

Important Safety Instructions

READ CAREFULLY AND KEEP FOR FUTURE REFERENCE

Precautions to be taken when using Microwave Ovens for Heating Foodstuffs

Inspection for Damage:

A microwave oven should only be used if an inspection confirms all of the following conditions:

1. The grille is not damaged or broken.
2. The door fits squarely and securely and opens and closes smoothly.
3. The door hinges are in good condition.
4. The metal plates of a metal seal on the door are neither buckled nor deformed.
5. The door seals are neither covered with food nor have large burn marks.

Precautions:

Microwave radiation from microwave ovens can cause harmful effects if the following precautions are not taken:

1. Never tamper with or deactivate the interlocking devices on the door.
2. Never poke an object, particularly a metal object, through a grille or between the door and the oven while the oven is operating.
3. Never place saucepans, unopened cans or other heavy metal objects in the oven.
4. Do not let other metallic articles, e.g. fast food foil containers, touch the side of the oven.
5. Clean the oven cavity, the door and the seals with water and a mild detergent at regular intervals. Never use any form of abrasive cleaner that may scratch or scour surfaces around the door.
6. Always use the oven with the trays or cookware recommended by the manufacturer.
7. Never operate the oven without a load (i.e. an absorbing material such as food or water) in the oven cavity unless specifically allowed in the manufacturer's literature.
8. For horizontally hinged doors, never rest heavy objects such as food containers on the door while it is open.
9. Do not place sealed containers in the microwave oven. Baby bottles fitted with a screw cap or a teat are considered to be sealed containers.
10. 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.
11. Young children should be supervised to ensure that they do not play with the appliance.
12. 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.

Important Instructions

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

1. Read all instructions before using microwave oven.
2. Some products such as whole eggs and sealed containers - (for example, closed glass jars **and sealed baby bottles with teat**) may explode and should not be heated in microwave oven.
3. Use this microwave oven only for its intended use as described in this manual.

4. As with any appliance, close supervision is necessary when used by children.
5. Do not operate this microwave oven, if it is not working properly, or if it has been damaged or dropped.
6. Do not store or use this appliance outdoors.
7. Do not immerse cord or plug in water.
8. Keep cord away from heated surfaces.
9. Do not let cord hang over edge of table or counter.
10. To reduce the risk of fire in the oven cavity:
 - (a) Do not overcook food. Carefully attend microwave oven if paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
 - (b) Remove wire twist-ties from bags before placing bag in oven.
 - (c) If materials inside the oven should ignite, keep oven door closed, turn oven off at the wall switch, or shut off power at the fuse or circuit breaker panel.
 - (d) Never leave microwave unattended while cooking or reheating.
11. Do not remove outer panel from oven.
12. Appliances are not intended to be operated by means of an external timer or separate remote-control system.
13. 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.

Circuits

Your microwave ovens should be operated on a separate circuit from other appliances. The voltage used must be the same as specified on this microwave oven. Failure to do this may cause the power board fuse to blow, and/or food to cook slower. Do not insert higher value fuse in the power board.

Practical Hints:

1. For initial use of COMBINATION and GRILL, if you see white smoke arise, it is not malfunction.
2. Exterior oven surfaces, including air vents on the cabinet and the oven door will get hot during COMBINATION and GRILL. Use care when opening or closing door and when inserting or removing food and accessories.
3. The oven has a heater situated in the top of the oven. After using the GRILL and COMBINATION functions, the ceiling will be very hot.
4. The accessible parts may become hot when GRILL or COMBINATION is in use. Children should be kept away.

Earthing Instructions

This microwave oven must be earthed. In the event of an electrical short circuit, earthing reduces the risk of electric shock by providing an escape wire for the electric current. This microwave oven is equipped with an earthing plug. The plug must be plugged into an outlet that is properly installed and earthed.

WARNING—Improper use of the earthing plug can result in electric shock.

Fan Motor Operation after Cooking

After using this oven, the fan may rotate to cool the electric components. This is perfectly normal, and you can take out the food from the oven while the fan operates.

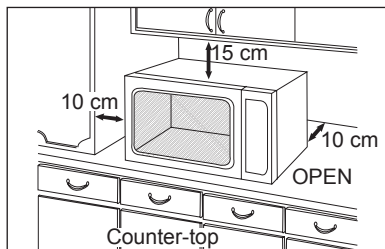
Installation and General Instructions

General Use

1. In order to maintain high quality, do not operate the oven when empty. The microwave energy will reflect continuously throughout the oven if no food or water is present to absorb energy. This can lead to damage to the microwave oven including arcing within the oven cavity.
2. If smoke is observed, press the **Stop/Reset** Button and leave door closed. Disconnect the power cord, or shut off power at the fuse or circuit breaker panel.
3. Do not dry clothes, newspapers or other materials in oven. They may catch on fire.
4. Do not use recycled paper products, as they may contain impurities which may cause sparks and/or fires when used.
5. Do not use newspapers or paper bags for cooking.
6. Do not hit or strike control panel. Damage to controls may occur.
7. **POT HOLDERS** may be needed as heat from food is transferred to the cooking container and from the container to the glass tray. The glass tray can be very hot after removing the cooking container from the oven.
8. Do not store flammable materials next to, on top of, or in the oven. It could be a fire hazard.
9. Do not cook food directly on glass tray unless indicated in recipes. (Food should be placed in a suitable cooking utensil.)
10. **DO NOT** use this oven to heat chemicals or other nonfood products. **DO NOT** clean this oven with any product that is labeled as containing corrosive chemicals. **The heating of corrosive chemicals in this oven may cause microwave radiation leaks.**
11. If glass tray is hot, allow to cool before cleaning or placing in water.
12. During use the appliance becomes hot. Care should be taken to avoid touching heating elements inside the oven.
13. When using the **COMBINATION** mode, never place any aluminum or metal container directly on the wire rack.
14. During cooking, some steam will condense inside and/or on the oven door. This is normal and safe. Steam will disappear after the oven is cool down.

Placement of Oven

1. The oven must be placed on a flat, stable surface, more than 85 cm above the floor. For correct operation, the oven must have sufficient air flow. Allow 15 cm of space on the top of the oven, 10 cm at back and 10 cm on both sides. If one side of the oven is placed flush to a wall, the other side or top must not be blocked. Do not remove feet.

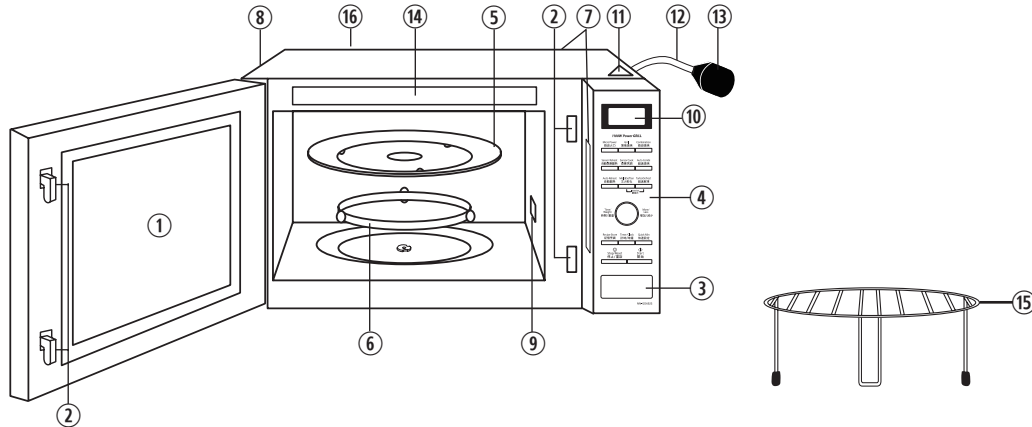


- (a) Do not block air vents. If they are blocked during operation, the oven may overheat. If the oven overheats, a thermal safety device will turn the oven off. The oven will remain inoperable until it has cooled.
 - (b) Do not place oven near a hot or damp surface such as a gas stove, electric range or sink etc.
 - (c) Do not operate oven when room humidity is too high.
2. This oven was manufactured for household use only.
 3. If the oven is designed for installation into a wall cabinet, use the proper trim kit available from a local Panasonic dealer. Follow all instructions packed with the kit.

Food

1. Do not use your oven for home canning or the heating of any closed jar. Pressure will build up and the jar may explode. In addition, the microwave oven cannot maintain the food at the correct canning temperature. Improperly canned food may spoil and be dangerous to consume.
2. Do not attempt to deep fat fry in your microwave oven.
3. Do not boil eggs in their shell (unless otherwise stated in cookbook). Pressure will build up and the eggs will explode.
4. Potatoes, apples, egg yolks, whole squash and sausages are examples of foods with nonporous skins. This type of food must be pierced before cooking, to prevent bursting.
5. When heating liquids, e.g. soup, sauces and beverages in your microwave oven, overheating the liquid beyond boiling point can occur without evidence of bubbling. This could result in a sudden boil over the hot liquid. To prevent this possibility the following steps should be taken.
 - (a) Avoid using straight-sided containers with narrow necks.
 - (b) Do not overheat.
 - (c) Stir the liquid before placing the container in the oven and again halfway through cooking time.
 - (d) After heating, allow to stand in the oven for a short time, stirring again before carefully removing the container.
6. **DO NOT USE A CONVENTIONAL MEAT THERMOMETER IN THE MICROWAVE OVEN. To check the degree of cooking of roasts and poultry use a MICROWAVE THERMOMETER.** Alternatively, a conventional meat thermometer may be used after the food is removed from the oven. If undercooked, return meat or poultry to the oven and cook for a few more minutes at the recommended power level. It is important to ensure that meat and poultry are thoroughly cooked.
7. **COOKING TIMES given in the cookbook are APPROXIMATE.** Factors that may affect cooking time are preferred degree of moisture content, starting temperature, altitude, volume, size, shape of food and utensils used. As you become familiar with the oven, you will be able to adjust for these factors.
8. **It is better to UNDERCOOK RATHER THAN OVERCOOK** foods. If food is undercooked, it can always be returned to the oven for further cooking. If food is overcooked, nothing can be done. Always start with minimum cooking times recommended.
9. Extreme care should be taken when cooking popcorn in a microwave oven. Cook for minimum time as recommended by manufacturer. Use the directions suitable for the wattage of your microwave oven. **NEVER** leave oven unattended when popping popcorn.
10. When heating food in plastic or paper containers, check the oven frequently due to the possibility of ignition.
11. The contents of feeding bottles and baby food jars are to be stirred or shaken and the temperature is to be checked before consumption, in order to avoid burns.

Feature Diagram



English

① **Oven Window**

② **Door Safety Lock System**

③ **Door Release Button**

Push to open the door. Opening the door during cooking will stop the cooking process without cancelling the program. Cook resumes as soon as the door is closed and **Start** Button is pressed. The oven light will turn on and stay on whenever the door is opened. It is quite safe to open the door at any time during a cooking program and there is no risk of Microwave exposure.

④ **Control Panel**

⑤ **Glass Tray**

- a. **DO NOT** operate the oven without the Roller Ring and Glass Tray in place.
- b. Only use the Glass Tray specifically designed for this oven. Do not substitute any other Glass Tray.
- c. If the Glass Tray is hot, allow to cool before cleaning or placing in water.
- d. **DO NOT** cook directly on the Glass Tray. Always place food on a microwave-safe dish, or on a rack set in a microwave-safe dish.
- e. If food or utensil on the Glass Tray touches oven walls, causing the tray to stop moving, the tray will automatically rotate in the opposite direction. This is normal.
- f. Glass Tray can rotate in either direction.

⑥ **Roller Ring**

- a. Roller Ring should be cleaned regularly to avoid excessive noise.
- b. Roller Ring and Glass Tray should be used at the same time.

⑦ **Identification Plate** (Alternate location)

⑧ **External Over Air Vents**

⑨ **Waveguide Cover** (do not remove)

⑩ **Display Window**

⑪ **Hot Surface Label**

⑫ **Power Supply Cord**

⑬ **Power Supply Plug**

⑭ **Menu Label**

Position your supplied menu label here.

⑮ **Wire Rack**

- a. A Wire Rack is included with the oven in order to facilitate browning of small dishes.
- b. Wire Rack should be cleaned regularly.
- c. When using Wire Rack in the manual GRILL or COMBINATION cooking modes, be careful to choose heat-proof containers; containers made of plastic or paper may melt or burn when exposed to the heat radiating from the grill.
- d. When using the COMBINATION mode, never place any aluminum or metal container directly on Wire Rack. Always insert a glass plate or dish between Wire Rack and the aluminum container. This will prevent sparking that may damage the oven.
- e. Do not use Wire Rack when cooking in the MICROWAVE mode only.

⑯ **Warning Label**

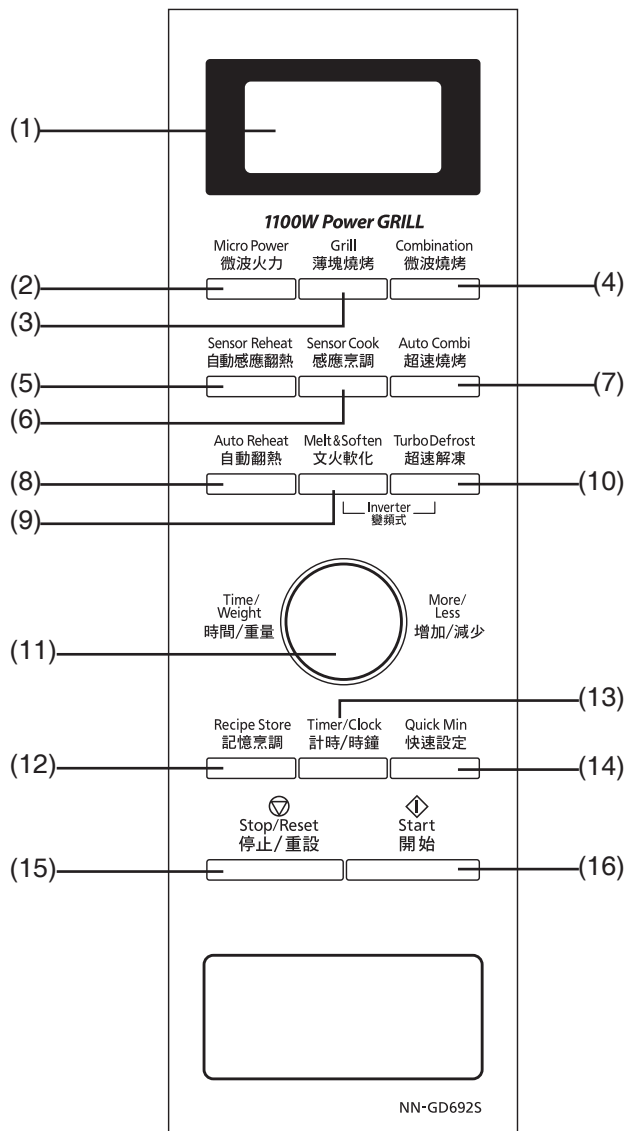
NOTE:

The above illustration is for reference only.

Warning

- (a) The door seals and door seal areas should be cleaned with a damp cloth. The appliance should be inspected for damage to the door seals and door seal areas and if these areas are damaged the appliance should not be operated until it has been repaired by a service technician trained by the manufacturer.
- (b) It is dangerous for anyone other than a service technician trained by the manufacturer to perform repair service.
- (c) If the supply cord of this appliance is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- (d) Before use, the user should check that whether the utensils are suitable for use in microwave ovens.
- (e) Liquids or other foods must not be heated in sealed containers since they are liable to explode, at the same time it should avoid the boiling liquids splash.
- (f) 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.
- (g) When the appliance is operated in the grill or combination modes, children should only use the oven under adult supervision due to the temperatures generated.

Control Panel



- (1) **Display Window** (pg. 5)
- (2) **Micro Power Button** (pg. 6)
- (3) **Grill Button** (pg. 7)
- (4) **Combination Button** (pg. 8)
- (5) **Sensor Reheat Button** (pg.16)
- (6) **Sensor Cook Button** (pg.17)
- (7) **Auto Combi Button** (pg.11)
- (8) **Auto Reheat Button** (pg. 12)
- (9) **Inverter Melt & Soften Button** (pg.13)
- (10) **Inverter Turbo Defrost Button** (pg. 14)
- (11) **Time/Weight and More/Less Dial**
Press and release dial to expand (pop-up). After setting desired program, push dial in to avoid accidental changing of the Programmed time.
- (12) **Recipe Store Button** (pg. 9)
- (13) **Timer/Clock Button** (pg. 5, 19)
- (14) **Quick Min Button** (pg.10)
- (15) **Stop/Reset Button**
Before cooking: One tap clears all your instructions.
During cooking: One tap temporarily stops the cooking process. Another tap cancels all your instructions and colon or time of day appears in the Display Window.
- (16) **Start Button**
One tap allows oven to begin functioning. If door is opened or **Stop/Reset Button** is pressed once during oven operation, **Start Button** must be pressed again to restart oven.

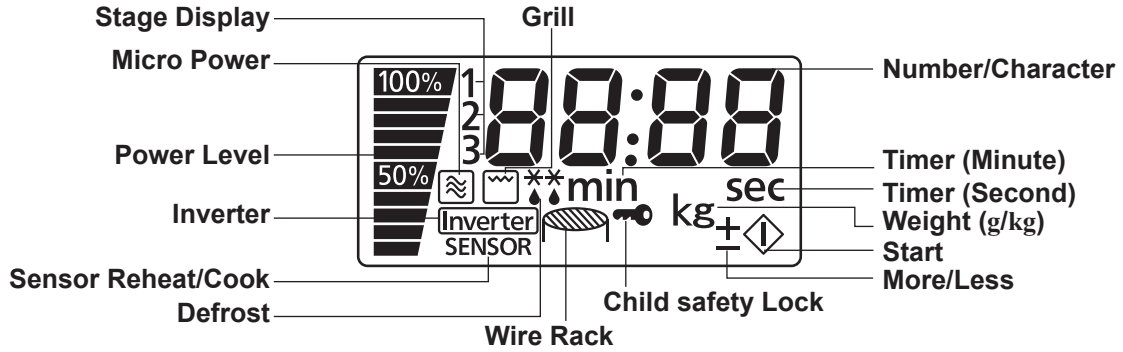
Beep Sound:

When a button is pressed correctly, a beep will be heard. If a button 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.

NOTE:

If an operation is set and **Start Button** is not pressed, after 6 minutes, the oven will automatically cancel the operation. The display will revert back to clock or colon mode.

Display Window



English

Operation (Setting Clock)

You can use the oven without setting the clock.

The clock is an optional function for the user. Its accuracy may be affected by the local power supply condition.



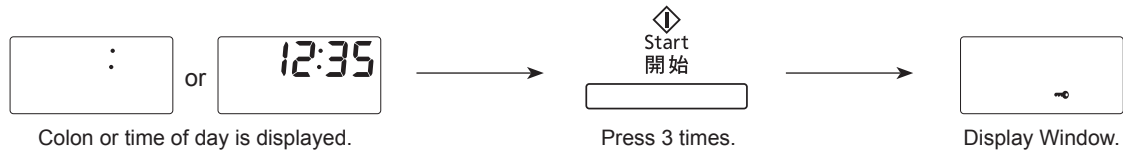
NOTES:

- Oven will not operate while colon is blinking.
- To reset time of day, repeat steps 1-3.
- The clock will keep the time of day as long as oven is plugged in and electricity is supplied.
- Clock is a 12-hour display.

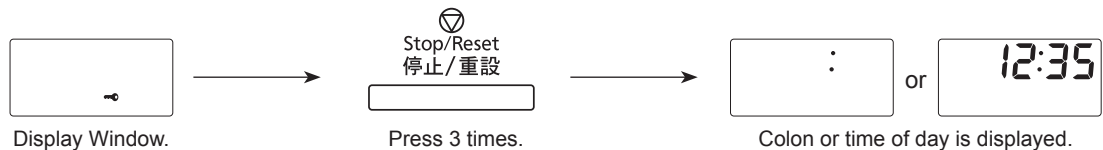
Operation (Child Safety Lock)

This feature allows you to prevent operation of the oven by a young child. You can set Child Safety Lock when colon or time of day is displayed.

To set:



To cancel:



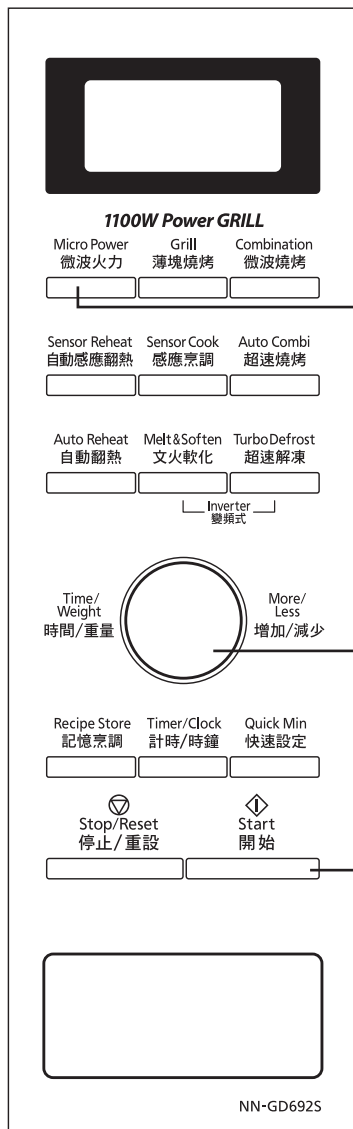
NOTE:

To set or cancel child safety lock, **Start** button or **Stop/Reset** button must be pressed 3 times within 10 seconds.

Operation (Setting Micro Power and Time)

This feature allows you to set the desired power and time for cooking by yourself.

English



1. Put the food into the oven

2. Select Micro Power Level

Press **Micro Power** Button until the desired power level appears in the Display Window. (see chart below)

3. Select Cooking Time

(P10 Power: up to 30 minutes)
(Other powers: up to 90 minutes)

4. Press

Cooking will start.
The time in the Display Window will count down.

NOTES:

- When selecting P10 Power on the first stage, you can skip step 2.
- For more than one stage cooking, repeat steps 2 & 3 above then press **Start**. The maximum number of stages for cooking is 3. The oven will beep twice between stages. For the details, please refer to page 9.

Micro Power:

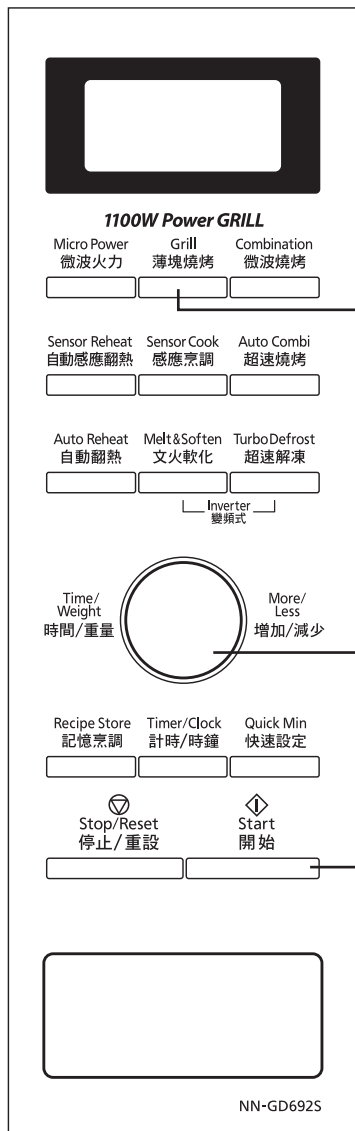
The **Micro Power** Button gives you a selection of different power levels representing decreasing amounts of microwave energy, used for cooking foods at different speeds.

e.g. The lower the micro power setting, the more evenly the food cooks, although it will take a little longer.

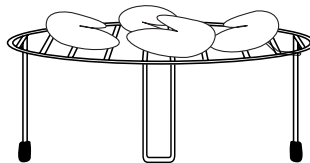
To select the correct power level for cooking different foods, refer to the chart below.

Press	Power Level	Example of Use
1 time	P10 (1000 W)	Boil water. Cook vegetables, rice, pasta and noodles. Reheating.
2 times	P9 (900 W)	Cook fresh fruits.
3 times	P8 (800 W)	Cook cakes, desserts. Heat milk.
4 times	P7 (700 W)	Whole chicken and chicken pieces.
5 times	P6 (600 W)	Cook beef, lamb and eggs.
6 times	P5 (500 W)	Cook meatloaves. Cook fish and seafood.
7 times	P4 (400 W)	Cook christmas pudding, corned beef, dried beans and peas.
8 times	P3 (300 W)	Melt butter and chocolate. Soften ice cream and cream cheese.
9 times	P2 (250 W)	Thaw foods. Simmer soups, stews and casseroles (less tender cuts of meat).
10 times	P1 (100 W)	Keep cooked foods warm, simmer slowly.

Operation (To Cook on Grill by Time Setting)



1. Put the food into the oven



2. Select Grill setting

3. Select Cooking Time
(up to 90 minutes)

4. Press

Cooking will start.
The time in the Display Window will count down.

Directions for Grilling

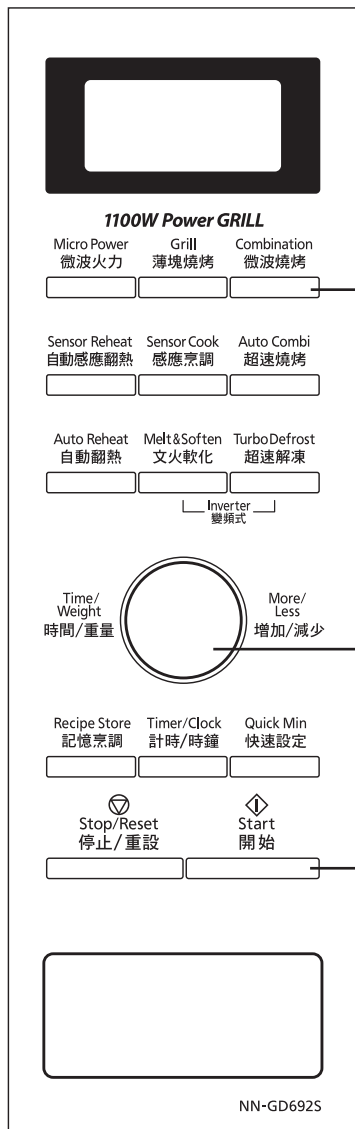
When grilling, heat is radiated from the two elements at the top of the oven. The oven door must be kept closed to prevent cooking odours from spreading in the kitchen and so as not to waste energy. The grill elements do not require preheating. The grill is particularly useful for thin slices of meat, steaks chops, kebabs, sausages or pieces of chicken. It is also suitable for heating sandwiches and all gratin dishes.

Place food to be grilled on wire rack on glass tray with a dish underneath. Select Grill setting, set the time and start the oven. The food being grilled should normally be turned over after half the grilling time. When the oven door is opened the program is interrupted. Turn the food over, place it back the oven, close the door and restart oven. While grilling, the oven door can be opened at any time to check the food.

Press	Power	Types of food
Once	Grill 1	Meat, poultry, pieces
Twice	Grill 2	Seafood
3 Times	Grill 3	Garlic bread, Toast

Operation (To Cook on Combination by Time Setting)

English



1. Put the food into the oven



2. Select Combination setting

3. Select Cooking Time

(up to 90 minutes)

4. Press

Cooking will start.
The time in the Display Window will count down.

Directions for Combination Cooking

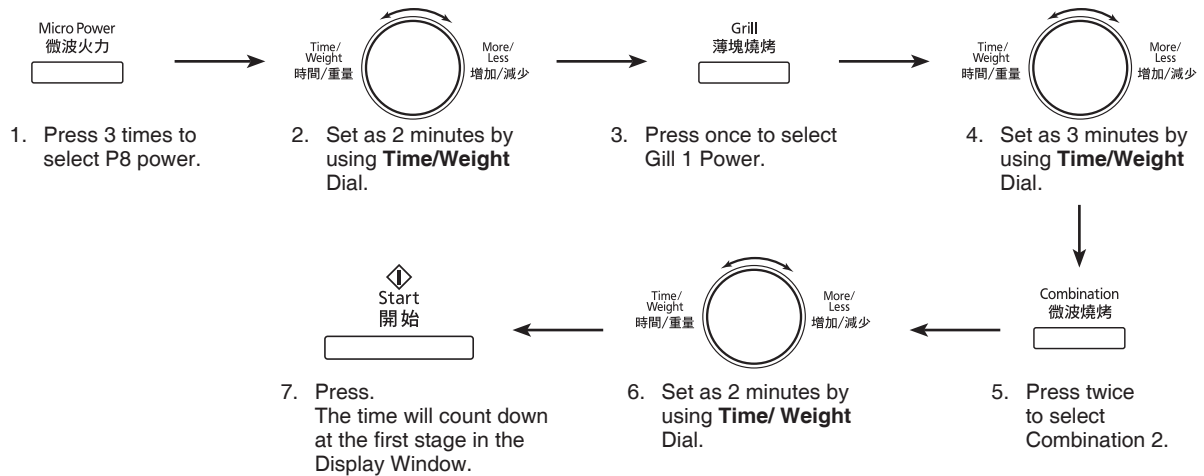
The combination means that it is possible to combine the microwave and grill function for thawing, cooking, and heating foods. This function can ensure the foods cook evenly and retain their crispness as well as browning of certain foods. Turn the food over, place it back the oven, close the door and restart oven while cooking, the oven door can be opened at any time to check the food.

Press	Power	Types of food
once	Combination 1	Whole poultry
twice	Combination 2	Beef, Lamb, Seafood
3 times	Combination 3	Baked potatoes, puddings

Multi-Stage Cooking

This feature allows you to program 2-3 Stages of cooking continuously.

E.g.: Continually set [P8] power 2 minutes, [Grill 1] power 3 minutes and [Combination 2] power 2 minutes.



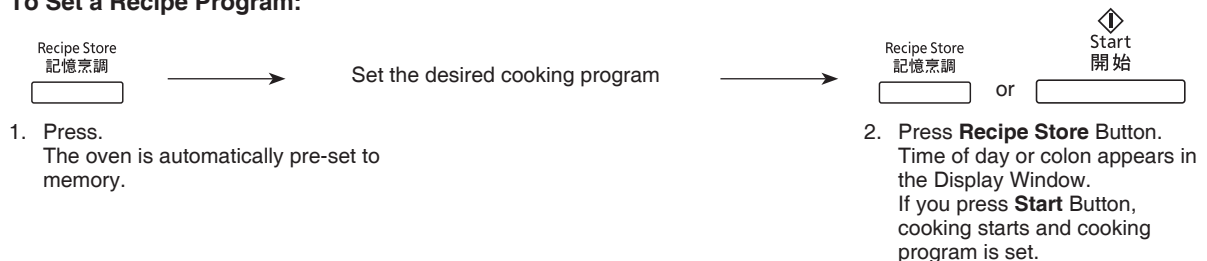
NOTES:

- When operating, two beeps will sound between each stage.
- During cooking pressing **Stop/Reset** Button once will stop the operation, Pressing **Start** Button will re-start the programmed operation. Pressing **Stop/Reset** Button twice will stop and clear the programmed operation.
- Auto programs can not be used with multi-stage cooking.
- This feature is not available for Turbo Defrost, Sensor Cook and Reheat function.

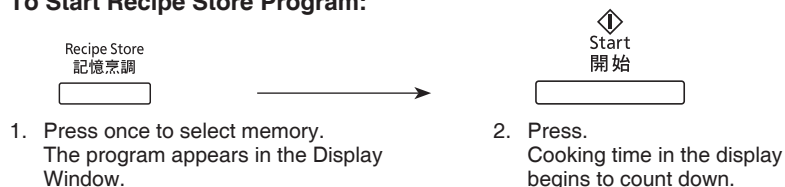
To Cook using the Recipe Store Button

This feature allows you to pre-program your oven for regular reheating or cooking tasks. You are able to pre-program your oven for a specific power level and time that is convenient for you.

To Set a Recipe Program:



To Start Recipe Store Program:



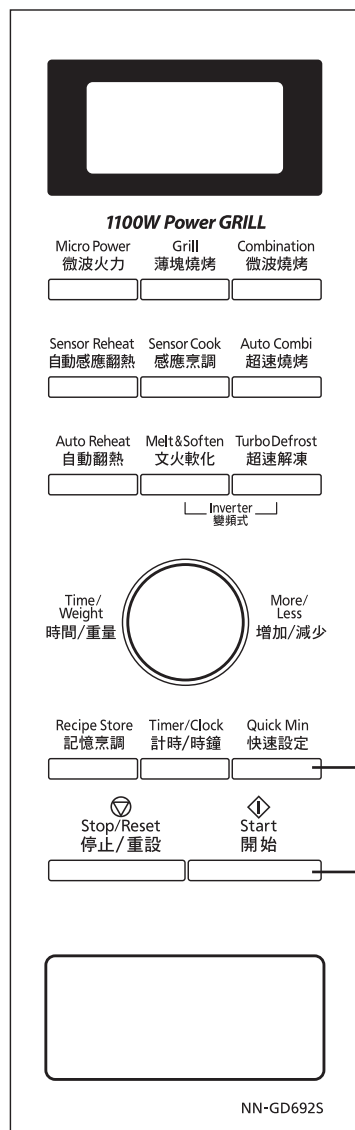
NOTES:

- Auto Control Functions cannot be programmed into Recipe Store.
- Recipe Store can only store 1 stage cooking. It is not possible to store 2 or 3 stage cooking.
- A new recipe program will cancel the recipe program previously stored.
- The recipe program will be cancelled if the oven is unplugged.

Operation (To Cook using Quick Min)

This feature allows you to set cooking time in 1 minute increments up to 10 minutes.

English



1. Put the food into the oven

2. Press Quick Min Button

Press **Quick Min** Button until the desired cooking time (up to 10 minutes) appears in the display window. Power Level is pre-set at P10.

3. Press

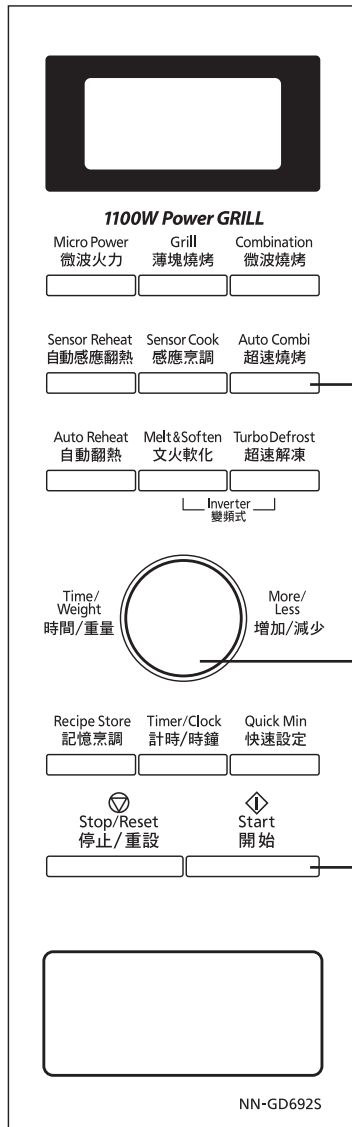
Cooking begins and the time in the Display Window will count down.

NOTES:

1. If desired, you can use other power levels. Select desired power level before setting cooking time.
2. After setting the time by **Quick Min** Button, you cannot use Dial.
3. **Quick Min** Button can not be used to add more time during manual cooking.

Operation (To Cook using Auto Combi)

This feature enables you to cook food without having to select the power level or cooking time as the microwave does this for you.



1. Put the food into the oven

2. Press Auto Combi Button

Select until the desired number of category appears in the Display Window.

3. Select the desired weight

Select until the desired serving/weight appears in the Display Window.

4. Press

The time in the Display Window will count down.

No.	Category	Weight			
		600 g	900 g	1200 g	1500 g
8	Roast (Whole) Chicken	200 g	400 g	600 g	800 g
9	Roast Beef/Lamb	50 g	150 g	350 g	500 g
10	BBQ Meat Pieces				
11	Reheat Fried Foods				

8. Roast (Whole) Chicken

It is suitable for roasting whole chicken. Clean the chicken and marinate it for about 1 hour with seasonings. Put the prepared chicken onto a microwave safe dish. Turn over when beep sounds.

9. Roast Beef/Lamb

It is suitable for cooking beef and lamb. Meat may be cooked marinated with gravy or vegetables. Place prepared beef/lamb on a wire rack with dish underneath. Turn over when beep sounds.

10. BBQ Meat Pieces

It is suitable for cooking meat pieces. Pierce the meat pieces and marinate with gravy or vegetables if needed. Place prepared meat pieces on a wire rack with dish underneath. Turn over when beep sounds.

11. Reheat Fried Foods

It is suitable for reheating most kinds of fried foods, like fried chicken, curry puffs, fried spring rolls and etc. Arrange fried foods on wire rack placed on glass tray. Turn over when beep sounds.

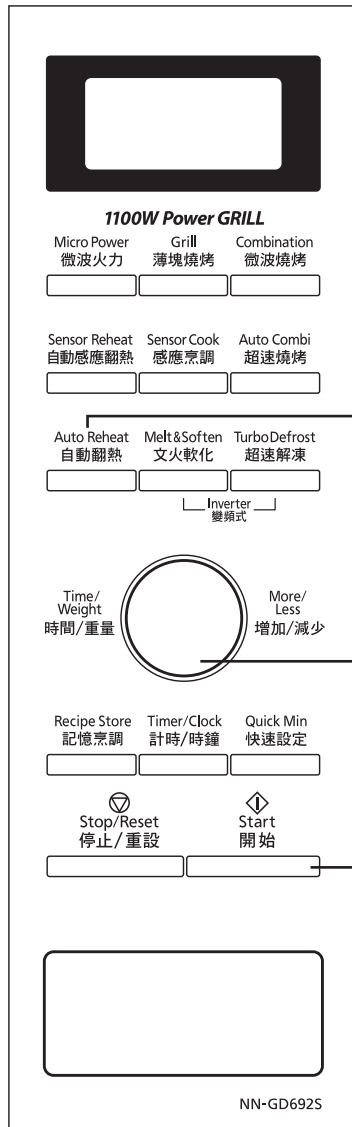
NOTE:

When you select **Auto Combi** program, symbols will appear in the display to show the cooking mode that will be used and the accessories that are needed.

Operation (To Cook using Auto Reheat)

This feature enables you to reheat food without having to select the power level or cooking time as the microwave does this for you.

English



1. Put the food into the oven

2. Press Auto Reheat Button

Select until the desired number of category appears in the Display Window.

3. Select the desired weight

Select until the desired serving/weight appears in the Display Window.

4. Press

The time in the Display Window will count down.

No.	Category	Weight			
12	Meals	200 g	400 g	600 g	800 g
13	Beverage	1 serv.	2 serv.	3 serv.	4 serv.
14	Auto Reheat Bread	50 g	100 g	150 g	200 g
15	Chinese Bun (Pau)	50 g	100 g	150 g	200 g

12. Meals

Pre-cooked foods are reheated automatically by setting the food's weight. You need not select power level or reheating time. The foods should be at refrigerator temperature (5-7 °C). Use suitable size microwave safe casserole, add 1-4 tbsp. of water if desired, and cover with lid. Stir after beep sounds.

13. Beverage

It is suitable for reheating beverage (milk, coffee, tea, etc.) from room temperature or fridge temperature. At the completion of heating, stir carefully.

Note: 1 cup = 250 ml of beverage

14. Auto Reheat Bread

It is suitable for reheating bread at refrigerator temperature (5-7 °C). Put the bread on a suitable size microwave safe dish. Cook without cover.

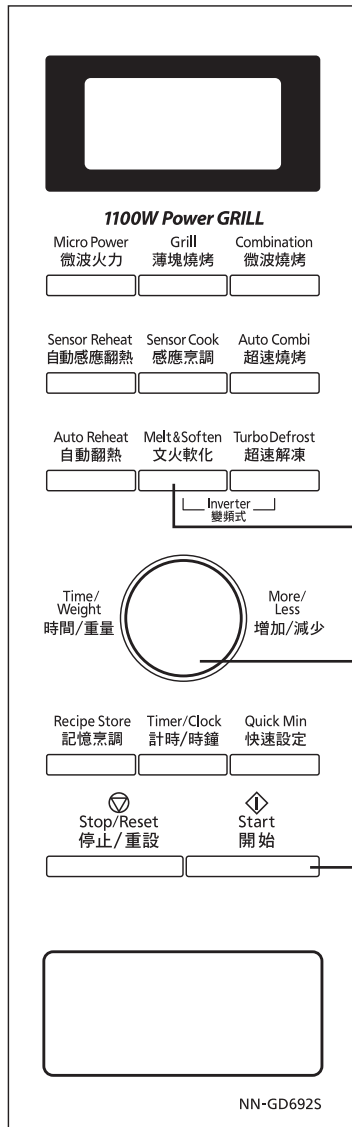
NOTE: 50 g = one standard slice of bread.

15. Chinese Bun (Pau)

It is suitable for reheating "dim sum", like chinese bun, siu mai, etc. Put foods on a suitable size microwave safe dish, sprinkle with some water. Cover with lid or plastic wrap.

Operation (To Cook using Melt/Soften)

This feature enables you to Melt/Soften food without having to select the power level or cooking time as the microwave does this for you.



1. Put the food into the oven

2. Press Melt/Soften Button

Select until the desired number of category appears in the Display Window.

3. Select the desired weight

Select until the desired serving/weight appears in the Display Window.

4. Press

The time in the Display Window will count down.

No.	Category	Weight					
		50 g	100 g	150 g	200 g	250 g	300 g
16	Melt Butter	50 g	100 g	150 g	200 g	250 g	300 g
17	Soften Cream Cheese	50 g	100 g	150 g	200 g	250 g	300 g
18	Soften Ice Cream	300 g	600 g	900 g	1200 g	-	-
19	Melt Chocolate	50 g	100 g	150 g	200 g	250 g	300 g

16. Melt Butter

Remove wrapper, cut butter into 3 cm cube, and place into a microwave safe dish. Melt with lid or plastic wrap. Stir after cooking.

18. Soften Ice Cream

Soften slightly without lid.

17. Soften Cream Cheese

Remove wrapper and place in a microwave safe bowl/ dish. Soften without cover.

19. Melt Chocolate

Remove wrapper and place chocolate into a microwave safe dish. Cook without cover. After heating, stir until completely melted.

Note: Chocolate holds its shape even when softened.

NOTE:

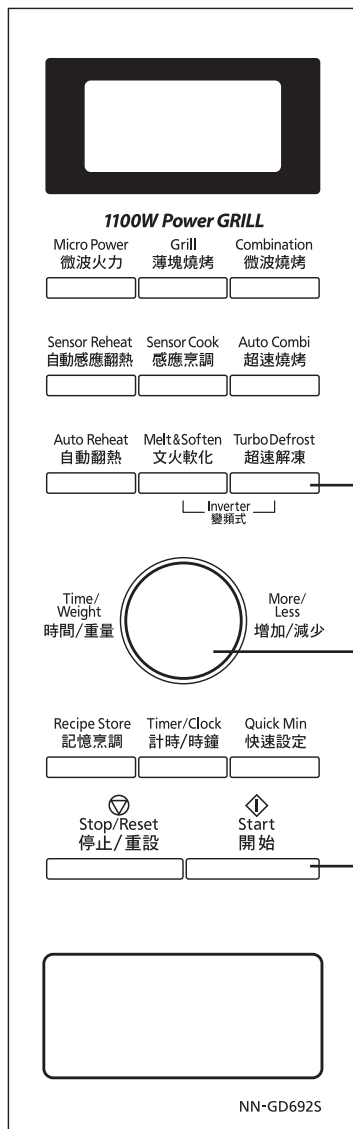
If food needs more time cooking or weight exceeds range, cook using P3 power for melting and softening.

Operation (Inverter Turbo Defrost)

Turbo Defrost

This feature allows you to defrost meat, poultry and seafood automatically by just setting the weight of the food. Weight must be programmed in kilograms.

English



1. Put the food into the oven

2. Press Inverter Turbo Defrost Button

3. Select the Weight of food by turning the Time/Weight Dial (0.1 kg - 3.0 kg)

When selecting 0.1 kg, you can skip this step.

4. Press

Defrosting time appears in the Display Window and begins to count down.

When cooking time is longer than 60 minutes, the time will appear in hours and minutes.

NOTES:

1. Turbo Defrost can be used to defrost many cuts of meat, poultry and fish by weight. To use, simply program Turbo Defrost and the weight of the food in kg (1.0) and tenths of a kg (0.1). The oven will determine the defrosting time and power levels. Once the oven is programmed, the defrosting time will appear in the display. For best results the minimum recommended weight is 0.2 kg.
2. BONE-IN ROASTS, such as a Beef Rib Roast have a smaller muscle than a boneless roast of the same weight. Therefore, for bone-in roasts weighing over 2 kg reduce weight by 0.5 kg. For bone-in roasts weighing less than 2 kg, reduce weight by 0.25 kg.
3. Turn over or remove or shield food when buzzer rings in the middle of cooking.

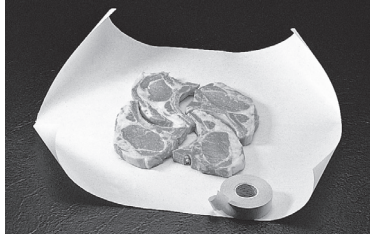
Defrosting Tips and Techniques

Preparation for Freezing

The quality of the cooked foods depends on the quality of foods before freezing, freezing ways, defrosting tips and defrosting time. So it is important to purchase fresh and high quality foods, and freeze them immediately. Thick plastic foil, package, freezing

wrap and the meat which has been sealed before selling are all able to be reserved in the refrigerator for some times.

Note: Please remove the aluminum foil if the package is made of aluminum to prevent arcing.



When freezing meats, poultry and fish or seafood, the foods should be arranged evenly and wrap as 2.5-5 cm square or a round shape.



Please clean the whole chicken before freezing. (The bowels can be frozen individually.) Clean the whole chicken and make it dry. Binding the leg and thigh.



Remove all air and seal securely. Label package with type and cut of meat, date and weight.

The foods in the refrigerator should be kept under 18 °C. (At least 24 hours in freezer before defrosting.)

Inverter Turbo Defrost

The turbo defrost function is operated based on the weight of foods. Most cut foods such as chicken, meat and fish can be defrosted by using this function easily. Set the **Time/Weight** dial for weight based on the real weight of foods, and the microwave oven will set the power and time automatically. The display window will display the time of defrost after setting. The foods listed in the below table are the most suitable for using chaos defrost function. The minimum weight is 0.1 kg and the maximum is 3.0 kg for getting the best result.

Tips for turbo defrost

Meat, which is with bones. For example, if the meat with bones has the same weight as the pure meat, the meat in the former one is lighter than the latter one. So, subtract 0.5 kg for 2 kg meat with bones is better for defrosting and 0.2-0.3 kg for meat with bones which is less than 2 kg.

Two buzz beeps

Turn over the meat, chicken, fish and shellfish. Separate the stewed meat, chicken pieces and meat loaf. Apart the meat loaf from the hamburger. Shield the edge of chicken wings, roast, fat or bones.

Foods	The maximum weight for the foods
Meat loaf, chicken, rib	2 kg
Beef, lamb, whole chicken	3 kg
Whole fish, shellfish, prawn and fish fillet	1 kg

Key to defrosting

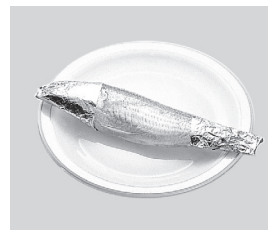
For evenly defrosting, turn over the foods or move the position of the foods in the containers during the progress of defrosting.



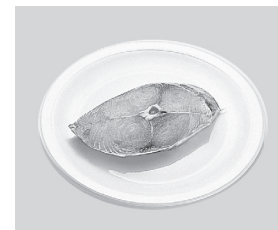
Remove the package of the raw meat and place it on the plate.



Shield the front part of the chicken drumsticks by using aluminum foil.



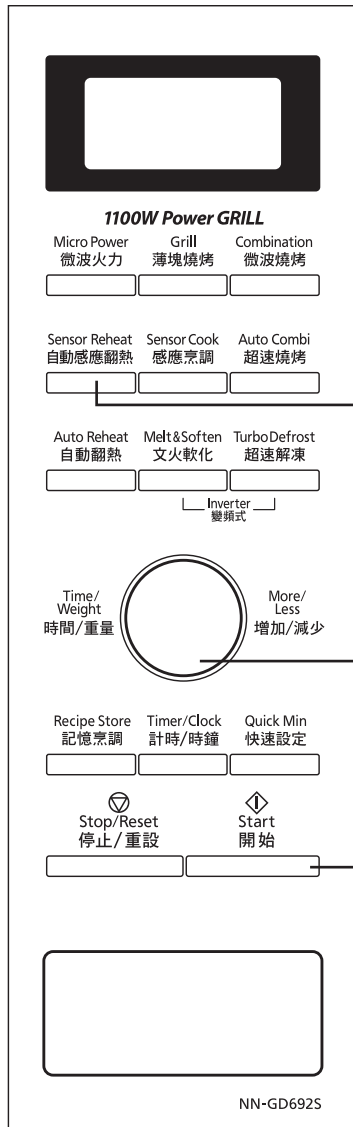
Shield the head and tail of the whole fish by using aluminum foil.



Remove the package of the fish fillet and place it on the plate.

Operation (To Reheat Food Using Sensor Reheat)

The Sensor Cooking features enable you to cook a variety of foods without having to select the power level or cooking time as the foods are automatically cooked by detecting a build-up of steam on the humidity sensor. As foods cook in a microwave, steam is produced. When foods are covered, the steam will build up and escape from the dish and burst. This burst of steam is detected by the humidity sensor and then the oven automatically calculate the remaining cooking time. All you need to do is to select the correct cooking category.



1. Put the food into the oven

2. Press Sensor Reheat Button

(If desired, rotate **More/Less** Dial.)

3. More/Less Dial (Optional*):

Preferences for food doneness vary with each individual. After using Sensor Reheat for a few times, you may decide the doneness of food. By rotating the **More/Less** dial, the programs can be adjusted to cook food for longer or shorter time.

*If you are satisfied with the result of the Sensor program, you don't have to use this dial.

4. Press

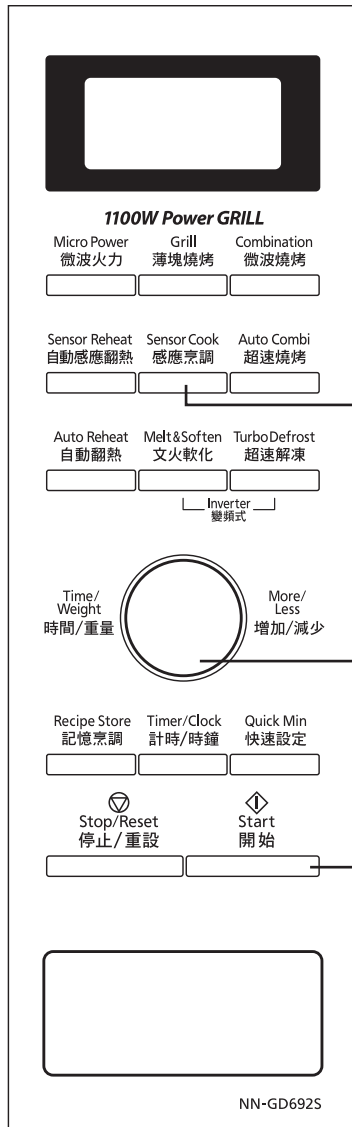
After the heat and humidity is detected by the SENSOR the oven will beep twice, the remaining time appears in the Display Window and begins to count down.

For best results on Sensor Reheat, follow these recommendations:

1. The room temperature surrounding the oven should be below 35 °C.
2. Food being reheated should weigh between 125 g and 1.0 kg. Foods weighing less than 125 g and more than 1.0 kg, use a manual micro power setting.
3. All food must be previously cooked and at room or refrigerator temperature.
4. Food should always be covered loosely, but completely, with plastic wrap. (Do not use any snap closing lids.)
5. Be sure the glass tray, the outside of the cooking containers and the inside of the microwave are dry before placing food in the oven. Residual beads of moisture turning into steam can mislead the sensor.
6. DO NOT open the oven door until 2 beeps sound and cooking time appears in the display Window. Doing so will cause inaccurate cooking since the steam from food is no longer contained within the oven cavity. Once the cooking time begins to count down, the oven door may be opened to stir, turn, or rearrange foods.
7. DO NOT reheat bread or pastry products (raw or uncooked), or beverages.
8. DO NOT use if oven cavity is warm (from previously cooked foods).
9. All food should have a covered stand time of at least 3 to 5 minutes.

Operation (To Cook Food Using Sensor Cook)

The Sensor Cooking features enable you to cook a variety of foods without having to select the power level or cooking time as the foods are automatically cooked by detecting a build-up of steam on the humidity sensor. As foods cook in a microwave, steam is produced. When foods are covered, the steam will build up and escape from the dish and burst. This burst of steam is detected by the humidity sensor and then the oven automatically calculate the remaining cooking time. All you need to do is to select the cooking category.



1. Put the food into the oven

2. Press Sensor Cook Button

Select until the desired number of category appears in the Display Window.

3. More/Less Dial (Optional*):

Preferences for food doneness vary with each individual. After using Sensor Reheat for a few times, you may decide the doneness of food. By rotating the **More/Less** dial, the programs can be adjusted to cook food for longer or shorter time.

*If you are satisfied with the result of the Sensor program, you don't have to use this dial.

4. Press

After the heat and humidity is detected by the SENSOR the oven will beep twice, the remaining time appears in the Display Window and begins to count down.

For best results on Sensor Cook, follow these recommendations:

1. The room temperature surrounding the oven should be below 35 °C.
2. Be sure the glass tray, the outside of the cooking containers and the inside of the microwave are dry before placing food in the oven. Residual beads of moisture turning into steam can mislead the sensor.
3. Food should always be covered loosely, but completely, with plastic wrap. (Do not use any snap closing lids.)
4. DO NOT open the oven door until 2 beeps sound and cooking time appears in the display Window. Doing so will cause inaccurate cooking since the steam from food is no longer contained within the oven cavity. Once the cooking time begins to count down, the oven door may be opened to stir, turn, or rearrange foods.
5. All food should have a covered stand time of at least 3 to 5 minutes.
6. DO NOT use if oven cavity is warm (from previously cooked foods).

Sensor Reheat/Cook

Sensor Reheat

All foods must be pre-cooked. Suitable for casseroles, plate dinners, stews, pasta dishes (except lasagne). Foods should be stored in refrigerator or at room temperature. Do not reheat frozen foods on this setting. Do not reheat in foil or plastic containers. All foods should be covered with lid or plastic wrap. Stir after beep sounds.

Sensor Cook

1. Vegetables

Suitable for cooking all types of leaf, green and soft varieties, including broccoli, squash, cauliflower, cabbage, asparagus, beans, celery, zucchini, spinach, capsicum or a mixture of these. All vegetables should be trimmed or prepared and cut into pieces of equal size. Add 1 tablespoon to ¼ cup water if vegetables appear slightly dehydrated. Place in a suitable size dish. Butter, herbs etc. may be added before heating, but do not add salt until serving. Cover with lid or plastic wrap. Stir after beep sounds. For larger portions of vegetables, stir it after cooking completes.

2. Casserole Rice

It is suitable for cooking white rice including short, long grain, jasmine and basmati. Place rice in a suitable size microwave safe casserole. Add water and allow at least ½ depth of volume for evaporation to prevent boiling over. Cover with lid. Stand 5 minutes after cooking.

3. Congee/Porridge

It is suitable for cooking congee/porridge. Place the rice/porridge in a suitable size microwave safe casserole. Add water and allow at least ½ depth of volume for evaporation to prevent boiling over. During cooking, partially cover with lid. Stir after beep sounds.

4. Instant Noodles

It is suitable for cooking instant noodle. Place the instant noodle and seasoning in a suitable size microwave safe casserole. Add water and allow at least ½ depth of volume for evaporation to prevent boiling over. Cover with lid. Stir after beep sounds.

5. Steam Fish

It is suitable for cooking whole fish and fish fillets. Put the prepared fish in a microwave safe dish. Add sauce and water. Cover with plastic wrap. After cooking large portions of fish, allow the fish to stand 3 to 5 minutes before serving. (thickness of fish should not be more than 3 cm)

6. Steam Chicken

It is suitable for chicken piece, such as wings, drumsticks, thighs, half breast etc. Pierce the chicken pieces and marinate with gravy or vegetables if needed. Put the prepared chicken pieces onto a microwave safe dish. Cover with lid or plastic wrap. Turn over after beep sounds.

7. Double Boil

It is suitable for cooking traditional soups; herbal soup, birdnest soup, etc., that requires slow simmer or "double boil". This method ensures food remains tender without losing its shape. It also extracts and retains aromatic flavour of the food. Place all ingredients in a microwave safe casserole. Add water and allow at least ½ depth of volume for evaporation to prevent boiling over. Cover with lid. Stir after beep sounds.

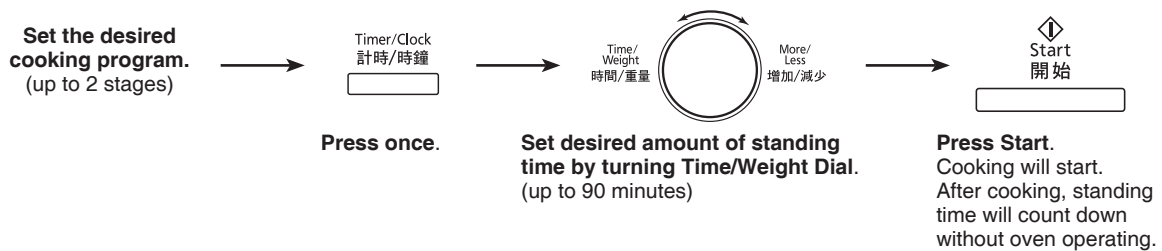
Operation (Setting Timer)

To Use as a Kitchen Timer

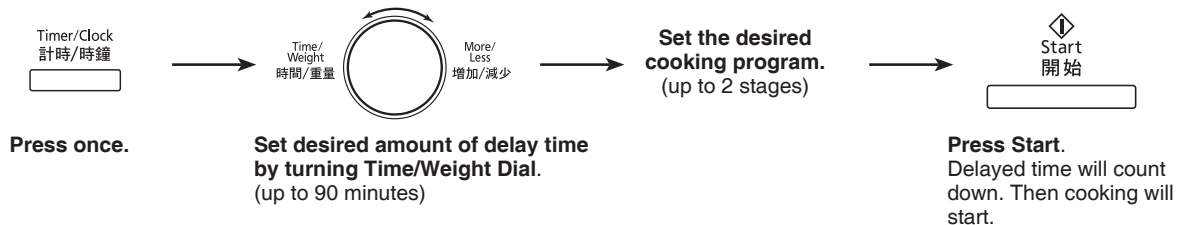


English

To Set Standing Time



To Set Delay Start



NOTES:

1. If oven door is opened during the Standing Time, Delay Start or Kitchen Timer, the time in the Display Window will continue to count down.
2. Delay Start/Standing Time cannot be programmed before/after any Auto Control function. This is to prevent the standing temperature of the food from rising before defrosting or cooking begins. A change in the starting temperature could cause inaccurate results and / or food may deteriorate.
3. Multi-stage cooking can be programmed including Standing Time/Delay Start.

Before Requesting Service

English

ALL THESE THINGS ARE NORMAL:	
The oven causes interference with my TV.	Some radio and TV interference might occur when you cook with the microwave oven. This interference is similar to the interference caused by small appliances such as mixers, vacuums, hair dryers, etc. It does not indicate a problem with your oven.
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 inside and/or on the oven door. This is normal and safe. Steam will disappear after the oven is cool down.
I accidentally operate my microwave oven without any food in it.	Operating the oven empty for a short time will not damage the oven. However, we do not recommend this to be done.
There are humming and clicking noises from my oven when I cook by Combination.	These noise occur as the oven automatically switches from microwave power to Grill, to create the Combination setting. This is normal.
The oven has an odor and generates smoke when using Combination and Grill function.	It is essential that your oven is wiped out regularly particularly after cooking by Combination or Grill. Any fat and grease that builds up on the roof and walls of the oven will begin to smoke if not cleaned.
The fan motor continue operating after cooking is over.	After using the microwave oven, the fan motor will operate for several minutes to cool the electric components.

PROBLEM	POSSIBLE CAUSE	REMEDY
Cannot turn on the oven.	The oven is not plugged in securely.	Remove plug from outlet, wait 10 seconds and re-insert.
	Circuit breaker or fuse is tripped or blown.	Contact the specified service centre.
	There is a problem with the outlet.	Plug another appliance into the outlet to check if the outlet is working.
Oven cannot start cooking.	The door is not closed completely.	Close the oven door securely.
	Start Button was not pressed after programming.	Press Start Button.
	Another program has already been entered into the oven.	Press Stop/Reset Button to cancel the previous program and program again.
	The program has not been entered correctly.	Program again according to the Operating Instructions.
	Stop/Reset Button has been pressed accidentally.	Program oven again.
"HOT" appears in the display window.	The cavity is overheated.	Operate again after it cools down.
When the oven is turning on, there is noise coming from Glass Tray.	The roller ring and oven bottom are dirty.	Clean these parts according to "Care of Your Microwave Oven" (See next page).
"🔒" appears in the Display Window.	The Child Lock was activated by pressing Start Button 3 times.	Deactivate Lock by pressing Stop/Reset Button 3 times.
"H97", "H98" or "H00" appears in the Display Window.	The display indicates a problem with microwave generation system.	Contact the specified service centre.

If it seems there is a problem with the oven, contact an authorized Service Centre.

Care of your Microwave Oven

- The oven should be cleaned regularly and any food deposits removed.
- Turn the oven off and remove the power plug from the wall socket before cleaning, if possible.
- 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. The use of harsh detergent or abrasives is not recommended.
- To prevent overheating caused by blocked vents, clean periodically with damp cloth. To prevent damage to the operating parts inside the oven, water should not be allowed to seep into ventilation openings.
- Do not allow the Control Panel to become wet. Clean with a soft, damp cloth. Do not use detergents, abrasives or spray-on cleaners on the Control Panel. When cleaning the Control Panel, leave oven door open to prevent oven from accidentally turning on. After cleaning press **Stop/Reset** Button to clear Display Window.
- 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 conditions and in no way indicates malfunction of the unit.
- It is occasionally necessary to remove the glass tray for cleaning. Wash the tray in warm sudsy water or in a dishwasher.
- The roller ring and oven cavity floor should be cleaned regularly to avoid excessive noise. Simply wipe the bottom surface of the oven with mild detergent, water or window cleaner and dry. The roller ring may be washed in mild sudsy water or dish washer. Cooking vapors collect during repeated use but in no way affect the bottom surface or roller ring wheels. When removing the roller ring from cavity floor for cleaning, be sure to replace in the proper position.
- When using the GRILL or cooking in the COMBINATION mode, some foods may inevitably splatter grease on to the oven walls. If the oven is not cleaned, occasionally it may start to "smoke" during use. These marks will be more difficult to clean later.
A steam cleaner is not to be used for cleaning.
- After GRILL or COMBINATION cooking the ceiling and walls of the oven should be cleaned with a soft cloth squeezed in soapy water. Particular care should be taken to keep the window area clean particularly after cooking by GRILL or COMBINATION. Stubborn spots inside the oven can be removed by using a small amount of microwave oven cleaner sprayed onto a soft damp cloth. Wipe onto problem spots, leave for recommended time and then wipe off. Avoid cleaning oven door and the microwave feed guide area situated on the right hand side of the cavity wall.
DO NOT SPRAY DIRECTLY INSIDE THE OVEN.
- Wipe with a soft cloth when steam accumulates inside or around the outside of the oven door. This may occur when the microwave oven is operated under high humidity conditions and in no way indicates a malfunction of the unit or of microwave leakage.
- 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.
- When it becomes necessary to replace the oven light, please consult a dealer to have it replaced.
- 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.

Technical Specifications

Power Source		220 V 50 Hz	230 ~ 240 V 50 Hz
Power Consumption	Microwave	4.8 A 1,050 W	4.5 A 1,050 W
	Grill	5.3 A 1,160 W	4.9 A 1,160 W
	Combination	8.8 A 1,920 W	8.2 A 1,950 W
Cooking Power	Microwave*	1,000 W	
	Grill	1,100 W	
Outside Dimensions		525 mm (W) x 310 mm (H) x 414 mm (D)	
Oven Cavity Dimensions		359 mm (W) x 247 mm (H) x 362 mm (D)	
Glass Tray Diameter		Ø340 mm	
Operating Frequency		2,450 MHz	
Net Weight		13.2 kg	

Trim Kit (only for NN-GD692SHPE)

Model Number:	NN-TK612GS
Outside Dimension:	596 mm (W) x 410 mm (H)
Cabinet Opening:	562 mm (W) x 395 mm (H) x 480 mm(D)

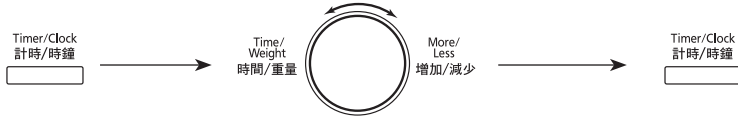


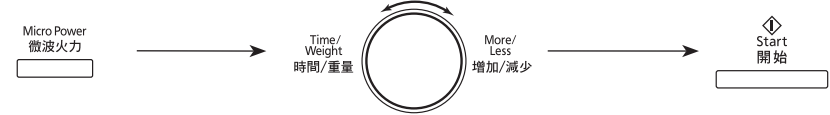
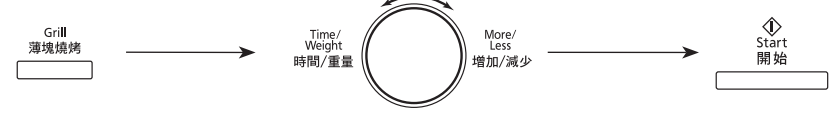
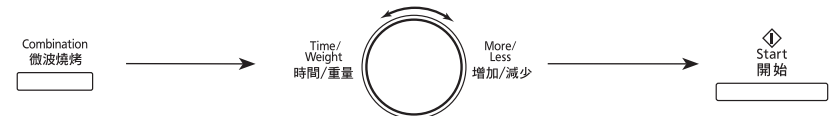



* IEC Test Procedure

Specifications subject to change without notice.

As for the voltage requirement, the production month, country and serial number, please refer to the identification plate on the microwave oven.

Quick Guide to Operation

English

Feature	How to Operate
To Set Clock (☞ page 5)	 <p>Press twice. Set time of day. Press.</p>
To Set / Cancel Child Safety Lock (☞ page 5)	<p>To Set: Display</p>  <p>Press 3 times.</p> <p>To Cancel: Display</p>  <p>Press 3 times.</p>
To Cook / Reheat / Defrost by Micro Power and Time Setting (☞ page 6)	 <p>Select power. Set the cooking time. Press.</p>
To Cook using Grill Button (☞ page 7)	 <p>Select setting Set the cooking time. Press.</p>
To Cook using Combination Button (☞ page 8)	 <p>Select setting Set the cooking time. Press.</p>
To Cook using the Recipe Store Button (☞ page 9)	<p>To Set:</p>  <p>Press. Set the desired cooking program. Press.</p> <p>To Start:</p>  <p>Press. Press.</p>
To Use Quick Min Button (☞ page 10)	 <p>Press. Press. (up to 10 min)</p>

Quick Guide to Operation

Feature	How to Operate
<p>To cook using Auto Combi Button (☞ page 11)</p>	<p>Auto Combi 超速燒烤</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Start 開始</p> <p>Press to select the desired food number.</p> <p>Select the weight.</p> <p>Press.</p>
<p>To cook using Auto Reheat Button (☞ page 12)</p>	<p>Auto Reheat 自動翻熱</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Start 開始</p> <p>Press to select the desired food number.</p> <p>Select the weight.</p> <p>Press.</p>
<p>To Use Inverter Melt & Soften Button (☞ page 13)</p>	<p>Melt&Soften 文火軟化</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Start 開始</p> <p>Press to select the desired food number.</p> <p>Select the weight.</p> <p>Press.</p>
<p>To Use Inverter Turbo Defrost Button (☞ page 14)</p>	<p>TurboDefrost 超速解凍</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Start 開始</p> <p>Press.</p> <p>Select the weight.</p> <p>Press.</p>
<p>To Reheat using Sensor Reheat Button (☞ page 16)</p>	<p>Sensor Reheat 自動感應翻熱</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Start 開始</p> <p>Press.</p> <p>Rotate More/Less Dial (Optional)</p> <p>Press.</p>
<p>To Cook using Sensor Cook Button (☞ page 17)</p>	<p>Sensor Cook 感應烹調</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Start 開始</p> <p>Press to select the desired food number.</p> <p>Rotate More/Less Dial (Optional)</p> <p>Press.</p>
<p>To Use as a Kitchen Timer (☞ page 19)</p>	<p>Timer/Clock 計時/時鐘</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Start 開始</p> <p>Press.</p> <p>Set the kitchen time.</p> <p>Press.</p>
<p>To Set Standing Time (☞ page 19)</p>	<p>Set the desired cooking program.</p> <p>Timer/Clock 計時/時鐘</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Start 開始</p> <p>Press.</p> <p>Set the standing time.</p> <p>Press.</p>
<p>To Set Delay Start (☞ page 19)</p>	<p>Timer/Clock 計時/時鐘</p> <p>Time/Weight 時間/重量</p> <p>More/Less 增加/減少</p> <p>Set the desired cooking program.</p> <p>Start 開始</p> <p>Press.</p> <p>Set the delay time.</p> <p>Press.</p>