

CHERS, NICE CTOMETYOU



I'LL CHANGE YOUR LIFE 40 PINTS AT ATIME



THANK YOU FOR CHOOSING THE GRAINFATHER (G30)

Get started by following these instructions on how to assemble and use your **G**30³. We recommend reading the following safety information before use. Please also find enclosed, advice for cleaning and storing your **G**30³.

WARNING! (NORTH AMERICA 220V ONLY)

If your unit is a North America 220V product, the power cord, controller and boiler body included in the box are designed to be used together with a 220V supply. Using any of these components with another product may result in hazards and equipment damage.

SOCKET GUIDE (NORTH AMERICA 220V ONLY)

POWER SUPPLY SOCKET	DESCRIPTION	COMPATIBILITY	
NEMA 6-15R NEMA 6-20R	3-pin workshop and power tools supply.	Brewing system is compatible using power cord supplied in-box.	
NEMA L6-20R	3-pin workshop and power tools supply.	Brewing system is compatible by using an adapter that includes a ground connection and has appropriate electrical certification.	
NEMA 10-30R NOT SUITABLE	3-pin laundry dryer supply, most common installation prior to 1996.	This power supply socket is NOT SUITABLE for use with the brewing system. This socket provides hot-hot-neutral connections. The brewing system requires a ground connection to perform safely in the event of an electrical fault.	
NEMA 14-30R NEMA L14-30R	4-pin modern laundry dryer supply, commonly installed after 1996.	Brewing system is compatible by using an adapter that includes a ground connection and has appropriate electrical certification.	
NEMA 14-50R NEMA 14-60R	4-pin electric oven supply.	Brewing system is compatible by using an adapter that includes a ground connection and has appropriate electrical certification.	

SAFETY INFORMATION

- **1.** Read all instructions before using the Grainfather **G**30³.
- 2. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or a qualified person to avoid a hazard.
- 3. This appliance is intended to be used in household and similar applications such as staff kitchen areas in shops, offices, and other working environments; farmhouses and by clients in hotels, motels and other residential type environments; bed and breakfast type environments; catering and similar non-retailed applications.
- **4.** The appliance is for indoor use only.
- **5.** The appliance is not suitable for installation in an area where a water jet could be used.
- **6.** The appliance must not be cleaned by a water jet.
- 7. The appliance must be in an upright position at all times when in use.
- **8.** The appliance is only to be installed in locations where it can be overseen by trained personnel.
- The installation of a residual current device (RCD) having a rated residual operating current not exceeding 30 mA is advisable.
- **10.** The A-weighted sound pressure level of the appliance should be below 70 dB.
- **11.** Always unplug the unit before cleaning, during storage or in the event of a fault.
- 12. The boiler, lid and pipes may reach temperatures of up to 100°C (212°F) and therefore must be handled with caution. Never move the unit while it is in operation.
- 13. Access of the service area is restricted to persons having knowledge and practical experience of the appliance. The maximum and minimum ambient temperatures for normal use of the appliance is: 40°C (104°F) to -20°C (-4°F).
- **14.** To protect against fire, electric shock, and injury, do not immerse cord/plugs in water or other liquid.
- **15.** Do not boil dry. See warning note on page 14.

THE FOLLOWING STATEMENT APPLIES TO GRAINFATHER PRODUCTS SOLD IN EUROPE:

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
 Cleaning and user maintenance shall not be made by children without supervision.

THE FOLLOWING STATEMENT APPLIES TO GRAINFATHER PRODUCTS SOLD IN THE UNITED KINGDOM:

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
- The fixed wiring insulation must be protected, for example, by insulating sleeving having an appropriate temperature rating.

THE FOLLOWING STATEMENT APPLIES TO GRAINFATHER PRODUCTS SOLD IN AUSTRALIA AND NEW ZEALAND:

- This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

NOTE: Further to the safeguards listed above, we do not recommend the use of this product by children. Not following the safety information above could result in serious injuries and may void your warranty.



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PRE-BREWING ASSEMBLY

Before use, we recommend cleaning your **G**30³ and all of its components using the Grainfather High Performance Cleaner. For detailed cleaning instructions, see page 16.

1. INSTALLING THE FILTER

With the filter silicone insert (14) and filter silicone cap (12) already fitted, install the filter (13) into the boiler body by pushing the silicone insert into the inlet pipe nut (15).





2. ATTACHING THE CONTROLLER

Feed the temperature probe cord that is attached to the bottom of the controller (20) through the handle of the **G**30³ as shown below. Fit the lugs at the back of the controller into the holes on the bracket and sit the controller on the cradle.



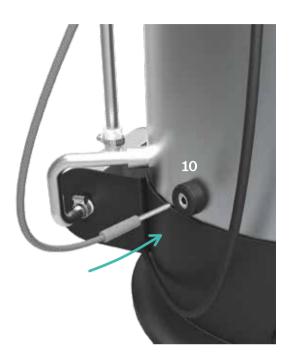
Temperature probe cord threaded through handle



Insert the pump plug (23) and the heating element plug (21) into the relevant sockets on the bottom of the controller as shown below.



Then, insert the temperature probe into the thermowell (10) that is located at the bottom of the $\mathbf{G}30^3$ as shown in the image below.



3. CONNECTING TO POWER

Take the controller power plug (22) and plug it into the middle socket on the bottom of the controller. Plug the other end of the cable into a suitable power socket for your **G**30³. The display screen on the controller should now turn on, however if this does not happen, please check that both the connection on the controller and power socket are secure.

NOTE: The **G**30³ is available in both 110V and 220V in some markets - please ensure that your power socket is suitable for your **G**30³ model.



BLUETOOTH CONTROL&APP AINTEGRATION

The **G**30³ has built-in Bluetooth, making it compatible with the Grainfather App where you can use your mobile device as a remote control for a completely connected brewing experience.

1. Make sure that your **G**30³ unit is powered on and within line of sight of your mobile device.

NOTE: You can also connect your **G**30³ to Wi-Fi and control your brew from virtually anywhere with the **G**CAST. Sold separately on the online Grainfather Store: shop.grainfather.com

Download the Grainfather App on your mobile device from the App Store or Google Play Store and register an account if you're a new user.





3. Once in the app, navigate to the equipment screen. The equipment screen shows all the brewing and fermenting equipment that you have set up on your account.

NOTE: The following screen layouts depict an iOS device and may differ slightly for Android.

- **4.** To add a new device, tap on the '+' icon on the bottom right of the screen and select 'brewing equipment'.
- **5.** Select 'Grainfather' on the list of brands and then select 'Grainfather **G**30³' on the list of equipment. Your **G**30³ is now ready to brew using the Grainfather App. Choose to select a recipe or even create your own, you can also use the step-by-step brewing system to brew confidently.





MANUAL BREWING ON THE G30° ...

Use the **G**30³ smart controller in manual brewing mode for no connection to your mobile device required. From the main menu, choose between step mashing or delayed heating to get started.

DEFAULT SCREEN

The default screen shows the current temperature and target temperatures, unit symbol (Celsius or Fahrenheit), timer (when active), wireless connection and status symbol.

MAIN MENU				
BUTTON	PRESS ONCE	HOLD FOR 3 SECONDS	HOLD FOR 6 SECONDS	
PUMP	Pump on/off (the button will light up when on)			
HEAT	Heat on/off (the button will light up when on)	Go straight to boil/sets target temperature to 100°C (212°F)	Voltage control mode for distilling	
SET	Turn off alarms	Set timer (hold until timer unit flashes then enter time using the up and down arrows)	Switch between °C and °F	
UP	Increase target temperature/time	Increase target by 2°C (3.6°F)/5 minutes		
DOWN	Decrease target temperature/time	Decrease target by 2°C (3.6°F)/5 minutes		
MENU	Press the up and down arrows together to enter menu mode			

ACCESSING THE MENU

1. Press both the up and down arrow together once to enter menu mode.



2. Press the up or down arrow to choose an option and press the 'HEAT' button to proceed with your selected option.





STEP MASHING

In this mode, you can choose to program up to four steps of your brew day into the controller.

1. Choose how many steps you need by pressing the up or down arrow, then press 'HEAT' to proceed.



2. Press up or down to change the temperature.



3. Press 'SET' to edit the time.



4. Press up or down to change the time for that step.



5. Press the 'HEAT' button to proceed to the next step. Repeat, depending on the number of steps you have selected.



6. On the last step you require press the 'HEAT' button to start brewing.



DELAYED HEATING

You can choose to set your Grainfather controller to begin heating at a later stage. For example, you could set it to start heating in seven hours as shown below.

1. Press the up or down arrows to set the time delay.



2. Press the 'SET' button to toggle between hours and minutes.



3. Press the 'HEAT' button to start.
The screen will display the countdown.

NOTE: Target temperature can be set before or after the timer starts for delayed heating.



BREVVING ON THE G30°

You are now set up and ready to start brewing! Follow these instructions to guide you through your brew on the **G**30³.

1. ADD THE MASH WATER

Make sure that your **G**30³ is on a flat, stable surface before you start brewing. We recommend placing your **G**30³ on the floor due to heavy lifting that is required later in the brewing process. Add the volume of mash water required by your recipe – you can use the advanced calculators available on the Grainfather App.

NOTE: Ensure that the recirculation ball valve is open during this step to avoid a pump airlock.

2. SET THE MASH/STRIKE TEMPERATURE

Using the controller or your mobile device, set the required mash temperature and press the 'HEAT' button to begin heating. Place the glass lid (17) on the ${\bf G}30^3$ to reduce the heating time. At this stage, if your ${\bf G}30^3$ is connected to the Grainfather App, you can run your brew session remotely from your mobile device.

NOTE: The clips on the side of the **G**30³ should not be used to secure the glass lid. These should only be used with distilling attachments.

3. ASSEMBLE THE GRAIN BASKET

Insert the grain plate (26) into the grain basket (27) and ensure that the plate is sitting firmly on the bottom of the basket.



4. INSTALL THE GRAIN BASKET

Slowly insert the assembled grain basket into the **G**30³. Ensure that the top of the grain basket rests flat on the support ring (19).



5. ADD GRAINS AND STIR

Once your water has reached the set temperature, slowly add the grain to the grain basket, stirring well to avoid any dry clumps.

NOTE: Unlike prior Grainfather G30 systems, the G30³ does not require a top plate or an overflow pipe in the basket. The grain basket now has extra drainage holes, removing the need for these parts. You can choose to use a top plate when brewing higher ABV beers if you want to maximise the amount of grain used in the G303. In this case, the top plate can help to keep grain in the basket if the wort levels are high, and stop any wort from draining through the lifting bar holes on the side of the basket. An additional grain plate can be purchased for use as a top plate on the online Grainfather Store or at your local retailer. The maximum grain weight that the G303 basket can hold is 9kg. However, this is affected by grain crush, type and variety. It may be easier to manage this by using an additional grain plate on top of the mash. If you're unsure how well your particular grain bill will fit then we recommend mashing up to 8kg.

6. ASSEMBLE AND ATTACH THE RECIRCULATION PIPE

Check that the O-ring is fitted into the plastic knob underneath the rolled groove of the pipe. Then, insert the silicone hose (16) over the barbed end of the recirculation pipe (1).



Place the lid on the **G**30³ and feed the silicone hose through the hole in the lid and firmly screw the recirculation pipe onto the safety valve (2). The end of the silicone hose should rest on the grain bed.



7. RECIRCULATE YOUR MASH (WORT)

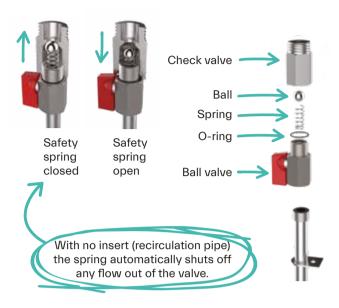
Ensure the ball valve (4) on the side of the unit is open. Then to begin recirculating, press the 'PUMP' button on the controller or via the Grainfather App. If recirculation doesn't start, press the 'PUMP' button to turn it off, blow into the hose to clear the airlock, then restart the pump. The ball valve can be used to adjust the flow rate so that the wort level is just above the grain bed (approx. 2cm).

NOTE: To save time, we recommend preparing your sparge water during your mash.

BALL AND SAFETY VALVE OPERATION



DISCHARGE PIPE SAFETY VALVE



NOTE: If at any stage the valves block up, switch off the pump, take the valves apart and clean them. It is good practice to take apart the valve assembly and give it a good clean after a brew to ensure it is clear from any debris.

8. LIFTING THE GRAIN BASKET

When the mash has finished, turn off the pump and remove the recirculation pipe and lid. Close the ball valve and insert the lifting bar (25) into the two opposite holes in the grain basket. Lift the grain basket, and then turn it 45° so that the feet at the bottom rest securely on the support ring.





CAUTION

BE VERY CAREFUL not to twist the basket while it's in the sparge position as it could knock it off the support ring. If the sparge is stuck and not draining, lower the basket and slice the grain bed with a stainless steel paddle or similar. Cut through the stuck grain from the centre towards the outside repeatedly until it loosens. Then, return the basket to the sparge position to continue sparging.

Always ensure that the support ring fits tightly into its groove and is held in place by the support ring retainer (18). If you remove the support ring for cleaning, ensure that it is correctly reinstalled along with the support ring retainer.





9. SPARGING AND BASKET REMOVAL

Allow the mash liquid to drain into the boiler. Then, gently pour the sparge water evenly over the grain bed until the water is a few millimeters above the grain and allow to drain. Once the sparge is finished, use the lifting bar to remove grain basket from the **G**30³.

TIP: To save time, you can now start to increase the temperature in preparation for the boil. If you are using a large grain bill, we recommend scooping some of the grain from the basket to reduce the weight before lifting.

10. BOIL YOUR WORT

After removing the grain basket, complete the boil and add the hop additions required by your recipe.

CAUTION

Ensure that the unit does not reach a boil while the grain basket is still in place. During the boil, do not use the glass lid as it may cause a boil over.

CAUTION

In the event the unit is boiled dry, the Grainfather **G**30³ has an automatic reset switch under the base of the boiler which will reset once the boiler has cooled down. Older models of the Grainfather **G**30 have a reset button under the base of the unit. When it is safe to do so, press the reset button to reset the thermostat. In the unlikely event this cut-out fails on any Grainfather **G**30, a thermal fuse gives added protection. This fuse will activate and cut the flow of electric current if the temperature exceeds a safe level.

Current units with automatic reset cannot be reset by the user and the boiler will require professional attention.

COOLING WITH THE COUNTERFLOW &CHILLER

A cooling method is needed to get the boiled wort down to a suitable temperature for the yeast. The Counterflow Chiller is a great way to do this in a simple one step process.

CLEANING

Start by adding warm cleaning solution to your Counterflow chiller, then attach the Counterflow chiller to your brewing unit. Once ready, switch the pump on allowing the water to flow into the sink until it runs clear. Proceed to insert the hose into the unit, promoting water recirculation for a duration of 10–15 minutes. Once complete, switch the pump off, disconnect the Counterflow chiller and empty it's contents. Lastly, fill the brewing system with clean water, and repeat the process to flush the counterflow chiller.

CAUTION

The maximum flow rate of water through the Counterflow chiller is 3L (0.8 US Gal) per minute. Do not exceed this flow rate as it may cause bursting with excessive water pressure.

FLOW RATES

The maximum flow rate of wort through the counterflow chiller is 1.5L (0.4 US Gal). At this flow rate, with a tap water temperature of 20°C (68°F), the wort in the fermenter should be at approximately 25°C (77°F). To achieve a wort temperature close to 3°C (5°F) above your tap water temperature, you can reduce the flow of the wort through the Counterflow chiller and make adjustments using the ball valve.

DIRECTIONS

 At the end of the boil turn the heating element off. Create a whirlpool by stirring the wort vigorously with your paddle. 2. Place the counterflow chiller on top of the brewing system or nearby table or bench. Connect the Counterflow chiller using either the G30 attachment or the right angle hose barb. Screw the plastic knob on the hot wort in (A) hose to the safety valve.

CAUTION

Be careful not to sit the chiller on top of any hoses as this could cause a build-up of liquid that may cause the hose to burst.

3 The coloured hoses are where the cold water enters (blue) and hot water exits (red). Attach the blue hose to your tap to allow cold water to enter, using your tap adapter set (24). The red hose is where the hot water drains out as it flows through the counterflow chiller. The cold wort out hose (B) is where your wort exits the counterflow chiller. Ensure the red hose is directed somewhere to collect or drain safely.

TIP: Collect some of the hot water from the red hose to use as cleaning water after your wort has finished transferring.

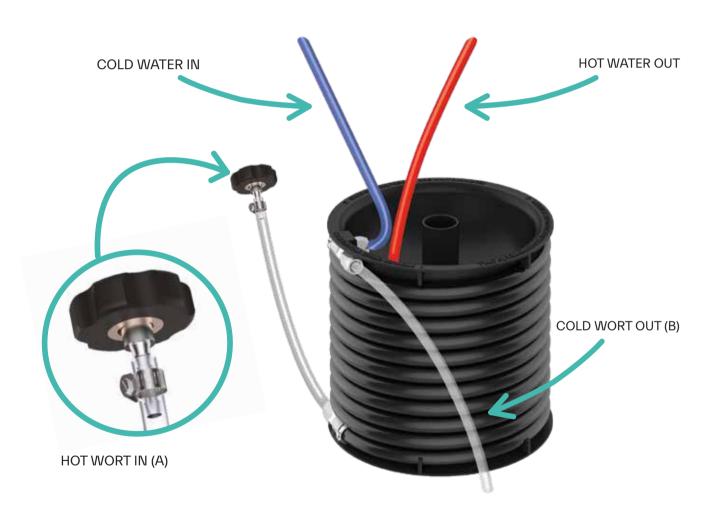
4. To sanitise the counterflow chiller, place the cold wort out hose into the brewing system body. Turn the pump on to recirculate hot wort back into the brewing system to sanitise the inside of the coil. Complete this step without cold water circulating and recirculate for approximately 30–60 seconds but no longer then turn the pump off.

NOTE: The Counterflow chiller is designed to cool while simultaneously transferring your wort to your fermenter. You should not cool by recirculating into your brewing system as this reduces the thermal efficiency and may damage the Counterflow chiller.

5. Ensure no hoses are kinked and that the water can flow freely then gradually turn on your cooling water and adjust the flow rate. Allow the cooling water to flow for 2 minutes then turn on the pump. Once the cold wort out hose (B) runs cool, switch the pump off and place the end of the hose inside your clean and sanitised fermenter and switch the pump back on. Always try to keep the fermenter opening covered to avoid contamination while transferring your wort.

CAUTION

The counterflow chiller is not intended for continuous hot wort circulation without cooling water flowing through. Do not use during processes like whirlpooling and hop stands. Unintended use may damage the counterflow chiller.



*Tap adapter set included with the Counterflow Chiller

WAYS TO COOL YOUR WOORT **

IMMERSION CHILLERS

CLEANING

Before using it, you will need to clean the immersion chiller to ensure there are no machining oils left on the surface of the coils, which may affect your final beer. Also, ensure your fermenter is cleaned and sanitised before cooling and transferring the wort.

OPERATION

Once the immersion chiller is clean, connect the hoses to the immersion chiller. Ensure hose clamps are used and don't exceed the maximum flow rates for the immersion coil. If the connection bursts, this may result in tap water diluting your wort and introducing chlorine and chloramines, which the yeast don't like.

1. Insert the immersion coil into the freshly boiled wort about a minute or two from the end of the boil with the hoses pointing away from you.



CAUTION

If the immersion coil contains water, this will rapidly heat up, sending hot water out of the hoses.

The immersion coil will also rapidly heat up, so gloves should be used once inserted into the boiling wort.

- 2. Connect one of the hoses to your cold water faucet and direct the other to the drain or collection bucket for later use while cleaning. In practice, it usually doesn't make a difference due to the thermal convection within the boiler until the wort is cool. But check with your brand of immersion chiller to see if they have a recommended orientation.
- 3. Slowly turn on the faucet of cold water. There will be 'spluttering' as water in the chiller comes out. Ensure there is no leaking water into your wort from the connections.
- **4.** Cool until the work temperature reaches a suitable temperature for your yeast. Then, transfer the pump and recirculation arm to your clean and sanitised fermenter.

CUBING

Before you start, you must ensure your Jerry can/cube is clean using a food-safe cleaner and water. You will also need to adjust your batch volume to the volume of the cube.

CAUTION

The cube will get hot. Do not try to move the cube once it has been filled.

1. Once the boil has finished, use the recirculation arm to transfer the hot wort to your cube.

CAUTION

Any overflowing liquid will be hot and will cause nasty burns.

- 2. Once the cube is full, remove the recirculation hose from the cube and gently squeeze the sides of the cube to push the wort to the top of the cube opening to remove any oxygen.
- 3. Cap the cube and leave it overnight. If there have been any spillages, use sanitiser and cloth to clean up.
- 4. Once the cube is cool. Transfer the wort to your clean and sanitised fermenter. Your wort is the perfect temperature for microorganisms. Avoid leaving the open wort exposed to the air for too long.

ADVICEFOR CLEANING & STORAGE 品

No one really enjoys cleaning, but it's worth it for great beer!

ADVICE FOR CLEANING AND STORAGE

- Always disconnect the G30³ before cleaning.
- After use, the G30³ and all of its components should be cleaned immediately and dried thoroughly.
- We recommend using the Grainfather High Performance Cleaner or Five Star PBW as it removes the need for tedious scrubbing.
- All stainless steel components can be cleaned using a conventional, unscented detergent. Abrasive agents and sponges/brushes could cause scratching and are not suitable for use. Ideally, use a dish brush to clean the base of the unit.
- Do not store in a damp area as this could cause damage to the product.
- Once you have cleaned your equipment, dry, reassemble and store.

CLEANING THE G303

- 1. Remove all trub and solids from the **G**30³ by rinsing thoroughly and emptying the contents.
- 2. Fill the unit with 10L (2 US Gal) of water and 1 cap of Grainfather High Performance Cleaner.
- 3. Heat the water to 60°C (140°F) and use a dish brush or soft sponge to clean the unit.
- 4. Attach the counterflow chiller and place the cold wort out hose from the chiller into a 5L (1.3 US Gal) jug. Once ready, switch the pump on and let the water run into the jug until the water clears. Now, place the hose into the unit (through the counterflow chiller spindle) so the water continues to recirculate and leave for 10–15 minutes.

- **5.** Once complete, switch the heating and pump off, disconnect the counterflow chiller and empty the contents.
- 6. Follow steps 2–5 again but this time with clean water only to rinse and flush the **G**30³ and counterflow chiller.

CAUTION: RISK OF BURNS

Use heat resistant brewing gloves or other suitable gloves during this process.

PUMP CLEANING

We recommend cleaning your pump every 5-10 brew sessions. This process should be done after you've cleaned your $\mathbf{G}30^3$.

- 1. Remove the pump cover (6) to expose the pump in the pump housing.
- Shift the hose clamps away from the pump inlet and outlet.
- 3. Remove the two screws that hold the pump in place and detach the inlet and outlet hoses from the pump.
- 4. Remove the screws holding the impeller housing to the pump.
- Remove the top cover of the impeller housing exposing the impeller.

NOTE: There is no need to expose the magnetic drive pump.

6. Use a pipe brush or something similar to clean the impeller and impeller housing.

NOTE: Do not submerge the pump in water.

7. Dry the components and reassemble the unit.



Get the most out of your **G**30³ Brewing System with these optional upgrades. Each sold separately on the Grainfather store: https://shop.grainfather.com

COUNTERFLOW CHILLER

The counter flow chiller has been designed to efficiently cool your wort, and allow easy, and sanitary transfer directly into a fermenter.



G30³ **ROLLED PLATE WITH HANDLE**

Upgrade your **G**30³ and enhance your brewing experience with the **G**30³ Rolled plate. This plate is to be used with the perforated grain basket and can be used as a top and bottom plate. Using this top plate means you can increase your grain volume.



WORTOMETER

Use in conjunction with the **G**30³ Controller thermometer, to monitor and manage your wort transfer temperature through the counterflow chiller.



GCAST

Connect your $\mathbf{G}30^3$ Controller to Wi-Fi and never go out of range via Bluetooth again. Plus, connect and view data from your TiltTM without the need for extra equipment and software.



ALEMBIC DOME & CONDENSER

Turn the **G**30³ into a microdistillery by attaching the Still Spirits Alembic Dome and Condenser.



IMPORTANT: SAFEGUARDS

READ AND FOLLOW ALL INSTRUCTIONS

CAUTION

- Risk of fires and electric shock.
- Replace only with genuine Grainfather cord set.
- Do not immerse in water.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

FOR COMMERCIAL AND INDOOR USE ONLY



WARNING AVERTISSEMENT

RISK OF ELECTRIC SHOCK . DO NOT OPEN. RISQUE DE CHOC ÉLECTRIQUE. NE PAS OUVRIR







RESOURCES: Check out our YouTube Channel for helpful videos.

For more information and help, visit our Help Centre: help.grainfather.com

