

SHARP®



AX-1100S/1100R

**Steam oven with microwave and grill function
OPERATION MANUAL WITH COOKBOOK**

Read all instructions carefully before using the oven

SHARP®

SHARP ELECTRONICS CORPORATION
Sharp Plaza, Mahwah, NJ 07495-1163

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FOR CUSTOMER ASSISTANCE

To aid in reporting this Steam Oven in case of loss or theft, please record below the model number and serial number located on the unit. We also suggest you record all the information listed and retain for future reference.

MODEL NUMBER _____	SERIAL NUMBER _____
DATE OF PURCHASE _____	
DEALER _____	TELEPHONE _____
SERVICER _____	TELEPHONE _____

TO PHONE:

DIAL 1-800- BE-SHARP (237-4277) for :

SERVICE (for your nearest Sharp Authorized Servicer)

PARTS (for your authorized parts distributor)

ADDITIONAL CUSTOMER INFORMATION

DIAL 1-800-642-2122 for :

REPLACEMENT ACCESSORIES

TO WRITE:

Sharp Electronics Corporation

Customer Assistance Center

1300 Naperville Drive

Romeoville, IL 60446-1091

TO ACCESS INTERNET: www.sharppusa.com

Please provide the following information when you write or call: model number, serial number, date of purchase, your complete mailing address (including zip code), your daytime telephone number (including area code) and description of the problem.

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- Do not attempt to operate this oven with the door open since open-door operation can result in harmful exposure to microwave energy. It is important not to defeat or tamper with the safety interlocks.
- Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- Do not operate the oven if it is damaged. It is particularly important that the oven door close properly and that there is no damage to the: (1) door (bent), (2) hinges and latches (broken or loosened), (3) door seals and sealing surfaces.
- The oven should not be adjusted or repaired by anyone except properly qualified service personnel.



LIMITED WARRANTY

SHARP ELECTRONICS CORPORATION warrants to the first consumer purchaser that this Sharp brand product (the Product), when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period(s) set forth below.

This warranty does not apply to any appearance items of the Product nor to the additional excluded item(s) set forth below nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the servicer.

The limited warranty described herein is in addition to whatever implied warranties may be granted to purchasers by law. ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE PERIOD(S) FROM THE DATE OF PURCHASE SET FORTH BELOW. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of Sharp.

The warranties described herein shall be the sole and exclusive warranties granted by Sharp and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Sharp to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall Sharp be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer. Nor shall Sharp be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Your Product Model Number & Description:

AX-1100S or AX-1100R Home Use Steam Oven. Be sure to have this information available when you need service for your Product.

Warranty Period for this Product:

One (1) year parts and labor. The warranty period continues for an additional four (4) years, for a total of five (5) years, with respect to the magnetron tube in the Product for parts only; labor and service are not provided free of charge for this additional period.

Additional Item(s) Excluded from Warranty Coverage (if any):

Non-functional accessories and light bulb.

Where to Obtain Service:

From a Sharp Authorized Servicer located In the United States. To find the location of the nearest Sharp Authorized Servicer, call Sharp toll free at 1-800-BE-SHARP (1-800-237-4277).

What to do to Obtain Service:

Ship prepaid or carry in your Product to a Sharp Authorized Servicer. Be sure to have **Proof of Purchase** available. If you ship the Product, be sure it is insured and packaged securely.

TO OBTAIN SUPPLY, ACCESSORY OR PRODUCT INFORMATION, CALL **1-800-BE-SHARP** OR VISIT **www.sharpusa.com**.

Save the **Proof of Purchase** as it is needed should your oven ever require warranty service.

PRODUCT INFORMATION CARD

The product information card, which is inside of the Steam Oven carton, should be completed within ten days of purchase and returned. We will keep it on file and help you access the information in case of loss, damage or theft. This will also enable us to contact you in the unlikely event that any adjustments or modifications are ever required for your oven.



IMPORTANT SAFETY INSTRUCTIONS

When using electrical appliances basic safety precautions should be followed, including the following:

WARNING - To reduce the risk of burns, electric shock, fire, injury to persons or exposure to excessive microwave energy:

1. **Read all instructions before using the appliance.**
2. Read and follow the specific **“PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY”** on page 1.
3. This appliance must be grounded. Connect only to properly grounded outlet. See **“GROUNDING INSTRUCTIONS”** on page 5.
4. Install or locate this appliance only in accordance with the provided installation instructions.
5. Some products such as whole eggs and sealed containers – for example, closed glass jars – are able to explode and should not be heated in this oven.
6. Use this appliance only for its intended use as described in this manual. Do not use corrosive chemicals or vapors in this appliance. This type of oven is specifically designed to heat, cook or dry food. It is not designed for industrial or laboratory use.
7. As with any appliance, close supervision is necessary when used by children.
8. Do not operate this appliance if it has a damaged cord or plug, if it is not working properly or if it has been damaged or dropped.
9. This appliance should be serviced only by qualified service personnel. Contact nearest Sharp Authorized Servicer for examination, repair or adjustment.
10. Do not cover or block any openings on the appliance.
11. Do not store or use this appliance outdoors. Do not use this product near water, – for example near a kitchen sink, in a wet basement, near a swimming pool or similar locations.
12. Do not immerse cord or plug in water.
13. Keep cord away from heated surfaces.
14. Do not let cord hang over edge of table or counter.
15. See door surface cleaning instructions on page 32.
16. To reduce the risk of fire in the oven cavity:
 - a. Do not overcook food. Carefully attend appliance when paper, plastic or other combustible materials are placed inside the oven to facilitate cooking.
 - b. Remove wire twist-ties from paper or plastic bags before placing bag in oven.
 - c. **If materials inside the oven ignite, keep oven door closed, turn oven off and disconnect the power cord or shut off power at the fuse or circuit breaker panel.**
 - d. Do not use the cavity for storage purposes. Do not leave paper products, cooking utensils or food in the cavity when not in use.
17. Liquids, such as water, coffee or tea are able to be overheated beyond the boiling point without appearing to be boiling. Visible bubbling or boiling when the container is removed from the microwave oven is not always present. **THIS COULD RESULT IN VERY HOT LIQUID SUDDENLY BOILING OVER WHEN A SPOON OR OTHER UTENSIL IS INSERTED INTO THE LIQUID.** To reduce the risk of injury to persons:
 - a. Do not overheat the liquid.
 - b. Stir the liquid both before and halfway through heating it.
 - c. Do not use straight-sided containers with narrow necks. Use a wide-mouthed container.
 - d. After heating, allow the container to stand in the microwave oven at least for 20 seconds before removing the container.
 - e. Use extreme care when inserting a spoon or other utensil into the container.
18. If the oven light fails, consult a SHARP AUTHORIZED SERVICER.
19. Do not store anything directly on top of the appliance surface when the appliance is in operation.

SAVE THESE INSTRUCTIONS

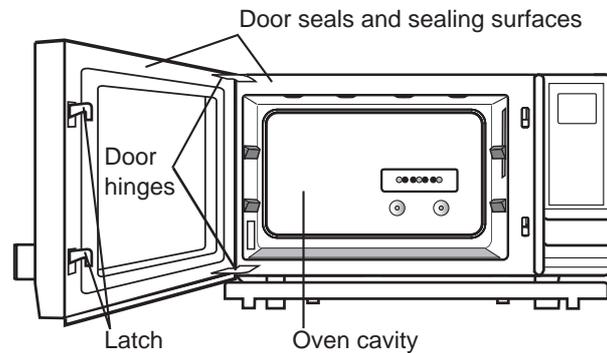
UNPACKING AND INSTALLATION INSTRUCTIONS

Unpacking and Examining Your Oven

Remove:

1. all packing materials from inside the oven cavity. Read enclosures and **SAVE** the Operation Manual.
2. the feature sticker from the outside of the door, if there is one.

Check the oven for any damage, such as misaligned or bent door, damaged door seals and sealing surfaces, broken or loose door hinges and latches and dents inside the cavity or on the door. If there is any damage, do not operate the oven and contact your dealer or SHARP AUTHORIZED SERVICER.



Choosing a Location for Your Oven

You will use your oven frequently so plan its location for ease of use. Do not place the oven on a mat, carpet or tablecloth or block the ventilation openings. The oven must be placed on a countertop which is a minimum of 36 inches (91.5 cm) from the floor. Allow at least 2 inches (5.1 cm) on the sides, and 5 inches (12.7 cm) above the top, and 2 inches (5.1 cm) at the rear of the oven for air circulation. Be sure to position oven so that the rear cannot be touched inadvertently.

GROUNDING INSTRUCTIONS

This appliance must be grounded. This oven is equipped with a cord having a grounding wire with a grounding plug. It must be plugged into a wall receptacle that is properly installed and grounded in accordance with the National Electrical Code and local codes and ordinances. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.

WARNING – Improper use of the grounding plug can result in a risk of electric shock.

Electrical Requirements

The electrical requirements are a 120 volt 60 Hz, AC only, 15 amp. or more protected electrical supply. It is recommended that a separate circuit serving only this oven be provided.

The oven is equipped with a 3-prong grounding plug. It must be plugged into a wall receptacle that is properly installed and grounded. Should you only have a 2-prong outlet, have a qualified electrician install a correct wall receptacle.

A 3-prong adapter may be purchased and used temporarily if local codes allow. Follow package directions.

A short power-supply cord is provided to reduce risk of becoming entangled in or tripping over a longer cord.

Extension Cord

If it is necessary to use an extension cord, use only a 3-wire extension cord that has a 3-blade grounding plug and a 3-slot receptacle that will accept the plug on the oven. The marked rating of the extension cord should be AC 115-120 volt, 15 amp. or more.

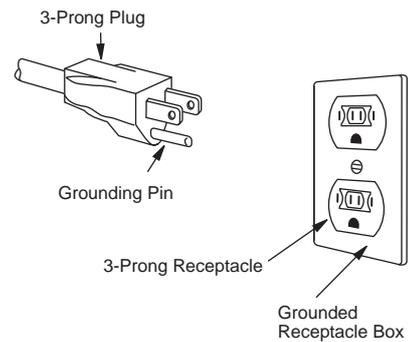
Be careful not to drape the cord over the countertop or table where it can be pulled on by children or tripped over accidentally.

NOTES:

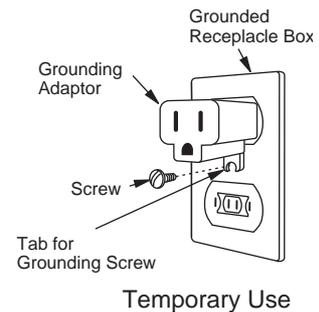
1. If you have any questions about the grounding or electrical instructions, consult a qualified electrician or service person.
2. Neither Sharp nor the dealer can accept any liability for damage to the oven or personal injury resulting from failure to observe the correct electrical connection procedures.

Radio or TV Interference

Should there be any interference caused by the microwave part of the oven to your radio or TV, check that the oven is on a different electrical circuit, relocate the radio or TV as far away from the oven as feasible or check position and signal of receiving antenna.



Permanent and Correct Installation





INFORMATION YOU NEED TO KNOW

POINTS TO REMEMBER

- Please make reading the Operation Manual your very first step in working with your new oven. This important booklet explains exactly how the oven works and what you need to know to operate it successfully.
- Use the information in the charts and recipes to help adapt your own favorite recipes or convenience foods for preparation in the oven.
- The stated cooking times in the charts and recipes are guidelines and are based on standard conditions. Cooking results will vary according to the conditions of food, utensils and the oven. Please check the cooking result and if necessary, adjust cooking times accordingly.
- Prepare the food and use accessories as instructed.
- When placing food in the oven, turning, stirring or adding something to the food, please ensure the door does not remain open long so as to avoid loss of heat.
- Please refer to Food and Utensil Position Chart on page 25 before setting food in the oven.
- Always distribute the ingredients evenly inside a piece of ovenware or steam tray to achieve even cooking results.
- There is no need to fill the water tank for Microwave, Grill, Grill Mix High or Grill Mix Low cooking.
- If you would like to adapt your favorite recipes for the microwave, you should take note of the following: Shorten cooking times by a third to a half. Follow the example of the recipes in this cook book.





INFORMATION YOU NEED TO KNOW

ABOUT UTENSILS AND COVERINGS

The chart below will help you decide what utensils and coverings should be used in each mode.

Cooking Mode Utensils - Coverings	Steam	Grill	Grill Mix	Microwave
Aluminium Foil	YES	YES	YES	YES
			Small flat pieces of aluminum foil placed smoothly on food can be used to shield areas from cooking or defrosting too quickly. Keep foil at least 1 inch (2.54 cm) from walls of oven.	
Metal, Foil Containers	YES	YES	NO	NO
China, Ceramics, Porcelain, Pottery, Stoneware	YES	YES	YES	YES
	Oven-proof porcelain, pottery, glazed earthenware and bone china are usually suitable. Do not use the container if it has a flaw.		In general, porcelain is suitable. Please be sure that your porcelain does not contain any metal or gold or silver plating. Check manufacturer's recommendation for being microwave safe. Do not use the container if it has a flaw.	
Heat-resistant Glassware e.g. Pyrex®	YES	YES	YES	YES
	Care should be taken if using fine glassware as it can break or crack if heated suddenly.			
Non-heat-resistant Glassware	NO	NO	NO	NO
Plastic/Polystyrene heat-resistant temp. over 140°C	YES	NO	NO	YES
	Care must be taken as some containers warp, melt or discolor at high temperatures.			Use microwave-safe plastic containers for reheating and defrosting. Some microwave-safe plastics are not suitable for cooking foods with high sugar content. Follow manufacturer's directions.
Plastic, Thermoset	YES	NO	NO	YES
Plastic Wrap heat-resistant temp. over 140°C	YES	NO	NO	YES
Paper Towels, Paper Plates	NO	NO	NO	YES
				Only use for warming or to absorb moisture. Care must be taken, as overheating may cause fire. Do not use recycled paper towels which may contain metal filings.
Containers made of synthetic material	NO	NO	NO	NO
	They could melt at high temperature.			
Parchment Paper	YES	NO	NO	YES
Wax Paper	NO	NO	NO	YES
Baking paper	YES	NO	NO	NO
Roasting Rack	NO	NO	NO	NO
Roasting Bags	NO	NO	NO	YES
				Follow manufacturer's directions.
Silver Dishes and Cooking Utensils or Containers that might rust inside the oven.	NO	NO	NO	NO
Rack	NO	YES	YES	NO
			The metal rack supplied have been specially designed for Grill Mix and will not damage the oven.	
Steam trays	YES	NO	NO	NO
Glass tray	YES	YES	YES	YES
	To prevent the glass tray from breaking: <ul style="list-style-type: none"> • Before cleaning the turntable with water, leave the glass tray to cool. • Do not place anything hot on a cold glass tray. • Do not place anything cold on a hot glass tray 			





INFORMATION YOU NEED TO KNOW

Utensils should be checked to ensure that they are suitable for use in each cooking mode. When heating food in plastic containers, pay special attention to the melting temperature of the containers. Never heat the plastic containers at over their melting temperature. Keep an eye on the oven due to the possibility of melting and ignition.

DISH CHECK. If you wish to check if a dish is safe for microwaving, place the empty dish in the oven and microwave on 100% power for 30 seconds. If the dish becomes very hot, do NOT use it for microwaving.

ACCESSORIES There are many microwave or heat-resistant accessories available for purchase. Evaluate carefully before you purchase so that they meet your needs. A microwave-safe thermometer will assist you in determining correct doneness and assure you that foods have been cooked to safe temperatures when using microwave-only cooking. Sharp is not responsible for any damage to the oven when accessories are used.

For automatic cooking, use the recommended container in the cooking chart in this operation manual or the cookbook.

ABOUT STEAM COOKING

There are certain techniques for cooking with steam. It is essential that these techniques are followed for good results. Many of them are similar to those used in conventional cooking so may require little change. Note information in all of the charts in the cookbook for all cooking options that use Steam (Healthy Cooking*, Steam Cook High, Steam Cook Low).

*Except for Auto Grill

- Always attend the oven when in use.
- Use utensils/cookware suitable for the cooking mode as described on page 7.
- Ventilate the room to allow the steam to dissipate.
- After cooking and the oven has cooled, remove and empty the water tank, wipe oven cavity with a soft cloth or sponge. Empty the drip tray.

FOR STEAM COOKING

Cooking Techniques	
Container	Ensure food is arranged evenly. Food which has little or no space between will take longer to cook, please ensure food is positioned with enough space between items to allow the steam to circulate around it. For the container, a shallow dish is suitable. It is not recommended to use dense dishes, because of the thickness of such dishes, recommended cooking times will have to be extended.
Covering	Covering is not necessary in most cases. If a cover is required, aluminum foil is recommended to keep food from becoming wet from the condensed water in the oven cavity. Covered food will take longer to cook.
Door	For accurate cooking times, keep the door closed.
Stir	Sometimes soups or casseroles reheated without covering look watery after cooking. Appearance will be better if stirred well.
Stand	Standing time is recommended after cooking to allow heat to disperse equally throughout the food. Do not allow to stand in the oven for a long time; food may be overcooked or wet from the residual steam.



INFORMATION YOU NEED TO KNOW

FOR STEAM COOKING

Food Characteristics	
Density	Food density will affect the amount of cooking time. Cut the food into thinner parts, if possible, and arrange in single layer.
Quantity	The cooking time must be increased as the amount increases.
Size	Small foods and small pieces cook faster than large ones, as heat can penetrate from all sides to the center. For even cooking make all the pieces the same size.
Shape	Foods which are irregular in shape, such as chicken breasts or drumsticks, may take longer to cook in the thicker parts. Check that these parts are cooked thoroughly before serving.
Temperature of Food	The initial temperature of food affects the cooking time. Chilled foods will take longer to cook than foods at room temperature. The temperature of the container is not the actual temperature of the food or drink.
Seasoning and Flavoring	Seasoning or flavoring are best added after cooking. If added as marinades or rubs, the taste may become less pronounced when cooking with steam. Add seasoning or flavoring again after cooking, if necessary.

- Check that food is thoroughly cooked/reheated before serving.
- Cooking time will be affected by the shape, depth, quantity and temperature of food together with the size, shape and material of the container.

CAUTION:

- Always use dry pot holders or oven mitts to remove food or utensils from the oven.
- Be careful when opening the oven door to allow steam to dissipate.
- Do not remove the food from the oven with your bare hand.
- Check the temperature of food and drink and stir before serving.
- Take special care when serving to babies, children or the elderly.

ABOUT MICROWAVE COOKING

- * **ALWAYS** have food in the oven when it is on to absorb the microwave energy.
- * Your oven is rated 900 watts using the IEC Test Procedure. In using recipes or package directions, check food at the minimum time and add time accordingly.
- * Condensation is a normal part of microwave cooking. Room humidity and the moisture in food will influence the amount of moisture that condenses in the oven. Generally, covered foods will not cause as much condensation as uncovered ones. Vents on the oven back must not be blocked.
- * Arrange food carefully. Place thickest areas toward outside of dish.
- * Watch cooking time. Cook for the shortest amount of time indicated and add more as needed. Foods severely overcooked can smoke or ignite.
- * Cover foods while cooking. Check recipe or cookbook for suggestions: paper towels, wax paper, microwave plastic wrap or a lid. Covers prevent spattering and help foods to cook evenly.
- * Shield with small flat pieces of aluminum foil any thin areas of meat or poultry to prevent overcooking before dense, thick areas are cooked thoroughly.
- * Stir foods from outside to center of dish once or twice during cooking, if possible.
- * Turn foods over once during microwaving to speed cooking of such foods as chicken and hamburgers. Large items like roasts or turkey breasts must be turned over at least once.
- * Rearrange foods like meatballs halfway through cooking both from top to bottom and from the center of the dish to the outside.
- * Add standing time. Remove food from oven and stir, if possible. Cover for standing time which allows the food to finish cooking without overcooking.
- * Check for doneness. Look for signs indicating that cooking temperatures have been reached.
Doneness signs include:
 - Food steams throughout, not just at edge.
 - Center bottom of dish is very hot to the touch.
 - Poultry thigh joints move easily.
 - Meat and poultry show no pinkness.
 - Fish is opaque and flakes easily with a fork.



INFORMATION YOU NEED TO KNOW

ABOUT FOOD WHEN USING THE MICROWAVE MODE

	DO	DON'T
Eggs, sausages, nuts, seeds, fruits & vegetables	<ul style="list-style-type: none"> * Puncture egg yolks before cooking to prevent "explosion". * Pierce skins of potatoes, apples, squash, hot dogs and sausages so that steam escapes. 	<ul style="list-style-type: none"> * Cook eggs in shells. * Reheat whole eggs. * Dry nuts or seeds in shells.
Popcorn	<ul style="list-style-type: none"> * Use specially bagged popcorn for the microwave oven. * Listen while popping corn for the popping to slow to 1 or 2 seconds or use SENSOR POPCORN for "no-guess" popping. 	<ul style="list-style-type: none"> * Pop popcorn in regular brown bags or glass bowls. * Exceed maximum time on popcorn package.
Baby food	<ul style="list-style-type: none"> * Transfer baby food to small dish and heat carefully, stirring often. Check temperature before serving. * Put nipples on bottles after heating and shake thoroughly. "Wrist" test before feeding. 	<ul style="list-style-type: none"> * Heat baby food in original jars. * Heat disposable bottles. * Heat bottles with nipples on.
General	<ul style="list-style-type: none"> * Cut baked goods with filling after heating to release steam and avoid burns. * Stir liquid briskly before and after heating to avoid "eruption". * Use deep bowl when cooking liquid or cereal to prevent boilovers. 	<ul style="list-style-type: none"> * Heat or cook in closed glass jars or air tight containers. * Can in the microwave as harmful bacteria may not be destroyed. * Deep fat fry. * Dry wood, gourds, herbs or wet papers.

ABOUT CHILDREN

Children below the age of 7 should use the oven with a supervising person very near to them. Between the ages of 7 and 12, the supervising person should be in the same room.

The child must be able to reach the oven comfortably; if not, he/she should stand on a sturdy stool.

At no time should anyone be allowed to lean or swing on the oven door.

Children should be taught all safety precautions.

Don't assume that because a child has mastered one cooking skill he/she can cook everything.

Children need to learn that the oven is not a toy. Young children should be supervised to ensure that they do not play with the oven.

ABOUT SAFETY

- Check foods to see that they are cooked to the United States Department of Agriculture's recommended temperatures.

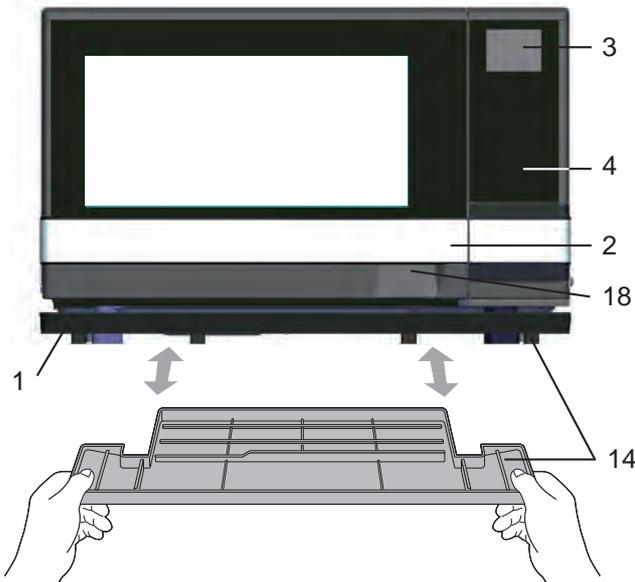
TEMP	FOOD
145°F (63°C)	... for beef, lamb or veal cut into steaks, chops or roasts, fish
160°F (71°C)	... for fresh pork, ground meat, fish, seafood, egg dishes, frozen prepared food and beef, lamb or veal cut into steaks, chops or roasts
165°F (74°C)	... for leftover, ready-to-reheat refrigerated, deli and carry out "fresh" food, whole chicken or turkey, chicken or turkey breasts and ground poultry used in chicken or turkey burgers. NOTE: Do not cook whole, stuffed poultry. Cook stuffing separately to 165°F (74°C).



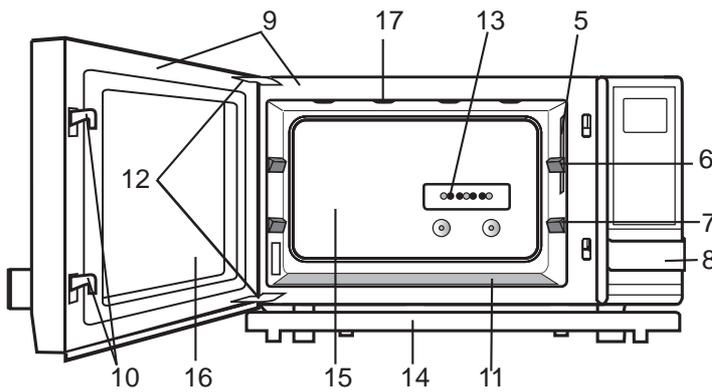
INFORMATION YOU NEED TO KNOW

- To test for doneness, insert a meat thermometer in a thick or dense area away from fat or bone. NEVER leave the thermometer in the food during cooking, unless it is approved for microwave oven use.
- Accessible parts (e.g. oven door, oven cavity, dishes, accessories and especially the grill heating element) may become hot during use. Use dry pot holders or oven mitts when removing container, food and oven accessories from the oven and be careful not to touch the oven cavity to prevent burns.
- Use care when opening door. Avoid steam burns by directing steam away from the face and hands. Always stand back from the oven when opening it.
- Slowly lift the farthest edge of a dish's covering and carefully open popcorn and oven cooking bags away from the face.
- Stay near the oven while it's in use and check cooking progress frequently so that there is no chance of overcooking food.
- NEVER use the cavity for storing cookbooks or other items.
- Select, store and handle food carefully to preserve its high quality and minimize the spread of foodborne bacteria.
- Use care when removing items from the oven so that the utensil, your clothes or accessories do not touch the door projection.
- Do not touch around the oven light. This part will become hot when the oven light is on.
- To avoid burns, always be careful of splashing grease from the baking tray when removing roasted or broiled meats from the oven.
- To avoid burns, always test food and container temperature and stir before serving. Pay special attention to the temperature of containers, foods and drinks. Do not drink beverage or soup without checking the container's temperature.
- Do not touch the oven door, outer cabinet, rear cabinet, oven cavity, ventilation openings, accessories, dishes and the escaping steam from the air vent openings during operation because they will become hot.
- Do not operate the oven if water tank cracks and water leaks. Call 1-800-BE-SHARP to purchase a replacement part.
- After use, condensed water may be inside oven cavity, especially on the oven floor. Dry any liquid residue with a sponge and wipe out to keep the oven clean.
- Do not place anything on the outer cabinet during operation.
- Do not move the oven during the operation. If the oven needs to be moved, always drain all water inside the oven using the DRAIN WATER function (See page 16). After draining, empty the drip tray.
- To prevent condensation, which could corrode the appliance, do not leave cooked food in the oven for an extended period.
- Clean the oven at regular intervals and remove any food deposits in the oven or on the door.
- Do not heat oil or fat for deep frying.
- ALWAYS use potholders to prevent burns when handling utensils that are in contact with hot food. Enough heat from the food can transfer through utensils to cause skin burns. In Steam, Grill and Grill Mix modes, cabinet, interior and door may be too hot to touch.
- Keep aluminum foil used for shielding at least 1 inch (2.54 cm) away from walls, ceiling and door for microwave cooking.
- Do not pour cold water on the oven floor after cooking as it might break.
- Do not pour cold water on the door as it might break.
- Do not touch hot surfaces.
- The use of accessory attachments not recommended by the appliance manufacturer may cause injuries.
- The oven should not be left unattended during operation. Oven temperatures that are too high or cooking times that are too long may overheat foods resulting in a fire.
- Do not insert fingers or objects in the steam outlets or air vent openings, as this may damage the oven and cause an electric shock or a hazard.
- If any objects drop inside the air vent openings, turn off the oven immediately, unplug and consult a Sharp Authorized Servicer.
- Do not touch the plug with wet hands when inserting or removing from the outlet. Plug securely into the electric wall receptacle and remove by gripping on the plug end. Never pull using just the cord.

PART NAMES

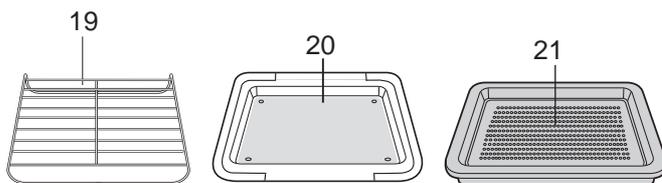


- 1** Ventilation openings
Be aware that hot steam or air comes out during steam or grill mix cooking, and keep children away from the oven.
- 2** Door open handle
- 3** LCD display
- 4** Control panel
- 5** Oven lamp
- 6** Upper position (position 3)
- 7** Lower position (position 2)
- 8** Water tank (See page 14.)
- 9** Door seals and sealing surfaces
- 10** Latch
- 11** Oven floor (position 1)
- 12** Door hinges
- 13** Steam outlets
- 14** Drip tray (See page 14.)
- 15** Oven cavity
- 16** See through door
- 17** Grill heating element (at the oven cavity ceiling)
- 18** Door lever
To open, grip the door lever from the bottom and pull it towards you.



ACCESSORIES

- 19** Rack
For Grill and Grill Mix.
Do not use for Steam and Microwave.
Always place on glass tray.
- 20** Glass tray
- 21** Steam tray x2
For Steam only.
Always place above/on glass tray.
Do not use for Microwave, Grill and Grill Mix.



WARNING for stacking the steam tray and glass tray:

After cooking, take out the steam tray first. See figure 2. Be aware of excess water from the steam tray, we recommend you place it directly on a flat dish or tray to avoid spillages. Before taking out the glass tray, make sure that it is cool. Be aware that there may be water on the glass tray, so take care when removing it.

NOTE:

Place the rack on glass tray as shown in Figure 1.

WARNING:

The oven cavity, door, outer cabinet, accessories and dishes will become very hot, use thick dry pot holders when removing the food or accessories from the oven to prevent burns.

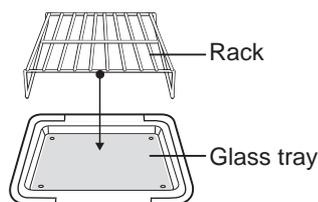


Figure 1
12

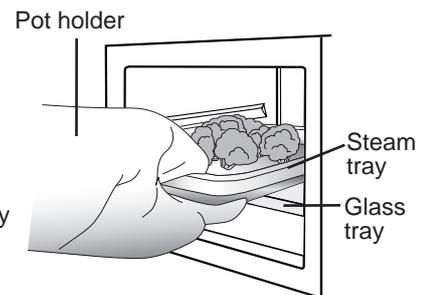
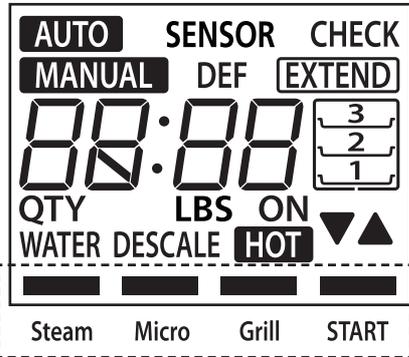


Figure 2

CONTROL PANEL

DISPLAY INFORMATION

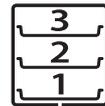


The display shows useful information including cooking time and cooking mode.

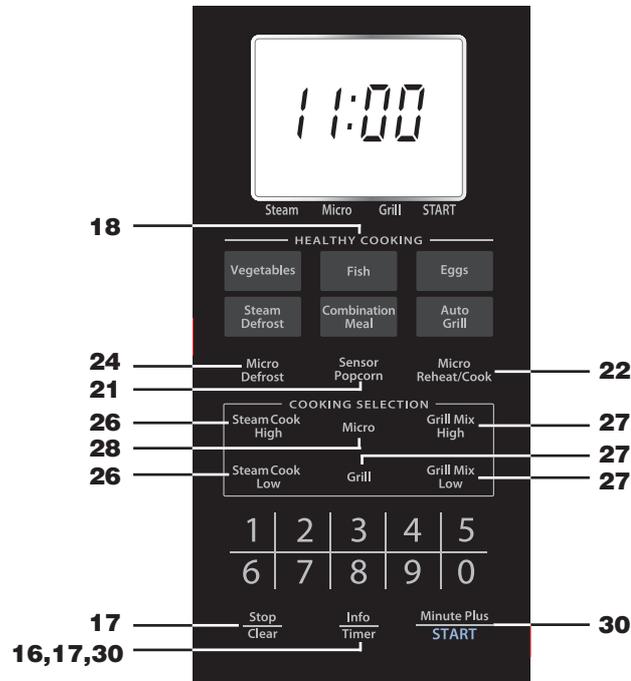
1. Cooking mode & START indicators

The indicator will flash or light up during the operation. You can press a concerned key when the indicators are flashing. When the indicators light up on the display, they mean that each cooking mode is selected or the oven is operating in each cooking mode.

- AUTO:** Automatic cooking is selected or in progress.
- SENSOR:** Sensor cooking is selected or in progress.
- MANUAL:** Manual cooking is selected or in progress.
- CHECK:** Some action is necessary (e.g. turn over, stir).
- DEF:** Steam Defrost or Micro Defrost is selected or in progress.
- ON:** The oven is in operation.
- EXTEND:** Cooking time can be extended.
- HOT:** The oven is very hot.
- ▲ (MORE):** More time adjustment is selected for automatic cooking.
- ▼ (LESS):** Less time adjustment is selected for automatic cooking.
- DESCALE:** Descaling is necessary.
- WATER:** Water is necessary. When this indicator is appeared on the display, the oven is operating in the menu using water.



- Tray position indicators:
The position of the tray(s) for automatic cooking and manual steam cooking.
- 3: Upper position
 - 2: Lower position
 - 1: Oven Floor



Number next to the control panel illustration indicates pages on which there are feature descriptions and usage information.

IMPORTANT INSTRUCTIONS

READ CAREFULLY BEFORE COOKING WITH STEAM

WATER TANK

To fill the water tank with fresh cold tap water is a must for cooking with steam. Be sure to follow the directions below.

1. Pull the water tank toward you to remove. (Figure 1)
2. Wash the water tank and lid for the first time.
3. Open the lid and fill the water tank with **fresh cold tap water to the MAX mark each time you begin to cook.** (Figure 2) Do not fill the water tank over the MAX mark.
4. Make sure the lid is closed firmly. (Figure 3)
5. Install the water tank by pushing firmly. (Figure 4)
6. After cooking, empty the water tank and wash the water tank and the lid.

NOTES:

1. Do not use any other liquids like distilled water, R.O water, mineral water and etc.
2. An insufficient amount of water in the water tank may cause an undesired result.
3. We recommend that you empty the water tank every time after cooking. Do not leave the water tank filled with water in the oven over a day.
4. If "Err, WATER (flashing)" is shown in the display during Steam cooking, refer to Troubleshooting Chart on page 33. The message will not appear in Descal function.
5. Do not drop or damage the water tank. Heat may cause the water tank to change shape. Do not use a damaged water tank. Call 1-800-BE-SHARP to purchase a replacement part.
6. There may be a few water drops when removing the water tank. Wipe the oven dry with a soft cloth.
7. Do not block the air holes on the lid of the water tank. It will cause trouble during cooking.

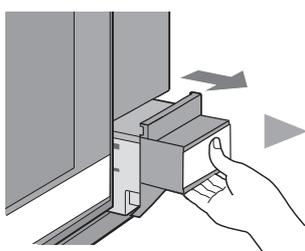


Figure 1

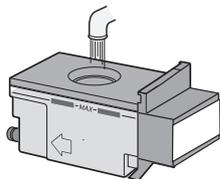


Figure 2

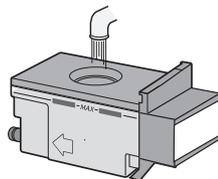


Figure 3

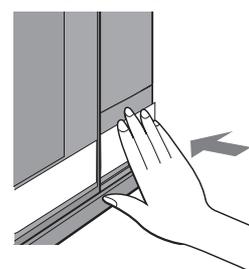


Figure 4

DRIP TRAY

Be sure to cook with drip tray in position and follow the directions below.

The drip tray is packed with the oven. Place the drip tray under the oven door as shown in Figure 4. This drip tray collects the condensation from the oven door.

To remove the drip tray: Pull the drip tray toward you with both hands.

* Make sure water is not dripping down before removing the drip tray.

To replace the drip tray: Place the drip tray onto the right and left hooks under the oven and push firmly as shown in Figure 4. Insert the drip tray horizontally when you attach it. Improper use may cause the damage to the hooks.

Empty the drip tray after each time you cook. Empty, rinse thoroughly, dry and replace. Failure to empty may cause the drip tray to overflow. Cooking repeatedly without emptying the drip tray may cause it to overflow.

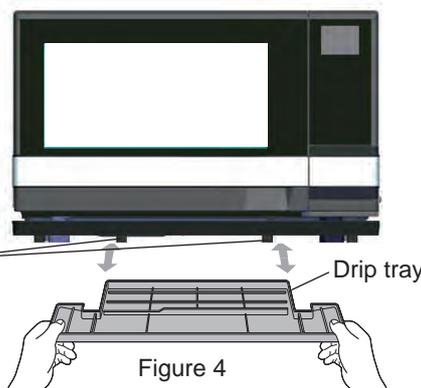


Figure 4

WARNINGS:

1. The oven will become very hot after cooking and draining water function.
2. Do not open the oven with your face close to the oven. Steam from the oven may cause burns.
3. Make sure that the oven has cooled before emptying the water tank and the drip tray and then wipe the oven cavity.
4. Do not touch the water directly as water in the drip tray may be hot.



IMPORTANT INSTRUCTIONS

STEAM IN AUTOMATIC AND MANUAL COOKING

Before cooking

1. Make sure the water tank is filled with fresh cold tap water and is installed. (See page 14.)
2. Make sure the empty drip tray is installed. (See page 14.)
3. Place food in the oven. Make sure to place the glass tray in lower position (position 2) for cooking with steam mode.

After Cooking

1. After the oven has cooled, remove and empty the water tank, wipe oven cavity. Be aware that the grill heating element and steam outlets may be still hot, so take care when wiping the ceiling and cavity back plate. (The grill heating element will turn on for a very short time before the end of the cooking.) Empty the drip tray.
2. Perform the Drain Water function at least once a day after using Healthy Cooking (except for Auto Grill), Steam Cook High and Steam Cook Low.
3. Check that water is not dripping down before removing the drip tray, as a small amount of water drains into the drip tray when the water tank is removed.
4. During and after cooking, condensed water may be on the door, oven walls and oven floor. Dry any liquid residue with a soft cloth. After the last use of the day, we recommend to operate the oven with Grill for 3 minutes without food and accessories for drying the water off around grill heating element.

WARNING: Do not open the oven with your face close to the oven. Steam from the oven may cause burns.

NOTE: Keep the door closed. If opened during cooking, steam will escape and a longer cooking time will be required.





IMPORTANT INSTRUCTIONS

DRAIN WATER FUNCTION

Perform the Drain Water function at least once a day after cooking with steam. It takes up to 7 minutes.

Drain Water function is very useful to prevent scale build up and the use of stale water. It causes evaporation of the internal steam system.

PROCEDURE

- 1 Remove the water tank. Ensure that no food is in the oven. Press **Info/Timer** and number **1** to select "In F1".

Info
Timer

1

- 2 Press **Minute Plus/START**. "In F1" will flash on and off in the display during the Drain Water function.

Minute Plus
START

- 3 When the drain function has ended and the oven is cool, wipe oven cavity. Empty the drip tray.

- 2 Press **Info/Timer** and number **2** to select "In F2".

Info
Timer

2

- 3 Place the glass tray in lower position (position 2). Slide tray toward back wall of oven until it stops.

- 4 Do not place any food in the oven. Close the door firmly. Press **Minute Plus/START** to begin descaling. (about 30 min.)

Minute Plus
START

- 5 When the oven has stopped and is cool, remove water tank, empty, rinse and refill with fresh cold tap water to the MAX mark. Replace the water tank. Empty the drip tray and replace it. Remove glass tray, empty, rinse and dry. Follow step 3 to replace glass tray. Close the door firmly. Press **Minute Plus/START**. Rinsing will start. (about 30 min.)

Minute Plus
START

- 6 When rinsing has ended and the oven is cool, remove water tank and empty. Remove glass tray and empty. Wipe oven cavity to dry. Empty the drip tray.

NOTES:

1. The water tank must be removed before starting this procedure.
2. If Drain Water Function is set, Energy Save Mode will be cancelled temporary.

NOTE:

If Descal Function is set, Energy Save Mode will be cancelled temporary.

DESCALE FUNCTION

White or gray grains, also called scale, may form in the water circuit inside the oven during steam generation, which could cause the oven to malfunction.

When "DESCALE (flashing)" is shown in the display, be sure to carry out Descal function immediately. It takes about 1 hour. (The descaling using citric acid or lemon juice is for about 30 minutes, and then rinsing with fresh water is for about 30 minutes.)

PROCEDURE

- 1 Pure citric acid, available at some drugstores, or bottled 100% lemon juice with no pulp are used for descaling. Choose one and prepare the descaling solution.

To use pure citric acid, dissolve 1 tablespoon of pure citric acid crystals in 2 cups of water in a non-porous container. Stir well and pour into the water tank to the MAX mark.

To use 100% bottled lemon juice, check that there is absolutely no pulp in it. If there is pulp or you are not sure, strain through a fine strainer. Measure 1/3 cup of the strained lemon juice and add it to 2 cups of water. Stir well and pour into the water tank to the MAX mark.

Place the water tank in the oven correctly and push firmly into place.



BEFORE OPERATING

- Before operating your oven, make sure you read and understand this operation manual completely.
- Before the oven can be used, follow these procedures:
 1. Place the drip tray correctly. See page 14.
 2. See below for getting started.
 3. Follow directions on the right side for clean the oven before first use.

GETTING STARTED

Your oven has an Energy Save Mode. This feature saves electricity when the oven is not in use.

PROCEDURE

- 1** Plug the oven into a approved outlet. Nothing will appear on the display at this time.
- 2** Open the door. The display will show “.0”.
- 3** Close the door. Now the oven is ready to use.

CAUTION:

In Energy Save Mode the clock will not be displayed. In Energy Save Mode, if you do not operate the oven for 3 minutes or more (i.e. after closing the door, or pressing **Stop/Clear**, or at the end of cooking), you will not be able to operate the oven until you open and close the oven door.

NOTE:

When you set Clock, Energy Save Mode will be cancelled.

TO SET THE CLOCK

* Suppose you want to enter the correct time of day. (A.M. or P.M.)

PROCEDURE

- 1** Press **Info/Timer** and number **7** (In F7).  **7**
- 2** Enter the correct time of day by pressing the numbers in sequence. 
- 3** Press **Minute Plus/START**. 

NOTES:

1. This is a 12 hour clock. If you attempt to enter an incorrect clock time, “Err” will appear in the display. Press the **Stop/Clear** and re-enter the time.
2. If the electrical power supply to the oven should be interrupted, the display will intermittently show blank after the power is reinstated. If this occurs during cooking, the program will be erased. The time of day will also be erased.
3. When you set Clock, Energy Save Mode will be canceled.

STOP/CLEAR

1. Press **Stop/Clear** if you make a mistake during programming.
2. Stop the oven temporarily during cooking.
3. Cancel a program during cooking, press twice.

CLEAN THE OVEN BEFORE FIRST USE

You may detect smoke or a burning smell when using the grill for the first time, this is normal and not a sign that the oven is out of order. To avoid this problem, when first using the oven, operate the grill without food for 20 minutes.

PREPARATION

Ventilate the room.

PROCEDURE

- 1** Ensure that no food is in the oven. Press **Grill** once. 
- 2** Enter the time (20.00) and **Minute Plus/START**.  

WARNING:

The oven door, outer cabinet, oven cavity and especially the grill heating element will become hot.

AUTOMATIC COOKING

Automatic Operation is cooked with steam, grill and microwave function. Refer to each function for the details.

HEALTHY COOKING

Healthy cooking has 6 categories and 15 menus.

Category 1-5: Vegetable/Fish/Eggs/Steam Defrost/Combination Meal

Category 6: Auto Grill

For Category 1-5:

Always cook food using steam tray and glass tray. Refer to the HEALTHY COOKING CHART for details on page 19. And see the important instructions on page 14-15.

* Suppose you want to defrost 0.3 lb of fish fillets.

PROCEDURE

- 1** Make sure the water tank is filled to the MAX mark with fresh cold tap water and is installed. Press **Steam Defrost** once.
- 2** Select desired Steam Defrost setting. (Ex: press number **2** to select Fish fillets.)
- 3*** Press number for desired weight. (Ex: press **3** for 0.3 lb.)
- 4** Place food in oven by following the directions in the cooking chart on page 19. Close the door. Press **Minute Plus/START**.
- 5** The oven will stop and CHECK will flash on and off. Open the door. Turn over the fish filets. Close the door. Press **Minute Plus/START**.
- 6** After cooking, EXTEND will appear. If you wish to extend cooking time, press the desired time and **Minute Plus/START**. If not, press **Stop/Clear**. After the oven has cooled, remove and empty the water tank, wipe oven cavity. Empty the drip tray.

* When selecting the quantity: Press repeatedly the same number key that you pressed at step 2, until the desired quantity appears. When you cook Hard boiled eggs. You don't need to select quantity. Skip step 3.

WARNING for stacking the steam tray and glass tray:

After cooking, take out the steam tray first. See Figure 2 on page 12. Be aware of excess water from the steam tray, we recommend you place it directly on a flat dish or tray to avoid spillages.

Before taking out the glass tray, make sure that it is cool. Be aware that there may be water on the glass tray, so take care when removing it.

NOTES:

1. Enter the weight or amount of the food only. Do not include the weight of the container.
2. For foods weighing more or less than weights given in the cooking charts, cook manually.
3. The programmed cooking times are average times. To extend cooking times preprogrammed in the automatic cooking, see EXTENDING COOKING TIME AT THE END OF STEAM COOKING on page 29. Before extending the cooking time, make sure the water tank is filled to the MAX mark with fresh cold tap water and is installed.
4. Any selection can be programmed with More or Less Time Adjustment. See page 29.
5. Keep the door closed. If opened during cooking, steam will escape and a longer cooking time will be required.
6. The amount of water in the water tank is sufficient for one cooking operation. Water does not need to be added during cooking.
7. During and after cooking, condensed water may be on the door, oven walls and oven floor. Dry any liquid residue with a soft cloth. After the last use of the day, we recommend to operate the oven with Grill for 3 minutes without food for drying the water off around grill heating element.
8. After cooking, the oven will automatically cool and you will hear the sound of the cooling fan. The fan may continue to operate up to 10 minutes depending on the oven and parts temperature.
9. If you attempt to enter more or less than the allowed amount as indicated in chart, "Err" will appear in the display.
10. Weight can be entered only by the pound.

WARNINGS:

1. The oven door, outer cabinet, oven cavity, accessories, dishes and especially the grill heating element will become hot. Use thick pot holders when adding or removing foods to prevent burns.
2. Do not open the oven with your face close to the oven. Steam from the oven may cause burns.

NOTE for Steam Defrost:

They are defrosted with Steam and Microwave. Do not use the glass tray, steam tray and metal rack.

AUTOMATIC COOKING

HEALTHY COOKING CHART

FOOD	AMOUNT	PROCEDURE	FOOD POSITION
Vegetables		Place vegetables in the steam tray on the glass tray.	2
1. Quick cooking	1 - 6 servings		
Asparagus spears (medium)	1 - 4 (1serving = 6spears)		
Broccoli florets	1 - 6 (cups)		
Cauliflower florets	1 - 6 (cups)		
Zucchini (1/4-inch thick slices)	1 - 6 (cups)		
2. Med. cooking	1 - 6 servings		
Carrots (Sliced: 1/4-inch thick slices)	1 - 6 (cups)		
Green beans (Cut into 2-inch pieces)	1 - 6 (cups)		
3. Long cooking	1 - 6 servings		
Carrots (Baby)	1 - 6 (cups)		
Corn on the cob	1 - 6 (ears)		
Acorn squash (Small, Cut into halves)	1 - 4 (halves)		
Fish		Spray the steam tray with nonstick cooking spray. Place fish in the steam tray on the glass tray.	2
1. Fish steaks (1/4-1/2 inch thick)	0.3 - 2 lb		
2. Fish fillets (3/4-1 inch thick)	0.3 - 2 lb		
Eggs			
1. Poached eggs	1 - 4 eggs	Put each egg into a greased custard cup and place custard cup(s) on the rack in the steam tray on the glass tray.	2
2. Hard boiled eggs	1 - 6 eggs	Place eggs in the steam tray on the glass tray.	2
Steam defrost		Place fish on microwave-safe rack or dish. Place the dish on the oven floor directly. When the oven stops, turn over the fish. After defrosting, remove any water and icy glaze and allow to stand 5-10 minutes until thoroughly defrost.	1
1. Fish steaks (1/4-1/2 inch thick)	0.3 - 1 lb		
2. Fish fillets (3/4-1 inch thick)	0.3 - 1 lb		
Combination meal			
1. Quick veg + Fish/Chicken fillets <1 portion of Vegetables> 6 Asparagus spears (medium) 1cup Broccoli florets 1cup Cauliflower 1cup Zucchini (1/4-inch thick slices) <1 portion of Fish fillets> 0.5lb Fish fillet <1 portion of Chicken fillets> 2 fillets (around 0.2lb. per 1fillet)	1 - 4 portion	Place vegetables in the steam tray. Place fish fillets or chicken fillets in the other steam try on the glass tray. Place the glass tray with fish fillets or chicken fillets on the steam tray into the oven. Start to cook. When the oven stops, place the steam tray with vegetables into the oven. Continue to cook.	Vegetable:3 Fish/Chicken:2
2. Med veg + Fish/Chicken fillets <1 portion of Vegetables> 1cup Carrots (Sliced: 1/4-inch thick slices) 1cup Green beans (cut into 2-inch pieces) <1 portion of Fish fillets> 0.5lb Fish fillet <1 portion of Chicken fillets> 2 fillets (around 0.2lb. per 1fillet)	1 - 4 portion	Place vegetables in the steam tray. Place fish fillets or chicken fillets in the other steam tray on the glass tray. Place the trays into the oven. Start to cook.	Vegetable:3 Fish/Chicken:2
3. Long veg + Fish/Chicken fillets <1 portion of Vegetables> 1cup Carrots (Baby) 1ears Corn on the cob half Acorn squash (Small, Cut into halves) <1 portion of Fish fillets> 0.5lb Fish fillet <1 portion of Chicken fillets> 2 fillets (around 0.2lb. per 1fillet)	1 - 4 portion	Place vegetables in the steam tray. Place fish fillets or chicken fillets in the other steam tray on the glass tray. Place the trays into the oven. Start to cook.	Vegetable:3 Fish/Chicken:2
*Standard setting is for chicken fillets. For fish fillets, please select Less setting. See page 29.			

AUTOMATIC COOKING

For Category 6 (Auto Grill):

Auto Grill has 3 menus.

- 1 Hamburgers
- 2 Boneless poultry
- 3 Chicken pieces

Refer to the AUTO GRILL CHART below for details.

* Suppose you want to cook 0.5 lb of chicken pieces.

PROCEDURE	
1 Press Auto Grill once.	Auto Grill
2 Select desired Auto Grill setting. (Ex: press number 3 to select Chicken pieces.)	3
3* Press number for desired weight. (Ex: press 5 for 0.5 lb.)	5
4 Place food in oven by following the directions in the cooking chart below. Close the door. Press Minute Plus/START .	Minute Plus START
5 The oven will stop and CHECK will flash on and off. Open the door. Turn over the chicken pieces. Close the door. Press Minute Plus/START .	Minute Plus START

NOTES:

1. Enter the weight of the food only. Do not include the weight of the container.
2. For foods weighing more or less than weights given in the cooking charts, cook manually.
3. Always follow the instructions in the cooking chart.
4. All selections can be programmed with More or Less Time Adjustment. See page 29.
5. After cooking, the oven will automatically cool and you will hear the sound of the cooling fan. The fan may continue to operate up to 10 minutes depending on the oven and parts temperature.

WARNING:

The oven door, outer cabinet, oven cavity, accessories, dishes and especially the grill heating element will become hot. Use thick pot holders when adding or removing foods to prevent burns.

* When selecting the quantity:
Press repeatedly the same number key that you pressed at step 2, until the desired quantity appears.
When you cook Hamburgers. You don't need to select quantity. Skip step 3.

AUTO GRILL CHART

SETTING	FOOD	AMOUNT	PROCEDURE	FOOD POSITON
1.	Hamburgers	1 - 5 (¹ / ₄ lb each)	Form patties and place on rack. Place rack on the glass tray. Start to preheat. No food in the oven. When preheat is over, place hamburgers in the oven. When oven stops, turn over.	3
2.	Boneless poultry	0.5 - 2 lb	Use this setting for boneless chicken or turkey cutlets. Fold under any very thin ends so no overcooking occurs. Arrange pieces on rack. Place rack on the glass tray. When oven stops, turn over.	2
3.	Chicken pieces	0.5 - 3 lb	Arrange pieces on rack. Place rack on the glass tray. When oven stops, turn over.	2

AUTOMATIC COOKING

SENSOR COOK

Sharp's Sensor is a semi-conductor device that detects the vapor (moisture and humidity) emitted from the food as it heats. The sensor adjusts the cooking times and power level for various foods and quantities.

Using Sensor Settings:

1. After the oven is plugged in, wait 2 minutes before cooking with Sensor function.
2. Be sure the exterior of the cooking container and the interior of the oven are dry. Wipe off any moisture with a dry cloth or paper towel.
3. The oven works with foods at normal storage temperature. For example, popcorn would be at room temperature.
4. Any Sensor Cook selection can be programmed with More or Less Time Adjustment. See page 29.
5. More or less food than the quantity listed in the chart should be cooked following the guidelines in any microwave cookbook.
6. During the first part of cooking with Sensor function, selected food number will appear on the display. Do not open the oven door or press **Stop/Clear** during this part of the cooking cycle. The measurement of vapor will be interrupted. If this occurs, an error message will appear. To continue cooking, press **Stop/Clear** and cook manually. When the sensor detects the vapor emitted from the food, the remainder of cooking time will appear. The door may be opened when remaining cooking time appears in the display. At this time, you may stir or season food, as desired.
7. If the sensor does not detect vapor properly, Err will be displayed, and the oven will turn off.
8. Check food for temperature or doneness after cooking. If food is not completely cooked, enter additional cooking time manually. Do not repeat cooking with Sensor function again as food may overcook.

Covering Foods:

Some foods work best when covered. Use the cover recommended in the chart.

1. Casserole lid.
2. Plastic wrap: Use plastic wrap recommended for microwave cooking. Cover dish loosely; allow approximately $\frac{1}{2}$ -inch to remain uncovered to allow steam to escape. Plastic wrap should not touch food.
3. Wax paper: Cover dish completely; fold excess wrap under dish to secure. If dish is wider than paper, overlap two pieces at least one inch to cover.

Be careful when removing any covering to allow steam to escape away from you.

SENSOR POPCORN

* Suppose you want to pop a regular size popcorn with Standard time.

PROCEDURE

- 1 Press **Sensor Popcorn** once. The oven starts automatically. "1" will appear in the display.

**Sensor
Popcorn**

NOTE:

To use **Sensor Popcorn**, press within 3 minutes after cooking, opening and closing the door or pressing the **Stop/Clear**.

SENSOR POPCORN CHART

FOOD	AMOUNT	PROCEDURE
Popcorn	1 package	Use only popcorn packaged for the microwave. Try several brands to decide which you like. Do not try to pop unpopped kernels.
1. Regular	2.9 - 3.5 oz	Press Sensor Popcorn once. "1" will appear in the display.
2. Regular light	2.9 - 3.0 oz	Press Sensor Popcorn twice within 2 seconds. "2" will appear in the display.
3. Mini	1.1 - 1.55 oz	Press Sensor Popcorn three times within 2 seconds. "3" will appear in the display.



AUTOMATIC COOKING

MICRO REHEAT/COOK

MICRO REHEAT/COOK has 9 menus and allows you to heat many of your favorite foods.

- 1 Sensor reheat*
- 2 Frozen entrees*
- 3 Fresh vegetables: quick cooking*
- 4 Fresh vegetables: longer cooking*
- 5 Frozen vegetables*
- 6 Baked potatoes*
- 7 Beverage
- 8 Fresh roll, muffin
- 9 Frozen roll, muffin

* These menus are sensor cooking. Read carefully the instructions for Sensor Cook on page 21 before the cooking.

Refer to MICRO REHEAT/COOK CHART for details on page 23.

* Suppose you want to reheat 6 fresh muffins with Standard time.

PROCEDURE

1 Press **Micro Reheat/Cook** once. 

2 Select desired Micro Reheat/Cook setting. (Ex: press number **8** to select fresh muffin.) 

3 Repeat pressing same number **8** to increase quantity to 6 muffins. (Ex: press **8** 6 more times for 6 muffins.)  x 6

4 Press **Minute Plus/START**. 

NOTES:

1. Any selection can be programmed with More or Less Time Adjustment. See page 29.
2. More or less food than the quantity listed in the chart should be cooked following the guidelines in any microwave cookbook.
3. The final result will vary according to the food condition (e.g. initial temperature, shape, quality). Check food temperature after heating. If additional time is needed, continue to heat manually.
4. For sensor cooking, it is not necessary to enter amount. Skip the step 3.



AUTOMATIC COOKING

MICRO REHEAT/COOK CHART

FOOD	AMOUNT	PROCEDURE
1. Sensor reheat	4 - 36 oz	Place in dish or casserole slightly larger than amount to be reheated. Flatten, if possible. Cover with lid, plastic wrap or wax paper. Use covers such as plastic wrap or lids with larger quantities of more dense foods such as stews. After reheating, stir well, if possible. Re-cover and allow to stand 2 to 3 minutes. Foods should be very hot. If not, continue to heat with variable power and time.
2. Frozen entrees	6 - 17 oz	Use this setting for frozen, convenience foods. It will give satisfactory results for most brands. You may wish to try several and choose your favorite. Remove package from outer wrapping and follow package directions for covering. After cooking, let stand, covered for 1 to 3 minutes.
3. Fresh vegetables: Quick cooking		
Broccoli	0.25 - 2.0 lb	Wash and place in casserole. Add no water if vegetables have just been washed. Cover with lid for tender vegetables. Use plastic wrap for tender-crisp vegetables. After cooking, stir, if possible. Let stand, covered, for 2 to 5 minutes.
Brussels sprouts	0.25 - 2.0 lb	
Cabbage	0.25 - 2.0 lb	
Caulif. (flowerets)	0.25 - 2.0 lb	
Cauliflower (whole)	1 med.	
Spinach	0.25 - 1.0 lb	
Zucchini	0.25 - 2.0 lb	
Baked apples	2 - 4 med.	
4. Fresh vegetables: Longer cooking		
Carrots, sliced	0.25 - 1.5 lb	Place in casserole. Add 1 - 4 tbsp. water. Cover with lid for tender vegetables. Use plastic wrap cover for tender-crisp vegetables. After cooking, stir, if possible. Let stand, covered, for 2 to 5 minutes.
Corn on the cob	2 - 4	
Green beans	0.25 - 1.5 lb	
Winter squash:		
diced	0.25 - 1.5 lb	
halves	1 - 2	
5. Frozen vegetables	0.25 - 1.5 lb	Add no water. Cover with lid or plastic wrap. After cooking, stir and let stand, covered, for 3 minutes.
6. Baked potatoes	1 - 4 med.	Pierce. Place on paper towel on the grass tray. Put the glass tray on the lower position. After cooking, remove from oven, wrap in aluminum foil and let stand 5 to 10 minutes. Use pot holders or oven mitts to prevent burns.
7. Beverage	0.5 - 2.0 cups	This setting is good for restoring cooled beverage to a better drinking temperature. Stir liquid briskly before and after heating to avoid "eruption".
8. Fresh roll, muffin	1 - 8 pieces	Use this setting to warm fresh rolls, muffins, biscuits, bagels, etc. Large items should be considered as 2 or 3 regular size. Arrange on plate; cover with paper towel.
9. Frozen roll, muffin	1 - 8 pieces	Use this setting to warm frozen rolls, muffins, biscuits, bagels, etc. Large items should be considered as 2 or 3 regular size. Arrange on plate; cover with paper towel.

AUTOMATIC COOKING

MICRO DEFROST

Micro Defrost has 4 menus. Do not use the glass tray, steam tray and metal rack.

- 1 Ground meat
- 2 Chicken bone-in
- 3 Chicken boneless
- 4 Steaks, Chops

Refer to MICRO DEFROST CHART below for details.

* Suppose you want to defrost a 0.5 lb steak.

PROCEDURE	
1 Press Micro Defrost once.	Micro Defrost
2 Select desired Micro Defrost setting. (Ex: press number 4 to select steaks.)	4
3 Press number for desired weight. (Ex: press 5 for 0.5 lb.)	5
4 Place food in oven by following the directions in the cooking chart below. Close the door. Press Minute Plus/START .	Minute Plus START
5 The oven will stop and CHECK will flash on and off. Open the door. Turn over the steak and shield the defrosted portions. Close the door. Press Minute Plus/START .	Minute Plus START

NOTES:

1. Enter the weight of the food only. Do not include the weight of the container.
2. Any selection can be programmed with More or Less Time Adjustment. See page 29.
3. To defrost other foods or foods above or below the weights allowed on Micro Defrost Chart, use time and 30% microwave power. See MANUAL DEFROST below.
4. Do not use the glass tray, steam tray and metal rack.
5. After cooking, the oven will automatically cool and you will hear the sound of the cooling fan. The fan may continue to operate up to 10 minutes depending on the oven and parts temperature.

MANUAL DEFROST

If the food that you wish to defrost is not listed on the MICRO DEFROST CHART or is above or below the limits in the "Amount" column on the MICRO DEFROST CHART below, you need to defrost manually.

You can defrost any frozen food, either raw or previously cooked, by using Power Level 30%.

Follow the exact 3-step procedure found under MICROWAVE on page 28.

Estimate defrosting time and select 30% when you select the power level.

For either raw or previously cooked frozen food the rule of thumb is approximately 5 minutes per pound. For example, defrost 5 minutes for 1 pound of frozen spaghetti sauce. Always stop the oven periodically to remove or separate the portions that are defrosted. If food is not defrosted at the end of the estimated defrosting time, program the oven in 1 minute increments on Power Level 30% until totally defrosted.

When using plastic containers from the freezer, defrost only long enough to remove from the plastic in order to place in a microwave-safe dish.

MICRO DEFROST CHART

FOOD	AMOUNT	PROCEDURE
1. Ground meat	0.5 - 2.0 lb	Remove any thawed pieces after each stage. Let stand, covered, for 5 to 10 minutes.
2. Chicken bone-in	0.5 - 3.0 lb	Arrange pieces with meatiest portions toward outside of glass dish or microwave-safe rack. After each stage, if there are warm or thawed portions, rearrange or remove. Let stand, covered, for 10 to 20 minutes.
3. Chicken boneless	0.5 - 2.0 lb	After each stage, if there are warm or thawed portions, rearrange or remove. Let stand, covered, for 10 to 20 minutes.
4. Steaks, Chops	0.5 - 3.0 lb	After each stage, rearrange and if there are warm or thawed portions, shield with small flat pieces of aluminum foil. Remove any meat or fish that is nearly defrosted. Let stand, covered, for 10 to 20 minutes.

MANUAL COOKING

Manual Cooking is an option in Steam Cook, Grill, Grill Mix and Microwave. Refer to the "Manual Cooking Chart" and "Food and Utensil Position Chart". The charts give information on each setting.

MANUAL COOKING CHART

Cooking mode		Temp/power range	Time range	Water tank
Steam Cook	High	212 °F	0 - 35 min.	YES
	Low	160 - 200 °F *	0 - 60 min.	YES
Grill		-	0 - 99 min. 99 sec.	NO
Grill Mix	High	Grill: 50% power Microwave: 50% power	0 - 99 min. 99 sec.	NO
	Low	Grill: 90% power Microwave: 10% power	0 - 99 min. 99 sec.	NO
Microwave		0 - 100% power	0 - 99 min. 99 sec.	NO

* You can set the temperature from 160°F to 200°F in multiples of 5°F. (Initial setting: 190°F)

FOOD AND UTENSIL POSITION CHART

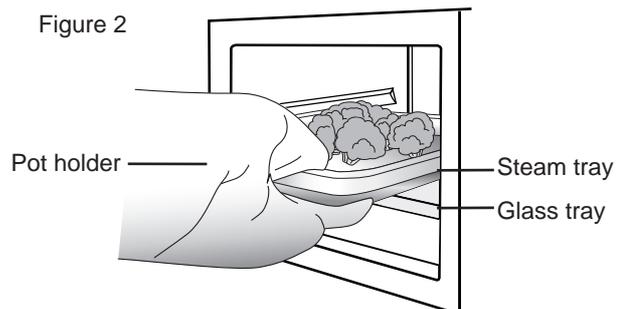
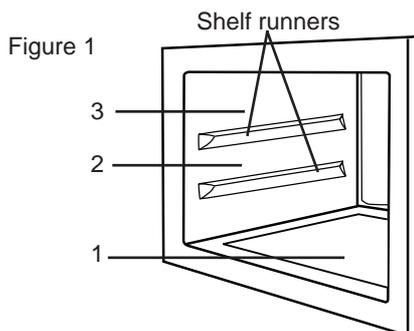
Cooking mode	2 layer cooking		Food and utensil position (Refer to Figure 1.)			
			3: Upper	2: Lower	1: Oven floor	
Steam Cook	High	YES	1 layer	—	Food Steam tray	—
		2 layers	Food Steam tray	Food Steam tray Glass tray	—	
	Low	NO	—	Steam tray	Glass tray (No food)	—
Grill		NO	Food Rack or dish Glass tray			
Grill Mix	High	NO	See NOTE 1.			
	Low	NO				
Microwave		NO	—	Food Microwave safe container Glass tray See NOTE 2.	Food Microwave safe container	

NOTES:

1. Select desired position depending on the food size. Position 2 or position 3 is recommended for most recipes. Place the food and glass tray on position 1 when roasting big portions to prevent touching the food to the oven ceiling. Smoke will occur during the cooking if the food touches the grill heating element.
2. For cooking cake, meatloaf and baked potato.
3. Do not leave the steam tray and rack wet after use.

WARNING for stacking the steam tray and glass tray:

After cooking, take out the steam tray first. See Figure 2. Be aware of excess water from the steam tray, we recommend you place it directly on a flat dish or tray to avoid spillages. Before taking out the glass tray, make sure that it is cool. Be aware that there may be water on the glass tray, so take care when removing it.



MANUAL COOKING

STEAM COOK

Manual Steam Cook has 2 options, Steam Cook High and Steam Cook Low. Always cook food using steam tray and glass tray. See page 25 for the details. And see the important instructions on page 14-15.

Cooking mode		Temperature
Steam Cook High	Steam Cook High	212 °F
Steam Cook Low	Steam Cook Low	160 - 200 °F

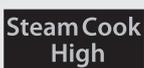
Use Steam Cook High to steam foods such as chicken or vegetables. Use Steam Cook Low to steam fish or egg custard gently. With Steam Cook Low mode, cooking time is a little longer than Steam Cook High mode. Steam cooks food gently without destroying shape, color or aroma. The Steam Cook High can be programmed for up to 35 minutes (35.00). The Steam Cook Low can be programmed for up to 60 minutes (60.00). On Steam Cook Low, the temperature can be set between 160°F and 200°F by 5°F step. 2 layers cooking is available for Steam Cook High. 1 layer cooking only is available for Steam Cook Low.

STEAM COOK HIGH

* Suppose you want to cook for 20 minutes on Steam Cook High with 2 layers.

PROCEDURE

- 1** Make sure the water tank is filled to the MAX mark with fresh cold tap water and is installed. Press **Steam Cook High** until the desired tray position indicators are displayed (2 and 3).

 x 2
- 2** Enter the desired cooking time.


- 3** Press **Minute Plus/START**.


- 4** After cooking, EXTEND will appear. If you wish to extend cooking time, enter the desired time and press **Minute Plus/START**. If not, press **Stop/Clear**. After the oven has cooled, remove and empty the water tank, wipe oven cavity. Empty the drip tray.





STEAM COOK LOW

* Suppose you want to cook for 20 minutes on Steam Cook Low (175°F).

PROCEDURE

- 1** Make sure the water tank is filled to the MAX mark with fresh cold tap water and is installed. Press **Steam Cook Low** until the desired temperature is displayed (175°F) .

 x 4
- 2** Enter the desired cooking time.


- 3** Press **Minute Plus/START**.


- 4** After cooking, EXTEND will appear. If you wish to extend cooking time, enter the desired time and press **Minute Plus/START**. If not, press **Stop/Clear**. After the oven has cooled, remove and empty the water tank, wipe oven cavity. Empty the drip tray.





NOTES:

1. "Err" will be displayed at step 3 if the longer time than the maximum time for each Steam cooking mode is entered. To clear, press **Stop/Clear** and re-program.
2. To extend steaming times, see EXTENDING COOKING TIME AT THE END OF STEAM COOKING on page 29. Before extending the cooking time, make sure the water tank is filled to the MAX mark with fresh cold tap water and is installed.
3. Keep the door closed. If opened during cooking, steam will escape and a longer cooking time will be required.
4. The amount of water in the water tank is sufficient for one cooking operation. Water does not need to be added during cooking.
5. During and after cooking, condensed water may be on the door, oven walls and oven floor. Dry any liquid residue with a soft cloth. After the last use of the day, we recommend to operate the oven with Grill for 3 minutes without food for drying the water off around grill heating element.
6. After cooking, the oven will automatically cool and you will hear the sound of the cooling fan. The fan may continue to operate up to 10 minutes depending on the oven and parts temperature.

WARNINGS:

1. The oven door, outer cabinet, oven cavity, accessories, dishes and especially the grill heating element will become hot. Use thick pot holders when adding or removing foods to prevent burns.
2. Do not open the oven with your face close to the oven. Steam from the oven may cause burns.

MANUAL COOKING

GRILL

The grill heating element at the top of the oven cavity has one power setting only. This mode does not use steam. This mode can be programmed for up to 99 minutes 99 seconds. 1 layer cooking only. Place the food onto the rack on glass tray and select desired position depending on the food size.

Your oven can be programmed to combine preheating and grill cooking operation.

Grill setting	Press Grill
Grill without preheat	once
Grill with preheat	twice

To preheat and cook with Grill

* Suppose you want to cook for 10 minutes on Grill with preheat.

PROCEDURE	
1 Press Grill twice.	Grill x 2
2 Enter the desired cooking time.	1 0 0 0
3 Press Minute Plus/START . PRE-HEAt will appear in the display.	Minute Plus START
4 When preheating is completed, a signal will sound 4 times and PRE-HEAt End will appear in the display. Open the door and place the food in the oven.	
5 Press Minute Plus/START .	Minute Plus START

* If the oven door is not opened, the oven will automatically hold at the preheat condition for 30 minutes. After this time has elapsed, an audible signal will sound, and “. 0” or the time of day will appear in the display.

To cook Grill without preheat

To cook without preheat, press **Grill** once in step 1. Enter cooking time and press **Minute Plus/START**.

WARNING:

The oven door, outer cabinet, oven cavity, accessories, dishes and especially the grill heating element will become hot. Use thick pot holders when adding or removing foods to prevent burns.

NOTES:

1. Keep the door closed. If opened during cooking, heat will escape and a longer cooking time will be required.
2. After cooking, the oven will automatically cool and you will hear the sound of the cooling fan. The fan may continue to operate up to 10 minutes depending on the oven and parts temperature.
3. To program only preheat, press **Minute Plus/START** after step1. Preheating will start.

GRILL MIX

Grill Mix combines microwave power with grill. Grill Mix has 2 options; Grill Mix High and Grill Mix Low. This mode does not use steam. This mode can be programmed for up to 99 minutes 99 seconds. 1 layer cooking only.

Cooking mode	Cooking method
Grill Mix High Grill Mix High	Grill 50% Microwave 50%
Grill Mix Low Grill Mix Low	Grill 90% Microwave 10%

* Suppose you want to cook for 20 minutes on Grill Mix High.

PROCEDURE	
1 Press Grill Mix High once.	Grill Mix High
2 Enter the desired cooking time.	2 0 0 0
3 Press Minute Plus/START .	Minute Plus START

WARNING:

The oven door, outer cabinet, oven cavity, accessories, dishes and especially the grill heating element will become hot. Use thick pot holders when adding or removing foods to prevent burns.

NOTES:

1. Keep the door closed. If opened during cooking, heat will escape and a longer cooking time will be required.
2. After cooking, the oven will automatically cool and you will hear the sound of the cooling fan. The fan may continue to operate up to 10 minutes depending on the oven and parts temperature.

MANUAL COOKING

MICROWAVE

Microwave is fast and convenient for cooking, reheating and defrosting.

First enter the cooking time then select the power level. This mode does not use steam. This mode can be programmed for up to 99 minutes 99 seconds.

There are 11 different power levels.

Display	Power level	Common words for power levels
P- HI	100%	High
P- 90	90%	
P- 80	80%	
P- 70	70%	Medium High
P- 60	60%	
P- 50	50%	Medium
P- 40	40%	
P- 30	30%	Med Low / Defrost
P- 20	20%	
P- 10	10%	Low
P- 0	0%	

This variable cooking control allows you to select the rate of microwave cooking.

If a power level is not selected, then 100% is automatically used.

1 layer cooking only.

* Suppose you want to cook for 5 minutes on 100%.

PROCEDURE

1 Enter the desired cooking time. 

2 Press **Minute Plus/START**. 

To change the microwave power level, press **Microwave** until the desired power level is displayed.

* Suppose you want to defrost for 5 minutes on 30%.

PROCEDURE

1 Enter the desired cooking time. 

2 Change the power level by pressing **Microwave** until the desired microwave power level is displayed (30P).  x 8

3 Press **Minute Plus/START**. 

NOTES:

- After cooking, the oven will automatically cool and you will hear the sound of the cooling fan. The fan may continue to operate up to 10 minutes depending on the oven and parts temperature.
- Do not use the steam tray and metal rack.

HINT:

For cooking cake, meatloaf and baked potato, place the container or food on the glass tray in lower position (position 2) .



OTHER CONVENIENT FEATURES

MORE OR LESS TIME ADJUSTMENT

To use with automatic cooking:

You can adjust cooking results as you like.

Should you discover that you like any automatic settings slightly **more** done, press **Micro** once after entering weight and before pressing **Minute Plus/START**.

Should you discover that you like any automatic settings slightly **less** done, press **Micro** twice after entering weight and before pressing **Minute Plus/START**.

EXTENDING COOKING TIME AT THE END OF STEAM COOKING

This function is for Healthy Cooking (except Steam Defrost and Auto Grill), Steam Cook High and Steam Cook Low only.

Cooking results may vary depending on room temperature, initial food temperature and other factors. You can adjust cooking results by adding more cooking time at the end. When cooking is finished, the display will show "EXTEND". It is only possible to add extra time during the 5 minutes when "EXTEND" is in the display. The time can be extended up to 9 minutes 99 seconds. Enter the desired time then press **Minute Plus/START**. The same cooking mode will be continued. Carefully check the cooking process.

NOTES:

1. Before extending Steam mode, make sure the water tank is filled to the MAX mark with fresh cold tap water and is installed. If "Err, WATER (flashing)" is displayed during cooking, fill the water tank to the MAX mark. Position and push firmly into place, then press **Stop/Clear** to clear the error message. To continue the cooking, cook manually. Check for doneness from time to time.
2. Extend mode is cancelled when **Stop/Clear** is pressed.
3. The Extending Cooking Time function can be repeated until the food is cooked as you desire.
4. While the display shows "EXTEND", Energy Save Mode will be cancelled temporary.

MULTIPLE SEQUENCE COOKING

This function allows you to cook using up to 3 manual cooking programs; combinations of Microwave, Grill and Grill Mix.

* Suppose you want to cook in Sequence Cooking for:

- 5 minutes on 70 % microwave power (Stage 1)
- 3 minutes on Grill without preheat (Stage 2)
- 3 minutes on Grill Mix High (Stage 3)

PROCEDURE

- 1 For 1st stage, press **Micro** until the desired microwave power level is displayed (70P), and enter the desired cooking time.

Micro
x 4

5 0 0

- 2 For 2nd stage, press **Grill** and enter the desired cooking time.

Grill

3 0 0

- 3 For 3rd stage, press **Grill Mix High**, and enter the desired cooking time.

Grill Mix High

3 0 0

- 4 Press **Minute Plus/START**.

Minute Plus
START

NOTE:

1. After cooking, the oven will automatically cool and you will hear the sound of the cooling fan. The fan may continue to operate up to 10 minutes depending on the oven and parts temperature.
2. You can only program Grill with preheat at the 1st stage.

WARNING:

The oven door, outer cabinet, oven cavity, accessories, dishes and especially the grill heating element will become hot. Use thick pot holders when adding or removing foods to prevent burns.

OTHER CONVENIENT FEATURES

KITCHEN TIMER

Use the Kitchen Timer as a minute timer or to monitor the standing time for cooked/defrosted food.

- Suppose you want to set the kitchen timer for 5 minutes.

PROCEDURE

1 Enter the desired time. 

2 Press **Info/Timer** once. 

NOTE:

In Energy Save Mode, Open and close the door to activate Kitchen Timer before entering the desired time.

MINUTE PLUS

Auto minute allows you to operate the two following functions:

a) Direct start

You can directly start cooking on 100% microwave power for 1 minute by pressing **Minute Plus/START**.

NOTE:

To avoid the misuse by children **Minute Plus** can be used only within 3 minutes after preceding operation, i.e., closing the door, pressing the **Stop/Clear** key or cooking completion.

b) Extend the manual cooking time

You can extend the manual cooking time for multiples of 1 minute if **Minute Plus/START** is pressed while the oven is in operation.

NOTE:

You can not use this function for Steam cooking. The cooking time can be extended up to 99 minutes.

INFO

Info key provides 8 features.

- | | |
|-----------------------|-------------------------|
| In F1: Drain | In F5: Child lock |
| In F2: Descale | In F6: Sound on/off |
| In F3: Water hardness | In F7: Clock |
| In F4: Demo | In F8: Energy save mode |

The number from "In F1" to "In F8" will be displayed when you select the feature.

These features can be selected by pressing **Info/Timer** and the desired function number and pressing **Minute Plus/START**.

DRAIN

The remaining water inside the steam generator can be evaporated by using the DRAIN function. See page 16.

DESCALE

See page 16.

WATER HARDNESS

Your oven is set at the factory to water hardness setting 2 (hard). You can set the oven for the water hardness level.

You can use a test strip available at some drug stores, to check the water hardness level.

In some areas, it is possible to ask the water supply company for the water hardness.

When you use test strips, follow the instructions of them.

Hardness level	Hardness range	Setting
1	<120 ppm <120 mg/l <6.7 °dH	Soft
2	120 - 250 ppm 120 - 250 mg/l 6.7 - 14.0 °dH	Hard
3	>250 ppm >250 mg/l >14.0 °dH	Very hard

PROCEDURE

1 Press **Info/Timer** and the number **3** to select Water Hardness. "In F3" will be displayed.

2 Press same number **3** until desired hardness level is displayed and press **Minute Plus/START**. The water hardness setting will be held in the memory even if the oven power is off.



OTHER CONVENIENT FEATURES

DEMONSTRATION MODE

This feature is mainly for use by retail outlets, and also allows you to practice the key operation.

To demonstrate, press **Info/Timer** and number **4** (In F4) and then press **Minute Plus/START**. "dISP" will appear in the display.

Cooking operations can now be demonstrated with no power in the oven. The display will count down to zero at ten times the speed faster than normal.

To cancel, press **Info/Timer** and number **4** (In F4) and then press **Minute Plus/START**. The display will show "dISP OFF". Or unplug the oven from the electrical outlet and re-plug to cancel Demo Mode.

NOTES:

1. "dISP" will change to ". 0" when pressing **Stop/Clear**.
2. If you set Demo Mode, Energy Save Mode will be cancelled.

CHILD LOCK

Child Lock prevents unwanted oven operation such as by small children. The oven can be set so that the control panel is deactivated and locked.

To set the Child Lock, press **Info/Timer** and number **5** (In F5) and then press **Minute Plus/START**. "SAFE" will appear in the display. The control panel is now locked, each time a key is pressed, the display will show "SAFE".

To unlock the control panel, press **Info/Timer** and number **5** (In F5) and **Minute Plus/START** quickly. The display will show "SAFE OFF" and the oven is ready to use.

NOTES:

1. If you set Child Lock, Energy Save Mode will be cancelled.
2. When the oven power is off, the setting returns to OFF.

SOUND ON/OFF

You can mute the oven.

To mute the oven, press **Info/Timer** and number **6** (In F6) then press **Minute Plus/START**.

To cancel the mute setting, press **Info/Timer** and number **6** (In F6) then press **Minute Plus/START**.

NOTE:

The sound setting will be held in the memory even if the oven power is off.

CLOCK

See page 17.

ENERGY SAVE MODE

Your oven has the Energy Save Mode. This feature saves electricity when the oven is not in use.

If you set the clock, Energy Save Mode will be cancelled. To start Energy Save Mode manually, follow the instructions below. To set Energy Save Mode, press **Info/Timer** and number **8** (In F8) then press **Minute Plus/START**. "SV" will appear in the display. Then the display will show ". 0" for 3 minutes before the oven power is off.

To cancel Energy Save Mode, set Clock. See page 17.

NOTES:

1. If Clock, Child Lock or Demonstration Mode is set, Energy Save Mode will be cancelled.
2. The setting will be held in the memory even if the oven power is off.

CLEANING AND CARE

Key Point for Cleaning - Immediately and frequently!

The food splashes and oily meat juice, remaining on the oven interior walls will get stuck and hard to remove if it is not cleaned immediately and after each use. The usage of the steam function will assist in this cleaning process. They will be also perishable by the influence of steam.

CAUTION: DO NOT USE COMMERCIAL OVEN CLEANERS, STEAM CLEANERS, ABRASIVE, HARSH CLEANERS, ANY THAT CONTAIN SODIUM HYDROXIDE OR SCOURING PADS ON ANY PART OF YOUR MICROWAVE OVEN.

Before cleaning, make sure the oven cavity, door, oven cabinet, accessories and especially the grill heating element are completely cool.

CLEAN THE OVEN AT REGULAR INTERVALS AND REMOVE ANY FOOD DEPOSITS - Keep the oven clean, or the oven could lead to a deterioration of the surface. This could adversely affect the life of the appliance and possibly result in a hazardous situation.

Oven exterior

The outside of your oven can be cleaned easily with mild soap and water. Make sure the soap is wiped off with a moist cloth, and dry the exterior with a soft towel.

Oven controls

Open the door before cleaning to de-activate the oven controls. Care should be taken when cleaning the oven control. Using a cloth dampened with water only, gently wipe the panel until it becomes clean. Avoid using excessive amounts of water. Do not use any sort of chemical or abrasive cleaner.

Door

To remove all trace of dirt, regularly clean both sides of the door, the door seals and adjacent parts with a soft, damp cloth. Do not use harsh abrasive cleaners or sharp metal scrapers to clean the oven door glass since they can scratch the surface, which may result in shattering of the glass.

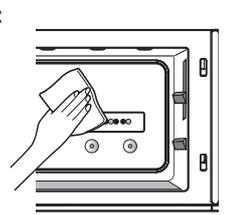
Door Seals

Always keep the door seals clean to prevent any damage. If water condenses inside the door seals, wipe dry with a soft cloth. Polish with another soft cloth. Do not use a chemical or abrasive cleaner on these surfaces. Care should be taken not to rub, damage, pull or move the seals. Before cooking, always check that door seals is lying smooth and flat. If not, steam will leak from the door. Do not use the oven if it has a damaged door seals. Consult a Sharp Authorized Servicer.

Oven interior

IMPORTANT INFORMATION:

- After every use: Wipe the oven walls with a soft cloth and warm water (or mild soapy water) while the oven is still warm. Using the oven without cleaning may lead spatters to get stuck.
- Do not use caustic cleaners (acidic/alkaline), spray type cleaners, abrasive or harsh cleaners or scouring pads as it may damage the surface of oven walls.



For removal of OIL AND FOOD SPLASHES on oven walls:

1. Fill the water tank with fresh cold tap water through the lid to the MAX mark.
2. Operate the oven with Steam Cook High for 10 minutes without food. See page 26.
3. After the steaming, wipe the dirt in the oven interior with a dry soft cloth while the oven is still warm. Be aware that the grill heating element and steam outlets may be still hot, so take care when wiping the ceiling and cavity back plate. (The grill heating element will turn on for a very short time before at the end of the operation.) And then, we recommend to operate the oven with Grill for 3 minutes without food and accessories for drying the water off around grill heating element.

Steam Tray / Glass Tray / Rack

Wash steam tray, glass tray and rack after cooking with a mild soap or detergent solution, rinsing and polishing dry. Do not use harsh cleaners, sharp metal scrapers or stiff brushes to prevent damage to the easy clean surface. All the accessories can be washed in the dishwasher. Do not leave the steam tray and rack wet.

Water Tank and Water Tank Lid

After cooking, wash in a mild soap or detergent solution with a soft damp cloth or sponge, rinse and polish dry. Do not wash in the dishwasher. Do not use harsh cleaners, sharp metal scrapers or stiff brushes on the water tank and water tank lid.

Drip Tray

Empty drip tray after cooking, wash in a mild soap or detergent solution with a soft damp cloth or sponge, rinse, polish dry and replace below the oven front. Do not wash in the dishwasher.

Descaling within the Oven's Steam Parts

During steam production, scale may form in the steam generator. To remove scale, carry out descale function when "DESCALE" flashes on and off in the display. See page 16 for complete instructions.

TROUBLESHOOTING CHART

If EE is displayed or you think the oven is not working properly, check the chart below before consulting a Sharp Authorized Servicer. This will help to prevent unnecessary service calls.

WARNING:

Never adjust, repair or modify the oven by yourself. It is hazardous for anyone other than a qualified service technician trained by SHARP to carry out any service or repair operation. This is important as it may involve the removal of covers that provide protection against electrical parts.

- Repairs and Modifications: Do not attempt to operate the oven if it is not working properly.
- Outer cabinet: Never remove the outer cabinet to avoid the possibility of electric shock or burns.

TROUBLESHOOTING CHART

TECHNICAL ERROR MESSAGE / INFORMATION MESSAGE

MESSAGE ON DISPLAY		ACTION
TECHNICAL ERROR MESSAGE	EE	Due to technical error, call service for your nearest Sharp Authorized Servicer.
SENSOR ERROR	Err, SENSOR (flashing)	1. The sensor does not detect vapor properly in microwave sensor mode. 2. Oven door is opened or Stop/Clear is pressed during sensing. For both 1 and 2, press Stop/Clear and cook manually.
INFORMATION MESSAGE	Err	1. The time you set is over the maximum time for Steam Cook High or Steam Cook Low. Press Stop/Clear and re-program. 2. The time of day you enter is incorrect. This is 12 hour clock. Press the Stop/Clear and re-enter the time.
	Err, AUTO, DEF* , LBS (flashing) * (DEF is on the display at Steam Defrost and Micro Defrost mode)	The weight you enter is more or less than the allowed amount as indicated in chart. Press the Stop/Clear and re-enter the weight.
	Err, HOT (flashing)	The oven is too hot to use for Steam Defrost, Auto Defrost Menus or Steam Cook Low. Remove food from oven and allow to cool until the message clears.
	Err, WATER (flashing)	Remove water tank and fill with water to the MAX mark. Replace and push firmly into place, then press Stop/Clear to clear the error message. Make sure that the water tank is filled to the MAX mark with fresh cold tap water. To continue the cooking, cook manually. Check for doneness from time to time. NOTES: 1. Ensure you do not use any other liquids like distilled water, R.O water, mineral water and etc. 2. When this error message appears again and again even if you fill the water tank with water, the internal steam system may be out of order. Call service for your nearest Sharp Authorized Servicer. You can use the oven for the cooking modes which do not use steam.
	COLd	The water in the internal steam system is frozen. Operate the oven with Grill without food for 10 minutes. See page 27.
	DESCALE (flashing)	Follow step-by-step instructions for descaling. See page 16.
	HOT (flashing)	The oven cabinet and oven cavity are very hot. Pay extra attention not to burn yourself.
	SV	This message is not sign that the oven is malfunctioning. When the setting of Energy Save Mode is completed, "SV" will appear on the display. Then the display will show ". 0" for 3 minutes before the oven power is off. See page 31.

TROUBLESHOOTING CHART

The following situations are normal and are not signs that the oven is malfunctioning.

QUESTION / SITUATION		ANSWER
Control panel / power supply	The display is black / blank.	<ul style="list-style-type: none"> * Open the door and close. * Check the power plug is properly connected to a suitable wall outlet. * Check that fuse or circuit breaker is functioning properly. * Disconnect the power cord, wait for a minute. Then reconnect, open and close the door.
	The display is fine but Minute Plus/START will not function when pressed.	<ul style="list-style-type: none"> * Open the door and close. Is the oven light off? Press Minute Plus/START again. * If the message "Err, HOT (flashing)" is displayed, wait until the message has disappeared.
	Electrical power supply is interrupted during cooking.	The programmed cooking time and mode will be cancelled. Continue to cook with manual mode.
Energy save mode	The display does not change to blank.	<p>In the following cases, Energy Save Mode will be cancelled temporary:</p> <ul style="list-style-type: none"> - When the door is opening. - Pause of the automatic cooking. - When the cooking fan is working after cooking. - Demonstration mode - Child lock - Extend mode - Drain mode - Descaling mode - Kitchen timer mode - When the display shows "Err, WATER (flashing)". - When Clock is set. - When the oven hold preheated condition.
Water	Leakage water from the bottom front of the oven.	<ul style="list-style-type: none"> * Check the drip tray is installed correctly. Remove and replace the drip tray correctly. See page 14. * Did you empty the drip tray before the cooking? You must empty the drip tray and replace it before Steam Cooking will start. See page 14.



TROUBLESHOOTING CHART

The following situations are normal and are not signs that the oven is malfunctioning.

QUESTION / SITUATION		ANSWER
Steam	Water is found inside the oven when the door is opened.	Steam has condensed inside the oven. Wipe dry with a soft cloth or a sponge after cooling.
	Steam comes out from the bottom of the oven.	The air ventilation openings are at the oven bottom (left side). It is normal for used steam to come from the air ventilation openings. Be aware that hot steam comes out during steam cooking, and keep children away from the oven.
	Condensed water can be seen in the oven cavity.	This operation is normal. Steam has condensed on the oven floor. Wipe dry with a soft cloth or a sponge after cooling.
	Steam comes from the door during cooking.	Check the door sealings to make sure it is lying smoothly and flat.
Noise / Sound	Noise during microwave cooking.	When microwaving, you may hear the magnetron cycling on and off depending on the power level.
	Noise after cooking.	The cooling fan will operate until the oven is cool. The fan may continue to operate up to 10 minutes depending on the oven and parts temperatures.
	Noise when cooking with high temperature.	High temperatures may cause expansion of the oven's components. This is normal.
Smoke / Aroma	When using the oven for the first time, it may smoke or smell.	See page 17 for step-by-step instructions for cleaning the oven before the first use.
Cooking result	The menu using the water does not have a good result.	<ul style="list-style-type: none"> * Did you fill the water tank with water to the MAX mark before cooking? * Did you take the water tank off from the oven during the cooking? Do not remove the water tank during the cooking except for the case instructed in the cookbook or the operation manual. * Did you use the glass tray? See the important instructions on page 14-15.
Food spatters	It is difficult to remove food spatters stuck on the oven walls.	See "For removal of OIL AND FOOD SPLASHES on oven walls:" on page 32. It is important to clean the oven interior after every use.
Others	Time appearing in the display is counting down very rapidly.	Check Demonstration Mode on page 31 and cancel.
	Hot air comes out from the bottom of the oven.	The air ventilation openings are at the oven bottom (left side). This is normal. Be aware that hot air comes out during Grill Mix cooking, and keep children away from the oven.

SERVICE CALL CHECK

Please check the following before calling for service:

1. Place one cup of water in a glass measuring cup in the oven and close the door securely.
Operate the oven for one minute on Microwave, HIGH 100% power.
 - A. Does the oven light come on? YES _____ NO _____
 - B. Does the cooling fan work? YES _____ NO _____
You will hear the fan sound.
 - C. Does the Microwave indicator appear in the display? YES _____ NO _____
 - D. After 1 minute does the signal sound? YES _____ NO _____
 - E. Is the water in the oven hot? YES _____ NO _____
2. Remove water from the oven and operate the oven for 5 minutes on Grill without preheat.
 - A. Does the Grill indicator appear in the display? YES _____ NO _____
 - B. After the oven stops, is inside of the oven hot? YES _____ NO _____
3. Fill the water tank with water and replace.
Operate the oven for 3 minutes on Steam Cook High.
 - A. After the oven stops, is the inside of the oven filled with steam? YES _____ NO _____

If “NO” is the answer to any of the above questions, please check electrical outlet, fuse and/or circuit breaker. If they are functioning properly, CONTACT YOUR NEAREST SHARP AUTHORIZED SERVICER. A microwave oven should never be serviced by a “do-it-yourself” repair person.

IMPORTANT: If the display shows nothing even if the power supply plug is properly connected, the Energy Save Mode may be in operation. Open and close the oven door to operate the oven. See page 17.

NOTES:

1. If time in the display is counting down very rapidly, check Demonstration Mode. (Please see page 31 for detail.)
2. If the oven is set for more than 30 minutes at 80, 90 or 100 percent power level, after the first 30 minutes the power level will automatically adjust to 70 percent power to avoid overcooking.

SPECIFICATIONS

AC Line Voltage:	Single phase 120V, 60Hz, AC only
AC Power Required:	1500 W 13A (Microwave) 1150 W 9.6A (Grill/Steam)
Output Power:	
Microwave	900W* (IEC Test Procedure)
Grill Heater	1100W
Steam	900W
Frequency:	2450 MHz
Outside Dimensions (WxHxD):	20 ^{1/2} " x 13" x 19 ^{5/8} " 520 mm x 330 mm x 500 mm
Cavity Dimensions (WxHxD)**:	13 ^{1/2} " x 8" x 15" 343 mm x 210 mm x 381 mm
Oven Capacity **:	1.0 cft / 27 L
Weight:	Approx. 44 lbs. / 20 kg

* The International Electrotechnical Commission's standardized method for measuring output wattage. This test method is widely recognized.

** Internal capacity is calculated by measuring maximum width, depth and height. Actual capacity for holding food is less.

CHART

Grilling chart

Use rack and glass tray.

FOOD		AMOUNT	OVEN SETTING	TIME	DONENESS	FOOD POSITION
Beef	Flank steak, 3/4 inch thick	1.0-1.5 lb.	Grill		Med. 160°F	3
	Steaks: Porterhouse, T-bone, Rib eye or Sirloin	1 1/2 inch thick	Grill		Med. 160°F	3
		3/4 inch thick	Grill		Med.Rare 145°F	3
	Hamburgers*, 1/2 inch thick	0.25 lb. each	Auto Grill, Hamburgers	Preset	160°F	3
Pork	Boneless loin chops, 3/4 inch thick	0.5-2.0 lb.	Grill Mix Low	15-25	160°F	3
	Bone-in loin or rib chops, 3/4 inch thick		Grill Mix Low	17-28	160°F	3
	Ham slice, fully cooked, 3/4 inch thick		Grill		Heated through	3
	Frankfurters	Up to 1.0lb.	Grill		160°F	3
Sausage	Fresh patties or links	0.75-1.0 lb.	Grill		Welldone	3
	Smoked	0.75-1.0 lb.	Grill	13-15	140°F	3
Lamb	Chops (rib or loin), 3/4 inch thick	3-4 oz. each	Grill Mix Low	12-15	160°F	2
Poultry	Boneless chicken breast halves*, 3/4 inch thick	0.5-2.0 lb.	Auto Grill, Boneless poultry	Preset	160°F	2
	Chicken pieces*	0.5-3.0 lb.	Auto Grill, Chicken pieces	Preset	180°F	2
Fish	Steaks, 3/4 inch thick	0.5-2.0 lb.	Grill Mix Low	20-25		2
Shellfish	Scallops, sea	Up to 1.0lb.	Grill with preheat	15-18	Opaque	2
	Shrimp, jumbo	Up to 1.0lb.	Grill with preheat	10-12	Opaque	2

* These menu are Health Cooking. See page 20 for the detail.

Steam chart

Use steam tray and glass tray.

FOOD		AMOUNT	OVEN SETTING	TIME	FOOD POSITION	
Dumplings	Asian, cook	8-16	Steam Cook High	13-15 min.	2	
Eggs	Poached*	1-4	Eggs, Poached eggs	Preset	2	
Fish	Filletts*, 1/4 - 1/2 inch thick	0.3-2.0 lb.	Fish, Fish fillets	Preset	2	
Poultry	Chicken breasts, boneless	0.3-2.0 lb.	Steam Cook High	20-30 min.	2	
Shellfish	Clams and Mussels, in shell	0.5-2.0 lb.	Steam Cook High	12-16 min.	2	
	Lobster tails, defrosted, 8 oz. each, in shell	1-4 tails	Steam Cook High	12-17 min.	2	
	Scallops	0.3-2.0 lb.	Steam Cook High	7-10 min.	2	
	Shrimp, medium	0.3-2.0 lb.	Steam Cook High	10-16 min.	2	
Vegetables Fresh	Asparagus spears*, medium	6-24 spears	Vegetables, Quick cooking	Preset	2	
	Broccoli florets*	Baby	1-6 cups	Vegetables, Quick cooking	Preset	2
		Sliced, 1/4-inch thick slices	1-6 cups	Vegetables, Med cooking	Preset	2
	Cauliflower florets*	1-6 cups	Vegetables, Quick cooking	Preset	2	
	Corn on the cob*	1-6 ears	Vegetables, Long cooking	Preset	2	
	Green beans*, cut into 2-inch pieces	1-6 cups	Vegetables, Med cooking	Preset	2	
	Greens	Bok choy, chopped	1-6 cups	Steam Cook High	5-8 min.	2
		Chinese broccoli, chopped	1-6 cups	Steam Cook High	5-8 min.	2
		Chinese cabbage, chopped	1-6 cups	Steam Cook High	5-8 min.	2
		Kale, torn	1-6 cups	Steam Cook High	5-8 min.	2
		Spinach, torn	1-6 cups	Steam Cook High	5-8 min.	2
	Potatoes, new	Cut, 1 1/2-inch wedges	0.5-2.0 lb.	Steam Cook High	30-35 min.	2
		Whole, 1 1/2-inch diameter	0.5-2.0 lb.	Steam Cook High	30-35 min.	2
	Squash*	Acorn squash, small, cut into halves	1-4 halves	Vegetables, Long cooking	Preset	2
		Zucchini, 1/4-inch thick slices	1-6 cups	Vegetables, Quick cooking	Preset	2

* These menu are Health Cooking. See page 18,19 for the detail.

RECIPES

Basil Chicken Kabobs

- ½ pound boneless chicken breast, cut into 12 cubes
- 12 large fresh basil leaves
- 1 yellow pepper, cut into 12 (1-inch) squares
- 6 medium white or brown mushrooms, stemmed
- 6 (4-inch) wooden skewers
- 6 cherry tomatoes
- ¼ cup orange juice
- 1 tablespoon walnut oil
- 1 tablespoon balsamic vinegar
- 1 tablespoon honey
- ½ teaspoon prepared mustard
- freshly ground pepper

Makes 6 kabobs

Wrap each chicken cube with a basil leaf. Thread 1 wrapped chicken cube, one pepper square, one mushroom and another chicken cube on each skewer. Place them in the greased steam tray on the glass tray. Place all on the lower position.

Press **Steam Cook High** and enter 18-20 minutes. Press **Minute Plus/START**.

While kabobs are cooking, in small bowl, combine all remaining ingredients for sauce. Remove kabobs from oven and add a cherry tomato to the end of each skewer. Serve kabob with sauce.

Nutritional analysis per serving:

Calories:	90	Fat:	3 g.
Protein:	9 g.	Cholesterol:	20 mg.
Carbohydrate:	7 g.	Sodium:	35 mg.

Steamed Moneybags

- ½ pound lean ground pork
- 8 large raw shrimp (about 2 ½ ounces)
- 1 egg white
- 1 teaspoon cornstarch
- 1 teaspoon sesame oil
- 1 teaspoon grated fresh ginger
- ½ teaspoon salt
- ½ teaspoon crushed red pepper flakes
- 1 small garlic clove, minced
- 2 scallions, finely chopped
- 2 canned water chestnuts, drained and finely chopped
- 2 fresh Chinese long green beans, finely chopped
- 16 (3-inch) square thin wonton wrappers

Makes 16 dumplings

In food processor, blend pork and shrimp until smooth. With the motor running, add the egg white, cornstarch, sesame oil, ginger, salt, pepper and garlic. In medium bowl, combine pork mixture, scallions, water chestnuts and beans.

Holding one wonton wrapper in palm of your hand, moisten edge of wonton wrapper. Place a scant 1 tablespoon of pork filling in center of wrapper. Bring sides of wrapper up around filling, pleating the wrapper as you go. Tap bottom of dumpling against the work surface to flatten it. Gently twist tops and press together. Tie each moneybag with a chive "string", if desired. Repeat with remaining wrappers and filling.

Spray steam tray with nonstick cooking spray. Arrange moneybags in steam tray. Place steam tray on the glass tray. Place all on the lower position.

Press **Steam Cook High** and enter 15-17 minutes. Press **Minute Plus/START**.

Note: You may chop the scallions, water chestnuts and green beans in the food processor.

* Dip long chives in boiling water to soften for easier tying.

Nutritional analysis per serving:

Calories:	60	Fat:	2.5 g.
Protein:	5 g.	Cholesterol:	15 mg.
Carbohydrate:	5 g.	Sodium:	135 mg.

RECIPES

Pork Dumplings with Dipping Sauce

- 1/3 pound ground lean pork
- 1/3 cup finely chopped button mushrooms (about 1 ounce)
- 3 scallions, chopped
- 1/2 small carrot, peeled and finely chopped
- 1 celery rib, finely chopped
- 2 tablespoons soy sauce
- 1 teaspoon sesame oil
- 36 potsticker or Hong Kong dumpling wrappers*
- 2 tablespoons soy sauce
- 1 medium green chile pepper, chopped
- 1/2 teaspoon dark sesame oil
- 2 teaspoons brown sugar
- 1 tablespoon sherry

Makes 36 dumplings

In medium bowl, mix the first seven ingredients together well. Working with 2 or 3 wrappers at a time, place rounded teaspoon of mixture in center of each wrapper. Moisten edges with finger dipped in cold water, then press edges together firmly to form half moon. Continue until all pork mixture has been used.

Spray steam tray with nonstick cooking spray. Place 18 dumplings in the each steam tray leaving some space between. Place one steam tray on the glass tray. Place trays on the upper and lower position.

Press **Steam Cook High** and enter 16-18 minutes. Press **Minute Plus/START**.

Combine remaining five ingredients for the dipping sauce.

* You may also use round wrappers called Gyoza wrappers or you can use square wonton wrappers and trim the corners to form a circle.

Nutritional analysis per serving:

Serving size: 2 dumplings

Calories:	60	Fat:	1.5 g.
Protein:	3 g.	Cholesterol:	5 mg.
Carbohydrate:	8 g.	Sodium:	380 mg.

Chicken & Bacon Dumplings

- 6 Chinese dried mushrooms
- 1/4 pound very lean bacon, coarsely chopped
- 1/4 pound boneless chicken breast, coarsely chopped
- 1 tablespoon cornstarch
- 1 tablespoon oil
- 10 canned water chestnuts, drained and finely chopped
- 1 tablespoon dry sherry
- 1 teaspoon sugar
- 1 teaspoon sesame oil
- 1 1/2 tablespoons dark soy sauce
- 1 teaspoon minced garlic
- 36 potsticker or Hong Kong dumpling wrappers*
- 36 single leaves of cilantro

Makes 36 dumplings

In small bowl, place mushrooms and 2 cups boiling water. Cover and set aside for 15 minutes. Drain and squeeze as dry as possible. Remove and discard the stems and any hard pieces. Finely chop the rest and put in bowl.

In small or large food processor, blend bacon, chicken and cornstarch into a paste.

In medium skillet over high heat, heat oil. Swirl to cover the bottom. Add the chicken mixture and stir-fry, breaking up any lumps, until opaque. Add the next six ingredients and mushrooms. Stir-fry until heated through, to mix the flavors, about 2 to 3 minutes. Turn into medium bowl. Cover and chill.

Work with 2 or 3 wrappers at a time. Keep remainder covered. Put 1 teaspoon of the chicken mixture in the center of each wrapper. Put a cilantro leaf on top of the mixture. Dip your finger in water and run it around the edge of the wrapper. Bring the edges together firmly to form a half moon. Press between fingers to seal edges. Set finished dumplings aside, covered, until all the dumplings have been made.

Spray steam tray with nonstick cooking spray. Place 18 dumplings in the each steam tray leaving some space between. Place one steam tray on the glass tray. Place trays on the upper and lower position.

Press **Steam Cook High** and enter 16-18 minutes. Press **Minute Plus/START**.

Serve hot, with soy sauce seasoned with freshly ground pepper.

* You may also use round wrappers called Gyoza wrappers or you can use square wonton wrappers and trim the corners to form a circle.

Nutritional analysis per serving:

Calories:	30	Fat:	1 g.
Protein:	1 g.	Cholesterol:	0 mg.
Carbohydrate:	4 g.	Sodium:	100 mg.



RECIPES

Mussels with Herb Butter Sauce

- 2 pounds fresh mussels
- ¼ cup butter, softened
- 1 clove garlic, minced
- 1 tablespoon chopped fresh parsley
- 1 tablespoon chopped fresh chives or basil
- ½ teaspoon grated lime or lemon zest
- freshly cracked black pepper to taste

Makes 6 servings

Scrub mussels under cold, running water with a nylon pad or stiff brush. Remove hair-like “beards”, if present. Discard mussels that are cracked or do not close when tapped.

Place mussels in the steam tray on the glass tray. Place all on the lower position. Press **Steam Cook High** and enter 14-16 minutes. Press **Minute Plus/START**.

While mussels are steaming, combine remaining ingredients and set aside. At end, spoon butter mixture onto each mussel. Serve immediately.

Nutritional analysis per serving:

Calories:	200	Fat:	11 g.
Protein:	18 g.	Cholesterol:	60 mg.
Carbohydrate:	6 g.	Sodium:	490 mg.

Teriyaki Fish Fillets

- ½ cup water
- ¼ cup soy sauce
- ¼ cup dry sherry
- 2 tablespoons packed brown sugar
- ½ teaspoon ground ginger
- 1/8 teaspoon garlic powder
- 1 pound thin fish fillets, fresh or defrosted

Makes 4 servings

In 8-inch square glass baking dish, combine all ingredients except fish. Stir until blended. Add fish, turning once to coat both sides. Cover with plastic wrap. Refrigerate 1 hour.

Spray the steam tray with nonstick cooking spray. Lift fish fillets from marinade and drain well. Arrange on the steam tray.

Place the steam tray on the glass tray. Place all on the lower position in the oven. Press **Steam Cook High** and enter 16-18 minutes. Press **Minute Plus/START**.

Nutritional analysis per serving:

Calories:	130	Fat:	1 g.
Protein:	21 g.	Cholesterol:	55 mg.
Carbohydrate:	7 g.	Sodium:	1000 mg.

Italian Stuffed Peppers

- 3 medium red, orange or yellow bell peppers
- 1 pound 93% lean ground beef
- 1 (8-ounce) can tomato sauce, divided
- ½ cup uncooked instant rice
- 1 egg, slightly beaten
- ½ teaspoon dried oregano leaves, crushed
- ½ teaspoon salt
- ¼ teaspoon pepper
- 1/8 teaspoon garlic powder

Makes 6 servings

Cut peppers in half lengthwise. Remove seeds and membranes. Set aside.

In large bowl, mix ground beef, all but ¼ cup tomato sauce, rice, egg, oregano, salt, pepper and garlic powder. Spoon into pepper halves.

Spray steam tray with nonstick cooking spray and arrange pepper halves in it. Place steam tray on the glass tray. Place all on the lower position in the oven.

Press **Steam Cook High** and enter 35 minutes. Press **Minute Plus/START**.

When the oven stops, carefully open door and top each pepper half evenly with remaining ¼ cup tomato sauce. Fill the water tank. Press **Steam Cook High** and enter 5-8 minutes and press **Minute Plus/START**.

Nutritional analysis per serving:

Calories:	170	Fat:	6 g.
Protein:	16 g.	Cholesterol:	75 mg.
Carbohydrate:	13 g.	Sodium:	450 mg.

Orange Carrots

- 4 large carrots (approximately 1 pound) peeled and cut in ¼-inch slices or 1 pound baby carrots
- 2 tablespoons butter or margarine
- 1 tablespoon grated orange peel
- 1 teaspoon sugar of equivalent artificial sweetener

Makes 6 servings

Place carrot slices in steam tray on the glass tray. Place all on the lower position. Press **Steam Cook High** and enter 18-20 minutes. Press **Minute Plus/START**.

While carrots are steaming, in serving bowl, combine remaining ingredients. Add steamed carrots to orange mixture. Toss to coat. Serve hot.

Nutritional analysis per serving:

Calories:	60	Fat:	4 g.
Protein:	1 g.	Cholesterol:	10 mg.
Carbohydrate:	7 g.	Sodium:	75 mg.

RECIPES

Corn on the Cob with a Twist

- 1 tablespoon light soy sauce
- 1 tablespoon olive oil
- ½ teaspoon sesame oil
- 1 clove garlic, minced
- 4 ears fresh corn, husks and silk removed

Makes 4 servings

In resealable plastic bag, combine first four ingredients. Add corn ears. Turn to coat corn. Seal. Refrigerate for several hours or overnight, turning corn ears occasionally.

Lift corn out of bag. Discard marinade. Wrap each ear in parchment paper, twisting the ends to seal. Place ears in the steam tray, trimming ends to fit in the tray. Place the tray on the glass tray. Place all on the lower position. Press **Steam Cook High** and enter 30-33 minutes. Press **Minute Plus/START**.

Carefully remove parchment. Serve hot.

Nutritional analysis per serving:

Calories:	110	Fat:	5 g.
Protein:	3 g.	Cholesterol:	0 mg.
Carbohydrate:	18 g.	Sodium:	160 mg.

Green Vegetable Medley

- ½ cup frozen green peas
- 4 baby zucchini or pattypan squash
- 12 fresh green beans
- 12 small asparagus spears
- 12 sugar snap peas
- 12 snow peas
- 2 tablespoons butter or margarine
- 4 green onions, sliced
- 1 inch fresh ginger, peeled and grated
- 2 tablespoons lemon juice
- 3 tablespoons soy sauce

Makes 4 servings

Place frozen peas in a small custard cup and put in the center of the steam tray. Rinse and trim ends of next 5 vegetables. Place in the steam tray. Place the steam tray on the glass tray. Place all on the lower position.

Press **Steam Cook High** and enter 12-14 minutes. Press **Minute Plus/START**.

After vegetables are done, remove from oven and wipe up any remaining moisture. In small microwave-safe bowl, combine remaining ingredients. Put in oven. Press **Microwave** and enter 1-2 minutes and 100% power. Press **Minute Plus/START**.

Nutritional analysis per serving:

Calories:	110	Fat:	6 g.
Protein:	5 g.	Cholesterol:	15 mg.
Carbohydrate:	9 g.	Sodium:	750 mg.

Green Beans Almondine

- 1 pound fresh green beans
- ¼ cup slivered almonds
- 2 tablespoons butter or margarine
- ¼ teaspoon salt
- ¼ teaspoon ground nutmeg
- ¼ teaspoon pepper

Makes 6 servings

Rinse beans. Break off ends. Break beans into 1 to 1½-inch pieces. Place beans in steam tray. Place steam tray on the glass tray. Place all on the lower position.

Press **Steam Cook High** and enter 18-20 minutes. Press **Minute Plus/START**.

When green beans are done, remove them from oven and wipe up any remaining moisture. In medium microwave-safe serving dish, mix almonds, butter, salt, nutmeg and pepper. Put them in oven. Press **Microwave** and enter 1 minute and 100% power. Press **Minute Plus/START**.

Add cooked beans to butter mixture and toss to coat. Serve hot.

Nutritional analysis per serving:

Calories:	80	Fat:	6 g.
Protein:	2 g.	Cholesterol:	10 mg.
Carbohydrate:	6 g.	Sodium:	130 mg.

Savory Cauliflower

- 1 medium whole cauliflower (about 1½ pounds)
- ¼ cup shredded Cheddar cheese
- 2 tablespoons butter, melted
- ¼ cup fresh bread crumbs
- ¼ teaspoon black pepper
- 1 tablespoon chopped fresh parsley

Makes 6 servings

Rinse cauliflower. Cut out core. Place cauliflower in steam tray on the glass tray. Put all on the lower level in the oven.

Press **Steam Cook High** and enter 32-35 minutes. Press **Minute Plus/START**.

While cauliflower is steaming, in medium bowl, combine remaining ingredients. Place cooked cauliflower on serving platter and quickly top with cheese mixture. Serve hot.

Nutritional analysis per serving:

Calories:	90	Fat:	6 g.
Protein:	4 g.	Cholesterol:	15 mg.
Carbohydrate:	7 g.	Sodium:	105 mg.



RECIPES

Ginger Pork Kabobs

- 1 egg, beaten
- 1/2 cup crushed chow mein noodles
- 1/4 cup apple juice
- 2 tablespoons soy sauce
- 1 tablespoon grated gingerroot
- 1 pound ground pork
- 1 can (8 ounces) pineapple chunks (juice pack), drained
- 1 large red pepper, cut into 3/4-inch chunks
- 1/2 cup apple juice
- 2 tablespoons cider vinegar
- 1 teaspoon cornstarch

Makes 4 servings

Mix egg, crushed noodles, 1/4 cup apple juice, soy sauce and gingerroot. Crumble ground pork into mixture; blend thoroughly, shape into 1-inch balls. Set aside.

For glaze, mix 1/2 cup apple juice, vinegar and cornstarch in small bowl. Microwave at HIGH (100%) until thickened, 3-4 minutes, stirring every 30 seconds.

Thread pork balls alternately with pineapple and red pepper chunks on 4 wooden or metal skewers. Place them on rack in the glass tray.

Brush kabobs with glaze. Place all on the lower position in the oven. Press **Grill Mix Low** and enter 25-30 minutes. Press **Minute Plus/START**. Turn over halfway through grill time and brush with glaze. Brush with remaining glaze before serving.

Per Serving:			
Calories:	256	Fat:	7 g.
Protein:	29 g.	Cholesterol:	153 mg.
Carbohydrate:	18 g.	Sodium:	652 mg.

Honey Mustard Chicken

- 1/2 cup coarse ground mustard
- 1/4 cup Dijon-style mustard
- 1/4 cup honey
- 2 to 3 pounds boneless chicken breasts and thighs, skin removed

Makes 4 servings

Combine coarse mustard, Dijon mustard and honey. Set aside.

Place chicken in 10-inch oven-safe dish. Put dish in the glass tray. Place all on the lower position in the oven. Press **Grill Mix High** and enter 25-30 minutes. Press **Minute Plus/START**. Turn over halfway through grill time and pour off any liquid and brush with sauce to cover chicken pieces completely.

Chicken next to bone should no longer be pink at end.

Per Serving:			
Calories:	368	Fat:	8 g.
Protein:	50 g.	Cholesterol:	133 mg.
Carbohydrate:	19 g.	Sodium:	950 mg.

Steak Kabobs

- 1/4 cup sugar
- 1/4 cup soy sauce
- 1/4 cup white wine
- 1 tablespoon vegetable oil
- 1 teaspoon ground ginger
- 1/4 teaspoon salt
- 2 pounds lean top beef round steak, cut into 1-inch cubes
- 2 large green peppers, cut into chunks
- 8 cherry tomatoes, cut into halves
- 1 can (8 ounces) pineapple chunks (juice pack), drained

Makes 4 servings

Mix sugar, soy sauce, wine, oil, ginger and salt in medium bowl. Stir in steak cubes; cover. Marinate at room temperature 1 hour or at least 4 hours in refrigerator.

Remove steak cubes from marinade; reserve marinade. Thread steak cubes alternately with remaining ingredients on 8 wooden or metal skewers. Place on rack in the glass tray. Place all on the lower position in the oven. Press **Grill Mix Low** and enter 15 minutes. Press **Minute Plus/START**. Turn and brush with marinade. Continue to cook for 15-20 minutes on **Grill Mix Low** or until desired doneness.

Per Serving:			
Calories:	432	Fat:	17 g.
Protein:	52 g.	Cholesterol:	153 mg.
Carbohydrate:	15 g.	Sodium:	381 mg.

RECIPES

Grilled Salmon with Basil Sauce

- 2 tablespoons olive oil
- 1 clove garlic, minced
- ¼ cup white wine
- 2 tablespoons lemon juice
- 1 cup fresh basil*
- ¼ cup grated Parmesan cheese
- ½ teaspoon Dijon-style mustard
- 4 salmon steaks (1¼ to 1½ pounds) or haddock, halibut, swordfish
- Cayenne pepper

Makes 4 servings

Combine oil, garlic, white wine and lemon juice in blender. Add basil, Parmesan cheese and mustard and blend until smooth.

Put one-fourth of basil sauce in bottom of 9-inch oven-safe dish. Arrange steaks on sauce and pour remaining sauce over tops of steaks. Sprinkle with cayenne.

Place dish on the glass tray. Place all on the lower position in the oven. Press **Grill Mix Low** and enter 20-25 minutes. Press **Minute Plus/START**. Fish flakes easily when tested with a fork at end.

*If not available, substitute ½ cup fresh parsley and 2 tablespoons dried basil.

Per Serving:			
Calories:	357	Fat:	21 g.
Protein:	35 g.	Cholesterol:	97 mg.
Carbohydrate:	2 g.	Sodium:	209 mg.

Crunchy Crab Boats

- 1 can (6 ounces) fancy white crabmeat, drained
- 1 package (3 ounces) cream cheese, softened
- ½ cup chopped almonds
- 2 tablespoons green onions, chopped
- 1 tablespoon dry white wine
- 1 teaspoon lemon juice
- 1 teaspoon prepared horseradish
- ¼ teaspoon garlic powder
- ¼ teaspoon salt
- Dash of white pepper
- Dash of cayenne pepper
- 2 hard rolls, cut in half
- ¼ cup shredded Swiss cheese

Makes 4 servings

Remove any bits of shell or cartilage from crab. Combine with next 10 ingredients. Mix well. Set aside. Toast rolls on **GRILL** for 3-5 minutes.

Spread one-fourth of crab filling on each roll half. Place Swiss cheese on top of each. Place them on rack in the glass tray. Place all on the lower position in the oven. Press **Grill** and enter 14-16 minutes. Press **Minute Plus/START**. Cook until cheese is melted and crab is hot. Sprinkle with paprika and serve.

Per Serving:			
Calories:	292	Fat:	19 g.
Protein:	15 g.	Cholesterol:	57 mg.
Carbohydrate:	15 g.	Sodium:	416 mg.

Spicy Shrimp

- ¼ cup white wine
- ¼ cup water
- 3 tablespoons soy sauce
- 2 tablespoons sugar
- 1 tablespoon vegetable oil
- 2 teaspoons dried parsley flakes
- ⅛ to ¼ teaspoon ground ginger
- Dash of hot pepper sauce
- 1 pound jumbo raw shrimp, shelled and deveined

Makes 4 servings

Mix all ingredients except shrimp in medium bowl. Stir in shrimp; cover. Marinate at room temperature 45 minutes or 3 hours in refrigerator.

Remove shrimp from marinade; reserve marinade. Place shrimp on the glass tray. Press **Grill** twice and enter 10 minutes. Press **Minute Plus/START** to start preheating. After preheated, Place the tray on the lower position in the oven. Brushing with marinade after half the time.

Microwave remaining marinade at HIGH (100%) 2-3 minutes. Serve over rice or as a dipping sauce when served as an appetizer, if desired.

Per Serving:			
Calories:	109	Fat:	2 g.
Protein:	18 g.	Cholesterol:	129 mg.
Carbohydrate:	3 g.	Sodium:	319 mg.

Grilled Herbed Vegetables

- 2 pounds fresh vegetables of your choice (red onion, peppers, zucchini, portobello mushrooms, eggplant, etc.)
- ⅓ cup olive oil
- 2 tablespoons chopped fresh herbs or 2 teaspoons of dried herbs (thyme, rosemary, oregano, tarragon, etc.)

Makes 8 servings

Coat prepared vegetables with seasoned olive oil. Allow to stand for 30 minutes. Drain and pat dry. Place vegetables on the glass tray. Place the tray on the lower position in the oven. Press **Grill** and enter 25-30 minutes. Press **Minute Plus/START**. Turning frequently until vegetables are tender when pierced with a fork and browned. Serve hot or at room temperature.

Per Serving: Will depend on the varieties of vegetables used.			
Calories:	60	Fat:	6 g.
Protein:	1 g.	Cholesterol:	0 mg.
Carbohydrate:	2 g.	Sodium:	0 mg.

TOUCH GUIDE

For more detailed information and safety precautions, read all instructions carefully in this Operation Manual.

Basic Operation

ENERGY SAVE MODE

If you do not operate the oven for 3 minutes or more (i.e. after closing the door, or pressing **STOP/CLEAR**, or at the end of cooking), you will not be able to operate the oven until you open and close the oven door.
Note: When you set Clock, Energy Save Mode will be canceled.

OPERATION HELP FOR STEAM COOKING

BEFORE COOKING:

1. Make sure that the water tank is filled to the MAX mark with fresh cold tap water and is installed properly.

BASIC CARE:

Please refer to the Operation Manual for complete details.

AFTER COOKING:

1. After the oven has cooled, remove and empty the water tank. Wipe the oven cavity dry.
2. Remove and empty the drip tray.

1. Drain water
2. Descal - When "DESCALE (flashing)" appears in the display, descale the oven.

Automatic Operation (See page 18-24 for details)

1. Press the desired cooking key and cooking number.
2. Enter the weight by pressing number or enter the quantity by pressing the same number key that you pressed at 1.
3. Place food in the oven following the directions in the Cooking Guide or indicator(s) in the display.
4. Press **Minute Plus/START**.

Note: Procedure for sensor popcorn is different from above. See page 21.

Healthy Cooking

Steam cooks foods gently while retaining moisture, natural flavours and nutrients. Make sure the water tank filled to the MAX. Automatic options are detailed below.

Vegetables

- 1: Quick cooking
- 2: Med cooking
- 3: Long cooking

Fish

- 1: Fish steaks
- 2: Fish fillets

Steam Defrost

- 1: Fish steaks
- 2: Fish fillets

Combination Meal

- 1: Quick veg + Fish/Chicken fillets
- 2: Med veg + Fish/Chicken fillets
- 3: Long veg + Fish/Chicken fillets

Eggs

- 1: Poached eggs
- 2: Hard boiled eggs

Auto Grill

- 1: Hamburgers
- 2: Boneless poultry
- 3: Chicken pieces

Note: Foods in Auto grill are not cooked by steam.

Sensor Popcorn

- 1: Regular
- 2: Regular light
- 3: Mini

Micro Defrost

- 1: Ground meat
- 2: Chicken bone-in
- 3: Chicken boneless
- 4: Steaks, Chops

Micro Reheat/Cook

- 1: Sensor reheat
- 2: Frozen entrees
- 3: Fresh vegetables: quick cooking
- 4: Fresh vegetables: longer cooking
- 5: Frozen vegetables
- 6: Baked potatoes
- 7: Beverage
- 8: Fresh roll, muffin
- 9: Frozen roll, muffin

Manual Operation (See page 25-28 for details)

Cook manually when preparing foods that do not have Auto Settings.

1. Select the cooking mode by pressing the desired cooking mode key.
2. Enter the desired cooking time by pressing **TIME**.
3. Follow the directions in the operation manual.
4. Press **Minute Plus/START**.

Manual Cooking Chart

Cooking mode	Temp/power range	Time range	Water tank
Steam Cook	High	0 - 35 min.	YES
	Low	0 - 60 min.	YES
Grill	—	0 - 99 min. 99 sec.	NO
	High	0 - 99 min. 99 sec.	NO
Combi	Grill: 50% power Microwave: 50% power	0 - 99 min. 99 sec.	NO
	Grill: 90% power Microwave: 10% power	0 - 99 min. 99 sec.	NO
Microwave	0 - 100% power	0 - 99 min. 99 sec.	NO
	—	0 - 99 min. 99 sec.	NO

* You can set the temperature from 160°F to 200°F in multiples of 5°F. (Initial setting : 190°F)

Food and Utensil Position Chart

Cooking mode	Food and utensil position (Refer to Figure 1 above.)		
	2 layer cooking	3: Upper	2: Lower
Steam Cook	High	—	Food, Steam tray
	Low	Food, Steam tray	Glass tray (No food)
Grill	NO	—	—
	NO	Food	Rack or dish
Combi	High	—	Glass tray
	Low	—	Food, Microwave safe container
Microwave	NO	—	Food, Microwave safe container
	NO	—	Glass tray - See NOTE 2.

Notes:

1. Select desired position depending on the food size. Position 2 or position 3 is recommended for most recipes. Place the food and glass tray on position 1 when roasting big portions to prevent touching food to the oven ceiling. Smoke will occur during the cooking if the food touches the grill heating element.
2. For cooking cake, meatloaf and baked potato.
3. Do not leave the steam tray and rack wet after use.

WARNING for stacking the steam tray and glass tray:

After cooking, take out the steam tray first. See Figure 2. Be aware of excess water from steam tray, we recommend you place it directly on a flat dish or tray to avoid spillages. Before taking out the glass tray, make sure that it is cool. Be aware that there may be water on the glass tray, so take care when removing it.

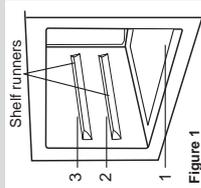


Figure 1

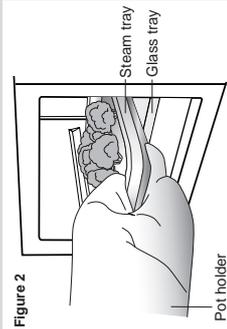


Figure 2

Info (See page 30-31 for details)

Info key provides 8 features.

- 1: Drain
- 2: Descal
- 3: Water hardness
- 4: Demo
- 5: Child lock
- 6: Sound on/off
- 7: Clock
- 8: Energy save mode

Note:
Please see page 17 before setting clock.