

# Panasonic®

## Operating Instruction and Cook Book Convection/Grill/Microwave Oven Household Use Only

**INVERTER**



**Model No. NN-CD87KS**

Please read these instructions carefully before using this product, and save this manual for future use.

We are glad you have chosen to purchase a PANASONIC microwave oven. Before operating this oven, please read these instructions carefully and completely, and keep them for further reference.

If you have only used a microwave oven for reheating and defrosting, with Panasonic's Inverter Technology you can be reassured of excellent results when cooking a variety of foods, as the 'soft' penetration of microwave energy to the centre of food helps prevent over cooking on edges and surfaces. Foods can now be gently simmered without the concern of boil over.

After reading the introductory chapter, we are sure you will be able to master the basic techniques and thereby develop a firm understanding of your new oven. This book includes recipes from starters to desserts. After trying our recipes be sure to adapt your favourite recipes to microwave methods.

Start experimenting now, and enjoy the first class results you will achieve by using your new microwave oven.

Panasonic Australia Pty Ltd  
1 Innovation Road  
Macquarie Park  
NSW 2113



Panasonic NZ Ltd  
Customer Care Centre  
18 Sir Woolf Fisher Drive  
Highbrook, Auckland  
Private Bag 14911  
Panmure, Auckland

0178 272 (09) ... :Phone  
0129 272 (09) .....:Fax

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

MODEL NUMBER \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

DATE OF PURCHASE \_\_\_\_\_

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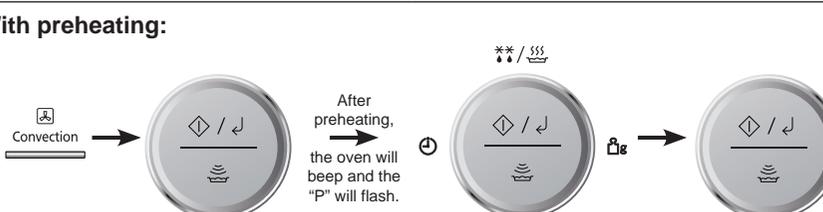
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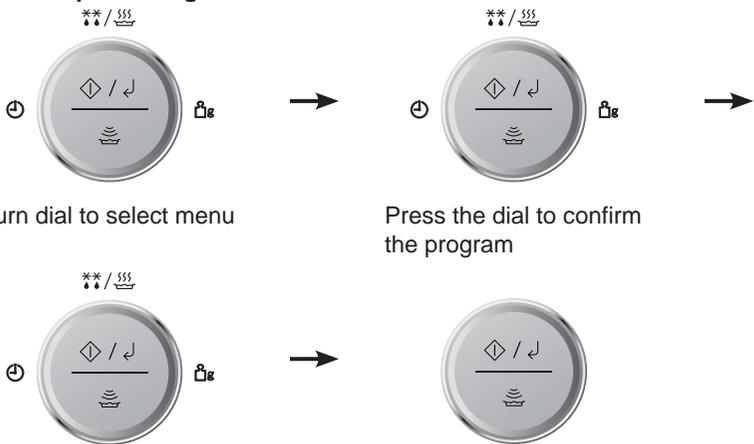
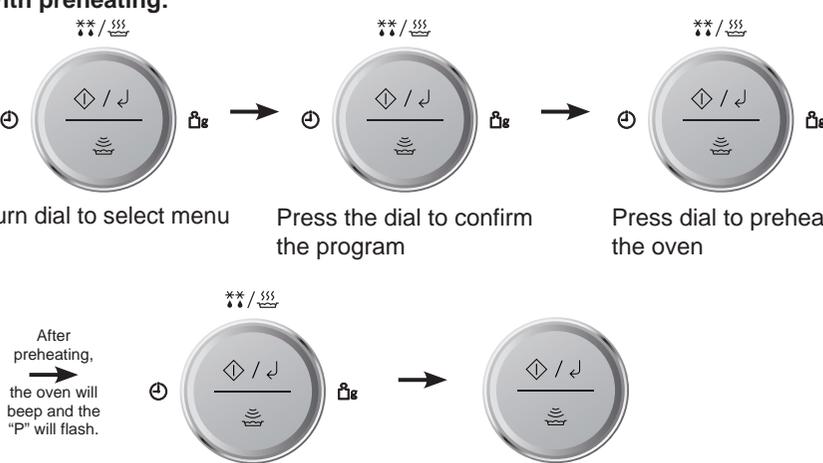
# Quick Guide to Operation

Feature	How to Operate			
<b>To Set/Cancel Child Safety Lock</b> (page 17)	<b>To set:</b>  Press 3 times	<b>Display:</b> Key appears in the display window.	<b>To Cancel:</b>  Press 3 times	<b>Display:</b> Colon or time of day appears in the display window
<b>To Set Clock</b> (page 18)	 Press twice	 Set time of day (12-hour)	 Press once	
<b>To Use Micro Power</b> (page 20)	 Select power level	 Set time	 Press once	
<b>To Use Turbo Defrost</b> (page 22)	 Select program	 Select desired weight	 Press once	
<b>To Use Add Time</b> (page 23)	 Turn dial after cooking	 Press once		
<b>To Use Grill</b> (page 24-25)	 Select power level	 Set time	 Press once	

# Quick Guide to Operation (continued)

Feature	How to Operate
<b>To Use Convection</b> (page 26-27)	<p><b>Without preheating:</b></p>  <p>Select temperature                      Set time                      Press once</p> <p><b>With preheating:</b></p>  <p>Select temperature                      Press once                      Set time                      Press once</p> <p>After preheating, the oven will beep and the "P" will flash.</p>
<b>To Use Combination Combi 1 (Grill + Microwave)</b> (page 28)	 <p>Press once                      Set time                      Press once</p>
<b>To Use Combination Combi 2/3/4/5 (Convection + Microwave)</b> (page 29-30)	<p><b>Without preheating:</b></p>  <p>Select power level                      Set time                      Press once</p> <p><b>With preheating:</b></p>  <p>Select power level                      Press once                      Set time                      Press once</p> <p>After preheating, the oven will beep and the "P" will flash.</p>

# Quick Guide to Operation (continued)

Feature	How to Operate
<p><b>To Use Auto program</b> (page 35-36)</p>	<p><b>Without preheating:</b></p>  <p>Turn dial to select menu → Press the dial to confirm the program</p> <p>Select desired weight → Press once</p> <p><b>With preheating:</b></p>  <p>Turn dial to select menu → Press the dial to confirm the program → Press dial to preheat the oven</p> <p>After preheating, the oven will beep and the "P" will flash.</p> <p>Select desired weight → Press once</p>
<p><b>To Use as a Kitchen Timer</b> (page 32)</p>	 <p>Press once → Set time → Press once</p>

# Quick Guide to Operation (continued)

Feature	How to Operate
<b>To Set Standing Time</b> (page 32)	<p data-bbox="401 258 546 316">Set the desired cooking programme (up to 2 stage).</p> <p data-bbox="622 272 701 305">Timer/Clock</p> <p data-bbox="598 394 718 419">Press once</p> <p data-bbox="890 198 948 220">** / SSS</p>  <p data-bbox="875 394 965 419">Set time</p>  <p data-bbox="1133 394 1254 419">Press once</p>
<b>To Set Delay Start</b> (page 32)	<p data-bbox="426 523 504 556">Timer/Clock</p> <p data-bbox="401 645 522 670">Press once</p> <p data-bbox="673 645 751 670">Set time</p> <p data-bbox="897 510 1041 568">Set the desired cooking programme (up to 2 stage).</p> <p data-bbox="1122 645 1243 670">Press once</p> <p data-bbox="673 446 731 467">** / SSS</p>  

# 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, 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. 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.
7. Always use the oven with the cookware recommended by the manufacturer.
8. 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.
9. For horizontally hinged doors, never rest heavy objects such as food containers on the door while it is open.
10. 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.
11. 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.
12. Children should be supervised to ensure that they do not play with the appliance.

13. 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.
14. The surfaces are liable to get hot during use.
15. The appliance must not be installed behind a decorative door in order to avoid overheating.

### Practical Hints:

1. For initial use of GRILL, CONVECTION and COMBINATION, if you see white smoke arise, it is not a malfunction.
2. Exterior oven surfaces, including air vents on the cabinet and the oven door will get hot during GRILL, CONVECTION and COMBINATION. Use care when opening or closing door and when inserting or removing food and accessories.



### Caution! Hot surfaces

3. The oven has a heating element situated in the top of the oven. After using the GRILL, CONVECTION and COMBINATION functions, the ceiling will be very hot.
4. During use the appliance becomes hot. Care should be taken to avoid touching heating elements inside the oven.
5. The accessible parts may become hot when GRILL, CONVECTION and COMBINATION is in use. Children should be kept away.
6. Before using GRILL, CONVECTION and COMBINATION functions for the first time, operate the oven without food and accessories on CONVECTION 220 °C for 5 minutes. This will allow the oil that is used for rust protection to be burned off. This is the only time that the oven is operated completely empty.

### 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 the 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 the 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.

# Important Safety Instructions (continued)

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) Heating therapeutic wheat bags is not recommended. If heating, do not leave unattended and follow manufacturers' instructions carefully.
  - (c) Remove wire twist-ties from bags before placing bag in oven.
  - (d) 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.
  - (e) 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.

## 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 a cord having an earthing wire 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 a risk of electric shock.

WE CERTIFY THAT THIS MICROWAVE OVEN HAS BEEN INSPECTED AND COMPLIES WITH THE REQUIREMENTS OF REGULATION 3, SUBCLAUSE(2), OF THE MICROWAVE OVENS REGULATIONS 1982.

(This statement applicable only to New Zealand.)

We certify that this microwave oven has been inspected and complies with the safety requirements of government notice 466 of March 1981, and complies with the Radio Regulation of government notice 587 of March 1986.

(This statement applicable only to South Africa)

## 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.

## 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 qualified service technician trained by the manufacturer.
- b) If the door or door seals are damaged, the oven must not be operated until it has been repaired by a competent person.
- c) It is dangerous for anyone other than a service technician trained by the manufacturer to perform repair service.
- d) 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.
- e) If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- f) Before use, the user should check that whether the utensils are suitable for use in microwave ovens.
- g) 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.
- h) 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.
- i) When the appliance is operated in the GRILL, CONVECTION and COMBINATION modes, children should only use the oven under adult supervision due to the temperatures generated.
- j) Care should be taken not to displace the glass tray when removing containers from the appliance.

# 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 in order to stifle any flames. Disconnect the power cord, and/or shut off power at the fuse or circuit breaker panel.
3. The microwave oven is intended for heating food and beverages. Drying of food or clothing and heating of warming pads, slippers, sponges, damp cloth and similar may lead to risk of injury, ignition or fire.
4. Do not dry clothes, newspapers or other materials in oven. They may catch on fire.
5. Do not use recycled paper products, unless the paper product is labelled as safe for microwave oven use. Recycled paper products may contain impurities which may cause sparks and/or fires when used.
6. Do not use newspapers or paper bags for cooking.
7. Do not hit or strike control panel. Damage to controls may occur.
8. 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.
9. Do not store flammable materials next to, on top of, or in the oven. It could be a fire hazard.
10. Do not cook food directly on Glass Tray unless indicated in recipes. (Food should be placed in a suitable cooking utensil.)
11. **DO NOT** use this oven to heat chemicals or other non-food products. **DO NOT** clean this oven with any product that is labelled as containing corrosive chemicals. **The heating of corrosive chemicals in this oven may cause microwave radiation leaks.**
12. If Glass Tray is hot, allow to cool before cleaning or placing in water.
13. When using the COMBINATION mode, never place any aluminum or metal container directly on the Wire Rack or Enamel tray. Always insert a heat-proof and microwave safe, glass plate or dish between the Wire Rack and the aluminum container. This will prevent sparking that may damage the oven.
14. It is recommended not to use the Wire Rack when cooking in the MICROWAVE mode only.
15. 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.
16. Do not leave the microwave unattended while reheating or cooking food in disposable containers made of plastic, paper or other combustible materials, as these types of containers can ignite if overheated.
17. Metallic containers for food and beverages are not allowed during microwave cooking.
18. Only use utensils that are suitable for use in microwave ovens.

## Placement of the 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. If one side of the oven is 5 cm at one side, 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 be overheated and damaged. When using any cloth over the oven, the air intake and exhaust should not be blocked. Do not place a cloth on top of the unit during GRILL, CONVECTION and COMBINATION cooking as the top of the oven gets very hot. Also allow sufficient space on back and both sides of the oven.
  - (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.

## Building-in your oven

1. This oven is intended for counter-top and built-in use only. It is not intended for use inside a cupboard. This oven may be built into a wall cabinet by using the proper trim kit (**NN-TK81KCSCP**) which may be purchased from your local Panasonic dealer.
2. In case of fitting into an oven housing, please use Panasonic's Trim Kit, **NN-TK81KCSCP**.
3. Microwave ovens should not be built into a unit directly above a top front venting conventional cooker. This may be a safety hazard and could result in damage to your oven. This will invalidate your one year guarantee.
4. A microwave which is built in must be more than 850 mm above floor level. Read Trim-Kit instructions carefully before installation. It is recommended that the microwave oven is placed below a conventional oven to avoid heat damage to the fascia of the microwave.

## 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. Eggs in their shell and whole hard-boiled eggs should not be heated in microwave ovens since they may explode, even after microwave heating has ended.

# Installation and General Instructions (continued)

4. Potatoes, apples, egg yolks, chicken wings, 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 of 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.
  - (e) Microwave heating of beverages can result in delayed eruptive boiling, therefore care must be taken when handling 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 Cooking Guide section 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, keep an eye on the oven 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.

## Microwaves and How They Work

Microwaves are a form of high frequency radio waves similar to those used by a radio, including AM, FM and CB. They are similar to a television where the radio waves are converted to a picture on the screen. However, microwaves are much shorter than radio waves; approximately twelve centimetres wave length. Electricity is converted into microwave energy by the magnetron tube (which is the heart of the microwave oven).

From the magnetron tube, microwave energy is transmitted to the oven cavity. The microwaves are converted to heat in the food. The microwaves enter from the outside of the food and travel through the food losing half of their power every two to three centimetres. Continued cooking to the centre occurs by conduction.

Although pacemakers used to be affected by microwaves (as well as by other radio waves), they are now shielded and are not bothered by these interferences. This allows people with pacemakers to sit calmly by their radio or television and cook with microwave ovens.

When microwaves come in contact with a substance, any one or combination of three things may occur.

They can be:

1. REFLECTED

2. TRANSMITTED

3. ABSORBED

### Reflection:

Metal substances REFLECT microwave energy and because there is no absorption, there is no heating. This is why the oven interior is either stainless steel or epoxy-coated steel. This ensures that the microwaves are kept inside the cavity and evenly distributed throughout the food with the help of the Glass Tray.

### Transmission:

Such substances as paper, glass and plastic TRANSMIT microwave energy and do not become hot except from food. Because these substances do not reflect or absorb microwave energy, they are ideal materials for microwave cooking containers.

### Absorption:

Food contains moisture and will ABSORB microwave energy, which causes the moisture molecules within the food to vibrate at an incredible rate (2,450,000,000 times per second). Friction, created by the vibration, produces heat energy which is conducted throughout the food.

# Cookware and Utensils Guide

It is important to use the correct container when cooking in a microwave oven. The following will help you make the right selection.

## How to Test a Container for Safe Microwave Oven Use

**TO TEST A CONTAINER FOR SAFE MICROWAVE OVEN USE:** Fill a 1-cup glass measure with cool water and place it in the microwave oven alongside the empty container to be tested; **heat one (1) minute at 1000 W.** If the container is microwave oven safe (transparent to microwave energy), the container should remain comfortably cool, the water in glass measure 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.

## Paper Products and Freezer Wrap

Waxed paper, paper plates, cups and napkins should not be used for heating or cooking food. Freezer wrap should not be used as it is not heat resistant and may melt. Paper towel, greaseproof paper and bake paper may be safely used for short periods of time for covering or lining.

## Glass, Ceramic and China

**Heat-Resistant glass cookware** is invaluable in microwave cooking. Many of these items are readily available in most homes: glass jugs, mixing bowls, loaf dishes, covered casseroles, oblong baking dishes, pie plates and round or square cake dishes. Examples of this type of cookware are Pyrex® and Corningware®.

**Dinnerware** can be used for microwave heating. Many brands of dinnerware are microwave safe. Check the care information for reference to microwave use for dinnerware and serving pieces. If dinnerware is marked ovenproof, it frequently is safe to use in the microwave oven. However, to be sure, check by conducting microwave dish test previously mentioned.

**Several types of glassware and dinnerware** are not recommended for use in the microwave oven. Do not use dishes with metallic trim or containers with metal parts. Do not use cups or mugs with glued on handles, as they may fall off with continued heating. Do not use delicate glassware. Although the glassware may be transparent to microwave energy the heat from the food may cause the glassware to crack.

## Plastic

**Plastic dishes, cups and some freezer containers** should be used with care in a microwave oven. Choose plastic containers carefully, as some plastic containers may become soft, melt and may scorch. The majority of plastic dishes, even those designed for use in the microwave oven, are not suitable for cooking foods with high fat or sugar content, or for lengthy cooking times. Most microwave plastic dishes should not be used for longer than 3 to 5 minutes on **1000 W.** These dishes, although not suitable for extended cooking, may be used successfully for defrosting or for use on lower power levels.

**Cooking Bags** designed to withstand boiling, freezing, or conventional heating are microwave safe. Prepare bags according to manufacturer's directions. When cooking by microwave, **DO NOT** use wire twist-ties to close bag. They can act as an antenna and cause arcing (sparks).

**DO NOT COOK IN PLASTIC FOOD STORAGE BAGS.**

**Plastic Wrap** such as GLAD WRAP® can be used to cover dishes in most recipes. Over an extended heating time, some disfiguration of the wrap may occur. When removing plastic wrap "covers", as well as any glass lid, be careful to remove it away from you to avoid steam burns.

Loosen plastic but let dish stand, covered.

## Jars and Bottles

Jars and bottles can be used to warm food to serving temperature, if the lid is removed first. Cooking should not be done in these containers since most are not heat resistant and during extended heating times, heat from food would cause cracking or breaking.

## Metal

Metal cookware or utensils, or those with metallic trim, should NOT be used in the microwave. Since microwave energy is reflected by metal, foods in metal containers will not cook evenly. There is also a possibility of "arcing".

Although metal utensils should be avoided in microwave cooking, some metal can be helpful when used correctly. Aluminum foil can be used safely, if certain guidelines are followed, to prevent overcooking. Small pieces of foil are used to shield areas such as chicken wings, tips of roasts, or other thin parts that cook before the rest of the recipe is finished. Make sure foil is attached securely and doesn't touch sides of oven, otherwise arcing may occur. Foil lined containers, either cardboard or plastic, should NOT be used in the microwave oven as arcing could occur.

Metal twist-ties, either paper or plastic coated, should NOT be used in the microwave oven. Frozen dinner trays can be used in the microwave, if the container is no deeper than 2 cm and is filled with food. Metal skewers can not be used in microwave ovens as arcing may occur. Wooden skewers are readily available and give the same result.

**Shells:** Scalloped baking shells are best used during reheating and for short periods of cooking time only.

**Thermometers** are available for use in microwave ovens. **DO NOT USE CONVENTIONAL MERCURY TYPE CANDY OR MEAT THERMOMETERS** in food while cooking in the microwave oven.

## Straw, Wicker and Wood

Straw and wicker baskets may be used in the microwave oven for short periods of time to warm rolls or bread. Large wooden utensils, such as bowls or cutting boards should NOT be used for prolonged heating as the microwave energy may cause the wood to become dry and brittle.

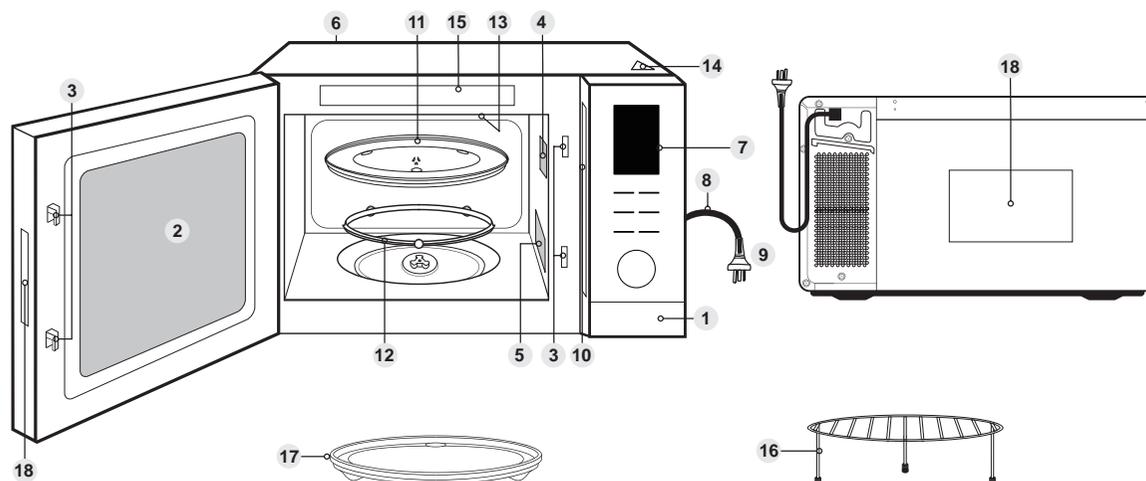
# Cookware and Utensil Chart

	Microwave	Grill	Convection	Combination	
				Combi 1 (Grill + Microwave)	Combi 2/3/4/5 (Convection + Microwave)
<b>Enamel tray</b> (oven accessories) 	no	yes	yes	yes	yes
<b>Wire rack</b> (oven accessories) 	no	yes	yes	yes	yes
Aluminium foil	for shielding	yes	yes	for shielding	for shielding
Ceramic Plate	yes	yes	yes	yes	yes
Browning Dish	yes	no	no	no	no
Brown paper bags	no	no	no	no	no
<b>Dinnerware</b> oven/microwave safe	yes	yes	yes	yes	yes
non-oven/microwave safe	no	no	no	no	no
<b>Disposable</b> paperboard containers	yes*1	yes*1	yes*1	yes*1	yes*1
<b>Glassware</b> oven glassware & ceramic	yes	yes	yes	yes	yes
non-heat resistant	no	no	no	no	no
Metal cookware	no	yes	yes	no	no
Metal twist-ties	no	yes	yes	no	no
Oven cooking bag	yes	yes*1	yes*1	yes*1	yes*1
Paper towels and napkins	yes	no	no	no	no
Plastic defrosting rack	yes	no	no	no	no
<b>Plastic dishes</b> microwave safe	yes	no	no	no	no
non microwave safe	no	no	no	no	no
Microwave safe plastic wrap	yes	no	no	no	no
Straw, wicker, wood	yes	no	no	no	no
<b>Thermometers</b> microwave safe	yes	no	no	no	no
conventional	no	yes	yes	no	no
Waxed paper	yes	yes	yes	yes	yes
Silicon bakeware	yes*1	yes*1	yes*1	yes*1	yes*1

\*1 Check manufacturers' recommendation, must withstand heat or follow the recipe instructions.

\*2 Follow the Cooking Guide section.

# Feature Diagram



## ① 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. It is quite safe to open the door at any time during a cooking program and there is no risk of Microwave exposure.

## ② Oven Window

## ③ Door Safety Lock System

## ④ Oven Light

Oven light will turn on during cooking and also when door is opened.

## ⑤ Waveguide Cover (do not remove)

## ⑥ External Oven Air Vents

## ⑦ Control Panel

## ⑧ Power Supply Cord

## ⑨ Power Supply Plug

## ⑩ Identification Label

## ⑪ Glass Tray

- DO NOT operate the oven without the Roller Ring and Glass Tray in place.
- Only use the Glass Tray specifically designed for this oven. Do not substitute any other Glass Tray.
- If the Glass Tray is hot, allow to cool before cleaning or placing in water.
- Do not cook foods directly on the glass tray, except when cooking jacket potatoes in microwave mode. Always place food on a microwave-safe dish, or on a rack set in a microwave-safe dish.
- 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.
- Glass Tray can rotate in either direction.

## ⑫ Roller Ring

- Roller Ring should be cleaned regularly to avoid excessive noise.

- Roller Ring and Glass Tray should be used at the same time.

## ⑬ Heating Elements

## ⑭ Warning Label

## ⑮ Menu Label

## ⑯ Wire Rack

- The wire rack is used to facilitate browning of small dishes and help with the good circulation of the heat.
- Wire Rack should be cleaned regularly.
- When using Wire Rack in the manual GRILL, COMBINATION and CONVECTION 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.
- 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.
- Do not use Wire Rack when cooking in the MICROWAVE mode only.

## ⑰ Enamel Tray

- The enamel tray is for cooking on grill, convection and combination modes.
- Do not use enamel tray in microwave mode only.
- The enamel tray must always be in place on the glass tray (unless stated).

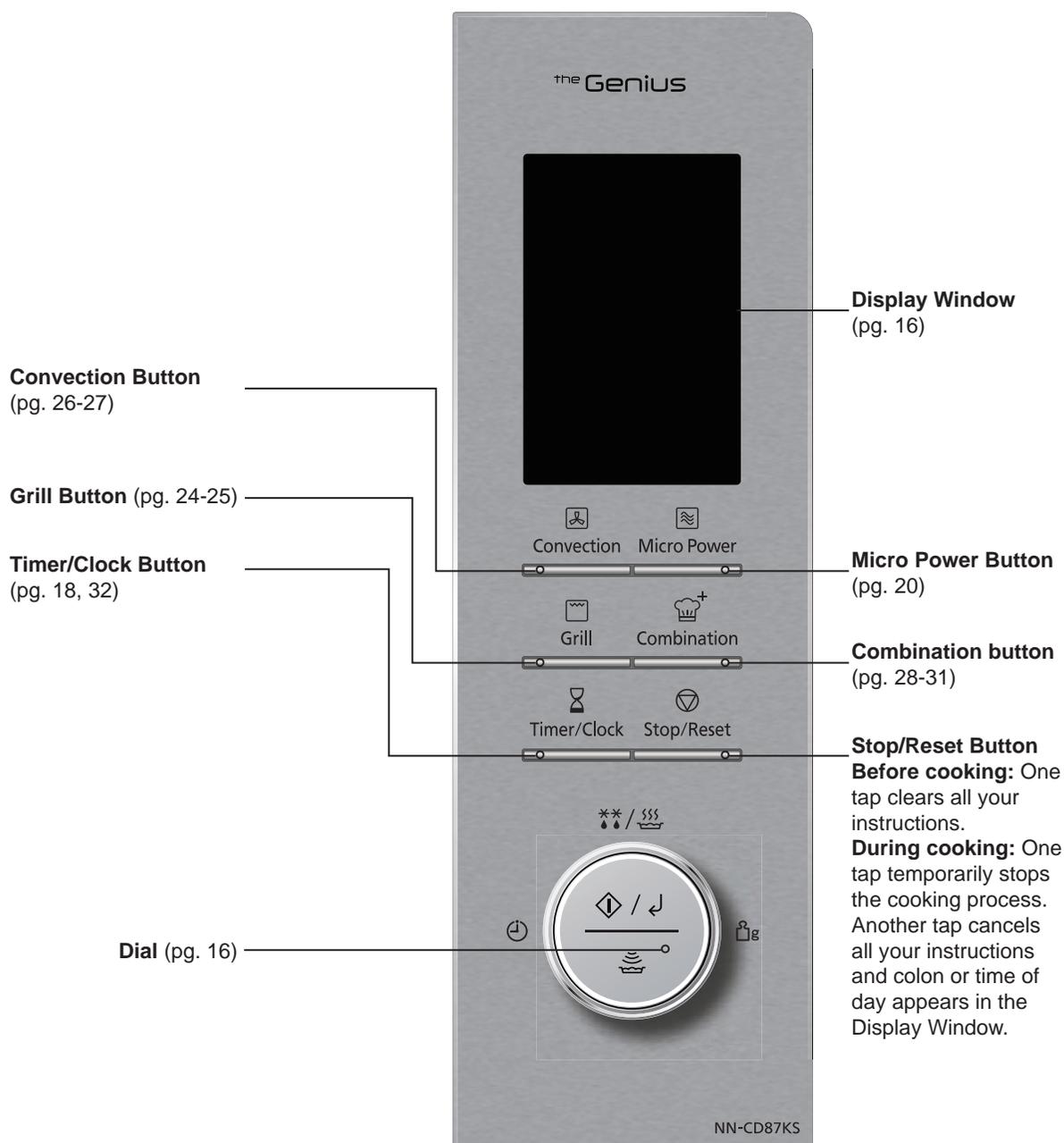
## ⑱ Warning Label



## Notes

- The illustration is for reference only.
- The glass tray, wire rack and enamel tray are the only accessories with this oven. All other cooking utensils mentioned in this manual must be purchased separately.

# Control Panel



## Notes

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

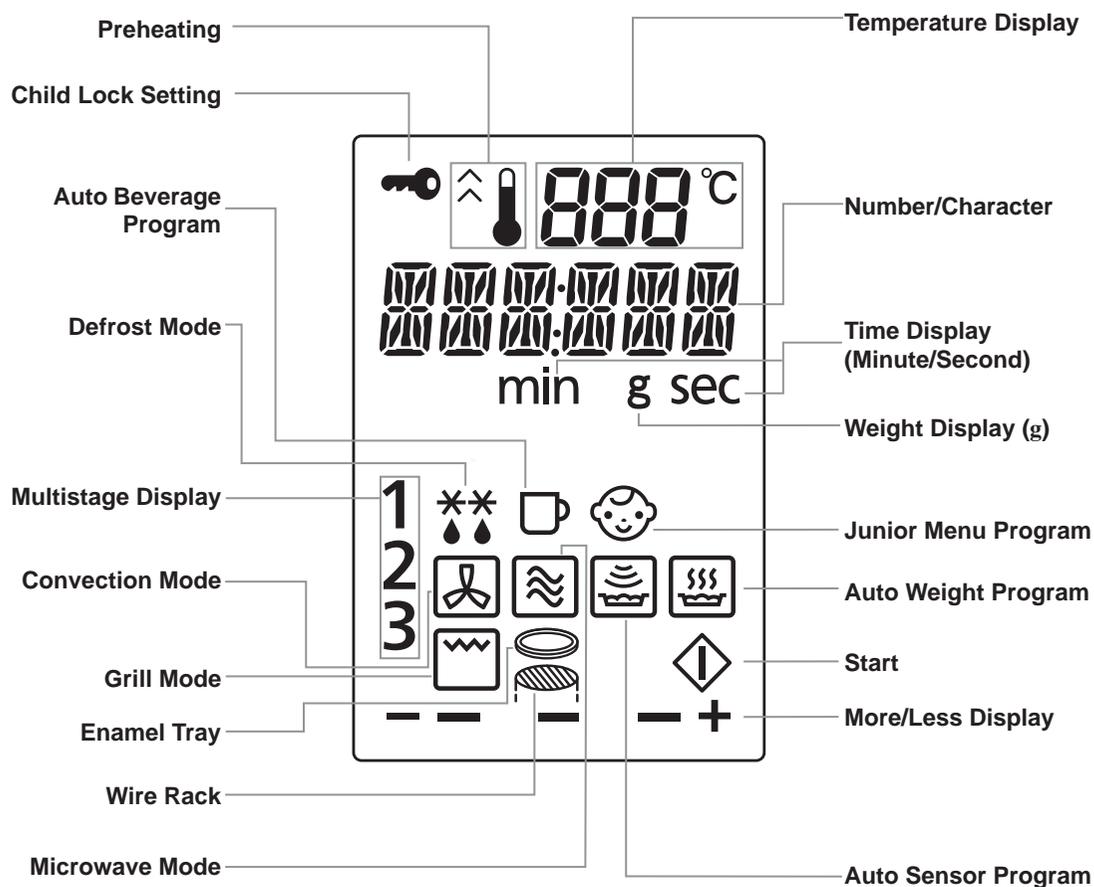


## Beep Sound

When a button is pressed correctly, a beep sound will be heard. If a button is pressed and no beep is heard, the unit does not or can not accept the instruction. The oven will beep twice between programmed stages. The oven will beep three times after preheating. At the end of any completed program, the oven will beep 5 times.

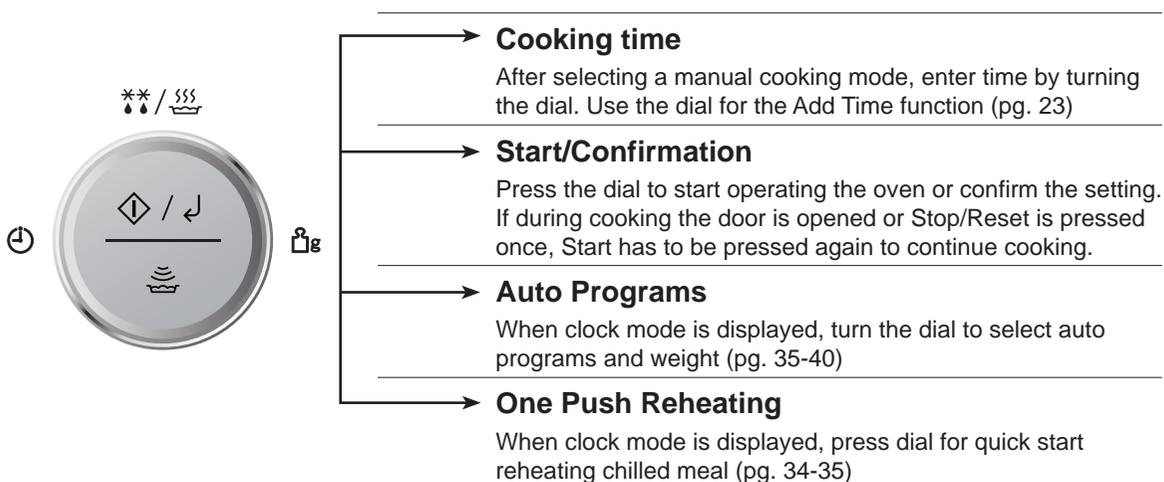
# Display Window

To help you operate the oven conveniently, the present state will appear in the display window.



# Dial Feature

The dial has the following 4 functions:



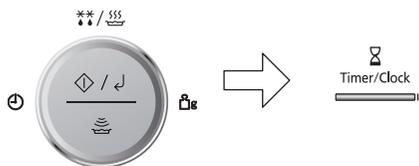
# Let's Start To Use Your Oven!

## 1. Plug in.

Plug into a properly earthed electrical outlet. "REFER TO OPERATING INSTRUCTIONS BEFORE USE" will appear in the display window, then you can start to operate.

## 2. Press twice to set clock.

Set clock as a 12 hour clock. Turn dial to select the time, then press **Timer/Clock**. (See page 18 for details)



## 3. Press .

"" will appear in the display window with the oven temperature. This procedure is to burn off the oil used for rust protection in the oven. Press **Convection** button until 220 °C appears in the display window. Remove all accessories from the oven.

## 4. Turn Dial to Select Time.

Turn dial until 5 minutes is displayed in the window.



## 5. Press .

The time will be displayed in the window and count down. The oven will beep at the end of the program. The oven is now ready to use.

**Caution:** heating elements and oven will be hot.

# To Use Child Safety Lock

This feature allows you to prevent operation of the oven by a young child; however, the door will open. **This feature can be set when colon or time of day is displayed.**

### To set:



Press **Stop/Reset** button 3 times.  
▶ "" appears in the display window.

Press 3 times.

### To cancel:



Press **Stop/Reset** button 3 times.  
▶ Colon or time of day appears in the display window.

Press 3 times.

To set or cancel child lock, **Stop/Reset** button must be pressed 3 times within a 10 second period. Child Lock can be set when a colon or the time of day is displayed.

# To Set Clock

## 1. Press twice.

“SET TIME” will appear in the display window, and the colon starts to blink.

## 2. Turn dial.

Enter the time by turning the dial. The time appears in the display.



## 3. Press .

The colon stops blinking. Time of day is now locked into the display.



### Notes

1. If you want to reset time, please repeat step 1-3.
2. The clock will keep the time of day as long as oven is plugged in and electricity is supplied.
3. Clock is a 12-hour display.
4. Oven will not operate while colon is still blinking.

# Operation Guide Setting

To assist you in programming your oven, the following operation will appear in the display window. When you become familiar with your oven, the operation guide can be turned off.

### To turn off:



OPERATION GUIDE OFF



Colon or time of day appears in the display window.

Press **Timer/Clock** button four times.

Display window.

### To turn on:



OPERATION GUIDE ON



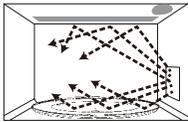
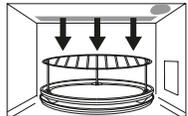
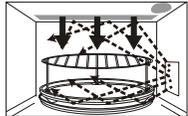
Colon or time of day appears in the display window.

Press **Timer/Clock** button four times.

Display window.

# Cooking Modes

The diagrams shown below are examples of the accessories. It may vary depending on recipe/dish used. Further information can be found in the **Cooking Guide** section.

Cooking Modes	Uses	Recommended Accessories	Containers
<p><b>MICROWAVE</b></p> 	<ul style="list-style-type: none"> <li>Defrosting.</li> <li>Reheating.</li> <li>Melting: butter, chocolate, cheese.</li> <li>Cooking: fish, vegetables, fruits, eggs.</li> <li>Preparing: stewed fruits, jam, sauces, custards, choux, pastry, caramel, meat, fish.</li> <li>Baking: cakes without colour.</li> </ul> <p><b>No Preheating</b></p>	—	<p>Use your own Pyrex® dishes, plates or bowls, directly on the glass tray.</p> <p>No metal.</p>
<p><b>GRILL</b></p> 	<ul style="list-style-type: none"> <li>Grilling of meat or fish.</li> <li>Toast grilling.</li> <li>Colouring of gratin dishes or meringue pies.</li> </ul> <p><b>No Preheating</b></p>	Wire rack on enamel tray	<p>Use your own Pyrex® dishes, heat-proof plates or bowls, directly on the wire rack on enamel tray on glass tray.</p>
<p><b>CONVECTION</b></p> 	<ul style="list-style-type: none"> <li>Baking of small items with short cooking times: puff pastry, cookies, roll cakes.</li> <li>Special baking: bread rolls or brioches, sponge cakes.</li> <li>Baking of pizzas and tarts.</li> </ul> <p><b>Preheating Advised</b></p>	Enamel tray	<p>Heat-proof, metal tin can be used on enamel tray.</p> <p><b>Do not place dishes directly on glass tray.</b></p>
<p><b>GRILL + MICROWAVE</b></p> 	<ul style="list-style-type: none"> <li>Cooking lasagne, meat, potatoes or vegetable gratins.</li> </ul> <p><b>No Preheating</b></p>	Wire rack on enamel tray	<p>Microwaveable and heat-proof dishes placed directly on wire rack on enamel tray on glass tray.</p> <p>No metal.</p>
<p><b>CONVECTION + MICROWAVE</b></p> 	<ul style="list-style-type: none"> <li>Baking cakes.</li> <li>Puff pastry tarts.</li> </ul> <p><b>Preheating If Necessary</b></p>	Enamel tray	<p>Microwaveable and heat-proof dishes can be used on the enamel tray.</p> <p><b>Do not place dishes directly on glass tray.</b></p> <p>No metal.</p>

# To Cook/Reheat/Defrost on Micro Power by Time Setting

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

## 1. Open Door.

Open the door and place container with food on the glass tray. Then close the door.

## 2. Press Micro Power.

Press this button until the power you require appears in the display window. (see chart below)

Press	Power Level	Example of Use
Once	1000 W (High)	Boil water. Cook fresh fruits, vegetables, preserved fruit and candies.
Twice	800 W (Medium-High)	Cook poultry, meat, cakes, desserts. Heat milk
3 times	270 W (Defrost)	Defrost meat, poultry or seafood.
4 times	600 W (Medium)	Cook beef, lamb, eggs, fish and seafood. Melt butter.
5 times	440 W (Low)	Simmer soups, stew and casseroles (less tender cuts).
6 times	300 W (Simmer)	Cook tough meat, stew soup and soften butter.
7 times	100 W (Warm)	Keep food warm and soften ice cream.

## 3. Enter Time.

Enter the cooking time by using the dial. (1000 W : up to 30 minutes; Other Powers : up to 1 hour 30 minutes)



## 4. Press .

The cooking time appears in the display window and begins to count down.



## Notes

1. Three stages can be set continuously. This feature allows you to set only once for some different stages without taking care during cooking. Please refer to page 33.
2. You can change the cooking time during cooking if required. Turn the dial to increase or decrease the cooking time. Time can be increased/decreased in 1 minute increments up to maximum time of 10 minutes can be changed, turning the dial to zero will end cooking.
3. Do not attempt to use microwave only with any metal container in the oven.
4. Do not place food directly on the glass tray. Place in a microwaveable or glass dish. Foods reheated or cooked by microwave only should be covered with a lid or pierced cling film, unless otherwise stated.
5. Stand time can be programmed after microwave power and time setting. Refer to using the timer page 32.
6. After using the oven, the fan may rotate to cool the electric components and "HOT" appears in the display window. This is perfectly normal, and you can take out the food from the oven while the fan operates.
7. When cooking time is longer than 60 minutes, the time will appear in hours and minutes.
8. For manual defrosting times, please refer to defrosting chart on page 21.

## Oven Accessories to Use

When using your oven on **microwave** only, the glass tray provided must always be in position.



# Defrosting Using Defrost Microwave and Time

Select **Defrost** microwave. The times given below are a guideline only. Always check the progress of the food by opening the oven door and then re-starting.

For larger quantities adjust times accordingly. Food should not be covered during defrosting.

Food	Defrosting Time	Method	Standing Time
<b>Meat</b>			
Beef/Lamb/Pork joint 500 g	8-9 mins	Place in a suitable dish or on an upturned saucer or use a microwave safe rack. Turn once. Shield.	30 mins
Minced beef 500 g	6 mins 30 secs	Place in a suitable dish. Break up and turn once.	5 mins
Chops 450 g	6-7 mins	Place in a suitable dish in a single layer. Turn once. Shield if necessary.	5 mins
Sausages 450 g	6 mins	Place in a suitable dish in a single layer. Turn twice. Shield if necessary.	5 mins
Bacon rashers 500 g	4-6 mins	Place in a suitable dish. Turn and separate twice. Shield if necessary.	3 mins
Stewing steak 450 g	6 mins	Place in a suitable dish. Break up frequently.	5 mins
Whole chicken 500 g	6-8 mins	Place in a suitable dish on an upturned saucer or use a microwave safe rack. Turn once. Shield.	10 mins
Chicken portions 450 g	5-7 mins	Place in a suitable dish in a single layer. Turn once. Shield if necessary.	10 mins
<b>Fish</b>			
Whole 350 g	7-9 mins	Place in a suitable dish. Turn once. Shield.	5 mins
Fillet/Steak 450 g	5-6 mins	Place in a suitable dish. Turn once, separate and shield if necessary.	5 mins
Prawns 450 g	5-7 mins	Place in a suitable dish. Stir halfway during defrosting.	5 mins
<b>General</b>			
Bread sliced 400 g	4 mins	Place on a plate. Separate and rearrange during defrosting.	5 mins
Slice of bread 45 g	20 secs-30 secs	Place on a plate.	1-2 mins
Pastry 500 g	4 mins	Place on a plate. Turn halfway.	5-10 mins
Soft fruit 450 g	5-6 mins	Place in a suitable dish. Stir once during defrosting.	2 mins



## Notes

Opening the door and taking out the defrosted parts during the operating time is recommended. Turn over, stir or rearrange the parts which are still in icy.

# To Defrost Using Turbo Defrost

This feature allows you to defrost meat, poultry and seafood automatically by just setting the weight. The serving/weight is 0.1 kg to 3.0 kg. The weight can be programmed in grams. The weight starts from the minimum weight.



## 1. Turn

Select the desired program by turning the dial.

## 2. Press the dial to confirm the program selection.

The microwave (  ) and defrost (  ) symbol will also appear.

## 3. Select Desired Weight.

Select the weight of the food by turning the dial. Turning the dial slowly will count up in 10 g steps. Turning the dial quickly will speed up this process.



## 4. Press

Defrosting time appears in the display window and begins to count down.

### Tips for Turbo defrost

Boneless meat always demands longer time to defrost than meat with bones, as to meat with bones, we recommend to subtract 0.5 kg from total weight when it exceeds 2 kg, subtract 0.2-0.3 kg from total when it weights under 2 kg.

### Two buzz beeps

Turn over the meat, chicken, fish and shell fish. 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.

### 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.

# To Defrost Using Turbo Defrost (continued)

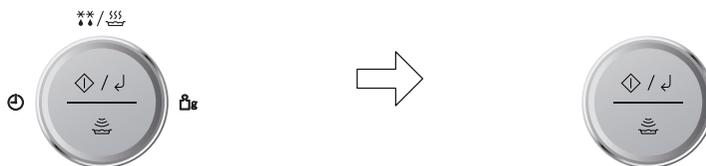
## Defrosting Guidelines

For Best Results:

1. Place foods in a suitable container. Meat joints and chickens should be placed on an upturned saucer or on a plastic rack if you have one.
2. Check food during defrosting, as foods vary in their defrosting speed.
3. It is not necessary to cover the food.
4. Always turn or stir the food especially when the oven “beeps”. Shield if necessary (see point 6).
5. Minced meat/chops/chicken portions should be broken up or separated as soon as possible and placed in a single layer.
6. Shielding prevents food cooking. It is essential when defrosting chickens and joints of meat. The outside thaws out first, so protect wings/breast and fat with smooth pieces of aluminium foil secured with cocktail sticks.
7. Allow standing time so that the centre of the food thaws out. (Minimum of 1 hour for joints of meat and whole chickens).

## To Use the Add Time Feature

This feature allows you to add cooking time at the end of previous cooking.



1. After cooking, turn dial to select **Add Time** feature.  
Maximum cooking time:  
Micro Power: 1000 W up to 30 minutes;  
other microwave powers: up to 1 hour 30 minutes;  
Grill: 1 hour 30 minutes,  
Convection, Combination and timer: 9 hours.
2. Press **Start** button.  
Time will be added.  
The time in the display window will count down.



## Notes

1. This feature is only available for Micro Power, Grill, Convection, Combination and Timer feature and it is not available for Turbo Defrost and Auto programs.
2. The Add Time feature will not operate after 1 minute cooking.
3. The Add Time feature can be used after the 3-stage cooking and during cooking.
4. The power level is the same as the last stage.

# To Cook on Grill by Time Setting

The grill system on the oven gives fast efficient cooking for a wide variety of foods e.g. chops, sausages, steaks, toast, etc. There are 3 different grill settings available. The glass tray must always be in position when using the oven.

## 1. Press Grill.

Press to set the desired power level. (see chart below)

Press	Power Level	Suitable kinds of foods
Once	Grill 1 (High)	Toasting bread, muffins and teacakes etc.
Twice	Grill 2 (Medium)	Thin seafood.
3 times	Grill 3 (Low)	Slice of poultry or meat.

## 2. Enter Time.

Enter the cooking time by using the dial. (up to 1 hour 30 minutes)



## 3. Press .

The cooking time appears in the display window and begins to count down.



## Notes

1. There is no microwave power on the grill only program.
2. Use the accessories provided, as explained.
3. Most meat items e.g. bacon, sausages, chops can be cooked on the hottest setting - Grill 1. This setting is also suitable for toasting bread, muffins and teacakes etc.
4. Grill 2 and Grill 3 are used for more delicate foods or those that require a longer grill time e.g. fish or chicken portions.
5. **Never cover foods when grilling.**
6. **Do not attempt to preheat the grill.**
7. The grill will only operate with the oven door closed. It is not possible to use the grill function with the door open.
8. Most foods require turning halfway during cooking. When turning food, open oven door and carefully remove wire rack using oven gloves.
9. **Always use oven gloves when removing the food and accessories after grilling as the oven and accessories will be very hot.**
10. After turning, return food to the oven and close door. After closing oven door, press **Start** button. The oven display will continue to count down the remaining grilling time. It is quite safe to open the oven door at any time to check the progress of the food as it is grilling.
11. You can change the cooking time during cooking if required. Turn the dial to increase or decrease the cooking time. Time can be increased/decreased in 1 minute increments up to maximum time of 10 minutes can be changed, turning the dial to zero will end cooking.
12. The grill will glow on and off during cooking - this is normal. Always clean the oven after using the grill and before using the microwave or combination.
13. After grilling it is important that the grill accessories are removed for cleaning before reuse and that the oven walls and floor are wiped with a cloth squeezed in hot soapy water to remove any grease. **Do not put accessories in dish washer.**

# To Cook on Grill by Time Setting (continued)

## Oven Accessories to Use

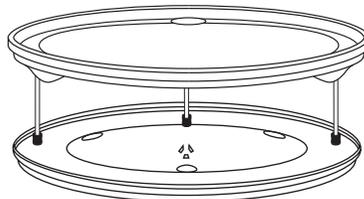
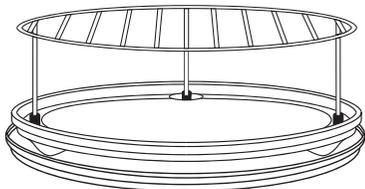
When grilling foods the glass tray should be in position, with the enamel tray and the wire rack on top.

Place food on wire rack on the enamel tray on the glass tray. The wire rack will allow fat to drip through into the enamel tray to reduce excess splatter and smoke when grilling steaks, chops and other fatty foods.

Most foods require turning halfway during cooking. When turning food, open oven door and carefully remove the enamel tray and wire rack by holding the accessories firmly. Use oven gloves when removing accessories as they will be very hot, and so will the roof and walls of the oven.

After turning, return food to the oven, close door and press **Start** button. The oven will continue to count down the remaining cooking time. It is quite safe to open the oven door at any time to check the progress of the food as it is grilling.

If grilling fish or small items, place the enamel tray on top of the wire rack.



# To Cook on Convection by Time Setting

Your microwave oven can be used in convection mode which incorporates a heating element with a fan. For best results always place food in a preheated oven. The enamel tray must be on the glass tray when preheating.

## ● Without Preheating:

### 1. Press Convection.

Press to select oven temperature. There is a choice of convection temperatures 40 °C and 100 °C - 220 °C. Default temperature is 150 °C.

### 2. Enter Time.

Enter the cooking time by using the dial. (up to 9 hours)



### 3. Press .

The cooking time appears in the display window and begins to count down.

## ● With Preheating:

### 1. Press Convection.

Press to select oven temperature. There is a choice of convection temperatures 100 °C - 220 °C. Default temperature is 150 °C.



### 2. Press to Preheat Oven.

A “P” will appear in the display window. When the oven is preheated the oven will beep and the “P” will flash. Then open the door and place the food inside.

**Note:** Open the door using the door release, because if the **Stop/Reset** button is pressed the program may be cancelled.

### 3. Enter Time.

Enter the cooking time by using the dial. (up to 9 hours)



### 4. Press .

The cooking time appears in the display window and begins to count down.

# To Cook on Convection by Time Setting (continued)



## Notes

1. For quick selection of the most commonly used cooking temperatures, the oven starts at 150 °C and then for each press the temperature will count up in 10 °C stages to 220 °C, then to, 40 °C, 100 °C, 110 °C etc.
2. 40 °C is for dough fermentation, such as the pizza base or bakery dough when making bread.
3. The oven can not preheat to 40 °C.
4. Do not open the door during preheating.
5. The oven will maintain the selected temperature for approximately 30 minutes. If no food has been placed inside the oven, then it will automatically cancel the cooking program "OPEN DOOR" will appear in the display window. If no cooking time is set, oven will revert to time of day after 6 minutes.
6. After pressing **Start** button, the selected temperature can be recalled and changed. Press **Convection** button once to indicate the temperature in the display window. While the temperature is recalled in the display window, you can change the temperature by pressing **Convection** button.
7. You can change the cooking time during cooking if required. Turn dial to increase or decrease the cooking time. Time can be increased/decreased in 1 minute increments, up to 10 minutes. Turning the dial to zero will end cooking.
8. The accessories and the surrounding oven will get very hot. Use oven gloves.

## Oven Accessories to Use

When using the Convection oven the glass tray should be in position and must have the enamel tray placed on top.

The food is then placed onto the enamel tray. Follow your individual recipe guidelines.



**Roasting meat:** glass tray, enamel tray.



**Baking:** glass tray, enamel tray.



**Baking:** glass tray, enamel tray, wire rack.

When using the oven as a **convection** oven, there is **no microwave power**, i.e. the oven is operating as a conventional oven and you can use all your standard metal baking tins and ovenware.

It is not recommended to cook on more than one level when using the **convection** oven. When cooking 2 trays of buns etc, cook in two batches.

# To Cook on Combination by Time Setting

Your oven has two methods of cooking by Combination.

1. Grill and Microwave (preheat is not possible)
2. Convection and Microwave (with and without preheat)

**Combination** cooking is ideal for many foods. The microwave power cooks them quickly, whilst the convection or grill gives the traditional browning and crispness. All this happens simultaneously resulting in most foods being cooked in  $\frac{1}{2}$  -  $\frac{2}{3}$  of the conventional cooking time.

Press	Combi Level	Combination Type	Uses
Once	Combi 1	Grill 1 (High) + MW 440 W	Breaded fish, breaded chicken, toasted sandwiches, frozen croquettes, samosas, spring rolls

## Grill + Microwave

This combination mode is suitable for foods which are normally grilled and for reheating small savoury items.

### 1. Press .

Press once.

### 2. Enter Time.

Enter the cooking time by using the dial. (up to 9 hours)



### 3. Press .

The cooking time appears in the display window and begins to count down.



## Notes

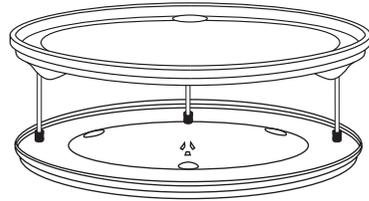
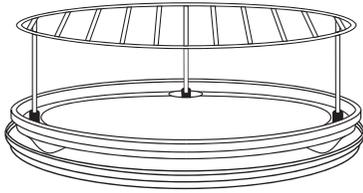
1. Do not use this program with less than 200 g of food.
2. It is not necessary to preheat when using this combination mode and food should always be cooked uncovered.
3. The grill will glow on and off during cooking - this is normal.
4. To turn food just press the door release, remove the enamel tray and wire rack, turn the food, return to the oven, close the door and press **Start** button. The oven will continue to countdown the remaining cooking time.
5. You can change the cooking time during cooking if required. Turn dial to increase or decrease the cooking time. Time can be increased/decreased in 1 minute increments, up to 10 minutes. Turning the dial to zero will end cooking.
6. The accessories and the surrounding oven will get very hot. Use oven gloves.

# To Cook on Combination by Time Setting (continued)

## Oven Accessories to Use

When using Combination cooking the glass tray should be in position and must have the enamel tray on top, unless otherwise stated.

Food should be placed directly onto the wire rack on the enamel tray. This is then placed on the glass tray. When cooking fish or small items, food can be placed directly on the enamel tray on top of the wire rack.



## Convection + Microwave

This is the most popular combination mode combining Convection heat with Micro Power. Casseroles, meat joints, jacket potatoes and pastries are very successful using this combination. Unsuitable foods are those which contain whisked eggs, meringues, rich fruit cakes, biscuits and yorkshire puddings.

Press	Combi Level	Combination Type	Uses
Twice	Combi 2	Convection 180 °C + MW 100 W	Stews, casseroles and slow cooking roast meats
3 times	Combi 3	Convection 220 °C + MW 440 W	Frozen potato products, quiches, part baked rolls and baguettes, thin based pizzas, chilled gratins, fruit pies, crumbles
4 times	Combi 4	Convection 200 °C + MW 440 W	Pasties, meat pies, whole chicken, turkey crown, frozen gratins
5 times	Combi 5	Convection 160 °C + MW 440 W	Joints of meat, croissants, thick based pizzas

## ● Without Preheating:

### 1. Press .

Press to select combination levels. (There is a choice of 4 levels available).

### 2. Enter Time.

Enter the cooking time by using the dial. (up to 9 hours)



### 3. Press .

The cooking time appears in the display window and begins to count down.

# To Cook on Combination by Time Setting (continued)

## ● With Preheating:

### 1. Press .

Press to select combination levels. (There is a choice of 4 levels available).



### 2. Press to Preheat Oven.

A “P” will appear in the display window. When the oven is preheated the oven will beep and the “P” will flash. Then open the door and place the food inside.

**Note:** Open the door using the door release, because if the **Stop/Reset** button is pressed the program may be cancelled.

### 3. Enter Time.

Enter the cooking time by using the dial. (up to 9 hours)



### 4. Press .

The cooking time appears in the display window and begins to count down.



## Notes

1. Do not use this program with less than 200 g of food.
2. Food is usually cooked uncovered.
3. You can change the cooking time during cooking if required. Turn dial to increase or decrease the cooking time. Time can be increased/decreased in 1 minute increments, up to 10 minutes. Turning the dial to zero will end cooking.
4. After pressing **Start** button, the selected temperature can be recalled and changed. Press **Convection** button once to indicate the temperature in the display window. While the temperature is recalled in the display window, you can change the temperature by pressing **Convection** button.
5. Foods should always be cooked until browned and piping hot.
6. The accessories and the surrounding oven will get very hot. Use oven gloves.
7. After cooking it is important that the accessories are removed for cleaning before re-use and that the oven walls and floor are wiped with a cloth squeezed in hot soapy water to remove any grease. Do not put accessories in the dishwasher.

# To Cook on Combination by Time Setting (continued)

## Oven Accessories to Use

When using Combination cooking the glass tray should be in position and must have the enamel tray on top, unless otherwise stated.

Items of food can be placed onto the wire rack on the enamel tray on the glass tray. Heatproof dishes of food should be placed directly onto the enamel tray on the glass tray.

Joints and portions of meat should be placed on an upturned saucer on the enamel tray on the glass tray.

Alternatively they can be placed in a heatproof dish on the enamel tray on the glass tray.

Recipes using foil or metal containers e.g. cakes and pastries should be placed directly onto the enamel tray on glass tray.



## Containers to Use for Combination Feature

It is possible to use smooth seamed metal tins and foil containers on combination but they must be placed directly onto the enamel tray on the glass tray. They must not be placed directly onto the wire rack, or arcing will occur.

If you experience arcing, which is when you see blue sparks or hear crackling noises, the metal container is unsuitable or you have insufficient food in the oven. You should stop the program immediately and change the container or re-program to convection only.

Do not use plastic microwave containers on Combination programs (unless suitable for combination cooking).

Dishes must be able to withstand the heat of the top grill. Do not put dishes on wire rack directly under the grill, place on enamel tray on glass tray.

# To Use Timer (Kitchen Timer/Standing Time/Delay Start)

This feature allows you to program the oven as a kitchen timer. It can be also used to program a stand time after cooking is completed or to program a delay start.

## To Set Kitchen Timer.



Press once.

Set desired amount of time by using the dial. An "H" will appear in the display to denote hours. (up to 1 hour 30 minutes)

Press **Start** button. Time will count down without oven operating.

## To Set Standing Time:

Set the desired cooking program. (up to 2 stages)



Press once.

Set desired amount of time by using the dial. An "H" will appear in the display to denote hours. (up to 1 hour 30 minutes)

Press **Start** button. Cooking will start. After cooking, standing time will count down without oven operating.

## To set Delay Start:



Set the desired cooking program. (up to 2 stages)



Press once.

Set desired amount of time by using the dial. An "H" will appear in the display to denote hours. (up to 1 hour 30 minutes)

Press **Start** button. Cooking will start. After cooking, standing time will count down without oven operating.



## Notes

1. If the oven door is opened during Kitchen Timer, Standing Time, Delay Start, the time in the display window will continue to count down.
2. Standing Time and Delay Start can not be programmed together with Turbo Defrost and Auto Programs and preheating. This is to prevent the starting temperature of food from rising before defrosting or cooking begins. A change in starting temperature could cause inaccurate results.
3. When using Standing time or Delay Start, it's up to 2 power stages.
4. If the programmed stand time exceeds one hour, the time will count down in units of minutes. If less than one hour, the time will count down in units of seconds.

# 3-Stage Setting

This feature allows you to program 3-Stage continually.

E.g.: To cook on 600 W for 2 minutes, cook on 180 °C for 15 minutes and cook on Grill 1 for 10 minutes.



Press **Micro Power** button 4 times to select 600 W.

Set the cooking time to 2 minutes using the dial.

Press **Convection** button 4 times to select 180 °C.



Set the cooking time to 15 minutes using the dial.

Press **Grill** button once to select Grill 1.

Set the cooking time to 10 minutes using the dial.

Press **Start** button. The cooking program will start and the time in the display will count down.



## Notes

1. When operating, two beeps will sound between each stage.
2. Turbo Defrost, Auto Programs and preheating can not be used with 3-stages cooking.
3. Standing Time and Delay Start can be used in 3-stages cooking.

This unique feature 'the Genius' built in sensor allows you to reheat a chilled meal with one push of the dial. It is not necessary to select the power level or cooking time. The built-in sensor measures the humidity of the food and calculates the microwave power level together with a cooking time.



When clock mode is displayed, press the dial to start. To reset oven and return to clock mode, press Stop/Reset.

Program	Weight	Accessories	Instructions
<b>Reheat a fresh pre-cooked chilled meal</b>  	200-1000 g		<p>All foods must be pre-cooked. Foods should be at refrigerator temperature approx.+ 5 °C. Reheat in microwavable container as purchased. Pierce covering film with a sharp knife once in the centre and four times around the edge.</p> <p>If transferring food to dish, cover with pierced cling film. Press dial to Start. Stir at beeps. Stir again at end of program and allow a few minutes standing time.</p> <p>Large pieces of meat/fish in a thin sauce may require longer cooking. This program is not suitable for starchy food such as rice, noodles or potatoes.</p>

## How it works

Once the One Push Reheating has been selected and Start is pressed the food is heated up. As food begins to get hot, steam is emitted. When the food reaches a certain temperature and begins to cook, an even greater amount of steam is released. The increase in steam emission is detected by a humidity sensor in the oven. This acts as a signal for the oven to calculate how much longer the food needs to cook.

The remaining cooking time will appear in the display window after two beeps.

Whilst the Sensor program is still in the display window the oven door **should not be opened**. Wait until the cooking time appears in the window, and then open the door if required, to stir or turn the food.

## Adjust to Taste

The One Push Reheating reheats a chilled meal for average tastes. You are able to adjust the reheating program to your own taste. After pressing Start, +/- symbol and flashing bar appears in the display, turn dial clockwise for more time or anticlockwise for less time. This operation should be completed within 14 seconds. Default mode is normal.



## Notes

1. This feature is not suitable for foods that cannot be stirred eg. lasagne / shepherds pie.
2. **Do not** reheat bread or pastry products (raw or uncooked), or beverages.
3. The oven automatically calculates the reheating time or the remaining reheating time.
4. The door should not be opened before the time appears in the display window.
5. To prevent any mistakes during One Push Reheating ensure that glass tray and the container are dry.
6. The room temperature should not be more than 35 °C and not less than 0 °C.
7. If the oven has previously been used and it is too hot to be used on One Push Reheating, 'HOT' will appear in the display window. After the 'HOT' disappears, the One Push Reheating may be used. If in a hurry, cook food manually by selecting the correct cooking mode and cooking time yourself.

## Auto Weight Program Setting

It is not necessary to preheat the oven for the remaining auto programs. Operate as below:

### Auto Programs without Preheating



**Press the dial to confirm the program.** Auto program number appears in the display. The microwave and /or grill or convection and auto weight symbols appear in the display and frozen food symbol if applicable.



**To allow auto program operation, ensure the oven is in Clock mode. Select the desired Auto Weight program by turning the dial.**

**Select the weight of the food by turning the dial.** Turning the dial slowly will count up in 10 g steps.

**Press Start**

When you select an automatic program symbols will appear in the display to show the cooking mode that will be used and the accessories that are needed, in addition to the glass tray. These are what they mean:



Microwave



Grill



Convection



Preheat



Enamel tray



Wire rack



Frozen food



## Notes

The auto weight programs are designed to take the guesswork out of cooking or reheating your food. They must **only** be used for the foods described.

1. Only cook foods within the weight ranges described (see page 37).
2. Only use the accessories as indicated on pages 38-40.
3. Beverage programs 2-4 and Junior programs 15-16, 21 use Microwave power only. Re-bake Bread programs 5-6; Junior programs 17-20 and Combi programs 22-26 use a combination of Microwave and Convection or Grill. Roast programs 27-30 use Convection.
4. **Do not** cover food unless stated, when using a Combination or Convection program, it will prevent the food browning. The heat will also melt any plastic covering.
5. Most foods benefit from a **standing** time after cooking on an auto program, to allow heat to continue conducting to the centre.
6. To allow for some variations that occur in food, check that food is thoroughly cooked and piping hot before serving.
7. Always weigh the food rather than relying on the package weight information.

# Auto Weight Program Setting (continued)



This feature allows you to cook or reheat foods by setting the weight only. The oven determines the Microwave power level and/or Convection and/or Combination setting, then the cooking time automatically. Select the category of food and then just enter the weight. The weight will be entered in grams.

## Auto Programs with Preheating

It is necessary to preheat the oven for Re-Bake Bread programs 5 (Baguette/Crusty Rolls), 6 (Croissants); Junior Menu programs, 19 (Frozen Breaded Products), 20 (Fresh Vegetable Fries); Combi programs, 23 (Frozen Potato Products), 25 (Fish and Chips), 26 (Whole Chicken).



**Press dial to confirm program selection.**

Auto program number appears in the display. The microwave and /or grill or convection and auto weight symbols appear in the display and frozen food symbol if applicable.



**To allow for Auto Weight Program operation, ensure the oven is in clock mode. Select the desired program by turning the dial. Refer to pages 38-40.**



**Press dial to preheat the oven.**  
Preheat with enamel tray on glass tray.



After preheating, beeps sound and 'P' will flash in the display. Place the food in the oven and set weight using dial. Take care when handling the hot enamel tray.



**Press Start**

# Auto Weight Programs

## Minimum/Maximum Weights for Auto Weight Programs



Program	Minimum weight	Maximum weight
2. Tea/Coffee	200 g	400 g
3. Milk/ Hot Chocolate/ Milky Coffee	200 g	600 g
4. Soup	200 g	1000 g



Program	Minimum weight	Maximum weight
5. Baguette/Crusty Rolls	100 g	500 g
6. Croissants	50 g	350 g



Program	Minimum weight	Maximum weight
15. Purée Vegetables	100 g	400 g
16. Purée Fruits	100 g	400 g
17. Junior Pasta Bake	250 g	800 g
18. Chilled Breaded Products	100 g	500 g
19. Frozen Breaded Products	100 g	500 g
20. Fresh Vegetable Fries	100 g	500 g
21. Mug Cake		1 mug



Program	Minimum weight	Maximum weight
22. Frozen Pizza	200 g	450 g
23. Frozen Potato Products	200 g	500 g
24. Roast Pork	500 g	2000 g
25. Fish and Chips	200 g	500 g
26. Whole Chicken	900 g	2000 g
27. Beef Rare	500 g	2000 g
28. Beef Medium	500 g	2000 g
29. Lamb Medium	1000 g	2000 g
30. Lamb Well Done	1000 g	2000 g

# Auto Weight Beverage Programs Setting

## 2. Tea/Coffee

For reheating one beverage with a fixed weight of 200 g or two beverages of 200 g each from room temperature eg. tea, coffee or hot chocolate. Turn dial to select program 2, Tea/Coffee. Press the dial to confirm the program. Select 200 g for 1 beverage or 400 g for two beverages using the dial and press Start. Stir before and after heating.

## 3. Milk/Hot Chocolate/ Milky Coffee

For reheating one mug of milk with a fixed weight of 200 g or one jug of milk with a fixed weight of 600 g from fridge temperature. This program is suitable for full fat, semi-skimmed and skimmed milk.

The hot milk can be used for making milky coffee or hot chocolate. Turn the dial to select program 3, Milk/Hot Chocolate/Milky Coffee. Press the dial to confirm the program. Select 200 g for 1 mug or 600 g for 1 jug using the dial and press Start. Stir before and after heating for one mug of milk. Stir at beeps during heating for one jug of milk.

## 4. Soup

For reheating tetra, canned or homemade soups. Soup should be at room or refrigerator temperatures. Soup should be placed in a suitable sized microwaveable bowl. It is preferable to cover with a lid or plate or saucer. Turn the dial to select program 4, Soup. Press the dial to confirm the program. Turn the dial to select weight and press Start. Stir before, at beeps and after reheating. Final temperature of soup may vary depending on thickness of soup, starting temperature, sugar and fat content of soup.

# Re-Bake Bread Programs

## 5. Baguette/Crusty Rolls +



To re-bake baguettes and crusty rolls. This program is suitable for reheating, browning and crisping pre-purchased baguettes and rolls from room temperature. Ensure height of baguette/rolls is no more than 5 cm. Turn the dial to select program 5, Baguettes/Crusty Rolls. Press the dial to confirm the program. Press Start to preheat the oven. After preheating, beeps sound and 'P' will flash in the display. Place baguette/crusty rolls on enamel tray on glass tray. Turn the dial to enter weight and press Start. After cooking place on a wire rack for a few minutes.

## 6. Croissants +

To re-bake croissants. This program is suitable for reheating, browning and crisping pre-purchased croissants from room temperature. Turn the dial to select program 6, Croissants. Press the dial to confirm the program. Press Start to preheat the oven. After preheating, beeps sound and 'P' will flash in the display. Place croissants on enamel tray on glass tray. Turn the dial to enter weight and press Start. After cooking, place on a wire rack for a few minutes.

# Junior menu programs

The Junior Menu offers a range of programs catering for babies, toddlers and older children - great for time saving and convenience. The fruit and vegetable purées are ideal first foods for weaning babies. Homemade purées taste like real food and cost less than jars or packets. Extra portions can be frozen in ice cube trays, then defrosted and reheated. Healthy vegetable fries and pasta bakes are perfect for smaller tummies. For operation refer to pages 35-36.

## 15. Purée Vegetables

This program is suitable for cooking parsnips, potatoes, butternut squash, carrots, sweet potato and swede. The cooked vegetables are then puréed and suitable when weaning babies. Peel and chop the vegetables into even sized pieces. Place in a Pyrex® dish. Add the following quantities of water:

Vegetables	Water
100 g - 150 g	75 ml
155 g - 300 g	100 ml
305 g - 400 g	150 ml

Cover with lid. Turn the dial to select program 15, Purée Vegetables. Press the dial to confirm the program. Turn the dial to enter the weight of the vegetables. Press **Start** button. Stir at beeps. After cooking allow to stand for 10 minutes. Purée the vegetables with the cooking liquid using a blender. If necessary adjust the consistency with a little water to thin or baby rice to thicken. Check the temperature before feeding.

## 16. Purée Fruits

This program is suitable for cooking apples, pears, peaches, papaya and mango. The cooked fruit is then puréed and suitable when weaning babies. Peel and chop the fruit into even sized pieces. Place in a Pyrex® dish. Add the following quantities of water:

Fruit	Water
100 g -150 g	75 ml
155 g - 300 g	100 ml
305 g - 400 g	150 ml

Cover with lid. Turn the dial to select program 16, Purée Fruits. Press the dial to confirm the program. Turn the dial to enter the weight of the fruit. Press **Start** button. Stir at beeps. After cooking allow to stand for 10 minutes. Purée the fruit with the cooking liquid using a blender. If necessary adjust the consistency with a little water to thin or baby rice to thicken. Check the temperature before feeding.

## 17. Junior Pasta

### Bake +

For cooking fresh pasta bake using fresh pasta (penne, spaghetti, fusilli), cheese or tomato based sauce and grated mild cheddar cheese. Use a suitable square, shallow Pyrex® container. Place on wire rack on glass tray. Use the following quantities:

	Pasta	Sauce	Cheese
250 g	70 g	140 g	40 g
500 g	150 g	300 g	50 g
800 g	250 g	500 g	50 g



Other ingredients may be added such as ham, tuna and sweetcorn. In this case substitute some of the sauce for the chosen added ingredients. Turn the dial to select program 17, Junior Pasta Bake. Press the dial to confirm the program. Turn the dial to enter the weight - 250 g, 500 g or 800 g. Press **Start** button.

## 18. Chilled Breaded

### Products +



For preparing chilled breaded products such as breaded chicken strips, fish goujons, popcorn chicken, chicken bites or breaded chicken fillets. Turn the dial to select program 18, Chilled Breaded Products. Press the dial to confirm the program. Remove all packaging and place the chilled breaded products on the enamel tray on the wire rack. Turn the dial to enter weight of food and Press **Start** button. Turn at beeps.

## 19. Frozen Breaded

### Products

### \* P +



For preparing frozen breaded products such as frozen popcorn chicken, frozen chicken nuggets, frozen turkey drummers, frozen fish fingers, frozen scampi. Turn the dial to select program 19, Frozen Breaded Products. Press the dial to confirm the program. Press **Start** to preheat the oven. After preheating, beeps sound and 'P' will flash in the display. Remove all packaging and place the frozen breaded products on the enamel tray on the wire rack. Turn the dial to enter weight of food and Press **Start** button. Turn at beeps.

## 20. Fresh Vegetable

### Fries P +



For preparing fresh vegetable fries such as sweet potato, white potato, carrots, parsnips and courgettes. Peel and cut the vegetables into baton shapes. Toss in a tablespoon of vegetable oil. Turn the dial to select program 20, Fresh Vegetables Fries. Press the dial to confirm the program. Press **Start** to preheat the oven. After preheating, beeps sound and 'P' will flash in the display. Place the vegetables on the enamel tray on the wire rack. Turn the dial to enter weight of food and Press **Start** button. Turn/Stir at beeps.

## 21. Mug Cake

For cooking one mug cake, either Chocolate Brownie, Lemon or banana. Prepare the mug cake as in the following recipes. Size of mug should be no smaller than 300 ml. Turn the dial to select program 21, Mug Cake. Press the dial to confirm the program. Press **Start**. After cooking allow to stand for a few minutes and serve warm in the mug with ice cream, custard or cream.

# Auto Combi/Roast Programs Setting

## 22. Frozen Pizza



For reheating and browning frozen, purchased pizza. Turn the dial to select program 22, Frozen Pizza. Press the dial to confirm the program. Remove all packaging and place pizza on wire rack on enamel tray on glass tray. Turn the dial to enter weight and press Start.

## 23. Frozen Potato Products



To cook frozen potato products, e.g. hash browns, croquettes, etc., that are suitable for grilling. Turn the dial to select program 23, Frozen Potato Products. Press the dial to confirm the program. Press Start to preheat the oven. After preheating, beeps sound and 'P' will flash in the display. Spread potato products out on enamel tray on wire rack on glass tray. Turn the dial to enter the weight. Press **Start** button. Turn during cooking. For best results cook in a single layer. **Note:** Potato products vary considerably. We suggest checking a few minutes before the end of cooking to assess levels of browning.

## 24. Roast Pork



Suitable for roasting joints of pork, leg, boned and rolled loin, rib roast and shoulder. Score rind, brush with lemon juice and rub liberally with salt. Place roast rind side up on enamel tray and place on glass tray. Turn the dial to select program 24, Roast Pork, enter the weight of the food and press **Start** button. Turn over at beeps. Do not use plastic wrap or lid.

## 25. Fish and Chips



This program is suitable for pre-purchased frozen battered or breaded fish and pre-purchased frozen oven chips. This program is suitable for 1 portion of fish and chips. The fish must weigh between 100 g - 250 g and the chips must weigh between 100 g - 300 g. Turn the dial to select program 25, Fish and Chips. Press the dial to confirm the program. Press **Start** button to preheat the oven. After preheating, beeps sound and 'P' will flash in the display. Spread the fish and chips out on the enamel tray on wire rack on glass tray. Turn the dial to enter the weight of the fish and chips. Press **Start** button. Turn fish and chips at the beeps. For best results cook in a single layer.

## 26. Whole Chicken



To cook whole fresh unstuffed chickens. Cook stuffing separately. Turn the dial to select program 26, Whole Chicken. Press the dial to confirm the program. Press **Start** to preheat the oven. After preheating, beeps sound and 'P' will flash in the display. Place chicken on enamel tray and place on glass tray. Turn the dial to enter the weight of the chicken, then press To cook whole fresh unstuffed chickens. Cook stuffing separately. Turn the dial to select program 25, Whole Chicken. Press the dial to confirm the program. Press Start to preheat the oven. After preheating, beeps sound and 'P' will flash in the display. Place chicken on enamel tray and place on glass tray. Turn the dial to enter the weight of the chicken, then press **Start** button. Start cooking breast side down and turn at beeps, taking care with hot juices. Stand for 5 minutes.

## 27. Beef Rare



For cooking rare fresh roast beef (top side, rump or silverside). Place on enamel tray on the glass tray. Turn the dial to select program 27, Beef Rare. Press the dial to confirm the program, Turn the dial to enter the weight of the food and press **Start** button. Turn over at beeps after cooking stand for 10 to 20 minutes.

## 28. Beef Medium



For cooking medium fresh roast beef (top side, rump or silverside). Place on enamel tray on the glass tray. Turn the dial to select program 28, Beef Medium. Press the dial to confirm the program, Turn the dial to enter the weight of the food and press **Start** button. Turn over at beeps after cooking stand for 10 to 20 minutes.

## 29. Lamb Medium



For cooking medium fresh roast leg of lamb with bone. Place on enamel tray on the glass tray. Turn the dial to select program 29, Lamb Medium. Press the dial to confirm the program. Turn the dial to enter the weight of the food and press **Start** button. Turn over at beeps after cooking stand for 10 to 20 minutes.

## 30. Lamb Well Done



For cooking well done fresh roast leg of lamb with bone. Place on enamel tray on the glass tray. Turn the dial to select program 30, Lamb Well Done. Press the dial to confirm the program, Turn the dial to enter the weight of the food and press **Start** button. Turn over at beeps after cooking stand for 10 to 20 minutes.

# Auto Sensor Programs



This feature allows you to cook or reheat foods without entering the weight. The built-in sensor measures the humidity of the food and calculates the recommended microwave power level together with a suggested cooking time.

## How it works

Once the food has been selected and Start pressed the food is heated up. As food begins to get hot, steam is emitted. When the food reaches a certain temperature and begins to cook, an even greater amount of steam is released. The increase in steam emission is detected by a humidity sensor in the oven. This acts as a signal for the oven to calculate how much longer the food needs to cook.

The remaining cooking time will appear in the display window after two beeps.

Whilst the Sensor program is still in the display window the oven door **should not be opened**. Wait until the cooking time appears in the window, and then open the door if required, to stir or turn the food.

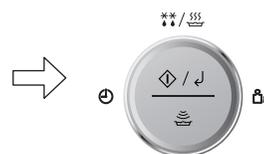
## Adjust to Taste

The Sensor programs cook foods for average tastes. You are able to adjust the cooking programs to your own taste. After pressing Start, turn dial clockwise for more time or anti-clockwise for less time. This operation should be completed within 14 seconds. Default mode is normal.



### Press the dial to confirm the program.

Auto program number appears in the display. The microwave and sensor auto symbols appear in the display and frozen food symbol if applicable.



**To allow Auto Program operation, ensure the oven is in clock mode. Select desired Auto Sensor Program by turning the dial.**

**Press Start.** The food category will be repeated in the display window until the oven calculates the cooking time after detecting a burst of steam. **Do not** open the oven door until the remaining cooking time appears in the display window.



## Notes

For best results the Sensor programs should only be used when the oven is cold. It is recommended that the oven is allowed to cool between using the sensor programs, if one or more programs are being used. If in a hurry, cook the food manually i.e. select the correct power level and cooking time. It is not recommended to keep using the Auto Sensor Programs consecutively.

# Auto Sensor Programs (continued)



## Notes

1. For the Auto Sensor Programs it is not necessary to enter the weight of the food. They must **only** be used for foods described.
2. Only cook foods within the weight ranges described (See table below).
3. Only use the accessories as indicated on pages 43.
4. It is essential when using the auto sensor programs to cover the food.  
The exception to this rule is jacket potatoes (see page 43). For auto sensor programs fresh vegetables, frozen vegetables, fresh fish, cover with cling film. Pierce the cling film with a sharp knife once in the centre and four times around the edge. For auto sensor program casserole, cover with a lid.
5. For foods covered with cling film, pierce the film with a sharp knife, once in the centre and four times around the edge. If the cling film is not pierced, steam can not escape and this could result in over cooking.
6. Always choose a container size that is suitable for the quantity of food, ie. do not allow a large headspace or food may not be cooked correctly.
7. For best results ensure that the oven is cold before using any Sensor program.
8. Most foods benefit from a **standing** time, after cooking on an Auto Program, to allow heat to continue conducting to the centre.
9. To allow for some variations that occur in food, check that food is thoroughly cooked and piping hot before serving.



Program	Minimum weight	Maximum weight
7. Fresh Vegetables	200 g	1000 g
8. Frozen Vegetables	200 g	800 g
9. Jacket Potatoes	200 g	1500 g
10. Casserole	900 g	2000 g
11. Fresh Fish	200 g	800 g
12. Rice	100 g	400 g
13. Dried Pasta	100 g	500 g
14. Fresh Pasta	200 g	800 g

# Auto Sensor Programs (continued)

## 7. Fresh Vegetables

To cook fresh vegetables. Place prepared vegetables into a suitable sized container.

Sprinkle with 1 tbsp water per 100 g vegetables. Cover with cling film. Pierce cling film with a sharp knife once in the centre and four times around the edge. Turn the dial to select program 7, Fresh Vegetables. Press the dial to confirm the program. Press **Start** button. Stir at beeps. Drain after cooking and season to taste.

## 8. Frozen Vegetables

To cook frozen vegetables. Place vegetables into a suitable sized container. Sprinkle with 1-3 tbsp water. If cooking vegetables with high water content, such as spinach or tomatoes, do not add water. Cover with cling film. Pierce cling film with a sharp knife once in the centre and four times around the edge. Turn the dial to select program 8, Frozen Vegetables. Press the dial to confirm the program. Press **Start** button. Stir at beeps. Drain after cooking.

## 9. Jacket Potatoes +



To cook jacket potatoes with a crisper drier skin. Choose medium sized potatoes 200 g - 250 g (7 oz - 9 oz), for best results. Wash and dry potatoes and prick with a fork several times. Place on enamel tray on glass tray. Turn the dial to select program 9, Jacket Potatoes. Press the dial to confirm the program. Press **Start** button.

## 10. Casserole

For cubed meat (e.g. braising steak, lamb, pork, not chicken) and vegetables. Place in a suitable sized casserole dish with stock. Use a minimum of 400 ml of stock. If you use a cook-in sauce, also add the same quantity of water. Cover with lid. Turn the dial to select program 10, Casserole. Press the dial to confirm the program. Press **Start** button. Stir at beeps.

## 11. Fresh Fish

To cook fresh fillets or steaks of fish. Place in a suitable sized container, add 2 tbsp (30 ml) water. Cover with cling film. Pierce cling film with a sharp knife once in the centre and four times around the edge. Turn the dial to select program 11, Fresh Fish. Press the dial to confirm the program. Press **Start** button.

## 12. Rice

It is suitable for cooking short and long grain rice including specialty rice. It is not suitable for cooking brown rice or wild rice. Place rice with water at room temperature in a suitable microwave safe dish. We recommend the following proportions of rice to cold tap water:

Rice	Water	Dish size
100 - 200 g	200 - 350 ml	3 L
210 - 300 g	350 - 550 ml	3.25 L
310 - 400 g	550 - 700 ml	4 L

It may be necessary to adjust the water to your personal preference. Soak in water for 10-15 minutes. Always allow at least ½ depth of volume for evaporation to prevent boiling over. Do not cook rice in plastic dishes as incorrect cooking times may result. Cover partially with lid and place container at the center of the glass tray. Turn the dial to select program 12, Rice. Press the dial to confirm the program. Press **Start** button. Stir at beeps, at the end of the cooking, let stand 5 to 10 minutes, covered.

## 13. Dried Pasta

It is suitable for cooking a variety of pastas such as spaghetti, fettuccine, tagliatelle, macaroni, penne, spiral and various pasta shapes. Place pasta in an appropriate size microwave safe dish with boiling water. Use the below chart as a guide:

Pasta	Boiling water	Dish size
100 - 200 g	1 - 1.2 L	3 L
210 - 300 g	1.2 - 1.5 L	3.5 L
310 - 400 g	1.5 - 1.8 L	4 L
410 - 500 g	1.8 - 2 L	5 L

Always allow at least ½ depth of volume for evaporation to prevent boiling over. Add 1 tablespoon of oil, if desired, before cooking to prevent pasta from sticking together. Cover securely with lid and place container at the center of the glass tray. Turn the dial to select program 13, Dried Pasta. Press the dial to confirm the program. Press **Start** button. At the end of the cooking, cover and let stand for 5 to 10 minutes, if required, before draining.

## 14. Fresh Pasta

Suitable for cooking fresh pasta such as fettuccine, tagliatelle, tortellini, ravioli and agnolotti. (Gnocchi should be cooked by manual MICRO POWER.) Place pasta in an appropriate size dish with boiling water. Use the below chart as a guide:

Pasta	Boiling water	Dish size
200 - 300 g	1 - 1.25 L	3 L
310 - 400 g	1.25 - 2 L	3.5 L
410 - 500 g	2 - 2.5 L	4 L

Add 1 tablespoon of oil, if desired, before cooking to prevent pasta from sticking together. Cover dish securely with plastic wrap. Turn the dial to select program 14, Fresh Pasta. Press the dial to confirm the program. Press **Start** button. At the end of the cooking time, cover and let stand for 5 to 10 minutes, if required, before draining.

# INGREDIENT CONVERSION CHART

INGREDIENT CONVERSION CHART			
¼ cup	60 ml	¼ teaspoon	1 ml
⅓ cup	85 ml	½ teaspoon	2 ml
½ cup	125 ml	1 teaspoon	5 ml
⅔ cup	165 ml	2 teaspoons	10 ml
¾ cup	190 ml	3 teaspoons	15 ml
1 cup	250 ml	1 tablespoon	20 ml
1¼ cups	310 ml	1½ tablespoons	30 ml
1½ cups	375 ml	2 tablespoons	40 ml
2 cups	500 ml	3 tablespoons	60 ml
3 cups	750 ml	4 tablespoons	80 ml
3½ cups	875 ml		
4 cups	1 litre		
6 cups	1.5 litre		
8 cups	2 litre		

All recipes are tested using standard measurement that appear in the above chart.

# Before Requesting Service

## ALL THESE THINGS ARE NORMAL:

The oven causes interference with my TV.

Some radio, TV, Wi-Fi, cordless telephone, baby monitor, blue tooth or other wireless equipment interference might occur when you cook with the oven. This interference is similar to the interference caused by small appliances such as mixers, vacuums, blow 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 switch the Grill or Convection. This is normal.

The oven has an odour and generates smoke when using Combination, Convection and Grill function.

It is essential that your oven is wiped out regularly particularly after cooking by Combination, Convection and Grill function. Any fat and grease that builds up on the roof and walls of the oven will begin to smoke if not cleaned.

Some smoke will be given off from the cavity when using grill, Combination, Convection and Grill for the first time.

It caused by the excessive oil in the cavity and oil used for rust protection volatilizing.

# Before Requesting Service (continued)

PROBLEM	POSSIBLE CAUSE	REMEDY
Oven will not turn on.	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.	Reset circuit breaker or replace fuse.
	There is a problem with the outlet.	Plug another appliance into the outlet to check if the outlet is working.
Oven will not start cooking.	The door is not closed completely.	Close the oven door securely.
	<b>Start</b> button was not pressed after programming.	Press <b>Start</b> button.
	Another program has already been entered into the oven.	Press <b>Stop/Reset</b> button to cancel the previous program and program again.
	The program has not been entered correctly.	Program again according to the Operating Instructions.
	<b>Stop/Reset</b> button has been pressed accidentally.	Program oven again.
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 oven (See next page).
"H97" or "H98", "H00" appears in the display window.	This display indicates a problem with the microwave generation system.	Contact the authorised service centre.
"DEMO MODE PRESS ANY KEY" or "D" appears in the display window.	The oven is under demonstration mode.	Press <b>Micro Power</b> button once, then press <b>Start</b> button 4 times and <b>Stop/Reset</b> button 4 times.
The "🔒" appears in the Display Window.	The Child Lock was activated by pressing <b>Stop/Reset</b> button 3 times.	Deactivate Lock by pressing <b>Stop/Reset</b> button 3 times.
"HOT" appears in the display window.	The fan is operating to cool the electric components.	The word "COOL" will disappear after the fan stops.

Demonstration mode is designed for retail store display. Cooking and other functions will not operate during the demonstration mode. If it seems there is a problem with the oven, contact an authorized Service Centre.

# Care of your Microwave Oven

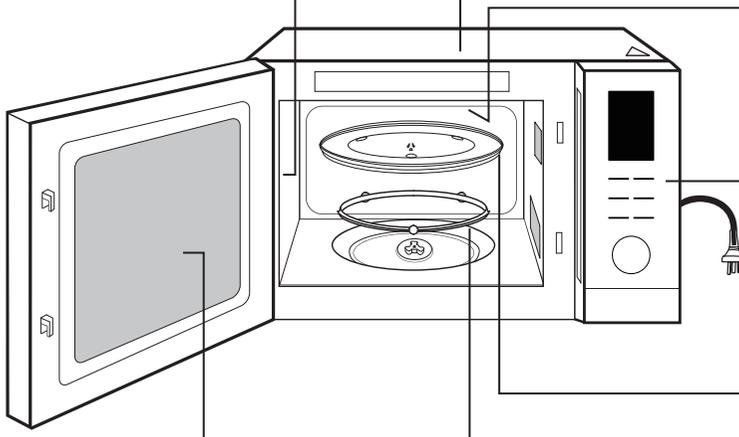
The oven should be cleaned regularly and any food deposits removed.

Turn the oven off and remove the power plug from the wall socket before cleaning.

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.

The outside oven surfaces should be cleaned with a damp cloth. To prevent damage to the operating parts inside the oven, water should not be allowed to seep into the ventilation openings.

Clean the upper heater after it is completely cold. Wipe with a soft and damp cloth carefully to avoid breaking the heater and hurting your fingers by the broken heater.



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.

It is occasionally necessary to remove the glass tray for cleaning. Wash the tray in warm sudsy water or in a dishwasher.

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.

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.

After using, clean it with a mild detergent or dishwasher.



Enamel Tray



Wire Rack



## Notes

1. When using the Grill, Convection or 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.
2. After Grill, Convection 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, 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. This method can not be used to clean the oven door.  
DO NOT SPRAY DIRECTLY INSIDE THE OVEN.  
A steam cleaner is not to be used for cleaning.
3. 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.
4. When it becomes necessary to replace the oven light, please consult the service center specified by Panasonic.

# Technical Specifications

<b>Model</b>		<b>NN-CD87KS</b>
<b>Power Supply:</b>		230 - 240 V, 50 Hz
<b>Power Consumption*:</b>	<b>Microwave</b>	4.8 A 1110 W
	<b>Grill</b>	5.7 A 1350 W
	<b>Convection</b>	5.7 A 1350 W
	<b>Combination</b>	8.9 A 2130 W
<b>Power Requirement: (Maximum)</b>		2130 W
<b>Output power*:</b>	<b>Microwave</b>	1000 W
	<b>Grill</b>	1300 W
	<b>Convection</b>	1300 W
<b>Outside Dimensions W x H x D (mm)</b>		560 (W) x 343 (H) x 450 (D)
<b>Oven Cavity Dimensions W x H x D (mm)</b>		380 (W) x 228.4 (H) x 390 (D)
<b>Overall Cavity Volume:</b>		34 L
<b>Operating Frequency:</b>		2450 MHz
<b>Net Weight</b>		Approx. 17.7 kg

\* IEC Test Procedure

Specifications subject to change without notice.

As for the voltage requirement, the production date, manufactory and serial number, please refer to the name plate on the microwave oven.

# Panasonic Warranty (for Australia)

## Home Appliance 12 Month Warranty from Date of Purchase

1. Subject to the conditions of this warranty Panasonic or its Authorised Service Centre will perform necessary service on the product without charge for parts or labour, if in the opinion of Panasonic, the product is found to be faulty within the warranty period. For Communications products (i.e. Cordless Phones, etc) the genuine battery(s) has a 3 month warranty.
2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or its territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.
3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only (also Clip & Trim Professional use) and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
  - (a) Cabinet Parts
  - (b) Microwave Oven Plates.
  - (c) User replaceable Batteries
  - (d) Kneader Mounting Shaft, Shaver Heads, Cutters, Foils, Blades
  - (e) Accessories
  - (f) Noise or vibration that is considered normal
5. To claim warranty service, when required, you should:
  - Contact Panasonic's Customer Care Centre on 132600
  - Send or take the product to a Panasonic Authorised Service Centre together with your purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
6. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or remounting of any screen, (and any other ancillary activities), delivery, handling, freighting, transportation or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by reason of, during, associated with, or related to such installation, de-installation, re-installation or transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600.

In addition to your rights under this warranty, Panasonic products come with consumer guarantees that cannot be excluded under the Australian Consumer Law. If there is a major failure with the product, you can reject the product and elect to have a refund or to have the product replaced or if you wish you may elect to keep the goods and be compensated for the drop in value of the goods. You are also entitled to have the product repaired or replaced if the product fails to be of acceptable quality and the failure does not amount to a major failure.

If there is a major failure in regard to the product which cannot be remedied then you must notify us within a reasonable period by contacting the Panasonic Customer Care Centre. If the failure in the product is not a major failure then Panasonic may choose to repair or replace the product and will do so in a reasonable period of time from receiving notice from you.

**THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE)  
SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES**

If you require assistance regarding warranty conditions or any other enquiries, please visit the **Panasonic Australia** website [www.panasonic.com.au](http://www.panasonic.com.au) or contact by phone on **132 600**  
*If phoning in, please ensure you have your operating instructions available.*

**Panasonic Australia Pty. Limited**

ACN 001 592 187 ABN 83 001 592 187

1 Innovation Road, Macquarie Park NSW 2113  
[www.panasonic.com.au](http://www.panasonic.com.au)

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02-10-2013

# Panasonic Warranty (for New Zealand)

## Built In Kitchen Appliance 24 Month from Date of Purchase Home Appliance 24 Month Warranty from Date of Purchase

1. Subject to the conditions of this warranty Panasonic or its Authorised Service Centre will perform necessary service on the product without charge for parts or labour, if in the opinion of Panasonic, the product is found to be faulty within the warranty period. For Line Communications products (i.e. Cordless Phones, etc.) the genuine battery(s) has a 3 month warranty.
2. This warranty only applies to Panasonic products purchased in New Zealand and sold by Panasonic New Zealand or its authorised Distributors or Dealers and only where the products are used and serviced within New Zealand or its territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service and only if valid proof of purchase is presented when warranty service is requested.
3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only (also Clip & Trim Professional use) and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
  - (a) Cabinet Parts
  - (b) Microwave Oven cook plates
  - (c) User replaceable Batteries from wear and tear in normal use
  - (d) Kneader mounting shaft unit and Heads, Cutters, Foils, Blades and other accessories
  - (e) Noise or vibration that is considered normal
  - (f) Correcting the installation (e.g. removal of transit bolts, levelling and locking feet)
  - (g) Damage caused by water pressure exceeding 1MPa
  - (h) Water on floor due to incorrect loading, excessive suds, foreign matter on door seals
  - (i) Blocked pumps and removal filters, removal of foreign objects from the machine (e.g. bra wires, bread tags, nails, screws, coins, grit etc.)
  - (j) Replaceable lint filters
  - (k) Damage to surfaces caused by liquid or solid spillages, impact or lack of maintenance & cleaning products other than that recommended in the operating instructions
  - (l) Consumables (light bulbs, filters)
5. To claim warranty service, when required, you should:
  - Telephone Panasonic's Customer Care Centre on 09 272 0178 or visit our website referred to below and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
  - Send or take the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
6. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or remounting of any screen, (and any other ancillary activities), delivery, handling, freighting, transportation, or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by any reason of, during, associated with, or related to such installation, de-installation, re-installation or transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of New Zealand, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our customer Care Centre on 09 272 0178 or visit our website and use the Service Centre locator.

Unless otherwise specified to the consumer the benefits conferred by this express warranty are additional to all other conditions, warranties, guarantees, rights and remedies expressed or implied by the Consumer Guarantees Act of New Zealand and all other obligations and liabilities on the part of the manufacturer or supplier and nothing contained herein shall restrict or modify such rights, remedies, obligations and liabilities.

**THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE)  
SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES**

If you require assistance regarding warranty conditions or any other enquiries, please visit the **Panasonic New Zealand** website [www.panasonic.co.nz](http://www.panasonic.co.nz) or contact by phone on **09 272 0178**  
*If phoning in, please ensure you have your operating instructions available.*

### PANASONIC NEW ZEALAND CUSTOMER CARE CENTRE

Phone: 09 272 0178

Fax: 09 272 0129

Email: [customerservice@nz.panasonic.com](mailto:customerservice@nz.panasonic.com)

Website: [www.panasonic.co.nz/support](http://www.panasonic.co.nz/support)