

**Venus- I**

**208V 60Hz/USA**

**Operator's Manual**



FCC ID: 2BO5E-VENUS

The product information, technical details and instructions contained in this manual may be updated without further notice. The contents of this manual do not comprehensively cover all the characteristics and changes of the product. Nor can it anticipate and guide every possible special situation that may be encountered during the product installation, operation and maintenance processes.

This manual assumes that the personnel operating the equipment have received corresponding professional training and possess knowledge in the fields of electrical, piping, pneumatic, and mechanical engineering. It is assumed that all necessary safety precautions have been taken during the operation process. In addition, in addition to the information provided in this manual, all relevant local safety regulations and construction requirements should also be complied with..

Recommended that the unit should be used constantly to reduce the risk of affecting the unit's lifetime of use.

## **Correct Disposal of this Product**



This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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## General description

### Purpose:

This document is the guideline of operating instruction including images illustrated based on the specifications of Clover Vertica machines for the qualified user reference.

### Scope:

This instruction included the procedure of daily maintenance, cleaning and coffee brewing. The whole process to operate machine from the very beginning of cleaning to brewing a coffee. including the indications of removable parts disassembly and user maintenance requirements

### Safety instruction:

- Read and follow ALL safety instructions. Read and follow **ALL SAFETY INSTRUCTIONS** in this manual and any warning/caution labels on the unit (decals, labels or laminated cards).
- Read and understand All applicable OSHA (Occupational Safety and Health Administration) safety regulations and/or national and local codes before operating this unit.
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

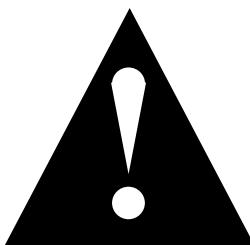
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

The FCC ID is 2BO5E-VENUS



## Recognition



***This is the safety alert symbol. When you see it in this manual or on the unit, be Alert to the potential of personal injury or damage to the unit.***

### Different types of Alerts

#### **⚠ DANGER/DANGER**

Indicates an immediate hazardous situation which, if not avoided **Will** result in serious injury, death or damage.

#### **⚠ WARNING/AVERTISSEMENT**

Indicates an immediate hazardous situation which, if not avoided **COULD** result in serious injury, death or damage.

#### **⚠ CAUTION/PRUDENCE**

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury or equipment damage.

### Safety Tips

- Carefully read and follow all safety messages in this manual and safety signs on the unit.

- Keep safety signs in good condition and replace missing or damaged items.
- Learn how to operate the unit and how to use the controls properly.
- Do not let anyone operate the unit without proper training. This appliance is not intended for use by very young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
- Keep your unit in proper working condition and do not allow unauthorized modifications to the unit.

## Qualified Service Personnel

### **⚠ WARNING/AVERTISSEMENT**

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit. **ALL WIRING AND PLUMBING MUST CONFORM TO NATIONAL AND LOCAL CODES. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.**

## Safety Precautions

This unit has been specifically designed to provide protection against personal injury. To ensure continued protection, observe the following::

### **⚠ WARNING/AVERTISSEMENT**

Disconnect power to the unit before servicing following all lock out/tag out procedures established by the user. Verify all of the power is off to the unit before any work is performed.

Failure to disconnect the power could result in serious injury, death or equipment damage.

### **⚠ CAUTION/PRUDENCE**

Always be sure to keep area around the unit clean, free of clutter and bugs. Failure to keep this area clean may result in injury or equipment damage. Important! Damage caused under these circumstances will not be covered by the warranty.

## Device location

### **⚠ CAUTION/PRUDENCE**

Appliance is not suitable for installation in an area where a water jet could be used.

### **⚠ CAUTION/PRUDENCE**

The appliance must be placed in an upright position on a horizontally level surface

### **⚠ CAUTION/PRUDENCE**

This unit is not designed for use in outdoor locations.



### **CAUTION/PRUDENCE**

The maximum intended altitude of use for this appliance is 877.5m.

### **Unit Cleaning**



### **CAUTION/PRUDENCE**

This unit must not be cleaned by using a water jet.

### **Grounding instructions**



### **CAUTION/PRUDENCE**

This appliance must be grounded. in the event of malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.



### **DANGER/DANGER**

improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with green insulation with or without yellow stripes is the equipment grounding conductor. If repair or replacement of the cord or plug is necessary, do not connect the equipment grounding conductor to a live terminal. If in doubt whether the appliance is properly grounded, check with a qualified electrician or serviceman. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.



### **CAUTION/PRUDENCE**

This appliance is for use on electrical circuits. A qualified electrician should be consulted if there is any doubt about the outlet box being properly grounded.

### **System overview**

The Clover Vertica brewer provides six different flavors of coffee for made-to order coffee, brewed for each individual customer.

- The brewer is an innovative new technology developed to enable barista to serve made to order coffee to our customers.
- Coffee is individually ground and brewed fresh for each customer.
- Barista can choose the bean(flavor), size, and amount of room in the cup ordered from customer.

- Machine grinder, brews and dispense valve automatically activate once the Barista start the brewing cycle.
- Hot water dispenser, ICE coffee preparation and traveller size are fully integrated.
- No more pouring coffee down the drain.

## Features

- Three coffee flavors available at on time of brewing
- Three distinct drink sizes
- Three fill sizes
- Easy to use
- Selectable cleaning mode

## Selectable cleaning mode

### Electrical:

- 208VAC, 60Hz
- Max. Current Dra: 40Amps
- Receptacle: NEMA 14-50
- Equipment requires 208VAC, single-phase, 60Hz, 50Amp service. It is recommended that the service be a dedicated line. Line voltage under load must be lie within the specified range.

### Water:

Requires a dedicated filtered water supply satisfying all Starbucks water requirements:

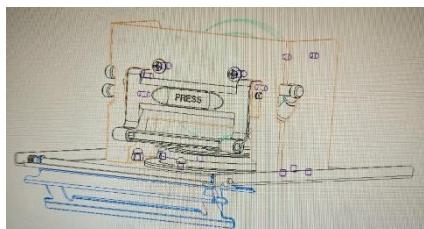
- Chlorine < 0.5ppm
- Total Dissolved Solids: 50-200ppm
- Hardness: 90-140ppm
- PH: 6.5-8.5
- Alkalinity: 20-140ppm
- Iron <0.3ppm
- Pressure: 1gpm 为 30-60PSI (32floz/15s)

## Critical to coffee quality and brewer performance

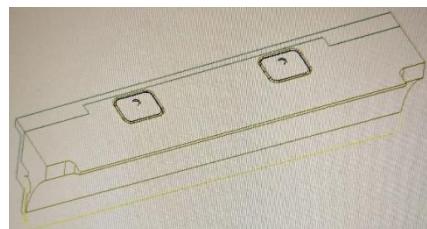
### Weight:

- Weight of each module 120lbs. weight excludes bean and drip tray; it includes hoppers, coffee grounds drawers and residual water in the boilers.

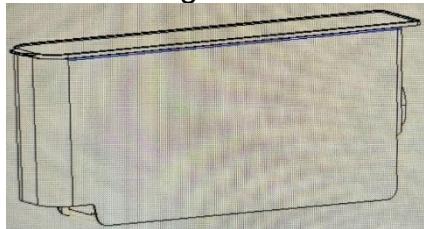
## Removable parts list



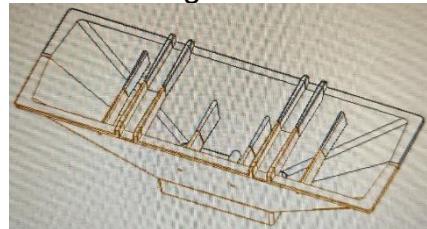
Cassette  
Figure 1.



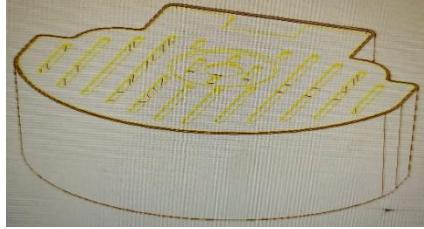
Scraper unit  
Figure 2.



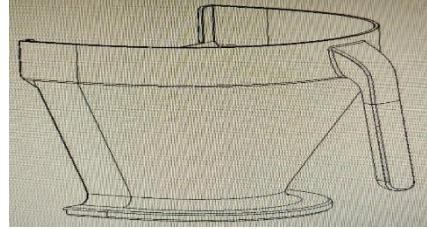
Hopper  
Figure 3.



Bean Funnel  
Figure 4.



Drip Tray  
Figure 5



Residue Container  
Figure 6.

Figure 1-6

## User Interface Overview

The following part describes the components on the user interface (UI) and their functions:

The user interface is a touch screen component on the device. On the UI interface, menu configurations can be separately carried out for each bean box, and technicians can set up menus for daily cleaning or practical applications.

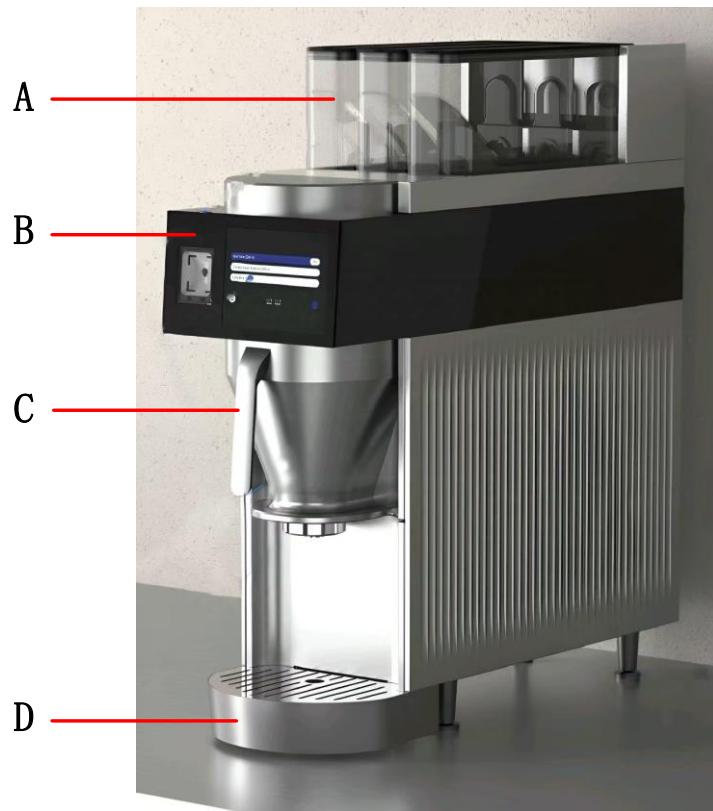


Figure 7

**A. 3 independent hoppers**

Hopper capacity is 1.2KG/2.5LB

**B. Coffee tower control panel**

8-inch touch screen and 1 barcode scanner

**C. Slag Receiving Bucket Component**

Coffee dregs bucket, used to hold used coffee grounds

**D. Water receiving tray component**

Drip tray volume is 860ml/29oz.。

## Normal Operation

When the device is started, the UI displays four self-check procedures (bean box self-check, water shortage self-check, startup self-check, and automatic cleaning). The operator can choose whether to perform cleaning by themselves.

When clicking "Automatic Cleaning", the UI interface enters the "Cleaning Mode".

If you click "Skip Cleaning", the UI interface will enter the main interface.

## Opening procedures

After startup, the brewer begins to initiate the program. The brewer continues through the sequence until it reaches the pre - operation rinse cycle. The pre - operation rinse cycle prevents the coffee liquid from being in a ready state. The liquid remains in the brewing chamber, causing abnormal situations during coffee brewing or brewing chamber cleaning, which leads to a decrease in coffee concentration.

(During the brewing process, please be careful of the high-temperature hot water at the coffee outlet).

Table 1

Step	Action	
1	Turn on the circuit breaker switch on the back of the coffee machine and the rocker switch at the bottom of the coffee machine.	
2	<p>The equipment starts to be powered on, and the logo of Luckin Coffee is displayed on the screen.</p> <ul style="list-style-type: none"> <li>Main Interface - Settings - Luckin Coffee</li> </ul>	
3	<p>Before starting the equipment every day, it is necessary to run the detection program, which takes about 5 minutes to complete.</p> <p>The brewer cannot be operated until the program is opened and finished.</p> <p>The equipment automatically enters the detection state.</p>	
4	<ul style="list-style-type: none"> <li>Prepare 2 water jugs of 1.5 liters each and perform 3 cleaning cycles.</li> <li>Click "Automatic Cleaning" to enter the equipment cleaning mode system.</li> <li>Press the "Start" option to initiate the cleaning cycle.</li> </ul>	
5	It takes 20 minutes of waiting for the cleaning to be completed.	
6	<p>Fill the Bean Box</p> <p>Fill the empty bean box with coffee beans.</p> <p>Make sure the coffee recipes in the menu</p>	

match the coffee beans in the bean box correctly.

#### Set coffee recipe

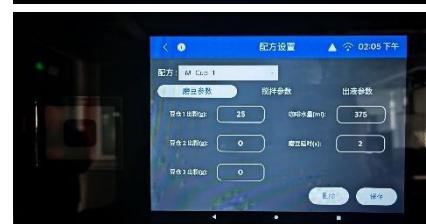
7

- Press the "Settings" button to enter the device settings interface.
- Click "Recipe Parameters" to enter the recipe settings interface.



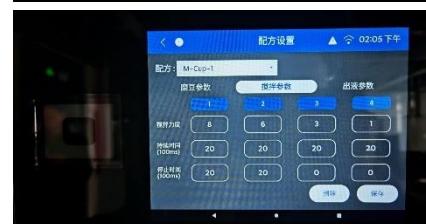
8

- Select the coffee recipe you want to set.
- Set the coffee beans (bean box) and cup size for brewing coffee.



9

In the formula setting interface, set the "stirring parameters".



## Daily maintenance

### ⚠ CAUTION/PRUDENCE

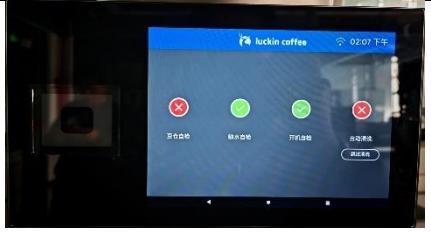
Use only products approved by Donlim in coffee brewing equipment. Using unapproved products may result in reduced equipment performance or malfunction of the equipment.

## Cleaning Procedure

To maintain the performance of the equipment, it is recommended to perform a minor cleaning daily and a major cleaning weekly. Otherwise, the equipment will lock and directly prompt that cleaning of dirt is required. To put the equipment into cleaning mode, please follow the operating procedures in the table. After completing the cleaning operation, the equipment will automatically return to the main menu.

**Table 2.**

Step	Action	

1	Press the "Clean" button to enter the menu.	
2	Press "Start" to begin the daily cleaning operation. The whole process will take approximately 20 minutes to complete.	
3	Empty the cavity... Wait until the movement is completed before continuing.	
4	Removal and emptying: <ul style="list-style-type: none"><li>● Residue Container, Drip Tray and Splash Guard</li><li>● Do this for both sides</li></ul>	
5	Clean the parts Rinse off the coffee residue on it and place all the parts on the dish rack for cleaning.	
6	Open the "Control Panel" from the bottom. Lift the control panel from the side or bottom.	
7	Remove the brewing head module: Lift the handle of the brewing module and directly pull it out from the device. Place it on the rack to rinse off the residual coffee powder.	
8	Extension of slag scraping module: Wait until the upper module of the brewer has finished moving before continuing.	
9	Remove from the slag scraping module: <ul style="list-style-type: none"><li>● Press the two buckles on the slag scraping module and remove the slag scraping mold.</li><li>● Please place it on the bowl rack.</li></ul> Turn off the control panel	
10	Turn off the control panel...	
11	Open the "Control Panel" and wipe the internal components with a disinfectant cloth.	

12	Press the "Scum - scraping" key to move the upper module of the brewer forward in order to replace the scum - scraping module.	
13	Move the upper part of the brewer to the front.....	
14	Install the cleaned slag scraping module onto the upper module of the brewer and close the panel. Wait for the module to retract to its original position.	
15	Install a clean anti-splash baffle and waste bin.	
16	After cleaning in the dishwasher, install the anti-splash baffle and waste bin.	
17	Add cleaning agent. ● Open the "Control Panel". ● Put 1 piece of EVERSYS cleaner into the brewing chamber. ( <b>No need to put it in for daily minor cleaning</b> )	
18	Replace with a clean brewing head module. Gently push the brewing head module directly back onto the brewer and secure the brewing head handle, then close the panel.	
19	Place the cup with a handle under the equipment's liquid outlet.	
20	Start the brewing cycle.	
21	Remove and clean the bean container. Pour out the remaining coffee beans and labels in the bean container.	
22	Put the disassembled bean box and bean discharging trough on the dish rack for cleaning. Do this for both sides	
23	Drain all the remaining coffee beans in the lower bean chute and replace the bean container.	

24	Replace the clean bean trough and bean box. <ul style="list-style-type: none"> <li>● Leave the bean box empty for one night.</li> <li>● After the brewing cycle is finished, click "Next".</li> </ul>	
25	Place the cup with a handle under the equipment's liquid outlet, and click "Next" to start the brewing cycle.	
26	Click "Start" to begin the brewing cycle. Do not start rinsing when there are no containers on both sides.	
27	Pour the waste water in the cup into the sink, and then place the cup under the equipment liquid outlet again.	
28	Daily cleaning completed.	
29	Don't forget to wipe the surface of the equipment with a towel.	

### **Daily/Weekly Equipment Surface Cleaning and Maintenance**

#### **⚠ CAUTION/PRUDENCE**

Products approved by Donim can only be used in the coffee brewing component. Failure to comply will lead to a decline in component performance or the component becoming inoperable.

It is recommended to clean the surface of this device after a period of use. We suggest doing it once a week. In addition, if the device is to be shut down for at least one week, its surface should be cleaned in advance. Please refer to the equipment surface cleaning procedure steps in **Table 3**.

**Table 3.**

Step	Action	
1	Ensure that the power and water supply of the equipment have been cut off, and place it for a few minutes before continuing.	
2	Remove all the bean boxes, the silicone parts under the bean boxes, and the lower bean trough components.	

Wipe the body with a clean damp cloth. If there is dirt, clean it with a special cleaning agent. In addition, it should be noted that water must not seep into the interior of the device to prevent circuit system failures.

Remove the water tray and slag bucket, open the control panel and remove the brewing head assembly. Rinse the coffee residue on the parts/components, and place all the removed parts/components on the dish rack for cleaning.

4

## Beverage Preparation

### **⚠ CAUTION/PRUDENCE**

During the brewing process, be careful with the high-temperature coffee flowing out of the coffee outlet. Before brewing coffee, perform the equipment calibration first. .

### **⚠ CAUTION/PRUDENCE**

Only trained and certified water - handling personnel can carry out this operation. Incorrect operation may cause coffee machine failure.

## Main process for brewing

### **⚠ CAUTION/PRUDENCE**

During the brewing process, please be careful of the high-temperature coffee at the outlet. To brew a beverage, please follow the steps in **Table 4**.

**Table 4**

Step	Action
1	Fill the bean container with coffee beans and install the bean container on the top of the coffee machine.
2	Place a cup or measuring cup of appropriate specifications under the coffee machine's water outlet. Make sure the drip tray is already in place.

3	<ul style="list-style-type: none"><li>Configure the corresponding coffee menu.</li><li>Press the coffee menu on the control panel.</li><li>Start making coffee.</li></ul>	
4	Wait for a few minutes and the coffee will be brewed..	
5	When the water in the water collection tray can be directly discharged through the water pipe behind it.	
<p><i>Note: If the required standards are met, the calibration is completed; otherwise, repeat the calibration steps.</i></p>		

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