



Laminar Flow Cabinet

Model YR05734

## Instruction Manual

Thank you very much for purchasing our Kalstein Laminar Flow Cabinet Model YR05734

Please read the "Operating Instructions" and "Warranty" before operating this unit to assure proper operation. After reading these documents, be sure to store them securely together with the "Warranty" at a hand place for future reference.



**Warning:** Before operating the unit, be sure to read carefully and fully understand important warnings in the operating instructions.



OUR SERVICES

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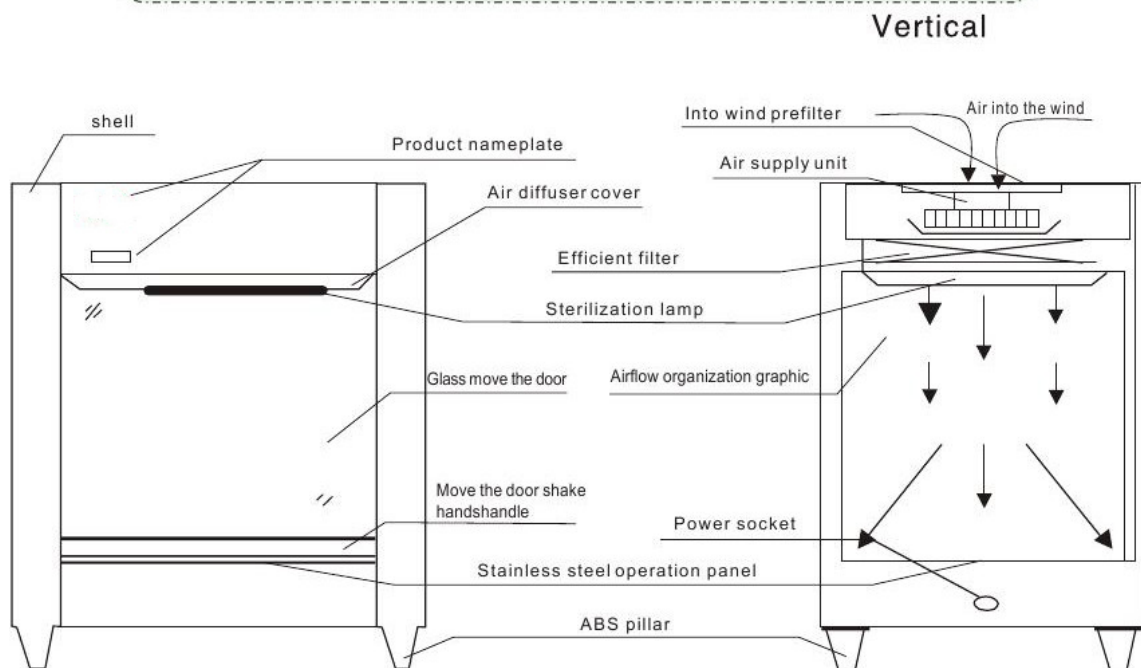
With more than 25 years growing with our customers, Kalstein's multiformat and modern content, is now present in more than 10 countries and increasing.



## 1. Brief Introduction

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. Wireless controller, 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.

### Structure schematic diagram



## 2. Technical Specification

Model		YR05734
Technical		
Clean level		Class 100 @ $\geq 0.5\mu\text{M}$ (The US federal 209E)
Clump count		$\leq 0.5\text{pcs/dish}\cdot\text{h}$ ( $\Phi 90\text{mm}$ dish)
Average wind Speed		0.25~0.45m/s
Noise		$\leq 62\text{dB}$ (A)
Vibration in Half-Peak		$\leq 5\mu\text{M}$ (x、y、z direction)
Illuminance		$\geq 300\text{Lx}$
Voltage		AC Single phase 110V/60Hz
Work size	W1×D1×H1	490×490×490
Overall size	W×D×H	650×530×850
Hepa filter size and Qty.		475×410×38×①
Fluorescent lamp/UV size and Qty.		5W×①/10W×①

## 3. Structural Characteristics

Laminar flow cabinet: by several major components of the cabinet, fan and high efficiency filters, operating switches, etc. Box cold plate production, surface spray treatment, work tops, stainless steel. Purification unit uses a variable air volume fan system, by adjusting the fan working status, can the average wind speed to maintain a clean work area within the rated range, and effectively extend the life of the high efficiency filter.

## 4. Working Principle

By The Centrifugal fan pressure air through the primary filter, into the plenum chamber, and then after a hepa filtered from the blowing of the wind surface, clean air, clean air flow to the uniform cross-section wind speed through the clean area, the region the dust away, thus forming a work environment of high cleanliness.



## 5. Installation

The laminar flow cabinet in place locations in the environment is relatively clean work room (preferably placed between the primary purification of one hundred thousand grade or three hundred thousand grade), plug in the power, as shown in function on the control panel to open the can, deal with purification workspace surface and shell before starting the carefully cleaning to remove surface dust, ten minutes after boot can be implemented normal operation.

## 6. Maintenance

1、 Based on actual usage, periodically remove the primary filter cleaning, the cleaning cycle is generally 3-6 months. (if not long-term cleaning, the dust will affect the amount of wind insufficient to reduce the cleaning effect.)

2、 When the early effect of the normal exchange or clean the filter air filter, still can not achieve the desired cross-section wind speed, then adjust the fan voltage, and thus achieve the desired uniform wind speed.

3、 generally when the fan operating voltage adjustment to the highest point in the use of eighteen, still can not achieve the desired wind speed, description of the filter on the high efficiency filter dust too much (filter kong has basically stuck to timely update) general efficiency air filters use a period of eighteen months.

4、 replacement of high efficiency air filters, should pay attention to the correctness of the model dimensions (original manufacturer configuration), arrow wind devices, and pay attention to the peripheral sealing of the filter is absolutely no leakage occurs.

## 7. General Failure, Causes, and Troubleshooting

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

closed, automatically trip	short circuit in the circuit	good condition.
Low wind speed	1. Too much dust in the primary filter. 2. The high efficiency filter fails.	1. Clean the primary filter. 2. Replace the HEPA filter
The fan does not turn	1. The contactor does not work.	1. Check whether the contactor line is normal
Fluorescent light does not light up	1. The lamp or relay is damaged	1. Replace the lamp or relay

## 8. Schematic Diagram for Controller

The panel:

