

Moist Heat Pack

HEATING UNIT

User Manual (Rev. 3)



NGL-LJM-4

Introduction:

Before you use the moist heat pack heating unit (hereinafter referred to as the "Heating unit" or the "Unit"), please read this Manual carefully and use the unit correctly in accordance with this operating procedure.

Unit Parameters:

1. Power Supply: 200 to 250VAC
2. Rated Frequency: 50Hz
3. Power: 1500W
4. Rated Fuse: 13 Amp
5. Maximum Tank Capacity: 130L
6. Approximated Filled Weight: 182 Kg
7. Temperature Preset: 71 - 80°C
8. Cut-out Temperature: 90°C
9. Heat Up Time to 75°C - Around 5 hours
10. Cool Down Time from 75°C - Around 3 hours
11. Dimensions: 88.5cm(H) X 89.5 cm (L) X 49.5 cm (W)
12. Export Packing Dimension: 97cm (H) X 98 cm (L) X 54.5 cm (W)
13. Net Weight: 41.5 Kg
14. Gross Weight: 66.7 Kg
15. Casing Material: Stainless Steel 304
16. Caster Wheels: 2 lock and 2 unlock

Notice:

The temperature of the unit has been preset to the optimum temperature of **71°C - 80°C** best for moist heat packs. Please wrap the moist heat pack with towel or matching terry cover after it is properly heated.

Statement:

Due to the upgrading of the product, the contents of this Manual may be slightly different from your latest product, please consult the field service personnel when you use it for the first time. If you find any problem when you use the product in the future, please contact our company in time and we will serve you wholeheartedly.

In addition, due to the writer's limited abilities, there are inevitably imperfect contents in this manual. Welcome to point out them.

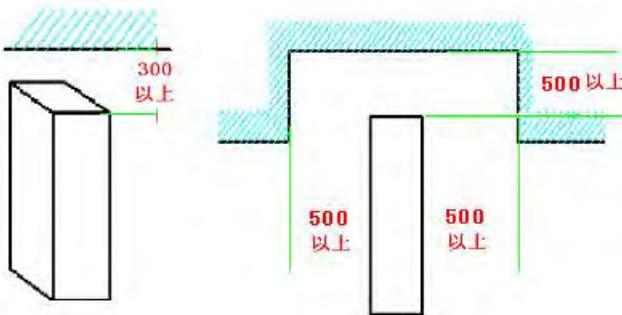
I. Installation Instructions:

The Unit should be installed in a laboratory with a good environment according to the following principle:

| Principles for the Selection of Installation Sites | |
|---|--|
| 1 | Well ventilated, dust-free and cool stable floor or experimental tables; |
| 2 | Avoid places with droplet and steam; |
| 3 | Avoid places where may flammable gas may flow inside, stop and leak; |
| 4 | Avoid places where high frequencies (High frequency welders) may occur; |
| 5 | Avoid places where acidic solutions are frequently used; |
| 6 | Avoid places where special sprayers (containing sulfides, etc.) are frequently used; |

For the convenience and safety of maintenance and installation, you should leave the space between the indoor machine and the obstacles as far as possible. When indoor machines are installed, please be sure to ensure the following dimensions:

- 1) The distance between the top of the heating unit and obstacles on the top shall be more than 300mm;
- 2) The distance between the side of the heating unit and the obstacles on both sides should be at least 500mm;
- 3) The distance between the rear side of the heating unit and the obstacle should be at least 500mm;
- 4) The distance between the front of the heating unit and the obstacle should be at least 1000mm. The following figure shows requirements for the installation space of the unit (unit: mm).



Refer to Point 1 for more than 300mm

Refer to Point 2 for more than 500mm

After you open the outer package, please check whether the accessories are complete. If you find anything missing, please contact our Sales Service for solution.

After you open the package, please lift the heating unit away from the wooden packing base and place it flat in a spacious position. Check whether the unit is damaged during transportation. After you confirm that it has no mistake, please push it flat to the installation position and ensure that it is stable. Then, please connect the power cord of the unit.

II. Detailed Operating Instructions. HOW TO USE:

1. Installation of the unit: Lift the heating unit out of the wooden packing base after you open the package. Place it flat in a spacious position; check whether the unit is damaged during transportation. After you confirm that it has no mistake, please push it flat to the installation position and ensure that it is stable.

(1) Please be sure to check whether the clamp or flange bolts of the external hose are tightened. After the liquid is added, please observe whether there is water leakage at the pipe joint.

If there is water leakage, please deal with the problem in time.

(2) After it is well placed, please wipe the inner and outer surfaces of the container gently with a wet cloth to remove the protective oil and keep the container clean.

2. When you use the unit, please fix it on a fixed platform and open the valve of the water inlet. Then, inject clean water into the box. In order to shorten the heating time, warm water can also be added. After water is added, please close the water inlet valve and start to operate the Unit.
3. After connecting power supply, you will see the RED switch at the rear of the Unit lights up. When it is turned to "1" to turn it on, the Controller Module in front of the Unit will light up and this means the Unit starts to operate. Since temperature has been preset to the best of moist heat pack heating condition, therefore no more setting is required.
4. After the unit is heated and have constant temperature steadily obtained, please dip the hot pack into water and hang it on columns at both ends of the separation frame.
5. When taking the moist heat pack out from the Unit, please use insulating clamps. Do not do operations with bare hands so as to avoid being scalded.

Detailed Instructions of the Temperature and Timer Controller:

Panel Instruction:

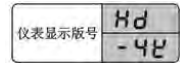


| | |
|--------------|--|
| ①功能键 | (1) Function keys |
| ②减键 | (2) Down |
| ③增键 | (3) Up |
| ④输出指示 | (4) Output Instructions |
| ⑤上限报警指示 (选配) | (5) Upper Limit Alarm Indicator (Optional) |
| ⑥测量值 | (6) Observed Value |
| ⑦设定值 | (7) Setting Value |

Operation and Usage Method:


1. Power on: Switch on the Unit by pressing the **red power switch to "1"** at the rear of the Unit.




The digital display panel will then show the "Version No." which will turn to the normal display about 6 seconds later.



2. **Temperature Setting: Temperature of the heating unit has been preset to 71°C-80°C which is the best condition for moist heat packs, no more setting is needed when use.**

The below setting guide is for reference only. If settings have been accidentally adjusted, please follow the below instructions to reset it:

Click  to enter the temperature setting mode. The lower panel will then blink to enter the standby

mode. Then set the required temperature by pressing  and  

buttons until it has been set. Then, click the "Set" button again to exit the setting Mode. The updated setting will be saved automatically. Under this setting mode, if no key is pressed/set within one minute, the controller will automatically return to the normal display state. The temperature of the Unit will run to match with the preset temperature display on the upper panel.

III. Solutions to Common Problems:

Note: To ensure your safety, please switch off the equipment and connections, as well as discharge any media in the Unit before checking or examining it.

Phenomenon: When you switch on the power switch for the first boot-up, if nothing is displayed, the **fuse** inside the power plug (if it has) might have been burnt for whatever reasons, remove the plug cover to replace with a new fuse and restart the Unit again.

Temperature and Timer Settings: As all settings have been well set ex-factory, settings of the Unit are not recommended nor required as the packs need consistent temperature to keep it at optimum condition in the Unit. The Temperature and Timer Setting of this Unit have been locked to attain a more efficient operation of the Unit. The below settings for temperature and timer are for reference only. If these have been accidentally adjusted, please follow the below instructions to reset it:

Temperature Setting: (Unlock and Lock Mode)

1. Press the set button for 3 seconds, then press the set button again for 5 times, you will see "LCK" appears on the upper panel, press the arrow button to set from the value "2" to "0" (Set to "0" is to unlock the Temperature setting).
2. Press the set button again for 3 seconds, adjust the arrow button to the temperature of 75 degrees (recommend).
3. Press the set button again for 5 times, you will see "LCK" appears on the upper panel, then press the arrow button to set the value to 2 (Setting to "2" is to lock it up).
4. Press the set button to save the settings and exit.
5. End.

Timer Setting: (Unlock and Lock Mode)

1. Press the set button for 3 seconds to enter the setting mode.
2. Press the set button again for 5 times, you will see the "LCK" appears on the upper panel. Then set it to "0" to release the locking mode. Press the set button once to return to normal state.
3. Press the set button again for 3 seconds, adjust the "ST" from "1" or a higher value to "0" to cancel the timer setting.
4. The Module will automatically be set after 3 seconds. This time the Timer of the Unit is not set and no audible alarm will be activated.
5. End.



Attention Please:

1. Please use deionized water or pure water to prevent foreign matters from blocking pipes and having scale so that the service life of the equipment can be extended. The water tank should be cleaned regularly and the circulating liquid in the tank should be replaced regularly to prevent microbial growth. If you do not use the unit, please cut off the power supply to clean the box and ensure that it is dry.
2. Please do not burn yourself when you use it. Please refer to the internal temperature displayed by the controller before you open the cover and please avoid being burned.
3. Do not move the box when you use it. Do not move the container when the water temperature is too high so as to prevent safety accidents.
4. When you use the unit, please do not let water or oil splash on the surface of the instrument, otherwise, the instrument will be damaged.
5. Do not use the instrument in places with flammable and explosive gas, corrosive gas or steam emissions, strong electromagnetic interference and strong impact vibration.



Unit Rear View

The manufacturer reserves the right of changing or upgrading the design of the Heating Unit without prior notice.

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