

**A – DAILY CHECK LIST :**

1. Check that water and steam valves are open.
2. Turn on the power on the mains supply board.
3. Turn on the ON/OFF switch of the sterilizer.
4. Wait for the steam generator, ready to supply saturated steam. Pressure should reach to 3,5 – 4 bars.
5. Wait for 15 – 20 minutes in order to fill up steam jacket with pressurized steam. Observe that steam jacket pressure is 1.4 bars(for 121 °C) or 2.4 bars (for 134 °C).

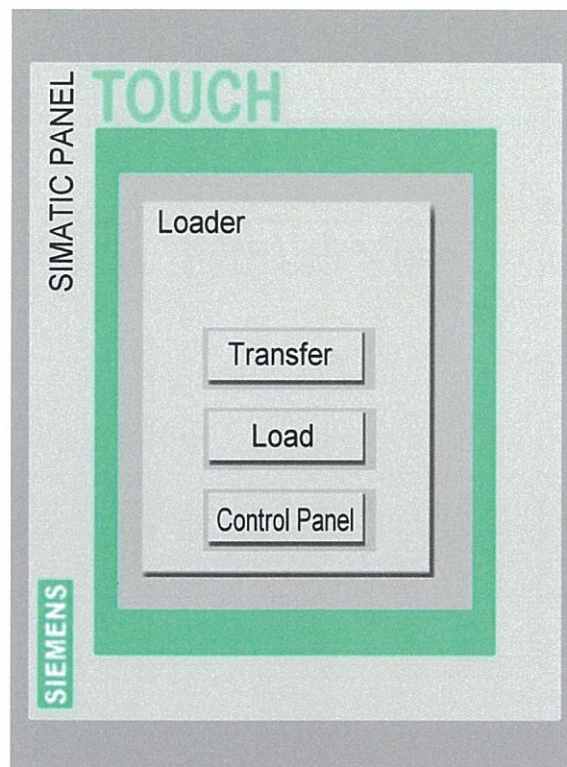
**B – OPERATION :**

The Sterilizer is controlled by help of a microcomputer and a touch panel.

**1- PIN CODE :**

If the sterilizer is shut down after a normal cycle, it is necessary to enter the correct pin code to restart it. This is to prevent the sterilizer to be used by an unauthorized person.

a-) The opening page (Fig. 1) will appear on the screen.

**FIG. 1**

b-) Touch the START button or wait for a few seconds, Fig. 2 will be seen.



**FIG. 2**

c-) When you touch the box in front of Pin Code, the screen will change to the page shown in Fig. 3.



**FIG. 3**

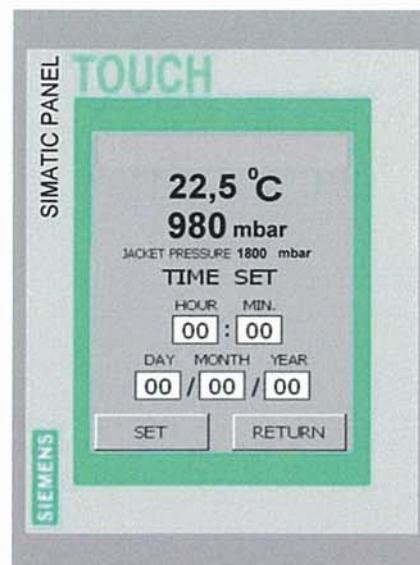
d-) Write down the pin code, by using the numbers in page shown in Fig. 3. Turn back to the page of Fig. 2, by touching ENTER “↵” button. Then touch the Pin Code Approval button to check if the code is true. The page of Fig. 4 will come to the screen, if it is true.



**FIG. 4**

## 2 – MAIN MENU AND PROGRAM SELECTION

a-) The time and clock can be adjusted, by touching the TIME SET button, if it is needed.

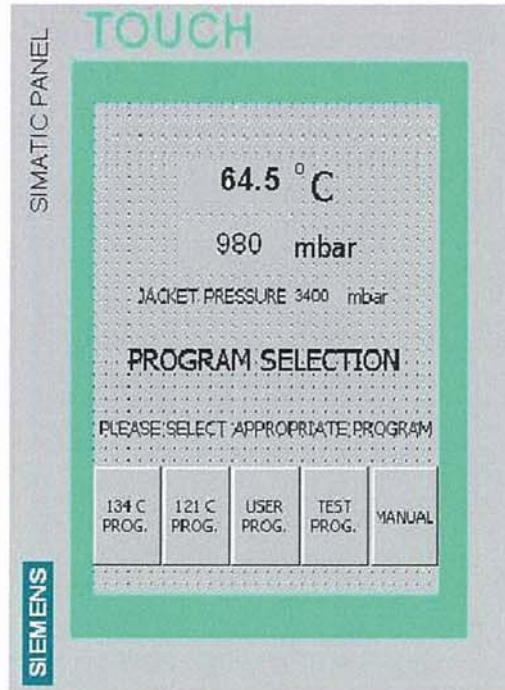


**FIG.5**



b-) Load the material to be sterilized into the chamber and close the door.

c-) The Main Menu appears on the screen, when the door is closed.



**FIG.6**

d-) Considering the type of the material loaded, select the program by touching the related button.

### **3 – SELECTING THE STERILIZATION PROGRAM**

a-) When the 134 °C Program button is touched;



**FIG. 7**

b-) When the 121 °C Program button is touched;



**FIG. 8**

c-) When the User Program button is touched. . (To adjust the parameters in the User Program, see 4.SETTINGS PROGRAMS section)



**FIG. 9**

d-) When the Test Program button is touched;



**FIG. 10**

e-) When the Manual Control button is touched at Main Menu (FIG.6) ;



**FIG. 11**

With the help of the touch buttons in this page, it is possible to operate the sterilizer manually. (see C. MANUAL OPERATION section for manual control.)



f-) The page show in Fig. 12 comes on to the screen after selecting the required program. Touching the Main Menu button, the Main Menu page comes into the sight.



**FIG.12**

g-) Touch the START button, if the program parameters are found to be suitable. Touch the RETURN button to turn back or touch the Main Menu button to turn Main Menu.



**FIG. 13**



h-) During the cycle, it is possible to have technical information by touching related buttons.



**FIG. 14**



**FIG.15**

i-) In order to interrupt a cycle, simply touch the STOP button. The page in Fig.17 will appear;



**FIG. 16**



**FIG. 17**

By use of this page, it is possible to restart the cycle, to open the door or to turn back to the Main Menu.

k-) Door is released at the end of the cycle, and alerts audibly. In order to shut down the buzzer, either the door is opened or STOP button is touched

#### 4 – SETTINGS IN USER PROGRAMS :

Touching the SETTINGS button at User Programs, the page of Fig. 18 will appear;



**FIG. 18**

- a-) First select the user program number to be set. (01 to 15)
- b-) Touch the boxes across the Prevacuum, Sterilization Time and Dry Time buttons. Fig. 3 will appear on the screen.
- c-) Adjust the parameter and save it by touching ENTER button.
- d-) Repeat c-) for all parameters.
- e-) Check the values and touch RETURN button if they are suitable. The new values will be saved and page shown in Fig. 9 will appear.



**C- MANUAL OPERATION :**

1. Load the equipment to be sterilized inside the chamber and close the door. Touch the MANUAL button to transfer to manual page (see Fig. 11).

**FIG. 19**

2. Touch GASKET PRESSURE button and observe the pressure of Gasket Pressure manometer to reach 4.5 bars.
3. Select process temperature by 121 °C / 134 °C button.
4. Press EXHAUST and VAC. PUMP buttons and wait for the chamber pressure drop down to 150 mbar. This period should take maximum 5 minutes; otherwise see if there is an air leakage or vacuum pump failure.
5. Release EXHAUST and VAC. PUMP buttons and press STERILIZATION button to fill sterilizer chamber up to 1700 mbar with steam. When reached to this pressure level, release STERILIZATION button.
6. Repeat steps 4 and 5 as many as the number of prevacuum cycles required. Advised number of prevacuum is 4.
7. Press STERILIZATION button and start a timer after reaching the selected temperature.
8. At the end of the sterilization period release STERILIZATION button and touch EXHAUST button.
9. Touch also VAC. PUMP button when chamber pressure drops below 1200 mbar, in order to start drying cycle.
10. Wait for 10-15 minutes for drying period and then release EXHAUST and VAC. PUMP buttons.
11. Release GASKET PRESSURE button and touch GASKET RELIEVE button.
12. Wait for 1 minute and press FILTERED AIR button to reach atmospheric pressure in order to open the door.
13. Release FILTERED AIR and GASKET RELIEVE buttons after chamber reaches to atmospheric pressure.
14. You can open the door and unload the sterile goods.



**D – END OF DAY CHECK LIST :**

1. Turn off the ON / OFF switch of the sterilizer.
2. Turn off water and steam valves.
3. Turn off the power on the mains supply board.
4. Let the door open in order to have long-term seal quality.

**E- DAILY MAINTENANCE OF THE STERILIZER CHAMBER**

1. Sterilizer chamber should be cleaned with a plastic brush at the end of the day.
2. Chamber should be cleaned immediately, in case of dirtyness between sterilization cycles.
3. Surface of the chamber should not be scratched during cleaning.

**F – LIME CLEANING PROCEDURE OF STERILIZATION CHAMBER DRAINAGE  
(monthly)**

1. Pour 1 table spoon of “lime remover” into 1liter of water. Mix well and heat up to 50 °C
2. Put off steel filter at the bottom of the chamber and pour the mixture in to drainage.
3. Wait for 5 minutes.
4. Pour 1 liter of fresh water and rinse drainage.
5. Put back the steel filter.

**G– ISSUES TO PAY ATTENTION FOR CONNECTIONS OF THE STERILIZER :****1 – WATER :**

- Water supply should have water without lime and dregs. Hardness of water should be less than 5 fr.
- Use of bad quality water, will terminate warranty period of the sterilizer.

**2 – MAINS SUPPLY:**

- Mains supply should be 380 V, 3 phases, 50 Hz. Voltage variations should not exceed %5.
- Mains supply cables should be suitable for the electric consumption of the unit.
- Connections should be done by an authorized electrician.

**3 - DRAINAGE:**

- Drainage should have bigger diameter than the drain line of the sterilizer.
- Drainage should have descending slope and should have check valve to prevent backwards leak.
- Drainage should resist heat and steam.