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# PANASONIC NN-S532 Owner's Manual

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# Panasonic

# **Operating Instructions**

Microwave Oven Models NN-S542 NN-S532



This manual contains Safety Instructions, Operating Instructions and Maintenance of the oven Before operating this oven, please road these instructions completely. Antes de operar este producto, lea este instructivo en su totalidad Él manual de instrucciones en español puede ser encontrada un la págmas 21-29 (Spanish Operating Instructions can be found on pages 21-29)

For assistance, please call :1-800-211-PANA(7262) or send e-mail to :consumerproducts@panasonic.com or visit us at www.panasonic.com	(U.S.A)
For assistance, please call : 787-750-4300 or visit us at www.panasonicpr.com	(Puerto Rico)

## PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- (a) 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. Under normal conditions oven will not operate with door open.
- (b) Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- (c) Do not operate the oven if it is damaged. It is particularly important that the oven door close properly and that there is no damage to the:
  - (1) door (bent),

The serial number of this product may be found on the back side of the oven. You should note the model number and the serial number of this oven in the space provided and retain this book as a permanent record of your purchase for future ref-

erence.

- (2) hinges and latches (broken or loosened),
- (3) door seals and sealing surfaces.
- (d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

	NN-S542	NN-S532
Power Source:	120 V	60 Hz
Power Consumption:	11.5 Amps	. 1,320 W
Output:*	1,300 W	1,200 W
Outside Dimensions	11 <sup>7</sup> /8" x 20 <sup>3</sup>	/s" x 15 <sup>7</sup> /s"
(H x W x D):	(301 x 518 :	x 404 mm)
Oven Cavity Dimensions	8 <sup>7</sup> /8" x 14 <sup>3</sup> /	4" x 15 <sup>3</sup> /16"
(H x W x D):	(225 x 375 )	x 386 mm)
Operating Frequency:	2,450	MHz
Uncrated Weight:	Approx. 23 lb	s. (10.5 kg)

#### Technical Specifications

\*IEC 705-88 Test procedure Specifications subject to change without notice.

Model No	
Serial No	
Date of Purchase	· · · · · · · · · · · · · · · · · · ·

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## For assistance, PLEASE CALL 1-800-211-PANA (7262)

## **IMPORTANT SAFETY INSTRUCTIONS**

Your microwave oven is a cooking device and you should use as much care as you use with a stove or any other cooking device. When using this electric 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. Read all instructions before using the appliance.
- 2. Read and follow the specific "PRECAU-TIONS TO AVOID POSSIBLE EXPO-SURE TO EXCESSIVE MICROWAVE ENERGY," found inside of the front cover.
- This appliance must be grounded. Connect only to properly grounded outlet. See "GROUNDING INSTRUCTIONS" found on page 4.
- Install or locate this appliance only in accordance with the installation instructions found on page 4.
- Do not cover or block any openings on this appliance.
- Do not store or use this appliance outdoors.
   Do not use this product near water—for example, near a kitchen sink, in a wet
- basement, or near a swimming pool, and the like.
- 7. Use this appliance only for its intended use as described in this manual. Do not use corrosive chemicals, vapors, or nonfood products in this appliance. This type of oven is specifically designed to heat, or cook food. It is not designed for industrial or laboratory use. The use of corrosive chemicals in heating or cleaning will damage the appliance and may result in radiation leaks.
- When cleaning surfaces of door and oven that come together on closing the door, use only mild, non-abrasive soaps or detergents applied with a sponge or soft cloth.
- Do not allow children to use this appliance, unless closely supervised by an adult.
- 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.
- 11. Do not immerse cord or plug in water.
- 12. Keep cord away from heated surfaces.
- Do not let cord hang over edge of table or counter.

## SAVE THESE INSTRUCTIONS

For proper use of your oven read remaining safety cautions and operating instructions.

- This appliance should be serviced only by qualified service personnel. Contact the nearest authorized service facility for examination, repair or adjustment.
- 15. Some products such as whole eggs, narrow neck bottles and sealed containers for example, closed glass jars—may explode and should not be heated in this oven.
- To reduce the risk of fire in the oven cavity:
  - (a) Do not overcook food. Carefully attend appliance if paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
  - (b) Remove wire twist-ties from paper or plastic bags before placing bag in oven.
  - (c) If materials inside the oven should ignite, keep oven door closed, turn oven off, and disconnect the power cord, or shut off power at the fuse or circuit breaker panel.
  - (d) Do not use the cavity for storage purposes. Do not leave paper products, cooking utensils, or food in the cavity when not in use.
- 17. Liquids, such as water, coffee, or tea are able to be overheated beyond the boiling point without appearing to be boiling due to surface tension of the liquid. Visible bubbling or boiling when the container is removed from the microwave oven is not always present. THIS COULD RESULT IN VERY HOT LIQUIDS SUDDENLY BOILING OVER WHEN A SPOON OR OTHER UTENSIL IS INSERTED INTO THE LIQUID. To reduce the risk of injury to persons:
  - (a) Do not overheat the liquid.
  - (b) Stir the liquid both before and halfway through heating it.
  - (c) Do not use straight-sided containers with narrow necks.
  - (d) After heating, allow the container to stand in the microwave oven for a short time before removing the container.
  - (e) Use extreme care when inserting a spoon or other utensil into the container.

## **IMPORTANT SAFETY INSTRUCTIONS**

#### **General Use**

1. DO NOT tamper with or make any adjustments or repairs to door, Control Panel housing, safety interlock switches or any other part of the oven. DO NOT remove outer



panel from oven. Repairs must only be done by a qualified service person.

2. DO NOT operate the oven empty. The microwave energy will reflect continuously throughout the oven causing overheating if food or water is not present to absorb



energy. This could damage the oven and result in the risk of a fire.

- 3. DO NOT dry clothes, newspapers or other materials in oven, or use newspapers or paper bags for cooking. Fire could result.
- 4. DO NOT use recycled paper products unless the paper product is labeled as safe for microwave oven use. Recycled paper products may contain impurities which may cause sparks, and result in fires when used.
- 5. DO NOT hit or strike Control Panel. Damage to controls may occur. Fire could result.
- 6. POT HOLDERS should always be used when removing items from the oven. Heat is transferred from the HOT food to the cooking container and from the cooking container to the Glass Tray. The Glass Tray can be very HOT after removing cooking container from oven.
- DO NOT store flammable materials next to, 7. on top of, or in the oven. These could be fire hazards.

- Glass Tray 1. DO NOT operate the oven without Roller Ring and Glass Tray in place.
- . DO NOT operate the oven without the Glass Tray fully engaged on the drive hub. Improper cooking or damage to the oven could result. Verify that the Glass Tray is properly engaged and rotating by observing its rotation when
- you press Start. 3. Only use the Glass Tray specifically designed for this oven. Do not substitute any other glass trav
- 4. If the Glass Tray is hot, allow to cool before cleaning or placing in water.
- 5. DO NOT cook directly on the Glass Tray. Always place food in a microwave-safe dish, or on a rack set in a microwave-safe dish.
- 6. If food or utensil on Glass Tray touches oven walls, causing the tray to stop moving, the tray will automatically rotate in the opposite direction. This is normal.
- 7. Glass Tray can turn in either direction.

#### Roller Ring

- 1. Roller Ring and oven floor should be cleaned frequently to prevent excessive noise.
- Roller Ring must always be used for cooking
- along with Glass Tray. 3. Always replace Roller Ring and Glass Tray in their proper positions.

## **INSTALLATION AND GROUNDING INSTRUCTIONS**

#### Examine Your Oven

Unpack oven, remove all packing material, and examine the oven for any dam-ages such as dents, broken door latches or cracks in the door. Notify dealer immediately if oven is damaged. DO NOT install if oven is damaged.

#### Placement of Oven

- Oven must be placed on a flat, stable surface. For proper operation, the oven must have sufficient air flow. Allow 3-inches (7.6 cm) of control of the stable stable. must have sufficient air now. Anow s-inches (7.6 cm) of space on both sides of the oven and 1-inch (2.5 cm) of space of space on top of oven. a. **DO NOT** block air vents. If they are blocked during operation, the over may be overheated and

  - the oven may be overheated and damaged.
  - When using any cloth over the oven, the air intake and exhaust should not be blocked. Also should allow space on back and both sides of oven prop-
  - b. DO NOT place oven near a hot damp surface such as a gas or elec-
  - c. DO NOT operate oven when room humidity is too high.
- This oven was manufactured for household use only.

## Grounding Instructions

This appliance must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

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

Consult a qualified electrician or service person if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded. If it is necessary to use an extension cord, use only a three wire extension cord that has a three blade grounding plug, and a three slot recepta-cle that will accept the plug on the appli-ance. The marked rating of the extension

cord should be equal to or greater than the electrical rating of the appliance.



4



- A short power-supply cord is provided to reduce the risks resulting from becoming entangled in or tripping over a longer cord.
- Longer cord sets or extension cords are available and may be used if care is exercised in their use.
- If a long cord or extension cord is used, (1) the marked electrical rating of the cord set or extension cord should be at least as great as the electrical rating of the appliance, (2) the extension cord must be a grounding-type 3-wire cord, and (3) the longer cord should be arranged so that it will not drape over the counter top or tabletop where it can be pulled on by children or tripped over accidentally.

#### Wiring Requirements

- 1. The oven must be operated on a SEP-ARATE CIRCUIT. No other appliance should share the circuit with the microwave oven. If it does, the branch circuit fuse may blow, the circuit breaker may trip, or the food may cook slower than the times recommended in this manual
- 2. The VOLTAGE used must be the same as specified on this microwave oven (120 V, 60 Hz). Using a higher voltage is dangerous and may result in a fire or another incident causing oven damage. Using a lower voltage will cause slow cooking. Panasonic is **NOT** responsible for any damages resulting from the use of the oven with any voltage other than specified.
- 3. The oven must be plugged into at least a 20 AMP, 120 VOLT, 60 Hz GROUND-ED OUTLET. Where a standard twoprong outlet is encountered, it is the personal responsibility and obligation of the consumer to have it replaced with a properly grounded three-prong outlet.

#### TV / Radio Interference

- 1. Operation of the microwave oven may cause interference to your radio, TV or similar equipment.
- When there is interference, it may be reduced or eliminated by taking the fol-2. lowing measures
  - a. Clean door and sealing surfaces of the oven. (See Care of Your
  - Microwave Oven) b. Place the radio, TV, etc. away from the microwave oven as far as possible.
  - c. Use a properly installed antenna to obtain stronger signal reception.

## Safety Precautions

Follow These Safety Precautions When Cooking in Your Oven

#### **IMPORTANT**

Proper cooking depends upon the power, the time set and quantity of food. If you use a smaller portion than recommended and cook at the time for the recommended portion, fire could result.

- 1) HOME CANNING / DRYING FOODS / SMALL QUANTITIES OF FOODS
- Do not use your oven for home canning, your oven cannot maintain the food at the proper canning temperature. Improperly canned food may spoil and be dangerous to consume.
- · Do not dry meats, herbs, fruits or vegetables in your oven. Small quantities of food or foods with low moisture content can dry out, scorch or catch on fire if overheated.

#### 2) POPCORN

Popcorn may be popped in a microwave oven com popper. Microwave popcorn which pops in its own package is also available. Follow popcorn manufacturers' directions and use a brand suitable for the wattage of your microwave oven.

#### CAUTION: When using pre-packaged

microwave popcorn, follow recommended package instructions. Check package weight before using the Popcorn pad (see Popcorn Pad section). Set the oven for the weight of the popcorn package.

If these instructions are not followed, the pop corn may not pop adequately or may ignite and cause a fire. Never leave oven unattended when popping popcorn. Allow the popcorn bag to cool before opening, always open the bag away from your face and body to prevent steam burns.

#### 3) DEEP FAT FRYING

- Do not attempt to deep fat fry in your microwave oven. Cooking oils may burst into flames and may cause damage to the oven and perhaps result in burns. Microwave utensils may not be able to withstand the temperature of the hot oil, and could shatter or melt.
- 4) FOODS WITH NONPOROUS SKINS
- Potatoes, apples, egg yolks, whole eggs, whole squash and sausages are examples of foods with nonporous skins. These types of foods must be pierced before microwave cooking
- to prevent their bursting. Use fresh potatoes for baking and cook until just done. <u>Use recommended weights for pro-</u> grammed cooking. Overcooking causes dehydra-tion and may result in a fire. 5) GLASS TRAY / COOKING UTENSILS / FOIL
- Cooking utensils get hot during microwaving. Heat is transferred from the HOT food to the container

and the Glass Tray. Use potholders when removing utensils from the oven or when removing lids or plastic wrap covers from cooking utensils, to avoid burns.

- . The glass tray will get hot during cooking. It should be allowed to cool before handling or before paper products, such as paper plates or microwave popcorn bags, are placed in the oven for microwave cooking.
- When using foil, skewers, warming rack or utensils made of metal in the oven, allow at least 1inch (2.5 cm) of space between metal material and interior oven walls. If arcing occurs (sparking), remove metal material (skewers etc.) and/or transfer to a non-metallic container.
- · Dishes with metallic trim should not be used, as arcing may occur.
- If an entree is heated in a foil tray, maintain at least 1-inch (2.5 cm) spacing from the oven walls. 6) PAPER TOWELS / CLOTHS
- DO NOT use paper towels or cloths which contain a synthetic fiber woven into them. The synthetic fiber may cause the towel to ignite. Use paper toweling under supervision. 7) BROWNING DISHES / OVEN COOKING
- BAGS
- Browning dishes or grills are designed for microwave cooking only. Always follow instructions provided by the manufacturer. DO NOT preheat browning dish more than 6 minutes.
- If an oven cooking bag is used for microwave cooking, prepare according to package directions. DO NOT use a wire twist-tie to close bag, instead use plastic ties, cotton string or a strip cut from the open end of the bag

#### 8) THERMOMETERS

DO NOT use a conventional meat thermometer in your oven. Arcing may occur. Microwave-safe thermometers are available for both meat and candv

#### 9) BABY FORMULA / FOOD

 DO NOT heat baby formula or food in the microwave oven. The glass jar or surface of the food may appear warm while the interior can be so hot as to burn the infant's mouth and esopha-

#### 10) REHEATING PASTRY PRODUCTS

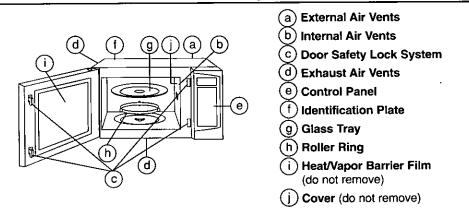
- When reheating pastry products, check tempera-tures of any fillings before eating. Some foods have fillings which heat faster and can be extremely hot, while the surface remains warm to the touch (ex. Jelly Donuts). 11) GENERAL OVEN USAGE GUIDELINES
- DO NOT use the oven for any reason other than the preparation of food.
- DO NOT leave oven unattended while in use.



Cookware and Utensil Guide		
ITEM	MICROWAVE	COMMENTS
Aluminum Foil	Yes for Shielding only	Small strips of foil can be molded around thin parts of meat or poultry to prevent overcooking. Arcing can occur if foil is too close to oven wall or if too much foil is used.
Browning Dish	Yes	Browning dishes are designed for microwave cooking only. Check browning dish information for instructions and heating chart. Do not preheat for more than 6 mins.
Brown paper bags	<u>No</u>	May cause a fire in the oven.
Dinnerware Labelled "Microwave-Safe"	Yes	Check manufacturers' use and care directions for use in microwave heating. Some dinnerware may state on the back of the dish, "Oven-Microwave Safe".
Other Dinnerware	?	Use CONTAINER TEST below.
Disposable polyester Paperboard Dishes	Yes	Some frozen foods are packaged in these dishes. Can be purchased in grocery stores.
Fast Food Carton with Metal Handle	No	Metal handle may cause arcing
Frozen Dinner Tray Metal	Yes	Frozen dinners may be heated in foil tray, if tray is less than ¼ in.(2 cm) high. Place foil tray in center of oven. Leave at least 1 in. (2.5 cm) space between foil tray and oven walls.
Microwave-safe	Yes	Heat only 1 foil tray in the oven at time. For containers more than % inch (2 cm) deep,remove food and place in a similar size microwave-safe container.
Glass Jars	Yes, use caution	Remove lid. Heat food until just warm, not HOT. Most glass jars are not heat resistant. Do not use for cooking
Glassware Heat Resistant Oven Glassware & Ceramics	Yes	Ideal for microwave cooking and browning. (See CONTAINER TEST below)
Metal Bakeware	No	Not recommended for use in microwave ovens.
Metal Twist-Ties	No	May cause arcing which could cause a fire in the oven.
Oven Cooking Bag	Yes	Follow manufacturers' directions. Close bag with the nylon tie provided, a strip cut from the end of the bag, or a piece of cotton string. Do not close with metal twist-tie. Make six $\frac{1}{2}$ in. (1 cm) slits near the closure.
Paper Plates & Cups	Yes	Use to warm cooked foods, and to cook foods that require short cooking times such as hot dogs.
Paper Towels & Napkins	Yes	Use to warm rolls and sandwiches by microwave.
Parchment Paper	Yes	Use as a cover to prevent spattering. Safe for use in microwave, microwave/convection and conventional ovens.
Plastic Microwave-Safe Cookware	Yes	Should be labeled, "Suitable for Microwave Heating." Check manufacuters' directions for recommended uses.
Reheat & Storage	Yes, use caution	Some microwave-safe plastic dishes are not suitable for cooking foods with high fat or sugar content. The heat from hot food may cause the plastic to warp.
Melamine	No	This material absorbs microwave energy. Dishes get HOT!
Plastic Foam Cups	Yes	Plastic foam will melt if foods reach a high temperature. Use to bring foods to a low serving temperature.
Plastic Wrap	Yes	Use to cover food during cooking to retain moisture and prevent spattering. Should be labelled "Suitable for Microwave Heating". Check package directions.
Straw, Wicker, Wood	Yes	Use only for short term reheating and to bring food to a low serving temperature.
Thermometers Microwave-safe, only	Yes	Use only microwave-safe meat and candy thermometers. Not suitable for use in microwave oven, will cause sparks
Conventional	No	and get hot.
Wax paper	Yes	Use as a cover to prevent spattering and to retain moisture.

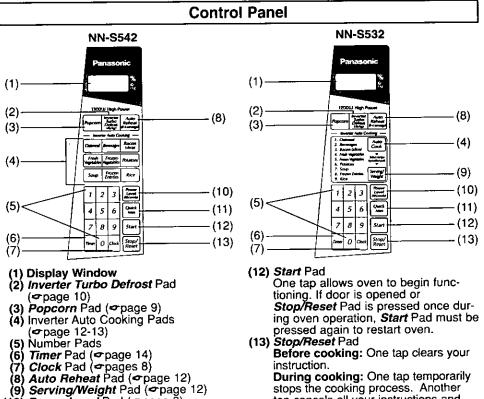
CONTAINER TEST TO TEST A CONTAINER FOR SAFE MICROWAVE OVEN USE: Fill a 1- cup glass measure with water and place it in the microwave oven along with the container to be tested; heat one (1) minute at HIGH (P10). If the container is microwave oven-safe (transparent to microwave energy), the container should remain comfortably cool and the water should be hot. If the container is hot, it has absorbed some microwave energy and should NOT be used. This test cannot be used for plastic containers. 6

#### **Feature Diagram**



#### **Oven Light:**

Oven Light turns on only while cooking and will not turn on when oven door is opened.



- (10) Power Level Pad ( page 8)
- (11) Quick Min Pad ( page 10)

Beep Sound: When a pad is pressed correctly, a beep will be heard. If a pad is pressed and no beep is heard, the unit did not or cannot accept the instruction. The oven will beep twice between programmed stages. At the end of any complete program, the oven will beep 5 times.

tap cancels all your instructions and

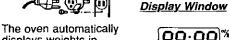
time of day or colon appears on the

Display Window.

#### Let's Start to Use Your Oven!

1. Plug into a properly grounded electrical outlet.

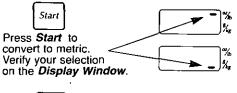




displays weights in imperial (oz/lb).



2. If you wish to use metric (g/kg):





Now, enjoy cooking with your Panasonic microwave.

Cloc	k Setting	
The oven will operate without setting the clock.		
Example: To set 11:25 a.m. or p.m.		
1.	<ul> <li>Press once.</li> <li>≻Colon flashes.</li> </ul>	
<b>2.</b>	<ul> <li>Enter time of day using the number pads.</li> <li>&gt; Time appears on the Display Window; colon continues flashing.</li> </ul>	
3. Clock	<ul> <li>Press.</li> <li>Colon stops flashing; time of day is entered.</li> </ul>	

#### NOTES:

- 1.To reset the colck, repeat steps 1-3.
- 2. The clock will keep the time of day as long as the oven is plugged in and electricity is

supplied. 3.Clock is a 12 hour display.

4. Oven will not operate while colon is flashing.

Power	&	Time	Setting	

How do I program Power and Time? Example: To cook at P 6 (MEDIUM) Power for 1 minute 30 seconds 1. Power Level (10 Levels Select Power Level. (according to the chart below) Press 5 times. 2. Set Cooking Time using number pads. 1 3 0 3. Press. ►Cooking will start. The Start time on the screen will count down. Press Power Level P10 (HIGH) once **P**9 twice 3 times P 8 P 7 (MEDIUM-HIGH) 4 times P 6 (MEDIUM) 5 times 6 times P 5 Ρ4 7 times P 3 (MEDIUM-LOW)/DEFROST 8 times

#### 10 times NOTES:

8

9 times

1.For more than one stage cooking, repeat steps 1 and 2 for each stage of cooking before

P 2 P 1 (LOW)

- pressing *Start* Pad. 2.When selecting P10 (HIGH) power for the first stage, you may begin at step 2. 3.Two beeps will sound between each stage of
- programming. Five beeps will sound at the end of the entire sequence.
- 4.When selecting P10 (HIGH) power, the maximum programmable time is 30 minutes. For other power levels, the maximum time is 99 minutes and 99 seconds.
- 5.For reheating, use P10 (HIGH) for liquids, P7 (MEDIUM-HIGH) for most foods and P6 (MEDIUM) for dense foods. 6.For defrosting, use P3 (MEDIUM-LOW).

Popcorn Function		
Example: To heat 1.75 oz. of Popcorn		
1. Popcorn	<ul> <li>Set the desired weight of prepackaged microwave popcorn.</li> </ul>	
Press once	Press         Weight           once         1.75 oz. (50g)           twice         2.65 oz. (75g)           3 times         2.85 oz. (80g)           4 times         3.0 oz. (85g)           5 times         3.5 oz. (99g)	
<b>2.</b> 1 or 0 Optional.		
<b>3.</b> <i>Start</i>	<ul> <li>Press Start Pad.</li> <li>➤ After several seconds, cooking time appears on the Display</li> <li>Window and begins to count down.</li> </ul>	

#### NOTES ON POPCORN PAD:

- 1. Use prepackaged room temperature microwave popcorn. Read manufacturers' instructions.
- 2. Place bag in oven according to manufacturers'
- Place bag in over according to manuacturers directions.
   Pop only one bag at a time.
   After popping, allow the contents of the bag to cool for a few minutes before opening. Open bag carefully away from face and body because popcorn and steam are extremely hot.
   Do not reheat unpopped kernels or reuse bag.
   NEVER leave oven unattended when popping a popcorn. Stop the oven when popping
- ping popcorn. Stop the oven when popping slows to 2 to 3 seconds between pops. Overcooking may cause scorching.
- 7. With the many varieties of microwave popcorn available in the market place, it may be necessary for you to move the popcorn container to the outer edge of the Glass Tray to obtain the best cooking results.

REMARK: When popping multiple bags one right after the other, the cooking times may vary slight-ly. This does not affect the popcorn results.

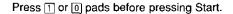
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### Ingenious Use by 1 or 0

When using popcorn pad, the weight may not be the same as offered. By using the number pad 1 or 0, the programs can be adjusted to cook food for a heavier or lighter weight.

To control by 1 or 0 pad:

1	1 tap = More+
Press	2 taps = More++
0	1 taps = Less <sup>-</sup>
Press	2 taps = Less <sup></sup>



#### To Use Child Safety Lock

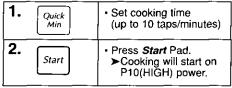
This feature prevents the electronic operation of the oven until cancelled. It does not lock the door.

To Set: Start Press 3 times.	<ul> <li>"Child" appears on the Display Window.</li> <li>"Child" continues to be displayed until Child Lock is can- celled. Keypads may be pressed but the microwave will not start.</li> </ul>
To Cancel: Stop/ Reset Press 3 times.	The Display Window will return to colon or time of day when Child Lock has been cancelled.

#### **Quick Min Function**

This feature allows you to set and/or add cooking times easily in multiples of one minute.

#### To Set Standing Time:



#### NOTE:

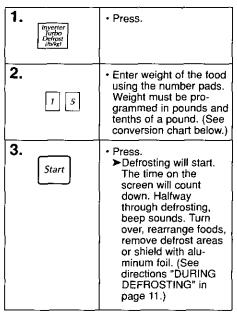
- 1. You can use other power levels. Select desired
- power level before setting cooking time. 2.After setting the time by *Quick Min* Pad, you cannot use Number Pads, and vice versa.
- 3.Press Quick Min Pad to add more time during cooking. To verify the additional cooking time, check the Display Window.

#### Inverter Turbo Defrost

This feature allows you to defrost meat, poultry and seafood simply by entering the weight.

#### Example: To defrost 1.5 pounds of meat.

Place food on microwave safe roasting rack in an appropriately sized dish.



#### **Conversion Chart:**

Follow the chart to convert ounces or hundredths of a pound into tenths of a pound. To use Auto Defrost, program the weight of the food in lbs. (1.0) and tenths of a lb. (0.1). If a piece of meat weighs 1.95 lbs. or 1 lb. 14 oz., program 1.9 lbs. If a piece of meat weighs 1.99 lbs. or 2 lbs. 0 oz., program 2.0 pounds.

Ounces	Hundredths of a Pound	Tenths of a Pound
0	.0105	0.0
1 - 2	.0615	0.1
3 - 4	.1625	0.2
5	.2635	0.3
6 - 7	.3645	0.4
8	.4655	0.5
9 - 10	.5665	0.6
11 - 12	.6675	0.7
13	.7685	0.8
14 - 15	.8695	0.9

## **Defrosting Tips & Techniques**

#### **Before Freezing:**

- 1. Freeze meats, poultry, and fish in packages with only 1 or 2 layers of food. Place wax paper between layers.
- Package in heavy-duty plastic wraps, bags (labeled "For Freezer"), or freezer paper.
   Remove as much air as possible, i.e. create a vacuum.
   Seal securely, date, and label.

#### To Defrost:

- Remove wrapper. This helps moisture to evaporate. Juices from food can get hot and cook the food.
   Set food on microwave safe roasting rack in an appropriately sized dish.
   Place roasts fat-side down. Place whole poultry breast-side down.

- Place roasts larsing domining the point y breast side domining 4.
   Drain liquids during defrosting.
   Turn over (invert) items during defrosting.
   Shield edges and ends if needed. (See Cooking Techniques).
   Select power and minimum time so that items will be under-defrosted.

#### After Defrosting:

- 1. Large items may be icy in the center. Defrosting will complete during STANDING TIME. 2. Let stand, covered with plastic wrap, in the refrigerator for time shown in the chart below.
- See chart below for standing time and rinsing directions.
   Items which have been layered should be rinsed separately or have a longer stand time.

FOOD	DEFROST TIME at P3 (min./lb.)	DURING DEFROSTING	AFTER DEFROSTING Stand Time Rinse	
Fish and Seafood [up to 3 lbs. (1.4 kg)]				
Crabmeat	6	Break apart/Rearrange		
Fish Steaks	4 to 6	Turn over	5 min.	YES
Fish Fillets	4 to 6	Turn over/Rearrange/Shield ends		
Sea Scallops	4 to 6	Break apart/Remove defrosted pieces		
Whole fish	4 to 6	Turn over		
Meat Ground Meat	4 to 5	Turn over/Remove defrosted portion/ Shield edges	10 min.	
Roasts [2½-4 lbs. (1.1-1.8 kg)]	4 to 8	Turn over/Shield ends and defrosted surface	30 min. in refrig.	
Chops/Steak	6 to 8	Turn over/Rearrange/Shield ends and defrosted surface		
Ribs/T-bone	6 to 8	Turn over/Rearrange/Shield ends and defrosted surface		NO
Stew Meat	4 to 8	Break apart/Rearrange/ Remove defrosted pieces	5 min.	
Liver (thin sliced)	4 to 6	Drain liquid/Turn over/ Separate pieces		
Bacon (sliced)	4	Turn over		
Poultry				
Chicken, Whole [up to 3 lbs. (1.4 kg)]	4 to 6	Turn over/Shield	20 min. in refrig.	
Cutlets	4 to 6	Break apart/Turn over/ Remove defrosted Pieces	5 min.	YES
Pieces	4 to 6	Break apart/Turn over/Shield		
Cornish Hens	6 to 8	Turn over/Shield	10 min.	
Turkey Breast [5-6 lbs. (2.3-2.7 kg)]	6	Turn over/Shield	20 min. in refrig.	

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#### **Auto Reheat**

This feature allows you to reheat 1 to 4 servings of precooked room temperature and refrigerator temperature foods without setting power and time.

Example: To reheat 2 cups of soup			
<b>1.</b> Reheat It's servings? Press twice.	<ul> <li>Press until the desired number of servings appears on the <i>Display Window</i>.</li> </ul>		
2. Start	<ul> <li>Press.</li> <li>Cooking time appears on the <i>Display Window</i> and begins to count down.</li> </ul>		

Press Auto Reheat pad to indicate number or servings	Average Serving Size	Time
once	4-6 oz.	will vary
f twice	8 oz.	depending
three times	12 oz.	on size and
four times	16 oz.	wattage of oven

**NOTES:** For best results, follow these recommendations:

1.All foods must be previously cooked.

- Foods should always be covered loosely with plastic wrap, wax paper or casserole lid.
   All foods should have a covered stand time of 3
- 3.All foods should have a covered stand time of 3 to 5 minutes.
- 4.DO NOT reheat bread and pastry products using Auto Reheat Use manual power and time instead.

5.DO NOT reheat beverages.

- 6.Times are based on an approximate serving size of 4 oz.
- 7.A plate of food is normally 3-4 servings.

#### Inverter Auto Cooking (NN-S532)

These are tested and pre-timed (based on the power rating of this oven) for the quantity of food listed in the chart on page 13. Locale, power fluctuations and personal tastes are not taken into account. Should you prefer your food cooked differently, use power and time method shown on page 8.

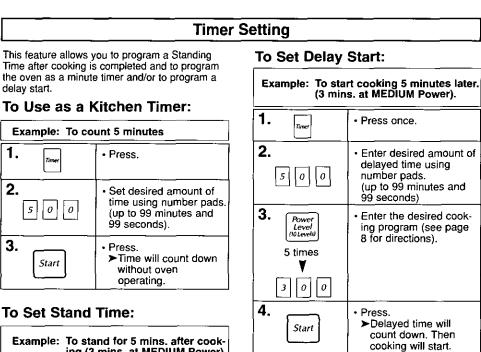
Example: To cook a 10 oz. Frozen Entrée			
1. Auto Cook	• Press.		
2. 8	<ul> <li>Select the desired category number using the number pads.</li> </ul>		
3. Serving/ Weight	<ul> <li>Press until the desired quantity appears on the <i>Display Window</i>.</li> </ul>		
4. Start	<ul> <li>Press.</li> <li>Cooking time appears on the <i>Display Window</i> and begins to count down.</li> </ul>		

Inverter Auto Cooking (NN-S542)			
Example: To cook a 10 oz. Frozen Entrée			
1. Frozen Entrées Press twice.	<ul> <li>Press until the desired serving/weight appears on the Display Window.</li> </ul>		
2.	<ul> <li>Press.</li> <li>Cooking time appears on the <i>Display Window</i> and begins to count down.</li> </ul>		

### Inverter Auto Cooking

The following chart is the recommended serving/weights for Inverter Auto Cooking.

Pad	Serving/Weight	Hints
1.Oatmeal	0.5, 1 cup	Place inside a microwave-safe serving bowl with no cover. Follow manufacturers' directions for preparation of quick oatmeal.
2.Beverages	1, 2 cups	Use a microwave-safe coffee cup. Heated liquids can erupt if not mixed with air. Do not heat liquids in your microwave oven without stirring first before and after heating.
3.Bacon (slice)	4 slices (3.2-4 oz.) (90-110 g) 6 slices (4.8-5.8 oz.) (135-165 g) 10 slices (8.1-9.5 oz.) (230-270 g) 14 slices (11.6-13 oz.) (330-370 g)	Place slices of bacon on a microwave-safe dish. Cover with paper towel. Times may vary by brand (weight). If bacon is not cooked to your liking, continue to heat by manually adding more time.
4.Fresh Vegetables	4, 8, 12, 16 oz.	All pieces should be the same size. Add a small amount of water and cover loosely with lid or vented plastic wrap.
5.Frozen Vegetables	6, 10, 16 oz.	Follow manufacturers' directions. Do not salt until after cooking. Not suitable for vegetables in butter or sauce.
6.Potatoes	1, 2, 3, 4 pieces (6 to 8 oz. each)	Pierce skin with fork 6 times on top. Place pota- toes on a microwave-safe dish. Do not cover. Let stand 5 minutes to complete cooking.
7.Soup	1, 2 cups	Pour soup into a microwave-safe serving bowl. Cover loosely with lid or vented plastic wrap.
8.Frozen Entrées	8, 10, 20, 32 oz.	Follow manufacturers' directions for covering or removing covers. For best results, do not use frozen foods packaged in foil tray. If additional time is needed, continue to cook manually.
9.Rice	0.5, 1, 1.5 cups	Place rice with hot water in a microwave-safe casserole dish. Cover loosely with lid or vented plastic wrap. Let stand 5 to 10 minutes before serving.



#### To Set Stand Time:

500

Start

To Use as a Kitchen Timer:

• Press.

• Press.

99 seconds).

without oven operating.

Example: To count 5 minutes

delay start.

1.

2.

3.

ſ

Example: To stand for 5 mins. after cook- ing (3 mins. at MEDIUM Power)			
Power tevel           tevel           0 times           3 0 0	• Enter the desired cook- ing program (see page 8 for directions).		
2. Timer	Press once.		
<b>3.</b> 5 0 0	Set desired amount of Stand Time using num- ber pads. (up to 99 min- utes and 99 seconds)		
<b>4.</b> Start	<ul> <li>Press.</li> <li>≻Cooking will start. After cooking, stand time will count down without oven operat- ing.</li> </ul>		

#### NOTES:

- 1. When each stage finishes, a two-beep signal sounds. At the end of the program, the oven will beep five times.
- 2. If oven door is opened during Stand Time or Kitchen Timer, the time on the screen will con-
- Kitchen Timer, the time on the screen wir contribution to count down.
  3. Stand time and Delay time cannot be programmed before any Auto Control Function. This is to prevent the starting temperature of food from rising before defrosting or cooking begins. A change in starting temperature could begins. A change in starting temperature could be incompared to control. cause inaccurate results.

Microwave Shortcuts			
FOOD	POWER	TIME (in mins.)	DIRECTIONS
To separate <b>Bacon</b> , 1 pound (450 g)	P10 (High)	30 sec.	Remove wrapper and place in microwave safe dish. After heating, use a plastic spatula to separate slices.
To soften Brown Sugar 1 cup (250 mL)	P10 (High)	20 - 30 sec.	Place brown sugar in microwave safe dish with a slice of bread. Cover with plastic wrap.
To soften Butter, 1 stick, ¼ pound (110 g)	P3 (MEDLOW)	1	Remove wrapper and place butter in a microwave-safe dish.
To melt <b>Butter,</b> 1 stick ¼ pound (110 g)	P6 (MEDIUM)	11/2 - 2	Remove wrapper and place butter in a microwave-safe dish covered with plastic wrap.
To melt Chocolate, 1 square, 1 oz. (28 g) To melt Chocolate, ½ cup (125 mL) chips	P10 (High) P10 (High)	1 - 1 <sup>1</sup> /2 1 - 1 <sup>1</sup> /2	Remove wrapper and place chocolate in a microwave-safe dish. Stir before adding more time. (Stir until completely melted.) Note: Chocolate holds its shape even when softened.
To toast Coconut, 1/2 cup (125 mL)	P10 (High)	1	Place in a microwave-safe dish. Stir every 30 seconds.
To soften Cream Cheese, 8 oz. (250 g)	P3 (MEDLOW)	1 - 2	Remove wrapper and place in a microwave-safe bowl.
To brown Ground Beef, 1 pound (450 g)	P10 (High)	4 - 5	Crumble into a microwave-safe colander set into another dish. Stir twice. Drain grease.
To steam Hand Towels - 4	P10 (High)	20 - 30 sec.	Soak in water, then wring out excess. Place on a microwave-safe dish. Heat. Present immediately.
To soften Ice Cream, <sup>1</sup> / <sub>2</sub> gallon (2L)	P3 (MEDLOW)	1 - 11/2	Check often to prevent melting.
Cup of liquid boiling water, broth, etc. 1 cup, 8 oz. (250 mL) 2 cups, 16 oz. (500 mL) to heat milk 1 cup, 8 oz. (250 mL) 2 cups, 16 oz. (500 mL)	P10 (High) P7 (MEDHIGH)	2'/a - 3 4 2 - 3 4 - 5	Heated liquids can erupt if not stirred. Do not heat liquids in microwave oven without stirring before and after heating.
To roast Nuts, 1½ cups (375 mL)	P10 (High)	4 - 5	Spread nuts into a 9-inch (230 mm) microwave-safe pie plate. Stir occasionally.
To toast Sesame Seeds, 1/4 cup (50 mL)	P10 (High)	3 - 5	Place in a small microwave-safe bowl. Stir twice.
To skin <b>Tomatoes</b> (one at a time)	P10 (High)	30 sec.	Place tomato into a microwave-safe bowl containing boiling water. Rinse and peel. Repeat for each tomato.
To remove Cooking Odors	P10 (High)	5	Combine 1 to 1 <sup>1</sup> / <sub>2</sub> cups (250 - 375 mL) water with the juice and peel of one lemon in a small microwave-safe bowl. After heating, wipe interior of oven with a cloth.

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#### Food Characteristics

#### Bone and Fat

Both bone and fat affect cooking. Bones may cause irregular cooking. Meat next to the tips of bones may overcook while meat positioned under a large bone, such as a ham bone, may be undercooked. Large amounts of fat absorb microwave energy and the meat next to these areas may overcook.

#### Density

Porous, airy foods such as breads, cakes or rolls take less time to cook than heavy, dense foods such as potatoes and roasts. When reheating donuts or other foods with different centers be very careful. Certain foods have centers made with sugar, water, or fat and these centers attract microwaves (For example, jelly donuts). When a jelly donut is heated, the jelly can become extremely hot while the exterior remains warm to the touch. This could result in a burn if the food is not allowed to cool properly in the center.

Quantity Two potatoes take longer to cook than one potato. As the quantity of the food increases so does the cooking time. When cooking small amounts of food such as one or two potatoes, do not leave oven unattended. The moisture content in the food may decrease and a fire could result.

#### Shape

Uniform sizes heat more evenly. The thin end of a drumstick will cook more quickly than the meaty end. To compensate for irregular shapes, place thin parts toward the center of the dish and thick pieces toward the edge.

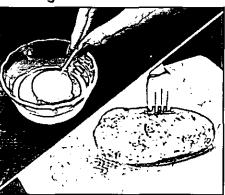
#### Size

Thin pieces cook more quickly than thick pieces.

Starting Temperature Foods that are room temperature take less time to cook than if they are chilled, refrigerated, or frozen.

#### **Cooking Techniques**

#### Piercing



Foods with skins or membranes must be pierced scored or have a strip of skin peeled before cook-ing to allow steam to escape. Pierce whole egg yolks and whites, clams, oysters, chicken livers, whole potatoes and whole vegetables. Whole apples or new potatoes should have a 1-inch strip of skin peeled before cooking. Score sausages and frankfurters.

#### Browning



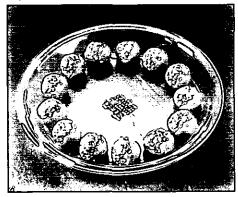
Foods will not have the same brown appearance as conventionally cooked foods or those foods which are cooked utilizing a browning feature. Meats and poultry may be coated with browning sauce, Worcestershire sauce, barbecue sauce or shake-on browning sauce. To use, combine browning sauce with melted butter or margarine; brush on before cooking. For quick breads or muffins, brown sugar can be

used in the recipe in place of granulated sugar, or the surface can be sprinkled with dark spices before baking.



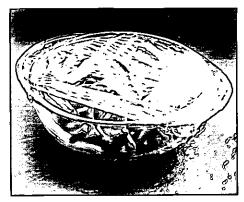
#### **Cooking Techniques**

#### Spacing



Individual foods, such as baked potatoes, cupcakes and appetizers, will cook more evenly if placed in the oven equal distances apart. When possible, arrange foods in a circular pattern.

#### Covering



As with conventional cooking, moisture evaporates during microwave cooking. Casserole lids or plastic wrap are used for a tighter seal. When using plastic wrap, vent the plastic wrap by folding back part of the plastic wrap from the edge of the dish to allow steam to escape. Loosen or remove plastic wrap as recipe directs for stand time. When removing plastic wrap covers, as well as any glass lids, be careful to remove them away from you to avoid steam burns. Various degrees of moisture retention are also obtained by using wax paper or paper towels. However, unless specified, a recipe is cooked covered.

#### Cooking Techniques

#### Shielding

Thin areas of meat and poultry cook more quickly than meaty portions. To prevent overcooking, these thin areas can be shielded with strips of aluminum foil. Wooden toothpicks may be used to hold the foil in place.

#### Timing

A range in cooking time is given in each recipe. The time range compensates for the uncontrollable differences in food shapes, starting temperature, and regional preferences. Always cook food for the minimum cooking time given in a recipe and check for doneness. If the food is undercooked, continue cooking. It is easier to add time to an undercooked product. Once the food is overcooked, nothing can be done.

#### Stirring

Stirring is usually necessary during microwave cooking. We have noted when stirring is helpful, using the words once, twice, frequently, or occasionally to describe the amount of stirring necessary. Always bring the cooked outside edges toward the center and the less cooked center portions toward the outside of the dish.

#### Rearranging

Rearrange small items such as chicken pieces, shrimp, hamburger patties, or pork chops. Rearrange pieces from the edge to the center and pieces from the center to the edge of the dish.

#### Turning

It is not possible to stir some foods to redistribute the heat. At times, microwave energy will concentrate in one area of a food. To help insure even cooking, these foods need to be turned. Turn over large foods, such as roasts or turkeys, hatfway through cooking.

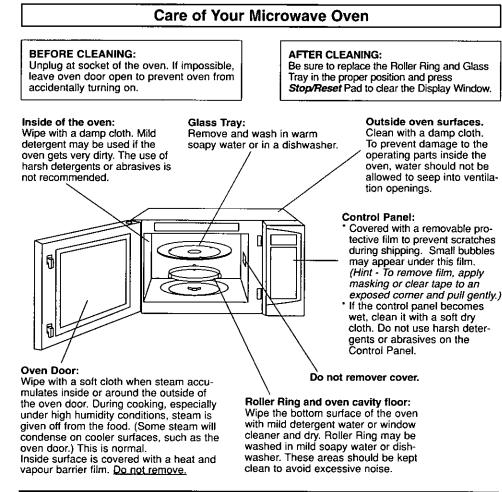
#### Stand Time

Most foods will continue to cook by conduction after the microwave oven is turned off. In meat cookery, the internal temperature will rise 5°F to 15°F (3°C to 8°C), if allowed to stand, tented with foil, for 10 to 15 minutes. Casseroles and vegetables need a shorter amount of standing time, but this standing time is necessary to allow foods to complete cooking to the center without overcooking on the edges.

#### Test for Doneness

The same tests for doneness used in conventional cooking may be used for microwave cooking. Meat is done when fork-tender or splits at fibers. Chicken is done when juices are clear yellow and drumstick moves freely. Fish is done when it flakes and is opaque. Cake is done when a toothpick or cake tester is inserted and comes out clean. Candy is done when it reaches the proper temperature for each stage of crystallization.





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#### **Before Requesting Service**

# All these things are normal: The oven causes interference with my TV. Some radio and TV interference might occur when you cook with the interference with my TV. Steam accumulates on the oven door and warm air comes from the oven vents. During cooking, steam and warm air are given off from the food. Most of the steam and warm air are removed from the oven by the air which circulates in the oven cavity. However, some steam will condense on cooler surfaces such as the oven door. This is normal. I accidentally ran my microwave oven without any food in it. Running the oven empty for a short time will not damage the oven. without any food in it.

PROBLEM		POSSIBLE CAUSE	REMEDY	
		The oven is not plugged in securely.	Remove plug from outlet, wait 10 seconds and reinsert.	
Oven will not turn on.	→	Circuit breaker or fuse is tripped or blown.	Reset circuit breaker or replace fuse.	
	ļ	There is a problem with the outlet.	Plug another appliance into the outlet to check if it is working.	
	)	The door is not closed completely.	Close the oven door securely.	
		Start Pad was not pressed after programming.	Press Start Pad.	
Oven will not start cooking.	→	Another program is already entered into the oven.	Press <b>Stop/Reset</b> Pad to cancel the previous program and enter new program.	
		The program is not correct.	Program again according to the Operating Instructions.	
	ļ	Stop/Reset Pad has been pressed accidentally.	Program oven again.	
	- \			
When the oven is operating, there is noise coming from the glass tray.	⇒	The Rolter Ring and oven bottom are dirty.	Clean these parts according to Care of Your Microwave Oven.	

#### Limited Warranty & Customer Services Directory

PANASONIC CONSUMER ELECTRONICS COMPANY, DIVISION OF MATSUSHITA ELECTRIC CORPORATION OF AMERICA One Panasonic Way Secaucus, New Jersey 07094

PANASONIC SALES COMPANY, ELECTRIC OF PUERTO RICO, INC., Ave. 65 de Infanteria, Km. 9.5 San Gabriel Industrial Park Carolina, Puerto Rico 00985

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#### Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

	PARTS	LABOR
ALL PARTS(EXCEPT MAGNETRON TUBE)	1 (ONE) YEAR	1 (ONE) YEAR
MAGNETRON TUBE	5 (FIVE) YEAR	1 (ONE) YEAR

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in or mail-in your product during the warranty period. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchase of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service. Carry-In or Mail-In Service in the United States call 1 800 211 PANIA/72020 and the Descention Web States.

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