

# User Manual



Please read operating manual before installation and operation.

**Drawell International Technology Limited**

**Chongqing Drawell Instrument Co., Ltd.**

**Shanghai Drawell Scientific Instrument Co.,Ltd.**

Chongqing Center : Suite 2605, Building No.11, Shiyou Road No.1, Yuzhong District, Chongqing, China.

Shanghai Office : Suite 1117, Lane 561 XiuChuan Rd., PuDong New Area, Shanghai, China

Homepage : [www.drawell.com.cn](http://www.drawell.com.cn)

Tel : 0086-023-63268643

Email : [sales05@drawell.com.cn](mailto:sales05@drawell.com.cn)

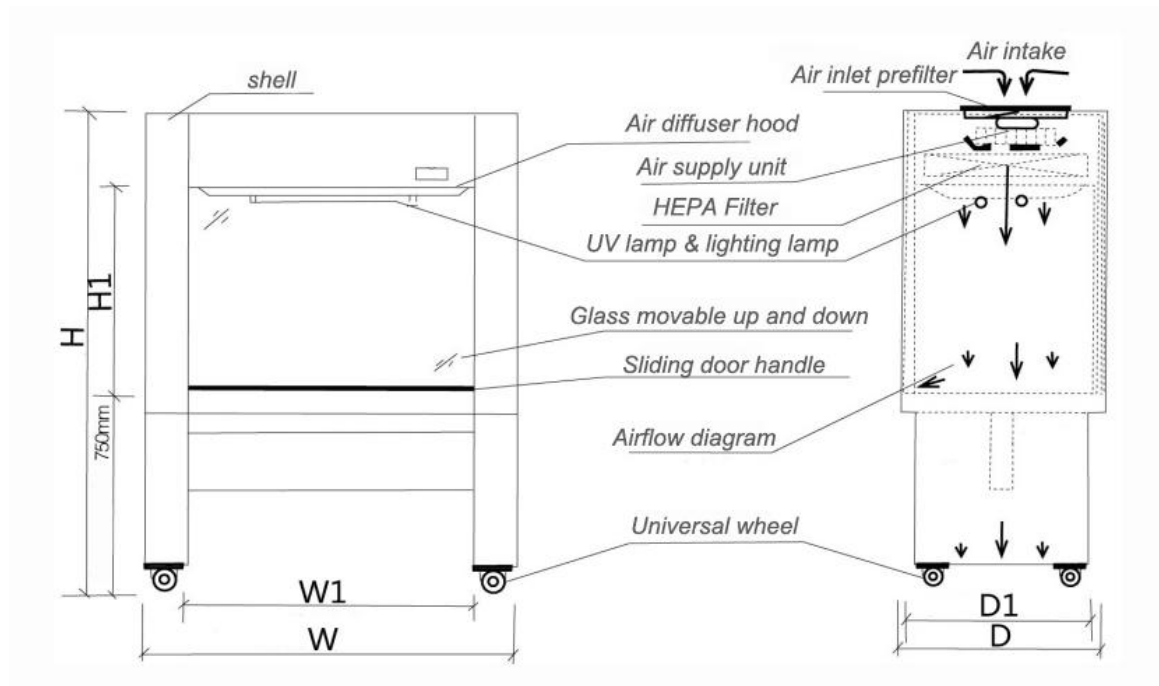
# Catalogue

SW-CJ-1D Laminar flow cabinet .....	3
1、 Product features .....	4
2、 Technical parameter .....	4
3、 Structure .....	5
4、 Working principle .....	5
5、 Install and use .....	6
7、 General faults, causes, and troubleshooting methods .....	6
8、 Wiring instructions for the panel controller of the clean bench .....	6

# SW-CJ-1D Laminar flow cabinet

## 1、 Product features

1. Adopting arbitrary positioning sliding door system
2. The shell is made of cold plate electrostatic spray, and the work surface is SUS304 brushed stainless steel, which is corrosion-resistant and easy to clean.
3. Safety interlock between lighting and sterilization system
4. Digital display LCD control interface, adjustable speed in two speeds, more user-friendly design
5. The vertical quasi-closed table top and the formation of a downward flow air curtain in the operation room can effectively prevent the input of external air and the operation area is clean
6. Equipped with HEPA high-efficiency air filter, with primary filter for preliminary filtration, which can effectively extend the service life of the high-efficiency filter

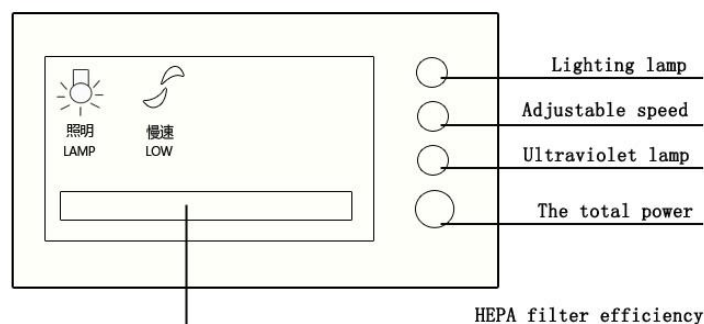


SW-CJ-1D Schematic

## 2、 Technical parameter

Parameter	Model	SW-CJ-1D
Cleanliness level		Class 100@ $\geq 0.5\mu\text{M}$ (US Federal 209E)
Number of colonies		$\leq 0.5\text{pcs/dish}\cdot\text{hour}$ ( $\Phi 90\text{mm}$ culture plate)
average wind speed		0.25~0.45m/s

noise	≤62dB (A)	
Vibration half peak	≤5μM (x、y、z direction)	
Illuminance	≥300Lx	
power supply	AC single-phase 220V/50Hz	
Maximum power	100W	
weight	80kg	
Working area	W1×D1×H1	700×550×580
Overall dimension	W×D×H	860×590×1600
Applicable number	single/single	
High efficiency filter specification and quantity	685×455×50×①	
Specification and quantity of fluorescent lamp/ultraviolet lamp	12W×①/20W×①	



### LCD control panel button description

### 3、Structural features

The purification workbench is composed of several major components such as a cabinet, a fan, a high-efficiency filter, and an operation switch. The box body is made of cold-rolled plate, and the surface is sprayed with plastic. The purification unit adopts a fan system with adjustable air volume. By adjusting the working state of the fan, the average wind speed in the clean working area can be kept within the rated range, and the service life of the high-efficiency filter can be effectively extended.

### 4、Working principle

The air passes through the primary filter, is pressed into the static pressure box by the centrifugal fan, and then blown out from the air outlet after being filtered by the high efficiency filter to form a clean air flow. The clean air flow flows through the area to be purified at a uniform cross-sectional wind speed, and the area is The dust is taken away, thus forming a highly clean working environment.

## 5、 Install and use

The workbench should be placed in a clean room (preferably in a primary clean room with a level of 100,000 or 300,000), plug in the power source, and turn it on according to the function shown on the controller. The working area and shell of the clean bench should be carefully cleaned before starting up to remove dust on the surface. Normal operation and use can be carried out ten minutes after starting up.

## 6、 Maintain

1. According to the actual use, the primary filter is removed and cleaned regularly. The cleaning cycle is generally 3-6 months. (If it is not cleaned for a long time, dust accumulation will affect the insufficient air intake and reduce the cleaning effect.)

2. When the ideal cross-sectional wind speed cannot be reached after the normal exchange or cleaning of the primary filter air filter, the working voltage of the fan should be adjusted to achieve the ideal uniform wind speed.

3. Generally, when the working voltage of the fan is adjusted to the highest point after the eighteenth is used, when the ideal wind speed is still not reached, it means that the high-efficiency filter has too much dust (the filter hole on the filter material has been basically blocked, and it should be updated in time) , Generally, the service life of high-efficiency air filters is 18 months.

4. When replacing the high-efficiency air filter, pay attention to whether the model, specification and size are correct (configured by the original manufacturer), follow the arrow wind direction device, and pay attention to the surrounding seal of the filter, and there is absolutely no leakage.

## 7、 General faults, causes, and troubleshooting methods

Failure phenomenon	Reason	Discharge method
The main power switch can not be closed,	1. The fan is stuck and the motor is blocked, or there is a short circuit in the	1. Adjust the position of the fan shaft, or replace the impeller and bearing, and check whether the circuit is in good condition.

automatically trip	circuit	
Low wind speed	1. Too much dust in the primary filter.	2. Check the insulation resistance of the circuit and components to the shell point by point according to the wiring diagram, and repair the insulation failure.
The fan does not turn	2. The high efficiency filter fails.	1. Clean the primary filter.
Fluorescent light does not light up	1. The contactor does not work.	2. Replace the high-efficiency filter.

## 8、Wiring instructions for the panel controller of the clean bench

### a.Controller function description

This controller is suitable for control applications such as clean benches, biological safety cabinets, etc. It is equipped with blower speed regulation control, germicidal lamp and lighting lamp switch control, and timer control (optional) for the service life of the filter.

### b.Controller technical index

Input power: AC220V 50Hz

Static power consumption: <10W

Load characteristics:

Lighting lamp, germicidal lamp: AC220V 50Hz power consumption <800W

Two-speed adjustable-speed blower: AC220V 50Hz, power consumption <1000W

Control interface:

Low-power LCD module + blue backlight

Highly reliable physical keys, pressing life> 1 million times

### c.Wiring instructions

#### 3.1 Power junction box

Port description	Wiring color	Function
power input	Red	AC220V – L
	black	AC220V – N
Load output	Yellow	Germicidal lamp-L
	White	Illumination lamp-L
	blue	Fan slow-L

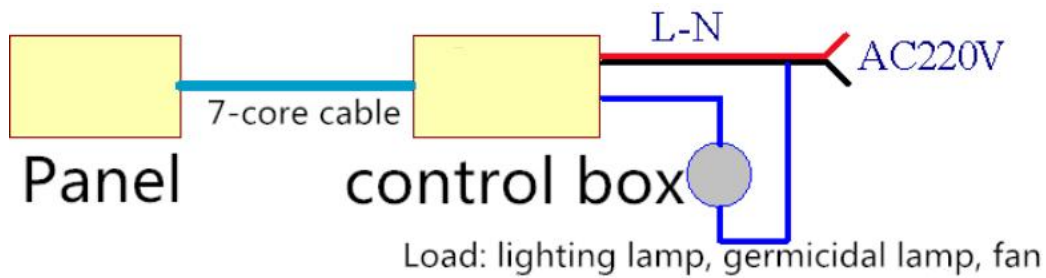
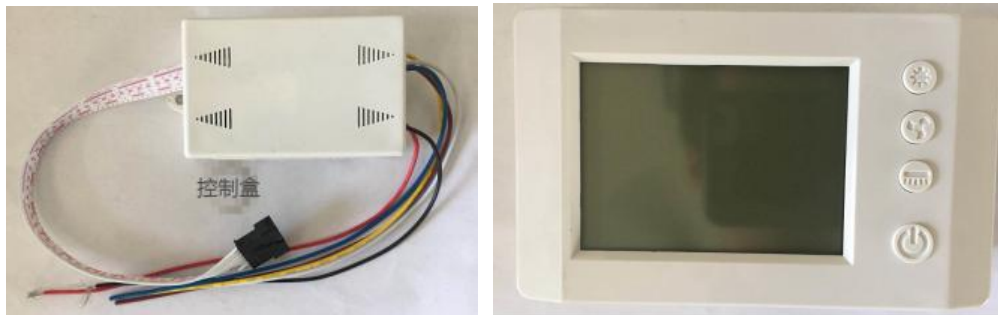
	Brown	Fan fast gear-L
Control input	SM-7P pin	Logic control input

### 3.2 Panel

Port description	Wiring color	Function
Power supply and control output	XH2.54-7P socket	Power input + logic control out

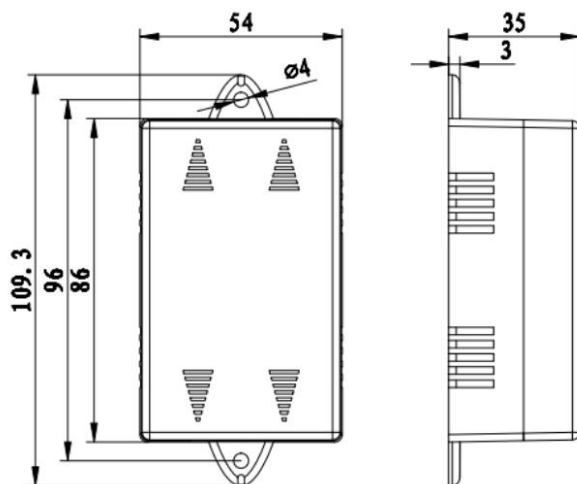
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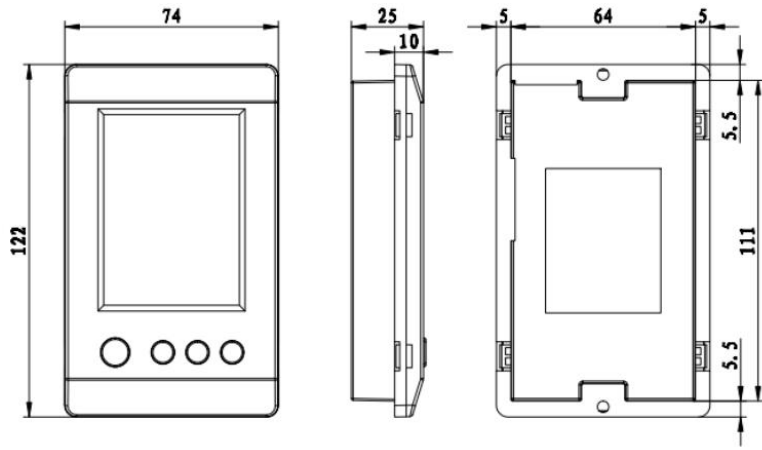


### f、Installation size

4.1 Power control box installation size:



4.2 Panel mounting size





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