

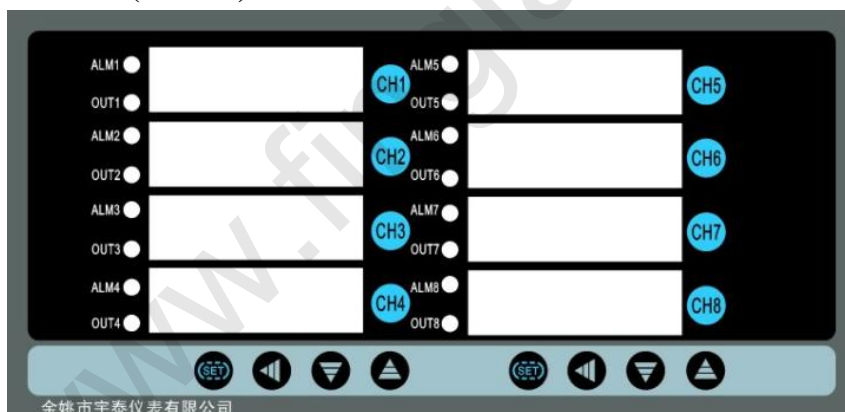
XMT-JK808 series intellectual temperature adjustment instrument

XMT-JK808 series intelligent temperature control instrument is a new meter to meet the market needs. The meter is controlled by single chip microcomputer, every channel setting value and some parameters can be set up independently. It has the advantages of small volume, low power consumption, simple operation, easy control, stable operation, reliable, economical characteristics. It is widely used in the temperature automatic control systems of machinery、chemical、ceramics、light industrial、metallurgy、petrification and heat treatment, and so on.

I、Main technical specification

- 1、Input(can be selected): CU50(-50~150)、PT100 (-80~600)、K (-30~999)、E (-30~700)、J (-30~900)、T (199~400)
- 2、Measurement deviation: $\leq \pm 0.5\%F \cdot S \pm 1B$ Cold end compensating deviation: $\leq \pm 2.0^{\circ}C$
- 3、Sampling cycle: 0.5S
- 4、Control cycle: relay output 2~120S , other is 2S.
- 5、Relay output contact capacity: AC220V/5A (resistance load) or AC220V/0.3A (perceptual load)
- 6、Alarm relay contact output: AC220V/1A (resistance load)
- 7、Driving solid relay signal output: driving electric current $\geq 15mA$, voltage $\geq 9V$.
- 8、Power supply: AC85V~242V, 50/60Hz
- 9、Working condition: temperature 0~50.0°C, relative humidity $\leq 85\%RH$, without corrode and strong electric radiation.

II、Panel instruction(consult)



- ALM1~ALM8: The first channel to the eighth channel alarm output indicator light (red);
- OUT1~OUT8: The first channel to the eighth channel control output indicator light (green);
- CH1~CH8 key: The first channel to the eighth channel corresponding channel parameter setting key;
- SET/ I key: The first channel to the fourth channel function setting key;
- SET/ II key: The fifth channel to the eighth channel function setting key;
- ◀ key (left): The first channel to the fourth channel shift key;
- ▶ key (right): The fifth channel to the eighth channel shift key;
- ▼ key (left): The first channel to the fourth channel data decrease key;
- ▼ key (right): The fifth channel to the eighth channel data decrease key;
- ▲ key (left): The first channel to the fourth channel data increase key;
- ▲ key (right): The fifth channel to the eighth channel data increase key;

三、 Model significance:

XMT - **JK 8** **8**
 (1) (2) (3) (4) (5) (6)

- (1) Meter faceplate and Installation dimension(mm): 160×80×130; 152×76;
- (2) Design serial number: Eight channel independent control meter, PID and ON/OFF control can optional;
- (3) Alarm: ‘0’: no set alarm; ‘1’: one alarm (alarm mode optional);
- (4) Input signal: “8”: Free exchange of the input signal
- (5) Main control mode: ‘space’: relay normally-open normally-closed contact output;
 ‘A’: Single phase zero trigger control; ‘G’: Solid state relay control output
- (6) Suffix: ‘K’: with 485 or RS232 Communication module interface;
 ‘WT’: With an external printer module interface

四、 Internal parameters:

| Series | Code | Name | Setting range | Manual | Ex-Factory |
|--------|-----------|----------------|--|---|-------------|
| First | 0 | LOCK | Electronics lock 0~50 | LOCK=18 all the parameter can be revised; LOCK≠18 all the parameter can not be revised | 18 |
| | 1 | Sn | Input type <i>CU50, Pt100, K, E, J</i> | CU50 (<i>CU50</i>) -50.0~150.0℃ Pt100 (<i>Pt100</i>) -199.9~600.0℃ K (<i>K</i>), -30.0~1300℃ E (<i>E</i>), -30.0~700.0℃ J (<i>J</i>) -30.0~900.0℃ | <i>CU50</i> |
| Menu | 2 | ALP | Alarm output definition 0~6 | ‘0’no alarm; ‘1’upper limit alarm; ‘2’lower limit alarm; ‘3’positive deviation alarm ‘4’negative deviation alarm. ‘5’outside the interval alarm ‘6’inside the interval alarm | 1 |
| | 3 | t | Output cycle 2~120 S | Relay set for 10S; SSR set for 2S. | 10 S |
| | 4 | dp | Decimal point 0~1 | 0: have not decimal point; 1: have decimal point | 0 |
| | 5 | P-SH | The max. value of temperature range --- | They are used to reset proper temperature range as per user’s application. As for the Max. temperature range for different inputs, please refer to Sn, P-SH≥P-SL. | 1300 |
| | 6 | P-SL | The min. value of temperature range --- | | 0 |
| | 7 | OPB | Assistant output method 0~2 | 0: No assistant output; 1: RS485 serial communication; 2: Mini printer | 0 |
| | 8 | Add | Communications address / interval time 1~64 (1~9999) | Instrument No. in the centralized control system (in the band miniature printing, as printing interval time) | 1 |
| 9 | bt | baud rate — | 1200; 2400; 4800; 9600 Four optional | 9600 | |

In the following parameters, N represents the corresponding channel number 1 ~ 8.

| | | | | | | |
|--------|----|-------|-------------------------------------|--|---|--------|
| Second | 10 | SP+N | N channel temperature setting value | Rang decide by P-SL, P-SH, deviation alarm range : 0.5~100 | According to users need to set the controlling temperature value | random |
| | 11 | AL+N | Alarm setting value | | Output mode decide by 'AL-P' | random |
| Menu | 12 | SC+N | Sensor error amendment | ± 20.0 | When the sensor have deviation, You can use it to revisal | 0 |
| | 13 | P+N | Proportion modulus | 0~100 | When the P increase, the proportion function decrease. When P=0,the meter is ON/OFF control | 8 |
| | 14 | I+N | Integral time | 0~3000 | Set integral time so as to unchain residual. Deflection caused by proportion control. To increase it, the static difference will be reduced, but when it is too high, the static difference will drift instability. | 240 |
| | 15 | d+N | Differential time | 0~200S | Set the differential time, so as to avoid. The output's fluctuation, Improve the control's stability. | 30 |
| | 16 | Hy+N | The main control return difference | 0.1~50.0 | It makes sense when only ON/OFF control. | 1.0 |
| | 17 | At+N | Setting itself (auto-tune) | 0~1 | 0: Close setting itself function 1: Open setting itself function Please refer to "VII、Setting itself" | 0 |
| | 18 | COL+N | control model | 0-1 | 0:Heating mode 1:Refrigeration mode | 0 |

V、Instrument operation:

5.1、The first menu setting (public menu setting):

Press the function key (SET / I key) 3 seconds, enter into the first channel to the fourth channel the first menu setting state, this time ' the first channel display window ' and ' the second channel display window ' respectively display the first menu parameter symbols and parameter values, this time you can press respectively correspond to the ◀ (shift)、▲、▼ keys to change the parameter value, after the completion modified, press SET / I key to preserve and enter into the next parameter; modify the other parameters by the same method. If in the setting without any operation 10 seconds, the meter will automatically save and exit the modified state.

Press the function key (SET / II key) 3 seconds, enter into the fifth channel and the eighth channel the first menu setting state, this time ' the fifth channel display window ' and ' the sixth channel display window ' respectively display the first menu parameter symbols and parameter values, modification method is as above.

5.2、The second menu setting (each channel corresponding to the menu setting):

The first channel to the fourth channel parameters respectively press A1~A4 three seconds to enter into the corresponding channel menu item, this time 'the first channel display window ' and 'the second channel display window ' respectively display the corresponding channel the second menu parameter symbols and parameter values, this time you can press respectively correspond to the ◀ (shift)、▲、▼ keys to change the parameter value, modification method is as above "5.1、The first menu setting".

The fifth channel to the eighth parameters respectively press B1~B4 three seconds to enter into the corresponding channel menu item, this time 'the fifth channel display window' and 'the sixth channel display window' respectively display the corresponding channel the second menu parameter symbols and parameter values, this time you can press respectively correspond to the ◀ (shift)、▲、▼ keys to change the parameter value, modification method is as above "5.1、The first menu setting".

VI、Setting itself:

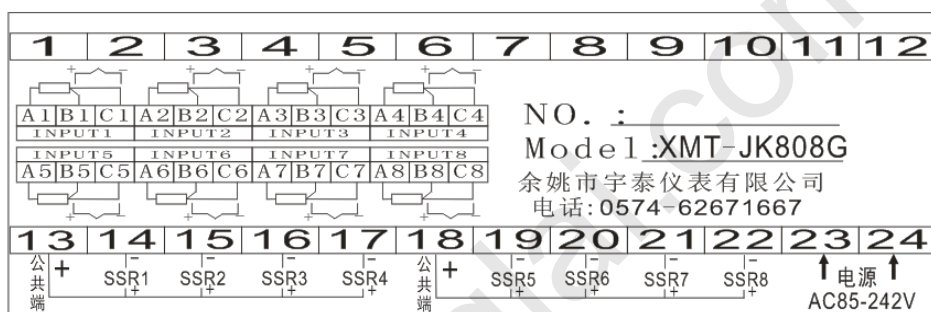
The meter use in the first time or the surroundings have changer, finding it control not good, this time you need use the setting itself. For example:

At first set up the corresponding channel setting value, and then enter into the corresponding channel menu, set the corresponding Hy is 0.5~1°C, set the AT=1, "AT" and the measured temperature value flash alternately, the meter enter into setting itself, the meter have three times vibrate, automatic preserved P, I, D parameter and the setting itself finish.

Note: ①when the power off during setting itself, as the meter has the memory, it will restart setting itself next time.

②when it need artificially exit during setting itself, set the corresponding channel self-tuning the parameter AT to 0 so that can exit, but the setting result will not be valid.

VII、Connection scheme(consult):



Note: 1)The above diagram is an example of XMT-JK808, only for reference, controller's specific connection should be confirm to the case's connection.

2)The meter's signal input used to isolate type sensor, or that may affect the meter's measurement.

VIII、Fault Analysis and Clearance:

XMT-JK808 series adopt advanced production process, and have the strict test before leaving factory, it improve the reliability of the meter .The usual fault caused by the wrong operation or parameter setting. If you find the fault couldn't be cope with, please record it, and contact with the agent or us. Sheet 8-1 is the usual fault of XMT-JK808 series in the daily application:

Sheet 8-1 Common fault handling

| Fault symptom | Analysis of causes | Disposal measurement |
|--|---|--|
| Abnormal power | 1、 Poor contact of power cord 2、 Power switch without lose | Check the power |
| Signal display do not correlate with the facts. (display 'HH') | 1、 Sensor model mismatch 2、 Wrong signal connection | 1、 Check sensor model and meter interior input parameter 2、 Check signal wire |
| Abnormal output control | 1、 Wrong connecting output wire | 1、 Check output connection |

Attached 1: Statement of meter's parameter attention letter and English letter

| | | | | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| A | B | C | D | E | F | G | H | I | J | K | L | M |
| <i>A</i> | <i>b</i> | <i>C</i> | <i>d</i> | <i>E</i> | <i>F</i> | <i>G</i> | <i>H</i> | <i>I</i> | <i>J</i> | <i>K</i> | <i>L</i> | <i>M</i> |
| N | O | P | Q | R | S | T | U | Y | | | | |
| <i>n</i> | <i>o</i> | <i>p</i> | <i>q</i> | <i>r</i> | <i>s</i> | <i>t</i> | <i>u</i> | <i>y</i> | | | | |

Note: Our company will continue to improve product technology, design specification. If change, please subject to the material object, without notice.