MS23H3125\*\*



# imagine the possibilities

Thank you for purchasing this Samsung product.



# Microwave Oven

# Owner's Instructions & Cooking Guide

Please be advised that the Samsung warranty does NOT cover service calls to explain product operation, correct improper installation, or perform normal cleaning or maintenance.



This manual is made with 100 % recycled paper.



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# safety information

#### USING THIS INSTRUCTION BOOKLET

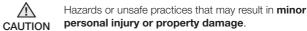
You have just purchased a SAMSUNG microwave oven. Your Owner's Instructions contain valuable information on cooking with your microwave oven:

- Safety precautions
- Suitable accessories and cookware
- Useful cooking tips
- Cooking tips

#### LEGEND FOR SYMBOLS AND ICONS



Hazards or unsafe practices that may result in severe personal injury or death.



Warning; Fire hazard 18 Warning; Hot surface Warning; Electricity Warning; Explosive material /4\ A  $\land$ Do NOT attempt. B  $\mathbb{X}$ Do NOT disassemble.  $(\bigstar)$ Unplug the power plug **.** Ē from the wall socket. Call the service center for Note help.

#### Important

Do NOT touch. Follow directions explicitly. Make sure the machine is grounded to prevent electric shock.

IMPORTANT SAFETY INSTRUCTIONS READ CAREFULLY AND KEEP FOR FUTURE REFERENCE. Make sure that these safety precautions are obeyed at all times. Before using the oven, confirm that the	★ 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.
following instructions are followed.	🗙 WARNING: This appliance can be
A WARNING (Microwave function only)	used by children aged from 8 years and above and persons with reduced
■ WARNING: If the door or door seals are damaged, the oven must not be operated until it has been repaired by a competent person.	physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the
WARNING: It is hazardous for anyone other than a competent person to carry out any service or repair operation that involves the removal of a cover which gives protection against exposure to microwave energy.	appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children unless they are aged from 8 years and above and supervised.
<ul> <li>This appliance is intended to be used in household only.</li> </ul>	Only use utensils that are suitable for use in microwave ovens.
	When heating food in plasitic or paper containers, keep an eye on the oven due to the possibility of ignitions.

*	The microwave oven is intended for heating food and beverages. Drying of food or clothing and heating of warming pads, slippers, sponges, damp cloth and similar may lead to risk of injury, ignition or fire.		Failure to maintain the oven in a clean conditioin could lead to deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation.
<b>†</b>	If smoke is emitted, switch off or unplug the appliance and keep the door closed		The appliance is not intended for installing in road vehicles, caravans and similar vehicles etc.
*	in order to stifle any flames. WARNING: Microwave heating of beverages can result in delayed eruptive boiling, therefore care must be taken when handling the container.		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
*	<b>WARNING:</b> The contents of feeding bottles and baby food jars shall be stirred or shaken and the temperature		or instruction concerning use of the appliance by a person responsible for their safety.
	checked before consumption, in order to avoid burns.		Children should be supervised to ensure that they do not play with the appliance.
	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.		If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
*	The oven should be cleaned regularly and any food deposites removed.	C	WARNING: Liquids or other foods must not be heated in sealed containers since they are liable to explode;

2

SAFETY INFORMATION

(*	This oven should be positioned proper		heating elements inside the oven.
	direction and height permitting easy access to cavity and control area.		<b>WARNING:</b> Accessible parts may become hot during use. Young children
*	Before using the your oven first time,		should be kept away. A steam cleaner is not to be used.
	oven should be operated with the water during 10 minute and then used.		
*	If the oven generates a strange noise, a burning smell, or smoke is emitted,		<b>WARNING:</b> Ensure that the appliance is switched off before replacing the lamp to avoid the possibility of electric shock.
	unplug the power plug immediately and contact your nearest service center.		<b>WARNING:</b> The appliance and its accessible parts become hot during use.
*	The microwave oven has to be positioned so that plug is accessible.		Care should be taken to avoid touching heating elements. Children less than 8
	The microwave oven is intended to be used on the counter or counter top use only, the microwave oven shall not be placed in a cabinet.		years of age shall be kept away unless continuously supervised.
	WARNING (Oven function only) - Optional	1	
	<b>WARNING:</b> When the appliance is operated in the combination mode, children should only use the oven under adult supervision due to the temperatures generated.		
	End	alish - 5	
		, U	

 $\bigstar$ 

The appliance should not be cleaned

with a water jet.

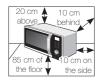
*	This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
	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.
Ø	The temperature of accessible surfaces may be high when the appliance is operating.
8	The door or the outer surface may get hot when the appliance is operating.
	Keep the appliance and its cord out of reach of children less than 8 years.
	Appliances are not intended to be operated by means of an external timer or separate remote-control system.

This product is a Group 2 Class B ISM equipment. The definition of group 2 which contains all ISM equipment in which radiofrequency energy is intentionally generated and/or used in the form of electromagnetic radiation for the treatment of material, and EDM and arc welding equipment. For Class B equipment is equipment suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

# INSTALLING YOUR MICROWAVE OVEN

Place the oven on a flat level surface 85 cm 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.
- **3.** Install the roller ring and turntable. Check that the turntable rotates freely. (Turntable type model only)
- **4.** This microwave oven has to be positioned so that plug is accessible.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

For your personal safety, plug the cable into a proper AC earthed socket.

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.

# **CLEANING YOUR MICROWAVE OVEN**

The following parts of your microwave oven should be cleaned regularly to prevent grease and food particles from building up:

- Inside and outside surfaces
- Door and door seals
- Turntable and Roller rings (Turntable type model only)
- ALWAYS ensure that the door seals are clean and the door closes properly.
- 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.
- **1.** Clean the outside surfaces with a soft cloth and warm, soapy water. Rinse and dry.
- 2. Remove any splashes or stains on the inside surfaces of oven with a soapy cloth. Rinse and dry.
- **3.** To loosen hardened food particles and remove smells, place a cup of diluted lemon juice in the oven and heat for ten minutes at maximum power.

- **4.** Wash the dishwasher-safe plate whenever necessary.
- DO NOT spill water in the vents. NEVER use any abrasive products or chemical solvents. Take particular care when cleaning the door seals to ensure that no particles:
  - Accumulate
  - Prevent the door from closing correctly
- Clean the microwave oven cavity right after each use with a mild detergent solution, but let the microwave oven cool down before cleaning in order to avoid injury.

When cleaning the upper part inside the cavity, it will be convenient to turn heater downward by 45 ° and clean it. (Swing heater model only)



# STORING AND REPAIRING YOUR MICROWAVE OVEN

A few simple precautions should be taken when storing or having your microwave oven serviced.

The oven must not be used if the door or door seals are damaged:

- Broken hinge
- Deteriorated seals
- Distorted or bent oven casing

Only a qualified microwave service technician should perform repair

- NEVER remove the outer casing from the oven. If the oven is faulty and needs servicing or you are in doubt about its condition:
  - Unplug it from the wall socket
  - Contact the nearest after-sales service centre
- If you wish to store your oven away temporarily, choose a dry, dustfree place.
   Reason : Dust and damp may adversely affect the working parts in the oven.
- This microwave oven is not intended for commercial use.
- The Light bulb should not be replaced in person for safety reasons. Please contact nearest authorised Samsung customer care, to arrange for a qualified engineer to replace the bulb.

	WARNING	۵	Â		k		Do not place the oven over a fragile object such as a sink or glass object.	~	~		
$\bigotimes$	Only qualified staff should be allowed to modify or repair the appliance.	~	~	~			Do not use benzene, thinner, alcohol, steam cleaner or high pressure cleaner to clean the appliance.	~	~	~	~
	Do not heat liquids and other food in sealed containers for microwave function.	~	$\checkmark$	$\checkmark$	$\checkmark$		Ensure that the power voltage, frequency and current are the same as those of the product	~	$\checkmark$		
	For your safety, do not use high-pressure water cleaners or steam jet cleaners.	<b>~</b>	$\checkmark$	$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>		specifications. Plug the power plug into the wall socket firmly. Do	<ul><li>✓</li></ul>	$\checkmark$	<ul> <li>✓</li> </ul>	
	Do not install this appliance; near heater, inflammable material; in a humid, oily or dusty	<b>~</b>	$\checkmark$	$\checkmark$			not use a multiple plug adapter, an extension cord or an electric transformer.				
	location, in a location exposed to direct sunlight and water or where gas may leak; on un level ground.						Do not hook the power cord on a metal object, insert the power cord between the objects or behind the oven.		~	~	
Ð	This appliance must be properly grounded in accordance with local and national codes.	<b>~</b>					Do not use a damaged power plug, damaged power			<ul> <li>✓</li> </ul>	$\checkmark$
*	Remove all foreign substances such as dust or water from the power plug terminals and contact points using a dry cloth on a regular basis.	~	~	~	~		cord or loose wall socket. When the power plug or power cord is damaged, contact your nearest service centre.				
	Do not pull or excessively bend or place heavy objecton the power cord.	~	~	~			Do not pour or directly spray water onto the oven.	$\checkmark$	$\checkmark$		
*	In the event of a gas leak (such as propane gas, LP	<ul><li>✓</li></ul>					Do not place objects on the oven, inside or on the door of the oven.	$\checkmark$	$\checkmark$	<b>~</b>	
	gas, etc.), ventilate immediately without touching the power plug.						Do not spray volatile material such as insecticide onto the surface of the oven.	~	<ul> <li>✓</li> </ul>		
Ø	Do not touch the power plug with wet hands.	$\checkmark$	$\checkmark$	$\checkmark$			Do not store flammable materials in the oven. Take	$\checkmark$		<ul> <li>✓</li> </ul>	$\checkmark$
	Do not turn the appliance off by unplugging the power plug while an operation is in progress.	~	~	~		;   _	special care when heating dishes or drinks that contain alcohol as alcohol vapours may contact a hot part of the oven.				
<b>†</b>	Do not insert fingers or foreign substances, If any foreign substance such as water has entered the appliance, unplug the power plug and contact your nearest service centre.	~					Keep children away from the door when opening or closing it as they may bump themselves on the door or catch their fingers in the door.	~	~	~	~
	Do not apply excessive pressure or impact to the appliance.	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$						

*	<b>WARNING:</b> Microwave heating of beverages can result in delayed eruptive boiling, therefore care must	<ul> <li>✓</li> </ul>	<b>~ ~</b>				CAUTION	۵	A		k
	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:					*	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.	~		~	~
	<ul> <li>Immerse the scalded area in cold water for at least 10 minutes.</li> <li>Cover with a clean, dry dressing.</li> </ul>						Do not use your microwave oven to dry papers or clothes.			~	~
	• Do not apply any creams, oils or lotions.				İ	*	Use shorter times for smaller amounts of food to prevent overheating and burning food.	$\checkmark$		~	$\checkmark$
	Do not put the tray or rack in water shortly after cooking because it may cause breakage or damage of the tray or rack.						Do not immerse the power cable or power plug in water and keep the power cable away from heat.	~	~		
	Do not operate the microwave oven for deep fat frying because the oil temperature cannot be controlled. This could result in a sudden boil over of the hot liquid.	~		~	-		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 inshells, tomatoes etc.			~	~
							Do not cover the ventilation slots with cloth or paper. They may catch fire as hot air escapes from the oven. The oven may also overheat and switch itself off automatically, and will remain off until it cools sufficiently.	~		~	
						Ø	Always use oven mitts when removing a dish from the oven to avoid unintentional burns.			✓	
						*	Stir liquids halfway during heating or after heating ends and allow the liquid stand at least 20 seconds after heating to prevent eruptive boiling.			~	
						*	Stand at arms length from the oven when opening the door to avoid getting scalded by escaping hot air			✓	

or steam.

	Do not operate the microwave oven when it is empty. The microwave oven will automatically shut down for 30 minutes for safety purposes. We recommend placing a glass of water inside the oven at all times to absorb microwave energy in case the microwave oven is started accidentally.	<ul> <li>Image: A start of the start of</li></ul>			<b>~</b>
*	Install the oven in compliance with the clearances stated in this manual. (See installing your microwave oven.)	~		~	
*	Take care when connecting other electrical appliances to sockets near the oven.	~	✓	~	

#### PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY. (MICROWAVE FUNCTION ONLY)

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.

Samsung will charge a repair fee for replacing an accessory or repairing a cosmetic defect if the damage to the unit and/or damage to or loss of the accessory was caused by the customer. Items this stipulation covers include:

(a) A dented, scratched, or broken door, handle, out-panel, or control panel.

- (b) A broken or missing tray, guide roller, coupler, or wire rack.
- Use this appliance only for its intended purpose as described in this instruction manual. Warnings and Important Safety Instructions in this manual do not cover all possible conditions and situations that may occur. It is your responsibility to use common sense, caution, and care when installing, maintaining, and operating your appliance.
- Because these following operating instructions cover various models, the characteristics of your microwave oven may differ slightly from those described in this manual and not all warning signs may be applicable. If you have any questions or concerns, contact your nearest service centre or find help and information online at www.samsung.com.
- This microwave oven is supposed for heating food. It is intended for domestic home-use only. Do not heat any type of textiles or cushions filled with grains, which could cause burns and fire. The manufacturer cannot be held liable for damage caused by improper or incorrect use of the appliance.
- 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 possible result in a hazardous situation.

#### CORRECT DISPOSAL OF THIS PRODUCT (WASTE ELECTRICAL & ELECTRONIC EQUIPMENT)

#### (Applicable in countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

#### **INSTALLATION & WIRING INSTRUCTIONS**

#### **IMPORTANT NOTE :**

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse.

The value of the fuse is indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BS1363 of the same rating must be used.

Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug.

Replacement covers are available from your Dealer. If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your Dealer for assistance. However, if there is no alternative to cutting off the plug, remove the fuse and then safely dispose of the plug. Do not connect the plug to a mains socket, as there is a risk of shock hazard from the bared flexible cord.

#### WIRING INSTRUCTIONS

#### WARNING THIS APPLIANCE MUST BE EARTHED.

This appliance must be earthed. In the event of an electrical short circuit, earthing reduces the risk of electric shock providing an escape wire for the electric current. The appliance is equipped with a mains lead which includes an earth wire for connecting to the earth terminal of your mains plug. The plug must be plugged into a socket that is properly installed and earthed.

- The wires in this mains lead are coloured in accordance with the following code:
  - Green and yellow : Earth
  - Blue : Neutral
  - Brown : Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings indentifying the terminals in your plug, proceed as follows.

Connect the green and yellow wire to the terminal in the plug marked with the letter E or the earth symbol ( $\pm$ ) or coloured green or green-and-yellow.

Connect the blue wire to the terminal marked with the letter N or coloured black.

Consult a qualified electrician or service technician if in doubt about any of these instructions.

The manufacturer of this oven will not accept any liability for damage to persons or material for non observance of these requirements.

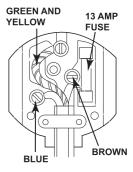
There are no user-serviceable parts inside the oven and if the mains lead of this appliance is damaged, it must only be replaced by qualified service personnel approved by the manufacturer because special tools are required.

#### **WARNING :** Ensure that the plug and

WARNING power cord are not damaged before use. If you have any reason to remove the moulded plug from this appliance, immediately remove the fuse and dispose of the plug.

> Do not connect the plug to a mains socket under any circumstances as there is a danger of electric shock.

CIRCUITS : Your microwave oven should warning be operated on a separate circuit from other appliances. Failure to do this may cause the circuit breaker to trip, the fuse to blow, or the food to cook more slowly.



#### COOKING INSTRUCTIONS ON FOOD PACKAGING

#### **Microwave Symbols**

On the front of your oven there is a microwave oven symbol, as shown below.

This symbol has been introduced for your benefit when cooking or reheating packaged food.



Packaged food is also, increasingly, using a microwave symbol similar to the one below. When you see this



Symbol on food packaging, the cooking instructions are based on either the IEC Power Output Rating, or the Reheating Categories A, B, C, D or E.

#### **COOKING INSTRUCTIONS**

The IEC Power Output rating is an internationally standardised rating, so all microwave manufacturers now use the same method of measuring power output.

If food packaging gives cooking instructions based on IEC Power ratings, set cooking times according to the IEC Power of your oven.

#### For example :

If the cooking instructions are based on a 650 W oven, then you will need to reduce some cooking time for the MS23H3125\*\* (800 W).

Ready meals are now very convenient and popular. These are meals which are already prepared and cooked by the food manufacturer, and then frozen, chilled or vacuum sealed for long life.

Increasingly, heating times for such ready meals are being based on the Heating Categories A, B, C, D and E.

On this instance, simply match the heating category of your oven to the instructions on the food package, and set your timer accordingly.

#### For example :

If the heating instructions are 3 minutes on HIGH for a D category oven, then you will need to set your timer for less than 3 minutes on HIGH for the MS23H3125<sup>\*\*</sup> (E category).

Always remember that cooking instructions are intended only as a guide. If you have followed the instructions and the food is still not piping hot throughout, simply return it to the oven and cook it until it is.

# quick look up guide

#### If you want to cook some food.

//) Microwave	Place the food in the over Press the <b>Microwave</b> bu	
		sired until the appropriate power time, press the <b>Dial Knob</b> to set
	Set the cooking time by t	urning the <b>Dial Knob</b> .
€ START	Press the <b>START/+30s</b> b <b>Result:</b> Cooking starts cooking is over	s. The oven beeps 4 times when

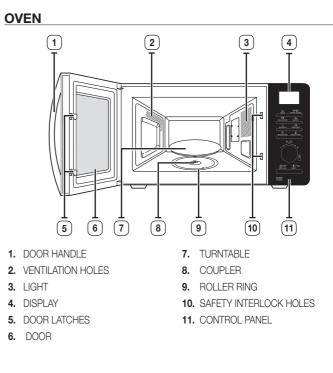
#### If you want to auto Power defrost some food.

** ÖÖ Power Defrost	1.	Place the frozen food in the oven. Press the <b>Power Defrost</b> button.
	2.	Set the cooking category by turning the <b>Dial Knob</b> . Press the <b>Dial Knob</b> to set desired.
	3.	Select the weight by turning the <b>Dial Knob</b> as required.
START	4.	Press the <b>START/+30s</b> button.

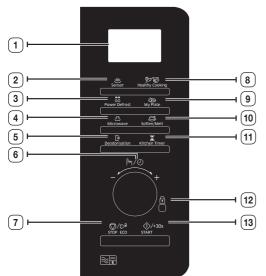
#### If you want to add extra 30 seconds.

<li>(1)/+30s</li>	Leave the food in the oven.
	Press START/+30s one or more times for each extra
	30 seconds that you wish to add.

## oven features



#### **CONTROL PANEL**

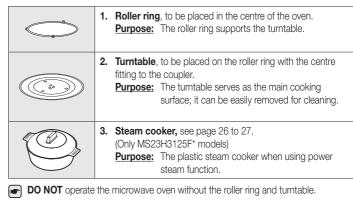


- 1. DISPLAY
- 2. SENSOR COOK BUTTON
- **3.** POWER DEFROST BUTTON
- 4. MICROWAVE BUTTON
- 5. DEODORISATION BUTTON
- 6. DIAL KNOB (WEIGHT/SERVING/TIME/SELECT)

- 7. STOP/ECO BUTTON
- 8. HEALTHY COOKING BUTTON
- 9. MY PLATE BUTTON
- **10.** SOFTEN/MELT BUTTON
- **11.** KITCHEN TIMER BUTTON
- 12. CHILD LOCK BUTTON
- 13. START/+30s BUTTON

#### ACCESSORIES

Depending on the model that you have purchased, you are supplied with several accessories that can be used in a variety of ways.



## oven use

#### HOW A MICROWAVE OVEN WORKS

Microwaves are high-frequency electromagnetic waves; the energy released enables food to be cooked or reheated without the foods form or colour changing.

You can use your microwave oven to:

- Defrost (manual & auto)
- Cook
- Reheat

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 recipient 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					

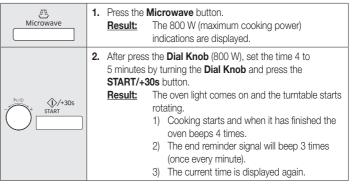
As the centre of the food is cooked by heat dissipation, cooking continues even when you have taken the food out of the oven. Standing times specified in recipes and in this booklet must therefore be respected to ensure:

- Even cooking of the food right to the centre.
- The same temperature throughout the food.

#### CHECKING THAT YOUR OVEN IS OPERATING CORRECTLY

The following simple procedure enables you to check that your oven is working correctly at all times.

Open the oven door by pulling the handle on the right side of the door. Place a glass of water on the turntable. Then, close the door.



The oven must be plugged into an appropriate wall socket. The turntable must be in position in the oven. If a power level other than the maximum is used, the water takes longer to boil.

#### **SETTING THE TIME**

Your microwave oven has an inbuilt clock. When power is supplied, ":0", "88:88" or "12:00" is automatically displayed on the display.

Please set the current time. The time can be displayed in either the 24-hour or 12-hour notation. You must set the clock:

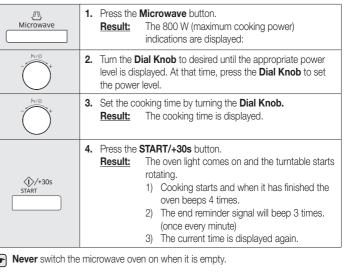
- When you first install your microwave oven
- After a power failure

 $\swarrow$  Do not forget to reset the clock when you switch to and from summer and winter time.

1. Press the Dial Knob. To display the time in the 24-hour notation. 12-hour notation.	
<b>2.</b> Turn the <b>Dial Knob</b> to set time display type. (24H or 12H). At that time, press the <b>Dial Knob</b> to select the type of time.	
 3. Turn the Dial Knob to set the hour. At that time, press the Dial Knob to set the hour.	
4. Turn the Dial Knob to set the minute.	
5. Press the <b>Dial Knob</b> to complete the setup.	æ

#### **COOKING/REHEATING**

The following procedure explains how to cook or reheat food. ALWAYS check your cooking settings before leaving the oven unattended. First, place the food in the centre of the turntable. Then, close the door.



If you wish to heat a dish for a short period of time at maximum power (800 W), simply press the START/+30s button once for each 30 seconds of cooking time. The oven starts immediately. 3

OVEN USE

#### POWER LEVELS

You can choose among the power levels below.

Power level	Output
HIGH	800 W
MEDIUM HIGH	600 W
MEDIUM	450 W
MEDIUM LOW	300 W
DEFROST	180 W
LOW/KEEP WARM	100 W

If you select higher power level, the cooking time must be decreased.

If you select lower power level, the cooking time must be increased.

#### ADJUSTING THE COOKING TIME

START	You can increase the cooking time by pressing the <b>START/+30s</b> button once for each 30 seconds to be added.
	You can also increase the cooking time by turning <b>Dial Knob</b> once for each 10 sec to be added.

#### **STOPPING THE COOKING**

You can stop cooking at any time to check the food.

	1.	To stop ter 1) Open t	1 57	
		Result:	Cooking stops. To resume cooking, close the door and press <b>START/+30s</b> button again.	
<u>leon</u>		2) Press	the STOP/ECO button.	
		Result:	Cooking stops. To resume cooking, press <b>START/+30s</b> button again.	
STOP ECO	2.	To stop completely; Press the <b>STOP/ECO</b> button. <b>Result:</b> The cooking stops. If you wish to cancel the cooking settings, press the <b>STOP/ECO</b> button again.		

You can also cancel any setting before starting by simply pressing **STOP/ECO** button.

#### SETTING THE ENERGY SAVE MODE

The oven has an energy save mode. This facility saves electricity when the oven is not in use. Normal condition is standby mode and show clock when not using.



- Press the STOP/ECO button.
  - Result: Display off.
- To remove energy save mode, open the door and then display shows current time. The oven is ready for use.

#### (V) Auto energy saving function

If you do not select any function when appliance is in the middle of setting or operating with temporary stop condition, function is canceled and clock will be displayed after 25 minutes.

Oven Lamp will be turned off after 5 minutes with door open condition.

#### USING THE DEODORISATION FEATURES

Use this feature after cooking odorous food or when there is a lot of smoke in the oven interior. First clean the oven interior.



Press the **Deodorisation** button after you have finished cleaning, you will hear four beeps.

The deodorisation time has been specified as 5 minutes. It increases by 30 seconds whenever the START/+30s button is pressed.



The maximum deodorisation time is 15 minutes.

#### **USING THE KITCHEN TIMER FEATURES**

You can use timer function with Kitchen Timer button.

Kitchen Timer	1.	Press the <b>Kitchen Timer</b> button.	
	2.	Set the kitchen time by turning the <b>Dial Knob</b> .	
START	3.	Press the <b>START/+30s</b> button to begin Kitchen Timer Function. <u>Result:</u> The display counts down and beeps when the time has elapsed.	

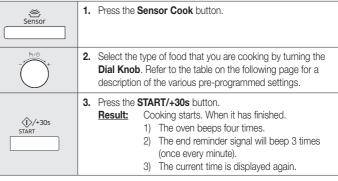
M The Microwave does not turn on when the kitchen timer is used.

#### USING THE SENSOR COOK FEATURES

The Sensor Cook Features has Five pre-programmed cooking times. You do not need to set either the cooking times or the power level. You can adjust the Sensor Cook category by turning the dial knob.

First, place the food in the center of the turntable and close the door.

Use only dishes that are microwave-safe.



Use only recipients that are microwave-safe. 

			Auto Se
Code/Food	Serving Size	Instructions	The Auto Se gases gener
1 Broccoli Florets	200-500 g	Wash and clean broccoli and prepare florets. Put them evenly into a glass bowl with lid. Add 30- 45 ml water (2-3 tbsp). Put bowl in the centre of turntable. Cook covered. Stir after cooking. This programme is suitable for broccoli as well as courgette, egg plant, pumpkin or pepper. Stand for 1-2 minutes.	<ul> <li>When conductive the second seco</li></ul>
2 Sliced Carrots	200-500 g	Wash and clean carrots and cut into round slices evenly. Put them into a glass bowl with lid. Add 30-45 ml water (2-3 tbsp). Put bowl in the centre of turntable. Cook covered. Stir after cooking. This programme is suitable for carrots as well as cauliflower florets or turnip cabbage. Stand for 1-2 minutes.	<ul> <li>Shortly the shortly the second /li></ul>
3 Peeled Potatoes	200-800 g	Wash and peel the potatoes and cut into a similar size. Put them into a glass bowl with lid. Add 45- 60 ml (3-4 tbsp) water. Put bowl in the centre of turntable. Cook covered. Stand for 2-3 minutes.	<ul> <li>Always</li> <li>wrap. W</li> <li>proper r</li> <li>Always</li> </ul>
4 Chilled Soup	250-500 g	Pour into a deep ceramic plate or bowl and cover with plastic lid during heating. Put soup in the centre of turntable. Stir carefully before and after standing time. Stand for 2-3 minutes.	<ul> <li>Fill conta</li> <li>Foods the Sense</li> </ul>
5 Frozen Soup	250-500 g	Pierce film of frozen soup and put in the centre of turntable. Put soup in the centre of turntable. Stir carefully before and after standing time. Stand for 2-3 minutes.	

#### Use oven gloves while taking out!

#### **Auto Sensor Cooking Instructions**

The Auto Sensor allows you to cook your food automatically by detecting the amount of gases generated from the food while cooking.

- When cooking food, many kinds of gases are generated. The Auto Sensor determines the proper time and power level by detecting these gases from the food, eliminating the need to set the cooking time and power level.
- When you cover a container with its lid or plastic wrap during Sensor Cooking, the Auto Sensor will detect the gases generated after the container has been saturated with steam.

# If using cling film or plastic wrap be sure to leave a small opening near the edge of dish for ventilation or be sure to pierce at several times.

- Shortly before cooking ends, the remaining cooking time will begin its count down. This will be a good time for you to rotate or stir the food for even cooking if it is necessary.
- Before auto sensor cooking food may be seasoned with herbs, spices or browning sauces. A word of caution though, salt or sugar may cause burn spots on food so these ingredients should be added after cooking.
- To obtain good cooking results with this function, follow the directions for selecting appropriate containers and covers in the charts in this book.
- Always use microwave-safe containers and cover them with their lids or with plastic wrap. When using plastic wrap, turn back one corner to allow steam to escape at the proper rate.
- Always cover with the lid intended for the utensil being used. If the utensil does not have its own lid, use plastic wrap.
- Fill containers at least half full.
- Foods that require stirring or rotating should be stirred or turned toward the end of the Sensor Cook cycle, after the time has started to count down on the display.

# 3 OVEN USE

#### **Utensils & Cover For Sensor Cooking**

- To obtain good cooking results with this function, follow the directions for selecting appropriate containers and covers in the charts in this book.
- Always use microwave-safe containers and cover them with their lids or with plastic wrap. When using plastic wrap, turn back one corner to allow steam to escape at the proper rate.
- Always cover with the lid intended for the utensil being used. If the utensil does not have its own lid, use plastic wrap.
- Fill containers at least half full.
- Foods that require stirring or rotating should be stirred or turned toward the end of the Sensor Cook cycle, after the time has started to count down on the display.

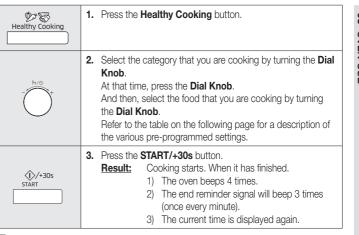
#### Important

- After installing the oven and plugging into an electrical outlet, do not unplug the power cord. The gas sensor needs time to stabilize in order to cook satisfactorily.
- It its not advisable to use the auto sensor cooking feature on a continuous cooking operation, i.e. one cooking operation immediately after another.
- Install the oven in a well ventilated location for proper cooling and airflow and to ensure the sensor will operate accurately.
- To avoid poor results, do not use the Auto sensor when the room ambient temperature is too high or too low.
- Do not use volatile detergent to clean your oven. Gas resulting from this detergent may affect the sensor.
- Avoid placing the oven near high moisture or gas emitting appliances, since this will interfere with the proper performance of the Auto Sensor.
- Always keep the inside of the oven clean. Wipe all spills with a damp cloth. This oven is designed for household use only.

#### USING THE HEALTHY COOKING FEATURES

The Healthy Cooking Features has thirteen pre-programmed cooking times. You do not need to set either the cooking times or the power level. You can adjust the serving size of the item by turning the dial knob.

First, place the food in the centre of the turntable and close the door.



Use only recipients that are microwave-safe.

#### 1. Vegetables & Grain

Code/Food	Serving Size	Instructions
1-1 Green Beans	250 g	Rinse and clean green beans. Put them evenly into a glass bowl with lid. Add 30 ml (2 tbsp) water when cooking 250 g. Put bowl in the centre of turntable. Cook covered. Stir after cooking. Stand for 1-2 minutes.
1-2 Spinach	150 g	Rinse and clean spinach. Put into a glass bowl with lid. Do not add water. Put bowl in the centre of turntable. Cook covered. Stir after cooking. Stand for 1-2 minutes.
1-3 Corn on the Cob	250 g (1 pcs)	Rinse and clean corn on the cob and put into an oval glass dish. Cover with microwave cling film and pierce film. Stand for 1-2 minutes.
1-4 Brown Rice (Parboiled)	125 g	Use a large glass ovenware dish with lid. Add double quantity of cold water (250 ml). Cook covered. Stir before standing time and add salt and herbs. Stand for 5-10 minutes.
1-5 Wholemeal Macaroni	125 g	Use a large glass ovenware dish with lid. Add 500 ml hot boiling water, a pinch of salt and stir well. Cook uncovered. Stir before standing time and drain thoroughly afterwards. Stand for 1 minutes.
1-6 Quinoa	125 g	Use a large glass ovenware dish with lid. Add double quantity of cold water (250 ml). Cook covered. Stir before standing time and add salt and herbs. Stand for 1-3 minutes.
1-7 Bulgur	125 g	Use a large glass ovenware dish with lid. Add double quantity of cold water (250 ml). Cook covered. Stir before standing time and add salt and herbs. Stand for 2-5 minutes.

#### 2. Poultry & Fish

Code/Food	Serving Size	Instructions
2-1 Chicken Breasts	300 g (2 pcs)	Rinse pieces and put on a ceramic plate. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 2 minutes.
2-2 Turkey Breasts	300 g (2 pcs)	Rinse pieces and put on a ceramic plate. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 2 minutes.
2-3 Fresh Fish Fillets	300 g (2 pcs)	Rinse fish and put on a ceramic plate, add 1 tbsp lemon juice. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 1-2 minutes.
2-4 Fresh Salmon Fillets	300 g (2 pcs)	Rinse fish and put on a ceramic plate, add 1 tbsp lemon juice. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 1-2 minutes.
2-5 Fresh Prawns	250 g	Rinse prawns on a ceramic plate, add 1 tbsp lemon juice. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 1-2 minutes.
2-6 Fresh Trout	200 g (1 fish)	Put 2 fresh whole fish into an ovenproof dish. Add a pinch salt, 1 tbsp lemon juice and herbs. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 2 minutes.

#### USING THE AUTO POWER DEFROST FEATURES

The Auto Power Defrost feature enables you to defrost meat, poultry, and fish. The defrost time and power level are set automatically.

You simply select the programme and the weight.

First, place the frozen food in the centre of the turntable and close the door.

VO Power Defrost	Press the <b>Power Defrost</b> button.	
	Select the type of food that you are cooking by turning the <b>Dial Knob</b> . (Refer to the table on the side).	
	3. Press the <b>Dial Knob</b> to select the type of food.	
	Set the weight of food by turning the <b>Dial Knob</b> .	
\$\/+30s START	<ul> <li>Press the START/+30s button.</li> <li>Result: <ul> <li>Defrosting begins.</li> <li>The oven beeps half way through defrosting to remind you to turn the food over.</li> <li>Press START/+30s button again to finish defrosting.</li> </ul> </li> </ul>	

The following table presents the various Auto power Defrost programmes, quantities and appropriate Instructions. Remove all kinds of package material before defrosting. Place meat, poultry, fish, bread/cake on a ceramic plate.

Code/Food	Serving Size	Instructions
1 Meat	200-1500 g	Shield the edges with aluminium foil. Turn the meat over when the oven beeps. This programme is suitable for beef, lamb, pork, steaks, chops and minced meat. Stand for 20-60 minutes.
2 Poultry	200-1500 g	Shield the leg and wing tips with aluminium foil. Turn the poultry over when the oven beeps. This programme is suitable for whole chicken and chicken portions. Stand for 20-60 minutes.
3 Fish	200-1500 g	Shield the tail of the whole fish with aluminium foil. Turn the fish over when the oven beeps. This programme is suitable for whole fishes and fish fillets. Stand for 20-50 minutes.
4 Bread/Cake	125-625 g	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 stopped, when you open the door. This programme is suitable for all kinds of bread, sliced 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. Stand for 5-20 minutes.

03 OVEN USE

#### **USING THE MY PLATE FEATURES**

The My Plate feature has two pre-programmed cooking times. You do not need to set either the cooking times or the power level. You can adjust the number of servings by turning the dial knob. First, place the food in the centre of the turntable and close the door.

My Plate	Press the My Plate button.	
	Select the type of food that you are cooking by turning the <b>Dial Knob</b> .	
	Press the <b>Dial Knob</b> to select the type of food.	
	Select the size of the serving by turning the <b>Dial Knob.</b> (Refer to the table on the side.)	
€ START	Press the START/+30s button.         Result:       Cooking starts. When it has finished.         1)       The oven beeps 4 times.         2)       The end reminder signal will beep 3 times (once every minute).         3)       The current time is displayed again.	

Use only recipients that are microwave-safe.

The following table presents the My Plate auto reheat programmes, quantities and appropriate Instructions. Those programmes are running with microwave energy only.

Code/Food	Serving Size	Instructions
1 Chilled Ready Meal	300-350 g 400-450 g	Put on a ceramic plate and cover with microwave cling film. This programme is suitable for meals consisting of 3 components (e.g. meat with sauce, vegetables and a side dishes like potatoes, rice or pasta). Stand for 2-3 minutes.
2 Chilled Vegetarian Meal	300-350 g 400-450 g	Put meal on a ceramic plate and cover with microwave cling film. This programme is suitable for meals consisting of 2 components (e.g. spaghetti with sauce or rice with vegetables). Stand for 2-3 minutes.

#### **USING THE SOFTEN/MELT FEATURES**

The Soften/Melt feature has four pre-programmed cooking times. You do not need to set either the cooking times or the power level. You can adjust the number of servings by turning the dial knob. First, place the food in the centre of the turntable and close the door.

Soften/Melt	1.	Press the <b>Soften/Melt</b> button.		
	2.	Select the type of food that you are cooking by turning the <b>Dial Knob</b> .		
	3.	Press the <b>Dial Knob</b> to select the type of food.		
	4.	Select the size of the serving by turning the <b>Dial knob</b> . (Refer to the table on the side.)		
	5.	Press the <b>START/+30s</b> button.		
START		Result:       Cooking starts. When it has finished.         1)       The oven beeps 4 times.         2)       The end reminder signal will beep 3 times (once every minute).         3)       The current time is displayed again.		

The following table presents the Soften/Melt auto reheat programmes, quantities and appropriate Instructions. Those programmes are running with microwave energy only.

Code/Food	Serving Size	Instructions
1 Melting Butter	50 g 100 g	Cut butter into 3 or 4 pieces and Put them on small glass bowl. Melt uncovered. Stir after cooking. Stand for 1-2 minutes.
2 Melting Dark Chocolate	50 g 100 g	Grate dark chocolate and put in small glass bowl. Melt uncovered. Stir after melting. Stand for 1-2 minutes.
3 Melting Sugar	25 g 50 g	Put sugar on small glass bowl. Add 10 ml water for 25 g and add 20 ml water for 50 g. Melt uncovered. Take out carefully, use oven gloves! Use spoon or fork and pour caramel decorations on baking paper. Let stand for 10 minutes until dry and remove from paper.
4 Soften Butter	50 g 100 g	Cut butter into 3 or 4 pieces and Put them in small glass bowl. Soften uncovered. Stir after cooking. Stand for 1-2 minutes.

Use only recipients that are microwave-safe.

03 OVEN USE

#### POWER STEAM COOKING GUIDE (ONLY MS23H3125F\* MODELS)

The Power Steamer is based on the principle of steam cooking, and is designed for fast, healthy cooking in your Samsung Microwave oven.

This accessory is ideal for cooking rice, pasta, vegetables, etc. in record time, while preserving their nutritional values.

The Microwave Power steamer set is made up of 3 items:



Insert trav

#### Bowl

Lid

All parts withstand temperatures from -20 °C to 140 °C. Suitable for freezer storage. Can also be used separately or together.

#### **CONDITIONS of USE:**

- Do not use:
  - to cook foods with a high sugar or fat content,
  - with the grill or rotating heat function or on a hob.
- Wash all parts well in soapy water before first use.
- To find out cooking times, please refer to the instructions in the table on next page.

#### **MAINTENANCE:**

- Your steamer can be washed in a dishwasher.
- When washing by hand, use hot water and washing-up liquid. Do not use abrasive pads.
- Some foods (such as tomato) may discolour the plastic. This is normal and not a manufacturing fault.

#### **DEFROSTING:**

Place the frozen food in the steam bowl without the lid. The liquid will remain in the bottom of the pot and will not harm the food.

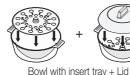
#### COOKING:

Food	Serving Size	Power levels	Cooking time (min.)	Handling		
Artichokes	300 g (1-2 pcs)	800 W	5-6	Bowl with insert tray + Lid		
	Instructions Rinse and clean artichokes. Put insert tray into bowl. Set artichokes on tray. Add one tablespoon lemon juice. Cover with lid. Stand for 1-2 minutes.					
Fresh	300 g	800 W	4-5	Bowl with insert tray + Lid		
Vegetables	Instructions Weigh the vegetables (e.g. broccoli, cauliflower, carrots, pepper) after washing, cleaning and cutting into similar size. Put tray into bowl. Distribute vegetables on insert tray. Add 2 tbsp water. Cover with lid. Stand for 1-2 minutes.					
Frozen	300 g	300 g 600 W 7-8 Bowl with insert tray + Lid				
Vegetables	Instructions Put the frozen vegetables into the steam bowl. Put insert tray into bowl. Add 1 tbsp water. Cover with lid. Stir well after cooking and standing. Stand for 2-3 minutes.					
Rice	250 g	800 W	15-18	Bowl + Lid		
	Instructions Put rice into the steam bowl. Add 500 ml cold water. Cover with lid. After cooking let stand white rice 5 minutes, brown rice 10 minutes.					
Jacket	500 g	800 W	7-8	Bowl + Lid		
Potatoes	<b>Instructions</b> Weigh and rinse the potatoes and put them into steam bowl. Add 3 tbsp water. Cover with lid. Stand for 2-3 minutes.					
Stew (Chilled)	400 g	600 W	5-6	Bowl + Lid		
	Instructions Put stew into the steam bowl. Cover with lid. Stir well before standing. Stand for 1-2 minutes.					

Food	Serving Size	Power levels	Cooking time (min.)	Handling	
Soup (Chilled)	400 g	800 W	3-4	Bowl + Lid	
	Instructions Pour into steam bowl. Cover with lid. Stir well before standing. Stand for 1-2 minutes.				
Frozen Soup	400 g	800 W	8-10	Bowl + Lid	
	Instructions Put frozen soup into steam bowl. Cover with lid. Stir well before standing. Stand for 2-3 minutes.				
Frozen Yeast	150 g	600 W	1-2	Bowl + Lid	
Dumpling with Jam Filling	Instructions Moist the top of filled dumplings with cold water. Put 1-2 frozen dumplings side by side into the steam bowl. Cover with lid. Stand for 2-3 minutes.				
Fruit Compote	250 g	800 W	3-4	Bowl + Lid	
	<b>Instructions</b> Weigh the fresh fruits (e.g. apples, pears, plums, apricots, mangoes or pineapple) after peeling, washing and cutting into similar sizes or cubes. Put into steam bowl. Add 1-2 tbsp water and 1-2 tbsp sugar. Cover with lid. Stand for 2-3 minutes.				

#### Handling of power steam cooker





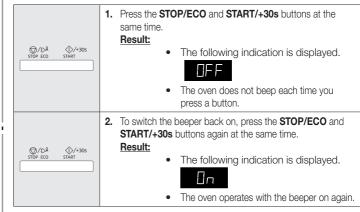
Bowl + Lid

#### **PRECAUTIONS:**

- Take special care when opening the lid of your steamer, because the steam escaping may be very hot.
- Use oven gloves when handling after cooking.

#### SWITCHING THE BEEPER OFF

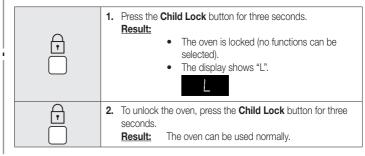
You can switch the beeper off whenever you want.



#### SAFETY-LOCKING YOUR MICROWAVE OVEN

Your microwave oven is fitted with a special Child Safety programme, which enables the oven to be "locked" so that children or anyone unfamiliar with it cannot operate it accidentally.

The oven can be locked at any time.



## cookware guide

To cook food in the microwave oven, the microwaves must be able to penetrate the food, without being reflected or absorbed by the dish used.

Care must therefore be taken when choosing the cookware. If the cookware is marked microwave-safe, you do not need to worry.

The following table lists various types of cookware and indicates whether and how they should be used in a microwave oven.

Cookware	Microwave- safe	Comments	
Aluminum foil	√ X	Can be used in small quantities to protect areas against overcooking. Arcing can occur if the foil is too close to the oven wall or if too much foil is used.	
Crust plate	1	Do not preheat for more than 8 minutes.	
China and earthenware	<i>√</i>	Porcelain, pottery, glazed earthenware and bone china are usually suitable, unless decorated with a metal trim.	
Disposable ✓ polyester cardboard dishes		Some frozen foods are packaged in these dishes.	
Fast-food packaging			
<ul> <li>Polystyrene cups containers</li> </ul>	1	Can be used to warm food. Overheating may cause the polystyrene to melt.	
Paper bags or newspaper	×	May catch fire.	
Recycled paper or metal trims	X	May cause arcing.	

Cookware	Microwave- safe	Comments	
Glassware			
<ul> <li>Oven-to- tableware</li> </ul>	$\checkmark$	Can be used, unless decorated with a metal trim.	
Fine glassware	1	Can be used to warm foods or liquids. Delicate glass may break or crack if heated suddenly.	
<ul> <li>Glass jars</li> </ul>	$\checkmark$	Must remove the lid. Suitable for warming only.	
Metal			
<ul> <li>Dishes</li> </ul>	×	May cause arcing or fire.	
<ul> <li>Freezer bag twist ties</li> </ul>	×		
Paper			
<ul> <li>Plates, cups, napkins and kitchen paper</li> </ul>	1	For short cooking times and warming. Also to absorb excess moisture.	
Recycled paper	×	May cause arcing.	
Plastic			
Containers	J	Particularly if heat-resistant thermoplastic. Some other plastics may warp or discolour at high temperatures. Do not use Melamine plastic.	
Cling film	1	Can be used to retain moisture. Should not touch the food. Take care when removing the film as hot steam will escape.	
Freezer bags	√ ×	Only if boilable or oven-proof. Should not be airtight. Prick with a fork, if necessary.	
Wax or grease- proof paper	$\checkmark$	Can be used to retain moisture and prevent spattering.	

: Recommended

✓ X : Use Caution

χ : Unsafe

# cooking guide

#### MICROWAVES

Microwave energy actually penetrates food, attracted and absorbed by its water, fat and sugar content.

The microwaves cause the molecules in the food to move rapidly. The rapid movement of these molecules creates friction and the resulting heat cooks the food.

#### COOKING

#### Cookware for microwave cooking:

Cookware must allow microwave energy to pass through it for maximum efficiency. Microwaves are reflected by metal, such as stainless steel, aluminium and copper, but they can penetrate through ceramic, glass, porcelain and plastic as well as paper and wood. So food must never be cooked in metal containers.

#### Food suitable for microwave cooking:

Many kinds of food are suitable for microwave cooking, including fresh or frozen vegetables, fruit, pasta, rice, grains, beans, fish, and meat. Sauces, custard, soups, steamed puddings, preserves, and chutneys can also be cooked in a microwave oven. Generally speaking, microwave cooking is ideal for any food that would normally be prepared on a hob. Melting butter or chocolate, for example (see the chapter with tips, techniques and hints).

#### Covering during cooking

To cover the food during cooking is very important, as the evaporated water rises as steam and contributes to cooking process. Food can be covered in different ways: e.g. with a ceramic plate, plastic cover or microwave suitable cling film.

#### Standing times

After cooking is over food the standing time is important to allow the temperature to even out within the food.

#### Reheating Liquids and Food

Use the power levels and times in this table as a guide lines for reheating.

Food	Serving Size	Power	Time (min.)	
Drinks (Coffee,	150 ml (1 cup)	800 W	1-1½	
Tea and Water)	250 ml (1 mug)		1½-2	
	Instructions			
		eat uncovered. Put cup		
		microwave oven during	standing time and	
	stir well. Stand for 1-2	2 minutes.		
Soup (Chilled)	250 g	800 W	3-31/2	
	Instructions			
	Pour into a deep cera	mic plate. Cover with p	lastic lid. Stir well	
	after reheating. Stir ag	gain before serving. Sta	nd for 2-3 minutes.	
Stew (Chilled)	350 g	600 W	51/2-61/2	
	Instructions			
	Put stew in a deep ceramic plate. Cover with plastic lid. Stir			
	occasionally during reheating and again before standing and			
	serving. Stand for 2-3	3 minutes.		
Pasta with	350 g	600 W	41/2-51/2	
Sauce (Chilled)	Instructions			
	Put pasta (e.g. spagh	etti or egg noodles) on	a flat ceramic plate.	
	Cover with microwave cling film. Stir before serving. Stand for			
	3 minutes.			
Filled Pasta	350 g	600 W	5-6	
with Sauce	Instructions			
(Chilled)	Put filled pasta (e.g. ravioli, tortellini) in a deep ceramic plate.			
, ,	Cover with plastic lid. Stir occasionally during reheating and again			
	before standing and serving. Stand for 3 minutes.			

(continued)

Food	Serving Size	Power	Time (min.)	
Plated Meal	350 g	600 W	51/2-61/2	
(Chilled)	Instructions			
	Plate a meal of 2-3 ch	nilled components on a	ceramic dish. Cover	
	with microwave cling-	film. Stand for 3 minute	es.	
Pasta (Frozen)	400 g	450 W	16-16½	
(Cannelloni,	Instructions			
Macaroni,	Put frozen pasta into a	a small flat rectangular	glass pyrex dish. Put	
Lasagne)	the dish directly on the turntable. Stand for 2-3 minutes.			
Indomie	1 Small pack (80 g)	800 W	71⁄2-8	
	1 Big pack (120 g)		91⁄2-10	
	Instructions			
	Use a glass pyrex bowl. Put the noodle and add room			
	temperature 350 ml water in bowl. Cook covered with wrap			
	and pierce at several times. After cooking, drain water and mix indomie spices.			
Boiled Yam	350 g	800 W	121⁄2-13	
	<b>Instructions</b> Peel and cut yam 3 cm thick and put on pyrex bowl. Add room temperature 250 ml water in bowl. Cook covered with wrap and pierce at several times. After cooking, drain water and serve.			
	Stand for 1-2 minutes.			

# troubleshooting and error code

#### TROUBLESHOOTING

Becoming familiar with a new appliance always takes a little time. If you have any of the problems listed below, try the solutions given. They may save you the time and inconvenience of an unnecessary service call.

#### The following are normal occurrences.

- Condensation inside the oven
- Air flow around the door and outer casing
- Light reflection around the door and outer casing
- Steam escaping from around the door or vents

#### The food is not cooked at all.

- Have you set the timer correctly and pressed the START/+30s button?
- Is the door closed?
- Have you overloaded the electric circuit and caused a fuse to blow or a breaker to be triggered.

#### The food is either overcooked or undercooked.

- Was the appropriate cooking length set for the type of food?
- Was an appropriate power level chosen?

#### The oven causes interference with radios or televisions.

- Slight interference may be observed on televisions or radios when the oven is operating. This is normal.
  - Solution: install the oven away from televisions, radios and aerials.
- If interference is detected by the oven's microprocessor, the display may be reset.
  - Solution: Disconnect the power plug and reconnect it. Reset the time.

#### The light bulb is not working.

• The Light bulb should not be replaced in person for safety reasons. Please contact nearest authorised Samsung customer care, to arrange for a qualified engineer to replace the bulb.

# 05 TROUBLESHOOTING & TECHNICAL SPEC

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#### Sparking and cracking occur inside the oven (arcing).

- Have you used a dish with metal trimmings?
- Have you left a fork or other metal utensil inside the oven?
- Is aluminum foil too close to the inside walls?

#### Smoke and bad smell when initial operating.

- It's a temporary condition by new component heating. Smoke and smell will disappear completely after 10 minutes operation.
   To remove smell more quickly, please operate microwave oven with putting lemon formation or lemon juice in the cabinet.
- If the above guidelines do not enable you to solve the problem, then contact your local SAMSUNG customer service centre. Please have the following information read:
  - The model and serial numbers, normally printed on the rear of the oven
  - Your warranty details
  - A clear description of the problem

Then contact your local dealer or SAMSUNG aftersales service.

#### ERROR CODE

#### "SE" message indicates.

• Clean the keys and check if there is water on the surface around key. Turn off the microwave oven and try setting again. If it occurs again, call your local SAMSUNG Customer Care Centre.

#### "E-12" message indicates.

 The "E-12" message is Gas Sensor Short. This error may occur because of the high humidity in the cavity when you operate the microwave oven once again shortly after the previous operation of microwave oven for some food is finished. In this case, because there is a possibility that the Gas Sensor is not out of order turn off the microwave oven and try setting again. If this error occurs again, call your local SAMSUNG Customer Care Centre.

# technical specifications

SAMSUNG strives to improve its products at all times. Both the design specifications and these user instructions are thus subject to change without notice.

Model	MS23H3125**	
Power source	230 V ~ 50 Hz	
Power consumption Microwave	1150 W	
Output power	100 W / 800 W (IEC-705) - 240 V : 800 W - 230 V : 750 W	
Operating frequency	2450 MHz	
Magnetron	OM75S (31)	
Cooling method	Cooling fan motor	
Dimensions (W x H x D) Outside Oven cavity	489 x 275 x 374 mm 330 x 211 x 324 mm	
Volume	23 liter	
Weight Net	12 kg approx	

For any codes not listed above, or if the suggested solution does not solve the problem, contact your local SAMSUNG Customer Care Centre.



#### QUESTIONS OR COMMENTS

COUNTRY	CALL	OR VISIT US ONLINE AT	
AUSTRIA	0800 - SAMSUNG (0800 - 7267864)	www.samsung.com/at/support	
BELGIUM	02-201-24-18	www.samsung.com/be/support (Dutch) www.samsung.com/be_fr/support (French)	
DENMARK	70 70 19 70	www.samsung.com/dk/support	
FINLAND	030-6227 515	www.samsung.com/fi/support	
FRANCE	01 48 63 00 00	www.samsung.com/fr/support	
GERMANY	0180 6 SAMSUNG bzw. 0180 6 7267864* (*0,20 €/Anruf aus dem dt. Festnetz, aus dem Mobilfunk max. 0,60 €/Anruf)	www.samsung.com/de/support	
ITALIA	800-SAMSUNG (800.7267864)	www.samsung.com/it/support	
CYPRUS	8009 4000 only from landline, toll free		
GREECE	80111-SAMSUNG (80111 726 7864) only from land line (+30) 210 6897691 from mobile and land line	www.samsung.com/gr/support	
LUXEMBURG	261 03 710	www.samsung.com/support	
NETHERLANDS	0900-SAMSUNG (0900-7267864) (€ 0,10/Min)	www.samsung.com/nl/support	
NORWAY	815 56480	www.samsung.com/no/support	
PORTUGAL	808 20 7267	www.samsung.com/pt/support	
SPAIN	0034902172678	www.samsung.com/es/support	
SWEDEN	0771 726 7864 (SAMSUNG)	www.samsung.com/se/support	
SWITZERLAND	0848 726 78 64 (0848-SAMSUNG)	www.samsung.com/ch/support (German) www.samsung.com/ch_fr/support (French)	
U.K	0330 SAMSUNG (7267864)	www.samsung.com/uk/support	
EIRE	0818 717100	www.samsung.com/ie/support	

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