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SEQUENCE INJECTION CONTROLLER SIT700

Instruction Manual



Ver. 4.5 MN SIT700 English

Thank you for using Sequence Injection Timer SIT700

Before using the product, please read this instruction manual carefully to avoid any damage due to improper use. If you have any questions, please do not hesitate to contact our Head Office or your nearest YUDO Office.

Contents

- 1. Environments 3
- 2. Composition of Control Module 3
- 3. Central Processing Unit 3
- 4. Input 3
- 5. Display 4
- 6. Output 4
- 7. Start to Run 4
- 8. Menu Setting 6
- 9. Wiring Specification 7

1. Environments

- 1) Main Power Input : AC220V/50-60Hz
- 2) Signal Input Power : DC24V or AC220V
- 3) Solenoid Valve Output Power : DC24V(Less than 100mA per GATE) or AC220V(Total less than 1A)

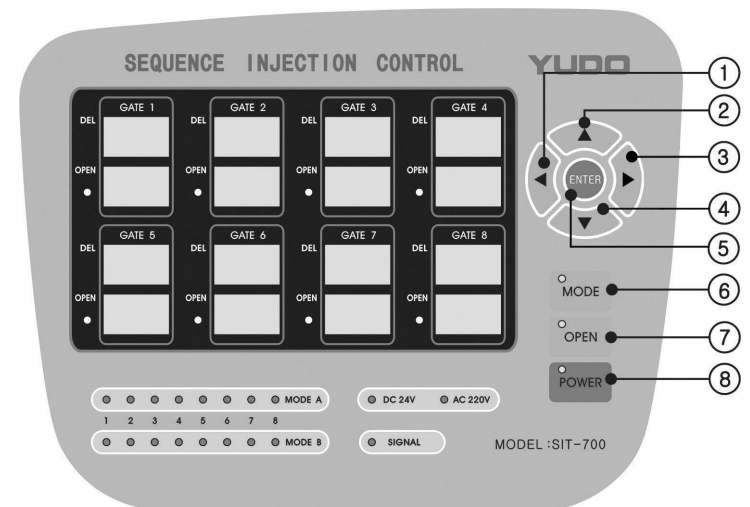
2. Composition of Control Module

- 1) Control PCB : Power unit, MICOM, Input/Output unit
- 2) Display PCB : Display unit, Switch









3. Central Processing Unit

- 1) S.M.P.S¹⁾ : To transform input AC220V to DC24V/1A, DC5V/1A
- 2) M.P.U : To control input/output and display
- 3) RELAY : Solenoid Valve running element(DC24V or AC220V output)

4. Input



1) S.M.P.S : Switching Mode Power Supply

- ①    
 - a. To move to gate for setting.
 - b. To set or to move.
- ⑤ 
 - a. To select gate for setting.
 - b. To finalize set or to exit the gate selected.
- ⑥ 
 - a. To select motion mode (MODE A >> MODE B >> GATE off) for each gate.
 - b. To set unit of each gate (999/99.9 /9.99).
- ⑦ 
 - a. To open manually a gate or all gate
- ⑧ 
 - a. To turn On/Off timer


5. Display

- 1) Display delay time and open time of each gate in display panel.
- 2) Display LED on while output on.
- 3) Display MODE A or MODE B of each gate with LED.
- 4) Display output voltage (DC24V or AC220V) to Solenoid Valve with LED.
- 5) Display LED on while signal on.







6. Output

- 1) Put out DC24V or AC220V via relay for the open time of each gate.









7. Start to Run

- 1) Connect cables
 - Connect to main input power, signal input from injection machine, output to mold.
 - Make sure the main input voltage(see rear of timer case), output voltage to mold.
- 2) Power on
 - Power LED is blinking while power on.
- 3) Switch between actions
 - i) Press 
 - a. Power LED blinks.
 - b. Display delay time value and open time value at each display panel.







4) Switch between MODE A, MODE B and gate off

- i) Press  for 4 seconds.
 - a. Buzzer rings and mode LED blinks.
 - b. MODE LED of 1st gate blinks.
 - c. Hit ,  to switch MODE A/B and gate off.
 - d. MODE A or MODE B LED blinks.
 - Both MODE A and MODE B LEDs blink when gate off.
 - e. Move using ,  between gates.
 - f. When move, MODE A or MODE B LED is blinking in the gate.
 - g. Press  to save, or keep idle for 4 seconds to automatic save.
 - h. When gate off, all display is off(MODE A/B LED, DEL/OPEN display panel off).











5) Switch between units(999 / 99.9 / 9.99)

- i) Move to the gate using , , and press  for 4 seconds to confirm.
 - a. Buzzer rings and mode LED blinks.
 - b. "Unl" displays in DEL panel and 999(or 99.9/9.99) displays in OPEN panel.
 - c. Switch units using , .
 - d. Move gate using , .
 - e. Hit  to save, or keep idle for 4 seconds to automatic save.






6) Manual open

- i) All OPEN
 - a. It keeps open while  pressed.
- ii) A gate OPEN
 - a. Move using , , ,  to get gate.
 - b. It keeps open the gate while  pressed.

7) Set DEL time

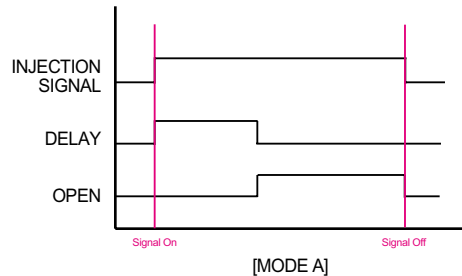
- i) Move using , , ,  to get gate and its DEL panel,  to confirm.
 - a. Right digit in DEL panel blinks.
 - b. Set time using , .
 - c. Move between digits using , .
 - d. Hit  to save, or keep idle for 4 seconds to automatic save.

8) Set OPEN time

- i) Move using  to get gate and its OPEN panel,  to confirm.
 - a. Right digit in OPEN panel blinks.
 - b. Set time using .
 - c. Move between digits using .
 - d. Hit  to save, or keep idle for 4 seconds to automatic save.

8. Menu Setting

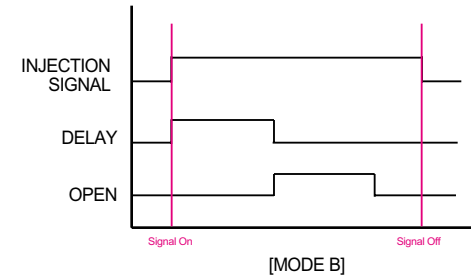
1) MODE A



i) Example

- a. In case injection signal = 10sec and DEL time = 4sec, then after DEL time, it opens (Relay ON) for 6 sec.
- b. For the delay time, it counts down and displays it in DEL display panel, and just after DEL time, it opens (Relay ON).
- c. In case injection signal is off before delay time passed, it resets to set time.
- d. Even after DELAY time passed, injection signal is keeping on, it opens, and it counts up the open time and displays it in OPEN display panel.
- e. When injection signal is off, delay set time will be displayed in DEL display panel, and OPEN display panel displays counted open time until next injection signal comes on.

2) MODE B



i) Example

- a. In case injection signal = 10sec, DEL time = 4sec, and OPEN time = 4sec, then when injection signal comes on, after DEL time, it opens for OPEN time(4 sec).
- b. For the delay time, it counts down and displays it in DEL display panel, and just after DEL time, it opens for OPEN time and it counts down from the OPEN set time and displays it in OPEN display panel.
- c. In case injection signal is off before delay time passed, it resets to set time.
- d. In case injection signal is off before open time passed, it resets to set time.
- e. When injection signal is off, delay set time and open set time will be displayed in DEL display panel and OPEN display panel respectively.

3) Other Menu

i) Output Voltage Indicator

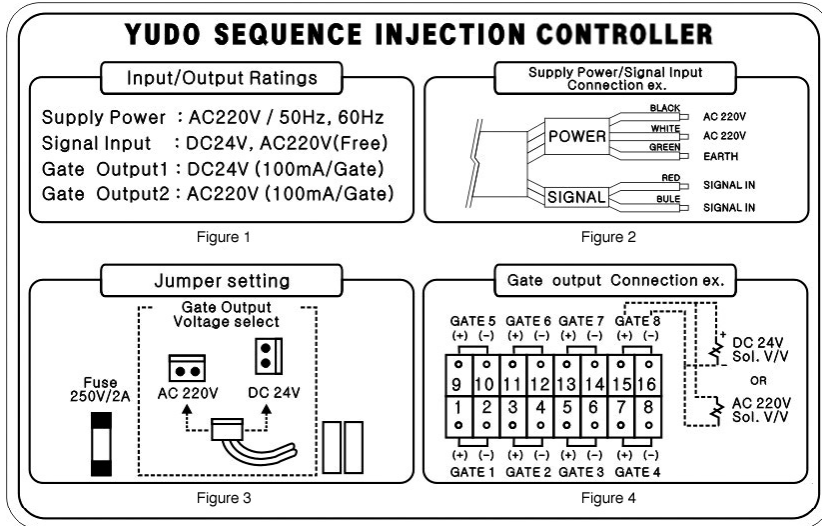
- a. Select output voltage DC24V or AC220V in compliance with Solenoid valve.
- b. Display output voltage in DC24V LED or AC220V LED.

ii) Input ON / OFF Indicator

- a. When input is on, SIGNAL LED is on.
- b. When input is off, SIGNAL LED is off.

9. Wiring Specification

[MEMO]



- 1) Power Input Connection
 Connect POWER-BLACK and POWER-WHITE to AC220V(Figure 2) and earth POWER-GREEN line.
- 2) Signal Input Connection
 Connect SIGNAL RED and SIGNAL BLUE to SIGNAL INJECTION.
- 3) Gate Output Connection
 Connect Solenoid Valve as referred to Figure 4.
 Caution : Use the same electric poles using DC24V Solenoid Valve connection.
- 4) Gate Output Voltage Select
 Jumper Setting is located on the back of SIT700 (Figure 3).
 Connect AC220V using AC220V Solenoid Valve and DC24V Solenoid Valve to DC24V.

[MEMO]

[MEMO]