

Thermal Block

Model : NB-305CB



Operation Manual

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I. General Information

NOTE : Before operating your Thermal Block, take a few minutes to familiarize yourself with the contents of this manual.

IMPORTANT : The material in this manual is for informational purposes only. The contents and the product it describes are subject to change without notice. The manufacturer makes no representations or warranties with respect to this manual. In no event shall the manufacturer be liable for any damages, direct or incidental, arising out of or related to the use of this manual.

Your satisfaction and safety will be assured by a complete understanding of this equipment.

Awareness of the stated cautions and warnings, compliance with recommended operating parameters, and periodic maintenance requirements are important for safe and satisfactory operation.

The unit should be used for its intended application; alterations or modifications will void the warranty.

INSPECTION : This equipment was carefully packed and thoroughly inspected before leaving our factory. Responsibility for its safe delivery assumed by the carrier upon acceptance of the shipment; therefore, claims for loss or damage sustained in transit must be made upon the carrier. So, if you receive this equipment in the customs or carrier, please check all packing (Box) immediate before undertake from your the customs or carrier.

SERVICE : N-BIOTEK products are designed and manufactured to give the user satisfactory service for many years. Should a N-BIOTEK product require servicing, trained service personnel are available from our Service Network throughout the country.

II-1. Introduction

This Thermal Block is a general instrument which needed in typical laboratories. Microprocessor PID controller with feed-back system offers accurate temperature. This digital temperature controller is enable to use this Thermal Block very easy to display all of temperature digitally.

II-2. Location

Choose a site free from rapidly changing ambient temperature conditions or one which will experience high rises in ambient temperature during the summer months.

To assure proper ventilation, allow a minimum of 2 inches (5 Cm) of the clearance between the rear and side of the unit and adjacent walls.

II-3. Leveling

The unit should be leveled in all directions (side by side, front to back and ground).

WARNING : For personal safety, this apparatus must be properly grounded.

Do not under any circumstances, cut or remove the third (ground) prong from the power cord.

II-4. Before install

- 1) Please check to your electric condition.
- 230 V~, 50/60 Hz
- 2) Avoid a direct ray and light.
- 3) Avoid high humidity and dust air.

II-5. Specification

Items	Unit	NB-305CB
Temperature		
Range	°C	-4°C to 80°C
Accuracy	°C	±0.5°C
Method		Peltier
control		Microprocessor Digital PID
Operating Panel		Touch Bitton
Display		LED Display
Block Material		Solid Anodized Aluminum
Block Capacity		BL x 1ea, BS x 2ea
Dimensions	mm	250(W) x 250(D) x 175(H)mm
Power	V/Hz	110/220V, 50/60Hz, 100W
Weight	kg	5kg

II-6. Features

- 1) Hinged transparent lid provides thermal stability, allow easy viewing samples.
- 2) Models hold 1-2 interchangeable blocks to accomodate a variety of tubes. (NB-305TB ONLY)
- 3) Microprocessor digital control of temperature from -4°C to 80°C

III-1. Installation

- 1) Move to this Thermal Block at installation place and un-packing carefully.
 - 2) The unit should be leveled in all directions (side by side, front to back and ground) and vibration free place.
 - 3) Connect electric power plug.
- * Check to electric condition before connect power plug.
- 230 V~, 50/60 Hz.

WARNING : Before connect the power cable to the plug, turn off the power switch.

III-2. Temperature Set-up

- 1) Place the Power switch "ON" position which locate in right side. Then, LED screen will displayed present temperature in the chamber.
 - 2) Press the "SET" key, than LED screen displayed "Set-up" temperature and flicker continually.
 - 3) Then, you can set-up the new temperature using UP (▲) and DOWN (▼) key as desired set-point temperature.
 - 4) Press "SET" key again after set up the new temperature as desired set-point temperature, than LED screen will be stop to flicker and saved as new temperature.
- * If you don't press "SET" key after set up the new temperature, new set-up temperature will not save at all.
- * Set-up Temperature range are -4°C to 80°C
- * Do not set up temperature lower than room temperature while COLD SPEED is off (switch placed at 'O' position) → **Peltier might get damage.**

Cold Speed Description



Cold Speed Level 02 : For high cooling required.

Heating Only

Cold Speed Level 01 : For cooling to room temperature (e.g. 25°C) or less.

III-3. Service and Check Point

WARNING : Service should only be performed by qualified service personnel. Before replacing any electrical or mechanical components, disconnect unit from its electrical power source. If electrical power is required for service, exercise extreme caution as LINE VOLTAGE is present.

1. Unit will not function

(1) Electrical connection

- Please dis-connect main power cable and connect again.

(2) Voltage supply

- Please check to voltage.

(3) Fuse check

(4) Verify voltage on unit

(5) Defective power switch (check voltage at switch)