



Warnings:

- * Make sure that the door is closed well to prevent heat loss and power drain.
- * The surface is hot. Do not touch.
- * Do not put any objects on the top of the instrument.
- * Please keep the environment ventilated.
- 1. Connect with power supply. Please make sure the power voltage is the same as the voltage shown on the label stuck on the back of machine.
- 2. Put your sample in and close the door.
- 3. Press "ON/OFF Button", then you will see the "Power indicator' becomes green. Wait for about 5 seconds; you can see that on the display screen, the top row is the present temperature value (PV) and the bottom row is the setting temperature value (SV).
- 4. Set temperature: you will see $\overrightarrow{SU}(SV)$. Press ∇ or \blacktriangle to adjust SV value and then press SET to enter the value.
- 5. Set time: Select time mode: Continouos mode 💮 or Timer mode 🥎 .
 - 5.1 Press of to set Continuous mode. OUT2 indicator on display screen will disappear. The setting is finished. Go to Step 6.

5.2 Press () to set Timer mode. OUT2 indicator on screen will appear.

5.2.1 You will see $ELME_{MEN}$ ELME.

5.2.2 Use \blacktriangle or \checkmark key to select time unit $\square\square\square$ (hour) or $\square\square\square$ (minute). Press SET to enter the value. Press K to next setting.



value. Press < to next setting.

- 5.2.4 You will see <u>999</u> (PV) <u>999</u> (remaining). Press ← and you will see <u>100</u> (SV). The setting is finished.
- Remark: If you want to interrupt the timer mode, you can press 💮 to be continuous mode.
- 6. After finishing the work, please press "ON/OFF Button" to turn off the power, and then the "Power indicator' becomes red.

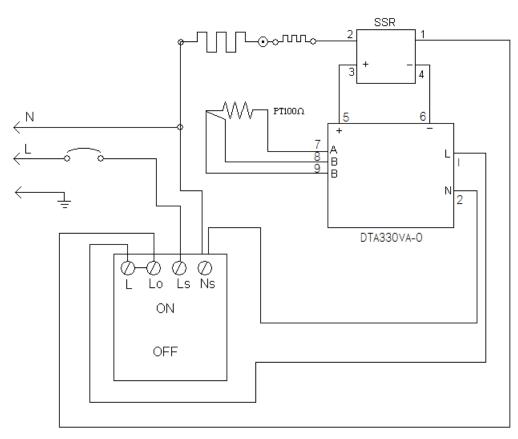
Remark:

- 1. When the "OUT1" indicator on the display screen is sparkling, it means that the instrument is heating.
- 2. After the PV value reaches to SV value and tends to be stable, the "ALM1" indicator lamp will appear if the PV value exceeds the SV value by setting point (10° C). In this situation, please turn the power off, open the door and wait for about 30 minutes, and then restart it.
- 3. If you feel the PV value is much higher or lower than the SV value, you can adjust the "Air vent" on the back of machine to balance the temperature. That is, if the PV value is too high, you can open the "Air vent"; if the PV value is too low, you can close the "Air vent".

Maintenance and care:

Keep the machine clean all the time, so no routine maintenance is required. Cleaning can be done with a damp cloth. Avoid the use of solvents as they may damage the product housing and inner chamber.

Circuit Diagram:



Other functions:

Note: Before executing other functions, please make sure that the continuous mode is selected.

If you see OUT2 indicator on the screen, please press 👩 to set Continouos mode.

1. Other functions include PV shift (offset) value, setting alarm point, setting temperature unit, auto tuning function.

Action	Display	Explanation	Adjustment
	(Initial value)		
Press ≪	ÈV⊿E	PV shift (offset) value. If PV value is not	Press 🛦 or 🔻 to adjust
	(0)	correct, you can use this function to calibrate	the value. Then $press_{\mathbf{SET}}$
		by your own thermometer.	to enter the value.
Press ≪	82 98	Upper-limit point for alarm. When the	If you want to go back to
	(10)	difference between PV and SV is over	PV/SV display, press SET
		upper-limit, the alarm indicator (ALM1) on	again.
		display screen will be flashing.	
Press ≪	BE AL	Lower-limit point for alarm. When the	
	(10)	difference between SV and PV is over	
		upper-limit, the alarm indicator (ALM1) on	
		display screen will be flashing.	
Press <	EPBN	Temperature unit. C or F.	
	(C)		
Press ≪	888E	Auto-tuning function. When auto-tuning	
	(OFF)	function is on, the "AT" indicator" on display	
		screen is flashing. When the function is off, the	
		light of the "AT" indicator" is extinguish.	

2. Restore default value:

2.1 Press 👩 more than 3 seconds, and then you will see

dEV dsc

2.2 Press \checkmark and then press \blacktriangle , you will see <u>d5</u> is flashing. Please press SET to enter the value. Then the default value is restored.

Service Manual

Troubleshooting Guide

Caution: Always disconnect the power cord before troubleshooting.

Trouble	Cause	Remedy
	Power cord not connected to outlet.	Plug instrument in.
	Dead power output.	Change to different output.
Instrument inoperative	No fuse Breaker is off	Press the breaker back of the machine, and check if the current is overload.
	Electronic element broken	Contact your distributor for repair.
	Power switch is broken	Contact your distributor for repair.
Controllor con't control the	Sensor is broken	Contact your distributor for repair.
Controller can't control the	Controller	Contact your distributor for repair.
temperature	Heater is broken	Contact your distributor for repair.
The key of PID controller can't work	The keys has been locked	Please refer to the other function to release the lock status.
Temperature is not stable	The initial setting value is not suitable for the ambient air temperature where the machine is located	Refer to the other functions, execute the Auto-tuning function.
PV value is not correct	User's calibration thermometer is different from the factory's calibration thermometer	Refer to the other functions, execute the function for PV shift (offset) value.