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Precautions Before Use

- A. Select a well ventilated location – Good ventilation facilitates ultimate refrigerating performance of the unit and satisfactory heat dissipation.

- B. Install the unit at a location free from heat source – Keep away from heat sources such as direct sunshine or stoves which may affect heat dissipation.

- C. Place the unit at a sound and level location – Poor level or soundness of the installation location may cause vibration and noise.

- D. Draining – Check if the draining pipe on the back of the refrigerator is lowered and the cock is plugged.

- E. Power source – Before connecting the power, make sure it is applicable to the refrigerator. Use a separate socket for the unit.

- F. Place the unit at a less humid location – DO NOT place the unit at a place subject to humidity or rain, otherwise electrical short or leak caused by poor insulation may occur.

- G. Handling and moving – Before moving the refrigerator, switch off the power and detach the power cord. In case of laying the unit down when moving it to the location, wait for at least 2 hours before switching the unit on again.

Safety and Precautions

- I. Precautions shall be taken when using flammable atomizers – Do not use flammable painting aerosols near the equipment rooms.
- II. Do not stock flammable substances in the warehouse – Do not stock volatile and flammable substances such as ether, volatile fuel, alcohol, adhesives, etc. in the warehouse, to prevent any hazard.
- III. Do not splash with water directly – Do not splash water on electrical parts, to prevent electrical leak and short.
- IV. In case of gas leakage – During a gas leakage, sparks from the non-fuse breaker switch may Cause In case of gas leakage – During a gas leakage, sparks from the non-fuse breaker switch may cause an explosion hazard; strict precautions must be taken.
- V. Avoid treading on the power cord – Do not repeatedly tread on and drag with the power cord, otherwise the cable cladding may be damaged, resulting in exposed wires which not only affect the appearance but also may cause electrical leak and electric shock.
- VI. During replenishment – If the replenishment takes more than 5 minutes, it is suggested to turn the power off to save energy, since the cold air will flow out the refrigerator during the replenishment and the refrigerating operation will be in vain).
- VII. Heat dissipation – Keep good ventilation around the equipment room; do not stock miscellaneous objects to block heat dissipation.
- VIII. Setting- Do not alter parameters except for those of the temperature. Parameter setting shall be carried out by the technical personnel.
- IX. Cleaning – Maintain cleanliness both inside and outside the refrigerator. Cleaning shall be carried out at least once a month.
- X. Maintenance – For extended lifecycle of the machine, maintain the unit at least once every 2 months.

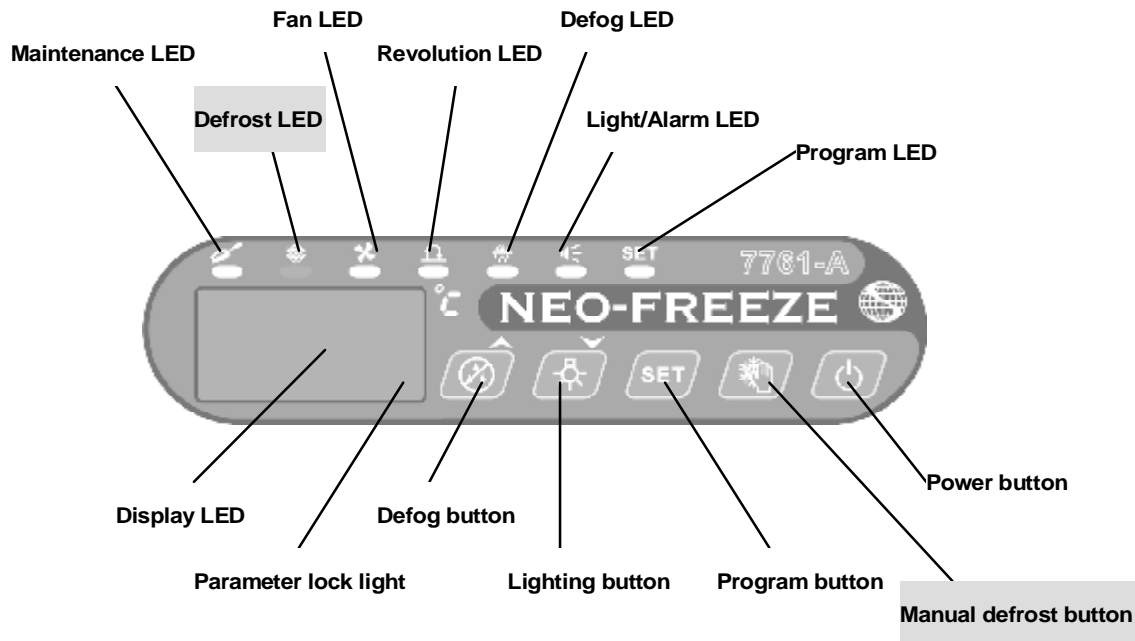
Setting and Operation

1. ADVICE

- The controller must be installed by qualified staff.
- The input voltage must be 110V or 220V at 50~60 Hz.
- The front panel and control box must installation in a dry position.
- Leakance may cause sensor failure.

2. TECHICAL DATA

2.1 PANEL INTRO (※7763-A does not support gray part)



2.2 The operation of control panel

“Display LED” light up after connecting to electricity, If power cut not normally controller will memory status before power cut and restore after power supply.

2.3 Power button

Push button 3 seconds will startup or shutdown controller, **Display LED** will display **Pon** 3 times before system startup and appear the indoor temperature **t1** after system startup.

2.4 Manual defrost button (for 7761-A only)



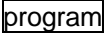


Push 3 seconds, **Display LED** flash **DEF** 3 times, microprocessor decide to enter defrost mode or not according to defrost criteria.

Defrost criteria : Evaporator temperature **t2** > defrost stop temperature **dS**

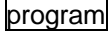



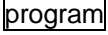
During defrost, **Defrost LED** light on, defrost relay energized, compressor run according to defrost criteria in heater or hot gas defrost. When defrost complete, **Defrost light** off and **Display LED** flash **run** 3 times than system back to refrigeration run.

2.5 Program button

This button is used for enter into general parameter or select parameter code, Push button 3 seconds **program LED** being to flash and continue to setting finished.

At same time, Display LED flash **888** 3 times, appear the **General parameter**, using   button select parameter code and push  button again to entry parameter code setting , than using   set parameter code's value.


If you need to enter into **Lock parameter**, push   together during **Display LED** flashing **888**. It will appear parameter after flashing.

If you want enter into **Record**, please push  button & "" button for 3 seconds while **Display LED** are appear the indoor temperature **t1**, after **Display LED** flash **888** use   select the code what you want to read and push  button again to see it's value. It will flash record 3 times, and return to parameter selection.

When setting finished push button 3 seconds or don't touching ant button after 8 seconds, **Display LED** flash **888** 3 times and return to appear the indoor temperature **t1**. "**Program LED**" light off.


2.6 Lighting button

At normal mode this button is to be used for lighting. Push once, **Light LED** on and relay energized, push again, **Light LED** light off and relay released.

When at programming parameter mode, this button is used to be a down key () for adjust parameters or decrease value.

2.7 Defog button

At normal mode this button is to be used for defog heater. Push once, **Defog LED** on and relay energized, push again, **Defog LED** light off and relay released.

When at programming parameter mode, this button is used to be a up key () for adjust parameters or increase value.

2.8 Parameter lock light (a dot)

Lock the parameter setting, let user only can adjust **ts** setting.

2.9 Maintenance light

Remind user it's time to do maintenance.

3. INSTALLATION

ATTENTION :Compressor relay connector only support rated current below 9 amp's compressor, If rated current greater then 9 amp please use magnetic electrical connectors.

3.1 Sensor install

Cabinet sensor (Green)can be set in any suitable position ◦ Evaporator sensor (Red) is design for detection defrost temperature, Recommend set between evaporator's fin and fin but don't trough the defrost heater.

3.2 Electrical connections

Verify that the voltage of power supply of installation is compatible with controller.

Verify that the circuit diagram of the unit is compatible with installation.

3.3 Safety switch loop

When use this safety switch must cut off white wire and series connection pressure switch or safety overload switch. When the loop detect a cut off, The system will stop immediate and "Display LED" will show Abc warning, Don't' input power in this loop.

3.4 Parameter setting

Before setting temperature, Recommend adjust **tS**、**td**、**tHS**、**tLS** in proper. Avoids when in the future will adjust **tS**、**td** effect the **AtH** and **AtL**.

4. Parameter

4.1 General parameter (NEO-7763A does not support gray part)

Description	Para	Rang	Freezer	Chiller
Temperature setting	<i>tS</i>	+50 ~ -50 °C	-18 °C	+2 °C
Differential	<i>td</i>	1 ~ 15 °C	5°C	5°C
Compressor time delay	<i>Sd</i>	0 ~ 15 min.	1 min.	1 min.
Defrost cycle time	<i>d i</i>	0 ~ 24 hr.	4 hr.	4 hr.
Defrost duration	<i>dd</i>	0 ~ 60 min.	20 min.	20 min.
Defrost stop temperature	<i>dS</i>	+40 ~ -20°C	20 °C	

4.2 Lock parameter

Description	Parameter	Rang	Default
General parameter lock	<i>Loc</i>	<i>no</i> : unlock /	YES
High temp. adjust limit	<i>tHS</i>	+50 ~ -50 °C	50 °C
Low temp. adjust limit	<i>tLS</i>	+50 ~ -50 °C	-50 °C
High temp. alarm setting	<i>AtH</i>	+59 ~ -47 °C	60 °C
High temp. alarm delay	<i>Ad</i>	0 ~ 60 min	30 min.
Low temp. alarm setting	<i>AtL</i>	+48 ~ -50 °C	-50 °C
Evaporator fan control while comp	<i>Fc</i>	<i>Run</i> -keep run /	Run
Fan delay after defrost	<i>Fd</i>	0 ~ 15 min	3 min.
Fan start temperature	<i>FS</i>	+40 ~ -20 °C	0 °C
Calibration	<i>tA</i>	+10 ~ -10 °C	0 °C
Set Maintenance days	<i>SEr</i>	0 ~ 365 days	120 days
Long compressor revolution alarm	<i>ALr</i>	0 ~ 180min	120 min.

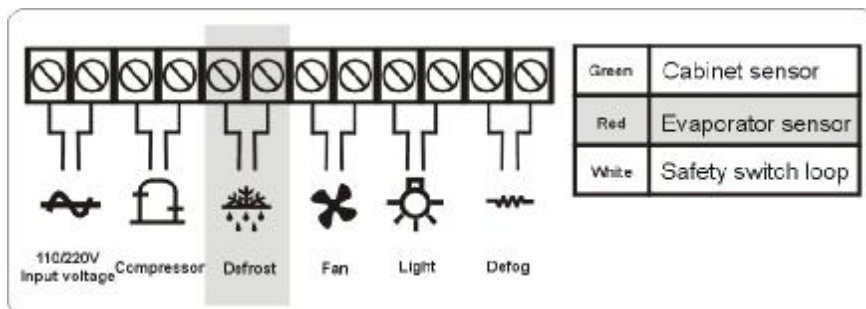
4.3 Record parameter

Description	Paramet	Rang
Remind maintenance (count)	<i>SEr</i>	0 / 999 days
Evaporator temperature	<i>t2</i>	+60 / -50°C
Total running time	<i>tot</i>	000 , 000 / 999 , 999 Hr.
Safety circuit breakdown	<i>Abc</i>	0 / 999

4.4 Automatic error detect system & parameter code

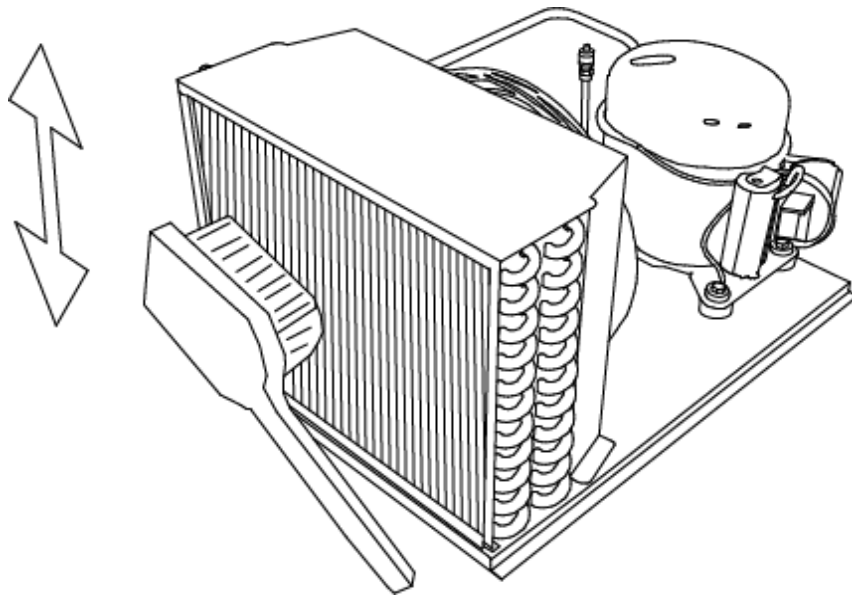
Description	Parameter	Action
Cabinet sensor shorted /	<i>E1H/E1L</i>	<i>t2</i> sensor will change to cabinet sensor
Evaporator sensor shorted /	<i>E2H/E2L</i>	System won't defrost
Safety circuit breakdown	<i>Abc</i>	System stop
High temperature alarm	<i>AtH</i>	Just warning
Low temperature alarm	<i>AtL</i>	Just warning
Long compressor revolution	<i>ALr</i>	Just warning
Defrost temperature high alarm	<i>dtH</i>	System stop

5. Circuit didram



Maintenance and Cleaning

1. For cleaning, switch off the unit and then detach the power plug.
2. Remove the panel before cleaning; clean the heat dissipation fin with a palm brush in an up to down movement. Do not splash with water or the wiring may get a short. (See Fig. 1)
3. Wipe the casing with a clean cloth dipped in mild detergent, then clean the door panel and magnetic pad with a soft cloth. Do not use methylbenzene or other volatile solution for cleaning.
4. Clean inside and outside of the refrigerator regularly; do not wash the internal with water, to avoid wetting the circuit.



Operation steps

1. Turn the switch off, remove the power plug.
2. Freezer – remove the panel. Working platform – leave the equipment room door open.
3. Brush the fin in top-to-bottom direction. (Do not use water.)
4. After cleaning, standby for one hour before connecting the power and switch on the unit.

Simplified Troubleshooting

Please carry out the following checks before calling for service.

Totally inoperative	Power outage? Power trip?
	Power cord unplugged?
	Check if wiring of Temperature Gauge is loosened.
	High-pressure switch trip?
	Defrosting? (Red defrost indicator lights up)
Insufficient refrigeration	Check for proper temperature adjustment.
	Whether frequent door opening is taking place.
	Check if ventilation louver is blocked by food.
	Excessive packing of food may have blocked air circulation.
	Incorrect temperature adjustment resulting in frost build-up.
	Check if rotation of motor fan is in the correct direction.
Sweating on the outside	High room temperature or humidity
	Door is not properly closed.
	Defroster switch is not switched on.