Micro processor controller V6.1

MY106/MY406/MY506/MY706/MY906

INSTRUCTION MANUAL

MY061-E2

Carefully read all the instructions in this manual. Please place this manual in a convenient location for easy reference.

Specification

- MY06 series instrument: 4 big LED display, 0-100%LED bar display output , Accuracy: (Max±0.2% fus or ±1)≤±1 digit
  RTD or TC input, the maximum resolution is 0.1 degree. Analog input ,the maximum resolution is 0.001 degree.
  Auto/Manual operation control function, 2 PID (heating/Cooling) outputs.
- Pleases make sure that the power and output types are right before using, there is a wire diagram beside the controller, in the code NO4 and No 5,you can see the output mode, such as relay, SSR or 4-20mA etc.
  (SEE 1. PRODUCT CHECK)
- Clients can set TC, RTD by keyboard ,please set the input type coincide with the sensor, Check details of the manual"6.3"parameter INP1,If need analog signal inputs, please specified when order. (Except 0-20mV or 0-50mV input)
- Controller have Auto/Manual function, Check"7.MANUAL OPERATION"
- As usual, controllers were set as out1(heating),out2(coolong) before leaving factory, of course, users can select out1(cooling), check manual "6.3 Parameter Oud in level3 "
- 2 outputs PID heating/cooling function, check manual"10.Heating/cooling specification"
- PID control: As usual, controllers have PID control before leaving factory, with Autotuning function.
- ON/OFF Control: Set P=0.0,it will be changed as on/off control. Check manual"6.1 parameter P " and "9.cotrol action instruction". Position difference is HYS. when heating :PV＞SV, OUT stop, when PV＜SV-HYS, OUT start, fitting for OUT1. When Cooling: PV＞SV+HYS, output start, when PV＜SV,output stop,fitting for OUT1 or OUT2
- Proportional control: when P≠0，I=0，d=0, which is purely Proportional control,Proportional reset is set as rSt, proportional cycle is Cyt. When heating, rSt value is smaller, then output is smaller. When cooling: rSt value is smaller, output is bigger. These fit for OUT1 or OUT2.
  Check manaual "9. Control mode " "10. Heating/Cooling "
- when PID Control, we suggest adopt the Autotuning to improve the control effect. Check"8.Autotuning"
- When anolog signal output, can using output buffer function when in some special control position, which can make output more stable.
  Check manual"6.2 level 2 bUFF parameter, and 6.3 level 3 bEr parameter"

1. PRODUCT CHECK

MODEL (Size: wideXhigh)

MY106 (48mmX48mm)
MY406 (48mmX96mm)
MY506 (96mmX48mm)
MY706 (72mmX72mm)
MY906 (96mmX96mm)

CODE

□□□□-□□∗□□□- N □ □ - N／N／N／N

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15)

(1) Control action

N: No action
F: ReversePID action (for Heating)
D: Direct PID action (for cooling)
W: Heat/cool double PID action
B: ON/OFF control （for heating）
M: ON/OFF control （for cooling）

(2) Input type，(3) Range code: See"12.INPUT RANGE TABLE"

(4) First control output [OUT1]

N: No action
M: Relay contact
V: Voltage pulse(for SSR)
2: Current(DC0~20mA)
8: Current(DC4 ~ 20 mA)
5: 0~5VDC
6: 0~10VDC
7: 1~5VDC
T:Triac single phase zero crossing control
H:Unidirectional triac single phase zero crossing control
K:Triac 3 phase zero crossing control
L:Unidirectional triac 3 phase zero crossing control
C:Triac single phase angle control
Q:Unidirectional single phase angle control
S:Triac 3 phase angle control
D:Unidirectional 3 phase angle control

(5) Second control output [OUT2] (Cool-side)

N: No action
M: Relay contact
V:Voltage pulse(for SSR)）
2: Current(DC0~20mA)
8: Current(DC4 ~ 20 mA)
5: 0~5VDC
6: 0~10VDC
7: 1~5VDC
T:Triac single phase zero crossing control

(6) Alarm 1[AL1] (7) Alarm 2[AL2] (8) Alarm 3[AL3]

See " 6.3.1 alarm mode "

A: Deviation high alarm
B: Deviation low alarm
C: Deviation high/low alarm
D: Deviation band alarm
E: Deviation high alarm with hold action
F: Deviation low alarm with hold action
G: Deviation high/low alarm with hold action
M: Deviation band alarm with hold action
H: Process high alarm
J : Process low alarm
K: Process high alarm with hold action
L: Process low alarm with hold action

(9) Remark code: N

(10) Communication

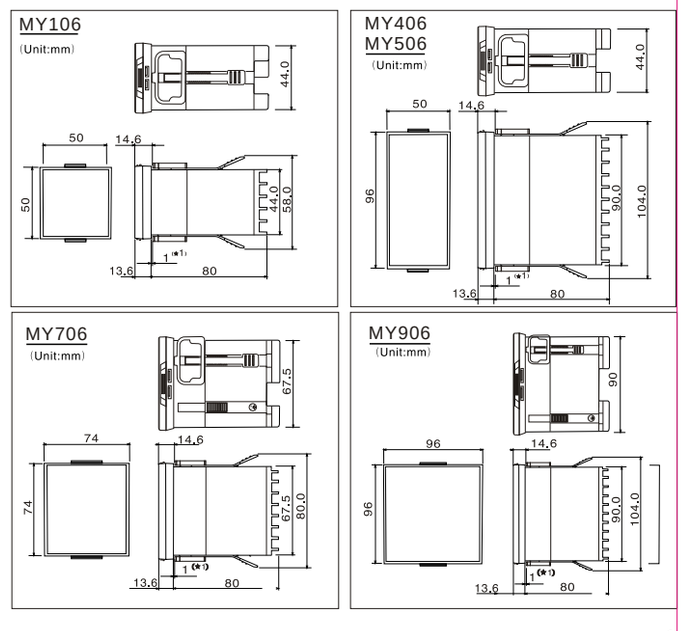
N: No Communication
5: Rs485 communication Modbus-RTU

(11) Transmission

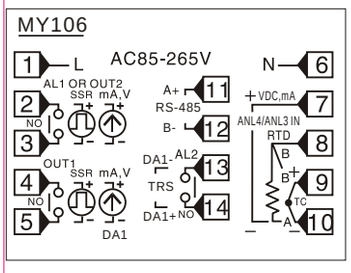
N:No transmission
C: PV transmission (4-20mA)
E: SV transmission (4-20mA)
P: PV transmission (0-5V)
R: SV transmission (0-5V)
Q: PV transmission (0-10V)
S: SV transmission (0-10V)

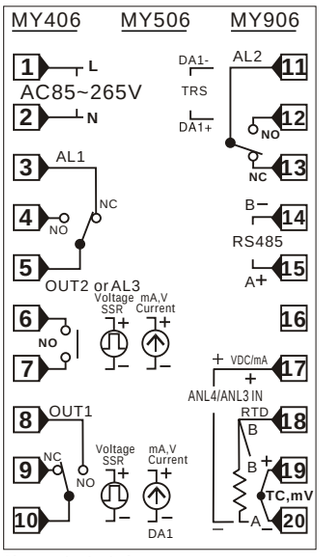
(12)/(13)/(14)/(15) Remark code: N

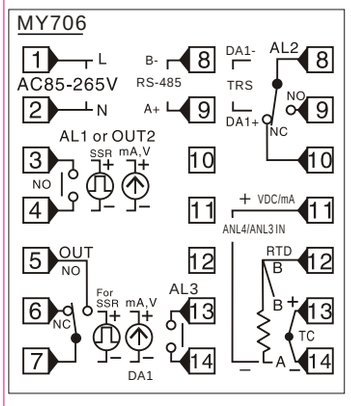
2. MOUNTING SIZE



3. WIRING

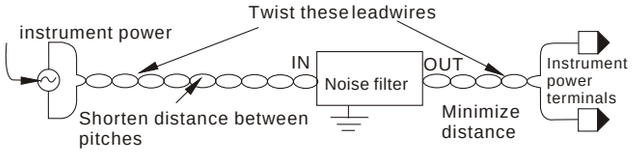




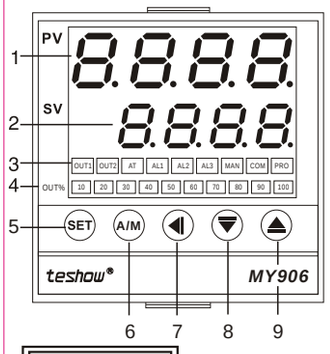


Alarm output rated:
Relay contact output：250V AC, 3A (Resistive load)
Control output rated：
Relay contact output: 250V AC,5A(Resistive load)
Voltage pulse output: 0/12 V DC or 0/24V DC (Load resistance 600 ohm or more)
Current output: 4 to 20mA DC (Load resistance 500 ohm or less)
Triac single phase zero crossing: 100A or less

3.1 Wiring cautions



4. PARTS DESCRIPTION

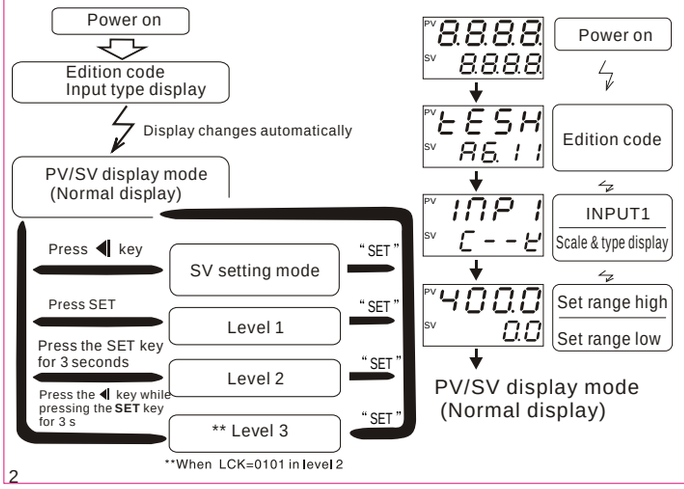


1 Measured value (PV) display [RED]
2 Set value(SV)display [GREEN]
3 OUT1lamp: Out1 output indication
OUT2 lamp: Out2 output indication
AT lamp:Autotuning indication
AL1 lamp: Alarm 1 output indication
AL2 lamp: Alarm 2 output indication
AL3 lamp: Alarm 3 output indication
MAN lamp: ,anual mode indication
COM lamp: Communication indication
PRG lamp: Remark lamp
4 LED bar: Output1 % value indication
5 SET key: Used for parameter calling up and set value registration
6 A/M key: Auto/Manual key or set value registration
7 ◀ : Shift key and setting SV key
8 ▼ : Down key, decrease numbers
9 ▲ :Up key ,increase numbers

CAUTION To avoid damage to instrument, never use a sharp object to press keys.

5. SETTING

5.1 Calling up procedure of each mode

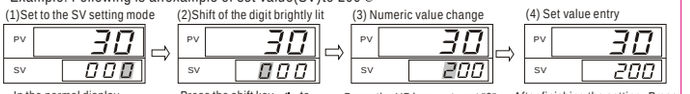


Display	P1	P2	E1	E2	J1	J2	n	u
Input	K	K	E	E	J	J	N	Wu3_Re25
Range	400.0 ℃	1300 ℃	300.0 ℃	600 ℃	400.0 ℃	800 ℃	1300 ℃	2000 ℃

Display	S	t	r	b	AN4	AN3	AN2	AN1	Pt1	Pt2
Input	S	T	R	B	2-10VDC 1-5VDC 4-20mA	0-10VDC 0-5VDC 0-20mA	0-50mV	0-20mV	Pt100	Pt100
Range	1600 ℃	400.0 ℃	1700 ℃	1800 ℃					-199.9~200.0 ℃	-200~800 ℃

5.2 Setting set value(SV)

Example: Following is anexample of set value(SV)to 200℃



In the normal display modePress ◀ key to enter the SV setting mode. The digit which flashingis settable.

Press the shift key ◀ to shift the digit which lights brightly up to the hundreds dights

Press the UP key ▲ to set "2". Pressing the UP key increase numerals, and pressing the DOWN key ▼ decrease numerals.

After finishing the setting, Press the SET key, All of the set value digits stop flash and as a result the instrument return to PV/SV display mode.

*In any time you can press A/M key to save value and exit to PV/SV mode.

5.3 Setting parameters other than set value (SV)

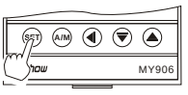
The setting procedures are the same as those of example (2) to (4) in the above "Setting set value (SV)". Press the SET key after the setting end shifts to the next parameter. When no parameter setting is required, return the instrument to the PV/SV display mode.

6. LEVEL

In any level you can press the SET key for 3 seconds to return the instrument to the PV/SV display mode, and register the value.

6.1 Level 1

Press the SET key to level 1:



The following parameter symbols are displayed one by one every time the SET key is pressed.

1# Factory set value

Symbol	Name	Range	1#	Description
AT	Autotuning	NO or YES	NO	YES: Autotuning on,NO: Autotuning off
AL1	Alarm 1	-1999 to 9999	10	Set the alarm value for alarm 1 . Alarm differential gap=AH1
AL2	Alarm 2	-1999 to 9999	10	Set the alarm value for alarm 2 Alarm differential gap=AH2
AL3	Alarm 3	-1999 to 9999	10	Set the alarm value for alarm 3 Alarm differential gap=AH3
UAd	Device address checking		1	Communication device address, only for checking.

6.2 Level 2

Press the SET key for 3 seconds to level 2

The following parameter symbols are displayed one by one every time the SET key is pressed.

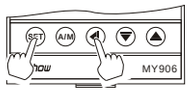
1# Factory set value

Symbol	Name	Range	1#	Description
P1	Proportional band for out1	0.0~200.0	30.0	Proportional band in PID with unit ℃ for OUT1 P1=0.0, ON/OFF control for ouput1
I1	Integral time for out1	0-3600sec	240	Set the time of integral action to eliminate the offset occurring in proportional control.
d1	Derivative time For out1	0-3600sec	60	Set the time of derivative action to improve control stability by preparing for output changes.
AtvL	Auto tuning offset value (AtVL)	0-199	0	Set ATVL to prevent overshoot occurred during autotuning process.
CYt1	Proportioning cycle for out1	0 to 999sec	20	Proportioning cycle time for PID control Only for out1 output
HYS1	Control Hysteresis For out1	0.0 to 100.0	1.0	Control out differential gap=HYS1 For out1 output. Only for ON/OFF action when P1=0.0
P2	Proportional band for out2	0.0~200.0	20.0	Proportional band in PID with unit ℃ for OUT2 P2=0.0, ON/OFF control for ouput1
I2	Integral time for out2	0-3600sec	240	Set the time of integral action to eliminate the offset occurring in proportional control.
d2	Derivative time cycle for out2	0-3600sec	60	Set the time of derivative action to improve control stability by preparing for output changes.
CYt2	Proportioning cycle for out2	0 to 999sec	20	Proportioning cycle time for PID control Only for out2 output
HYS2	Control Hysteresis For out2	0.0 to 100.0	1.0	Control out differential gap=HYS2 For out2 output. Only for ON/OFF action when P2=0.0
GAP2	Control gap (For output 2)	0.0-200.0	10.0	Set point of output 2 (Cooling side) =SV + GAP2
rE	Overshoot protection For out1	0.0 to 100.0	10.0	Overshoot protection for first power on or SV modify later.For out1 output. (Auto setting after autotuning)
rSt1	Proportional reset For out1	-30 to 30	-5	Proportional reset for overshoot protection only for out1 output. (Auto setting after autotuning)
rSt2	Proportional reset For out2	-30 to 30	0	Proportional reset for overshoot protection only for out2 output(Cooling side).

Symbol	Name	Range	1#	Description
OPL	Output1 limit (Low)	0.0 to 100.0%	0.0	Output manipulated variable lowest limit For out1 output.
OPH	Output1 limit (High)	0.0 to 100.0%	100.0	Output manipulated variable highest limit For out1 output.
OPL2	Output2 limit (Low)	0.0 to 100.0%	0.0	Output manipulated variable lowest limit For out2 output. (Cooling side)
OPH2	Output2 limit (High)	0.0 to 100.0%	100.0	Output manipulated variable highest limit For out2 output.(Cooling side)
PVo	Initial output value for OUT1	0.0 to 100.0%	0.0	Setting initial output value for manual operation with Power-on Manual function
bUFF	Output buffer only for out1	0.0 to 100%	100.0	Output variance value percentage per second buffer limit Only for 4-20mA output1
LCY	Set data lock	0000-0255	0	LCK=0000:Allow to modify any parameter and SV LCK=0001:Only allow to modify SV LCK=0010:Only allow to modify SV and Level1 LCK=0011:Not allow to modify any parameter and SV LCK=0101:Allow to setting Level3

NOTE: Some function of parameters, please see " 8.", " 9.", " 10." specification.
Some parameter symbols may not be displayed depending on the specification.

6.3 Level 3



6.3.1Go to level3:

1,Press the SET key for 5 seconds to PID level, then change LCK to 0101.

2,Press the ◀| key while pressing the **SET** key for 3s to Level3

The following parameter symbols are displayed one by one every time the SET key is pressed.

1# Factory set value

Symbol	Name	Range	1#	Description
INP1	Main input type select			

Setting	E1	E2	E1	E2	J1	J2	N	U
Input	K	K	E	E	J	J	N	Wu3_Re25
Range	400.0 ℃	1300 ℃	300.0 ℃	600 ℃	400.0 ℃	800 ℃	1300 ℃	2000 ℃

Setting	S	t	r	b	AN4	AN3	AN2	AN1	Pt1	Pt2
Input	S	T	R	B	2-10VDC 1-5VDC 4-20mA	0-10VDC 0-5VDC 0-20mA	0-50mV	0-20mV	Pt100	Pt100
Range	1600 ℃	400.0 ℃	1700 ℃	1800 ℃					-199.9~200.0 ℃	-200~800 ℃

Note: AN4,AN3 input type can not setting by keyboard, because of without calibration .(Custom - made)

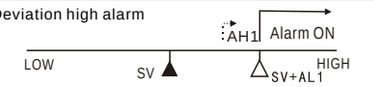
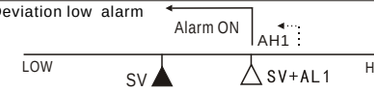
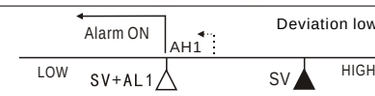
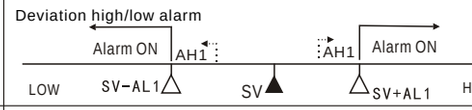
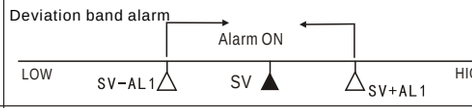
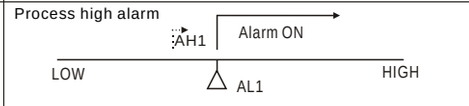
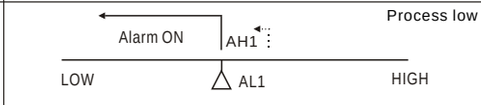
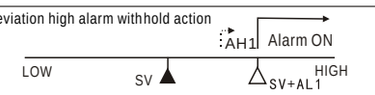
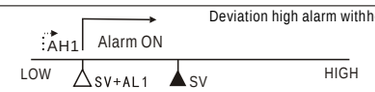
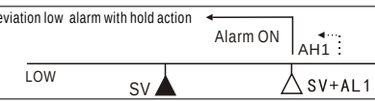
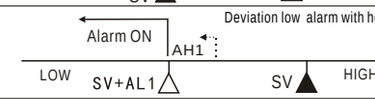
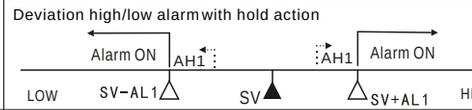
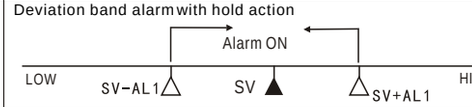
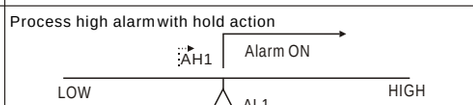
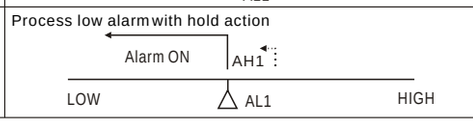
dP	Decimal point	0 ,1,2,3	0	0, 1, 2, 3 Only for Linear analog type input
LSPL	Low setting limiter	-1999 to 9999	0	Set lower setting limiter Lower point of transmission
USPL	High setting limiter	-1999 to 9999	400	Set high setting limiter Higher point of transmission
UNIt	Display scale	0 ,1,2	0	0: Centigrade, 1: Fahrenheit 2: without scale（for linear analog)
PVOS	PV bias	-199to 199	0.0	Sensor correction is made by adding bias value to measured value(PV).
PVFt	PV follow-up PV input filter	0 to 60	55	PV variable-value control, 0-30: for general, 31-60:for enhanced
ANL 1	Lowest value of PV display	-199~9999	0	Lowest value display when linear analog inputs ,Such as 4-20mA input.
ANH 1	Highest value of PV display	-1999~9999	2000	Highest value display when linear analog inputs ,Such as 4-20mA input.
ALd 1	Alarm1 mode	00 to 16	11	Select the type of alarm1 See(**ALARM TYPE TABLE)
AH 1	Alarm1 differential gap	0.0 to 100.0	1.0	Alarm1 differential gap setting
ALd2	Alarm2 mode	00 to 16	10	Select the type of alarm2 See(**ALARM TYPE TABLE)
AH2	Alarm2 differential gap	0.0 to 100.0	1.0	Alarm2 differential gap setting
ALd3	Alarm3 mode	00 to 16	10	Select the type of alarm3 See(**ALARM TYPE TABLE)
AH3	Alarm3 differential gap	0.0 to 100.0	1.0	Alarm3 differential gap setting
OUd	Control action	0 or 1	0	0: Reverse action (Heating) 1: Direct action (Cooling)
bEr	Buffer mode for out1 analog output	0,1,2	0	0: No buffer for analog output1 1: Always with buffer for analog output1 2: With buffer when the output1 increases only. (Soft-start) Output variance value percentage per second buffer limit according BUFF in Level2
IdNO	Device address setting	0-127	1	Communication device address setting.
bAUd	Band-rate setting	0,1,2,3	2	BAUd =0: 2.4K, =1: 4.8K, =2: 9.6K, =3:19.2K

**ALARM TYPE TABLE (ALd_=00~16)

10: No alarm output
11: Deviation high alarm
12: Deviation low alarm
13: Deviation high/low alarm
14: Deviation band alarm
15: Process high alarm
16: Process low alarm

00: No alarm output
01: Deviation high alarm with hold action
02: Deviation low alarm with hold action
03: Deviation high/low alarm with hold action
04: Deviation band alarm with hold action
05: Process high alarm with hold action
06: Process low alarm with hold action

6.3.2 Alarm mode specification

Code	ALd□	Specification（Example for alrm1）
N	10 or 00	No alarm
A	11	AL1≥0: Deviation high alarm  AL1<0: Deviation high alarm 
B	12	AL1≥0: Deviation low alarm  AL1<0: Deviation low alarm 
C	13	Deviation high/low alarm 
D	14	Deviation band alarm 
H	15	Process high alarm 
J	16	Process low alarm 
E	01	AL1≥0: Deviation high alarm with hold action  AL1<0: Deviation high alarm with hold action 
F	02	AL1≥0: Deviation low alarm with hold action  AL1<0: Deviation low alarm with hold action 
G	03	Deviation high/low alarm with hold action 
M	04	Deviation band alarm with hold action 
K	05	Process high alarm with hold action 
L	06	Process low alarm with hold action 

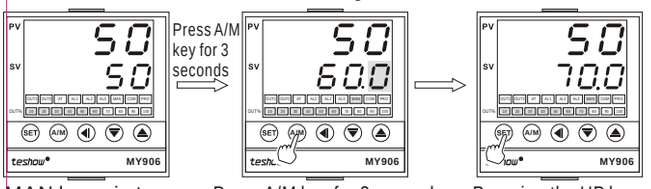
NOTE:
With hold action:
When Hod action is ON, the alarm action is suppressed at start-up until the measured value enters the non-alarm range.

7.MANUAL OPERATION

All instrument except MY106 with manual operation key (A/M)

Example: Following is an example of manual setting to 70% output.

Auto control mode | Manual setting mode | Manual control mode



MAN lamp is turns off in Auto control mode.

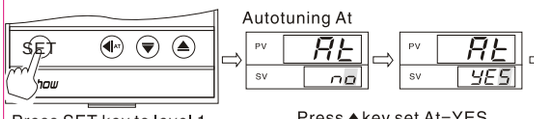
Press A/M key for 3 seconds to manual setting mode. In manual setting mode, MAN lamp light up,The digit which flashing is settable.

Pressing the UP key increase numerals, and pressing the DOWN key decrease numerals. Press SET key after set value to 70.0.

**In manual control mode ,press A/M key for 3 seconds to auto control mode.
**Power-on Manual function can be selected. Pko in level2 for initial output value.
**A/M key can also be used for SAVE and EXIT key.

8. AUTOTUNING

When controller's power are just on,it will be good to autotuning when the measured value is far lower than the set value



Press SET key to level 1

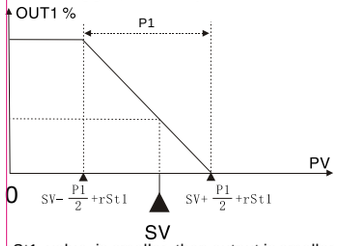
Press ▲key set At=YES

Press SET key for 3 seconds to exit level. Autotuning start.

NOTE:
1, When begin to autotuning, AT light flash, which means to begin to autotuning,if you want to exit from autotuning, please enter into the AT menu, set AT=no
2,In the middle of the autotuning, it is ON/OFF control, according to the different systems, temperature may be have a big variance and the autotuning time is of a long short.
3,After finishing autotuning, AT light stops flashing, controller will automatically save P1、I1、d1、rE、rSt1 parameters,then automatic return to the normal control state, controller will continue to run with new P1、I1、d1、rE、rSt1 parameters value
4,In some special occasions, if you can not control by autotuning, or the autotuning effect is bad, please set parameters by manual.
5,.P1 is proportional band of the first group OUT1,the standard proportional band range is Set value=SV±P1/2,as usual,we set P1=10% to 15% of SV.
6,I1 is the integration time of the first group OUT1,as usual I1 is setted about 200 before leaving factory. If I1 is smalller, the integral action will be bigger, and the feedback to the temperature difference will be bigger. But if I1 is too small, it will lead to the temperature swinging up and down around the set value.
(1)If temperature is not up for a long time, and the output is still not increased more, can reduce the integration time I1
(2)If temperature is up overshoot for a long time and output is still heating, can reduce the integration time I1
(3)If temperature swings up and down around the set value for a long time, can increase the integration time I1
7,D1 is the differential time of the first group OUT1,which is equal to 20% to 30% of the integration time. Derivative action is main used to cause the inhibition of the overshoot (because of integral action).d1 is bigger, derivative action is stronger.
(1)When go into the proportional band, if the output heating is bigger, temperature will overshoot,you can increase the derivative time. If the temperature decrease more, which will lead to the undershoot, then you can increase the derivative time.
(2)In some control situation, if the system feedback is very sensitive. which means that the output slight variations will lead to a big variations in the goal Value, then you can reduce the derivative time, or close the derivative time（d1=0).Using this,control is stable,such as in the constant-pressure water supply system.
8,Parameter rE is used to cause the inhibition of the overshoot(in the first heating of OUT1), or the overshoot caused by set value changes after control system stability. rE is only useful first, this function will be automatically cancelled when temperature reach to the goal value, If rE is set too big, the first heating will not easy to overshoot, but the first output will be very slowly.
9,rSt1 is the reset of the OUT1 proportion, which is used to eliminate static errors in the pure time proportion control, in PID control,rSt1 can be used to adjust the proportion band to reach the system stability quickly.
(1)when the thermal inertia is big in the heating system, usually rSt1 is negative, pls note this value can not be too small(when rst1＞-P1/2,e.g P1=30.0, rSt1≥-15).usually rSt1=0, in the heating system, the value is smaller, the heating will be slower
(2)While in the PID cooling system,rSt1 is positive, if this value is bigger, the colling will be slower.

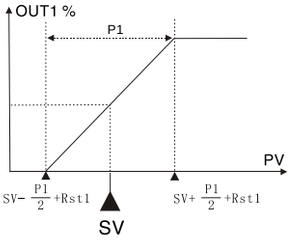
9. CONTROL MODE SPECIFICATION

(1)OUT1 side, PID reverse action(heating)
PV is bigger, then output is smaller.



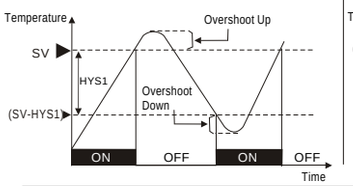
rSt1 value is smaller, then output is smaller.

(2)OUT1 side, PID direct action(cooling)
PV is bigger, then output is bigger.

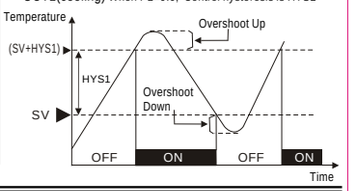


rSt1 value is biger, then output is smaller.

(3)OUT1 side, ON/OFF control (heating)
*OUT1(heating) When P1=0.0, Control hysteresis is HYS1



(4)OUT1side, ON/OFF control(cooling)
*OUT1(cooling) When P1=0.0, Control hysteresis is HYS1

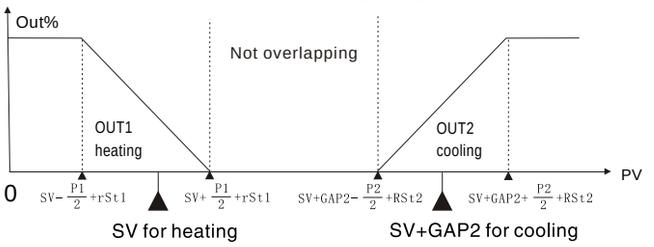


10. HEATING/COOLING SPECIFICATION

If the thermal inertia of the controlled temperature is bigger, it will be difficult to natural cooling, we can use the cooling output control at the same time, Just use 1 pc controller can have heating and cooling dual output control.

**Below illustration using the pure time proportion control

Using GAP2 and rSt1 or rSt2,you can have heating/cooling control or just single control



By setting the P2, I2,d2 etc parameters, you can have the different OUT2 controls mode, such as PID control, time proportion control or on/off control, to meet with different requirements of cooling actuator.

11.COMMUNICATION SPECIFICATION

(1) Communication protocol is Modbus-RTU, support 03 read command, 06 or 10 write command
(2) Communication mode: single-master RS485 asynchronous serial communication
baud rate:2400、4800、9600、19200(9600 baud rate is acquiesced)
Byte date format:1 start bits,+8 data bits+No parity checking+1 Stop bits
(3) Controllers support writing 36 data more, when writing data, if the address is beyond 0048H,the address will still write data as 0048H.
(4) Controllers support reading 37 data more, when reading data, if the address is beyond 0048H,then read data=0
(5) Parameter address please see "MY06 series communication address list"

12. INPUT RANGE TABLE

Input type			Code	
K1	0.0 to 100.0 ℃		2	D1
	0.0 to 200.0 ℃		2	D2
	0.0 to 300.0 ℃		2	D3
	0.0 to 400.0 ℃		2	D4
K2	0 to 200 ℃		K	A2
	0 to 400 ℃		K	A4
	0 to 600 ℃		K	A6
	0 to 1300 ℃		K	B3
E1	0.0 to 100.0 ℃		3	D1
	0.0 to 200.0 ℃		3	D2
	0.0 to 300.0 ℃		3	D3
E2	0 to 200 ℃		E	A2
	0 to 400 ℃		E	A4
	0 to 600 ℃		E	A6
J1	0.0 to 100.0 ℃		1	D1
	0.0 to 200.0 ℃		1	D2
	0.0 to 300.0 ℃		1	D3
	0.0 to 400.0 ℃		1	D4
J2	0 to 200 ℃		J	A2
	0 to 300 ℃		J	A3
	0 to 400 ℃		J	A4
	0 to 800 ℃		J	A8
T	0.0 to 100.0 ℃		T	D1
	0.0 to 200.0 ℃		T	D2
	0.0 to 300.0 ℃		T	D3
	0.0 to 400.0 ℃		T	D4
S	0 to 1000 ℃		S	B0
	0 to 1600 ℃		S	B6
R	0 to 1000 ℃		R	B0
	0 to 1700 ℃		R	B7
B	200 to 1000 ℃		B	B0
	200 to 1800 ℃		B	B8
N	0 to 1000 ℃		N	B0
	0 to 1300 ℃		N	B3
Wu3_Re25	600 to 2000 ℃		W	B0

Input type			Code	
Pt1 (Pt100)	0.0 to 50.0 ℃		P	06
	0.0 to 100.0 ℃		P	07
	0.0 to 150.0 ℃		P	11
	0.0 to 200.0 ℃		P	08
	-50.0 to 50.0 ℃		P	12
	-50.0 to 100.0 ℃		P	13
	-100.0 to +100.0 ℃		P	04
	-100.0 to +200.0 ℃		P	05
	-199.9 to +200.0 ℃		P	02
Pt2 (Pt100)	0 to 100 ℃		D	A1
	0 to 200 ℃		D	A2
	0 to 400 ℃		D	A4
	0 to 600 ℃		D	A6
	0 to 800 ℃		D	A8
	-50 to 100 ℃		D	C1
	-100 to 200 ℃		D	C2
	-100 to 300 ℃		D	C3
	-200 to 400 ℃		D	C4
	-200 to 500 ℃		D	C5
	-200 to 600 ℃		D	C6
	-200 to 700 ℃		D	C7
	-200 to 800 ℃		D	C8

Input type			Code	
AN1	0 to 20mV	-1999 to 9999	V	01
AN2	0 to 50mV		V	02
AN3	0 to 5VDC	-199.9 to 999.9	V	03
AN3	0 to 10VDC		V	04
AN4	1 to 5VDC	-19.99 to 99.99	V	08
AN4	2 to 10VDC		V	09
AN4	4 to 20mA	-1.999 to 9.999	A	03
AN3	0 to 20mA		A	02
AN3	0 to 10mA		A	01

Note: Clients can set TC, RTD by keyboard ,please set the input type coincide with the sensor. Check details of the manual"6.3"parameter INP1,If need analog signal inputs, please specified when order.(Except 0-20mV or 0-50mV input)

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