



FGC100 / FGC200

# **Gas Convection Oven**

## **User's Manual**

## Your Excellency:

Firstly, thanks for purchasing and using our product. All the information and guidelines of this user's manual comply with certain applicable regulations, which come out from our long-term accumulated knowledge and experience as well as current project development situations.

Limited to some special structures, additional specified items or new technology changes, the actual usage situation might be some different from what stated in this user's manual. Should you have any question, please do not hesitate to contact the manufacturer via the method shown in back cover page of this manual.

For safety purpose and efficient operation, please make this document available to users for reference. Do have them to read this manual carefully before carry out any action on this device, especially when starting.

**The manufacturer declines any responsibility in the event users do not follow the instructions or guidelines stated here.**

The user's manual should be placed close to the device, in convenience of users' reading before operation. We have the full authority to reserve the further technical changes of the device, in the scope of further performance improvement characteristic development.



## Warning

- ◆ Any self-modification, wrong installation, adjustment or maintenance can lead to property loss or casualty. Please contact the manufacturer for any adjustment or maintenance, and have the work done by a trained & qualified person.
- ◆ For your safety sake, please keep the machine away from any liquid, gas or other object, which is flammable or explosive.
- ◆ This appliance should not be operated by those who have physiological, perceptual or mental disabilities or those who have insufficient experience or knowledge (including children). Only in conditions of being given sufficient supervise & guarantee of personal safety, as well as proper instructions & guidance, those who were mentioned above can make some particular operation of this device.
- ◆ Keep children away from the device.
- ◆ Preserve this manual safely. When passing on/selling the device to a third party, the manuals must be handed over along with the device. All users must operate the device complying with the user's manual and related safety guidelines.
- ◆ Do not store or use gas, liquid or object that is flammable or explosive in vicinity of the mounting position.
- ◆ If the appliance is placed near walls, partitions or kitchen furniture and the like, it is advisable to make these facilities with non-combustible material, otherwise cover them with non-combustible heat-resistant material, and pay attention to fire prevention regulations.

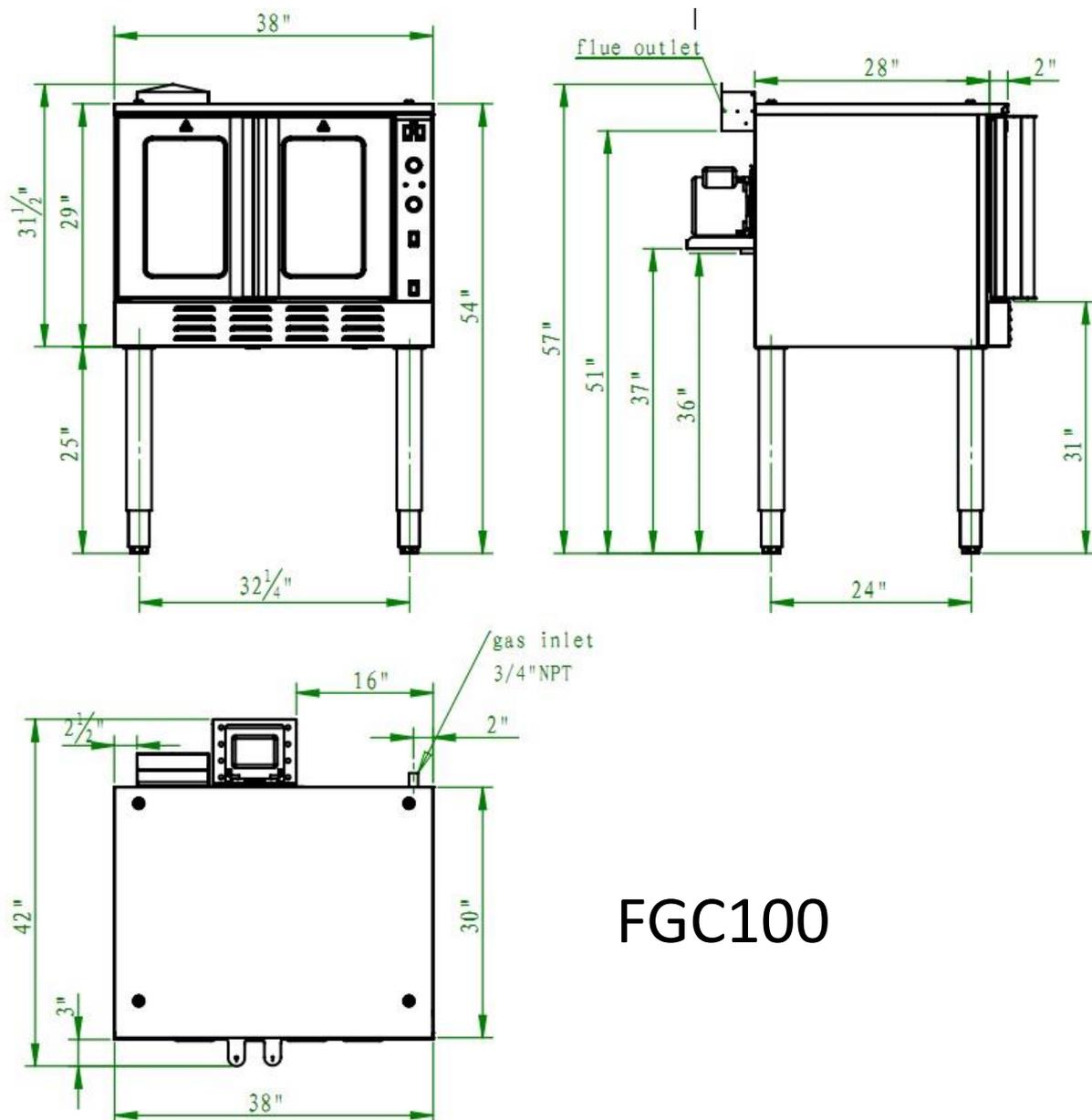
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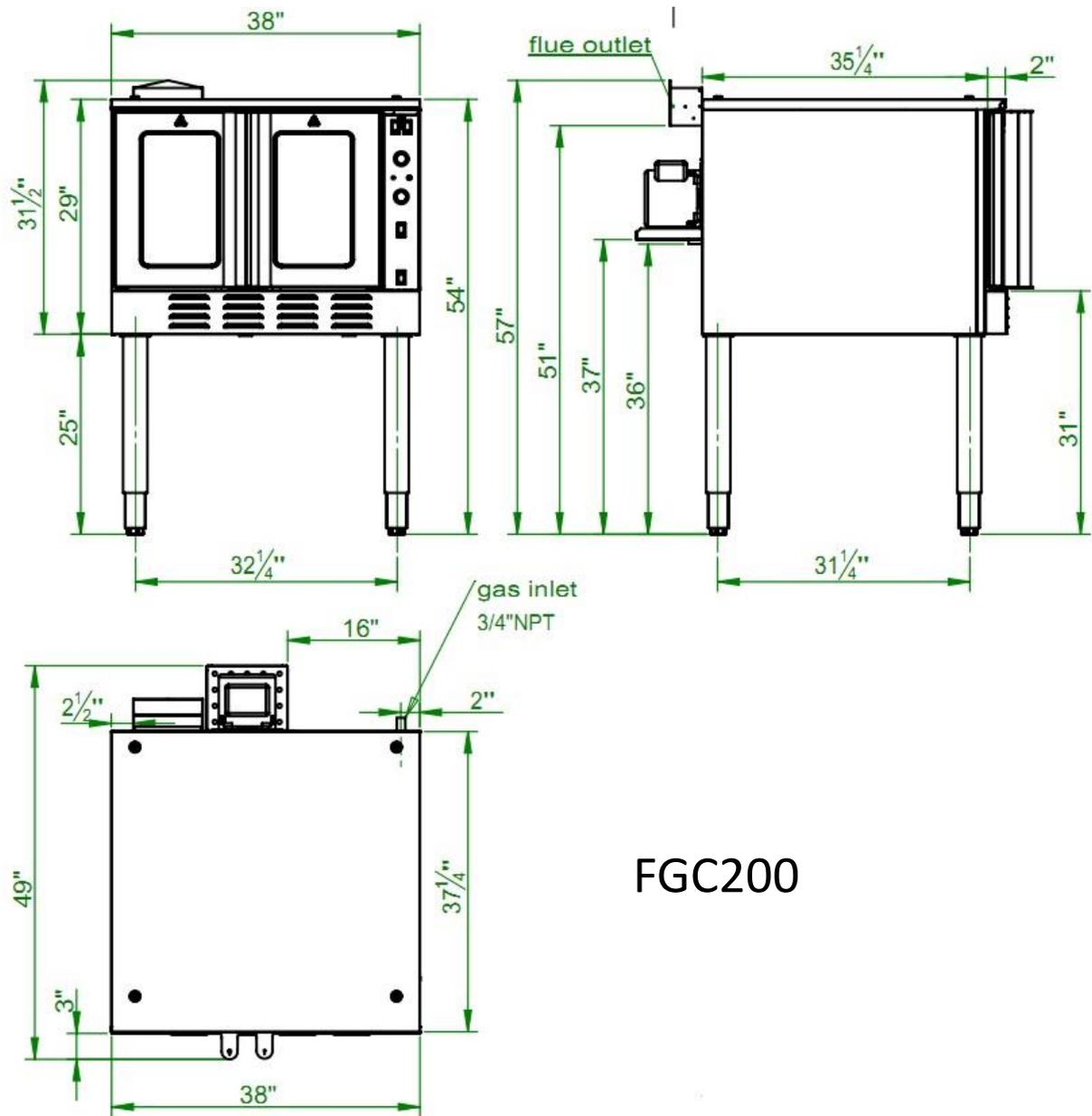
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## 1. Functional Introduction

Sturdy steel structure with 4 legs that can be adjusted in height. Equipped with built-in convection fan(s), ensuring the temperature uniformity in chamber. Also, provided with automatic ignition system in the case of flameout, and a shutdown device which will stop trying to ignite the burner(s) after 3 attempts, so as to guarantee the safe use of gas. The electronic automatic thermostatic device, with less temperature controlled offset, could set desired cooking temperature in accordance with requirements. Moreover, the over-temperature protection device prevents damages caused by temperature rise that is too high.

## 2. Structure Schematic Diagram & Working Principle





FGC200

### 3. Basic Features & Parameters

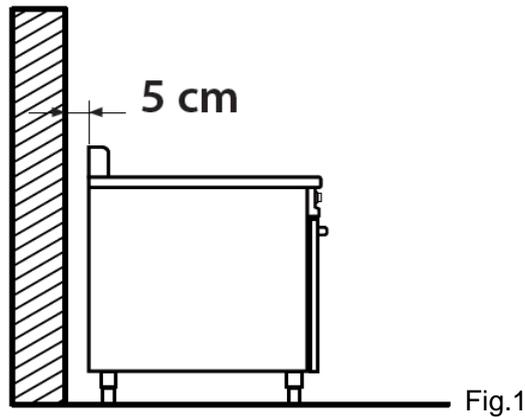
Model		FGC100 Gas Convection Oven	FGC200 Gas Convection Oven
Dimension (mm)		970×1060×1450	970×1240×1450
Cavity Size (mm)		730×650×500	730×830×500
LPG	Pressure (Pa)	2800	2800
	Power (kW)	15.8	17.6
	Gas Cons. (kg/h)	1.31	1.46
NG	Pressure (Pa)	2000	2000
	Power (kW)	15.8	17.6
	Gas Cons. (m <sup>3</sup> /h)	1.67	1.86
Gas Inlet Size		NPT 3/4"	NPT 3/4"
Voltage (V)		120V 60Hz	120V 60Hz
N/W (kg)		183	201

Hint: This appliance is only applicable for NG or LPG.

### 4. Precautions & Recommendations

#### 4.1 Installment

1. Before beginning the installation, remove the packaging. A few parts are protected with an adhesive film, which should be removed carefully. Remove any glue residual with the proper substances, such as petrol; never use abrasive substances.
2. Mount the unit feet; the unit must be leveled; small differences of height can be solved by adjusting the feet.
3. The connections to the gas and/or electric network must be close to the appliance and easy to reach.
4. We recommend placing the unit under a suction hood so that vapor can quickly evacuate.
5. Install the unit at least 5cm from the wall if the wall does not bear a minimum temperature of 150°C (see Fig.1). If the unit is placed very close to the wall, partition walls, kitchen cabinets, decorative walls, etc., we recommend that they are made with a non-combustible material with a proper thermal insulation. Pay a lot of attention to regulations concerning fire prevention.



**Attention:**

- Air necessary for the burner combustion is equal to 2 cum/h per each kW of installed power.
- Do not locate the oven adjacent to any high heat or grease-producing piece of equipment, such as a range top, griddle, fryer, etc., that could allow radiant heat to raise the exterior temperature of the oven above 130°F (54°C) . Do not mount above other cooking equipment.

6. **Law provisions, technical regulations and directives:** The manufacturer declares that the appliances comply with the EEC directives and the particular reference regulations. The manufacturer requires the installation to be performed according to the regulations in force. Before installing, check that the following provisions are met:

- Building regulations and local fire prevention measures
- Accident prevention regulations in force
- Local Gas Board regulations
- Local electric energy supply Board regulations

7. **Running the appliance on other types of gas:** To change over to another type of gas, for example from methane to liquid, use the correct type of nozzles for the burner in accordance to the “Burners” table. The burner nozzles for different types of gas, marked in 100ths of a mm, are in a case supplied with the appliance. When the appliance has been transformed or adapted, recheck its functions as described in the “Checking the functions” paragraph. After the appliance has been transformed or adapted, specify the new gas type on the plate.

8. **Checking the functions:** Start the appliance; check the gas pipes for leaks; check the burner flame, even at the minimum.

9. **Notes for the installer:**

- Explain and demonstrate how the appliance works to the user according to the instructions, and hand him the user’s manual.
- Remind the user that, in the event of any structural alterations or modifications to the room that houses the appliance, the appliance functions must be rechecked.

#### 10. **Room ventilation:**

- The room where the appliance is installed must be fitted with air intakes to guarantee the correct operation of the unit and air exchange. Air necessary for the burner combustion is equal to 2 cum/h per each kW of installed power. The air intakes must be of adequate dimensions, be protected by grids and positioned free of any obstruction.
- Do not install the appliance close to other units that can reach high temperature: the electrical components might be damaged.
- During installation, make sure the air suction and evacuation ways are free from any obstacles.

#### 11. **Users should observe the following warnings:**

- Improper installation may lead to property loss or casualty.
- Installation of gas appliance should be performed strictly in accordance with the instructions or relevant provisions.
- Component maintenance and replacement should be done only by authorized agent or professional technicians.
- Do not dismantle any sealing element in the gas appliance.
- For appliance operation, operator only.

## **4.2 Gas Connection**

1. The serial plate is located inside the lower front panel. It indicates the type of gas the unit is equipped to burn. All our equipment is adjusted at the factory. Check type of gas on serial plate.
2. The appliance is design-certified for operation on natural or propane gases, it should be connected only to the type of gas for which it is equipped.
3. A 3/4" NPT line is provided at the rear for the gas connection. An adequate gas supply is imperative. Undersized or low pressure lines will restrict the volume of gas required for satisfactory performance. Fluctuations of more than 25% on natural gas or 10% on propane gas will create problems and affect burner operating characteristics.
4. An adequate gas supply line to the unit should be no smaller than the inside diameter of the pipe from the unit to which it is connected.
5. Purge the supply line to clean out dust, dirt, or other foreign matter before connecting the line to the unit.
6. All pipe joints and connections must be tested thoroughly for gas leaks. Use only soapy water for testing on all gases. Never use an open flame to check for gas leaks. All connections must be checked for leaks after the unit has been put into operation.

### 4.3 Electric Connection

1. Before connecting the appliance to the network, check the following:
  - Network voltage corresponds to the data written in the plate.
  - Grounding is efficient.
  - The connection cable is suitable to the power absorbed by the appliance.
2. Place a device before the appliance itself that allows the unit's disconnection from the mains circuit in an omnipolar way; this device must have an opening of contacts of at least 3mm. safety switches can be used. The omnipolar switch must be close to the appliance, be approved and have a section suitable to the appliance.
3. The cable must have features similar to the H07 RN-F type. The YELLOW-GREEN ground cable must be longer than the others in the event that, if the cable stopper breaks, the cable will disconnect after the tension cables. **The YELLOW-GREEN cable must never be broken.**
4. Equipotential: The appliance must be connected to an equipotential system. The terminal is positioned close to the cable input. It is marked by a label:



#### **Warning: ELECTRIC GROUNDING INSTRUCTIONS:**

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding from this plug.

### 4.4 Exhaust System

1. The appliances must be positioned in suitable areas for the discharge of the combustion products in respect to how much is prescribed by the installation's norms. Our appliances are classified as type "A" gas units.
2. These appliances are not designed to be connected to an evacuation duct for the discharge of combustible products.
3. These appliances must discharge the combustible products into appropriate hoods, or similar devices, connected to a flue of proven efficiency, or they may be connected directly to an outdoor vent.
4. If such an arrangement is not possible, the unit may be connected to an air exhaust system that leads directly outdoors, having a capacity no lower than required; see the technical data table, plus the air exchange necessary, in order to make operators comfortable.

## 4.5 Warnings

1. Always supervise the appliance while being used and never let it run while empty.
2. The appliances do not require special adjustment assistance from specialized personnel if the adjustments are carried out by the user during the use of the appliance.
3. Use only the accessories recommended by the manufacturer.
4. During the initial uses of the appliance, an acrid or burning smell may be detected. This will disappear after two or three uses.
5. After use, the areas are hot for a certain amount of time (residual heat). Avoid resting your hands on them and allowing children to get too close.
6. These are very important regulations; if they are neglected, the appliance may not perform properly or the user may be placed at risk.
7. The appliance is strictly for professional use and must be used by qualified personnel.
8. This product is a commercial machine that needs to be operated by trained personnel, not applicable for household use.
9. The installation, start-up and maintenance of the appliance must be carried out by qualified personnel.
10. All installation works must be carried out according to the law in force. The manufacturer is not responsible for damages due to an incorrect installation, bad maintenance or incorrect use.

## 5. Working Instructions & Operation Flow

### 5.1 Lighting, Relighting, and Shutdown Instructions

- To light the oven, just switch the power switch at the top left corner of the control panel to the “ON” position. (The oven is equipped with a direct hot surface ignition system. There is no pilot to light.)
- If the burners fail to ignite within four seconds, the oven will automatically shut off the gas, wait five minutes to allow the gas that was released to dissipate, and try to light the burners again. If the burners still fail to ignite after three such attempts, the oven will stop trying, even though the power switch is in the “ON” position. To continue to attempt to light the burners, turn the power switch “OFF” and then “ON” again.
- To shutdown the oven, switch the power switch to the “OFF” position. For a complete shutdown, also open the control panel and turn the manual shut-off valve to the “OFF” position.

### 5.2 Operating the Controls

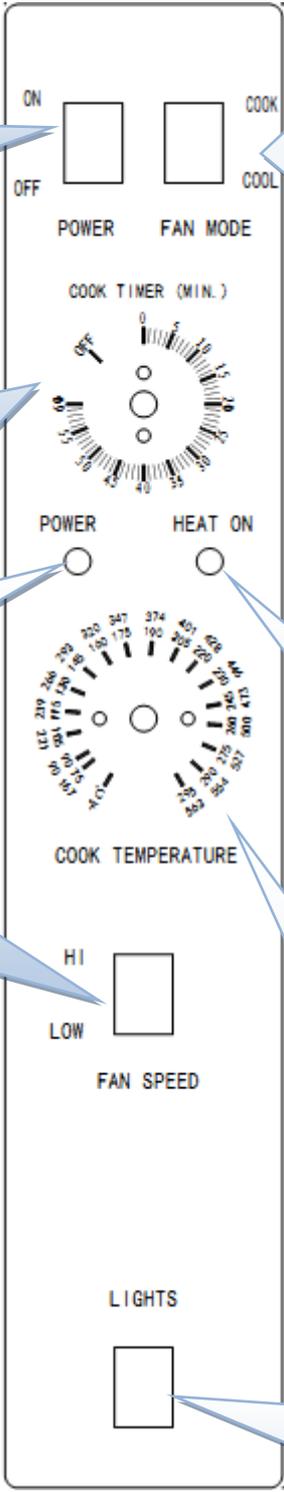
A convection oven is a different type of oven that offers many features and advantages to the food service operation. The additional capabilities and features of the oven require some learning. However, the operation of the oven is not difficult to understand or control once you have some practice. See the controls in the following feature:

**Power Switch:**  
Switch ON to use the oven, switch OFF when done using the oven.

**Cook Timer:**  
Turn knob to set a time duration. An alarm will sound when the timer runs out. Turn the knob to OFF to cancel the alarm. The timer is a reminder to the user; the timer does not control the oven.

**Power Indicator:**  
It illuminates when the power switch is in ON position.

**HI/LOW Fan Speed:**  
Use to select fan speed (HI or LOW). The appropriate speed is determined by the type of food being cooked.



**Fan Mode:**  
In COOK mode, the fan runs continuously except when the doors are open. The fan does not cycle with the operation of the burners. In COOL mode, the fan runs continuously even if the doors are open. To rapidly cool the oven after cooking is completed, open the doors and switch the fan mode to COOL.  
**The COOL mode has same function with COOK mode when close the door**

**HEAT-ON Indicator:**  
The HEAT-ON indicator will light when the burners are on and will remain on while the oven preheats.

**Cook Temperature Control:**  
Turn the knob to desired temperature. When the set point is reached, the HEAT ON indicator will be off. When the burners maintain in the set temperature, the indicator will cycle on or off.

**Oven Interior Light Switch:**  
Press to turn on the light. The light is controlled independently.

## 5.3 Operations

Turn the oven ON and select a cooking temperature. Two additional controls are used to control the fan (as described below).

The timer is a reminder to you of when to remove food from the oven. The timer does not control the temperature of the oven.

### To cook, do the following:

1. Turn the oven ON using the Power Switch at the top of the control panel.
2. Select the desired fan speed using the Fan Speed switch. The appropriate fan speed (HI or LOW) depends on the type of food being cooked.
3. Switch the Fan Mode switch to COOK. The fan will run continuously when the oven doors are closed (the fan does not cycle on and off with the burners). (If this switch is set to COOL, the only difference is that the fan will continue to run when the oven doors are open.)
4. Set the cooking temperature by turning the Cook Temperature Control until the indicator mark on the knob is pointed to desired cooking temperature. The HEAT ON indicator will light when the burners are on and will remain on while the oven preheats.
5. Wait until the HEAT ON indicator has come on and gone out three times. At that time the oven will have reached the set cooking temperature.
6. Open the oven doors, load the product into the oven, and close the doors.
7. You can use the Cook Timer as a reminder of when to remove the load from the oven. If so desired, turn the Cook Timer knob until the indicator mark points to the desired cooking time (up to 55 minutes). The timer knob will rotate counterclockwise as the timer runs down, indicating how much time remains. You can turn the knob while cooking to increase or decrease the remaining time. When the timer runs out, a buzzer will sound for a short time, then turn itself off. (To immediately silence the buzzer, turn the Cook Timer knob to the OFF position.) The timer is a reminder to you; the timer does not control the oven.

If you open the oven doors, the burners and fan will shut off until the doors are closed. However, the timer will continue running even if the doors are open.

For ovens that are equipped with an oven interior light, to turn on the light, press and hold the switch located at the bottom of the control panel.

### FGC timer instructions:

1. If the set time is  $\geq 5$  minutes, rotate it clockwise to the required set time;
  2. If the set time is  $\leq 5$  minutes, rotate it clockwise to the position indicating 5 minutes or a little more than 5 minutes, and then rotate it counterclockwise to the required set time.
8. Cool down the oven:
- Step 1: Turn the thermostat to minimum.
- Step 2: Open the door then switch to COOL mode, the fan will run to cool down the oven.
- For the most rapid cooling, switch the Fan Speed to HI.



5. Do not use substances for cleaning silver and be careful with hydrochloric or sulphuric vapors coming from floor washing products, for example. Do not aim water jets directly on the appliance, it might be damaged. After cleaning, rinse properly with clean water and dry carefully with a cloth.
6. The appliances are made in a way that little maintenance is necessary. Despite this, we recommend that the user subscribes to a maintenance agreement to have the appliance checked at least once a year by the specialized personnel of our assistance service or by a specialized technician.
7. **Before carrying out any maintenance or repair, disconnect the appliance from the gas network or cut off the mains. Use only original spare parts supplied by the manufacturer.**
8. If the appliance is not used for long period of time, please clean the equipment and the surrounding areas properly. Pour a small quantity of cooking oil on the stainless steel surfaces. Carry out all maintenance operations. Cover all appliances with a suitable material and leave a few openings to allow air to circulate.