# **Freestanding Electric Range Control Guide**

### **FEATURE GUIDE**

**WARNING:** To reduce the risk of fire, electric shock, or injury to persons, read the IMPORTANT SAFETY INSTRUCTIONS, located in your appliance's Owner's Manual, before operating this appliance.

This manual covers several models. Your model may have some or all of the items listed. Refer to this manual or the Frequently Asked Questions section of our website at **www.amana.com** in U.S.A. or **www.amanacanada.ca** in Canada, for more detailed instructions.

# AWARNING

**Food Poisoning Hazard** 

Do not let food sit for more than one hour before or after cooking.

Doing so can result in food poisoning or sickness.



KEYPAD	FEATURE	INSTRUCTIONS
CLOCK	Clock	<ol> <li>This clock uses a 12 hour cycle.</li> <li>Check that the oven is OFF.</li> <li>Press CLOCK.</li> <li>Press the Temp/Time "up" or "down" arrow keypad to set the hours. Press CLOCK to switch to the minutes. Press the Temp/Time "up" or "down" arrow keypad to set the minutes.</li> <li>Press CLOCK or START.</li> </ol>
Oven LIGHT	Oven cavity light	While the oven door is closed, press OVEN LIGHT to turn the light on and off. The oven light will come on when the oven door is opened. The oven light will not come on during the Self-Cleaning cycle.
TIMER SET/OFF	Oven timer	<ol> <li>The Timer can be set in hours or minutes up to 9 hours and 59 minutes.</li> <li>Press TIMER SET/OFF.</li> <li>Press the Temp/Time "up" or "down" arrow keypad to set the length of time.</li> <li>Press START to begin the countdown. If enabled, end-of-cycle tones will sound at end of countdown.</li> <li>Press TIMER SET•OFF to cancel the Timer. Do not press OFF/CANCEL because the oven will turn off.</li> </ol>
START	Cooking start	The Start keypad begins any oven function. If Start is not pressed within 10 seconds, a tone will sound and Start will blink until pressed or canceled. If Start is not pressed within 30 seconds after pressing a keypad, the function is canceled and the time of day is displayed.
OFF/CANCEL	Range function	The Cancel keypad stops any oven function except the Oven Control Lockout and Timer.
TEMP/TIME	Temperature and time adjust	The Temp/Time "up" and "down" arrow keypads are used to adjust time and temperature settings.

Baking and roasting	1. Press BAKE
	<ol> <li>Press the Temp/Time "up" or "down" arrow keypad until desired temperature is reached. A tone will sound if the minimum or maximum temperature is reached.</li> <li>Press START.</li> <li>To change the temperature, repeat steps 2. Press START.</li> <li>Press OFF/CANCEL when finished.</li> <li>NOTE: On models with convection, the convection fan will shut off when the oven door is opened. If the oven door remains open for too long, the heating elements will shut off until the oven door is closed. All timers, including any active Cook Time or Timed Cook functions, will continue to count down.</li> </ol>
Baking and roasting	<ol> <li>Press the desired Bake Assist Temp keypad.</li> <li>Press the Temp/Time "up" or "down" arrow keypad to set a temperature other than the Bake Assist Temperature. A tone will sound if the minimum or maximum temperature is reached.</li> <li>Press START.</li> <li>Press OFF/CANCEL when finished.</li> <li>NOTE: On models with convection, the convection fan will shut off when the oven door is opened. If the oven door remains open for too long, the heating elements will shut off until the oven door is closed. All timers, including any active Cook Time or Timed Cook functions, will continue to count down.</li> </ol>
Broiling	<ol> <li>Position cookware in the oven and close the oven door.</li> <li>Press BROIL.</li> <li>Press the Temp/Time "up" or "down" arrow keypad until the desired temperature is reached. A tone will sound if the minimum or maximum temperature is reached.</li> <li>Press START.</li> <li>To change the temperature, repeat Step 3 and press START.</li> <li>Press OFF/CANCEL when finished.</li> <li>NOTE: On models with convection, the convection fan will shut off when the oven door is opened. If the oven door remains open for too long, the heating elements will shut off until the oven door is closed. All timers, including any active Cook Time or Timed Cook functions, will continue to count down.</li> </ol>
Hold warm	<ul> <li>Food must be at serving temperature before placing it in the warmed oven.</li> <li>Press WARM.</li> <li>Press the Temp/Time "up" or "down" arrow keypad until desired temperature is reached. A tone will sound if the minimum or maximum temperature is reached.</li> <li>Press START.</li> <li>Press OFF/CANCEL when finished.</li> <li>NOTE: On some models: The oven will automatically turn off after 60 minutes.</li> <li>NOTE: On models with convection, the convection fan will shut off when the oven door is opened. If the oven door remains open for too long, the heating elements will shut off until the oven door is closed. All timers, including any active Cook Time or Timed Cook functions, will continue to count down.</li> </ul>
Self-Cleaning cycle	See the "Self-Cleaning Cycle" section in the Owner's Manual.
Oven control lockout	<ul> <li>No keypads will function with the controls locked.</li> <li>1. Check that the oven is off.</li> <li>2. Press and hold CONTROL LOCK keypad for 3 seconds.</li> </ul>
	roasting Broiling Hold warm Kolf-Cleaning cycle

# Surface Temperature

When the range is in use, all range surfaces may become hot, such as the knobs and oven door.

# Warming Drawer, Storage Drawer, or Baking Drawer (On Some Models)

When the oven is in use, the drawer may become hot. Do not store plastics, cloth, or other items that could melt or burn in the drawer.

#### **Oven Vent**

The oven vent releases hot air and moisture from the oven, and should not be blocked or covered. Do not set plastics, paper or other items that could melt or burn near the oven vent.

# Cooktop Use



#### Failure to do so could result in death or fire.

#### Ceramic Glass (on some models)

The surface cooking area will glow red when an element is ON. Some parts of the surface cooking area may not glow red when an element is ON. This is normal operation. It will also randomly cycle off and back on again, even while on Hi, to keep the cooktop from extreme temperatures.

It is normal for the surface of light-colored ceramic glass to appear to change color when surface cooking areas are hot. As the glass cools, it will return to its original color.

Clean the cooktop after each use to help avoid scratches, pitting, abrasions, and to condition the glass surface. Ceramic glass cooktop cleaner and a cooktop scraper are also recommended for stubborn soils. Do not use abrasive cleaners, cleaning pads, or harsh chemicals for cleaning. The Cooktop Care Kit Part Number 31605 contains all of the items needed to clean and condition your ceramic glass cooktop. Refer to the "Range Maintenance and Care" section in the Owner's Manual for additional information.

**IMPORTANT:** To avoid permanent damage to the cooktop surface and to make soils easier to remove, clean the cooktop after each use to remove all soils.

- Avoid storing jars or cans above the cooktop. Dropping a heavy or hard object onto the cooktop could crack the cooktop.
- To avoid damage to the cooktop, do not leave a hot lid on the cooktop. As the cooktop cools, air can become trapped between the lid and the cooktop and the ceramic glass could break when the lid is removed.
- For foods containing sugar in any form, clean up all spills and soils as soon as possible. Allow the cooktop to cool down slightly. Then, while wearing oven mitts, remove the spills using a scraper while the surface is still warm. If sugary spills are allowed to cool down, they can adhere to the cooktop and can cause pitting and permanent marks.
- To avoid scratches, do not slide cookware or bakeware across the cooktop. Aluminum or copper bottoms and rough finishes on cookware or bakeware could leave scratches or marks on the cooktop.

- Do not cook popcorn in prepackaged aluminum containers on the cooktop. They could leave aluminum marks that cannot be removed completely.
- To avoid damage to the cooktop, do not allow objects that could melt, such as plastic or aluminum foil, to touch any part of the entire cooktop.
- To avoid damage to the cooktop, do not use the cooktop as a cutting board.
- Use cookware about the same size as the surface cooking area. Cookware should not extend more than 1/2" (13 mm) outside the area.



- A. Surface cooking area
- B. Cookware/canner
- C. 1/2" (1.3 cm) maximum overhang
- Use flat-bottomed cookware for best heat conduction and energy efficiency. Cookware with rounded, warped, ribbed, or dented bottoms could cause uneven heating and poor cooking results.
- Determine flatness by placing the straight edge of a ruler across the bottom of the cookware. While you rotate the ruler, no space or light should be visible between it and the cookware.
- Cookware designed with slightly indented bottoms or small expansion channels can be used.
- Make sure the bottoms of pots and pans are clean and dry before using them. Residue and water can leave deposits when heated.
- To avoid damage to the cooktop, do not cook foods directly on the cooktop.

# Ceramic Glass Cooktop Cleaning (on some models)

Clean the cooktop after each use to help avoid scratches, pitting, abrasions, and to condition the glass surface. Ceramic glass cooktop cleaner and a cooktop scraper are also recommended for stubborn soils. Do not use abrasive cleaners, cleaning pads, or harsh chemicals for cleaning. The Cooktop Care Kit Part Number 31605 contains all of the items needed to clean and condition your ceramic glass cooktop. Refer to the "Range Maintenance and Care" section in the Owner's Manual for additional information.

**IMPORTANT:** To avoid permanent damage to the cooktop surface and to make soils easier to remove, clean the cooktop after each use to remove all soils.

#### **Cooktop On Indicator Light**

The Cooktop On indicator light is located on the console panel. When any control knob/cooktop element on the console panel is turned on, the Cooktop On indicator light will glow.

#### Hot Surface Indicator Light

On ceramic glass models, the hot surface indicator light is located on the console panel.

The hot surface indicator light will glow as long as any surface cooking area is too hot to touch, even after the surface cooking area is turned off.

# Coil Elements and Burner Bowls (on some models)

Coil elements should be level for optimal cooking results. Burner bowls, when clean, reflect heat back to the cookware. They also help catch spills.

Cookware should not extend more than 1/2" (1.3 cm) over the coil element. If cookware is uneven or too large, it can produce excess heat, causing the burner bowl to change color.

- Weight of the Cookware to be no Lighter than 1 lb.
- Discoloration of Medallion of the Coil Element is expected over time.

#### **Dual Zone Cooking Element (on some models)**

The Dual Zone cooking element offers flexibility depending on the size of the cookware. Single size can be used in the same way as a regular element. The dual size combines both the single and outer elements and is recommended for larger size cookware.





#### Melt Cooking Element (on some models)

The Melt cooking element offers flexibility due to a wide range of settings between Hi and Melt. The Hi heat option can be used to boil small amounts of liquid quickly. The lowest setting can be used to prepare sauces and to keep foods at a low temperature. Use cookware appropriate in size for the Melt element.



A. Hi heat option B. Melt option

### Cookware

**IMPORTANT:** Do not leave empty cookware on a hot surface cooking area, element or surface burner.

Ideal cookware should have a flat bottom, straight sides and a well-fitting lid, and the material should be of medium-to-heavy thickness.

Rough finishes may scratch the cooktop. Aluminum and copper may be used as a core or base in cookware. However, when used as a base, they can leave permanent marks on the surfaces.

Cookware material is a factor in how quickly and evenly heat is transferred, which affects cooking results. A nonstick finish has the same characteristics as its base material. For example, aluminum cookware with a nonstick finish will take on the properties of aluminum. Cookware with nonstick surfaces should not be used under the broiler.

Check for flatness by placing the straight edge of a ruler across the bottom of the cookware. While you rotate the ruler, no space or light should be visible between it and the cookware.



Use the following chart as a guide for cookware material characteristics.

COOKWARE	CHARACTERISTICS
Aluminum	<ul> <li>Heats quickly and evenly.</li> <li>Suitable for all types of cooking.</li> <li>Medium or heavy thickness is best for most cooking tasks.</li> <li>May leave aluminum residues, which may be diminished if cleaned immediately after cooking.</li> </ul>
Cast iron	<ul> <li>Heats slowly and evenly.</li> <li>Good for browning and frying.</li> <li>Maintains heat for slow cooking.</li> <li>Rough edges or burrs may scratch the cooktop.</li> </ul>
Ceramic or Ceramic glass	<ul> <li>Follow manufacturer's instructions.</li> <li>Heats slowly, but unevenly.</li> <li>Ideal results on low to medium heat settings.</li> <li>May scratch the cooktop.</li> </ul>
Copper	<ul> <li>Heats very quickly and evenly.</li> <li>May leave copper residues, which may be diminished if cleaned immediately after cooking</li> <li>Can leave a permanent stain or bond to the cooktop if overheated.</li> </ul>
Earthenware	<ul><li>Follow manufacturer's instructions.</li><li>Use on low heat settings.</li><li>May scratch the cooktop.</li></ul>
Porcelain enamel-on- steel or cast iron	<ul> <li>See stainless steel or cast iron.</li> <li>Porcelain enamel bakeware without the metal base may bond to the cooktop if overheated.</li> </ul>
Stainless steel	<ul> <li>Heats quickly, but unevenly.</li> <li>A core or base of aluminum or copper on stainless steel provides even heating.</li> </ul>

Use flat-bottomed cookware for best cooking results and energy efficiency. The cookware should be about the same size as the cooking area outlined on the cooktop. Cookware should not extend more than 1/2" (1.3 cm) outside the area.



### **Home Canning**

Canning can be performed on a glass smooth top cooking surface or traditional coil element cooktop. When canning for long periods, alternate the use of surface cooking areas or elements between batches. This allows time for the most recently used areas to cool.

- Center the canner on the largest surface cooking area or element. On electric cooktops, canners should not extend more than 1/2" (1.3 cm) beyond the surface cooking area or element.
- Do not place canner on 2 surface cooking areas or elements at the same time.
- On ceramic glass models, use only flat-bottomed canners to avoid damage to the cooktop and elements.
- For more information, contact your local agricultural extension office, or refer to published home canning guides. Companies that manufacture home canning products can also offer assistance.

# **OVEN USE**

Odors and smoke are normal when the oven is used the first few times or when it is heavily soiled.

**IMPORTANT:** The health of some birds is extremely sensitive to the fumes given off. Exposure to the fumes may result in death to certain birds. Always move birds to another closed and well ventilated room.

## **Electronic Oven Controls**

#### **Control Display**

The display will flash when powered up or after a power loss. Press OFF/Cancel to clear. When oven is not in use, the time of day is displayed. Indicator lights show functions that are in use.

#### Tones

Tones are audible signals, indicating the following:

#### **Basic Functions**

#### One Tone

- Valid keypad press.
- Oven is preheated (long tone).
- Function has been entered.
- Reminder (on some models), repeating every 20 seconds after the end-of-cycle tones.

#### Three Tones

Invalid keypad press

#### Four Tones

End of cycle

#### **Fahrenheit and Celsius**

The temperature is preset to Fahrenheit but can be changed to Celsius.

**To change:** Press and hold the Temp/Time "up" arrow keypad for 5 seconds. "°C" or "°F" will appear on the display. Repeat to change back.

To exit mode, press OFF/CANCEL.

#### **Keypress Tones**

Activates or turns off the tones when a keypad is pressed.

**To Change:** Press and hold OVEN LIGHT for 5 seconds. Repeat to change back.

To exit mode, press OFF/CANCEL.

#### **Demo Mode**

**IMPORTANT:** This feature is intended for use on the sales floor with 120 V power connection and permits the control features to be demonstrated without heating elements turning on. If this feature is activated, the oven will not work.

**To change:** Press OFF/CANCEL, OFF/CANCEL, the Temp/Time "up" arrow keypad, TIMER SET•OFF. Repeat to change back and end Demo mode.

#### **Oven Temperature Control**

**IMPORTANT:** Do not use a thermometer to measure oven temperature. Elements will cycle on and off as needed to provide consistent temperature but may run slightly hot or cool at any point in time due to this cycling. Most thermometers are slow to react to temperature change and will not provide an accurate reading due to this cycling.

The oven provides accurate temperatures; however, it may cook faster or slower than your previous oven, so the temperature can be adjusted to personalize it for your cooking needs. It can be changed in Fahrenheit or Celsius.

#### To Adjust Oven Temperature:

- 1. Press and hold the Temp/Time "down" arrow keypad for 5 seconds until the oven display shows the current setting, for example "0°F CAL" or "00".
- Press the Temp/Time "up" or "down" arrow keypad to increase or decrease the temperature in 5°F (3°C) amounts. The adjustment can be set between 30°F (18°C) and -30°F (-18° C).
- 3. Press START.

### Sabbath Mode (on some models)

For guidance on usage and a complete list of models with Sabbath mode, visit **www.star-k.org**.

The Sabbath mode sets the oven to remain on in a Bake setting until turned off.

The Oven Control Lockout feature will be disabled during the Sabbath mode. After the Sabbath mode is set, no tones will sound, the display will not show the temperature, the Kitchen Timer mode will be canceled (if active), and only the following keypads will function:

- Temp/Time "up" and "down" arrow keypads
- Off/Cancel

When the oven door is opened or closed, the oven light will not turn on or off and the heating elements will not turn on or off immediately.

When power is restored after a power failure, the oven will return to Sabbath mode and remain Sabbath compliant with the bake elements OFF until the OFF/CANCEL keypad is pressed.

Pressing the OFF/CANCEL keypad at any time returns the oven to the normal cooking mode (not Sabbath compliant).

Before entering the Sabbath mode, it must be decided if the oven light is to be ON or OFF for the entire Sabbath mode period. If the light is ON when entering Sabbath mode, it will remain ON for the entire time Sabbath mode is in use. If the light is OFF when entering Sabbath mode, it will remain OFF for the entire time Sabbath mode is in use. Opening the oven door or pressing the OVEN LIGHT will not affect the oven light once Sabbath mode has been entered.

On the Holiday, the oven temperature can be changed once the oven is in Sabbath mode by pressing the Temp/Time "up" or "down" arrow keypad. The oven temperature will change 25°F (14°C) each time the Temp/Time "up" and "down" arrow keypads are pressed. Press START to activate the new temperature. The display will not change, and there will be no sounds during this adjustment.

#### To Activate and Bake Using Sabbath Mode:

- 1. Press BAKE.
- 2. Press the Temp/Time "up" or "down" arrow keypad.
- 3. Press START.
- 4. Press and hold the TIMER SET•OFF keypad for 5 seconds. "SAb" will flash in the display.
- 5. Press START while "SAb" is flashing to enter Sabbath mode; otherwise, the entire cycle cancels out. "SAb" will stop flashing and remain ON in the display. The oven is now in Sabbath mode and is Sabbath compliant.

Pressing the OFF/CANCEL keypad at any time returns the oven to the normal cooking mode (not Sabbath compliant).

**NOTE:** If "SAb" does not appear in your display, the Sabbath mode is not active. After Sabbath mode is deactivated, you must activate Sabbath mode by completing steps 1 through 5.

#### Warm

**NOTE:** On models with convection, the convection fan will shut off when the oven door is opened. If the oven door remains open for too long, the heating elements will shut off until the oven door is closed. All timers, including any active Cook Time or Timed Cook functions, will continue to count down.

**IMPORTANT:** Food must be at serving temperature before placing it in the warmed oven. Food may be held up to 1 hour; however, breads and casseroles may become too dry if left in the oven during the Keep Warm or warm function. For best results, cover food.

The Warm feature allows hot cooked foods to stay at serving temperature.

#### To Use:

- 1. Press WARM.
- 2. Press Temp/Time "up" or "down" arrow keypad until desired temperature is reached. A tone will sound if the minimum or maximum temperature is reached.
- 3. Press START.
- 4. Place food in the oven.
- 5. Press OFF/CANCEL when finished.

**NOTE:** The temperature may be changed at any time by pressing the Temp/Time "up" or "down" arrow keypad to reach the desired temperature and then pressing START.

### **Positioning Racks and Bakeware**

To move a rack, pull it out to the stop position, raise the front edge, and then lift out. Use the following illustration as a guide.



#### **Rack Positions**

Rack 5: Toasting bread or broiling thin, non-fatty foods

Rack 4: 2-rack baking and broiling

Rack 3: Most baked goods on a cookie sheet, muffin pan, or jelly roll pan; layer cakes; broiling chicken pieces

Rack 2: Pies, casseroles, yeast bread, quick breads, frozen convenience foods, 2-rack baking

Rack 1: Roasting large and small cuts of meat and poultry

### Multiple Rack Cooking

2-rack: Use rack positions 2 and 4.

#### Bakeware

To cook food evenly, hot air must be able to circulate. Allow 2" (5 cm) of space around bakeware and oven walls. Make sure that no bakeware piece is directly over another.

### **Baking and Roasting**

**NOTE:** On models with convection, the convection fan will shut off when the oven door is opened. If the oven door remains open for too long, the heating elements will shut off until the oven door is closed. All timers, including any active Cook Time or Timed Cook functions, will continue to count down.

#### Preheating

When START is pressed, the oven will begin preheating. Once 100°F (38°C) is reached, the display temperature will increase as the actual temperature of the oven increases. When the preheat temperature is reached, a tone will sound and the selected temperature will appear on the display.

#### **Oven Temperature**

While in use, the oven elements will cycle on and off as needed to maintain a consistent temperature, but they may run slightly hot or cool at any point in time due to this cycling. Opening the oven door while in use will release the hot air and cool the oven which could impact the cooking time and performance. It is recommended to use the oven light to monitor cooking progress.

**NOTE:** On models with convection, the convection fan may run in the non-convection bake mode to improve oven performance.

#### **Temperature Management System**

The Temperature Management System electronically regulates the oven heat levels during preheat and bake to maintain a precise temperature range for optimal cooking results. The bake and broil elements or burners cycle on and off in intervals. On convection range models, the fan will run while preheating and may be cycled on and off for short intervals during bake to provide the best results. This feature is automatically activated when the oven is in use.

Before baking and roasting, position racks according to the "Positioning Racks and Bakeware" section. When roasting, it is not necessary to wait for the oven preheat cycle to end before putting food in unless it is recommended in the recipe.

# Broiling

**NOTE:** On models with convection, the convection fan will shut off when the oven door is opened. If the oven door remains open for too long, the heating elements will shut off until the oven door is closed. All timers, including any active Cook Time or Timed Cook functions, will continue to count down.

Close the oven door while broiling. No preheating is necessary. Position food on grid in a broiler pan, then place it in the center of the oven rack.

Changing the temperature when broiling allows more precise control when cooking. The lower the broil setting is, the slower the cooking. Thicker cuts and unevenly shaped pieces of meat, fish, and poultry may cook better at lower broil settings. Use racks 4 or 5 for broiling. Refer to the "Positioning Racks and Bakeware" section for more information.

On lower settings, the broil element will cycle on and off to maintain the proper temperature.

For best results, use a broiler pan and grid. It is designed to drain juices and help avoid spatter and smoke.

If you would like to purchase a broiler pan, one may be ordered. See the Quick Start Guide for contact information.

**NOTE:** Odors and smoke are normal the first few times the oven is used or if the oven is heavily soiled.