SC Filtration
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Assembly Instructions

Separatore Plasmastatic R&D

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Table of Contents

ID Plate

Manufacturer:	Pyrite Trading Company LLC
Address:	3028 NW 72nd Ave., Suite 16
	Miami, FL 33122
Product Name:	Separatore Plasmastatic
Year:	2025
Model:	V.R&D

2. INTRODUCTION

2.1 Instruction Manual

The purpose of this instruction and maintenance manual is to provide all the necessary information to operate this separation unit safely. The manufacturer is at your disposal for any questions the user may have.

The instruction manual is divided into main chapters and subchapters, all listed in the index. The instructions may be accompanied by graphic or photographic illustrations in these chapters and subchapters.

The intended uses of the machine are clearly stated in the enclosed description.

You will find the following symbols in this manual:

IMPORTANT : instructions of particular importance

NOTE : informative notes

PROHIBITION : prohibited operations

TECHNICAL ASSISTANCE : contact the assistance centre

WARNING

Sambo Creeck Filtration follows a sales policy that allows for a continual improvement of its products. For that reason, this information contained in the present manual can be changed without warning.

This instruction manual must be stored for future reference.

2.2 Personnel Requirements

There are general safety aspects that must be brought to the attention of personnel:

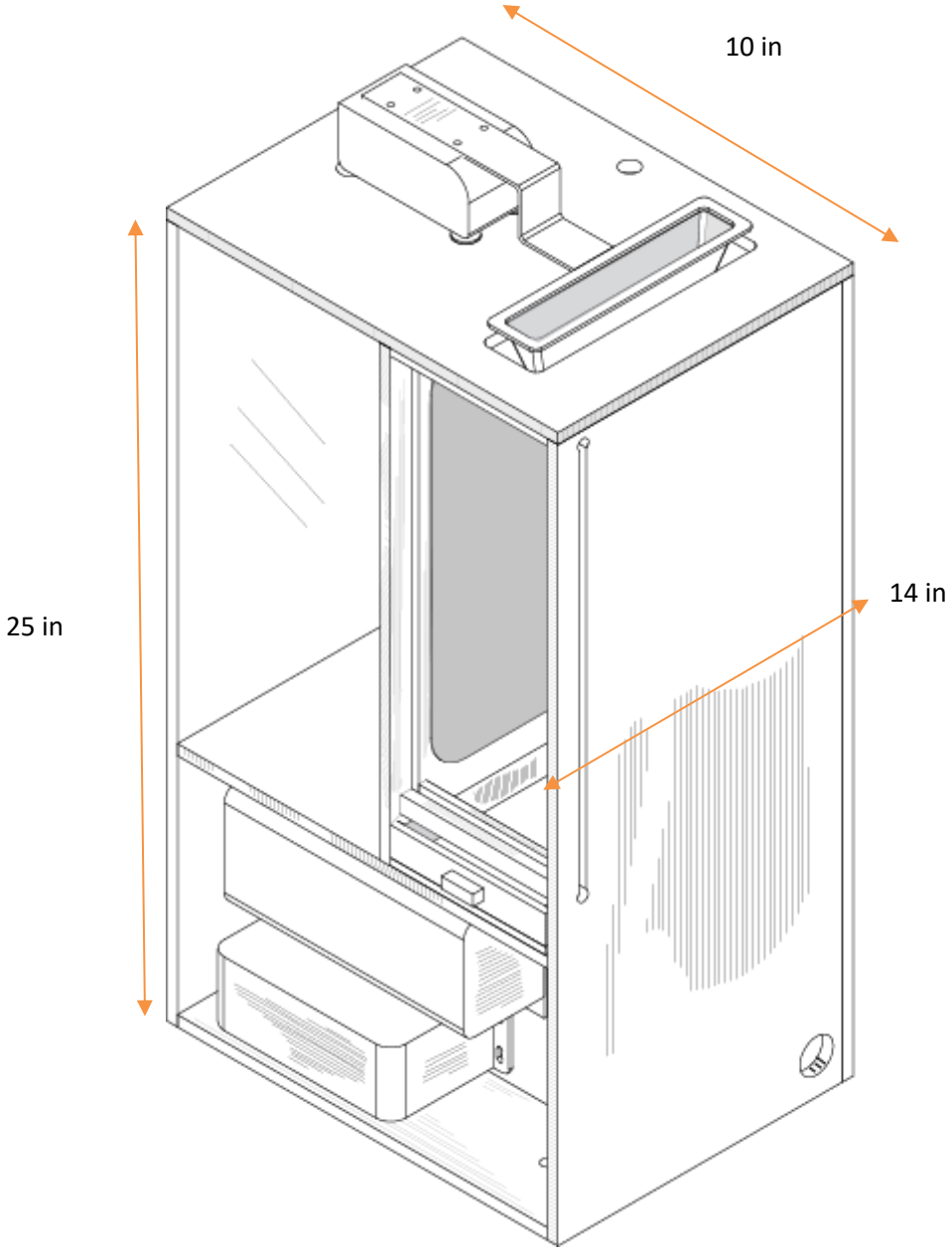
- Read the present manual carefully and follow the instructions therein.
- Keep the present manual in a place accessible to all people who operate the machine.
- The present manual is an integral part of the machine; in case of loss or deterioration, ask the manufacturer for another copy.
- Use the machine only if authorized and properly trained.
- Do not remove or tamper with protective carters, protective covers, or safety devices.
- Always wear individual protection devices.

Bear the following safety features in mind:

- The present manual supplies all the necessary safety instructions according to the Safety Norms in force. This does not represent a substitution for the common sense and experience of the operator, nor does it supersede local or federal regulations.
- The employer must analyze the various functions and characteristics of the machine, the adopted safety precautions, any eventual personal protection devices, and any remaining risks. After this analysis, he must evaluate which personnel should be authorized to operate the machine.

3.0 LAYOUT 🕮

3.1 Dimensions



4.0 DESCRIPTION 🕮

4.1 What is Cold Plasma Separation?

Cold plasma separation of trichomes is a method used to extract trichomes from cannabis plants or other botanical materials using a cold plasma process. Trichomes are tiny, crystal-like structures on the surface of plants that contain various compounds, including cannabinoids, terpenes, and flavonoids, which are of interest for their medicinal and recreational properties.

Cold plasma is a state of matter similar to gas but consisting of ions, electrons, and neutral particles. It is generated by applying an electrical field to a gas, causing it to ionize. This process creates highly reactive species such as ions, radicals, and UV radiation, which can effectively break down organic matter.

In the context of trichome separation, cold plasma is used to selectively remove trichomes from the plant material without damaging them or degrading their chemical composition. The process typically involves exposing the plant material to cold plasma under controlled conditions, allowing the trichomes to be dislodged from the plant surface. These trichomes can then be collected and further processed to extract desired compounds like THC, CBD, or terpenes.

Cold plasma separation offers several advantages over traditional extraction methods, including:

1. Selectivity: Cold plasma can specifically target trichomes, minimizing unwanted plant material extraction.

2. Preservation of compounds: The low temperatures used in cold plasma extraction help preserve the trichomes' delicate chemical composition, ensuring high-quality extracts.

3. Efficiency: Cold plasma extraction can be a relatively fast and efficient process compared to some other extraction methods.

4. No solvent usage: Unlike solvent-based extraction methods, cold plasma extraction requires no solvent, reducing environmental impact and production costs.

Overall, cold plasma separation of trichomes is an innovative extraction technique produces high-quality cannabis extracts with enhanced purity and potency.

4.2 How does the Separatore Plasmastatic R&D work with cold plasma?

This innovative system utilizes static electricity, as explained in point 1.1, to separate trichome heads from contaminants, ensuring the purity and quality of your powdered biomass.

4.3 Introduction

Welcome to the Separatore Plasmastatic R&D Assembly and Operation Manual. This comprehensive guide is designed to assist you in assembling and operating our advanced Plasmastatic Separator R&D with ease and precision. Whether you're a seasoned operator or new to this technology, this manual will provide you with step-by-step instructions, safety guidelines, and troubleshooting tips to ensure optimal performance and longevity of your equipment.

Inside this manual, you will find detailed illustrations and clear explanations to guide you through the assembly process, from unpacking the components to setting up the machine for operation. Additionally, we will walk you through the operation of the Separatore Plasmastatic R&D, including how to adjust settings, initiate separation processes, and monitor performance.

Safety is our top priority, and we have included important safety precautions throughout the manual to protect you and your team during assembly and operation. It is essential to follow these guidelines carefully to prevent accidents and ensure a safe working environment.

We are committed to providing you with the highest level of support and guidance to maximize the efficiency and effectiveness of your Separatore Plasmastatic R&D**. Thank you for choosing our product,** and we look forward to helping you achieve outstanding results in your separation processes.

Let's get started on your journey to superior separation with the Separatore Plasmastatic R&D!

4.4 Materials and resources necessary for operation.

4.1.1 Always wear appropriate personal protective equipment (PPE) such as:

- Safety Goggles
- Safety Gloves
- Hair Net
- Respiratory protection

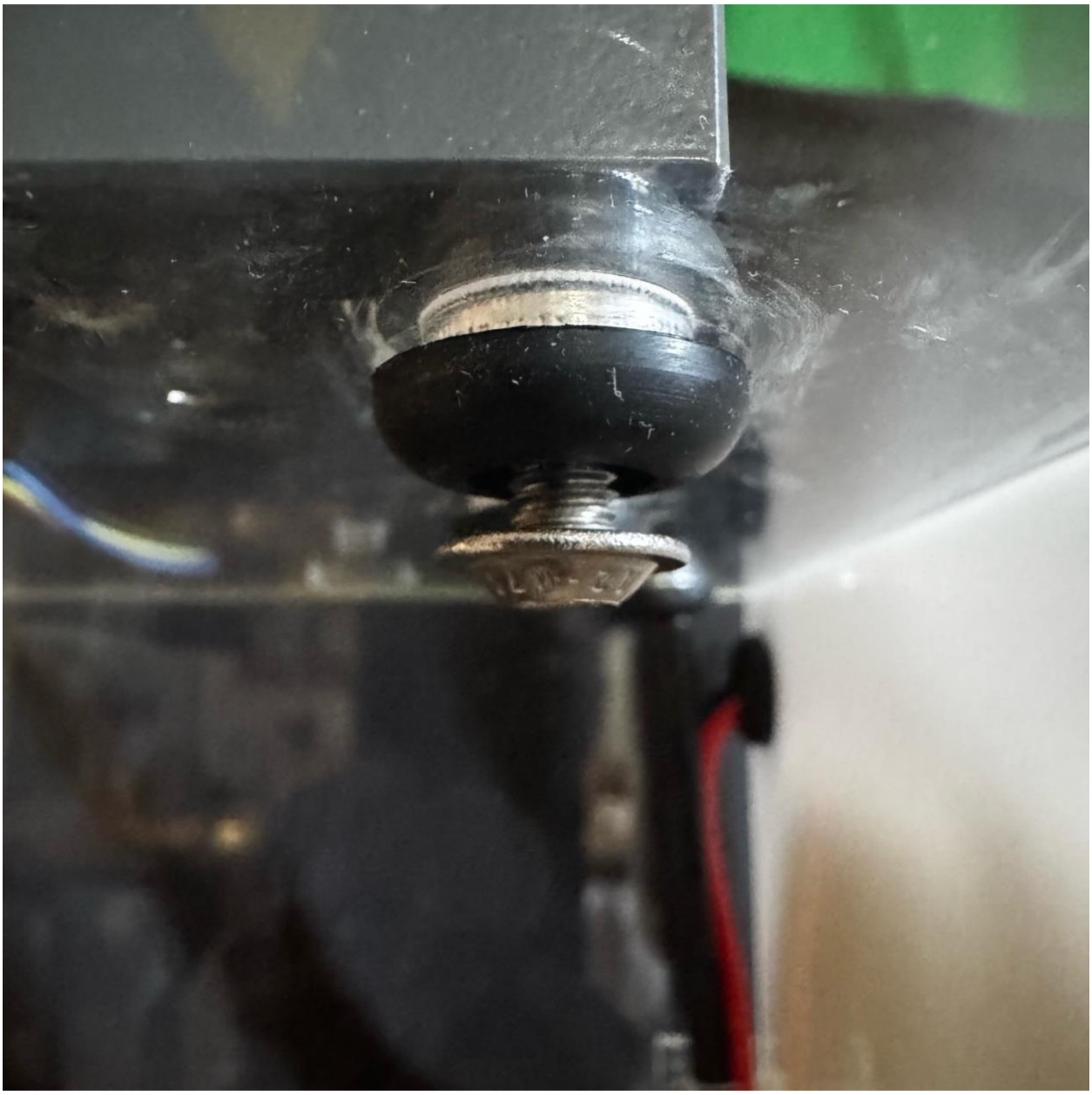
5.0 PROCEDURE FOR SETTING UP AND USING THE DEVICE. ⚠

PUT ON PROTECTIVE CLOTHING BEFORE STARTING

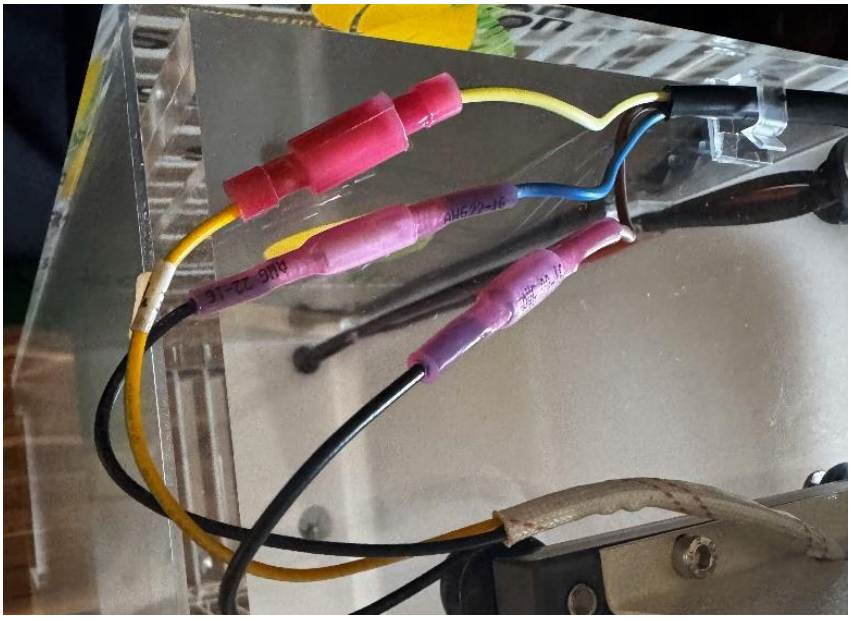
6. ASSEMBLY INSTRUCTIONS FOR THE PLASMASTATIC R&D

6.1 Place the vibrator on top of the sieve, ensuring it is positioned over the vibration-dampening grommets.

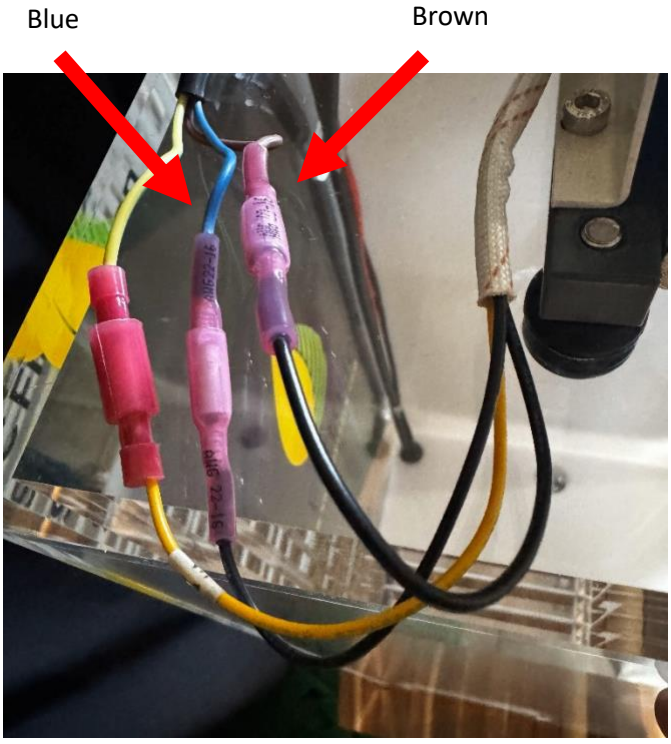
6.2 Install the four screws to secure the vibrator. Add a dab of Loctite 242 (included) on each bolt so they don't vibrate out during use. Be careful not to over-tighten the screws as the machine must not be tied down tight, the screws should not press the vibrator to the device, just hold it in place.



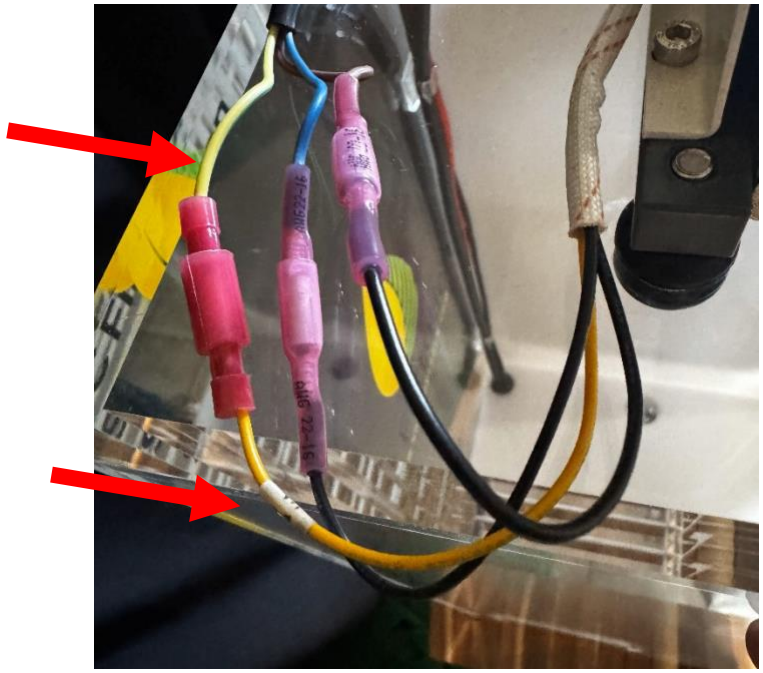
6.3 Connect the vibrating feeder.



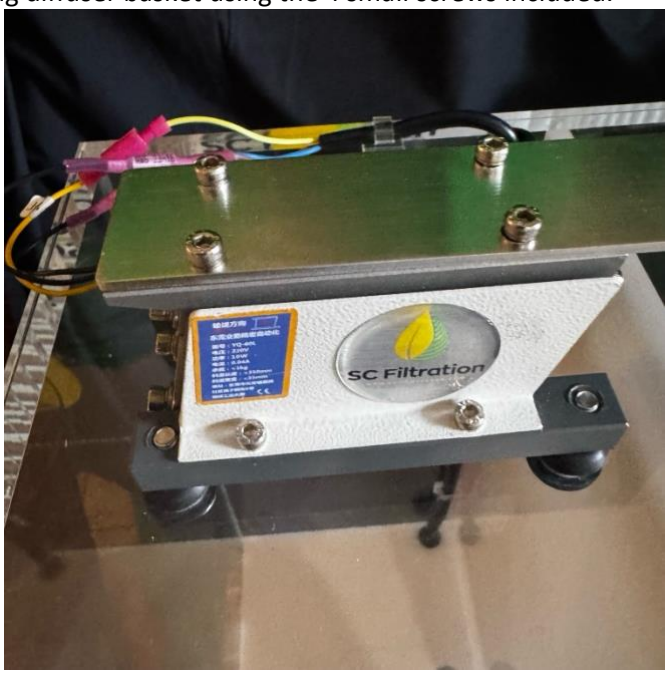
6.4 Connect the blue and brown wires to any black wire.



6.5 Connect the yellow and green wire to the corresponding yellow and green wire.



6.6 Install the tribocharging diffuser basket using the 4 small screws included.

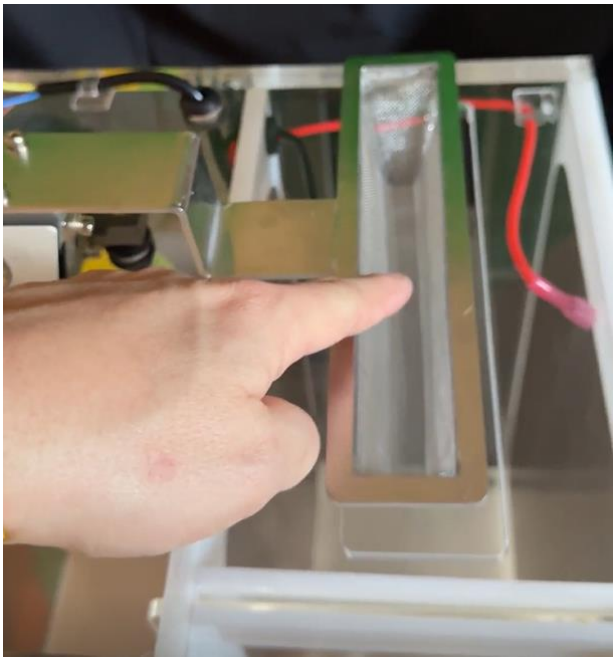


6.7 Turn the power button ON to activate the vibrating feeder.

6.7 Set the voltage to **30** and the frequency to **50** by using the function button. Read the VFD manual in section 8 for more information on this step. Adjust the voltage as gentle as possible until you find a suitable vibration frequency, typically between 30-50 volts.

6.8 Turn on the power supply.

6.9 Spoon-feed the product into the vibrating feeder. Observe as the particles separate while they fall.



Congratulations on finishing assembling your Separatore R&D!

This is how it should look like

7. OPERATING INSTRUCTIONS

- Use isopropyl alcohol for cleaning everything before operating the machine.
- Do not operate the device without the door closed.
- Always turn off the power supply before cleaning the machine to avoid the risk of electric shock.
- To clean your plates, use the included brush.

Pro Tips

- **The room humidity should be 40-60% RH max.**
- **The room temperature should be stable for the hash (where has is not sticky), 60F max.**
- **The hash Active water content (AW) should be 0.4 or less. It must look and feel like dry beach sand, and not moist or wet construction sand or play sand that clumps together easily.**
- **If your hash is too wet, freeze-dry for 1-2 hours.**
- **Sieve your hash for 30 mins to decapitate trichomes and to remove +190um and -74um particles for PRO results.**
- **If your hash is in a refrigerator or freezer, keep it in a sealed container. When you pull it out of the refrigerator, keep the container closed and let it reach room temperature so water does not condense on your hash.**
- **99% of problems are due to wet hash or a wet room.**

Additional Notes

- Ensure all connections are secure and follow the color-coding for wiring.
- Refer to the user manual for any additional settings or adjustments.
- Regularly clean the machine to maintain optimal performance and safety.

8. VIBRATING FEEDER CONTROLLER

8.1 External Components Description

8.2 Parameter Adjustment Methods

Controller parameters are categorized into three types based on different adjustment methods: Common Parameters, Basic Parameters, and Advanced Parameters.

8.2.1 Common Parameters

- Directly use the "Voltage+" and "Voltage-" keys to adjust parameter values.
- These keys are specifically designed for adjusting common parameters marked with "↓".
- These parameters can be adjusted directly in any parameter adjustment state. After adjustment, the controller will automatically return to the previous parameter state.

Parameter	Symbol	Min Value	Max Value	Default State
Output Voltage	U	0	260	150

8.2.2 Basic Parameters

- Press and hold the "Function" button for 2 seconds to enter the basic parameter adjustment mode.
- Press the "Function" button briefly to cycle through the basic parameters.
- Use the "▲" and "▼" buttons to adjust the parameter values.
- Press and hold the "Function" button for 2 seconds again to exit the parameter setting mode.

Parameter	Symbol	Min Value	Min Value	Default State
	E	40	400	50
Smart Sensor ON Delay	J	0.0	20	0.2
Smart Sensor OFF Delay	L	0.0	20	0.2
Soft Start Time	t	0.0	1.00	0.5

8.3 Output Voltage Setting

This controller allows direct digital output voltage adjustment via the panel. Equipped with voltage stabilization, the set value represents an absolute output voltage, unaffected by input voltage fluctuations—ensuring stable operation even in unstable power conditions. The numeric voltage display also provides accurate real-time monitoring for users.

Steps:

1. Turn on the power switch of the controller.
2. The controller enters output voltage mode (indicated by the voltage LED). The LED screen displays the voltage symbol **"U"** and the last configured value.
3. Use the **"Voltage+"** or **"Voltage–"** buttons to adjust the "U" value.

Note: During any basic or advanced parameter adjustment, pressing **"Voltage+"/ "Voltage–"** will directly modify the output voltage **"U."** The controller automatically returns to the parameter adjustment state after setting.

Acceleration function

Boost Function:

- When the set output voltage exceeds the input voltage, the controller automatically activates the **boost function** to achieve the target voltage (indicated by the boost LED).
- If the set voltage is too high and exceeds the controller's boost capacity, the output will fail to reach the target (indicated by the **saturation LED**).

8.4 Output Frequency Setting

This controller utilizes Direct Digital Synthesis (DDS) technology, ensuring exceptional frequency precision and long-term stability unaffected by time or temperature variations.

1. Press and hold the **"Function"** key for 2 seconds to enter **basic function adjustment mode**.
2. The frequency LED will illuminate, and the display will show the frequency symbol **"E"** along with the current value.
3. Use the **"▲" (Up)** and **"▼" (Down)** keys to adjust the frequency ("E").

- In basic function adjustment mode, pressing the **"Function"** key cycles through settings: Frequency **"E",** turn-on delay **"J",** turn-off delay **"L"**, Soft-start duration **"L"**
- To exit, hold the **"Function"** key for 2 seconds again.
- The controller automatically returns to **voltage adjustment mode** after 1 minute of inactivity.

8.5 Keyboard Lock Function

To prevent accidental operation, this device is equipped with a keyboard lock. Once all controller parameters are properly configured, this feature effectively prevents unintended changes caused by others.

- **To lock all keys**: Press and hold the **"On/Off"** key for **2 seconds**. The keyboard lock indicator will illuminate.
- **To unlock**: Press and hold the **"On/Off"** key for **2 seconds** again.

(Note: The keyboard lock ensures stable operation by preventing unauthorized adjustments.)

8.6 Parameter Identification Definition Comparison Table

Display	Meaning
	Output VoltageOutput Voltage
	Output Frequency
	Photoelectric Sensor ON Delay
	Photoelectric Sensor OFF Delay
	Soft-start Time
	Digital Input OFF Delay
	Digital Input ON Delay
	Photoelectric Sensor State
	Digital Input Logic Direction
	Control Output Logic Direction
	Main Output Stop Control
	Control Signal Logic Relation
	Maximum Output Voltage
	Acceleration Index
	Waveform Index
	Photoelectric Sensor Sensitivity
	Factory Reset

8.7 Error Message Indications and Troubleshooting

1	Turn on the switch, no display	• Check if the power outlet has electricity. • Check if the power plug is securely connected to the outlet.
2	Display is on, but vibration plate doesn't move and there is no sound.	• Check whether the output cable is properly connected between the controller and the vibration plate. • Check the controller parameters to see if the output voltage is set too low. • Check whether the control signal has put the controller in "Stop" mode. • Check if any parameter is set to "Normally Open", causing the controller to be in "Stop" mode.
3	Control signal not working	• Check whether the control signal is input correctly. • Check whether the ground wire of the input control signal is properly connected to the machine ground. • Check whether the control signal logic setting is configured as expected.
4	Periodic intensity fluctuations	• Check for vibration coupling issues between multiple vibrating bodies. • Increase frequency separation by adjusting coupled vibration equipment.
5	Display is on, vibration plate not moving, but sound can be heard.	• Please adjust each parameter step by step according to the adjustment methods described in this manual.
6		• Output short circuit detected. Check wiring and vibration plate coil for possible short circuits.
7		• Output overcurrent detected. Reduce the output voltage setting and check for excessive gaps between electromagnets in the vibrating equipment.
8		• System overheating detected. Install the controller in a well-ventilated environment for proper heat dissipation.
9		• If the issue persists, please contact our technical support team.
10		• If the issue persists, please contact our technical support team. •
11		• If the issue persists, please contact our technical support team.

9. ORDINARY MAINTENANCE

As specified, the mechanical or electronic maintenance person must carry out all maintenance operations. All maintenance operations must be carried out:

- Periodical*ly clean with a sponge and wash* the contaminated parts using *dilute* ethanol or similar solvent as allowed, followed by a rinse of *warm* water.
- Disassemble the vibrating feeder and clean and sanitize the affected parts. Brush dust off the device and wipe clean.

10. EXTRAORDINARY MAINTENANCE

In case of abnormal wear of some components, we recommend the following procedure:

- Identify components *and models* from damage or wear.
- Check whether there is damage *to* the consumables.
- In case of components present among the consumables, order the components *from* Sambo Creeck Filtration by calling or emailing *the* Code and Quantity to sales@sambocreeck.com

Sambo Creeck Filtration
Tel: 786-206-6298
support@sambocreeck.com

In case of persistence of some alarms, please contact:

11. RESPONSABILITY

The manufacturer declines all responsibility in cases of:

- Incorrect use of the machine.
- Unforeseen or inappropriate use of the machine.
- Modifications to the machine.
- Removal or tampering with repair operations to the machine.
- Use of the machine in inappropriate environments.
- Installation of the machine in an unsuitable environment.
- Installation or use not in accordance with local or Federal regulations.