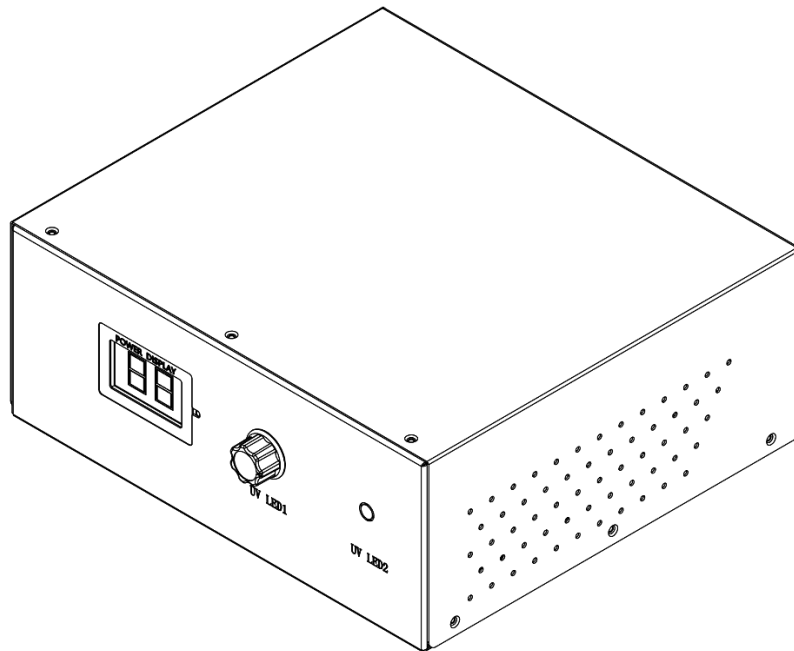


UV LED Curing of the system

D400-H6020-F Usage Manual

Knob type



2022 Version: 1.0

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一、 Company Overview:

The pioneer in the UVLED curing industry

Since its inception, the company has been 100% focused on UV LED curing technology, is the pioneer of UVLED curing industry, the products are suitable for UV inks, UV coatings, UV adhesives and many other commercial and industrial fields.

The company controls the entire R & D and manufacturing process, the company's UVLED curing products with its excellent performance, stability, and energy saving and environmental protection value has become the first choice of customers, and to "do our best to provide customers with good quality and money products and services" to make customers more competitive.

Product safety information

二、 UV LED Curing light source:

Design uses

The company's curing light source and power supply are provided with "open" equipment. These system components must be installed in a frame structure suitable for the final product-specific operating environment, and are overall designed to prevent possible personnel injuries arising from contact with live parts during the operation.

三、 guard:

The electromechanical system of the Company UV LED light source has fully enclosed protection to prevent personnel injuries that may occur during normal operation. These fixed protective devices meet the corresponding international safety standards.

四、 **Warning: When the light source protection device is open, or it is loose, damaged or lost, do not use the light source or the machine and equipment equipped with the light source.**

五、 **According to the IEC62471 (Optical Biosafety) standard, the company's light sources are divided into hazard groups at a 200 mm distance**





六、 **The IEC 62471 hazard group is defined as:**

1. Relief means no photohazard at the end point according to this standard.
2. Risk Group 1 Low degree risk. Within the scope of normal behavior, it constitutes no harm.
3. Risk Group 2 Moderate hazard. When exposed to a strong light source, due to the discomfort reaction can be avoided in time, it does not cause harm.
4. Hazard Group 3 is highly hazardous. Instant or brief exposure can cause harm.
5. Warning: Do not look directly at the UV light source without wearing UV protective glasses.
6. Note: Some UV light sources will be within the field of vision and will cause strong visual stimulation.
7. Minimum requirements: Black or orange protective goggles can relieve eye fatigue by considering blue and green light, and make operators clearly see the parts during curing and inspection, while absorbing 99.9% of UV radiation and visible light up to 532 nm in length.
8. Note: More than 90% of the UV light energy emitted by our products is in the narrow band wavelength range.
9. Wavelength: 365-370 nm 380-385 nm 395-400 nm 400-405 nm 415-420 nm

七、 **Hazard and Safety Notification:**

1. The symbols and labels in the following table are used for the light source product instructions

and product labels. To avoid product misuse, please be familiar with these symbols and their meanings. Table 1: Safety notification

Symbol				
Safety notice	Pay attention to read the instructions, and fully understand the safety instructions	UV light use instructions, a comprehensive understanding of the safety instructions	Surface high temperature	warn The UV light radiation from this product is Dangerous Group 3 to avoid contact between the eyes and skin and the unprotected product.

1. The severity of the hazard is indicated as follows:
The yellow safety warning symbol indicates a potential personal injury hazard.

DANGER (dangerous) sign: used to indicate an emergency danger, if not to avoid death or serious injury.

WARNING (warning) sign: used to indicate potentially dangerous conditions that may not avoid death or serious injury.

CAUTION (warning) sign: used to indicate potentially dangerous conditions without causing minor or moderate injuries.



2. Regulations on the Registration, Evaluation, Licensing and Restrictions of Chemicals (RoHS)The Company announces that, to the best of our knowledge, with our available information, our UV LED curing system does not contain any homogeneous material exceeding the following standards:

- 1) Lead (Pb) content over 0.1% (weight) (1000 ppm)
- 2) Mercury (Hg) content over 0.1% (weight) (1000 ppm)
- 3) Hexavalent chromium (Cr VI) content over 0.1% (weight) (1000 ppm)
- 4) Polybromated biphenyl (PBB) or polybromodimethyl ether (PBDE) content is over 0.1% (weight) (1,000 p p m)
- 5) Cadmium (Cd) content over 0.01% (weight) (100 ppm)



八、 Product recovery:


1.The picture shows an internationally recognized sign with the symbol not being associated with waste that will eventually be dumped into the landfill

Or garbage disposal together, but to return the product to the company for reuse or by local regulations




handle. Figure 1.1: Do not throw in the garbage symbols

九、 Use Environment and Precautions

service environment; operating environment; environmental conditions:

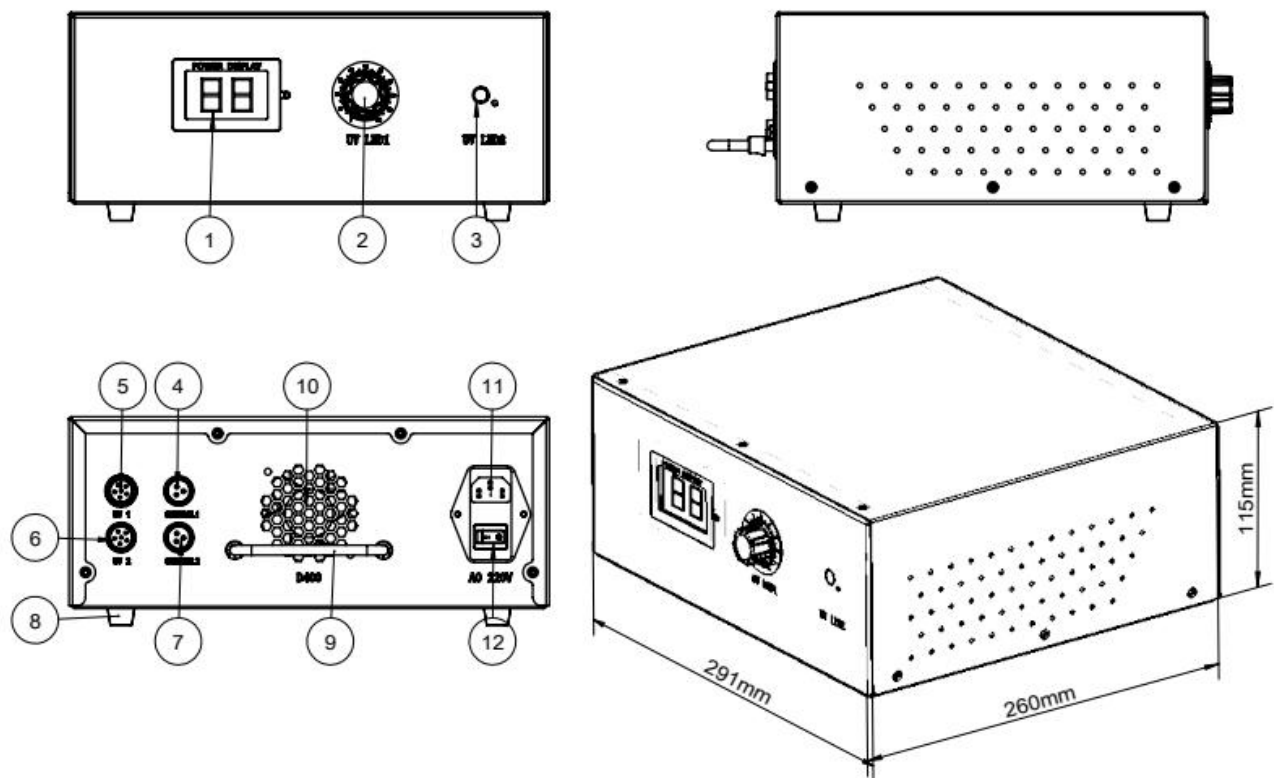
- 1、 Ambient temperature 0℃ - - + 35℃ (non-icing), ambient humidity 30% -85%RH (non-condensation dew). 
- 2、 No water, oil, dust, lampblack, conductive dust, corrosive, combustible gas, salt, iron and other places.
- 3、 No violent temperature change and vibration, impact of place.
- 4、 Places without direct sunlight, places without strong magnetic field and strong electric field.

matters need attention; matters needing attention :

- 1、 Please use our accessories, if using third-party accessories will cause short circuit and burn the host.
- 2、 Do not disassemble or refit privately, otherwise it will not be covered by the warranty.
- 3、 Avoid possible personal injury, especially to the eyes, must not look directly, should wear the company's protective glasses. 
- 4、 Do not plug the power with wet hands to avoid electric shock.
- 5、 Do not touch the newly used irradiation head to avoid burns.
- 6、 Try to avoid using the equipment in thunderstorm days, which may  cause the danger of electric shock due to lightning.
- 7、 When starting up, turn off the power switch first, and then turn on the equipment, otherwise the controller and the irradiation head may burn out.
- 8、 Do not plug and pull the irradiation head when the device is turned on, otherwise the controller and irradiation head may burn out.
- 9、 When the equipment is running, do not block the rotation of the head fan, otherwise the head will be damaged.
- 10、 When the UV LED irradiation head is a drag chain cable, the minimum bending radius is greater than 80mm, and the bending radius is less than the recommended value, there may be the possibility of early damage.
- 11、 Please input an AC voltage of 180V-240V (frequency 50Hz / 60Hz) to supply the power, and keep the ground.
- 12、 Do not use the same power supply with the motor and inductive machinery, high-power devices.
- 13、 The interference superimposed on the power line has sufficient interference resistance, but it is recommended to use the isolation transformer and so on to carry out the corresponding disposal before the power supply, to reduce the interference.
- 14、 Keep level when installing controller and irradiation head. Do not tilt, put down and reverse installation. Otherwise, it may lead to fever and cause damage.
- 15、 Do not install them in confined spaces or block vents blocking the radiator.
- 16、 Before turning on the power supply, please check if the connection is wrong. 

十、 Overview of controller:

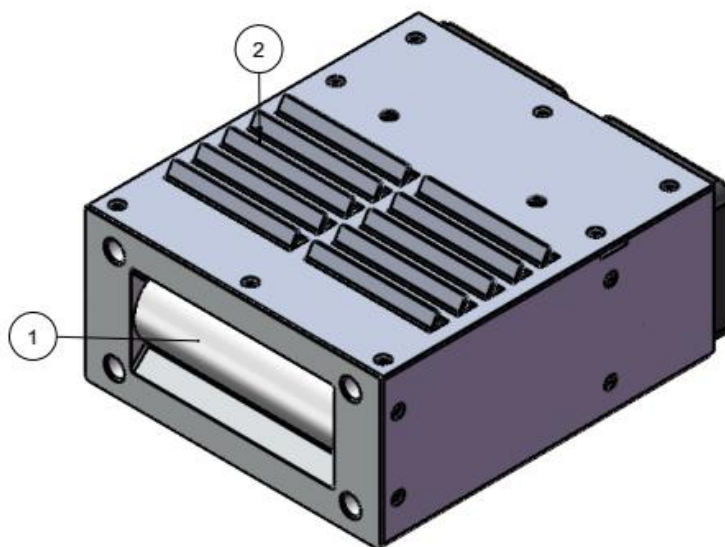
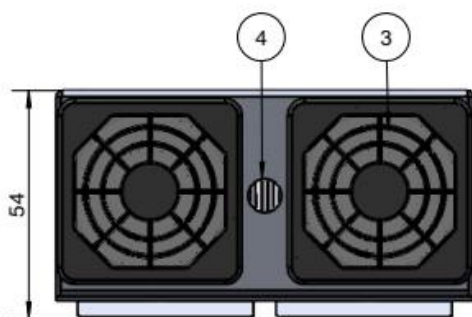
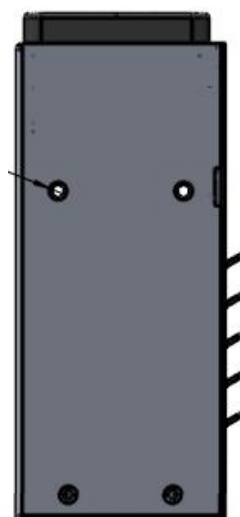
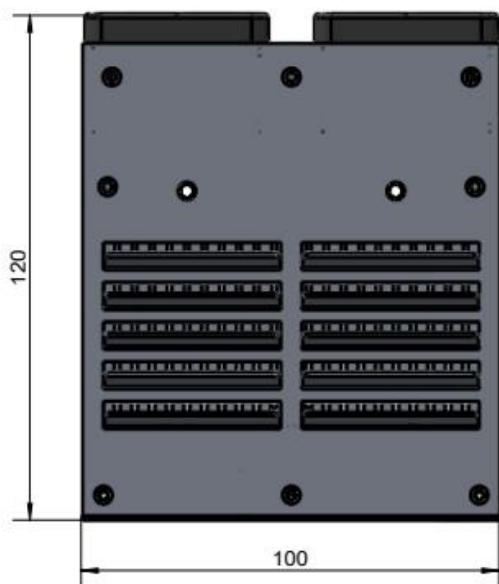
1,Electric power display 2, light power control knob 3, (empty) 4, control socket (lamp 1 control signal) 5, plug UV LED lamp (lamp 1UV lamp socket) 6, plug UV LED lamp (lamp 2UV lamp socket) 7, control socket (lamp 2 control signal) 8, pad 9, handle 10, heat outlet (not shielding, keep smooth) 11, insert word power line 12, switch (built-in insurance)



Host model:	D400	Input power:	180-240VAC、 50/60HZ
Standby power consumption:	10W	Outline dimension:	L260*W291*H115
Mode of operation:	Knob adjustment	External wiring terminal:	Dry contact point GX 16-3 core
Service environment:	Indoor 0℃ --- + 35℃	Material / Weight:	About 6Kg
Ambient humidity:	30% -85%RH		

十一、 Schematic diagram of the irradiation head:

1, UV LED irradiation head out of the surface 2, heat dissipation air outlet (not block, keep unobstructed) from the item at least 20CM 3, fan air inlet (not block, keep unobstructed) from the item at least 20CM 4, lamp head line socket



十二、 Radiation head parameters:

Radiation head model:	H6020-F		
Full-load power:	180W	life span:	15000-20000h
Slug:	SA	SA	SA
Peak wavelength:	365nm	395nm	405nm
Maximum optical power:	7W/ cm ² (1cm test)	14W/ cm ² (1cm test)	14W/ cm ² (1cm test)
Luminescence Size:	60*20mm	Radiation height:	Recommended for 30-50mm
Outline dimension:	L100*W54*H120	Service environment:	0℃—+30℃/30% -85%RH
Weight:	~0.5Kg	Material quality:	alufer

十三、 Common problem solutions:

hitch	Possible cause	process mode
1. The irradiation head cannot be lit	Whether the irradiation head line is inserted	Check the head line
2. Turn off the light during the working of irradiation head	Control line disconnect solid state relay is burnt out	Check whether the control wire is short-connected to replace the solid-state relay
3. No response to touch	The irradiation head temperature is too high	Check that the fan is operating properly

If the listed possible reasons are not applicable and the lights are still not working properly, please send the equipment to us immediately.

十四、 Appendix:

Name	Quantity	Unit	Name	Wire length (m)	Quantity	Unit
controller	1	PCS	Light head line	3	1	strip
Radiation head	1	PCS	Control line	3	1	strip
			Main power cord	2	1	strip

十五、 Equipment maintenance process tracking record

Date	Position	Unhealthy phenomenon	Bad cause	Maintenance time	Maintenance of the people

十六、 Products and purposes

Main products: UV automation equipment, UV LED surface light source, line light source, point light source, can be customized according to the requirements.

UV glue curing: motor and parts installation, speaker, Bluetooth headset, mobile phone parts, optical communication industry equipment, capacitive touch screen curing, sensor manufacturing, all kinds of medical products and battery industry, etc

Ink curing: silk printing, offset printing, transfer printing, medium and high speed printing, coating

Spray printing equipment: spray code printing, UV flat panel printing, digital printing equipment

Domestic and foreign university laboratories

