

## **GENERAL INFORMATION**

Precision Reciprocal Shaking Water Baths are ideal for applications needing constant, controlled agitation and precise temperature uniformity. Two sizes are available: 14.5 liter (Model 2870/2871) and 26.5 liter (Model 2872/2873). These instructions are applicable to all models listed in Table 1.

The microprocessor control panel houses all functions necessary to operate the bath. The five push-button switches and single display window allow the operator to adjust bath temperature, motor speed, and calibration via a single set of controls.

The proportional integral derivative temperature control allows precise temperature control from 5°C above ambient to 55°C without cover and to 99.9°C with use of the gable cover provided.

A high limit thermostat is provided and can be set to prevent heater runaway in the event of temperature control failure.

Tray shaking speed is easily adjusted between 30 and 200 cycles per minute at 5 cpm intervals. The tray stroke can be adjusted to three different lengths: 0.5", 1" and 1.5". The drive mechanism contains self-lubricating bearings which require no maintenance.

The tray is easily removable and rides silently on four plastic balls.

The interior of the bath is constructed of stainless steel and is designed for operation with **distilled water** or equivalent. **Do not use deionized water.** The acceptable resistivity range is 50K to 1M ohm (conductivity 1 to 20 micro Siemens). The acceptable pH range is 7 to 9.

The body is made from galvanized steel and is painted for added protection. A drain is located at the far left end of the bath. A stainless steel gable cover is also provided with the bath.

The 230 volt units are identical in appearance to the 120 volt units.

**Table 1. Listing of Models included in this Manual**

Model No.	Volts	Hertz	Watts	Amps	Mains Fuse	Power Supply Board Fuse
2870	120	50/60	1050	8.8	N/A	N/A
2871	240	50/60	1050	4.4	N/A	N/A
2872	120	50/60	1550	12.9	FST-5x20-6.3A	FST-6.3x32-63mA
2873	240	50/60	1550	6.5	FST-5x20-10A	FST-6.3x32-63mA

## **PERFORMANCE DATA**

The following table identifies specifications for Models 2870/2871 and 2872/2873 Shaker Baths.

<b>Performance Data</b>					
		<b>Model 2870/2871</b>		<b>Model 2872/2873</b>	
		<b>With Cover</b>	<b>Without Cover</b>	<b>With Cover</b>	<b>Without Cover</b>
<b>Uniformity</b>	<b>37°C</b>	±0.05	±0.15	±0.1	±0.2
	<b>56°C</b>	±0.05	±0.2	±0.2	±0.2