

JEC-3000FC AUTO FINE COATER

Coating Operation Procedure (AUTO mode)

1. JEC-3000FC turned off (Chamber: atmospheric pressure).
2. Select “Air” using the gas type switch.
3. Remove top plate and glass cylinder and adjust the height of the base plate.
Make sure that you place the top plate on the silicon rubber that is provided. Do not place the top plate upside down. *Placing the top plate upside down may cause or to lose stability and fall or cause damage.*
4. Set the SEM specimen stage with the specimen mounted to the base plate.
5. Set the glass cylinder and mount the top plate.
6. Turn on the JEC-3000FC -*this will start Rotary Pump, can not operate until the chamber pressure reaches 20Pa or less (indication: “-H-”)*
7. Press the Display Mode Selection button (3, see figure 5) and change the indication to TIMER. Set the coating time using ▼▲ buttons.
8. Select the current using the Ion current preset buttons.
9. Press the AUTO button to select the AUTO mode.
10. Press the START/STOP button to start coating - *This will start sputtering after flash introduction or micro introduction of the gas.*
11. Coating complete.
12. Turn off the power of the JEC-3000FC and ventilate the chamber and take out the specimen.

The operation panel includes switches, buttons, and a display on the front of the basic unit. Immediately after power on, (-H-) will be displayed on the ② display. Operations from the buttons other than the power switch are disabled until the vacuum degree reaches 20 Pa and a beeping buzzer sound is heard. This is a normal initial operation and not an indication of abnormality.

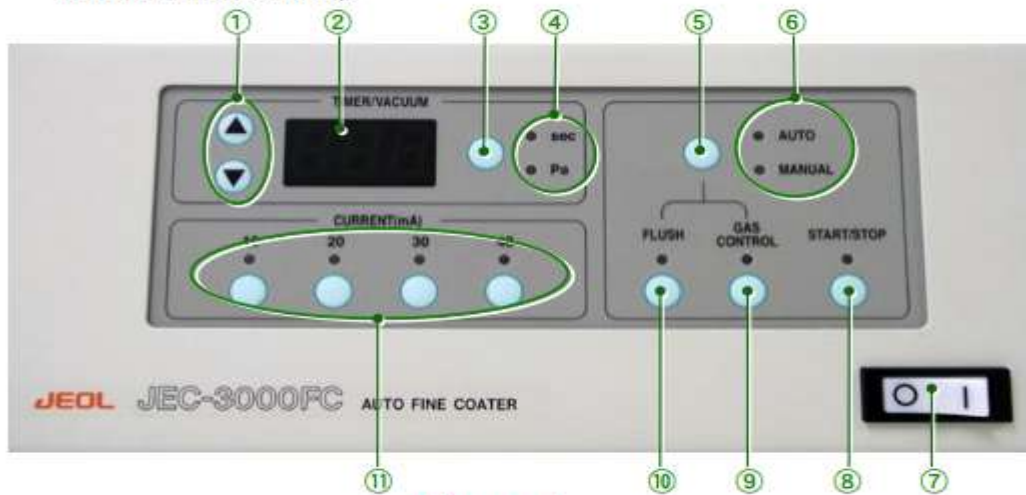


Figure 1

- ① **Timer setting button**
Pressing these buttons sets the coating time.
▲: Press this button to increase the coating time.
▼: Press this button to decrease the coating time.
✂ The time range that can be set is 1 sec to 300 sec. The time can be set in 1-second intervals within the above range.
- ② **Display**
Indicator that displays coating time and the pressure in the chamber
- ③ **Display mode selection button**
Pressing this button switches the display mode.
Sec: Coating time
Pa: Pressure in the chamber
- ④ **Display mode**
The LED indicator of the mode selected using the ③ Display mode selection buttons will light up.
- ⑤ **Coating mode selection button**
Pressing this button selects the coating mode.
AUTO: AUTO mode
MANUAL: MANUAL mode
- ⑥ **Coating mode indication**
The LED indicator of the mode selected using the ⑤ Coating mode selection button will light up.
- ⑦ **Power switch**
 - Turning this switch to ☐ turn the power on.
Upon turning on the power, the power is supplied to the RP or the attachments that are connected to the JEC-3000FC.
 - Turning this switch to ☐ turns the power off.
When the power is turn off, the chamber will be automatically vented to the atmospheric pressure.
- ⑧ **"START/STOP" button**
Pressing this button starts the coating in the mode selected using the ⑤ Coating mode selection button.
✂ If this button is pressed during the coating operation, the coating will be terminated.
- ⑨ **"GAS CONTROL" button**
Pressing this button injects a specified amount of gas into the chamber.
✂ This button is enabled only in the MANUAL mode. After pressing the START button, this button becomes disabled.
- ⑩ **"FLUSH" button**
Pressing this button injects purge gas into the chamber for the specified length of time.
✂ This button is enabled only in the MANUAL mode. After pressing the START button, this button becomes disabled.
- ⑪ **Current selection button**
These buttons are for selecting the current from 10mA/ 20mA/ 30mA/ 40mA.
The set value is stored when the START button in pressed and retained even after the power is turned off by using the ⑦ power switch.
✂ A current value other than the above options cannot be selected.
✂ Be sure to press the buttons one at a time. If two or more buttons are pressed simultaneously, all the LED indications will turn off.