

INDICATOR/CONTROLLER ALARM

Model : CT-2002MA



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1. FEATURES

- * The CT-2002MA can cooperate all the LUTRON transmitters (or any other transmitters if it build 4 to 20 mA output signal) , then whole system will be become the useful Controller/Alarm/Indicator for following measuring function :

Humidity, Light, pH, Dissolved Oxygen, Conductivity, Vibration Pressure Sound, Temperature, RPM, Hz, Load cell (Weight, Force), Potential (Angle, Level). ACV, ACA, DCV, DCA, WATT, VAR, Power Factor

- * According the 4 to 20 mA input signal, user can preset the desire display value between -1999 to 9999 (decimal point can select to DP1, DP2, DP3). Until set the display value, all the data will save into the memory circuit permanently
- * Easy to adjust the function factors by push button on the front panel.

2. SPECIFICATIONS

Display	* 4 digits red LED, 14 mm (0.55 inch) digit height
	* 4 indicators : PV (process value) indicator SV (set value) indicator Control out indicator Alarm out indicator
	* According the 4-20 mA input signal, user can preset the desire display value between -1999 to 9999 (decimal point can select to DP1, DP2, DP3). Until set the display value, all the data will save into the memory circuit permanently
Input Signal	Linear, 4 to 20 mA
Output	Relay contact output : 5A/240 VAC (resistive load)
	* Control output : 3 points (Com, NO, NC)
	* Alarm output : 2 points
Control Function Select	Control value can set from the front panel buttons
	* <i>Control function 1</i> : High control with deviation value setting.
	* <i>Control function 2</i> : Low control with deviation value setting.
Alarm Function Select	Alarm value can set from the front panel buttons
	* <i>Alarm function 1</i> : High Alarm with deviation value setting.
	* <i>Alarm function 2</i> : Low alarm with deviation value setting.
Sample Time	Approx. 0.5 second.

Internal Function Selection	* Dcimal point adjustment : DP1,DP2,DP3
	* Low limit of range adjustment 0 mA = X X X X, min. value is -1999
	* High limit of range adjustment 20 mA = X X X X, max. value is 9999
	* Alarm function adjustment High Alarm or Low alarm.
	* Control function adjustment High control or Low control.
	Default of internal function : Without advice previously, the function of CT-2002MA will preset :
	* 4 mA = 0, 20 mA = 9999. * High control mode. * High alarm mode.
Front Panel Function Selection	* Control set-point value adjustment.
	* Alarm set-point value adjustment. (Code : ALSP)
	* Deviation of Alarm (Code : ALHY)
	* Deviation of Control (Code : HYSt)
	* Filter value of display reading (Code : FiLt)
	* Offset value adjustment of Display (Code : SPoF)
Power Supply	90 ACV - 264 ACV, 50/60 Hz
Power Consumption	Less than 3 VA
Operation Temperature	0 𐄂 to 50 𐄂 (32𐄂 to 122𐄂).
Operation Humidity	Less than 85 % RH (Non condensed).
Weight	230 g (0.51 LB).
Dimension	Case : 96 x 48 x 80 mm. <i>Refer Fig. 3</i> Panel cut size : 92 mm x 45 mm.
Standard Accessories	Operation Manual..... 1 PC
	Panel holder..... 2 PCs

3. FRONT PANEL DESCRIPTION

Fig. 1

- 3-1 Display
- 3-2 SET () Button
- 3-3 Upper () Button
- 3-4 Down () Button
- 3-5 Control Output Status Indicator
- 3-6 Alarm Output Status Indicator
- 3-7 PV (Process Value) Indicator
- 3-8 SV (Set Value) Indicator
- 3-9 Terminals

4. WIRE CONNECTION OF TERMINALS

Fig. 2

5. INTERNAL FUNCTION SELECTION

To access the " Internal Function Selection " ,
press " SET " key for at least 5 seconds.

The parameters in option level are as follow :

Pb

Set Pb value to " 0.0 "

tyPE

To select sensor type, select code to " LinE "

Unit

Not necessary to make selection.

dP

To select the decimal point (DP1, DP2, DP3).

LoLt

To adjust the " Low limit of range ", min. adjust value is -1999.

To set the display value when input signal is 0 mA.

- * For example 1, if the transmitter output is 4 mA = 0,
20 mA = 100.0, then should set " Low limit of range " = -25.0
- * For example 2, if the transmitter output is 4 mA = 0
12 mA = 7.00, 20 mA = 14.00, then should set " Low limit of
range " = -3.50

HiLt

To adjust the " High limit of range ", max. adjust value is 9999.

To set the display value when input signal is 20 mA.

- * For example 1, if the transmitter output are 4 mA = 0
20 mA = 100.0 then should set " High limit of range " = 100.0
- * For example 2, if the transmitter output is 4 mA = 0
12 mA = 7.00, 20 mA = 14.00, then should set " High limit of
range " = 14.00

AIFU

To select the " Alarm function ".

- * To select the " High Alarm function ".

Select Code : " Hi "

- * To select the " Low Alarm function ".

Select Code : " Lo "

@ Other alarm function, please do not enter and select.

ACt

To select the " Control function ".

- * To select the " High Control function "

Select Code : " dir "

- * To select the " Low Control function "

Select Code : " rEy "

SCrH - Not necessary to make selection.

SCrL - Not necessary to make selection.

rtSH - Not necessary to make selection.

rtSL - Not necessary to make selection.

@ " SET () Button " + " Down () Button " will return
to process value display.

6. FRONT PANEL FUNCTION SELECTION

To set the " Control value "

Use the " Up () Button " and the " Down () Button " to adjust control set-point value .

Code : ALSP

To adjust alarm set-point value

Code : ALHY

To adjust the deviation value of Alarm.

Code : HYSt

To adjust the deviation value of Control.

Code : FiLt

* To adjust the filter value of the display reading , typical select to 3.0.

Code : PyoF

- Not necessary to make selection.

Code : SPoF

To adjust the offset value of display reading

7. MESSAGE ON FRONT PANEL

<i>Symptom</i>	<i>Problem</i>
uuuu	Input signal beyond the high limit.
nnnn	Input signal below the low limit.
oPEn	Input signal is not connected.

8. DEFAULT FUNCTION

Internal Function	* Display :
	4 mA = 0, 20 mA = 9999.
Selection	* Dimal point : none
	* High control function.
	* High alarm function.
Front Panel Function Selection	* Set-point value of Control = 0
	* Set-point value of Alarm = 0 (Code : ALSP)
	* Deviation of Control = 0 (Code : HYSt)
	* Deviation of Alarm = 0 (Code : ALHY)
	* Filter of display reading = 3.0.
	* Offset value of display reading = 0 (Code : SPoF)

9. DIMENSIONS

Fig. 3

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