

# ControlTec AccuTank Modulating Burner Controller

## Instruction Sheet 3 – CONTROL OPERATION



This controller can operate in TWO ways:

1. **PID CONTROL MODE** – where the PID settings established in the Auto-tuning sequence previously performed are used to control burner damper to achieve and maintain the set point (SP) automatically, quickly and without overshoot
2. **MANUAL MODE** – you control the damper position and thus flame intensity for the burner by setting output to damper anywhere between 0% (closed) -100% (full open)

**PLEASE NOTE:** *based on the size of the brewing vessel it may not be possible to run the controller in Auto mode when the temperature of the liquid is too far away from setpoint (SP) – this may result in too much flame intensity for the vessel and too much heat and flow going up the flue.*

**It may be necessary to run in Manual mode until you are closer to SP and then put control into Auto mode to control the boil. In Auto, you will not go over SP, keep from foaming over (NOT 100%!) and allow you to concentrate on other things during the boil**



### PID MODE

Use  **UP** and  **Down** arrows on the control to select a **SP** value and let the PID control do its thing to get there and maintain temperature.



The **Quick Set button** (lighted Blue button under control) can be used to quickly get to up to 4 SP's you preprogram into control. Once you operate the burner on your kettle you will figure out the SP that is necessary to: 1. Get to Boil as fast as possible 2. Maintain a rolling boil 3. Or other temperature setting you want to use (ex: pre-heat water for Mash or other use)

I would recommend setting one of the pre-programmed SPs to a low value that can be reached fast if the boil gets out of hand or you need to shut off the burner quicky (now set at 40° F)

## MANUAL MODE



Press and **HOLD** the  and within 1 second, press the  to put control in Manual mode. To exit Manual mode, do the same steps to return to PID **reg** mode via **SP** control


Note: If you do not get to Manual Mode, just press and hold  to exit and try again

This allows you to use the  and  to set a damper position (burner intensity) anywhere between closed (0%) and fully open (100%)

Think of this like a “potentiometer” to send the 2-10 volt signal to open and close damper as you use fit.

## STANDBY MODE

In the second set of instructions the  key was set to **STANDBY Mode (st.by)** – Press and **HOLD** the  and this puts the control into standby and stops all control action. Bottom display shows **st.by**. This can be used to take control out of service when kettle is not in use or quickly shut down control action if/when needed.

To return to control (**reg mode**) just press and hold  again