SAMSUNG

Microwave Oven

Owner's Manual

MW123H / ME123H
MW103H / ME103H

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Safety

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

Failure to observe the following safety precautions may result in harmful exposure to microwave energy.

(a) Under no circumstances should any attempt be made to operate the oven with the door open or to tamper with the safety interlocks (door latches) or to insert anything into the safety interlock holes.

(b) Do not place any object between the oven door and front face or allow food or cleaner residues to accumulate on sealing surfaces. Ensure that the door and door sealing surfaces are kept clean by wiping after use first with a damp cloth and then with a soft dry cloth.

(c) Do not operate the oven if it is damaged until it has been repaired by a qualified microwave service technician trained by the manufacturer. It is particularly important that the oven door closes properly and that there is no damage to the:
(1) Door (bent)
(2) Door hinges (broken or loose)
(3) door seals and sealing surfaces

(d) The oven should not be adjusted or repaired by anyone other than a properly qualified microwave service technician trained by the manufacturer.

Safety Precautions

IMPORTANT SAFETY INSTRUCTIONS. READ CAREFULLY AND KEEP FOR FUTURE REFERENCE. Before cooking food or liquids in your microwave oven, please check that the following safety precautions are taken.

- Only use utensils that are suitable for use in microwave ovens;
  DO NOT use any metallic containers, Dinnerware with gold or silver trimmings, Skewers, forks, etc.
  Remove wire twist ties from paper or plastic bags.

Reason: Electric arcing or sparking may occur and may damage the oven.

- When heating food in plastic or paper containers, keep an eye on the oven due to the possibility of ignition;
  Do not use your microwave oven to dry papers or clothes.
- Small amounts of food require shorter cooking or heating time.
  If normal times are allowed they may overheat and burn.
- If smoke is observed, switch off or unplug the appliance and keep the door closed in order to stifle any flames;
- Microwave heating of beverages can result in delayed eruptive boiling, therefore care must be taken when handling the container; To prevent this situation
  ALWAYS allow a standing time of at least 20 seconds after the oven has been switched off so that the temperature can equalize.
  Stir during heating, if necessary, and ALWAYS stir after heating.
  In the event of scalding, follow these FIRST AID instructions:
  * Immerse the scalded area in cold water for at least 10 minutes.
  * Cover with a clean, dry dressing.
  * Do not apply any creams, oils or lotions.
- **NEVER** fill the container to the top and choose a container that is wider at the top than at the bottom to prevent the liquid from boiling over. Bottles with narrow necks may also explode if overheated.
  NEVER heat a babys bottle with the teat on, as the bottle may explode if overheated.
- The contents of feeding bottles and baby food jars shall be stirred or shaken and the temperature checked before consumption, in order to avoid burns;
- Eggs in their shell and whole hard-boiled eggs should not be heated in microwave ovens since they may explode, even after microwave heating has ended;
  Also do not heat airtight or vacuum-sealed bottles, jars, containers, nuts in shells, tomatoes etc.
- The oven should be cleaned regularly and any food deposits removed;
- Failure to maintain the oven in a clean condition could lead to deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation;
- **DO NOT** cover the ventilation slots with cloths or paper. They may catch fire as hot air is evacuated from the oven.
  The oven may overheat and automatically switch itself off. It will remain inoperable until it has cooled sufficiently.
- **ALWAYS** use oven gloves when removing a dish from the oven to avoid unintentional burn.

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Safety Precautions

- **DO NOT** touch heating elements or interior oven walls until the oven be cooled down.
- Do not immerse the power cable or plug in water and keep the power cable away from heated surfaces.
  Do not operate this appliance if it has a damaged power cable or plug.
- Stand at arms length from the oven when opening the door.

Reason: The hot air or steam released may cause scalding.

- You may notice a Clicking sound during operation(especially when the oven is defrosting).

Reason: This sound is normal when the electrical power output is changing.

- **DO NOT** operate the microwave oven when it is empty. The power will be cut off automatically for safety. You can operate normally after letting it stand for over 30 minutes.
  It is best to leave a glass of water inside the oven at all times.The water will absorb the microwaves energy if the oven accidently started.
- The microwave oven shall not be placed in a cabinet.

IMPORTANT

- Young children should **NEVER** be allowed to use or play with the microwave oven. Nor should they be left unattended near the microwave oven when it is in use. Items of interest to children should not be stored or hidden just above the oven.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

WARNING:
If the door or door seals are damaged, the oven must not be operated until it has been repaired by a competent person.

WARNING:
It is hazardous for anyone other than a comperent person to carry out any service or repair operation which involves the removal of a cover which gives protection against exposure to microwave energy.

WARNING:
Liquids and other foods must not be heated in sealed containers since they are liable to explode.

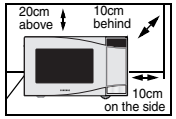
WARNING:
Only allow children to use the oven without supervision when adequate instructions have been given so that the child is able to use the oven in a safe way and understands the hazards of improper use.

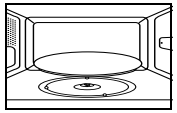
Please recycle or dispose of the packaging material for this product in an environmentally responsible manner.

Please contact your local authorities in regard to the enviromentally safe disposal of this product.

Installing Your Microwave Oven

Place the oven on a flat level surface 85cm above the floor. The surface should be strong enough to safety bear the weight of the oven.





1. When you install your oven, make sure there is adequate ventilation for your oven by leaving at least 10 cm (4 inches) of space behind and, on the sides of the oven and 20 cm (8 inches) of space above.
2. Remove all packing materials inside the oven.
   Install the roller ring and turntable.
   Check that the turntable rotates freely.
3. This microwave oven has to be positioned so that plug is accessible.

☛ The appliance is not intended for installing in road vehicles, caravans and similar vehicles etc.

☛ If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
For your personal safety, plug the cable into a 3-pin, 240 Volt, 50Hz, AC earthed socket. If the power cable of this appliance is damaged, it must be replaced by a special cable.

☛ Do not install the microwave oven in hot or damp surroundings like next to a traditional oven or radiator. The power supply specifications of the oven must be respected and any extension cable used must be of the same standard as the power cable supplied with the oven. Wipe the interior and the door seal with a damp cloth before using your microwave oven for the first time.

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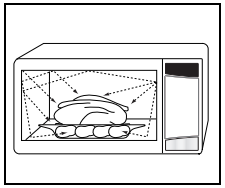
How a Microwave Oven Works

Cooking Principle



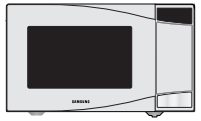
1. The microwaves generated by the magnetron are distributed uniformly as the food rotates on the turntable. The food is thus cooked evenly.
2. The microwaves are absorbed by the food up to a depth of about 1 inch (2.5 cm). Cooking then continues as the heat is dissipated within the food.
3. Cooking times vary according to the container used and the properties of the food:
   - Quantity and density
   - Water content
   - Initial temperature (refrigerated or not)

☛ As the centre of the food is cooked by heat dissipation, cooking continues even when you have taken the food out of the oven. Standing times specified in recipes and in this booklet must therefore be respected to ensure:
- Even cooking of the food right to the centre
- The same temperature throughout the food

Your New Microwave oven

Checking Parts

Unpack your microwave oven and check to make sure that you have all the parts shown here. If any part is missing or broken, call your dealer.



Microwave oven

Glass tray

Roller guide ring

Warranty and Service Information

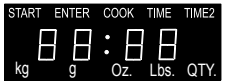
- When contacting Samsung, please provide the specific model and serial number information which is usually located on the back or bottom of the product. Please record these numbers below, along with the other requested information. Keep this information in a safe place as a permnent record of your purchase to aid in identification in case of theft or loss, and a copy of your sales receipt as a proof of purchase if waranty service is needed.

MODEL NUMBER _____
SERIAL NUMBER _____
DATE PURCHASED _____
PURCHASED FROM _____

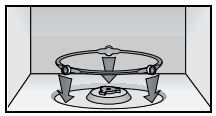
Warranty service can only be performed by a Samsung Authorized Service Center. If you should require warranty service, provide the above information with a copy of your sales receipt to the Samsung Authorized Service Center.

Setting Up Your Microwave Oven

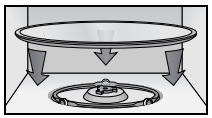
1. Place the oven on a flat, sturdy surface and plug the cord into a grounded outlet. once plugged in, the display on your oven will show:



   Make sure there is adequate ventilation for your oven by leaving at least four inches of space behind, above, and to the side of the oven.
2. Open the oven door by pressing the button below the control panel.
3. Wipe the inside of the oven with a damp cloth.
4. Place the pre-assembled ring in the indentation in the center of the oven.



5. Place the glass tray on top of the ring so that the three glass tabs in the center of the tray fit securely into the tabs on the floor of the oven.)



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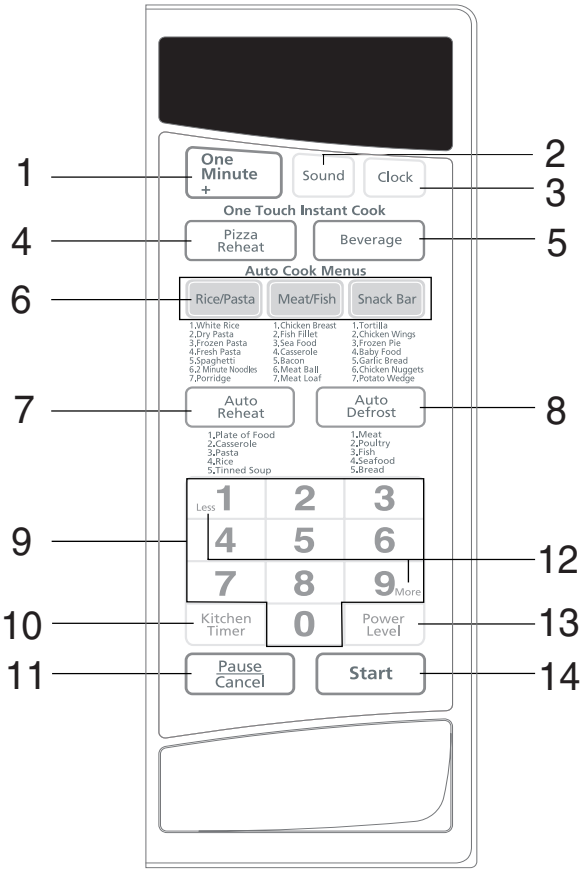
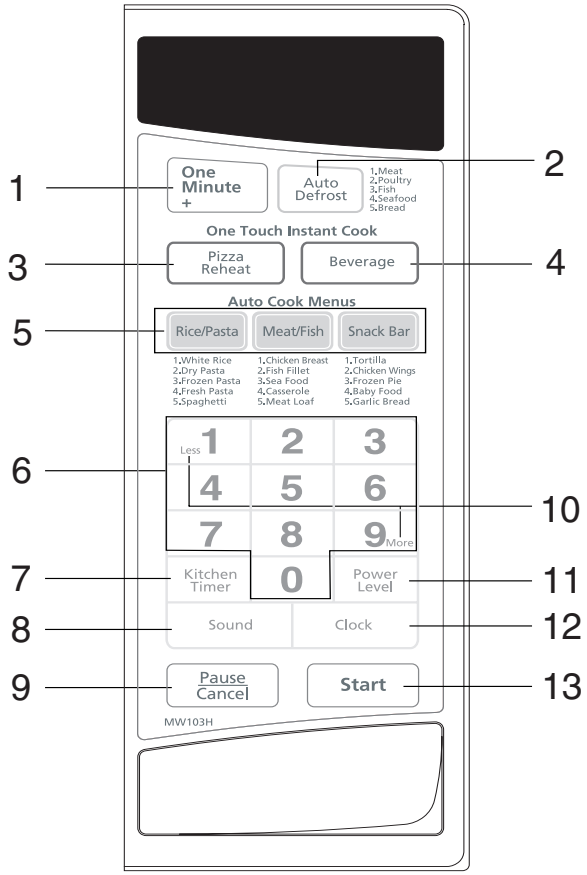
Your New Microwave oven

Control panel Buttons (MW123H)



1. One Minute +
2. Sound
3. Clock
4. One Touch Instant Cook (Pizza Reheat)
5. One Touch Instant Cook (Beverage)
6. Auto Cook Menus
7. Auto Reheat
8. Auto Defrost
9. Number Button
10. Kitchen Timer
11. Pause/Cancel
12. More/Less
13. Power Level
14. Start

(MW103H)



1. One Minute +
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4. One Touch Instant Cook (Beverage)
5. Auto Cook Menus
6. Number Buttons
7. Kitchen Timer
8. Sound
9. Pause/Cancel
10. More/Less
11. Power Level
12. Clock
13. Start

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Your New Microwave oven

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Operation

Setting the Clock

1. Press the **Clock** button. The “ENTER” and “TIME” indicators flash.
2. Use the number buttons to enter the current time. You must press at least three numbers to set the clock. If the current time is 5:00 enter, 5,0,0.
3. When 5 seconds has elapsed, “ENTER” indicator flash and “Cloc” will be displayed.
4. Press **Clock** again. A colon will blink, indicating that the time is set.
   If there is a power interruption, you will need to reset the clock.
   *You can check the current time while cooking is in progress by pressing the **Clock** button.*

Using the Pause/Cancel Button

The **Pause/Cancel** button allows you to clear instructions you have entered. It also allows you to pause the oven’s cooking cycle, so that you can check the food.

- To pause the oven during cooking: press **Pause/Cancel** once. To restart, press **Start**.
- To stop cooking, erase instructions, and return the oven display to the time of day: press **Pause/Cancel** twice.
- To correct a mistake you have just entered: press **Pause/Cancel** once, then re-enter the instructions.

Using the One Minute + Button

This button offers a convenient way to heat food in one minute increments at the High power level.

1. Press the **One Minute+** button once for each minute you wish to cook the food. For example, press it twice for two minutes. The time will display, and the oven starts automatically.
   *Add minutes to a program in progress by pressing the **One Minute+** button for each minute you want to add.*

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Operation

Using the Instant Cook Buttons

1. Press the **Instant Cook** button corresponding to the food you are cooking (**Beverage**, for example). The display shows the first serving size. (“ENTER” and “QTY.” will flash):
2. Press the button repeatedly to select the serving size you want. The display will cycle through all available serving sizes. Once you select the correct serving size, the microwave will begin cooking automatically.
   When the cooking time is over, the oven will beep. The oven will then beep every minute
   .

Item	Weight	Remarks
Beverage	½ cup 1 cup 2 cups	• Use measuring cup or mug ; do not cover. • Place the beverage in the oven. • After heating, stir well.
Pizza reheat	1 Slice 2 Slices 3 Slices 4 Slices	• Put the pizza on a microwave-safe plate with wide end of slice towards the outside edge of the plate. • Do not let slices overlap. Do not cover. • Before serving, let stand 1-2 min.

Using the Snack Bar Button

1. Press the **Snack Bar** button corresponding to the food you are cooking. The display shows “A-1”(item code).
   Press the **Snack Bar** button repeatedly to select the item you want.(Refer to the **Snack Bar Chart** below)
2. Press the **Number 1** or **2** , **3** button to select the serving size you want. Only **the 1** button(serving) is available for TORTILLA
   (Refer to the **Snack Bar Chart** below for the serving)
3. Press **Start** button to begin cooking.

Snack Bar Chart

Code	Item	Weight	Initial Temperature	Remarks
A-1	Tortilla	400g	Refrigerated	Cut top off tortilla bag, remove moisture sachet and place bag of tortilla directly in center of microwave turntable. Heat. Use heated tortilla immediately as required.
A-2	Chicken wings	4-5 pcs 8-10 pcs	Refrigerated	Place wings around plate, spoke-fashion. Cover with wax paper.
A-3	Frozen Pie	50-60g 100-110g 150-160g	Frozen	Place frozen party pies into microwave oven on microwave-safe plate or Pyrex dish uncovered. Heat. After cooking stand pies for 1 minute. Serve.
A-4	Baby Food	70g 110g 170g	Room	Remove metal top from room temperature jars of baby food. Remove plastic lid and metal lid from cups of baby food replace lid, discarding metal lid. Place jar cup in center of turntable and microwave on high power until temperature is reached. Stir well. Serve. The More/Less key cannot be used with the baby food key.
A-5	Garlic Bread	200g 400g 600g	Refrigerated	Remove garlic bread sticks from packaging and place into microwave oven on microwave-safe plate or Pyres dish. Heat. After cooking stand garlic bread sticks for 3 minutes to melt butter in centre completely. Serve.
A-6	Chicken Nuggets (MW123H)	4 pcs 8 pcs	Refrigerated	Put a paper on top of plate and arrange nuggets in spoke fashion on paper towel. Do not cover. Let stand 1 min.
A-7	Potato Wedge (MW123H)	4 pcs 8 pcs	Room	Cut potato into 4 even wedges. scoop or out potato flesh, leaving about 1.4 inch of skin. Place skins in spoke fashion around plate, Sprinkle with bacon, onions and Cheese. Microwave on High power for until cheese is melted.

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Operation

Using the Rice/Pasta Buttons

1. Press the **Rice/Pasta** button corresponding to the food you are cooking.
   The display shows “A-1”(item code).
   Press the **Rice/Pasta** button repeatedly to select the item you want.(Refer to the **Rice/Pasta Chart** below)
2. Press the **Number 1** or **2** , **3** button to select the serving size you want.
   (Refer to the **Rice/Pasta Chart** below for the serving)
3. Press **Start** button to begin cooking.

Rice/Pasta Chart

Code	Item	Weight	Initial Temperature	Remarks
A-1	White Rice	1-2 serves	Rice:Room Water:Room	Wash rice with cold water until water runs clear. Place the rice and water in a microwave-safe rice cooker or round glass Pyrex dish with a lid and after cooking allow rice to stand without removing lid. Stand rice for 3-5 minutes and stir to separate grains. (1 Serv. / 2 Serv.) Rice: 100g / 200g Water: 250ml / 375ml
A-2	Dry Pasta	1-2 serves	Water: boiling water	Place dry pasta into microwave-safe rice cooker or bowl or round Glass Pyrex dish breaking if necessary to fit - without lids on and cook uncovered. After cooking put on lid, allow standing time of 2-5 minutes. Stir and serve. (1 Serv. / 2 Serv.) Pasta: 100g / 200g Water: 3cups / 5cups
A-3	Frozen Pasta	1-2 serves	Water: boiling water	Place frozen pasta into microwave-safe rice cooker or bowl or round Glass Pyrex dish without lids on and cook uncovered. After cooking put on lid, allow standing time of 2-5 minutes. Stir and serve. (1 Serv. / 2 Serv.) Pasta: 125g / 250g Water: 3cups / 5cups
A-4	Fresh Pasta	1-2 serves	Water: boiling water	Place fresh pasta into microwave-safe rice cooker or bowl or round Glass Pyrex dish without lids on and cook uncovered. After cooking put on lid, allow standing time of 2-5 minutes. Stir and serve. (1 Serv. / 2 Serv.) Pasta: 125g / 250g Water: 3cups / 5cups
A-5	Spaghetti	1-2 serves	Water: boiling water	Place dry spaghetti into microwave-safe rice cooker or bowl or round Glass Pyrex dish breaking if necessary to fit - without lids on and cook uncovered. After cooking put on lid, allow standing time of 2-5 minutes. Stir and serve. (1 Serv. / 2 Serv.) Spaghetti: 100g / 200g Water: 3cups / 5cups
A-6	2 Minute noodles (MW123H)	1-3 serves	Water: boiling water	Break noodle cake and place into a microwave-safe large bowl. Pour boiling water over noodles and cook uncovered. After oven beeps at half cooking time, stir well and press start to continue. After cooking and then standing time of two minutes, stir and serve. (1 Serv. / 2 Serv. / 3 serv.) Noodle: 1 packet / 2 packets / 3 packets Water: 500 ml / 1000 ml / 1500 ml
A-7	Porridge (MW123H)	1-2 serves	Porridge oats: Room Water&milk: Cold	Place dry porridge oats and water or milk in a microwave safe bowl and cook uncovered. After oven beeps, stir the oats well and press start to continue. After cooking, stir well and top with brown sugar or honey. (1 Serv. / 2 Serv.) Oats: 35g / 70g Water & Milk: 185 ml / 375ml

Using the Meat/Fish Buttons

1. Press the **Meat/Fish** button corresponding to the food you are cooking. The display shows “A-1”(item code).
   Press the **Meat/Fish** button repeatedly to select the item you want.(Refer to the **Meat/Fish Chart** below)
2. Press the **Number 1** or **2** , **3** button to select the serving size you want.
   (Refer to the **Meat/Fish Chart** below for the serving)
3. Press **Start** button to begin cooking.

Meat/Fish Chart

Code	Item	Weight	Initial Tempe-rature	Remarks
A-1	Chicken Breast	200-250g 300-350g 400-450g	Refrige rated	Select fresh chicken breasts, score, insert 3-4 cuts with a sharp knife along breast and cook plain or firstly marinate with you favo-rite flavor for two hours or overnight covered in the refrigerator. Or sprinkle breasts with soy sauce or lemon juice or your favorite shaker herbs salt or pepper. Then cover breasts with baking paper tucked in on plate or in Pyrex dish and cook. At half cooking time oven will beep turn breast(s) over and press start to continue. After cooking stand breast(s) for 3-5 minutes. Serve.
A-2	Fish Fillet	150-200g 250-300g 350-400g	Refrige rated	Select fresh fish fillets and cook plain or marinate with you favorite seafood marin-ade for two hours or overnight covered in the refrigerator. Or sprinkle fillets with lemon juice or your favorite shaker herbs especially lemon pepper seasoning, salt or pepper. Then cover fillets with baking paper tucked in on plate or in Pyrex dish and cook. After cooking stand fillets(s) for 3 minutes. Serve.

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Operation

Meat/Fish Chart

Code	Item	Weight	Initial Tempe-rature	Remarks
A-3	Sea Food	150-200g 250-300g 350-400g	Refrig-erated	Select fresh seafood and set out on microw-avesafe plate or Pyrex dish. Sprinkle with lemon juice or salt if desired, cover seafood with baking paper eg. Glad Bake - tucked in around and cook. After cooking stand seafood for 3 minutes. Serve.
A-4	Casserole	1 dish	Refrig-erated	Ingredients For casserole. 2 medium carrots (85g to 110g Before peeling), 2 medium onions(110g to 140g. Before peeling), 2 medium potatoes(165g to 195g before peeling), 450 ground chuck beef, teaspoon salt, cup water, teaspoon pepper. Peel and slice vegetables into inch thick slices, Form beef into 12 small, flat pattie using the 2-inch Reynolds Brass Ring. Flattern patties. In 2-quart casserole, layer half of beef patties, half of carrots, half of onions, and half of potatoes. Springkle with salt and pepper. Repeat layers, making sure that top layer of beef patties is completely covered with vegetables. Add water. Press layer down into casserole. Cover. After cooking stand casserole for 5 minutes. Serve.
A-5	Bacon (MW123H)	100-125g 200-225g 300-325g	Refrig-erated	Select fresh bacon rashers from your butcher, deli or supermarket. Place on the absorbent paper towel on microwavesafe plate or Pyrex dish and cover with another piece of paper towel and cook. Serve.
A-6	Meatball (MW123H)	1 dish	Refrig-erated	Ingredients For Meat Balls. 450 g ground beef,cup chopped onion,1 egg beaten, 1 teaspoon salt, teaspoon pepper and 2 tabl-espoons water.Combine all ingredients and mix well. Shape into 20 x (25mm) meat balls. Place meat balls in utensil. Cover with microwave cling wrap turning back one corner of the wrap by about 50mm to vent. Cook. After cooking, stand meat balls for 5 minutes. Serve.
A-7	Meat loaf (MW123H)	1 dish	Refrig-erated	Ingredients For meat loaf. 675g ground chuck beef, cup fine dry bread crumbles, cup chopped onion, cup chopped green pepper, 1 cup milk,1 egg, 2 tablespoons ketchup, teaspoon pepper, cup teaspoon salt. Combine all ingredients: mix well. Pack meat mixture firmly in loaf dish: smooth out top. Cover with plastic wrap, turning back one corner about 2 inch-es to vent. Place in oven parallel to front of oven. After cooking stand casserole for 5 minutes. Serve
A-5	Meat loaf (MW103H)			

Reheating Automatically (MW123H)

To reheat food, select the type of dish and the number of servings you want to reheat, and the microwave automatically sets the reheating time.

1. Press the **Auto Reheat** button repeatedly to select the type of dish you wish to reheat. The initial serving size for each dish is one serving.
   You can select up to four cups for casseroles and pasta, Rice tinned reheat. Only one serving is available for a plate of food.
   The display shows the dish and quantity you have chosen.
2. Use the number buttons to increase the serving size. **For example, for three servings, press the 3 button(Refer to the Auto Reheat Chart below for the servings).** The display shows the number of servings you have selected:
3. Press the **Start** button. The display will show Cooking Time.

Auto Reheat Chart

Item	Code	Weight	Remarks
Plate of food	A-1	1 serving	• Use only pre-cooked, refrigerated foods. • Cover plate with vented plastic wrap or wax paper. • Contents - 85-110 g meat, poultry or fish (up to 170 g with bone) - ½ cup starch (potatoes, pasta, rice, etc.) - ½ cup vegetables (about 85-110 g)
Casserole	A-2	1-4 Cups	• Use only refrigerated foods. • Cover with lid or vented plastic wrap. • Stir foods well before serving.
Pasta	A-3		
Rice	A-4		
Tinned Soup	A-5		

Defrosting Automatically

To thaw frozen food, set the weight of the food and the microwave automatically sets the defrosting time, power level and standing time.

1. Press the **Auto Defrost** button. The display shows “1”.
   (“ENTER” and “kg” will flash).
2. To set the type of your food, press the **Auto Defrost** button repeatedly. You can also use the number buttons to enter the weight of the food directly.
   It is possible to set up to a maximum of 2 kg(except to bread).
3. Press the **Start** button. The display will show cooking time during defrosting, the oven will beep to let you know to turn the food over.
4. Open the oven door, and turn the food over.
5. Press the start button to resume defrosting.

• ***See page 13 for the Auto Defrosting Guide.***

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Operation

Setting Cooking Times & Power Levels

Your microwave allows you to set up to two different stages of cooking, each with its own time length and power level. The power level button lets you control the heating intensity from Warm (1) to High (0).

One-stage Cooking

For simple one-stage cooking, you only need to set a cooking time. The power level is automatically set to High. If you want to set the power to any other level, you must set it using the **Power Level** button.

1. Use the number buttons to set a cooking time. You can set a time from one second to 99 minutes, 99 seconds. To set a time over one minute, enter the seconds too.
   For example, to set 20 minutes, enter 2, 0, 0, 0 .
2. If you want to set the power level to something other than High, press the **Power Level** button, then use the number buttons to enter a power level.

Power Levels:

1 = PL:10	(Warm)	6 = PL:60	(Simmer)
2 = PL:20	(Low)	7 = PL:70	(Medium High)
3 = PL:30	(Defrost)	8 = PL:80	(Reheat)
4 = PL:40	(Medium Low)	9 = PL:90	(Sauté)
5 = PL:50	(Medium)	0 = PL:Hi	(High)

3. Press the **Start** button to begin cooking. If you want to change the power level, press **Pause/Cancel** before you press **Start**, and re-enter all of the instructions.

Some recipes require different stages of cooking at different temperatures. You can set multiple stages of cooking with your microwave.

Multi-stage Cooking

1. Follow steps 1 and 2 in the “One-Stage Cooking” section on the previous page.
   *When entering more than one cooking stage, the **Power Level** button must be pressed before the second cooking stage can be entered.*
   *To set the power level at High for a stage of cooking, press the **Power Level** button twice.*
2. Use the number buttons to set a second cooking time.
3. Press the ***Power Level*** button, then use the number buttons to set the power level of the second stage of cooking.
4. Press **Start** to begin cooking.

You can check the Power Level while cooking is in progress by pressing the ***Power Level*** button.

Demonstration Mode

You can use the Demonstration Mode to see how your microwave oven operates without the oven heating.

1. Hold the **0** button and then press the **1** button.

To turn demo mode off, repeat step 1 above.

Using the More/Less Buttons

The **More/Less** buttons allow you to adjust pre-set cooking times. They only work in the **Rice/Pasta, Meat/Fish, Snack Bar, Auto Reheat, Custom Cook, Pizza Reheat, Beverage or Time Cook, Kitchen Time modes**. Use the **More/Less** button only after you have already begun cooking with one of these procedures.

- **Auto Reheat : MS123HCE, MS143HCE**

The **More/Less** feature cannot be used with the **Sensor Cook** button.
The **More/Less** key cannot be used with the **Baby Food** key.

1. To ADD more time to an automatic cooking procedure: Press the **More**(9) button.
2. To REDUCE the time of an automatic cooking procedure: Press the **Less**(1) button.

*If you wish to increase/decrease in **Time Cook, Kitchen Time mode** by 10sec, press the More(9) or Less(1) button.*

Switching the Beeper On/Off

You can switch the beeper off whenever you want.

1. Press the **Sound** button. The display shows “ON”. (“START” will flash)
2. Press the **Sound** button to turn the volume off. The display shows: “OFF”.(“START” will flash)
3. Press **Start.** The display returns to the time of day.

Using the Kitchen Timer

1. Press the **Kitchen Timer** button.
2. Use the **Number** buttons to set the length of time you want the timer to run.
3. Press **Start** to begin Kitchen Timer.
4. The display counts down and beeps when the time has elapsed.
   Note: The microwave does not turn on when the Kitchen timer is used.

Setting the Child Protection Lock

You can lock your microwave oven so it can’t be used by unsupervised children.

1. Hold the “**0**” button and then press the “**2**” button. The display shows “Loc”.
   At this point, the microwave oven cannot be used until it is unlocked. To unlock it, repeat step 1 above.

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Cooking Instructions

Cooking Utensils

Recommended Use

- **Glass and glass-ceramic bowls and dishes** — Use for heating or cooking.
- **Microwavable browning dish** — Use to brown the exterior of small items such as steaks, chops, or pancakes. Follow the directions provided with your browning dish.
- **Microwavable plastic wrap** — Use to retain steam. Leave a small opening for some steam to escape and avoid placing it directly on the food.
- **Wax paper** — Use as a cover to prevent spattering.
- **Paper towels and napkins** — Use for short-term heating and covering; they absorb excess moisture and prevent spattering. Do not use recycled paper towels, which may contain metal and can catch fire.
- **Paper plates and cups** — Use for short-term heating at low temperatures. Do not use recycled paper, which may contain metal and can catch fire.
- **Thermometers** — Use only those labeled “Microwave Safe” and follow all directions. Check the food in several places. Conventional thermometers may be used once the food has been removed from the oven.

Limited Use

- **Aluminum foil** — Use narrow strips of foil to prevent overcooking of exposed areas. Using too much foil can damage your oven, so be careful.
- **Ceramic, porcelain, and stoneware** — Use these if they are labeled “Microwave Safe”. If they are not labeled, test them to make sure they can be used safely. Never use dishes with metallic trim.
- **Plastic** — Use only if labeled “Microwave Safe”. Other plastics can melt.
- **Straw, wicker, and wood** — Use only for short-term heating, as they can be flammable.

Not Recommended

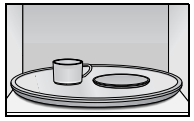
- **Glass jars and bottles** — Regular glass is too thin to be used in a microwave, and can shatter.
- **Paper bags** — These are a fire hazard, except for popcorn bags that are designed for microwave use.
- **Styrofoam plates and cups** — These can melt and leave an unhealthy residue on food.
- **Plastic storage and food containers** — Containers such as margarine tubs can melt in the microwave.

  Metal utensils — *These can damage your oven. Remove all metal before cooking.*

Testing Utensils

If you are not sure whether a dish is microwave-safe or not, you can perform this test:

1. Fill a 1 cup glass measuring cup with water and put it inside your oven, next to the dish you want to test.



2. Press the **One Minute +** button once to heat them for one minute at High power. The water should be warm and the dish you are testing should be cool. If the dish is warm, then it is absorbing microwave energy and is not acceptable for use in the microwave.

Cooking Techniques

Stirring

Stir foods such as casseroles and vegetables while cooking to distribute heat evenly. Food at the outside of the dish absorbs more energy and heats more quickly, so stir from the outside to the center. The oven will turn off when you open the door to stir your food.

Arrangement

Arrange unevenly shaped foods, such as chicken pieces or chops, with the thicker, meatier parts toward the outside of the turntable where they receive more microwave energy. To prevent overcooking, place thin or delicate parts toward the center of the turntable.

Shielding

Shield food with narrow strips of aluminum foil to prevent overcooking. Areas that need shielding include poultry wing-tips, the ends of poultry legs, and corners of square baking dishes. Use only small amounts of aluminum foil. Larger amounts can damage your oven.

Turning

Turn foods over midway through cooking to expose all parts to microwave energy. This is especially important with large items such as roasts.

Standing

Foods cooked in the microwave build up internal heat and continue to cook for a few minutes after the oven stops. Let foods stand to complete cooking, especially foods such as roasts and whole vegetables. Roasts need this time to complete cooking in the center without overcooking the outer areas. All liquids, such as soup or hot chocolate, should be shaken or stirred when cooking is complete. Let liquids stand a moment before serving. When heating baby food, stir well and test the temperature before serving.

Adding Moisture

Microwave energy is attracted to water molecules. Food that is uneven in moisture content should be covered or allowed to stand so that the heat disperses evenly. Add a small amount of water to dry food to help it cook.

General Tips

- Dense foods, such as potatoes, take longer to heat than lighter foods. Foods with a delicate texture should be heated at a low power level to avoid becoming tough.
- Altitude and the type of cookware you are using can affect cooking time. When using a new recipe, use the minimum cooking time and check the food occasionally to prevent overcooking.
- Foods with a non-porous skin such as potatoes or hot dogs, should be pierced to prevent bursting.
- Frying with heating oil or fat is not recommended. Fat and oil can suddenly boil over and cause severe burns.
- Some ingredients heat faster than others. For example, the jelly inside a jelly doughnut will be hotter than the dough. Keep this in mind to avoid burns.
- Home canning in the microwave oven is not recommended because all harmful bacteria may not be destroyed by the microwave heating process.
- Although microwaves do not heat the cookware, the heat from the food is often transferred to the cookware. Always use pot holders when removing food from the microwave and instruct children to do the same.
- Making candy in the microwave is not recommended as candy can heat to very high temperatures. Keep this in mind to avoid injury.

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Cooking Instructions

Cooking Guide

Guide for Cooking Meat in Your Microwave

- Place meat on a microwave-safe roasting rack in a microwave-safe dish.
- Start meat fat-side down. Use narrow strips of aluminum foil to shield any bone tips or thin meat areas.
- Check the temperature in several places before letting the meat stand the recommended time.
- The following temperatures are removal temperatures. The temperature of the food will rise during the standing time.

Food	Cook Time/Power Level	Directions
Roast Beef Boneless Up to 4 lbs.	**Cooking Time:** 8-12 min. / 0.5 kg for 50°C - Rare 9-13 min. / 0.5 kg for 55°C - Medium 10-15 min. / 0.5 kg for 65°C - Well Done **Power Level:** High(0) for first 5 min., then Medium(5).	Place roast fat-side down on roasting rack. Cover with wax paper. Turn over when cooking time is half up. Let stand 10 min.
Pork Boneless or bone-in Up to 4 lbs.	**Cooking Time:** 12-16 min. / 0.5 kg for 70°C Well Done **Power Level:** High(0) for first 5 min., then Medium(5).	Place roast fat-side down on roasting rack. Cover with vented plastic wrap. Turn over when cooking time is half up. Let stand 10 min.

Guide for Cooking Poultry in Your Microwave

- Place poultry on a microwave-safe roasting rack in a microwave-safe dish.
- Cover poultry with wax paper to prevent spattering.
- Use aluminum foil to shield bone tips, thin meat areas, or areas that start to overcook.
- Check the temperature in several places before letting the poultry stand the recommended time.

Food	Cook Time/Power Level	Directions
Whole Chicken Up to 4 lbs.	**Cooking Time:** 7-10 min. / 0.5kg 80°C **Power Level:** Medium High(7).	Place chicken breast-side down on roasting rack. Cover with wax paper. Turn over when the cooking time is half up. Cook until juices run clear and meat near the bone is no longer pink. Let stand 5-10 min.
Chicken Pieces Up to 2 lbs.	**Cooking Time:** 7-10 min. / 0.5kg 80°C dark meat 75°C light meat **Power Level**: Medium High(7).	Place chicken bone-side down on dish, with the thickest portions towards the outside of the dish. Cover with wax paper. Turn over when the cooking time is half up. Cook until juices run clear and meat near the bone is no longer pink. Let stand 5-10 min.

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Cooking Instructions

Guide for Cooking Seafood in Your Microwave

- Cook fish until it flakes easily with a fork.
- Place fish on a microwave-safe roasting rack in a microwave-safe dish.
- Use a tight cover to steam fish. A lighter cover of wax paper or paper towel provides less steaming.
- Do not overcook fish; check it at minimum cooking time.Guide for

Food	Cook Time/Power Level	Directions
Steaks Up to 0.7 kg	**Cooking Time:** 7-11 min. / 0.5 kg **Power Level:** Medium-High(7).	Arrange steaks on roasting rack with meaty portions towards the outside of rack. Cover with wax paper. Turn over and rearrange when cooking time is half up. Cook until fish flakes easily with a fork. Let stand 3-5 min.
Fillets Up to 0.7 kg	**Cooking Time:** 4-8 min. / 0.5 kg **Power Level**: Medium-High(7).	Arrange fillets in a baking dish, turning any thin pieces under Cover with wax paper. If over ½ inch thick, turn over and rearrange when cooking time is half up. Cook until fish flakes easily with a fork. Let stand 2-3 min.
Shrimp Up to 0.7 kg	**Cooking Time:** 4-6½ min. / 0.5 kg **Power Level**: Medium-High(7).	Arrange shrimp in a baking dish without overlapping or layering. Cover with wax paper. Cook until firm and opaque, stirring 2 or 3 times. Let stand 5 min.

Cooking Eggs in Your Microwave

- Never cook eggs in the shell, and never warm hard-cooked eggs in the shell; they can explode.
- Always pierce whole eggs to keep them from bursting.
- Cook eggs just until set; they become tough if overcooked.

Guide for Cooking Vegetables in Your Microwave

- Vegetables should be washed just before cooking. Often, no extra water is needed. If dense vegetables such as potatoes, carrots and green beans are being cooked, add about ¼ cup water.
- Small vegetables (sliced carrots, peas, lima beans, etc.) will cook faster than larger ones.
- Whole vegetables, such as potatoes, acorn squash or corn on the cob, should be arranged in a circle on the turntable before cooking. They will cook more evenly if turned over after half the cooking time.
- Always place vegetables like asparagus and broccoli with the stem ends pointing towards the edge of the dish and the tips toward the center.
- When cooking cut vegetables, always cover the dish with a lid or vented microwavable plastic wrap.
- Whole, unpeeled vegetables such as potatoes, squash, eggplant, etc., should have their skin pricked in several spots before cooking to prevent them from bursting.
- For more even cooking, stir or rearrange whole vegetables halfway through the cooking time.
- Generally, the denser the food, the longer the standing time. (Standing time refers to the time necessary for dense, large foods and vegetables to finish cooking after they come out of the oven.) A baked potato can stand on the counter for five minutes before cooking is completed, while a dish of peas can be served immediately.

Auto Defrosting Guide

- Follow the instructions below when defrosting different types of food.

Code	Item	Weight	Initial Temperature	Remarks
1	Meat	100-2000g	20-60 mins	Shield the sdges with aluminium foil. Turn the meat over, when the over beeps. This programme is suitable for beef, lamb, pork, steaks, chops, minced meat.
2	Poultry	100-2000g	20-60 mins	Shield the leg and wing tios with aluminium foil. Turn the poultry over, when the oven beeps. This programme is suitable for whole shicken as well as for chicken portions.
3	Fish	100-2000g	20-50 mins	Shield the tail of a whole fish with aluminium foil. Turn the fish over, when the oven beeps. This programme is suitable for whole fishes as well as for fish fillets.
4	Sea Food	100-2000g	20-50 mins	Shield the tail of a whole fish with aluminium foil. Turn the fish over, when the oven beeps. This programme is suitable for shrimp, prawn shell fish, clarn.
5	Bread Cake	100-700g	5-30 mins	Put bread on a piece of kitchen paper and turn over, as soon as the oven beeps. Place cake on a ceramic plate and if possible, turn over, as soon as the oven beeps. (Oven keeps operating and is stoppde, when you open the door.) This programme is suitable for all kinds of bread, slicde or whole, as well as for bread rolls and baguettes. Arrange bread rolls in a circle. This programme is suitable for all kinds of yeast cake, biscuit, cheese cake and puff pastry. It is not suitable for short/crust pastry, fruit and cream cakes as well as for cake with chocolate topping.

Notes

Check foods when the oven signals. After the final stage, small sections may still be icy; let them stand to continue thawing. Do not defrost until all ice crystals have thawed. Shielding roasts and steaks with small pieces of foil prevents the edges from cooking before the center of the food has defrosted. Use narrow, flat, smooth strips of aluminum foil to cover the edges and thinner sections of the food.

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Cooking Instructions

Recipes

Beef and Barley Stew

675 g beef stew cubes, cut into ½-inch pieces
½ cup chopped onion
2 Tbs. all-purpose flour
1 Tbs Worcestershire sauce
1 can (380-405g) beef broth
2 medium carrots, cut into ½-inch slices (about 1 cup)
½ cup barley
1 bay leaf
¼ tsp. pepper
1 pkg. (250-280g) frozen peas, thawed

1. In a 2-quart casserole, combine beef, onion, flour, and Worcestershire; mix well. Cover with lid. Cook at High(0) for 6 to 8 minutes until beef is no longer pink, stirring once.
2. Stir in beef broth, carrots, barley, bay leaf, and pepper. Cover with lid. Cook at Medium for 1 to 1½ hours until carrots and beef are tender, stirring 2 to 3 times.
3. Stir in peas. Cover with lid. Cook at Medium for 10 minutes. Let stand for 10 minutes. Remove bay leaf before serving.
   Makes 6 servings.

Broccoli and Cheese Casserole

¼ cup butter or margarine
¼ cup chopped onion
1½ Tbs. flour
½ tsp. salt
¼ tsp. dry mustard
1/8 tsp. pepper
1½ cups milk
¼ cup chopped red pepper
225g (2 cups) cheddar cheese, shredded
1 pkg. (250-280g) frozen chopped broccoli, thawed
4 cups cooked spiral shaped pasta (225g dry)

1. In a 2-quart casserole, cook butter and onion at High(0) for 1 to 2 minutes until onion is soft, stirring once.
2. Add flour, salt, mustard, and pepper; mix well. Cook at High(0) for 30 to 60 seconds until mixture boils. Stir in milk until smooth.
3. Stir in red pepper. Cook at High(0) for 2 to 3 minutes until mixture boils and thickens slightly, stirring twice. Stir in cheese until melted.
4. Add broccoli and pasta, mix well. Cover with lid. Cook at High(0) for 4 to 6 minutes until heated through, stirring once. Stir before serving.
   Makes 6 servings.

Warm Potato Salad

900g small red potatoes, cut into ½-inch pieces
4 slices bacon (uncooked), cut into ½-inch pieces
¼ cup chopped onion
2 tsp. sugar
1 tsp. salt
1 tsp. flour
½ tsp. celery seed
1/8 tsp. pepper
2½ Tbs. apple cider vinegar

1. In a 2-quart casserole, combine potatoes and ¼ cup water. Cover with lid. Cook at High(0) until potatoes are tender (7-10 min.); stir twice. Drain and set aside to cool slightly.
2. In a medium bowl, cook bacon at High(0) until crisp (2½-3½ min.); stir once. Place bacon on a paper towel. Reserve 1 Tbs. drippings.
3. Combine drippings and onion. Cover with plastic wrap; turn back a corner to vent steam. Cook at High(0) until tender (1½-2½ min.); stir once.
4. Stir in sugar, salt, flour, celery seed, and pepper. Cook at High(0) until mixture boils (30-40 sec.). Stir in vinegar and ½ cup water. Cook at High(0) until liquid boils and thickens slightly (1-2 min.); stir once. Add bacon to dressing. Pour dressing over potatoes. Stir well.
   Makes 6 servings.

Black Bean Soup

1 cup chopped onion
1 clove garlic, minced
2 cans (420g each) black beans, drained
1 can (390-450g) stewed tomatoes, chopped
1 can (385-405g) chicken broth
1 can (195-240g) corn
1 can (110g) chopped green chilies
1-2 tsp. ground cumin, or to taste

1. Place onion and garlic in a 3-quart casserole. Cover with lid. Cook at High(0) for 2 to 4 minutes until tender.
2. Add one can of beans, mash beans with a fork. Add remaining ingredients; mix well.
3. Cook uncovered, at High(0) for 10 minutes; stir. Reduce power to Medium and cook for 5 minutes. Stir before serving.
   Makes about 2 quarts.

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Appendix

Troubleshooting Guide

Before you call a repair person for your oven, check this list of possible problems and solutions.

Neither the oven's display nor the oven operate.

- Properly insert the plug into a grounded outlet.
- If the outlet is controlled by a wall switch, make sure the wall switch is turned on.
- Remove the plug from the outlet, wait ten seconds, then plug it in again.
- Reset the circuit breaker or replace any blown fuse.
- Plug another appliance into the outlet; if the other appliance doesn't work, have a qualified electrician repair the outlet.
- Plug the oven into a different outlet.

The oven's display works, but the power won't come on.

- Make sure the door is closed securely.
- Check to see if packing material or other material is stuck to the door seal.
- Check for door damage.
- Press Cancel twice and re-enter all cooking instructions.

The power goes off before the set time has elapsed.

- If there has not been a power outage, remove the plug from the outlet, wait ten seconds, then plug it in again. If there was a power outage, the time indicator will display " 88:88 " Reset the clock and any cooking instructions.
- Reset the circuit breaker or replace any blown fuse.

The food is cooking too slowly.

- Make sure the oven is on its own 10A amp circuit line. Operating another appliance on the same circuit can cause a voltage drop. If necessary, move the oven to its own circuit.

You see sparks or arcing.

- Remove any metallic utensils, cookware, or metal ties. If using foil, use only narrow strips and allow at least one inch between the foil and interior oven walls.

The turntable makes noises or sticks.

- Clean the turntable, roller ring and oven floor.
- Make sure the turntable and roller ring are positioned correctly.

Using your microwave causes TV or radio interference.

- This is similar to the interference caused by other small appliances, such as hair dryers. Move your microwave further away from other appliances, like your TV or radio.

Care and Cleaning

- Follow these instructions to clean and care for your oven.
- Keep the inside of the oven clean. Food particles and spilled liquids can stick to the oven walls, causing the oven to work less efficiently.
- Wipe up spills immediately. Use a damp cloth and mild soap. Do not use harsh detergents or abrasives.
- To help loosen baked on food particles or liquids, heat two cups of water (add the juice of one lemon if you desire to keep the oven fresh) in a four-cup measuring glass at **High** power for five minutes or until boiling. Let stand in the oven for one or two minutes.
- Remove the glass tray from the oven when cleaning the oven or tray. To prevent the tray from breaking, handle it carefully and do not put it in water immediately after cooking. Wash the tray carefully in warm sudsy water or in the dishwasher.
- Clean the outside surface of the oven with soap and a damp cloth. Dry with a soft cloth. To prevent damage to the operating parts of the oven, don't let water seep into the openings.
- Wash the door window with very mild soap and water. Be sure to use a soft cloth to avoid scratching.
- If steam accumulates inside or outside the oven door, wipe with a soft cloth. Steam can accumulate when operating the oven in high humidity and in no way indicates microwave leakage.
- Never operate the oven without food in it; this can damage the magnetron tube or glass tray. You may wish to leave a cup of water in the oven when it is not in use to prevent damage if the oven is accidentally turned on.

If you have a problem you cannot solve, Contact your local dealer or SAMSUNG after - sales service

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Appendix

Specifications

Model Number	MW103H / ME103H
Oven Cavity	1.0cuft
Controls	10 power levels, including defrost
Timer	99 minutes, 99 seconds
Power Source	240 V ~ 50 Hz
Power consumption Microwave	1550 Watts
Power Output	1000 Watts (IEC-705)
Operating frequency	2450 MHz
Outside Dimensions	517 (W) X 297 (H) X 379 (D)
Oven Cavity Dimensions	336 (W) X 241 (H) X 349 (D)
Weight Net	15.0 kg

Model Number	MW123H / ME123H
Oven Cavity	1.2cuft
Controls	10 power levels, including defrost
Timer	99 minutes, 99 seconds
Power Source	240 V ~ 50 Hz
Power consumption Microwave	1550 Watts
Power Output	1000 Watts (IEC-705)
Operating frequency	2450 MHz
Outside Dimensions	523 (W) X 299 (H) X 417 (D)
Oven Cavity Dimensions	368 (W) X 239 (H) X 396 (D)
Weight Net	15.5 kg

QUESTIONS OR COMMENTS

COUNTRY	CALL	OR VISIT US ONLINE AT
AUSTRALIA	1300-362-603	www.samsung.com
NEW ZEALAND	0800-SAMSUNG (0800-726-786)	
CHINA	400-810-5858	
HONG KONG	(852) 3698-4698	www.samsung.com/hk www.samsung.com/hk_en/
INDIA	3030-8282 1800-3000-8282	www.samsung.com
INDONESIA	0800-112-8888 021-5699-7777	
JAPAN	0120-327-527	
MALAYSIA	1800-88-9999	
PHILIPPINES	1-800-10-SAMSUNG (726-7864) 1-800-3-SAMSUNG (726-7864) 1-800-8-SAMSUNG (726-7864) 02-5805777	
SINGAPORE	1800-SAMSUNG(726-7864)	
THAILAND	1800-29-3232 02-689-3232	
TAIWAN	0800-329-999	
VIETNAM	1-800-588-889	

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