

Datacolor Lightbooth PS

User Manual

- Please read the user manual carefully before use.
- Please keep the manual properly for reference.

***This document has been translated by AI and may contain inaccuracies. Please refer to the original text or consult a professional for precise information.**

Please read carefully when any signs appear.



This symbol is used to remind you of potential dangers and behaviors that require attention.

Security information

Before installing and operating this device, please read this manual carefully and follow the instructions.

If this device is not used in the specified manner, it may cause the protective measures of the device to fail and result in personal injury.

Matters Needing Attention:



- **Using the correct power source:** Check the label on the back of the illuminant, understand and select the rated input power supply voltage. If the input power supply does not meet the requirements, it may lead to instability of the Light source, equipment burning or even personal injury.



- **Prevent burns:** Before touching the lamp or fluorescent filter, be sure to wait for the lamp to cool down first. Especially fluorescent lamps (D65) and Horizon lamps (Horizon, referred to as HZ) and incandescent lamp (CIE A, referred to as A), because the Type of lamp tube is tungsten halogen lamp, the glass temperature of lamp tube shell is very high after lighting for a period of time.



- **Do not block the ventilation holes:** When installing the observation box, ensure that there is an open space of 30CM around it to ensure good ventilation and heat dissipation conditions for the Light Booth.

- **The correct working environment:** The Light Booth workbench and surrounding area should be in neutral color as much as possible, and the observation box should avoid interference from natural light and other light sources. To ensure the stability of Light source, fluorescent lamp D65 Light source needs to preheat the Light source for 15 minutes, and other Light source need to preheat for 5 minutes to ensure the stability of Light source.

- **Waterproof and moisture-proof:** Do not place the suspended Light Booth under the fire sprinkler System or in an environment prone to water dripping, so as to avoid equipment failure caused by liquid dripping into the equipment.

- When the UV lamp is turned on, it emits UV rays. Avoid direct eye contact or exposing your skin to light sources.

- During the working process, the diffuser, air outlet, filter, and light source will all generate heat, so be careful of high temperatures when touching them.

- Unauthorized personnel, please do not open the chassis to prevent electric shock.

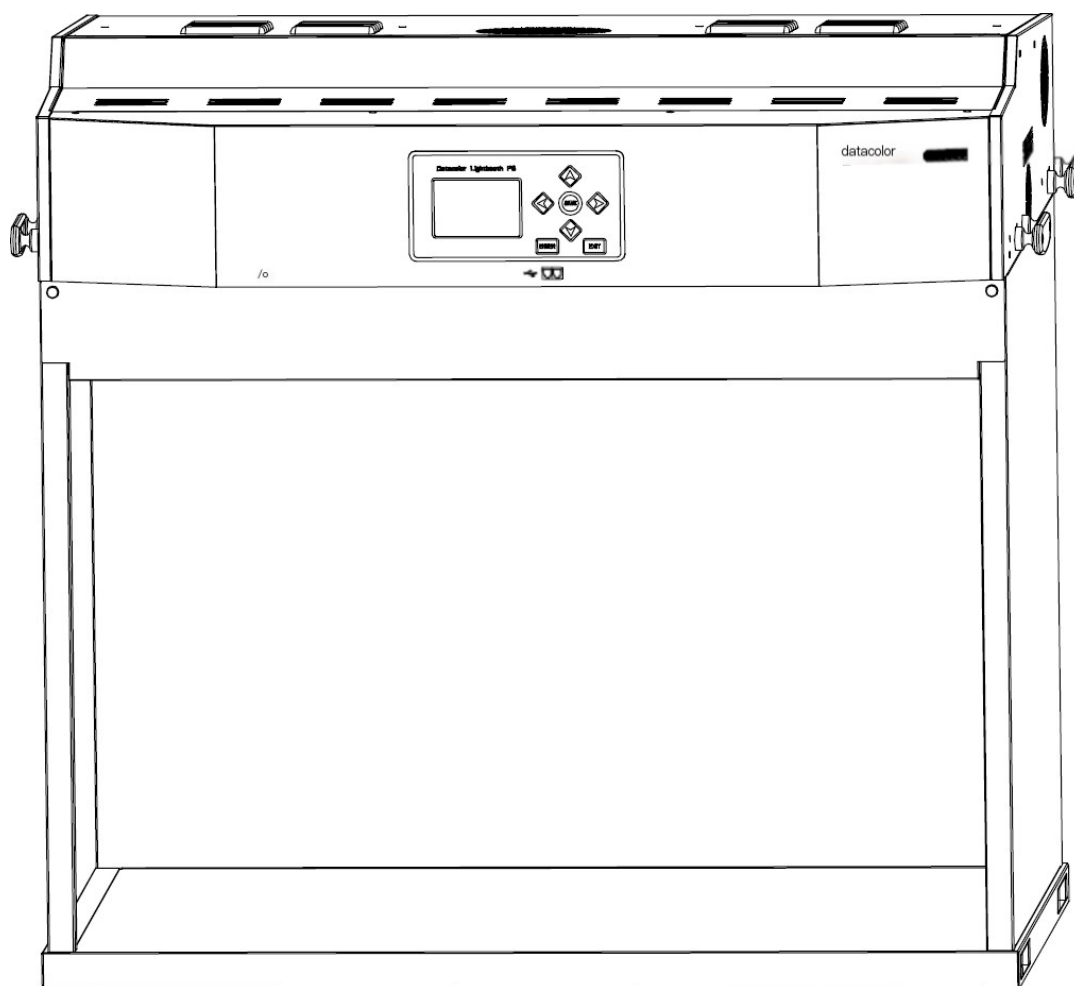
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1 Instructions and Installation

1.1 Product Introduction

This product is a professional standard light source box, which can provide up to 7 standard light sources. It can be widely used in the field of Color quality Management.



Appearance of Light Booth

Component list: luminaire x 1, box x 1, power cord x 1, diffuse glass x 1, 45 ° viewing angle table, USB data cable x 1, spare fuse 2 x 2.

Optional accessories: spring buckle, cascade cable, dimmer switch, remote control.

1.2 Function and Features

■ With 7 kinds of light sources

- Daylight CIE D65 (6500 K): Real time display of calibrated color temperature and illuminance, visible light Metamerism Index $MI_{vis} < 0.25$ (Class A), color rendering index CRI (Ra) ≥ 95 .
- Incandescent lamp CIE A (2856 K): Real time display of calibrated color temperature and illuminance.
- Horizon light Horizon (2300 K): Real time display of calibrated color temperature and illuminance.
- Fluorescent lamp CWF (4150 K) or LED 4000 K: Real time display of calibrated color temperature and illuminance, adjusting illuminance through illuminance control or voltage control mode.
- Fluorescent lamp TL84 (4000 K): Real time display of calibrated color temperature and illuminance, adjusting illuminance through illuminance control or voltage control mode.
- Fluorescent lamp U35 (3500 K) or fluorescent lamp TL83 (3000 K): Real time display of calibrated color temperature and illuminance, adjusting illuminance through illuminance control or voltage control mode.
- UV lamp UVA: It can be used in combination with any light source or alone. UV intensity can be manually adjusted.

■ Intelligent Power Switch Control

The intelligent regulated switching power supply design is adopted to provide constant power supply for light source of tungsten halogen lamp, ensuring the stability and consistency of daylight light source, incandescent lamp light source and Horizon lamp light source.

■ Intelligent Monitoring System

Built in color temperature and illuminance sensors can monitor the changes of color temperature and illuminance of each group of standard light source and the energy of UV light in real time. User can intuitively monitor the working conditions of each group of light sources.

■ Large Size Color Screen

The 4-inch color LCD screen provides real-time display of various functional data, which is convenient for User to operate comfortably.

■ Control of Intelligent Fluorescent Light source

It can automatically control the fast switching of each group of fluorescent light source, and the human-machine interface can monitor the illuminance value of light source in real time to visually display the stability of light source.

In addition, the illuminance of each group of fluorescent light source can be adjusted manually to meet the needs of different User.

■ Equipped with Wired Cascading and Wireless Remote Control Functions

Wired cascading and remote control functions can reduce repetitive operations by operators when multiple instruments need to work simultaneously. Wireless remote control can control instruments within 10 meters of open space.

■ CIE Class A Daylight D65 Light source

The innovative combination of halogen tungsten lamp plus filter and LED compensation is adopted to realize the simulation of the illuminance of the standard daylight CIE D65 light source, so that the visible metamerism index MI_{vis} can be stabilized within the Class

A range specified in CIE standard for a long time.

■ Uniform Illuminance

Using an ultra-white glass diffuser can eliminate dark areas of light and shadow, providing a more uniform lighting environment.

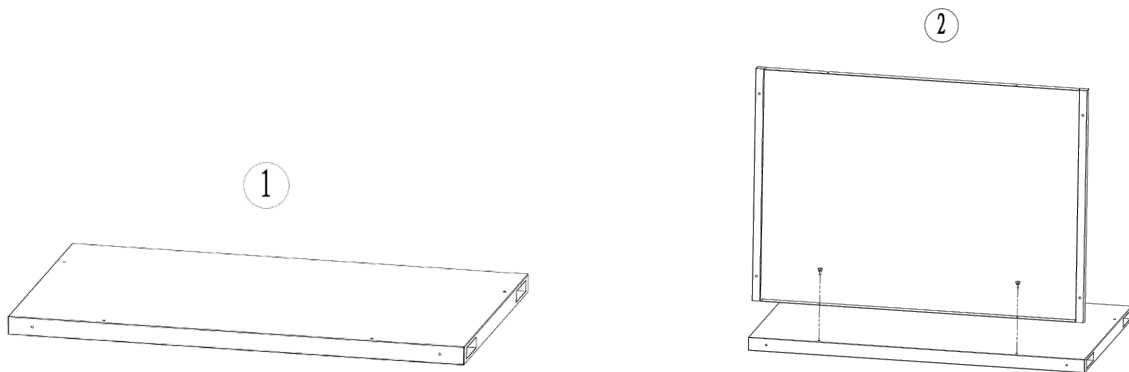
■ Equipment Casing

The all-metal casing and box are sturdy and durable. The coloring quality of the observation box surface meets the Munsell N7 Color standard. Munsell N5 Color can also be selected.

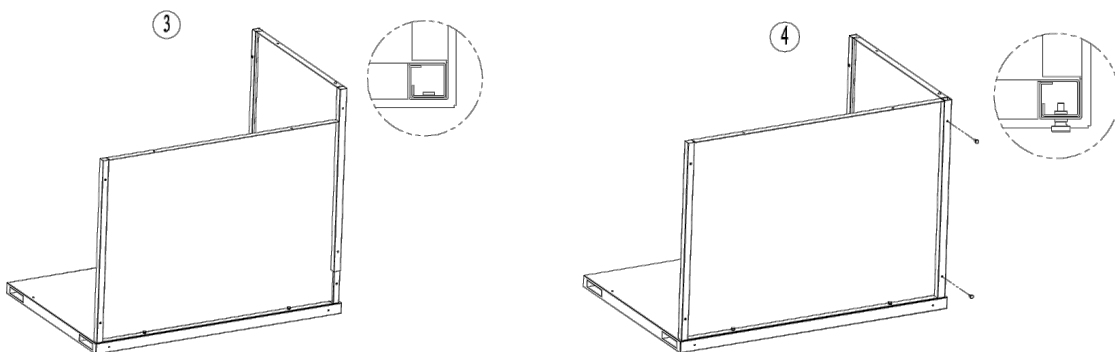
1.3 Assembly Instructions for Light Booth

Note: Select an open and flat table for installation, ensure that there is enough space for installing the Light Booth, and be careful not to scratch the surface of the box.

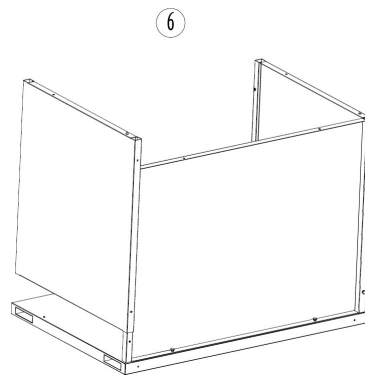
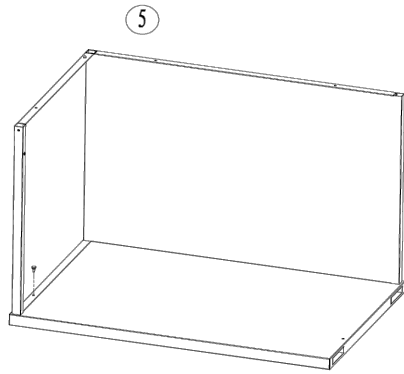
- 1 Place the bottom plate in the center of the countertop, as shown in Figure 1-1 for bottom plate placement.
- 2 Place the back panel behind the bottom panel and tighten the two fixing screws, as shown in Figure 1-2 for the installation of the back panel.



- 3 Slide the left side panel to the bottom along the groove as shown in the diagram, as shown in the installation of the left side panel in Figure 1-3.
- 4 Secure the screws on the rear side, as shown in Figure 1-4 for the installation of the screws on the left side panel.

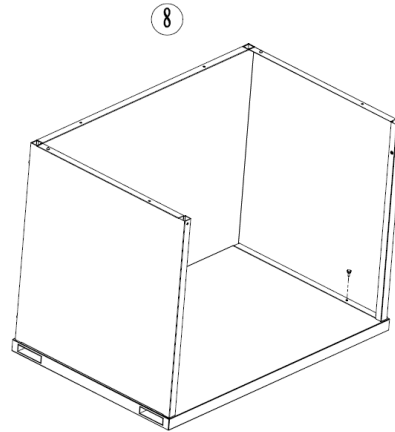
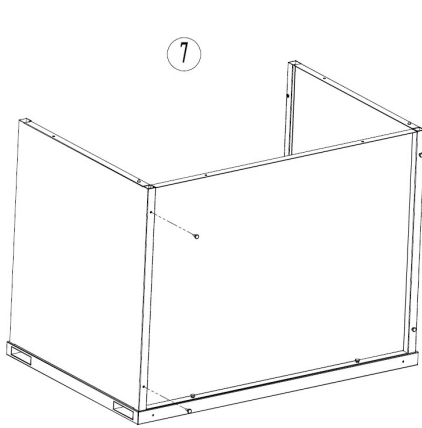


- 5 Secure the screws on the side, as shown in Figure 1-5 for the installation of screws on the left side panel.
- 6 Slide the right-side panel to the bottom in the same way as shown in the installation of the right-side panel in Figure 1-6.



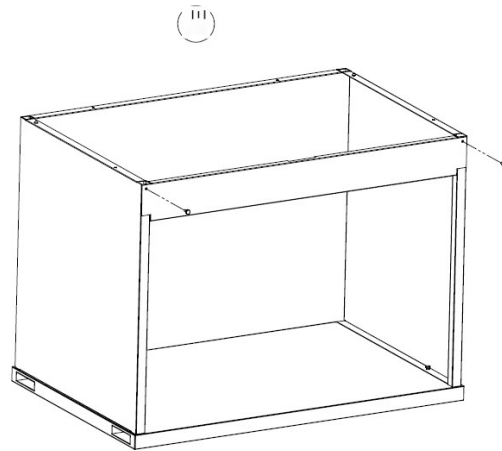
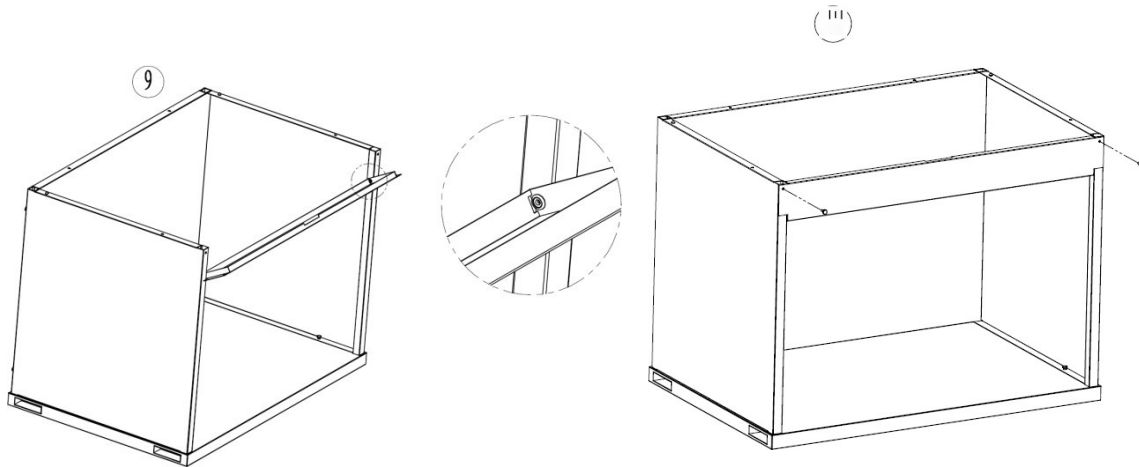
7 Tighten the rear fixing screws of the right-side panel, as shown in Figure 1-7 for the installation of the rear screws of the right-side panel.

8 Tighten the fixed screws on the inside of the right side, as shown in the installation of the screws on the side of the right plate in Figure 1-8.

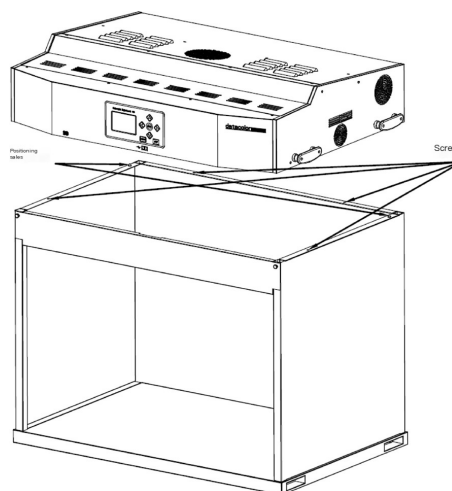


9 Insert the front sunshade into the buckle as shown in the diagram, as shown in the installation of the front sunshade in Figure 1-9.

10 Push upwards to fit onto the side panel, then tighten the screws on both sides, as shown in Figure 1-10 for the installation of the front light shielding plate screws.

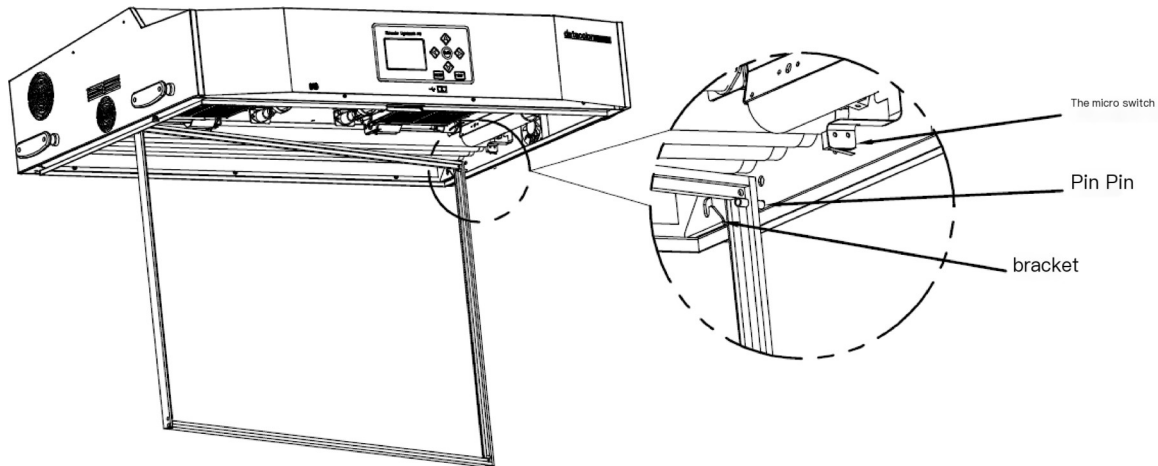


11 Use the handles on both sides of the luminaire to lift it up and adjust its position so that it clicks into the positioning pin. Tighten the fixing screws at the back and left and right again.



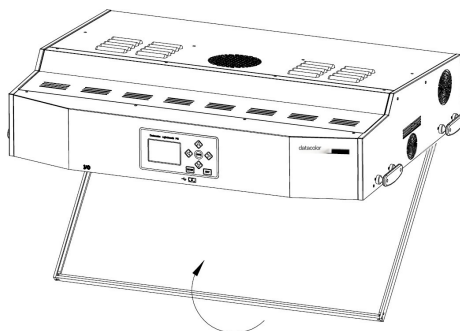
Support the diffuser and ensure that the rough side of the diffuser faces downwards during installation.

12 First, place the right pin of the diffuser in the bracket behind the micro switch, and then place the left pin in the bracket on the left side of the luminaire, as shown in the following figure.



Attention: When installing the diffuser, do not bump into the micro switch to avoid damage and failure of the micro switch.

13 Rotate the front of the diffuser and clip it into the lock. As shown in the following figure.



1.4 Installation instructions for overhead luminaire

The following are the installation steps for single or multiple suspended light emitters.

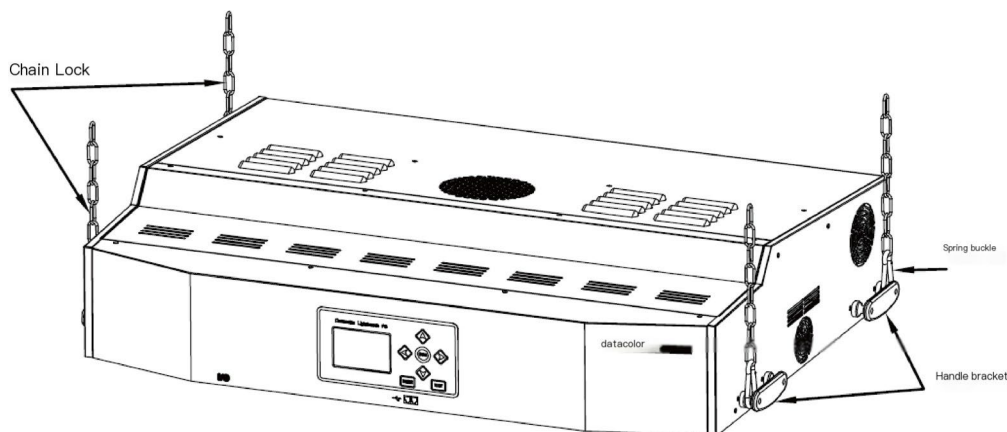
Be careful:

- *Do not install the suspended illuminant under the fire sprinkler System. The heat generated by the illuminant may activate the fire sprinkler System.*
- *Install according to local electrical regulations. It is Recommend that each emitter use a dedicated shunt circuit.*
- *Ensure sufficient support/load-bearing capacity when hanging the luminaire, with each luminaire weighing 49KG.*
- *Be careful when installing the diffuser to avoid damaging the lamp tube.*

1 Take the luminaire and diffuser from the packaging box and place them properly.

2 Install the provided spring buckles and chains (not provided) onto each bracket and hang the equipment in the work area at an appropriate height and angle.

When installing the luminaire, it should be ensured that the minimum distance between each luminaire or between the luminaire and the wall is 300 millimeters, as shown in the following figure.



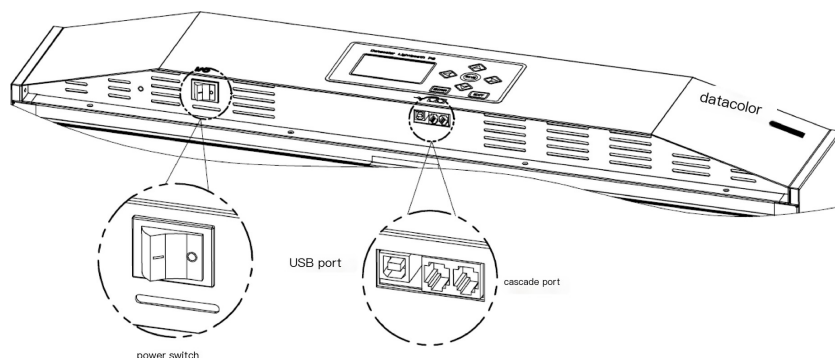
3 To install the diffuser, please refer to steps 12-14 in "**1.3 Light Booth Assembly Instructions**".

4 Install multiple light emitters, please repeat steps 2-5. To control the operation of multiple illuminants at the same time, refer to "System Setting" Part, learn about relevant information about control chain configuration.

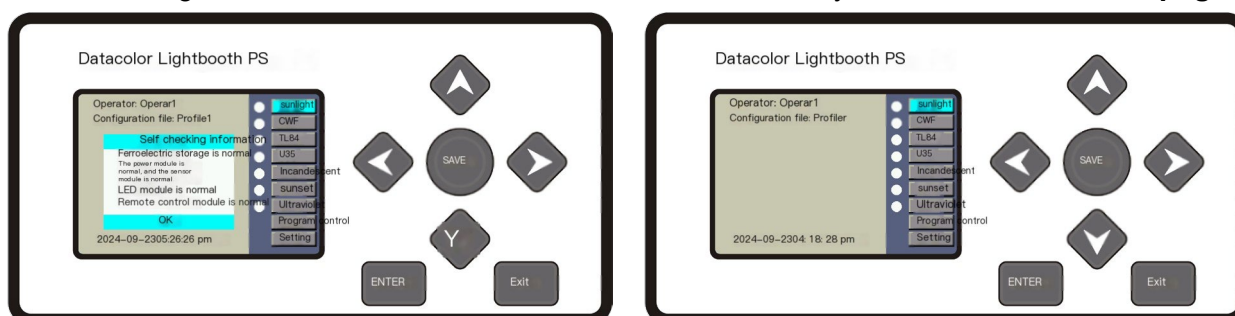
2 Basic Operation

2.1 Power On

- 1 Connect the power supply, toggle the power switch I/O on the lower left front side of the luminaire, and start the device.



- 2 After power on, the equipment will conduct System Self checking immediately. Then, the Self checking information will be displayed, and you can press the "ENTER" key to close the Self checking information or wait for 5 seconds for automatically close. Enter the 'main page'.



Note: After Close the *power*, wait at least 5 seconds for *restarting*.

This operation causes the firmware and hardware to power off normally. If the power is turned on in less than 5 seconds, the device may not be able to start. If this happened, please turn off the power supply of the device, wait at least 5 seconds, and then use the power switch to restart the power supply.

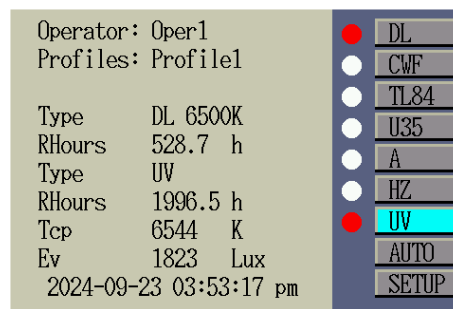
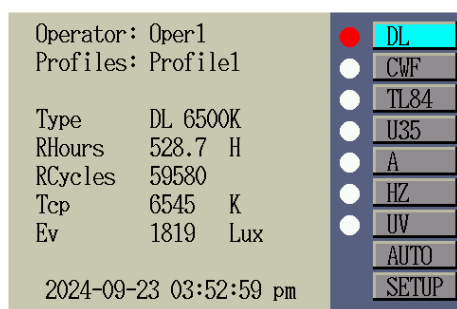
- 3 The following is an explanation of the "main page" option.

Main page options	Function description
Daylight	Turn on/off daylight Light source
CWF/L840	Turn on/off CWF/LED 4000K
TL84	Turn on/off TL84
U35/TL83	Turn on/off U35/TL83

Incandescent (A lamp)	Turn on/off incandescent lamps
Horizon (HZ light)	Turn on/off the Horizon light
UV	Turn on/off the UV lamp
Program control (short press)	Run automatic programs (refer to the content of "Automatic Programs" in this manual)
Program control (long press)	Edit automatic program (see "Automatic Program" in this manual)
Setting	Enter the Setting menu (see the "Setting" section of this manual)

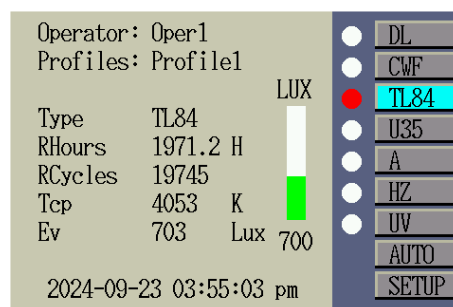
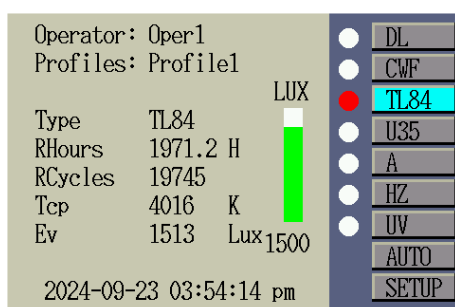
2.2 Turning on/off the Light source

- 1 In the "Main page", press the up **【▲】** and down **【▼】** keys to move the cursor and select the option (highlighted).
- 2 Press the **[ENTER]** key to control the on and off of the corresponding light source.
- 3 When the light source is turned on, the white circle on the left of the Name of the Light source ○ will become a red circle ●, and the Name of the light source, real-time color temperature, illuminance or UV intensity, and lamp life will be displayed.
Note: When any light source is turned on, it is necessary to resample and calculate its color temperature and illuminance. Please wait for a while
- 4 The UV lamp can be used alone or combined with any light source.
- 5 When the UV lamp is used in combination, first turn on the light source to be selected, then turn on the UV light source. At this time, the UV lamp will be added into the currently lit light source.



2.3 Adjust the Illuminance of Light source

- 1 Except for fluorescent lamp (D65), incandescent lamp (A) and Horizon lamp (Horizon) light source, the illuminance of other Light source can be adjusted.
- 2 When the light source lights up, press **[◀]** to reduce the illuminance or UV intensity, and press **[▶]** to increase the illuminance or UV intensity.

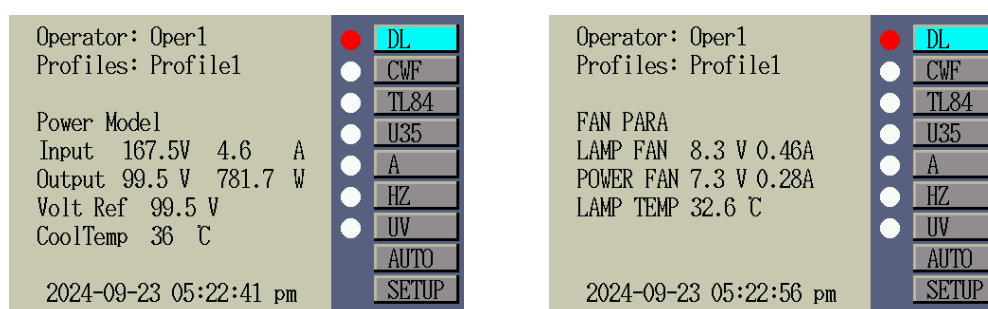


3 If you want to adjust the UV intensity in the combined light source, you need to adjust the UV lamp intensity first. Turn on the UV lamp separately, press the 【<】 or 【>】 key to adjust the UV intensity. Then turn on the combined light source.

2.4 Query Device Information

Except for fluorescent and UV light source, when other light source are lit, press 【<】 or 【>】 key to view sensor data such as power supply monitoring and temperature monitoring of light source.

For example, as shown in the following figure, query the sensor data of the daylight lamp.



2.5 Automatic Program Control

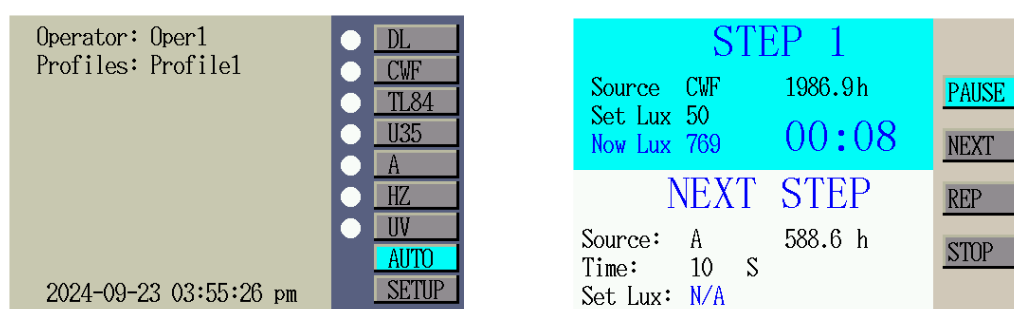
The function allows the User to Customize the automatic program control sequence to light up the light source in turn with the preset illuminance and lighting time.

When continuously checking the appearance of the sample under multiple different Light sources, this function can be used to automatically switch the light source, so there is no need to switch the light source manually.

For the setting operation of the automatic program, please refer to the relevant contents in "3.1.4 Administrator Setting".

1 Run automated programs

- Press the up 【▲】 and down 【▼】 keys to move the cursor and select the "AUTO" option.
- Press the [ENTER] key to enter the "Automatic Program Control Operation Page" and run the automatic program. When the last light source finishes running, it will automatically turn off all light sources and return to the main page.



2 Explanation of the "Automatic Program Control Operation Page" option


- **"PAUSE"**: Pause the program and keep the current light source in on status. Press the switch again to return to the program.
- **"NEXT"**: turn off the current light source and turn on the next light source.
- **"REP"**: Repeat the automatic program after finish.
- **"STOP"**: Stop the program and exit.

2.6 Remote control operation


The remote control function allows the User to turn on/off the light source remotely (the obstacle free response distance is 10 meters). The address code of the remote control in the Setting of the Light Booth System must be the same as the address code on the back of the remote control. Only when the address code is enabled can remote control be performed. Refer to **"3.1.2 Administrator System"** to configure the remote control. The default address code for the device is "1".



3 Remote control operation mode

- First, press the red power button  to wake up the remote control, and the green light will turn on.
- Press the corresponding light source button to turn on the light source; Press the corresponding light source again to turn off the light source.
- Press other light source keys, the current light source will be turned off first, and other light source will be turned on.

Be Careful:

- **The remote control will automatically enter sleep mode if not operated for 30 seconds. Pressing the power button  can wake up the remote control and keep the LED green light on for 3 seconds.**
- **Flashing green light: signal successfully sent; Red light: Signal transmission failed or there are no Light Booth devices around.**

4 Remote control address code Setting

The User can Setting address code for the remote control through the dial switch on the back of the remote control. The check mark "✓" indicates that the dip switch is turned on. The Job Code of the dial switch is A1-A8 from left to right, and the following is the address code of the remote control corresponding to the Job Code combination of the dial switch.

Address code	A 1	A 2	A 3	A 4	A 5	A 6	A 7	A 8
1								
2								
3								
4								
5								
6								
7								
8								



3 System Setting

Setting mode is used to view and adjust the Setting of the Light Booth. Each Setting will be described in the following pages.

3.1 Administrator Setting

The "**Administrator**" menu allows the User to configure the owner, System, lamp change, Program Setting, operator, time Setting, and restore Setting.

1 In the "**main page**", press up **[▲]** or down **[▼]** select "SETUP", press **[ENTER]** to enter the "**Setting page**".

2 Select "**Administrator**" and press **[ENTER]** to enter the "**Administrator page**".

The screenshot shows the main menu on the left with options: DL, CWF, TL84, U35, A, HZ, UV, AUTO, and SETUP (highlighted). The date and time are 2024-09-23 03:56:03 pm. The center panel shows the 'System Info' page with fields for Hardware Version (3.1), Software Version (5.1.1.1), Calibration (24-09-23), and Device Sn (2012345). The right panel shows the 'OWNER' page with fields for Company, Depart, District, Brand, Remark, and Password.

3.1.1 Administrator_Registration

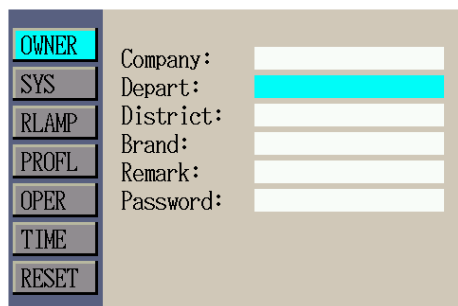
1 In the "**Administrator page**", select "**OWNER**" and press **[ENTER]** to enter the "**OWNER page**".

The screenshot shows the 'OWNER' page with a list of options: OWNER, SYS, RLAMP, PROFL, OPER, TIME, and RESET. The 'OWNER' option is highlighted. To the right, there are input fields for Company, Depart, District, Brand, Remark, and Password.

The following is an explanation of the **"OWNER Page"** option.

Registration Options	Enter Text	Factory default value	Description
company	text	blank	Enter a company Name with a maximum length of 15 characters. common The Name of the division will appear in the report.
department	text	blank	Enter the Name of the department, which cannot exceed 15 characters. Department The door Name appears in the report.
region	text	blank	Enter the Name of the region. The maximum length is 15 characters. The region Name appears in the report.
trademark	text	blank	Enter the trademark Name, which can be no longer than 15 characters. merchant The tag name will appear in the report.
Notes	text	blank	Enter a Notes with a maximum length of 15 characters. Notes will Appeared in the report.
PD	text	blank	Enter a New Password with a maximum length of 15 characters. Can be in Activate or disable PD protection in "System".

2 Press the up **[▲]** or down **[▼]** key to select the desired option. Press **[ENTER]** to enter the **"Options Edit Page"**.



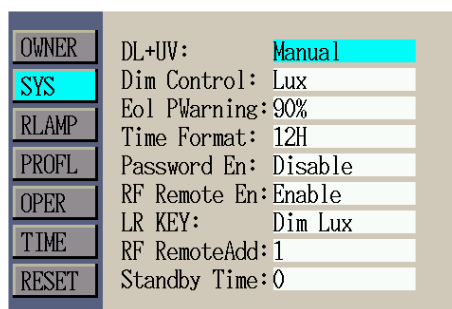
3 In the **Options Edit Page**, enter the desired text characters. Refer to the following methods:

- Press the left **[◀]**, right **[▶]**, up **[▲]**, and down **[▼]** keys to move the cursor and select the text character.
- Press the **[ENTER]** key to enter text characters.
- Press the **[EXIT]** key to Delete a character.
- Press the **[SAVE]** key to Save the text.

4 When Finish registration, press the **[EXIT]** key to Exit from the **"OWNER page"**.

3.1.2 Administrator_System

1 In the **"Administrator page"**, select **"SYS"** and press **[ENTER]** to enter the **"System Setting page"**.



The following is a description of the "System Setting Page" option.

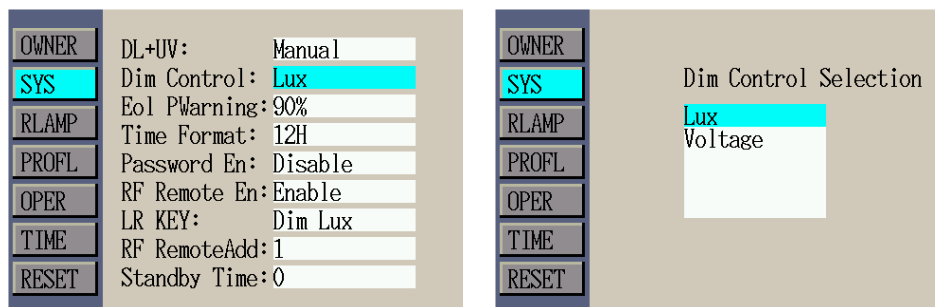
System Setting	Select Value or Select option	Factory default value	explain
Daylight+UV	Manual, automatic	automatic	Automatically add UV light to daylight, or manually add UV light to daylight.
Dimming control	Voltage and illuminance	illuminance	Setting fluorescent lamp dimming control mode: by illuminance or voltage. UV intensity is always controlled by voltage.
Lifespan warning	Close, 80% 85%, 90% 95%	90%	Setting the EOL warning percentage.
Clock format	12H、24H	12H	Setting the clock format.
Password enable	on, off	off	Turn on or off Password protection of "Administrator (ADMIN) Setting" Function.
Remote control enable	on, off	off	Turn the remote control on or off.
Left and right keys	Dimming and parameter inquiry	Dimming	Setting the left or right key to control dimming or query parameters. (Only applicable when the fluorescent lamp is lit)
Remote control address	1 to 8	0	Setting the remote control address code to match the remote control switch Setting. Refer to the "Remote Control Operation" section at the end of this manual to perform remote control Setting.
Enter standby time	0 to 999	0	Set a time limit (in minutes). Make the device enter the standby Status when not in use. After entering the standby Status, pressing any switch on the display front panel will activate the device. 0 means Close the standby function

2 Press the up **▲** or down **▼** key to select the desired option. Press [ENTER] to enter the "Options Edit Page".

3 On the Edit page, Select an option or value and enter text.

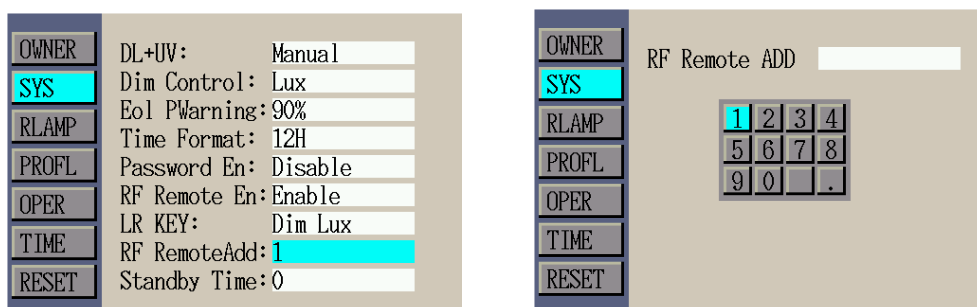
Refer to the following method: Select option or value:

- Press the up **[▲]** or down **[▼]** key to select the desired option.
- Press **[ENTER]** to Save the selected option/value. For example, as shown in the following figure, Select the dimming control mode.



Enter text:

- Press the left **[◀]**, right **[▶]**, up **[▲]**, and down **[▼]** keys to move the cursor and select the text character.
- Press the **[ENTER]** key to enter text characters.
- Press the **[EXIT]** key to Delete a character.
- Press the **[SAVE]** key to Save the text. For example, as shown in the following figure, enter the remote control address.



4 When Finish system setting, press the **[EXIT]** key to Exit the "System Setting Page".

3.1.3 Administrator _ Lamp replacement

The "lamp replacement" function displays the information of all lamps in the System, including Type configuration of lamps, service life timing, remaining switching times, and lamp serial number. The User can Select the lamp model, reset the lamp life time/switching times, and add the lamp serial number.

- 1 In the "Administrator page", select "RLAMP" and press the **[ENTER]** key to enter the "Replace lamp page".

OWNER		DL
SYS	LType: DL 6500K	CWF
RLAMP	RHours: 528.7	TL84
PROFL	RCycles: 59580	U35
OPER	SN# Left: 0187	A
TIME	SN# Right: 0255	HZ
RESET	2012345 0	UV

2 Press the up **▲** or down **▼** key to select the light source to be viewed. Press the **ENTER** key to enter the 'Options View Page' of the light source.

Select lamp Type:

Note: CWF can support optional LED 4000K (L840), and U35 can support optional TL83. The Type of other light source cannot be changed.

If you change the configuration information, you need to calibrate again, otherwise the parameters such as light source illuminance may change significantly. Please operate carefully!

- In the "Option View Page", press the up **▲** or down **▼** key to select the "Light Type" option. Press down **ENTER** key to enter the "light Type page".
 - Press the up **▲** or down **▼** key to select the target lamp Type. Press the **ENTER** key to Save. For example, as shown in the following figure, Select CWF instead of L840.

OWNER		DL
SYS	LType: CWF	CWF
RLAMP	RHours: 1986.9	TL84
PROFL	RCycles: 19768	U35
OPER	SN# Left: 210001	A
TIME	SN# Right: 210001	HZ
RESET	2012345 0	UV

OWNER		
SYS	LType	
RLAMP	CWF	
PROFL	L840	
OPER		
TIME		
RESET		

Reset the lamp timer:

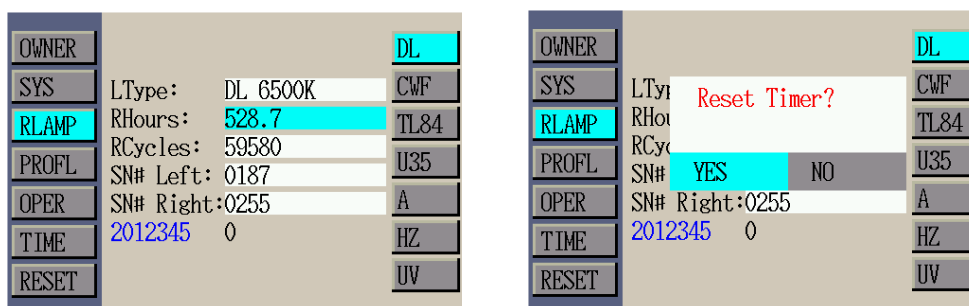
Attention: The initial service life of fluorescent lamps, incandescent lamps, and Horizon lamps is 600 hours. Other light sources are 2000 hours
Resetting the service life time of light source may affect the warranty terms, please operate with caution!

- In the "Options View Page", press the up **▲** or down **▼** key to select the Remaining Time "RHours" option. Press down **ENTER** key.

Note: When applying for after-sales service, User may be required to provide photos of "option view page" as evidence.

 - Press Left **◀** and Right **▶** to select OK or Cancel. Press the **ENTER** key to reset the life or Cancel.
 - When the lamp lifespan timer is reset, the reset count will increase by 1 (initially 0).

For example, as shown in the following figure, reset the lifespan timer of the daylight lamp.

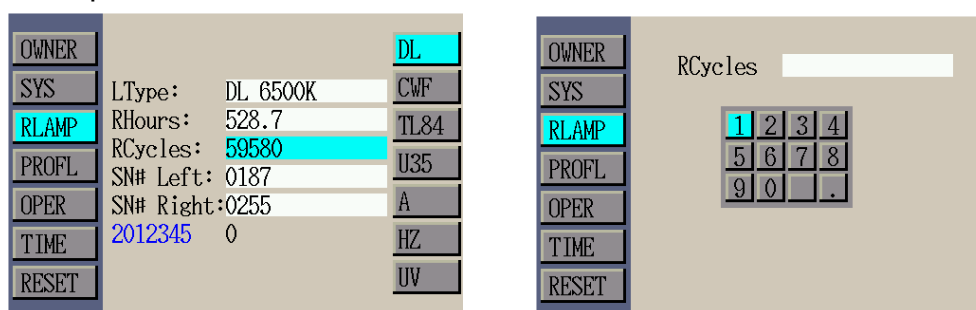


Reset remaining times:

Attention: The *initial remaining number of times for daylight lamps, incandescent lamps, and Horizon lamps is 60000 times. Other light sources are 20000 times.*

- In the "Options View Page", press the up **[▲]** or down **[▼]** key to select the Remaining Times "RCycles" option. Press down the **ENTER** key to enter the "Remaining Times Page".
- Press LEFT **[◀]**, RIGHT **[▶]**, UP **[▲]**, DOWN **[▼]** key to select the text.
- Press the **[ENTER]** key to enter text characters.
- Press the **[EXIT]** key to Delete a character.
- Press the **[SAVE]** key to Save the text.

For example, as shown in the following figure, reset the remaining number of times for the daylight lamp.

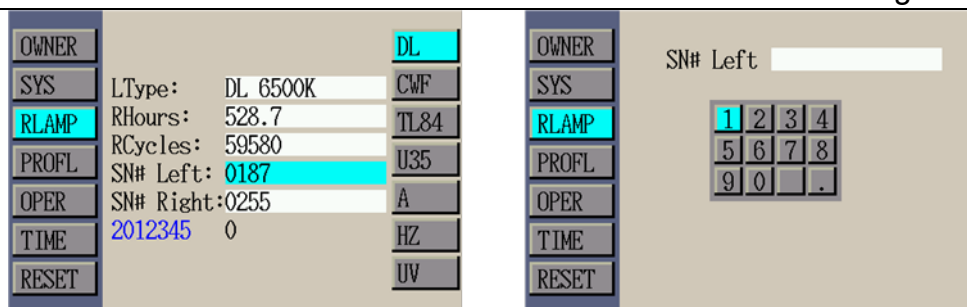


Enter the lamp tube serial number:

Attention: The *serial number of the lamp tube cannot exceed 15 characters. The input number is the serial number located on the lamp or lamp packaging.*

- In the "Options View Page", press the up or down key to select the "SN# Left" or "SN# Right" option. Press the **[ENTER]** key to enter the "lamp serial number Edit page".
- Press the left, right, up, and down keys to move the cursor and select the text character.
- Press the **[ENTER]** key to enter text characters.
- Press the **[EXIT]** key to Delete a character.
- Press the **[SAVE]** key to Save the text.

For example, as shown in the following figure, reset the serial number of the left daylight lamp.

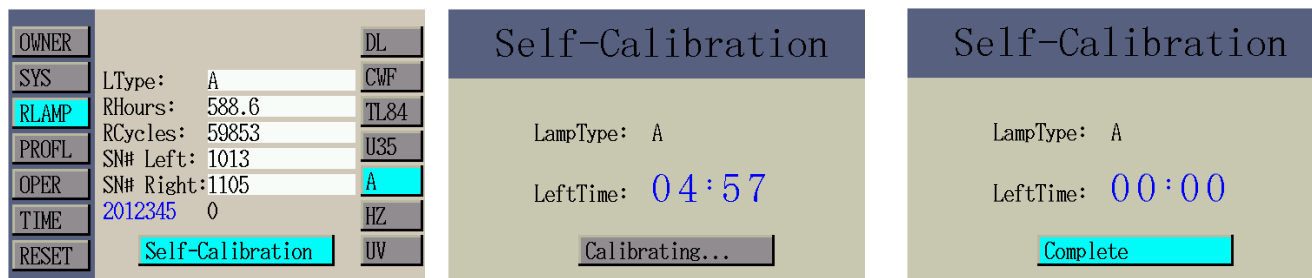


Self-Calibration Function of A lamp/Horizon Lamp:

After replacing the incandescent lamp or Horizon lamp, the display value of real-time color temperature or illuminance may change significantly. The display value can be calibrated through the self-calibration function provided by the System.

- In the **"option view page"** of incandescent lamp or Horizon lamp, press the up or down key to select the **"Self calibration"** option. Press the [ENTER] key to Start self-calibration.
- The calibration process lasts about 5 minutes.
- When the calibration is Finish, the text of the button option of **"Self-calibration page"** will change to **"Complete"**. At this time, press the [ENTER] key to Finish the self-calibration and return to the **"option view page"**. During calibration, if you need to Exit, you need to turn off the power and restart the device.

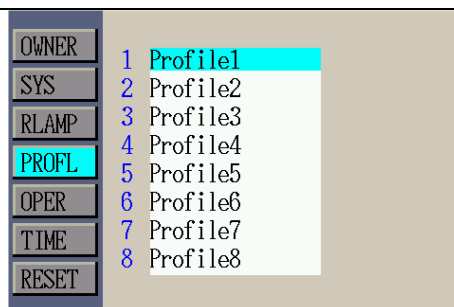
For example, as shown in the figure below, the self-calibration process of incandescent lamps.



3.1.4 Administrator_Profile Setting

"Profile Setting" allows User to create up to 8 configuration files. The effective configuration file can be Select on the **"Profile Page"** screen.

- 1 In the **"Administrator page"**, select **"PROFL"** and press [ENTER] to enter the **"Profile Setting page"**.
- 2 In the **"Profile Setting Page"**, press the Up or Down button to select the configuration file option. Press the [ENTER] key to enter the **"Configuration File View Page"** and view the configuration file.



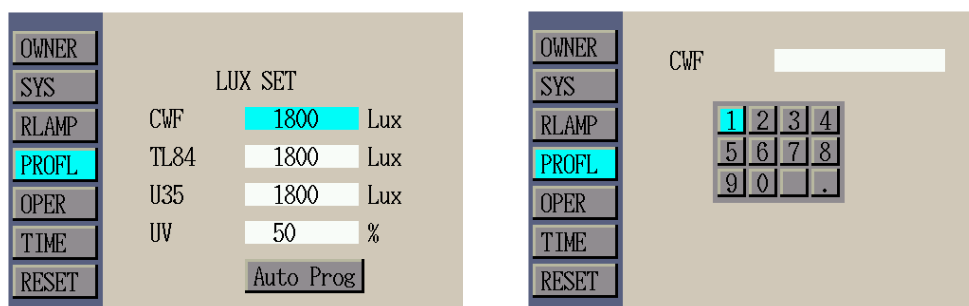
Illuminance Setting:

The User is allowed to Set the target illuminance value when the fluorescent lamp is turned on and the intensity value when the UV lamp is turned on.

Note: Illuminance Setting is only effective when the "Left Right" option in the "System" Setting is set to "Query".

- In the **"Profile View Page"**, press the up or down key to select the fluorescent or UV light option. Press the [ENTER] key to enter the **"LUX Setting Edit Page"**.
- Press the left, right, up, and down keys to move the cursor and select the text character.
- Press the [ENTER] key to enter text characters.
- Press the [EXIT] key to Delete a character.
- Press the [SAVE] key to Save the text.

For example, as shown in the following figure, set the CWF light source illuminance of Profile1.



Programmed Setting:

The User is allowed to Customize the automatic program control sequence to light up the light source in turn according to the preset illuminance and lighting time.

- In the **"Profile View Page"**, press the up or down key to select the **"Auto Prog"** option. Press down [ENTER] key to enter the **"Program Setting Edit Page"**.

Select Light source:

- In the **"Programmed Setting Edit Page"**, press the up and down keys to move the cursor, and select the light source to be set in the step.
- Press [ENTER] to enter the "Light source Select interface".
- Press up and down keys to move the cursor and select the target light source.
- Press the [ENTER] key to Save.

For example, as shown in the following figure, set the Light source in step 1 as CWF.

OWNER			
SYS			
RLAMP			
PROFL			
OPER			
TIME			
RESET			

LUX SET			
CWF	1800	Lux	
TL84	1800	Lux	
U35	1800	Lux	
UV	50	%	
<input type="button" value="Auto Prog"/>			

Step	Light	Time(S)	Light(Lux)
1	CWF	10	50
2	A	10	N/A
3	TL84	10	1800
4	OFF	N/A	N/A
5	OFF	N/A	N/A
6	OFF	N/A	N/A
7	OFF	N/A	N/A
8	OFF	N/A	N/A
9	OFF	N/A	N/A

Select Light Source:

DL
CWF
TL84
U35
A
HZ
UV
DL+UV
OFF

Setting lighting time:

- In the "**Program Setting Edit page**", press the up and down keys to move the cursor, and select the time needed for the step.
- Press the **[ENTER]** key to enter the "**Lighting time Setting Edit interface**".
- Press the left, right, up, and down keys to move the cursor and select the text character.
- Press the **[ENTER]** key to enter text characters.
- Press the **[EXIT]** key to Delete a character.
- Press the **[SAVE]** key to Save the text.

For example, as shown in the following figure, Setting the time of light source in step 1.

Step	Light	Time(S)	Light(Lux)
1	CWF	10	50
2	A	10	N/A
3	TL84	10	1800
4	OFF	N/A	N/A
5	OFF	N/A	N/A
6	OFF	N/A	N/A
7	OFF	N/A	N/A
8	OFF	N/A	N/A
9	OFF	N/A	N/A

Light Time:

1	2	3	4
5	6	7	8
9	0	.	

Setting illuminance:

Note: CWF/L840/TL84/U35/TL83 can Setting illuminance value (0-1800lux), and the intensity of UV lamp is its energy percentage (10-100%).

- In the "**Program control Setting Edit page**", press the up and down keys to move the cursor and select the illuminance to be set in the step.
- Press the **[ENTER]** key to enter the "**Illuminance Setting Edit Interface**".
- Press the left, right, up, and down keys to move the cursor and select the text character.
- Press the **[ENTER]** key to enter text characters.
- Press the **[EXIT]** key to Delete a character.
- Press the **[SAVE]** key to Save the text.

For example, as shown in the following figure, Setting the illuminance of light source in step 1.

Step	Light	Time(S)	Light(Lux)
1	CWF	10	50
2	A	10	N/A
3	TL84	10	1800
4	OFF	N/A	N/A
5	OFF	N/A	N/A
6	OFF	N/A	N/A
7	OFF	N/A	N/A
8	OFF	N/A	N/A
9	OFF	N/A	N/A

Light Lux:

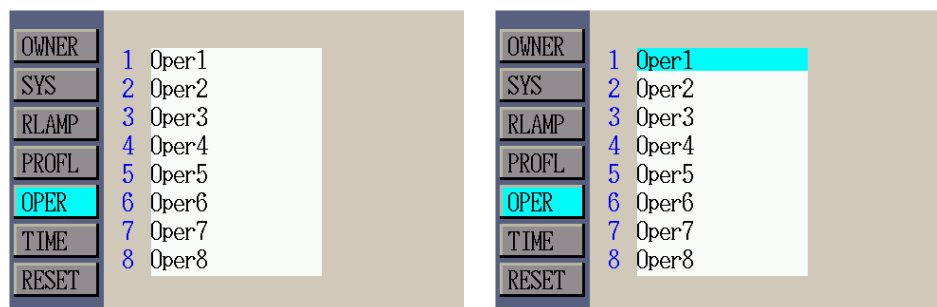
1	2	3	4
5	6	7	8
9	0	.	

3.1.5 Administrator_Operator

"Operator" allows the User to enter specific information of up to 8 operators. The operator information will be printed in the report.

1 In the "Administrator page", select "OPER" and press [ENTER] to enter the "Operator page".

2 In the "Operator Page", press the up or down key to select the target operator option. Press the [ENTER] key to enter the "Operator Viewing Page" and view operator information.



The following is an explanation of the "Operator View Page" option.

Operator Options	Text input Value or option	Factory default value	Description
Name	text		Enter the operator's Name, which can be no longer than 15 characters.
ID	text		Enter the operator ID, which is no longer than 15 characters. The ID will appear in the report.
Gender	Male and Female		Select operator gender.
Age	0 to 99		Select the birth date of the operator.
FM100 Test	0 to 99		Munsell Farnsworth FM100. The best score is 0.
Ishihara Test	0 to 99		The Ishihara test consists of a series of colored charts. Each image is individually evaluated Score, this test is the overall evaluation result of a series of charts.
Other quizzes 1	0 to 99		User defined
Other quizzes 2	0 to 99		User defined

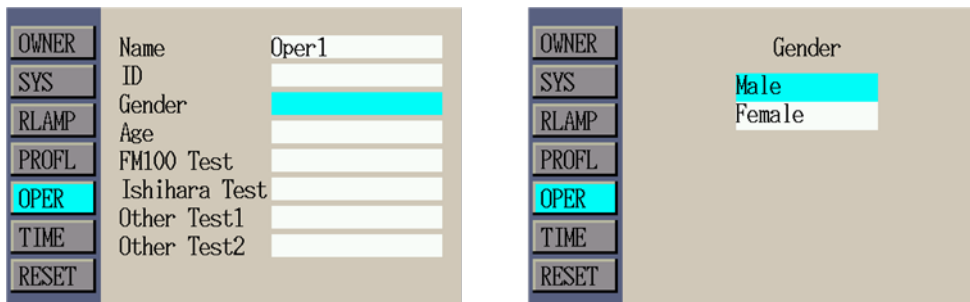
3 In the "Operator View Page", press the up or down key to select the option to be modified. Press [ENTER] to enter the "Options Edit Page".

4 Select the desired option or value, or enter text

Select option or value:

- Press the up or down key to select the desired option.
- Press [ENTER] to Save the selected option/value

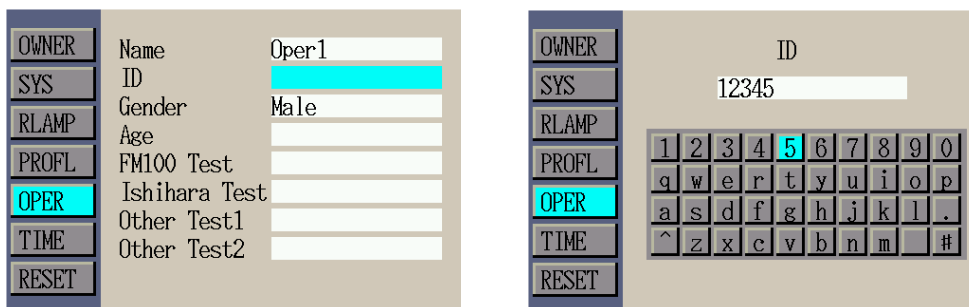
For example, as shown in the following figure, Select **Gender**.



Enter text:

- Press the left, right, up, and down keys to move the cursor and select the text character.
- Press the **[ENTER]** key to enter text characters.
- Press the **[EXIT]** key to Delete a character.
- Press the **[SAVE]** key to Save the text.

For example, as shown in the following figure, enter "ID".



3.1.6 Administrator_Clock

Clock allows the User to Setting the time and date of the System.

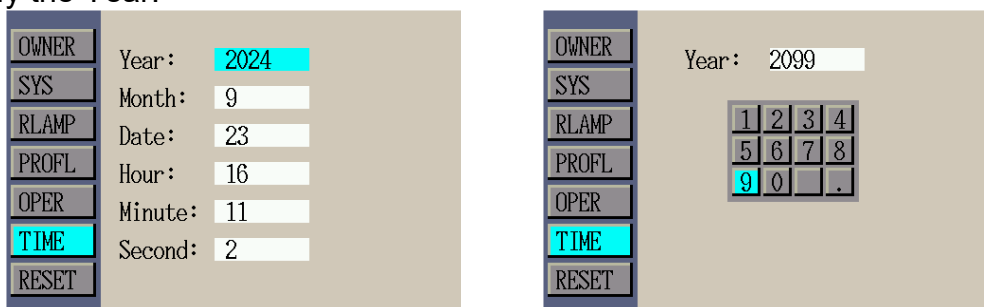
1 In the "**Administrator page**", select "**Time**" and press **[ENTER]** to enter the "**Clock page**".

2 In the "**Clock Page**", press the up or down key to select the target clock option. Press the **[ENTER]** key to enter the "**Clock Edit Page**" and Setting parameters.

Parameter Setting:

- Press the left, right, up, and down keys to move the cursor and select the numeric character.
- Press the **[ENTER]** key and enter numerical characters.
- Press the **[EXIT]** key to Delete a numeric character.

- Press the [SAVE] key to Save the number. For example, as shown in the figure below, Modify the Year.



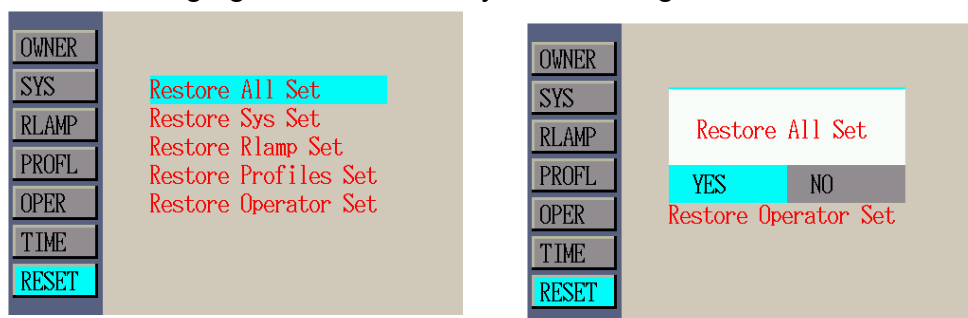
3.1.7 Administrator _ Reset

The "RESET" menu allows the User to initialize parameters, such as

Note: Once the factory Setting are restored, the original Setting will be cleared. Please operate carefully!

- 1 In the "Administrator page", select "RESET" and press the [ENTER] key to enter the "Reset page".
- 2 In the "Reset Page", press the up or down key to select the operation option. Press the **【 ENTER 】** key.
- 3 Press Left and Right to select **OK** or **Cancel**. Press [ENTER] to reset or cancel.

As shown in the following figure, restore all System Setting.

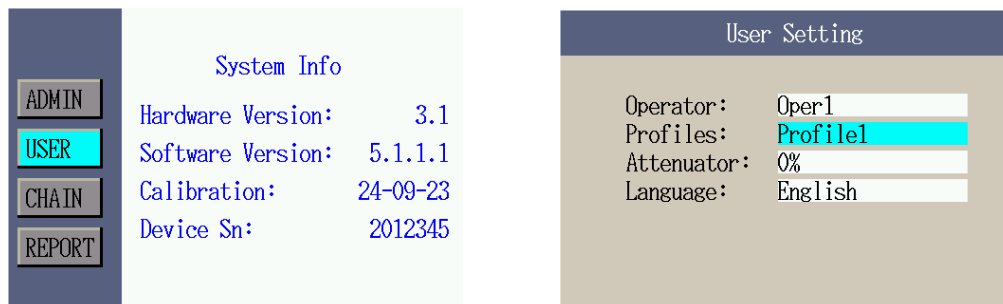


3.2 User Setting

The **User** menu allows the User to Select operator, profile, attenuator, and language.

- 1 In the "Setup page", select "User" and press [ENTER] to enter the "User page".

2 In the "User Page", press the up or down key to select the operation option. Press [ENTER] to enter the "Options Edit Page".



The following is a description of the **User Page** option.

User Setting	Select Value or Select Option	Factory default value	Description
operator	Oper1-Oper8	Oper1	Select the operator from the list. Operator Name will appear Now the main menu.
Profile	Profile1-Profile8	Profile1	Select a profile from the list. Profile Name It will appear in the main menu.
Attenuator	0%	0%	When the daylight output is D65 light source, Setting the dimmer to 0% (i.e. no dimmer).
Language	Chinese, English	English	Select Language from the list.

3 Select the desired option or value

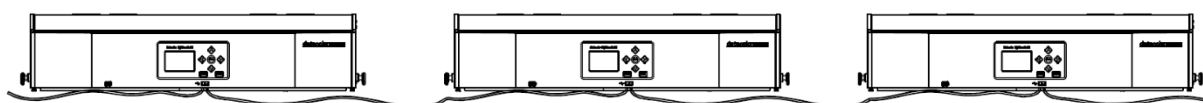
Select option or value:

- Press the up or down key to select the desired option.
- Press [ENTER] to Save the selected option/value.

3.3 Control Chain Setting

The "**control chain**" function allows the User to connect two or more Light Booths in series to turn on or off the light source at the same time. The control chain can connect up to 32 Light Booths. To realize the control chain function, all Setting of each Light Booth control chain must be consistent.

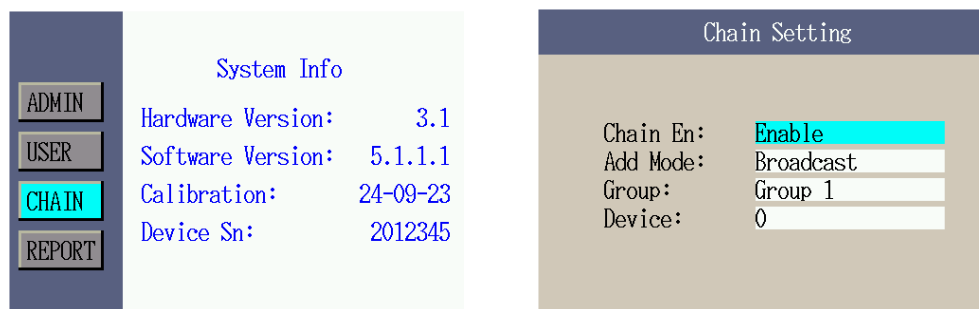
1 Use cascading lines to sequentially connect the Light Booths that need to be controlled. As shown in the following figure.



2 In the "Setup page", select "CHAIN" and press the [ENTER] key to enter the "Control chain page".

3 In the "Control Chain Page", press the up or down key to select the operation option.

Press [ENTER] to enter the "Options Edit Page".



The following is a description of the "Control Chain Page" option.

Setting	Options Select	default	explain
Chain En	On/off	on	Turn on/off the control chain operation.
Add mode	Broadcast style, group address, single Machine address	Broadcast style	Setting the address mode options for the Light Booth. Broadcast style includes all connected devices. "Group address" includes the selected Group, and "stand-alone address" refers to a single device.
Group	Group 1 to Group 8	1	Setting the Group Job Code for the group address.
Device	1 to 32	0	Setting the Device Job Code for the Device address.

4 Select the desired option or value, or enter text.

Select option or value:

- Press the up or down key to select the desired option.
- Press [ENTER] to Save the selected option/value.

Enter text:

- Press the left, right, up, and down keys to move the cursor and select the text character.
- Press the [ENTER] key to enter text characters.
- Press the [EXIT] key to Delete a character.
- Press the [SAVE] key to Save the text.

3.4 Report

The reporting function is used to generate consistency reports and lamp reports.

Note: When running the System report, no objects can be placed in the box.

1 In the "Setup page", select "Report" and press [ENTER] to enter the "Report page".

2 In the "Report page", press the [ENTER] key to run the report test program, and the System will turn on each light source in turn for testing and recording.

3 Press the [EXIT] key to Exit or stop the test.

4 After the test is Finish, the test information will be automatically recorded on the device.

ADMIN

USER

CHAIN

REPORT

System Info

Hardware Version: 3.1

Software Version: 5.1.1.1

Calibration: 24-09-23

Device Sn: 2012345

Report information

Start

REPORT

CWF Testing...

STOP

Appendix I Maintenance



Be careful:

- ***Before maintenance, be sure to turn off the power and unplug the power cord.***
- ***Before replacing the lamp tube, please loosen the diffuser glass lock and slowly lower the front end of the diffuser glass until it reaches the fully open vertical position.***
- ***Before touching the lamp or filter, please wait for the lamp to cool down to prevent burns.***

1 Equipment maintenance and cleaning

1 Clean the diffuser

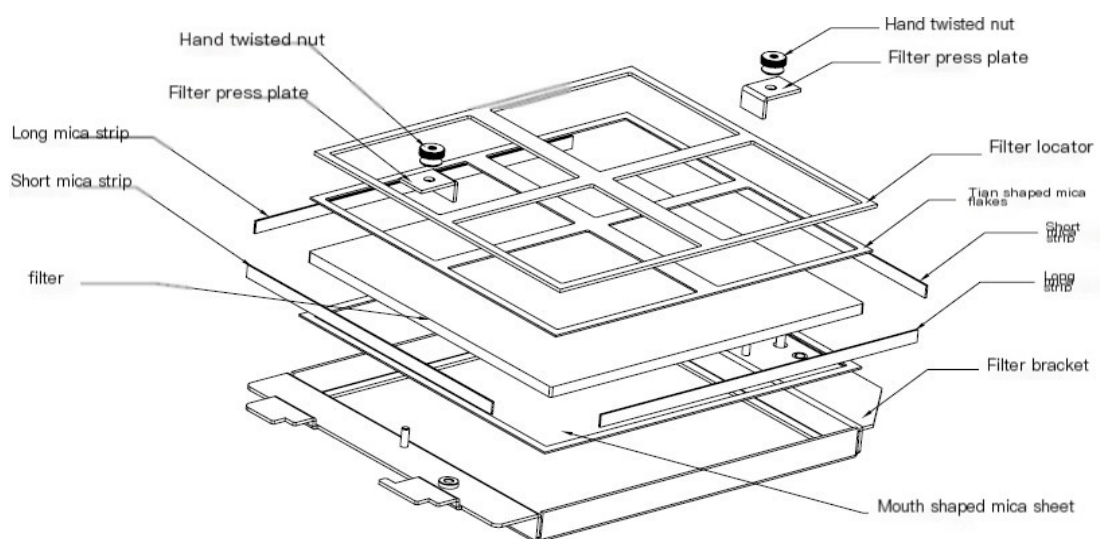
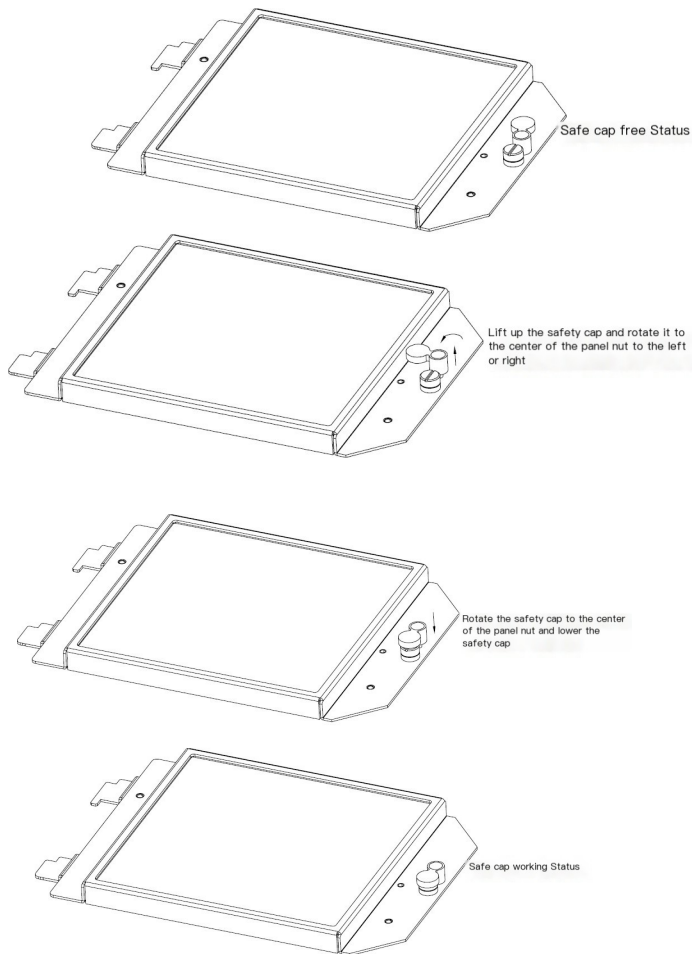
- Remove the front light shield of the box.
- Hold the diffuser under one hand, open the lock and slowly lower the diffuser.
- Clean the inner surface of the diffuser glass with a neutral cleaner and let it air dry naturally.
- Lift up the diffuser and close the lock.
- Clean the outer surface of the diffuser glass with a neutral cleaner and let it air dry naturally.

2 Clean fluorescent lamps and halogen lamps

- Use a clean, dry lint free cloth to wipe away all dirt from the lamp tubes.
- Use a cleaning cloth dipped in warm water or window cleaner (containing ammonia) to wipe away all dirt from the reflective film. Air dry all components naturally.

3 Clean the filter of the daylight lamp

- Remove the front light shield of the box.
- Hold the diffuser glass underneath, open the lock and slowly lower the diffuser glass.
- Hold onto the filter tray, lift and rotate the safety cap of the filter assembly, unscrew the screws that secure the filter assembly, and slowly remove the filter assembly.
- Unscrew the hand nut, separate the components of the filter, and remove the filter.
- Use a clean, dry lint free cloth dipped in some neutral cleaner to wipe the filter and let it air dry naturally.



2 Replace the Lamp Tube

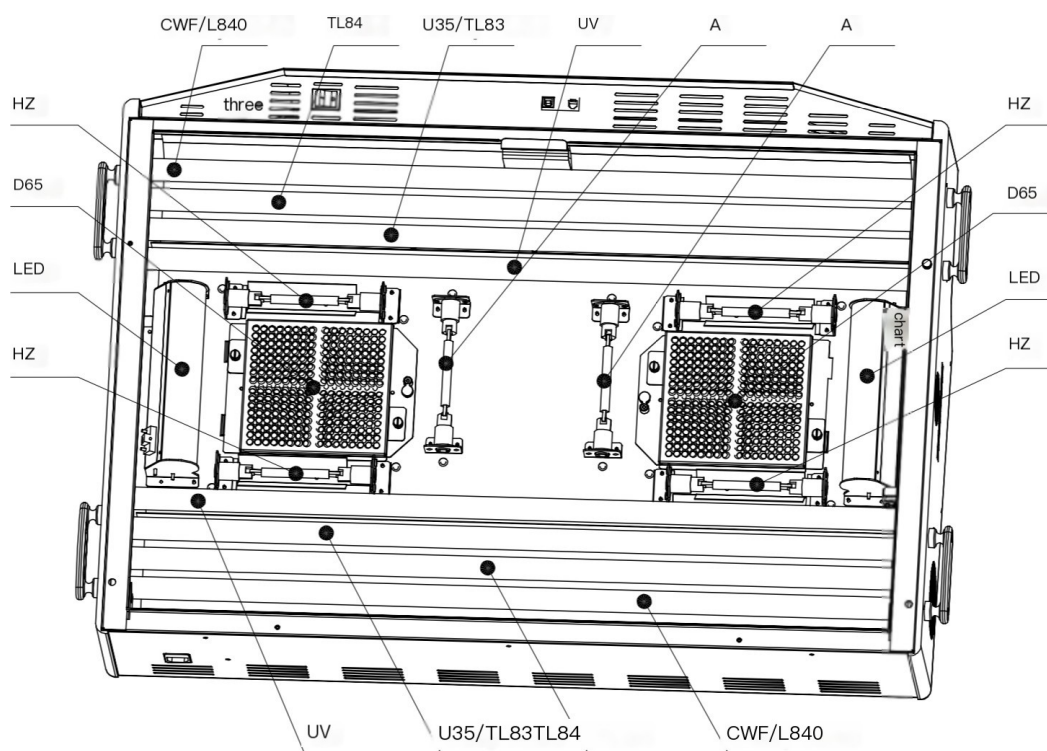
Immediately replace the burnt or expired lamp tubes to maintain overall performance standards.

Note: We Recommend replacing the complete set of lamps.

The service life of Recommend lamps is listed in the table below.

Lamp model	Change time	Lamp model	Change time
Daylight CIE D65	600 hours	U35	2000 hours
Incandescent CIE A	600 hours	UV UVA	2000 hours
Horizon light HZ	600 hours	LED 4000 K	2000 hours
CWF	2000 hours	TL83	2000 hours
TL84	2000 hours		

Lamp Position Guidance



1 Replace the halogen tungsten lamp

Before touching the halogen lamp tube, please wait for the tube to cool down.

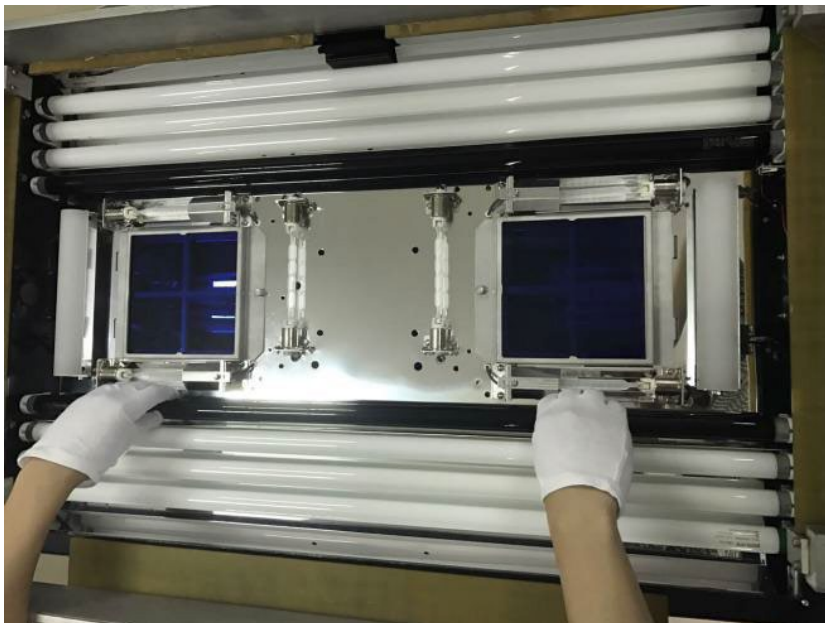
When touching the lamp tube, please use clean gloves or similar products, as skin oil can affect the performance of the lamp tube.

- Disassemble the filter assembly (only for daylight lamps): Hold the filter assembly, push in the firmware button, and lower the daylight filter assembly. Repeat this operation on another filter component.
- Push one end of the old lamp tube into the groove of the lamp holder with force and release the other end from the groove. Pull up the lamp completely from both grooves and discard it.
- Push one end of the replacement lamp into the groove of the lamp holder. Insert the other end of the lamp tube into the groove of another lamp holder. The reference diagram is as follows.
- Repeat the above steps to replace another lamp.
- Install filter assembly (for fluorescent lamps only):
- Rotate the daylight filter assembly to its original position and press the firmware button to secure it. Repeat this operation on another solar filter component.
- After Finish, please turn on and off the light source to test whether the installation is correct.



2 Replace the fluorescent lamp

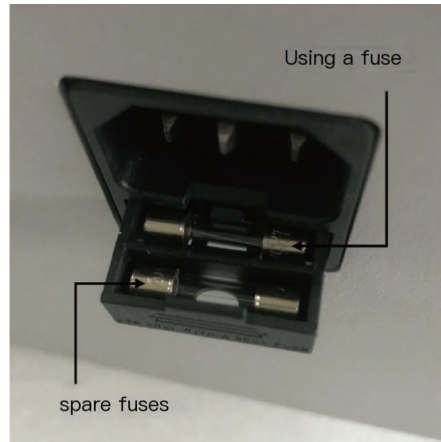
- Rotate the lamp tube 1/4 turn with both hands simultaneously and remove the lamp tube from both grooves. The reference diagram is as follows.
- Discard it in a suitable container.
- Install the new fluorescent lamp into the groove. Rotate the lamp tube in the opposite direction by 1/4 turn, as shown in the installation of the fluorescent lamp in Figure 4-5.
- Repeat steps 1 to 3 for the other lamp tube.



3 Replace the fuse

- Before operation, please turn off the power and unplug the power cord.
- Use tools to open the fuse box. The fuse box is located below the power socket.
- Take out the damaged '**in use fuse**' and replace it with a '**spare fuse**'.

- After Finish, push the fuse box in the direction of the interface. The reference diagram is as follows.



Appendix II Troubleshooting

fault	Reasons and solutions for malfunctions
The device is unresponsive	Please check if the power switch on the front cover is turned on correctly
	Check whether the fuse is burnt
	Check whether the input power is connected
	Contact technical support
Light source cannot be turned on	Ensure that the lamp is installed correctly
	Check whether the high temperature cause power protection
	Contact technical support
The remote control cannot operate	Check whether the IP address of the remote control matches
	Wake up the remote control from sleep mode
	Remote control battery is low, replace battery
	Contact technical support
Power-on self-test error	Check whether frequent startup causes abnormal Reset. Shut down again and wait for 10s to power on again
	Contact technical support

Appendix III Technical Specifications

Dimensions (H x W x Darker)	Light Booth	Observation area
	H 915 x W 990 x D 690 mm	H 560 x W 890 x D 580 mm
Weight/Shipping Weight	74 Kg / 95.58 Kg (Excluding the weight of 2.2 Kg for the optional 45 degree viewing platform)	
electrical	Power supply: 115V AC (100-120 Vac), 50/60 Hz, 1150 W 230V AC (220-240 Vac), 50/60 Hz, 1150 W Main fuse: 115V AC mode: 250 V, 15 A 230V AC mode: 250 V, 6.3 A Transformer slow melting fuse: 115V AC mode: 250 V, 6.3 A 230V AC mode: 250 V, 3.15 A power cord: Head plug: Depending on the specific country Tail plug: IEC 60320 C13 Standby power: ≤ 15W	
optics	Lamp tube: 1 Daylight D65: 2pcs, 500 W, 120 V 2 Incandescent A lamps, 2pcs, 160 W, 120 V 3 Horizon lights: 4pcs, 200 W, 120 V 4 CWF: 2pcs, T8, 30 W; LED 4000K (optional), 2pcs 5 TL84: 2pcs, T8, 30 W 6 U35: 2pcs, T8, 25 W; TL83 (optional), 2pcs, T8, 30W 7 UV lamps: 2pcs, T8, 30 W Daylight LED compensation module: 2pcs D65 filter: 2 pcs	
Environmental requirements	1 Indoor use 2 Altitude requirement: ≤ 2000 meters 3 Environmental temperature: 5 °C to 35 °C 4 Storage temperature: -40 °C to 70 °C 5 Relative humidity: 0 to 80% maximum (non-condensing)	
Transportation method	Manual handling	