

HOW TO USE

Before use



Clean the refrigerator.

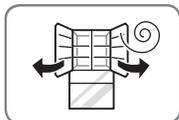
Clean your refrigerator thoroughly and wipe off all dust that accumulated during shipping.

! CAUTION

- Do not scratch the refrigerator with a sharp object or use a detergent that contains alcohol, a flammable liquid or an abrasive when removing any tape or adhesive from the refrigerator.
- Do not peel off the model or serial number label or the technical information on the rear surface of the refrigerator.

! NOTE

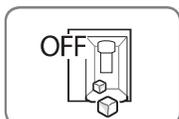
Remove adhesive residue by wiping it off with your thumb or dish detergent.



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.



Check if the power supply is connected before use.
Read the "Turning On The Power" section.



Turn off the automatic icemaker and then plug the power plug of the refrigerator into the grounded electrical outlet.

* This is applicable only to certain models.

! CAUTION

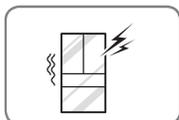
Running the automatic icemaker before connecting it to the water supply may cause the refrigerator to malfunction.



Allow your 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 could linger inside the refrigerator.

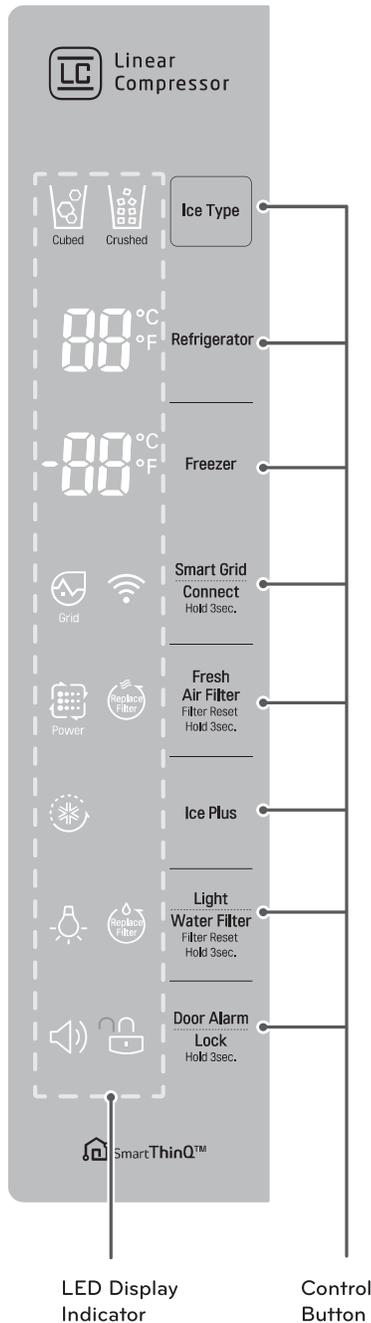


This is normal. The volume will decrease as the temperature lowers.

Control Panel

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

Control Panel Features



Ice Type

Cubed Crushed

Press the Ice Type button to choose either cubed or crushed ice. The cubed or crushed ice icon will illuminate.

Refrigerator Temperature

Indicates the set temperature of the refrigerator compartment in Celsius (°C) or Fahrenheit (°F). The default temperature for the refrigerator is 37°F.

Freezer Temperature

Indicates the set temperature of the freezer compartment in Celsius (°C) or Fahrenheit (°F). The default temperature for the freezer is 0°F.

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 indication on the display window switches between Celsius and Fahrenheit.

NOTE

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.

Fresh Air Filter (On some models)

The Fresh Air Filter helps remove odors from the refrigerator. The Fresh Air Filter has two settings, Auto and Power(PWR). In Auto mode, the Fresh Air Filter will cycle on and off in increments of ten minutes on and 110 minutes off. If set to the Power(PWR) mode, the Fresh Air Filter will stay 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 will switch back to Auto mode.

- Press the Fresh Air Filter button once for Power(PWR) mode.
- Press the Fresh Air Filter button again to switch back to Auto mode.

Control Panel Features (continued)

Change Filter [(On some models)]

When the Change Filter icon turns on, the air filter needs to be replaced. After replacing the air filter, press and hold the Fresh Air Filter button for three seconds to turn the icon light off. Change the air filter approximately every 6 months.

Ice Plus

This function increases both ice making and freezing capabilities.

- When you touch the **Ice Plus** button, the graphic will illuminate in the display and will continue for 24 hours. The function will automatically shut off after 24 hours.
- You can stop this function manually by touching the button one more time.

Light

When you press the Light button, the dispenser light will turn on and the indicator will appear on the LED display.

Change Water Filter

When the Water Filter indicator turns on, you need to change the water filter. After changing the water filter, press and hold the Change Filter button for three seconds to turn the indicator light off. Change the water filter approximately every six months.

Door Alarm

- When power is connected to the refrigerator, the door alarm is initially set to ON. When you press the **Alarm** button, the display will change to OFF and the **Door Alarm** function will deactivate.
- When either the refrigerator or the freezer door is left open for more than 60 seconds, the alarm tone will sound to let you know that the door is open.
- When you close the door, the door alarm will stop.

Lock

The Lock function disables every other button on the display.

- When power is initially connected to the refrigerator, the **Lock** function is off.
- If you want to activate the **Lock** function to lock other buttons, press and hold the **Lock** button for three seconds or more. The **Lock** icon will display and the **Lock** function is now enabled.
- To disable the **Lock** function, press and hold the **Lock** button for approximately three seconds.

Connect

The Connect button, when used with the LG Smart Refrigerator smart phone app, allows the refrigerator to connect to your home's Wi-Fi network. Refer to the following page for information on the initial setup of the application.

The Connect icon allows you to check the status of the refrigerator's network connection. When the refrigerator is connected to the network, the Connect icon is illuminated.

Press and hold the Connect button for 3 seconds to connect to the network. The icon will blink while the connection is being made, then turn on once the connection is successfully made. To disconnect, press and hold the button again.

Smart Grid

Press the Smart Grid button to turn the Smart Grid function On/Off. When the function is on, the icon will illuminate. 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 will illuminate.

Power Saving Mode

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



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 will display on the control panel and the display will remain 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 will beep and the temperature settings will display to confirm that Display Mode is deactivated. Use the same procedure to activate the Display Mode.

Smart Features

To use the Smart Features on the refrigerator, you will need the following devices and apps:

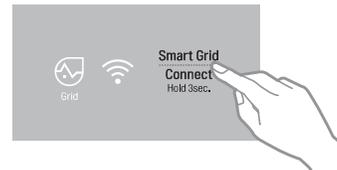
1. a wireless router and home Wi-Fi network
2. the LG Smart Grid refrigerator
3. an Android-based smart phone
4. the LG Smart Refrigerator app from the Google Play Store.

NOTE

To use the Smart Grid feature, you must also register for the Smart Grid (Demand Response) service with your local electric utility company. The company must provide Demand Response service.

Setting Up the Smart App and Connecting the Refrigerator

- 1 Create an account at Smart ThinQ.
<https://us.smarthinq.com/>
You will use the ID and password from this account in the smart phone application.
- 2 Download the smart phone app from the Google Play Store. (LG Smart Refrigerator app)
- 3 In the app, select the Smart Model.
- 4 Log in to the app using the Smart ThinQ ID and password created in step 1.
- 5 When prompted, select the Non-Touch Screen Model.
- 6 Choose your home wireless router from the list of routers in the app. Your refrigerator and smart phone must both be connected to the same Wi-Fi network.
- 7 If necessary, enter the password for your router and click the connect button in the app.
- 8 Make sure the refrigerator display is active by pressing any button. Press and hold the Smart Grid button on the refrigerator for three seconds. The Connect LED should blink while the connection is being made.



- 9 The app will automatically go through the process of registering your product on the network, using the information you've provided. This may take some time, and the Connect LED will continue to blink during this process. After the registration process is completed, a message is displayed and the app will proceed to the Home screen.
- 10 Check that the Connect LED is illuminated to confirm that the Wi-Fi network is connected. You can now use the app to control the Smart Features on your refrigerator.

NOTE

You must connect the refrigerator to the internet using a wireless router on your home network. Tethering to a mobile phone, hotspot, or an unsecured network, for example, will cause unstable functionality.

Food Manager

Allows you to keep track of items in your refrigerator and freezer, so you can be alerted when they are near their use-by dates, generate grocery lists, and link to related recipes.

Recipes

Features recipes from the Food Channel, searchable by ingredient, course, cuisine, total time required, and the food in your refrigerator (if entered in the Food Manager). Automatically makes grocery lists from chosen recipes.

Grocery

Makes and manages grocery lists from items in your refrigerator or recipes.

Refrigerator Manager

Allows you to control the refrigerator and freezer temperature settings, air filter, water filter, Ice Plus, Smart Saving, and Energy Monitoring from your smart phone.

Smart Diagnosis

Allows you to diagnose and troubleshoot problems with your refrigerator.

Settings

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

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

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 it lasts for the amount of time 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 it lasts for 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.

Smart Features (continued)

Override Smart Grid Mode

If you want the refrigerator to ignore the Demand Response signal from the utility company, you can override the Smart Grid function by pushing 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.

Open API

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.smarthings.com.

API list :

Demand response

- Send demand response signal

Power saving

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

Energy monitoring

- Get setting temperature
- Get door open event
- Get energy consumption

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 Grid Application Features

1 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.

Smart Saving_Delay Defrost

Lower energy usage based on time period.

2 Energy monitoring

The refrigerator can check number of door openings and power consumption.

3 Remote Control

You can control the Refrigerator Temperature, Fresh Air Filter and Ice Plus from the smart phone app.

4 Push messages.

- When the door is open over ten minutes, you will receive a push message.
- When Ice Plus is finished, you will receive a push message.

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 three (3) years from the date on which you purchased the 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 of the device.

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.

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 minimum distance 20 cm (7.8 inches) between the antenna and your body. Users must follow the specific operating instructions for satisfying RF exposure compliance.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

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

This Class B digital apparatus complies with Canadian ICES-003.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm (7.8 inches) between the antenna & 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.

Wireless LAN Module (LCW-003) Specifications	
Frequency Range	2412~2462 MHz
Output Power (max.)	IEEE 802.11b: 17.56 dBm IEEE 802.11g: 25.53 dBm IEEE 802.11n: 25.29 dBm