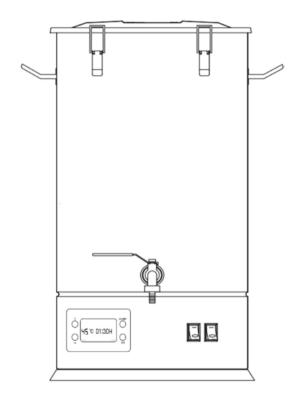
USER MANUAL

Multipurpose Boiler for distilling, mashing, and sparging.





Model No. LB/1001

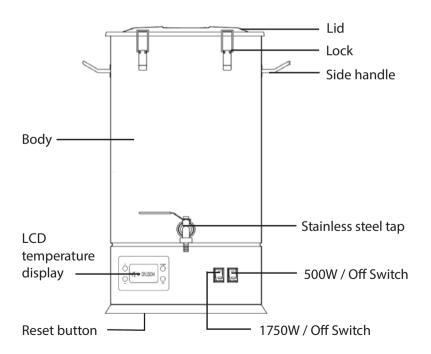
Instructions Version 1.0
For the very latest instructions please visit: https://lvbr.eu/BoilerInstructions

This electric boiler has a fully integrated element so is ideal for boiling products where an exposed element would be a disadvantage.

PLEASE READ ALL OF THESE INSTRUCTIONS CAREFULLY BEFORE USING YOUR BOILER

This appliance is intended to be used in household and similar applications such as staff kitchen areas in shops, offices and other working environments; farm houses; by clients in hotels, motels and other residential type environments; bed and breakfast type environments.

CONSTRUCTION



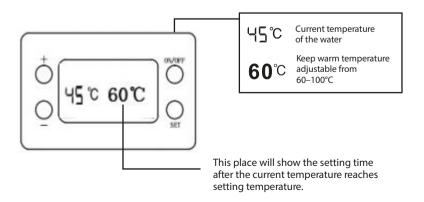
HOW IT WORKS

The LCD panel allows you to set the temperature for the boiler. There are 2 temperature power switches, 500W and 1,750W. At the start, switch both on to power the boiler at 2,250W until it reaches the set temperature. It then depends upon what you are using the boiler for, to determine the next actions.

If you are mashing, or heating water for sparging, leave both 500W and 1,750W switches active. When the temperature of the liquid in the boiler reaches the set temperature the power is cut to stop further increase. The temperature will reduce with time, until it drops by 3 degrees. At this point the boiler element is powered at 500W to keep the temperature warm. Once it drops by 5 degrees below the set temperature, the 1,750W element restarts to rapidly bring the contents back to temperature.

If you are reflux distilling, you will need continuous and controlled power to produce distillate. The temperature is held in check by the flow rate of the cooling water through the condenser, so you want to reduce the power of the element for greater control. Once you reach temperature and see distillate coming off the condenser, turn off the 500W power switch and power the still at 1,750W. Despite ethanol boiling at 78.37°C, a higher temperature is needed to overcome the effect of the cooling water in the condenser column.

We recommend setting the temperature to 96°C for 6KG sugar washes and 105°C for 8KG sugar washes using a reflux still such as the T500.



Insulation jacket is available for the boiler and this should be "worn" at all times. This will help to maintain temperature (reducing electric wastage) and will also protect the boiler from getting knocks. Its comes with a Velcro strip for ease of fitting. There is a cut out to position this over the tap to line everything up.

We would also like to point out that the boiler tap has a slide locking system. This will mean that the tap can't be opened unless this is moved. This is s safety feature to make sure the hot liquid cant accidently escape if someone were to knock the tap. Please be aware this needs to slide up to be able to open the tap.

With the boiler you will receive two bungs. These are not required for distilling as the Turbo 500 Condenser Column will fit into the hole in the lid. Should you use the boiler for Sparging then the solid bung can be inserted into the hole in the lid. Similarly if using the boiler for fermentation then apply the bung with a hole which takes an airlock.





For more details of the products we can offer please review

www.lovebrewing.co.uk

We have showrooms in Chesterfield and Liverpool.



MAIN FFATURES

1. ON/OFF Switch

Turn ON/OFF on, there will be one bleep, all icons will show for 3 seconds, and show the current temperature, then it will turn back to the black screen in standby.

- Reset Button (Situated underneath in the centre of the boiler).
 There is a boil dry protection system, which will auto switch off if the water level is low. Please refill with cold water and push the reset button underneath the boiler.
- 3. Power Adjustment Switch (500W/1,750W)

500W: Switch to the 500W indicator light will come on, boiler will start to heat (slowly)

1,750W: Switch on the 1,750W indicator light will turn on, boiler will start to heat (quicker).

For maximum speed boiler turn both switches on.

4. LCD Temperature and Time Display

ANTI-DRY PROTECTION

The boiler will automatically cut out when it over heats or boils dry. It will make a long bleeping for a warning.

ERROR CODE

E1/E2: Sensor Shorting or Open /Short Circuit.

E3: Anti-Dry Protection, need manual reset.

I CD OPFRATING INSTRUCTIONS

- The default temperature is set to 68°C the range of adjustment is from 20°C to 100°C plus.
- The default time is 3.30mins, the range of adjustment time is 0 to 24hours.
- The default timer is 0.00, the range of the timer is 1.00 to 24.00 hours.
- It will default to these settings of temperature, time and timer if there is no operational input after 5 seconds.

When the boiler is powered the LCD will light up and all the of the display will be shown for a few seconds. After this the screen backlight will turn off and just the current temperature will show.

When the boiler is switched off, the default settings of Heating to 68° C and heat for $3\frac{1}{2}$ hours will be set.

You can set the designed temperature, how long to heat for and how long to wait before heating (if required) by going through the below stages:



WARNING

Do not switch the boiler on before it has been filled. If the boiler is operated when it is 'dry' it can overheat and damage the internal components.

For the below example we are going to set the heating temperature to 98°C and the Heat for Time to 4 hours and 32 minutes.

- STEP 1: Press the "ON/OFF button to switch the boiler on. The temperature will start to blink.
 - Press the "+" or "-" buttons until it displays 98°C. Then press the SET button.
- STEP 2: The hours for the Time will start to blink. Pres the " +" or "-" buttons until it displays "4", then press the " SET" button. The minutes for the heat for time will start to blink. Press the " +" or "-" buttons until it displays "32", then press the " SET" button.
 - If you do not want to have a heat for time so that it is permanently on, set both the Hours and Minutes to "0".
- STEP 3: The next screen is the timer for how long to wait until it starts to heat. The default timer is "00:00" meaning it will heat straight away. If you want it to start later, press the "+" or "-" buttons until you have reached the required time (in hours).
 - Next, press the "SET" button to go to the main screen which will start heating or else start the Timer.

SPARGING:

Using the Boiler for Sparge Water. Simply set the sparge temperature you are asked for in your beer mashing and go for it. There is a solid bung which should be used for Sparging.

FERMENTER:

Should you want control the temperature of your fermentation between 20°C (this is the minimum) and say 30°C (depending on what you are making) then just set the temperature to the desired setting and leave this during fermentation. This is thermostatically controlled so if the room temperature goes above your setting then the liquid temperature will rise to the room temperature and override any setting so please bear this in mind. There are two bungs which come with it one will take an airlock the other is a solid one which would only be used for storing.

SAFETY:

- 1 This appliance should only be used by a responsible adult. It should not be used by Children or persons with reduced physical sensory or mental capabilities, or lack of experience or knowledge. Children should be supervised to make sure they do not play with this appliance.
- 2 Do not touch any metal parts as they will become very hot and burn during the heating process and be mindful of any steam that may be released.
- 3 Do not leave unattended or try to move during use. Make sure the surface is flat and will take the weight of the boiler filled with water. Do not overfill. Max capacity is 25 litres which is marked on the boiler inside.
- 4 Do not attempt to disassemble (no user serviceable parts inside). The appliance contains a manual reset thermal cut-out and a thermal fuse. If damaged these need to be replaced by the manufacturer, its service agent or a similarly qualified person. If the power lead is damaged in any way this should be replaced by the manufacturer. If being used with a brewing boiling kettle the appliances should not be plugged into the same electrical supply circuit.
- 5 The appliance should not be submersed or cleaned with a water jet.
- 6 Do not position the boiler with the tap over hanging any surface as the tap could be turned on with a danger of serious scalding. Let the tap overhanging into a sink bowl. This will also help when emptying the boiler. Always unplug and allow the water to cool first.

CLEANING:

Clean boiler after use with a weak solution of dishwashing liquid. Make sure the machine has cooled and is unplugged before starting. Scrub inside with a nylon brush or similar. Wipe down the inside and outside with a clean damp cloth. Do not use abrasive materials. Every so often we would recommend using our Still Cleaner to do a deep clean of the internal boiler. Full instructions are included with this.