

# 4-20 mA Control/Alarm/Indicator

Model : CT-2012

ISO-9001, CE, IEC1010



4 -20 mA  
Transmitters



LUTRON ELECTRONIC

*The Art of Measurement*

# 4-20 mA Controller/Alarm/Indicator


## Model : CT-2012

### FEATURES

* Input : 4-20 mA DC, linear.
* User can default the desired display value between -1999 to 9999 ( decimal point can be selected to DP1, DP2, DP3 ) and all the preset data will be saved into the memory circuit permanently.
* 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
* When CT-2012 cooperate LUTRON's 4 to 20 mA transmitters ( or any other transmitters if it build 4 to 20 mA output signal ), whole system will become the high performance Controller/Alarm/Indicator for following measuring functions : Humidity, Light, pH, Dissolved Oxygen, Conductivity, Vibration, Pressure, Sound, Temperature, RPM, Hz, Load cell ( Weight, Force ), Potential ( Angle, Level ). ACV, ACA, DCV, DCA, WATT....
* Easy to adjust the function factors by push button on the front panel.
* Control output : 2 points ( COM, NO ).
* Alarm output : 2 points ( COM, NO ).
* Control Relay will make action when the reading value reach to control value.
* Hysteresis value setting for control and alarm function.
* Large red LED display, high brightness and easy to read.
* Microprocessor circuit ensures high accuracy and provides special functions and features.
* DC 24V power supply output.
* RS232/USB computer interface.
* Power : 90 ACV - 264 ACV, 50/60 Hz.
* Standard 96 X 48 mm DIN case.
* Optional data acquisition software.

### GENERAL 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
Accuracy @ 23 ± 5 °C	Span ± ( 0.15% + 2d ) F.S.
	Zero ± ( 0.1% + 2d ) F.S. * F.S. : full scale
Circuit	Custom chip of microprocessor LSI circuit.
Sampling Time	Approx. 1 second.
External Power Supply	DC 24 V, 50 mA max.
Data Output	RS 232 PC serial interface.

Relay Output	Number	2 relays
	Function	<i>Relay 1 :</i> High/Low control relay. <i>Relay 2 :</i> High/Low alarm relay.
	Max load	0.5 ACA/250 ACV 0.5 DCA/24 DCV <b>* Do not apply the relay contact load current &gt; 0.5 A, other wise the relay may be damaged permanently without warranty.</b>
	Main Internal Function Selection	* Decimal point adjustment : DP1, DP2, DP3 * Low limit of range adjustment 4 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. * Deviation of Alarm * Deviation of Control * Filter value of display reading * Offset adjustment. * Gain adjustment. * RS232 output unit code setting  <i>Default of internal function : Without advice previously, the function of CT-2012 will preset :</i> * 4 mA = 0, 20 mA = 9999. * High control mode. * High alarm mode. * RS232 output unit code = 0 ( no unit ).
Front Panel Function Selection	* Control set-point value adjustment. * Measuring value ( Process value ) offset. Use to offset the PV indication from the actual PV. * Alarm set-point value adjustment.	
Operating Temperature	0 to 50 °C.	
Operating Humidity	Less than 80% R.H.	
Power Supply	90 to 260 ACV, 50/60 Hz.	
Power Consumption	Approx. 3.5 VA/AC 110V. Approx. 4.9 VA/AC 220V.	
Weight	384 g/ 0.84 LB.	
Dimension	DIN size : 96 x 48 mm. Panel cut size : 92 mm x 46 mm. Depth : 110 mm.	
Accessories Included	Instruction manual.....1 PC Case holder with screw..... 2 PCs	
Optional Accessories	* Data Acquisition software, SW-U801-WIN. * RS232 cable, UPCB-02. * USB cable, USB-01.	

\* Appearance and specifications listed in this brochure are subject to change without notice.