





# ControlTec AccuTank Modulating Burner Controller

## Instruction Sheet 2 – CONTROL SET UP



DO THESE PROCEDURS SECOND AFTER CONTROL IS POWERED AND WIRED

*There are 3 different sequences to perform here*

### SEQUENCE 1

1. Fill vessel with water
2. Press and HOLD  key then, within 1 second press/click 
3. This puts control in **MANUAL** Mode – bottom display will show value between 0-100 and using   keys will set that value. Arrow shows display reading MAN and bottom display shows output (damper) set to 50%



4. If you do not get manual mode and get some other display (**A.SP** or other) just press and HOLD  to return to **REG** (control) mode and try again
5. Once in **Manual** mode, set output to a % you are comfortable running the burner based on manufacturers recommendation or limit of your exhaust flue capacity - this is important, too much flame and heat can damage the vessel and your flue
6. You want to heat the water to a temperature around 190° -195° - this temperature is based on the flame intensity you kettle can handle as well as the capacity of flow and temperature your exhaust flue can handle – PLEASE USE CAUTION – if control opens damper too much while attempting Autotune procedure, go back to manual mode and let temp rise closer to 212° before initiating another Autotune
7. Once at or near temperature above - Use step 2 to get out of manual mode and back to reg mode
8. Press lighted blue **Quick Set** button to make bottom LED display the set point (SP) of 212°
9. Press and HOLD the  to put control into Autotuning mode. Bottom display will briefly show **tune** and a white dot will flash to the bottom right of tank temperature









10. Allow controller to “take control” of burner damper to get to **SP** and “learn” your system as it does

**NOTE: the PID Autotune procedure may open the damper to 100% (full burner intensity) If this is too much for the vessel or exhaust flue to handle I suggest waiting until the vessel temperature is closer to 212 ° - you may need to adjust timing of Autotune procedure as necessary**

11. When complete, the control will stop autotune and white dot will disappear


## SEQUENCE 2

For proper temperature controlling when using PID Set Point mode to automatically maintain temperature (as opposed to MANUAL MODE) the following parameter must be turned off once Autotuning is complete

1. Press and **HOLD**  until PASS is on top display
2. Use  to make bottom display read **30**
3. Click  one time to enter parameter access mode
4. Display will read **inP** on top
5. Press/Click  **6 times** until top display shows **reg**
6. press/click  **6 times** to get bottom display to show **td**
7. Use  to change from current value to **0** and then click  to accept
8. Press and **HOLD**  to exit programming mode

### **SEQUENCE 3**


**NOW, Follow the steps below to turn off AUTOTUNE function and turn on Standby function for  key**

Press and **HOLD**  until PASS is on top display


Use  to make bottom display read **20**


Click  one time to enter parameter access mode

Display will read **oPER** on top, and **Auto** on bottom

Press  **6 times** until top display reads **uSrb**

Press  **5 times** to change setting from **tune** to **st.by**

Press  to accept the parameter change

Press and **HOLD**  until display exits configuration mode and returns to **reg** mode

If there are any questions, please reach out to  
Dwight Kelly at Controltec for help

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