

Features

The K3NV Weighing Meter displays voltage or current input after performing the numeric conversion of the input.

The K3NV has the following functions.

Scaling

Current or voltage input is converted into a value within a specified range to display engineering units.

There are two scaling methods: scaling by using measured input values or scaling without connecting a sensor and using assumed input values instead.

Refer to *NO TAG Scaling Menu*.

Comparative Output Selection

Comparison output patterns can be selected from the standard, level, or zone output depending on the application.

Refer to *Comparative Output Patterns* in Section 3–2–6.

Linear Output

Refer to *Linear Output Range* in Section 3–2–6.

BCD Output

A digital data output format where every four binary bits is numerically equivalent to one decimal digit.

Refer to *Section NO TAG BCD Output*.

Communications Output

Refer to the *Communications Manual*.

HOLD

HOLD is an external input which is used to stop the A/D process and freeze the display. The comparative, linear, and BCD outputs are also retained.

Refer to *NO TAG External Input Signals* for details.

RESET

RESET is an external input to reset the present maximum and minimum values. The process value when the RESET is ON is set as the maximum and minimum values. The maximum and minimum values can be reset using the front panel keys.

Refer to *1-4 Displaying and Resetting of Maximum and Minimum Values*.

Teaching

The K3NV is provided with a teaching function that can set an actual measured value as a setting value without key input.

This function is useful for setting parameters while checking the operating status of the K3NV.

The teaching function can be used to set the set and scaling values. It can be also used to set the linear output range of the K3NV with a Linear Output Board.

Refer to *1-5 Teaching Function* for details.

Output Test

This function is convenient for checking a system to which the K3NV is connected, especially when some inputs cannot be operated. The K3NV simulates an input to check the output conditions.

Refer to *1-6 Output Test* for details.

Forced-zero

By turning the ZERO input ON, the process value can be calibrated to zero.

This function is useful for measurement on the basis of any process value as zero.

This calibration is maintained without being influenced by input range changes or power interruptions until the next time the ZERO input signal is turned ON or the scaling value is changed.

Refer to *1-3 Forced-zero* for details.

Hysteresis

The established setting value includes a hysteresis setting to prevent “chattering” of the output when the measured value fluctuates in the vicinity of the setting values.

Hysteresis is enabled when the measured value starts to become smaller than the HH and H setting values and larger than the LL and L setting values.

Refer to *Hysteresis in Section 3–2–6*.

Startup Compensation Time

The startup compensation time parameter keeps the measurement operation from sending an unnecessary output corresponding to instantaneous, fluctuating input from the moment the K3NV is turned ON until the end of the preset period.

Refer to *Startup Compensation Time in Section 3–2–6*.

Remote/Local Selection

The K3NV can be operated remotely through a host computer or locally with key inputs.

Remote Mode: For programming remotely by downloading setup parameters from a host computer via RS-232C, RS-485, or RS-422.

Local Mode: Programming is performed with the front panel key input.

Refer to *Remote/Local Programming in Section 3–2–6*.

Average Processing

Average processing prevents the display from fluctuating due to unstable input. Simple average processing or movement average processing can be selected.

Refer to *Average Processing in Section 3–2–6*.