

mitsubishi electric

Refrigerator-Freezer

MR-S45N

OPERATING INSTRUCTIONS

Non-Freon Refrigerators

This refrigerator uses non-Freon refrigerant (isobutane) and non-Freon foam insulation (cyclopentane).

These materials are harmless to the environment, and do not affect the ozone layer and global warming.

A refrigerator to brighten up your table everyday.

Now, a refrigerator that keeps food

Refrigeration

The fridge is featured with elevating shelves. By adjusting up or down shelf without having to remove already stored items, Storage capacity of the refrigerator compartment is maximized. The shelf can be "made to fit" to larger items.

Surround Cooling System Cold air is directed into the refrigerator from the front, back and both sides of the compartment. This ensures uniform cooling throughout the compartment as well as airflow to all shelves even with large quantities of foods stored.

Vegetables are exposed to LED light to maintain their freshness. In addition, vitamins and polyphenols increase.

Vegetable

Quick freezing function freezes instantaneously at -40°C food and therefore the taste of food is preserved. By using soft freezing feature, the food preserved at -7°C but still frozen but soft enough to cut. No more thawing frozen food before cutting or portioning fresh food before freezing.

Freezing

With Automatic Ice Maker, water is purified. UV Catalyst and Lead reducing filter removes bacteria with the power of light and enhances the flavor of water. Enjoy pure clear ice cubes using tap water or mineral water.

All parts of the water tank can be removed for easy cleaning.

Silent Ice making and easy to use ice compartment. Ice cubes drop automatically in the ice drawer on the silence mat which absorbs sound. Ice cubes are ready to use.

Ice

◆ Universal design & layout

Designed to take frequency to use into consideration, the layout of the drawers makes life easier.

◆ Quiet design

Using Mitsubishi's original new technology, a noise level of approximately 17 dB(A)*1 was achieved.

*1 According to noise testing using the JIS C9607 standard (during low-speed operation).
dB(A): Noise level unit: decibel A

◆ Non-Freon Refrigerators

Those materials are environmentally friendly and do not affect the ozone layer and global warming.

tasting fresh!

C O N T E N T S

Safety Precautions

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- This refrigerator is manufactured for refrigerating and freezing foods in general households. For industrial use, please use a commercial refrigerator-freezer.
- Key plastic parts of the refrigerator have the material name on them to facilitate recycling.

Safety Precautions

Safety Precautions

■ Danger and the degree of danger caused by improper handling are categorized and described by the following indicators.

Warning

Improper handling can result in death, serious injury, etc.

Caution

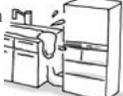
Improper handling can result in personal injury or damage to house, household furnishings, etc.

■ Meaning of symbols

	Never do
	Never touch
	Never attempt to dismantle, repair or alter
	Never bring into contact or wet with water
	Never touch when your hand is wet
	Be sure to follow instructions for execution
	Be sure to remove the power plug from the socket

■ In the case of malfunction or defect, immediately unplug the refrigerator and consult the retail store at which you purchased it or a Mitsubishi Electric Maintenance Service or Customer Service representative.

Warning

Installation	
<p>Leave space around the refrigerator</p> <p>Leaking refrigerant can accumulate, then catch fire and explode.</p>   <p>Leave space</p>	<p>Anchor the refrigerator to a strong wall or posts to provide against damage during earthquakes</p> <p>The refrigerator can tip over and cause injury.</p>   <p>Tip-resistance</p> <p>page 7</p>
<p>Avoid installing the refrigerator in an easily wet or highly humid area</p> <p>Insulation failure can cause electric shock or fire.</p>   <p>Do not wet</p> <p>page 6</p>	<p>Use a dedicated outlet for the power supply that meets the rating specified on the rating label. (The rating label is located on the door-liner of the refrigerator compartment.)</p> <p>Using extension cords and plugging too many leads into a single socket can cause heat build-up or fire.</p>   <p>page 6 Only use an outlet that meets the specified rating.</p>
<p>If the power cord is damaged, call our MITSUBISHI SERVICE CENTER for the replacement.</p> <p>If the power cord is damaged, purchase a new cord from MITSUBISHI SERVICE CENTER. Make sure that the power cord is designed for this model.</p>  <p>Service Call</p> <p>page 6</p>	<p>Insert prongs to the root of plug</p> <p>Insert prongs to the root of plug firmly otherwise it can cause heat build-up and fire.</p>  

Power and power plug	
<p>Remove power plug before changing interior light bulb or maintenance</p> <p>Non-removal of plug can cause electric shock or injury.</p>   <p>Remove plug</p>	<p>Do not push the refrigerator on to or against the power cord. Do not damage power cord.</p> <p>Placing heavy objects against or on, folding or bundling cord can cause electric shock or fire.</p>   <p>Prohibited</p>
<p>Do not use damaged cords, plugs, or loose sockets</p> <p>Can cause electric shock or fire.</p>   <p>Do not use</p>	<p>Do not pull on the power plug or cord to unplug it.</p> <p>Can cause damage to the cord, electric shock or fire.</p>   <p>Prohibited</p>
<p>Remove dust from power plug</p> <p>Dust can cause insulation failure, which may lead to fire.</p>   <p>Remove dust</p>	<p>Do not remove or insert power plug with wet hands.</p> <p>Can cause electric shock.</p>   <p>Wet hands prohibited</p>

Caution

Installation and transportation	
<p>Anchor the refrigerator to a strong and level floor by adjusting the adjustable supports</p> <p>Unstable anchoring can cause the refrigerator to move and lead to injury.</p>   <p>Install level</p> <p>page 7</p>	<p>Use transport hand-holds when transporting the refrigerator</p> <p>Holding other parts can cause injury.</p>   <p>Grip hand-holds</p> <p>page 26</p>



⚠ Warning

Use

<p>Do not place containers with water on top of the refrigerator</p> <p>Wetting electrical parts can cause electric shock or fire.</p>   <p style="text-align: right;">Do not wet</p>	<p>Do not use electrical appliances in the refrigerator</p> <p>If the refrigerant leaks and contacts the electrical appliance, it can cause explosion or fire.</p>   <p style="text-align: right;">Prohibited</p>	<p>Do not place volatile inflammable objects inside the refrigerator</p> <p>Benzene, cosmetics and hair dressing products can catch fire or explode.</p>   <p style="text-align: right;">Do not store</p>
<p>Do not place objects on top of the refrigerator</p> <p>Objects may fall when doors are opened and closed and cause injury.</p>   <p style="text-align: right;">Prohibited</p>	<p>Do not store chemicals or scientific specimens in the refrigerator</p> <p>Items that require strict management should not be stored household refrigerators.</p>   <p style="text-align: right;">Do not store</p>	<p>Use only interior bulbs with designated rating.</p> <p>Using non-designated bulbs can cause fire.</p> <p>page 25 →</p>   <p style="text-align: right;">Designated products only</p>
<p>Do not hang on door or door handle; do not stand on compartment doors</p> <p>The refrigerator may tip over and cause injury.</p>   <p style="text-align: right;">Prohibited</p>	<p>Do not touch the machinery of the automatic icemaker (located above the ice storage bin)</p> <p>Can cause injury when icemaker plate revolves.</p>   <p style="text-align: right;">Do not touch</p>	<p>Do not damage the refrigerant circuit or the pipes nor mount anything with screw</p> <p>The refrigerant is flammable, which can cause explosion or fire.</p>   <p style="text-align: right;">Prohibited</p>
<p>If you notice gas leakage, do not touch the refrigerator. Open windows to ventilate.</p> <p>Sparks from electrical contacts can cause explosion or fire.</p>   <p style="text-align: right;">Ventilate</p>	<p>Do not wash with water or spill food liquids on the refrigerator</p> <p>Water and food liquids can cause electric shock or fire. Immediately wipe clean wet surfaces.</p>   <p style="text-align: right;">Do not wet</p>	<p>Do not place combustible sprays near the refrigerator</p> <p>Sparks from electrical contacts can cause inflammation or fire.</p>   <p style="text-align: right;">Do not use</p>

Malfunction and long-term storage

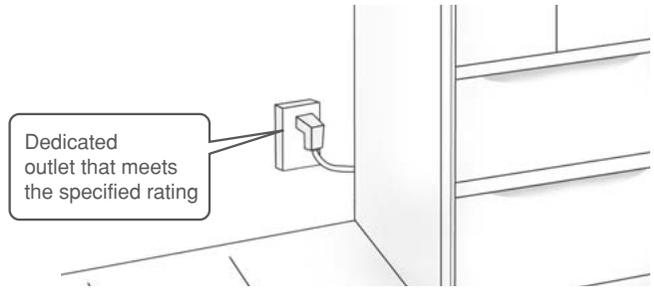
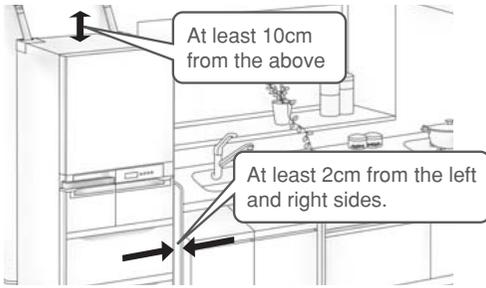
<p>If the refrigerant circuit is damaged, do not touch the refrigerator and avoid using flames nearby. Open windows to ventilate.</p> <p>If the refrigerant circuit is damaged, consult the retail store.</p>   <p style="text-align: right;">Ventilate</p>	<p>In the event of malfunction (when you detect a burning odour or other abnormality), remove the power plug from the socket turn off the refrigerator</p> <p>Continued operation during malfunction can cause electric shock or fire.</p>   <p style="text-align: right;">Remove plug</p>	<p>Do not attempt to dismantle, repair or alter</p> <p>Can cause injury, electric shock or fire.</p>   <p style="text-align: right;">Do not dismantle</p>
<p>When refrigerator is not in use for a long period, remove the door seal</p> <p>Children can be put in danger if they are trapped inside the refrigerator.</p>   <p style="text-align: right;">Remove seal</p>	<p>When the refrigerator is not in use for a long period, remove the power plug from the socket and open the door to dry the refrigerator</p> <p>If not dried sufficiently, refrigerant (gas) can leak due to condenser corrosion and cause explosion or fire.</p>   <p style="text-align: right;">Dry</p>	<p>This refrigerator uses flammable refrigerant and foaming gas for insulation. Please deliver the unit to specialized industrial waste dealer when you wish to dispose of it. Please follow the rules in your country.</p>   <p style="text-align: right;">Dispose of properly</p>

⚠ Caution

Use

<p>Do not excessively pack with food items, or remove shelves or open doors with excessive force</p> <p>Can cause food items to fall and injury.</p>   <p style="text-align: right;">Prohibited</p>	<p>Do not place bottles in the freezer compartment</p> <p>Can cause injury if content of the bottle freezes, causing the bottle to shatter.</p>   <p style="text-align: right;">Do not store</p>	<p>Do not eat smelly or discoloured food</p> <p>Can cause food poisoning or illness.</p>   <p style="text-align: right;">Prohibited</p>
<p>Do not touch food items or containers in the freezer compartment with wet hands</p> <p>Can cause frostbite.</p>   <p style="text-align: right;">Wet hands prohibited</p>	<p>Do not put your hands or feet underneath the refrigerator</p> <p>Steel plates, etc. can cause injury.</p>   <p style="text-align: right;">Do not touch</p>	<p>Close the door using the door handles</p> <p>Be careful not to catch fingers in the door when you hold it. Can cause injury.</p>   <p style="text-align: right;">Hold door handle</p>

From Installation to Operation



1 Install the refrigerator.

● Installation area

The installation area should not be exposed to direct sunlight and hot air, and be well-ventilated

to avoid diminished cooling power and to economize on cost of electricity

It should have little humidity to prevent rusting

It should be strong and level to prevent vibration and noise, half-shut doors, and tilted doors

● Install a strong plate or board under the refrigerator if the supports easily sink into the floor. (For prevention of deformation or discoloration due to heat or weight)

It should be far from the TV

to prevent the cause of noise or interference to the images on the TV

● Leave space for heat ventilation

Leave at least 2cm of space on the right and left and 10cm of space between the ceiling and the top of the refrigerator

to allow heat to escape from the ceiling and the sides of the refrigerator

Heat builds up in exterior walls of the refrigerator

When the refrigerator is first used and during the summer heat build-up can exceed 50-60°C

⚠ Warning

Do not close the ventilation hole of the refrigerator or the crack around the refrigerator. If the refrigerant leaks, ignition or explosion may be caused.

2 Connect the power supply. *Connect power supply soon after installing the refrigerator.

● Use a dedicated outlet

Use a dedicated outlet for the power supply that meets the rating specified on the rating label. (The rating label is located on the door-liner of the refrigerator compartment.)

⚠ Warning

Using outlets that do not meet the specified rating or plugging in too many leads into a single socket can cause heat build up or fire.

● **The refrigerator will not be damaged even if the power is supplied soon after installation. It takes a while for the refrigerator to cool, therefore supply power as soon as possible.**

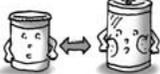
● Electrical Connections

Make sure this unit is properly grounded.

- The unit should always be plugged into its own electrical outlet. This will provide the best performance and prevent electrical circuits from being overloaded and causing a fire. Make sure that the electrical outlet provides the proper voltage. Extension cords are not recommended.
- If your unit is installed in the high humidity location, installation of an earth leakage breaker is recommended.
- Make sure that the power cord is designed for this model.
- If the power cord is damaged, call our MITSUBISHI SERVICE CENTER for the replacement, in order to avoid a hazard.

Use your refrigerator efficiently to save electricity

Leave space between items in the refrigerator.



Avoid opening and closing the door unnecessarily and leaving the door open for a long time.



Allow large quantities of food to cool before storing



Frost build-up can cause decline in cooling ability as a result of even the slightest door opening

Be sure not to catch food items, plastic bags, power cords, etc. in the door when you close it.



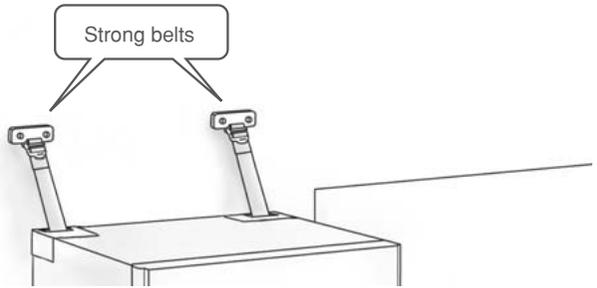
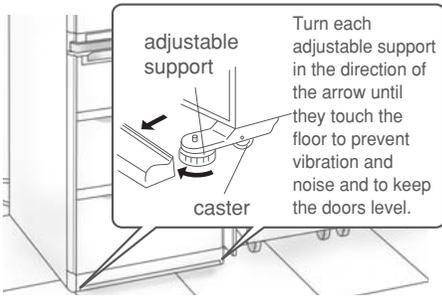
Helpful storage hints

wipe



wrap





3 Adjust the supports to level the refrigerator.

Turn the adjustable supports until they touch the floor and the casters are raised from the floor

to prevent vibration and noise, transmigration and half-shut doors

⚠ Caution

Insufficiently adjusted supports can cause injury due to movement of the refrigerator.

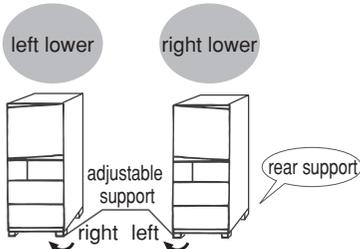
- Level the refrigerator left to right, with the front of the refrigerator raised slightly, so that the doors close easily and to prevent half-open doors.

Adjusting tilted doors and uneven refrigerator

If the installation area is not level or the refrigerator supports sink after a few days due to the weight of the food, the door will appear lower. (Depending on the quantity of food, the food weight can exceed 100 kg.) Readjust the refrigerator by turning the adjustable supports in the directions shown.

For example, if the refrigerator is installed in the corner of a room, one of the rear supports may sink into the floor. Use a caster stand (sold separately) or strong plate at the rear of the refrigerator. (In general, the plate should be 2–3 mm thick.)

To obtain a caster stand, contact your retail store.



After adjusting the supports, install the toe grille at the lowest area on the front of the refrigerator.

Prepare for earth-quakes

Thread strong belts through the 2 handy-grip recesses on the top-rear of the refrigerator and secure them to the wall, posts or other strong area

Consult the retail store at which purchase was made for tip-resistance belts for your refrigerator (sold separately).

⚠ Warning

Your refrigerator tipping over can cause injury.

The refrigerator will not cool immediately after power is turned on.

The control panel will display “H” for current temperature (Numeric values will be displayed when the temperature goes below 20°C)

- It will take 2-3 hours for the control panel to display numeric values. (In particular, the vegetable compartment, which uses radiant cooling, can take more than half a day to cool.)
- Allow the refrigerator to cool sufficiently before you store non-cooled items and ice cream. Open and close the doors only as much as necessary and do not leave open for long periods of time.

Initial is set to “Regular ice making mode”.

- To use the Crystal ice making mode, please change the setting for ice making compartment.

page 11

Especially during hot summers, ice may take 24 hours to make the first time, and more than half a day may pass before the control panel displays numeric figures.

About Non-Freon Refrigerator

Do not damage the refrigerant circuit or the pipes nor mount anything with screw.

Non-Freon Refrigerants are flammable gas. However, it is hermetically-sealed, therefore, leaking is infrequent.

⚠ Warning

Should the refrigerant circuit be damaged:

1. Do not use electric items or fire equipments near by.
2. Open the window and ventilate the room.

Please contact the retail store at which you purchased it or a Mitsubishi Electric Maintenance Service or Customer Service representative.

Names and Functions of the Control Panel

Indicates the corresponding compartment

The temperature of the indicated compartment
When the cooking timer is used, the residual time (min/hr) is displayed on this section.

Displays the temperature control level of the indicated compartment

Indicates the settings of the ice making compartment page 11

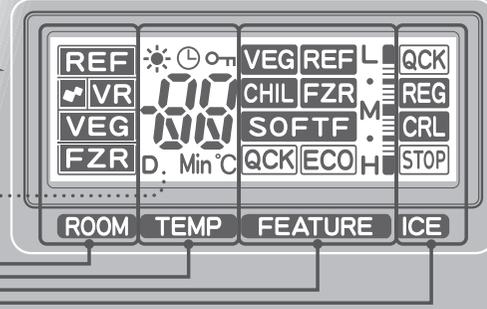
Turns on during tricolor LED lighting page 16

QCK Turns on during the fast cooling operation page 12

ECO Turns on during the energy-saving operation page 13

* Please note that the displays below are meant for explanatory purposes only. It might be different from the actual display.

LCD section

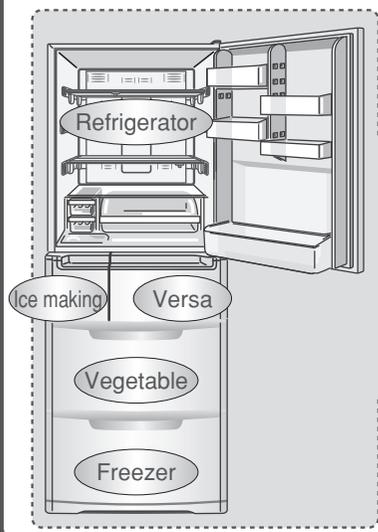


Canceling the "D" display

When "D" is appearing on the LCD, the refrigerator will not start to cool.

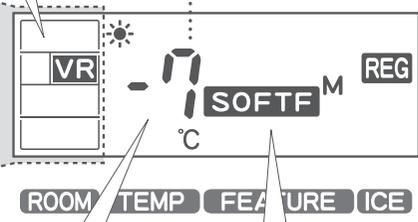
1. Leave the refrigerator door open.
SELECT QUICK ECO
2. Press , , and buttons simultaneously and hold down for about 5 seconds (until a "beep" sound is heard).
● "D" mark will go off.

How to Read Indication When the versa compartment is displayed



It indicates that the versa compartment is selected now.

When the product is not functioning, like installation time, "H" is indicated. (Value indication is equal or more than 20°C)



It indicates that the present temperature in the versa compartment is about -7°C.

It indicates that the temperature control of the versa compartment is set to "Soft Freezing, M" level.

Short Notes for Users
Carefully wrap any foods emitting strong smells to avoid diffusing the odour to other foods. It is not possible to perfectly eliminate the odour by using deodorization function.

Foods with strong odour which may transfer to other foods
Pickled scallions, dried fishes, fermented soybeans, soybean paste, beef, pickled radish, sardine, Korean pickles, dumplings, etc.

Foods which easily absorb odour from other foods
Custard pudding, ice cream, potato salad, bean curd, rice, loaf of bread, milk, cake, ice, etc.



The control panel displays “present temperature”, “temperature control setting”, etc. for each compartment of the refrigerator, ice making, versa, vegetable and freezer.

SELECT button

- To control the temperature
 - For refrigerator, vegetable and freezer compartments **page 10**
 - For versa compartment **page 10**

To change ice maker setting or stop ice making **page 11**

Fast Cooling button

- To cool fast
 - Ice making compartment (Quick ice making) **page 12**
 - Other compartments **page 12**

Ice maker cleaning

To clean (rinse) the ice tray. **page 23**

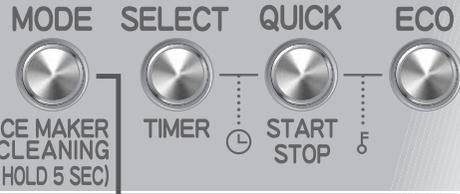
Child Lock

To prevent children from using the buttons on the control panel accidentally. **page 13**

Cooking Timer button

To tell the completion of cooking time. Use this to set an alarm. **page 13**

Control buttons



MODE button

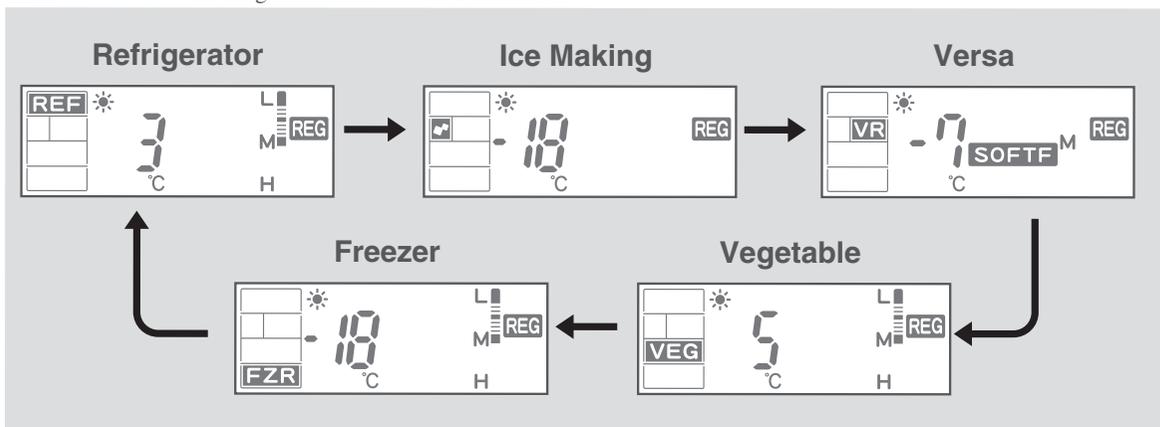
To change over the compartment to be displayed on the LCD

ECO button

To use the energy-saving operation. **page 13**

The indication on the LCD will change at each press of the button.

* The illustrations below are examples. Temperature may be different depending on the room temperature where the fridge is installed or conditions to use.

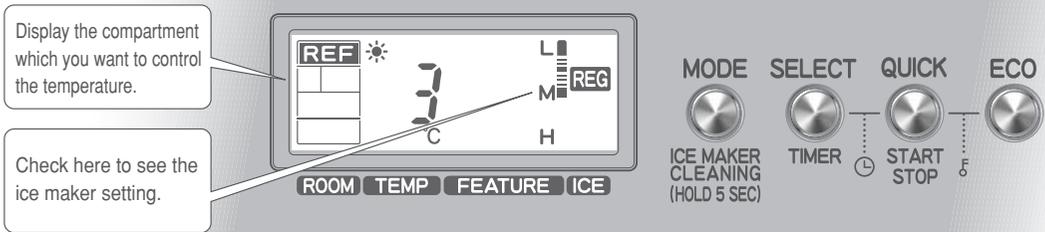


Note Do not press and hold the button.

- Otherwise, the ice tray will be cleaned (rinsed). Do not press and hold the button unless you want to clean (rinse) the ice tray.

Controlling temperature for each compartment

To control the temperature for the Refrigerator, Vegetable and Freezer compartments



* The illustration above is a display example. Temperature may be different depending on the room temperature where this product is installed or conditions to use.

- 1 Press **MODE** button and select the required compartment for temperature control.

The display will change at each press.

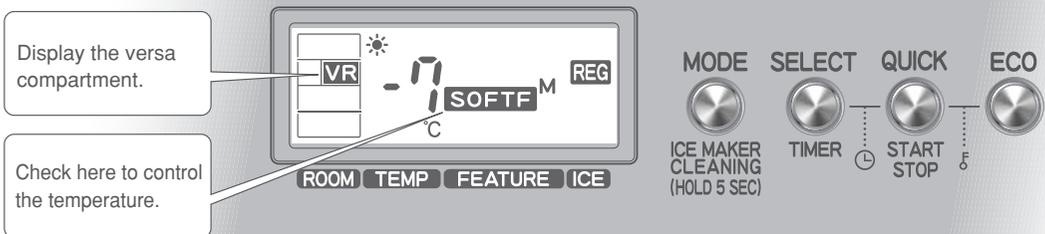
- 2 Press **SELECT** button to control the temperature.

The display will change at each press.

* The indicated temperature values are used only as a guideline. Temperature may be different depending on the conditions to use such as food storage conditions or the door operation conditions.

Compartment display		Refrigerator	Vegetable	Freezer
Temperature control	Adjust the temperature level to "L" if it is too cold	2 to 3°C higher than "M" level	2 to 3°C higher than "M" level	2 to 3°C higher than "M" level
	Normally adjust the temperature level to "M"	About 0 to 6°C	About 3 to 9°C	About -16 to -22°C
	Adjust the temperature level to "H" if it is not cold enough	2 to 3°C lower than "M" level	1 to 2°C lower than "M" level	2 to 3°C lower than "M" level

To control the temperature for the Versa compartment



* The illustration above is a display example. Temperature may be different depending on the room temperature where this product is installed or conditions to use.

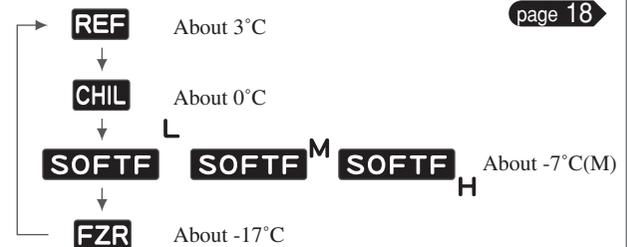
- 1 Press **MODE** button and display the versa compartment.

- 2 Press **SELECT** button repeatedly to make your required temperature blinks.

The display will change at each press.

After the blinking display is left for a while, it will stay lit and the mode is set to the lighting display. The beep sound is heard

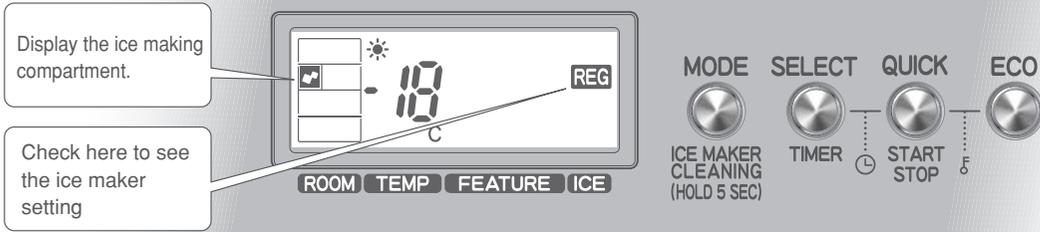
Six settings for the versa compartment are provided.





- Initial settings of each compartment at delivery are as follows. Refrigerator, Vegetable and Freezer Compartments are set to "M", the Versa Compartment is set to "REF" and the Ice Making Compartment is set to "REG".
- The temperatures can be adjusted according to personal preference.

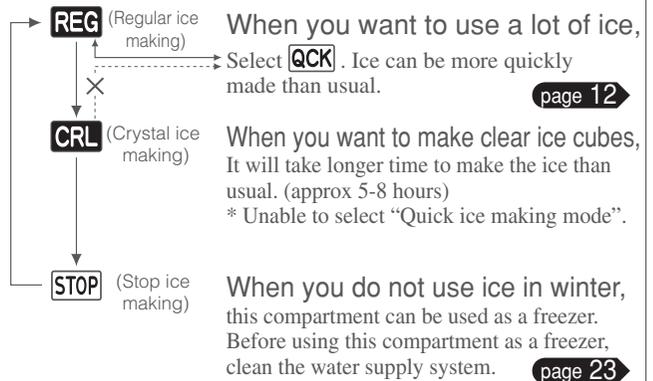
To change the setting for the Ice Making compartment



* The illustration above is a display example. The displayed temperature may be different depending on the ice maker setting or conditions to use.

- 1** Press **MODE** button to display the ice making compartment.
- 2** Press **SELECT** button repeatedly to make your required ice maker setting blink. After each pressing of the button, the blinking display of the ice maker setting will change. After the blinking display is left for a while, it will stay lit and the mode is set to the lighting display. The beep sound is heard

Three ice maker settings are provided.



To use the Ice Making compartment as a refrigerator

Select the temperature mode to REF when you don't make ices in winter.

- Remove the foods and ice in the water tank and ice making compartment.
- Press **MODE** button to display the Ice Making compartment.
- Press **SELECT** button and hold for about 3 seconds (until a "beep" sound is heard.) Then the **REF** indicator blinks and stays lit. **REF** turns on after a while.
- After about 1 minute later, clean the water tank and ice making compartment. No cleaning will produce molding. [page 23](#) When using the "STOP" or "REF" setting

To start making ice again

Select **REG** or **CRL**.

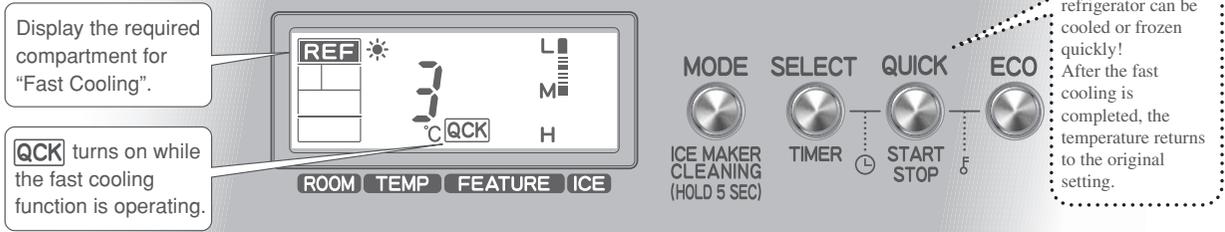
- See "To change the setting for the Ice Making compartment" above.

Short Notes for Users

- The temperature value indication is meant for estimated food temperature at a specific area inside the product. (The temperature is different from the compartment temperature inside the product.) Due to this reason, the temperature indication is not immediately changed by opening and closing the compartment doors or changing the temperature control setting.
- The compartment temperature inside the product may rise or fall for a short period before or after a defrosting cycle and this is a normal phenomenon.
- The indicated temperatures used as guidelines here are based on the stabilized temperature which was measured slightly lower than the center part of the product under the condition of room temperature 30°C, without placing any food inside the compartment with all doors closed.
- After the temperature control setting for the versa compartment is changed, the temperature indicated on  (LCD section) may vary for a while.

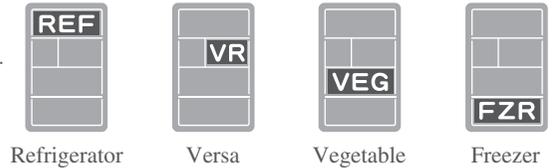
Main Functions of the Control Panel

Fast Cooling It is used for home freezing or cooling bulk purchased foods fast.



* The illustration is a display example. The displayed example may be different depending on the setting or conditions of use.

1 Press **MODE** button and display the required compartment for "Fast Cooling".
The display will change at each press.



2 Press **QUICK** button.
The **QCK** indicator comes on.

The cooling is automatically completed after about 2 hours.

The **QCK** indicator goes off.



To stop the operation halfway through, press the button again.

Short Notes for Users

- If you select the soft freezing and then use the fast cooling function, the temperature inside the compartment becomes temporarily too low, freezing the food too hard. In such a case, you may not cut it with a knife. Items that have frozen too much can be cut with a knife if they are left at room temperature for 5–10 minutes.

To Make Ice Fast (Quick ice making) The "Quick ice making mode" cannot be selected when "CRL" is set.

1 Press **MODE** button to display the Ice Making compartment.



Ice Making

2 Press **SELECT** button repeatedly and make **REG** blink.
After a while, the blinking display will stay lit.

Automatic stop

It automatically completes after operating for about 9 hours, when the ice storage bin is full of ice (about 70 to 100 pieces) or when no water is left in the water tank.

QCK light goes out and **REG** will stay lit.

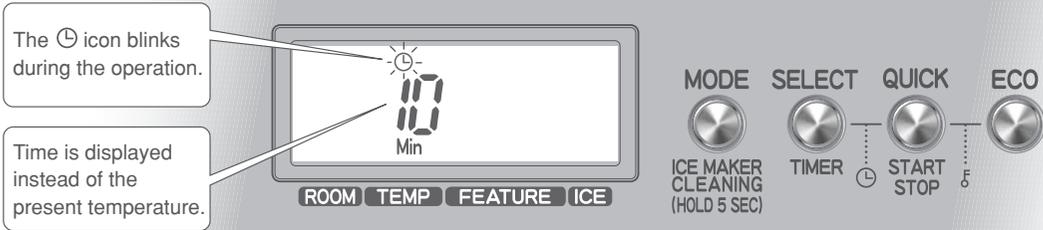
3 Press **QUICK** button.
The **QCK** indicator turns on.

Short Notes for Users

- After fast cooling, the temperature inside the compartment is too low and the values on the temperature display section may be lower than the target values shown on pages 10 and 18.
- Noise levels will rise while in the "Fast Cooling" mode.
- The time for making ice varies with the room temperature where the fridge is installed or conditions to use.
- It might take 24 hours or more to make ice just after the installation of the product.



Cooking Timer It can also be used as an alarm at the completion of cooking time.



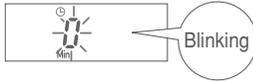
* The illustration is a display example. The displayed example may be different depending on the setting or conditions of use.

To enter the Timer Mode

SELECT and QUICK

Press and hold and buttons simultaneously for 1 second (until a “beep” sound is heard).

The number blinks on the display.



If you want to control the temperature for each compartment (page 10), cancel the timer mode before making the settings.

To release Repeat the operation explained above.

The timer mode is not released.

To stop the timer halfway through the operation, press button again. The number returns to “0”. (It does not blink)

Short Notes for Users

- In case of using “Cooking Timer” and “Fast Cooling” concurrently, start “Fast Cooling” mode first followed by “Cooking Timer” setting.
- No other setting is available while using the “Cooking Timer”, therefore cancel the timer mode before making the settings.
- While using the “Cooking Timer”, control panel light stays “ON”.

Child Lock

It rejects any mischievous tampering or unintentional pressing of control panel settings.

Press and buttons simultaneously and hold down for about 3 seconds (until a “beep” sound is heard).

ON turns on.

To release Repeat the operation explained above.

Re-setting

It re-sets all settings of “Temperature Control”, “Fast Cooling”, and “Energy-Saving Operation” to the initial setting. Also, it will cancel the timer mode.

To set the time and start

SELECT

1 Press button to set the timer.

TIMER Setting range is minimum 1 minute up to maximum 99 minutes with 1-minute increments. To set the timer for 10-minute increments, hold down the panel switch longer.

2 Press button to start.

START STOP Alarm sound will announce the completion. Any panel switch can be pressed to stop the alarm sound. (It automatically stops after 1 minute, if no panel switch was pressed.)

QUICK START STOP

Energy-Saving operation

It automatically switches between “Energy-Saving Operation Mode” and “Normal Operation Mode” when the doors are not opened and closed, such as at night and when the house is unoccupied, to minimize the energy consumption.

Press buttons.

ECO comes on in the LCD section.

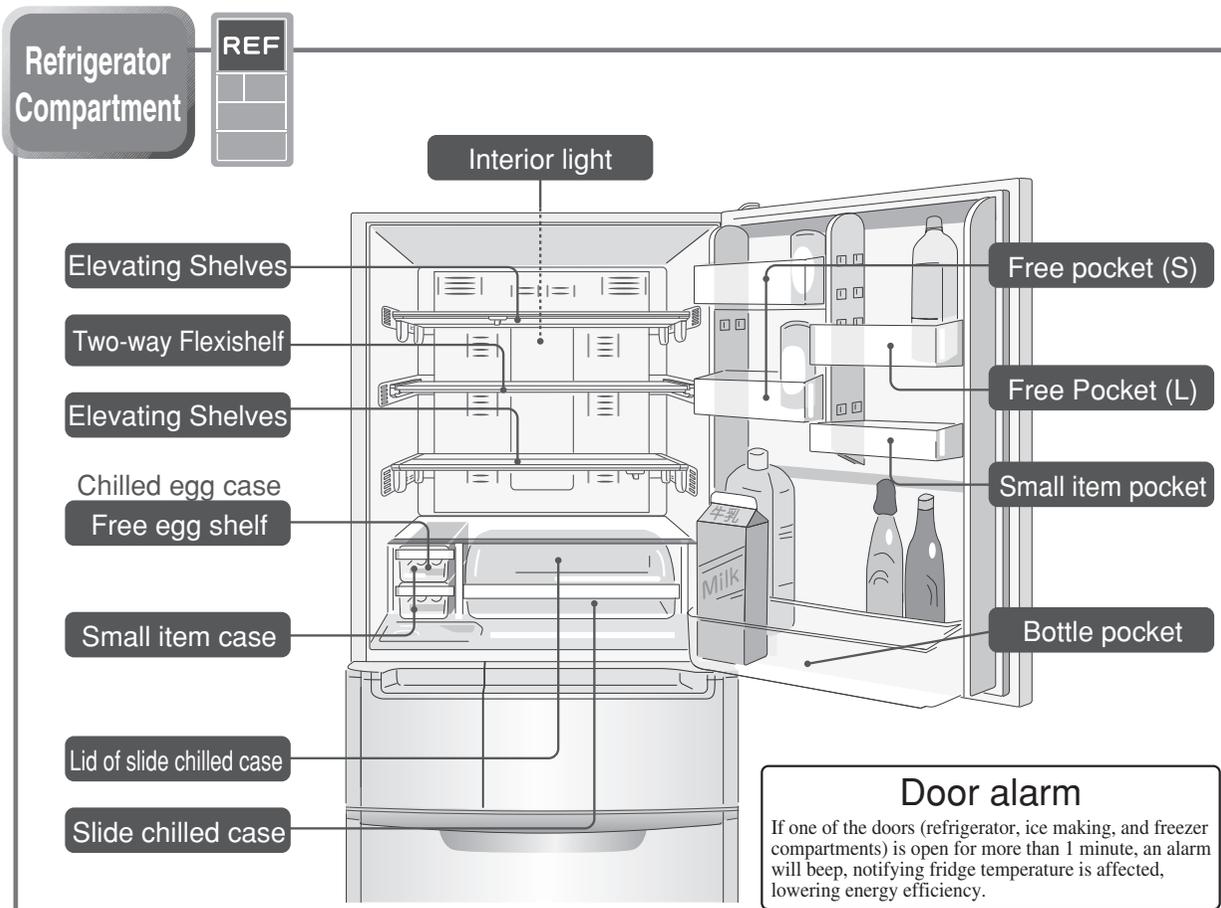
To release Repeat the operation explained above.

QUICK

Press button and hold down for about 3 seconds (until a “beep” sound is heard).

There are no changes in temperature control for “Ice Making Compartment” and “Versa Compartment”.

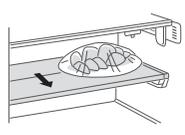
Refrigerator Compartment



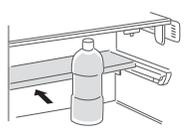
Door alarm
 If one of the doors (refrigerator, ice making, and freezer compartments) is open for more than 1 minute, an alarm will beep, notifying fridge temperature is affected, lowering energy efficiency.

Two-way Flexishelf

1 As a wide shelf.

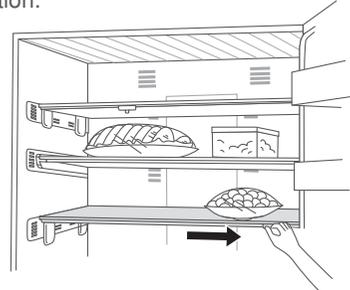


2 Make the shelf to the half size for taller foodstuffs.

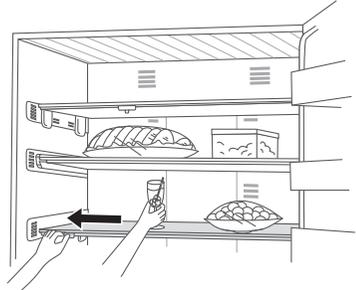


Elevating Shelves

Move the lever on the front of the shelf left or right to adjust the shelf to the desired position.



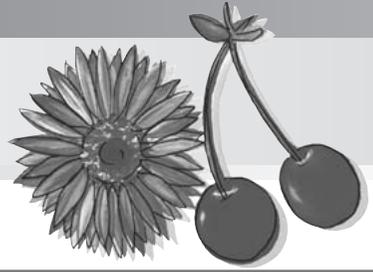
Move the lever to the right to raise the shelf.



Move the lever to the left to lower the shelf.

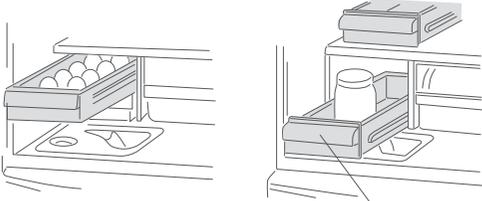
- The lever will be difficult to move when heavy items are placed on the shelf.
- When the Elevating Shelves are lowered, one of the shelf supports may come off if the shelf contacts any foods under the shelf. This is to prevent damaging the foods. If one of the supports comes off, push it back into position from above.

How to remove the shelf. [page 24](#)



Small Item Case

The case can be used for storing various items including eggs and small articles according to your idea.

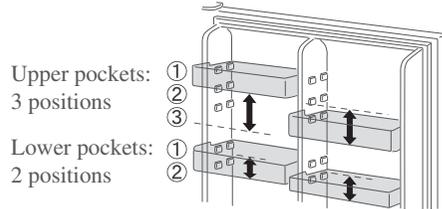


The case is automatically set to "CHIL".
 ● Do not store foods that easily freeze.

By removing the upper case

Free Pocket

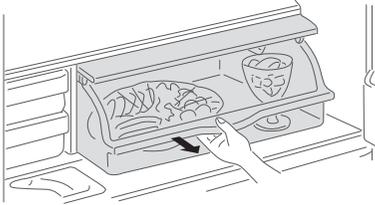
Pocket can be hung in different positions.



How to remove the pockets. [page 25](#)

Lid of slide chilled case

Open the lid by pulling the case toward you.



The case is automatically set to "CHIL".
 The temperature cannot be adjusted using the control panel.

- To store meat, fish, processed foods (such as fish paste, ham, etc.), yogurt, etc.

- The interior light will go out if it is continuously on for 60 minutes. After the door is closed, the light will come on again the next time the door is opened.

Short Notes for Users

Note

**Do not leave food items hanging over the edge of the shelves.
 Do not place bottles that can not reach the bottom of the compartment in the front row of the bottle pocket.**

- Doing so can cause half-shut doors and broken bottles.

In the following cases, the items in the slide chilled case may be frozen. Set the temperature for the refrigerator to "M" or "L".

- When the temperature for the refrigerator is set to "H" or "CHIL".
- When the ambient temperature becomes 5°C or less (in winter).

Do not close the door of the refrigerator with the items in front of the slide chilled case.



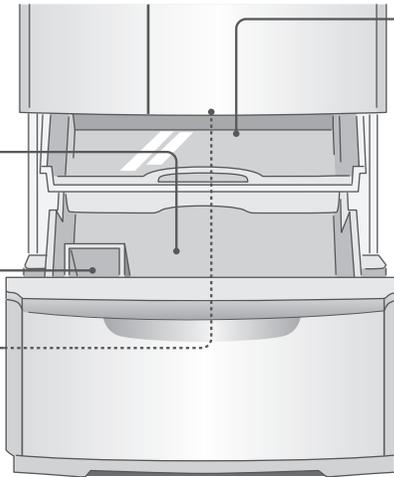
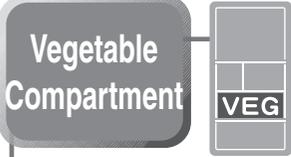
Be sure to properly replace and cover the case with the lid.

Do not set a commercial tube stand outside the door pocket.



- Failure to do so may prevent the door from closing properly, cause insufficient cooling, items to drop from shelves, injury and damage to the case or lid.

Vegetable, Freezer and Versa



Sliding case

Vegetable case

2L-plastic bottles can be put into the case.

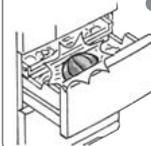
Vegetable stand

To stand and store the asparagus, cucumbers or the like.

Note

Do not place tall objects underneath the slide case.

- Doing so can cause damage to food items or the slide case.
- Using the vegetable compartment without the slide case will cause vegetables to dehydrate.



Tricolor LEDs (top of compartment)

Vegetables are exposed to LED light to maintain their freshness. Vitamins and polyphenols increase.

Vegetables are still living even after being harvested. By bathing the vegetables in light, their nutrients are increased and the freshness is preserved.

* Orange LEDs (3 locations)
These LEDs are always on.

* Purple and blue LEDs (1 location each)
These LEDs are on for about 160 minutes a day, therefore the LEDs may not be on when the door is opened.

Short Notes for Users

- There are no foods that cannot be stored under the LED light. Simply store them in the usual manner.
- Even with poor light, vegetables increase nutrients. Therefore, there is no need to unwrap the covers, unless the cover shut out the light.
- Cover vegetables and fruit in plastic wrap to preserve freshness.
- Vegetable nutrients will not continue to increase forever. The storage stability will depend on the freshness when bought. Please use the freshest vegetables available. In addition, vegetables should still be consumed when they are at their freshest.
- The vegetable compartment has high humidity, therefore the bottom of each case may become cloudy or condensation may form when a large amount of leafy vegetables is placed in the vegetable compartment. If condensation collects in the bottom of a case, it will cause the case to become dirty, therefore wipe the case with a dry cloth.



Note

Do not break down or pour water over the LEDs.

- Doing so can cause damage to the LEDs.
- Long-lasting LEDs are used for the tricolor LEDs, therefore replacement is not normally needed.

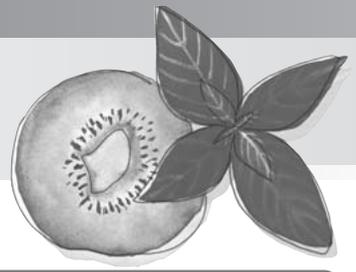
When you want to turn off the tricolor LED light

Control at the control panel.

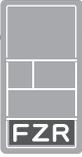
- ① Press MODE button to light up the VEG.
- ② Press SELECT and ECO buttons simultaneously for 3 seconds (until a "beep" sound is heard).
☀ mark will disappear from the LCD.

* When turning on the LED lights, follow the above.

* However, the light from the purple and blue LEDs cannot be controlled using the control panel.



Freezer Compartment



Freezing case (upper)

Freezing case (lower)

Storage-limit line

Door alarm

If one of the doors (refrigerator, ice making, and freezer compartments) is open for more than 1 minute, an alarm will beep, notifying fridge temperature is affected, lowering energy efficiency.

Do not place the food items over Storage-limit line on Freezing case (lower).

- Doing so can cause incomplete door-closing and damage to food items or Freezing case.

Versa Compartment



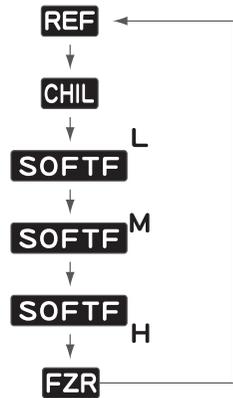
Aluminum tray

Food is cooled quickly due to pre-cooled aluminum.

Versa case

Adjust temperature to suit your dietary habits [page 10,18](#)

You can select one from 6 settings



Note

When changing the setting to "FZR" or "SOFTF", wait at least 30 minutes before placing frozen foods in the versa compartment or use fast cooling. [page 12](#)

- The current temperature display may not indicate the freezer or soft freezer temperature even after 30 minutes, however, this will not affect your food items.
- Place the food items so that the cool airflow can flow above the items.

Short Notes for Users

- The indicated temperatures used as guidelines here are based on the stabilized temperature which was measured slightly lower than the center part of the product under the condition of room temperature 30°C, without placing any food inside the compartment with all doors closed. Temperature may be different depending on the conditions to use such as food storage conditions or the door operation conditions.

Versa Compartment Temperatures / Soft Freezing

Guidelines for temperature control and each temperature page 10

REF About 3°C

- To store vegetables and fruits.
- To cool drinks.
- To store foods which cannot be placed in the refrigerator compartment.
(Always wrap vegetables to avoid getting dehydrated)



CHIL About 0°C

- To store processed foods (such as fish paste, ham, etc.) yogurt or cheese for about a week.



SOFTF About -7°C (M)

- To store meats or fish for about 2 to 3 weeks.

If it is hard and difficult to cut, adjust the temperature level towards "L" and if it is not frozen enough, then adjust the level towards "H"



FZR About -17°C

- To store frozen foods or ice creams.
- To store meats, fish or other processed foods for 1 to 3 months.



Items that are not suitable for soft freezing

Items that can not be frozen normally are not suitable for frost freezing either. Form and quality of such items after freezing are not guaranteed.

Example: milk, eggs, potatoes, bean curd, konyaku (nutritious yam paste), etc.



The soft freezer can not preserve commercial ice cream or frozen foods. Store these items in the freezer compartment.



Soft Freezing

Meat and Fish

Though your meat or fish may seem to be frozen as if it were frozen normally, with soft freezing you need not separate food or wait for it to thaw because your meat or fish can be cut with a knife immediately after you remove them from the versa compartment, thereby shortening your cooking time!

- Items that have been transferred from freezer to soft freezer or soft freezer to freezer should be used within 1-2 weeks.

Blocks of meat

Meat that has been stored in the freezer or was bought frozen can be transferred to the soft freezer, so you can divide up and remove only the amount that you want to use.

- Depending on its size, your meat should be ready to cut within 2-5 hours after it is transferred to the soft freezer.



Thinly sliced meat or bacon

Thinly sliced meat or bacon can be cut immediately. They will thaw while cooking or dipped in basting, during which time you can easily separate them.

- They may not be able to be separated immediately after they are removed from the soft freezer.



Ground meat

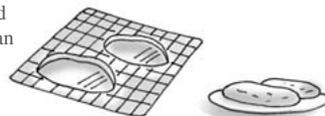
You can cut and remove the amount you want to use.

Furthermore, if you cut them into small cubes, they will thaw enough in 15-30 minutes for you to loosen with your hands.



Cutlets and cod roe

Cutlets can be cooked on a low flame without taking the time to thaw them. Cod roe and other highly salted foods do not freeze and can be used immediately.





Fruit

The soft freezer is recommended for very sweet fruit. Try soft freezing with various fruit.

- Eat fruit frozen without thawing. (these fruit will not be fresh again after thawing)
- The flavor of fruit kept in the soft freezer for more than 1 week may change. It is recommended to eat fruit within 2-3 days to best enjoy its new taste.
- Freezing time may vary depending on sugar content of the fruit, so allow 1 day for freezing.

Smoothie

Blend soft-frozen fruit and yogurt and milk in a blender to make an easy healthy drink.

Example: Cut half a peeled apple into bite-size pieces, and a peeled kiwi fruit into 1-cm circular slices. Freeze fruit in the soft freezer. Then blend soft-frozen apple and kiwi fruit, 250cc of milk and honey (if you like) in a mixer until it becomes smooth. (makes 2 servings)

Watermelon

Make watermelon ice by cutting watermelon into bite-size pieces and freezing in the soft freezer.



Canned fruit

Soft-freeze mikan oranges or pineapple in its syrup to make easy sherbet.

- May not freeze depending on the sugar content of the syrup.

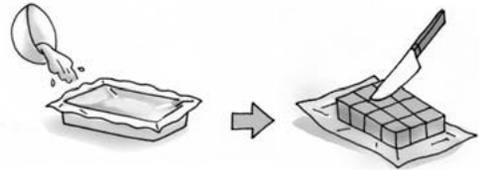


Others

Meat sauce

Store left over sauces in an airtight container. You can remove the sauce with a spoon and use it as a universal sauce with gratin or omelets.

- Sauces with high liquid content may not be removable with a spoon.
Line the inside of a storage container with plastic wrap, pour sauce into container, remove by holding the wrap and cut the amount you need with a knife.



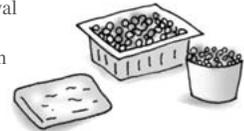
Spinach

Boil spinach, place it in an airtight container and soft-freeze for later use in miso soup or butter saute.



Fermented soybeans and fried bean curd

Fermented soybeans can be mixed immediately after removal from the versa compartment. Chilled fermented soybeans can be quite tasty. You can cut the amount of fried bean curd you want to use.



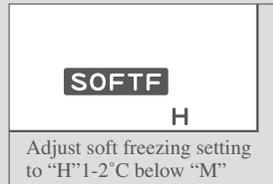
Short Notes for Users

Please pay attention to the following when using soft freezing

- Since food freezing takes place at approximately -7°C with soft freezing, it may take up to 24 hours for food to freeze completely.
- Open and close compartment doors with as low frequency as possible when you add items to the soft freezer.
- The degree of freezing may vary depending on the type of item, cooking method, arrangement of item (folded and layered or location of item), amount, and period of storage.
- Items may not freeze or may freeze too much (for cutting with a knife) depending on content of sugar, salt and fat.
- Items that have frozen too much can be cut with a knife if they are left in room temperature for 5-15 minutes.
- **Adjust the temperature in accordance with degree of freezing required.**

page 10

◆ When not frozen enough

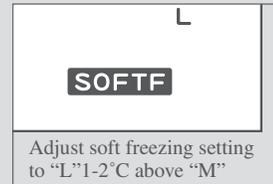


Adjust soft freezing setting to "H" 1-2°C below "M"

Foods that do not freeze easily

- Food with high salt content, such as cod roe
- Food pre-seasoned with soy sauce or bean paste
- Food with high sugar content, such as stewed beans
- Food with high sugar content, such as bananas

◆ When frozen too much

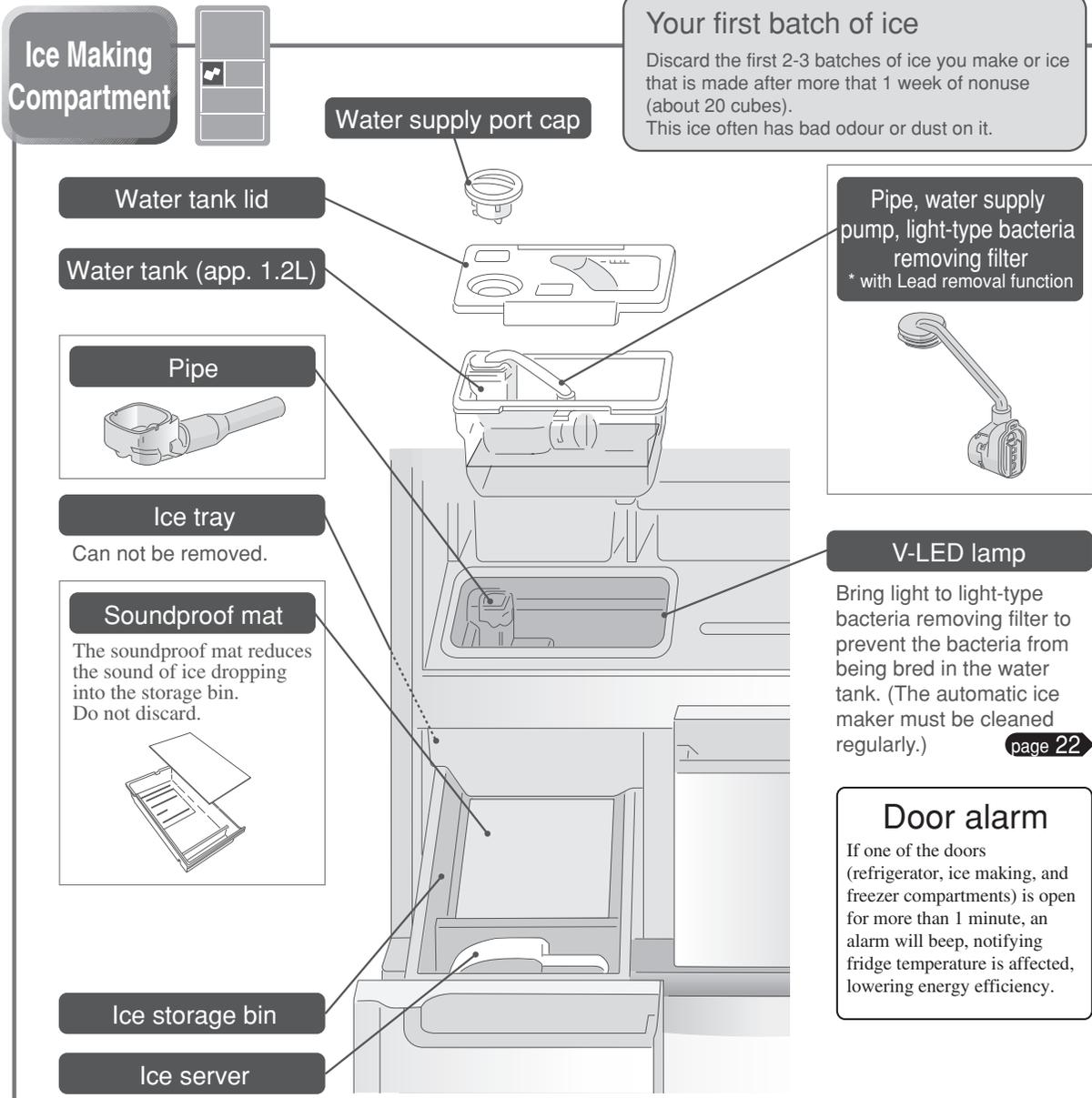


Adjust soft freezing setting to "L" 1-2°C above "M"

Foods that freeze easily

- Food with high water content, such as boiled vegetables
- Food with high water content, such as rice
- Large blocks of meat with low fat content, such as thigh meat

Ice Making Compartment (Automatic Ice Maker)



Your first batch of ice
Discard the first 2-3 batches of ice you make or ice that is made after more than 1 week of nonuse (about 20 cubes). This ice often has bad odour or dust on it.

Pipe, water supply pump, light-type bacteria removing filter * with Lead removal function

V-LED lamp
Bring light to light-type bacteria removing filter to prevent the bacteria from being bred in the water tank. (The automatic ice maker must be cleaned regularly.) **page 22**

Door alarm
If one of the doors (refrigerator, ice making, and freezer compartments) is open for more than 1 minute, an alarm will beep, notifying fridge temperature is affected, lowering energy efficiency.

Note

Please do not put anything deep inside the ice storage bin.

Ice server, Ice level sensor lever, Door, Ice storage bin, Make the ice flat.

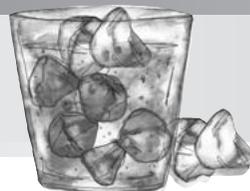
- When storing food items in the ice storage bin, they must not be higher than the top of the bin. (This can cause a malfunction or prevent the door from closing.)
- The ice level sensor lever will detect the ice storage automatically, and will stop ice-making when it reaches a certain amount. (70 to 100pcs.) In order to detect the ice level correctly, please make the ice flat and put the ice server in the front of the ice storage bin. The automatic ice maker could be damaged if it contacts an object.

Please do not pour anything like sugar, juice or tea apart from water in the water tank. (The water tank can withstand up to 60°C)

- If you pour anything apart from water into it, the water pump may malfunction.

Do not fill the water tank higher than the filled-level mark.

- Filling the water tank with a kettle while it is still in the tank holder, or filling it higher than the filled-level mark may cause "connected" ice to form.



Making Ice

1 Select **REG** or **CRL** on the control panel. page 11

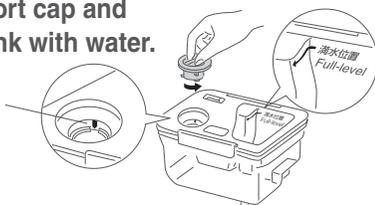
- Initial setting of the ice making compartment at delivery is **REG**.

2 Check the amount of water remaining in the water tank.

- Open the door to the refrigerator compartment and check the level from above the tank.

3 Remove the water tank. Remove the water supply port cap and fill the tank with water.

Up to the full-level mark



4 Replace the water tank holding it level.

- Tipping the tank will cause water spillage.
- If the water tank does not fit properly in place, ice will not be made. In addition, it can cause the water tank to freeze. Check that there is no foreign material in the tank holder or water supply pipe.

Use the control panel for the following operations.

To stop ice making page 11

To use the ice making compartment as a refrigerator page 11

To make ice quickly page 12

Short Notes for Users

- Ice made of water containing much mineral such as mineral water might cause white sediment (white crystal). When the ice melts into water, it may appear fibrous. This white sediment is a crystal of mineral ingredients, which is not harmful.
- The V-LED lamp comes on in the following condition:
 - When the door of the refrigerator compartment or ice making compartment is kept open (However, the lamp goes out when the door is kept open for 5 minutes.)
 - Before and after feeding water into the ice tray.
- To cool the Ice Making compartment, set the target temperature between -30°C to -20°C when Quick ice making. page 12
- The time required for making ice might be longer according to the frequency of closing and opening the door, the temperature around the refrigerator, and the amount and temperature of the water added to the tank.

About Crystal Ice

- There may be white sediment (white crystal) or bubbles inside the ice cube.
- In cases below, may cause clear ice into such white sediment ice.
 - When shifting from “Regular ice making mode” to “Crystal ice making mode.” (Initial is set to “**REG**”)
 - Ice made of water containing much mineral. (This white sediment is a crystal of mineral ingredients, which is not harmful.)
 - When surrounding temperature, status of use have changed.
 - When pieces of ice are stored long time in the ice storage bin. (Frost will cover the ice. If it is put into water, the frost will dissolve.)

When you want to maintenance the clarity of the ice or the ice making time operation page 27

Ice making time

- Approximately time for making one set of ice (7-8 pieces)

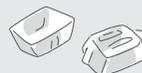
Regular Ice making mode	Crystal Ice making mode	Quick ice making mode
90-120 minutes	5-8 hours	50-80 minutes

Clear ice is made slowly to increase the clarity of the ice cube.

- Ice making time can increase depending on the surrounding temperature, the status of usage, and type of water.
- Please decrease the number of times the door is opened when making clear ice.

Ice shapes

- The ice is such a shape as irregular and flat trapezium or rhombus.
- The size of ice made for one time may vary with the water amount in the water tank.
- One batch of ice is 7-8 pieces.
- If the water tank is filled above the full-level mark, the water channels in the ice tray will freeze, causing 2-3 pieces of ice to stick together and bumpy ice.
- If some pieces of ice stored long time, they will be stuck or become smaller. (This phenomenon is called “sublimation”.)
- The quickly made ice may be cracked or split due to fast freezing.



Maintaining the Automatic Ice Maker

Cleaning once a week

Water tank

Remove the lid and wash with water.

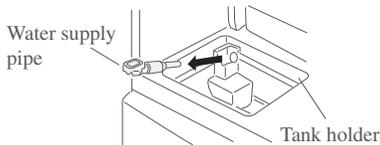
(the tank can withstand up to approximately 60°C)



Cleaning once a month

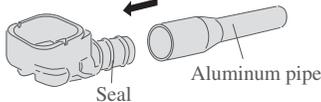
Water supply pipe / Tank holder

1 Pull out water supply pipe. Wipe the tank holder with clean cloth.



● Do not let water flow into the tank holder.

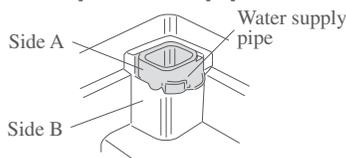
2 Separate pieces and wash with water.



● Twist on the aluminum pipe to replace it.

*The water supply pipe may be white due to minerals or chlorine, but this is not abnormal. Wash the pipe and continue using it.

3 Reverse steps to replace the pipe.



● Replace the water supply pipe. Be sure that sides A and B fit flush against each other. Otherwise, the ice maker may malfunction if the pipe is not installed properly.

Cleaning once a month

Water supply pump / Light-type bacteria removing filter

1 Pull out the pipe. Twist the pump to remove it.

2 Disassemble and wash the parts with water.

● The impeller is magnetic. Wash carefully to remove all foreign objects.

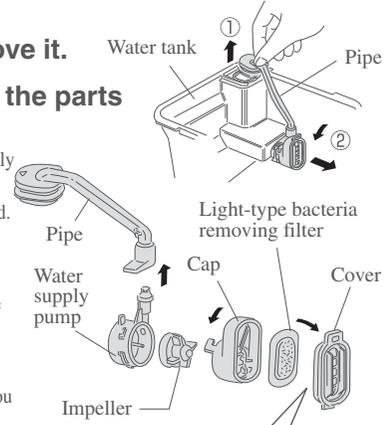
● Normally the filter need not be replaced. However, replace it in the following conditions:

•When the filter is clogged by passing something other than water through the filter.

•When the filter is broken.

•When the filter is moldy.

In such cases, contact the dealer that you purchased this refrigerator.

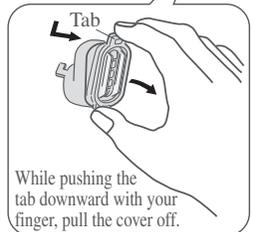


Note

Do not use kitchen detergent, benzene, bleach or other cleaning products to clean the light-type bacteria removing filter.

● The products above give ice odours.

Be sure to read all instructions for detergents, bleach and other cleaning products you use to clean the water tank and lid.



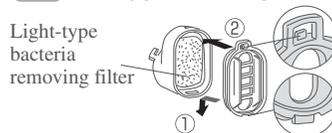
While pushing the tab downward with your finger, pull the cover off.

3 Reverse the steps to replace the pump.

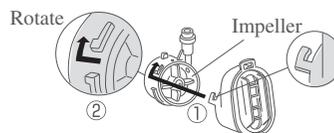
Reassembly points

Improper reassembling might cause failed ice making or increased noise. Check the following.

1 Fit the filter cover's tab (1) and hook (2) into the cap.

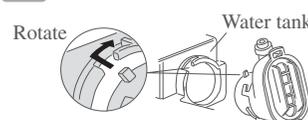


2 Rotate the cap and catch the cap hook (1) onto the water supply pump projection (2).



*Make sure that the impeller is in the pump.

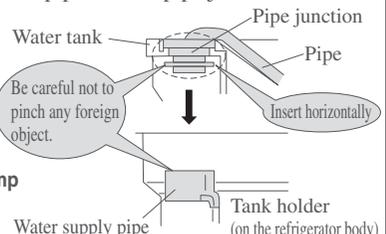
3 Securely rotate the water supply pump into the water tank to install it.



4 Align the ▲ marks on the pipe and the water tank.



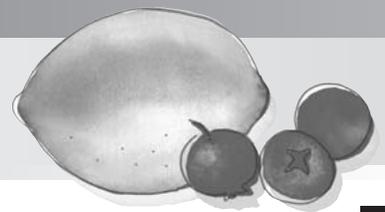
* Make sure that no foreign object is found between the water supply pipe and the pipe junction.



Water supply pipe Tank holder (on the refrigerator body)

● Improper fitting or any foreign object will produce a clearance between the pipe and the pipe junction to cause freezing of the water tank.

- Regular cleaning produces clean and delicious ice.
- Regular cleaning prevents water stains, molding, etc.

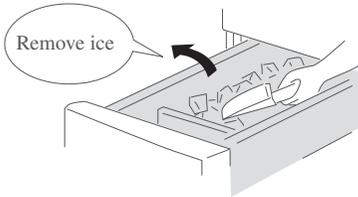


To clean (rinse) the ice tray

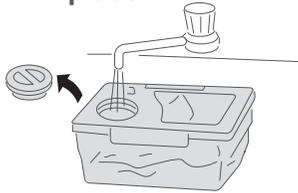
Cleaning the ice tray using water from the water tank

When the setting of Ice Making compartment is “REF (Refrigerator)”, this function is impossible. After changing the setting from “REF”, perform the following procedure. (To change the setting for the ice making compartment) [page 11](#)

- 1 Remove ice from the ice storage bin and close the Ice Making compartment door.



- 2 Fill the water tank with water and set it in place.



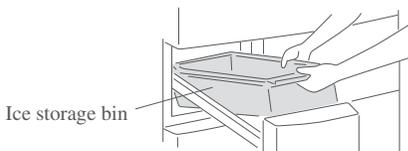
- 3 Press  button on the control panel for about 5 seconds (until a “beep” sound is heard).

- The display (“REG”, “CRL”, or “STOP”) of the ice making compartment will blink (for about 1 minute). (The ice tray will be cleaned by the water from the water tank.)
- After the blinking stops, the original display will return. You may hear a knocking sound. This is not a malfunction. (This sound indicates that the operation of refrigerant valve is being checked.)

- 4 Repeat step 3 2 to 3 times.

- 5 Remove the ice storage bin and discard the water and ice.

- Do not discard the two-layer soundproof mat.

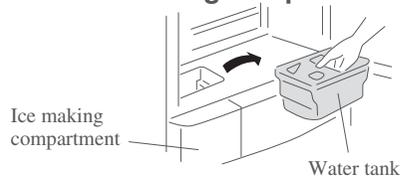


When the automatic ice maker will not be used for a long period of time When using the “STOP” or “REF” setting

* Follow these instructions for transportation of the refrigerator as well.

Discard all the ice and water from the ice tray in the ice storage bin to empty the ice tray.

- 1 Remove the water tank and close the ice making compartment door.

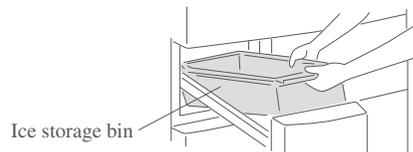


- 2 Press  button on the control panel for about 5 seconds (until a “beep” sound is heard).

- The display (“REG”, “CRL”, or “STOP”) of the ice making compartment will blink (for about 1 minute). (The water and ice will empty from the ice tray.)
- After the blinking stops, the original display will return. You may hear a knocking sound. This is not a malfunction. (This sound indicates that the operation of refrigerant valve is being checked.)

- 3 Remove the ice storage bin and discard the water and ice.

- Do not discard the two-layer soundproof mat.



- 4 Set the ice making compartment to “STOP” or “REF”. [page 11](#)

- 5 Wash the water tank (water pump, pipe, and light-type bacteria removing filter), water supply pipe, ice storage bin, and soundproof mat with water. Dry carefully and reinstall parts.

- To restart the ice maker, switch the ice making setting.

[page 11](#)



Put the water tank back to its original position.

Removing and Maintaining the Accessories

Before you start

Remove the power plug from the socket.



Warning

Failure to remove the plug may result in electric shock.

Wait at least 10 minutes before you replace the power plug. The refrigerator will not operate if the plug is replaced immediately after it is removed.

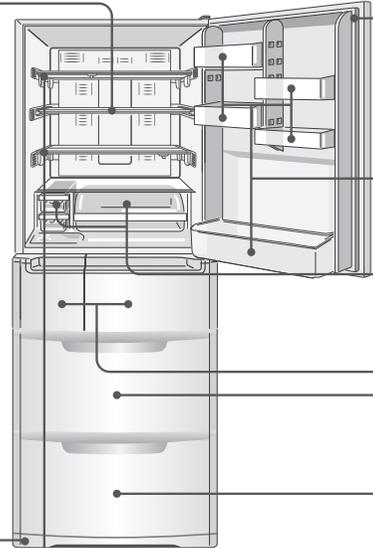
Maintenance and Cleaning

- Wipe or remove and wash parts with water.
- To remove oily deposits, wet a cloth with warm water or dishwashing detergent and wipe. (Be sure to wipe off all oily deposits. Oily deposits can cause plastic parts to break.)
- Be sure to wipe off any detergent you used.
- Be sure to read all instructions and heed precautions for chemically treated disposable cloths you use to clean parts.
- Do not use alcohol, benzene, steel wool or alkaline-base detergents. They will cause damage to plastic parts (door handles, cap, cases, etc.) and coating.



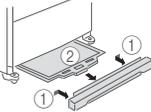
Two-way flexishelf

Push the shelf inward, then lift and pull forward.



Drain pan

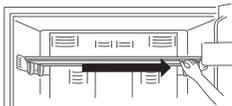
- ① Remove the toe grille by pressing the left and right sides inward while pulling forward.
- ② Hold the drain pan with two hands and pull out gently.



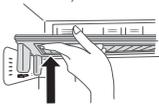
Elevating Shelves

Removal

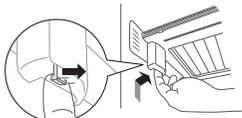
- ① Move the lever completely to the right.



- ② Push up each support, one at a time, with a strong effort. (4 supports) (When the internal hooks are released from the refrigerator, a "click" sound will be heard.)



If the supports are not released easily, push the internal hooks inward.



- ③ After the 4 supports are released, pull out the shelf.



Installation

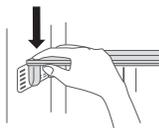
- ① Make sure that the lever is moved completely to the right.



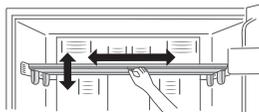
- ② Make sure that the 4 metal stoppers are securely fitted into the refrigerator, then lightly set the shelf into the refrigerator and align the 4 supports with the 4 stoppers.



- ③ Push each of the 4 supports, one at a time, downward from above. (When the internal hooks catch onto the refrigerator, a "click" sound will be heard.)

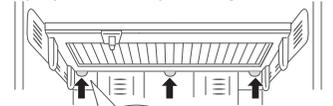


- ④ Finally, move the lever to the left and right and check that the shelf moves up and down while remaining level. (If the shelf does not remain level, the 4 hooks are not securely caught onto the refrigerator. Remove the shelf and repeat steps ① to ④.)

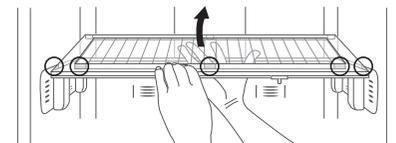
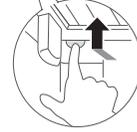


Tray removal

- ① Push the hooks (3) at the back of the tray upward with your finger.



- ② Lift up the back of the tray until the front hooks (3) and side hooks (2) are released. * Lift up the tray slowly, otherwise it may fall.

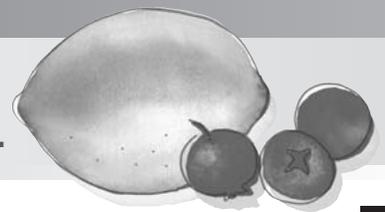


- ③ Remove the tray with both hands.



● Disassembling or applying grease to the Elevating Shelves can cause it to malfunction.

Reverse removal procedures to reinstall accessories.



Door seal

Dirty seal is easily damaged and can cause refrigerated air to leak.

Free Pockets / Bottle pocket

Free pocket

- Alternately lift up the left and right sides (the pockets are securely installed).
- Pull toward you.

Bottle pocket

- Alternately lift up the left and right sides (the pockets are securely installed).
- Pull toward you.

Slide chilled case / Small Item Case

Sliding chilled case

- Support the lid with a hand.
- Lift up the case and pull it towards you.

* The upper shelf of the sliding case compartment cannot be removed.

Small Item Case

- Pull the case till it stops.
- Lift up the case and pull it towards you.

Ice Making Compartment and Versa Compartment

- Open the compartment door all the way.
- Lift out holding the area closest to you.

Vegetable Compartment

Sliding case

- Open the door all the way.
- Pull up and lift the case toward you.

Vegetable case

- Lift up the door slightly and pull it toward you, then angle it down.
- Pull up and lift the case toward you.

Freezer Compartment

- Open the door all the way.
- Pull up and lift the freezing case (upper) toward you.
- Pull up and lift the freezing case (lower) toward you.

Replacing the interior light bulb

Refrigerator Compartment / Vegetable Compartment (Tricolor LED)

Refrigerator Compartment

- Remove the plug.
- Remove the AUTO-shelves (2) and two-way flexishelf.
- Press the ▲ tab upward as you pull the cover forward.
- Replace the interior light bulb
 - Please purchase a light bulb for the refrigerator (MR-S45N) from your retail store.
- To replace the cover, insert the upper tabs and then the lower tabs.

Vegetable Compartment (Tricolor LED)

Please contact the retail store at which you purchased it or a Mitsubishi Electric Maintenance Service or Customer Service representative.

Warning

Using non-designated interior light bulbs can cause fire. Non-removal of plug before changing interior light bulb can cause electric shock or injury. Just in case of refrigerant-leakage, explosion or fire can be caused.

Control panel

Wipe with a soft dry cloth.

* Do not use alcohol, benzene, steel wool or alkaline-base detergents. They can cause the control panel to malfunction.

Drip Gutters

Wipe away all soil or drippings.

The rear of the refrigerator and the floor

- Turn the adjustable supports to lift them off the floor and move the refrigerator.
- Wipe away all soil from the rear of the refrigerator, the wall and the floor. Air circulation can cause dust to collect at the rear of and on the floor under the refrigerator, creating black soiled areas.

Caution

Do not put your hands underneath the refrigerator. Doing so can cause injury.

After Maintenance

Inspect the power cord, plug and outlet

- Is the power cord or plug damaged?
- Has dust collected on the power plug?
- Is there abnormal heat build-up in the power plug?
- Is the outlet coming loose?
- Have you properly reinserted the power plug?

Warning

Damaged power cords or plugs, and dust collected on plugs can cause electric shock or fire.

What to do

Electric power goes out

- Refrain from frequently opening and closing the refrigerator doors, and avoid storing additional items.
- Setting for modes other than temperature may change. Please check. (Child Lock, Energy-Saving, Fast Cooling, etc.)

Transporting the unit

- 1 Discard the water and ice in the water tank and the ice tray. page 23
- 2 Wear some protection such as work-gloves.
- 3 Discard water collected in the drain pan. page 24
- 4 Gently transport the unit with 2 or more people, gripping the hand-holds on the lower-front interior and the upper-rear of the unit.



Front Lower interior

Gripping the hand-holds on the upper

- Do not lay the unit on its side (doing so can cause malfunction of the compressor).

Warning

It uses flammable refrigerant, do not damage the refrigerant circuit.
 • If the gas leaks, ignition or explosion may be caused.

When [E56] appears on the LCD or the alarm does not stop

Please contact the retail store at which you purchased the refrigerator or a Mitsubishi Electric Maintenance Service or Customer Service representative. page 31

- When the alarm does not stop, press the button for 5 seconds for the alarm to stop. After the alarm has stopped, Please contact the retail store at which you purchased it or a Mitsubishi Electric Maintenance Service or Customer Service representative.

The unit will not be used for a long period of time

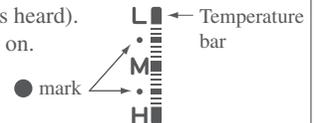
- 1 Clean the automatic ice maker. page 23
- 2 After removing the power plug from the outlet, clean the interior of the unit. Leave the doors open for 2 to 3 days to sufficiently dry the interior of the unit.
 * Failure to sufficiently dry the interior of the unit can cause molding, odours, and refrigerant (gas) leakage due to corrosion of the condenser.

To make fine adjustments of temperature (Fine Adjustments mode)

You can set fine adjustment mode for the refrigerator, freezer or versa compartments when selecting settings for "REF" or "FZR".

Setting to fine adjustment mode

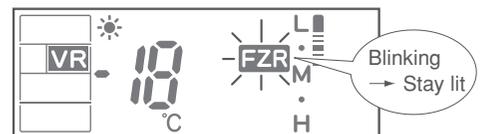
- 1 Press button and select the refrigerator.
- 2 Press and buttons simultaneously for about 3 seconds. (until a "beep" sound is heard). The ● mark will come on.



To release Repeat the operation explained above.

Fine temperature adjustment

- 1 Press button and display the required compartment for temperature adjustment.
- 2 Press button repeatedly and adjust temperature.



When selecting the versa compartment, the light of the temperature control display first blinks and then stays on to perform the setting. (A "beep" sound is heard).

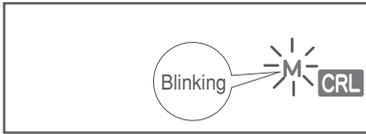


Specifications



When you want to make high clarity ice or fasten the speed making high clarity ice

- 1 Press **MODE** and **QUICK** and **ECO** buttons simultaneously for about 3 seconds. (until a “beep” sound is heard).



- 2 Press **SELECT** button. When you want to make high clarity ice, set to “H” and to speed up making clear ice, set to “L”. The light of the high, medium, low control display first blinks and then stays on to perform the setting. (a “beep” sound is heard).



It shows that the setting is “L”.

* When set to “M”, the light does not appear on the control panel.

Table of high clarity ice and making time set at each mode.

Display	Time of making ice	Degree of clearness (the percentage of clearness area of the ice)
L	Faster than “M”	70-80% of the ice
M	Approx 5-8 hours	80-90% of the ice
H	Slower than “M”	Over 90% of the ice

● Initial is set to “M”

This appliance is designed for use in New Zealand only and can not be used in any other country. No servicing is available outside of New Zealand.

	Accessories	Units
	Model	MR-S45N
Refrigerator Compartment	Elevating Shelves	2
	Two-way flexishelf	1
	Slide chilled case	1
	Lid of slide chilled case	1
	Water tank (with light-type bacteria removing filter)	1
	* With Plumbum-removal function.	
	Free pocket (L)	1
	Free pocket (S)	2
	Small item pocket	1
	Small item case	2
Ice Making Compartment	Free egg shelf	1
	Bottle pocket	1
	Ice storage bin	1
Versa Compartment	Soundproof mat	1
	Ice server	1
Vegetable Compartment	Versa case	1
	Aluminum tray	1
Freezer Compartment	Vegetable case	1
	Sliding case	1
	Vegetable stand	1
	Freezing case (upper)	1
	Freezing case (lower)	1
	Drain pan	1
	Toe grills	1

Troubleshooting

Troubleshooting

When	Check the following	Solutions and reasons
Unit does not cool at all	<ol style="list-style-type: none"> Is the unit receiving power? Is "D" displayed on the control panel? 	<ol style="list-style-type: none"> Check the power plug and the main power supply. The demonstration operation is on. Cancel the "D" display. page 8
Unit does not cool sufficiently; unit does not produce ice or ice melts	<ol style="list-style-type: none"> Is temperature set to "L"? Have you just begun using the unit? Have you impeded heat ventilation due to no space around the refrigerator, placed it in direct sunlight, etc.? Have you blocked the flow of refrigerated air or left the door open? 	<ol style="list-style-type: none"> Change setting to "M" or "H". It sometimes take 4-5 hours for unit to cool and up to 24 hours for ice to make in the summer. Check that installation was properly executed. page 6 Check that the unit is not excessively packed with food items and that the doors are not ajar. page 6
Ice maker does not produce ice or produces very little ice; water level in water tank does not decrease	<ol style="list-style-type: none"> Have you just begun using the unit? Are the water supply pump and pipe set properly in the water tank? Is the water supply pipe set properly in the tank holder? Have you left food or the ice server laying in the ice storage bin? Is the ice making compartment set to "STOP" or "REF"? Is the ice making compartment set to "CRL"? Is there enough water in the water tank? Is the refrigerator tilted? 	<ol style="list-style-type: none"> It sometimes take 4-5 hours for unit to cool and up to 24 hours for ice to make in the summer. In particular, check that the outlet of the pipe in the tank is securely installed to the tank. page 22 Check the installation. page 22 Assume that there is sufficient ice in the storage bin. Remove foods, etc. from the storage bin. Level out the ice evenly in the storage bin. Set to "REG" or "CRL" High Clarity ice takes longer time to be made than usual ice. (approx 5-8 hours) Sometimes there are few pieces of ice in a batch. page 21
Items in compartments other than the freezer compartment begin to freeze	<ol style="list-style-type: none"> Is the temperature setting set to "H" or "CHIL"? Have you placed items with high water content in the back of the unit? Is surrounding air temperature less than 5°C? 	<ol style="list-style-type: none"> Change setting to "M". Keep in mind that temperature temporarily drops during QUICK MODE. Store vegetables, fruit, items with high water content and beverages in the front of the unit. Set refrigerator compartment and vegetable compartment to "L" to prevent freezing.
Items in the versa compartment begin to freeze	<ol style="list-style-type: none"> Is the versa compartment set to "SOFTF" or "FZR"? 	<ol style="list-style-type: none"> Items will freeze when the temperature setting is set to "SOFTF" or "FZR".
Items in the versa compartment begin to melt	<ol style="list-style-type: none"> Is the temperature setting set to "REF" or "CHIL"? Has the temperature just been adjusted or have you just begun using the unit? Are the items on top packed too tightly? 	<ol style="list-style-type: none"> Items will not freeze when the temperature setting is set to "REF" or "CHIL". It takes some time for the unit to cool. Wait at least 30 minutes before placing frozen foods in the versa compartment or use fast cooling. Place the food items so that the cool airflow can flow above the items.
Temperature cannot be adjusted; display moves	<ol style="list-style-type: none"> Has the temperature just been adjusted? Is the display moving? Is  or  displayed? 	<ol style="list-style-type: none"> The temperature is an estimate of the food temperature and does not change quickly. After the temperature for the versa or ice making compartment is adjusted, the display may move until the temperature stabilizes. Cancel the timer mode or child lock setting. page 13
Control panel temperature display changes suddenly	<ol style="list-style-type: none"> Has the temperature setting changed even though the doors of the unit are closed? Do you open the doors of the unit frequently? Is the unit set to fast cooling mode? 	<ol style="list-style-type: none"> Temperature may change when the compressor starts or stops, when surrounding air temperature changes, or before and after operation of the automatic defrost function. Refrain from opening and closing doors until the unit cools. Temperature may temporarily drop during "QUICK" mode.

If situation does not change even after troubleshooting, immediately contact a representative of the retail store where purchase was made.



<p>Moisture or frost collects on the interior or exterior of the unit.</p> 	<p>① Do you open the door frequently or is the door ajar?</p> <p>② Is it a rainy or highly humid time of year?</p>	<p>① Moisture in the air becomes condensation or frost when it cools. Moisture or frost can collect even if the door is only slightly ajar. page 6</p> <p>② Moisture may temporarily collect on the unit. Wipe with a dry cloth. Frost can form easily in the freezer compartment. Try to reduce the time that the door is open.</p>
<p>The door is easy to open. The door will not close.</p> 	<p>① Does any food come in contact with the refrigerator door? Is there too much food stored in the refrigerator?</p> <p>② Is any food dropped into the back side of the sliding door, or is the power cable placed between the unit and the door?</p> <p>③ Is the unit installed properly? Are the adjustable supports right on the floor?</p>	<p>① Be careful not to stick any stored foods out of the shelves or cases.</p> <p>② Remove the dropped or pinched items. Be careful not to pinch foods, power cables or plastic bags.</p> <p>③ Lower the adjustable supports to raise the front of the refrigerator slightly and make closing the door easier. page 7</p>
<p>You are concerned by strong odours (from food or ice)</p>	<p>① Have you placed items with strong odours inside the unit without covering them with plastic wrap?</p> <p>② Is the water tank clean?</p>	<p>① The deodoriser can not completely remove extremely strong odours, so be sure to cover with plastic wrap. page 8</p> <p>② Perform maintenance and clean regularly. page 22</p>
<p>The water tank or the water supply pipe freezes</p>	<p>① Is the pipe installed on the water tank securely? Is there any foreign object between the pipe and water supply pipe?</p> <p>② Is any food or plastic dropped into the back side of the case in the ice making or freezer compartment?</p>	<p>① Improper installation or any foreign object might produce a clearance. Then the cold air can flow backward to cause freezing. page 22</p> <p>② The cold air flows backward to cause freezing. Remove the dropped food or plastic.</p>
<p>Your television picks up noise</p>	<p>① Is your television or other appliances located near the refrigerator?</p> <p>② Is the refrigerator's power outlet close to the antennae drop area?</p>	<p>① Relocate unit at a distance from televisions and other appliances.</p> <p>② Use a dedicated power source.</p>
<p>Noise is loud; the unit makes disturbing sounds; the following sounds are normal</p> 	<p>① Sounds suddenly get louder or tone changes.</p> <p>② Rattling, squeaking sounds sometimes (every 1-2 hours)</p> <p>③ Choking, squeaking sounds after turning on power, sometimes during ice making (every 1-2 hours)</p> <p>④ Whistle sounds after closing doors, etc.</p> <p>⑤ Hissing, bubbling sounds sometimes</p> <p>⑥ Sound like dripping water sometimes when doors are opened.</p> <p>⑦ Tapping sound (approximately 1-10 times) after turning on power, sometimes while unit is running, during cleaning of ice maker plate, etc.</p> <p>⑧ Sounds like buzzing mosquitoes.</p> <p>⑨ Low whirring sound sometimes after opening the freezer compartment door.</p>	<p>① The unit has switched to high-speed operation for powerful cooling during first operation, when temperature is hot, when doors are opened and closed frequently, during QUICK MODE, etc.</p> <p>② These are sounds made during automatic ice making. The unit's automatic ice maker and pump make a sound every 100 minutes or so, regardless of whether or not the tank is filled with water.</p> <p>③ These are sounds made during automatic ice making operation check. This sound is made even during "STOP" mode.</p> <p>④ This is a sound made when the fan motor stops and starts.</p> <p>⑤ These are sounds made during gas flow.</p> <p>⑥ This is a creaking sound made when warm air has penetrated the unit, causing plastic parts to expand.</p> <p>⑦ This is a sound made during refrigerant valve operation check.</p> <p>⑧ The sound is made when the air control damper operates.</p> <p>⑨ This is the sound of the airflow from the cooling fan.</p>
<p>Ice is dented, comes out cloudy small melts</p>	<p>Refer to page 21 regarding shape and clarity of the ice. page 21</p>	
<p>The water tank and water supply pipe become warm.</p>	<p>The anti-freeze heater is turned on. This is a normal phenomenon.</p>	
<p>The outer walls heat up; wind blows from the floor</p>	<p>The unit is equipped with side and ceiling heat ventilation prevention piping and on bottom with a fan to promote heat ventilation. When unit is first operated or during the summer, exterior walls become especially hot (approximately 50-60°C) and warm air can flow from below the unit. These are necessary devices for cooling the unit; resulting heat is not abnormal.</p>	

MEMO

MEMO

- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the appliance.
- **WARNING** - Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- **WARNING** - Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.
- **WARNING** - Should the refrigerant circuit be damaged, do not use electric items or fire equipments near by, and open the window to ventilate the room. And contact the retail store at which you purchased it or the following MITSUBISHI SERVICE CENTER.



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