

Far-infrared method Pre-Heater

PHN-3040

PHN-4545

Instruction manual
(User's manual)

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The 2nd edition

JAPAN BONKOTE CO.,LTD.



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1. Preface

Please read Notes for safety before use the product, and use the machine properly, also keep this manual in a safety place after read.

2. Notes for safety

CAUTION!

Be sure to read this manual before using this machine.

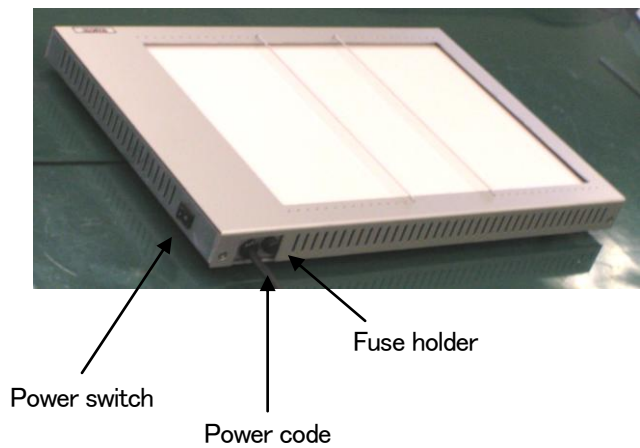
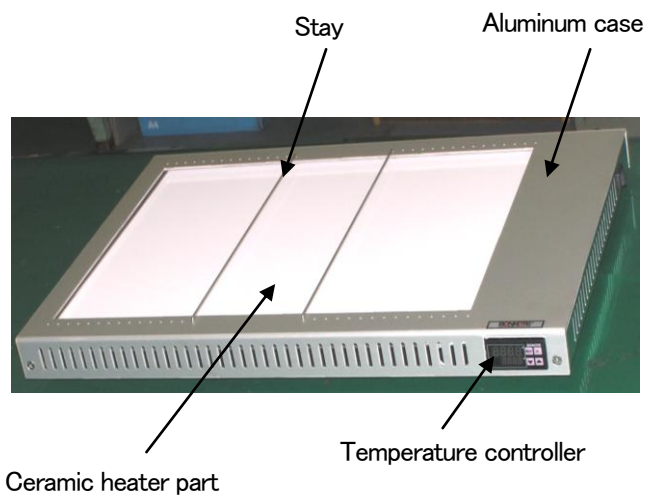
- ① DO NOT TOUCH the machine body and surface of the heater during the operation and right after turn off the heater.
- ② This machine is designed with earth specification. For safety, be sure to use an earth-equipped receptacle.
- ③ Refrain from places where the machine would be exposed too much of moisture, direct sunlight, dust or vibration.
- ④ Be sure to grab the power plug instead of cord when inserting or pulling out the plug.
- ⑤ Unplug the machine when it's not used.
- ⑥ Use genuine parts for replacement. The use of imitation parts may cause the machine malfunction.
- ⑦ Before the replacement, pull out the plug and wait until the machine cools down.
- ⑧ DO NOT heat up inflammable materials, chemicals or spray cans.
- ⑨ DO NOT use the machine with vertical way.
- ⑩ Extra pressure or strong shock may cause the ceramic heater to crack
- ⑪ Keep the machine a safe distance from inflammable materials.

3. Main feature

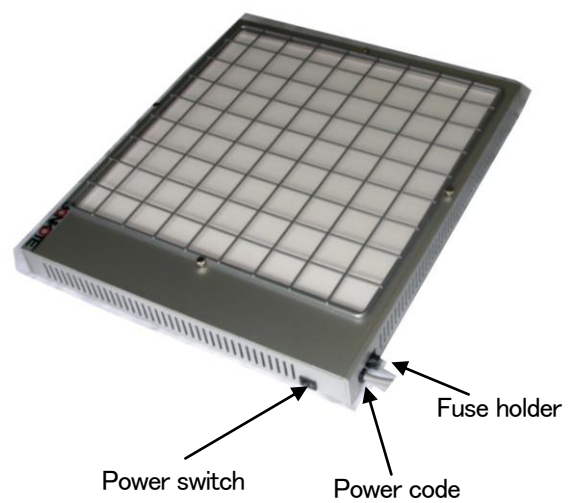
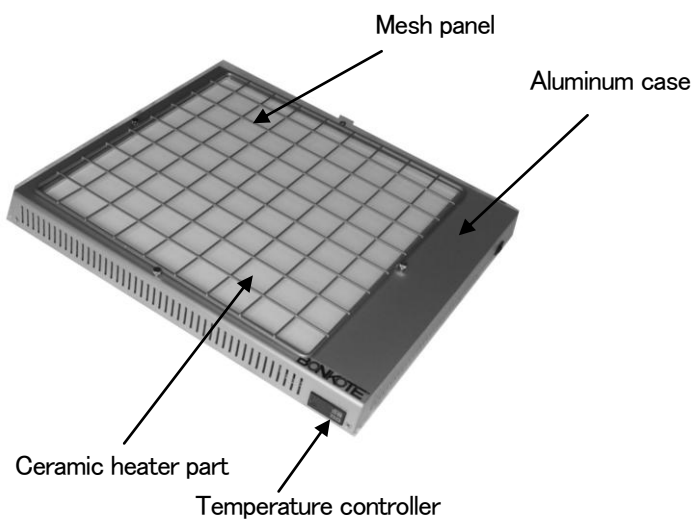
- The entire board can be uniformly heated by Far-infrared radiation heater.
- The temperature is adjustable.

4. Parts name

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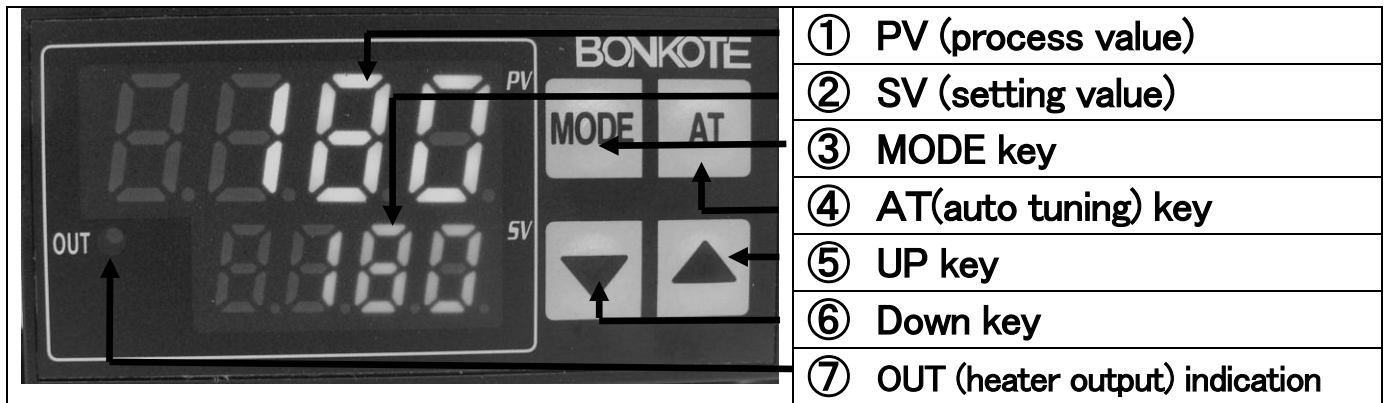


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5. How to use the controller

Parts name




- ① PV (process value) : Indicate the heater temperature
- ② SV (setting value) : Indicate the setting value of each parameter
- ③ MODE key : Press to switch the mode
- ④ AT(auto tuning) key : Press to start & stop Auto-tuning
- ⑤ UP key : Press to input setting value(+)
- ⑥ Down key : Press to input setting value(-)
- ⑦ OUT (heater output) indication : Blinking at heater output is ON

5-1 Temperature setting

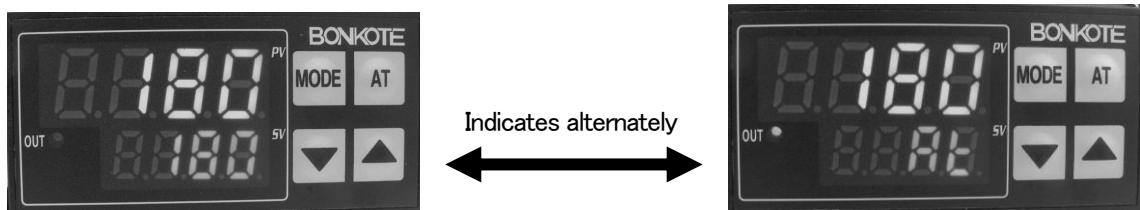
Input setting value by using UP & Down key. The value indicates on the SV display.

* Initial value for shipment is 180°C

5-2 Auto-tuning (for IPD values) setting

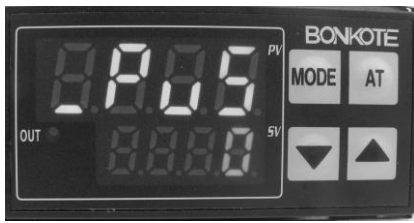
- 1.Press AT key once.
- 2.During the auto-tuning, 「」 and setting temperature value are indicating alternately.
3. When it is done, it returns to the normal operation mode.

* Initial setting for shipment is 180°C.



5—3 How to adjust the temperature difference of the machine and standard thermometer.

Press MODE key once, to indicate “_PuS” on the display.

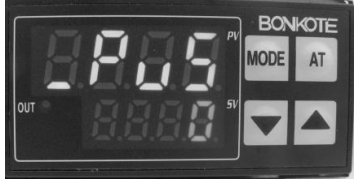
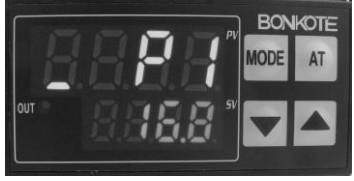


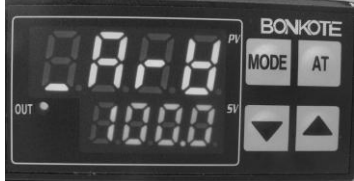



Adjust the temperature by UP (Δ) • Down (▽) keys.

Press MODE key 5times to return to the normal operation mode.

Ex) When the controller indicates 10°C lower than standard thermometer,
press Down key 10 times..

5—4 Character indications

Press 1 time		Temperature adjusting mode
Press 2 times		Proportional band input mode (Unnecessary to input. The value is automatically calculated by Auto-tuning.)
Press 3imes		Integration time band input mode (Unnecessary to input. The value is automatically calculated by Auto-tuning.)
Press 4times		Derivative time band input mode (Unnecessary to input. The value is automatically calculated by Auto-tuning.)
Press 5imes		Integration movement range setting mode Prevention of overshooting (100% at shipment)
Press 6imes		Return to the normal operation

6. Maintenance

6-1 How to clean the Aluminum case

- ① Switch off the machine and pull the plug and wait until it cools down..
- ② Remove the Stays or Mesh panel.
- ③ Gently wipe the surface with soft cloth or paper.

* Do not use acid-based cleansers or solvent-type materials.

6-2 How to clean the ceramic heater parts

- ① Switch off the machine and pull the plug and wait until it cools down..
- ② Remove the Stays or Mesh panel.
- ③ Wipe with alcohol for light stains.

For the hard-to-remove stain, use High-tech scrubbing blush (resinous), alumina particle or sand eraser. Then, wipe with alcohol.

* Avoid to put extra pressure or strong shock to the heater during the cleaning.

* Do not use metal tools to scrub the stain off.

7. Specifications

		PHN-3040	PHN-4545
Heater part & Body	Heating method	Far-infrared radiation method (Ceramicheater)	
	Input voltage	100V(AC)	
	Power consumption	1000W	1400W
	Fuse capacity	10A	20A
	Temperature sensor	Grade 0. 75 TYPE-K	
	Max. surface temp.	200°C	
	Size	485(W) 330(D) 40(H)	550(W) 480(D) 62(H)
	Weight	4. 8Kg	10Kg
Controller	Control method	PID control	
	Temp. range	Room temp. ~ 200°C	
	Input voltage	100V(AC)	

8. Warranty and After-sales service

8-1 Warranty

Our products are shipped after several factory tests & inspections.

BONKOTE warrants their products to be free of manufacturing defects or shipping damage for a period one year with exception of replaceable parts. The warranty also does not cover product wear due to use or misuse.

8-2 After-sales service

If the products do not work properly, read this manual again.

If troubles are still not solved, please contact with your dealer or us.

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