

Gas Blowing Concentrator



Model : NB-503GB

Operation Manual

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I. General Information

NOTE : Before operating your Gas Blowing Concentrator, 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 Gas Blowing Concentrator 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 Gas Blowing Concentrator 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

GAS BLOWING CONCENTRATOR

Temp. Range : Ambient +5℃ to 120℃

Temp. Increment : 0.1℃

Temp. Control : Microprocessor Digital PID

Temp. Method : Heater

Operating Panel : Touch Button

Display : 5 Digit LED

Manifold Size : 130x110x30(mm)

Nozzle : Each Nozzle Control(20ea) Flow Rate

Stand : Pinion Motion Stand

Block Dimension : 110x90x45(mm) x 2ea

Block Capacity : 1.5ml or 10ml tube x 20 x 2ea

Connecting Port : Flow Control Valve

Operable Temperature : Ambient +5℃ to 50℃

Weight : 6kg

Power : 110/220V, 50/60Hz

Exhaust System : Contamination Free (Each Nozzle)

II-6. Features

- 1) Efficient evaporation by allowing simultaneous or separate delivery of non-reactive pressurized gas to samples
- 2) By blowing inert gas onto the sample. It can concentrate the liquid without oxidization.
- 3) Can adjust flow rate of each nozzle, on and off
- 4) Stop screw and pinion motion stand

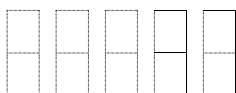
III-1. Installation

- 1) Move to this Gas Blowing Concentrator 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.*

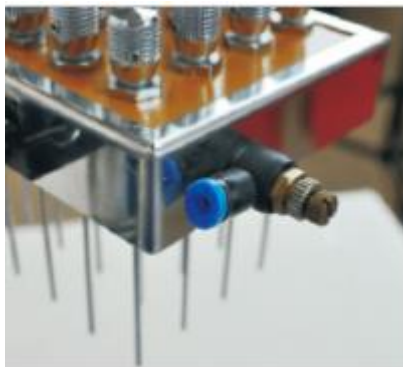
III-2. Operation

- 1) Place the Power switch "**ON**" position which locate in rear panel (Left side).
The digital readout will display as below.



Present temperature display

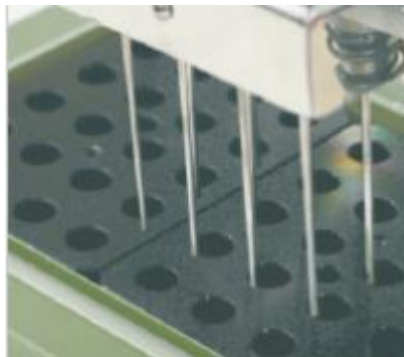
- * Present temperature in the chamber displayed.
- 2) Connect a gas hose from N2 gas cylinder to "**INLET**" located in manifold.



There is master valve to control "**INLET**" N2 gas beside N2 injection nozzle.

3) Turn the nozzle of manifold for operating

- You can control each nozzles of manifold.
- Open nozzles of manifold in proportion to a number of samples to save N2 gas



- When you locate nozzle to right and left, it is closed and when you locate nozzle to upper and lower, it is locked.

TIP : In case that the Nozzle is difficult to control, use the screw-driver.

4) By using Pinion Motion Stand, you can use the nozzle of manifold near to sample.



* Adjust manifold's level by control knob.

III-3. 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 Ambient +5℃ to 120℃(NB-503GB), 0℃ to 80℃(NB-503GBC)

III-4. 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.

Unit not in operation

- (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)

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