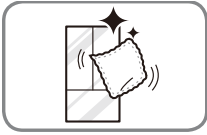


OPERATION

Before Use

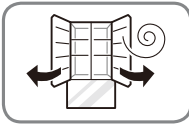


Clean the refrigerator.

Clean the refrigerator thoroughly and wipe off all dust that accumulated during shipping.

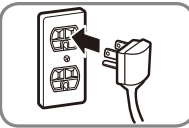
⚠ CAUTION

- Wipe adhesive residue off with your thumb or dish detergent. Do not use sharp objects or abrasive, flammable, or alcohol-based cleaners.
- Do not peel off the model or serial number label or the technical information on the rear surface of the refrigerator.



Open refrigerator and freezer doors to ventilate the interior.

The inside of the refrigerator may smell like plastic at first. Remove any adhesive tape from inside the refrigerator and open the refrigerator doors and the freezer drawers for ventilation.



Connect the power supply.

Check if the power supply is connected before use.

Read the "Turning On The Power" section.



Turn off the icemaker

Turn off the icemaker if the refrigerator is not yet connected to the water supply.

NOTE

- The icemaker water valve may buzz if the icemaker is turned on while the refrigerator is not connected to the water supply.

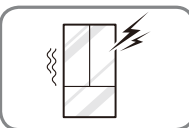


Wait for the refrigerator to cool.

Allow the refrigerator to run for at least two to three hours before putting food in it. Check the flow of cold air in the freezer compartment to ensure proper cooling.

⚠ CAUTION

- Putting food in the refrigerator before it has cooled could cause the food to spoil, or a bad odor to remain inside the refrigerator.



The refrigerator makes a loud noise after initial operation.

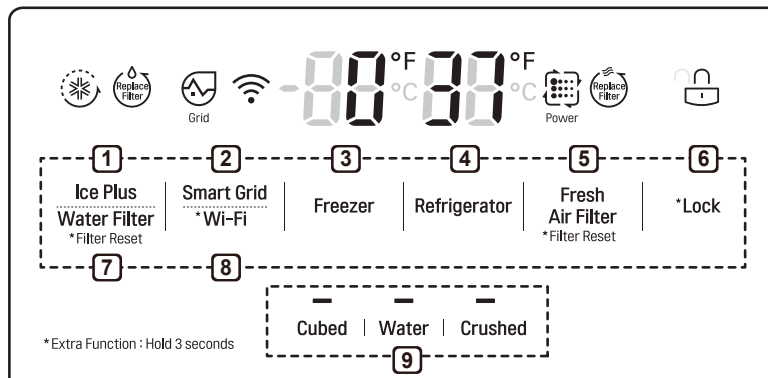
This is normal. The volume will decrease as the temperature decreases.

Control Panel

Depending on the model, some of the following functions may not be available.

When the refrigerator is in the Power Saving Mode, the display remains off until a door is opened or a button is pressed. Once on, the display remains on for 20 seconds.

Control Panel Features



1 Ice Plus

This function increases both ice making and freezing capabilities.

- Press the **Ice Plus** button to illuminate the icon and activate the function for 24 hours. The function automatically shuts off after 24 hours.
- Stop the function manually by pressing the button once more.

2 Smart Grid

Press the **Smart Grid** button to turn the Smart Grid function On/Off. When the function is on, the icon illuminates. The Smart Grid function automatically turns on when the refrigerator is connected to the Wi-Fi network.

When the refrigerator is responding to a Demand Response (DR) message from the electric company, the Grid text illuminates.

3 Freezer

Indicates the set temperature of the freezer compartment in Celsius (°C) or Fahrenheit (°F).

The default freezer temperature is 0°F (-18 °C). Press the **Freezer** button repeatedly to select a new set temperature from -6 °F to 8 °F (-21 °C to -13 °C).

4 Refrigerator Temperature

Indicates the set temperature of the refrigerator compartment in Celsius (°C) or Fahrenheit (°F). The default refrigerator temperature is 37 °F (3 °C). Press the **Refrigerator** button repeatedly to select a new set temperature from 33 °F to 46 °F (1 °C to 8 °C).

NOTE

- To change the temperature mode from °F to °C (or vice versa) press and hold the **Refrigerator** and **Freezer Temperature** buttons simultaneously for approximately five seconds. The temperature indicator on the display window switches between Celsius and Fahrenheit.
- The displayed temperature is the target temperature, and not the actual temperature of the refrigerator. The actual refrigerator temperature depends on the food inside the refrigerator.

5 Fresh Air Filter

The Fresh Air Filter helps remove odors from the refrigerator. The Fresh Air Filter has two settings, Auto and Power. In Auto mode, the Fresh Air Filter cycles on and off in increments of ten minutes on and 110 minutes off. If set to the Power mode, the Fresh Air Filter stays on continuously for four hours, cycling on and off in increments of ten minutes on and five minutes off. After four hours, the Fresh Air Filter switches back to Auto mode.

- Press the **Fresh Air Filter** button repeatedly to toggle between Power mode and Auto mode.


NOTE

- Replace the air filter when the **Replace Filter** icon turns on. After replacing the air filter, press and hold the **Fresh Air Filter** button for three seconds to turn the icon light off. Replace the air filter approximately every six months.
- Refer to the Replacing the Fresh Air Filter section for details.

6 * Lock

The Lock function disables every other button on the display.

- When power is initially connected to the refrigerator, the Lock function is off.

- To lock the control panel buttons, press and hold the **Lock** button until the closed **Lock**  icon appears in the display and the function is activated.
- To disable the Lock function, press and hold the **Lock** button for approximately three seconds.

7 Water Filter

Replace the water filter when the **Replace Filter** icon turns on. After replacing the water filter, press and hold the **Water Filter** button for three seconds to turn the icon light off. Replace the water filter approximately every six months.

8 * Wi-Fi

The **Wi-Fi** button, when used with the LG SmartThinQ app, allows the refrigerator to connect to a home Wi-Fi network. Refer to the Smart Functions section for information on the initial setup of the application.

The **Wi-Fi** icon shows the status of the refrigerator's network connection. The icon illuminates when the refrigerator is connected to the Wi-Fi network.

Press and hold the **Wi-Fi** button for 3 seconds to connect to the network. The icon blinks while the connection is being made, then turns on once the connection is successfully made.

3 and 8 SABBATH (On Some Models)

Sabbath mode is used on the Jewish Sabbath and holidays.

- To turn Sabbath mode on, touch the display to activate it, then press and hold the Freezer and Wi-Fi buttons for 3 seconds until Sb appears in the display.
- Sabbath mode automatically turns off after 96 hours.
- To turn Sabbath mode off manually, press and hold the Freezer and Wi-Fi buttons for 3 seconds.
- Once turned on, Sabbath mode is maintained even after a power outage.
- Selecting Sabbath mode automatically turns off the Alarm functions. The dispenser and InstaView function are disabled.

9 Dispenser Mode

Press the buttons to select cubed ice, water, or crushed ice. The LED illuminates over the mode selected.

⚠ CAUTION

Display Mode (For Store Use Only)

- The Display Mode disables all cooling in the refrigerator and freezer sections to conserve energy while on display in a retail store. When activated, OFF is displayed on the control panel and the display remains on for 20 seconds.

To deactivate / activate:

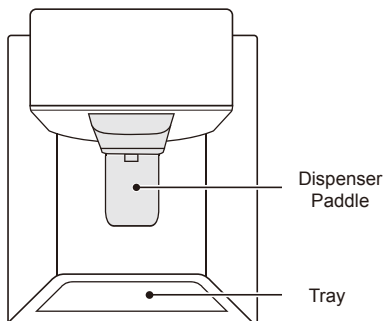
- With either refrigerator door opened, press and hold the Refrigerator and Ice Plus buttons at the same time for five seconds. The control panel beeps and the temperature settings display to confirm that Display Mode is deactivated. Use the same procedure to activate Display Mode.

⚠ CAUTION

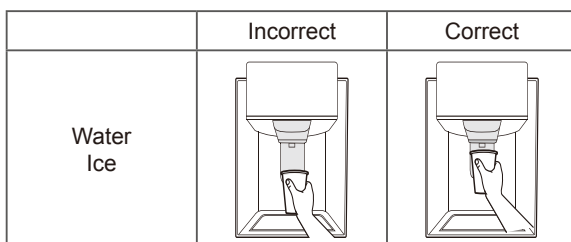
- Keep children away from the dispenser. Children may play with or damage the controls.
- Throw away the first few batches of ice (about 140 - 160 cubes) after installation. This is also necessary if the refrigerator has not been used for a long time.
- If ice or water dispenses unexpectedly, turn off the water supply and contact an LG Electronics Customer Information Center.
- Never use a glass that is exceptionally narrow or deep. Ice may jam in the ice passage and refrigerator performance may be affected.

Ice and Water Dispenser

Dispenser Structure



Using the Dispenser



NOTE

- To dispense cold water or ice, push on the dispenser paddle with a glass.
- The first ice and water dispensed may include particles or odor from the water supply line or the water tank. Throw away the first few batches of ice (about 140 - 160 cubes). This is also necessary if the refrigerator has not been used for a long time.
- The dispenser will not operate when either of the refrigerator doors is open.
- If discolored ice is dispensed, check the water filter and water supply. If the problem continues, contact an LG Electronics Customer Information Center. Do not use the water or ice until the problem is corrected.
- Dispense ice into a glass before filling it with water or other beverages. Splashing may occur if ice is dispensed into a glass that already contains liquid.
- Some dripping may occur after dispensing. Hold the cup beneath the dispenser for a few seconds after dispensing to catch all of the drops.
- Keep containers at an appropriate distance from the dispensers. Tall, narrow glasses should be held far enough from the ice outlet to prevent ice from jamming in the ice chute. A container with a very small opening should be held as close to the dispenser as possible to avoid spilling.
- Keep the glass at a proper distance from the ice outlet. A glass held too close to the outlet may prevent ice from dispensing.

Locking the Dispenser

Press the **Lock** button on the control panel for 3 seconds to lock or unlock the dispenser and all of the control panel functions.

Ice Compartment

CAUTION

- Keep hands and tools out of the ice compartment door and dispenser chute. Failure to do so may result in damage or personal injury.

Keep the ice compartment door closed tightly. If the ice compartment door is not closed tightly, the cold air in the ice bin will freeze food in the refrigerator compartment. This could also cause the icemaker to stop producing ice.

In-Door Ice Bin

The icemaker stops producing ice when the in-door ice bin is full.

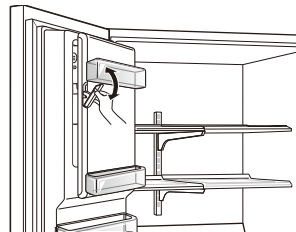
During use, the ice may stack unevenly in the bin, causing the icemaker to misread the number of ice cubes and stop producing ice. Shaking the ice bin to level the ice within it can reduce this problem.

To prevent ice cubes from melting and leaking from the dispenser, **ALWAYS** empty the ice bin when the icemaker is turned OFF for more than a few hours.

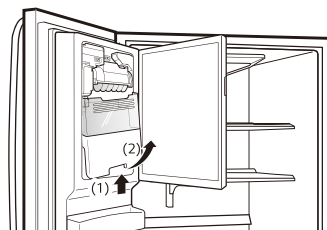
The ice passage may become blocked with frost if only crushed ice is used. Remove the frost that accumulates by removing the ice bin and clearing the passage with a rubber spatula. Dispensing cubed ice can also help prevent frost buildup.

Detaching the In-Door Ice Bin

- 1 Gently pull the handle to open the ice compartment.

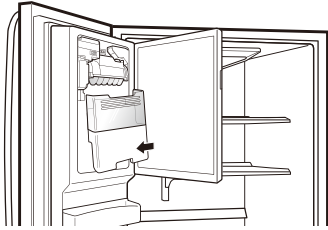


- 2 To remove the in-door ice bin, grip the front handle, slightly lift the lower part, and slowly pull out the bin as shown.



Assembling the In-Door Ice Bin

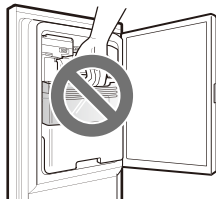
- 1 Carefully insert the in-door ice bin, slanting the top slightly to fit it under the icemaker.



- 2 Gently push the handle to close the ice compartment.

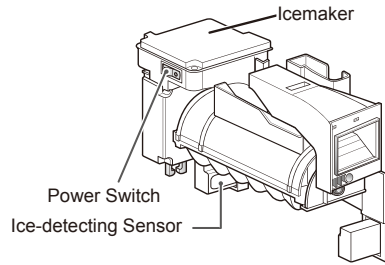
CAUTION

- When handling the ice bin, keep hands away from the icemaker tray area to avoid personal injury.
- Storing cans or other items in the ice bin will damage the icemaker.
- Never use thin crystal glasses or containers to collect ice. Such containers may chip or break resulting in glass fragments in the ice.
- Avoid touching the auto shutoff (feeler arm) when replacing the ice bin. See the label on the ice compartment door for details.



Automatic Icemaker

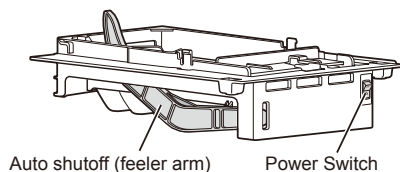
In-Door Icemaker



NOTE

- Ice is made in the automatic in-door icemaker and sent to the dispenser. The icemaker produces 70 - 182 cubes in a 24-hour period, depending on freezer compartment temperature, room temperature, number of door openings and other operating conditions.
- It takes about 12 to 24 hours for a newly installed refrigerator to begin making ice.
- Ice-making stops when the in-door ice bin is full. When full, the in-door ice bin holds approximately 6 to 8 (12-16 oz.) glasses of ice.
- Foreign substances or frost on the ice-detecting sensor can interrupt ice production. Make sure the sensor area is clean at all times for proper operation.
- To increase ice production, use the Ice Plus function. The function increases both ice making and freezing capabilities.

Freezer Icemaker (On Some Models)



NOTE

- The automatic freezer icemaker produces 12 cubes at a time, 50-110 pieces within a 24 hour period if conditions are favorable. This amount may vary according to the environment (ambient temperature around the appliance, frequency of the door being opened, amount of food stored in the appliance, etc.).
- If the ice bin is completely filled with ice, ice production will stop.
- Sound of ice dropping into the ice bin is normal.
- The icemaker produces ice once approximately 48 hours have passed after the appliance is initially installed.
- Discard the first ice cubes produced after initial install.
- Ice cubes which are stored in the ice bin for a long time may clump together and be difficult to separate. If this happens, empty the ice bin completely and clean it before reinstalling it.

WARNING

Personal Injury Hazard

- DO NOT place fingers or hands on the automatic ice making mechanism while the refrigerator is plugged in.
- To avoid personal injury, keep hands out of the ice door and passage.

CAUTION

- Never store beverage cans or other items in the ice bin for the purpose of rapid cooling. Doing so may damage the icemaker or the containers may burst.

Turning the Automatic Icemakers On or Off

To turn off one of the automatic icemakers, set the icemaker switch to **OFF (O)**. To turn on the automatic icemaker, set the switch to **ON (I)**.

Normal Sounds You May Hear

- Keeping the power turned on to the icemakers before the water line is connected can damage the icemakers.
- The icemaker water valve will buzz as the icemaker fills with water. If the power switch is in the **ON (I)** position, it will buzz even if it has not yet been hooked up to water. To stop the buzzing, move the power switch to **OFF (O)**.
- You will hear the sound of cubes dropping into the bin and water running in the pipes as the icemaker refills.

NOTE

- Do not keep the power turned on to the icemakers if the water line is not connected. Doing so can damage the icemakers.

Preparing for Vacation

Set both icemaker power switches to **OFF (O)** and shut off the water supply to the appliance.

If the ambient temperature will drop below freezing, have a qualified technician drain the water supply system to prevent serious property damage due to flooding caused by ruptured water lines or connections.

NOTE

- The ice bin should be emptied any time the power switch is turned to the **OFF (O)** position.

Storing Food

Depending on the model, some of the following functions may not be available.

Each compartment inside the refrigerator is designed to store different types of food. Store food in the optimal space to enjoy the freshest taste.

CAUTION

- Do not overfill or pack items too tightly into door bins. Doing so may cause damage to the bin or personal injury if items are removed with excessive force.
- Do not store glass containers in the freezer. Contents may expand when frozen, break the container and cause injury.

NOTE

- If you are leaving home for a short period, like a short vacation, the refrigerator should be left on. Refrigerated foods that are able to be frozen will stay preserved longer if stored in the freezer.
- If you are leaving the refrigerator turned off for an extended period, remove all food and unplug the power cord. Clean the interior, and leave the doors open to prevent fungi from growing in the refrigerator.
- Do not store food with high moisture content towards the top of the refrigerator. The moisture could come in direct contact with the cold air and freeze.
- Wash food before storing it in the refrigerator. Vegetables should be washed, and food packaging should be wiped down to prevent adjacent foods from being contaminated.
- If the refrigerator is kept in a hot and humid place, frequent opening of the door or storing a lot of vegetables in the refrigerator may cause condensation to form. Wipe off the condensation with a clean cloth or a paper towel.
- If the refrigerator door or freezer drawer is opened or closed too often, warm air may penetrate the refrigerator and raise its temperature. This can increase the running costs of the unit.

Food Storage Tips

Wrap or store food in the refrigerator in airtight and moisture-proof material unless otherwise noted. This prevents food odor and taste transfer throughout the refrigerator. For dated products, check date code to ensure freshness.

Food	How to
Butter or Margarine	Keep opened butter in covered dish or closed compartment. When storing an extra supply, wrap in freezer packaging and freeze.
Cheese	Store in original wrapping until used. Once opened, rewrap tightly in plastic wrap or aluminum foil.
Milk	Wipe milk cartons. For coldest milk, place containers on an interior shelf.
Eggs	Store in original carton on interior shelf, not on door shelf.
Fruit	Do not wash or hull fruit until it is ready to be used. Sort and keep fruit in original container in a crisper, or store in completely closed paper bag on refrigerator shelf.
Leafy Vegetables	Remove store wrapping, trim or tear off bruised and discolored areas, wash in cold water, and drain. Place in plastic bag or plastic container and store in crisper.
Vegetables with skins(carrots,peppers)	Place in plastic bags or plastic container and store in crisper.
Fish	Freeze fresh fish and shellfish if they are not being eaten the same day purchased. Eating fresh fish and shellfish the same day purchased is recommended.
Leftovers	Cover leftovers with plastic wrap or aluminum foil, or store in plastic containers with tight lids.

Storing Frozen Food

Check a freezer guide or a reliable cookbook for further information about preparing food for freezing or food storage times.

Freezing

Your freezer will not quick-freeze a large quantity of food. Do not put more unfrozen food into the freezer than will freeze within 24 hours (no more than 2 to 3 pounds of food per cubic foot of freezer space). Leave enough space in the freezer for air to circulate around packages. Be careful to leave enough room at the front so the door can close tightly.

Storage times will vary according to the quality and type of food, the type of packaging or wrap used (how airtight and moisture-proof) and the storage temperature. Ice crystals inside a sealed package are normal. This simply means that moisture in the food and air inside the package have condensed, creating ice crystals.

NOTE

- Allow hot foods to cool at room temperature for 30 minutes, and then package and freeze. Cooling hot foods before freezing saves energy.

Packaging

Successful freezing depends on correct packaging. When you close and seal the package, it must not allow air or moisture in or out. If it does, you could have food odor and taste transfer throughout the refrigerator and could also dry out frozen food.

Packaging recommendations

- Rigid plastic containers with tight-fitting lids
- Straight-sided canning/freezing jars
- Heavy-duty aluminum foil
- Plastic-coated paper
- Non-permeable plastic wraps
- Specified freezer-grade self-sealing plastic bags

Follow package or container instructions for proper freezing methods.

Do not use

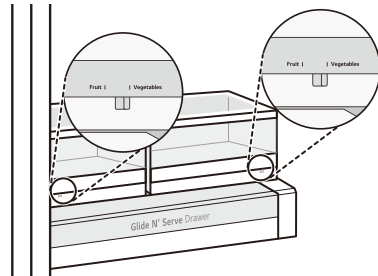
- Bread wrappers
- Non-polyethylene plastic containers
- Containers without tight lids
- Wax paper or wax-coated freezer wrap
- Thin, semi-permeable wrap

Humidity Controlled Crispers (On Some Models)

The crispers provide fresher tasting fruit and vegetables by letting you easily control humidity inside the drawer.

You can control the amount of humidity in the moisture-sealed crispers by adjusting the control to any setting between **Vegetables** and **Fruit**.

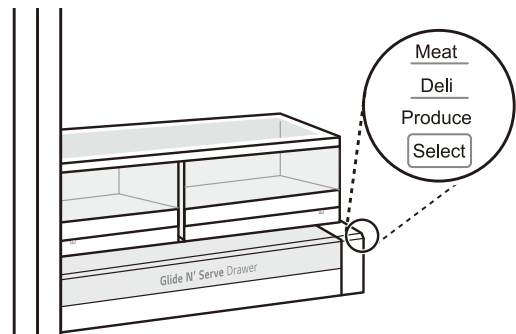
- **Vegetables** keeps moist air in the crisper for best storage of fresh, leafy vegetables.
- **Fruit** lets moist air out of the crisper for best storage of fruit.



Glide'N'Serve (On Some Models)

The Glide'N'Serve provides storage space with a variable temperature control that can keep the compartment at a slightly different temperature than the refrigerator section. This drawer can be used for large party trays, deli items and beverages. (This drawer should not be used to store vegetables that require high humidity.)

Press the **Select** button to choose between **Produce** (Cold), **Deli** (Colder) and **Meat** (Coldest).



Durabase®

The Durabase® divider allows you to organize the Durabase® area into sections. It can be adjusted from side to side to accommodate items of different sizes.

⚠ WARNING

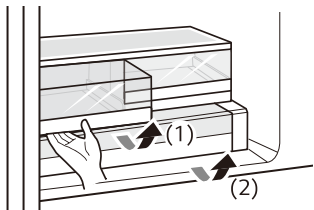
- If the Durabase® divider is removed, there is enough open space for children or pets to crawl inside. To prevent accidental child and pet entrapment or suffocation risk, **DO NOT** allow children or pets to touch or go near the drawer.

Detaching/Assembling the Storage Bins

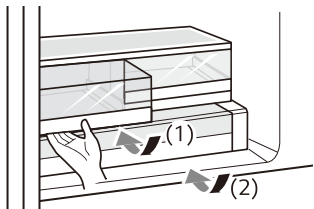
Some bins may vary in appearance and will only fit in one location.

Glide'N'Serve and Crispers

- 1 To remove the humidity controlled crispers and the Glide'N'Serve, pull out the crisper (1) or Glide'N'Serve (2) to full extension, lift the front up, and pull straight out.

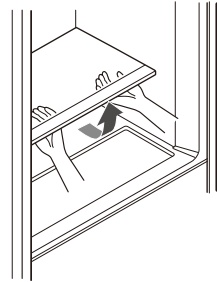


- 2 To install, slightly tilt up the front, insert the crisper or drawer into the frame and push it back into place.



Crisper Cover

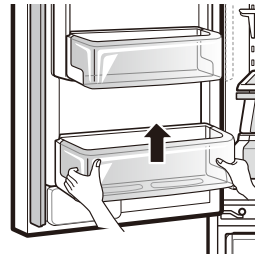
To remove, lift the front of the cover up until it detaches from the back wall of the cabinet, then pull it out.



Door Bins

The door bins are removable for easy cleaning and adjustment.

- 1 To remove the bin, simply lift the bin up and pull straight out.
- 2 To replace the bin, slide it in above the desired support and push down until it snaps into place.

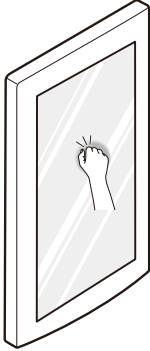


⚠ CAUTION

- Regularly detach and wash the storage bins and shelves; they can become easily contaminated by food.
- Do not apply excessive force while detaching or assembling the storage bins.
- Do not use the dishwasher to clean the storage bins and shelves.

InstaView Door-in-Door

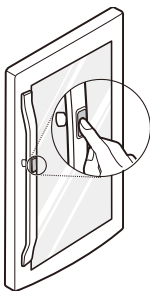
The InstaView function on the Door-in-Door lets you see if you're running low on frequently used items like beverages and snacks, without opening the refrigerator door.



- 1 Knock twice on the glass to turn the LED light inside the Door-in-Door on or off.
 - 2 The LED light turns off automatically after 10 seconds.
- The InstaView Door-in-Door function is disabled when the right refrigerator door is open, for two seconds after closing the door, and when the ice dispenser is in use.
 - Knock near the center of the glass. Knocking near the edges of the glass may not activate the InstaView Door-in-Door function properly.
 - Knock hard enough that the knocking sound is audible.
 - The InstaView Door-in-Door function may activate if a loud noise occurs near the refrigerator.

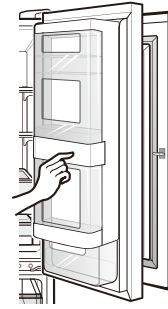
Door-in-Door Compartment

To access the Door-in-Door compartment, lightly press the button on the right refrigerator door handle.

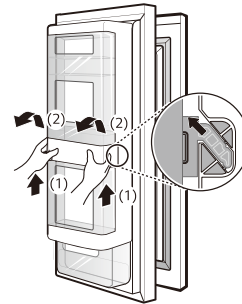


Door-in-Door Case

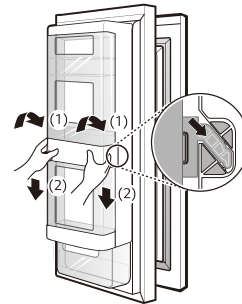
To open the Door-in-Door case, pull evenly on the marked area. The Door-in-Door case is removable for easy cleaning and adjustment.



- 1 To remove the Door-In-Door case, lift up and pull out.



- 2 To replace the Door-in-Door case, line up the tabs on the Door-In-Door case with the slots on the door and push down until it snaps into place.



⚠ CAUTION

- Do not overcrowd door bins or close doors with excessive force. The inner Door-in-Door may not close properly or may be pushed open by falling items, resulting in product or property damage or personal injury.

Adjusting the Refrigerator Shelves

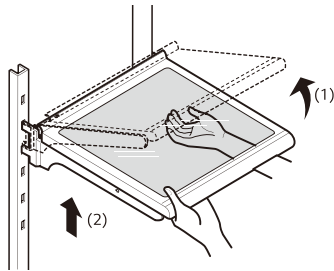
The shelves in the refrigerator are adjustable to meet individual storage needs. Your model may have full or split shelves.

Adjusting the shelves to fit items of different heights will make finding the exact item you want easier.

Detaching the Shelf

(Half Shelf Type)

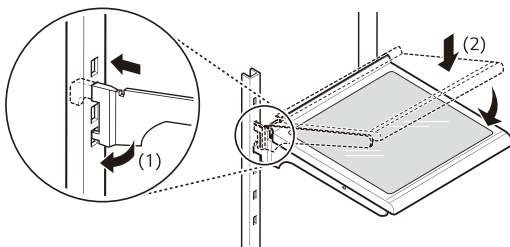
- 1 Tilt up the front of the shelf and then lift the shelf straight up.
- 2 Pull the shelf out.



Assembling the Shelf

(Half Shelf Type)

- 1 Tilt the front of the shelf up and guide the shelf hooks into the slots at a desired height.
- 2 Lower the front of the shelf so that the hooks drop into the slots.

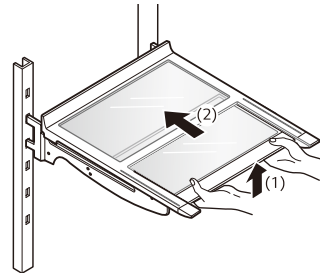


! CAUTION

- Make sure that shelves are level from one side to the other. Failure to do so may result in the shelf falling or spilled food.
- Do not clean glass shelves with warm water while they are cold. Shelves may break if exposed to sudden temperature changes or impact.
- Glass shelves are heavy. Use special care when removing them.

Using the Folding Shelf (On Some Models)

Store taller items, such as a gallon container or bottles, by pushing the front half of the shelf underneath the back half of the shelf. Pull the front of the shelf forward to return to a full shelf.



! CAUTION

- Glass shelves are heavy. Use special care when removing them.
- Do not clean glass shelves with warm water while they are cold. Shelves may break if exposed to sudden temperature changes or impact.

SMART FUNCTIONS

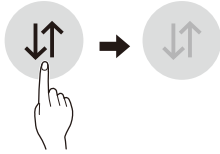
- For appliances with the  or  logo

LG SmartThinQ Application

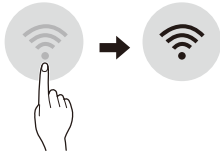
The LG SmartThinQ application allows you to communicate with the appliance using a smartphone.

Before Using LG SmartThinQ


- 1 Use a smartphone to check the strength of the wireless router (Wi-Fi network) near the appliance.
 - If the distance between the appliance and the wireless router is too far, the signal strength becomes weak. It may take a long time to register or installation may fail.
- 2 Turn off the **Mobile data** or **Cellular Data** on your smartphone.



- 3 Connect your smartphone to the wireless router.



NOTE

- To verify the Wi-Fi connection, check that **Wi-Fi**  icon on the control panel is lit.
- The appliance supports 2.4 GHz Wi-Fi networks only. To check your network frequency, contact your Internet service provider or refer to your wireless router manual.
- LG SmartThinQ is not responsible for any network connection problems or any faults, malfunctions, or errors caused by network connection.
- The surrounding wireless environment can make the wireless network service run slowly.

- If the appliance is having trouble connecting to the Wi-Fi network, it may be too far from the router. Purchase a Wi-Fi repeater (range extender) to improve the Wi-Fi signal strength.
- The network connection may not work properly depending on the Internet service provider.
- The Wi-Fi connection may not connect or may be interrupted because of the home network environment.
- If the appliance cannot be registered due to problems with the wireless signal transmission, unplug the appliance for about a minute, then plug in the appliance and try again.
- If the firewall on your wireless router is enabled, disable the firewall or add an exception to it.
- The wireless network name (SSID) should be a combination of English letters and numbers. (Do not use special characters.)
- Smartphone user interface (UI) may vary depending on the mobile operating system (OS) and the manufacturer.
- If the security protocol of the router is set to **WEP**, network setup may fail. Change the security protocol (**WPA2** is recommended), and register the product again.

Installing the LG SmartThinQ

Application

Search for the LG SmartThinQ application from the Google Play Store or Apple App Store on a smart phone. Follow instructions to download and install the application.

LG SmartThinQ Application Features

Firmware Update

Keep the appliance performance updated.

Energy Monitoring (On Some Models)

This feature keeps track of the refrigerator's power consumption and the number of door openings.

Remote Control

Control the refrigerator set temperature, Fresh Air Filter and Ice Plus from the smart phone app.

Push Messages

If the door remains open for more than ten minutes, you will receive a push message. When Ice Plus is finished, you will receive a push message.

Smart Diagnosis™

This function provides useful information for diagnosing and solving issues with the appliance based on the pattern of use.

Settings

Allows you to set various options on the refrigerator and in the application.

NOTE

- If you change your wireless router, Internet service provider, or password, delete the registered appliance from the LG SmartThinQ application and register it again.
- This information is current at the time of publication. The application is subject to change for product improvement purposes without notice to users.

Connecting to Wi-Fi

The **Wi-Fi** button, when used with the LG SmartThinQ application, allows the refrigerator to connect to a home Wi-Fi network. The **Wi-Fi** icon shows the status of the refrigerator's network connection. The icon illuminates when the refrigerator is connected to the Wi-Fi network.

Initial Appliance Registration

Run the LG SmartThinQ application and follow the instructions in the application to register the appliance.

Re-registering the Appliance or Registering Another User

Press and hold the **Wi-Fi** button for 3 seconds to temporarily turn it off. Run the LG SmartThinQ application and follow the instructions in the application to register the appliance.

NOTE

- To disable the Wi-Fi function, press and hold the **Wi-Fi** button for 3 seconds. Wi-Fi icon will be turned off.

Wireless LAN Module Specifications

Model	LCW-004
Frequency Range	2412 - 2462 MHz
Output Power (Max)	IEEE 802.11 b : 22.44 dBm
	IEEE 802.11 g : 24.68 dBm
	IEEE 802.11 n : 24.11 dBm

FCC Notice (For transmitter module contained in this product)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 20 cm (7.8 inches) between the antenna and your body. Users must follow the specific operating instructions for satisfying RF exposure compliance.

Industry Canada Statement (For transmitter module contained in this product)

This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

IC Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 cm (7.8 inches) between the antenna and your body.

NOTE

- THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Open Source Software Notice Information

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>. In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com. This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

Smart Grid Function

When the refrigerator operates in Smart Grid mode, the Smart Refrigerator function can control energy usage or delay the operation of some functions to save energy during peak usage periods.

- You can override the Smart Grid function any time (using the **Smart Grid** button or application).
- To use the Smart Grid function, you need to register your appliance with your electric utility company.

Smart Grid Application Features

Smart Saving_Demand Response

You can lower energy usage based on Demand Response (DR) signals from the utility company. If the refrigerator is operating in Smart Saving mode according to the DR signal, you can see a pop up.

Seasonal Energy Savings

Lower energy usage based on time period.

Using the Smart Grid Function

This feature responds to notification events from your utility company to run high energy consuming tasks during off-peak periods when demand is lower. These notification events are known as Demand Response signals.

If the refrigerator receives a Demand Response signal from the utility company, the refrigerator will turn on the Grid LED on the refrigerator display and control its power consumption according to the signal.

The refrigerator will respond to the signals received from the utility company as long as product performance is maintained.

If the refrigerator receives a Demand Response signal, the refrigerator will operate in Delay Appliance Load (DAL) or Temporary Appliance Load Reduction (TALR) mode.

Delay Appliance Load (DAL)

The refrigerator responds to a DAL signal by providing a moderate load reduction for the duration of the delay period.

This mode controls functions that consume a lot of energy such as adjusting the cooling system, running the defrost cycle, and making ice.

- When the refrigerator operates in DAL mode, the Grid LED is illuminated on the refrigerator display.
- DAL mode is automatically deactivated after the period stipulated by the DAL signal (max. 4 hours) or when you override the Smart Grid function.

Temporary Appliance Load Reduction (TALR)

The refrigerator responds to a TALR signal by aggressively reducing the load for a short time period, typically 10 minutes. This mode reduces energy consumption by stopping the compressor and controlling the functions that consume a lot of energy such as the defrost cycle and fan.

- When the refrigerator operates in TALR mode, the Grid LED is illuminated on the refrigerator display.
- TALR mode is automatically deactivated after the received duration (max. 10 minutes), or when you override the Smart Grid function. The mode is immediately deactivated and the refrigerator returns to its normal state when the door is opened or closed, or the dispenser is used.

Override Smart Grid Mode

To ignore the Demand Response signal from the utility company and override the Smart Grid function, push the **Smart Grid** button while the refrigerator is in Smart Grid mode.

When you override the Smart Grid function, the refrigerator ignores the Demand Response signal and is no longer controlled by the utility company until the next Demand Response signal is sent. You can also override the Smart Grid function using the smart phone app.

LG Open API

You can manage Smart Grid features for the LG Smart Refrigerator.

Please check the detailed specifications on the notice page on us.smarthinq.com.

API list

Demand Response

- Send demand response signal

Power Saving

- Set saving mode
- Get schedule of DR/Delay Defrost



Energy Monitoring

- Get door open event information
- Get energy consumption information

Delay Defrost Capability

- Insert a delay defrost schedule event
- Update a delay defrost schedule event
- Delete a delay defrost schedule event
- Get the delay defrost schedule

Smart Diagnosis™ Function

- For appliances with the  or  logo

Should you experience any problems with the appliance, it has the capability of transmitting data via your telephone to the LG Customer Information Center. NFC or Wi-Fi equipped models can also transmit data to a smartphone using the LG Smart ThinQ application.

Smart Diagnosis™ through the Customer Information Center

This method allows you to speak directly to our trained specialists. The specialist records the data transmitted from the appliance and uses it to analyze the issue, providing a fast and effective diagnosis.

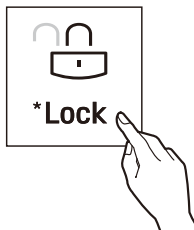
- 1 Call the LG Electronics Customer Information Center at:

(LG U.S.A.) 1-800-243-0000

(LG Canada) 1-888-542-2623

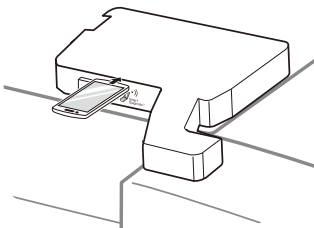
- 2 Hold the Lock button for three seconds.

- If the display has been locked for over five minutes, you must deactivate the lock and then reactivate it.

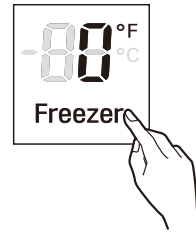


- 3 Open the right refrigerator door.

- 4 Hold the mouthpiece of your phone in front of the speaker that is located on the right hinge of the refrigerator door, when instructed to do so by the call center.



- 5 Press and hold the **Freezer** button for three seconds while continuing to hold your phone to the speaker.



- 6 After you hear three beeps, release the **Freezer** button.

- 7 Keep the phone in place until the tone transmission has finished. The display will count down the time. Once the countdown is over and the tones have stopped, resume your conversation with the specialist, who will then be able to assist you in using the information transmitted for analysis.

NOTE

- For best results, do not move the phone while the tones are being transmitted.
- If the call center agent is not able to get an accurate recording of the data, you may be asked to try again.
- The Smart Diagnosis™ function depends on the local call quality.
- Bad call quality may result in poor data transmission from your phone to the call center, which could cause Smart Diagnosis™ to malfunction.

MAINTENANCE

Cleaning

WARNING

- Use non-flammable cleaner. Failure to do so can result in fire, explosion, or death.

CAUTION

- Do not use an abrasive cloth or sponge when cleaning the interior and exterior of the refrigerator.
- Do not place your hand on the bottom surface of the refrigerator when opening and closing the doors.
- When lifting the hinge free of the latch, be careful that the door does not fall forward.

General Cleaning Tips

- Both the refrigerator and freezer sections defrost automatically; however, clean both sections once a month to prevent odors.
- Wipe up spills immediately.
- Unplug the refrigerator or disconnect power before cleaning.
- Remove all removable parts, such as shelves.
- Use a clean sponge or soft cloth and a mild detergent in warm water. Do not use abrasive or harsh cleaners.
- Hand wash, rinse and dry all surfaces thoroughly.
- When cleaning the inside or outside of the appliance, do not wipe it with a rough brush, toothpaste, or flammable materials. Do not use cleaning agents containing flammable substances.
 - This may cause discoloration or damage to the appliance.
 - Flammable substances: alcohol (ethanol, methanol, isopropyl alcohol, isobutyl alcohol, etc.), thinner, bleach, benzene, flammable liquid, abrasive, etc.

Exterior

Waxing external painted metal surfaces helps provide rust protection. Do not wax plastic parts. Wax painted metal surfaces at least twice a year using appliance wax (or auto paste wax). Apply wax with a clean, soft cloth.

For products with black stainless steel exterior, spray glass cleaner on a clean, microfiber cloth and rub in direction of grain. Do not spray glass cleaner directly at the display panel. Do not use harsh or abrasive cleaners.

For products with a standard stainless steel exterior, use a damp microfiber cloth and rub in the direction of the grain. Dry with a paper towel to avoid streaks. For stubborn stains and fingerprints, use a few drops of liquid dish soap in water, and rinse with hot water before drying. Do not use abrasive or harsh cleaners.

Inside Walls

- Allow freezer to warm up so the cloth will not stick.

To help remove odors, wash the inside of the refrigerator with a mixture of baking soda and warm water. Mix 2 tablespoons of baking soda to 1 quart of water (26 g soda to 1 liter water.) Be sure the baking soda is completely dissolved so it does not scratch the surfaces of the refrigerator.

Door Liners and Gaskets

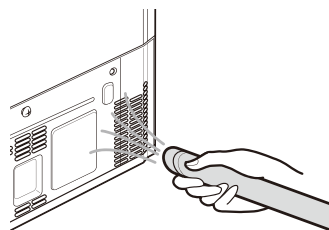
Use a clean sponge or soft cloth and a mild detergent in warm water. Do not use cleaning waxes, concentrated detergents, bleaches, or cleaners containing petroleum on plastic refrigerator parts.

Plastic Parts (covers and panels)

Use a clean sponge or soft cloth and a mild detergent in warm water. Do not use glass cleaners, abrasive cleansers, or flammable fluids. These can scratch or damage the material.

Condenser Coils

Use a vacuum cleaner with a brush or crevice attachment to clean the condenser cover and vents. Do not remove the panel covering the condenser coil area.

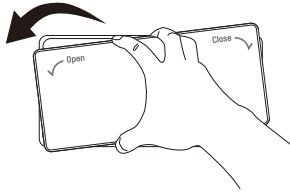


Replacing the Fresh Air Filter

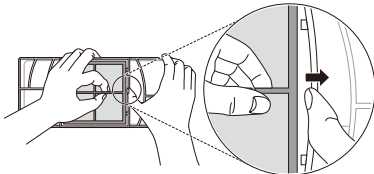
Replace the Fresh Air Filter:

- Approximately every six months.
- When the **Replace Filter**  icon turns on.

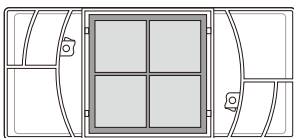
1 Rotate the filter cover counterclockwise to release the tabs, and remove the cover.



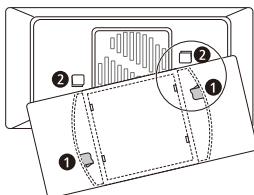
2 Remove the filter from the inside of the cover by pressing the side of the filter in and pulling the center out.



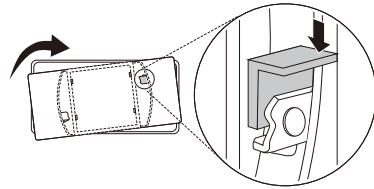
3 Place the new filter inside of the cover with the side that says **FRONT** facing outward.



4 Align tabs **1** on the filter cover with hooks **2** on the refrigerator wall.



5 Rotate the air filter cover clockwise until the hooks engage and the cover locks in place.




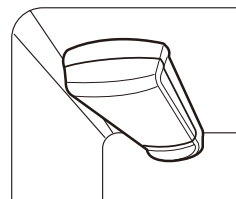
6 Press and hold the **Fresh Air Filter** button on the control panel for 3 seconds to reset the filter sensor.



Replacing the Water Filter

Replace the Water Filter :

- Approximately every six months.
- When the **Replace Filter**  icon turns on.
- When the water dispenser output decreases.



Before Replacing the Water Filter:

If the top shelf, located below the water filter, is in the highest position, it will need to be removed prior to replacing the water filter.

To remove any shelf : Tilt up the front of the shelf (1) and lift (2). Pull the shelf out.

