

# **Hyper S330**

## **Product Specification**

This user's manual is made for the YODN illuminator model Hyper S330. To ensure operation safety, maximize device performance, and to familiarize yourself fully with the operation of this illuminator, the manufacture recommends that you study this user's manual thoroughly before operating this device. Please retain this user's manual in an easily accessible place near the work desk for future reference.

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## Important Notifications

### SAFETY PRECAUTIONS :

1. Never power on the device (turn on the lamp) without the liquid light guide and adapter to the microscope attached. UV light is designed to emit from this illuminator during lamp operation; do not directly look into the light without protection, it may damage your eyes. On the other hand, please avoid fix the light output in a fix spot (especially on flammable objects) for a long time as it may cause fire.
2. To replacing the lamp, please make sure the device power is off and unplug the power cord from the outlet, and wait until the lamp and its replacement cover cooled down completely (more than 30 minutes) to avoid accidental electrical shock or burn.
3. Install or place the illuminator unit on a sturdy, level table or bench.
4. Install this device on a flat surface to avoiding blocking the ventilation opening on the sides of device. Do not place it on a soft surface, i.e. paper or cloth, etc.; this could cause fire.
5. Please ensure leaving sufficient space for ventilation around this device. Never allow metallic objects to enter from the ventilation opening; this could cause fire or electrical shock.
6. It's recommended to secure sufficient space (larger than 10 cm) around this device to release the heat generated during operation.
7. To prevent the liquid light guide (optional accessory) from damage, the bend radius of the liquid light guide must be larger than 60 mm.
8. Always use the power cord provided by the manufacture to ensure the device operated under its original safety design and performance; fail to do so may void the manufacture product warranty. Keep sufficient distance from the power cord to all possible heat sources and avoid direct contact.
9. Do not power on the device when the lamp replacement cover is open; this could result in electrical shock, burn, illuminator failure, or light guide damages.
10. Please ensure to connect the device power cord to a grounded outlet. Fail to do so may void the intended electrical safety design and device performance.
11. Do not touch the power plug during a thunderstorm to avoid accidental electrical shock.

### Getting Ready :

1. This user's manual only illustrate to the illuminator. Read also the Instruction Manual of the designated microscope to ensure the microscope and illuminator working together perfectly.
2. This device is a precision optical equipment; please handle it carefully and avoid sudden and severe impact. This device is not waterproof.

3. Do not operate this device where it is subjected to direct sunlight, dust, steam, or vibration.
4. Highly flammable organic solvent may cause fire. Keep it away from the illuminator when it is in operation and soon after the illuminator is turned off.
5. Do not twist the liquid light guide (optional accessory) excessively to prevent damaged.
6. Make sure the device is powered off, unplug the power cord from the electrical outlet, and remove the liquid light guide in the event of transporting the device.
7. Please avoid touch the ventilation opening area during the device operation and immediately after power off as its temperature might be high and may cause burns.
8. Please avoid turn the device on and off in short period (this device has protective control) as the lamp is not designed to do so and it will shorten the lamp life.

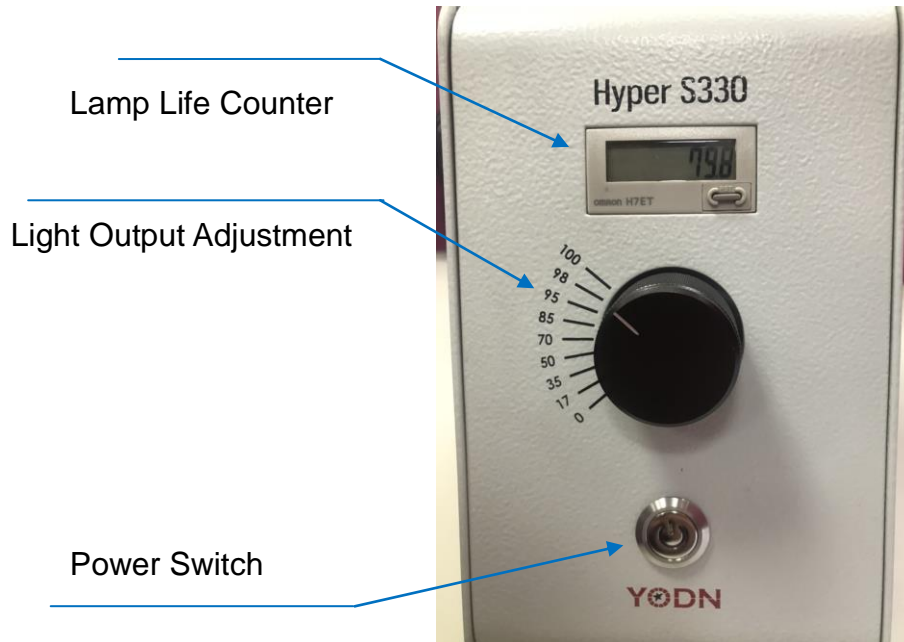
### **Maintenance and Storage :**

1. Clean the device periodically (every 200 hours as a guide). Before cleaning, unplug the power plug from the outlet and wipe it with a fluff-free soft dry cloth.
2. Wipe clean with the soft cloth slightly containing the diluted detergent and use the clean air to blow the dust off if the illuminator and the liquid light guide are very dirty.
3. Never disassemble/remodel anything other than those described in this user's manual. This may cause the optical performance deterioration or incidents; unauthorized disassemble the device will result in product warranty void.
4. When the device is idle, please unplug the power cord from electrical outlet. It is recommend to use the dust prevention cover to cover the device if it's not used on a regular basis or storage; however, please make sure the device is completely cooled off before applying any cover on it.
5. Please replace a new lamp when the lamp energy level drops using the replacement lamp authorized by the manufacture. The mercury lamp design is different from the fluorescence, which contains a high pressure gas within the tube. If the lamp is used beyond its designed lifetime, the glass tube may burst due to the accumulated strain. The used mercury lamp must be disposed of as industrial waste and only to the authorized recycle professionals. Before disposing of this product, be sure to follow your local government regulations and rules.

### **※In the event of lamp burst, please follow the procedures below.**

- Should the lamp burst, unplug the power cord from the outlet and leave that place while keeping the place ventilate for at least 30 minutes.
- Wait until the lamp and the lamp house have cooled down completely, then use a protective glove to collect the remaining glass with packing tape and store in a sealable package.
- The collected shattered glass and tools used must be sealed completely in a nonmetallic container, and ask the waste disposer to dispose them as it will contain mercury.
- Should you have inhaled mercury steam, consult the doctor immediately and follow his/her instructions.

## Device Introduction



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## Optional Components List



Liquid Light Guide (1.5m )

### Special Collimator (Adapter to Microscope) :

Compatible Microscopes	Olympus BX & IX Microscopes	Leica DMI Microscopes	Zeiss Axioskop Microscopes	Nikon Eclipse Ti Microscopes
Item Photo (Click to Enlarge)				
Item #	LLG5A1-A	LLG5A2-A	LLG5A4-A	LLG5A5-A
LLG Diameter	3mm	3mm	3mm	3mm
AR Coating	350nm - 700nm	350nm - 700nm	350nm - 700nm	350nm - 700nm

## Device Specifications

Input Voltage	AC 100~240V , Full voltage input
Frequency	50 / 60 Hz
Power Consumption	Standby: 5W Power On (Lamp Ignition): 165W Power Off(with Cooling): 12.5W
Light Source	YODN AC132W for Hyper S330 Color Temperature (Average): 8000K
Drive mode	AC Type
Light Output Adjustment	9-level Brightness Adjustment- 0% ~ 100%
Protective Function	Lamp Re-ignition Protection Current Overload Protection Lamp Ignition Fail Lock
Lamp Hour Recorder	Omron Time Counter
Cooling Function	Forced Electrical Fan to exhaust
Internal Filter	UV / IR Cut Filter
Fuse Type	Glass Tube Fuse -AC250VM 3A (Φ5.2 x 20mm)
Operating Temp.	10°C ~ 50°C / 20% ~ 80%RH (No condensation)
Dimensions (H x W x D)	220 x 130 x 365 mm (Except for raised parts)
Weight	5.5 Kgs



## Operation Instruction



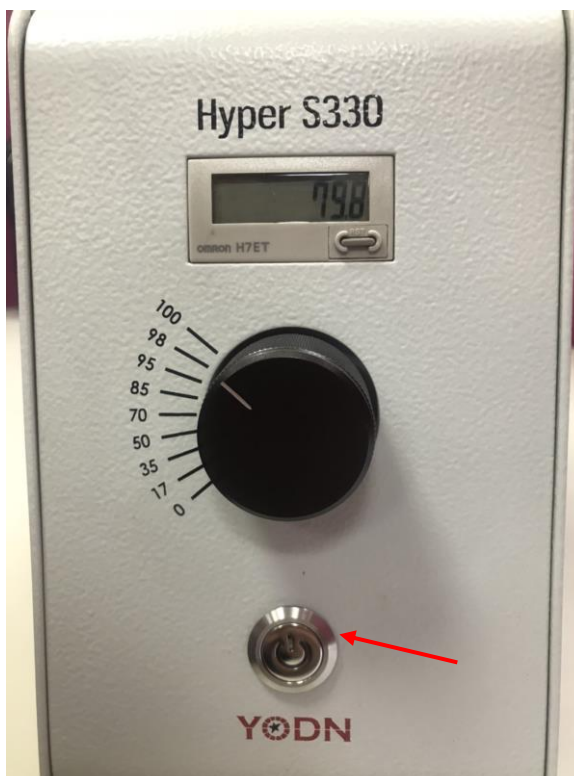
### Mounting the light guide:

1. Insert light guide into the port (direction of yellow arrow)
2. Screw at part A to fix the light guide (direction of red arrow)



### Mounting the power cord:

1. Insert the power cord inside the switch socket
2. Turn on the switch to "I" (ON)



### Pressing the lamp switch:

1. Under normal operation- green light is always on
2. When power is off while cooling- red light is flashing
3. When machine is abnormal- red light is always on



### Light Output Adjustment :

1. Turn the knob to adjust the brightness
2. 9-level Brightness Adjustment (0-100%)



## Troubleshooting Guide

Under certain conditions, performance of the unit may be adversely affected by factors other than defects. If the problems occur, please review the list and take remedial action as needed. If you cannot solve the problem after checking the list, please contact your sales representative for assistance.

Trouble異常狀況	Cause可能原因	Remedy處理方式
The power of the equipment can not be turned on 設備的電源無法打開	Power cord and plug are not connected properly 電源線未正確連接插座	Connect them correctly 正確連接他們
	The built-in fuse is blown 內置保險絲燒毀	Replace the fuse with a new one 重新更換新保險絲
The lamp cannot be turned on, the cooling fan isn't start 燈泡無法點亮，風扇未啟動	The cooling fan or the power supply has failed 風扇或電源出現故障	Contact your sales representative 聯繫你的銷售代表
The lamp cannot be turned on, the cooling fan is operating ，the lamp switch flashing red light 燈泡無法點亮，風扇正常作動，啟動開關閃爍紅燈	The lamp has failed or life has expired 燈泡產生異常或壽命終止	Replace with a new lamp 更換新燈泡
	The lamp is not mounted properly 燈泡未正確安裝	Mount the lamp properly 正確安裝燈泡
The lamp can be turned on but is unstable 燈泡可點亮但不穩定	The lamp has failed or life has expired 燈泡產生異常或壽命終止	Replace with a new lamp 更換新燈泡
The lamp can be turned on but is dark 燈泡可點亮但未有光輸出	The lamp is not mounted properly 燈泡未正確安裝	Mount the lamp properly 正確安裝燈泡
	The light guide is not mounted properly 光導管未正確安裝	Mount the light guide properly 正確安裝光導管
	The dial value of light volume adjustment is close 光亮調節鈕被關閉	Rotate the light volume adjustment dial toward 100% by each level 按各階段光亮調整旋鈕至100%
The lamp turns off during use 使用中燈泡關閉	The lamp has failed or life has expired 燈泡產生異常或壽命終止	Replace with a new lamp 更換新燈泡
	The built-in fuse is blown 內置保險絲燒毀	Replace the fuse with a new one 重新更換新保險絲