

MANUAL USER

INDUCTION

MODEL: TOM04I-P (PANORAMIC series)

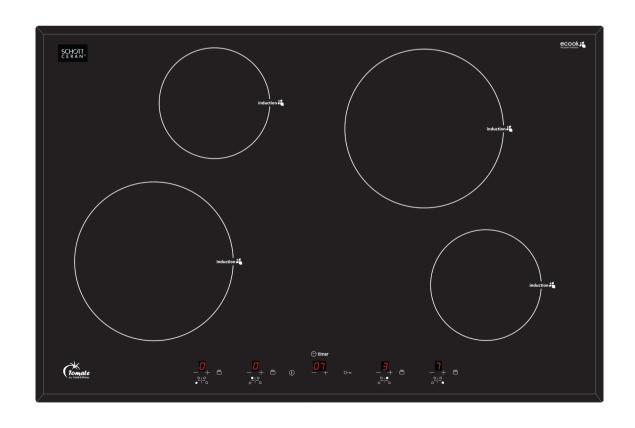


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PART A: GENERAL USE AND QUICK GIUDE

GENERAL

Carefully read the contents of this leaflet since it provides important instructions regarding safety of installation, use and maintenance. Keep the leaflet for possible future consultation. All the operations relating to installation (electrical connections) must be carried out by specialised personnel in accordance with current regulations.

SAFETY INSTRUCTIONS

This apparatus is not suitable for use by children or people who need supervision. For safety reasons, never place large ferromagnetic objects (e.g. oven plates for cakes) on the cooking area of the fibreglass top.

People carrying pacemakers are advised to consult a doctor before using the induction cooking areas. Metal objects such as knives, forks, spoons or lids must not be placed on the surface of the cooking top because they can become hot.

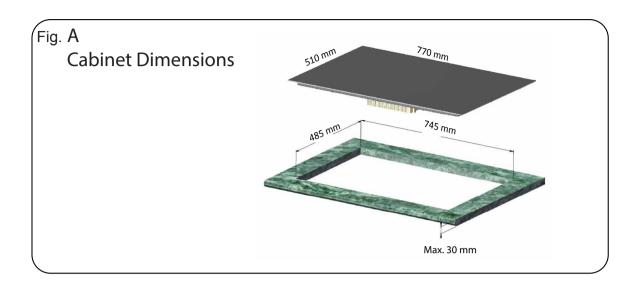
IMPORTANT: After use, switch the cooking top off using the control device.

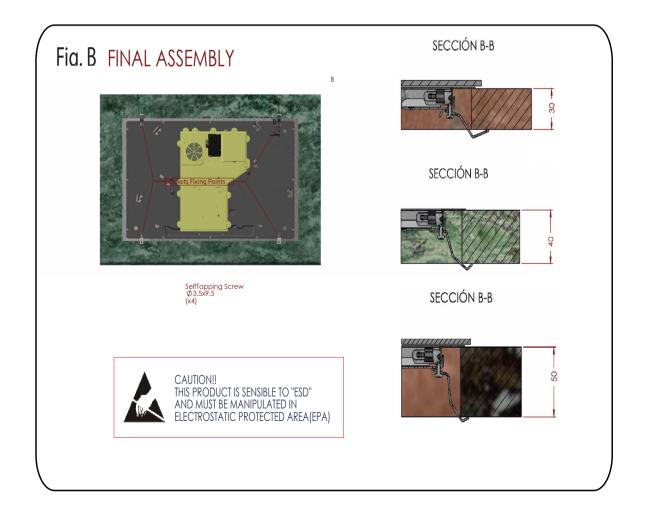
IMPORTANT:

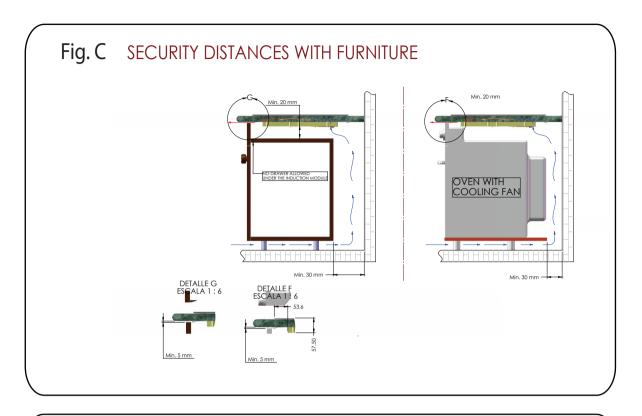
- Avoid spilling liquid, therefore reduce the heat when boiling or heating liquids.
- Do not leave the heating elements on without recipients or with empty recipients.
- When you have finished cooking, switch off the relevant heating element using the control indicated below.

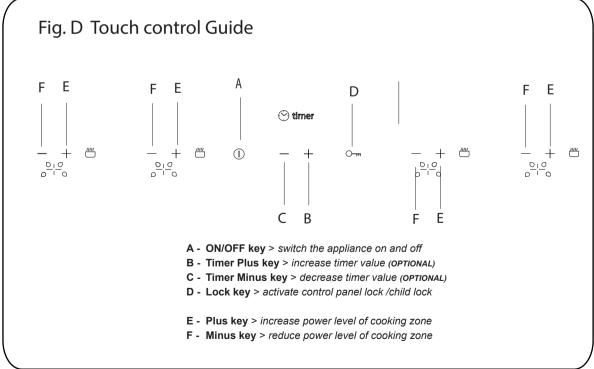
riangle Warning riangle

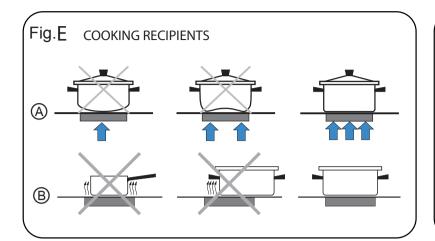
If the surface of the hob is cracked, turn off the appliance and disconnect it from the electrical mains in order to prevent any possible electric shocks.





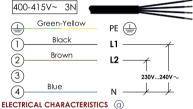












NOMINAL VOLTAGE : 230±10%V WORKING FRECUENCY : 50/60Hz NOMINAL POWER : 7200W

GENERAL CHARACTERISTICS

WEIGHT: 6.5 Kg|aprox.] STORAGE TEMPERATURE RANGE: -20°C A 85°C PACKAGING DOESN'T GENERATE ELECTROSTATIC CHARGE

ABSOLUTE MAXIMUN RATINGS

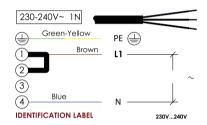
WORKING TEMPERATURES FROM 0°C TO 85°C MAXIMUN FAN INPUT AIR TEMPERATURE WITHOUT ANY POWER REDUCTION : 50°C MAXIMUN FAN AIR TEMPERATURE : 70°C MAXIMUN RELATIVE HUMIDITY AT 25°C : 90% WITHOUT CONDENSATION

BOOSTER KEY

THE BOOSTER KEY ALLOWS AN EXTRA POWER LEVEL IN THE COIL DURING 10 MINUTES. THIS LEVEL IS SHOWED LIKE "P".

STANDARD POWER LEVEL

CONSIGNA	COIL 210	COIL 145
Booster "P"	2000W	1600W
9	1500W	1200W
8	1300W	1000W
7	1100W	800W
6	900W	600W
5	700W	500W
4	500W	400W
3	300W	300W
2	200W	150W
1	100W	75W





INDUCTION DYNAMIC CHARACTERISTICS Vs HEATSINK TEMPERATURE:

FAN ON FAN OFF GRADUAL POWER LIMITATION ON-OFF POWER SHUTDOWN POWER DECOVERING	50°C 45°C 58.3°C 78°C
POWER RECOVERING	73.6°C
I OTTER RECOVERING	70.00

INDUCTION DYNAMIC CHARACTERISTICS Vs COIL TEMPERATURE:

RESIDUAL HEAT INDICATION(H) DISPLAYED RESIDUAL HEAT INDICATION(H) NO DISPLAYED GRADUAL POWER LIMITATION ON-OFF POWER SHUTDOWN POWER RECOVERING PAN DETECTION VS COIL DIAMETER

>65°C	
<55°C	
190°C	
220°C	
210°C	

COILØ	MINIMUN PAN Ø
145mm	90mm
210mm	130mm

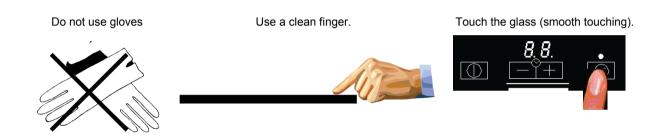
PART B: INSTRUCTIONS

1. INSTALATION INSTRUCTION:

1.1. 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.

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



1.2. 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 effect 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 approx 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.



2. Basic control functions

- The control allows different layout configurations:
 - o Full Induction up to 4 heaters with different heater diameters.
- 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 each heater to select Booster function [BOOSTER] *NOTE
 *NOTE: Only available for the XLL User Interface



Fig. 1: XLL UI complete configuration



 $Fig.\ 2: XLS\ UI\ complete\ configuration$

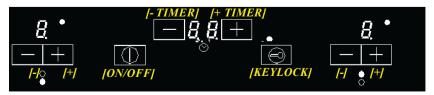


Fig. 3: XLD UI complete configuration

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 cook set for 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. A beep sounds and all the heaters are switched off.



Fig. 2: Switching OFF 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

When the Cooktop is on, the power level for a heater can be selected by touching the heater [-] [+] keys. In each 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:

- o If the Cooktop is off, or
- o if the key lock is activated (KEYLOCK LED on), or
- o 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.



Fig. 4: Selected cookset 9 from 0.

5. Fast Boil (Booster) Function

If the user interface configuration has specific keys for the Booster function, the [Booster] key raises the cooking level to Booster level a beep sounds and the heater display shows "P".

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

The [Booster] keys will be locked:

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

*NOTE: The [Booster] keyis only available for the XLL UI models.

If the user interface configuration has not specific keys for the Booster function With the heater at power level 9, the [+] key raises the cooking level to Booster level a beep sounds and the heater display shows "P".

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

With 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. 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 maxi mum power is lower than 6000W.

7.1. 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 left and right end heaters [+] and [-] keys.



Fig. 7: First step to set a new Cooktop Power Limit.

• 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.



Fig. 8: Showing the Cooktop power limit.

For selecting a new Power Limit:

• With the (+) and (-) keys, 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.



Fig. 9: Selecting the Cooktop power limit.

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

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



Fig. 10:Accepting the selected Cooktop power limit.

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.

7.2. Power management for ECO Cooktop

For ECO power cook tops, 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.



Fig. 11:Power increment not allowed.

8. 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

9. 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.

Table.1: Heater Auto switch off

Power level	Max. time on (hours)
1	10
2	10
3	10
4	10
5	10
6	10
7	10
8	10
9	3

10. 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).

10.1. 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" blinking indicating that a heater has to be selected.

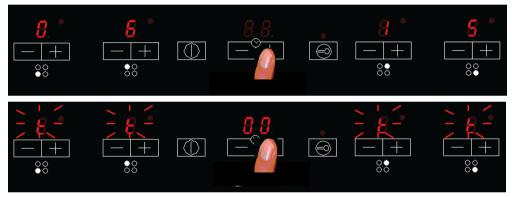


Fig. 13: Activating the timer

10.2. 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 starts blinking if no power is selected, or is on if any power is selected. The timer display starts blinking indicating that the time has to be selected.

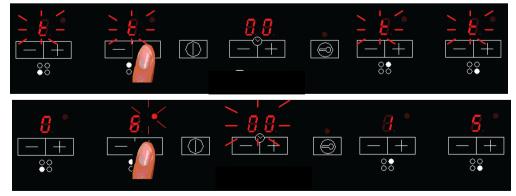


Fig. 14: Selecting a timed heater

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.

10.3. 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 ter time

If the time is not selected before 10 seconds, the timer is switched off.

If the selected time is "00" after 10 seconds the timer is switched off.

10.4. Starting Timer Countdown

The countdown starts 10 seconds after the last operation over the [+TIMER] or [-TIMER] key. A beep sounds and the timer display stop blinking and also led heater stops blinking if any power is selected.



Fig. 16: Timer countdown

The last minute will be displayed in seconds.

10.5. 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.

10.6. Timer Countdown End

USER INSTRUCTION

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.

10.7. 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.

10.8. 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.

11. Displaying software versions

The sequence to show the software version is:

- During the first 30 seconds after plugging the appliance
- . The Touch has to be unlocked and all Heaters Off

User interface's software version is shown by pressing at the same time the left and right end heaters [-] keyand the Key-Lock key.

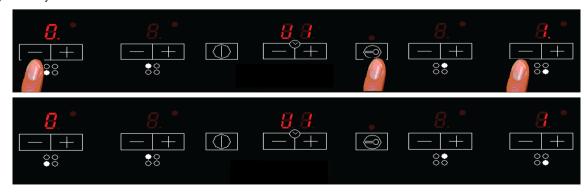


Fig. 19: UI software version

Induction microcontroller 1 software version is shown by pressing at the same time the left and right end heaters [+] keys and the Key-Lock key.



Fig. 20: Induction microcontroller1 software version

Induction microcontroller 2 (only for 3 or 4 heaters cooktops) software version is shown by pressing at the same time the left end heaters [+] key, the right end heaters [-] key and the Key-Lock key.

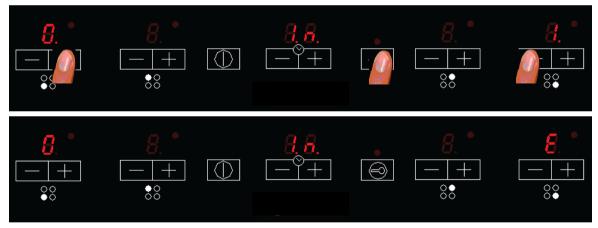


Fig. 21: Induction microconvroller2 software version

A beep sounds and the rear heater displays show the software version. Software version is composed of two parts: functional part and safety part. To distinguish between the two parts, when safety version is shown the dots of the displays are activated.

The message is kept for 10 seconds or until any key or combination of keys is touched. When the message disappears a beep sounds and the user can continue with normal operation.

12. Displaying Special Statuses

The corresponding heater display alternates between two characters depending on the status.



Event (Visualization Priority Order)	Start conditions	End conditions	Action	Heater status	Heater Display fore (1 sec.)	Heater Display back (1 sec.)
Power increment not allowed (only for ECO models)	Asked Cooktop power > Cooktop ECO power limit	2 sec	Power increment not allowed	On/Off	'r	,
Heater without suitable pan or without pan	No pan or not suitable pan over the heater	Suitable pan over the heater	After 1 minute Heater off	On	'Power'	'?'
Induction heater overtemperature	COIL TEMPERATURE	COIL TEMPERATURE	No power is delivered to	Off	' ' or 'H'	'C'
·	> T1 ⁽¹⁾	< T2 ⁽¹⁾	the heater	On	'Power'	
Induction generator	HEATSINK TEMPERATURE	HEATSINK TEMPERATURE	No power is delivered to	Off	' ' or 'H'	'c'
overtemperature	> T3 ⁽¹⁾	> T4 ⁽¹⁾	the heater	On	'Power'	
Hot glass over a heater (residual heat)	COIL TEMPERATURE > T5 ⁽¹⁾	COIL TEMPERATURE < T6 ⁽¹⁾		Off	Ή	,

⁽¹⁾ For T1, T2, T3, T4, T5 and T6 values see the corresponding drawing.

13. Heater errors

Heater errors are the errors which generate the switch off of one or more heaters.

When a heater error is detected, the involved heaters are switched off, a beep sounds (only if one or more heaters are active) and the displays corresponding to these heaters show a 'F' letter and the error code alternately.

While in error status the keys of the corresponding heaters are not operative.

All errors are recoverable. That is, when the cause of the error disappears the corresponding displays are deactivated and the heaters return to normal operation.



Heater errors				
Event (Visualization Priority Order)	Error recovery	Action	Heater Display (fore 0.5 sec./ back 0.5 sec)	
Communication fault	When the fault disappears	Left or right side heaters Off (****)	F5	
Heater temperature sensor short-circuit	When the fault disappears	Heater Off(**)	F1	
Heater temperature sensor open-circuit	When the fault disappears	Heater Off(**)	F2	
Heater temperature sensor error 1	When the fault disappears	Heater Off(**)	F7	
Heater temperature sensor error 2	When the fault disappears	Heater Off(**)	F8	
Bus relay fault	When the fault disappears	Heater Off(**)	F9	
Power unit temperature sensor short-circuit	When the fault disappears	All heaters Off (***)	F3	
Power unit temperature sensor open-circuit	When the fault disappears	All heaters Off (***)	F4	
Mains zero crossing loss	When the fault disappears	Left or right side heaters Off (****)	F6	

^(**) Heater switched off and locked

^(***) All the Induction heaters switched off and locked

^(****) Left or right side heaters switched off and locked



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