

# **USER MANUAL** INDUCTION & INFRARED COOKER

FS - ID268, FS - ID266, FS - ID 288, FS MIX 388, FS MIX266, FS MIX 288,

FS - 2SI, FS-2SIR, FS 3SI



# 1. Installation instructions

# 1.1 Installation conditions

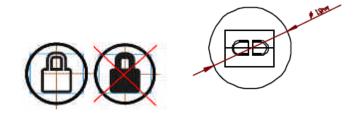
All the infrared sensors must be in contact with the glass surface.

No movement of the control under the glass ceramic after installation must be assured. **1.2** Printing on glass

#### The gloss printing area over the con

The glass printing area over the sensors must be centred with the sensor.

Glass printing thickness in an area of 10mm around the centre of the keys <= 0.5mm.



# 1.3. Type of glass

The glass thickness must be 4mm.

The glass infrared light transmission wavelength range must be around 925nm.

# 1.4. User interface initial calibration

The User Interface has implemented an initial keyboard calibration focused to adapt the sensibility of the keys, to the final mechanical, environmental and user conditions.

Any time the Cooktop is plugged or there is a power failure that generates a reset in the user interface, the first time the **Key Lock** is touched the sensitivity of the keyboard is readjusted. This first touch of the **Key Lock** must be done in certain conditions:



Do not use gloves







Touch the glass( smooth touching)

# **1.5. Initial Light Conditions**

When power is initially applied to the Cooktop, the touch control conducts a calibration process for the touch keys, which requires a low level of ambient light in the area of the touch keys. If during this calibration process excessive ambient lighting is detected the User Interface displays "FL" (Infrared Ambient Light Error) and the control calibration process is suspended. In order to rectify the process any lighting that could affect the calibration process should be switched off (e.g. halogen cooker hood lighting). The error will disappear when satisfactory ambient lighting is detected and the touch control calibration procedure will now complete satisfactorily.

# Notes:

1) The "FL" error can only be generated within approximately 3s of initial power being applied to the cooktop.

2) We recommend that the user switches off all cooker hood lighting and lighting directed towards the cooktop when power is initially applied to the cooktop.

3) After the touch control has conducted its initial calibration process, (approx. 3s) any cooker hood or other lighting can be switched on as normal and will not affect the operation of the touch control.



<u>- 8-</u> -	18		8,8.		18:	<u>`</u> 8-
		٥	Ē	$\hat{\boldsymbol{\Theta}}$	<u>- +</u>	
8- - 1+	- <u>B</u> - - <u>-</u> +	0	<u> </u>	8	-8- 	- 6- - 213+

# 2. Basic control functions

- Key Lock function.
- Fast boil function.
- Indication of residual heat for each heater.
- Thermal control protection.

• Protection from accidental activation of keys: - One or more keys activated for more than 10 sec. -> Switching off the touch control. A warning beep sounds every 10 sec., while the key/s is/are activated.

- With all heaters at zero power during 10 sec. -> The Cooktop is switched off. If the switching off is due to an accidental activation of keys, the touch control actuates as above.

• Acoustic warning to attract the user's attention.

• Pan detection for induction heaters; After 60 sec. with no pan, the heater switches off. GENERAL KEYS

- 1 key for switching On/Off the Cooktop [ON/OFF].
- 1 key for locking the keyboard [KEYLOCK].
- 2 key for timer time set [-TIMER] [+TIMER].

## HEATER KEYS

- 2 keys for each heater to select the cook set [- HEATERx] [+HEATERx].

- 1 key for left front and right rear heaters to enable/ disable radiant heaters double zone [ZONE].

# **BUZZER SOUNDS**

- 3 beeps for switching Off the Cooktop [OFF\_SOUND].



# 3. Switching On/Off the Cooktop

The Cooktop is switched ON by touching the [ON/OFF] key for 1 sec. A beep sounds and all the heater displays show a '0'.



Fig. 1: Switching ON the cooktop

If the selection of a heater is not done in 10 seconds, the cooktop will be turned off automatically.



The cooktop is switched Off by touching the [ON/OFF] key for 1 sec. An [OFF\_SOUND] sounds and all the heaters are switched Off. The purpose of these [OFF\_SOUND] is to distinguish the OFF action over all others.



Fig. 2: Switching OFF the cooktop

When the cooktop is OFF, after 5 sec whitout any error/alarm to display and without any message to indicate (residual heat), the control switches off the (KEYLOCK LED) in order to reduce as much as possible the power consumption. As soon as we Touch a key, the (KEYLOCK LED) goes ON and we can continue to operate us normal unlocking the keyboard if necessary and touching the [ON/OFF] key to switch ON the cooktop.

The (ON/OFF) key will be locked to switch On the cooktop:

- if the key lock is activated (KEYLOCK LED on),
- or if there is any appliance error.
- 4. Selecting a power level for a heater
- For FS ID268, FS ID266, FS ID 288, FS MIX 388, FS MIX266, FS MIX 288, FS 2SI, FS-2SIR

When the Cooktop is on, the power level for a heater can be selected by touching the heater [-] [+] keys. Ineach increase/ decrease a beep sounds and the corresponding display shows the new power level.

The touch sends the new power level to the Induction Control Unit.

The [-] [+] keys will be locked:

- If the Cooktop is off, or
- if the key lock is activated (KEYLOCK LED on), or
- if there is any heater error or appliance error.

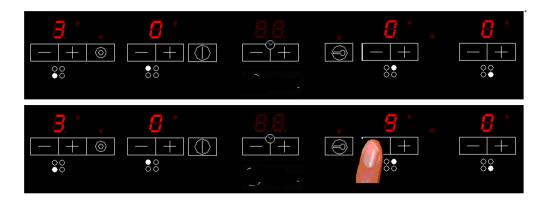
If the finger is held down on the key, the action is repeated twice every second. The [+] key raises the cooking level to 9, whereas the [-] key reduces the cooking level to 0.



Fig. 3: Select cookset for a heaters.

With the heater at power level 0, the [-] key raises the cooking level to 9.





# For FS 3SI

# Selecting a power level for a heater

To switch on a heater it is necessary to actuate every cooking zone by means of two operations:

- □ Select a heater
- $\hfill\square$  Select the desired cook set.

# Selecting a heater

A heater is selected by touching the heater [HEATER\_n\_KEY] key for 160 ms, a beep sounds and the heater display shows the power level.

The heaters that are not selected are shown with a dot point.



The [HEATER\_n\_KEY] key will be locked to select a heater:

o If the cooktop is off (all the heater displays off), or

o if the key lock is activated , or

o if there is any heater or appliance error.

The heater selection will finish:

o 10 second after the last touch over the [SLIDER] key

o if another heater is selected

o or if the [HEATER\_n\_KEY] key is touched for 160 ms.

When the heater selection is finished after 10 seconds, a beep sounds and all the heater displays show the power levels again.

# Selecting a power level for a heater

Once the heater is selected, the power level can be selected by touching the [SLIDER]. Each position over the slider surface corresponds to a cooking level. The power level selection is



done by sliding the finger or by placing the finger on a specific position of the slider surface. When the power level is changed sliding the finger a slider sound sounds.

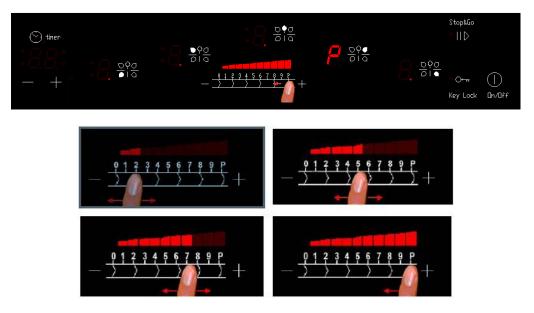
There are 11 selectable power levels, from 0 to 9 and P (Booster) level. If booster power level is selected the heater display will show a P.

The power set will be shown by displays [HEATERn\_DISPLAY] and the [BARGRAPH\_LED]. The [SLIDER] keys will be locked:

o If no heater is selected, or

o if the key lock is activated , or

o if there is any heater or appliance error.



# 5. Fast Boil (Booster) Function

Being the heater at power level 9, the [+] key raises the cooking level to Booster level a beep sounds and the heater display shows "P".

Being the heater at Booster level, if the [+] key is Touched an error beep sounds and the cook set doesn't change



Fig. 4: Selected Booster function for a heater.

With the heater at Booster level, if the [-] key is Touched a beep sounds and the cook set is reduced to 9.





Fig. 5: Cancelling Booster function for a heater.

The heater will work at maximum power level for 10 minutes. After these 10 minutes a beep sounds and the heater will return to level "9".

# 6. Switching Off a Heater

When a heater is on, the heater can be switched off by touching the heater [-] and [+] keys simultaneously. A beep sounds and the corresponding display shows "0".



Fig. 6: Switching OFF a heater with the [+] end [-] keys

#### 7. Key lock

Touching the [KEYLOCK] key for 1 second, the key lock function is activated and deactivated. If the LED associated to the key lock key is on, the keyboard is locked.

The locking function can be activated when the heaters are on or when the cook top is off. If the cook top is on, the key lock function locks all the keys except the general [ON/OFF] key and the [KEYLOCK].

When the cook top is off, the key lock function locks all the keys, including the general [ON/OFF] key.

The key-lock is always activated at the start-up of the control.



Fig. 12: Key Lock

# 8. Stop & Go function : apply for FS 3SI

The Stop and Go function allows temporary pausing of the cooking process, allowing the users to answer the door or the telephone without worrying that the water is boiling over. This function is also useful to clean the user interface surface without changing the cooking set up. **The stop function is activated** if the [STOP\_GO\_KEY] is touched for more than 120 milliseconds:

• [STOP\_GO\_LED] blinks, a [STOP&GO\_SOUND] sounds and the cooktop is stopped





The heaters actual power setting is stored and all the active heaters power is set to power level 0,

- The heaters auto swich off time is stopped,
- All the timers running count downs are stopped,
- All keys are locked except [STOP\_GO\_KEY] and [ON\_OFF\_KEY],

• The Stop & Go LED is blinking and all the heater displays show the stop sequence.

**Stop sequence:** All the heater displays show a line growing sequentially until a round is filled, when the round is filled the round segments are switched off sequentially. When the last segment is going to be switched off the cycle begins again. The round segments are switched on/off anticlockwise. A new segment is switched on/off every T\_320ms.



# To deactivate the stop function:

• If the [STOP\_GO\_KEY] is touched for more than 120 milliseconds a beep sounds and the heaters actual power setting is restored, or

• If the cooktop is stopped for more than 10 minutes the cooktop is switched off automatically.

# 9. Operating the timer

The timer value can be selected between 1 and 99 minutes. It is possible for the user to time a heater at any power level (0...Bo). The user can select only one heater on which the timer function is to operate. The timer last minute will be displayed in seconds.

The [+TIMER] [-TIMER] keys will be locked:

o If the Cooktop is off, or

o if the key lock is activated (KEYLOCK LED on).

# 8.1 Activating the timer

When the timer off, it is activated by pressing the timer keys [+TIMER] or [-TIMER]. A beep sounds, the timer display shows a "00" and the heater displays show a "t" indicating that a heater has to be selected.

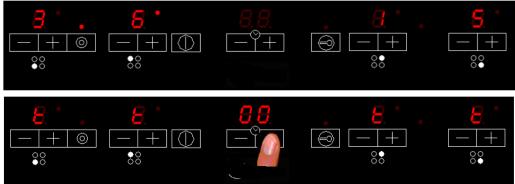




Fig. 13: Activating the timer

#### 8.2 Selecting a timed heater

When the timer is waiting a heater selection, the timed heater is selected by pressing any heater key. A beep sounds, the LED next to the heater display is on. The timer display shows the point.

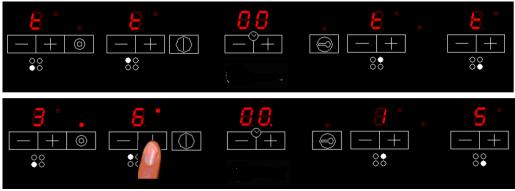


Fig. 14: Selecting a timed heater

The user can select only one heater at a time. The heater selection can be done beginning from timer off status.

The heater must always be selected before the time is set. When the timer is waiting for heater selection, if the timer key [+TIMER] or [-TIMER] is pressed, the timer is switched off. If the heater is not selected before 10 seconds, the timer is switched off.

# 8.3 Selecting the time

When the timer is in waiting a time selection, the timer value can be selected between 1 and 99 minutes touching the [+TIMER] or [-TIMER] keys,.

If the key [+TIMER] or [-TIMER] associated with the timer is held down, the change speed is increased automatically.

This makes possible to reach the desired time setting more quickly.



Fig. 15: Selecting timer time

If the selected time is "00" after 5 seconds the timer is switched off.

# 8.4 Starting Timer Countdown

The countdown starts 5 seconds after the last operation over the [+TIMER] or [-TIMER] key.

# 8.5 Changing the time

When the timer is in countdown the user can change the time at any time by touching the timer [+TIMER] or [-TIMER] key, the countdown stops and the timer changes to time selection status waiting a time selection.

# 8.6 Timer Countdown End

When the time set on the timer has run out, the timed heater is switched off, the timer display and the timed heater led starts blinking and a timer alarm beep sounds for one minute.



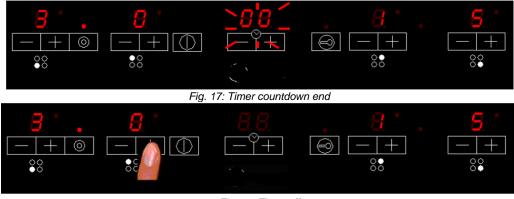


Fig. 18: Timer off

The timer alarm can be cancelled by the user at any time, even during the first minute of the alarm. When the timer is in alarm status, by pressing any key of the touch control the timer is switched off.

#### 8.7 Switching off the timer

To cancel the operation of the timer, select the time value of "00" using the [-TIMER] key or pressing the [+TIMER] and [-TIMER] keys at the same time.

#### 8.8 Autokey-lock

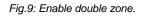
When all the heaters are not powered, and one heater is temporized at zero power level, the key-lock function is activated after 1 minute.

#### 10. Enable / Disable double zone for radiant heaters

(Apply for FS MIX 388, FS MIX266, FS MIX 288, FS - 2SIR)

When a heater is on, the double zone of the radiant heater can be enabled/ disabled by pressing [ZONE] key. A beep sounds and the double zone LED switched ON if the double zone is enabled.





The zone can be enabled/ disabled after selecting the power level when the heater is on.

# 11. Heat-up function for radiant heaters

(Apply for FS MIX 388, FS MIX266, FS MIX 288, FS - 2SIR)

# **10.1** Activating the heat-up function

This function takes the cooking level to maximum power for a defined time. The heat-up function is activated selecting the power level 9, and touching the [+] key. The decimal point of the display blinks for 10 seconds.



Fig. 10: Activate Heat Up



During these 10 seconds the desired power level must be selected (between 1 and 8). After this time a beep sounds, and the decimal point remains fixed, indicating the heat-up function is ON. If the power level is 0 or 9, the heat-up function is cancelled.



Fig. 12: Heat Up function activated

If the heat-up function is activated, pressing the heater [+] key, the duration of the heat-up function will be the duration for the new power level; if the new level is 9, the heat up function is cancelled.

Power level	1	2	3	4	5	6	7	8
Time(sec.)	1'12"	2'44"	4'48"	5'28"	6'30"	1'12"	2'44"	2'44"

Table 1: Heat Up function time

## 10.2 Cancelling the heat-up function

The Heat-up function can be cancelled either automatically, when the time expires, or when the user wishes.

When the heat-up function is cancelled automatically, a beep sounds, the decimal point of the display turns out, and the power level of the heater remains the selected power level. If we press the [-] key when the heat-up function is activated, the function is cancelled

# 12. Residual heat time calculation for radiant heaters

(Apply for FS MIX 388, FS MIX266, FS MIX 288, FS - 2SIR)

While a temperature on the cook top glass surface is above 65°C, this condition will be shown in the associated display, by means of an "H".

If the cook top is switched off, the residual heat is shown by a static "H" in the display



Fig. 14:Residual Heat (Cooktop off)

If the cook top is on, but the power level is 0, the associated display will show alternately "H" and "0".





Fig. 15:Residual Heat (Cooktop On)

To generate a temperature above 65°C a heating element has to be in operation for certain time, this time depends on the power level. Once this time has expired, the residual heat warning will be shown when the heating element is switched off.

The preset time to generate a temperature above 65°C is shown in table 4.

	Power level								
	1	2	3	4	5	6	7	8	9
T (sec.)	7"	7"	7"	7"	7"	7"	7"	7"	7"

Table 3: Preset time to generate a temperature above 65\*C

If the minimum time to generate 65°C is over 15", the time the residual heat indication remains, depends on the time the heater has been switched on in a certain power level.

	Power Level								
Heater On Time (seg)	1	2	3	4	5	6	7	8	9
>= 7	10	30	60	150	180	300	360	360	360
>=15	30	50	60	150	180	360	360	600	750
>=30	60	90	150	180	300	360	480	720	900
>=45	90	150	210	240	420	480	670	900	1200
>=60	120	210	300	450	540	780	900	1200	1500
>= 120	120	300	600	600	960	1200	1500	1500	1800
>= 180	180	540	720	900	1200	1200	1500	1500	1800
>= 240	480	720	900	900	1200	1200	1500	1500	1800
>= 300	600	720	900	900	1200	1200	1500	1500	1800

Table 4: Residual heat indication time

#### 13. Relay Ton / Toff for radiant heaters

(Apply for FS MIX 388, FS MIX266, FS MIX 288, FS - 2SIR)

The relay Ton/ Toff (Duty Cycle), are shown in the Table.2 depending on the power level.

Power level	Ton(sec)	Toff(sec)	Power %
1	1.3	42.7	3.1
2	2.8	41.2	6.3
3	6.2	37.8	14.1
4	8.2	35.8	18.6
5	11	33	25.0
6	13.8	30.2	31.3
7	19.9	24.1	45.3
8	28.2	15.8	64.1
9	44 "		100

Table 2: Relays Ton/Toff vs. power level



# 14. Automatic safety off

If the power level is not changed during a preset time, the corresponding heater turns off automatically.

The maximum time a heater can stay on, depends on the selected cooking level.

	5 ID 268, FS ID 288, 2SI	FOR FS MIX266, FS MIX 288, FS MIX 388, FS 2SIR			
Power level	Max.time on (hours)	Power level	Max.time on (hours)		
1	10	1	10		
2	10	2	5		
3	10	3	5		
4	10	4	4		
5	10	5	3		
6	10	6	2		
7	7 10		2		
8	8 10		2		
9	3	9	1		

#### 15. Cleaning and maintenance

#### FS 3SI

**Power Management** 

Setting CookTop ECO Power Limit

The cooktop maximum power limit is 7200W. This power limit can be reduced by the user to 2800W, 3500W or 6000W.

The sequence to set a new Cooktop Power Limit is:

- During the first 30 seconds after plugging the appliance
- The Touch has to be unlocked and all Heaters Off
- Press at the same time [+TIMER\_KEY], [-TIMER\_KEY] and [ON\_OFF\_KEY] keys



• Once this is done, a beep sounds and the actual Cooktop Power Limit will be shown in the heater displays.



For selecting a new Power Limit:

• With the [KEYLOCK\_KEY], the Power Limit is increased. The selectable powers are: 2800W, 3500W, 6000W

or 7200W. When the power is 7200W, if the [KEYLOCK\_KEY] is touched the power changes to 2800W.





The sequence to finish recording the new Cooktop Power Limit is: • Press at the same time [+TIMER KEY], [-TIMER\_KEY] and [ON\_OFF\_KEY] keys



Once this is done, new Cooktop Power Limit is recorded and there is a system reset. To finish without recording changes:

• If during 60 seconds there is no action, changes are not recorded and there is a system reset.

# Power management for ECO Cooktop

For ECO power cooktops, each time the user tries to increase the power, the total power level of the cooktop is calculated. If this total power level is greater than the cooktop power limit, the power increase is not allowed. An error beep sounds and the heater display shows an 'r' for 3 seconds.



# \* FS 2SI, FS ID 268, FS ID 266, FS ID 288

# **Power Management**

The Cooktop maximum power limit (7200W\*NOTE) can be reduced by the user to 2800W, 3500W or 6000W\*\*NOTE (ECO

Power Limits).

\*NOTE: Even if the cooktop maximum power is lower than 7200W.

\*\*NOTE: The selectable power limits are 2800W, 3500W or 6000W even if the cooktop maximum power is lower than 6000W.

Setting Cooktop ECO Power Limit

The sequence to set a new Cooktop Power Limit is:

- During the first 30 seconds after plugging the appliance
- The Touch has to be unlocked and all Heaters Off
- Press at the same time the heaters [+] and [-] keys.



Once this is done, a beep sounds and "Po" characters will be in the timer displays and the "actual Cooktop

Power Limit" will be in the left and right end heater displays

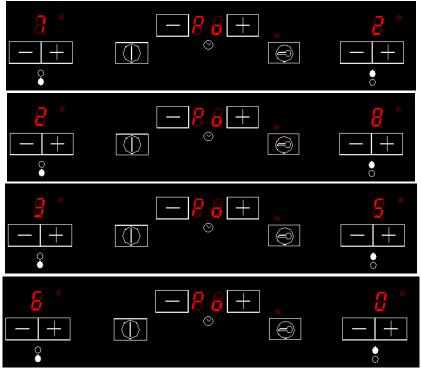




For selecting a new Power Limit:

• Touching any (+) or (-) key, the Power Limit is increased. The selectable powers are: 2800W, 3500W, 6000W

or 7200W. When the power is 7200W, if the [+] or [-] key is touched the power changes to 2800W



The sequence to finish recording the new Cooktop Power Limit is:

• Press at the same time the heaters [+] and [-] keys.



Once this is done, new Cooktop Power Limit is recorded and there is a system reset. To finish without recording changes:

• If during 60 seconds there is no action, changes are not recorded and there is a system reset.

# 16. Cleaning and maintenance

- Always clean the glass surface after it has cooled down. Even the slightest amount of dirt will burn into the surface the next time you switch it on. Use only recommended cleaners. Steel wool, sponges and powdered cleaning agents must not be used since they may scratch the surface. Do not use oven sprays as these are normally corrosive and can damage the surface.
- Light amounts of dirt Use a damp cloth or a warm rinse to clean of dirt from the surface.
  Rinse with cold water and then dry thoroughly. Use vinegar, lemon juice or a calcium



dissolving agent to remove water stains from the surface. If these agents come into contact with the frame, wipe them off with a wet cloth, otherwise the frame will lose its gloss.

- Heavy dirt: Use "Special cleaner for Stainless Steel", "Stahlfix" or "Cerafix" to remove heavy dirt. Apply the cleaner with kitchen paper and rub it in. Leave it to take effect, then wipe off completely with cold water and dry the surface thoroughly. Cleaning res- idues on the surface can become corrosive when the hob is reheated. Persistent dirt and caking can best be removed with a glass scraper. A glass scraper can be obtained in household goods stores, paint and DIY shops or from our Customer service. If you buy a glass scraper, make sure that the handle is not made of plastic as this will stick to the hot surface. Take care when using the scraper. Risk of injury!
- Food that contains sugar may permanently damage the glass ceramic surface because they can produce scratches or permanent stains after they have become dry. In order to prevent such surface damage, such substances must be immediately removed with the glass scraper while they are still hot

THANKS FOR YOUR ATTENTION!