

# User Operation Manual

MyVodkaMaker

MVM5.01

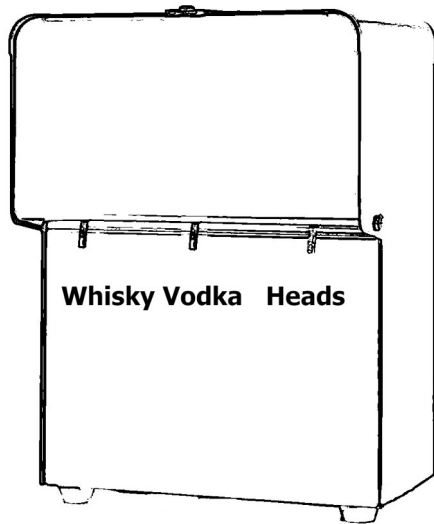


November 2023

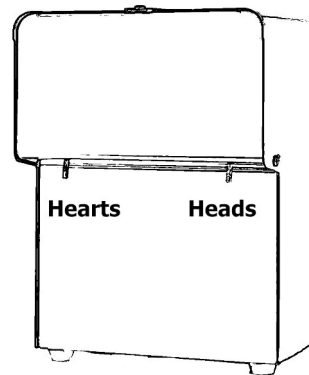
**Indoor household use only**

Please save and read this instruction manual carefully before use.

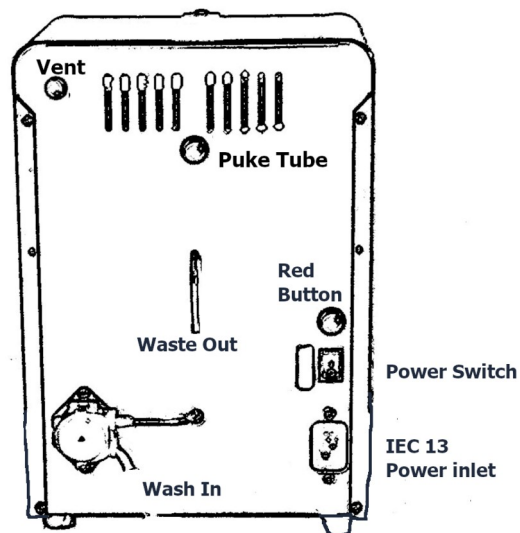
# MyVodkaMaker



*Plus*



*Mini*



Boiler Capacity: 15ml (Mini); 50ml (Plus)  
Voltage: AC100V to AC240V  
Wattage: 250W maximum.  
Connection: 3 Pins grounded IEC13 socket  
Fuse: 20mm 5A Fast blow.

Thank you for purchasing MyVodkaMaker. Each unit has been manufactured to ensure safety, reliability, and ease of use. MyVodkaMaker ships in “Permit required” mode, and it will only make water. If you switch it on it will immediately start to make water and only water.

## Important safety instructions

When using MyVodkaMaker basic precautions should always be followed, including but not limited to the following.

- MyVodkaMaker requires a IEC13 power cord(computer or kettle plug) (not supplied) to suit your local wall outlet, as power requirement are low any IEC13 power cord would be suitable, but check that the supply cord is not damaged.
- Although all possible steps have been taken to make MyVodkaMaker the safest appliance in your kitchen, incorrect or improper use can still result injury or damage.
- MyVodkaMaker is intended for own use, household use only. Industrial or commercial use is not allowed and will void the warranty.
- MyVodkaMaker is not intended for use by children or persons with reduced physical, sensory, or mental capabilities.
- Do not carry MyVodkaMaker by the power cord or tubes.
- Do not use MyVodkaMaker if it has been dropped or damaged in any way.
- Do not immerse any part (other than the feed tube)of MyVodkaMaker in any liquid ever.
- Always use in a well ventilated room away from strong winds and direct sunlight.
- Do not use near open flames, gas cookers or gas heaters.
- Do not use near flammable materials, curtains or drapes.
- Do not let any part touch or be near hot surfaces such cooking surfaces or heaters.
- Do not use near bathtubs, showers or where MyVodkaMaker or the electric cord can come in contact with a body of water.
- Always place MyVodkaMaker on a safe, stable, non flammable surface.
- Do not let the cord or tubes hang over a counter where they could be grabbed or snagged inadvertently, thereby pulling MyVodkaMaker off the counter.
- Some of the surfaces are hot when in operation, avoid touching by hand.
- Be careful not to be burned by hot liquid or steam that may escape the vent tube, spouts, or waste drain.
- Allow MyVodkaMaker to cool before moving or cleaning it.
- Always unplug MyVodkaMaker when not in use, when cleaning or storing.
- To disconnect press the on/off switch to off, then remove the plug from the wall outlet.
- Remove the plugs by gripping on the plug and not on the cord.
- Remove the tubes by gripping on the tube at the connection and not along the length of the tube.
- Since MyVodkaMaker is used outside of our control and supervision, the manufacturer does not accept any responsibility for any damage, injury or other distress or liability caused by the use of MyVodkaMaker.

Please contact our customer care at [service@xienoid.com](mailto:service@xienoid.com) if you have any questions.

## Step 1. Leak check procedure (before first use)

Before first use or after storage or at least on a monthly basis you should perform this procedure.

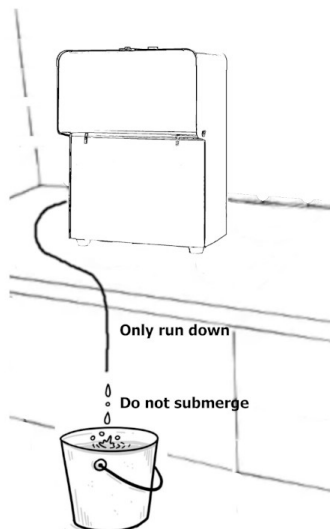
1. Ensure the storage dust caps are fitted securely and the hold the vent closed with a finger..
2. Using the waste tube, try and inflate MyVodkaMaker like you would a balloon, block the hole with your tongue, check that MyVodkaMaker holds the pressure for several seconds.
3. Continue with normal operation

## Step 2. Pump maintenance procedure (if needed)

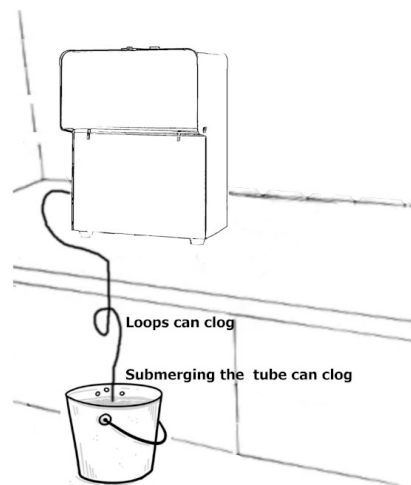
**If you notice the pump is not pumping the wash or water,** Switch off, un-clip and re-seat and re-clip the pump head on the clips, If that does not help, un-clip the pump head cover and turn the roller assembly by hand a few times, and retry. If that still does not help, it could be because the tough tube in the pump tends to deform if it has been sitting in one shape for a long while. You should take apart the rollers. Then roll the tube between your hands to help it relax and return to the normal tube shape. Optionally, pouring some hot water over the tube in a mug helps it go back to form.

## Step 3 – Setup

- Place the waste bucket on the floor or use a drain (sink) at a lower level than MyVodkaMaker,
- **It is important to prevent the formation of an airlock or siphon. Ensure that the waste tube runs strictly in a downward direction and never upwards and make sure the end will not submerge.**
- Fit the puke tube and place the end over a small heat proof container.
- Place the feed tube in bucket of fermented sugar wash that had a SG of about 1075, Check that the tube does not kink, especially at the pump. It is important for Auto Calibration that the boiler is filled properly at the start.
- Ensure the power cord and tubes are intact and placed such that they do not pose any snagging, electrical or other risks to passers by, pets or children.
- Remove dust caps (hearts, heads and vent) and keep them safe.
- Place suitable glass collection jars (preferably heat proof) under the spouts. You can raise MyVodkaMaker onto a stand if your jars are too tall. Make sure the fan intake is not obstructed.



Correct drain



Wrong drain - this can clog and push wash out the spout

## Step 4 – Simple start

Out the box MyVodkaMaker will only make water, to make anything else you need to “modify” it, either with the AP setup or simple button start. For simple button start: switch on, wait 20 seconds, press the red button three times (1 second per press). Now it will be in the vodka mode with no network visible. To switch it back to water only hold the red button for 5 seconds right after after power up and it will no longer make spirits – it will also clear all network settings and not show a network after a reboot.

For the Plus model place a dust cap on the whisky spout and collect from the vodka spout.

It is important that the boiler fills properly from the startup, so after you power up MyVodkaMaker, check that the water or wash pumps up the tube. Sometimes it is useful to pull the feed end out the wash for a few seconds so bubbles are visibly moving up the tube as it pumps.

During startup it will first fill the boiler, and even overflow a little, then it will seem like it does nothing for about 20 minutes...then you will get first drops of varying ABV, then after another 20 minutes the pump will slowly start pulsing a bit of wash and slowly increase. During the startup you may get a higher portion of heads or even a bit of vapor out the vent. After about an hour it will be running “stable”.

If the ambient temperature is hot, it may be best to direct a desktop fan at the case to keep it cool.

Fine Calibration, Developing new recipes and expert PID settings are optional procedures that can enhance your experience as you gain more skills.

## Step 5. Mini Sac Run Cleaning procedure

Always discard the first 30ml of hearts as a preventative measure, if it is tinted blue or green then run another 30ml and keep discarding it until it runs clear.

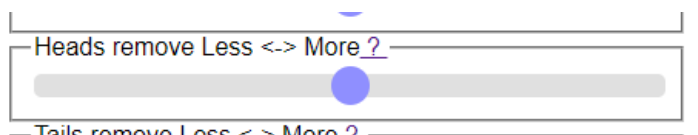
If your still has not been used for a more than a week, and especially if you had not done an end-of-run cleaning you should discard at least 100ml.

Alternately perform a Vinegar Cleaning run.

1. Prepare a container with 500ml of white spirit vinegar, and 1 liter of water.
2. Place the feed tube in the vinegar solution.
3. Run MyVodkaMaker until done.
4. Place the feed tube in 2 liters of clean water.
5. Run until done.
6. Discard all product. It is normal for this to be tinted blue or green.
7. Place the feed tube in your wash.
8. Discard the first 30ml of product.

## Step 6. Running procedure

As the run proceeds assess and check that the heads take off is approximately 10% of the product takeoff, if it is taking too little move the heads slider to the right a notch to take of more, if it is taking too much move it left to take of less.



If it is running hot (low ABV) you may turn the total power down. Try 60% to 40%.



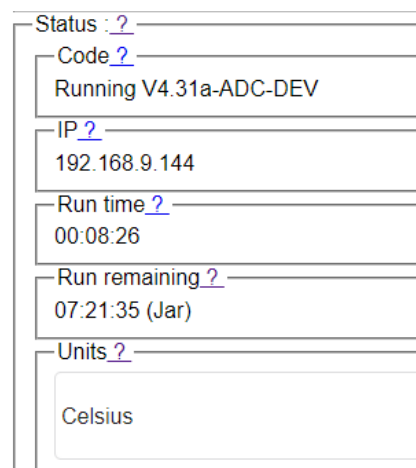
## Step 7. Clear the Run Limit procedure

MyVodkaMaker has a run limit set by hours, jar size and room size.

MyVodkaMaker will keep the last recipe selected and the remaining run time even when there is a power failure or if MyVodkaMaker is switched off. So even if you have a number of power failures, MyVodkaMaker will automatically start and continue where it was interrupted, and it will remain in stop if it had last stopped.

So when you are **starting a new run always remember to press the red button to clear the run limit** from the last time you used it. (press it twice to reset the runtime and restart the fill)

The rear red LED will indicate the current state: Totally off means there is no power; ON means active and running; Mostly on & blinking off means it is still running but it is trying to connect to the Wi-Fi; Mostly off & blinking on means the run time limit exceeded(Clear jars and press the red button).



## Step 8. End-of-Run cleaning procedure

Always clean after use by following these steps.

1. Place the feed tube in clean water (at least 1 liter) and press the red button.
2. Let MyVodkaMaker run for an hour or two.
3. Switch off MyVodkaMaker. Let it cool a bit.
4. Tilt MyVodkaMaker backward over a sink and let the water drain out.
5. Hold upright, and tilt again; repeat until most of the water is out.
6. Leave upside down to fully drain for at least an hour or even overnight is better.
7. Place on the storage dust caps to prevent ingress of dust, dirt or insects.
8. Store in a clean dry place.

Fusel oils will often appear as dark brown or even black dirt specs in the waste, you may notice this more when you perform the cleaning procedure. Do not be concerned with this as it is in the waste path and will flush out, and will not make its way back to your product.

## Step 9. Pump Storage procedure

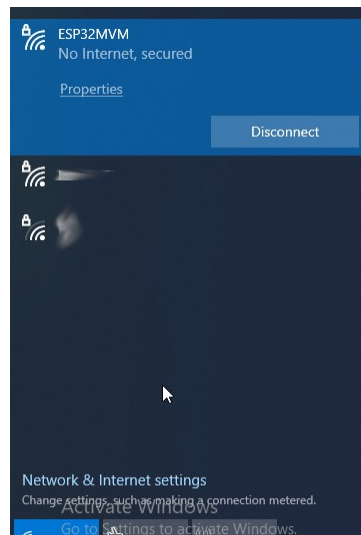
The pump contains a tough tube that does tend to deform if it has been sitting unused in one shape for a long while.

If you are storing MyVodkaMaker for an extended period (4 weeks or more) then you should un-clip the pump head and take apart the rollers. Then store them loose in a plastic bag.

## AP Setup procedure (Optional)

You may indicate to MyVodkaMaker that it is “Permitted” to make spirits by changing some settings :

1. Enable Wi-Fi by pressing and holding the red button, switching on MyVodkaMaker, and continue to hold the red button for 6 seconds. This will clear the prior settings so you can make a fresh configuration.
2. Then either on your phone or computer look for, and connect to a Wi-Fi network called “ESP32MVM” with password 12345678.
3. Your phone or computer should open a web page. If it does not, open your browser on <http://8.8.8.8/>
4. Now you can change you settings, set “Permit” to yes and MyVodkaMaker will start making Vodka. To make other recipes you must select the recipe via your WiFi or the AP.



**You must set the AC voltage** according to your local power supply; For the USA the range is 100V to 130V; For the rest of the world 200V to 250V; It will not damage MyVodkaMaker if you set it incorrectly, it may just run too fast or too slow, or push wash out the spouts.

### You should set your elevation:

Simply google “what is my location elevation in meters” or try <https://whatismyelevation.com/> from your phone. Setting your elevation will adjust the temperature readings to reflect the ideal values expected at sea level. I.e. water boils at 100°C at sea level.

**You should set your maximum run time.** You can set up to 99 hours to put a hard run limit. Set 0 to disable this limit.

**You should set your smallest jar size** to set the limit

based on the size of your collection jar to avoid an overflow. A 1 liter jar can run 12 hours and a 2 liter jar can run 24 hours. A 8 liter jar can run 96 hours. Sometimes it may be useful to put MyVodkaMaker on a stand so that you can fit a larger collection jar under the spout. Set 0 to disable this limit.

## Setup

Menu ?
Select
Operation ?
Permit: ?
Yes
AC Voltage (100V to 250V): ?
215
Elevation in meter: ?
600
Max Runtime hours: ?
24
Smallest Jar Size(Litre): ?
1
Room size (Cubic meter): ?
24

**You should set your room size** to set the limit based on the size the room. This will limit the amount of vapor to a safe level in case someone has closed all the windows and a catastrophic failure occurs. A 24 cubic meter room (typical bedroom or kitchen) can run 12 hours and a 48 cubic meter open plan kitchen and lounge can run 24 hours. If you distill in a **guaranteed** ventilated space like an open porch you can set the room size 0 to disable this limit.

## Network Join procedure ( Optional )

On the same set-up page...

**To access MyVodkaMaker via your Wi-Fi and browser** you must set an access point name, and join MyVodkaMaker to a your 2.4 Ghz Wi-Fi. Then you can access it in your windows/chrome browser as “name/” (note the slash) or on other devices as “name.local”. (if your device does not have built in mDNS you may need to download a mDNS discovery app to locate your device) Check the network troubleshooting document ( <https://www.myvodka.com/doc/Network%20Troubleshooting%20Current.pdf> ) if you have issues.

You can add further security by setting a web page password so that other people sharing your Wi-Fi won't be able to access MyVodkaMaker.

**To further limit access to MyVodkaMaker** you can set it so you only have direct access to it via the AP. Set an access point name, and password and enable the AP then you can access it by switching your phone Wi-Fi to the name.

After all changes were made press Save&Boot and close your browser. After a few seconds it will restart and start the Vodka recipe and attempt to connect to your Wi-Fi, if the connection fails the red LED will blink off every second. If the connection is ok, you should be able to open a new browser window and connect to “name/” or “name.local”.

### MQTT remote (as from version 4.4)

You can optionally setup a relay service to access MyVodkaMaker remotely. Note: MyVodkaMaker does not store any usage information. Unless you set up MQTT, MyVodkaMaker will not transmit any data over the internet. If you do set up MQTT, it will only send data to the specified MQTT service. Furthermore, the mqtt.myvodka.com service provides customer insulation based on the chosen alias. This means that if you use a strong alias, only you will have access to your system. The service maintains anonymity, and there is no requirement to sign up or create an account for the alias.

The screenshot shows a web-based configuration interface with the following sections:

- Access point**: Fields for Name, Password, and a dropdown for Enable AP (set to Yes).
- Wifi access**: A 'Scan WiFi' button, a 'Scanned networks' dropdown, and fields for Join by name, Password, and IP (192.168.9.144).
- Web access**: A field for Password.
- Save&Boot**: A large button at the bottom.

The screenshot shows the MQTT remote configuration interface with the following fields:

- MQTT remote**: A title for the section.
- Enable**: A dropdown menu set to Yes.
- URI**: A text field containing 'mqtt://mqtt.myvodka.com'.
- User(Alias)**: A text field.
- Password**: A text field.
- Client ID**: A text field.
- Sub Topic**: A text field.
- Pub Topic**: A text field.



To use it, enable the MQTT service and enter a strong and unique User Alias of at least 8 characters. Afterward, go to [app.myvodkamaker.com](http://app.myvodkamaker.com) and input the same User Alias. This will grant you access to your system from anywhere. While using [myvodkamaker.com](http://myvodkamaker.com), the other fields can be left blank. However, if you opt for a different MQTT relay, you will need to complete the fields with appropriate values

## Citric Acid Cleaning procedure(optional)

About every 200L wash (between each barrel)

1. Perform the End-of-Run cleaning procedure.
2. Keep on the hearts dust cap, but remove the heads dust cap and vent.
3. Place the drain tube above MyVodkaMaker (stick the tip into the vent tube).
4. Place the feed tube in a 500ml solution of citric acid 5% or lemon juice.
5. Switch on and let MyVodkaMaker start to fill the tubes with citric acid.
6. Repeat pressing the red button when the pump stops until citric acid starts coming out of the heads spout.
7. Switch off MyVodkaMaker.
8. Let it sit and soak for at least 4 hours.
9. Drain and clean with the same cleaning procedure above.

The main purpose of the Citric Acid Cleaning procedure is to clean the internal copper so it can absorb sulfur compounds in your distillation.

### Clean In Place (CIP) in a small continuous still.

MyVodkaMaker has been designed with 1mm thick heavy-duty Stainless steel 316 SPP packing that will last two lifetimes so there is no need to replace the packing.

Provided there is no scorching, the inside of a running still is a harsh self-cleaning environment, both the wash and the distillate are powerful solvents that will flush residues while the still is running. The problem comes in at the end of the run when contaminants will either dry into stubborn residues or a wet low PH wash can cause copper oxidation while the still is stored in the presence of oxygen.

**So**, when the run is over, to do the end-of-run clean you simply move the feed tube over to a clean water jar and let it steam clean itself, running until all the contaminants have left via the waste drain. The next morning you just turn it upside down over a sink and let it drip dry.

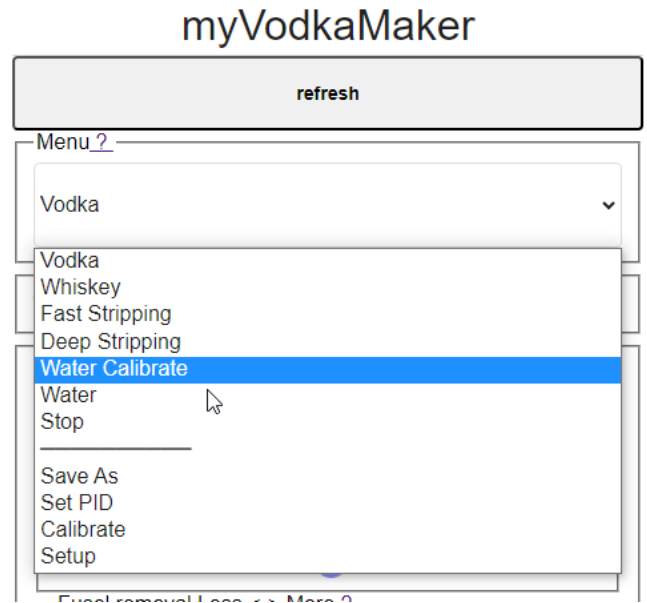
Then on the next run, you should do a "mini sac run". To do this you just run your wash as normal, and if you had done the end-of-run clean you simply discard the first 30ml as a preventative measure. If you forgot to do the proper end-of-run clean you simply let it run a while longer and discard a 100ml. Actually, it does not matter how 'dirty' your still was, the new incoming wash will clean it and you simply discard the sac portions until the product runs clean. The bulk of your wash will remain in the fermenter totally unaffected by a potential "unclean" still. You can even start your mini sac run with some old heads diluted to 12% and then just move the feed tube over to your wash once the still is clean.

In addition, it is just as easy to do a citric acid clean so the copper can again absorb sulfur and dislodge any possible contaminants. Just stick the feed tube in 300ml citric acid (or 551 cleaning solution),

attach the dust caps to the waste and hearts, then press the red button to pump the still full of citric acid and let it stand for an hour or four then turn upside down.

## Calibration (Optional)

Boiler Auto calibration is on by default, this does make startup a bit longer. You can disable auto calibration. You can manually set the calibration values or you can manually select 'Run Calibration' on the menu to do an immediate boiler calibration.



## Built-in Recipe overview

MyVodkaMaker is controlled by multiple PID controllers and process control logic. The recipes are preset values for the PID controllers to aim for specific results, making MyVodkaMaker a very simple to use but a powerful multi function appliance.

Even without calibration, **the built-in Vodka recipe** aims to achieve a clean decent hearts cut close to 90% ABV reliably under various conditions, but in order to do so it takes a small hearts cut, removing a lot of tails and heads. As a hobbyist looking for the best quality, it is best to take off more heads and tails than a commercial operation normally would. After all, we are making it for our pleasure, not for profit.

The MyVodkaMaker Mini only has a vodka function.

### For the Plus :

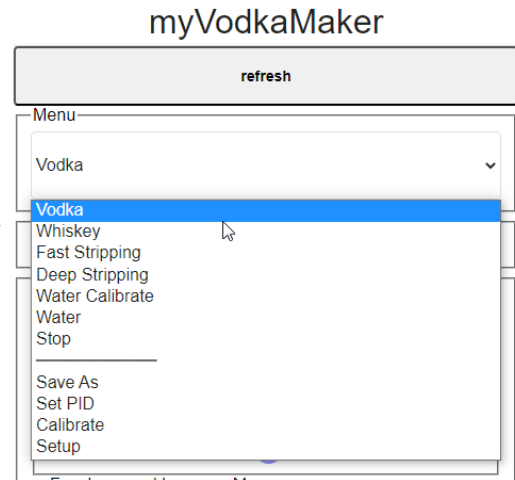
The built-in **whiskey, brandy, gin** recipe aims to extract the flavors from the mash while achieving an ABV of approximately 60% to 70%, here the ABV is less important than getting through the flavors. The whiskey recipe would also be great for making a macerated gin, or just about any traditional flavored spirit.

With MyVodkaMaker Plus put a dust cap on the left spout to collect vodka from the center spout, or put a dust cap on the center spout to collect whiskey/brandy or gin from the left spout.

MyVodkaMaker does not have a gin basket so it cannot make a vapor-infused gin, but it makes a lovely macerated gin...a nice simple recipe is:...make a neutral with MyVodkaMaker, dilute to about 70% then macerate crushed Juniper, cloves, cinnamon, and a teabag of rooibos tea. It gets harsh even after 3 days, dilute to 12%, put through the MyVodkaMaker on the whiskey recipe. It is just delicious like a Hot Toddy.

The built-in **fast stripping** recipe aims to run at maximum power and produce low wines, regardless of ABV, for further distillation. The spout function is different when stripping, where the hearts spout will have some tails and hearts at a lower ABV such as 50 to 70%, and the heads spout will have hearts and heads at higher ABV. Likely you will combine both as the low wines, but you can still adjust the sliders to remove a little more tails so the hearts spout will produce a nice flavorful hearts. You can't make proper heads cuts in the stripping recipes.

The built-in **deep stripping** recipe aims to extract the maximum amount of ethanol from low ABV washes in order to produce low wines for further distillation. However, deep stripping requires that you first perform water calibration so MyVodkaMaker can accurately track the amount of alcohol in the waste.



# Understanding how to make ‘Cuts’ in a fractional continuous still.

**Pot stills**, use the change in wash ABV over time to separate the heads, hearts, and tails fractions. A reflux still works on this same principle but has sharper transitions from heads to hearts to tails, so you can have bigger hearts portions as you take smaller heads and tails cuts. Likewise with MyVodkaMaker you can take smaller heads and tails cuts than you would with a pot still.

**In a continuous still**, we cannot use time to separate out the fractions. As the column remains in equilibrium throughout the run so there is no change over time.

Fortunately, there is an alternative method, when the column is in stable equilibrium, the ABV at every specific height in the column will be constant, and we can drain the liquid distillate from a specific point to get a specific ABV, allowing the higher volatile vapors to rise further.

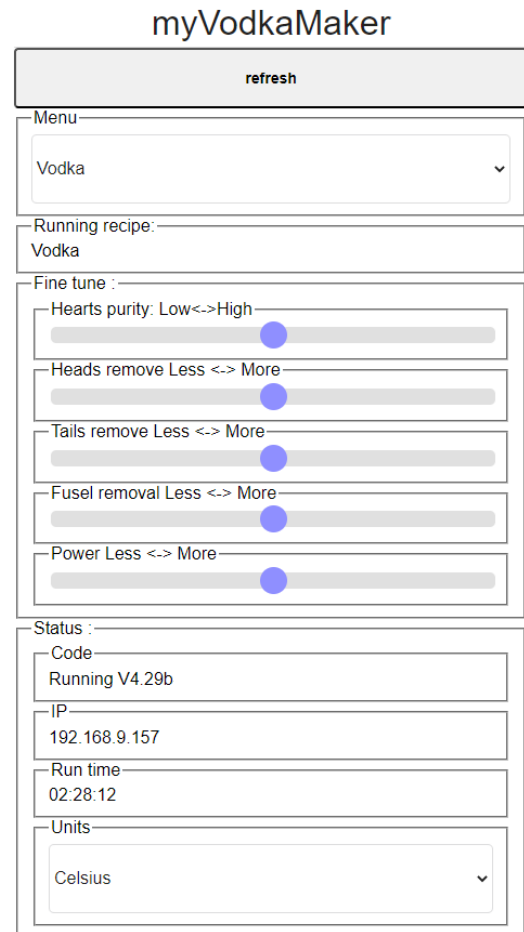
In industrial size stills, there are valves at every plate that can be opened to take off a wide range of distillate by ABV.

The MyVodkaMaker Plus has three takeoff points, Whiskey, Vodka and Heads and we can change the ABV at the takeoffs and the amount of heads by controlling the amount of reflux, and slowly over the time process control will track and trim the amount of reflux to reach the target ABV.

The MyVodkaMaker Mini does not have the precise control of ABV the Plus does. It has only two fixed takeoff points, Vodka and Heads and we can control the amount of heads, but the Vodka ABV will vary depending on the conditions (Typically 85% to 90%).

Having process control to do this means you don’t have to sit and trim the values manually over time, you simply run the recipe for a while, sample and taste the product, and adjust the sliders accordingly. You can run a whole barrel with a consistent output with very little effort.

**Heads:** If you have a good clean sugar wash you can take a smaller heads cut than you would with whiskey or a much smaller heads cut than you would with brandies. As a hobbyist looking for the best quality, it is best to take off more heads and tails than a commercial operation normally would. After all we are making it for our pleasure, not for profit.



The center of the heads slider will take off a fair amount of heads, but you can decrease or increase the amount by simply moving the slider left or right. A good ballpark estimate by volume is about 10% heads.

You should cut by taste or smell just like you would in a pot or reflux still, after the startup, you can run each slider position to take small samples and compare them by taste or smell. You should smell a distinct floral smell in your heads but never in your hearts, then you can run the best setting for the rest of the drum.

If you think you have taken off (collected) too large a heads cut you can let the heads vent in an open jar for a few days to get rid of high volatile(fores) compounds and then add it to your faints jar or back into your wash for re-distillation.

When there is only a little heads to be taken off, the low volume will cause the heads temperature indicator and deflagmentor to rise and fall as heads accumulate in the heads deflector and come through as small surges. This is normal.

When you collect an appropriate amount of heads you should discard it or use it for some purpose other than consumption.

**Tails:** MyVodkaMaker is very good at compressing tails, and preventing or removing the typical tails flavors, to this extent the amount of tails you want to keep is almost more about the speed vs the cost of electricity and sugar. But if you go very far into tails you will eventually get that tails flavor.

The tails slider center point is similar to typical pot distillation runs that are stopped at 20% ABV and gives a good compromise between taste, running cost, lost alcohol, and distillation rate.

To remove the least tails (or keep the most alcohol) with the slider all the way left, it is important to do a water calibration step. If you try and remove very little and the calibration is out then the feed may slow to a crawl as the process will try and reach an unattainable temperature, to correct this either just increase the slider by a step(or two) or correct the calibration.

**Fusel:** The volatility of fusel oils are highly dependent on the ABV of the solution they are in. In a pot still, they would mostly come out in the heads, and in a reflux still, they will mostly come out in the waste. In a continuous still, they will accumulate in the still at various ABV points depending on the specific fusel oil, over time so much will accumulate that it will bleed out of the hearts spout. MyVodkaMaker periodically flushes the fusel oils down the waste. The fusel slider sets how often this is done. The center point is once every two hours. Pulling the slider all the way left will disable the flushing. If you have a particularly 'nasty' wash you may want to slide it over to the right a notch or two. The Fusel oils will often appear as dark brown or even black specs in the waste, you may notice this when you perform the cleaning procedure because some of those oils will get trapped in the waste trap. Do not be concerned with this as it is in the waste path and will eventually flush out, and will not make its way back to your product.

**Save As:** At the end of the day it is all about the taste. If you have found the sweet-spot settings for your wash you can use the "Save As" option to store the settings you have made under a new name for later reuse.

## Notes, tips and tricks.

Clearing Wi-Fi and Permit mode can be done simply by holding the red button for 5 seconds immediately after power on, wait 10 seconds then power down...now it will be in water distiller mode with no network visibility – like it was shipped.

During operation pressing the red button for a second will activate the pump for about 60 seconds, and pressing it while pumping will stop the pump.

Low wines, should be diluted to about 8 to 15% to run through MyVodkaMaker. Using the wash as the coolant and recycling the heat energy results in the counter intuitive behavior where a lower ABV wash might actually result in faster distillation.

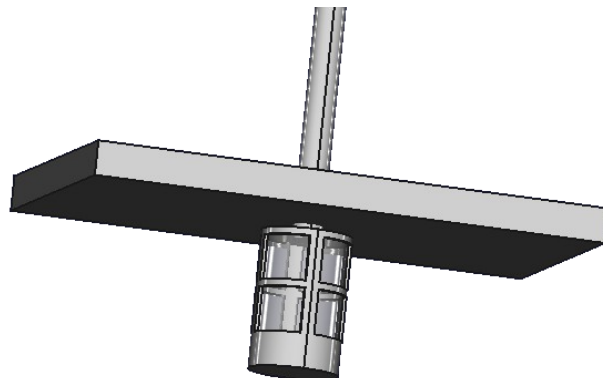
The ideal wash for MyVodkaMaker is a sugar wash started at about 1075. All stills are tested against this wash.

If your ambient temperature is hot MyVodkaMaker may slow down, it is then helpful to use a desk fan to cool it and keep the production rate up.

It is possible to fit the spouts with a drain to a large collection container, but it is vital that it does not form an airlock or siphon. As a guide it should have an inside diameter of at least 6mm, and run strictly in a downward direction and never upwards, and the end should never submerge. Preferably use (8mm) 5/16” or larger copper tube to fashion such a drain. The drain should fit loosely over the spout, so that it does not form a siphon.

For extra safety if you are worried about leaving MyVodkaMaker unattended, use a double size jar and pre-fill your jar with half water so for most of the day your collected spirit will be far below 40%.

If you use a 200L/55gal drum, do not pump thick sludge from the bottom of the wash, it can block up the thin tubes(see **Trouble Shooting**). Small ferments (<25L) normally do not produce enough lees to make thick sludge. A useful tip is to make a “raft”. Use some float-able material to hold the feed filter just below the surface, as the wash clears over time the feed will remain out of the sludge and in the most cleared wash.

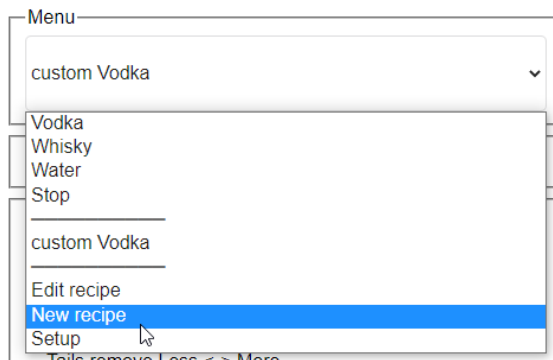


*Figure 1: Raft for feeding from the top of a barrel.*

## Developing new recipes.

For more advanced control you can create new recipes from the menu. You can edit user recipes(not the default ones) or select “Save as” and the current selected recipe settings will be copied to the new recipe, which you should then name.

In the edit recipe screen you can then give a custom name and adjust the settings.

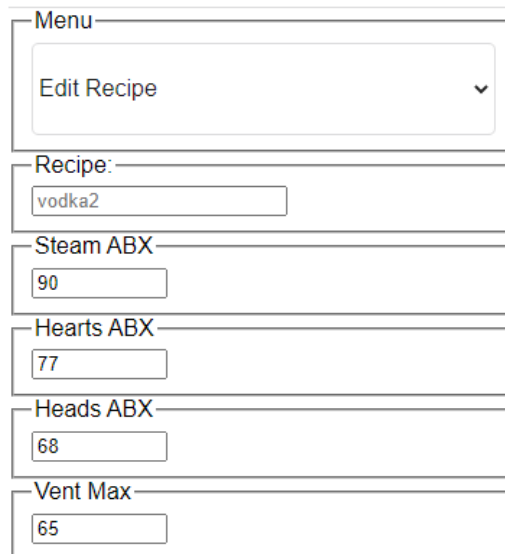
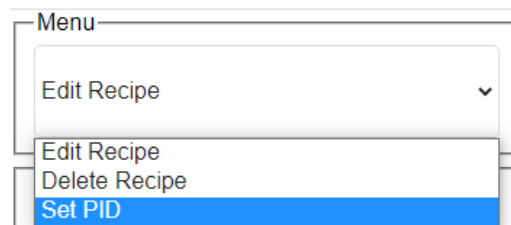


The term ABX is the alcohol vapor temperature you wish to extract, but we call it ABX because it is not the exact temperature as the exact temperature is affected by altitude, calibration, exact sensor calibration and many other factors. You adjust the ABX by running a sample and then deciding if your sample is high or low and then adjusting the values up or down. Unlike the sliders that just do fine adjustments you have complete control over the setting down to 0.1 degree.

Since you have full control it is possible to set a temperature that cannot be attained, like a hearts ABX of 70 would just block all vapors and MyVodkaMaker will produce nothing. We suggest at first, use the values from the default recipes, and adjust them a little by little until you get the result you are shooting for.

From within the recipe menu you can delete an unused recipe or you can enter the expert PID settings page.

## Edit Recipe

A screenshot of the 'Edit Recipe' screen. At the top, there is a dropdown menu labeled 'Menu' with 'Edit Recipe' selected. Below this, there are several input fields: 'Recipe:' with 'vodka2' entered, 'Steam ABX' with '90', 'Hearts ABX' with '77', 'Heads ABX' with '68', and 'Vent Max' with '65'.

# Expert PID settings.

MyVodkaMaker is run by 6 PID controllers, i.e. Power, Preheat, Reheat, Tails, Feed and Fan

Changes made to the built-in recipe settings are effective but they are not saved. If you change the recipe or reboot the changes will be lost. To make your own recipes use the “Save as” function to save and name a new recipe.

Each PID has a target, a start, a (P)proportional, (I)integral and a (D)Differential setting, a Minimum and Maximum.

You should not need to adjust these in the normal course of custom recipe development.

To understand this operation completely there is a lot of perquisite expert knowledge required so as such, for the moment a description of the PID intricacies are outside the scope of this user manual.

If you have a some knowledge of PID control and you would like to discuss the implementation details you are welcome to contact us on [service@xienoid.com](mailto:service@xienoid.com).

### PID Settings

**refresh**

Menu

Edit Recipe ▼

Recipe:

Vodka

Power :

°C Boiler

96

Start

0

P

50

I

0

D

0

min

60

max

65

Preheat :

°C Hearts ABX

78.6

Start

1

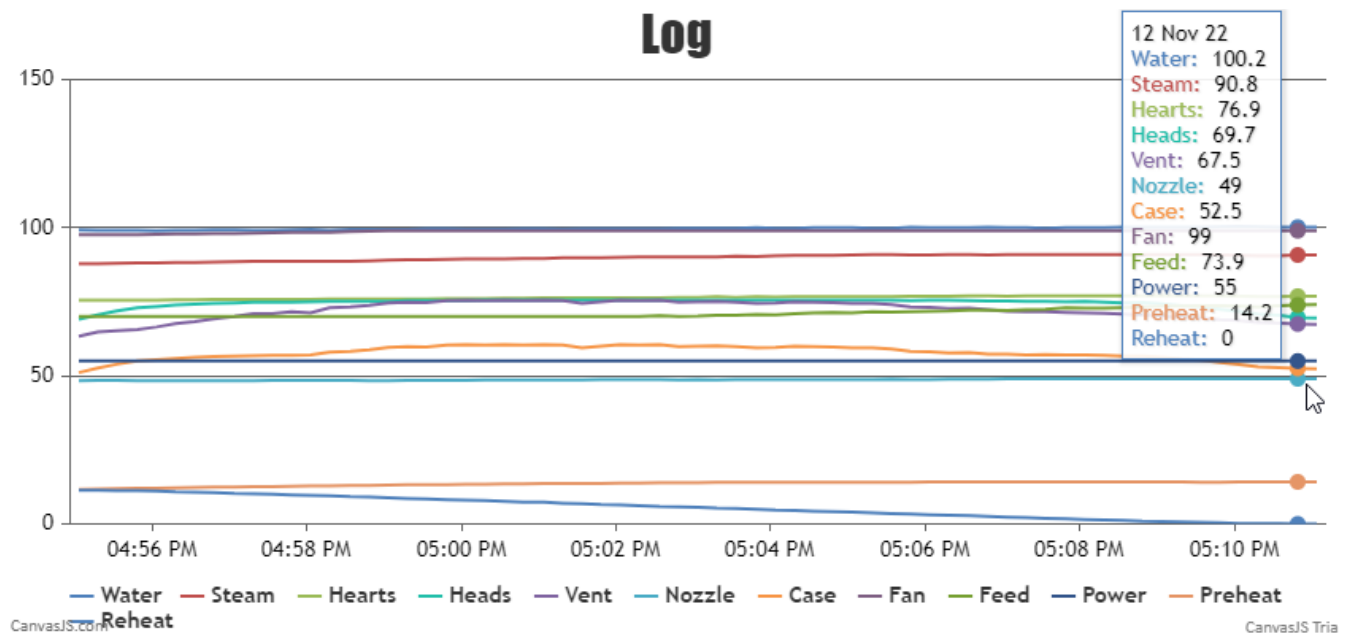
P

1



## Status Graph

The graph shows on each of the screens, and is quite interesting, if not downright useful to troubleshoot.



What you may notice is that sometimes heads and re-heater values cycle up and down – that is because the when there is only a little heads to be taken off, the low volume will cause the heads temperature indicator and deflagmentor to rise and fall as heads accumulate in the heads deflagmentor and come though as small surges. This is normal.

Note: MyVodkaMaker does not store or report any usage information. The log depicted here is stored in RAM for the duration of the view and is lost on power down. The web app that runs it does not store any information, either as cookies, database or any other storage information.

When you switch it off, all records are gone.

## **Trouble shooting – Wifi**

The module used is a very popular and well supported ESP32, but it has some limitations:

It uses mDNS to advertise it's name to be reachable to the network. If your phone does not have mDNS built in you may need to download a mDNS discovery app to locate the device on the network.

## Trouble shooting

Q. Wash is coming out of my hearts spout:

A. Make sure the waste tube is not in the waste, but dripping from above.

A. Check if your waste tube is clear by blowing into it.

A. Check if your mains voltage setting, you may be running with too much power.

Q: Does it matter that I have not degassed my wash?

A: No, the pump will simply pull a little faster to pull enough actual wash into the boiler.

Q: I have some spurting of wash out of the puke tube.

A: This is normal

Q. I get a "No Feed" error.

A, Check that the feed tube does not kink, especially at the pump.

Q. No or very little hearts comes out:

A. Your wash may be very weak and you cannot reach the ABV you are trying to reach, reduce the hearts purity or choose the deep stripping recipe.

Q. Just about as much heads comes out as hearts:

Q. Reduce the slider on the amount of heads.

Q. One of my spouts or waste seems blocked:

The thin tubes which can be cleared by applying slight air pressure by blowing into the blocked tube (use a bit of tube to make it less awkward).

Q: There is interference with TV reception

A: Radio and TV reception may be interfered when operating. It is similar to the interference of small electrical appliances like mixer, vacuum cleaner and electric fan. This is normal.



According to Waste of Electrical and Electronic Equipment (WEEE) directive, WEEE should be separately collected and treated. If at any time in future you need to dispose of this product please do NOT dispose of this product with household waste. Please send this product to WEEE collecting points where available.



End of file