OPERATION
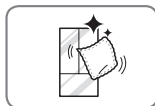
Before use

Clean the refrigerator.
Clean the 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.
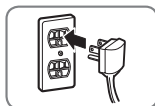
> ! **NOTE**
> Remove adhesive residue by wiping it off with your thumb or dish detergent.
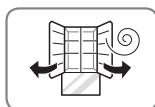
Open refrigerator doors and freezer drawers to ventilate the interior.
The inside of the refrigerator may smell like plastic at first. Remove any adhesive tape from inside the refrigerator and open the refrigerator doors and the freezer drawers for ventilation.

Connect the power supply.
Check if the power supply is connected before use.
Read the "Turning on the Power" section.
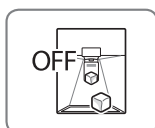
Turn off the icemaker if the refrigerator is not yet connected to the water supply.
Turn off the automatic icemaker and then plug the power plug of the refrigerator into the grounded electric outlet.
(This is only applicable to models with icemakers.)

> ⚠ **CAUTION**
> Running the automatic icemaker before connecting it to the water supply may cause the refrigerator to malfunction.
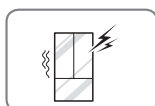
Wait for the refrigerator to cool.
Allow the refrigerator to run for at least two to three hours before putting food in it. Check the flow of cold air in the freezer compartment to ensure proper cooling.

> ⚠ **CAUTION**
> Putting food in the refrigerator before it has cooled could cause the food to spoil, or a bad odor could linger inside the refrigerator.
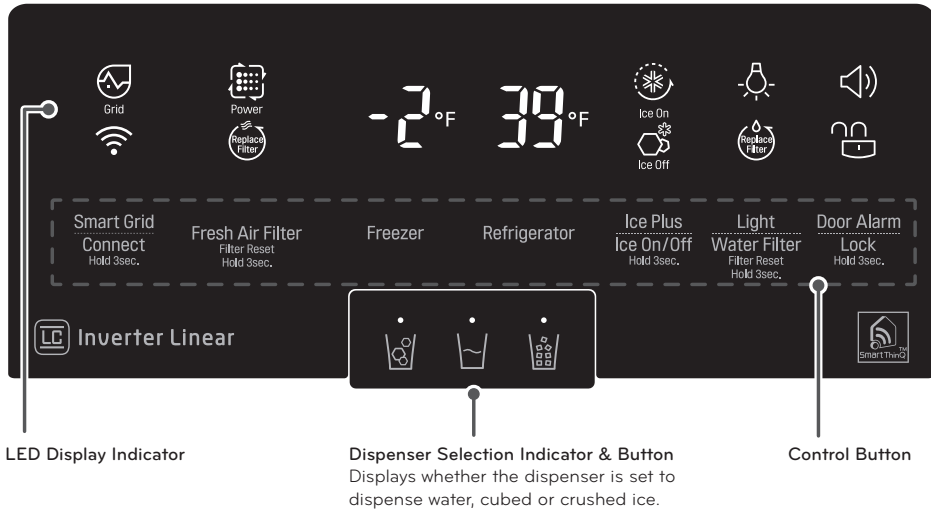
The refrigerator makes a loud noise after initial operation.
This is normal. The volume will decrease as the temperature decreases.

ENGLISH

Control Panel

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

Control Panel Features

LED Display Indicator

Dispenser Selection Indicator & Button
Displays whether the dispenser is set to dispense water, cubed or crushed ice.

Control Button

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 to set the temperature from 33°F to 46°F (1°C to 8°C).

Freezer Temperature

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 to set the temperature from -6°F to 8°F (-21°C to -13°C).

To change the temperature mode from °F to °C (or vice versa) press and hold the Refrigerator and Freezer buttons simultaneously for approximately five seconds.

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

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

Replace Filter [(On some models)]

Replace the air filter when the Replace Filter indicator appears in the display. After replacing the air filter, press and hold the Fresh Air Filter button for three seconds to turn the indicator light off. Replace the air filter about every six months.

Ice Plus

This function increases both ice making and freezing capabilities.

- Press the Ice Plus button and the indicator illuminates in the display. The function continues for 24 hours and shuts off automatically after 24 hours.
- To stop the function manually, press the button one more time.

Ice On/Off

Ice On
Ice Off

Press the Ice On/Off button for three seconds to turn the icemaker on/off.

Light

Press the Light button to turn the dispenser light on. The indicator appears in the LED display.

Replace Water Filter

Replace the water filter when the water filter indicator appears in the display. After replacing the water filter, press and hold the Water Filter button for three seconds to turn the indicator light off. Replace the water filter about every 6 months.

Door Alarm

- When power is connected to the refrigerator, the door alarm is initially set to ON. Press the Door Alarm button to change the display to OFF and deactivate the door alarm function.
- An alarm tone sounds when either the refrigerator or the freezer door is left open for more than 60 seconds.
- Close the door to stop the alarm.

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 activate the Lock function, press and hold the Lock button until the lock indicator appears in the display. The other buttons are now disabled.
- To disable the Lock function, press and hold the Lock button for approximately three seconds.

Control Panel Features (continued)

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 Smart Functions section 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.
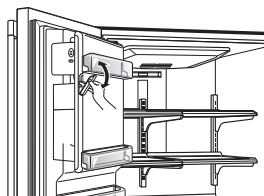
In-Door Ice Bin

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

⚠ **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.
- The icemaker will stop producing ice when the in-door ice bin is full. If you need more ice, empty the ice bin into the extra ice bin in the freezer compartment. During use, the ice can become uneven causing the icemaker to misread the amount of ice cubes and stop producing ice. Shaking the ice bin to level the ice within it can reduce this problem.
- Storing cans or other items in the ice bin will damage the icemaker.
- 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.
- If the Ice On/Off button on the display is set to OFF for an extended period of time, the ice compartment will gradually warm up to the temperature of the refrigerator compartment. To prevent ice cubes from melting and leaking from the dispenser, ALWAYS empty the ice bin when the icemaker is set to OFF for more than a few hours.

Detaching the In-Door Ice Bin

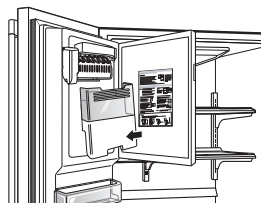1 Gently pull the handle to open the ice compartment.

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.
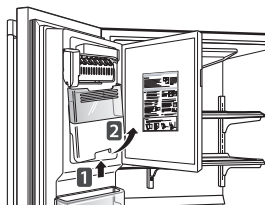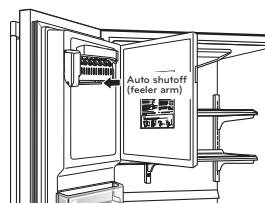

Assembling the In-Door Ice Bin

1 Carefully insert the in-door ice bin while slightly slanting it to avoid contact with the icemaker.

2 Avoid touching the auto shutoff (feeler arm) when replacing the ice bin. See the label on the ice compartment door for details.

Auto shutoff (feeler arm)

⚠ **CAUTION**

When handling the ice bin, keep hands away from the icemaker tray area to avoid personal injury.

Automatic Icemaker

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

Ice is made in the automatic icemaker and sent to the dispenser. The icemaker will produce 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. Wait 72 hours for full ice production to occur.
- 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 auto shutoff (feeler arm) can interrupt ice production. Make sure the feeler arm 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.

⚠ WARNING

Personal Injury Hazard

DO NOT place fingers or hands on the automatic ice making mechanism while the refrigerator is plugged in.

Icemaker

Auto shutoff (feeler arm)
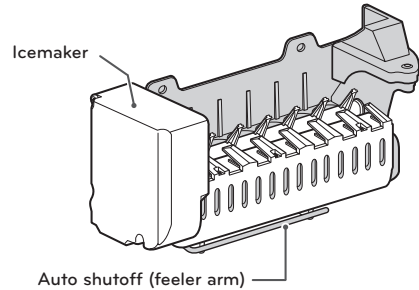
Turning the Automatic Icemaker On or Off

To turn the automatic icemaker On/Off, press and hold the Ice On/Off button on the control panel for three seconds.

⚠ CAUTION

- 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. This is also necessary if the refrigerator has not been used for a long time.
- 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.
- If discolored ice is dispensed, check the water filter and water supply. If the problem continues, contact a qualified service center. Do not use the ice or water until the problem is corrected.
- Keep children away from the dispenser. Children may play with or damage the controls.
- 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.
- Never use thin crystal glass or crockery to collect ice. Such containers may chip or break resulting in glass fragments in the ice.
- 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.
- Never use a glass that is exceptionally narrow or deep. Ice may jam in the ice passage and refrigerator performance may be affected.
- Keep the glass at a proper distance from the ice outlet. A glass held too close to the outlet may prevent ice from dispensing.
- To avoid personal injury, keep hands out of the ice door and passage.
- Never remove the dispenser cover.
- If ice or water dispenses unexpectedly, turn off the water supply and contact a qualified service center.

When to Turn the Icemaker Off

- When the water supply will be shut off for several hours.
- When the ice bin is removed for more than one or two minutes.
- When the refrigerator will not be used for several days.

ⓘ NOTE

The ice bin should be emptied when the Ice On/Off button is turned to the OFF mode.

Normal Sounds You May Hear

- The icemaker water valve will buzz as the icemaker fills with water. If the power button has been turned on, the ice maker will buzz even if it has not yet been hooked up to water. To stop the buzzing, press the power button to turn it off.

ⓘ NOTE

Keeping the power turned on to the icemaker before the water line is connected can damage the icemaker.

- You will hear the sound of cubes dropping into the bin and water running in the pipes as the icemaker refills.
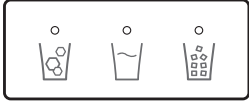
Preparing for Vacation

Set the icemaker power button to OFF and shut off the water supply to the refrigerator.

ⓘ NOTE

The ice bin should be emptied any time the Ice On/Off button is turned off.

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.

Operating the Dispenser

Dispensing Crushed Ice

Press the dispenser selection button repeatedly until the crushed ice icon illuminates. Press the dispenser switch with a glass or other container to dispense crushed ice.

Dispensing Cubed Ice

Press the dispenser selection button repeatedly until the cubed ice icon illuminates. Press the dispenser switch with a glass or other container to dispense cubed ice.

Dispensing Water

Press the dispenser selection button repeatedly until the water icon illuminates. Press the dispenser switch with a glass or other container to dispense water.

⚠ **CAUTION**

- Hold the container as close to the ice or water chute as possible to avoid spilling and splashing.
- Do not dispense ice into fine china or crystal glasses. China or crystal can be broken.

① **NOTE**

Hold the glass or other container in place for a couple of seconds after dispensing ice or water to catch the last few cubes or drops. The dispenser is designed to not operate while either refrigerator door is open.
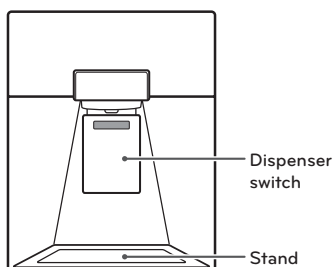
Ice and Water Dispenser

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

> ⚠ **CAUTION**
>
> Keep children away from the dispenser. Children may play with or damage the controls.

Dispenser

Dispenser switch

Stand

Using the Dispenser

- To dispense cold water or ice, push on the dispenser switch with a glass.

> ⓘ **NOTE**
>
> - If discolored ice is dispensed, check the water filter and water supply. If the problem continues, contact a qualified service center. Do not use the ice or water until the problem is corrected.
> - The dispenser will not operate when either of the refrigerator doors are open.
> - If dispensing water or ice into a container with a small opening, place it as close to the dispenser as possible.
> - Some dripping may occur after dispensing. Hold your cup beneath the dispenser for a few seconds after dispensing to catch all of the drops.

|	Incorrect Way	Correct Way
Water		
Ice		

> ⚠ **CAUTION**
>
> Throw away the first few batches of ice (about 24 cubes). This is also necessary if the refrigerator has not been used for a long time.

Locking the Dispenser

Press and hold the Lock button for three seconds to lock the dispenser and all the control panel functions. Follow the same instructions to unlock.

Cleaning the Dispenser Stand

1 Grip the stand with both hands, lift up, and pull out.
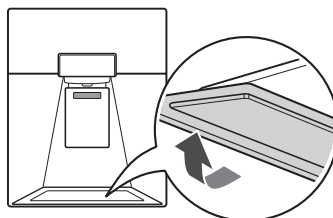
2 Wipe out dirty areas with a clean cloth.

Storing Food

Food Preservation Location

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

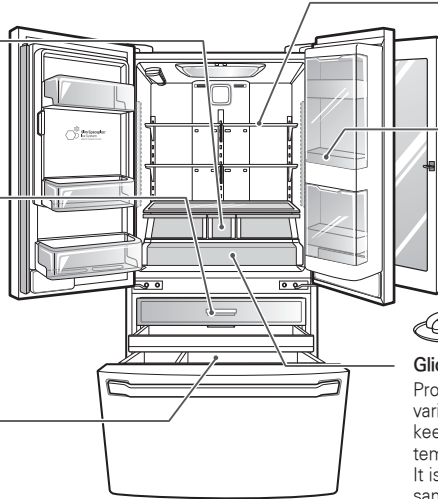**Vegetable storage (Crisper)**
Preserves vegetables and fruit.

Ice storage bin
If a large amount of ice is needed, transfer the ice in the in-door ice bin to the ice storage bin.

Durabase®
Largest storage space in the freezer.

Adjustable refrigerator shelf
Adjustable shelves to meet your individual storage needs.

Door-in-Door case
Store frequently used items such as beverages, butter, margarine, cream cheese, peanut butter, ketchup, mustard, relish, etc.

Glide'N'Serve
Provides storage space with a variable temperature control that keeps the compartment at a different temperature than the refrigerator. It is a convenient place to store sandwiches or meat to be cooked.

⚠ **CAUTION**

- 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 and fruit 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. It can also increase the running costs of the unit.
- 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 bottles in the pantry. If they are frozen, they can break and cause personal injury.

ⓘ **NOTE**

- If you are leaving home for a short period of time, 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 of time, remove all food and unplug the power cord. Clean the interior, and leave the door open to prevent fungi from growing in the refrigerator.

Food Storage Tips

The following tips may not be applicable depending on the model.

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 a covered dish or closed compartment. When storing an extra supply, wrap in freezer packaging and freeze.
Cheese	Store in the original wrapping until you are ready to use it. Once opened, rewrap tightly in plastic wrap or aluminum foil.
Milk	Wipe milk cartons. For coldest milk, place containers on interior shelf.
Eggs	Store in original carton on interior shelf, not on door shelf.
Fruit	Do not wash or hull the fruit until it is ready to be used. Sort and keep fruit in its original container, in a crisper, or store in a completely closed paper bag on a refrigerator shelf.
Leafy Vegetables	Remove store wrapping and 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	Store fresh fish and shellfish in the freezer section if they are not being consumed the same day of purchase. It is recommended to consume fresh fish and shellfish the same day purchased.
Leftovers	Cover leftovers with plastic wrap or aluminum foil, or store in plastic containers with tight lids.

Storing Frozen Food

> **NOTE**
>
> 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 lbs. 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, then package and freeze. Cooling hot foods before freezing saves energy.

Storing Frozen Food (continued)

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 Crisper and Glide'N'Serve

Humidity Controlled Crisper

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

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 **Vegetable** and **Fruit.**

• **Vegetable** 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.
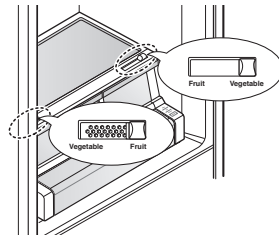
Glide'N'Serve

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 for vegetables that require high humidity.)
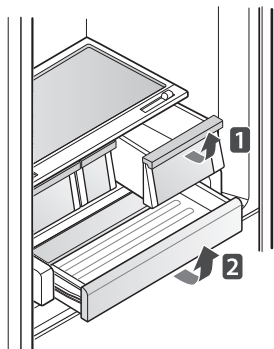
Press the **Select** button to choose between Produce (Cold), Deli (Colder) and Meat (Coldest).
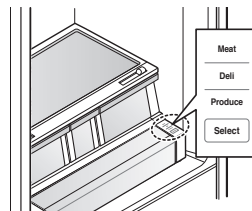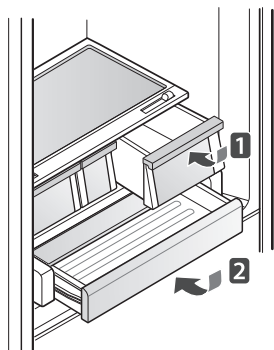
Detaching and Assembling the Storage Bins

Glide'N'Serve and Humidity Controlled Crisper

To remove the Humidity Controlled Crisper and the Glide'N'Serve, pull out the Crisper **1** and Glide'N'Serve **2** to full extension, lift the front up, and pull straight out.
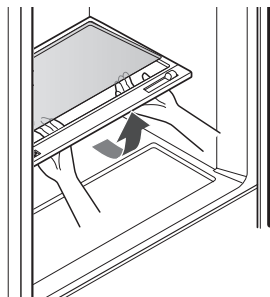
To install, slightly tilt up the front, insert the drawer into the frame and push it back into place.

To Remove the Glass

(Pantry drawer not shown for clarity)

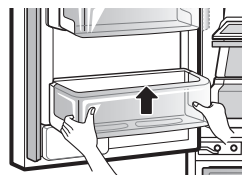Lift up the glass from under the crisper cover, and pull up and out.

Left Door Bins

The door bins on the left door 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.

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

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

InstaView Door-in-Door

The InstaView Door-in-Door compartment allows for easy access to commonly used food items.

Knock twice on the glass to turn the LED light inside the InstaView on or off.

- The LED light turns off automatically after 10 seconds.
- The LED light does not turn on if the right refrigerator door is open.
- The InstaView function will not activate for two seconds after closing the door.
- The InstaView function is disabled when the ice dispenser is in use.
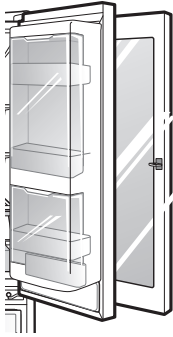
InstaView Door-in-Door Compartment

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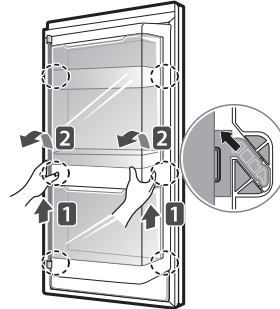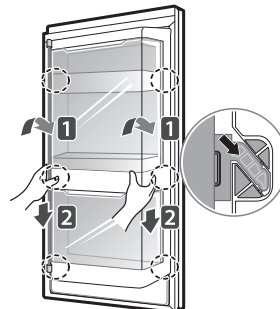
Door-in-Door Case

To open the Door-in-Door case, slightly push the marked area to pop it open. 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, align the tabs on the Door-in-Door case with the slots on the door and push down until it snaps into place.

Door-in-Door Lower Shelf

The Door-in-Door's lower shelf is removable for easy cleaning.

1   To remove the lower shelf, lift the shelf retainer up and out.

2   Remove the two screws from the shelf and pull it straight out.

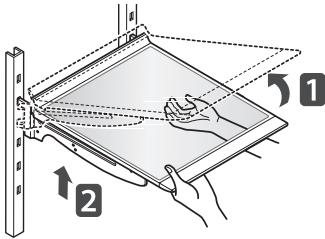3   Reverse the procedure to replace the shelf.
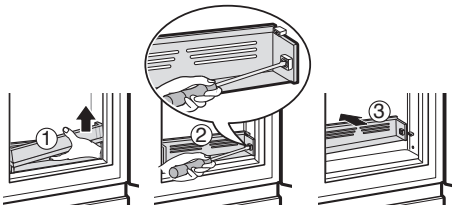
Adjusting the Refrigerator Shelves

The shelves in the refrigerator are adjustable to meet your individual storage needs. Your model may have glass or wire shelves.

Adjusting the shelves to fit items of different heights will make finding the exact item you want easier. Doing so will also reduce the amount of time the refrigerator door is open which will save energy.
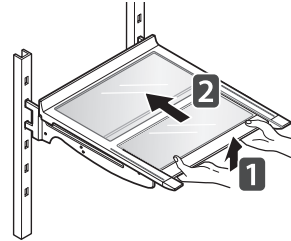
Detaching the Shelf

Tilt up the front of the shelf and lift it straight up. Pull the shelf out.

Assembling the Shelf

Tilt the front of the shelf up and guide the shelf hooks into the slots at a desired height. Then, 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.

Using the Folding Shelf

You can store taller items, such as a gallon container or bottles, by simply pushing the front half of the shelf underneath the back half of the shelf. Pull the front of the shelf toward you to return to a full shelf.
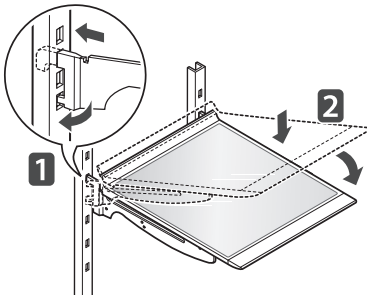

⚠ CAUTION

- 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.

Smart Functions

Application Installation

Search for the Smart ThinQ application from the Google Play Store on a smart phone. Follow instructions to download and install the application.

Product Registration

1. Run the Smart ThinQ application on a smart phone.
2. Create an account and sign in.
3. Select **Register**.
4. Select **Refrigerator**.
5. Follow the instructions on the smart phone to register the appliance and connect it to a Wi-Fi network.
   • To verify the Wi-Fi connection, check that the Wi-Fi icon 📶 on the control panel is lit.

⚠ NOTE

• LG Electronics is not responsible for any network connection problems or any faults, malfunctions, or errors caused by network connection.

• The machine supports 2.4 GHz Wi-Fi networks only.

• 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 Wi-Fi connection may not connect or may be interrupted because of the home network environment.

• The network connection may not work properly depending on the internet service provider.

• The surrounding wireless environment can make the wireless network service run slowly.

• This information is current at the time of publication. The application is subject to change for appliance improvement purposes without notice to users.

Smart Functions (continued)

LG Smart Refrigerator App - What's Included

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.

Manage Food
This feature helps track items in the refrigerator and freezer, sends alerts when items are near their use by dates, generates grocery lists, and links to related recipes.

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

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.

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 at 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.

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 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.

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.smartthinq.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 an delay defrost schedule event
- Update an delay defrost schedule event
- Delete an 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.

Open Source Software Notice

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.

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 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.

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 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.

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 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

Using Smart Diagnosis™

Should you experience any problems with the appliance, it has the capability of transmitting data to a smart phone using the Smart ThinQ application or via the phone to the LG Electronics call center.

Smart Diagnosis™ cannot be activated unless the appliance is connected to power. If the appliance is unable to turn on, then troubleshooting must be done without using Smart Diagnosis™.

Smart Diagnosis™ Using a Smart Phone

1. Open the Smart ThinQ application on the smart phone.
2. Select the appliance and then the menu on the upper right side.
3. Select the **Smart Diagnosis**, then press the **Start Smart Diagnosis** button.

> **NOTE**
> • If the diagnosis fails several times, use the following instructions.

4. Select the **Audible Diagnosis**.
5. Follow the instructions on the smart phone.
6. Keep the phone in place until the tone transmission has finished. View the diagnosis on the phone.

Smart Diagnosis™ Through the Customer Information Center

First, call 1-800-243-0000. Only use the Smart Diagnosis™ feature when instructed to do so by the LG Electronics call center agent.

1　Lock the display. To lock the display, press and 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.)

Door Alarm
Lock
Hold 3sec
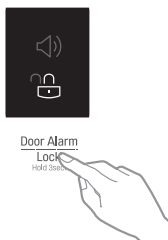
2　Open the right refrigerator door.

3　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.
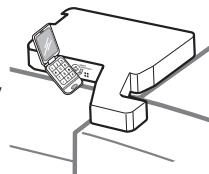
4　Press and hold the Freezer temperature button for three seconds while continuing to hold your phone to the speaker.

-88 °C °F

Freezer

5　After you hear three beeps, release the Freezer temperature button.

6　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.

> **NOTE**
> • The Smart Diagnosis™ function depends on the local call quality.
> • The communication performance will improve and you can receive better service if you use the home phone.
> • If the Smart Diagnosis™ data transfer is poor due to poor call quality, you may not receive the best Smart Diagnosis™ service.

MAINTENANCE

Cleaning

- Both the refrigerator and freezer sections defrost automatically; however, clean both sections about once a month to prevent odors.
- Wipe up spills immediately.
- Always unplug the refrigerator before cleaning.

General Cleaning Tips

- Unplug refrigerator or disconnect power.
- Remove all removable parts, such as shelves, crispers, etc.
- 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.

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 a stainless steel exterior, use a clean sponge or soft cloth and a mild detergent in warm water. Do not use abrasive or harsh cleaners. Dry thoroughly with a soft cloth.

> ⚠ CAUTION
> - Do not use a rough 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.

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

Inside Walls

Allow the freezer to warm up so a wet cloth will not stick to the walls. To help remove odors, you can 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.
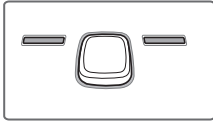
Condenser Coils

Use a vacuum cleaner with an attachment to clean the condenser cover and vents. Do not remove the panel covering the condenser coil area.
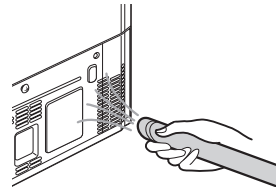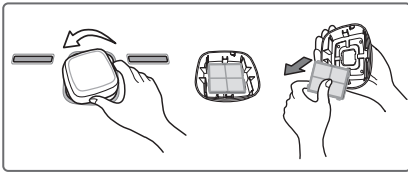
Replacing the Fresh Air Filter

Replace the air filter:

- Approximately every six months.
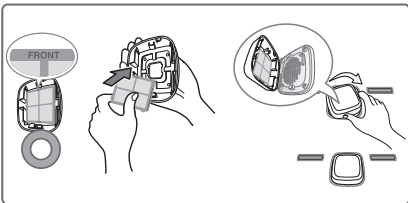- When the REPLACE FILTER indicator appears in the display.

1 Remove the old filter.

Turn the filter cover to the left to detach it from the refrigerator wall. The filter is located on the inside of the filter cover. Remove the filter from the cover and replace it with a new filter.

2 Install a new air filter.

Place the new filter inside of the cover with the side that says "Front" facing outward. Turn the filter cover to the right to attach it to the refrigerator wall.
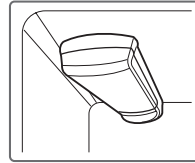

After changing the filter, push and hold the Fresh Air Filter button for three seconds to reset the filter sensor.

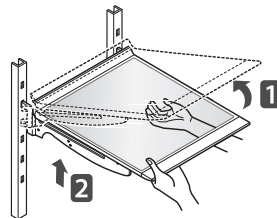## Replacing the Water Filter

Replace the water filter:

- Approximately every six months.
- When the water filter indicator appears in the display.
- When the water dispenser output decreases.
- When the ice cubes are smaller than normal.

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.
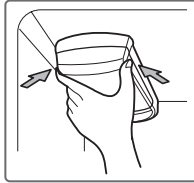
To remove any shelf—Tilt up the front of the shelf **1** and lift it **2**. Pull the shelf out.
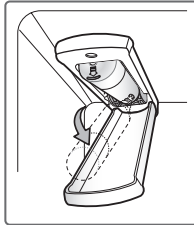
1   Remove the old water filter.

Lower or remove the top left shelf to allow the water filter to rotate all the way down.

Press the push button to open the water filter cover.

NOTE: Replacing the water filter causes a small amount of water (around 1 oz. or 25 cc) to drain. Place a cup under the front end of the water filter cover to collect any leaking water. Hold the water filter upright, once it is removed, to prevent any remaining water from spilling out of the water filter.

Pull the water filter downward and pull out. Make sure to rotate the filter down completely before pulling it out of the manifold hole.
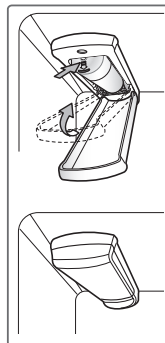
2   Replace with a new water filter.

Take the new water filter out of its packing and remove the protective cover from the o-rings. With the water filter tabs in the horizontal position, push the new water filter into the manifold hole until it stops.
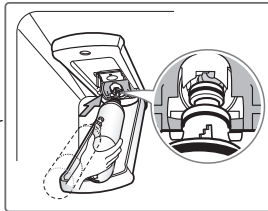
Rotate the water filter up into position and close the cover. The cover will click when closed correctly.

3   After the water filter is replaced, dispense 2.5 gallons of water (flush for approximately 5 minutes) to remove trapped air and contaminants from the system. Do not dispense the entire 2.5 gallon amount continuously. Depress and release the dispenser pad for cycles of 30 seconds ON and 60 seconds OFF.

4   Water Filter Bypass Plug

Keep the water filter bypass plug. You MUST use the water filter bypass plug when a replacement water filter cartridge is not available.

Water Filter Bypass Plug
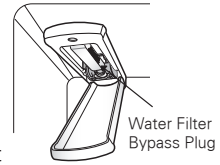
⚠ CAUTION

DO NOT operate refrigerator without water filter or water filter plug installed.

(!) NOTE

• To purchase a replacement water filter:
  Visit your local dealer or distributor
  Web: Find Parts & Accessories from
       Support section of lg.com
  Call : 1-800-243-0000 (USA)
         1-888-542-2623 (Canada)
• Part number of the replacement water filter: ADQ36006101

Performance Data Sheet

Model: ADQ36006101-S   Use Replacement Cartridge: ADQ36006101

The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system as specified in NSF/ANSI Standard 42 and Standard 53.

NSF System tested and certified by NSF International against NSF/ANSI Standard 42 and Standard 53 for the reduction of substances listed below.

Contaminant Reduction	Average Influent	NSF specified Challenge Concentration	Avg % Reduction	Average Product Water Concentration	Max Permissible Product Water Concentration	NSF Reduction equirements	NSF Test Report
Chlorine Taste and Odor	2.1 mg/L	2.0 mg/L ± 10%	97.2%	0.06 mg/L	N/A	≥ 50%	J-00049247
Nominal Particulate Class I, , ≥ 0.5 to < 1.0 μm	5,600,000 pts/mL	At least 10,000 particles/mL	98.7%	73,000 pts/ml	N/A	≥ 85%	J-00049282
Asbestos	190 MFL	10^7 to 10^8 MFL; fibers greater than 10 μm in length	>99%	< 1MLF	N/A	≥ 99%	J-0004928
Atrazine	0.0094 mg/L	0.009 mg/L ± 10%	94.7%	0.00005 mg/L	0.003 mg/L	N/A	J-00049293
Benzene	0.016 mg/L	0.015 mg/L ± 10%	96.7%	0.005 mg/L	0.005 mg/L	N/A	J-00049300
Carbofuran	0.08 mg/L	0.08 mg/L ± 10%	98.1%	0.002 mg/L	0.04 mg/L	N/A	J-00049294
Lindane	0.002 mg/L	0.002 mg/L ± 10%	98.2%	0.00004 mg/L	0.0002 mg/L	N/A	J-00051975
P-Dichlorobenzene	0.22 mg/L	0.225 mg/L ± 10%	99.8%	0.0005 mg/L	0.075 mg/L	N/A	J-00049298
Toxaphene	0.014 mg/L	0.015 mg/L ± 10%	93%	0.001 mg/L	0.003 mg/L	N/A	J-00049302
2,4-D	0.213 mg/L	0.210 mg/L ± 10%	95.2%	0.009 mg/L	0.07 mg/L	N/A	J-00049284
Lead pH @6.5	0.150 mg/L	0.15 mg/L ± 10%	>99.3%	0.001 mg/L	0.010 mg/L	N/A	J-00051974
Lead pH @8.5	0.150 mg/L	0.15 mg/L ± 10%	>99.3%	0.001 mg/L	0.010 mg/L	N/A	J-00049277
Mercury @ pH 6.5	0.0059 mg/L	0.006 mg/L ± 10%	96.1	0.0002 mg/L	0.002 mg/L	N/A	J-00053886
Mercury @ pH 8.5	0.0058 mg/L	0.006 mg/L ± 10%	90.1	0.0006 mg/L	0.002 mg/L	N/A	J-00051972
Cyst*	120,000 cysts/L	Minimum 50,000 cysts/L	99.99%	<1 cyst/L	N/A	≥ 99.95%	J-00049281

* Based on the use of Cryptosporidium parvum oocysts.

Application Guidelines/Water Supply Parameters	
Service Flow	0.5 gpm (1.9 lpm)
Water Supply	Potable Water
Water Pressure	20 -120 psi (138 - 827 kPa)
Water Temperature	33°F - 100°F (0.6°C - 38°C)

It is essential that the manufacturer's recommended installation, maintenance and filter replacement requirements be carried out for the product to perform as advertised.

ⓘ NOTE
- While the testing was performed under standard laboratory conditions, actual performance may vary.

Replacement Cartridge: ADQ36006101
For estimated costs of replacement elements please call USA 1-800-243-0000
CANADA 1-888-LGCANADA (24 hours per day/7 days per week) or visit our website at www.lg.com

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NSF is a trademark of NSF International.
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⚠ WARNING
To reduce the risk associated with choking:
- Do not allow children under 3 years of age to have access to small parts during the installation of this product.

To reduce the risk associated with the ingestion of contaminants:
- Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts. EPA Establishment # 070595-MEX-001

⚠ CAUTION
To reduce the risk associated with property damage due to water leakage:
- Read and follow Use Instructions before installation and use of this system.
- Installation and use MUST comply with all state and local plumbing codes.
- Do not install if water pressure exceeds 120 psi (827 kPa). If your water pressure exceeds 80 psi, you must install a pressure limiting valve. Contact a plumbing professional if you are uncertain how to check your water pressure.
- Do not install where water hammer conditions may occur. If water hammer conditions exist you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition.
- Do not install on hot water supply lines. The maximum operating water temperature of this filter system is 100°F (37.8°C).
- Protect filter from freezing. Drain filter when temperatures drop below 40°F (4.4°C).
- The disposable filter cartridge MUST be replaced every 6 months, at the rated capacity or if a noticeable reduction in flow rate occurs.
- Protect from freezing, remove filter cartridge when temperatures are expected to drop below 33° F.
- Do not install systems in areas where ambient temperatures may go above 110° F (43.3° C).
- Where a backflow prevention device is installed on a water system, a device for controlling pressure due to thermal expansion must be installed.
- Ensure all tubing and fittings are secure and free of leaks.

Manufactured for LG®Electronics by CUNO Incorporated 400 Research Parkway Meriden, CT 06450 U.S.A Worldwide: 203-237-5541
www.cuno.com

State of California
Department of Public Health

Water Treatment Device
Certificate Number
09‑2018

Date Issued: December 15, 2009

Trademark/Model Designation	**Replacement Elements**
ADQ36006101-S	ADQ36006101

Manufacturer: Cuno Inc.

The water treatment device(s) listed on this certificate have met the testing requirements pursuant to Section 116830 of the Health and Safety Code for the following health related contaminants:

Microbiological Contaminants and Turbidity
   Cysts

Inorganic/Radiological Contaminants
   Asbestos
   Lead
   Mercury

Organic Contaminants
   2,4-D Reduction
   Atrazine
   Benzene
   Carbofuran
   Lindane
   p-Dichlorobenzene
   Toxaphene

Rated Service Capacity: 200 gal   **Rated Service Flow:** 0.5 gpm

Conditions of Certification: