

XMT-8000 switch power intelligent digital-display controller

Operation Instructions

Before use, please carefully read the operation instructions so as to use it correctly and keep it well so as to get referred at any time.

● Cautions in operation

Do not clean the meter until cutting off the power, please use a soft cloth or cotton paper when to clear the dirt on the display.

The display is easily scraped, so do not use a hard object to clean or touch it.

Never use a screwdriver or written pen etc. hard object to operate the keys on the panel, or they would be injured.

1. Product confirmation

Please refer to the following code to confirm the product sent to you is identical to your order.

Product code:

XMT□—□□□□□ □□ □
① ②③④⑤⑥ ⑦ ⑧ ⑨

(1) Code of panel size(mm)

Omitted: 80x160 A: 80x160 D: 80x160 E: 80x160 G: 80x160

(2) Ordinal number of design: 8000 switch power

(3) Code of control mode

0: Bit-type control (heating type) 4: Two-bit PID action (heating type)

3: Time proportion (heating type) 7: Pulse PID action (heating type)

9: Continual PID regulating action (heating type)

(4) Code of warning output

0: no warning 1: Attached with deviation limited warning

(5) Input code

1: Thermocouple 2: thermo-resistance 3: electric level signal

(6) Code of output type

Omitted: relay output

V: logic output (for controlling the solid relay SSR)

A: large capacity relay output (240VAC, 16A)

(7) Lower limit range

(8) Upper limit range

(9) Index code of sensor: K, E, J, P100, Cu50

2. Installation

2.1 Cautions

Install the meter in the following environment:

Atmospheric pressure: 86~106KPa.

Ambient temperature: 0~50℃

Related humidity: 45---85RH%

Pay attention to the followings in installation:

Possibly caused dews by a sharp change of the ambient temperature.

Corrosive and combustible gas.

Direct shock or impact to the main structure.

Water, oil, chemicals, smoking or steam pollution.

Extra dust, salty composition or metal powder.

Directly under the air-conditioner.

Direct sunshine.

A place gathered with heat radiation.

2.2 Installation process

- (1) Open a rectangle square hole on the panel upon the panel drilling size used to mount the meter. In case of several meters' installation, leave a space over 25mm between both left and right two holes and 30mm between both upper and lower two holes.
- (2) Insert the meter into the hole.
- (3) Insert the installation stand into the installation slot.
- (4) Push the stand in to have both meter and panel securely combined, tighten the screws.

2.3 Dimensions

Out-form and panel drilling dimensions

Unit: mm

Model	Panel dimension	Casing dimension	Drilling dimension
XMTA	96×96	92×92×70	93×93
XMTD	72×72	68×68×70	69×69
XMTE	96×48	92×44×70	93×45
XMTG	48×48	44×44×100	45×45

2.4 Technical performance

- 1) Accuracy of measurement: < 0.5%FS +/- 1 digit
- 2) Power voltage: 220VAC
- 3) Ambient temperature: 0~50° C
- 4) Obscure PID control
- 5) The product conforms the requirement in the standard for “Q/NWIC XM series digital display regulator”

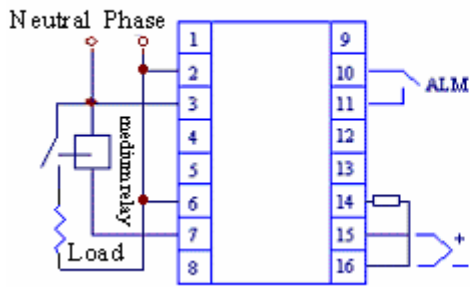
3. Wiring

3.1 Cautions at wiring:

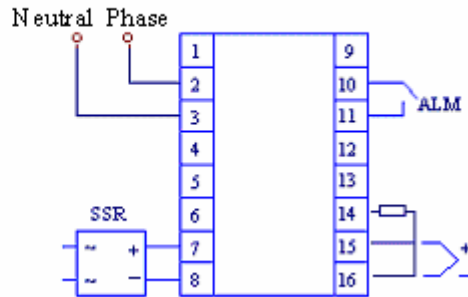
- (1) For a thermocouple input, use a corresponding compensating conductor.
- (2) Have the input signal line far away from the power cable of the meter, power line of the power supply and the load line so as to avoid producing noise disturbance.

3.2 Terminal:

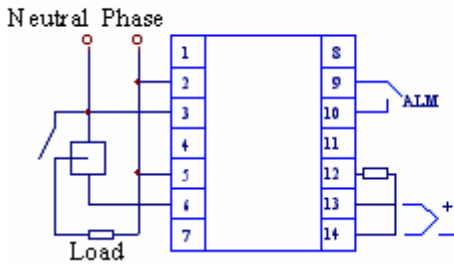
XMTA\XMTE-8411\8401\8412\8402



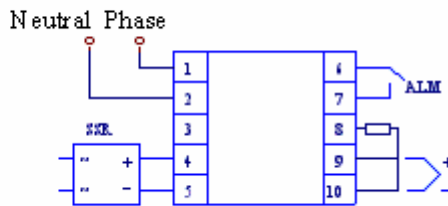
XMTE-8411V\8401V\8412V\8402V



XMTD-8411\8401\8412\8402



XMTG-8411V\8401V\8412V\8402V



4. Panel allocation:

(1) (PV) display

- Display the measured value
- Display various hint symbols upon the meter's state.

(2) (SP) display

- Display the given value
- Display various parameters upon the meter's state

(3) Indicator

- Self-setting indicator (AT), lit at working
- Control output indicator (OUT), lit at output
- Warning output indicator (ALM), lit at output

(4)Function key

- Parameter moved-out, modified and confirmed

(5), (6) Numeral adjusting key

* Used for adjusting numbers

5. Operation

Operation 1: change of the set temperature value

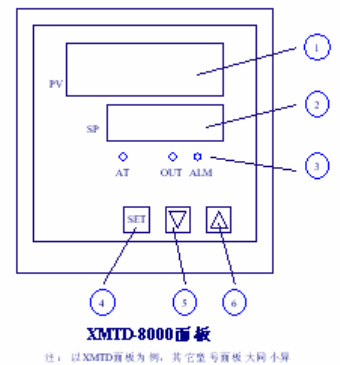
When the temperature setting code "SP" is displayed on the upper row after [SET] is pressed, press [^] or [v] key to select the temperature value required to control on the lower row.

Operation 2: change of the internal functional parameters

Step 1: go into the function table---press [SET] key for about 3s till the display "SP" on the upper row changed into the code "HE" in the table, then release it.

Step 2: change the function parameter---Press [SET] key in spot to select the code to be changed, then press [^] or [v] key to get the desired value.

Step 3: quit from the function table---press [SET] key for about 3s to quit from the



XMTD-8000面板

注：以XMTD面板为例，其它型号面板大同小异

XMTD-8000 panel

Note: take XMTD panel as the example, other models are almost the same.

table.

Code	Item	Setting range	Explanation	Ex-works value
HE	Time proportion reset	-99~100℃ _r	Used for adjusting the static difference of the proportional controller	0 _r
HT	Measuring error correct	-99~100℃ _r	Used for correcting the measuring error caused by the sensor	0 _r
DF	Non-sensitive area	-1~100℃ _r	Adjust the non-sensitive area of the bit-type meter control and warning point	1 _r
AL	Warning setting	-1999~1999℃ _r	As upper limit warning when AL>0, lower limit warning when AL<0	50 _r
T	Control period	1-100 秒 _r	Relay output≥20s, SSR and SCR≥3	30 _r
P	Proportional band	1-300℃ _r	The bigger the P, the lower the gain of the system, used for the heating side only	60 _r
I	Integration time	1-3600 秒 _r	The bigger the I, the weaker the integration action	120 _r
D	Differential time	1-3600 秒 _r	The bigger the D, the stronger the differential action, and can overcome extra-regulation	120 _r

6. Repair and storage

- This Co. will be responsible for repair for the failure caused due to manufacturing quality within 18 months after the date of invoice and the repairing cost will be charged for those caused due to improper use. All-life repair for the meters made in this Co. is available.
- Store the meter in a dry and venting place without corrosive gas with the packing of it available.

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