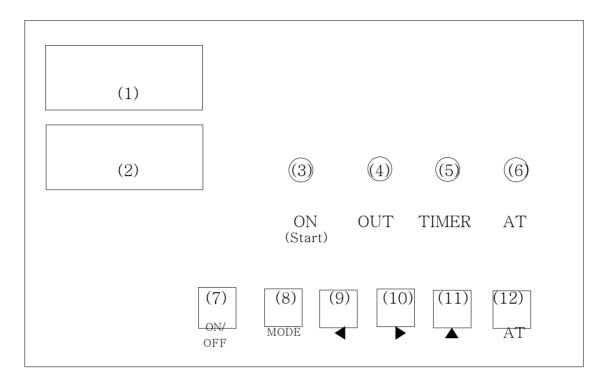# AUTOCLAVE

## ※ Operating Manual

### Safety instructions and warnings.

1. Check Power source and voltage.(220V, 1 Phase)
2. Close the cover of autoclave, and check the abnormalities.
3. Please close the valve (Manual ventilation valve) in front of the unit.
4. Use a timer to set the time you want.
5. Press switch (start/stop) .
6. The factory setting are 121℃ and 1.2Kg/㎠ pressure.
7. If target temperature and pressure, timer lamp "on" and starting timer.
8. After, sterilization. Buzzer is 20 seconds after ringing and remove the pressure.

## ※ Precautions.

1. This machine use high temperature and pressure. For your saety, Do not any abuse operation and damage the machine. Please read the manual.
2. Always keep the water clean. (recommend distillation water)
3. Always check the water level. Water supply to the perforated plate
   - Above situation, If stack lack of water or use the dirty water, It makes electronic short or failure.
4. After operation. cover is fully open.
   - If not follow may impairment of cover sealing.
5. Operation or after operation. keep caution. cover may very hot.

* If machine is abnormal. need to our assistance and service.
* We service warranty is 1 year. (after purchase)

* This machine not medical equipment.

TYPE



(1) : Temp. digital display  (PV)

(2) : Setting Temp. controller & display  (SV)

(3) : ON/OFF(start/stop) Lamp  (ON)

(4) : Heating Lamp  (OUT)

(5) : Timer Lamp  (TIMER)

(6) : Auto Tuning Lamp  (AT)

(7) : ON/OFF(start/stop) KEY

(8) : MODE KEY

(9) : Left  KEY

(10): Right  KEY

(11): Setting  KEY

(12): Auto Tuning KEY

# 1.2 Control Method

## 1.2.1 Begging state

1. At Power source of electricity to beggining display.
   - Temperature window (PV), setting temperature window and time window (SV) are displayed "0000"
   - Temperature window display sensor type(K-Pt, D-Pt,K-CA), setting temperature window display V5.0 (Version)
   - Temperature window display "current temperature", setting temperature window(SV) "display setting value"

2. Normal Mode screen
   - Temperature window display "current chamber temperature". set temperature window display "set temperature value" at power source of electricity to display named "normal mode"

## 1.2.2 Change screen

   - If you want see "set time" while the operation, press "AT KEY" once. under display window displayed set time. but must set monitor mode. however, the "factory mode" ⇨ P.SYS section ⇨ time(TIMER ENABLE) set "ON"

## 1.2.3. Operation

   - Set temperature and time, and ON/OFF KEY 1.5 seconds to press the ON lamp lights and driving state. back ON/OFF KEY 1.5 seconds to press the STOP state.

## 1.2.4 Operation

1. Temperature setting
   To change the temperature setting, press and release the MODE KEY briefly display the temperature on the display of temperature and the set temperature will be displayed in the window below the first digit(1 digit) the cursor is blinking.
   When the digit you want to change the "◄" (cursor) keys

to move the cursor and "INC" (▲) KEY is set to the desired number, then press the MODE KEY setting is completed.

2. Time and reservation setting

To change the value of time, double pressing and releasing the MODE KEY temperature on the display shows the time and the setting time is displayed in the window below the first digit (1 digit) the cursor is blinking.

When the digit you want to change the "◄"(cursor) keys to move the cursor and "INC" or "DEC" KEY is set to the desired number, then press the MODE KEY setting is completed.

FACTORY MODE ⇨ P.SyS TM.SC set depending on the setting of the change in hours will vary, as shown below.

- HH.MM -> 00 . 00 - 99 . 59 (Hour . Minute)
- DD.HH  -> 00 . 00 - 99 . 23 (Day . Hour)
- MM.SS -> 00 . 00 - 99 . 59 (Minutr . Second)

However, FACTORY MODE TIME -> P.SyS set to "ON" if you can see it only when the time can also be set.

To change the setting of the delay time on the front of the Press and release the MODE KEY three times the temperature on the display DELY(DELAY) is displayed in the window below is displayed, set the time, the first digit (1 digit) the cursor is blinking. The place to which you want to change the "◄" (cursor) to move the cursor and then press "INC" or "DEC" KEY is set to the desired number, then press the MODE KEY setting is completed.

FACTORY MODE -> P.SyS TM.SC set time depending on the setting of the unit will vary as the time scale. However, FACTORY MODE -> P.SyS DELY (DELAY ENABLE) set to "on" only when the delay time can be set.

### 1.2.5 Operation status

1. Begging

1.5 seconds by pressing the "RUN KEY RUN" lamp is lights up and

the RUN state.
- TIMER ENABLE = in case of "ON"
Variation (SV-PV absolute value) > tM.St the value => TIMER lamp flashes.
Variation (SV-PV absolute value) < tM.St the value => TIMER lamp lights.
-TIMER ENABLE = in case of off or TIMER setting = 0
TIMER lamp is off

2. Finish
- TIMER auto finish
After a set period of time SV TIMER lamp lit on the display "END" flashes on the announces that it is the end. "beep" is set to the amount of time the buzzer will sound. The RUN KEY If you press once STOP mode, all output is off.

- Forced finish
During operation, press the RUN KEY 1.5 seconds. RUN lamp goes off and force the STOP state.

3. AUTO TUNING
- RUN AT KEY for 5 seconds while the press is running the AT lamp will blink. STOP AT KEY force again for 5 seconds or press AUTO TUNING is interrupted. AUTO TUNING on the RUN state can run. Once AUTO TUNING is automatically turned off.