

# SMART DIAGNOSIS

Should you experience any problems with your refrigerator, it has the capability of transmitting data via your telephone to the LG service center. This allows you to speak directly to our trained specialists. The specialist records the data transmitted from your machine and uses it to analyze the issue, providing a fast and effective diagnosis.

If you experience problems with your refrigerator, call 1-800-984-6306. Only use the Smart Diagnosis™ feature when instructed to do so by the LG call center agent. The transmission sounds that you will hear are normal and sound similar to a fax machine.

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

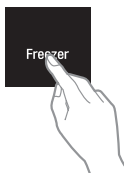
## Using Smart Diagnosis™

First, call 1-800-984-6306. Only use the Smart Diagnosis™ feature when instructed to do so by the LG call center agent.

- 1 Lock the display. To lock the display, open the InstaView™ Door-in-Door® and 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.)

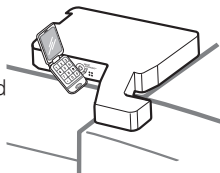


- 2 Press and hold the Freezer button for three seconds.



- 3 After the display indicates "Smart Diagnosis" and number "3", release the Freezer button.
- 4 When instructed to do so by the call center, close the Door-in-Door and open the right refrigerator door.

- 5 Immediately hold the mouthpiece of your phone in front of the speaker that is located on the right hinge of the refrigerator door.



- 6 Keep the phone in place until the tone transmission has finished. This takes about 6 seconds, and 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

- Call quality differences by region may affect the function.
- Use a land line rather than a cell phone for better communication performance, resulting in better service.
- Bad call quality may result in poor data transmission from your phone to the machine, which could cause Smart Diagnosis™ to malfunction.

# TROUBLESHOOTING

Review the Troubleshooting section before calling for service; doing so will save you both time and money.

Problem	Possible Causes	Solutions
Refrigerator and Freezer section are not cooling.	The refrigerator control is set to OFF (some models).	Turn the control ON. Refer to the Setting the Controls section for proper temperature settings.
	Refrigerator is in the defrost cycle.	During the defrost cycle, the temperature of each compartment may rise slightly. Wait 30 minutes and confirm the proper temperature has been restored once the defrost cycle has completed.
	Refrigerator was recently installed.	It may take up to 24 hours for each compartment to reach the desired temperature.
	Refrigerator was recently relocated.	If the refrigerator was stored for a long period of time or moved on its side, it is necessary for the refrigerator to stand upright for 24 hours before connecting it to power.
	May be in Display mode.	Refer to page 25 for Display mode instructions.
Cooling system runs too much.	Refrigerator is replacing an older model.	Modern refrigerators require more operating time but use less energy due to more efficient technology.
	Refrigerator was recently plugged in or power restored.	The refrigerator will take up to 24 hours to cool completely.
	Door opened often or a large amount of food / hot food was added.	Adding food and opening the door warms the refrigerator, requiring the compressor to run longer in order to cool the refrigerator back down. In order to conserve energy, try to get everything you need out of the refrigerator at once, keep food organized so it is easy to find, and close the door as soon as the food is removed. (Refer to the Food Storage Guide.)
	Doors are not closed completely.	Firmly push the doors shut. If they will not shut all the way, see the Doors will not close completely or pop open section in Troubleshooting.
	Refrigerator is installed in a hot location.	The compressor will run longer under warm conditions. At normal room temperatures (70°F) expect your compressor to run about 40% to 80% of the time. Under warmer conditions, expect it to run even more often. The refrigerator should not be operated above 110°F.
	Condenser / back cover is clogged.	Use a vacuum cleaner with an attachment to clean the condenser cover and vents. Do not remove the panel covering the condenser coil area. Unplug the cord or switch off the breaker before cleaning.

Problem	Possible Causes	Solutions
Refrigerator or Freezer section is too warm.	Refrigerator was recently installed.	It may take up to 24 hours for each compartment to reach the desired temperature.
	Air vents are blocked.	Rearrange items to allow air to flow throughout the compartment. Refer to the Airflow diagram in the Using Your Refrigerator section.
	Doors are opened often or for long periods of time.	When the doors are opened often or for long periods of time, warm, humid air enters the compartment. This raises the temperature and moisture level within the compartment. To lessen the effect, reduce the frequency and duration of door openings.
	Unit is installed in a hot location.	The refrigerator should not be operated in temperatures above 110°F.
	A large amount of food or hot food was added to either compartment.	Adding food warms the compartment requiring the cooling system to run. Allowing hot food to cool to room temperature before putting it in the refrigerator will reduce this effect.
	Doors not closed correctly.	See the Doors will not close correctly or pop open section in Troubleshooting.
	Temperature control is not set correctly.	If the temperature is too warm, adjust the control one increment at a time and wait for the temperature to stabilize. Refer to the Setting the Controls section for more information.
	Defrost cycle has recently completed.	During the defrost cycle, the temperature of each compartment may rise slightly and condensation may form on the back wall. Wait 30 minutes and confirm the proper temperature has been restored once the defrost cycle has completed.

Problem	Possible Causes	Solutions
Interior moisture buildup.	Doors are opened often or for long periods of time.	When the doors are opened often or for long periods of time, warm, humid air enters the compartment. This raises the temperature and moisture level within the compartment. To lessen the effect, reduce the frequency and duration of door openings.
	Doors not closed correctly.	See the Doors will not close correctly section in the Troubleshooting section.
	Weather is humid.	Humid weather allows additional moisture to enter the compartments when the doors are opened leading to condensation or frost. Maintaining a reasonable level of humidity in the home will help to control the amount of moisture that can enter the compartments.
	Defrost cycle recently completed.	During the defrost cycle, the temperature of each compartment may rise slightly and condensation may form on the back wall. Wait 30 minutes and confirm that the proper temperature has been restored once the defrost cycle has completed.
	Food is not packaged correctly.	Food stored uncovered or unwrapped, and damp containers can lead to moisture accumulation within each compartment. Wipe all containers dry and store food in sealed packaging to prevent condensation and frost.
Food is freezing in the refrigerator compartment.	Food with high water content was placed near an air vent.	Rearrange items with high water content away from air vents.
	Refrigerator temperature control is set incorrectly.	If the temperature is too cold, adjust the control one increment at a time and wait for the temperature to stabilize. Refer to the Setting the Controls section for more information.
	Refrigerator is installed in a cold location.	When the refrigerator is operated in temperatures below 41°F (5°C), food can freeze in the refrigerator compartment. The refrigerator should not be operated in temperatures below 55°F (13°C).
Frost or ice crystals form on frozen food (outside of package).	Door is opened frequently or for long periods of time.	When the doors are opened often or for long periods of time, warm, humid air enters the compartment. This raises the temperature and moisture level within the compartment. Increased moisture will lead to frost and condensation. To lessen the effect, reduce the frequency and duration of door openings.
	Door is not closing properly.	Refer to the Doors will not close correctly or pop open section in the Troubleshooting section.
Refrigerator or Freezer section is too cold.	Incorrect temperature control settings.	If the temperature is too cold, adjust the control one increment at a time and wait for the temperature to stabilize. Refer to the Setting the Controls section for more information.


Problem	Possible Causes	Solutions
Frost or ice crystals on frozen food (inside of sealed package).	Condensation from food with a high water content has frozen inside of the food package.	This is normal for food items with a high water content.
	Food has been left in the freezer for a long period of time.	Do not store food items with high water content in the freezer for a long period of time.
Icemaker is not making enough ice.	Demand exceeds ice storage capacity.	The icemaker will produce approximately 70~182 cubes in a 24 hour period.
	House water supply is not connected, valve is not turned on fully, or valve is clogged.	Connect the refrigerator to a cold water supply with adequate pressure and turn the water shutoff valve fully open.  If the problem persists, it may be necessary to contact a plumber.
	Water filter has been exhausted.	It is recommended that you replace the water filter: <ul style="list-style-type: none"> <li>• Approximately every six months.</li> <li>• When the water filter indicator blinks.</li> <li>• When the water dispenser output decreases.</li> <li>• When the ice cubes are smaller than normal.</li> </ul>
	Low house water supply pressure.	The water pressure must be 20~120 psi or 138~827 kPa or 1.4~8.4 kgf/cm <sup>2</sup> on models without a water filter and 40~120 psi or 276~827 kPa or 2.8~8.4 kgf/cm <sup>2</sup> on models with a water filter.  If the problem persists, it may be necessary to contact a plumber.
	Reverse Osmosis filtration system is used.	Reverse osmosis filtration systems can reduce the water pressure below the minimum amount and result in icemaker issues. (Refer to Water Pressure section.)
	Tubing connecting refrigerator to house supply valve is kinked.	The tubing can kink when the refrigerator is moved during installation or cleaning resulting in reduced water flow. Straighten or repair the water supply line and arrange it to prevent future kinks.

Problem	Possible Causes	Solutions
Icemaker is not making enough ice (continued).	Doors are opened often or for long periods of time.	If the doors of the unit are opened often, ambient air will warm the refrigerator which will prevent the unit from maintaining the set temperature. Lowering the refrigerator temperature can help, as well as not opening the doors as frequently.
	Doors are not closed completely.	If the doors are not properly closed, ice production will be affected. See the Doors will not close completely or pop open section in Troubleshooting for more information.
	The temperature setting for the freezer is too warm.	The recommended temperature for the freezer compartment for normal ice production is 0°F. If the freezer temperature is warmer, ice production will be affected.
Dispensing water slowly.	Water filter has been exhausted.	<p>It is recommended that you replace the water filter:</p> <ul style="list-style-type: none"> <li>• Approximately every six months.</li> <li>• When the water filter indicator blinks.</li> <li>• When the water dispenser output decreases.</li> <li>• When the ice cubes are smaller than normal.</li> </ul>
	Reverse osmosis filtration system is used.	<p>Reverse osmosis filtration systems can reduce the water pressure below the minimum amount and result in icemaker issues.</p> <p>If the problem persists, it may be necessary to contact a plumber.</p>
	Low house water supply pressure.	<p>The water pressure must be 20~120 psi or 138~827 kPa or 1.4~8.4 kgf/cm<sup>2</sup> on models without a water filter and 40~120 psi or 276~827 kPa or 2.8~8.4 kgf/cm<sup>2</sup> on models with a water filter.</p> <p>If the problem persists, it may be necessary to contact a plumber.</p>

Problem	Possible Causes	Solutions
Not dispensing ice.	Doors are not closed completely.	Ice will not dispense if any of the refrigerator doors are left open.
	Infrequent use of the dispenser.	Infrequent use of the ice dispenser will cause the cubes to stick together over time, which will prevent them from properly dispensing. Check the ice bin for ice cubes clumping/sticking together. If they are, break up the ice cubes to allow for proper operation.
	The delivery chute is clogged with frost or ice fragments.	Eliminate the frost or ice fragments by removing the ice bin and clearing the chute with a plastic utensil. Dispensing cubed ice can also help prevent frost or ice fragment buildup.
	The dispenser display is locked.	Press and hold the Lock button for three seconds to unlock the control panel and dispenser.
	Ice bin is empty.	It may take up to 24 hours for each compartment to reach the desired temperature and for the icemaker to begin making ice. Make sure that the shutoff (arm/sensor) is not obstructed.  Once the ice supply in the bin has been completely exhausted, it may take up to 90 minutes before additional ice is available, and approximately 24 hours to completely refill the bin.
Icemaker is not making ice.	Refrigerator was recently installed or icemaker recently connected.	It may take up to 24 hours for each compartment to reach the desired temperature and for the icemaker to begin making ice.
	Icemaker not turned on.	Locate the Ice On/Off button on the display and confirm that it is turned On.
	The ice detecting sensor is obstructed.	Foreign substances or frost on the ice-detecting sensor can interrupt ice production. Make sure that the sensor area is clean at all times for proper operation.
	The refrigerator is not connected to a water supply or the supply shutoff valve is not turned on.	Connect refrigerator to the water supply and turn the water shutoff valve fully open.
	Icemaker shutoff (arm or sensor) obstructed.	If your icemaker is equipped with an ice shutoff arm, make sure that the arm moves freely. If your icemaker is equipped with the electronic ice shutoff sensor, make sure that there is a clear path between the two sensors.
	Reverse osmosis water filtration system is connected to your cold water supply.	Reverse osmosis filtration systems can reduce the water pressure below the minimum amount and result in icemaker issues. (Refer to the Water Pressure section.)

Problem	Possible Causes	Solutions
Not dispensing water.	New installation or water line recently connected.	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.
	The dispenser panel is locked.	Press and hold the Lock button for three seconds to unlock the control panel and dispenser.
	The dispenser is not set for water dispensing.	The dispenser can be set for ice or water. Make certain that the control panel is set for the proper operation. Press the Water button on the control panel to dispense water.
	Refrigerator or freezer doors are not closed properly.	Water will not dispense if any of the refrigerator doors are left open.
	Water filter has been recently removed or replaced.	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.
	Tubing connecting refrigerator to house supply valve is kinked.	The tubing can kink when the refrigerator is moved during installation or cleaning resulting in reduced water flow. Straighten or repair the water supply line and arrange it to prevent future kinks.
	The house water supply is not connected, the valve is not turned on fully, or the valve is clogged.	Connect refrigerator to the water supply and turn the water shutoff valve fully open.  If the problem persists, it may be necessary to contact a plumber.



Problem	Possible Causes	Solutions
Ice has bad taste or odor.	Water supply contains minerals such as sulfur.	A water filter may need to be installed to eliminate taste and odor problems.  NOTE: In some cases, a filter may not help. It may not be possible to remove all minerals / odor / taste in all water supplies.
	Icemaker was recently installed.	Discard the first few batches of ice to avoid discolored or bad tasting ice.
	Ice has been stored for too long.	Ice that has been stored for too long will shrink, become cloudy, and may develop a stale taste. Throw away old ice and make a new supply.
	The food has not been stored properly in either compartment.	Rewrap the food. Odors may migrate to the ice if food is not wrapped properly.
	The interior of the refrigerator needs to be cleaned.	See the Care and Cleaning section for more information.
	The ice storage bin needs to be cleaned.	Empty and wash the bin (discard old cubes). Make sure that the bin is completely dry before reinstalling it.
Dispensing warm water.	Refrigerator was recently installed.	Allow 24 hours after installation for the water storage tank to cool completely.
	The water dispenser has been used recently and the storage tank was exhausted.	Depending on your specific model, the water storage capacity will range from approximately 20 to 30 oz.
	Dispenser has not been used for several hours.	If the dispenser has not been used for several hours, the first glass dispensed may be warm. Discard the first 10 oz.
	Refrigerator is connected to the hot water supply.	Make sure that the refrigerator is connected to a cold water pipe.   <b>WARNING:</b> Connecting the refrigerator to a hot water line may damage the icemaker.
Water has bad taste or odor.	Water supply contains minerals such as sulfur.	A water filter may need to be installed to eliminate taste and odor problems.
	Water filter has been exhausted.	It is recommended that you replace the water filter: <ul style="list-style-type: none"> <li>• Approximately every 6 months.</li> <li>• When the water filter indicator blinks.</li> <li>• When the water dispenser output decreases.</li> <li>• When the ice cubes are smaller than normal.</li> </ul>
	Refrigerator was recently installed.	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.

Problem	Possible Causes	Solutions
Icemaker is making too much ice.	Icemaker shutoff (arm/sensor) is obstructed.	Empty the ice bin. If your icemaker is equipped with an ice shutoff arm, make sure that the arm moves freely. If your icemaker is equipped with the electronic ice shutoff sensor, make sure that there is a clear path between the two sensors. Reinstall the ice bin and wait 24 hours to confirm proper operation.
Clicking	The defrost control will click when the automatic defrost cycle begins and ends. The thermostat control (or refrigerator control on some models) will also click when cycling on and off.	Normal Operation
Rattling	Rattling noises may come from the flow of refrigerant, the water line on the back of the unit, or items stored on top of or around the refrigerator.	Normal Operation
	Refrigerator is not resting solidly on the floor.	Floor is weak or uneven or leveling legs need to be adjusted. See the Door Alignment section.
	Refrigerator with linear compressor was jarred while running.	Normal Operation
Whooshing	Evaporator fan motor is circulating air through the refrigerator and freezer compartments.	Normal Operation
	Air is being forced over the condenser by the condenser fan.	Normal Operation
Gurgling	Refrigerant flowing through the cooling system.	Normal Operation
Popping	Contraction and expansion of the inside walls due to changes in temperature.	Normal Operation
Sizzling	Water dripping on the defrost heater during a defrost cycle.	Normal Operation
Vibrating	If the side or back of the refrigerator is touching a cabinet or wall, some of the normal vibrations may make an audible sound.	To eliminate the noise, make sure that the sides and back cannot vibrate against any wall or cabinet.
Dripping	Water running into the drain pan during the defrost cycle.	Normal Operation

Problem	Possible Causes	Solutions
Pulsating or High-Pitched Sound	Your refrigerator is designed to run more efficiently to keep your food items at the desired temperature. The high efficiency compressor may cause your new refrigerator to run longer than your old one, but it is still more energy efficient than previous models. While the refrigerator is running, it is normal to hear a pulsating or high-pitched sound.	Normal Operation
Doors will not close correctly or pop open.	Food packages are blocking the door open.	Rearrange food containers to clear the door and door shelves.
	Ice bin, crisper cover, pans, shelves, door bins, or baskets are out of position.	Push bins all the way in and put crisper cover, pans, shelves and baskets into their correct positions. See the Using Your Refrigerator section for more information.
	The doors were removed during product installation and not properly replaced.	Remove and replace the doors according to the Removing and Replacing Refrigerator Handles and Doors section.
	Refrigerator is not leveled properly.	See Door Alignment in the Refrigerator Installation section to level refrigerator.
Doors are difficult to open.	The gaskets are dirty or sticky.	Clean the gaskets and the surfaces that they touch. Rub a thin coat of appliance polish or kitchen wax on the gaskets after cleaning.
	Door was recently closed.	When you open the door, warmer air enters the refrigerator. As the warm air cools, it can create a vacuum. If the door is hard to open, wait one minute to allow the air pressure to equalize, then see if it opens more easily.
InstaView™ Door-in-Door® panel doesn't work properly.	Knocking too softly or on edges of panel. Loud noise near refrigerator.	Knock twice near the center of the glass panel. Tap hard enough so the taps are audible. Loud noises may activate InstaView™ function. The LED turns off automatically after 5 seconds.
Auto Open Door does not work properly.	Motion sensor not activated or flooring material too reflective.	Make sure your foot passes in front of the motion sensor before you step on the displayed text. If the flooring material is highly reflective, the Auto Door sensor may malfunction.
Auto Open Drawer does not work properly.	Door not open wide enough. Closing door too quickly.	Open the door at least 85 degrees. Close the door to less than 85 degrees, then allow the sensor to react and the drawers to close before fully closing the door.

Problem	Possible Causes	Solutions
Refrigerator wobbles or seems unstable.	Leveling legs are not adjusted properly.	Refer to the Leveling and Door Alignment section.
	Floor is not level.	It may be necessary to add shims under the leveling legs or rollers to complete installation.
Lights do not work.	LED interior lighting failure.	The refrigerator compartment lamp is LED interior lighting, and service should be performed by a qualified technician.
Refrigerator has an unusual odor.	The Air Filter may need to be set to the MAX setting or replaced.	Set the Air Filter to the MAX setting. If the odor does not go away within 24 hours, the filter may need to be replaced. See the Replacing the Air Filter section for replacement instructions.
The interior of the refrigerator is covered with dust or soot.	The refrigerator is located near a fire source, such as a fireplace, chimney or candle.	Make sure that the refrigerator is not located near a fire source, such as a fireplace, chimney or candle.