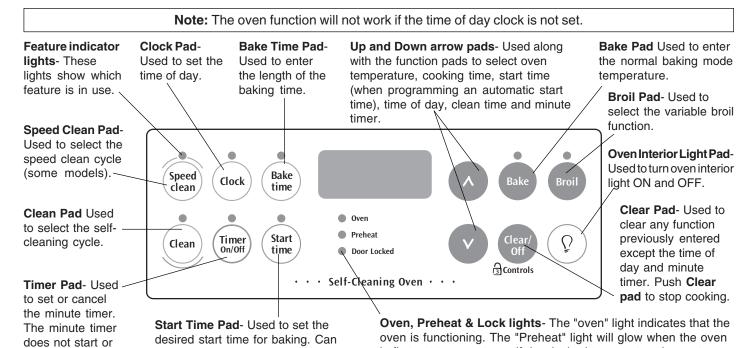# ELECTRONIC OVEN CONTROL

Control Pad Functions

Read the instructions carefully before using the oven. For satisfactory use of your oven, become familiar with the various functions of the oven as described below. **Note**: The graphics on your timer may not look exactly like the one shown. This doesn't change the way it operates.

> **Note:** The oven function will not work if the time of day clock is not set.

Feature indicator lights- These lights show which feature is in use.

Clock Pad- Used to set the time of day.

Bake Time Pad- Used to enter the length of the baking time.

Up and Down arrow pads- Used along with the function pads to select oven temperature, cooking time, start time (when programming an automatic start time), time of day, clean time and minute timer.

Bake Pad Used to enter the normal baking mode temperature.

Broil Pad- Used to select the variable broil function.

Oven Interior Light Pad- Used to turn oven interior light ON and OFF.

Speed Clean Pad- Used to select the speed clean cycle (some models).

Clean Pad Used to select the self-cleaning cycle.

Timer Pad- Used to set or cancel the minute timer. The minute timer does not start or stop cooking.

Clear Pad- Used to clear any function previously entered except the time of day and minute timer. Push **Clear pad** to stop cooking.

Start Time Pad- Used to set the desired start time for baking. Can be used with **BAKE TIME** to program a delayed bake cycle.

Oven, Preheat & Lock lights- The "oven" light indicates that the oven is functioning. The "Preheat" light will glow when the oven is first set to operate, or if the desired temperature is reset higher than the actual oven temperature. The "Door Locked" light will flash until the door locks when the self-clean cycle is in use. It glows constantly after the door locks (some models).

The oven can be programmed to:

Bake normally, Time Bake, Delay Start (delayed bake), Broil, Clean and Speed Clean.

Note: Push buttons or pads may be shaped differently.

For a silent control panel:

When choosing a function, a beep will be heard each time a pad is pushed. If desired, the controls can be programmed for silent operation.

To tell if your oven is set for normal or silent operation push and hold **START TIME** pad for 7 seconds. "**- -**" or "**SP**" appears in the display. Within 5 seconds, press the **UP** or **DOWN ARROW** pad to switch between normal sound operation and silent operation mode. The display will show either "**- -**" or "**SP**". Wait 5 seconds to return to normal operating mode.

Note: If "**SP**" appears, the control will operate with normal sounds and beeps. If "**- -**" appears, the control is in the silent operation mode.

Temperature Conversion (Fahrenheit / Celsius)

The electronic oven control is set to operate in °F (Fahrenheit) when shipped from the factory. The oven can be programmed to bake for any temperature from 170°F to 550°F (77°C to 288°C).

To change the temperature to °C (Celsius) or from °C to °F (control should not be in a Bake or Clean mode):
1. Press and hold **BROIL** pad for 7 seconds until °F or °C appears in the display.
2. Press the **UP** or **DOWN ARROW** pad to change °F to °C or °C to °F.
3. Wait 5 seconds to accept the changes or press **CLEAR/OFF** pad to accept the changes.

Setting the Clock and Minute Timer

Note: The time of day **must** first be set in order to operate the oven.

To set the Clock

When the range is first plugged in, or when the power supply to the appliance has been interrupted, the display will flash "12:00".

1. Press the **CLOCK** pad once (do not hold pad down).
2. Within 5 seconds, push and hold the **UP** or **DOWN ARROW** pad until the correct time of day appears in the display.
3. Press the **CLOCK** pad to accept the new time of day. If the **CLOCK** pad is not pressed, the timer will return automatically to the new time of day after 7 seconds.

    Note: The clock cannot be changed during any bake, timed bake, delayed time bake, clean cycle, speed clean or delayed clean cycle.

Changing between 12 or 24 Hour Time of Day Display

1. Press and hold the **CLOCK** pad for 7 seconds. After 7 seconds, **"12Hr"** or **"24Hr"** will appear in the display and the control will beep once.
2. Press the **UP** or **DOWN ARROW** pad to switch between the 12 and 24 hour time of day display. The display will show either **"12Hr"** or **"24Hr"**.
3. Wait 5 seconds or press the **CLEAR/OFF** pad to return to the time of day display.
4. Reset the correct time as described in **To set the Clock** above. Please note that if the 24 hour time of day mode was chosen, the clock will now display time from 0:00 through 23:59 hours.

To Set the Minute Timer

1. Press the **TIMER ON/OFF** pad.
2. Press the **UP ARROW** pad to increase or **DOWN ARROW** pad to decrease the time in one minute increments. The timer can be set for any amount of time from 1 minute to 11 hours and 59 minutes.
3. The display shows the timer count down in minutes if more than 1 hour remains. When less than 1 hour remains, the display will count down in seconds.
4. When the set time has run out, the timer will beep 3 times. It will continue to beep 3 times every 8 seconds until the **TIMER ON/OFF** pad is pressed.

Note: The indicator light located above the **TIMER ON/OFF** pad will glow while the minute timer is active.

Note: The minute timer does not start or stop cooking. It serves as an extra timer in the kitchen that will beep when the set time has run out. The minute timer can be used alone or during any of the other oven functions. When the minute timer is in use with any other mode, the minute timer will be shown in the display. To view other functions, press the function pad for that mode.

To Cancel the Minute Timer before the set time has run out: Press the **TIMER ON/OFF** pad.

To Set Control for Continuous Bake or 12 Hour Energy Saving:

The oven control has a built-in 12 Hour Energy Saving feature that will shut off the oven if the control is left on for more than 11 hours and 59 minutes. The oven can be programmed to override this feature for continuous baking.

To set control for continuous baking:
1. Press and hold the **TIMER ON/OFF** pad for 7 seconds until a tone is heard.
2. Within 5 seconds, press the **UP** or **DOWN ARROW** pad to switch between Continuous Bake and 12 Hour Energy Saving mode. The display will show either "— — hr" or "12hr". If "**- -** hr" appears, the oven will be set to continuous baking. If "12hr " appears, the oven is set to 12 hour energy saving mode.
3. Wait 5 seconds or press the **CLEAR/OFF** pad to accept the changes.

To Set Control for Oven Lockout (some models):

The control can be programmed to lock the oven door (some models) and/or lock the oven control pads (all models). The Oven Lockout feature prevents the oven from being accidentally turned on. It does not disable the clock, minute timer or the interior oven light.

To Set Control for Oven Lockout feature:
1. Press the **CLEAR/OFF** pad and hold for 3 seconds. The "Door Locked" indicator light will flash and the motor driven door lock will begin to close automatically. **DO NOT open the oven door** while the indicator light is flashing. Allow about 15 seconds for the oven door to lock. Once the oven door is locked, "Loc" will appear in display.
2. To cancel the Oven lockout feature, press the **CLEAR/OFF** pad and hold for 3 seconds. The control will unlock the oven door and resume normal operation.

Setting Oven Controls

To Set or Change the Temperature for Normal Baking

The oven can be programmed to bake at any temperature from 170°F to 550°F (77°C to 288°C).

To Set the Controls for Baking:
1. Arrange the interior oven racks and place food in the oven.
1. Press the **BAKE** pad."— — —°" appears in the display.
2. Within 5 seconds, Press the **UP** or **DOWN ARROW** pad. The display will show "350°F (177°C)." By holding the **UP** or **DOWN ARROW** pad, the temperature can then be adjusted in 5°F (1°C if control is set to display Celsius) increments.
3. 8 seconds after the **UP** or **DOWN ARROW** pad is released, the oven will begin heating to the selected temperature. When the displayed temperature reaches the desired baking temperature, the preheat indicator light will turn OFF.
4. To cancel the baking function, press the **CLEAR/OFF** pad.

To Change the Oven Temperature after Baking has Started:
Press the **UP** or **DOWN ARROW** pad to increase or decrease the set temperature.

Broil

Broiling is a method of cooking tender cuts of meat by direct heat under the broil element of the oven. Be sure you center the broiler pan directly under the broil element for best results.

Arrange oven rack while oven is still cool. Position the rack as needed.
The broiler pan and its insert allow dripping grease to drain and be kept away from the high heat of the broiler. **DO NOT** use the pan without its insert. **DO NOT cover the insert with foil.** The exposed grease could ignite.

⚠ **WARNING** Should an oven fire occur, close the oven door and turn off the oven. If the fire continues, throw baking soda on the fire or use a fire extinguisher. **DO NOT** put water or flour on the fire. Flour may be explosive and water can cause a grease fire to spread and cause personal injury.
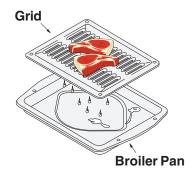

Figure 1

To set for broiling:
1. Place the insert on the broiler pan, then place the food on the insert. **DO NOT** use the pan without the insert or cover the insert with **aluminum foil**. The exposed grease could ignite.
2. Arrange the oven rack while oven is still cool. Be sure to center the broiler pan directly under the broiler element/burner. **Close the oven door. For optimum browning, preheat broil burner for 3-4 minutes before adding food.**
3. Press the **BROIL** pad. "- -" will appear in the display.
4. Press the **UP** or **DOWN ARROW** pad until the desired broil setting level appears in the display. Press the **UP ARROW** pad for **HI** broil or the **DOWN ARROW** pad for **LO** broil. Most foods may be broiled at the **HI** broil setting. Select the **LO** broil setting to avoid excess browning or drying of foods that should be cooked to the well-done stage.
5. Broil on one side until food is browned. Turn and broil food on 2nd side.
   Note: Always pull the rack out to the stop position before turning or removing food.
6. When broiling is finished, press the **CLEAR/OFF** pad.

Broiling Times

Use the following table for approximate broiling times. Increase or decrease broiling times, or move the broiling pan to a different rack position to suit for doneness. If the food you are broiling is not listed in the table, follow the instructions provided in your cookbook and watch the item closely.

Broiling Table Recommendations

Food Item	Rack Position (see figure 2)	Temp Setting	Cook Time in minutes 1st side	Cook Time in minutes 2nd side	Doneness
Steak 1" thick	3rd or 4th	550° F	8:00	6:00	Rare
	3rd or 4th	550° F	10:00	8:00	Medium
Pork Chops 3/4" thick	3rd	550° F	12:00	8:00	Well
Chicken - Bone In	2nd	450° F	25:00	15:00	Well
Chicken - Boneless	3rd	450° F	10:00	8:00	Well
Fish	3rd	500° F	as directed	as directed	Well
Shrimp	2nd	550° F	as directed	as directed	Well
Hamburger 1" thick	4th	550° F	12:00	10:00	Well
	3rd	550° F	14:00	12:00	Well

Figure 2
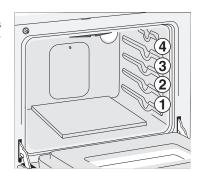
Setting Oven Controls (continued)

To Set the Timed Bake and Delay Start Features

The **BAKE TIME** and **START TIME** pads operate the features that will turn the oven ON and OFF at the times you select in advance. The oven can be programmed to start immediately and shut off automatically (Timed Bake) or to begin baking at a later time with a delayed start time (Delay Start).

Note: During Timed Bake the preheat indicator light will function during the preheat operation.

To Program the Oven to Begin Baking Immediately and To Shut Off Automatically (Timed Bake):

1. Be sure that the clock shows the correct time of day.
2. Place the food in the oven.
3. Press the **BAKE** pad. "— — —°" appears in the display.
4. Within 5 seconds, press the **UP** or **DOWN ARROW** pad. The display will show "350°F (177°C)". By holding the **UP** or **DOWN ARROW** pad, the temperature can then be adjusted in 5°F increments (1° if the control is set to display Celsius).
5. Wait 8 seconds to accept the temperature.
6. Press the **BAKE TIME** pad. "0:00" will flash in the display (MIN:SEC) and (HR:MIN) if programmed for more than 60 minutes.
7. Press the **UP** or **DOWN ARROW** pad until the desired baking time appears in the display.
8. The oven will turn ON and begin heating.

Note: When the control is set for this function the oven temperature will be displayed. To see the cook time remaining press the **BAKE TIME** pad and to see the time of day press the **CLOCK** pad.

To Program Oven for a Delayed Start Time and to Shut-Off Automatically (Delayed Start Bake):

1. Be sure that the clock shows the correct time of day.
2. Place the food in the oven.
3. Press the **BAKE** pad. "— — —°" appears in the display.
4. Within 5 seconds, press the **UP** or **DOWN ARROW** pad. The display will show "350°F (177°C)." By holding the **UP** or **DOWN ARROW** pad, the temperature can then be adjusted in 5°F increments (1° if the control is set to display Celsius).
5. Wait 8 seconds to accept the temperature.
6. Press the **BAKE TIME** pad. "0:00" will flash in the display (MIN:SEC) and (HR:MIN) if programmed for more than 60 minutes.
7. Press the **UP** or **DOWN ARROW** pad until the desired baking time appears.
8. Wait 5 seconds for the control to accept the time.
9. Press the **START TIME** pad. The earliest possible start time will appear in the display.
10. Press the **UP** or **DOWN ARROW** pad until the desired start time appears in the display and wait 7 seconds to accept.
11. Once the controls are set, the control calculates the time when baking will start and stop.
12. The oven will turn ON at the delayed start time and begin heating.

Note: When the control is set for a delayed time bake the time of day is displayed until the delayed time bake is reached. When the oven will turn on, the oven temperature will be displayed. To see the cook time remaining press the **BAKE TIME** pad and to see the time of day press the **CLOCK** pad.

When the Set Bake Time Runs Out:

1. "END" will appear in the display window and the oven will shut off automatically.
2. The control will beep 3 times every 25 seconds until the **CLEAR/OFF** pad is pressed.

To Change the Oven Temperature or Bake Time after Baking has Started:

1. Press the function pad you want to change.
2. Press the **UP** or **DOWN ARROW** pad to adjust the setting.

⚠ **CAUTION** Use caution with the Timed Bake and Delayed Start features. Foods that can easily spoil such as milk, eggs, fish, meat or poultry, should be chilled in the refrigerator first. 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.

Setting Oven Controls (continued)

To Set the Sabbath Feature (for use on the Jewish Sabbath & Holidays)

The **BAKE TIME** and **START TIME** pads are used to set the Sabbath feature. The Sabbath feature may only be used with the **BAKE** pad. The oven temperature may be set higher or lower after setting the Sabbath feature (the oven temperature adjustment feature should be used only during Jewish Holidays), however the display will not visibly show or provide any audible tones indicating whether the change occurred correctly. Once the oven is properly set using Bake with the Sabbath feature active, the oven will remain continuously ON until cancelled. This will override the factory preset 12-Hour Energy Saving feature.

If the oven light will be needed during the Sabbath, press the **OVEN LIGHT** pad before activating the Sabbath feature. Once the oven light is turned ON and the Sabbath feature is active, the oven light will remain ON until the Sabbath feature is turned OFF. If the oven light needs to be OFF, be sure to turn the oven light OFF before activating the Sabbath feature.

IMPORTANT NOTES: It is not advised to attempt to activate any other program feature other than **BAKE** while the Sabbath feature is active. ONLY the following key pads will function after setting the Sabbath feature; **UP** or **DOWN ARROW**, **BAKE** & **CLEAR/OFF**. **ALL OTHER KEYPADS** will not function once the Sabbath feature is properly activated.

To Program the Oven to Begin Baking Immediately & activate the Sabbath feature:

1. Be sure that the clock is set with the correct time of day.
2. Place the food in the oven.
3. Press the **BAKE** pad. " — — — ° " appears in the display.
4. Within 5 seconds, press the **UP** or **DOWN ARROW** pad. The display will show "350°F (177°C)." By holding the **UP** or **DOWN ARROW** pad, the temperature can then be adjusted in 5°F increments (1°C if the control is set to display Celsius).
5. If you desire to set the oven control for a **Timed Bake** or a **Delayed Start** do so at this time. If not, skip this step and continue to step 6. Refer to the **Bake Time** (complete steps 6-7) **/ Start Time** (complete steps 6-10) section for complete instructions. Remember the oven will shut down after using **Bake Time** and therefore may only be used once during the Sabbath/Jewish Holidays. The maximum **Start Time** is 11 hours & 59 minutes.
6. The oven will turn ON and begin heating.
7. Press and hold both the **Bake Time** and **Start Time** pads for at least 3 seconds. **SAb** will appear in the display. Once SAb appears in the display the oven control will no longer beep or display any further changes and the oven is properly set for the Sabbath feature.
   Note: You may change the oven temperature once baking has started by pressing the **UP** or **DOWN ARROW** (for Jewish Holidays only). The oven temperature will be adjusted in 5°F increments with each press of these pads (1°C if the control is set to display Celsius). Remember that **the oven control will no longer beep or display any further changes** once the oven is set for the Sabbath feature.
8. The oven may be turned OFF at any time by first pressing the **Clear/Off** pad (this will turn the oven OFF only). To turn OFF the Sabbath feature press and hold both the **Bake Time** and **Start Time** pads for at least 3 seconds. **SAb** will disappear from the display.

Should you experience a power failure or interruption, the oven will shut off. When power is returned the oven will not turn back on automatically. The oven will remember that it is set for the Sabbath and the food may be safely removed from the oven while still in the Sabbath feature, however the oven cannot be turned back on until after the Sabbath. After the Sabbath observance turn OFF the Sabbath feature. Press and hold both the **Bake Time** and **Start Time** pads for at least 3 seconds. **SAb** will disappear from the display and the oven may be used with all normal functions. For further assistance, guidelines for proper usage, and a complete list of models with the Sabbath feature, please visit the web at **http:\\www.star-k.org.**

To Operate the Oven Light(s)

The interior oven light(s) will automatically turn ON when the oven door is opened.

Press the **OVEN LIGHT** pad to turn the interior light(s) ON and OFF whenever the door is closed.

The interior oven light(s) is (are) located at the upper left (and right, some models) rear wall of the oven interior and is covered with a glass shield held by a wire holder. The glass shield must be in place whenever the oven is in use. To change the interior oven light(s), see changing the Oven Light in the **General Care & Cleaning** section in the Owner's Guide.

Oven Cleaning

Self-Clean or Speed Clean Cycle time length

For satisfactory results, use a 2 hour Self-Clean cycle for **light soils** and a 3 hour cycle for **average or heavy soils**.
NOTE: The kitchen area should be well ventilated using an open window, ventilation fan or exhaust hood during the Self-Clean or Speed Clean cycle. This will help eliminate the normal odors associated with the Self-Cleaning cycles.

To Set the Controls for a Self-Clean or Speed Clean Cycle or a Delayed Start Self-Clean or Delayed Start Speed Clean Cycle:
(**Note:** If you do not want to start a **Delayed** Self-Clean or Speed Clean Cycle, skips steps 2 & 3.)
1. Be sure the clock shows the correct time of day.
2. Press the **START TIME** pad.
3. Press and hold the **UP ARROW** pad to scroll to the time to start the delayed Self-Clean cycle. Release the pad when the desired time is displayed.
4. Press the **CLEAN** pad (for a 3 hour cycle) or the **SPEED CLEAN** pad (for a 2 hour cycle). "- -" appears in the display.
5. Press the **UP ARROW** pad once.
   As soon as the controls are set, the motor driven lock will begin to close automatically and the "Door Locked" indicator light will flash. **DO NOT** open the oven door while the light is flashing (it takes about 15 seconds for the oven door to lock).
6. "**CLn**" will appear in the display during the Self-Clean cycle and the "Door Locked" light will glow until the Self-Cleaning cycle is complete or cancelled and the oven temperature has cooled.

> ⚠ **CAUTION** To avoid possible burns use care when opening the oven door after the Self-Cleaning cycle. Stand to the side of the oven when opening the door to allow hot air or steam to escape.

> ⚠ **CAUTION** **DO NOT** force the oven door open. This can damage the automatic door locking system. Use caution and avoid possible burns when opening the door after the Self-Cleaning cycle has completed. The oven may still be VERY HOT.

When the Self-Clean or Speed Clean Cycle is Completed:
1. The time of day or "**End**" will appear in the display window and the "Clean" and "Door Lock" light will continue to glow.
2. Once the oven has cooled down for about 1 HOUR and the "Door Lock" light has gone out, the oven door can be opened.
3. If "**End**" is in the display and the Select Clean indicator light remains ON, press the **CLEAR/OFF** pad. The time of day will appear in the display.
NOTE: When the oven is cool, wipe away any residue or powdered ash with a damp cloth or paper towel.

Stopping or Interrupting a Self-Cleaning or Speed Cleaning Cycle
If it becomes necessary to stop or interrupt a Self-Cleaning cycle:
1. Press the **CLEAR/OFF** pad.
2. Once the oven has cooled down for about 1 HOUR and the "Door Lock" light has gone out, the oven door can be opened.
3. Restart the Self-Clean cycle once all conditions have been corrected.

Adjusting the Oven Temperature

Your oven thermostat has been precisely set at the factory. This setting may differ from your previous oven, however, so your recipe times may not give you the results you expect. If you think that the oven is cooking too hot or cool for your recipe times, you can adjust the thermostat so that the oven cooks hotter or cooler than the temperature displayed.

To Adjust Oven Temperature:
1. Press and hold the **BAKE** pad for 8 seconds. The display now indicates the amount of degrees offset between the original factory temperature setting and the current temperature setting. If the oven control has the original factory calibration, the display will read "0".
2. The temperature can now be adjusted up or down 35°F or 19°C, in 1°F or 1°C steps by pushing and holding the **UP** or **DOWN ARROW** pad. Adjust until the desired amount of degrees offset appears in the display. When lowering the oven temperature, a minus sign (-) will appear before the number to indicate that the oven will be cooler by the displayed amount of degrees.
3. When you have made the desired adjustment, wait 5 seconds and the display will go back to the time of day.

Note: Oven temperature adjustment made will not change the Self-Cleaning feature temperature.

Notes

Notes