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# 24.07 STATION

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INSTALLATION AND USER MANUAL

**TABLE OF CONTENTS**

<b>1.</b>	<b>PREMISE</b>	<b>page 3</b>
<b>2.</b>	<b>INSTALLATION</b>	<b>page 4</b>
<b>2.1</b>	<b>CONFIGURATION OF ELECTRONIC BOARDS WITH LCD DISPLAY</b>	<b>page 4</b>
<b>2.2</b>	<b>CONFIGURATION OF ELECTRONIC BOARDS WITH 7-SEGMENT DIGITS</b>	<b>page 6</b>
<b>2.3</b>	<b>24.7 STATION CONNECTION</b>	<b>page 8</b>
<b>2.4</b>	<b>24.7 STATION CONFIGURATION</b>	<b>page 9</b>
<b>3.</b>	<b>USER MODE</b>	<b>page 12</b>
<b>3.1</b>	<b>APPLIANCES</b>	<b>page 12</b>
<b>3.2</b>	<b>APPLIANCE STATUS</b>	<b>page 13</b>
<b>3.3</b>	<b>LOG</b>	<b>page 15</b>
<b>3.4</b>	<b>DOWNLOADING DATA ON A USB FLASH DRIVE</b>	<b>page 19</b>
<b>4.</b>	<b>BUTTON AND LED KEY OF THE 24.7 STATION</b>	<b>page 21</b>

## **1. PREMISE**

The 24.7 Station is a computerised system integrated with the cooking systems allowing you to record and organise data and temperature values whenever you want and wherever you are.

The appliances connected are remotely monitored as far as processes taking place, supply of assistance and the traceability and management of resource are concerned.

Installation disks are not necessary since it is a real computer working autonomously.

Recorded data can be downloaded at any time using a USB flash drive or through the network connection.

## 2. INSTALLATION

Follow the steps below in order to install the 24.7 Station properly:

1. Configuration of the appliance electronic boards.
2. Connection between the 24.7 Station and the appliances.
3. 24.7 Station configuration.

The paragraphs below describe the operations to be carried out for each of the abovementioned stages.

### 2.1 CONFIGURATION OF ELECTRONIC BOARDS WITH LCD DISPLAY

The configuration of the electronic boards **WITH LCD DISPLAY** of the appliances to be connected to the 24.7 Station must be carried out as follows:

1. **Connect** the appliance to the mains.
2. With the appliance on standby, **press “PLUS”**. The message **“OPERATOR/ASSISTENZA”** will be shown on the electronic board display [Fig. 1].



[Fig.1]

3. Go to the message **“ASSISTENZA”** using the **“ARROW DOWN”** button [Fig. 2].



[Fig. 2]

4. Press **“ENTER”**. The message **“PARAMETER SETTING”** will be shown on the board display [Fig. 3].



[Fig. 3]

5. Hold down **“ENTER”** until the message **“ENTER PASSWORD”** is shown on the board display. [Fig. 4].



[Fig. 4]

6. Press **“TEMPERATURE”**, **“TIME”** and **“ENTER”** buttons simultaneously. The message **“G03”** will be shown on the board display [Fig. 5].



[Fig. 5]

7. Go to parameter “G10” using “ARROW UP” and “ARROW DOWN” buttons.
8. Hold down “ENTER” for approx. three seconds until parameter “G10” starts flashing.
9. Choose a value between 1 and 31 using “ARROW UP” and “ARROW DOWN” buttons.

**WARNING: DO NOT SET SAME ADDRESSES ON DIFFERENT APPLIANCES.**

10. Hold down “ENTER” for approx. three seconds to save the parameter value [Fig. 6].



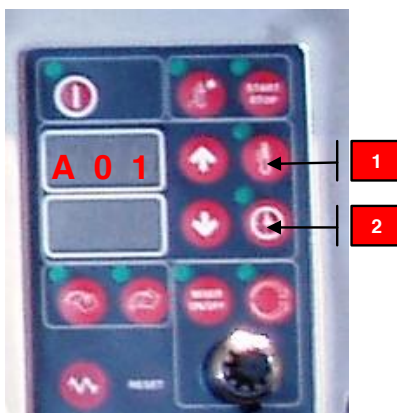
[Fig. 6]

11. Press “PLUS” to exit configuration.

## 2.2 CONFIGURATION OF ELECTRONIC BOARDS WITH 7-SEGMENT DIGITS

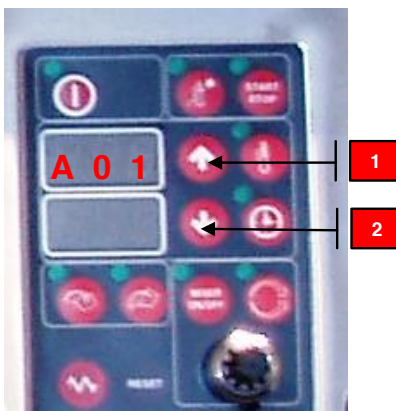
Follow the step-by-step operations below to configure the **7-SEGMENT DIGIT** electronic boards of the appliances to be connected to the 24.7 Station:

1. **Connect** the appliance to the mains.
2. With appliance on stand-by, press “THERMOMETER” [fig. 1 – Position 1] and “CLOCK” [Fig.1 – Position 2] buttons simultaneously until the message “A01” appears on the electronic board display [Fig. 1].



[Fig. 1]

3. With the message "A01" on the display, press **"ARROW UP"** [Fig. 2 – Position 1] and **"ARROW DOWN"** buttons [Fig. 1 – Position 2] simultaneously until **"A01"** parameter starts flashing.



[Fig. 2]

4. Go to parameter **"G10"** using **"ARROW UP"** and **"ARROW DOWN"** buttons.
5. **Hold down "THERMOMETER"** button for approx. three seconds until parameter **"G10"** starts flashing.
6. **Choose** a value between **1 and 31** for the parameter on the lower display using **"ARROW UP"** and **"ARROW DOWN"** buttons.

**WARNING: DO NOT SET SAME ADDRESSES ON DIFFERENT APPLIANCES.**

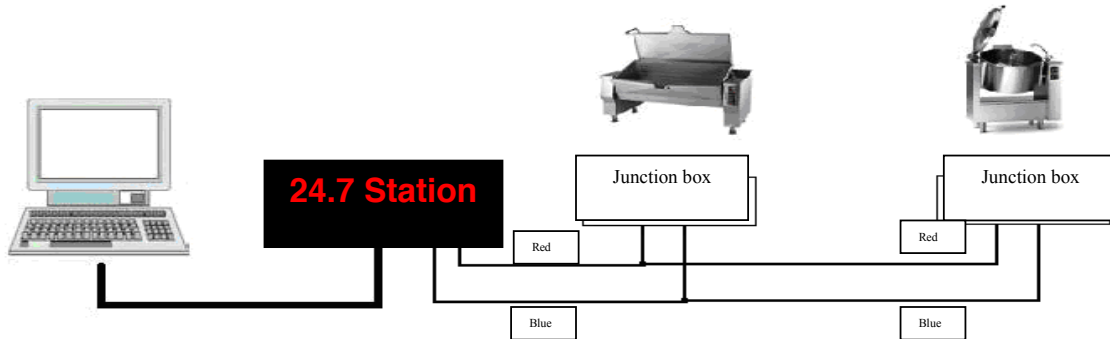
7. **Hold down "CLOCK"** button for approx. three seconds to save the parameter value.
8. Press **"ON/OFF"** to exit configuration [Fig. 3 – Position 1].



[Fig. 3]

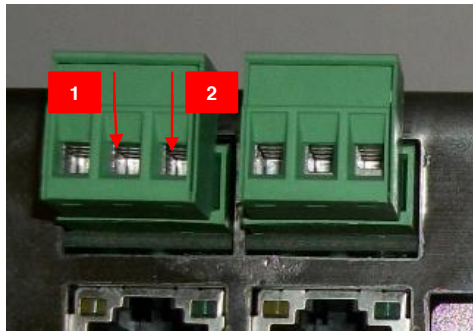
**2.3 24.7 STATION CONNECTION**

See below the diagram [Fig. 1] for the connection between the 24.7 Station, the appliances and, whenever necessary, the PC or network.



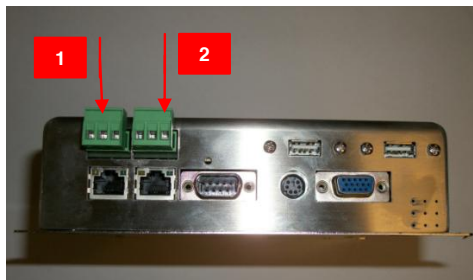
[Fig. 1]

In order to carry out the installation properly, connect the 24.7 Station to the appliance junction boxes using a 2 x 0.75 screened cable and respecting the polarity + (red) [Fig. 2 – Position 1] – (blue) [Fig. 2 – Position 2] of both the Station and the appliances.



[Fig. 2]

The appliances whose electronic boards were configured with the G10 parameter value set between 1 and 31 must be connected to junction box 1 [Fig. 3 - Position 1], while those configured with the G10 parameter value set between 33 and 63 must be connected to junction box 2 [Fig. 3 - Position 2].



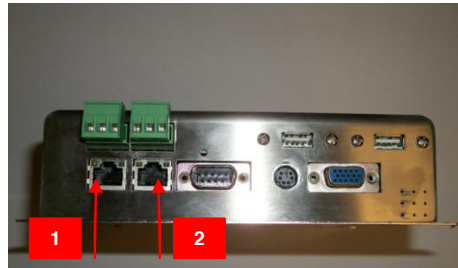
[Fig. 3]



If you want to monitor data using a network or a PC, connect them to the 24.7 Station using a RJ45 network cable. The two network ports [Fig. 4 – Positions 1 and 2] are factory configured with the following IP addresses:

Port	IP address
No. 1 [Fig. 4 – Position 1]	192.168.1.233
No. 2 [Fig. 4 – Position 2]	192.168.0.233

Both IP addresses may be modified according to the client's requirements (see following paragraph). Both standard and crossover RJ45 cables can be used since ports are auto-sensing.



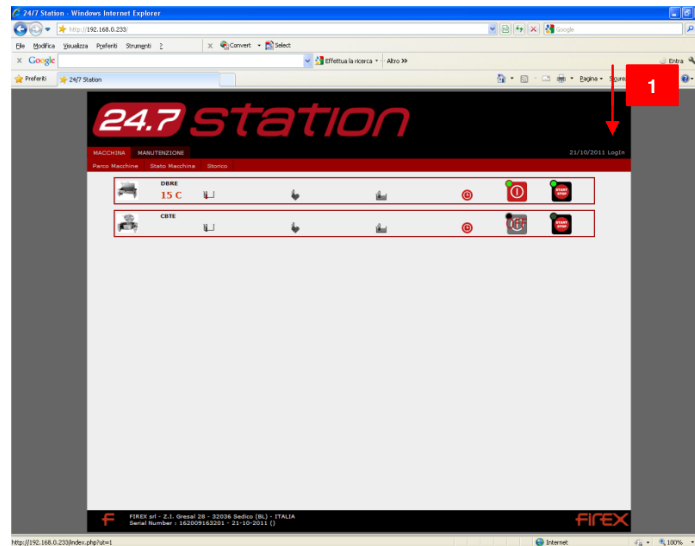
[Fig. 4]

#### 2.4 24.7 STATION CONFIGURATION

The 24.7 Station is delivered with a standard configuration which includes the list of the appliances purchased with it and two network addresses (192.168.0.233 and 192.168.1.233) corresponding to the two network ports as indicated in the paragraph above.

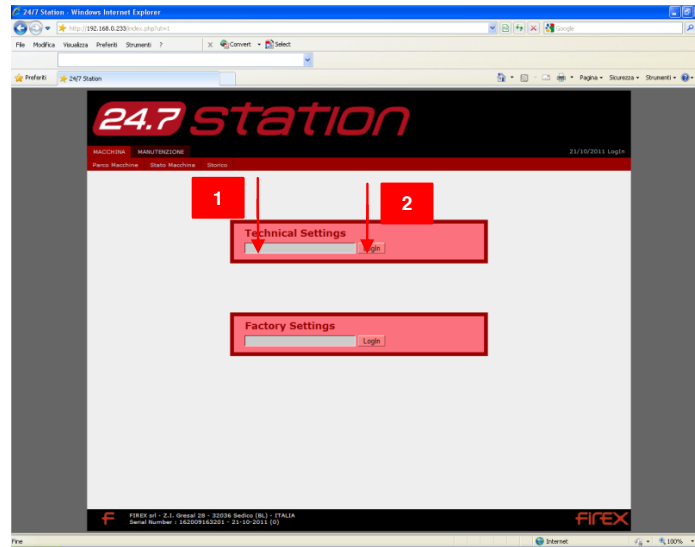
Follow the instructions listed below to modify the 24.7 Station factory configuration.

1. Click on “Login” [Fig. 1 – Position 1]



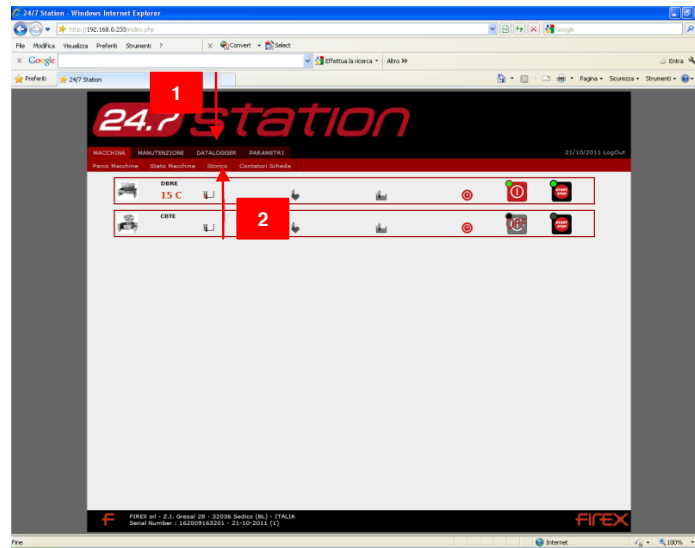
[Fig. 1]

2. Insert the access code in the “Technical Setting” field [Fig. 2 – Position 1] and click on the “LogIn” button [Fig. 2 – Position 2].



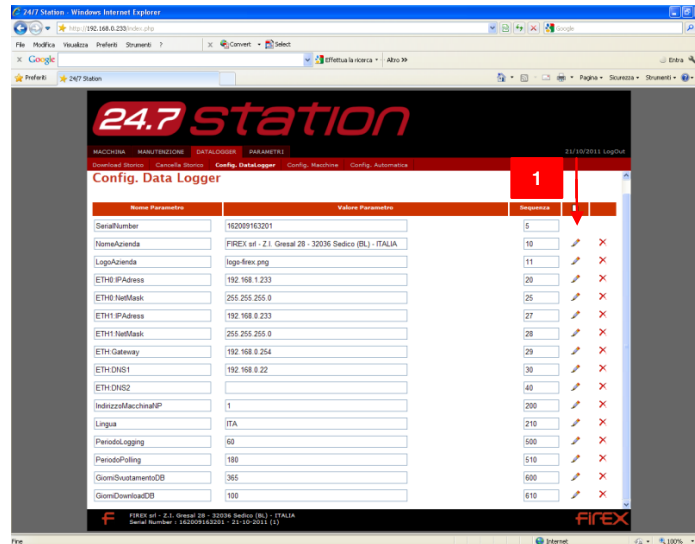
[Fig. 2]

3. Click on “DATALOGGER” [Fig. 3 – Position 1] and then on “Config.DataLogger” [Fig. 3 – Position 2].



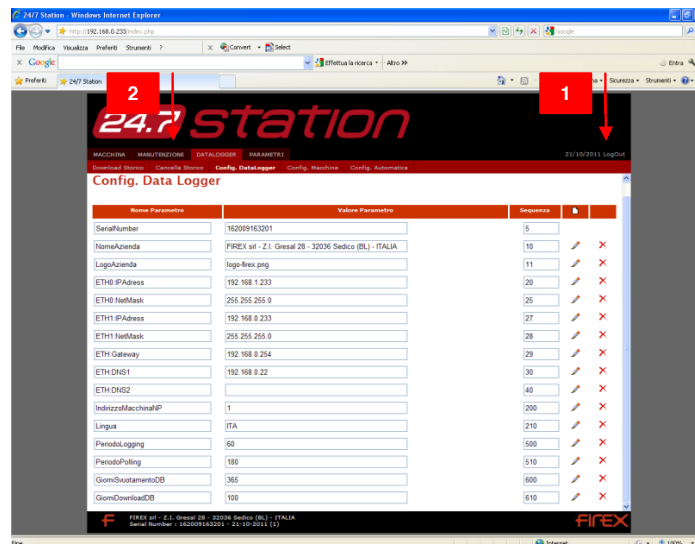
[Fig. 3]

4. Enter the changes you wish to make in the corresponding fields and save by clicking on the “Pen” icon [Fig. 4 – Position 1].



[Fig. 4]

5. Click on “LogOut” to exit configuration [Fig.5 – Position 1].



[Fig. 5]

Data saved in the record log can be deleted by clicking on “Delete Log” in the menu [Fig. 5 – Position 2].

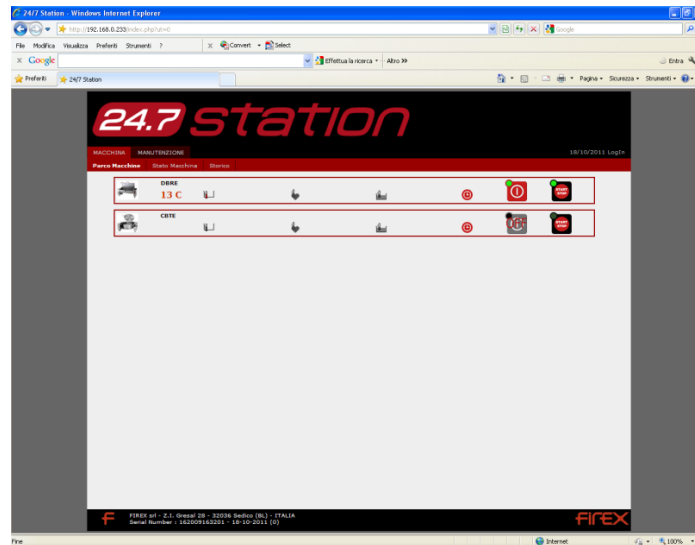
### 3. USER MODE

The 24.7 Station allows you to visualise the cooking session data of all the appliances connected to it, both as a group or in detail. It automatically stores the log concerning the different cooking sessions carried out and the relevant changes in the temperature of each appliance. You can visualise the log at any time and print it out whenever necessary.

All the information mentioned above can be visualised as listed and explained in the following paragraphs.

#### 3.1 APPLIANCES

Upon connection the first screen being visualised on the display is the one concerning the appliances connected to the 24.7 Station [Fig. 1]. As you will see, there is a line dedicated to each appliance listing the temperature values recorded by the different probes (bottom probe, core probe and probe in the vessel), the cooking time set, the appliance status (on or off) and the cooking session status (on or off). The appliances are identified by means of a picture and a customisable name (or by the Firex appliance code if no name has been selected).



[Fig. 1]

**Key**

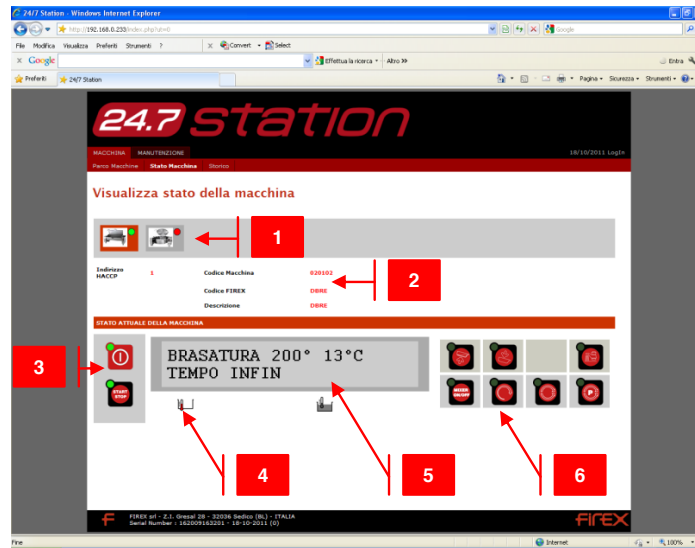
ICON	DESCRIPTION	FUNCTIONS
	<b>Bottom probe</b>	Indicates the temperature value detected in the appliance bottom at a specific time. No value is indicated if the appliance is switched off.
	<b>Core probe</b>	Indicates the temperature value detected in the product core at a specific time. No value is indicated if the appliance is switched off.
	<b>Probe in vessel</b>	Indicates the temperature value detected in the vessel at a specific time. No value is indicated if the appliance is switched off.
	<b>Cooking time</b>	Indicates the cooking time set in the appliance. No value is indicated if the appliance is switched off.
	<b>Appliance status</b>	Indicates the appliance status ("GREEN LIGHT" when the appliance is switched on or "OFF" when it is switched off). Click on the icon to switch it on or off.
	<b>Cooking session status</b>	Indicates the cooking session status ("GREEN LIGHT" when the cooking session is ongoing or "NO LIGHT" when it has been stopped).

**3.2 APPLIANCE STATUS**

Click on the relevant button in the menu to go to the "Appliance Status" [Fig. 1] screen. It lists the details of each appliance connected to the 24.7 Station. Data displayed (described in detail in the table below) refers to the appliance [Fig. 1 – Positions 1 and 2] and the cooking session status [Fig. 1 – Position 3] as well as to the probes provided as a standard option and the probes active at a specific time [Fig. 1 – Position 4], the messages on the electronic board display on the appliance [Fig. 1 – Position 5] and the functions available for each appliance identified by means of an icon (green light when the function has been selected) [Fig. 1 – Position 6].

Click on the picture of the appliance whose data you wish to visualise. The icon of the selected appliance will be highlighted with a red square. The small LED light included in the icon indicates the status of the appliance (green if it is switched on and red if it is switched off). This rule applies to all icons fitted with the same LED light.

Switch the appliance on and/or off by clicking on the "Appliance status" button, which is the only operation that can be carried out as described above.



[Fig. 1]

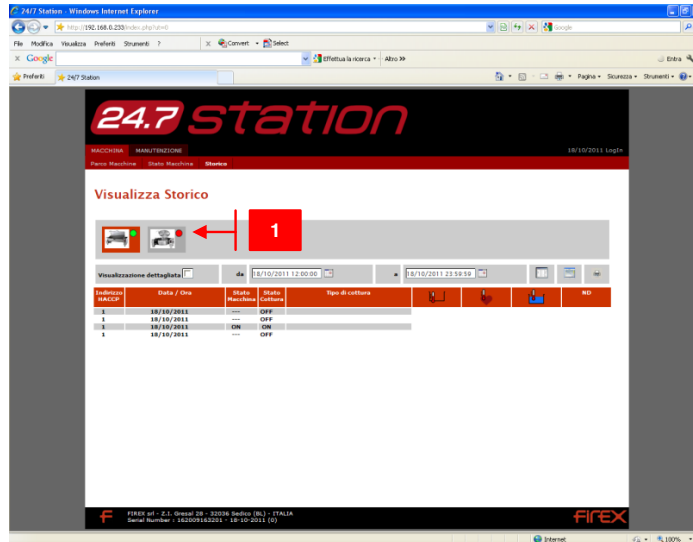
**Key**

POS.	DESCRIPTION	FUNCTIONS
1	<b>Selected appliance</b>	The selected appliance is highlighted by a red square. Click on the other appliance pictures to select them.
2	<b>Appliance identification data</b>	All the identification data of the selected appliance is displayed, such as the HACCP address, the appliance code, the FIREX code and a description.
3	<b>Appliance and cooking session status</b>	This indicates the appliance and the cooking session status according to the icon key included in the previous paragraph.
4	<b>Type of probe</b>	Displays the type of probes provided with the appliance as a standard option. It highlights in red the probes used during the ongoing cooking session.

<b>5</b>	<b>Appliance display</b>	Shows what it is visualised on the board display located on the side of the appliance.
<b>6</b>	<b>Appliance function buttons</b>	Shows the function buttons listed in the appliance board. If they have been selected the green light is on.

**3.3 LOG**

The “Log” screen [Fig. 1] allows you to visualise and print the detailed data stored for each appliance connected to the 24.7 Station. Click on the relevant button in the menu to display the screen. Click on the picture of the appliance whose data you wish to visualise. The icon of the selected appliance will be highlighted by a red square [Fig. 1 – Position 1].







[Fig. 1]

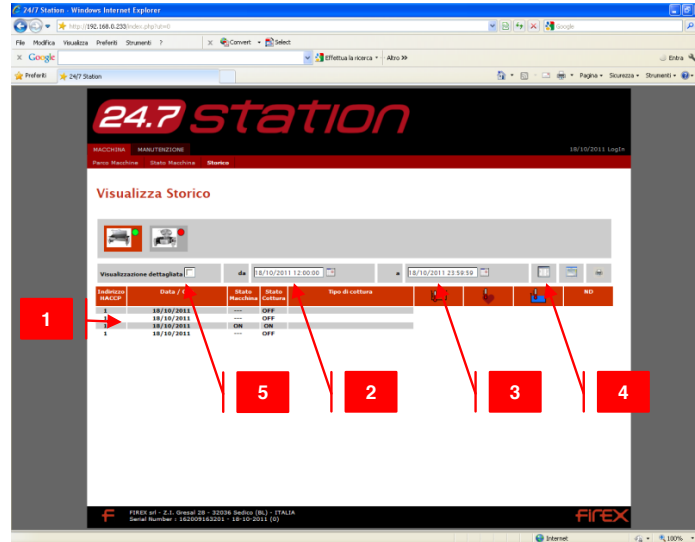
You can visualise:

1. Appliance and cooking session status.
2. Appliance and cooking session details.
3. Trend chart of the temperature values recorded by the different probes.
4. You can print the appliance and cooking session details.

**Key**

ICON	DESCRIPTION	FUNCTIONS
	<b>Calendar</b>	Displays the calendar (days and hours) to select the time span for the data you wish to visualise.
	<b>Visualise data</b>	Allows for the visualisation of the previously selected data.
	<b>Chart</b>	Displays the trends of the temperature values recorded by the probes during the selected time span.
	<b>Print</b>	Allows for the printing of the appliance and cooking session details for the selected time span.

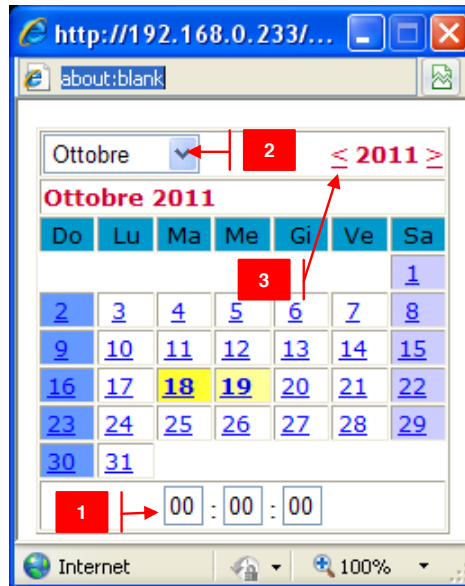
1. **Visualising the appliance and cooking session status (ON or OFF) at today's date [Fig. 2 – Position 1].** Enter the date and/or time in the “from” [Fig. 2 – Position 2] and “to” [Fig. 2 – Position 3] fields and click on the “Visualisation” button [Fig. 2 – Position 4] to visualise the data referring to a specific time during the day or change the date of the data stored.



[Fig. 2]

Insert date and time of the time span you wish to visualise using the window [Fig. 3] which can be opened by clicking on the "Calendar" icon. Select the date by clicking on it using the mouse and insert the time in the relevant fields [Fig. 3 – Position 1] according to the hh:mm:ss format. Confirm by clicking on the date as described above.

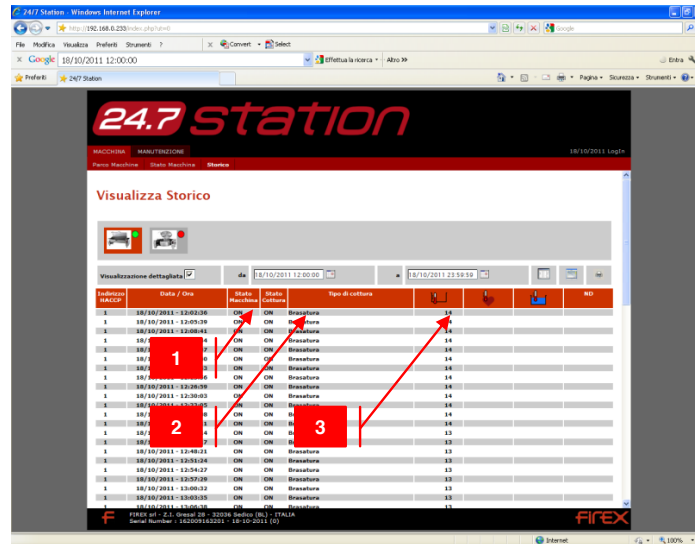
Select the month from the drop-down menu [Fig. 3 - Position 2] and the previous or the following year by clicking on the “<” or “>” buttons respectively [Fig.3 – Position 3].



[Fig. 3]

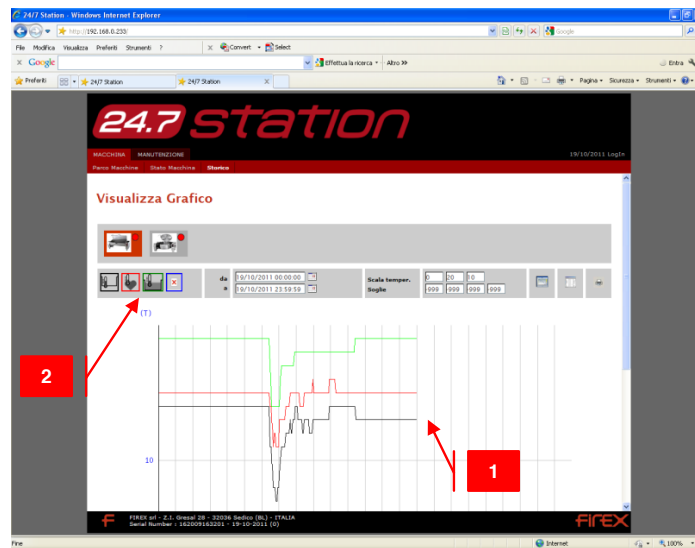


- Click the "Detail visualisation" field [Fig. 2 – Position 5] and the "Visualisation" button [Fig. 2 – Position 4] to **visualise the appliance and cooking session details** for the selected time span. The screen displays the recorded data, sorted by date-time, of the appliance and cooking session status (ON or OFF) [Fig. 4 – Position 1], as well as the type of cooking sessions carried out (e.g. braising) [Fig. 4 – Position 2] and the temperature values recorded by the various probes [Fig. 4 – Position 3]. The interval between one data recording and the next is three minutes, but it can be customised according to the client's requirements. The date and time of the detailed information you wish to visualise can be modified using the procedure described in the previous paragraph.



[Fig. 4]

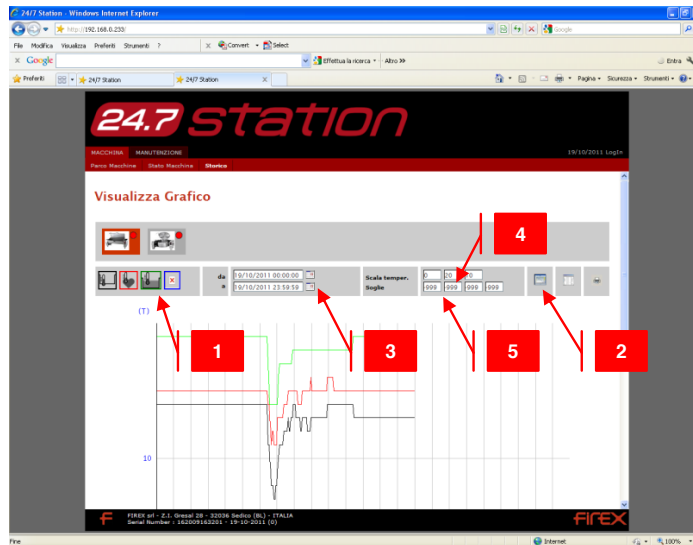
- Click on the relevant icon (see key under paragraph 3.3) to **visualise the temperature trend chart**. The screen will display the trends of the temperature values recorded by all the active probes during the selected time span [Fig. 5 – Position 1]. The colour of each line is the same as the one of the square around each probe icon [Fig. 5 – Position 2].



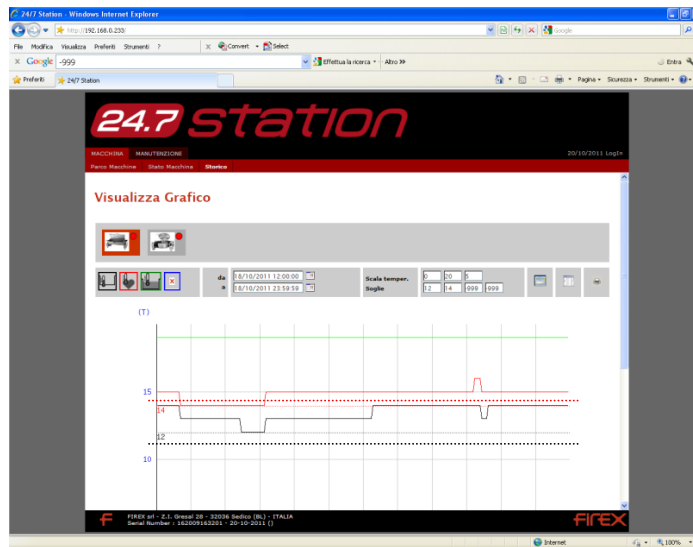
[Fig. 5]

In the temperature trend chart you can decide to:

- Exclude the representation of the recording of one or several probes by deselecting the relevant icon [Fig. 6 – Position 1] and then clicking on “Chart” [Fig. 6 – Position 2].
- Modify the time span by clicking on the calendar icon [Fig. 6 – Position 3], following the procedure under point 1 of this paragraph and then clicking on “Chart” [Fig. 6 – Position 2].
- Modify the temperature chart scale by entering the minimum value in the first field and the maximum value in the second field and the interval value in the second and third fields respectively. Then click on “Chart” [Fig. 6 – Position 2].
- Visualise control thresholds [Fig. 7] (up to a maximum of 4) by entering in the relevant fields [Fig. 6 – Position 5] the desired values. Then click on “Chart” [Fig. 6 – Position 2].



[Fig. 6]



[Fig. 7]

5. **Print the appliance and cooking session details** of the selected time span by clicking on the “Print” icon (see key under paragraph 3.3) of any Log screens you are currently visualising.

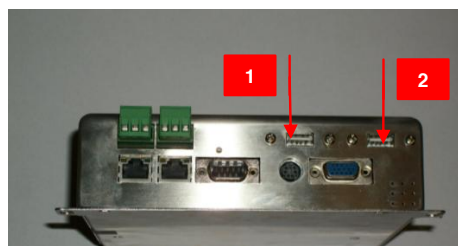
Id	Data	Cna	Cottura	Tipo Cottura	Sonda 1	Sonda 2	Sonda 3	Sonda 4	Errore
1	20111018	120236			14,00	15,00	15,00	0,00	Errore
1	20111018	120539			14,00	15,00	19,00	0,00	Errore
1	20111018	120841			14,00	15,00	19,00	0,00	Errore
1	20111018	121144			14,00	15,00	19,00	0,00	Errore
1	20111018	121447			14,00	15,00	19,00	0,00	Errore
1	20111018	121750			14,00	15,00	19,00	0,00	Errore
1	20111018	122053			14,00	15,00	19,00	0,00	Errore
1	20111018	122356			14,00	15,00	19,00	0,00	Errore
1	20111018	122659			14,00	15,00	19,00	0,00	Errore
1	20111018	122962			14,00	15,00	19,00	0,00	Errore
1	20111018	123265			14,00	15,00	19,00	0,00	Errore
1	20111018	123568			14,00	15,00	19,00	0,00	Errore
1	20111018	123871			14,00	15,00	19,00	0,00	Errore
1	20111018	124174			13,00	14,00	19,00	0,00	Errore
1	20111018	124477			13,00	14,00	19,00	0,00	Errore
1	20111018	124780			13,00	14,00	19,00	0,00	Errore
1	20111018	125083			13,00	14,00	19,00	0,00	Errore
1	20111018	125386			13,00	14,00	19,00	0,00	Errore
1	20111018	125689			13,00	14,00	19,00	0,00	Errore
1	20111018	125992			13,00	14,00	19,00	0,00	Errore
1	20111018	126295			13,00	14,00	19,00	0,00	Errore
1	20111018	126598			13,00	14,00	19,00	0,00	Errore
1	20111018	126901			13,00	14,00	19,00	0,00	Errore
1	20111018	127204			13,00	14,00	19,00	0,00	Errore
1	20111018	127507			13,00	14,00	19,00	0,00	Errore
1	20111018	127810			13,00	14,00	19,00	0,00	Errore
1	20111018	128113			13,00	14,00	19,00	0,00	Errore
1	20111018	128416			13,00	14,00	19,00	0,00	Errore
1	20111018	128719			13,00	14,00	19,00	0,00	Errore
1	20111018	129022			13,00	14,00	19,00	0,00	Errore
1	20111018	129325			13,00	14,00	19,00	0,00	Errore
1	20111018	129628			13,00	14,00	19,00	0,00	Errore
1	20111018	129931			13,00	14,00	19,00	0,00	Errore
1	20111018	130234			13,00	14,00	19,00	0,00	Errore
1	20111018	130537			13,00	14,00	19,00	0,00	Errore
1	20111018	130840			13,00	14,00	19,00	0,00	Errore
1	20111018	131143			13,00	14,00	19,00	0,00	Errore
1	20111018	131446			13,00	14,00	19,00	0,00	Errore
1	20111018	131749			13,00	14,00	19,00	0,00	Errore
1	20111018	132052			13,00	14,00	19,00	0,00	Errore
1	20111018	132355			13,00	14,00	19,00	0,00	Errore
1	20111018	132658			13,00	14,00	19,00	0,00	Errore
1	20111018	132961			13,00	14,00	19,00	0,00	Errore
1	20111018	133264			13,00	14,00	19,00	0,00	Errore
1	20111018	133567			13,00	14,00	19,00	0,00	Errore
1	20111018	133870			13,00	14,00	19,00	0,00	Errore

[Fig. 8]

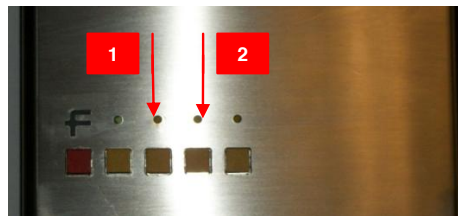
**3.4 DOWNLOADING DATA ON A USB FLASH DRIVE**

The 24.7 Station allows you to download recorded data to a USB flash drive (4Gb storage capacity recommended) and to visualise it in Excel (the file will be saved with a csv. format) following the procedure below:

1. **Insert** the USB flash drive in one of the two ports on the back of the 24.7 Station [Fig. 1 – Positions 1 and 2]. Two yellow LED lights will turn on [Fig. 2—Positions 1 and 2]



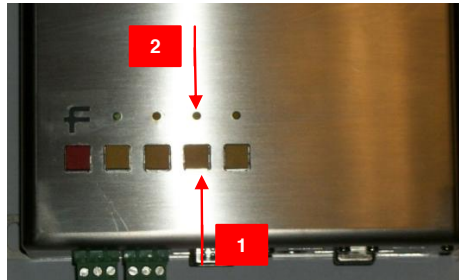
[Fig. 1]



[Fig. 2]

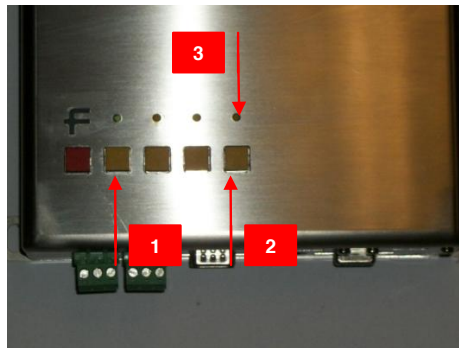
2. **Press P3** (third yellow button from the left) [Fig. 3 – Position 1] located on the upper part of the 24.7 Station. The relevant **L3** LED will start flashing [Fig. 3 – Position 2].

When the LED turns off [Fig. 3 – Position 1] the data has been successfully downloaded to the USB flash drive.



[Fig. 3]

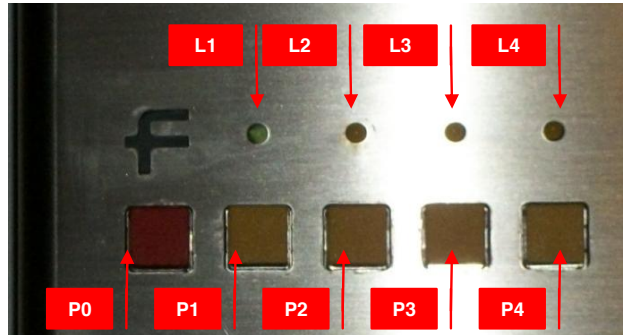
3. If the amount of data downloaded onto the USB flash drive approaches 4Gb, **delete** the oldest data from the database by clicking **P1** (first yellow button from the left) [Fig. 4 – Position 1] and **P4** (fourth button) [Fig. 4 – Position 2] simultaneously until LED **L4** starts flashing (fourth from the left) [Fig. 4 – Position 3]. When the latter turns off, all data, whose recording date precedes today's date minus the number of days previously entered in the "DB Emptying days" field in the "Data logger configuration" screen (see paragraph "2.4 24.7 STATION CONFIGURATION" Fig. 4), has been deleted.



[Fig. 4]

#### 4. BUTTON AND LED KEY OF THE 24.7 STATION

The main functions of the 24.7 Station LEDs and buttons are listed below:



**Button key**

BUTTON	FUNCTION
P0	Switch on/off
P1 + P4	Database deletion
P2	Data Logger Configuration from USB flash drive
P3	Copy of database on USB flash drive

**LED key**

LED	FUNCTION
L1	Flashes whenever the 24.7 Station is working
L2 + L3	Flash while operations on the USB flash drive are carried out
L4	Flashes when database is being deleted