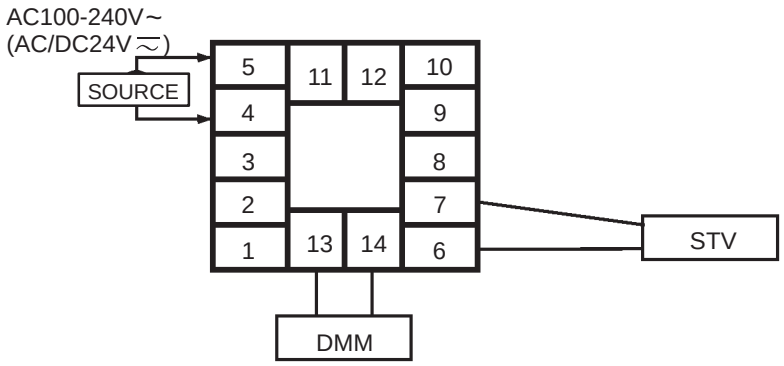
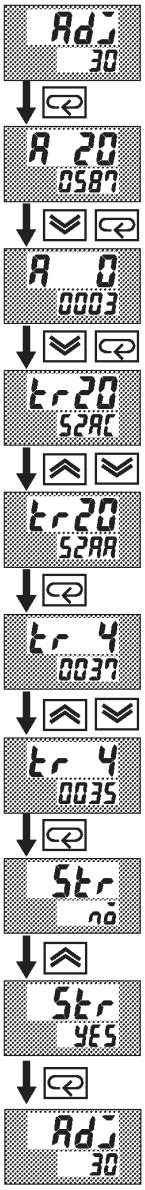
Calibrating Current Input

Preparation



Calibration



- In the above figure, STV refers to a standard DC current/voltage source, and DMM refers to a precision digital multimeter. However, note that the DMM is required only when the transfer output function is supported.

This example describes how to calibrate a platinum resistance thermometer when the transfer output function is supported. If the transfer output function is not supported, skips steps (4) to (7).

(1) When [Adj] is displayed, the 30-minute timer is displayed on the No.2 display and counts down. This timer serves as a guide for the aging time when aging is required.

(2) Press the [↵] key. The display changes to [A 20] (20 mA calibration display). Set the STV output to 20 mA. When the value on the No.2 display has stabilized (changes of several digits max.), press the [≪] key to temporarily store the calibration data.

(3) Press the [↵] key. The display changes to [A 0] (0 mA calibration display). Set the STV output to 0 mA. When the value on the No.2 display has stabilized (changes of several digits max.), press the [≪] key to temporarily store the calibration data.

(4) Next, calibrate the transfer output function. If the transfer output function is not supported, skip to step (8). Press the [↵] key. The display changes to [tr20] (20 mA calibration display).

(5) Set the output to 20 mA by the [≪] or [≫] keys while monitoring the voltage on the digital multimeter. In the example on the left, the display indicates that the value two digits smaller than before calibration is “20 mA”.

(6) Press the [↵] key. The display changes to [tr 4] (4 mA calibration display).

(7) Set the output to 4 mA by the [≪] or [≫] keys while monitoring the voltage on the digital multimeter. In the example on the left, the display indicates that the value two digits smaller than before calibration is “4 mA”.

(8) Press the [↵] key until the display changes to the data store display.
Press the [≫] key. The No.2 display changes to [YES], and two seconds later the calibration data is stored to internal memory. If you press the [↵] key when the No.2 display reads [no], the calibration data is disabled.

(9) This completes calibration of the current input. Press the [↵] key to return the display to [Adj].