BrewZilla 35L – Gen 4 Instruction Manual

KegLand Distribution PTY LTD

www.KegLand.com.au

Contents

WARNINGS - IMPORTANT INFORMATION!

1. Please read this ENTIRE instruction sheet before using the BrewZilla unit. If you are unsure about any part of using this brewery, please refer to the YouTube videos that we have made or contact your local distributor.
2. If the BrewZilla is damaged in any way do not use it. Contact your local distributor.
3. NEVER turn on the pump or energise the device without the recirculation arm securely connected. If you do not fit this arm, you could be at risk of spraying hot wort into the air causing injury.
4. Do not run the pump dry for extended periods. This can damage the pump.
5. NEVER lift the BrewZilla when it is completely full, we strongly urge you to use a hose to fill your unit. Use the pump or ball valve to transfer your wort. Lifting a heavy / hot BrewZilla may result in serious injury.
6. If at any stage the recirculation arm is not fitted and/or needs to be removed always ensure the ball valve is turned off. See the recirculation arm assembly section.
7. Do not boil dry. Do not energise the device or begin a profile from the RAPT Portal if there is less than 4 litres of liquid in the boiler. This is the minimum fill level.
8. NEVER direct a garden hose or mains water down the pump inlet or recirculation pipe as you risk rupturing the silicone hosing on the underside of the brewery.
9. Use only the recommended cleaners and sanitiser products listed in the recommended accessories section. Using chemicals not tested or recommended on the BrewZilla can result in permanent damage and void warranty. If you require further assistance with chemical compatibility please contact beer@kegland.com.au

Parts Checklist

☐ **Main BrewZilla Gen 4 Unit with Pump**

- ☐ Ball Valve Assembly
- ☐ Detachable Boiler Power Cable

- ☐ **Glass lid with recirculation hole**
    - ☐ 2 x Stainless Steel Lid Handles
- ☐ **Immersion Chiller**
- ☐ **Male Camlock Recirculation Arm Extension**
    - ☐ White camlock silicone washer for female Camlock
    - ☐ Silicone hose for recirculation arm
- ☐ **Brewzilla Gen 4 Boiler Perforated False Bottom**
    - ☐ Eye bolt assembly for boiler false bottom – 1 x nut and 1 x washer
- ☐ **Malt Pipe Assembly**
    - ☐ Malt Pipe Body
    - ☐ Malt Pipe Handle
    - ☐ Malt Pipe reinforced bottom screen (no hole and no seal required)
    - ☐ Malt Pipe reinforced top screen (no hole and no seal required)
- ☐ **BrewZilla Gen 4 RAPT Wi-Fi Controller**
    - ☐ 8 pin power cable for BrewZilla Wi-Fi controller

The Gen 4.0 BrewZilla is a complete all in one, all grain home brewing system for those who want to take the first step in all-grain brewing or simply want to upgrade their system allowing them full control of their batch from start to finish using Wi-Fi connectivity.

The Gen 4.0 BrewZilla can be used with no Wi-Fi connection using the detachable controller allowing temperature steps to be set and the pump operated manually through the controller. However, to utilise the full range of functions of the Gen 4.0 BrewZilla we would suggest connecting your controller to your Wi-Fi and registering it on the RAPT Portal.

This portal allows you to track, record and monitor your brews online and control your brewery remotely through a Wi-Fi connected device.

The RAPT Portal gives you complete remote control over your brewery and makes the whole brewing process easier with the ability to pre-heat your strike water remotely or set up push notifications for hop or adjunct additions, no more phone timers or hand written notes. Everything controlled and logged easily through the portal.

Registering your BrewZilla Gen 4.0 to the RAPT Portal is quick and easy and requires the steps below to be followed. If you intend to only use the controller manually skip ahead to the assembly instructions.

Digital Temperature Controller

Registering your BrewZilla to the RAPT Portal

To utilise the Wi-Fi connectivity of the BrewZilla RAPT controller you will need to sign up for an account on the RAPT Portal. This will allow you to import recipes from the RAPT portal directly on to your BrewZilla RAPT controller and control the BrewZilla directly from the RAPT portal using your Wi-Fi enabled device.

1. Sign up for a RAPT Account

1. Sign up for an account on the RAPT Portal at the following address: https://app.rapt.io/

2. Once signed up log in to your account on the RAPT Portal

2. Connect your BrewZilla to your Wi-Fi network

1. Plug your BrewZilla Gen 4.0 boiler into power using the supplied detachable 240V plug power cable.

2. Plug your BrewZilla Wi-Fi controller into the boiler using the provided 8-pin power cable.

3. On your smart phone or tablet, open your Wi-Fi settings and connect to the Kegland RAPT Wi-Fi Access Point using the Wi-Fi name and password displayed on the BrewZilla Wi-Fi controller.

4. Your smart phone or tablet should provide a prompt to sign into the network of your BrewZilla when you connect to its Wi-Fi Network. Clicking on this prompt will open the RAPT Captive Portal.
   If you are not prompted to sign into the network of your BrewZilla by your smart phone or tablet then open your Wi-Fi settings and select the RAPT Wi-Fi Network again to open the RAPT Captive Portal.

5. Select your Wi-Fi network, enter your Wi-Fi password and select **Join**. This will connect your BrewZilla controller to your Wi-Fi network.

   If your BrewZilla has been successfully connected to your Wi-Fi network then a Wi-Fi symbol will be present on the top left-hand corner of the BrewZilla display.

3. Register your BrewZilla to your Account on the RAPT Cloud

    1. Once your BrewZilla controller is connected to your Wi-Fi network enter the settings by pressing **Select** on the controller and select **Register Device**. A **Mac Address** and **Validation Code** will then be displayed on the device. Write both of these down. You will need to enter the MAC address and Validation Code later on the RAPT Cloud to register your device.

    2. Log in to the RAPT Portal (https://app.rapt.io/) on a device that is connected to the same Wi-Fi network as the BrewZilla controller you are registering.

    3. In the RAPT Portal select **Add New Device**. Select **BrewZilla** from the drop down. Select **Next** after ensuring that your BrewZilla Controller is connected to your Wi-Fi network as above.

    4. Enter the MAC address and Validation Code when prompted in the required fields, then select **Next**.

    5. Congratulations! Your BrewZilla controller is connected to Wi-Fi and registered to your RAPT Portal and your BrewZilla can now be controlled through the RAPT Portal.

Remote Operation via the RAPT Portal

The brewery can be controlled via a profile generated in the RAPT Portal. Once you have registered your device on the RAPT Portal select **Profiles** and **Create New Profile**. Then add your profile steps such as strike, mash, mash-out, sparge, boil etc. Once you have made your profile then either select **Send Profile to Device** from the profile menu or **Start Profile Session** on the Dashboard to send the profile to your BrewZilla controller. Once the profile has been sent to the device it will automatically energise the device and begin the profile.

You will still need to turn the pump on/off on the controller and adjust the heating power and pump output percentage (if required) manually on the controller.

For instructions to control the brewery manually via the temperature controller including adjusting the set temperature, adjust heating power and pump output percentage then refer to Operation of the BrewZilla via the Temperature Controller.

Digital Controller Assemby

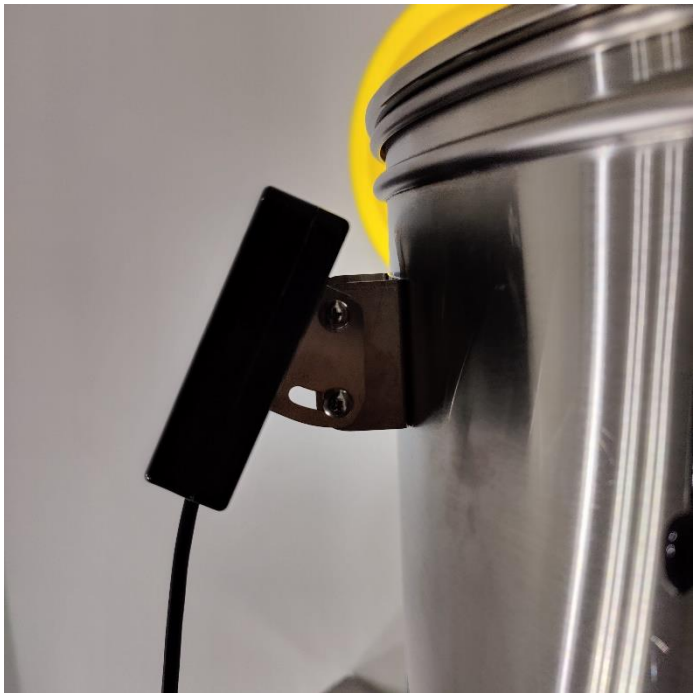
The BrewZilla Digital Controller is mounted in a position at the top of the boiler with a tilting frame so you can adjust the angle of the screen depending on your height, improving the overall ergonomics of the system.

To mount the Digital Controller onto the boiler, slide the controller onto the bracket using the grooves which are moulded into the rear of the controllers housing.

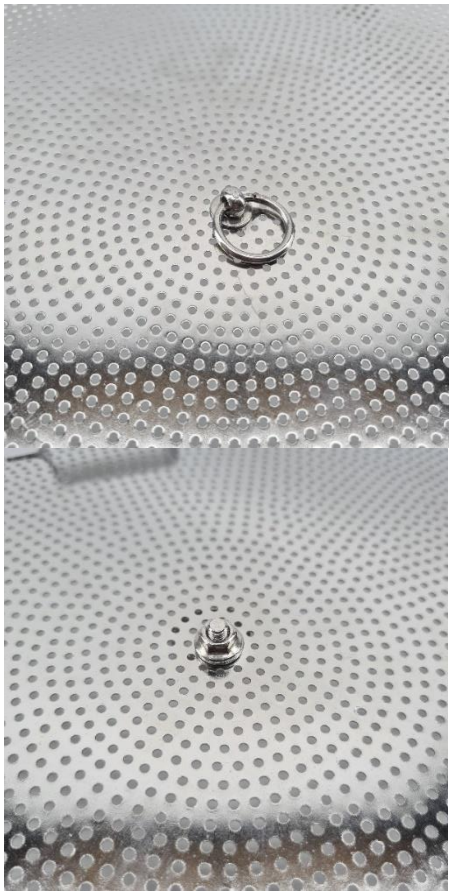
Adjusting the Angle of the Digital Controller

To adjust the angle of the screen, loosen the two bolts which hold the bracket in place on the boiler. Then adjust the angle of the bracket to your desired angle and tighten the bolts to hold the bracket in this position.

Tip: if you require a greater angle for the Digital Controller the mounting bracket can be rested on the bolt as shown below to the right.



Perforated False Bottom Installation



The BrewZilla Gen 4.0 includes a perforated false bottom. This false bottom is designed to prevent your pump drawing in more than 95% of solids such as hop pellets. It has NOT been designed so you can place grain directly onto this screen and is not designed to hold the weight of a grain bill. The false bottom adds significantly to the reliable operation of the BrewZilla and it's recommended that this screen is always in place if the pump is going to be used.

The false bottom has legs that suspend it about 14mm above the base of the dome of the boiler so all liquid that exits into the pump or out via the ball valve will be filtered by this screen.

To aid in lifting out the false bottom install the eye bolt assembly, washers and locking nut onto the false bottom. These parts are included in your BrewZilla kit.

TIP: For easy removal of the false bottom from the boiler press down on one side of the false bottom while lifting from the eye bolt assembly

Boiler Assembly

Tap Assembly and Installation

The BrewZilla is shipped with the tap assembled but not fitted to the boiler to minimise the risk of damage in transport.

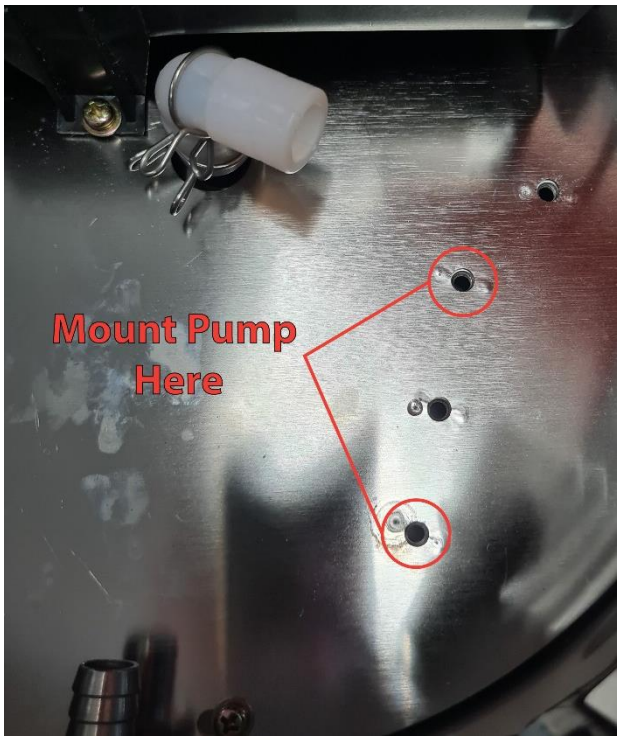
Unscrew the hex nut and retaining nut from the tap. Push the barb with seal into the tap and ensure the silicone seal is on the tap body prior to installation.

Then turn the BrewZilla upside down and insert the thread of the tap through the pre-drilled hole in the boiler. Secure the tap on the inside of the boiler using the hex nut and secure the barb in place by tightening the retaining nut onto the taps thread.

Push the unconnected silicone hose from the pump over the barb on the tap and secure in place with the wire clamp.

Plumbing the Tap to Bypass the Pump

The plumbing on the underside of the BrewZilla Gen 4.0 can be altered so that the wort runs to the tap before it enters the pump. This is handy as it allows the boiler to be drained through the tap even if you have a blockage in the pump. To achieve this, you will first need to move the position of the pump as shown to the right.



Then change the pipe work as shown below such that the tee piece from the boiler outlet splits to the tap before it reaches the pump inlet.

Make sure there are no kinks or twists in the silicone hosing which could impede the flow of liquid. If a kink is present then this may result in a pressure build up and the hose eventually splitting.

Malt Pipe Assembly

The malt pipe is the basket which sits inside the boiler and contains your grain during mashing and sparging.

It is made up of the malt pipe body, a perforated bottom screen and a perforated top screen. The BrewZilla gen 4 does not require any overflow pipework and hence the malt pipe bottom and top screens do not have any holes for pipework.

Simply insert the perforated bottom screen into your malt pipe body until it is flush with the bottom of the malt pipe. The perforated top screen is added to the malt pipe after all of your grain has been added to your malt pipe during the mashing step.

Please note: Use of the perforated top screen is optional. The system can be used without it if you prefer to gently stir the mash but it should be reinstalled for sparging to disperse the sparge water and prevent channelling which can reduce your efficiency.

Fitting the Malt Pipe Handle

We recommend installing the malt pipe handle before you add your grain and malt pipe into your BrewZilla.

To fit the handle, feed one end of the handle through one hole in the malt pipe. Push the handle in on one side far enough so you have enough clearance on the other side to feed the handle into the opposing hole.

Once the handle has been fitted you can lift/manoeuvre the malt pipe easily.

Operation of the BrewZilla using the Digital Controller

The Gen 4.0 BrewZilla can be controlled using the buttons on the digital controller or through the RAPT Portal.

If you do not intend to connect your device to the RAPT Portal and hence do not want to utilise the Wi-Fi functionality of the controller you can choose to control the brewery using only the digital controller. To remove the prompts requesting you to register your device to the RAPT Portal you will need to disable the Wi-Fi in the settings of the controller. To do this press select to enter the menu, then select **settings**, then navigate using the arrows to the **Disable Wi-Fi** settings, press select to disable Wi-Fi and the controller will then restart.

Enable/Disable Graph

By default, the BrewZilla Gen 4.0 controller will display a graph of temperature vs time. If you prefer instead for a numerical old school interface than this can be easily changed by unselecting the **Show graph** checkbox in the **Settings**.

Adjusting Target Temperature

Press the **Return** button until the Target Temperature is highlighted then use the up or down arrows to change the target temperature. The BrewZilla will only begin heating once the device has been energised by pressing the play button. ***Warning: Do not press play to energise the device if there is no liquid in the vessel.***

Turning the Pump On/Off

Press the pump button to turn the pump on/off. The Pump text will be coloured light blue when the pump is set to ON and coloured grey when set to OFF. The pump will only begin running once the device has been energised by pressing the play button. ***Warning: Do not press play to energise the device if there is no liquid in the vessel, this will result in the pump running dry which can damage the pump.***

Adjusting the Pump Duty Cycle (Percentage)

For greater repeatability of your mash schedule, you can control the pump output by adjusting the duty cycle of the pump rather than using the ball valve on the recirculation arm to adjust the output of the recirculating wort.

To adjust the duty cycle of the pump, press the **Return** button until the pump percentage is highlighted then use the up or down arrows to change the pump percentage. If the pump percentage is reduced then the pump will cycle on/off to reduce the output.

Alternatively, you can hold the pump button while pressing the up or down arrows to adjust the duty cycle.

Adjusting the heating power

Press the **Return** button until the Heat percentage is highlighted then use the up or down arrows to change the heating power.

If you have PID disabled then it is best to set the heating power to between 30-40% during the mash to stop the temperature overshooting your set temperature.

Mashing

Once you have assembled your boiler, digital controller and malt pipe you are then ready to add grains to begin mashing.

Ensure that you have added the correct volume of strike water and this water is heated up to the correct strike temperature according to your recipe. Generally, the strike temperature is a few degrees Celsius above your desired mash temperature.

Then add your malt pipe with the bottom perforated screen installed into your boiler, such that the top lip of the malt pipe rests on the wire supports which are nested in the groove at the top of the boiler.

You can then pour your grain into the malt pipe. The malt pipe is designed to take up to 11.5kg grain but in the majority of recipes you will probably only used 4-5kg.

It is best to stir the grain periodically while pouring it into your malt pipe to break up any dough balls (dry spots). Once you have added all the grain thoroughly stir the grain to ensure all the dough balls have been broken up. This will take about 2-5 minutes.

Then insert the top screen into the malt pipe so that it lightly rests on top of the grain. After all the grain has been stirred in and the top screen inserted, you can then assemble the recirculation arm to recirculate the wort during the mash.

You may find that the temperature may overshoot the target temperature if the heating power is set to 100%. To maintain a more stable mash temperature, reduce the heating power to between 30-40%. However, the exact power setting is dependent on a number of variables such as your grain bill, whether your unit is jacketed and heat loss from the system for example so the exact required power can vary.

Recirculation Arm Assembly

WARNING: The recirculation arm must be fitted whenever the pump is in use.

Recirculation assists in achieving high mash efficiency using your system as it aids in producing a homogenous mixture ensuring the temperature is even throughout the grain bed.

Before attaching your recirculation arm, please check to see if the silicone washer is in place in the female camlock. If this seal has rattled loose or fallen off, the male and female camlocks will not make a good seal and it will leak when the pump is in use.

To fit the recirculation arm to the BrewZilla, lift the arms on the female camlock, then insert the male camlock and engage the female camlock into its locked position.

If you need to rotate the recirculation arm for any reason, please switch off the pump and readjust the camlock to the position required and then reengage the camlock into its locked position before turning the pump back on.

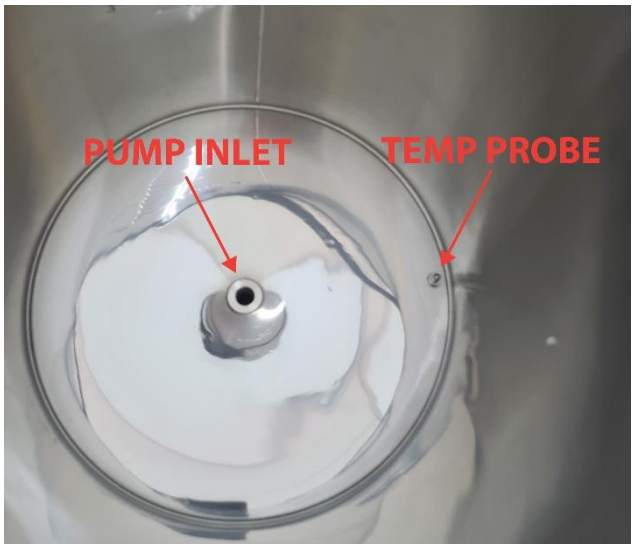
Important: If you are mashing without the top perforated in place in the malt pipe then always make sure to elevate the silicone hose from the recirculation arm above the grain bed if running a pump duty cycle below 100% and before turning the pump off. This prevents grain being sucked back up the recirculation arm and back into the pump when suction is generated when the pump is cycled off.

Mash Temperature Reading

The temperature on the digital controller reads the temperature at the bottom of the boiler near where the elements are mounted. It is important to understand that this is not the core temperature of the mash. If you recirculate long enough the mash temperature will eventually be close the measured temperature displayed on the digital controller. With that said if you want to increase the temperature of the mash it is normally fastest and easiest to overshoot the desired mash temperature by a few degrees while using a secondary calibrated thermometer in the mash to keep an eye on the core temperature of the mash.

If you are finding that you are overshooting your target temperature during the mash for example, then adjust your heating power.

The photo to the right shows the placement of the probe. The probe placement has been designed like this as it prevents the element from overheating and scorching the wort by taking the temperature of the wort closest to the elements. This is why your strike temperature needs to be accurate!



The BrewZilla includes Ultra Low Watt Density Elements (ULWD) meaning brighter beer can be brewed with the fear of scorching and burnt off-flavours.

Sparging

Once you have mashed your grain for 60-90 minutes it's then time to sparge the grain. Sparging involves rinsing the grain bed with warm water to extract as much sugar as possible without extracting undesirable tannins.

Using the malt pipe handle lift the malt pipe out of the boiler and rotate 90 degrees until you see the feet of the malt pipe located near the halo ring (wire supports). See picture below.

The Gen 4 BrewZilla includes a two-stage malt pipe. This gives you the option to lift the malt pipe half way up and support it on the halo ring. This makes it more ergonomic, making it easier to lift the heavy malt pipe out of the liquid. If you are making smaller batches only raising the malt pipe up halfway may be preferable.

It is advised to have the top screen inserted into the malt pipe during sparge to prevent channeling through the grain bed which can reduce your efficiency

Note: The malt pipe of the March 2022 batch of Gen 4.0 BZ does not feature a perforated malt pipe like the one shown above.

Once the malt pipe is suspended above the boiler and is securely supported by the halo ring then pour warm water (approximately 75-80°C) onto the top screen inside the malt pipe to rinse the grain of the majority of the remaining sugars. This process will probably require 5-15 Liters of water depending on your recipe and desired gravity that you are trying to achieve.

We highly recommend a secondary vessel to hold hot/warm water for this process such as a 35L Digiboil. If not, hot water directly from your faucet will do.

Boiling

Boiling is one of the final steps of making beer in the BrewZilla. Simply set the heating power to 100% and set the target temperature to over 100C which will result in the elements remaining on continuously. If you set the controller to 100C you may find that the elements turn off for a brief period once this temperature is hit. Ideally you want the elements to run at full power during the entirety of the boil.

Once you have reached a boil make your hop additions and boil as long as required as per your recipe. A normal boil length is 60 minutes however this can vary between beer styles.

Boil Temperature Reading

At sea level water will boil at 100°C. If a temperature of above 100°C is displayed on the controller while the wort is boiling then you will need to calibrate your temperature probe.

If a temperature below 100°C is displayed on the controller while the wort is boiling and you are at sea level then you will need to calibrate your temperature probe.

Water at a temperature less than 100°C at altitudes above sea level. So, if your wort is boiling below 100°C and you are at a high altitude then correlate the displayed temperature with the boiling point of water at your elevation to determine if calibration is required.

Cooling

The BrewZilla includes an immersion cooling coil. An optional counter flow can be purchased separately but these are complicated to use and it is sold as an optional extra.

The immersion chiller is easy to use and clean, simply connect your garden hose to each end and run cold water through the chiller while it's immersed in the wort inside the boiler.

If you were looking to save water you can also connect the immersion chiller to your pump on your BrewZilla and then immerse your immersion chiller in a bucket of ice water.

There are a number of optional fittings which can be used to easily connect your garden hose or pump to your immersion chiller which can be purchased separately

Connecting the immersion chiller to a garden hose (recommended)

The easiest way to connect a garden hose to the immersion chiller is to simply push the garden hose over the immersion chiller and secure with a hose clamp.

For a more ergonomic solution you can install compression fittings and garden hose fittings onto your immersion chiller. This will allow you to quickly connect and disconnect a garden hose using female garden hose quick disconnect fittings.

12.7mm compression fittings (KL02004) and male garden hose fittings (KL09461) can be purchased separately. Two of each fitting will be required to have a male garden hose fitting on each end of the immersion chiller.

Connecting the immersion chiller to your BrewZilla pump – Ice Bath (optional)

If you were looking to save water you can easily hook your immersion chiller up to the pump on your BrewZilla using 12.7mm compression fittings (KL02004) and camlock fittings (KL04503 and KL04497). Run some silicone hosing (KL06873) from your recirculation arm to your chiller and then run silicone hosing from the outlet of the chiller back into the BrewZilla. These compression fittings, camlock fittings and extra silicone hosing can be purchased separately.

If you prefer to use this method recirculate boiling wort through the chiller and back into the boiler for at least 5 minutes to make sure the coil is hot and any potential contaminant such as wild yeast or bacteria are killed by the boiling wort.

Once you have sanitised your chiller, place the chiller into a bucket of ice water and use the ball valve on the recirculation arm to adjust the flow rate. Adjusting the flow rate on the recirculation arm will change the temperature out of the output of the coil. So, use this adjustment to achieve your desired wort temperature so the wort is at a suitable temperature to put into your fermenter.

Hot Cubing

Another great method of cooling your wort that saves time is hot cubing. If you fill a HDPE Cube or HDPE Bladder with hot wort then quickly fit the lid, this will keep your wort in a sanitary environment. If you use this method, make sure to purge air out of the cube / bladder and then simply leave it at ambient temperature for 24 hours to cool down (preferably out of direct sunlight).

Cleaning

Cleaning after brew day

The Gen 4.0 BrewZilla has a domed bottom with a centralised pump inlet. This makes it easy to drain all liquid from the brewery at the end of your brew day simply by opening the tap. After the liquid has been drain then rinse to remove any trub from the boiler. You may find tipping the unit upside down will do a better job at getting all this trub out of the boiler.

Then fill your brewery up with water and an approved cleaner such as StellarClean according to the instructions on the package. Set the temperature on the boiler to 55°C and attach the camlock recirculation arm. Then select play on the device to energise it and recirculate this cleaner for 10 minutes using the pump, particulates on the wall of the brewery can be removed using a sponge or cloth. Then turn the pump off and connect your chiller (if required) and recirculate through the chiller for another 5 minutes.

Then the pause button to turn the elements and pump off, empty the cleaning liquid and rinse the brewery using a hose or fill with clean water. Attach the recirculation arm and press play to reenergise the device and run the pump to rinse the recirculation arm and repat with your chiller (if required).

After it has been rinsed, empty this water and then fill again with water and an approved sanitiser such as StellarSan according to the package instructions. Acidic sanitisers such as StellarSan assists with dissolving minerals which produce beer stone and also helps to passivate the stainless steel. Recirculate this StellarSan solution through the camlock recirculation arm and the chiller (if required). The StellarSan solution can then be emptied ready for the next brew day, it does not require rinsing.

Pump Cleaning and Maintenance

Generally, the pump does not require disassembly after each brew day, simply recirculating cleaner and sanitiser through it will break down and dissolve any proteins, minerals or contaminants present in the pump.

The pump on the Gen 4.0 BrewZilla is easily accessible by simply flipping the brewery over if you decide you wanted to perform a thorough clean or your pump happens to become stuck.

If you have a blocked pump you may need to disassemble the pump. To Disassemble the pump, detach all hosing first and then unscrew the pump from the brewery. Then remove the screws that hold the pump head on and check the pump head for debris and or solids that could be stuck in the pump head. Remove the impeller and check if for damage or any blockage that could be stopping it from spinning. Look in the impeller housing and confirm no blockages are within this housing.

NOTE: Never direct a garden hose down the pump inlet or recirculation arm as this can result in the silicone hosing rupturing due to the high pressure of mains water.

Troubleshooting Registration and Telemetry

No telemetry is being displayed on the RAPT Portal.

If you are experiencing issues receiving telemetry or sending a profile to your BrewZilla from the RAPT portal then you should first check that your BrewZilla controller is connected to your Wi-Fi network.

Determine whether your BrewZilla is connected to Wi-Fi and check the signal strength

To check your BrewZilla Gen 4.0 controller is connected to your Wi-Fi network with good signal strength press 'Select' and navigate to the **Settings** and then **Diagnostics**.

The Wi-Fi strength will be displayed in this Diagnostics menu and the Wi-Fi network which the controller is connected to will be shown next to wifi AP.

Signal strength is represented on a scale of 0 to -100dbm

Signal Strength (dBm)	What it means
0 to -30dBm	Maximum signal
-50dBm	Excellent signal
-67dBm	Good, reliable signal
-70dBm	Ok, not a strong signal
-80dBM	Poor, unreliable signal
-90dBM	Unusable

Re-register your BrewZilla Controller

If your BrewZilla controller is still not sending telemetry to the RAPT Portal or you are unable to remotely start a profile despite being connected to Wi-Fi with a good, reliable signal strength then you may need to re-register your BrewZilla controller to your account. To re-register your BrewZilla controller do not delete the device from the RAPT Portal, instead follow the steps below:

1. On your BrewZilla controller, enter the **Settings Menu** and then navigate to **Clear Registration** and press **Select** to clear the device registration
2. Open the RAPT Portal (https://app.rapt.io/) and click on the edit button of the BrewZilla controller you wish to re-register
3. Go to the **Troubleshooting** tab and select the **Reset Device Authentication** button

4. When prompted, enter the new Validation Code that is generated on the BrewZilla Controller and click **Save.** Your BrewZilla should now be registered successfully

The BrewZilla Controller has been sending telemetry but is no longer sending telemetry

This can occur for a number of reasons:

- Check that the BrewZilla is still connected to your Wi-Fi network.
- Check that the BrewZilla is within range of the Wi-Fi router.
- There may be an interruption to the network or internet.
- There may be a Wi-Fi connectivity issue caused by unusual network setups or network security settings

If you are still experiencing issues, please contact beer@kegland.com.au for further assistance

Updating Firmware

Your BrewZilla will automatically check for and install firmware updates when powered on and connected to Wi-Fi.

To check the latest firmware version installed on your device press **Select** and enter the **Settings** menu. Then navigate to **Diagnostics** and the installed firmware version (**ver**) will be displayed.

To manually perform a firmware update press **Select** on the device and enter the **Settings** menu. Then navigate to the **Check for OTA Update** and press **Select**.

Temperature Probe Calibration

If you find that your temperature probe is not reading the correct temperature for example if is reading over 100°C when boiling at sea level then a 2-point calibration can be performed.

To enter 2-point calibration mode press **Select** on the device and enter the **Settings** menu. Then select **2 point calibration.** Then fill your boiler with ice water and measure the temperature of the water using a calibration thermometer. Wait for the ADC reading to stabilise as much as possible and input the measured temperature of Calibration point: 1 by using the up or down arrows. Then press **Select** to set the temperature and ADC reading of Calibration point 1.

The controller will then move on to Calibration point 2. Empty the boiler and fill with hot or boiling water. Wait for the ADC reading to stabilise as much as possible and input the measured temperature of Calibration point: 2 by using the up or down arrows. Then press **Select** to set the temperature and ADC reading of Calibration point 2.

Your brewery should then be calibrated.

Please note if you are above sea level you may find that water reaches a boil before 100°C and if this occurs calibration may not be required. Refer to the boiling point of water at your elevation.

PID Temperature Control

The Gen 4.0 BrewZilla includes a setting to enable PID Temperature Control. The default settings for the PID coefficients are shown in the Default Settings table. These coefficients should work well to maintain the mash and boil temperature of a batch with fermenter volume of 23L.

If you brewing a different fermenter volume such as a small batch or a very high gravity beer with a large weight of grain you may need to tune these PID coefficients to according to your specific batch specifications.

Display Icons Legend

ICON	MEANING
	Heating Relay On
	Wi-Fi Connected
	Bluetooth Enabled
	PID Enabled

Default Settings

Setting	Default Value
Temperature sensor	Internal
Show graph	Enabled
Unit system	Metric
Zoom level	7 Hours
Heating hysteresis	1.0 C
Heater enabled	Enabled
Bluetooth enabled	Disabled
Allowed sensor diff.	15 C
Sensor timeout	130 sec
Sounds enabled	Enabled
NTC beta	3950 K
NTC ref. temperature	298.2 K
Relay cycle time	5 sec
PID heating	Disabled
PID P coefficient	0.250
PID I coefficient	0.0100
PID D coefficient	0.0750
Low temp. alarm	-10 C
High temp. alarm	120 C

Recommended Accessories

Silicone Tubing

Silicone tubing is great for transferring the wort from the BrewZilla unit to your fermenter or into a hot cube. We recommend heavy duty silicone tubing with 12.5mm ID and 18.5mm OD. This Silicone tubing is plasticiser free so there is no BPA. It's also suitable for temperatures up to 200C so it's suitable for the transfer of hot wort. Unfortunately, silicone tubing is more expensive than vinyl (PVC) tubing however it's better suited for this application.

(Part No. KL06873)

StellarClean

(Powerful Brewery Wash - PBW) is a buffered alkaline detergent that has been proven to be more than an effective substitute for caustic soda cleaners. Because of its unique formulation of buffers and mild alkalis, it is safe on skin as well as soft metals such as stainless steel, aluminium, and on plastics. StellarClean uses active oxygen to penetrate carbon or protein soils and is not affected by hard water. Works best in warm to hot water. It will require to be rinsed with the same temperature water after cleaning is finished.

(Part No. KL05494)

StellarSan

Phosphoric Acid Blend Sanitiser can be used to passivate the internals of the BrewZilla back to their original shiny finish. We recommend applying some undiluted to a rag, rubbing the internals. Leave for 30 minutes and rinse with cold water thoroughly until the foam subsides. You do not need to sterilize your BrewZilla prior to use, as the boiling action of the vessel will kill any harmful bacteria. But can be done to ensure the upkeep of the stainless steel is

as protected as possible.

It is also a great brewery sanitizer for any of your equipment that comes into contact with fermented beer. E.G mash paddle if you're adding gelatin / dextrose for clarifying / priming and stirring the vessel.

(Part No. KL05494)

Stainless Mash Paddle

These long handled stainless mash paddle. Ideal for removing dough balls and aid in equalising the heat of the mash from stirring.

(Part No. KL03810)

Refractometer with Light

A refractometer is a fantastic tool to take instant gravity readings of hot wort. This tool will help you optimize your sparging. If you want to collect the maximum sugars from your malt pipe you can keep sparging in the malt pipe until the wort falling from the underside of the malt pipe reaches 1.010. This tool is significantly better than the hydrometers as they give a faster reading without having to calibrate the reading based on the temperature of the wort.

(Part No. KL07344)

Extra Long Heavy Duty Brewery Cleaning Gloves

These heavy-duty gloves are great for handling

chemicals, and also for grabbing items covered in hot wort. They have long sleeves on them and are perfect for brewing with.

(Part No. KL05289)

Hop Scales / Brewing Salt Scales

Measuring small amounts of hops for your brew can be quite hard without the necessary tools. The same goes for measuring even smaller amounts of brewing salts. We highly recommend some jewellery scales to make t these measurements easy.

(Part No. KL20114)

A BrewFather Subscription

If there is one thing a lot of homebrewes can't go without, it is brewing software to find recipe inspiration, create your own recipes, water chemistry, brewing calculators and enough bells and whistles to log each step of your brewday with your added notes.

(Part No. brewfather-subscription)

Intermediate / Advanced Users Accessories

35L DigiBoil Hot Liquor Tank (HLT)

Primarily used for sparging purposes. Using an HLT will allow you to rinse your mash in the raised position with 76°C to 80°C water. Washing those sweet sugary morsels off the malted grain and into the boiler. Using a 5L Jug and gloves usually does the trick.

We picture it like washing your hands that are covered in toffee, yes, you'll get it off with cold water. But it will come off faster and use less water if it was warm.
#showerthought

(Part No. KL07252)

Digital pH Meter

If you have come this far into the manual, you're wanting the most out of brewing. Knowing each individual detail of your brew and how to make it better. One major part of brewing is mash pH and for some brewers its final pH before and after fermentation. Especially if making sour beers.

(Part No. KL04169)

Phosphoric Acid 85%

Adjusting your pH in conjunction with the pH Meter and perhaps BrewFather / Brewing Calculators to know how much to add. Phosphoric acid is our preferred means of acidifying pH in the brewing process.

(Part No. KL05364)

Reverse Osmosis Filter

For those deep down the rabbit hole and want to start with a blank canvas. Or simply your water supply changes in flavour / mineral concentration constantly. Having a supply of fresh Reverse Osmosis water or filtered yourself is a great asset to repeatable quality brewing.

(Part No. KL15141)

Cooling Upgrades

If you are looking to beef up your arsenal of brewing equipment, the cooling side is a great one to tune to how you brew and what you want out of your brewing set up. There are three alternatives to the stock cooling coil. From left to right The Braided Counter Flow Chiller, The Chillout Plate Chiller and the very chemically resistant Coolossus Counter Flow Chiller.

KL02035

KL10977

KL08747

Also Compatible with alcoengine

Distillation Accessories

Distillation Lid for BrewZilla 35L (47mm hole)

Make beer and spirits! with this handy attachment you will be able to fit an AlcoEngine Pot or Reflux still to your BrewZilla 35L or DigiBoil 35L.

(Part No. KL03483)

AlcoEngine Pot Still

A pure pot still is used when you want the flavour of the wash to come through. For instance, if you ferment fruit or grains, it will allow some of that flavour to enter your distillate.

If you use a reflux still, you would just end up with pure, unflavoured vodka. Inject some flavour into your drinks with the AlcoEngine Distilling Pot Still!

With an all copper construction for smoothness of taste it comes with a digital thermometer and is simple to use.

(Part No. KL04633)

AlcoEngine Reflux Still

With its easy-to-use operation, amazing features, and rock-solid reliability, the Spirit Maker is the foundation of Pure Neutral Alcohol Distilling. Even as our competitors try to catch up, the technologies and features built into this design keep our homemade alcohol distiller years ahead of the DIY home distilling trend.

Easiest Still to Use - That's our guarantee

This bulletproof design is so easy to use that we are giving you a guarantee that you will get great spirit in no time flat. All you need to do is make sure you have adequate water/coolant flowing through the head and just about everything else will look after itself.

(Part No. KL04640)

Support

Please join the RAPT Users Group and KegLand Home Brew Community Group Facebook pages for support on how to use your BrewZilla, recipes or tips and tricks. If you need hardware support, please contact your nearest BrewZilla distributor.

Warranty (Australia)

The BrewZilla 35L & 65L Generation 4.0 comes with a 3 Year Warranty when sold in Australia.

To lodge a warranty claim in Australia please forward as many visual pieces of supporting information and a detailed description of your issue to beer@kegland.com.au

If you purchased your unit from an international distributor, you will be required to go through their warranty claims process.

For full terms and conditions, please visit our website here -> Terms & Conditions