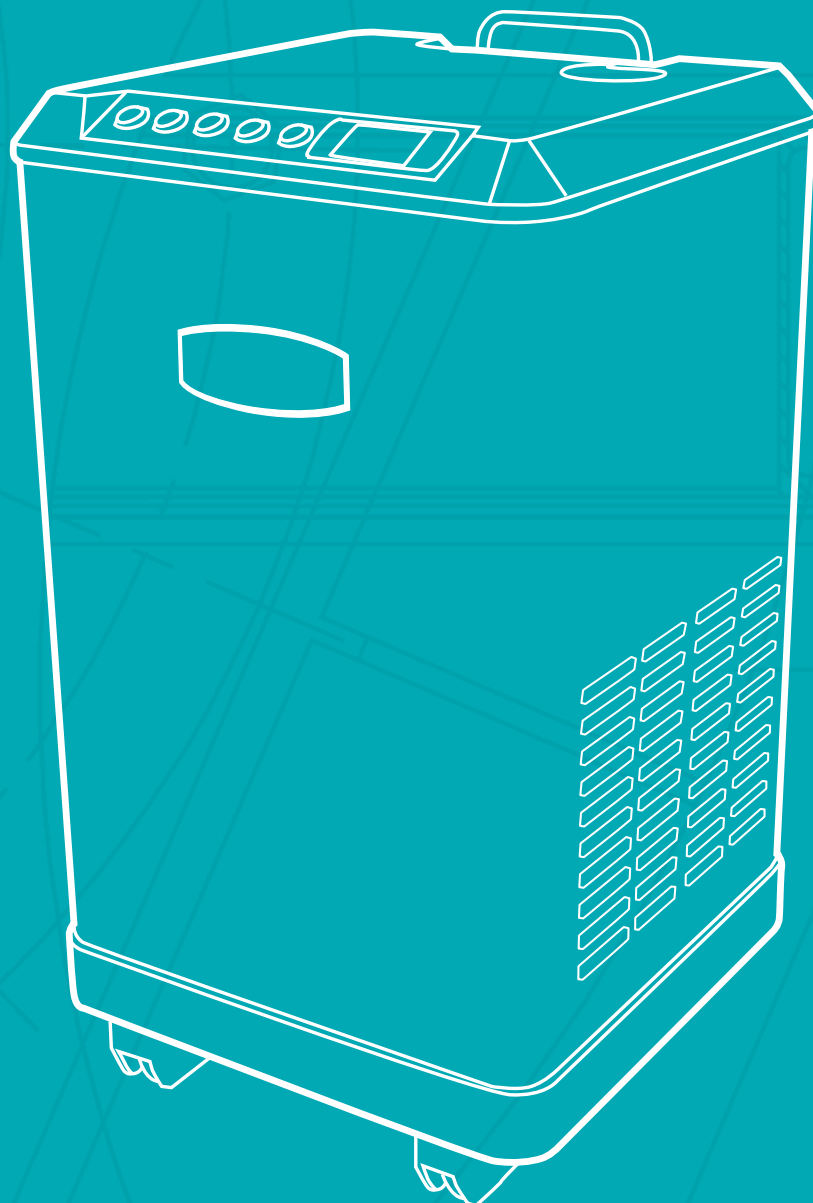


THE GRAINFATHER

ALL GRAIN BREWING

GLYCOL CHILLER INSTRUCTIONS



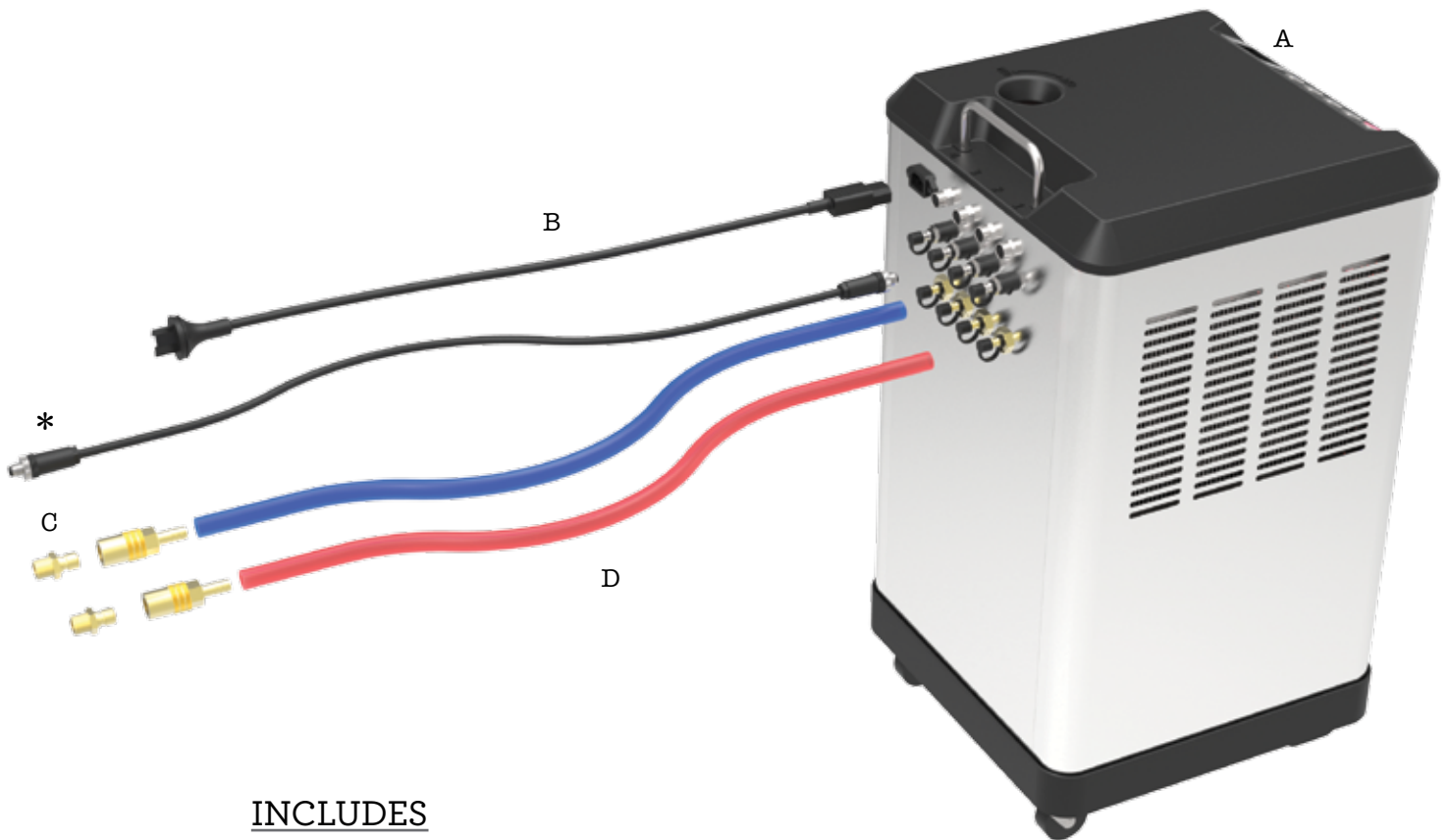


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KEY FEATURES

- LED displays.
- 6 L (1.6 US Gal) glycol tank.
- Cools glycol to -4°C (23°F).
- Connect up to four fermenters and ferment each one at a different temperature.
- Crash cool 23 L (6 US Gal) of beer to 4°C (39°F) in 4 hours.
- Glycol temperature controller.
- 3 pin power connections for fermenters.
- The R600a refrigerant used is an environmentally friendly replacement for other refrigerants causing no effects to the ozone layer or the greenhouse effect.



INCLUDES

- A 1x Glycol Chiller
- B 1x wall outlet power cord (with plug based on country of sale)
- C 2 x couplers (with self-sealing hose connections)
- D 2 x 2 m (6.5 ft) hoses

ALSO SHOWN (not included):

- * 1 x M12 power cord (taken from Conical Fermenter)

SAFETY INFORMATION

1. When transporting, keep level and lift from the base.
 2. Never tip the unit on its side or upside down. This will void the warranty as it will damage the electronics.
 3. Always operate on a flat surface in a well ventilated environment.
 4. Keep the sides of the unit where the vents are clear of any objects as it requires uninterrupted air flow to operate.
 5. Avoid getting any liquid on the controls area.
 6. Always use monopropylene food grade glycol. Seek glycol manufacturers specifications for more information.
 7. When transporting, keep level and lift from the base.
-

MAINTENANCE:

1. Turn off chiller before cleaning.
2. Regularly clean the air inlet & outlet using a soft brush.
3. DO NOT clean the stainless steel or plastic casing with a wire brush or steel wool.
4. Use water or washing liquid that does not contain alkali or chlorine.
5. DO NOT spray water onto ventilation louvers.

PRODUCT NAME: GLYCOL CHILLER

Rated: 300W - 3.0A max

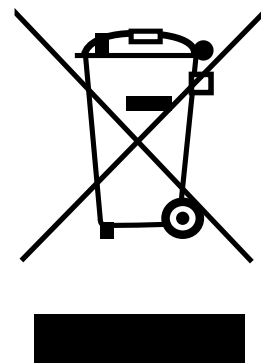
220-240V ~ 50Hz

110-120V ~ 60Hz

Dimensions (mm) - 390W x 405D x 656H

Total Weight - 28.3 Kg (63 lb)

Made in China





THE
GRAINFATHER
ALL GRAIN BREWING

CONTROL YOUR FERMENTATION TEMPERATURE ACCURATELY. EVERY TIME.

TEMPERATURE CONTROL IS ONE OF THE MOST CRUCIAL ELEMENTS FOR PRODUCING A GOOD QUALITY BEER. IT NEEDS TO BE REGULATED AND STABLE THROUGHOUT THE WHOLE FERMENTATION PROCESS TO ENSURE THE YEAST DOESN'T GET STRESSED AND FERMENTS CORRECTLY TO GET THE RIGHT FLAVOUR PROFILE.

WITH THE ABILITY TO INDIVIDUALLY CONTROL THE TEMPERATURE OF UP TO FOUR GRAINFATHER CONICAL FERMENTERS, EACH WITH THEIR OWN FERMENTING SCHEDULES, THE GRAINFATHER GLYCOL CHILLER IS THE PERFECT ADDITION TO YOUR BREWERY TO ENSURE SUPERIOR RESULTS.

HOW IT WORKS

This product cools glycol to a minimum optimal temperature of -4°C (23°F). This cold glycol can then be used keep the beer in a fermenter at a desired temperature and also crash cool it.

The glycol chiller includes a pump with 4 connections to make it possible to connect and control the temperature of up to four 30 L (8 US Gal) fermenters in total.

SET UP AND PREPARATION

IMPORTANT

Make sure the chiller has been standing upright for 24 hours before turning it ON.

Arrange and place the Glycol Chiller close to your fermenters so that all connections can be made without the need to move the unit again.

MIXING AND FILLING GLYCOL

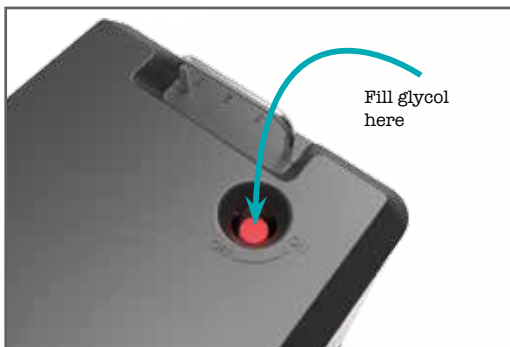
The glycol tank is made to hold 6 L (1.5 US Gal) of monopropylene glycol mixture. To make the mixture you will need to combine 50% glycol and 50% water.

- 3 L (0.8 US Gal) of glycol
- 3 L (0.8 US Gal) water

NOTE: Please ensure when mixing you use a clean vessel free from any foreign matter. As contaminants have the potential to cause blockages.

1. Open the cap on the top of the glycol chiller. Using a funnel add the glycol mixture to the tank.
2. Replace and tighten the cap.

NOTE: It is important to always make sure there is enough glycol in the tank. Always make sure the float in the glycol tank reaches the max line, if it is noticeably below this line then you need to fill more glycol. It is important to look at this level at least once a week and when connecting to additional fermenters (refer to page 8).



PREPARING COOLING CONNECTIONS

This product cools glycol to a maximum of -4°C (23°F). A cooling connection kit is included with your Glycol Chiller (see page 1). This consists of brass couplers and hoses. Firstly, connect the couplers to the fermenter:

1. Take the threaded section of the coupler and connect it to one side of the Grainfather Conical Fermenter. Make sure it is screwed in tightly. Use a spanner if necessary.
2. Connect the other end of the coupler to the section you just used by pushing the spring-loaded sleeve back and sliding it over.
3. Repeat these steps on the other side of the fermenter.

It is possible to cut the hoses shorter if necessary; this will also increase maximum cooling efficiency. Place the chiller and fermenter in their final place, measure and cut the hoses accordingly.



CONNECTING THE CHILLER TO A FERMENTER

On the back panel of the Glycol Chiller are the connections for the hoses. You can connect up to four fermenters to the chiller. The output connections from the chiller are silver in colour and the return connections are gold.

The buttons on the front of the chiller labelled 1,2,3,4, match up to the connections on the back labelled accordingly.



1. Make sure the unit is turned off.
2. On the back panel of the chiller locate the glycol mixture output connections; these are silver in colour. Connect the blue hose to the first silver connector labelled with number 1. This hose then connects to the coupler on the fermenter that is attached in the lowest position.
3. The glycol inlet connection is where the glycol is returned to the chiller to cool back down; these are gold in colour. Connect the red hose to the glycol inlet connection labelled with number 1. This hose then connects to the coupler on the fermenter that is attached in the highest position.
4. The Chiller will provide power to all fermenters that are connected. Connect the M12 power cord from the fermenter to this connection under number 1.



OPERATING AND USING THE CHILLER

1. Plug the power cord into the back of the Glycol Chiller and the other end into a wall socket.
2. Turn the power to the chiller on by pressing the power button on the front panel, the button will light up red.
3. The fermenter will now get its power from the glycol chiller via the M12 power cord that was included with your fermenter.
4. If the Glycol Chiller is plugged in and switched on, the fermenter will also turn on if plugged in correctly to the chiller.

NOTE: The chiller will provide power to the fermenter/s via the M12 power cord that was included with your fermenter. You do not need to use the wall plug on the fermenter once connected to the Glycol Chiller.



SETTING GLYCOL TEMPERATURE

1. Press and hold the 'OK' button to unlock the controller.
2. Press the 'Off temp' button
3. Use the 'Up/Down' buttons to set the desired temperature
4. Press the 'On temp' button.
5. Press and hold the 'OK' button to lock the controller again.

NOTE: the temperature displayed is the current temperature of the glycol inside the chiller. It is best to set the temperature of the Glycol Chiller to 8°C below the target temperature of the fermenter.

For example - if you require your fermenter to be set at 18°C (64°F) then set the chiller to 10°C (50°F).



SETTING FERMENTER TEMPERATURE

1. Set the desired fermenting temperature on the fermenter controller. This can be done in the settings menu on the fermenter controller.
2. Press the number button on the glycol chiller that corresponds to the outlets that will be in use.



3. The fermenter will now signal to the glycol chiller if it needs any additional glycol.

NOTE: The chiller will provide power to the fermenter/s via the M12 power cord that was included with your fermenter. You do not need to use the wall plug on the fermenter once connected to the Glycol Chiller.

CONNECTING MORE THAN ONE FERMENTER

The glycol chiller can allow up to four 30 L (8 US Gal) fermenters to be connected at one time. When connecting more than one fermenter, repeat the connection steps (see page 6) for each additional fermenter that needs to be connected by matching the remaining connections labelled from 2-4. Then complete the following:

1. Set the glycol temperature 8°C below the fermenter with the lowest desired temperature. For example: fermenter 1 is set to 18°C (64°F) and fermenter 2 is set to 4°C (39°F). The glycol chiller will need to be set to -4°C (25°F).
2. Top up the glycol tank for each additional fermenter connected. Every time an additional fermenter is connected, add 300 ml (10 fl oz) of glycol/water mixture into the glycol tank to compensate for this. See page 5 for mixing ratios.
3. Check that each fermenter is plugged into the correct connections. Take care to make sure that each fermenter is plugged into the correct numbers on the glycol chiller. It is a good idea to label the fermenter and hoses to the matching number on the glycol chiller to avoid any confusion.

Note: For safety reasons if the glycol level is too low, the pump will automatically switch off and the power button on the chiller will flash. When this happens, refill the glycol tank to its recommended level (see page 5 and point 3 above) to restart the pump.



TROUBLESHOOTING

PROBLEM	CAUSE	TROUBLESHOOTING
Unable to start normally	Wall outlet error	Detach from wall power socket and plug-in again
	Failed to press power switch	Press power switch and the indicating lamp will start shining
	Power switch failure	Contact your after-sales services
Failed to cool or cooling speed is low	The temperature set by the temperature controller was too high	Reset the temperature to -4°C (23°F)
	The ventilation inlet/outlet were blocked	Clean and clear blockage
Unable to supply glycol mixture to the fermenter	Connecting lines were clogged or bent	Check pipelines
	Failed to start the correct pump	Press the correct pump power switch
	Connected the hoses to the wrong inlets/outlets	Recheck hose connections
	Low liquid level of glycol mixture in the tank	Add more glycol mixture (refer to page 8)
	Power connection cable is not connected to fermenter correctly	Check whether the power cable connection is tightly screwed in
Temperature controller warning Code: E1	Thermometer probe failure	Please contact your after-sales service
Temperature controller warning Code: E2	Interference with memory data of the temperature controller	Turn off the power supply for five minutes and then restart

Reorder: 10233
Version: 2



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