



Operating Instructions

Pharmaceutical Refrigerator

MPR-514R

MPR-514 Series



MPR-514

Please read the operating instructions carefully before using this product, and keep the operating instructions for future use.

See page 42 for all model numbers.

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INTRODUCTION

- Read the operating instructions carefully before using the appliance and follow the instructions for safety operation.
- PHC Corporation never guarantees any safety if the appliance is used for any objects other than intended use or used by any procedures other than those mentioned in the operating instructions.
- Keep the operating instructions in an adequate place to refer to it as necessary.
- The contents of the operating instructions will be subjected to change without notice due to the improvement of performance or functions.
- Contact our sales representative or agent if any page of the operating instructions is lost or page order is incorrect.
- Contact our sales representative or agent if any point in the operating instructions is unclear or if there are any inaccuracies.
- No part of the operating instructions may be reproduced in any form without the expressed written permission of PHC Corporation.

IMPORTANT NOTICE

PHC Corporation guarantees this product under certain warranty conditions. However, please note that PHC Corporation shall not be responsible for any loss or damage to the contents of the product.

<Intended Use>

This equipment is designed for storage of pharmaceuticals, samples and reagents.

PRECAUTIONS FOR SAFE OPERATION

It is imperative that the user complies with the operating instructions as it contains important safety advice.

Items and procedures are described so that you can use this unit correctly and safely. If the precautions advised are followed, this will prevent possible injury to the user and any other person.

Precautions are illustrated in the following way:

WARNING

Failure to observe WARNING signs could result in a hazard to personnel possibly resulting in serious injury or death.

CAUTION

Failure to observe CAUTION signs could result in injury to personnel and damage to the unit and associated property.

Symbol shows;

-  This symbol means caution.
-  This symbol means an action is prohibited.
-  This symbol means an instruction must be followed.

Be sure to keep the operating instructions in a place accessible to users of this unit.

< Labels on the unit >



This mark is labeled on the cover in which the electrical components of high voltage are enclosed to prevent the electric shock. The cover should be removed by a qualified engineer or service personnel only.



This symbol indicates that caution is required. Refer to product documentation for details.

USA Only: This product has a fluorescent lamp that contains mercury. Disposal may be regulated in your community due to environmental considerations. For disposal or information, please visit PHC website: <https://www.phchd.com>.

Contains mercury / Contenu avec mercure

For more information on safe handling procedures, the measures to be taken in case of accidental breakage and safe disposal options visit:
ec.gc.ca/mercure-mercury/.
Dispose of or recycle in accordance with applicable laws.

Pour plus de renseignements sur les procédures de manutention sécuritaire, les mesures à prendre en cas de bris accidentel et les options d'élimination sécuritaire visitez:
ec.gc.ca/mercure-mercury/.
Mettez au rebut ou recyclez conformément aux lois applicables.

PRECAUTIONS FOR SAFE OPERATION



WARNING

-  **Do not use the unit outdoors.** Current leakage or electric shock may result if the unit is exposed to rain water.
-  **Only qualified engineers or service personnel should install the unit.** The installation by unqualified personnel may cause electric shock or fire.
-  **Install the unit on a sturdy floor and take an adequate precaution to prevent the unit from turning over.** If the floor is not strong enough or the installation site is not adequate, this may result in injury from the unit falling or tipping over.
-  **Never install the unit in a humid place or a place where it is likely to be splashed by water.** Deterioration of the insulation may result which could cause current leakage or electric shock.
-  **Never install the unit in a flammable or volatile location.** This may cause explosion or fire.
-  **Never install the unit where acid or corrosive gases are present** as current leakage or electric shock may result due to corrosion.
-  **Always ground (earth) the unit to prevent electric shock.** If the power supply outlet is not grounded, it will be necessary to install a ground by qualified engineers.
-  **Never ground the unit through a gas pipe, water main, telephone line or lightning rod.** Such grounding may cause electric shock in the case of an incomplete circuit.
-  **Connect the unit to a power source as indicated on the rating label attached to the unit.** Use of any other voltage or frequency other than that on the rating label may cause fire or electric shock.
-  **Never store volatile or flammable substances** in this unit if the container cannot be sealed. These may cause explosion or fire.
-  **Do not insert metal objects such as a pin or a wire into any vent, gap or any outlet on the unit.** This may cause electric shock or injury by accidental contact with moving parts.
-  **Use this unit in safe area when treating the poison, harmful or radiate articles.** Improper use may cause bad effect on your health or environment.
-  **Turn off the power switch (if provided) and disconnect the power supply to the unit prior to any repair or maintenance** of the unit in order to prevent electric shock or injury.
-  **Do not touch any electrical parts (such as power supply plug) or operate switches with a wet hand.** This may cause electric shock.

PRECAUTIONS FOR SAFE OPERATION

WARNING

-  **Ensure you do not inhale or consume medication or aerosols** from around the unit at the time of maintenance. These may be harmful to your health.
-  **Never splash water directly onto the unit** as this may cause electric shock or short circuit.
-  **Never put containers with liquid on the unit** as this may cause electric shock or short circuit when the liquid is spilled.
-  **Never bind, process, or step on the power supply cord, or never damage or break the power supply plug.** A broken supply cord or plug may cause fire or electric shock.
-  **Do not use the supply cord if its plug is loose.** Such supply cord may cause fire or electric shock.
-  **Never disassemble, repair, or modify the unit yourself.** Any such work carried out by an unauthorized person may result in fire, or electric shock or injury due to a malfunction.
-  **Disconnect the power supply plug if there is something wrong with the unit.** Continued abnormal operation may cause electric shock or fire.
-  **Do not position this unit and the other unit so that it is difficult to operate the disconnection of the power supply plug.** Failure to disconnect the power supply plug may cause fire if there is something wrong with the unit.
-  **When removing the power supply plug from the power supply outlet, grip the power supply plug, not the cord.** Pulling the cord may result in electric shock or fire by short circuit.
-  **Disconnect the power supply plug** before moving the unit. Take care not to damage the power supply cord. A damaged cord may cause electric shock or fire.
-  **Disconnect the power supply plug when the unit is not used for long periods.** Keeping the connection may cause electric shock, current leakage, or fire due to the deterioration of insulation.
-  **If the unit is to be stored unused in an unsupervised area for an extended period, ensure that children do not have access and that doors cannot be closed completely.**
-  **The disposal of the unit should be accomplished by appropriate personnel.** Remove doors to prevent accidents such as suffocation.
-  **Do not put the packing plastic bag within reach of children** as suffocation may result.

PRECAUTIONS FOR SAFE OPERATION

CAUTION

-  **This unit must be plugged into a dedicated circuit** protected by branch circuit breaker.
-  **Use a dedicated power source as indicated on the rating label attached to the unit.** A multiple-tap may cause fire resulting from abnormal heating.
-  **Connect the power supply plug to the power source firmly after removing the dust on the plug.** A dusty plug or improper insertion may cause a heat or ignition.
-  **Never store corrosive substances such as acids or alkalis in the unit except in a sealed container.** These may be detrimental to health and may cause corrosion of internal components, cooling circuit or electrical components.
-  **Check the setting when starting up of operation after power failure or turning off of power switch.** The stored items may be damaged due to the change of setting.
-  **Be careful not to tip over the unit** during movement to prevent damage or injury.
-  **Prepare a safety check sheet** when you request any repair or maintenance for the safety of service personnel.

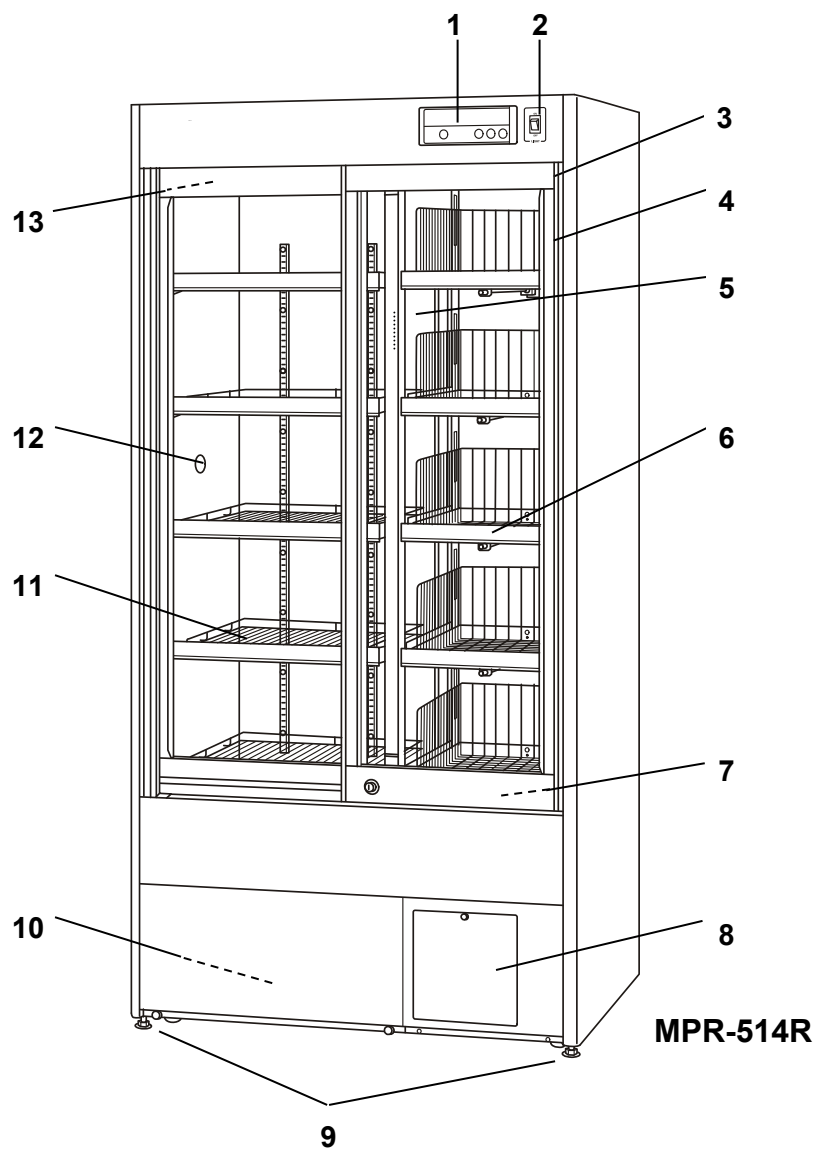
ENVIRONMENTAL CONDITIONS

This equipment is designed to be safe at least under the following conditions (based on the IEC 61010-1):

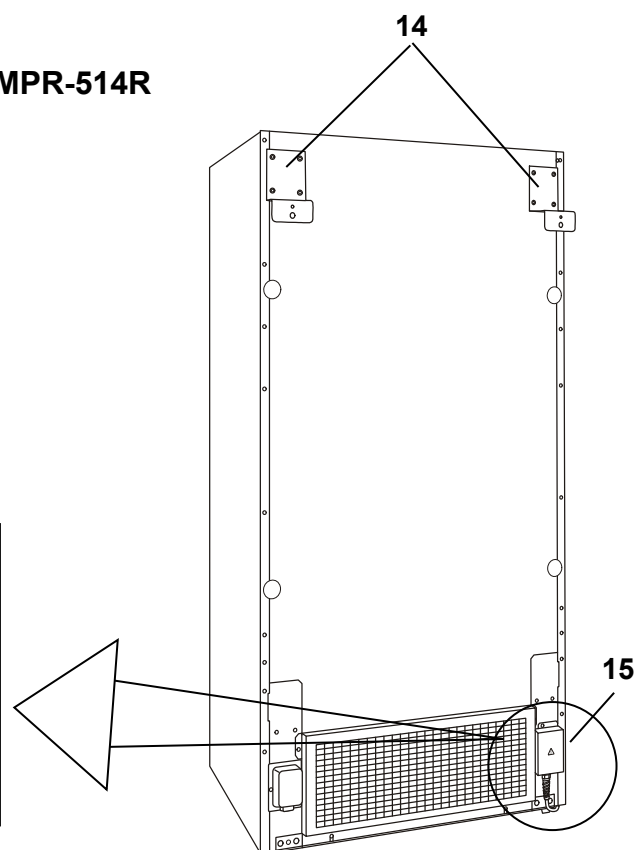
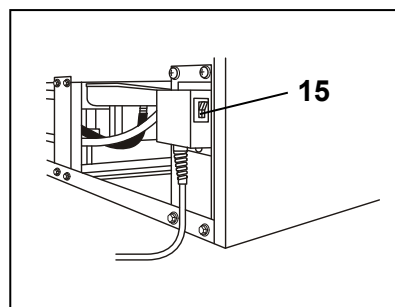
- Indoor use;
- Altitude up to 2000 m;
- Temperature 5 °C to 40 °C;
- Maximum relative humidity 80 % for temperature up to 31 °C decreasing linearly to 50 % relative humidity at 40 °C;
- Mains supply voltage fluctuations up to ± 10 % of the nominal voltage;
- Transient overvoltages up to the levels of OVERVOLTAGE CATEGORY II;
- Temporary OVERVOLTAGES occurring on the mains supply;
- Applicable pollution degree of the intended environment (POLLUTION DEGREE 2 in most cases);

REFRIGERATOR COMPONENTS

Refrigerator unit



MPR-514R



REFRIGERATOR COMPONENTS

1. Control panel: The chamber temperature and alarms can be set through the keys on the control panel. The temperature display and indicators are also provided on the control panel. Refer to page 10 for details.

2. Light switch: This switch is used for turning the fluorescent lamp off and on.

3. Door switch: This switch detects the door status (open/close). The door check lamp is ON when the door is open.

4. Door: Sliding type. The recessed portion on the rail enables the self-closing of the door. The glass is pair construction.

✧ The condensation may be found on the door frame with ambient humidity of about 50%R.H. and on the glass surface with ambient humidity of about 60%R.H. This is not a malfunction.

✧ The condensation on the door is dropped on the rail and exhausted to the evaporating tray.

5. Air exhaust vent: Do not block this vent. Arrange the stored items not to subject to the cold air from the vent.

6. Drawer (Right side of MPR-514R): To pull out the drawer, take out the drawer with pushing the button at the bottom of the drawer.

Note: Never pull out the multiple drawers at a time. It may cause tipping over of the unit.

7. Air intake vent (front bottom): Do not block this vent. Blocking this vent may cause unstable chamber temperature. Do not insert fingers or similar articles into the vent.

8. Space for a temperature recorder: A temperature recorder (optional accessory) can be mounted here. See page 33.

✧ For the installation, contact our sales representative or agent.

9. Leveling feet (front): These are used for install the unit. Adjust the height of the leveling feet by turning the screw bolts until 2 front casters are away from the floor.

10. Evaporating tray: Defrost water from the evaporator accumulates in the tray and evaporates into the atmosphere. See page 26 for cleaning.

11. Shelf: The set location is adjustable.

✧ Items to be stored in the chamber must be placed on the shelves. Do not put stored items directly on the bottom of the chamber.

12. Access port: This port allows a sensor or cable of measuring equipment to enter the chamber from outside.

✧ Replace insulation and the rubber caps when the access port is not used. Improper replacement may cause rise of chamber temperature or condensation around the access port.

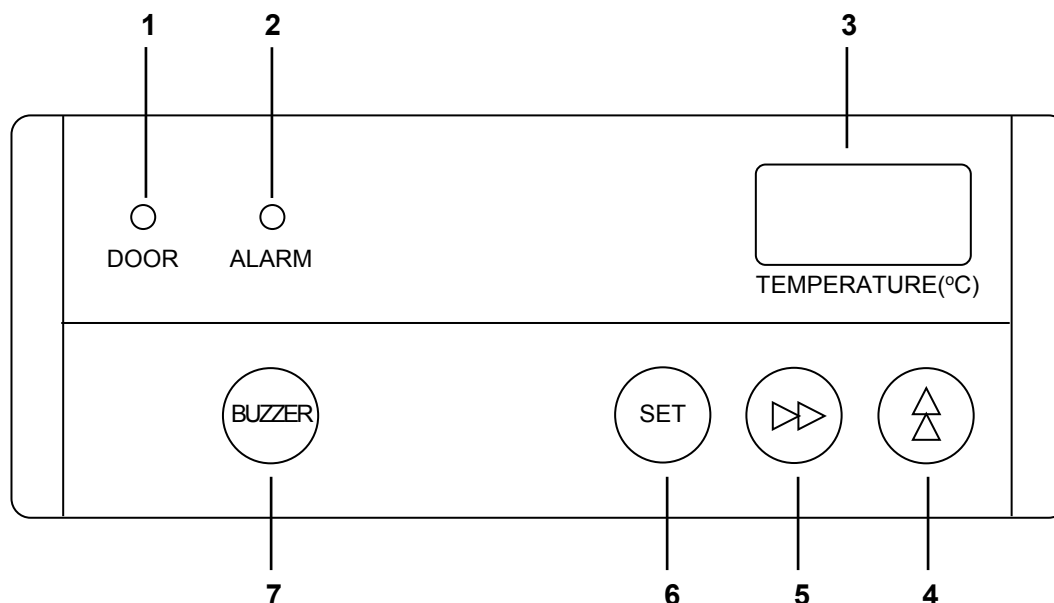
13. Exclusive alarm sensor: A sensor for detecting the temperature rise at the upper area of the chamber. Refer to page 22 for alarm functions.

14. Back spacer (also used as a fixture): To keep the space between the unit and the back wall for adequate cooling performance. And this can be used as a fixture. Fix the unit by using the fixture and a rope or chain.

15. Circuit breaker switch: Switch ON this circuit breaker switch before the unit starts to run. When the operation of the unit is stopped by the circuit breaker, contact our sales representative or agent after disconnecting the power supply plug.

REFRIGERATOR COMPONENTS

Control panel components



1. Door check indicator (DOOR): The red LED lamp is lit when the door is opened.

✧ 2 minutes after the door check indicator ON, the buzzer is activated to notice the door opening.

2. Alarm indicator (ALARM): The red LED lamp blinks during an alarm condition. See page 22.

3. Temperature display: Normally shows the present chamber temperature and during an alarm condition, shows an error code. See page 23.

4. Up arrow key (▲):

At "temperature display mode"; pressing this key for more than 5 seconds leads setting mode.

At "setting mode"; increases number values between choices. See page 14 to 15 and page 17 to 20.

At "setting of lock function"; selects ON-OFF of key lock for chamber temperature setting. See page 15.

5. Scroll key (▶▶):

At "temperature display mode"; pressing this key for more than 5 seconds leads "setting of lock function". See page 15.

At "setting mode"; moves the operator through digit on the display. See page 14 to 15 and page 17 to 20.

6. Set key (SET):

At "temperature display mode"; pressing this key leads "chamber temperature setting mode".

At "setting mode"; stores the value into computer memory.

7. Alarm buzzer stop key (BUZZER): Mutes the audible alarm.

✧ "temperature display mode": the status which the temperature display shows the current chamber temperature

✧ "setting mode"; the status which the temperature display is ready to be entered after pressing the up arrow key for 5 seconds.

INSTALLATION SITE

To operate this unit properly and to obtain maximum performance, install the unit in a location with the following conditions:

✧ A location not compliance with the following conditions may cause poor performance, failure or accident.

■ A location not subjected to direct sunlight

Do not install the unit under direct sunlight. Installation in a location subjected to direct sunlight may degrade the performance.

■ A location with adequate ventilation

Leave at least 10 cm around the unit for ventilation. Poor ventilation will result in a reduction of the performance and consequently the failure.

■ A location away from heat generating sources

Avoid installing the unit near heat-emitting appliances such as a heater or a boiler etc. Heat can decrease the intended performance of the unit.

■ A location with little temperature change

Install the unit under stable ambient temperature. Installing the unit under unstable ambient temperature may result in unstable performance.

■ A location with a sturdy and level floor

Always install the unit on a sturdy and level floor withstanding the total weight of the unit. The uneven floor or tilted installation may cause failure or injury. Unstable condition may cause vibration or noise.

■ A location not prone to high humidity

Install the unit in the ambient of 80 %R.H. or less humidity. Installation under high humidity may cause current leakage or electric shock.

CAUTION

The unit may collect excessive frost on the evaporator if it is installed in high temperature and high humidity location. This will cause frequent defrosting.

■ A location without flammable or corrosive gas

Never install the unit in a flammable or corrosive location. This may cause explosion or fire or may result in the current leakage or electric shock by the corrosion of the electrical components.

CAUTION

Never install the unit in a location where the corrosive material such as sulfur compound is likely to be generated (near a drainage facilities, etc). Corrosion of the copper pipe may result in deterioration of cooling unit and consequently the failure.

■ A location without the possibility of anything fall

Avoid installing the unit in the location where anything can fall down onto the unit. This may cause the breakdown or failure of the unit.

INSTALLATION

1. After unpackaging

Remove all transportation packaging materials and tapes. Open the doors and ventilate the unit. If the outside panels are dirty, clean them with a diluted neutral dishwashing detergent.

✧ Undiluted detergent can damage the plastic components. For the dilution, refer to the instruction of the detergent.

✧ After the cleaning with the diluted detergent, always wipe it off with a wet cloth. Then wipe off the panels with a dry cloth.

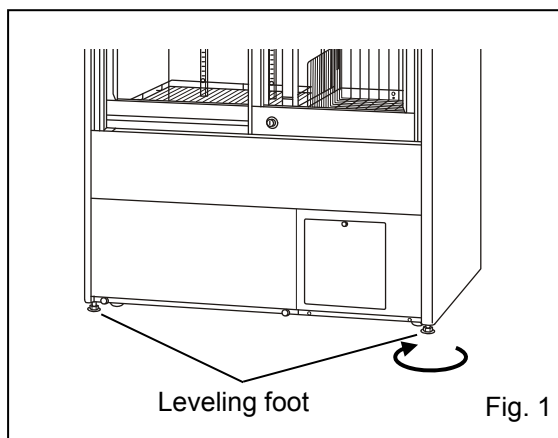
Note:

Remove the cable tie banding the power supply cord. Prolonged banding may cause the corrosion of the cord coating.

2. Installing the unit

Extend the leveling feet by rotating them to separate 2 front casters from the floor. [Fig. 1]

And adjust the leveling foot to level the unit.



3. Fixing the unit

Fix the unit to the wall by using 2 back spacers [Fig. 2] and a rope or chain.

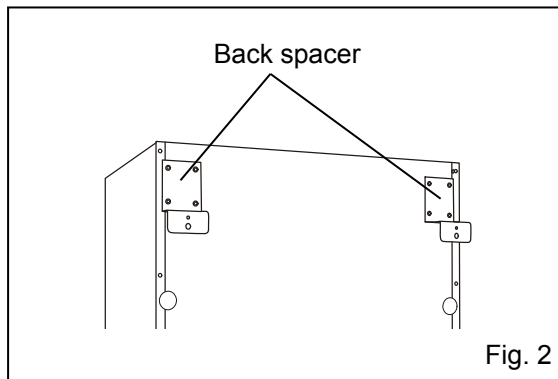
✧ The back spacers (which are also used to prevent the unit from toppling over) have a dual purpose: To provide a clearance between the unit and the wall behind it, and to prevent the unit toppling over.

4. Ground (earth) the unit

The ground (earth) is for preventing the electric shock in the case of the electrical insulation is somehow degraded. Always ground the unit at the time of installation.

✧ A 3-prong plug with grounding pole is provided to the power supply cord. There is no need for electric work for grounding.

✧ If the power supply outlet is not grounded, it will be necessary to install a ground by qualified engineers.



START-UP OF UNIT

Follow the procedures for the initial and consequent operations of the unit.

✧ At the recovery after power failure, the operation is start-up automatically with the setting before power failure. See page 20.

1. Connect the power supply cord to the dedicated outlet with appropriate rating.

<Important>

If the unit is unplugged or the power to the unit is interrupted, do not restart the unit for at least 5 minutes. This protects the compressor.

2. On start-up, the alarm buzzer sometimes operates. In this case, stop the alarm buzzer by pressing the alarm buzzer stop key (BUZZER). (This is not a malfunction.)

<Important>

Close the door securely. The door check indicator is lit when the door is open. The alarm buzzer activates when the door is opened for more than 2 minutes. The alarm is canceled when the door is closed.

3. Allow the chamber temperature to fall to 5 °C (The chamber temperature is set to 5 °C at the factory). Check the chamber temperature on the temperature display.

4. Switch on the light switch to check the fluorescent lamp is on. After checking, turn off the fluorescent lamp if the light is not necessary.

5. Set the desired chamber temperature. See page 14.

6. When the chamber temperature gets to the set temperature, begin slowly placing items into the chamber to minimize the temperature rise.

<Important>

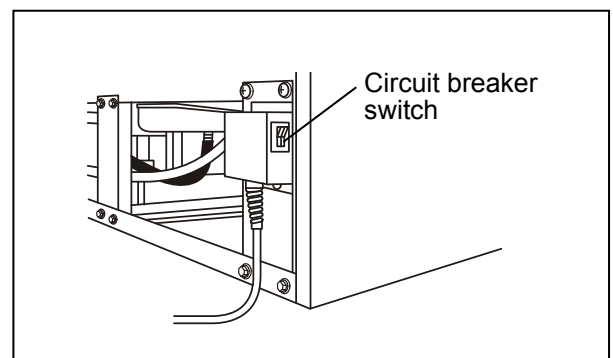
Always put the items on the shelf or in the drawer, not on the bottom of the chamber. Do not contact the items to the chamber walls.

Do not block the air intake vent nor air exhaust vent. Place the items with adequate space between them to keep the cool air circulation.

CAUTIONS FOR USAGE

This unit is equipped with a circuit breaker on the back. Make sure to switch ON this breaker before the unit starts to run. The figure shows the circuit breaker position.

When the operation of the unit is stopped by the circuit breaker, contact our sales representative or agent after disconnected the power supply plug.



CHAMBER TEMPERATURE SETTING

Set the chamber temperature according to the condition of use. This refrigerator can keep the stored items for long period under appropriate temperature.

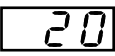
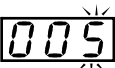
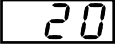
- Setting range of chamber temperature: between 2 °C and 14 °C
- Initial setting (factory setting): 5 °C

<Important>

The chamber temperature of 2 °C may cause partial freeze of stored items.

Example: Change the chamber temperature to 4 °C from 5 °C

► Following shows a sample setting. Set the desired chamber temperature according to the condition of use.

	Description of operation	Key operated	Indication after operation
1	Connect the power supply plug to the dedicated outlet. (only when start-up of unit)	----	The current chamber temperature is displayed. 
2	Press set key.	SET	The current setting (005) is displayed and the first digit blinks. 
3	Press up arrow key and scroll the figure to 4.		The display is changed to 004 from 005. 
4	Press set key.	SET	Set temperature is memorized and the current chamber temperature is displayed. 

◇ The setting mode returns to the temperature display mode automatically when 90 seconds has passed without any key operation (auto-return function). In this case, the setting is not accepted.

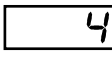
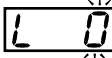
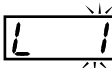
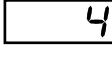
LOCK OF CHAMBER TEMPERATURE

The setting of chamber temperature can be protected to avoid an accidental change. When the lock is ON, change of chamber temperature setting through the key pad is not available.

- Initial setting (factory setting): lock OFF

Display	Mode	Function
L 0	Lock is OFF	Enable to change the chamber temperature setting
L 1	Lock is ON	Disable to change the chamber temperature setting

Example: Change the lock to ON from OFF (factory setting)

	Description of operation	Key operated	Indication after operation
		-----	The current chamber temperature is displayed. 
1	Press scroll key for 5 seconds.		The current setting (L 0) is displayed and the first digit blinks. 
2	Press up arrow key once.		The display is changed to L 1 from L 0. 
3	Press set key.	SET	Lock status is memorized and the current chamber temperature is displayed. 

✧ The setting mode returns to the temperature display mode automatically when 90 seconds has passed without any key operation (auto-return function). In this case, the setting is not accepted.

DEFROST OF EVAPORATOR

The following 2 kinds of defrost methods are provided with this refrigerator. Both defrost methods are controlled automatically.

■ Cycle defrost

To keep the chamber temperature stable, the refrigeration compressor is cycled on and off. During “off” period any frost which has accumulated on the evaporator is melted by energizing a defrost heater. This will not have any discernible effect on the chamber temperature.

■ Forced defrost

When the ambient humidity is high, or a large amount of damp product is being stored inside the chamber, there is a possibility that cycle defrost may not be enough to remove all of the frost on the evaporator. In this case, a forced defrost cycle can be initiated.

When the unit is operating under a forced defrost cycle, the current chamber temperature and dF is displayed alternately on the temperature display.

Once the forced defrost cycle is completed, normal operation resumes.



CAUTION

The unit may collect excessive frost on the evaporator if it is installed in high temperature and high humidity location. For example, the unit starts to defrost once a week with 2 °C setting in the ambient of 35 °C and 80 %R.H. **The chamber temperature goes up to approximately 10°C temporarily during defrosting.**

ALARM TEMPERATURE SETTING

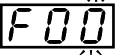
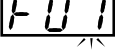
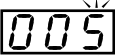
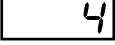
Setting of high temperature alarm

By setting the high temperature alarm, the alarm indicator and temperature display blinks and alarm buzzer operates (after 15 minutes) when the chamber temperature is over the setting of high temperature alarm. Set the high temperature alarm to protect the stored items against the damage resulting from temperature rise.

- Setting range of high temperature alarm:
Between chamber temperature plus 2 °C and chamber temperature plus 14 °C
- Initial setting (factory setting): chamber temperature plus 5 °C

Example: Change the high temperature alarm to chamber temperature plus 3 °C from chamber temperature plus 5 °C

► Following shows a sample setting. Set the desired high temperature alarm according to the condition of use.

	Description of operation	Key operated	Indication after operation
1		----	The current chamber temperature is displayed. 
2	Press up arrow key for 5 seconds.		F00 is displayed and the first digit blinks. 
3	Press up arrow key once.		The display is changed to F01 from F00. 
4	Press set key.	SET	The current setting (005) is displayed and the first digit blinks. 
5	Press up arrow key and scroll the figure to 3.		The display is changed to 003 from 005. 
6	Press set key.	SET	Set temperature is memorized and the current chamber temperature is displayed. 

◇ The setting mode returns to the temperature display mode automatically when 90 seconds has passed without any key operation (auto-return function). In this case, the setting is not accepted.

<Important>

The high temperature alarm may be activated after defrosting or a large amount of load is stored in the chamber. This is not a malfunction. The high temperature alarm is cancelled automatically when the chamber temperature reaches the set temperature.

ALARM TEMPERATURE SETTING

Setting of low temperature alarm

By setting the low temperature alarm, the alarm indicator and temperature display blinks and alarm buzzer operates (after 15 minutes) when the chamber temperature is below the setting of low temperature alarm. Set the low temperature alarm to protect the stored items against the damage resulting from temperature lowering.

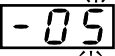
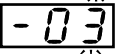
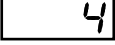
■ Setting range of low temperature alarm:

Between chamber temperature minus 2 °C and chamber temperature minus 14 °C

■ Initial setting (factory setting): chamber temperature minus 5 °C

Example: Change the low temperature alarm to chamber temperature minus 3 °C from chamber temperature minus 5 °C

► Following shows a sample setting. Set the desired low temperature alarm according to the condition of use.

	Description of operation	Key operated	Indication after operation
1		----	The current chamber temperature is displayed. 
2	Press up arrow key for 5 seconds.		F00 is displayed and the first digit blinks. 
3	Press up arrow key twice.		The display is changed to F02 from F00. 
4	Press set key.	SET	The current setting (-05) is displayed and the first digit blinks. 
5	Press up arrow key and scroll the figure to 3.		The display is changed to -03 from -05. 
6	Press set key.	SET	Set temperature is memorized and the current chamber temperature is displayed. 

◇ The setting mode returns to the temperature display mode automatically when 90 seconds has passed without any key operation (auto-return function). In this case, the setting is not accepted.

<Important>

Regardless of the setting of low temperature alarm, the alarm indicator and temperature display blinks and alarm buzzer operates if the chamber temperature is lower than 0°C to prevent the stored items from freezing.

SETTING OF DELAY OF DOOR ALARM

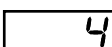
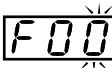
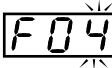
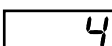
The door check indicator lights when the door is opened, and the alarm buzzer sounds with some delay to notice the door opening.

The delay time (between lighting of the door check indicator and activation of the alarm buzzer) can be changed. Set an appropriate delay time according to the condition of use to prevent the rise of chamber temperature resulting from inadequate door close.

- Setting range of delay time: between 1 minute and 15 minutes
- Initial setting (factory setting): 2 minutes

Example: Change the delay time to 3 minutes from 2 minutes

► Following shows a sample setting. Set the desired delay time according to the condition of use.

	Description of operation	Key operated	Indication after operation
1		-----	The current chamber temperature is displayed. 
2	Press up arrow key for 5 seconds.		F00 is displayed and the first digit blinks. 
3	Press up arrow key 4 times.		The display is changed to F04 from F00. 
4	Press set key.	SET	The current setting (002) is displayed and the first digit blinks. 
5	Press up arrow key and scroll the figure to 3.		The display is changed to 003 from 002. 
6	Press set key.	SET	Delay time is memorized and the current chamber temperature is displayed. 

◇ The setting mode returns to the temperature display mode automatically when 90 seconds has passed without any key operation (auto-return function). In this case, the setting is not accepted.

SETTING OF RINGBACK OF ALARM BUZZER

The alarm buzzer operates again after certain period (ringback time) even if the alarm buzzer is silenced by pressing the alarm buzzer stop key (BUZZER) when the same alarm status is continued. Set the ringback time to prevent the misidentify the alarm status.

- Setting range of ringback time: between 10 minutes and 60 minutes (10 minutes interval)

Display of setting: between 010 and 060 (000 display shows no ringback)

- Initial setting (factory setting): 30 minutes

The alarm buzzer will not recover once the alarm buzzer is silenced by pressing the alarm buzzer stop key (BUZZER) when the ringback time is set to 000. However, the alarm buzzer will operate if other alarm status is detected.

Example: Change the ringback time to 20 minutes from 30 minutes

► Following shows a sample setting. Set the desired ringback time according to the condition of use.

	Description of operation	Key operated	Indication after operation
1		----	The current chamber temperature is displayed.
2	Press up arrow key for 5 seconds.		F00 is displayed and the first digit blinks.
3	Press up arrow key 5 times.		The display is changed to F05 from F00.
4	Press scroll key once.		The second digit blinks.
5	Press up arrow key twice.		The display is changed to F25 from F05.
6	Press set key.	SET	The current setting (030) is displayed and the second digit blinks.
7	Press up arrow key and scroll the figure to 2.		The display is changed to 020 from 030.
8	Press set key.	SET	Ringback time is memorized and the current chamber temperature is displayed.

✧ The setting mode returns to the temperature display mode automatically when 90 seconds has passed without any key operation (auto-return function). In this case, the setting is not accepted.

✧ The setting should be performed during normal operation, not during alarm status.

OPERATION CHECK AFTER RECOVERY

After recovery from a power failure, the unit will resume operation automatically with the setting before power failure. Accordingly, there is no need for re-set however, always check the running status after recovery.

✧ The set value is memorized by nonvolatile memory during power failure.

REMOTE ALARM TERMINAL

The alarm status is noticed to a remote location when a remote alarm equipment (commercial item) is connected to the remote alarm terminal. It is recommended to install a remote alarm equipment (commercial item) when the refrigerator is installed in a desolate location so that an alarm status is noticed to an operator.

✧ Contact our sales representative or agent for the installation of a remote alarm equipment (commercial item).

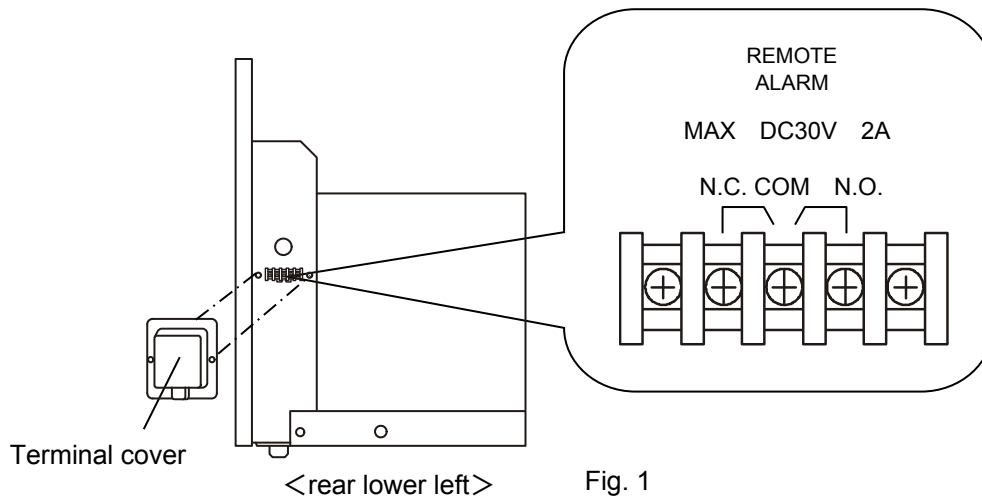
- Location of remote alarm terminal: rear lower left
- Allowable contact capacity: DC 30 V, 2 A

The alarm status of remote alarm terminal is cancelled by pressing the alarm buzzer stop key (BUZZER) since the remote alarm is operated in conjunction with alarm buzzer.

The remote alarm terminal is in alarm status when the power supply cord is unplugged because it is regarded as a power failure. In this case, the alarm status of remote alarm terminal is not cancelled by pressing the alarm buzzer stop key (BUZZER).

Connection of remote alarm terminal

1. Remove the terminal cover at rear lower left of the cabinet by unscrewing 2 screws. [Fig. 1]
2. Connect the lead wire of a remote alarm equipment (commercial item) to the terminal.
✧ It is recommended to use cables with a maximum length of 30 meters.
3. Replace the terminal cover and fix it by 2 screws.



ALARM FUNCTIONS

This unit has the alarm functions shown below.

Alarms	Situation	Indication	Alarm buzzer	Remote alarm
High temp. alarm	If the chamber temp. is higher than the high temp. alarm setting.	Alarm indicator blinks. Chamber temp. blinks.	Intermittent tone with 15 minutes delay.	Alarm status with 15 minutes delay.
Air circulation alarm	If the chamber temp. distribution gets worse. (chamber temperature at upper area is high)	Alarm indicator blinks.	Intermittent tone with 15 minutes delay.	Alarm status with 15 minutes delay.
Low temp. alarm	If the chamber temp. is lower than the low temp. alarm setting.	Alarm indicator blinks. Chamber temp. blinks.	Intermittent tone with 15 minutes delay.	Alarm status with 15 minutes delay.
0 °C alarm	If the chamber temp. is lower than 0 °C.	Alarm indicator blinks. Chamber temp. blinks.	Intermittent tone	Alarm status.
Power failure alarm	At power failure. If the power supply cord is unplugged.	-----	-----	Alarm status.
Power failure alarm (with MPR-48B1)	At power failure. If the power supply cord is unplugged.	Alarm indicator blinks.	Intermittent tone	Alarm status.
Door alarm	When the door is open.	Door check indicator blinks.	Intermittent tone with 2 minutes delay.	-----

✧ The alarm status of remote alarm terminal is cancelled by pressing the alarm buzzer stop key (BUZZER) since the remote alarm is operated in conjunction with alarm buzzer. (except for power failure alarm status)

Air circulation alarm

The alarm indicator blinks and the alarm buzzer sounds (after 15 minutes) when the sensor detects that the chamber temperature distribution is getting worse extremely. This may be caused by the block of cold air in the chamber due to the frost on the evaporator or stop of cooling fan motor.

✧ The air circulation is detected by the exclusive alarm sensor attached to the upper area of the chamber.

SELF DIAGNOSTIC FUNCTIONS

This unit has the self diagnostic functions shown below.

Self diagnostic	Situation	Indication	Alarm buzzer	Remote alarm
Sensor abnormality	If the thermal sensor is disconnected.	Alarm indicator blinks. E01 and -50 are displayed alternately.	Intermittent tone	Alarm status
	If the thermal sensor is short-circuited.	Alarm indicator blinks. E02 and 50 are displayed alternately.		
	If the defrost sensor is disconnected.	Alarm indicator blinks. E03 and chamber temp. are displayed alternately.		
	If the defrost sensor is short-circuited.	Alarm indicator blinks. E04 and chamber temp. are displayed alternately.		
	If the exclusive alarm sensor is disconnected.	Alarm indicator blinks. E13 and chamber temp. are displayed alternately.		
	If the exclusive alarm sensor is short-circuited.	Alarm indicator blinks. E14 and chamber temp. are displayed alternately.		
Battery check (with MPR-48B1)	When about 3 years has passed after plug in.	F-1 and chamber temp. are displayed alternately.	-----	-----
Setting check (with MPR-48B1)	When the battery switch is turned ON without setting after attachment.	E09 and chamber temp. are displayed alternately.	-----	-----

✧ The alarm status of remote alarm terminal is cancelled by pressing the alarm buzzer stop key (BUZZER) since the remote alarm is operated in conjunction with alarm buzzer. (except for power failure alarm status)

✧ The error code with smaller figure is displayed if some errors are occurred simultaneously.

✧ The chamber temperature is controlled at about 5°C by the defrost sensor if the thermal sensor is disconnected or short circuited.

SAFETY FUNCTIONS

This unit has the safety functions shown below.

Safety	Situation	Indication, Buzzer	Safety operation
Over-heat protection	When the chamber temp. is higher than about 28 °C.	-----	The defrost heater OFF. Fan motor for cold air circulation is OFF. Reset when the chamber temp. is lower than about 18 °C.
Over-cool protection	When the chamber temp. is lower than about 0 °C.	-----	Compressor OFF. Reset when the chamber temp. is higher than 6 °C.
Auto-return	When there is no key pressing in setting mode for 90 seconds.	-----	Finishing of setting mode and returning to temp. display mode.
Key lock	When the key lock is ON (L1).	-----	Change of chamber temp. setting is disable.

ROUTINE MAINTENANCE



WARNING

Always disconnect the power supply to the unit prior to any repair or maintenance of the unit in order to prevent electric shock or injury.

Ensure you do not inhale or consume medication or aerosols from around the unit at the time of maintenance. These may be harmful to your health.

Cleaning of exterior, interior, and accessories

Use a dry cloth to wipe off small amounts of dirt on the outside and inside of the unit and all accessories.

If the outside panels are dirty, clean them with a diluted neutral dishwashing detergent.

Wipe off the condensation on the glass or exterior of the cabinet with a dry soft cloth.

✧ Undiluted detergent can damage the plastic components. For the dilution, refer to the instruction of the detergent.

✧ After the cleaning with the diluted detergent, always wipe it off with a wet cloth. Then wipe off the cabinet or accessories with a dry cloth.

<Important> Never pour water onto or into the unit. This may cause electric shock or failure.



CAUTION

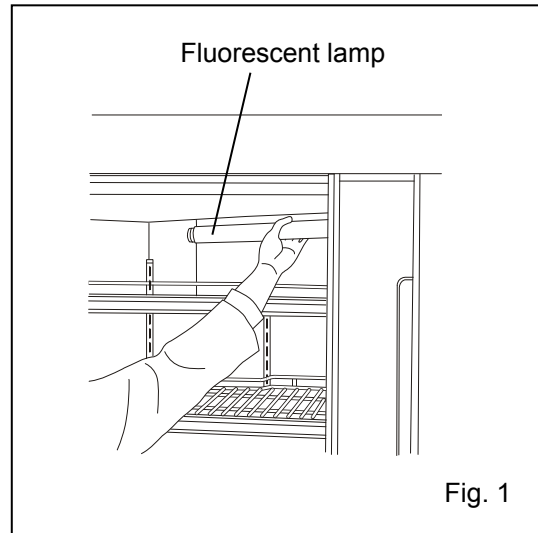
Do not use a brush, an acid, a thinner, laundry soap, a powder detergent, boiling water for cleaning. These cause damage of painted surface or failure of plastic and rubber components. Also, do not wipe the plastic and rubber components by a volatile material.

ROUTINE MAINTENANCE

Replacement of fluorescent lamp

Follow the procedure below when replacing a fluorescent lamp. The fluorescent lamp is located horizontally at upper front of the cabinet.

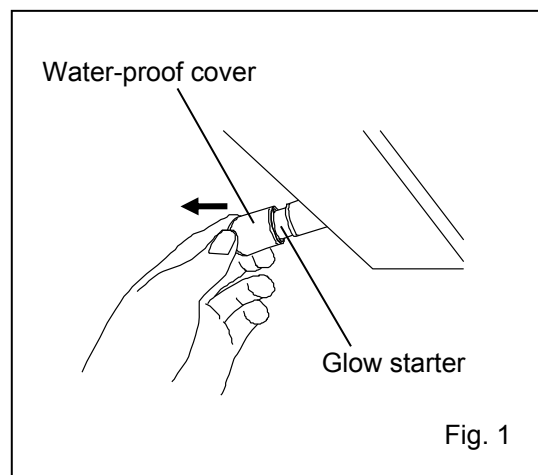
1. Turn off the light switch and disconnect the power supply plug of the refrigerator.
2. Move the stored items on the top shelf and in the top drawer (MPR-514R).
3. Pull the fluorescent lamp downwards from the stopper together with the lamp cover and wiring. [Fig. 1]
4. Remove the water-proof cover with the wiring on the both sides of the lamp cover.
5. Take out the fluorescent lamp and insert a new fluorescent lamp into the lamp cover.
6. Replace the water-proof cover on the both sides of the lamp cover and then replace the lamp cover to the stopper.
7. Replace the stored items on the top shelf and in the top drawer (MPR-514R) and connect the power supply cord to the outlet.



Replacement of glow starter

The glow starter is located on the right side of top front in the chamber.

1. Turn off the light switch and disconnect the power supply plug of the refrigerator.
2. Remove the water-proof cover and take out the glow starter. (glow starter; FG-1P) [Fig. 1]
3. Attach a new glow starter and replace the water-proof cover.
4. Connect the power supply cord to the outlet.



ROUTINE MAINTENANCE

Cleaning of evaporating tray

1. As shown in Fig. 1, remove 2 screws on the bottom of the unit cover and remove the unit cover.

2. The evaporating tray is installed in the back.
Pull the clips on the both sides of the mounting plate to loosen the mounting plate. Take out the evaporating tray with the mounting plate as shown in Fig. 2.

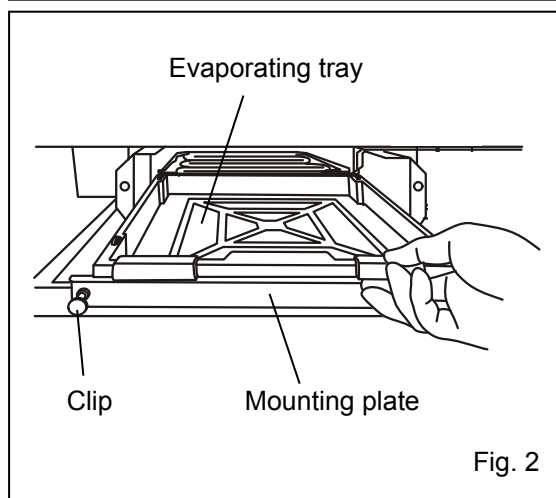
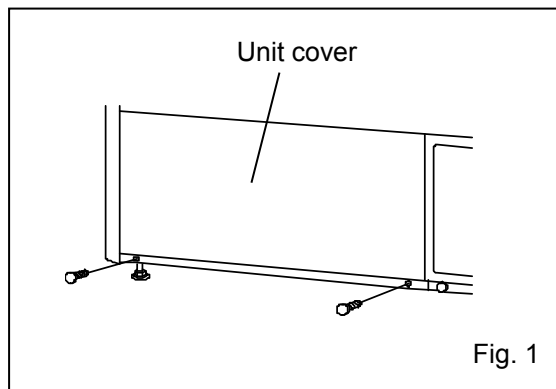
3. Dispose any accumulated water in the evaporating tray.

4. Wash the evaporating tray with a diluted neutral dishwashing detergent and clean water.

✧ Never use the hot or boiling water to clean the tray.

5. Replace the evaporating tray in its original position and push the clips on the both sides of the mounting plate to fix the evaporating tray.

6. Replace the unit cover and fix it with 2 screws.



<Important>

Improper installation of mounting plate or unit cover can cause abnormal noise. Install the mounting plate and unit cover surely and check there is no abnormal noise during operation.

TROUBLESHOOTING

If the unit malfunctions, check out the following before calling for service.

Malfunction	Check/Remedy
If nothing operates even when plugged in	□ The unit is not connected to the power supply properly. □ The capacity and voltage of power supply is not sufficient. □ There is a power failure. □ The circuit breaker on the supply circuit is activated. □ The fuse on the supply circuit is blown.
The alarm device is activated at start-up	✧ The alarm status is kept until the chamber temperature reaches the set temperature.
The alarm device is activated during operation	□ The unit is not connected to the power supply properly. □ The capacity and voltage of power supply is not sufficient. □ There is a power failure. □ The circuit breaker on the supply circuit is activated. □ The fuse on the supply circuit is blown. □ The chamber temperature setting was changed. □ The door was kept opened for a long time. □ The containers of high temperature (load) were put in the chamber. □ The door is opened.
No key operation is available	□ The key lock is set in ON (L 1). → Set the key lock in OFF (L 0).
During the setting mode, return to the temp. display mode	✧ The setting mode returns to the temperature display mode automatically when 90 seconds has passed without any key operation (auto-return function).
Noisy	□ The floor is not sturdy. □ The installation site is not level. □ The refrigerator is tilted. □ The cabinet contact the surrounding wall. □ The mounting plate or unit cover is not installed surely after cleaning the evaporating tray.
When chamber does not get cold enough	□ A large amount of items or warm product was put in the chamber. □ The door is frequently opened. □ The chamber temperature setting is high. □ The unit is in direct sunlight. □ The unit is not installed in the installation site specified in the operating instructions. □ The ventilation around the unit is blocked. □ There is a nearby heat source. □ The ambient temperature is too high. → The allowable ambient temperature is between -5 °C and +35 °C. □ The stored items is too much. □ The air exhaust vent is blocked up with containers. □ The access port is not covered. → The access port should be covered with the insulation and rubber caps when no use. □ The door seal is damaged. → If it is damaged, contact our sales representative or agent for replacement. □ Any foreign substance is located between door gaskets.

Note:

If the malfunction is not eliminated after checking the above items, or the malfunction is not shown in the above table, contact our sales representative or agent.

DISPOSAL OF UNIT



WARNING

If the unit is to be stored unused in an unsupervised area for an extended period **ensure that children do not have access and doors cannot be closed completely.**

The disposal of the unit should be accomplished by appropriate personnel. Always remove doors to prevent accidents such as suffocation.

Decontamination of unit

Before disposal of unit with biohazardous danger, decontaminate the unit to the extent possible by the user.

DISPOSAL OF UNIT

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Benutzerinformationen zur Entsorgung von elektrischen und elektronischen Geräten (private Haushalte)



Dieses Symbol auf Produkten und/oder begleitenden Dokumenten bedeutet, dass verbrauchte elektrische und elektronische Produkte nicht mit gewöhnlichem Haushaltsabfall vermischt werden sollen.

Bringen Sie zur ordnungsgemäßen Behandlung, Rückgewinnung und Recycling diese Produkte zu den entsprechenden Sammelstellen, wo sie ohne Gebühren entgegengenommen werden. In einigen Ländern kann es auch möglich sein, diese Produkte beim Kauf eines entsprechenden neuen Produkts bei Ihrem örtlichen Einzelhändler abzugeben.

Die ordnungsgemäße Entsorgung dieses Produkts dient dem Umweltschutz und verhindert mögliche schädliche Auswirkungen auf Mensch und Umgebung, die aus einer unsachgemäßen Handhabung von Abfall entstehen können. Genauere Informationen zur nächstgelegenen Sammelstelle erhalten Sie bei Ihrer Gemeindeverwaltung.

In Übereinstimmung mit der Landesgesetzgebung können für die unsachgemäße Entsorgung dieser Art von Abfall Strafgebühren erhoben werden.

Für Geschäftskunden in der Europäischen Union

Bitte treten Sie mit Ihrem Händler oder Lieferanten in Kontakt, wenn Sie elektrische und elektronische Geräte entsorgen möchten. Er hält weitere Informationen für Sie bereit.

Informationen zur Entsorgung in anderen Ländern außerhalb der Europäischen Union

Dieses Symbol ist nur in der Europäischen Union gültig.

Bitte treten Sie mit Ihrer Gemeindeverwaltung oder Ihrem Händler in Kontakt, wenn Sie dieses Produkt entsorgen möchten, und fragen Sie nach einer Entsorgungsmöglichkeit.

Tájékoztató az elektromos és elektronikus berendezések hulladékainak ártalmatlanításáról (háztartások)



Ha ez a szimbólum szerepel a termékeken és/vagy a mellékelt dokumentumokon, az elhasznált elektromos és elektronikus termékeket nem szabad keverni az általános háztartási szeméttel.

A megfelelő kezelés, visszanyerés és újrahasznosítás érdekében kérjük, szállítsák az ilyen termékeket a kijelölt gyűjtőhelyekre, ahol térítésmentesen átveszik azokat. Más lehetőségként bizonyos országokban a termékeket a helyi kiskereskedője is visszaveheti, amennyiben hasonló, új terméket vásárol.

A termék megfelelő ártalmatlanításával segít megőrizni az értékes erőforrásokat és megelőzheti a környezetre és az egészségre esetleg ártalmas hatásokat, amelyeket a hulladékok helytelen kezelése egyébként okozhat. Kérjük, lépjen kapcsolatba a helyi hatósággal további információért a legközelebbi kijelölt begyűjtő hely fellelhetőségét illetően.

A nemzeti törvények értelmében az ilyen hulladék helytelen ártalmatlanítása esetén büntetést szabhatnak ki. Amennyiben a használt termék elemet vagy akkumulátort tartalmaz, kérjük, a helyi környezetvédelmi előírások betartásával, külön ártalmatlanítsa ezeket.

Üzleti felhasználók az Európai Unióban

Amennyiben elektromos vagy elektronikus berendezést kíván ártalmatlanítani, kérjük, lépjen kapcsolatba kereskedőjével vagy szállítójával további információkért.

Tájékoztató az ártalmatlanítással kapcsolatban az Európai Unión kívüli országok esetében

Ez a szimbólum csak az Európai Unióban érvényes.

Amennyiben ezt a terméket kívánja ártalmatlanítani, kérjük, lépjen kapcsolatba a helyi hatósággal, illetve kereskedőjével, és érdeklődjön az ártalmatlanítás megfelelő módjáról.

Указания за изхвърляне на електрически и електронни отпадъци (за битови потребители)



Този символ върху изделия и-или в придружаваща документация означава, че електрически и електронни отпадъци не бива да се изхвърлят в общ контейнер.

Моля, да предавате тези отпадъци в пунктовете за вторични суровини, където ги приемат безплатно, за понататъшна обработка и рециклиране. В някои страни те могат да бъдат върнати на търговците на дребно, от които са купени, срещу закупуване на нови подобни изделия.

Правилното съхраняване и обработка на такива отпадъци спестява ценни ресурси и предпазва от негативно влияние върху здравето на хората и околната среда. За по-подробна информация относно пунктовете за вторични суровини се обърнете към местните органи.

Националните законодателства на някои страни предвиждат глоби за неправилно изхвърляне на отпадъци.

За промишлени потребители от Европейския съюз

Повече информация за изхвърляне на електрически и електронни отпадъци можете да получите от съответния доставчик или дилър.

За потребители от страните извън Европейския съюз

Този символ е валиден само в Европейския съюз.

За информация относно правилно изхвърляне на такива отпадъци потърсете местните органи на властта или дилъра си.

Πληροφορίες για την απόρριψη ηλεκτρικών και ηλεκτρονικών συσκευών (οικιακής χρήσης)



Αυτή η σήμανση στα προϊόντα και/ή στα συνοδευτικά τους έντυπα υποδηλώνει ότι τα εν λόγω ηλεκτρικά και ηλεκτρονικά προϊόντα δεν πρέπει να απορριφθούν μαζί με οικιακά απορρίμματα.

Προκειμένου να πραγματοποιηθεί η κατάλληλη επεξεργασία και ανακύκλωση, αποσύρετε αυτά τα προϊόντα σε ανάλογα σημεία περισυλλογής, όπου θα γίνουν δεκτά χωρίς χρέωση σας. Εναλλακτικά, σε ορισμένες χώρες, μπορείτε να επιστρέψετε τα προϊόντα σε τοπικά καταστήματα με σκοπό την αγορά ανάλογου νέου προϊόντος.

Η ορθή απόρριψη αυτού του προϊόντος βοηθάει στην εξοικονόμηση πολύτιμων φυσικών πόρων και στην αποφυγή τυχόν αρνητικών επιπτώσεων για την ανθρώπινη υγεία και το περιβάλλον, οι οποίες μπορεί να προκληθούν από λανθασμένη διαχείριση του εν λόγω απορρίμματος. Επικοινωνήστε με τις τοπικές αρχές για περισσότερες πληροφορίες σχετικά με το πλησιέστερο ανάλογο σημείο περισυλλογής.

Ενδέχεται να επιβληθούν κυρώσεις για λανθασμένη απόρριψη του εν λόγω προϊόντος, σύμφωνα με τη νομοθεσία της χώρας σας.

Προϊόντα επαγγελματικής χρήσης, Ευρωπαϊκή Ένωση

Αν επιθυμείτε να απορρίψετε ηλεκτρικό και ηλεκτρονικό εξοπλισμό, επικοινωνήστε με τον πωλητή ή τον προμηθευτή για περισσότερες πληροφορίες.

Πληροφορίες για την απόρριψη ηλεκτρικών και ηλεκτρονικών συσκευών σε χώρες εκτός της Ευρωπαϊκής Ένωσης

Αυτή η σήμανση ισχύει μόνο στην Ευρωπαϊκή Ένωση.

Αν επιθυμείτε να απορρίψετε αυτό το προϊόν, επικοινωνήστε με τις τοπικές αρχές ή καταστήματα πώλησης για να πληροφορηθείτε σχετικά με την ορθή διαδικασία απόρριψης.

Informations relatives à l'évacuation des déchets, destinées aux utilisateurs d'appareils électriques et électroniques (appareils ménagers domestiques)



Lorsque ce symbole figure sur les produits et/ou les documents qui les accompagnent, cela signifie que les appareils électriques et électroniques ne doivent pas être jetés avec les ordures ménagères.

Pour que ces produits subissent un traitement, une récupération et un recyclage appropriés, envoyez-les dans les points de collecte désignés, où ils peuvent être déposés gratuitement. Dans certains pays, il est possible de renvoyer les produits au revendeur local en cas d'achat d'un produit équivalent.

En éliminant correctement ce produit, vous contribuerez à la conservation des ressources vitales et à la prévention des éventuels effets négatifs sur l'environnement et la santé humaine qui pourraient survenir dans le cas contraire.

Afin de connaître le point de collecte le plus proche, veuillez contacter vos autorités locales.

Des sanctions peuvent être appliquées en cas d'élimination incorrecte de ces déchets, conformément à la législation nationale.

Utilisateurs professionnels de l'Union européenne

Pour en savoir plus sur l'élimination des appareils électriques et électroniques, contactez votre revendeur ou fournisseur.

Informations sur l'évacuation des déchets dans les pays ne faisant pas partie de l'Union européenne

Ce symbole n'est reconnu que dans l'Union européenne.

Pour vous débarrasser de ce produit, veuillez contacter les autorités locales ou votre revendeur afin de connaître la procédure d'élimination à suivre.

DISPOSAL OF UNIT

Oplysninger til brugerne om afhændelse af elektriske apparater og elektronisk udstyr (private husholdninger)



Når produkter og/eller medfølgende dokumenter indeholder dette symbol, betyder det, at elektriske apparater og elektronisk udstyr ikke må smides ud sammen med det almindelige husholdningsaffald.

For at sikre en korrekt behandling, indsamling og genbrug, skal du aflevere disse produkter på dertil indrettede indsamlingssteder, hvor de vil blive modtaget uden ekstra omkostninger. I nogle lande er der også mulighed for, at du kan indlevere dine produkter hos den lokale forhandler, hvis du køber et nyt og tilsvarende produkt.

Hvis du afhænder dette produkt på korrekt vis, vil det være med at spare på de værdifulde naturlige råstoffer og forhindre eventuelle negative påvirkninger på folkesundheden og miljøet, hvilket ellers kunne blive følgerne af en forkert håndtering af affaldet. Kontakt de lokale myndigheder for at få yderligere oplysninger om, hvor du kan finde det nærmeste indsamlingssted.

I visse lande vil en forkert afhændelse af affaldet medføre en bødestraf i henhold til de gældende bestemmelser på området.

Professionelle brugere i EU

Hvis du ønsker at smide elektriske apparater eller elektronisk udstyr ud, skal du kontakte din forhandler eller leverandør for at få yderligere oplysninger.

Oplysninger om afhændelse i lande uden for EU

Dette symbol er kun gyldigt i EU.

Hvis du ønsker at afhænde dette produkt, skal du rette henvendelse til de lokale myndigheder eller din forhandler. Her kan du få oplysninger om, hvordan du bedst kommer af med produktet.

Información sobre la eliminación para los usuarios de equipos eléctricos y electrónicos usados (particulares)



La aparición de este símbolo en un producto y/o en la documentación adjunta indica que los productos eléctricos y electrónicos usados no deben mezclarse con la basura doméstica general.

Para que estos productos se sometan a un proceso adecuado de tratamiento, recuperación y reciclaje, lívelos a los puntos de recogida designados, donde los admitirán sin coste alguno. En algunos países existe también la posibilidad de devolver los productos a su minorista local al comprar un producto nuevo equivalente.

Si desecha el producto correctamente, estará contribuyendo a preservar valiosos recursos y a evitar cualquier posible efecto negativo en la salud de las personas y en el medio ambiente que pudiera producirse debido al tratamiento inadecuado de desechos. Póngase en contacto con su autoridad local para que le informen detalladamente sobre el punto de recogida designado más cercano.

De acuerdo con la legislación nacional, podrían aplicarse multas por la eliminación incorrecta de estos desechos.

Para empresas de la Unión Europea

Si desea desechar equipos eléctricos y electrónicos, póngase en contacto con su distribuidor o proveedor para que le informe detalladamente.

Información sobre la eliminación en otros países no pertenecientes a la Unión Europea

Este símbolo sólo es válido en la Unión Europea.

Si desea desechar este producto, póngase en contacto con las autoridades locales o con su distribuidor para que le informen sobre el método correcto de eliminación.

Informácie pre užívateľov o likvidácii použitého elektrického a elektronického zariadenia (súkromné domácnosti)



Tento symbol na produktoch a/alebo na priložených dokumentoch znamená, že použité elektrické a elektronické zariadenia sa nesmú miešať so všeobecným domácim odpadom.

Pre správne zaobchádzanie, obnovu a recykláciu, odvezte prosím tieto produkty na určené zberné miesta, kde budú prijaté bez poplatku. V niektorých krajinách je možné tieto produkty vrátiť priamo miestnemu maloobchodu v prípade, ak si objednáte podobný nový výrobok.

Správna likvidácia týchto produktov pomôže ušetriť hodnotné zdroje a zabrániť možným negatívnym vplyvom na ľudské zdravie a prostredie, ktoré môžu vzniknúť z nesprávneho zaobchádzania s odpadom. Pre bližšie informácie o vašom najbližšom zbernom mieste kontaktujte, prosím, vaše miestne úrady.

V prípade nesprávnej likvidácie odpadu môžu byť uplatnené pokuty v súlade so štátnou legislatívou.

Pre právnické osoby v Európskej únii

Ak potrebujete zlikvidovať opotrebované elektrické a elektronické produkty, pre bližšie informácie kontaktujte, prosím, svojho miestneho predajcu alebo dodávateľa.

Informácie o likvidácii elektrického a elektronického odpadu v krajinách mimo Európskej únie

Tento symbol je platný iba v Európskej únii.

Ak si prajete zlikvidovať tento produkt, pre bližšie informácie kontaktujte, prosím, vaše miestne úrady alebo predajcu a informujte sa o správnej metóde likvidácie.

Informații pentru utilizatori, privind eliminarea echipamentelor electrice și electronice uzate (proprietate particulară)



Acest simbol, de pe produse și/sau documentele însoțitoare, are semnificația că produsele electrice și electronice uzate nu trebuie amestecate cu deșeurile menajere generale.

În scopul aplicării unui tratament corespunzător, recuperării și reciclării, vă rugăm să predați aceste produse la punctele de colectare desemnate, unde vor fi acceptate gratuit. Ca o alternativă, în unele țări, există posibilitatea să returnați produsele dumneavoastră uzate furnizorului cu amănuntul, în momentul achiziționării unui produs echivalent nou.

Eliminarea corectă a acestor produse uzate va ajuta la economisirea unor resurse valoroase și la prevenirea oricăror efecte potențial negative asupra sănătății umane și a mediului înconjurător, care, în caz contrar, ar putea fi cauzate prin manipularea necorespunzătoare a deșeurilor. Pentru mai multe detalii privind cele mai apropiate puncte de colectare, vă rugăm să contactați autoritățile locale.

Pentru eliminarea corectă a acestui tip de deșeuri se pot aplica amenzi, în conformitate cu legislația națională.

Pentru utilizatorii comerciali din Uniunea Europeană

Dacă doriți să vă debarași de echipamente electrice și electronice, vă rugăm să contactați distribuitorul sau furnizorul dumneavoastră, pentru mai multe informații.

Informații privind eliminarea deșeurilor în țările din afara Uniunii Europene

Acest simbol este valabil numai în Uniunea Europeană.

Dacă doriți să eliminați acest tip de produse uzate, vă rugăm să contactați autoritățile locale sau distribuitorul și să aflați metoda corectă de eliminare.

Informacja dla użytkowników o pozbywaniu się urządzeń elektrycznych i elektronicznych (dotyczy gospodarstw domowych)



Przedstawiony symbol umieszczony na produktach lub dołączonej do nich dokumentacji informuje, że niesprawnych urządzeń elektrycznych lub elektronicznych nie można wyrzucać razem z odpadami gospodarczymi.

Prawidłowe postępowanie w razie konieczności pozbycia się urządzeń elektrycznych lub elektronicznych, utylizacji, powtórnego użycia lub odzysku podzespół polega na przekazaniu urządzenia do wyspecjalizowanego punktu zbiórki, gdzie będzie przyjęte bezpłatnie. W niektórych krajach produkt można oddać lokalnemu dystrybutorowi podczas zakupu innego urządzenia.

Prawidłowa utylizacja urządzenia umożliwia zachowanie cennych zasobów i uniknięcie negatywnego wpływu na zdrowie i środowisko, które może być zagrożone przez nieodpowiednie postępowanie z odpadami. Szczegółowe informacje o najbliższym punkcie zbiórki można uzyskać u władz lokalnych.

Nieprawidłowa utylizacja odpadów zagrożona jest karami przewidzianymi w odpowiednich przepisach lokalnych.

Użytkownicy biznesowi w krajach Unii Europejskiej

W razie konieczności pozbycia się urządzeń elektrycznych lub elektronicznych, prosimy skontaktować się z najbliższym punktem sprzedaży lub z dostawcą, którzy udzielą dodatkowych informacji.

Pozbywanie się odpadów w krajach poza Unią Europejską

Taki symbol jest ważny tylko w Unii Europejskiej.

W razie potrzeby pozbycia się niniejszego produktu prosimy skontaktować się z lokalnymi władzami lub ze sprzedawcą celem uzyskania informacji o prawidłowym sposobie postępowania.

Informācija lietotājiem par elektrisko un elektronisko iekārtu atkritumiem (privāts mājāsaimniecības)



Šis simbols uz produktiem un/vai pievienotajiem dokumentiem nozīmē, ka no atkritumiem paredzētajām elektriskajām un elektroniskajām iekārtām nedrīkst atbrīvoties kopā ar pārējiem mājāsaimniecības atkritumiem.

Pienācīgai apstrādei, reģenerācijai un pārstrādei, lūdz, nogādāiet šos produktus tiem paredzētajos savākšanas punktos, kur tie tiks pieņemti bez maksas. Tāpat dažās valstīs jūs iespējams varēsiet nogādāt produktus pie tuvākā mazumtirgotāja, pērkot jaunu līdzvērtīgu produktu.

Pareiza atbrīvošanās no šiem produktiem palīdzēs ietaupīt vērtīgus resursus un izvairīties no potenciāli negatīvas iedarbības uz cilvēka veselību un apkārtni, kas varētu notikt, ja atkritumi netiktu pienācīgi apstrādāti. Lūdz, sazinieties ar vietējām varas iestādēm, lai saņemtu sīkāku informāciju par tuvāko šādiem atkritumiem paredzēto savākšanas punktu.

Var tikt piemēroti sodi par nepareizi šādu atkritumu apstrādi, atbilstoši valsts likumdošanai.

Komerclietotājiem Eiropas Savienībā

Ja vēlaties atbrīvoties no elektrisko un elektronisko iekārtu atkritumiem, lūdz, sazinieties ar tuvāko dīleri vai piegādātāju, lai saņemtu sīkāku informāciju.

Informācija par atbrīvošanos no šādiem atkritumiem valstīs, kas atrodas ārpus Eiropas Savienības

Šis simbols ir derīgs tikai Eiropas Savienībā.

Ja vēlaties atbrīvoties no šī produkta, lūdz, sazinieties ar vietējām varas iestādēm vai tuvāko dīleri un uzziniet pareizo veidu, kā atbrīvoties no šādiem atkritumiem.

DISPOSAL OF UNIT

Informace pro uživatele k likvidaci elektrických a elektronických zařízení (domácnosti)



Tento symbol na produktech anebo v průvodních dokumentech znamená, že použité elektrické a elektronické výrobky nesmí být přidány do běžného komunálního odpadu.

Ke správné likvidaci, obnově a recyklaci doručte tyto výrobky na určená sběrná místa, kde budou přijata zdarma. Alternativně v některých zemích můžete vrátit své výrobky místnímu prodejci při koupi ekvivalentního nového produktu.

Správnou likvidací tohoto produktu pomůžete zachovat cenné přírodní zdroje a napomáháte prevenci potenciálních negativních dopadů na životní prostředí a lidské zdraví, což by mohly být důsledky nesprávné likvidace odpadů. Další podrobnosti si vyžádejte od místního úřadu nebo nejbližšího sběrného místa.

Při nesprávné likvidaci tohoto druhu odpadu mohou být v souladu s národními předpisy uděleny pokuty.

Pro podnikové uživatele v zemích Evropské unie

Chcete-li likvidovat elektrická a elektronická zařízení, vyžádejte si potřebné informace od svého prodejce nebo dodavatele.

Informace k likvidaci v ostatních zemích mimo Evropskou unii

Tento symbol je platný jen v Evropské unii.

Chcete-li tento výrobek zlikvidovat, vyžádejte si potřebné informace o správném způsobu likvidace od místních úřadů nebo od svého prodejce.

Kullanılmayan Elektrikli ve Elektronik Aletlerin Elden Çıkarılmasına İlişkin Bilgi (bireysel kullanıcılar)



Ürünlerde ve/veya üründe birlikte gelen dokümanlarda yer alan bu simge, ömrü sona ermiş elektrikli ve elektronik ürünlerin genel ev çöptüne karıştırılmaması gerektiğini ifade eder.

Uygun biçimde toplanmaları, işlenmeleri ve geri dönüştürmeleri için lütfen bu tür ürünleri, bunlar için öngörülen ve ücretsiz olarak kabul edilen toplama noktalarına götürün. Ayrıca bazı ülkelerde eski ürününüzü, yeni eşdeğer bir ürün satın aldığınız yerel satıcınıza teslim edebilirsiniz.

Ürünün doğru bir şekilde elden çıkarılması, değerli kaynakları korumaya yardımcı olacak ve yanlış biçimde atık gidermenin insan sağlığına ve çevreye verebileceği olası negatif etkileri önleyecektir. Çevrenizdeki en yakın toplama noktasına ilişkin daha ayrıntılı bilgi almak için lütfen yerel yetkililere başvurun.

Ürünlerin uygun biçimde elden çıkarılmaması durumunda, ilgili ülkenin yasal düzenlemelerine bağlı olarak cezalar uygulanabilir.

Avrupa Birliği dahilindeki kurumsal kullanıcılar için

Elektrikli ve elektronik aletlerin elden çıkarmak istiyorsanız, ayrıntılı bilgi için lütfen satıcınıza veya tedarikçinize başvurun.

Avrupa Birliği dışındaki ülkelerde atık gidermeye ilişkin bilgi

Bu simge yalnızca Avrupa Birliği sınırları içerisinde geçerlidir. Bu ürünü elden çıkarmak istiyorsanız, lütfen yerel yetkililere veya satıcınıza başvurun ve uygun atık giderme yöntemi konusunda bilgi alın.

Informações sobre a eliminação de resíduos para utilizadores de equipamentos eléctricos e electrónicos (utilizadores particulares)



Este símbolo nos produtos e/ou documentos anexos significa que os produtos eléctricos e electrónicos usados não devem ser misturados com os resíduos urbanos indiferenciados.

Para efectuar um tratamento, recuperação e reciclagem correctos, leve estes produtos para pontos de recolha próprios para o efeito, onde serão aceites gratuitamente. Em alternativa, em alguns países, poderá devolver os produtos ao seu revendedor local, aquando da compra de um produto novo equivalente.

A eliminação correcta deste produto ajudará a poupar recursos valiosos e evitar quaisquer potenciais efeitos negativos na saúde humana e no ambiente, que poderiam resultar de um tratamento incorrecto de resíduos. Contacte as autoridades locais para obter mais informações sobre o ponto de recolha mais perto de si.

Poderão ser aplicadas multas pela eliminação incorrecta deste resíduo, de acordo com as leis locais.

Para utilizadores não particulares na União Europeia

Se pretender eliminar equipamento eléctrico e electrónico, contacte o seu revendedor ou fornecedor para obter mais informações.

Informações sobre a eliminação noutros países fora da União Europeia

Este símbolo apenas é válido na União Europeia.

Se pretender eliminar este produto, contacte as suas autoridades locais ou revendedor e peça informações sobre o método de eliminação correcto.

Informacija naudotojams dėl nenaudojamos elektros ir elektroninės įrangos utilizacijos (naudojantiems ją buityje)



Šis simbolis, pažymėtas ant gaminių ir / arba lydimųjų dokumentų, reiškia, kad nenaudojamą elektros ir elektroninių gaminių negalima maišyti su įprastomis buitinėmis atliekomis.

Tam, kad gaminiai būtų tinkamai apdoroti, atnaujinti arba perdirbti, prašom nugabenti juos į paskirtuosius surinkimo punktus, kur juos priims nemokamai. Be to, kai kuriose šalyse jūs galite gražinti turimus gaminius vietiniam mažmeniniam prekybininkui, įsigiję analogišką naują gaminį.

Tinkama šio gaminio utilizacija padės sutaupyti vertingų išteklių ir užkirs kelią galimam neigiamam poveikiui žmonių sveikatai bei aplinkai, kuris gali kilti netinkamai tvarkant atliekas. Dėl informacijos apie artimiausią paskirtąjį surinkimo punktą prašom kreiptis į vietos valdžios įstaigas.

Pagal jūsų šalies įstatymus, dėl netinkamos šių atliekų utilizacijos jums gali būti skirta bauda.

Verslo naudotojams Europos Sąjungoje

Jei norite išmesti elektros ir elektroninę įrangą, dėl išsamesnės informacijos prašom kreiptis į jus aptarnaujančią prekybą atstovą arba tiekėją.

Informacija dėl utilizacijos šalys – ne Europos Sąjungos narėse

Šis simbolis galioja tik Europos Sąjungoje.

Jei norite išmesti šį gaminį, dėl tinkamo utilizacijos būdo teiraukitės vietos valdžios įstaigų arba prekybos atstovo.

Informatie over het weggooien van elektrische en elektronische apparatuur (particulieren)



Dit symbool betekent in Europa dat gebruikte elektrische en elektronische producten niet bij het normale huishoudelijke afval mogen.

Lever deze producten in bij de aangewezen inzamelingspunten, waar ze gratis worden geaccepteerd en op de juiste manier worden verwerkt, teruggewonnen en hergebruikt. In Nederland kunt u uw producten bij uw winkelier inleveren bij de aanschaf van een vergelijkbaar nieuw product.

Wanneer u dit product op de juiste manier als afval inlevert, spaart u waardevolle hulpbronnen en voorkomt u potentiële negatieve gevolgen voor de volksgezondheid en het milieu, die anders kunnen ontstaan door een onjuiste verwerking van afval. Neem contact op met uw gemeente voor meer informatie over het dichtstbijzijnde inzamelingspunt of raadpleeg www.nvmp.nl, www.ictoffice.nl of www.stibat.nl.

Voor zakelijke gebruikers in de Europese Unie

Neem voor het weggooien van elektrische en elektronische apparatuur contact op met uw leverancier voor verdere informatie.

Informatie over verwijdering van afval in landen buiten de Europese Unie

Dit symbool is alleen geldig in de Europese Unie.

Neem wanneer u dit product wilt weggooien, contact op met de lokale overheid of uw leverancier en vraag wat de juiste verwijderingsmethode is.

Informacije o odlaganju u otpad za korisnike otpadne električne i elektroničke opreme (privatna domaćinstva)



Ovaj simbol na proizvodima i/ili pripadajućim dokumentima znače da se upotrijebljeni električni i elektronički proizvodi ne smiju miješati s običnim otpadom iz domaćinstava.

Za pravilnu obradu, iskorištavanje i recikliranje odnesite ove proizvode u namjenske centre za zbrinjavanje otpada gdje će ih besplatno preuzeti. Osim toga, u nekom državama ćete moći svoje proizvode vratiti lokalnom trgovcu prilikom kupnje ekvivalentnog proizvoda.

Pravilnim odlaganjem ovog proizvoda sačuvat ćete vrijedne resurse i spriječiti moguće negativne učinke na ljudsko zdravlje i okoliš koji bi se inače pojavili zbog neodgovarajućeg rukovanja otpadom. Za dodatne pojedinosti o najbližem namjenskom centru za zbrinjavanje otpada obratite se lokalnoj upravi.

Mogu se primijeniti kazne za neodgovarajuće odlaganje ovog otpada u skladu s lokalnim zakonima.

Za poslovne korisnike u Europskoj uniji

Ako želite baciti električnu i elektroničku opremu, obratite se prodavatelju ili dobavljaču za dodatne informacije.

Informacije o odlaganju u drugim zemljama izvan Europske unije

Ovaj simbol je važeći samo u Europskoj uniji.

Ako želite odbaciti ovaj proizvod, molimo kontaktirati lokalne vlasti ili prodavatelja i pitati za ispravnu metodu odlaganja.

Information om kassering för användare av elektrisk & elektronisk utrustning (privata konsumenter)



Om denna symbol finns på produkterna och/eller medföljande dokumentation, betyder det att förbrukade elektriska och elektroniska produkter inte ska blandas med vanliga hushållssopor.

För korrekt hantering, inhämtning och återvinning, ska dessa produkter lämnas på återvinningscentraler, där de tas emot utan kostnad. I vissa länder kan du som ett alternativ lämna in dina produkter hos återförsäljaren, när du köper en motsvarande, ny produkt.

Om denna produkt avyttras korrekt sparar värdefulla resurser och eventuellt negativa effekter på den mänskliga hälsan och miljön förhindras, vilket kan bli fallet vid felaktigt avyttring. Kontakta din lokala myndighet för mer information om var din närmsta återvinningsstation finns.

Böter kan tillämpas vid felaktig avyttring av dessa sopor, i enlighet med lagstiftningen i landet.

För företagsanvändare inom den Europeiska gemenskapen

Om ni vill kassera elektrisk eller elektronisk utrustning, vänligen kontakta er återförsäljare eller leverantör för mer information.

Information om kassering i övriga länder utanför den Europeiska gemenskapen

Denna symbol gäller bara inom den Europeiska gemenskapen.

Om du vill kassera denna produkt ska du kontakta de lokala myndigheterna eller din återförsäljare, och fråga om korrekt avyttringsmetod.

DISPOSAL OF UNIT

Informacije za uporabnike o odstranitvi odpadne električne in elektronske opreme (zasebna gospodinjstva)



Ta simbol, ki se nahaja na izdelkih in/ali priloženih dokumentih, pomeni, da se rabljeni električni in elektronski izdelki ne smejo mešati z navadnimi gospodinjstskimi odpadki. Za primerno ravnanje, predelavo in reciklažo vas prosimo, da odnesete te izdelke na ustrezne zbirne točke, kjer bodo sprejeti brezplačno. V nekaterih državah boste lahko vrnili vaše izdelke v vašo lokalno prodajalno, v zameno nakupa novega izdelka. Pravilno odstranjevanje teh izdelkov bo pomagalo obvarovati dragocene vire in preprečilo katerekoli negativne vplive na človeško zdravje in okolje, ki lahko nastanejo pri neprimernem ravnanju z odpadki. Prosimo vas, da za nadaljnje informacije o vaših najbližji zbirni točki kontaktirate vaše lokalne oblasti. V skladu z nacionalno zakonodajo se zaradi nepravilnega odstranjevanja odpadkov izrečejo primerne kazni.

Za poslovne uporabnike v Evropski Uniji

Če se želite znebiti električne in elektronske opreme vas prosimo, da za nadaljnje informacije kontaktirate vašega prodajalca ali dobavitelja.

Informacije o odstranitvi v drugih državah, ki so izven Evropske Unije

Simbol je veljaven samo v Evropski Uniji.

Če se želite znebiti tega izdelka vas prosimo, da kontaktirate vaše lokalne oblasti ali prodajalca in jih povprašate o ustrezni metodi odstranjevanja.

Informazioni per gli utenti sullo smaltimento di apparecchiature elettriche ed elettroniche obsolete (per i nuclei familiari privati)



Questo simbolo sui prodotti e/o sulla documentazione di accompagnamento significa che i prodotti elettrici ed elettronici usati non devono essere mescolati con i rifiuti domestici generici.

Per un corretto trattamento, recupero e riciclaggio, portare questi prodotti ai punti di raccolta designati, dove verranno accettati gratuitamente. In alternativa, in alcune nazioni potrebbe essere possibile restituire i prodotti al rivenditore locale, al momento dell'acquisto di un nuovo prodotto equivalente.

Uno smaltimento corretto di questo prodotto contribuirà a far risparmiare preziose risorse ed evitare potenziali effetti negativi sulla salute umana e sull'ambiente, che potrebbero derivare, altrimenti, da uno smaltimento inappropriato. Per ulteriori dettagli, contattare la propria autorità locale o il punto di raccolta designato più vicino.

In caso di smaltimento errato di questo materiale di scarto, potrebbero venire applicate delle pene, in base alle leggi nazionali.

Per gli utenti aziendali nell'Unione Europea

Qualora si desideri smaltire apparecchiature elettriche ed elettroniche, contattare il rivenditore o il fornitore per ulteriori informazioni.

Informazioni sullo smaltimento in nazioni al di fuori dell'Unione Europea

Questo simbolo è valido solo nell'Unione Europea.

Qualora si desideri smaltire questo prodotto, contattare le autorità locali o il rivenditore e chiedere informazioni sul metodo corretto di smaltimento.

Informazzjoni dwar ir-Rimi għall-Utenti ta' Skart ta' Tagħmir Elettriku u Elettroniku (unitajiet domestiċi privati)



Dan is-simbolu fuq il-prodotti u/jew id-dokumenti ta' appoggj ifisser li prodotti elettrici u elettronici ma għandhomx jiġihallu ma' skart domestiku ġenerali.

Għal trattament, irkupru jew riciklaġġ xieraq, jekk jogħġbok f'ha dawn il-prodotti f'punti ta' għir apposta, fejn jiġu accettati fuq bażi mingħajr ħlas. Inkella, f'xi pajjiżi tista' tirritorna l-prodotti tiegħek għand bejjiegh bl-imnut lokali max-xiri ta' prodott għid ekwivalenti.

Billi tarmi dan il-prodott b'mod korrett tkun qed tgħin sabiex tikkonserva riziorsi prezzjużi u tipprevjeni kwalunkwe effetti negattivi fuq is-saħħa tal-bniedem u l-ambjent li inkella jista' jirrizulta minn trattament ta' skart mhux xieraq. Jekk jogħġbok ikkuntattja lill-awtorità lokali tiegħek għal aktar dettalji dwar l-egreġ punt tal-għir deżinjat tiegħek.

F'każ ta' rimi mhux korrett ta' dan l-iskart jistgħu japplikaw penali, f'konformità mal-leġislazzjoni nazzjonali.

Għal utenti tan-negozju fl-Unjoni Ewropea

Jekk tixtieq tarmi tagħmir elettriku u elettroniku, jekk jogħġbok ikkuntattja lin-negozjant jew lill-fornitur tiegħek għal aktar informazzjoni.

Informazzjoni dwar ir-Rimi f'Pajjiżi oħra barra mill-Unjoni Ewropea

Dan is-simbolu huwa validu biss fl-Unjoni Ewropea.

Jekk tixtieq tarmi dan il-prodott, jekk jogħġbok ikkuntattja lill-awtoritajiet lokali jew lin-negozjant tiegħek u staqsihom għall-metodu ta' rimi korrett.

Tietoja sähkö- ja elektroniikkalaitteiden hävittämisestä (kotitaloudet)



Tämä symboli tuotteissa ja/tai niiden käyttöohjeissa osoittaa, että käytettyjä sähkö- ja elektroniikkalaitteita ei saa hävittää tavallisen kotitalousjätteen mukana.

Jotta laitteet käsitellään asianmukaisesti, toimita ne kierrätyspisteisiin, jotka vastaanottavat tällaisia laitteita ilmaiseksi. Joissakin maissa kuluttajat voivat myös palauttaa käytetyt laitteet paikalliselle jälleenmyyjälle, jos he ostavat tilalle uuden vastaavanlaisen tuotteen.

Tämän tuotteen asianmukainen hävittäminen säästää luonnonvaroja ja estää mahdollisesti muutoin syntyviä ympäristö- ja terveysongelmia. Lähitöllä sijaitsevista kierrätyspisteistä saa lisätietoja paikallisilta viranomaisilta.

Jätealassa ja rikoslaissa on säädetty rangaistus roskaamisesta ja lainvastaisesta hävittämisestä.

Yrityskäyttäjät Euroopan unionissa

Jos haluat hävittää sähkö- ja elektroniikkalaitteita, kysy lisätietoja jälleenmyyjältä tai tavarantoimittajalta.

Tietoja jätteiden käsittelystä Euroopan unionin ulkopuolella

Tämä symboli on käytössä vain Euroopan unionissa.

Jos haluat hävittää tämän tuotteen, tiedustele oikeaa hävitystapaa paikallisilta viranomaisilta tai jälleenmyyjältä.

Informasjon for brukerne om kassering av elektrisk og elektronisk utstyr (private husholdninger)



Når et produkt og/eller medfølgende dokumenter er merket med dette symbolet, betyr det at det elektriske eller elektroniske utstyret ikke bør kasseres sammen med vanlig husholdningsavfall.

For at det kasserte utstyret skal bli behandlet, gjenvunnet og resirkulert på riktig måte, må du bringe det til nærmeste innsamlingspunkt eller gjenvinningsstasjon. I enkelte land kan du alternativt returnere produktene dine til den lokale forhandleren, eventuelt mot kjøp av et tilsvarende nytt produkt.

Hvis du kasserer dette produktet på riktig måte, bidrar til du til å bevare verdifulle ressurser og til å motvirke de negative virkningene på miljøet og den menneskelige helse som kan forårsakes av feilaktig avfallsbehandling. Ta kontakt med de lokale myndigheter hvis du ønsker ytterligere informasjon om ditt nærmeste innsamlingspunkt.

Feilaktig kassering av dette utstyret kan kanskje bøtelegges, avhengig av nasjonale lover og regler.

For bedriftskunder i den Europeiske Union

Hvis du ønsker å kassere elektrisk og elektronisk utstyr, må du kontakte forhandleren eller leverandøren din for å få mer informasjon.

Informasjon om kassering i land utenfor den Europeiske Union

Dette symbolet er kun gyldig i den Europeiske Union.

Hvis du ønsker å kassere dette produktet, må du ta kontakt med forhandleren eller de lokale myndigheter og spørre dem om hvordan det skal kasseres på riktig måte.

Kasutajate elektri- ja elektroonikaseadmete kõrvaldamist puudutav teave (eramajapidamised)



See toodetel ja/või kaasas olevates dokumentides märgitud sümbol tähendab, et kasutatud elektri- ja elektroonikaseadmeid ei tohi kõrvaldada koos olmejäätmetega.

Korrektseks töötlemiseks, taaskasutuseks ja ringlussevõtuks viige need tooted kogumispunkti, kus need tasuta vastu võetakse. Samuti on mõnes riigis võimalik tooted kohalikule edasimüüjale tagastada juhul, kui ostetakse uus võrdväärne toode.

Selle toote korrektne kõrvaldamine aitab meil väärtuslikke ressursse säästa ning vältida inimeste tervisele ja keskkonnale võimalikke negatiivseid mõjusid, mis võivad tekkida sobimatu jäätmekäitluse tagajärjel. Pöörduge oma kohaliku omavalitsuse poole, et saada lisateavet teile lähima kogumispunkti kohta.

Selle jäätme sobimatu kõrvaldamise eest võidakse kohaldada siseriiklikele õigusnormidele vastavaid karistusi.

Euroopa Liidu ärikasutajatele

Kui soovite elektri- ja elektroonikaseadmeid kõrvaldada, pöörduge lisa teabe saamiseks oma edasimüüja või tarnija poole.

Kõrvaldamist puudutav teave muudes riikides väljaspool Euroopa Liitu

See sümbol kehtib ainult Euroopa Liidus.

Kui soovite seda toodet kõrvaldada, pöörduge oma kohaliku omavalitsuse või edasimüüja poole ning küsige neilt korrektsete kõrvaldamismeetmete kohta.

Информације за корисника о одлагању Отпадне електричне и електронске опреме (приватна домаћинства)



Овај симбол на производима и/или пратећој документацији значи да искоришћене електричне и електронске производе не треба мешати са обичним кућним смећем.

Да би ови производи били правилно третирани, поново искоришћени и рециклирани, однесите их на предвиђена сабирна места где ће бити бесплатно прихваћени. Друга могућност је да у неким земљама можете да вратите производе локалном продавцу када купите еквивалентни нови производ.

Одлагање овог производа на правилан начин штеди драгоцене ресурсе и спречава потенцијалне негативне ефекте на здравље људи и животну средину, који би иначе настали због неправилног руковања отпадом. Обратите се локалним властима за више детаља о најближем предвиђеном сабирном месту.

Неправилно одлагање овог отпада може бити кажњиво по националним законима.

За пословне кориснике у Европској унији

Ако желите да одложите електричну и електронску опрему, обратите се свом продавцу или добављачу за више информација.

Информације о одлагању у другим земљама изван Европске уније

Овај симбол се односи само на Европску унију.

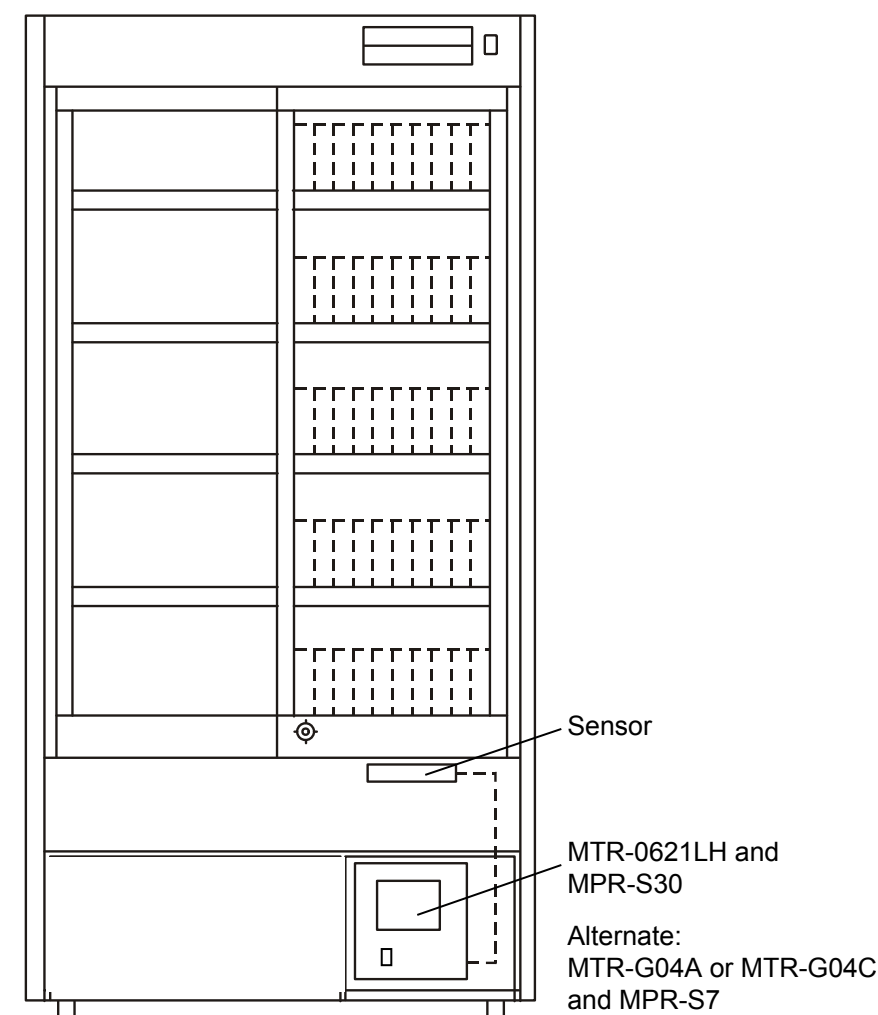
Ако желите да одложите овај производ у отпад, обратите се локалним властима или продавцу и распитајте се о правилном начину одлагања.

TEMPERATURE RECORDER

The chamber temperature is recorded and maintained by attaching a temperature recorder available as an optional component. For the attachment of a temperature recorder, an optional recorder fixing is necessary.

Temperature recorder	Recorder fixing
MTR-0621LH	MPR-S30
MTR-G04A (AC 100 V to 150 V) MTR-G04C (AC 220 V to 240 V)	MPR-S7

✧ Contact our sales representative or agent for the attachment of a temperature recorder. For the usage of the temperature recorder, refer to an instruction manual enclosed with the temperature recorder.



MPR-514R

✧ For MPR-514, the installation is same as for MPR-514R.



WARNING

Always disconnect the power supply plug before installing a temperature recorder in order to prevent electric shock or injury.

INSTALLATION OF TEMPERATRUE RECORDER

Attachment of MTR-0621LH

1. Remove the bottom shelf (bottom right drawer for MPR-514R) in the chamber.

✧For MPR-514, remove the doors before taking out the bottom shelf.

2. Unscrew the screw fixing the panel cover at the space for automatic temperature recorder and open the panel cover. [Fig. 1]

3. Remove the panel cover from the shaft by pushing the shaft edge to the right and left side respectively.

4. Fix the temperature recorder to the frame in the recorder fixing (MPR-S30) referring to the instruction manual enclosed with the recorder fixing. [Fig. 2]

5. Unscrew 2 screws on the air intake vent cover (right side) on the front bottom and then remove the air intake vent cover. [Fig. 3]

<Important>

A sensor is fixed to the back side of the air intake vent cover. Do not pull the air intake vent cover excessively.

6. Take out the insulation in the sensor port and pass the recorder sensor into the chamber through the sensor port from the space for temperature recorder. [Fig. 4]

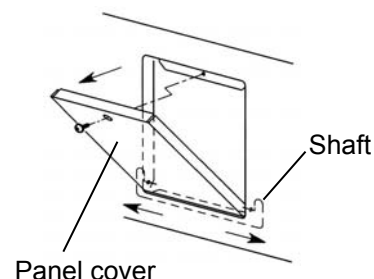


Fig. 1

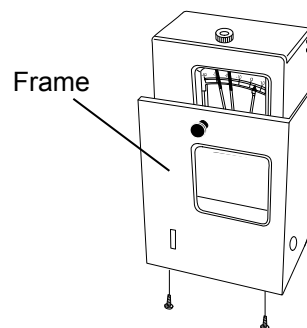
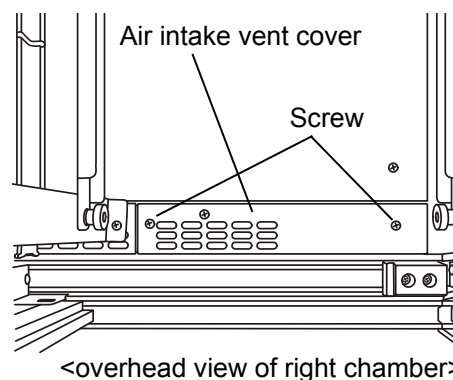
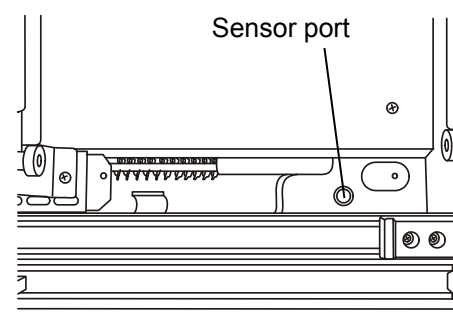


Fig. 2



<overhead view of right chamber>

Fig. 3

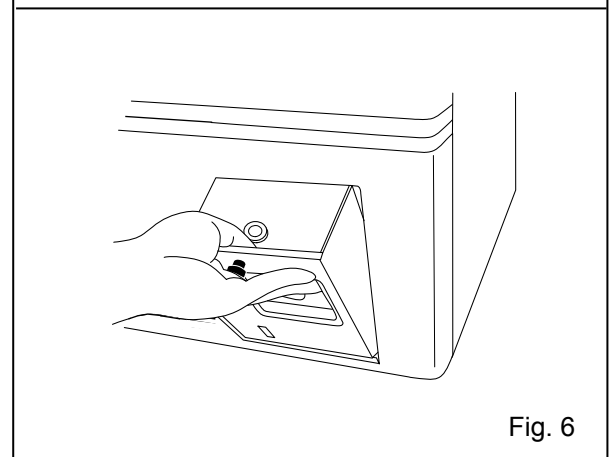
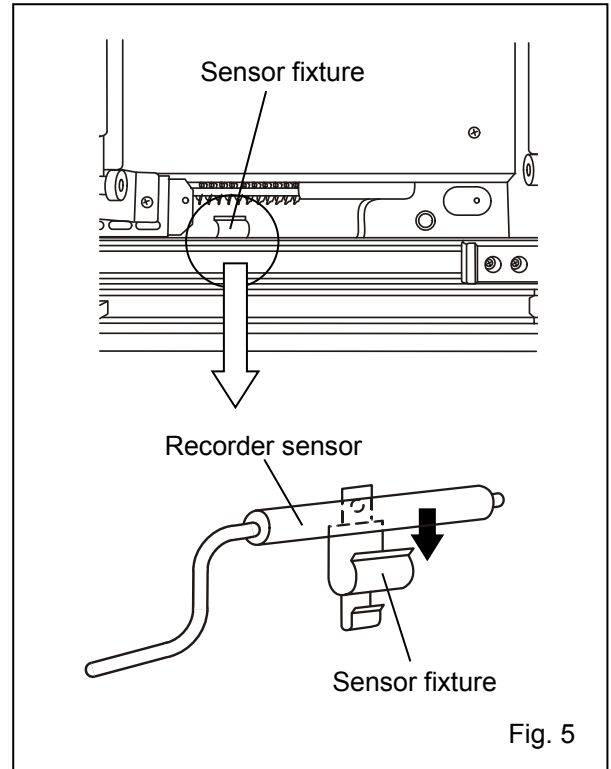


<overhead view of right chamber>

Fig. 4

INSTALLATION OF TEMPERATRUE RECORDER

7. Fix the recorder sensor to the sensor fixture. [Fig. 5]
8. Replace the insulation to the sensor port and then replace and fix the air intake vent cover by 2 screws.
9. Set the temperature recorder with the frame to the space for temperature recorder. [Fig. 6]
10. Replace the bottom shelf (bottom right drawer for MPR-514R) in the chamber.
✧For MPR-514, replace the doors after setting the bottom shelf.



INSTALLATION OF TEMPERATRUE RECORDER

Attachment of MTR-G04A or MTR-G04C

1. Remove the bottom shelf (bottom right drawer for MPR-514R) in the chamber.

✧For MPR-514, remove the doors before taking out the bottom shelf.

2. Unscrew the screw fixing the panel cover at the space for temperature recorder and open the panel cover. [Fig. 1]

3. Remove the panel cover from the shaft by pushing the shaft edge to the right and left side respectively.

4. Fix the recorder to the recorder fitting in the recorder fixing (MPR-S7) referring to the instruction manual enclosed with the recorder fixing. [Fig. 2]

5. Unscrew 2 screws on the air intake vent cover (right side) on the front bottom and then remove the air intake vent cover. [Fig. 3]

<Important>

A sensor is fixed to the back side of the air intake vent cover. Do not pull the air intake vent cover excessively.

6. Take out the insulation in the sensor port and pass the recorder sensor into the chamber through the sensor port from the space for automatic temperature recorder. [Fig. 4]

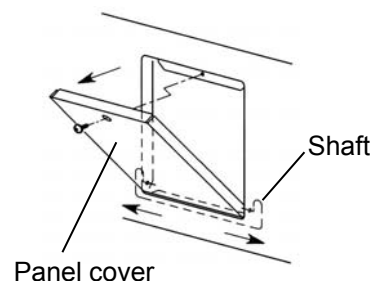


Fig. 1

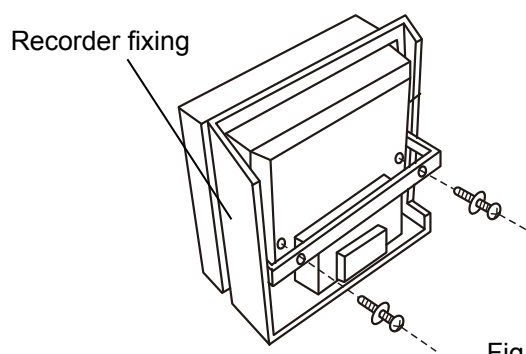


Fig. 2

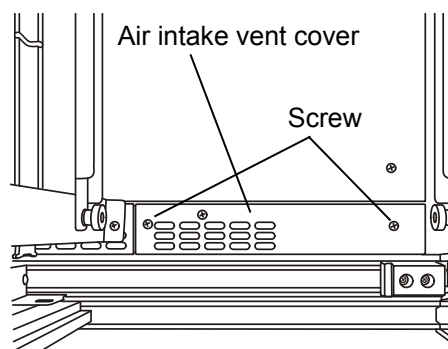
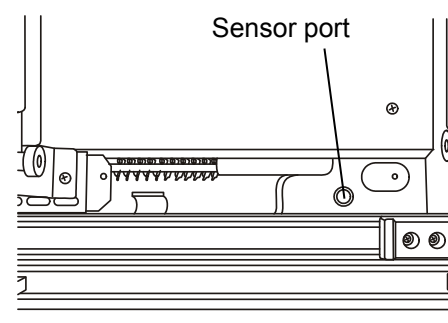


Fig. 3



<overhead view of right chamber>

Fig. 4

INSTALLATION OF TEMPERATRUE RECORDER

7. Fix the recorder sensor to the sensor fixture. [Fig. 5]

8. Replace the insulation to the sensor port and then replace and fix the air intake vent cover by 2 screws.

9. Connect the recorder connector to the connector for recorder power located at upper right inside the space for temperature recorder. [Fig. 6]

✧ The connector for recorder power has a connector cover. Remove the connector cover before connection.



WARNING

Always disconnect the power supply to the unit to prevent electric shock or injury since the connector on the unit is energized.

10. Set the temperature recorder with the channel on the recorder fitting aligned with the shaft and fix the temperature recorder by a screw at the space for temperature recorder. [Fig. 7]

11. Replace the bottom shelf (bottom right drawer for MPR-514R) in the chamber.

✧ For MPR-514, replace the doors after setting the bottom shelf.

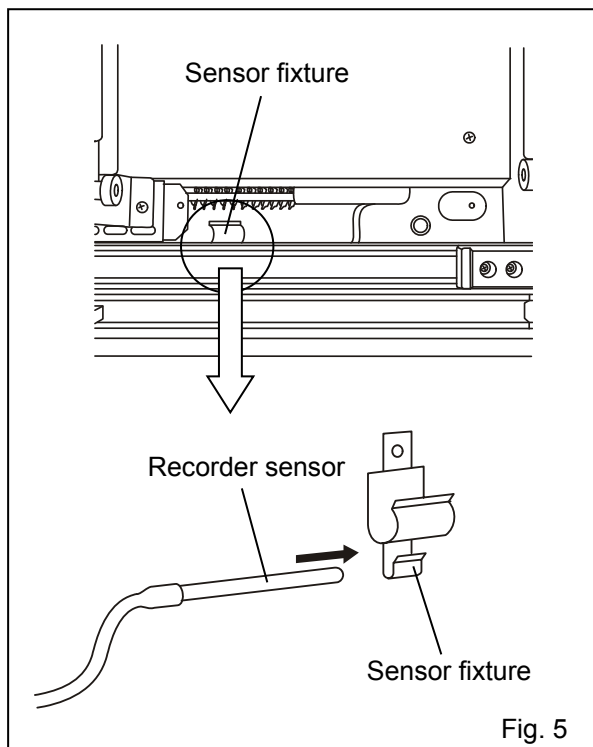


Fig. 5

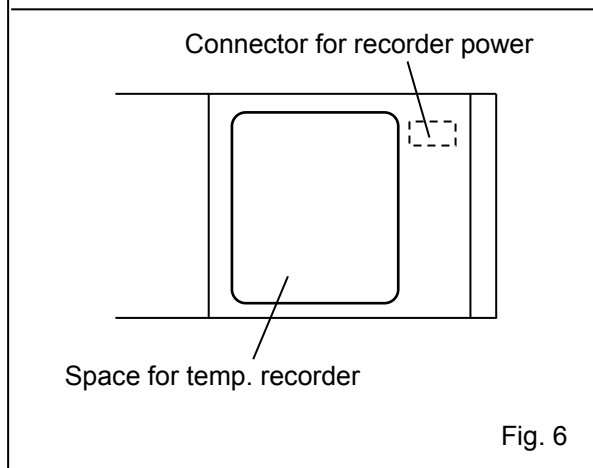


Fig. 6

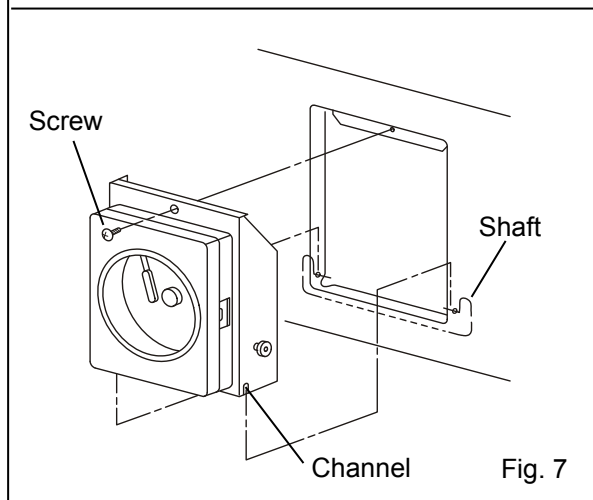


Fig. 7

BATTERY FOR POWER FAILURE ALARM

The alarm indicator blinks and the alarm buzzer sounds to notice the power failure when a battery for power failure alarm is installed. For the installation of the battery for power failure alarm, a battery mounting box (MPR-48B1), an optional component is necessary. A battery for power failure alarm is included in the battery mounting box.

✧ Contact our sales representative or agent for the installation of the battery mounting box (MPR-48B1).

1. Remove the top cover on the right front of the refrigerator top by unscrewing 4 screws. [Fig. 1]

2. Release the harnesses from the clip fixed to the back side of the top cover. [Fig. 2]

3. Pass the harnesses through the bottom opening of the battery box and set the battery box on the right front of the refrigerator top so that 4 screw holes can be aligned. [Fig. 3]

✧ The battery box should be located with the battery switch faced to the refrigerator back.

4. Put the battery on the right of the battery box. [Fig. 3]

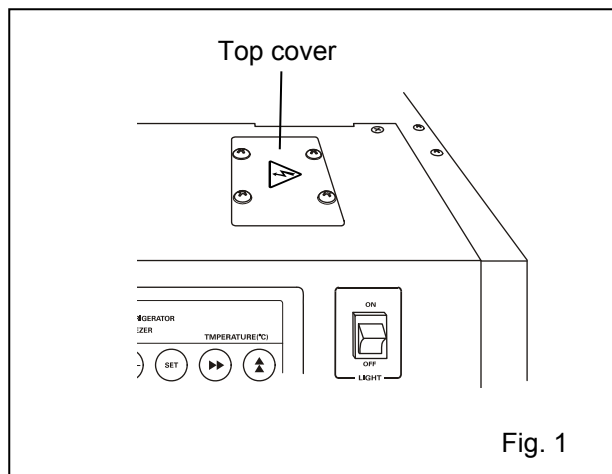


Fig. 1

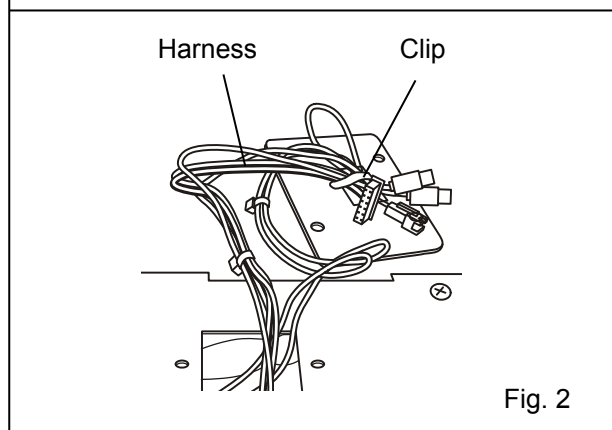


Fig. 2

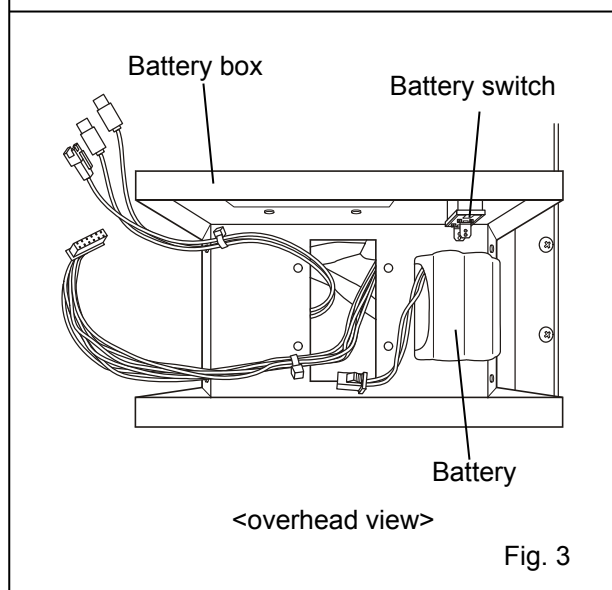


Fig. 3

BATTERY FOR POWER FAILURE ALARM

5. Put the battery fixture over the battery and fix the battery box and battery fixture by 4 screws. [Fig. 4]

6. Connect the harness to the battery connector and battery switch [Fig. 5] and bind the harnesses by the clip on the battery fixture. [Fig. 4]

7. Cover the opening beside the battery switch with the top cover removed in procedure 1 (4 screws). The harness in no use is bound by the clip on the back of the top cover.

8. Put the battery box cover over the battery box and fix the battery box cover with screws (3 screws on the right and left). [Fig. 6]

9. Perform the setting for battery through the keys on the control panel of refrigerator. Refer to the procedure on the next page "Setting for battery before starting".

10. Switch on the battery switch on the battery box.

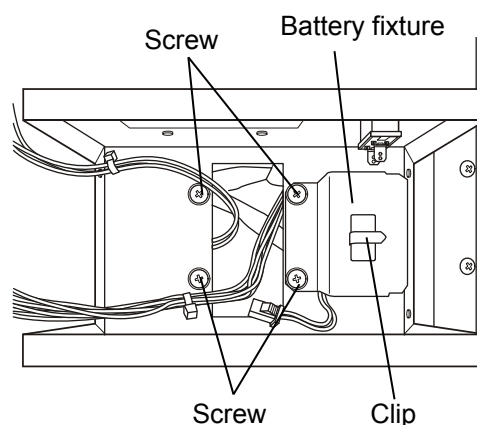


Fig. 4

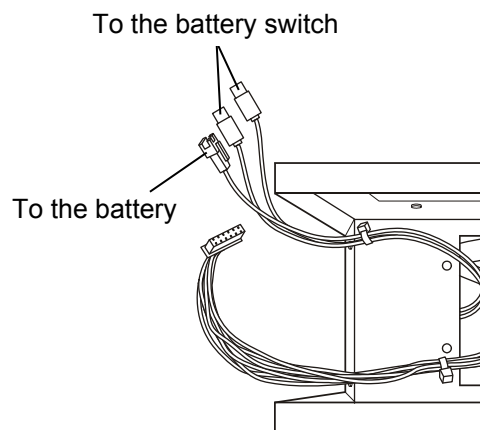


Fig. 5

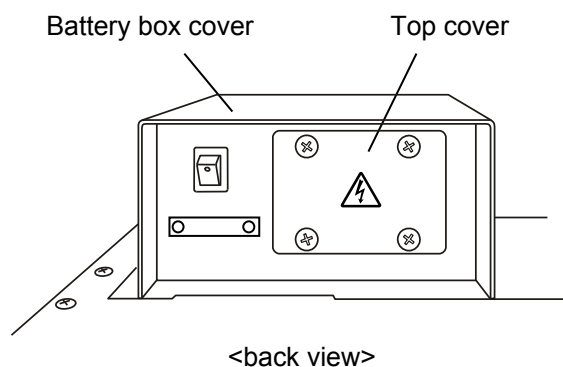


Fig. 6

SETTING FOR BATTERY BEFORE STARTING

After installing the optional battery mounting box (MPR-48B1), setting on the main unit is required.

✧ Contact our sales representative or agent for setting.

SPECIFICATIONS

Product name	Pharmaceutical refrigerator	
	MPR-514	MPR-514R
External dimensions	W900 mm x D600 mm + (58) mm x H1790 mm	
Internal dimensions	W800 mm x D465 mm x H1300 mm	
Effective capacity	489 L	486 L
Exterior	Painted steel	
Interior	Stainless steel	
Door	Sliding type, 2-layer pair glass with heat ray reflection film x 2	
Insulation	Rigid polyurethane foamed-in place	
Shelves	Hard steel wire on polyester coating x 5 Allowable load; 50 kg/shelf	Hard steel wire on polyester coating x 5 Allowable load; 20 kg/shelf
Drawers (MPR-514R only)	-----	Allowable load; 20 kg/drawer
Access port	Inner diameter; 30 mm, Left side	
Cooling method	Forced cool air circulation	
Compressor	Hermetic type, Output; 200 W x 1	
Fan motor	For chamber cooling; output 3 W x 1	
Evaporator	Fin and tube type	
Condenser	Wire and tube condenser + skin condenser	
Refrigerant	R-513A	
Defrosting	Cycle defrost + forced defrost, Fully automatic	
Defrost heater	148 W	
Temperature controller	Electronic control system (control range; between 2 °C and 14 °C)	
Thermometer	Digital thermometer	
Fluorescent lamp	FL20SD (FL20SSEXD for MPR-514-PE and MPR-514R-PE)	
Alarms	High temp. alarm, Low temp. alarm, 0°C alarm, Air circulation alarm, Door alarm	
Remote alarm contact	During alarm buzzer and power failure, Output; N.O.; "close", N.C.; "open" *	
Weight	141 kg	147 kg
Accessories	2 keys 20 shelf supports, 5 shelves	2 keys 20 shelf supports, 5 shelves 5 drawers
Optional components	Temperature recorder (MTR0621LH), Recorder fixing (MPR-S30) Temperature recorder (MTR-G04A, -G04C) , Recorder fixing (MPR-S7) Shield door (MPR-51G), Battery mounting box (MPR-48B1)	

✧ Design or specifications will be subject to change without notice.

✧ The dimension in () shows the projected dimension.

✧ Refer to the updated catalog when ordering an optional component.

* It is recommended to use cables with a maximum length of 30 meters.

PERFORMANCE

Product name	Pharmaceutical Refrigerator MPR-514				
Model number	MPR-514-PT	MPR-514-PA	MPR-514-PK	MPR-514-PR	MPR-514-PE
Temperature control range	+2 °C to +14 °C				
Usable ambient temperature	-5 °C to +35 °C				
Noise level	42 dB (A scale)				
Maximum pressure	1500 kPa				
Rated voltage	AC 110 V	AC 115 V	AC 220 V	AC 220 V	AC 220 V/230 V /240 V
Rated frequency	60 Hz	60 Hz	60 Hz	60 Hz	50 Hz
Amperage	2.4 A	3.2 A*	2.0 A*	1.4 A	1.3 A
Power consumption	240 W	320 W	330 W*	240 W	220 W

Product name	Pharmaceutical Refrigerator MPR-514R			
Model number	MPR-514R-PT	MPR-514R-PA	MPR-514R-PK	MPR-514R-PE
Temperature control range	+2 °C to +14 °C			
Usable ambient temperature	-5 °C to +35 °C			
Noise level	42 dB (A scale)			
Maximum pressure	1500 kPa			
Rated voltage	AC 110 V	AC 115 V	AC 220 V	AC 220 V/230 V /240 V
Rated frequency	60 Hz	60 Hz	60 Hz	50 Hz
Amperage	2.4 A	3.2 A*	2.0 A*	1.3 A
Power consumption	240 W	320 W *	330 W *	220 W

✧ The above data is measured based on our internal basis.

✧ Design or specifications will be subject to change without notice.

✧ The unit with CE mark complies with EU directives.

* These values are maximum amperage and power consumption.

CAUTION

**Please fill in this form before servicing.
Hand over this form to the service engineer to keep for his and your safety.**

Safety check sheet

1. Unit contents:

Risk of infection: ☐Yes ☐No
Risk of toxicity: ☐Yes ☐No
Risk from radioactive sources: ☐Yes ☐No

(List all potentially hazardous materials that have been stored in this unit.)

Notes:

2. Contamination of the unit:

Unit interior:

No contamination: ☐Yes ☐No
Decontaminated: ☐Yes ☐No
Contaminated: ☐Yes ☐No

Others:

3. Instructions for safe repair/maintenance/disposal of the unit

a) The unit is safe to work on ☐Yes ☐No
b) There is some danger (see below) ☐Yes ☐No

Procedure to be adhered to in order to reduce safety risk indicated in b) below.

Date:

Signature:

Address, Division:

Telephone:

Product name:

Pharmaceutical
Refrigerator

Model:

MPR-

Serial number:

Date of Installation:

Please decontaminate the unit yourself before calling the service engineer.

PHC Corporation

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