Kimchi refrigerator
User's Guide
Model: GR-J303UG
GR-J303TG

Please read this User's Guide carefully before operating and keep it handy for reference at all times for your safety.

Service center

Address:
P.O. Box240007
201 James Record Road
Huntsville, AL 35824

Call:
1-800-243-0000

Web:
http://www.lgservice.com
Advantages of the product

Not only a Kimchi storage, but also a refrigerator
- Keep Kimchi, vegetables, fruits, meat and fish for short-term preservation in Kimchi room, and other frozen and refrigerated food and Kimchi in Plusroom.

Multi-purpose Plusroom
- Multi-purpose Plusroom can keep various food thanks to its refrigeration and Kimchi preservation function.

Preserve and ferment Kimchi at the same time
- Kimchi can be preserved and fermented at the same time, because the Kimchi room has separate middle and lower compartments.

Easy-to-use Kimchi container
- Easy-to-use and airtight LOCK & LOCK Kimchi container keeps fresh Kimchi flavor for a long time.

Elegant design
- The elegant design of the product fits any place in the kitchen. Install this product wherever you want as long as the indoor temperature is between 5°C and 43°C.
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Safety precautions

Safety precautions must be observed to prevent accident or injury.

Keep this manual in a convenient place where it is readily available for reference.

⚠️ This symbol indicates a warning about a specific event or condition.

⚠️ Warning

- It can cause seriously dangerous situation including death or major injury when the directions are violated. Please follow the directions.

When connecting the power

**Use a dedicated circuit.**

Plugging in several products to the outlet can cause a fire. This can activate the circuit breaker to cause the food to go bad.

**Be sure that the power cord is connected properly and is not pinched by having the appliance pushed against it.**

Do not allow the plug to become damaged or get wet. It could cause a fire or an electrical shock.

**Unplug the appliance when cleaning it. Do not pull the cord or handle the electric cord with damp hands.**

There is a danger of electric shock or fire from short circuit.

**Do not bend the power cord forcibly. Be sure it is not damaged by being under a heavy object.**

The power cord may be damaged and cause a fire or electrical shock.

**When pushing in the refrigerator after unplugging the power plug during installation, make sure the power cord is not crushed or pressed under the refrigerator.**

It can cause a fire or an electric shock.
Do not extend or modify the length of the power plug.
There is a danger of electric shot of fire from electrical damage to the power line.

Unplug the appliance and wipe the cord with a dry cloth and plug it in firmly.
If the cord or plug are dusty or wet, or has a poor connection, it can cause a fire and electrical shock.

Do not damage, process, forcefully bend, pull or twist the power cord.
Damaged power cord can cause a fire or an electric shock.

Ground properly during installation.
It can cause electrical shock in case of a problem or leakage.

When using the refrigerator

Do not use or store fire devices and flammable products (ether, benzene, alcohol, chemical, LP gas, flammable spray, cosmetics etc.) near the refrigerator.
There is a danger of explosion or fire.

Do not use the product for usage other than home use (storing chemical or experimental material, for ship etc.)
This refrigerator is made for home use and when used on the ship, it can cause unexpected accidents (electric shock, fire etc.) due to high humidity and shaking etc.
Safety precautions

When using the refrigerator

Do not store anything that could leak water or other fluid such as flower vase, cup, cosmetics, chemical etc. It can cause a fire or electrical shock or cause an injury from falling off.

Do not use sharp objects (knife, ice pick etc.) when removing the icing or ice inside the refrigerator.
- It can cause a fire and electric shock due to damage to the product.
- It can over-fermenting Kimchi due to problem in the cooling function due to leakage of cool air.

Do not spray water or wipe with benzene, thinner etc. inside or outside the appliance. It may degrade the insulation of electrical parts and cause an injury, fire or electrical shock.

If gas leaks from the appliance, don’t touch the appliance or its plug, instead ventilate the area immediately. There is a danger of fire or other damage, as a spark could ignite the gas and cause an explosion.

Only a properly trained service agent experienced in refrigerator should disassemble, repair or modify this appliance. There is a danger of fire, injury or electrical shock.

When disposing the old appliance, be sure to detach the doors. Children could accidentally close themselves in an abandoned appliance and suffocate.
Do not hang on the drawer of the refrigerator or climb on open drawer. The refrigerator can fall over.

The refrigerator can fall over. Especially, if the refrigerator is installed on the veranda, the child can fall over the veranda to result in death.

Install the appliance on a firm and level floor.

When the refrigerator is installed unstably, it can fall over to cause death.

Do not install the appliance in a damp place or where water will spatter.

Water will degrade the insulation, posing a shock hazard.

Do not store any drinks in glass bottle.

If you store a drink in glass bottle (alcohol, cider, juice etc.) and the drink freezes, the bottle can break and cause an injury.

Do not lit a candle inside the refrigerator to remove the smell.

There is a danger of an explosion or a fire.

You should always get service before using if the refrigerator has been submersed under water.

It can cause a fire or an electric shock. You must have the submersed product serviced by the official service technician before you can use the product.
Safety precautions

Cautions ▶ It can cause injury or damage to the house or furniture when the directions are violated. Always be cautious.

If the power cord or plug is damaged, or if the outlet is loose, do not plug in.
It can cause an electric shock or short circuit.

Do not put your hand or metallic rod in the outlet of cool air, lid or bottom of the refrigerator.
It may cause electric shock or injury.

Do not put live animal inside the refrigerator.

If the hinge of the door is damaged or not working properly, do not use the doors and contact the service center. Use the refrigerator after getting service from the center.

Make sure that the drawer is closed properly.
Kimchi goes sour soon, if the drawer is not closed properly because of some stuff or garbage stuck in the drawer packing.

When opening/closing the door, be careful because it can cause injury to the people near by.
When opening or closing the door, be careful so that foot or hand does not get stuck or hurt, or when children are near by, they can be hurt when hit by the corner.
Installation method

- **Ground properly during installation.**
  It can cause electrical shock in case of a problem or leakage.

- **Do not install the appliance where it is too hot or too cold.**
  Install the appliance where the ambient temperature is between 5 to 43°C. If the temperature of the installation location is too high, it can cause problems to the function of the refrigerator. Do not install any fire-related devices such as a gas stove on the top of this product. It may cause explosion or fire.

- **Do not install this product in the direct sunlight or hang rags on the handle.**
  It can cause discoloration.

- **Install the appliance on a firm and level floor.**
  If the floor is unstable, the vibration may cause noise and functional failure.
  - If the appliance is not leveled, use the horizontal adjusting leg to level the product.
  - When install the appliance on a carpeted floor or on the wooden floor, place a piece of plywood or similar material underneath to prevent the discoloration.
  - When the refrigerator is installed on unstable ground, it can fall over to cause death.

- **Maintain a suitable clearance around the appliance.**
  Maintain suitable clearance around the appliance as shown in the figure. If there is insufficient clearance, the appliance performance deteriorates and the electricity cost will increase.

- **Ensure more than:**
  - 2cm
  - 5cm
  - 30cm
Installation method

**Ground safely.**
Plug the cord into a 115V grounded outlet. If you are unsure of the voltage or grounding integrity, consult a qualified electrician or service person.

- In the event of an electric short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.
- In order to prevent possible electric shock, this appliance must be grounded.
- Improper use of the grounding plug can result in an electric shock.

**Cautions**
- Never ground the appliance to gas pipe, water pipe, lightning rod or a telephone line connector.
- Plastic water pipe does not have the grounding effect.

**Do this after installation**

- **Do this after installation**
  Connect the power plug to the dedicated outlet.

- **Put in the food.**
  Store the food in the refrigerator 3-4 hours after the installation. When storing frozen food, store the frozen food after the power of the refrigerator has been connected for more than 1 day.

- **Wait for more than 5 minutes to re-insert the plug right after pulling it out.**
  Otherwise, excessive operation of the compressor may cause breakdown.
When transporting

**Before transportation**

- Tape the Plusroom door, Kimchi containers and drawer baskets after taking out all the food.
- Turn the horizontal adjusting leg counterclockwise(㎛) all the way and tighten it.
- Hang the power cord to the hanger on the back of the appliance and tape it.

**When transporting**

- When sliding and moving the appliance, turn the horizontal adjusting leg counterclockwise(㎛) all the way and tighten it. The leg can scratch the floor or become loose to be separated.
- Hold leveling legs at the bottom and handles on the top when moving this product.
- When transporting the appliance to a far away location, do not completely lay the refrigerator on the floor to the side. It can cause problems.
• You can change the compartment to freezer, Kimchi compartment or refrigerator for various uses depending on the type of food to store.

**Lock & Lock Kimchi container**

1. **Large Lock & Lock Kimchi container**

   Two large Kimchi containers go in the 2nd and 3rd shelf exclusively for Plus Room.

2. **Small Lock & Lock Kimchi container**

   Two small Kimchi containers go in the 4th shelf exclusively for Plus Room.
**How to take out the Kimchi container from the Plus Room**

**When taking out the small Kimchi container**
1. Take out the lower room shelf first and then push in the cool air locking cover.
2. Hold the handle of the Kimchi container and take it out by slightly lifting to the front.

**When taking out the large Kimchi container**
1. Pull the cool air locking cover to the front and then push in the cool air locking cover fully in as shown in the figure.
2. Hold the handle of the Kimchi container and take it out by slightly lifting to the front.

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**Cautions**
Be careful not to drop Kimchi containers with a lot of Kimchi when taking them out and putting them back in.
**Plus Room**
It can be used for various purpose of freezer/refrigerator/Kimchi compartment.
Refer to page 12 on how to use the Plus Room.
※ the Kimchi container is included as default.

**Kimchi container**
Put the food in the Kimchi container and cover the lid.

**Drawer basket**
This basket holds Kimchi containers.
Match the front and the back as marked on the both sides.

**Middle compartment**

**Lower compartment**

**Leveling leg**
Level the height by turning adjusting screws after installation or moving.

**Operating control board**
There are operating buttons such as temperature control and food type selection.
※ The display shape (display window) may be different by the model.
Using method of operating control parts

**Touch button function**

1. 
   As the capacitive switch, the touch button reacts and operates to human body or object with capacitance within a set distance without mechanical operation.

2. 
   Because the touch button is located under the center glass of the frame of the selecting menu button, you can touch the center of the frame to operate the display button. Do not press excessively hard and you can just put your finger lightly on the button sign to operate it.

3. 
   The lamp of the button is always turned off when in "Lock" condition. But in "Unlock" condition, the lamp of "Lock/Unlock" button is turned off with all other buttons turned on.

4. 
   When cleaning the front panel or if there is any human contact, the switch can be operated.

5. 
   If there is any alien particle on top of the button menu sign or if you operate the touch button with other cloth or glove besides the human touch, it might not be operated depending on the material or thickness.

According to the model, product shape or display can be different.
Before actually making and storing Kimchi, read and understand the name and function of each button.

To use the LG Kimchi Refrigerator, you must press the Lock/Unlock button for

This button is for prevention of setup changes made by mischief of children or inadvertent movements.

- Press the Lock/Unlock button for more than two seconds before operating any other function. The lamp above the Lock/Unlock button is turned off, and the control becomes unlocked. Then, other functions can be operated.
- After completing all the function operation in the "Unlock" state, press the Lock/Unlock button. Then, the lamp above the Lock/Unlock button is turned on, and the control becomes locked.

※ When in Lock condition, you cannot operate the unit with other buttons (excluding Lock/Unlock button) and the light on top of the Lock/Unlock button will flash 3 times.
If there is no operation on the button for more than 60 seconds in Unlock condition, it will automatically switch to the Lock condition in the current setting.

This button is for selection of food and temperature in each compartment.

- Preserve Frozen, Refrigerated and Kimchi in the upper compartment.
- Preserve Cabbage Kimchi, Old Kimchi, Light freezing and Vegetable/Fruit in the middle compartment.
- Preserve Cabbage Kimchi, Broth Kimchi and Vegetable/fruit in the lower compartment.

※ Select a compartment according to food. (Refer to “Storing Cabbage Kimchi/Old Kimchi/ Broth Kimchi” in page 20 for details.)
The display shape (display window) may be different more than 2 seconds to unlock the control.

This button is for selection of fermentation degree of each compartment.
- **Kimchi** is selected in the upper compartment.
- **Cabbage Kimchi, Old Kimchi** is selected in the middle compartment.
- **Cabbage Kimchi, Broth Kimchi** is selected in the lower compartment.

Fermentation degree can be selected differently according to the preserved food. (Refer to “Rhythmic Fermenting (Seasoning) of Cabbage Kimchi/Old Kimchi/Radish Kimchi/Broth Kimchi” in page 22 for details.)

This button is for preservation of fresh flavor of Kimchi.
- When you feel the Kimchi flavor is the tastiest, press the Flavor Keeping button. Then, this function helps the flavor preserved longer.
- The selection can be made for preservation and fermentation (seasoning) of Kimchi (cabbage kimchi, old Kimchi, radish Kimchi and Broth Kimchi)

LCD Back Light
- The back light will be turned on to make the display easier to read in the following cases.
  1. When you turn on the power
  2. When you press the desired button.
  3. When you open the door of the upper compartment of the refrigerator.
- The back light of the pane will be turned on when you press any button when the back light is off. It does not change the set condition.
- The back light will be turned off in the following case to save power.
  1. 1 minute after turning on the power
  2. 20 seconds after opening/closing the door of the upper compartment
  3. When there is no operation for 20 seconds after pressing the desired button.

When wiping the display panel with a dry cloth to clean the panel, you can temporarily see black lines on the panel due to the characteristics of the LCD. This will disappear soon and is not a problem.

To use Kimchi jar function, press the Lock/Unlock button to unlock the control. Check which compartment is appropriate to store or ferment the food.
For example, to ferment Kimchi in the cover drawer, keep Kimchi in the middle compartment and press the fermentation button of the middle compartment.
Using method of operating control parts

Storing Kimchi in the upper compartment

1. Press the Lock/Unlock button for more than 2 seconds.
   - Press the ‘Lock/Unlock’ button more than 2 seconds. The lamp above the Lock/Unlock button is turned off, and the control becomes unlocked. Then, other functions can be operated.

2. Press the Upper Store button.
   - Select the desired Kimchi type and storing stage by pressing the ‘Upper Store’ button. Every time you press the button, the menu will switch as follows.
     - **Kimchi : Mid → Max → Min**
     - **Frozen : Mid → Max → Min**
     - **Reigerated : Mid → Max → Min**
   - Select the right temperature according to the type of food to store and the degree of saltiness of the Kimchi.

3. Press the Lock/Unlock button again.
   - After setup is completed, press the ‘Lock/Unlock’ button. As the lamp above the button changes to , Kimchi preservation begins.
Underground fermenting (seasoning) Kimchi in the upper compartment

To ferment Kimchi in the upper compartment or in the lower compartment

1 Press the Lock/Unlock button for more than 2 seconds.
   - Press the ‘Lock/Unlock’ button more than 2 seconds. The lamp above the Lock/Unlock button is turned off, and the control becomes unlocked. Then, other functions can be operated.

2 Press the Upper Ferment button or the Lower Ferment button.
   - Press the ‘Upper Ferment’ button and the Kimchi will be selected to set underground fermentation.
   - Press the ‘Lower Ferment’ button and the Kimchi will be selected to set underground fermentation.

3 Press the Lock/Unlock button again.
   - After setup is completed, press the ‘Lock/Unlock’ button. As the lamp above the button changes to [                              ], Kimchi fermentation begins.

Cautions
If you select the underground ferment (seasoning), the storing period will be shorter than selecting store.

※ If you press the “Ferment” button even while storing in refrigerator, freezer or vegetable/fruit the Kimchi will be selected to set to underground fermentation. Therefore you must be careful.
Using method of operating control parts

Storing Cabbage Kimchi/Old Kimchi/Broth Kimchi

To store Kimchi in the Middle or Lower compartment

It can be kept at the standard temperature.

1. Press the Lock/Unlock button for more than 2 seconds.

   - Press the ‘Lock/Unlock’ button more than 2 seconds. The lamp above the Lock/Unlock button is turned off, and the control becomes unlocked. Then, other functions can be operated.

※ Because all compartments, upper, middle and lower, are automatically set to store Kimchi when you initially connect the power, if you store the type of food that requires different storage temperature (Ex, food for freezer, vegetable, food for refrigerator), it can go bad or freeze.

About Korean Kimchi

- There are more than 200 types of Kimchi in Korea.
  The storing temperature of each type of Kimchi slightly differs and also the optimal storing temperature differs by what type of seasoning is used. Adjust the temperature to “Min”, “Mid” and “Max” depending on the type and condition of the Kimchi.
2. Press the Middle Store button or Lower Store button or.

- Select the desired Kimchi type and storing stage by pressing the "Middle Store" button or "Lower Store" button.
- Every time you press the button, the menu will switch as follows.

   < Middle >
   Cabbage Kimchi : Mid → Max → Min
   Old Kimchi : Mid → Max → Min
   Light Freezing : Mid → Max → Min
   Vegetable/Fruit : Mid → Max → Min

※ Because the light freeze function is to store meat and fish, if you store Kimchi, it will freeze.

   < Lower >
   Cabbage Kimchi : Mid → Max → Min
   Broth Kimchi : Mid → Max → Min
   Vegetable/Fruit : Mid → Max → Min

- Select the right temperature according to the type of food to store and the degree of saltiness of the Kimchi.

3. Press the Lock/Unlock button again.

- After setup is completed, press the "Lock/Unlock" button.
  As the lamp above the button changes to [ ], Kimchi preservation begins.
Rhythm fermenting (seasoning)  
Cabbage Kimchi/Old Kimchi/Broth Kimchi

To ferment Kimchi in middle compartment

* Available only in middle compartment
* The remaining time differs by the season the Kimchi is made, weather temperature and temperature of the Kimchi.

If you select the rhythm ferment (seasoning), the storing period will be shorter than selecting store.

1. Press the Lock/Unlock button for more than 2 seconds.
   - Press the ‘Lock/Unlock’ button more than 2 seconds.
   - The lamp above the Lock/Unlock button is turned off, and the control becomes unlocked. Then, other functions can be operated.

2 sec

To cancel the rhythm fermenting easily

- You can do one of the two following methods to cancel the fermenting function already selected.
  1. Press the Flavor Keeping button. (This will cancel the fermenting process and start the flavor keeping process.)
  2. Press the Store button.

When the seasoning process is complete

- When the seasoning process is complete, the remaining time will show “0 hours” and the temperature will be set to "Mid" for the selected Kimchi type.
- When the fermenting process is complete, press the Lock/Unlock button to turn off the LED showing “Remaining 0 hours”.

Power failure

- Fermentation is canceled after powre failure, and it is set to keep Kimchi fresh.
**2 Press the Middle Ferment button.**

- Select the type of Kimchi and the fermenting stage by pressing the Middle Ferment button. Every time you press the button, the menu will switch as follows.

* Cabbage Kimchi (Total of 4 stages)

* Old Kimchi (Total of 3 stages)

- Underground fermentation can only be selected for the Cabbage Kimchi.
- Select the appropriate fermentation stage according to the type and saltiness of the Kimchi to store.

- Only Middle compartment, Cabbage Kimchi/Old Kimchi can be selected in

- When the refrigerator switches to lock condition, the Kimchi fermentation will start and the remaining time to completion will be displayed.

- Remaining time can be different according to the season and temperature of Kimchi making and the temperature of Kimchi.

**3 Press the Lock/Unlock button again.**

- After setup is completed, press the ‘Lock/Unlock’ button. As the lamp above the button changes to [ ], Kimchi fermentation begins.
Using method of operating control parts

Storing the flavor of Cabbage Kimchi / Old Kimchi / Broth Kimchi

To store, using "Flavor Keeping"

This function maintains the current flavor of the stored Kimchi for a long time.

1. Press the Lock/Unlock button for more than 2 seconds.

- Press the 'Lock/Unlock' button more than 2 seconds. The lamp above the Lock/Unlock button is turned off, and the control becomes unlocked. Then, other functions can be operated.

- To ferment two types of Kimchi in one compartment

  If you ferment two types of different Kimchi in one compartment, they can be under-fermented or over-fermented. Therefore in this case, select the type that is fermented faster. Generally, Kimchi is fermented in the order of Broth Kimchi → Cabbage Kimchi

- If you operating the fermenting function several times, the Kimchi will be too sour.

  Because operating the fermenting function several times can make the Kimchi too sour, operate the rhythm fermenting function only once. Generally, Kimchi is fermented in the order of Underground Ferment → Fresh → Standard → Mature.

- To ferment the Kimchi more

  Select Standard or Mature by pressing the button again.
Press the upper compartment Flavor Keeping button

- When you press the "upper compartment Flavor Keeping" button, the top compartment Flavor Keeping function is selected and when you press the button again, canceled.
- Flavor Keeping can only be selected for Kimchi and cannot be selected for freezer/refrigerator.

※ Storage temperature can be adjusted even in the Flavor Keeping function.

Press the middle compartment Flavor Keeping button

- When you press the "middle compartment Flavor Keeping" button, the middle compartment Flavor Keeping function is selected and when you press the button again, canceled.
- Flavor Keeping can only be selected for Kimchi(cabbage kimchi, old kimchi) and can not be selected for Light freezing and Vegetable/Fruit.

※ Storage temperature can be adjusted even in the Flavor Keeping function.

Press the lower compartment Flavor Keeping button

- When you press the "lower compartment Flavor Keeping" button, the lower compartment Flavor Keeping function is selected and when you press the button again, canceled.
- Flavor Keeping can only be selected for Kimchi(cabbage kimchi, Broth Kimchi) and can not be selected for Vegetable/Fruit.

※ Storage temperature can be adjusted even in the Flavor Keeping function.

Press the Lock/Unlock button again.

- After setup is completed, press the 'Lock/Unlock' button. As the lamp above the button changes to [ ], flavor keeping begins.
Using method of operating control parts

Storing vegetable/fruit, light freezing

**Vegetable/Fruit**
- This function stores the vegetable/fruit fresh for a long time.

**Light freezing**
- This is good for storing raw fish or meat to eat within 10 days.

※ When you select Light Freezing and store Broth Kimchi or vegetable/fruit, it can freeze.

1. **Press the Lock/Unlock button for more than 2 seconds.**
   - Press the 'Lock/Unlock' button more than 2 seconds. The lamp above the Lock/Unlock button is turned off, and the control becomes unlocked. Then, other functions can be operated.

2. **Press the Middle Store button.**
   - Select a preservation level by pressing the 'Middle Store' button.
   - Every time you press the button, the menu will switch consecutively as follows.

   < **Middle** >
   - Cabbage Kimchi: Mid → Max → Min
   - Light Freezing: Mid → Max → Min

   < **Lower** >
   - Old Kimchi: Mid → Max → Min
   - Vegetable/Fruit: Mid → Max → Min
   - Vegetable/Fruit: Mid → Max → Min
   - Broth Kimchi: Mid → Max → Min

   - Select the appropriate temperature according to the food type.

3. **Press the Lock/Unlock button again.**
   - After setup is completed, press the 'Lock/Unlock' button. As the lamp above the button is turned on, selected food preservation begins.
Storing Frozen/Refrigerated Foo

### Storing frozen food

* Available only in the upper compartment.

### Frozen food

~ Store food that should be preserved for a long time and frozen food.

---

1. **Press the Lock/Unlock button for more than 2 seconds.**
   - Press the "Lock/Unlock" button **more than 2 seconds**. The lamp above the Lock/Unlock button is turned off, and the control becomes unlocked. Then, other functions can be operated.

2. **Press the Upper Store button.**
   - Select the desired Kimchi type and storing stage by pressing the "Upper Store" button. Every time you press the button, the menu will switch as follows.
     - Kimchi: Mid → Max → Min
     - Frozen: Mid → Max → Min
     - Refrigerated: Mid → Max → Min
   - It is the same with refrigerated food.

3. **Press the Lock/Unlock button again.**
   - After setup is completed, press the "Lock/Unlock" button. As the lamp above the button is turned on, frozen food preservation begins.

---

- If you freeze or refrigerate food after strong Kimchi in Plusroom, the Kimchi smell may soak into the food. Clean up the Plusroom, before freezing or refrigerating food in the compartment. Refer to page 34~35 for the "Cleaning Method."
- To store dried fish or grains, select the "Refrigerated Food" and set the temperature at "Min."
Caution during vegetable/fruit and light freezing

Note the following when storing vegetable/fruit

- **To store vegetable or fruit for a long time**
  Because washed vegetables can turn bad easily, do not wash the vegetable before storing. Because leaf vegetables (sesame leaves, lettuce etc.) cannot be stored for a long time, wrap them in a newspaper or a sealed container to increase their storage period.

- **Do not put in tropical fruits.**
  Do not store tropical fruits (banana, pineapple etc.) which can go bad at low temperature.

- **To store dried fish or grains,** select the food type of the middlecompartment as "Vegetable/Fruit" and set the temperature at "Min."

- **Use designated containers to store vegetables/fruits in the middle/lower compartment,** because they may be frozen.

Note the following when storing food in light freezing

- **About light freezing function**
  If you store meat or fish in light freezing function, you can store it longer than an average refrigerator. And because it is lightly frozen, the defrosting time is reduced for cooking.
  - Store only food that you will consume within 10 days in the light freezing function and freeze the rest of the food.
  - You can cook it fresh when stored for less than 10 days.
    ※ If you need defrosting for meat or fish depending on the stored period, leave it for 10 to 30 minutes before cooking.

  ❗ **Cautions**
  If you store Kimchi, vegetable or fruit in light freezing, they can all freeze.

What is light freezing function?

- This is a convenient function that stores the food to eat within a short period such as fish or meat by storing them in about -5oC to make defrosting fast and convenient to reduce the cooking time. (The food cannot be stored for the long term with light freezing function. Therefore you must eat the food fast.)
How to make delicious old Kimchi

1 Prepare ingredients

The basic ingredients of old Kimchi are Kimchi cabbages, red pepper powder, minced garlic, minced ginger, leek, salted anchovies (little), salted shrimps, salt etc. The ingredients can be prepared by the ratio on the right table. Basically the old Kimchi must be made saltier than the common Kimchi.

<Caution>
◆ You must use cabbages for Kimchi when preparing old Kimchi. If you use summer cabbages, you will not be able to taste the old Kimchi because the cabbages are too soft.
◆ If you put too much ingredients, it can block the growth of lactobacillus to block the fermenting process.

[Old Kimchi recipe with saltiness of 3.5%]

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabbages</td>
<td>130</td>
</tr>
<tr>
<td>(100 salt water soaked cabbages)</td>
<td></td>
</tr>
<tr>
<td>Red pepper powder</td>
<td>4.5</td>
</tr>
<tr>
<td>Minced garlic</td>
<td>2.5</td>
</tr>
<tr>
<td>Minced ginger</td>
<td>0.7</td>
</tr>
<tr>
<td>Leek (cut)</td>
<td>2.0</td>
</tr>
<tr>
<td>Salted anchovies</td>
<td>5.0</td>
</tr>
<tr>
<td>Salted shrimps</td>
<td>4.0</td>
</tr>
<tr>
<td>Additional salt</td>
<td>0.6</td>
</tr>
</tbody>
</table>

* Saltiness of salted seafood: 25% (usually the level sold)

2 How to make old Kimchi

1) Soaking cabbages in salted water (saltiness 2.0 – 2.2%) – Same as common Kimchi
   ① Cut the cabbages in half.
   ② Make an 8% salt water of an amount of 2 times the weight of the cabbages.
   ③ Soak the half-cut cabbages in the salt water for 12-15 hours, and sprinkle some salt on the cabbages. (At this time, sprinkle more salt to the cabbages than the common Kimchi.)

2) Making Kimchi
   ① Wash the soaked cabbages once and drain the water for 1 hour.
   ② Prepare all the other ingredients 10 minutes ahead. (process of fermenting the spices.)
   ③ Apply the ingredients to the leaves of the cabbages by spreading them.
   ④ Put the Kimchi in the drawer left compartment Kimchi container. At this time make the cut side of the cabbages face up so that the spices do not flow out. (It is better to not have extra spaces. So press the cabbages while storing them.)
   ⑤ Cover the surface of the Kimchi with outer leaves of the cabbages or a clean vinyl wrap.

3) Fermenting old Kimchi (seasoning)
   ① Put the Kimchi container in the drawer left compartment and select old Kimchi fermenting.
   ② When the Kimchi fermenting is complete, “Remaining time 0 hours” is shown and automatically switched to storing.
   ③ If you think that the old Kimchi is not seasoned well enough, run the old Kimchi fermenting one more time.
Caution when fermenting old Kimchi

Note the following when fermenting old Kimchi.

- **Old Kimchi** takes a long period of about 23 to 30 days to ferment. If the power is turned off during the fermenting process or if the door is kept open, the taste of Kimchi can be different.

- **Old Kimchi** has to be done with winter cabbage for Kimchi and must be made with more salt to reduce the cabbage from being softened and to reduce the smell. (Saltiness of common Kimchi: 2.0 – 2.5%, saltiness of old Kimchi: 3.5-5.0%). If you put too much ingredients in the Kimchi, it can block the lactobacillus activity to make it fermented less.

- When the old Kimchi fermenting process is complete, the remaining time of "0 hours" will be shown, and it will automatically switch to "Old Kimchi" storing in "Mid" temperature.
Since old Kimchi is far more acid than any other fermented food, Kimchi may smell badly during and after fermentation. To reduce the smell, clean the container and the inside of the drawer with neutral detergent after fermentation is completed.

**What is old Kimchi?**

This refers to the Kimchi in the jar for more than a year to maximum of 5 years. It tastes salty, sour and a bit bitter but with a deep taste with a higher acidity of nearly 1.0%.
The seasoning process begins with adding salt.

Fermentation begins when salt is added to the Kimchi. Various substances within the cabbage and other vegetables begin to ferment and proteins are decomposed in the process. Thus, Kimchi will ferment and be seasoned even at low temperature. This is how Kimchi is slowly seasoned during the cold winter time.

Kimchi depending on the types of spices

The integrated taste of Kimchi is from the different types of spices, such as leek, garlic, ginger, pepper powder etc.

Everything in Kimchi affects the seasoning speed

Garlic, seafood (oyster, lobster, croaker, fish etc.), onion, pepper powder, cucumber, thin leeks etc. accelerates the seasoning process. Especially, if you add oyster, rice paste or salted shrimp, the seasoning speed will increase rapidly. Conversely, adding leek, leaf mustard, ginseng etc., will cause the seasoning process to slow down.

Kimchi begins to season as soon as it is made

Kimchi will turn sour if it is in contact with air and mold will form on it. This occurs when the Kimchi is not soaked in juice or when it is not salty enough. You can prevent this by making the Kimchi soak below the juice or block the exposure to air.

The effect of temperature on making Kimchi

The ambient temperature affects the seasoning process. Kimchi stores well and keeps its taste well at temperature below 10°C.
To store Kimchi for a long period of time

Because Kimchi is a live food, it will go bad after a long period of time, but scientifically to extend the storage of Kimchi, you need to store it in low temperature (near 0°C) and make it saltier. And if you store the Kimchi below the juice and put a clean vinyl wrap or Fresh vegetable on top of it, you can extend the period of storing the Kimchi by reducing oxidation.

Selecting cabbages for Kimchi

There are over 50 varieties of cabbage. Round heads make better Kimchi than the long, think heads. The soft, white inner leaves and soft outer leaves of light green and light blue are the most desirable.

Select the right type of radish

There are many types of radish Kimchi. For a radish used to spice a cabbage Kimchi, Chosun radishes are superb. Select a radish that has a large root and is moist. To make Chonggak Kimchi, use a Seoul (Nehrubak) radish. They should be thick near the tips, round, small, and hard. Many types of radish can be sliced and added to any Kimchi to improve the flavor. The radish of which the upper part is white is more desirable than blue. For Broth Kimchi, use a conventional radish. Select radishes with smooth leaves whose upper parts are white.
Cleaning instructions

- **Before cleaning**
  For safety always unplug the appliance before cleaning it.

- **To revitalize the deodorizer...**
  Pull up the cover of the deodorizer to separate the deodorizer. Dry the deodorizer with a hair dryer or on the sunlight. And then put it back in the deodorizer cover to reassemble it. (It is reusable because the absorbed smell on the deodorizer cleans away.)

![Diagram](image)

* The shape and size of the deodorizer can differ by the model.

- **About Kimchi containers and drawer baskets..**
  Clean Kimchi containers and drawer baskets with water, because they get dirty easily with food.
  When pulling out the drawer, remove all the food from the drawer. Then hold the drawer with two hands to pull it out by slightly lifting to the top (1).
  2. If you separate the basket before pulling out the drawer, be careful not to let the drawer fall.
  3. To separate the basket after taking out the drawer, hold the handles of the basket and lift its behind first.
- **Cleaning the outside**
  Wipe with a damp cloth. Use a neutral, non-abrasive detergent. Always wipe with clean cloth after using neutral detergent. Don’t use abrasive, petroleum-based cleaner, benzene, lacquer thinner, hydrochloric acid, boiling water or a stiff or wire brush. These and similar items will damage the outer case of your appliance.

- **Plus Room shelf and drawer…**
  Slightly lift the front part of the shelf and pull to the front to take it out. Since it can easily get dirty when storing Kimchi, frequently take it out and wipe it cleanly with a wet towel.

  **Caution** ► Set the left and right height properly.

- **Kimchi container lids**
  Clean it after removing the rubber packing within the lid. Re-install the rubber packing after cleaning. Do not boil the Kimchi container and lid in water of temperature of 50˚C or higher.

- **Cleaning the door packing**
  The door packing can be damaged easily from juice from food, fruit juice and Kimchi juice. Wipe the packing and its sealing surface regularly with a damp cloth.

- **After cleaning**
  Plug the power plug. Check if there is any damage to the cord or if there is any heating on the plug.
Proper food storage

- **Keep Kimchi in the Kimchi container**

  When using the Kimchi container, fill it up to the line so that the juice does not get spilled over and be sure to close the lid tightly to reduce any exposure to air. This will help prevent Kimchi from turning sour and forming molds on the surface. Also you can prevent this by covering the surface of the Kimchi by using the outer cabbage leaves or clean vinyl wrap.

- **Store vegetables and fruits in the designated container.**

  Because some vegetables and fruits can be damaged by the coldness, store them in the designated container. Because washed vegetables can turn bad faster, do not wash the vegetables before storing. Do not store tropical fruits (banana, pineapple etc.) which can go bad at low temperature.

- **Cool down hot food before putting it into the appliance**

  If you put hot food into the appliance, it will raise the temperature and accelerate the seasoning of the Kimchi, and also increase the electricity consumption.

- **To store the Kimchi for a long period of time**

  Put the Kimchi in the Kimchi container right after making it and use the storage function to store. Depending on the type of Kimchi and saltiness, Set the storing temperature among "Min", "Mid" and "Max". When storing the Kimchi for a long time, keep the Kimchi submerged.

- **Set the proper temperature for food storage.**

  If you select Fresh, Standard and Mature function for the Kimchi storage, it will turn sour fast. When setting the storage temperature to "Max", it can make some types of Kimchi to freeze. Therefore you check it frequently depending on the type of Kimchi. If you store other types of food with Kimchi in one compartment, there are cases when the other type of food freezes.

- **To use other containers**

  If you use the Plusroom as a freezer or a refrigerator, you can use similar containers or smaller bottle-type containers.
  
  ※ Provided Kimchi containers in the designated position guarantees the most delicious Kimchi.
  ※ Do not use bottle-type container to store Kimchi. It may freeze the food and break the bottle.
Kimchi flavor

Kimchi freezes

The storing temperature of Kimchi is around 0°C. The freezing temperature changed according to type of Kimchi, spices, amount of salt etc. At this time, low the storing temperature of the Kimchi.

- If the storing temperature is "Max", set to "Mid" or "Min".
- If the storing temperature is "Mid", set to "Min".

Kimchi turns sour fast

If you select rhythm fermenting function for Kimchi storage, it can turn sour fast. At this time cancel the rhythm fermenting and select storage or flavor keeping function.

Kimchi also turns sour fast if the storing temperature is high. At this time, adjust the temperature. The storing temperature is lower from Min → Mid → Max. Also the seasoning speed can differ by the type of Kimchi, spices, temperature of the day Kimchi was made etc.

Kimchi is soft

If you put too little salt in the Kimchi, the color of the Kimchi may look good but from the yeast effect, the Kimchi becomes soft. Also the seafood sauce can accelerate the seasoning speed and make the Kimchi softer.

The color of Kimchi is dark

If you store Kimchi for a long period of time, Kimchi starts to turn darker due to oxidization. To maintain the color of Kimchi for a long time, put a clean vinyl wrap to cover the Kimchi within the container.

White mold forms on the surface of and the outer cabbage of Kimchi.

If you do not close the container lid tightly, it will be exposed to air to form white yeasts on the Kimchi or on the outer cabbage of Kimchi. You can prevent this by putting wrap or vinyl bag on the surface of the Kimchi.
Not a problem

Temperature

The front and both sides of the refrigerator are hot.
To prevent moisture, heating pipes are installed on the front and around the product. You may feel that it is hot, especially when you first use this product or in summer. But, this is very normal, and do not worry to use it.

Noise

When you hear "dreruk", "dulkuk" or "woong" sound.
This is the noise coming from the compressor or fan when the refrigerator starts or ends operating just like a car makes a noise when starting or ending the engine.

When you hear "tuk tak", "krook", "shik" or "shoo" sound
This is the sound of operating the refrigerator from parts moving or refrigerant flowing. So be safe because it is not a problem.

Drawer opening

When I close one drawer, another drawer opens and closes.
When you close one drawer, the air goes through the other compartment and causes other drawer to move a little, because each compartment is designed to circulate the air between the compartments.

I cannot open the drawer easily, or the drawer closes by itself.
If the warm air in the room goes into the refrigerator, it is hard to open the drawer sometimes. Leave the drawer closed for about 30 seconds, and then you will be able to open the drawer easily. Also, the drawers closes almost automatically only by the soft push. If you want to leave the drawer open, pull them out completely and make them stuck on the threshold.
Icing, dew, ice, water, mold

There are dew drops forming outside the refrigerator.
This is the same effect as water forming on a cold glass of water. If the refrigerator is installed at a humid location or during the rainy season when it is hot and humid, sometimes the dew drops form on the outer side of the refrigerator. This happens when it is very humid, so just wipe it out with a dry cloth.

Dew or frost appears inside the refrigerator.
When you open and close the drawers, warm air goes in the refrigerator and causes moisture. But, this does not damage the product, and do not worry to use it.

Ice is formed on the lid of the Kimchi container.
Running the refrigerator at optimal temperature to store Kimchi for a long period of time can sometimes make the water drops freeze on the lid. Be safe because it is not a problem.
※ When you put a plastic wrap or vinyl cover on top of the Kimchi, you can reduce the icing and store Kimchi for a longer period of time.

There is some moisture inside the Kimchi refrigerator that was delivered.
The moisture or dew drops formed inside the delivered Kimchi refrigerator is from the production process and performance test. It has no relevance to whether the product was used or whether there is a performance issue.
### Checkpoints before requesting for service

<table>
<thead>
<tr>
<th>Check</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Is the power shut-down?</td>
<td>• Check the power of the other product.</td>
</tr>
<tr>
<td>• Is the power plug unplugged from the outlet?</td>
<td>• Connect the power cord properly to the outlet.</td>
</tr>
<tr>
<td>• Is the installed location too hot or cold?</td>
<td>• Install the refrigerator where the external temperature is between 5 and 43°C.</td>
</tr>
</tbody>
</table>

#### When the cooling does not work at all

<table>
<thead>
<tr>
<th>Check</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you store hot food without cooling it down?</td>
<td>Cool down the hot food before storing the food.</td>
</tr>
<tr>
<td>• Is the door completely closed?</td>
<td>• Close the drawer completely after adjusting the leveling legs to make the front of the product slightly higher and making sure that the stored food is not stuck.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Check</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Does it receive direct sunlight or is near a heating device?</td>
<td>• Check the installed location.</td>
</tr>
<tr>
<td>• Is there an appropriate clearance around the refrigerator?</td>
<td>• Leave an appropriate clearance around the refrigerator.</td>
</tr>
<tr>
<td>• Does the temperature of the installed location go below 5°C?</td>
<td>• Refer to the installation method and install where the surrounding temperature is above 5°C.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Check</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Did you set the storing temperature to &quot;Min&quot;?</td>
<td>• Set the storing temperature to &quot;Mid&quot; or &quot;Max&quot;.</td>
</tr>
<tr>
<td>• Is the drawer basket assembled correctly?</td>
<td>• Make sure that the deodorant goes inside when assembling it.</td>
</tr>
<tr>
<td>• Is the food type set as &quot;Vegetable/Fruit&quot;?</td>
<td>• Select the right food type.</td>
</tr>
</tbody>
</table>

#### When the cooling is not working well

<table>
<thead>
<tr>
<th>Check</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Is the floor of the installed location soft or is the refrigerator installed on an unstable floor? (It can make noises on the wooden floor.)</td>
<td>• Install the refrigerator where the floor is firm and leveled.</td>
</tr>
<tr>
<td>• Are there any objects on the top or on the back of the refrigerator?</td>
<td>• Set the object properly.</td>
</tr>
</tbody>
</table>

#### When you hear a weird noise

<table>
<thead>
<tr>
<th>Check</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Install the refrigerator where the floor is firm and leveled.</td>
<td>• Set the object properly.</td>
</tr>
</tbody>
</table>
### Problems of product

<table>
<thead>
<tr>
<th>Check</th>
<th>Resolution</th>
</tr>
</thead>
</table>
| Did you put the juicy food that can be easily frozen in the cold air outlet? | Store the juicy food far from the cold air outlet.  
* For your information, the cold air outlet of the middle compartment is inside the basket, and that of the lower compartment is outside the basket. |
| Is the storing temperature set to "Max"? | Change the storing temperature to "Mid" or "Min". |
| Did you set the food type as "Light Freezing"? | Select the right food type. |
| Are you storing the food in a storing container? | Put the food in the Kimchi container to store in the Kimchi storage. |
| Have you sealed the food with a strong smell? | Store food with strong smell in a sealed container. |
| Is the Kimchi container tightly closed? | Tightly close the Kimchi container. |
| Did you cool down the hot food before storing it? | Cool down the hot food before storing the food. |
| Did you keep the door open for a long time? | The dew drops will naturally disappear if you keep the door closed but it is better to wipe them off with a dry cloth. |
| Did you put food with moisture in the container without tightly closing the lid? | When storing the food, keep it in a container with a lid or a seal. |
| Did you put too much food within the refrigerator? | Keep an appropriate clearance around the refrigerator for good air circulation. |
| Does the refrigerator lean to the front side? | Adjust the leveling legs. (Make the front side of the refrigerator a little higher by adjusting the leveling legs to help the drawers close easily.) |
| Does the stored food in the drawer reach the ceiling of the refrigerator? | Make sure that the stored food does not reach the ceiling. |
Customer rights

When a problem occurs to the product, the customer has a valuable right to receive free service for 1 year warranty period from the date of purchase.

But problems occurring from customer fault or natural disaster as below can be paid by the customer even within the free service period.

Responsibility of paid service (Paid by customer)

When requesting for service, the following cases will be paid by the customer even within the free service period.

1. When a problem occurred from an alien object to the product (water, drink, coffee, toy etc.)
2. When the product is damaged or a problem occurred from dropping the product or from an impact
3. When the external part of the product has been damaged from using oil solvent such as thinner, benzene etc.
4. When a problem occurred from mistakenly connecting to a wrong voltage.
5. When a problem occurred from using parts or supplies not from LG Electronics.
6. When parts are missing or the product is damaged from customer’s disassembly.
7. When there is a problem from repairing or remodeling the product by a person other than the repair technician of LG customer service center.
8. When a problem occurred from not following the Safety Precautions(p. 4–p. 8) within the User Manual. If you follow the Safety Precaution, you can use the product longer.
9. When a problem occurred from natural disaster (lightening, fire, salt water, gas, storm & flood, earth quake etc.
10. When a problem occurred from a customer’s fault.

Service guide

For service request, consulting and service center inquiry,
Service center Address: P.O. Box240007 201 James Record Road Huntsville, AL 35824
Call: 1-800-243-0000 Web: http://www.lgservice.com
The details (external shape and product specification) indicated within this manual are subject to change without notification to improve the quality of the product.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Model name</th>
<th>GR-J303UG/TG</th>
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</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Total capacity</td>
<td>300L</td>
</tr>
<tr>
<td></td>
<td>Kimchi storage</td>
<td>300L</td>
</tr>
<tr>
<td>Product size</td>
<td>Width</td>
<td>666mm (26.22in)</td>
</tr>
<tr>
<td></td>
<td>Depth</td>
<td>667mm (26.26in) (excluding handle size)</td>
</tr>
<tr>
<td></td>
<td>Height</td>
<td>1775mm (69.88in)</td>
</tr>
<tr>
<td>Rated voltage and frequency</td>
<td></td>
<td>AC 115V 60Hz</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>113kg (249lb)</td>
</tr>
</tbody>
</table>
MEMO