6位数设定按键式计数器
6 DIGITS PRESETTING KEY COUNTER

CA-61K
CA-62K
CA-63KC

1 产品规格 SPECIFICATION

型号 Type No.	CA-61K,CA-62K,CA-63KC	
显示范围 Display Range	-99999~999999	
设定范围 Setting Range	1-999999	
字型尺寸 Character Height	Count LED 0.39"(Red) Preset LED 0.3"(Green)	
计数输入 Input signal Mode	有接点输入 Contact input:25Hz	无接点输入 non-contact Input:3kHz(on-off ratio 1:1)
输出方式 Output system	Relay output (250V,3A max)	
输出时间 Output time	0.1~9.9 seconds (Variable)	
复归方式 Reset system	External, Manual, Auto Reset	
输入信号 Input data	NPN, open collector	
停电记忆 Power failure Memory	记忆资料保持十年不变 EEPROM back up time is as long 10 years	
电源电压 Power voltage	AC 110V/220V±15% 50Hz/60Hz	
消耗电力 Power Consumption	5.5VA	
耐温湿度 Temperature Humidity	-10℃~+50℃ 35%~85% RH	
尺寸规格 External Dimensions	72mm×72mm×145mm（盘面开孔 Mounting flush dimension：68mm×68mm）	

2 面板说明 DIGITAL MONITOR DESCRIPTIONS
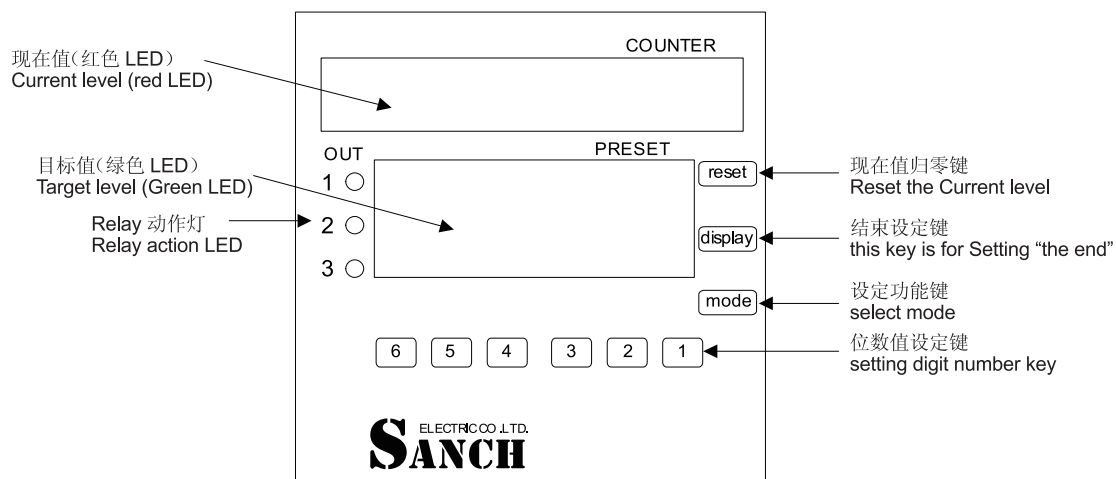
2.1 位数值设定键 SETTING DIGIT NUMBER KEY

CA-61K,CA-62K,CA-63KC 面板下方有编号 1~6，6 个按键，分别代表"个"、"拾"、"百"、"千"、"万"、"拾万"位数，若是要改变目标值，按下欲设定数之键。当按下设定位数之键，此位数变为闪烁状态。若一直按着，数字由 0 至 9 往上连续改变直到欲设定之设定值，放开按键 3 秒后即设定完成。

CA - 61K, CA – 61K, CA – 63KC 's monitor lower part is numbered 1 ~ 6, 6 keys, representing the "single digit", "tens", "hundred", "thousand", "ten thousand", "hundred thousand" digits, if you want to change the target data, press the number of keys to set. When you press the number of keys which set, this digit will be flashing state. If you hold on, Numbers from 0 to 9 continuous change until you would like to set up the data, if you finger left the he key for 3 seconds then the setting data will be completed.

2.2 信号输入方式 INPUT DATA

端子 A-in, B-in, RS 输入方式 皆为 NPN 输入（无电压入力）
Terminal A-in,B-in, RS input data, all inputs by NPN input(no voltage input)

2.3 Mode 键 Key :

mode：选择设定功能类别   Select mode
PS-I: 第一段设定（CA-62K）   1st step setting（CA-62K）
tr: Relay 动作保持时间,范围 0.1~9.9sec Relay action hold time, Range:0.1~9.9 sec
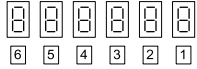SCL: 倍率设定,范围 0.001~99.9999   Set the ratio , Range: 0.001~99.9999
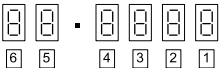POnt: 小数点位置设定   Setting decimal point position

2.4 Disp 键 key

在欲结束设定功能时，请按此键或3秒内不再按任何键，即自动结束设定。
When you want to finish the set function, please press this key or not press any key for 3 seconds, it will be finished the setting automatically.

设定类别 Setting data	步骤 step
目标值 Target data	8 8 8 8 8 8 ⑥ ⑤ ④ ③ ② ①
ㅏㄷ值 data	mode ㅏㄷ → 8 . 8 ② ①
SCL	mode ㅏㄷ → SCL → 8 8 . 8 8 8 8 ⑥ ⑤ ④ ③ ② ①
POnt	mode →mode →mode ㅏㄷ → SCL → POnt → 假如要在小数点第2位，请按 2 以此类推。 If you need the decimal point 2nd digit, please press 2 and so on.

2.5 Reset 键 key：

在按下此键时，现在值清除为零。
The current data will return to zero, when you press this key.

2.5.1. SW1：输入频率开关 Input Switch setup

SW1-Hi： 信号无滤波电容，频率可达 1kHz。
　　　　Removes damping capacitor and allows operation up to 1 kHz.

SW1-Md：信号有滤波电容，频率可达 300Hz。
　　　　Connects small damping capacitor and limits counter frequency to 300 Hz.

SW1-Lo：信号有滤波电容，频率可达 25Hz。
　　　　Connects small damping capacitor and limits counter frequency to 25 Hz.

2.5.2. SW2 开关 Switch

（1）计算方式 Counting mode
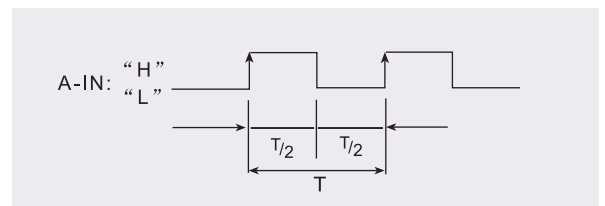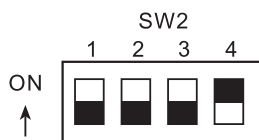
a. 加算（单相入力）SW2-4 OF　Add (Single input) SW2-4 OFF
　A-IN：加算入力　A-in add input
　B-IN：为 gate 功能（暂时停止信号入力）
　　　　it's GATE function (Temporarily stop signal input)

b. 加减算（90°相位差输入）SW2-4 ON
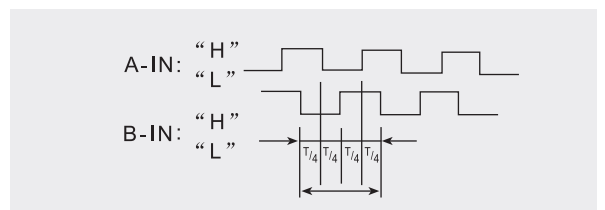　　Add and subtract (90°Phase angle input) SW2-4 ON

此计数模式最常配合译码器（encoder）使用，或配合两个 sensor，但请注意相位尽量为 90°。
The count mode is often used with encoder (encoder), or two sensors, but the phase angle is 90 ° as far as possible.

c. 注意：在改变计数模式后，必须切掉电源再重新开机。
　Note：when you changed counting mode, you must cut off the power before restarting.

（2）**Relay 复归 N.R.C　Relay :N.R.C**

a. N：手动 (Manual reset)，SW2-3 ON

计数值等于设定值时 RELAY ON；计数继续上数直到手动或外部复归，RELAY 才 OFF，计数值归零。

When counter reaches the preset number, relay contact turns on and counter keeps counting up, The counter display will return to zero only when we press down the " reset" key on the front panel or connect with terminal 12 &11. Relay contact turns off.
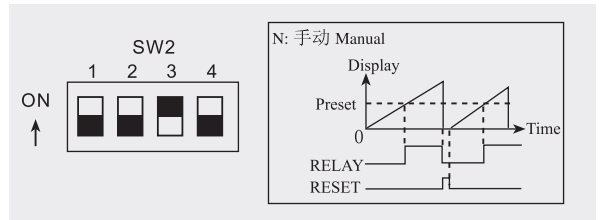
b. R：回归（RETURN），SW2-2 ON

计数值等于设定值时 RELAY ON，计数继续上数，待 T 时间后（面板 Timer 调整）RELAY Return（复归）计数值归零。

When counter reaches the Preset data, the relay will excite (relay contact turns ON) and counter keeps counting up. After 0.1~9.9 sec. (adjusting from the timer panel) the relay returns to low data and display returns to 0 automatically.
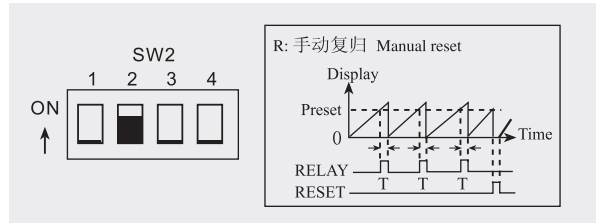
c. C：继续（CONTINUE），SW2-1 ON

计数值等于设定值时 RELAY ON，计数值立即归零后，再继续上数。待 T 时间后 RELAY 才会 OFF。

This reset mode may be also called as one-shot output function. When counter reaches preset data, the relay will turn on and display returns to zero at once and the display continues to count. The relay contact controlled by the Timer panel will return to low data after 0.1~9.9 sec.
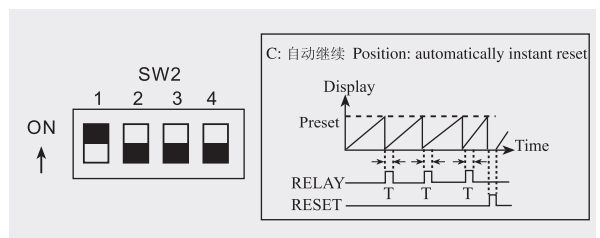
2.5.3. 输出模式 Output mode

（1）二段单独设定输出：（CA-62K）如右时序图有 N.R.C 动作，计数值≥第一段设定值时 Relay 1 ON，计数值≥第二段设定值时 Relay 2 ON，N.R.C 动作后一起释放。

2 step independent output: CA-62K. When the counter display is equal to or larger than the first preset value, relay 1 contact turns on. When the counter display is equal to or larger than the second preset value, relay 2 contact turns on and then the operation of N.R.C work together.
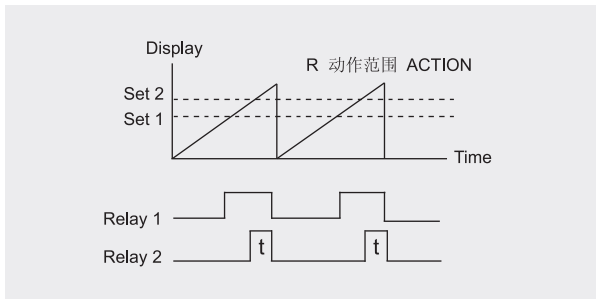
（2）Hi-Lo-Go 追踪器：CA-63KC，如右之时序图。

当计数值 < 设定值时，Lo-relay ON
当计数值 = 设定值时，Go-relay ON
当计数值 > 设定值时，Hi-relay ON
当 Go 已输出且计数值≠设定值时，Go 输出将延迟后再 OFF，输出延迟时间由面板 timer 决定。

Hi-Lo-Go tracer: The timing chart of CA-63KC illustrates at right side. When the counter display is less than the preset value, Lo-relay turns on.
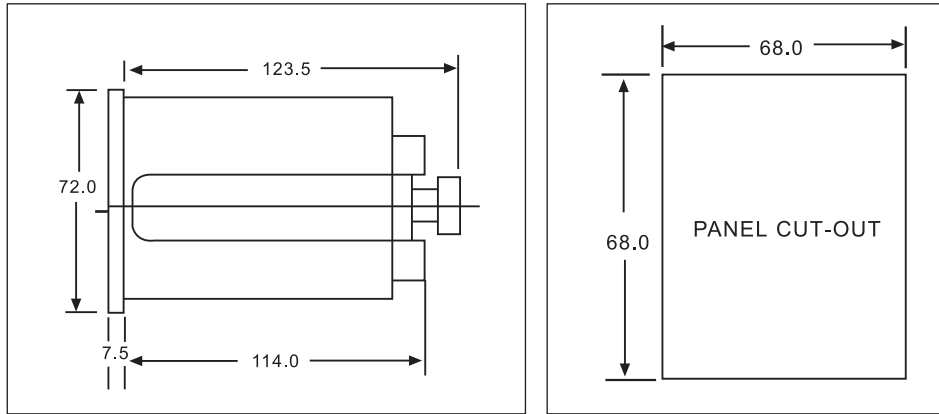
When the counter display is equal to the preset value, Go-relay contact turns on.

When the counter display is larger than the preset value, Hi-relay turns on.

As "Go" has output and the counter display is not equal to preset value, the "Go" output will delay and turns OFF. The delay time is decided by the "Time"button at the front panel.
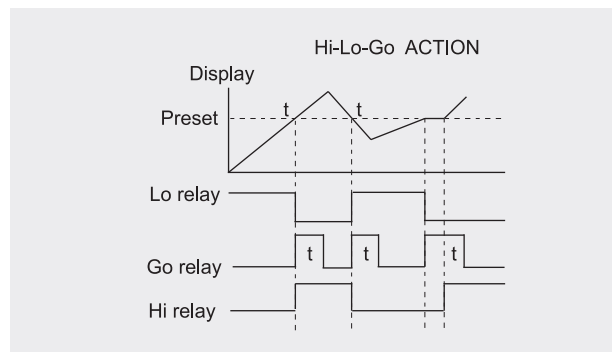
3 外形尺寸图 DIMENSION DIAGRAM

Unit: mm

4 端子说明 TERMINALS DESCRIPTIONS

CA-61K

CA-62K

CA-63K