STASIS FERMENTATION TEMPERATURE CONTROL

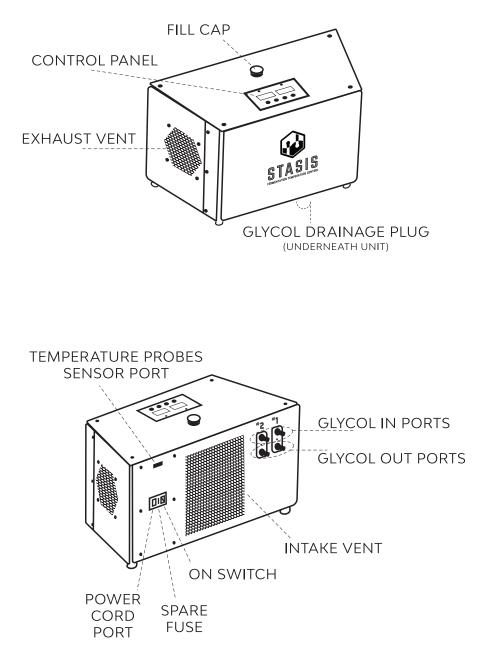
USER MANUAL



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FEATURES

- Control temperatures in two fermenters, independently.
- Internal glycol reservoir, internal pumps & internal thermostats.
- Lowest temperature setting of 36 °F.
 (actual achievable chilling temperatures are dependent on fermenter size, ambient temperature and insulation around fermenter)

SPECS

- 120V
- Powerful 1/5 HP compressor
- 1,700 BTU/hr cooling capacity

INCLUDES

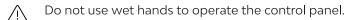
- The Stasis
- Power cord for standard 120V US outlet
- Wired temperature probe assembly (Serial Plug to two 6 foot probes)

NOT INCLUDED, BUT RECOMMENDED

- A cooling mechanism (stainless steel chilling coil, wrap, rod, or jacketed fermenter)
- At least 1 quart Propylene Glycol (food grade)
- Distilled water
- 5/16" 3/8" ID tubing and worm clamps to connect The Stasis to each fermenter (2 tubes needed for each fermenter)
- Tubing insulation to maximize chilling capability
- Fermenter insulation if available
- Thermowell for fermenter
- Funnel

SAFETY AND WARNINGS

- The Stasis must sit upright on a flat surface for no less than 24 hours before /!\ powering on to allow refrigerant and lubricants to settle properly before operation. Failure to do so can lead to complete compressor failure and will void the warranty.
- The Stasis is not designed to cool wort from a boil. Do not connect The /!\ Stasis to any vessel with a temperature above 120 °F, as the system may overload. Once wort is below 120 °F, The Stasis can be used to control fermentation temperatures.
- When transporting, keep The Stasis level and lift from the base. Never put \triangle on its side or upside down.
- Ŵ Only use The Stasis in a dry, well ventilated environment and do not block or obstruct the airflow to the 3 ventilation panels.



- \triangle Avoid getting liquid on the digital control panel. When filling the glycol tank always use a funnel to avoid spills and to use a towel to cover the panel & top of The Stasis in the case of an overflow or spill.
- Turn The Stasis off and allow to shut down before unplugging, failure to do Ŵ so can damage the compressor and electronics.
- Only use distilled water and glycol in the reservoir. Using tap or spring water will cause mineral deposits and can lead to pump failure.
- Do not attempt to open or disassemble The Stasis without express consent /ị\ from Craft a Brew, doing so will void the warranty.



ASSEMBLY

IMPORTANT

The Stasis must sit upright on a flat surface for no less than 24 hours before powering on.

- **1**. Begin with The Stasis off (rocker switch depressed to "O").
- 2. Connect the power cord to The Stasis & plug into power outlet.
- 3. Take the temperature probe assembly and plug the sensor into the back of The Stasis. Lightly finger-tighten the bolts into position, these do not need to be fully tightened in order to operate. Overtightening can cause damage.
- **4.** Attach one end of vinyl tubing to the <u>bottom</u> right port labeled #1 on the back of The Stasis (this is the "out" port) and secure with a stainless steel worm clamp. Attach the other end of the tube to the "in" port of your desired cooling mechanism (coil, wrap, jacketed fermenter, rod, etc).

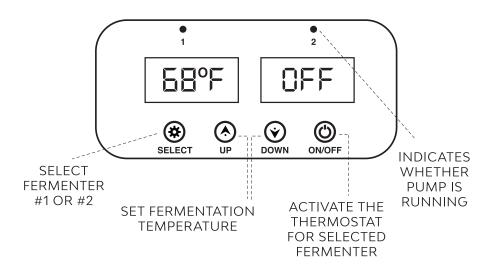
Note: On the back of The Stasis there are four total ports. For each fermenter, #1 & #2, there is an "in" port on top and an "out" port at the bottom. The lower "out" connections push glycol out of The Stasis. Glycol is returned to The Stasis through the upper "in" ports. The set of ports marked #1 & #2 are controlled by the corresponding digital control panels on the top of The Stasis.

- **5.** Attach another vinyl tube to the <u>top</u> right port labeled #1 (this is the "in" port). Attach the other end of this tube to the "out" port of your chilling coil, wrap, rod or jacketed fermenter.
- **6**. If you are connecting a second fermenter repeat steps 4-5, connecting tubing to the ports labeled #2. If only chilling one fermenter, keep both #2 ports capped so they do not leak.
- **7.** The temperature probes, labeled as #1 and #2, connect to the corresponding internal thermostats. Feed the desired temperature probe into your fermenter's thermowell for an accurate temperature reading.
- **8.** In a pitcher prepare a 1.5 L mixture of glycol and distilled water at a ratio of 1 part glycol, to 2 parts distilled water.
- **9.** Remove the fill cap from the top of The Stasis. Using a funnel, slowly pour the pre-mixed glycol & water solution to fill the reservoir, keeping a towel over the control panel in case there are any spills or overflow. Pour extremely slowly to allow air bubbles to escape throughout the process. Keep an eye on the fill level to ensure the liquid does not overflow. Screw on the cap once full.

OPERATION

IMPORTANT

The Stasis must sit upright on a flat surface for no less than 24 hours before powering on.



- 1. Turn The Stasis on using the switch on the back of the unit.
- 2. Both screens should display "Off."
- Confirm which fementer #1 or # 2 you want to operate. Click the SELECT button until the corresponding panel is blinking. While blinking, you can choose the set fermentation temperature for that fermenter (36 *F - 95 *F) by pressing the UP or DOWN buttons, changing the temperature 0.1 *F at a time. Hold the button down for faster scrolling.
- **4.** Once you reach your desired set fermentation temperature press the ON/OFF button to activate.
- **5.** Now The Stasis will begin chilling your fermenter to reach the set temperature. While it does, the screen will display the temperature probe reading or "actual fermentation temperature."

- **6**. For best performance, it is advised that you keep the reservoir topped off with 1 part glycol and 2 parts distilled water mixture. Once The Stasis is turned on, some liquid will fill the tubes and chilling coil, wrap, rod or jacket, leaving the reservoir less full and in need of a top off. Do this whenever you connect a new fermenter.
- **7.** To turn the thermostat & pump off for a fermenter press the SELECT button until the corresponding panel is blinking, then press the ON/OFF button to deactivate.

Note: Double check that you've selected the correct fermenter (#1 or #2) when setting the temperature. Once it is set the pumps will turn on even if tubing is not connected.

OPERATION NOTES

- Set temperature range is 36 °F 95 °F.
- The Stasis only chills and does not heat.
- The lowest achievable fermentation temperature is based on the ambient temperature, amount of beer being chilled, method of chilling (coil, jacket, etc.) and the effectiveness of the insulation around the fermenter.
- For optimum performance and effectiveness, store the Stasis and your fermenter(s) on a level plane. If the pumps are forced to overcome too much lift this will affect the lowest possible chilling temperature. If the distance between The Stasis and your fermenter(s) is too great it could strain the pumps causing eventual burn out.
- There are two internally programmed fan settings. One is designed to chill the fermenter quickly and one is designed to more quietly maintain the temperature at a lower thermal load.
- The compressor is programmed to operate so as not to damage itself. This means that if the compressor is turned off during normal operation it will wait at least 3 minutes before turning back on. If there is a power interruption the compressor will not turn back on for at least 3 minutes. If you experience a power interruption, please wait at least 3 minutes before plugging in and turning on.

CALIBRATION

ABSOLUTE TEMPERATURE CALIBRATION This calibration is used to change the true temperature for The Stasis. While the temperature is calibrated from the factory, you are able to adjust the calibration to match an external known temperature (such as a lab thermometer) if desired. To do this:

- Ensure both sensors are plugged into The Stasis and allow them to sit next to each other at room temperature for at least 5 minutes to equalize.
- Ensure both screens display "Off," otherwise you will not be able to enter calibration mode. To calibrate, press all three UP, DOWN & ON/OFF buttons simultaneously for at least 3 seconds.
- Screen #1 will flash the default calibration value of 0. At this time you can increase or decrease the calibration temperature. The adjustable range is -10 °F to 10 °F.

For instance, if your external, known temperature reading is 3 degrees higher than the display temperature, you would increase the calibration to 3 $^{\circ}$ F.

 4. After setting the calibration value, press all three UP, DOWN & ON/OFF buttons at the same time, holding for at least 3 seconds to save.

Note: The system must be on for at least 2 minutes before this calibration can be performed.

TEMPERATURE SENSOR CALIBRATION This calibration is used to ensure both sensors are reading the same value when at the same temperature.

- Ensure both sensors are plugged into The Stasis and allow them to sit next to each other at room temperature for at least 5 minutes to equalize.
- 2. This calibration mode can only be accessed when the unit is operational and there is a set temperature on both screens. Press both the UP and ON/OFF buttons simultaneously for at least 3 seconds until you see both screens flash once at the same time.
- **3.** The system will take up to 60 seconds to stabilize and confirm the temperature is consistent before it automatically sets the new calibrated temperature for both sensors.

FAHRENHEIT TO CELSIUS This allows you to change the unit of measure on the digital control panel.

- Ensure both screens display "Off," otherwise you will not be able to enter calibration mode. To calibrate, press both the UP and DOWN buttons simultaneously for at least 3 seconds until you see both screens flash once at the same time.
- **2.** Now when you go to set the fermentation temperature, the screen will display in degrees Celsius.
- **3.** To revert back to degrees Fahrenheit, repeat step 1.

STORAGE

FOR SHORT TERM STORAGE (6 months or less) or periods between use, The Stasis can be kept full of the glycol & water mixture. It can be powered off and unplugged or left plugged in and powered on.

FOR LONG TERM STORAGE (more than 6 months) or whenever transporting the device it is recommended to drain the glycol reservoir. To do this:

- **1**. First ensure The Stasis is powered off and not plugged in.
- **2.** Elevate The Stasis on a table for easy draining. Locate the drainage plug underneath The Stasis.
- **3.** Unscrew the fill cap at the top before removing the drainage plug at the bottom.
- **4.** Place a bucket below The Stasis to catch the liquid while draining. Be sure to position The Stasis so that the drainage plug clears the table. **Having a second person help with this step is highly recommended.
- **5.** Place the drainage plug and fill cap back on for storage in a cool, dry place.