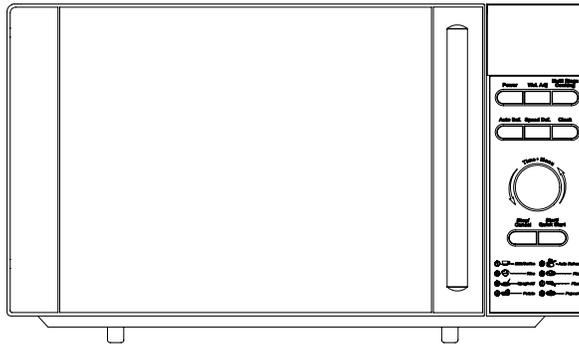




INSTRUCTION MANUAL

EM-S2220B

Microwave Oven



1. READ these instructions carefully before installing and operating the oven. Keep them for further reference.
2. Record in the space below the SERIAL NO. found on the nameplate on your oven and retain this information for future reference.

SERIAL NO.:

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

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

SPECIFICATIONS

Model:	EM-S2220B/V
Power Source:	230-240V/50Hz
Power Consumption:	1200W
Output Microwave:	800W 2450MHz
Outside Dimensions:(WxDxH)	452x390x262mm
Oven Capacity:	20L
Turntable Diameter:	245mm
Net Weight:	Approx.12 kg

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IMPORTANT SAFETY INSTRUCTIONS

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

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

1. Plug into a wall receptacle that is properly installed and grounded.
2. Read all instructions before using the appliance.
3. Use this appliance only for its intended use as described in this manual. Do not use corrosive chemicals or vapors in this appliance. This type of oven is specifically designed to heat, cook or dry food. It is not designed for industrial or laboratory use.
4. Do not operate the oven when empty.
5. Do not operate this appliance if it has a damaged cord or plug, if it is not working properly or if it has been damaged or dropped. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard
6. **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.
7. To reduce the risk of fire in the oven cavity:
 - ✧ When heating food in plastic or paper container, check the oven frequently to the possibility of ignition.
 - ✧ Remove wire twist-ties from paper or plastic bags before placing bag in oven.
 - ✧ If smoke is observed, switch off or unplug the appliance and keep the door closed in order to stifle any flames.
 - ✧ Do not use the cavity for storage purposes. Do not leave paper products, cooking utensils or food in the cavity when not in use.
8. **WARNING:** Liquid or other food must not be heated in sealed containers since they are liable to explode.
9. Microwave heating of beverage can result in delayed eruptive boiling, therefore care has to be taken when handle the container.
10. Do not fry food in the oven. Hot oil can damage oven parts and utensils and even result in skin burns.
11. 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.
12. Pierce foods with heavy skins such as potatoes, whole squashes, apples and chestnuts before cooking.
13. The contents of feeding bottles and baby jars should be stirred or shaken and the temperature should be checked before serving in order to avoid burns.
14. Cooking utensils may become hot because of heat transferred from the heated food. Potholders may be needed to handle the utensil.
15. Utensils should be checked to ensure that they are suitable for use in microwave oven.
16. **WARNING:** It is hazardous for anyone other than a trained person to carry out any service or repair operation which involves the removal of any cover which gives protection against exposure to microwave energy.
17. This product is a Group 2 Class B ISM equipment. The definition of Group 2 which contains all ISM (Industrial, Scientific and Medical) equipment in which radio-frequency energy is intentionally generated and/or used in the form of electromagnetic radiation for the treatment of material, and spark erosion 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 purpose.
18. 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.
19. Children should be supervised to ensure that they do not play with the appliance.
20. Operating the microwave oven without food in it, can result in oven heating and damage to the microwave oven unit. Please do not operate the unit without any food or beverage in it.

INSTALLATION

1. Make sure that all the packing materials are removed from the inside of the door.
2. **WARNING:** Check the oven for any damage, such as misaligned or bent door, damaged door seals and sealing surface, broken or loose door hinges and latches and dents inside the cavity or on the door. If there is any damage, do not operate the oven and contact qualified service personnel.
3. This microwave oven must be placed on a flat, stable surface to hold its weight and the heaviest food likely to be cooked in the oven.
4. Do not place the oven where heat, moisture, or high humidity are generated, or near combustible materials.
5. For correct operation, the oven must have sufficient airflow. Allow 20cm of space above the oven, 10cm at back and 5cm at both sides. Do not cover or block any openings on the appliance. Do not remove feet.
6. Do not operate the oven without glass tray, roller support, and shaft in their proper positions.
7. Make sure that the power supply cord is undamaged and does not run under the oven or over any hot or sharp surface.
8. The socket must be readily accessible so that it can be easily unplugged in an emergency.
9. Do not use the oven outdoors.
10. Please be advised that this microwave oven is not installed or used within an enclosed cabinet.

RADIO INTERFERENCE

Operation of the microwave oven can cause interference to your radio, TV, or similar equipment.

When there is interference, it may be reduced or eliminated by taking the following measures:

1. Clean door and sealing surface of the oven.
2. Reorient the receiving antenna of radio or television.
3. Relocate the microwave oven with respect to the receiver.
4. Move the microwave oven away from the receiver.
5. Plug the microwave oven into a different outlet so that microwave oven and receiver are on different branch circuits.

MICROWAVE COOKING PRINCIPLES

1. Arrange food carefully. Place thickest areas towards outside of dish.
2. Watch cooking time. Cook for the shortest amount of time indicated and add more as needed. Food severely overcooked can smoke or ignite.
3. Cover foods while cooking. Covers prevent spattering and help foods to cook evenly.
4. Turn foods over once during microwave cooking to speed cooking of such foods as chicken and hamburgers. Large items like roasts must be turned over at least once.
5. Rearrange foods such as meatballs halfway through cooking both from top to bottom and from the center of the dish to the outside.

BEFORE YOU CALL FOR SERVICE

If the oven fails to operate:

1. Check to ensure that the oven is plugged in securely. If it is not, remove the plug from the outlet, wait 10 seconds, and plug it in again securely.
2. Check for a blown circuit fuse or a tripped main circuit breaker. If these seem to be operating properly, test the outlet with another appliance.
3. Check to ensure that the control panel is programmed correctly and the timer is set.
4. Check to ensure that the door is securely closed engaging the door safety lock system. Otherwise, the microwave energy will not flow into the oven.

IF NONE OF THE ABOVE RECTIFIES THE SITUATION, THEN CONTACT A QUALIFIED TECHNICIAN. DO NOT TRY TO ADJUST OR REPAIR THE OVEN YOURSELF.

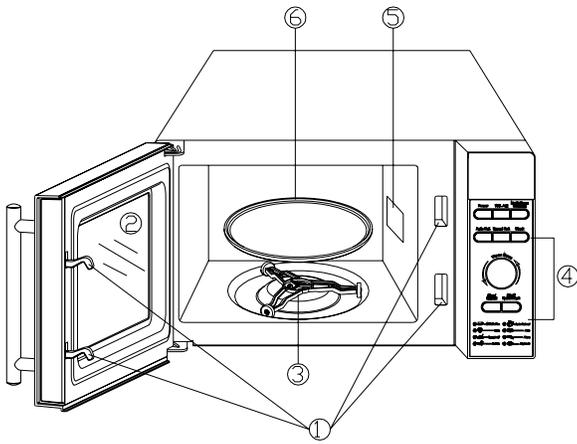
UTENSILS GUIDE

1. The ideal material for a microwave utensil is transparent to microwave, it allows energy to pass through the container and heat the food.
2. Microwave cannot penetrate metal, so metal utensils or dishes with metallic trim should not be used.
3. Do not use recycled paper products when microwave cooking, as they may contain small metal fragments which may cause sparks and/or fires.
4. Round /oval dishes rather than square/oblong ones are recommend, as food in corners tends to overcook.
5. Narrow strips of aluminum foil may be used to prevent overcooking of exposed areas. But be careful don't use too much and keep a distance of 1 inch (2.54cm) between foil and cavity.

The list below is a general guide to help you select the correct utensils.

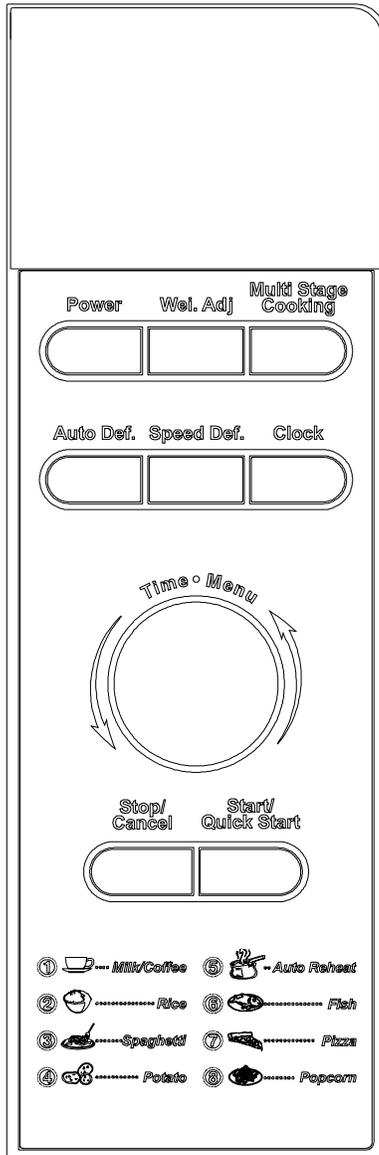
COOKWARE	MICROWAVE
Heat-Resistant Glass	Yes
Non Heat-Resistant Glass	No
Heat-Resistant Ceramics	Yes
Microwave-Safe Plastic Dish	Yes
Kitchen Paper	Yes
Metal Tray	No
Metal Rack	No
Aluminum Foil & Foil Containers	No

PART NAMES



1. Door Safety Lock System
2. Oven Window
3. Roller Ring
4. Control Panel
5. Wave Guide
6. Glass Tray

CONTROL PANEL



- **MENU ACTION SCREEN**

Cooking time, power, action indicators, and clock time are displayed.

- **POWER**

Touch to set microwave cooking power level.

- **WEI.ADJ.**

Touch to select food weight or the amounts.

- **MULTI STAGE COOKING**

Use to set multi stage cooking program.

- **AUTO DEF.**

Touch to defrost food by weight.

- **SPEED DEF.**

Touch to defrost food by time.

- **CLOCK**

Touch to set the oven clock.

- **TIME/MENU**

Turn the dial to input cooking time.

Rotate to select the cooking menu.

- **STOP/CANCEL**

Press to cancel setting or reset the oven before setting a cooking program.

Press once to stop cooking temporarily, or twice to cancel cooking altogether.

It is also used for setting child lock.

- **START/QUICK START**

Touch to start a cooking program.

HOW TO SET THE OVEN CONTROLS

Each time a button is touched, a beep will sound to acknowledge the touch.

SETTING DIGITAL CLOCK

With the oven ready for input, touch the CLOCK button once or twice to set the digital clock in 12 or 24 hours cycle.

FOR EXAMPLE: Suppose you want to set the oven clock time to 8:30.

1. Press CLOCK button once or twice
2. Turn TIME/MENU to indicate the hour digit 8.
3. Press CLOCK button.
4. Turn TIME/MENU dial to indicate the minute digits until the screen shows 8:30.
5. Press CLOCK to confirm the setting.

NOTE: To check clock time during cooking, press the CLOCK button once.

MICROWAVE COOKING

To cook with microwave power, press the POWER button to select a cooking power level, and then use the TIME/MENU dial to set a desired cooking time. The longest cooking time is 60 minutes.

Select power level by pressing the POWER button:

PRESS POWER BUTTON	COOKING POWER
once	100%
twice	80%
3 times	60%
4 times	40%
5 times	20%
6 times	0

For example, suppose you want to cook for 1 minute at 60% of microwave power.

1. Press POWER button 3 times.
2. Turn TIME/MENU to 1:00.
3. Press START/QUICK START button.

QUICK START

This feature allows you to start the oven quickly.

Press the START/QUICK START button to set the cooking time, the oven starts working at full power level immediately.

Each press increased by 30 seconds until 3 minutes 30 seconds and 1 minutes after that.

AUTO DEFROST

The oven can defrost meat, poultry, and seafood. The time and the defrosting power are adjusted automatically once the weight is programmed.

Weight can be set from 100g – 1800g.

FOR EXAMPLE: Suppose you want to defrost 600g shrimp.

1. Place the shrimp into the oven.
2. Press AUTO DEF. button once.
3. Turn TIME/MENU dial to choose weight 600g.
4. Press START/QUICK START button.

NOTE: During cooking, the system will sound to remind you to turn over the food and pause until you depress the button START to enter into the next defrosting stage, and the system resume.

SPEED DEFROST

The oven can quickly defrost food to the set time you entered.

FOR EXAMPLE: Suppose you want to defrost shrimp.

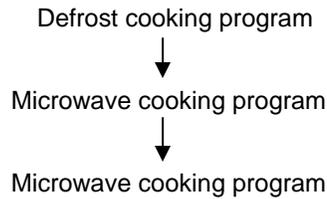
1. Place the shrimp to be defrosted into the oven.
2. Press SPEED DEF. button once.

3. Turn TIME/MENU dial to set cooking time.
4. Press START/QUICK START button.

MULTI STAGE COOKING

Some recipes may require setting a multi-stage program involving defrosting, and different power levels.

Example: suppose you want to set following multi stage cooking program.



1. Input speed defrost program as mentioned above.
2. Touch MULTI STAGE COOKING button once.
3. Press POWER a number of times to select you desired power level.
4. Turn TIME/MENU to select your desired cooking time.
5. Touch MULTI STAGE COOKING button again.
6. Input another microwave cooking program as above steps.
7. Touch START/QUICK START button.

NOTE:

Speed Defrost can only be set as the first stage in multi-stage cooking mode.

The respective lights will on to indicate which stage the oven is operating.

AUTO COOK

For food or the following cooking mode, it is not necessary to program the time and the cooking power. It is sufficient to indicate the type of food that you want to cook as well as the weight of this food. You can follow the steps below: rotate the TIME/MENU button to select a category of food/cooking mode, and then press WEI.ADJ. to enter weight of the food The oven begins cooking once the START button is pressed.

You may need to turn food over during cooking.

For example: to cook 400g of fish.

1. Turn TIME/MENU dial to select the food you are about to cook.
2. Press WEI.ADJ. to indicate food weight.
3. Press START/QUICK START button.

Auto Cook Menu

Code	Food/cooking mode	
A-1	Milk/Coffee(200ml/cup)	
A-2	Rice	
A-3	Spaghetti	
A-4	Potato (each 230g)	
A-5	Auto Reheat	
A-6	Fish	
A-7	Pizza (g)	
A-8	Popcorn (99g)	

1. Turn TIME/MENU dial to indicate weight of food.
2. For Spaghetti add boiled water before cooking.
3. For Popcorn, there is only one option.
4. Power fluctuation and other factors may cause the auto cooking not done exactly as you expected; the user may adjust cooking time accordingly.

Defaulted cooking times of TO COOK MENU's food are as follows:

	Unit(200ml/cup)	Needed Time(min.)
Milk/Coffee	1	1: 30
	2	2: 40
	3	3: 50

	Unit(g)	Needed Time(min.)
Rice	150	21: 00
	300	24: 00
	450	27: 00
	600	30: 00

	Unit(g)	Needed Time(min.)
Spaghetti	100	25: 00
	200	30: 00
	300	35: 00

	Unit(230g/each)	Needed Time(min.)
Potato	100	6: 00
	200	10: 00
	300	15: 00

	Unit(g)	Needed Time(min.)
Auto Reheat	200	1: 40
	300	2: 20
	400	3: 00
	500	3: 40
	600	4: 20
	700	5: 00
	800	5: 40

	Unit(g)	Needed Time(min.)
Fish	200	4: 30
	300	5: 30
	400	6: 30
	500	7: 30
	600	8: 30

	Unit(g)	Needed Time(min.)
Pizza	150g	0:50
	300g	1:20
	450g	1:50

	Unit(99g/each)	Needed Time(min.)
Popcorn	99g	2:30

CHILD LOCK

Use to prevent unsupervised operation of the oven by little children. The CHILD LOCK indicator will show up on display screen, and the oven can not be operated while the CHILD LOCK is set.

LOCK: Press and hold the STOP/CANCEL button for 3 seconds, a beep sounds and LOCK indicator lights.

UNLOCK: Press and hold the STOP/CANCEL button for 3 seconds until lock indicator on display off.

SPECIAL FEATURE

After cooking, beeps sound and END appears in display. Touch STOP/CANCEL or open oven door to clear END before starting another cooking function.

CLEANING AND CARE

1. Turn off the oven and remove the power plug from the wall socket before cleaning.
2. Keep the inside of the oven clean. When food splatters or spilled liquids adhere to oven walls, wipe with a damp cloth. Mild detergent may be used if the oven gets very dirty. Avoid the use of spray and other harsh cleaners as they may stain, streak or dull the door surface.
3. The outside surfaces should be cleaned with a damp cloth. To prevent damage to the operating parts inside the oven, water should not be allowed to seep into the ventilation openings.
4. Wipe the both sides of the door and window, the door seals and adjacent parts frequently with a damp cloth to remove any spills or splatters. Do not use abrasive cleaner.
5. Do not allow the control panel to become wet. Clean with a soft, damp cloth. When cleaning the control panel, leave oven door open to prevent oven from accidentally turning on.
6. If steam accumulates inside or around the outside of the oven door, wipe with a soft cloth. This may occur when the microwave oven is operated under high humidity condition. And it is normal.
7. It is occasionally necessary to remove the glass tray for cleaning. Wash the tray in warm sudsy water or in a dishwasher.
8. The roller ring and oven floor should be cleaned regularly to avoid excessive noise. Simply wipe the bottom surface of the oven with mild detergent. The roller ring may be washed in mild sudsy water or dishwasher. When removing the roller ring from cavity floor for cleaning, be sure to replace in the proper position.
9. Remove odors from your oven by combining a cup of water with the juice and skin of one lemon in a deep microwaveable bowl, microwave for 5 minutes. Wipe thoroughly and dry with a soft cloth.
10. When it becomes necessary to replace the oven light, please consult a dealer to have it replaced.
11. 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.
12. Please do not dispose this appliance into the domestic rubbish bin; it should be disposed to the particular disposal center provided by the municipalities.

SANYO
SANYO Electric Co., Ltd.