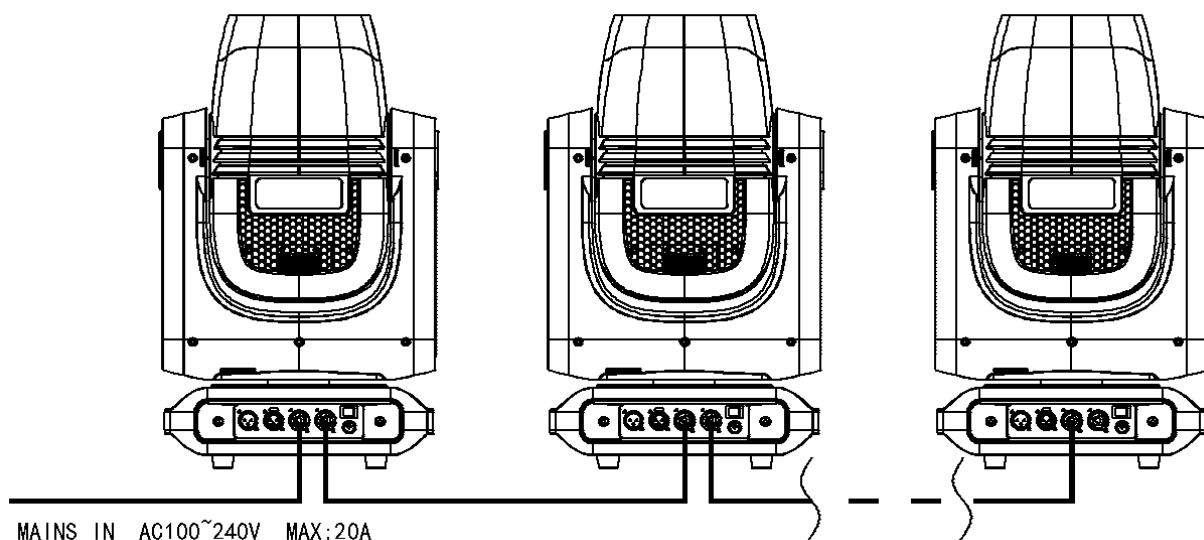
One end of the power cord has been installed with a plug that matches the power interface of the lamp, and the other end should be installed with a suitable power plug, a three-pin plug with grounding. It must be installed according to the manufacturer's instructions. The table below gives some recommendations for plug pin connections. If in doubt or in doubt, consult a qualified electrician.



连接电源线

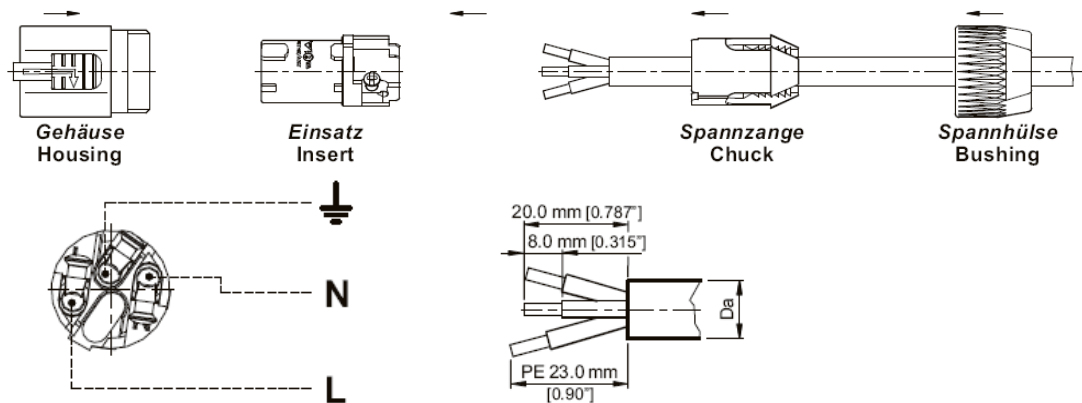


拆卸电源线



When the power cord is scratched, the outer protective skin is broken or the length of use is too short, it should be replaced

Change Power Cables

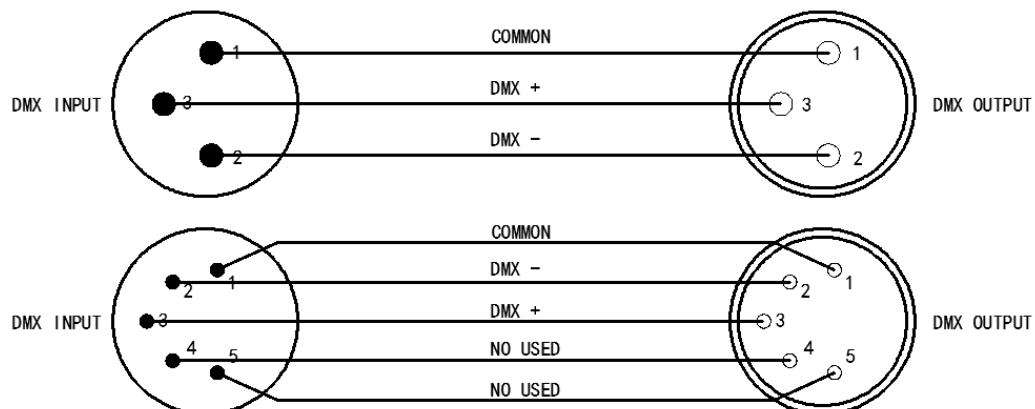


Color	Plug	Signal
Brown	Fire line	L
Blue	Zero line	N
Yellow/Green	Ground line	

1. Remove the original power cord plug
2. Cut a cable with a length of about 1.5 meters and a size of 3*1.5 square
3. Strip the cable according to the size in the picture above, and pass it through the plug end cap and fastener
4. Put the wire core on the compression plug in the correct position L—brown N—blue —yellow/green
5. Assemble the plug and tighten the end cap
6. Connect the other end of the power cord to a suitable, grounded three-pin plug

Signal Connection

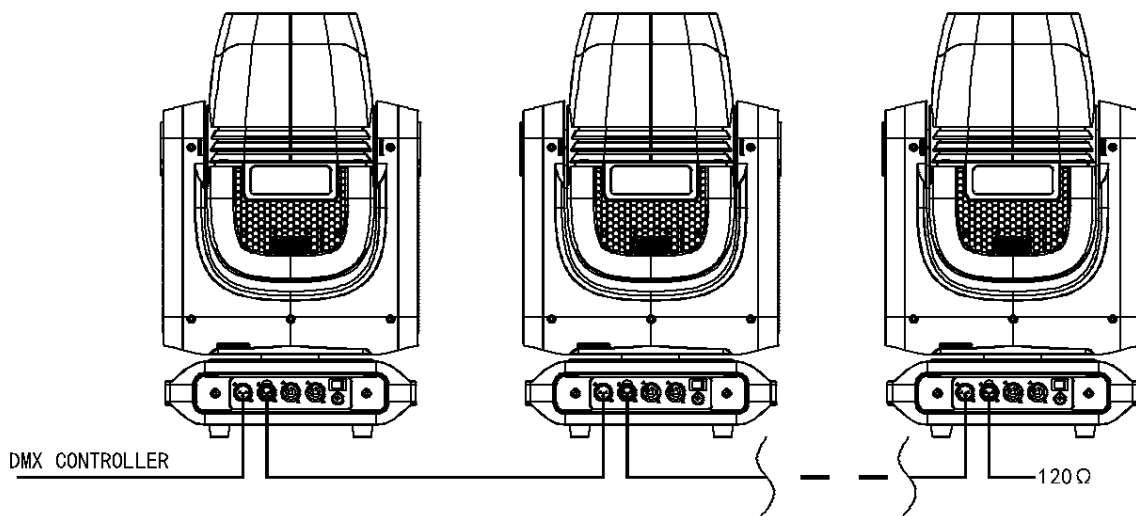
The lamps can input and output DMX signals through the XLR card, and the definition is as follows:



3 芯和 5 芯的插头

When the socket is transferred, the 5-pin XLR pin 4/pin 5 is not used

Data connection



1. Connect a DMX signal line from the controller to the light signal input. port
2. Connect a DMX signal line from the signal output port of the lamp to. the next lamp
3. The DMX signal lines of lamps can only be connected in series. If you. need to connect in parallel, please use a signal distributor
3. Connect a terminal resistor between pin 2 and pin 3 of the signal output. terminal of the last lamp

Reliability Tips

Use shielded twisted pair designed for RS-485: standard microphone cable is not suitable for long-distance data transmission, 24AGW cable transmission distance can exceed 300 meters (1000 feet), long-distance transmission requires thicker wires cable, and preferably with a signal amplifier

Branch drive (signal parallel connection) needs to use a signal distributor
Connect a 120 ohm 1/4 watt resistor between pin 2 and pin 3 of the signal output terminal of the last lamp to avoid signal reflection interference. on this resistor

CHANNEL LIST

CH16	CH20	Description	Value	Function
[CH1]	[CH1]	Pan	0-255	0-540
[CH2]	[CH2]	Pan Fine	0-255	0-2
[CH3]	[CH3]	Tilt	0-255	0-270
[CH4]	[CH4]	Tilt Fine	0-255	0-1
	[CH5]	Pan Tilt Speed	0-255	From fast to slow
[CH5]	[CH6]	Strobe		
			0-3	close
			4-127	From slow to fast pulse strobe
			128-191	Gradient strobe from slow to fast
			192-251	Random strobe from slow to fast
			252-255	Open/Close
[CH6]	[CH7]	Dimmer	0-255	0-100% dimmer
	[CH8]	Dimmer Fine	0-255	
[CH7]	[CH9]	Color		
			0-4	Open
			5-9	Open+color1
			10-14	Color1
			15-19	Color1+Color2
			20-24	Color2
			25-29	Color2+Color3
			30-34	Color3
			35-39	Color3+Color4
			40-44	Color4
			45-49	Color4+Color5
			50-54	Color5
			55-59	Color5+Color6
			60-64	Color6
			65-69	Color6+Color7
			70-74	Color7
			75-79	Color7+Color8
			80-84	Color8
			85-89	Color8+Color9
			90-94	Color9
			95-99	Color9+Color10
			100-180	Flow forward from fast to slow
			181-185	Pause

			186-255	Reverse flow from slow to fast
	[CH10]	Color Fine	0-255	
[CH8]	[CH11]	Gobo		
			0-9	Open
			10-19	Gobo1
			20-29	Gobo2
			30-39	Gobo3
			40-49	Gobo4
			50-59	Gobo5
			60-69	Gobo6
			70-79	Gobo7
			80-89	Gobo8
			90-99	Gobo8
			100-109	Vibrating white light from slow to fast
			110-119	Shake from slow to fast Gobo1
			120-129	Shake from slow to fast Gobo2
			130-139	Shake from slow to fast Gobo3
			140-149	Shake from slow to fast Gobo4
			150-159	Shake from slow to fast Gobo5
			160-169	Shake from slow to fast Gobo6
			170-179	Shake from slow to fast Gobo7
			180-189	Shake from slow to fast Gobo8
			190-223	Reverse flow from fast to slow
			224-255	Flow from slow to fast
[CH9]	[CH12]	Rotation Gobo		
			0-9	Open
			10-19	Gobo1
			20-29	Gobo2
			30-39	Gobo3
			40-49	Gobo4
			50-59	Gobo5

			60-69	Gobo6
			70-79	Gobo7
			80-89	Shake from slow to fastGobo1
			90-99	Shake from slow to fastGobo2
			100-109	Shake from slow to fastGobo3
			110-119	Shake from slow to fastGobo4
			120-129	Shake from slow to fastGobo5
			130-139	Shake from slow to fastGobo6
			140-149	Shake from slow to fastGobo7
			150-200	Reverse flow from fast to slow
			201-255	Flow from slow to fast
[CH10]	[CH13]	Gobo Rotation		
			0-127	0-360 degree
			128-190	Reverse flow from fast to slow
			191-192	Pause
			193-255	Flow from slow to fast
[CH11]	[CH14]	Prism 1		
			0-127	No function
			128-255	Prism 1
[CH12]	[CH15]	Prism Rotation		
			0-127	0-360 degree
			128-187	Flow forward from fast to slow
			188-195	Pause
			196-255	Reverse flow from slow to fast
[CH13]	[CH16]	Frost		
			0-127	No function
			128-255	Frost

[CH14]	[CH17]	Zoom	0-255	Zoom out to zoom in
[CH15]	[CH18]	Focus	0-255	From far to near
	[CH19]	Focus Fine	0-255	
[CH16]	[CH20]	Reset		
			0-209	No Function
			210-215	Reset pan tilt motor after 3 seconds
			216-219	No Function
			220-235	Reset effect motor after 3 seconds
			236-239	No Function
			240-255	Reset the whole lamp after 3 seconds

Maintenance

Light fixtures need daily cleaning. The time depends on the factors related to the use environment and cleaning cycle as follows:

Use a smoke machine, fog machine

Places with high wind speed (for example: air inlet and outlet)

Dust (such as stage special effects, building structures and occasions that need to simulate natural outdoor environments)

If there are one or more factors, check whether the lamp needs to be cleaned after 100 hours of operation, and check it periodically

All repairs not mentioned here should be consulted with a technician.



Warning:

Please disconnect the AC power supply before opening the lamp housing, and let the lamp cool down completely

Be careful when cleaning optics and work in a clean, well-lit area. Optically coated surfaces are fragile and prone to scratches. Do not use solvents that will damage plastic or colored surfaces.

Periodic dusting of fans and vents is necessary to maintain proper cooling

➤ **Clean Lens and optics**

1. Disconnect power and allow light to cool completely. Open the lamhousing.
2. Blow off dust with an air compressor.
3. Use a tissue dampened with glass cleaner or pure water to wipe away stubborn stains. But don't scratch the surface, you should rub it gently and repeatedly.
4. Use alcohol cotton cloth to remove oily fumes and debris. Glass cleaner. can also be used, but the residue should be cleaned with pure water. Slowly clean in circular motions from the inside out.
5. Blow dry with a clean and soft cloth or air compressor.

➤ **Clean the Fan**

Dust fans and vents with a soft brush, cotton cloth, vacuum cleaner or air compressor.