

## How to modify the input of analog signal :

This series provide the free input of T/C and RTD ;  
it doesn't need to modify the hardware except the analog input.

### A. Analog input hardware modification :

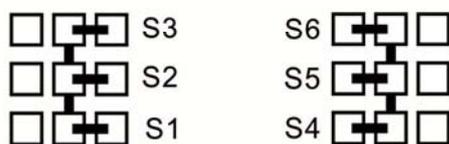
(Refer to S1~J2 on PC board)

INPUT	S1	S2	S3	S4	S5	S6	J2
T/C RTD	●	×	×	×	×	×	●
0~50mV	●	×	×	×	×	×	×
0~20mA	×	×	●	×	×	●	×
0~5V	×	●	×	×	●	×	×
0~10V	×	●	×	●	×	×	×

【●】 : Short

【×】 : Open

Diagram:



T/C RTD:



0~50mV:



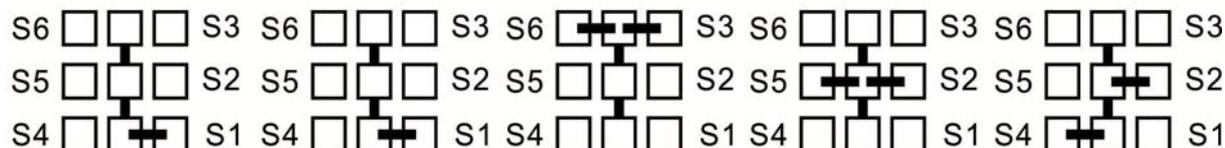
0~20mA:



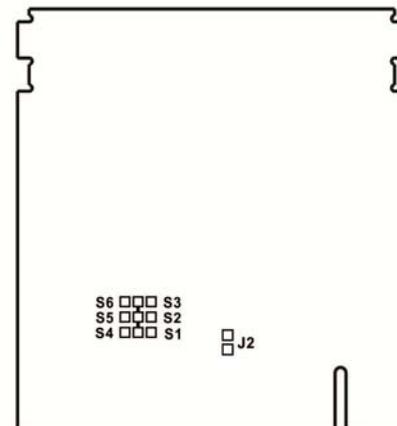
0~5V:



0~10V:



PCB:



### B. Analog input software modification :

1. Select "AnX" in "inP1" parameter .
2. Set "LSPL" in "input level" to lowest range .
3. Set "USPL" in "input level" to highest range .

### C. Analog input calibration :

1. Enter "AnL1" parameter in "Input level" .
2. Provide signal for lowest range and wait for 3 sec then keep pressing ▼ key .
3. Enter "AnH1" parameter in "Input level" .
4. Provide signal for highest range and wait for 3 sec then keep pressing ▼ key .
5. Return to PV/SV initial window and provide signal for lowest range again then check if PV equals to LSPL .
6. provide signal for highest range again then check if PV equals to USPL .
7. If it is not accurate after calibrating, please repeat the above procedures again .

## Order information :

### A. Hardware Modification Position ( Refer to Appendix 1 ) :

1. **MC-2438** : K1 on 24C2 board.
2. **MC-2738** : K1 on 27C2 board.
3. **MC-2838** : K1 on 28C2 board.
4. **MC-2538** : K1 on 28C2 board.
5. **MC-2638** : K1 on 28C2 board.

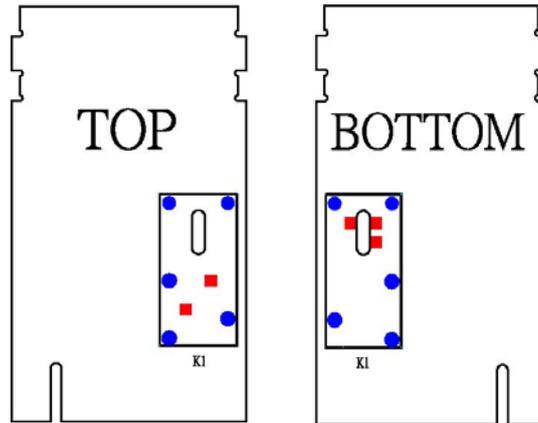
### B. Software Setting :

1. **RELAY Output** : Place the RELAY following the above hardware modification position. Set parameter CYT1 → 15.
2. **PULSED Output** : Place the SSR Module (MC-V2) following the above hardware modification position. Set parameter CYT1 → 2.
3. **0-20mA Output** : Place the SCR Module (MC-mA3) following the above hardware modification position. Set Parameter CYT1 → 0, CL01 → 0 and CH01 → 960.
4. **4-20mA Output** : Place the SCR Module (MC-mA3) following the above hardware modification position. Set parameter CYT1 → 0, CL01 → 240 and CH01 → 960.
5. **0-5V Output** : Short J1 & J2 on SCR Module (MC-mA3) then place on the controller board following the above modification position. Set parameter CYT1 → 0, CL01 → 0 and CH01 → 965.
6. **1-5V Output** : Short J1 & J2 on SCR Module (MC-mA3) then place on the controller board following the above modification position. Set parameter CYT1 → 0, CL01 → 235 and CH01 → 965.
7. **0-10V Output** : Short J1 on SCR Module (MC-mA3) then place on the controller board following the above modification position. Set parameter CYT1 → 0, CL01 → 0 and CH01 → 965.
8. **2-10V Output** : Short J1 on SCR Module (MC-mA3) then place on the controller board following the above modification position. Set parameter CYT1 → 0, CL01 → 235 and CH01 → 965.

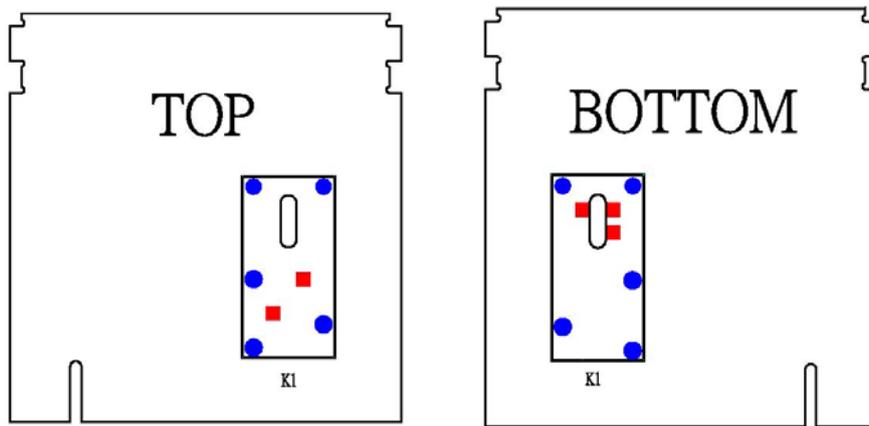
**Appendix 1 :**

RELAY : Welding pads in blue

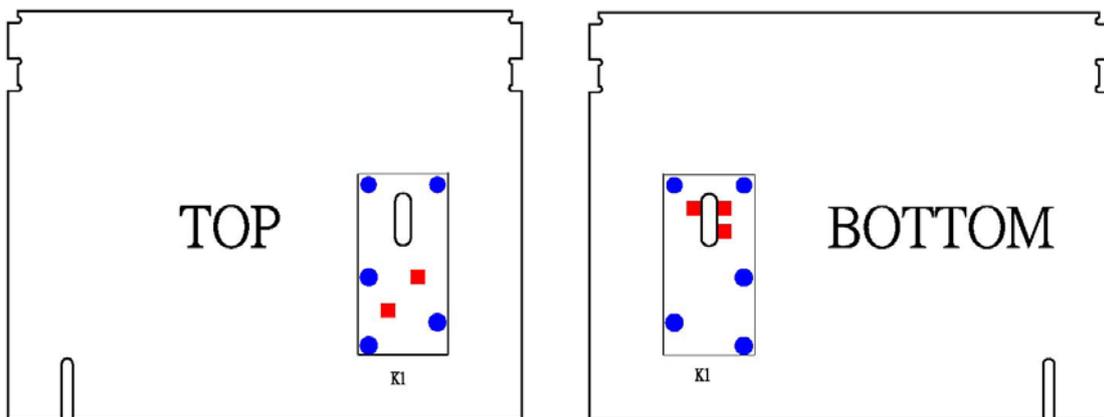
SSR & SCR : Welding pads in red



MC-2438

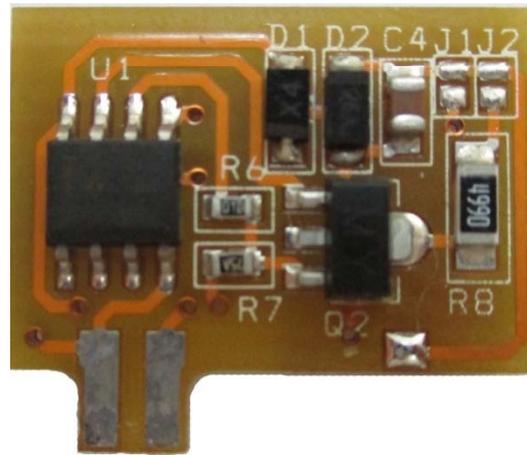
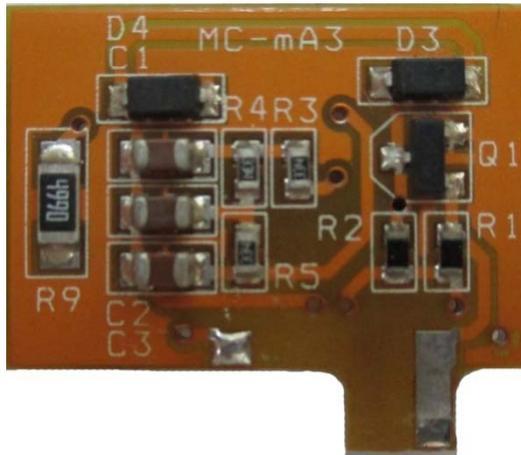


MC-2738

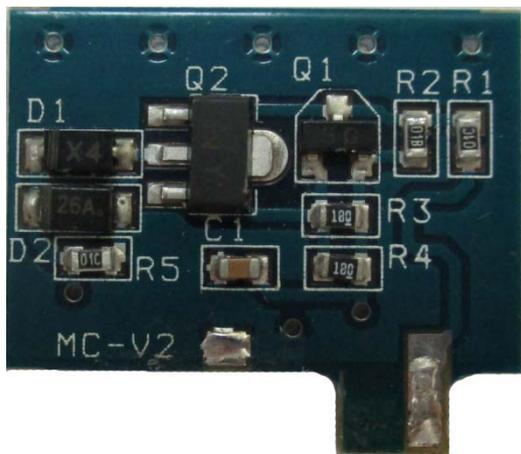


MC-2538/2638/2838

## Appendix 2 :



SCR Module (MC-mA3)



SSR Module (MC-V2)