

CE

OPERATING MANUAL

THERMO BATH & COOL BLOCK

- ALB64
- ALB128
- ALB6400

Operating Manual

1. PRODUCTS DESCRIPTION
2. USER CONSIDERATION
3. OPERATION (control temperature)
4. MAINTENANCE AND CLEANING
5. FAULTY RUNNING
6. ACCESSORIES
7. WARRANTY

⚠ CAUTION-Before attempting to operate the unit,
read this instruction manual carefully

⚠ CAUTION-HIGH TEMPERATURE

"Don't touch the block while it is in operation and
until the temperature of the block goes down after
turning it off"

FINEPCR

CHARACTERISTICS

- P.I.D temperature controller
 - Easy to control and check setting temp.
- FINEPCR Blocks are much ticker than others
 - Prevent current temp. from sudden down when a tube is put into a tube hole.
- Do not need put water or mineral oil into the gab between hole and tube. The shape of hole is same with tubes.
- Temperature Calibration
 - Able to calibrate the different temperature between setting and current temp.
- Safe device.
 - A. Electrical fuse
 - B. If current temp. does not reach the setting temp. for 2hours ALM Lamp on temperature controller would be brink.
 - C. This books are used in up to 150°C(ALB 64, 128), 95(ALB 6400)°C. If the current temp. is over 150.5°C(ALB64, 128), 95.5(ALB 6400)°C, ALM lamp would be brink
 - D. If the current temp. keep over 150°C continually, the heater would be turned out automatically.

Thermo Bath



ALB 64 (Ambient +5 ~150 °C) One block
(Dimension - external : W148XD230XH155)



ALB 128 (Ambient +5 ~150 °C) Two blocks
(Dimension - external : W238XD230XH155)

COOL BLOCK



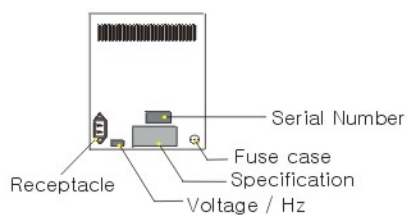
ALB6400 (0 ~ 95°C) One block
(Dimension - external : W190XD278XH230)

SPECIFICATION

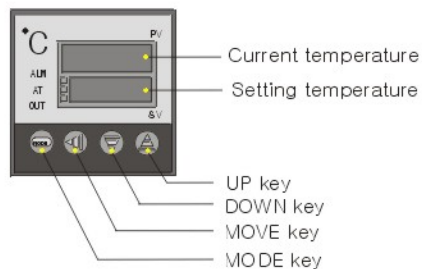
| SPECIFICATION | | | |
|----------------|--|-----------------------------|-----------------------------|
| | ALB64 | ALB128 | ALB 6400(Cool Block) |
| Temp. range | Ambient +5°C ~ 150°C | | 0°C ~ 95°C |
| Temp. accuracy | ± 0,5°C | | |
| Cooling method | Peltier heat pump | | |
| Heating method | Cartridge Heater 120W - 2ea | Cartridge Heater 120W - 4ea | Cartridge Heater 120W - 2ea |
| Material | Energy plate and sample block : Aluminum | | |
| | Inside and Insulating side : stainless steel | | |
| Dimension(mm) | W148XD230XH155 | W238XD230XH155 | W190XD278XH230 |
| Wattage | 250W | 490W | 300W |
| Weight | 4kg without block | 7kg without blocks | 8kg without block |
| Power | AC 110V / 220V / 230V~, 50/60Hz | | |

DISCRIPTION

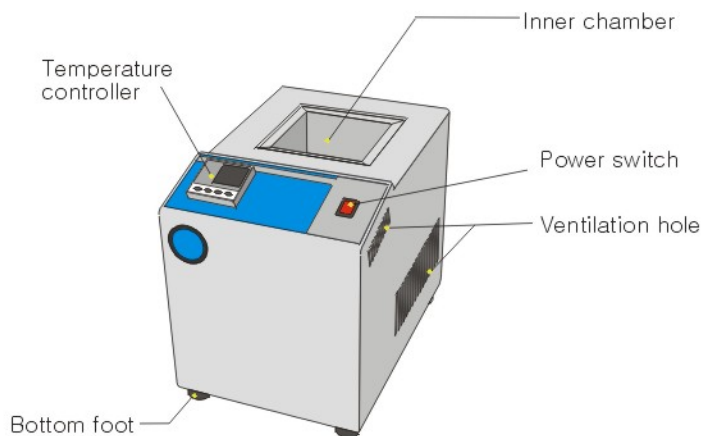
BACK



Temperature controller

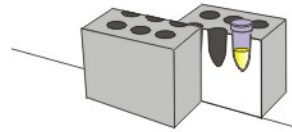


MAIN BODY



USER CONSIDERATION

Do not need put water or mineral oil into the gab between holes and tubes because the shape of hole and tube is same.

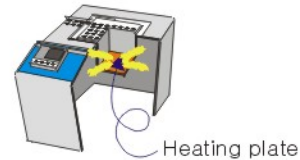


* never use PEG with this instrument, PEG could peel off the paint of main body.

During use this instrument, Please do not touch the block. Hand could be burnt.



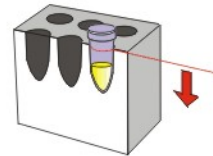
For stable temperature, the heating plate and the bottom of block should be clean. Please check the heating plate and the bottom of the block whether it is clean before using the instrument.



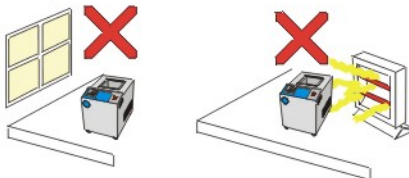
When you move this instruments, Please be careful not to drop. Because it is designed by very sensitive parts. Some impact could be cause fatal defects.



For precise test, Do not fill up reagent in the tube, keep the line inside the hole.



Do not place this instruments beside sunny place or heater. If the main body is higher than room temperature, It could affects the inside setting temperature.



Be careful not to drop any chemical liquid or water into the hole for blocks, because it could be reason of causing unstable setting temperature.

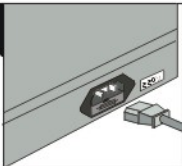
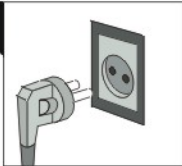

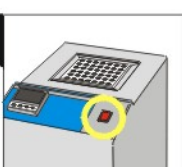


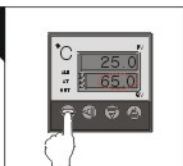
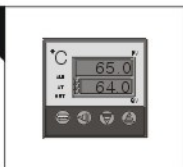
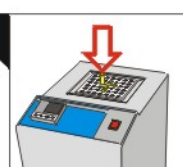



Environmental conditions

- Indoor use.
- Temperature 5°C to 40°C.
- Maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.
- Mains supply voltage fluctuations not to exceed $\pm 10\%$ of the nominal voltage.
- Other supply voltage fluctuations as stated by the manufacturer.
- Transient overvoltages according to installation categories.

USER OPERATION

This section summarizes operation procedures for FINEPCR's Heat Block & Cool Block controlling the temperature.

- 1**  Check the name rating plate for the correct voltage, then plug the power cord into the receptacle on back of the instrument.
- 2**  Plug the power cord into the wall receptacle.
- 3**  Put a block to the hole
Caution
 Before place a block check the bottom of block and inside heating plate clean.
- 4**  Turn the power on/off control button to position 'ON'
- 5**  (Temperature setting)
 Press 'mode'key on the temperature controller.
 * LED for setting temp. Will be brinked.
- 6**  Place setting temp. using 'up-down'key
- 7**  Press 'mode'key for confirming setting temp.
- 8**  **Caution**
 Temperature calibration. (If there are some difference between current temp. and setting temp. Please refer the section for calibrating Temperature)
- 9**  When the setting and current temp. are same. Put tubes to the holes into the block.
- 10**  Put the block on the lid

MAINTENANCE AND CLEANING

- ⚠ Always unplug the instrument before you start cleaning it.
- ⚠ Never immerse the appliance in water.
- ⚠ Never use the instrument if the plug, the cord or the instrument itself is damaged.

■ This equipment is maintenance-free

Clean the surfaces of the heated bath at regular intervals

- water containing a surfactant detergent additive.
- Isopropyl alcohol

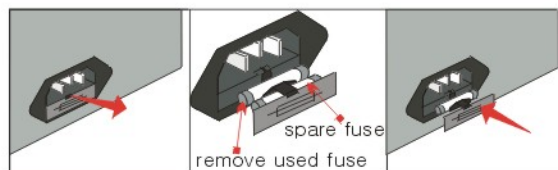
FAULTY RUNNING

1. The current temperature could not reach to setting temperature.
 - Room temperature could affect on controlling inside temp. In this case, the unit need 'AUTO TUNING' (see the 'AUTO TUNING' section of technical specification).

2. The current and setting temperature is different
 - Temperature bar may not be corrected, After testing the inside temperatures with several temp. bars at the same time, you could calibrate by referring calibrating temperature section of technical specification.

3. After turning on the power switch, The LED of the temperature controller could not display current temp.
 - In this case, the electronic fuse is broken. You see the back of the incubator, the fuse box could be seen. After detaching the box as the pictures, change the fuse.

Be able to find a fuse box on the back of the instrument, after departing the fuse box, It could be very easy to change the fuse with new one.

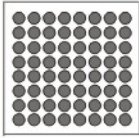


If the equipment have other defects, It should be informed to an authorised servicing agent.

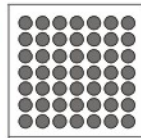
ACCESSORIES

* NON-STANDARDS CAN BE MADE BY ORDER

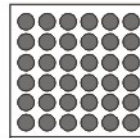
* DIMENSION (mm) : W90 X D90 X H60



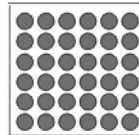
AB90-0.2
Test tube 0.2ml : 64holes



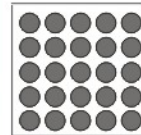
AB90-0.5
Test tube 0.5ml : 49holes



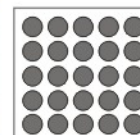
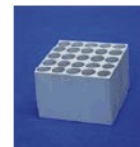
AB90-1.5
Test tube 0.5ml : 36holes



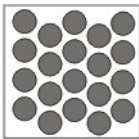
AB90-12
Test tube 12φ : 36holes



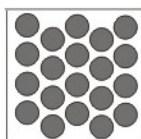
AB90-13
Test tube 13φ : 25holes



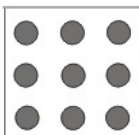
AB90-15
Test tube 15φ : 25holes



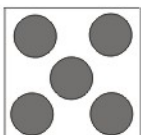
AB90-16.5
Test tube 16.5φ : 20holes



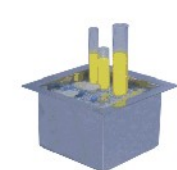
AB90-18
Test tube 18φ : 20holes



AB90-C15
Conical tube 15ml : 9holes



AB90-C50
Conical tube 50ml : 5holes



GB-90(Ball bath)



JD-90



CV64-80 / CV128-80
(Cover for glass tube)



CV64-F / CV128-F
(Cover for eppendorf tube)

WARRANTY

1 YEAR WARRANTY

Limited Warranty :

This equipment has been tested all the functions and parts for proper operation before shipment.

Please read this manual carefully. If you have any questions or problems, check with your dealer or write us direct.

This equipment is warranted for a period of 1 year from date of purchase against defects in workmanship and material only. If a system component should ever fail to work perfectly, It can be repaired and replaced by our after-sales service without difficulty.

Model# : _____

Serial# : _____

Date Purchased : _____

Dealer Name : _____

City and Country : _____

FINEPCR

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