# User's Manual

# **10-CH Digital Thermometer Module** WE7241

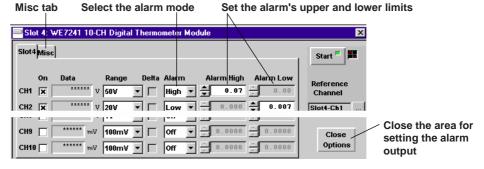
Please note the following (underlined) alternations to the IM707241-01E.

Page 1 "Notes"

 The contents of this manual describe WE7000 Control Software Ver. 4.0.2.0 and module software Ver 3.15.

Page 1-5 "Alarm Output"

To change the alarm output settings, click the [More Options] button in the operation panel.



#### Selecting the alarm mode

You can set upper and lower limits on the measured signal and output a bus trigger signal as an alarm based on those limits to the BUSTRG1 and BUSTRG2 buses in the measuring station. You can select the alarm output condition from the following six choices.

Rise: The measured value changes from a value below the upper limit to a value greater than or equal to the upper limit.

Fall: The measured value changes from a value above the lower limit to a value less than or equal to the lower limit.

High: When the measured value is greater than or equal to the upper limit.

Low: When the measured value is less than or equal to the lower limit.

In: When the measured value falls between the upper and lower limit inclusively.

Out: When the measured value falls above or below the upper and lower limit. If you set, in the trigger source/time base/Arming source setting dialog box, the WE7241 to output a bus trigger signal when an alarm occurs, the module sets the bus trigger signal to [True] for approximately 1 µs when the alarm condition is satisfied in the case of Rise/Fall. In the case of High/Low/In/Out, the module sets the bus trigger signal to [True] while the alarm condition is satisfied.

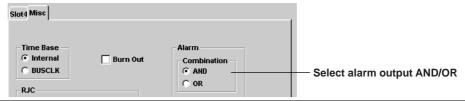
#### Setting the alarm's upper and lower limits

Set [Alarm High] (upper limit) and [Alarm Low] (lower limit) according to the alarm mode you have selected above. The setting range for the upper and lower limits is the measurement range for the DC voltage input and the accuracy guaranteed measurement range for the thermocouple input.

#### Select alarm output AND/OR [Alarm Combination]

Select which of the following conditions will be used to generate the alarm using the [Alarm Combination] option button in the panel that appears by clicking the [Misc] tab. AND: When the alarm conditions of all of the channels that have their alarms set are satisfied.

OR: When the alarm condition of at least one of the channels that have their alarms set is satisfied.





Page 4-1 Correction of "DC voltage input"

Range Setting	Accuracy	Resolution
50 mV	±(0.07% of rdg + 40 <u>μV</u> )	10 μV
100 mV	±(0.06% of rdg + 60 <u>μV</u> )	10 μV
200 mV	$\pm (0.06\% \text{ of rdg} + 80  \mu V)$	10 μV
500 mV	±(0.06% of rdg + 200 <u>μV</u> )	100 μV
1 V	$\pm (0.06\% \text{ of rdg} + 400 \mu\text{V})$	100 μV
2 V	$\pm (0.06\% \text{ of rdg} + 600 \mu\text{V})$	100 μV
5 V	±(0.2% of rdg + 2 mV)	1 mV
10 V	$\pm$ (0.2% of rdg + 3 mV)	1 mV
20 V	$\pm$ (0.2% of rdg + 5 mV)	1 mV
50 V	±(0.2% of rdg + 20 mV)	10 mV

Temperature coefficient (at 5 to 18°C or 28 to 40°C):

## Page 4-4 Correction of "Safety Standards"

Complies with CSA C22.2 No.1010.1 and EN61010-1, conforms to JIS C1010-1

- Overvoltage Category CAT II<sup>\*1</sup>
- Measurement Category CAT II<sup>\*2</sup>
- Pollution Degree 1 and 2\*3
- \*1 Overvoltage Category define transient overvoltage levels, including impulse withstand voltage levels.

  Overvoltage Category II: Applies to equipment supplied with electricity from fixed installations like a distribution board.
- \*2 Measurement Category describes a number which defines transient stresses from the circuit to which they are connected during measurement or test. It implies the regulation for impulse withstand voltage. Measurement Category is applied to the measuring circuit.
  - Measurement Category II: For measurements performed on circuits directly connected to the low voltage installation.
  - NOTE: Examples are measurements on household appliances, portable tools and similar equipment.
- \*3 Pollution Degree: Applies to the degree of adhesion of solid, liquid, or gas which deteriorates withstand voltage or surface resistivity.
  - Pollution Degree 1: Applies to closed atmospheres (with no, or only dry, non-conductive pollution).
  - Pollution Degree 2: Applies to normal indoor atmospheres (with only dry, non-conductive pollution).

## Page 4-4 Correction of "Complying standard" of "Immunity"

EN61326 Industrial Environment

<sup>±70</sup> ppm/°C of rdg at 50 mV to 2 V range ±80 ppm of rdg)/°C at 5 V to 50 V range