OPERATING MANUAL FOR MUFFLE FURNACE

INDEX

<u>SR NO.</u>	PERTICULARS
1.	General Description
2.	Specifications
3.	Operation Details
4.	Electrical control circuit
5.	Calibration certificate
6.	Safety Precaution
7.	Calibration Certificate for Temp controller
8.	Warranty

GENERAL DESCRIPTION OF MUFFLE FURNACE

- Manually operated Hot Air oven is usually used by R & D Laboratory, Glass ware Manufacturing company, hardening and annealing process in Industry
- Muffle Furnace requires 230V Ac Mains with Neutral and Earth
- This Muffle Furnace operates for temperature range from 5 Degree Centigrade Above room temperature and Max working temperature is 1100 Degree Centigrade with permissible tolerance of +/- 5 Degree Centigrade.
- The parts of muffle furnace can be classified into 3 groups namely. Heater to generate the Heat (temperature), Thermocouple for sensing temperature and PID temperature controller to control the temperature inside the chamber.

SPECIFICATIONS OF MUFFLE FU RNACE

- Inner Dimensions : 300 X 300 X 300 mm
- Maximum Temperature :1100 Degree C above room temperature
- Thermocouple K type to sense the actual temperature
- Top side control panel with PID temperature controller and Safety Temp controller
- Wattage is 6KW with 230 V Ac 50 Hz

OPERATION DETAILS

- Muffle Furnace is requires 230 V AC supply with Neutral and Earth. Connect to the mains .switch ON the mains and set the desired temperature with PID temperature provided on the Top Muffle Furnace.
- To set the desired temperature on temperature controller kindly follow the following procedure
- Press the SEL key for 3 sec then one can see the CH 1 on the upper display Now select the CH 3 by pressing the Down Arrow key. Then again press SEL key once. Now you can See the PtN on the upper display Default setting is 0 ie you can select the 8 pattern(8 Ramp and 8 Soak)
- Now press the down arrow key to set the Time Pattern which is default HH:MM
- Now press the down arrow key to set the SV-1 (Set temp one) to set the required temp from the room temperature ie RAMP temp. Then again press the down arrow key to set the tM1R ramp time in HH and MM. Then again press the down arrow key to set the tM1S Soak time in HH and MM .By this way any one can set the desired temperature up to the 8 patterns ie 8 Ramp and 8 Soak. Every time when you change the parameter in above case you have to press the SEL key to save the program. To come out from the program mode press ② key once.
- To execute or run the program press © key for 3 sec.
- For set the safety temp Press the Set button and by using up and down key adjust the required temperature. The safety temp is above 20 degree than the Main temp set in the PID.

WARRANTY

This Furnace/Oven is supplied by us is under the warranty upto 31st Oct 2020.During the warranty period only the free parts will be replaced or repaired to malfunctioning parts will be done by Priya Enterprises Mumbai during the warranty period, subject to the following conditions:--

- 1) The Equipment has been used within the specified Maximum temperature
- 2) Any damage because of power fluctuation will not be entertained
- 3) The Equipment has been used strictly as per the instruction given in the manual.
- 4) The Equipment has been kept in the clean area
- 5) If any problem it has been reported immediately to the manufacturer
- 6) Customer agrees to extend co-operation by attempting to solve minor problems following simple written /verbal instruction from our service engineer.
- 7) The customer allows the reasonable time to attend the complaint and solve the problem from our company engineer or manufacturer.