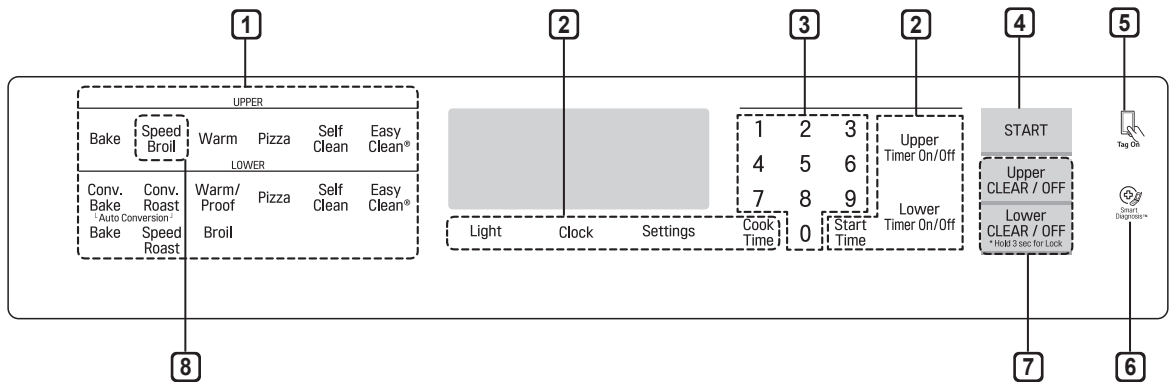


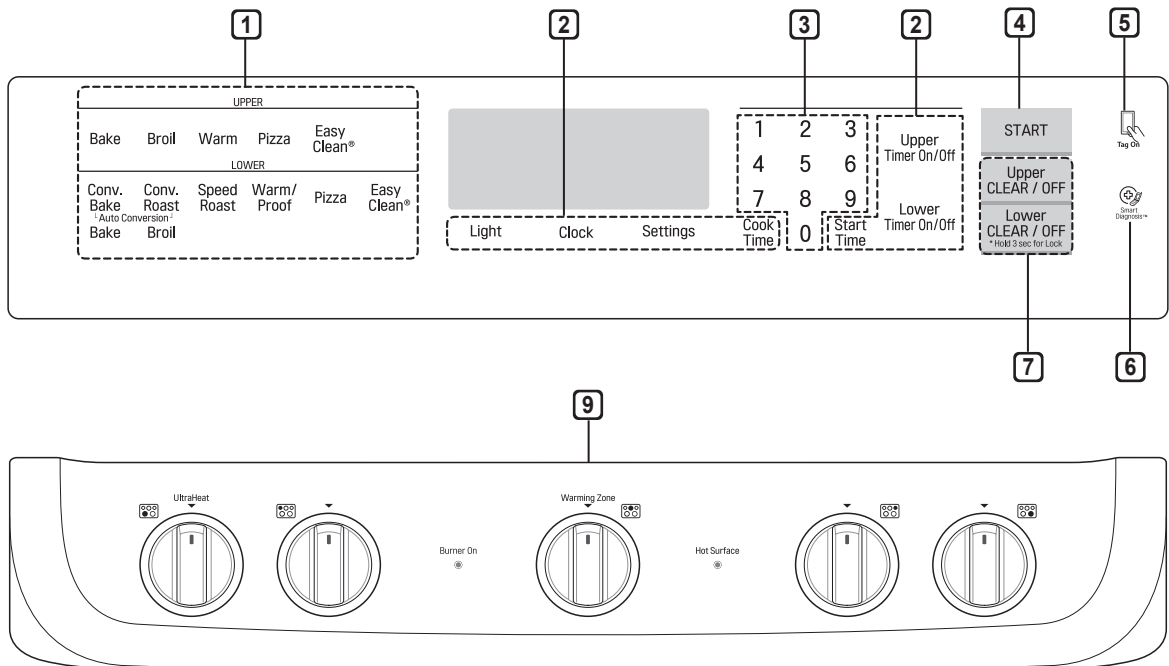
OPERATION

Control Panel Overview

For Model : LDE4415 / LDE4413



For Model : LDE4411



- 1** Oven Control
- 2** Features
- 3** Number Keys
- 4** Start Key
- 5** NFC Tag On
- 6** Smart Diagnosis™
- 7** Clear Off / Lockout Key
- 8** Speed Broil / Broil Key
 - LDE4415 : Speed Broil
 - LDE4413 : Broil
- 9** Cooktop Elements

Hot Surface Indicator

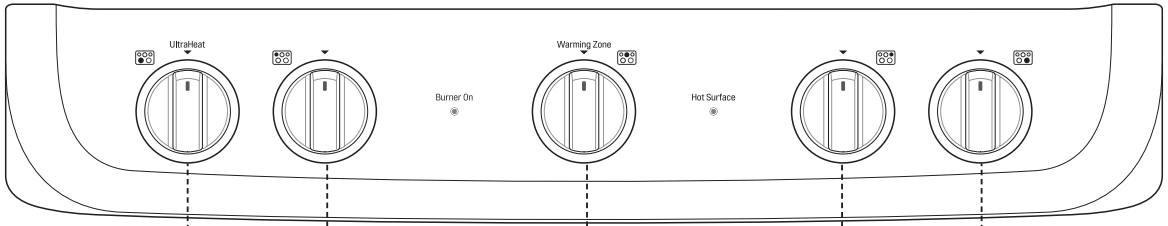
The hot surface indicator light glows as long as any surface cooking area is too hot to touch. It remains on after the element is turned off and until the surface has cooled to approximately 150 °F.

Flashing Time

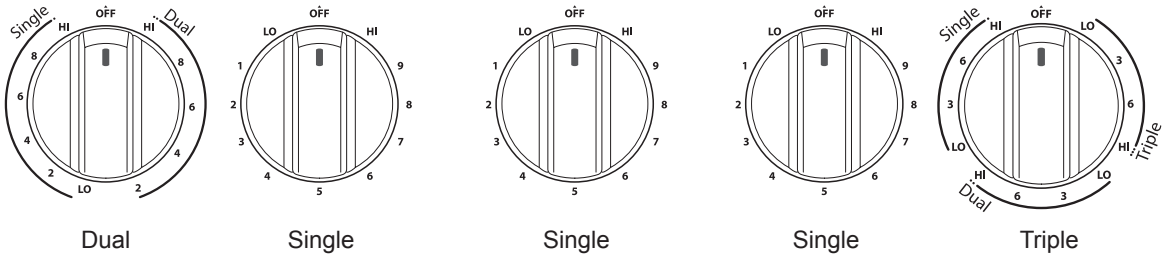
If your oven displays a flashing clock, touch **Clock** and reset the time, or touch any key to stop the flashing.

Knob Position

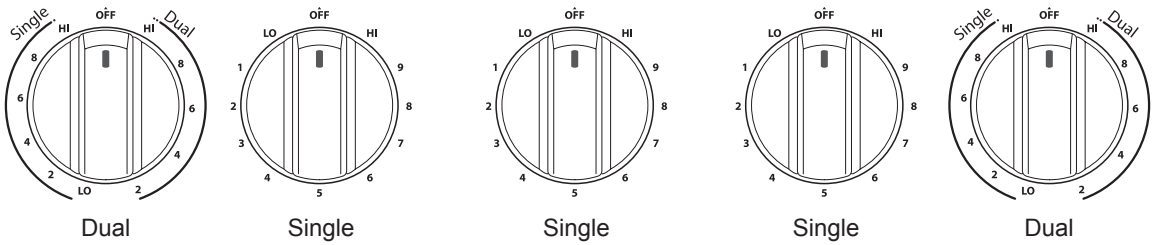
After cleaning the oven knobs, make sure to replace each knob in the correct position. Failure to do so can result in improper operation of the burners.



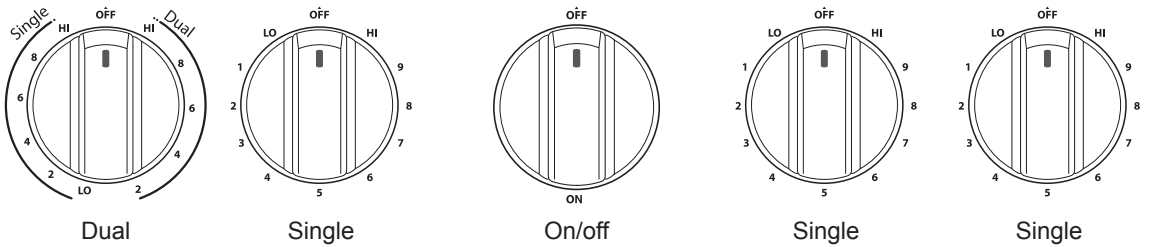
LDE4415



LDE4413



LDE4411



Changing Oven Settings

Clock

The clock must be set to the correct time of day in order for the automatic oven timing functions to work properly.

- 1 Touch **Clock**.
- 2 Touch the numbers to enter the time. For example, to set the clock for 10:30, touch the numbers: **1**, **0**, **3** and **0**.
- 3 Touch **Start**.

NOTE

- The time of day cannot be changed during a timed baking or self-clean cycle.
- To check the time of day when the display is showing other information, touch **Clock**.
- If no other keys are touched within 25 seconds of touching **Clock**, the display reverts to the original setting.
- If the display time is blinking, you may have experienced a power failure. Reset the time.

Oven Light

The interior oven light automatically turns on when the door is opened. Touch **Light** to manually turn the oven light on.

NOTE

The oven light cannot be turned on if the Self Clean function is active. (For Model : LDE4415 / LDE4413)

Minimum & Maximum Default Settings

All of the features listed have a minimum and a maximum time or temperature setting that may be entered into the control. An entry acceptance beep sounds each time a control key is touched.

An entry error tone (two short tones) sounds if the entry of the temperature or time is below the minimum or above the maximum setting for the feature.

Feature	min. Temp. / Time	max. Temp. / Time	Default	
Clock	12 Hr.	1:00 Hr. / min.	12:59 Hr. / min.	
	24 Hr.	0:00 Hr. / min.	23:59 Hr. / min.	
Timer	12 Hr.	0:01 min.	11:59 Hr. / min.	
	24 Hr.	0:01 min.	11:59 Hr. / min.	
Cook Time	12 Hr.	0:01 min.	11:59 Hr. / min.	
	24 Hr.	0:01 min.	11:59 Hr. / min.	
Conv. Bake	300 °F / 150 °C	550 °F / 285 °C	350 °F (*325 °F) / 12 Hr.	
Conv. Roast	300 °F / 150 °C	550 °F / 285 °C	350 °F (*325 °F) / 12 Hr.	
Speed Broil & Broil	Lo 400 °F	Hi 500 °F	Hi / 3 Hr.	
Bake	170 °F / 80 °C	550 °F / 285 °C	350 °F / 12 Hr.	
Proof			12 Hr.	
Pizza			12 Hr.	
Speed Roast			12 Hr.	
Warm			3 Hr.	
Self Clean (LDE4415 / LDE4413)	3 Hr.	5 Hr.	4 Hr.	
EasyClean®			10 min.	

* Using Auto Conversion

- Default cook mode times are without setting cook time.

Timer On/Off

The Upper or Lower Timer On/Off serves as an extra timer in the kitchen that beeps when the set time has run out. It does not start or stop cooking.

The Upper or Lower Timer On/Off feature can be used during any of the other oven control functions. The Upper and Lower Timer can be operated independently of each other.

Setting the Timer (for example to set 5 minutes)

- 1 Touch **Upper Timer On/Off** or **Lower Timer On/Off** once.
0:00 appears and **Timer** flashes in the display.
- 2 Touch **5**.
0:05 appears in the display.
- 3 Touch **Timer On/Off** to start the Timer. The remaining time countdown appears in the display.

NOTE

If **Upper Timer On/Off** or **Lower Timer On/Off** is not touched, the timer returns to the time of day.

- 4 When the set time runs out, **End** shows in the display. The indicator tones sound every 15 seconds until **Upper Timer On/Off** or **Lower Timer On/Off** is touched.

NOTE

- If the remaining time is not in the display, recall the remaining time by touching **Upper Timer On/Off** or **Lower Timer On/Off**.
- Touch **Upper Timer On/Off** or **Lower Timer On/Off** twice to set the time in minutes and seconds.
- Touch **Upper Timer On/Off** or **Lower Timer On/Off** once to set the time in hours and minutes.

Canceling the Timer

- 1 Touch **Upper Timer On/Off** or **Lower Timer On/Off** once.
The display returns to the time of day.

Settings

Touch the **Settings** key repeatedly to toggle through and change oven settings.

The **Settings** key allows you to:

- set the hour mode on the clock (12 or 24 hours)
- enable/disable convection auto conversion
- adjust the oven temperature
- activate/deactivate the preheating alarm light
- set the beeper volume
- switch the temperature scale between Fahrenheit and Celsius

Setting the Hour Mode

The control is set to use a 12-hour clock. To reset the clock to 24-hour mode, follow the steps below.

- 1 Touch **Settings** once.
- 2 Touch **1** to toggle between a 12-hour and 24-hour clock.
- 3 Touch **Start** to accept the change.

Setting Convection Auto Conversion

When **Conv. Bake** and **Conv. Roast** are selected, Convection Auto Conversion automatically converts the standard recipe temperature entered to a convection temperature by subtracting 25 °F / 14 °C. This auto-converted temperature shows on the display. For example, select **Conv. Bake**, enter 350 °F, and 325 °F shows on the display after preheat.

Convection Auto Conversion is enabled by default. To change the setting, follow these instructions.

- 1 Touch **Settings** repeatedly until **Auto** appears in the display.
- 2 Touch **1** to disable or enable auto conversion.
- 3 Touch **Start** to accept the change.

Adjusting the Oven Temperature

Your new oven may cook differently from the one it replaced. Use your new oven for a few weeks to become more familiar with it before changing the temperature settings. If after familiarizing yourself with the new oven, you still think that it is too hot or too cold, you can adjust the oven temperature yourself.

NOTE

To begin, either raise or lower the thermostat 15 °F (8 °C). Try the oven with the new setting. If the oven still needs adjustment, raise or lower the thermostat again, using the first adjustment as a gauge. For example, if the adjustment was too much, raise or lower the thermostat 10 °F (5 °C). If the adjustment was not enough, raise or lower the thermostat 20 °F (12 °C). Proceed in this way until the oven is adjusted to your satisfaction.

- 1 Touch **Settings** repeatedly until **L_AJ** or **U_AJ** appears in the display.
- 2 Use the number keys to enter the number of degrees you want to adjust the oven temperature.
- 3 Adjust the temperature either up or down by touching **Settings** repeatedly to toggle between plus (+) or minus (-).
- 4 Touch **Start** to accept the change.

NOTE

- This adjustment does not affect the broiling or Self Clean temperatures. The adjustment is retained in memory after a power failure. The oven temperature can be increased (+) or decreased (-) as much as 35 °F or 19 °C.
- Once the temperature is increased or decreased, the display shows the adjusted temperature until it readjusts.

Turning the Preheat Alarm Light On/Off

When the oven reaches its set-temperature, the preheating alarm light flashes 5 times or until the oven door is opened.

You can activate or deactivate the preheating alarm light.

- 1 Touch **Settings** repeatedly until **PrE** appears in the display.
- 2 Touch **1** to turn the light on/off.
- 3 Touch **Start** to accept the change.

Adjusting the Beeper Volume

- 1 Touch **Settings** repeatedly until **Beep** appears in the display.
- 2 Touch **1** to select **Hi**, **Lo** or **Off**.
- 3 Touch **Start** to accept the change.



Selecting Fahrenheit or Celsius

Set the oven temperature display to show either Fahrenheit (°F) or Celsius (°C) units. The oven defaults to Fahrenheit unless changed by the user.

- 1 Touch **Settings** repeatedly until **Unit** appears in the display.
- 2 Touch **1** to select **F** (Fahrenheit) or **C** (Celsius).
- 3 Touch **Start** to accept the change.

Lockout

The Lockout feature automatically locks the oven door and prevents most oven and cooktop controls from being turned on. It does not disable the clock, timer or the interior oven light.

- 1 Touch and hold **Lower Clear/Off** for three seconds.
- 2 The lock melody sounds, **Loc** appears in the display and the lock  blinks in the display.
- 3 Once the oven door is locked, the lock  indicator stops blinking and remains on.
- 4 To deactivate the Lockout feature, touch and hold **Lower Clear/Off** for three seconds. The unlock melody sounds and the door and the controls unlock.

NOTE (For model : LDE4415 / LDE4413)

The **Burner On** indicator light turns on when the knob is turned even if the cooktop element does not operate.

NOTE (For model : LDE4411)

In models without a self-clean option, the Lockout feature locks the controls but does not lock the oven door.

Start Time (Delayed Timed Cook)

The automatic timer of the Delayed Timed Cook function turns the oven on and off at the time you select. This feature can be used with the **Bake, Conv. Bake** and **Conv. Roast** modes.

Setting a Delayed Timed Cook

For example, to bake at 300 °F and delay the start of baking until 4:30, first set the clock for the correct time of day.

- 1 Touch **Bake**. 350 °F appears in the display.
- 2 Set the temperature: touch **3, 0** and **0**.
- 3 Touch **Cook Time** and set the baking time.
- 4 Touch **Start Time**.
- 5 Set the start time: touch **4, 3** and **0** for 4:30.
- 6 Touch **Start**. A short beep sounds and **Timed Delay** and the start time appear in the display. The oven begins baking at the set start time.

NOTE

- To cancel the Delayed Timed Cook function, touch **Clear/Off** at any time.
- To change the cooking time, repeat step 3 and touch **Start**.
- If the oven clock is set as a 12-hour clock, you can delay the cook time for 12 hours. If the oven clock is set as a 24-hour clock, you can delay the cook time for 24 hours.

The oven will continue to cook for the set amount of time and then turn off automatically. When the cooking time has elapsed:

- **End** and the time of day show in the display.
- The cook end indicator tone sounds every 60 seconds until **Clear/Off** is touched.
- When **Warm** is set, the warming function is activated after the cooking time ends.



CAUTION

- Use the automatic timer when cooking cured or frozen meats and most fruits and vegetables. Foods that can easily spoil, such as milk, eggs, fish, meat or poultry, should be chilled in the refrigerator. Even when chilled, they should not stand in the oven for more than 1 hour before cooking begins, and should be removed promptly when cooking is completed.
- Eating spoiled food can result in sickness from food poisoning.

Cook Time (Timed Cook)

Set the oven to cook for a specific length of time using the Timed Cook feature. This feature can only be used with the **Bake, Conv. Bake** and **Conv. Roast** modes.

Setting the Cook Time Function

For example, to bake at 300 °F for 30 minutes, first set the clock to the correct time of day.

- 1 Touch **Bake**. 350 °F appears in the display.
- 2 Set the temperature. Touch **3, 0** and **0**.
- 3 Touch **Cook Time**. **Timed** flashes in the display. **Bake**, 0:00 and 300 °F appear in the display.
- 4 Set the baking time: touch **3** and **0** (for 30 minutes). The baking time can be set for any amount of time between 1 minute and 11 hours and 59 minutes.
- 5 Touch **Start**.

NOTE

To activate the Warm function at the end of the timed cook cycle, repeat steps 1-4 and then touch **Warm**. **Warm** appears in the display. (Refer to the Warm section on page 33)

The oven will continue to cook for the set amount of time and then turn off automatically. When the cooking time has elapsed:

- **End** and the time of day show in the display.
- The cook end indicator tone sounds every 60 seconds until **Clear/Off** is touched.
- When **Warm** is set, the warming function is activated after the cooking time ends.

Changing the Cook Time during Cooking

For example, to change the cook time from 30 minutes to 1 hour and 30 minutes, do the following.

- 1 Touch **Cook Time**.
- 2 Change the baking time: touch **1, 3, 0**.
- 3 Touch **Start** to accept the change.

Using the Cooktop

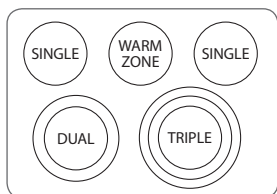
Cooking Areas

The cooking areas on your range are identified by permanent circles on the glass cooktop surface. For the most efficient cooking, fit the pan size to the element size.

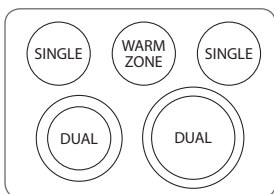
Pans should not extend more than 1/2 to 1-inch beyond the cooking area.

When a control is turned on, a glow can be seen through the glass cooktop surface. **The element cycles on and off to maintain the preset heat setting, even on Hi.**

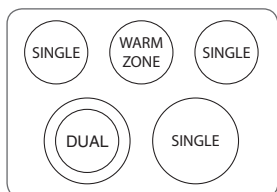
For Model : LDE4415



For Model : LDE4413



For Model : LDE4411



NOTE

It is normal to see a very faint red ring around the outer edge of a dual or triple element when using it as a single element at a high heat setting. This is only a reflection from the bright glow of the center element and is not a malfunction.

Hot Surface Indicator

The hot surface indicator light glows as long as any surface cooking area is too hot to touch.

It remains on after the element is turned off and until the surface has cooled to approximately 150 °F.

CAUTION

It is normal for the surface elements to cycle on and off during cooking, even on higher settings. This will happen more frequently if cooking on a lower temperature setting.

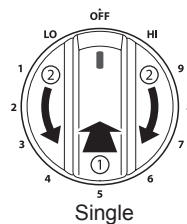
Using the Cooktop Elements

CAUTION

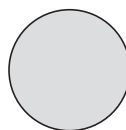
- Only use cookware and dishes that are safe for oven and cooktop use.
- Always use oven mitts when removing food from the cooktop and oven.
- Do not place sealed containers on the cooktop.
- Do not use plastic wrap to cover food while on the cooktop. Plastic may melt onto the surface and be very difficult to remove.
- **Never leave food on the cooktop unattended. Spillovers can cause smoke. Greasy spillovers may catch on fire.**
- The surface element may appear to have cooled after it has been turned off. The element may still be hot and touching the element before it has cooled sufficiently can cause burns.

Turning on a Single element

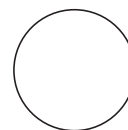
- 1 Push the **Single** element knob in.
- 2 Turn the knob in either direction to the desired setting.
The control knob clicks when it is positioned at both **Off** and **Hi**.



Off



On



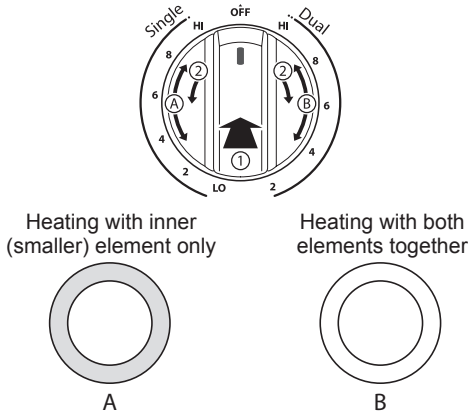
NOTE

- **Hi** is the highest temperature available.
- **Lo** is the lowest temperature available.

Turning on the Dual element

There is one dual element located in the left front position. Use the dual element as a dual or single element.

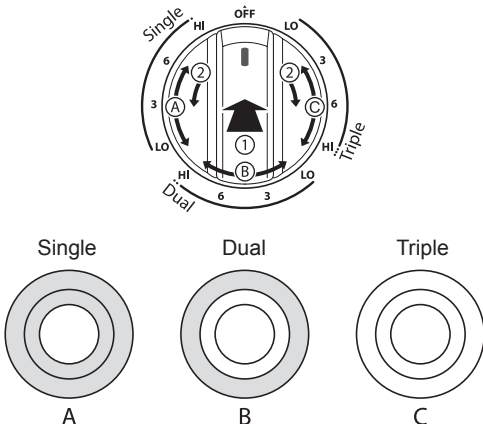
- 1 Push in the appropriate knob.
- 2-A Turn the knob counterclockwise to use it as a **Single** element.
- 2-B Turn the knob clockwise to use it as a **Dual** unit.



Turning on a Triple element (on some models)

There is one triple element that can be used as either a single, dual or triple element.

- 1 Push in the appropriate knob.
- 2-A Turn the knob counterclockwise to use the **Single** element.
- 2-B Turn the knob clockwise to the Dual position to use as a **Dual** element.
- 2-C Turn the knob clockwise to the Triple position to use as a **Triple** element.



Turning on the Warming Zone

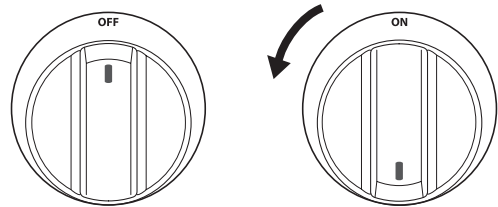
CAUTION

FOOD POISON HAZARD: Bacteria may grow in food at temperatures below 140 °F.

- Always start with hot food. Do not use the warm setting to heat cold food.
- Do not use the warm setting for more than 2 hours.
- Always use pot holders or oven mitts when removing food from the center warming element.

The Warming Zone, located in the back center of the glass surface, will keep hot, cooked food at serving temperature. Use the Warming Zone to keep food warm after it has already been cooked. Attempting to cook uncooked or cold food on the Warming Zone could result in a food-borne illness.

- 1 Turn the control knob to the **On** position.



NOTE

- For best results, food on the warmer should be kept in its container or covered with a lid or aluminum foil to maintain food quality.
- The warmer will not glow red like the other cooking elements.
- The Warming Zone can be operated as a single element on some models.

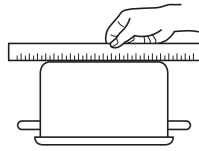
The Recommended Surface Cooking Setting

Setting	Recommended Use
8.5-Hi	<ul style="list-style-type: none"> • Bring liquid to a boil • Start cooking
5.5-8.0	<ul style="list-style-type: none"> • Hold a rapid boil, frying, deep fat fry • Quickly brown or sear food
3.5-5.0	<ul style="list-style-type: none"> • Maintain a slow boil • Fry or saute foods • Cook soups, sauces and gravies
2.2-3.0	<ul style="list-style-type: none"> • Stew or steam food • Simmer
Lo-2.0	<ul style="list-style-type: none"> • Keep food warm • Melt chocolate or butter • Simmer

Using the Proper Cookware

The size and type of cookware will influence the settings needed for the best cooking results. Be sure to follow the recommendations for using proper cookware.

Cookware should have flat bottoms that make good contact with the entire surface heating element. Check for flatness by placing a ruler across the bottom of the cookware. The ruler should touch the cookware across the entire bottom, with no gaps.

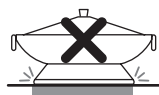
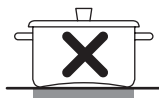


Cookware recommendations

- Flat bottom and straight sides
- Heavy-gauge pans
- Pan sizes that match the amount of food to be prepared and the size of the surface element
- Weight of handle does not tilt pan. Pan is well balanced
- Tight-fitting lids
- Flat bottom woks

Cookware should not

- have a curved or warped bottom.
- be smaller or larger than the surface burner.
- have a heavy handle that tilts the pan.
- be a wok with a ring stand.
- have loose or broken handles.
- have loose-fitting lids.



NOTE

- **Do not use pans less than 7 inches in diameter on the front elements.**
- Do not use foil or foil-type containers. Foil may melt onto the glass. Do not use the cooktop if metal has melted on it. Call an authorized LG Service Center.

Choosing Cookware

The cookware material determines how evenly and quickly heat is transferred from the surface element to the pan bottom. The most popular materials available are:

- **Aluminum** - Excellent heat conductor. Some types of food will cause it to darken (anodized aluminum cookware resists staining and pitting). If aluminum pans slide across the ceramic cooktop, they may leave metal marks which will resemble scratches. Remove these marks immediately.
- **Copper** - Excellent heat conductor but discolors easily. May leave metal marks on glass-ceramic (see Aluminum above).
- **Stainless steel** - Slow heat conductor with uneven cooking results. Is durable, easy to clean and resists staining.
- **Cast iron** - A poor heat conductor but retains heat very well. Cooks evenly once cooking temperature is reached. Not recommended for use on ceramic cooktops.
- **Porcelain-enamel on metal** - Heating characteristics will vary depending on base material. Porcelain-enamel coating must be smooth to avoid scratching ceramic cooktops.
- **Glass** - Slow heat conductor. Not recommended for ceramic cooktop surfaces because it may scratch the glass.

Home Canning Tips

Be sure that the canner is centered over the surface element and is flat on the bottom.

- The base must not be more than 1 inch larger than the element. Use of water bath canners with rippled bottoms may extend the time required to bring the water to a boil and may damage the cooktop.
- Some canners are designed with smaller bases for use on smooth surfaces.
- Use the high heat setting only until the water comes to a boil or pressure is reached in the canner.
- Reduce to the lowest heat setting that maintains the boil, or pressure. If the heat is not turned down, the cooktop may be damaged.

Using the Oven

Before Using the Oven

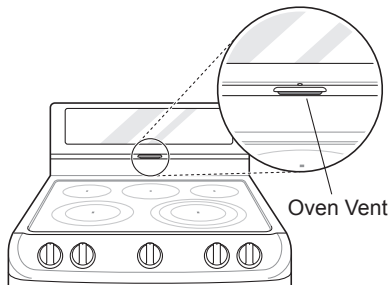
NOTE

- Because the oven temperature cycles, an oven thermometer placed in the oven cavity may not show the same temperature that is set on the oven.
- It is normal for the convection fan to run while preheating during a regular bake cycle.
- The convection fan motor may run periodically during a regular bake cycle.
- The heat turns off if the door is left open during baking. If the door is left open for longer than 30 seconds during baking, the heat turns off. The heat turns back on automatically once the door is closed.

Oven Vent

Areas near the vent may become hot during operation and may cause burns. Do not block the vent opening. Avoid placing plastics near the vent as heat may distort or melt the plastic.

It is normal for steam to be visible when cooking foods with high moisture content.



Using Oven Racks

The racks have a turned-up back edge that prevents them from being pulled out of the oven cavity.

Removing Racks

- 1 Pull the rack straight out until it stops.
- 2 Lift up the front of the rack and pull it out.

Replacing Racks

- 1 Place the end of the rack on the support.
- 2 Tilt the front end up and push the rack in.



CAUTION

- Replace oven racks before turning the oven on to prevent burns.
- Do not cover the racks with aluminum foil, or any other material, or place anything on the bottom of the oven. Doing so will result in poor baking and may damage the oven bottom.
- Only arrange oven racks when the oven is cool.

Bake

Bake is used to prepare foods such as pastries, breads and casseroles. The oven can be programmed to bake at any temperature from 170 °F (80 °C) to 550 °F (285 °C). The default temperature is 350 °F (175 °C).

Setting the Bake Function (example, 375 °F)

- 1 Touch **Bake**.
- 2 Set the oven temperature: touch **3**, **7** and **5**.
- 3 Touch **Start**. The oven starts to preheat.

As the oven preheats, the temperature is displayed and rises in 5-degree increments. Once the oven reaches the set temperature, a tone sounds and the oven light blinks on and off.

- 4 When cooking is complete, touch **Clear/Off**.
- 5 Remove food from the oven.

NOTE

It is normal for the convection fan to operate periodically throughout a normal bake cycle in the lower oven. This is to ensure even baking results.

Baking Tips

- Baking time and temperature will vary depending on the characteristics, size, and shape of the baking pan used.
- Check for food doneness at the minimum recipe time.
- Use metal bakeware (with or without a nonstick finish), heatproof glass-ceramic, ceramic or other bakeware recommended for oven use.
- Dark metal pans or nonstick coatings will cook food faster with more browning. Insulated bakeware will slightly lengthen the cooking time for most foods.

NOTE

The oven bottom has a porcelain-enamel finish. To make cleaning easier, protect the oven bottom from excessive spillovers by placing a cookie sheet on the rack below the rack you are cooking on. This is particularly important when baking a fruit pie or other foods with a high acid content. Hot fruit fillings or other foods that are highly acidic may cause pitting and damage to the porcelain-enamel surface and should be wiped up immediately.

Convection Mode

The convection system uses a fan to circulate the heat evenly within the oven. Improved heat distribution allows for even cooking and excellent results while cooking with single or multiple racks.

Setting the Convection Function (example, 375 °F)

- 1 Touch **Conv. Bake** or **Conv. Roast**. The display flashes 350 °F.
- 2 Set the oven temperature: touch **3**, **7** and **5**.
- 3 Touch **Start**. The display shows **Conv. Bake** or **Conv. Roast** and the oven temperature starting at 100 °F.

As the oven preheats, the display shows increasing temperatures in 5-degree increments. Once the oven reaches the set adjusted temperature, a tone sounds and the oven light flashes on and off. The display shows the auto converted oven temperature, 350 °F and the fan icon.

- 4 When cooking has finished or to cancel, touch **Clear/Off**.

NOTE

The oven fan runs while convection baking. The fan stops when the door is open. In some cases, the fan may shut off during a convection bake cycle.

Tips for Convection Baking

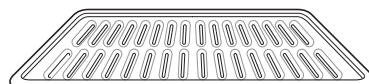
- Use Convection Bake for faster and more even multiple-rack cooking of pastries, cookies, muffins, biscuits, and breads of all kinds.
- Bake cookies and biscuits on pans with no sides or very low sides to allow heated air to circulate around the food. Food baked on pans with a dark finish will cook faster.
- When using Convection Bake with a single rack, place the oven rack in position 3. If cooking on multiple racks, place the oven racks in positions 1 and 3 (for two racks).
- Multiple oven rack cooking may slightly increase cook times for some foods.
- Cakes, cookies and muffins have better results when using multiple racks.

The Convection Roast feature is designed to give optimum roasting performance. Convection Roast combines cooking with the convection fan to roast meats and poultry. The heated air circulates around the food from all sides, sealing in juices and flavors. Foods are crispy brown on the outside while staying moist on the inside. Convection roasting is especially good for large tender cuts of meat, uncovered.

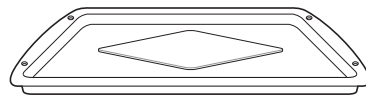
Tips for Convection Roasting

Use a broiler pan and grid when preparing meats for convection roasting. The broiler pan catches grease spills and the grid helps prevent grease splatters.

- 1 Place the oven rack on the bottom.
- 2 Place the grid in the broiler pan.
- 3 Place the broiler pan on the oven rack.



Grid (sold separately)



Broiler pan (sold separately)



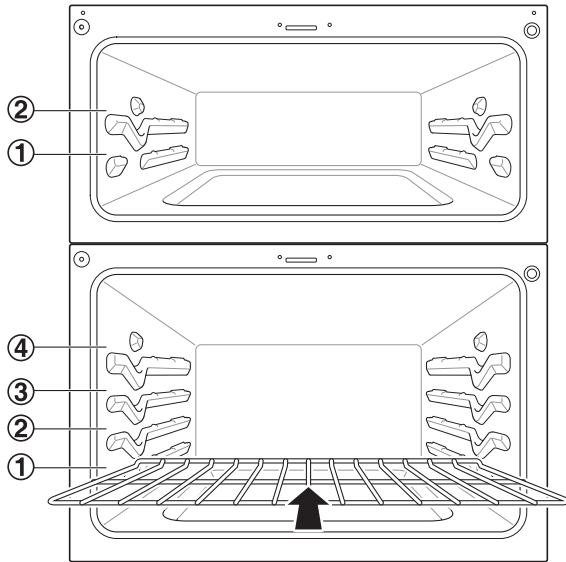
CAUTION

- Do not use a broiler pan without a grid.
- Do not cover the grid with aluminum foil.
- Position food (fat side up) on the grid.

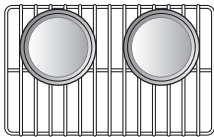
Recommended Baking and Roasting Guide

Baking results will be better if baking pans are centered in the oven as much as possible. If cooking on multiple racks, place the oven racks in the positions shown.

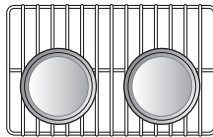
Rack and Pan Placement



Multiple rack baking

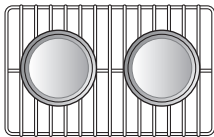


Standard rack
(Position 1)



Standard rack
(Position 3)

Single rack baking



Standard rack

Baking rack guide

	Food	Rack position	
		Upper Oven	Lower Oven
Cakes	• Layer cakes	1	3
	• Bundt cakes	1	3
Cookies	• Sugar cookies	1	3
	• Chocolate chips	1	3
	• Brownies	1	3
Pizza	• Fresh	2	2
	• Frozen	2	2
Pastry Crust	• From scratch	1	2
	• Refrigerator	1	2
Breads	• Biscuit, canned	1	3
	• Biscuit, from scratch	1	2
	• Muffins	1	2
Desserts	• Fruit crisps and cobbles, from scratch	1	3
	• Pies, from scratch, 2-crust fruit	1	2

Roasting rack guide

	Food		Rack position
			Lower Oven
Beef	Rib	Rare	1
		Medium	1
		Well done	1
Beef	Boneless rib, top sirloin	Rare	1
		Medium	1
		Well done	1
Beef	Beef tenderloin	Rare	1
		Medium	1
Pork	Rib		1
	Bone-in, sirloin		1
	Ham, cooked		1
Poultry	Whole chicken		1
	Chicken pieces		1
	Turkey		1

Broil

The Broil function uses intense heat from the upper heating element to cook food. Broiling works best for tender cuts of meat, fish, and thinly cut vegetables.

Some models may feature a hybrid broiler consisting of an inner broiler that utilizes a carbon heating element which provides instantaneous heat, and a traditional outer broiling element. During normal broiler operation, it is normal for either element to cycle off intermittently.

CAUTION

- Do not use a broiler pan without a grid. Oil can cause a grease fire.
- Do not cover the grid and broiler pan with aluminum foil. Doing so will cause a fire.
- Always use a broiler pan and grid for excess fat and grease drainage. This will help to reduce splatter, smoke, and flare-ups.

NOTE

- This range is designed for closed-door broiling. Close the door to set the Broil function. If the door is open, the Broil function cannot be set and **door** appears on the display. Close the door and reset the Broil function. Opening the door turns off the broil burner during broiling. If the door is opened during broiling, the broil burner turns off after five seconds. The broiler turns back on automatically once the door is closed.

Speed Broil (on some models)

The Speed Broil setting is designed to reduce the amount of time it takes to broil foods. By utilizing the infrared broil element, which provides heat instantaneously, there is no need for preheating.

Setting the oven to Broil / Speed Broil

- 1 Touch **Broil** or **Speed Broil** once for **Hi** or twice for **Lo**.
- 2 Touch **Start**. The oven begins to heat.
- 3 Let the oven preheat for approximately five minutes before cooking the food if using broil.
- 4 Touch **Clear/Off** to cancel at any time or when cooking is complete.

Smoking

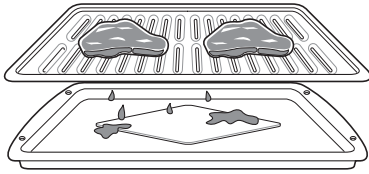
Due to the intense heat associated with broiling, it is normal to experience smoke during the cooking process. This smoke is a natural byproduct of searing and should not cause you to worry. If you are experiencing more smoke than you are comfortable with, use the following tips to reduce the amount of smoke in your oven.

- 1 Always use a broiler pan. Do not use saute pans or regular baking sheets for safety reasons.
- 2 The broiler pan should always be thoroughly cleaned and at room temperature at the beginning of cooking.
- 3 Always run your cooktop ventilation system or vent hood during broiling.
- 4 Keep the interior of your oven as clean as possible. Leftover debris from prior meals can burn or catch fire.
- 5 Avoid fatty marinades and sugary glazes. Both of these will increase the amount of smoke you experience. If you would like to use a glaze, apply it at the very end of cooking.
- 6 If you are experiencing significant smoke with any food item, consider:
 - Lowering the broiler to the Lo setting.
 - Lowering the rack position to cook the food further away from the broiler.
 - Using the Hi broil setting to achieve the level of searing you desire, and then either switching to the Lo broil setting, or switching to the Bake function.
- 7 As a rule, fattier cuts of meat and fish will produce more smoke than leaner items.
- 8 Adhere to the recommended broil settings and cooking guidelines in the chart on the following page whenever possible.

Recommended Broiling Guide

The size, weight, thickness, starting temperature, and your preference of doneness will affect broiling times.

This guide is based on meats at refrigerator temperature. For best results when broiling, use a pan designed for broiling.



Food	Quantity and/or Thickness	Upper oven			Lower oven			Comments
		Rack Position	First Side (minutes)	Second Side (minutes)	Rack Position	First Side (minutes)	Second Side (minutes)	
Ground Beef Well done	1 lb. (4 patties) 1/2 to 3/4" thick	2	4-7	3-5	4	4-7	3-5	Space evenly. Up to 8 patties may be broiled at once.
Beef Steaks Rare Medium Well done	1" thick 1 to 1 1/2 lbs.	2 2 2	3-4 4-5 5-6	2-3 2-3 3-4	4 4 4	4-5 4-7 6	2-3 3-4 4-5	Steaks less than 1" thick cook through before browning. Pan frying is recommended. Slash fat.
Rare Medium Well done	1 1/2" thick 2 to 2 1/2 lbs.	1 1 1	8 9 10	3-4 4-5 5-6	3 3 3	10 10-12 12	4 5-6 6-8	
Chicken	1 whole cut up 2 to 2 1/2 lbs., split lengthwise 2 Breasts	1 1	10 8-10	4-6 3-5	3 3	14-16 8-9	4-6 3-5	
Lobster Tails	2-4 10 to 12 oz. each	-	-	-	2	14	Do not turn over	Cut through back of shell. Spread open. Brush with melted butter before broiling and after half of broiling time.
Fish Fillets	1/4 to 1/2" thick	2	5	2-3	4	6	3-4	Handle and turn very carefully. Brush with lemon butter before and during cooking, if desired.
Ham Slices (precooked)	1/2" thick	2	4-5	2-3	4	6-8	2-4	Increase time 5 to 10 minutes per side for 1 1/2" thick or home-cured ham.
Pork Chops Well done	1 (1/2" thick) 2 (1" thick) about 1 lb.	2 1	7 7	3-5 2-4	4 3	5-6 9-10	2-4 4-6	
Lamb Chops Medium Well done	2 (1" thick) about 10 to 12 oz.	2 2	4-5 5-6	2-3 3-4	4 4	6 8	3-4 4-5	
Medium Well done	2 (1 1/2" thick) about 1 lb.	1 1	9 10	4-5 5-6	3 3	10 12	5-6 6-8	
Salmon Steaks	2 (1" thick) 4 (1" thick) about 1 lb.	2 1	6 7	3-5 3-5	4 3	8 9	4-6 4-6	Grease pan. Brush steaks with melted butter.

- This guide is only for reference. Adjust cook time according to your preference.

Tips for Broiling

Beef

- Steaks and chops should always be allowed to rest for five minutes before being cut into and eaten. This allows the heat to distribute evenly through the food and creates a more tender and juicy result.
- Pieces of meat that are thicker than two inches should be removed from the refrigerator 30 minutes prior to cooking. This will help them cook more quickly and evenly, and will produce less smoke when broiling. Cooking times will likely be shorter than the times indicated in the Broiling Chart.
- For bone-in steaks or chops that have been *frenched* (all meat removed from around the bone), wrap the exposed sections of bone in foil to reduce burning.

Seafood

- When broiling skin-on fish, always use the Lo broil setting and always broil the skin side last.
- Seafood is best consumed immediately after cooking. Allowing seafood to rest after cooking can cause the food to dry out.
- It is a good idea to rub a thin coating of oil on the surface of the broiling pan before cooking to reduce sticking, especially with fish and seafood. You can also use a light coating of non-stick pan spray.

Vegetables

- Toss your vegetables lightly in oil before cooking to improve browning.

Warm

This function will maintain an oven temperature of 170 °F. The Warm function will keep cooked food warm for serving up to three hours after cooking has finished. The Warm function may be used without any other cooking operations or can be used after cooking has finished using a Timed Cook or a Delayed Timed Cook.

Setting the Warm Function

- 1 Touch **Warm** or **Warm/Proof**. On the lower oven, touch **Warm/Proof** to toggle between warm and proof.
- 2 Touch **Start**.
- 3 Touch **Clear/Off** at any time to cancel.

Setting the Warm Function after a Timed Cook

- 1 Select the cooking function.
- 2 Enter the oven temperature using the number keys.
- 3 Touch **Cook Time** and enter the cook time using the number keys.
- 4 Touch **Warm**.
- 5 Touch **Start**.
- 6 When cooking is finished, touch **Clear/Off** to cancel the Warm function.

NOTE

- The Warm function is intended to keep food warm. Do not use it to cool food down.
- It is normal for the fan to operate during the Warm function.

Proof

This feature maintains a warm oven for rising yeast leavened products before baking.

Setting the Proof Function

- 1 Use rack position 2 or 3 for proofing.
- 2 Touch **Warm/Proof** until **Proof** appears in the display.
- 3 Touch **Start**.
- 4 Touch **Clear/Off** when proofing is finished.

NOTE

- To avoid lowering the oven temperature and lengthening proofing time, do not open the oven door unnecessarily. Check bread products early to avoid over proofing.
- Do not use the proofing mode for warming food or keeping food hot. The proofing oven temperature is not hot enough to keep foods at safe temperatures. Use the Warm feature to keep food warm. Proofing does not operate when the oven is above 125 °F. **Hot** shows in the display.
- It is normal for the fan to operate during the Proof function.

Pizza

The Pizza function is specially designed for cooking pizza. It heats from both the top and bottom to brown food more evenly.

This system is designed to give the optimum cooking performance for pizza by automatically selecting a combination of the broil and bake heating systems. When using this function, there is no need to preheat the oven prior to cooking.

Setting the Pizza Function

- 1 Touch **Pizza** once. **P1** appears in the display. Touch **Pizza** repeatedly to toggle between **P1**, **P2**, and **P3**. Select the desired option. (See Pizza Chart below.)
- 2 Touch **Start**. The Pizza function starts operation.
- 3 Touch **Clear/Off** to cancel Pizza at any time.

Upper Pizza

Display Mode	Item	Average temperature	Rack position	Recommended time (minutes)
P1	Frozen pizza, Regular crust	415 °F	2	13-18
P2	Frozen pizza, Rising crust	425 °F	2	18-23
P3	Fresh Pizza	400 °F	2	13-18

Lower Pizza

Display Mode	Item	Average temperature	Rack position	Recommended time (minutes)
P1	Frozen pizza, Regular crust	415 °F	2	15-20
P2	Frozen pizza, Rising crust	425 °F	2	22-26
P3	Fresh Pizza	400 °F	2	15-20

- This chart is based on one 12" pizza, and is only for reference. Adjust cook time according to size of pizza and preference.

Speed Roast

The Speed Roast feature is designed to quickly roast poultry. The combination of intense heat from the upper heating element and heated air from the back heating element result in crispier food and help to save cooking time. Speed roasting is especially good for medium sized poultry.

NOTE

- The recommended cook time is 60-65 minutes for a whole chicken weighing 3.3 lb.
- Adjust the cook time according to the weight of the poultry.
- Place the oven rack in position 2.
- Speed Roast is designed to reduce the cooking time. There is no need for preheating.
- This function is optimized for poultry, so the temperature of Speed Roast cannot be changed.
- It is normal for the fan to operate during the Speed Roast function.

Setting the Speed Roast Function

- 1 Put food in the oven.
- 2 Touch **Speed Roast**. The display shows **Roast**.
- 3 Touch **Start**.