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Temperature Controller

SPECIFICATIONS

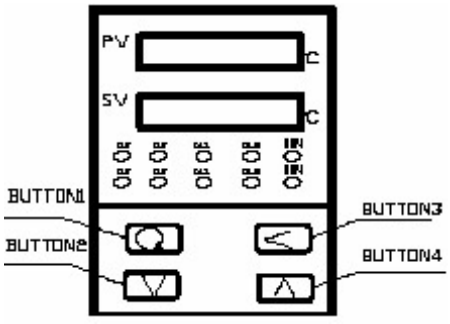
Temperature Range: Room temperature to 200^{o}C
AC Voltage: 85~135V
Size: 50×100×125mm^{3}

BASIC OPERATION

The controller is pre-configured in the factory to match the provided crystal oven. The temperature is pre-set at the temperature for the specified application indicated by the customer. Connect the matching oven to the 4-pin connector at the rear side of the controller and then plug the power cord into the power line, the controller shall run automatically. It may take 30 minutes for the temperature to stabilize.

To adjust the target temperature:

The temperature may need to be adjusted near the pre-set temperature to optimize the phase matching. Press Button 2 or 4 to decrease or increase the set temperature value. Use Button 3 to shift among the digits.



To run the auto tune procedure:

The controller has a built-in PID auto-tune procedure. Auto-tune is recommended when the target temperature is changed by over 10 ^{o}C or when the control accuracy obviously degrades. To run the auto-tune procedure, the oven must be "cold" or the system has been disconnected from the power for over 30 minutes. Power up the controller. Press Button 2 or 4 to set the temperature. Press Button 1 and hold for a few seconds until the PV window displays "HIAL". Press and release Button 1 a few times to see "Ctrl" in the PV window. Press Button 2 or 4 to change the value in the SV window to 2. Press Button 1 twice and the SV window will start to display "AT" and the set temperature alternatively to indicate the auto-tuning procedure is working. The SV window shows the set temperature continuously when the auto-tune procedure is completed.

THIS CONTROLLER IS ADAPTED AND CONFIGURED TO WORK WITH THE SUPPLIED OVEN. NO ATTEMPT SHOULD BE MADE TO USE IT TO CONTROL ANY OTHER DEVICES. FOR USE OUTSIDE NORTH AMERICA, A VOLTAGE CONVERTER MAY BE NEEDED TO CONVERT THE VOLTAGE TO ~ 110V.