7.2.11 Point Calibration

Calibrate a dot printing position.

ƷErₒ : Calibration of the zero point position

FULL : Calibration of the span point position

[Note]

Point calibration "HYS" and "CoLor" are setup item before shipment. Do not change the setup value.

Example) When calibrating the zero point.

Display	Operation keys	Description

□	P Adↄ	ENT △ PRINT ENT	Enter the engineering mode (See the key operation in page 69). Use the △ key to display "P Adↄ", and press the "ENT" key.
□	ƷErₒ	△ PRINT ENT	Use the △ key to select "ƷErₒ", and press the "ENT" key.
□	00003	△ PRINT ▷ FEED ENT	The instrument starts to feed and print the chart paper. With the △(left move) and ▷ (right move), adjust the 0 mm position of the chart paper and the recording position. Press the "ENT" key. Display displays the set counter value.
□	ƷErₒ		Setting is completed. Returned to the Zero Point Calibration screen.

Example) When calibrating the span point.

Display	Operation keys	Description

□	P Adↄ	ENT △ PRINT ENT	Enter the engineering mode (See the key operation in page 69). Use the △ key to display "P Adↄ", and press the"ENT" key.
□	FULL	△ PRINT ENT	Use the △ key to select "FULL", and press the "ENT" key.
□	01003	△ PRINT ▷ FEED ENT	The instrument starts to feed and print the chart paper. With the △ (left move) and ▷ (right move), adjust the 100 mm position of the chart paper and the recording position. Press the "ENT" key. Display displays the set counter value.
□	FULL		Setting is completed. Returned to the Span Point Calibration screen.

7.2.12 Data Calibration

Calibrate the voltage, resistance temperature detector, and reference junction compensation.

ᵇoᴸᵗ : Calibration of the voltage

rᵗd : Calibration of the resistance temperature detector

rᴊC : Calibration of reference junction compensation

[Note]

This recorder is precisely proofread. First of all, please reconfirm a setting value when the instruction value is abnormal.

The calibration value abnormality doesn't usually occur.

Example) When calibrating the voltage at Channel 1.

Display	Operation keys	Description
d Adᴊ	ENT / △ PRINT ENT	Enter the engineering mode (See the key operation in page 69). Use the △ key to display "d Adᴊ", and press the "ENT" key. Use the △
ᵇoᴸᵗ	△ PRINT ENT	key to select "ᵇoᴸᵗ", and press the "ENT" key.
Ch 1	△ PRINT ENT	Select the channel where an instrument for calibration such as a mV generator is connected, and then, press the "ENT" key.
00rᵇ	ENT	Enter 0 mV. After 30 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
15rᵇ	ENT	Enter 15 mV. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
25rᵇ	ENT	Enter 25 mV. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
35rᵇ	ENT	Enter 35 mV. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
55rᵇ	ENT	Enter 55 mV. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
200rᵇ	ENT	Enter 200 mV. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
00 1ᵇ	ENT	Enter 1 V. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
005ᵇ	ENT	Enter 5 V. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
0 10ᵇ	ENT	Enter 10 V. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.
StorE	△ PRINT ENT	If the calibration is correct, select "StorE" with the △ key, and if incorrect, select "Abort", respectively. Then, press the "ENT" key.

[Note]

For calibration for voltage input, only one channel calibration is effective to all the channel.

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Example) When calibrating the resistance temperature detector at Channel 2.

Display	Operation keys	Description

d Adu — ENT / △PRINT ENT

Enter the engineering mode (See the key operation in page 69). Use the △ key to display "**d Adu**", and press the "ENT" key. Use the △ key to select "**rtd**", and press the "ENT" key.

rtd — △PRINT ENT

Ch2 — △PRINT ENT

Select the channel where the instrument for calibration such as a dial resistor is connected and then, press the "ENT" key.

r **r 100** — ENT

Enter 100Ω. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.

r **r 150** — ENT

Enter 150Ω. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.

r **r300** — ENT

Enter 300Ω. After 10 seconds, make sure that the ALM lamp unilluminates and press the "ENT" key.

StorE — △PRINT ENT

If the calibration is correct, select "**StorE**" with the △ key, and if incorrect, select "**Abort**", respectively. Then, press the "ENT" key.

[Note]

When calibrate RTD for a channel, the input terminals of the other channels are shortcut. Recording requires RTD calibration for every channel.

[Note]

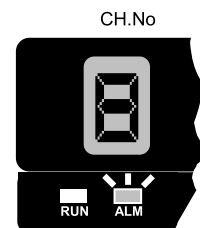During calibration, ALM lamp displays following conditions below.

①Unilluminating the ALM lamp
The calibration is within the range.
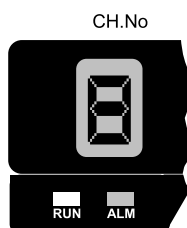
CH.No

②Blinking the ALM lamp
Judges the input value.

CH.No

☐ displays unilluminating the lamp.
▊ displays illuminating the lamp.

③Illuminating the ALM lamp
Make sure that the connection is properly or input is correctly.

CH.No

Example) When setting the terminal temperature for Channel 1.

Display	Operation keys	Description
☐ d Adj	ENT / PRINT △ ENT	Enter the engineering mode (See the key operation in page 69). Use the △ key to display "d Adj", and press the "ENT" key.
☐ rJC	PRINT △ ENT	Use the △ key to select "rJC", and press the "ENT" key.
r Ch 1	PRINT △ ENT	Select the Channel to set, and press the "ENT" key. Measure and display the real time terminal temperature. When press the "ENT" key, turn to the setting temperature display.
☐ 24.5	ENT	
☐ 25.0	PRINT △ FEED ▷ / ENT	Use the △ key to alter a numeral, and ▷ key to shift a digit. Then, press the "ENT" key. See 9.5 (3) Calibration of Reference Junction Compensation. If the calibration is correct, select "StorE" with the △ key, and if incorrect, select "Abort", respectively. Then, press the "ENT" key.
☐ StorE	PRINT △ ENT	

[Note]

When calibrate the terminal temperature, select a channel to calibrate for channel 1 to channel 3, and select another channel for channel 4 to channel 6. Calibrate these channels separately.

7.3 Terminating the Engineering Mode

Example) The following describes how to save the setting data.

Display	Operation keys	Description
☐ End	PRINT △ ENT	Use the △ key to display "End", and press the "ENT" key.
☐ StorE	ENT	Use the △ key to select "StorE", and press the "ENT" key. The settings of the engineering mode have been saved. Recording starts under the new settings.

[Note]

Upon termination, if you select "End" and turn off the power without selecting "StorE", the settings will become invalid. Selecting "Abort" invalidates the settings and starts recording under the previous settings.

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