



The Cellar

The Official Newsletter of the Colonial Ale Smiths and Keggers

CASK Oktoberfest 2012

The second CASK Oktoberfest was held on a beautiful late September day, which was quite a change from last year's rainy, but still festive, celebration. The raffle this year was a big success with a table full of prizes, including a plastic conical fermenter. There were ample sausages and other good eats to feast upon and over 10 entries for the Fall Iron Brew, the Brown Ale Challenge, to sample and enjoy.

Congratulations to winners of this year's Fall Iron Brew, Brown Ale Challenge!

- ★ First Place: Rollin Woolley
- ★ Second Place: Chris Wyatt
- ★ Third Place: Phil Vaughn

Sixth Annual Virginia Beer Blitz

The Sixth Annual Virginia Beer Blitz will be held on Saturday, December 1, 2012 at the St. George Brewing Company in Hampton. This is the premier beer competition that CASK sponsors and as such we are in need of a great many volunteers from the club. So if you can steward, judge or help out in anyway, please go to the CASK website and register. And if you have a couple of bottles of a great beer that you made hiding in the bottom of your beer fridge, enter those too!

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Dual-Stage Temperature Controller Build

By Bryan Falman



6ft temperature probe, and in three different power configurations: 120VAC, 240VAC, and 12VDC. The 120VAC model can be wired directly to a wall outlet and can control electrical loads up to 15amps, making it the ideal version to control a chest freezer and small space heater.

As with most homebrew projects there are many options with how to proceed. For my purposes, I decided to set the STC-1000 to control two outlets, one for powering the cooling side, and one for heating. Both outlets and the controller would be installed in a 3-gang electrical box with a standard cover plate. Cooling will be done using a chest freezer, and heating by a 200W electric ceramic heater. A desiccant dehumidifier will be used to control humidity, and a USB computer fan will be used

Fermentation temperature control is one of the most important improvements that can be made to improve the quality of your homebrew. Most temperature controllers commonly used by homebrewers are only single stage, controlling only the heating or cooling source. For the most accurate temperature control a dual-stage controller, one that can control heating and cooling at the same time, should be used.

For the most part, single-stage controllers cost \$60-80. Fortunately, there is a cheap, reliable dual stage temperature controller available for about \$25, it only requires some minor electrical and mechanical work to be ready for use. The STC-1000 controller can be found on eBay or Amazon with a



Parts List:

Item	Part	Source
1	STC-1000 controller, 120VAC power	eBay or Amazon
2	3-gang electrical box, 3.5" deep	Hardware store
3	3-gang rocker switch face plate	Hardware store
4	2-port USB/1 AC outlet	Hardware store
5	Rectangular double wall outlet	Hardware store
6	Extension cord	Hardware store
7	Thermaltake 12cm USB computer fan	Amazon
8	Lasko MyHeat 200W ceramic heater	Amazon
9	Eva-Dry E-500 Dehumidifier	Amazon

to circulate air while the chest freezer is running (the space heater has a fan built in). While a AC-USB charging adapter could be used on a standard outlet, I elected to use a wall outlet with two USB ports and a single AC outlet instead.

In addition to the above parts, you will also need some wire to connect the outlets, controller, and extension cord. You can either use extra wire from the extension cord, or buy additional wire to make the needed connections. Make sure to use 14 gauge wire or larger to support the maximum 15 amps.

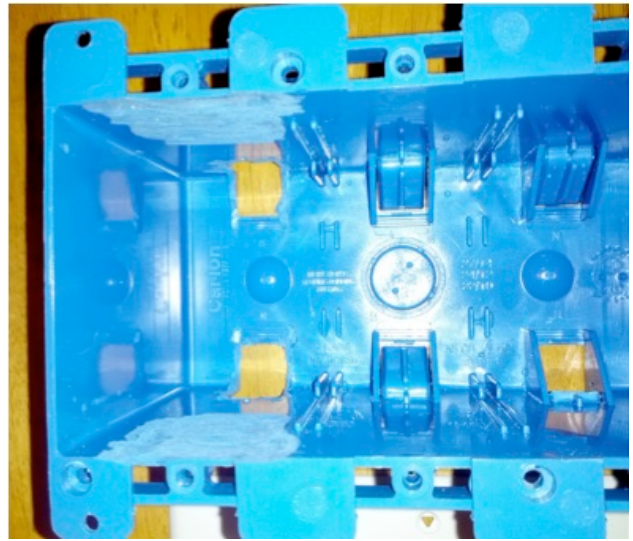


Assembly:

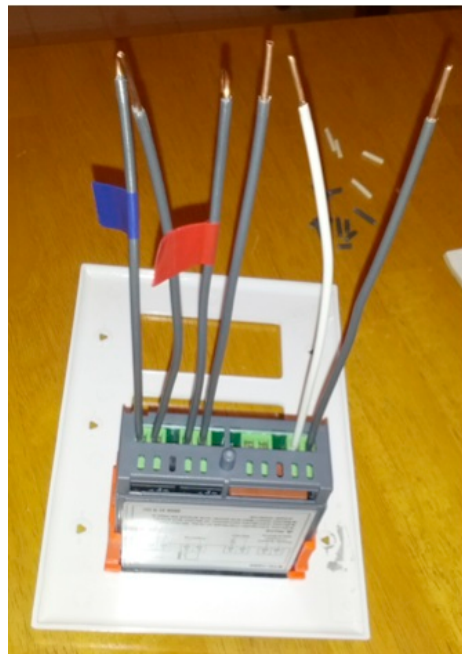
1. Remove enough material from the face plate so the STC-1000 controller can fit through the plate from the front.



2. Remove material from the side of the electrical box, and any material at the bottom that would prevent the controller from fitting fully into the box. Make sure to allow for access through the box for the extension cord and the temperature sensor.



3. Install the necessary wires into the terminal blocks on the back of the controller:
 - a. Three line-in wires
 - b. One neutral wire
 - c. Two line-out wires (one for heat, one for cooling)



4. Cut the female end off of the extension cord strip back the insulation.
5. Connect the controller wires to the outlet terminals and the extension cord (make sure to run the extension cord through the electrical box first).
 - a. Tie the ground terminals on both outlets to the ground wire (green) of the extension cord.
 - b. Tie the neutral terminals on both outlets and the STC-1000 together with the neutral wire (white) of the extension cord
 - c. Tie the three line-in wires together with the hot wire (black) of the extension cord.
 - d. Connect the outlet hot terminals with the appropriate line-out from the controller
6. Wire the temperature controller into the terminal blocks on the controller.
7. Shove everything into the electrical box.
8. Fasten the electrical outlets to the electrical box
9. Fasten the face plate to the outlets.

Due my placement of the controller at the top of the electrical box, there was no way to fasten the top of the face plate down. In this case, I purchased a cheap switch and cut off the needed metal tabs with tin snips.

Controller Use:

The STC-1000 has four options that can be set:

1. Temperature set-point ($^{\circ}\text{C}$). The desired fermentation temperature set in 0.1° from -50°C to 99.9°C .
2. Temperature difference setting ($^{\circ}\text{C}$). The allowable temperature change from the set-point before the controller attempts to correct back to the set-point, can be set in 0.1° increments from 0.3° to 10° .
3. Compressor delay time (minutes). Amount of time the controller waits before turning on the cooling source to allow the compressor time to cool down between runs, set in 1min increments from 0 to 10 minutes.
4. Temperature offset ($^{\circ}\text{C}$). Allows the user to change the temperature read by the controller by the offset value, set in 0.1° increments from -10°C to 10°C .



The cooling circuit will energize when the once the temperature climbs above the set-point plus the differential and the compressor delay timer has expired. The heating circuit energized once the temperature falls below the set-point minus the differential. In both cases, the controller de-energizes the active circuit when the set-point is achieved.

For best results, the temperature sensor should be mounted to the outside of the fermentation vessel, so any heat generated by fermentation is sensed and controlled for. The temperature sensor should be shielded from the air in the fermentation chamber using foam or some other insulation.

The Beer in Front of Me ...

"The Beer in Front of Me ..." is a new feature where you can tell your fellow CASK members about a beer that you are enjoying right now. E-mail your description to beer@colonialalesmiths.org

This month, Jeff Flamm tells us about Salvation from Russian River Brewing Company ...

I recently had the good fortune to come across several bottles of Russian River Salvation for sale at K&L Wines in Redwood City, California (thanks Eric for the tip on this fine shop!). I picked up a few to bring home. This is one of Russian River's staple Belgian beers typically on draft at their brewpub in Santa Rosa, CA. It is a Belgian dark strong ale. This bottle was labeled "Bottled On 041812" and was a 375ml Belgian style bottle with cork and wire cage. The bottle was labeled 9.5% ABV, although the Russian River website lists this beer at 9% ABV. I served the beer in a tulip style glass. It had a large thick tan head, which persisted long after the first pour. The beer was dark brown with ruby highlights and was slightly hazy and opaque. The first aroma I noted was spiciness with hints of clove and plum. As the beer warmed in the glass, the dark fruit aromas presented more strongly than the spice. The flavor was heavy on plums and raisins with a very dry finish; much dryer than I expected when compared to other beers more commonly available in the same category such as St. Bernardus Abt 12 or Chimay Grand Reserve (blue label). The flavor had just a hint of dark bitter chocolate as the beer warmed in the glass. The beer lent a slight alcohol warmth to the tongue and throat. There was bit of harshness that lingered on the tongue perhaps from the heavy carbonation. All in all a good beer, but I must say, given a choice, I would pick the Abt 12 or Chimay blue in a pinch. I think the Salvation will benefit from aging to mellow it down a little.

Prost,
Jeff



The CASK Calendar of Club Events and Competitions

Plan your brewing schedule now and hit as many club-only and other competitions as possible.

October - Barley Wine (**Old Ale COC**)

November - Wine and Mead

December - Open/Blitz Beers

January - Extract beers

February - Belgium and French Ale (BJCP
Category 16)

March - Fruit beers

Calendar looking empty?

You, yes you, can add items to the CASK calendar and keep your fellow club members informed about beer-related happenings in the area!

Just E-mail information about the event to calendar@colonialalesmiths.org

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