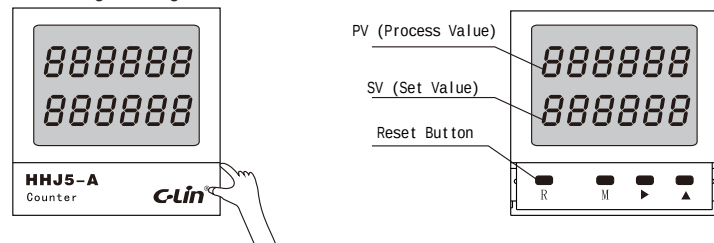


VII. Preset Setting

Gently pull the right concave part of the cover outward using a hook (as shown in the left diagram). Open the cover carefully (avoid excessive force to prevent damage), revealing the interface as in the right diagram.



1. Button Functions

① "M" Function Key: Press the "M" key once, and the lower row displays: Preset number (arbitrarily settable from 1 to 999999). Long-press the "M" key for 4 seconds, and the lower row displays: *R1*, *R2*, *R3*, *R4*, *R5*;

Explanation: *R1*: *R1---1* represents $\times 1$ multiplication factor (displays 1 for each pulse signal input).

R1---10 represents $\times 10$ multiplication factor (displays 1 for every 10 pulse signals input).

R1---100 represents $\times 100$ multiplication factor (displays 1 for every 100 pulse signals input).

R2: *R2---L* indicates low-frequency counting (counting speed ≤ 30 times/second).

R2---H indicates high-frequency counting (counting speed > 30 times/second and < 1000 times/second).

R3: *R3---U* indicates positive counting (display: 1, 2, 3, 4, 5...).

R3---d indicates reverse counting (display: 100, 99, 98, 97...).

R4: *R4---N* represents N mode. *R4---C* represents C mode. *R4---F* represents F mode.

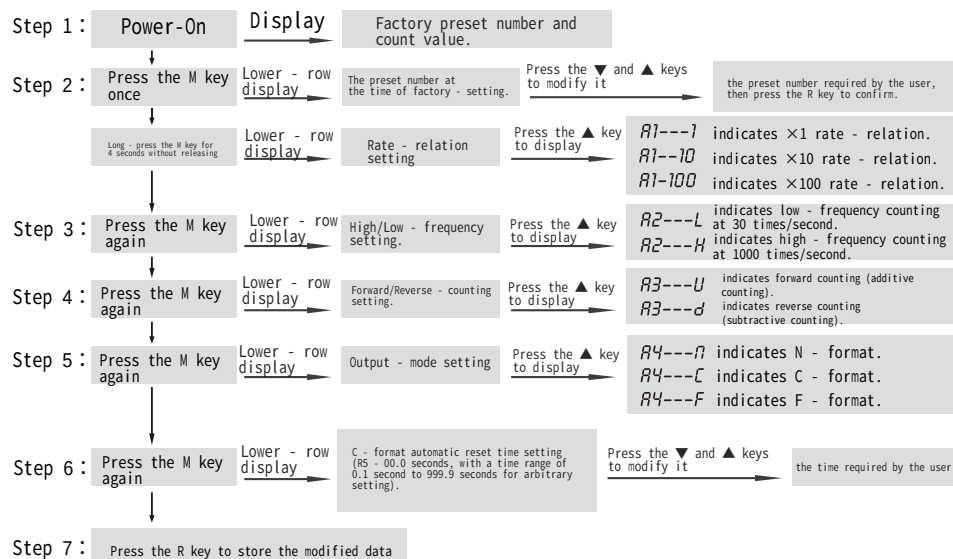
R5: *R5---00.0* automatic reset duration (0.1s to 99.9s, adjustable).
(Note: N-mode and F-mode do not support *R5* settings.)

② "►" Shift Key: Moves digit positions (e.g., units $\rightarrow$ tens, tens $\rightarrow$ hundreds).

③ "▲" Add Key: Increments the selected (flashing) digit.

④ "R" Reset Key: Resets displayed numbers and counting output to initial state.

2. Parameter Setting (N/F Modes Skip Step 6; Only C-Mode Includes All Steps):



Note: Pressing the R key at any step can store the modified data.

Example: The preset number is 126888, the counting rate is $\times 1$, the counting signal is high - frequency counting, the counting mode is forward counting, and the output formats are N - format, F - format, and C - format respectively, with an automatic reset time of 15.8 seconds. The display codes are as follows:

N-mode	126888	<i>R1---1</i>	<i>R2---H</i>	<i>R3---U</i>	<i>R4---N</i>	Finally, press the R key to store the data.
F-mode	126888	<i>R1---1</i>	<i>R2---H</i>	<i>R3---U</i>	<i>R4---F</i>	Finally, press the R key to store the data.
C-mode	126888	<i>R1---1</i>	<i>R2---H</i>	<i>R3---U</i>	<i>R4---C</i>	<i>R5---15.8</i> Finally, press the R key to store the data.

VIII. Instructions for Use

1.The "R" key serves as both a reset key and a confirmation key. After each parameter setting is completed, this key must be pressed for confirmation before the device can operate according to the newly - set parameters.

2.When counting with contact - signal input, if incorrect counting occurs due to poor contact or bounce of the input contact, connect a 4.7 μ F/50V electrolytic capacitor between terminals ⑧ and ⑨ of the counting - signal input. Connect the negative terminal of the electrolytic capacitor to terminal ⑧ and the positive terminal to terminal ⑨.

3.The counting - signal input wire and the reset control wire should be as short as possible. Avoid routing them in the same conduit or twisting them together with power wires and power - driven wires. If necessary, use shielded wires, and make sure no voltage is input at the reset end to avoid damaging the product.

IX. Ordering Instructions

When placing an order, the product model, operating voltage, output format, and quantity must be specified;

Example: HHJ5 - A (New Type) AC220V N, C, F modes 500 pieces

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C-Lin
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欣灵

使用说明书
Products Instructions

HHJ5-A (New Type)

Counting Relay

N/C/F Modes

Thank you very much for using C-Lin brand counters.
Please read the instruction manual before using the product!

29A018N0

I. Overview

The HHJ5 - A (new type) counting relay (hereinafter referred to as the counter) is suitable for use as a counting element in control circuits with an alternating current of 50/60Hz and a rated working voltage of 380V or less, or a direct - current working voltage of 24V. It connects or disconnects the circuit according to the preset number.

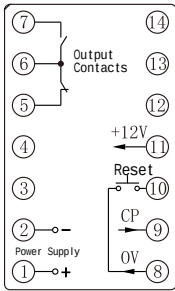
The counter adopts a single - chip microcomputer circuit, EPROM memory, photoelectric isolation for counting signals, and a 6 - digit LED digital display with selectable multiplication factors. It has the advantages of a wide counting range, multiple counting signal inputs, multiple output working modes, positive/reverse counting, power - failure memory for up to 10 years, and stable and reliable counting performance.

This product complies with the requirements of GB/T 14048.5.

II. Main Technical Data

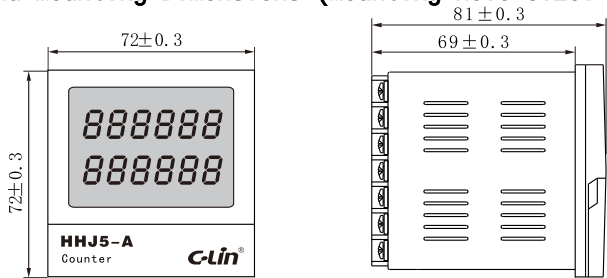
- 1.Working Power Supply: AC380V, 220V, 110V, 36V, 24V at 50/60Hz, with an allowable voltage fluctuation range of (85% - 110%) Ue; DC24V.
- 2.Counting Range: 1 - 999999 (×1, ×10, ×100 multiplication factors).
- 3.Counting Signal Input Modes:
 - a) Contact Signals: Relay contacts, limit switches, etc.
 - b) Level Signals: Pulse level (H: DC4V - 30V is valid, L: 0 - DC2V is invalid).
 - c) Sensor Signals: Photoelectric switches, proximity switches, Hall switches.
- 4.Counting Speed:
 - a) Low - frequency Counting: ≤30 times/second, with a minimum signal pulse width ≥15ms.
 - b) High - frequency Counting: >30 times/second and <1000 times/second, with a minimum signal pulse width ≥0.5ms and a signal duty cycle of 1:1.
- 5.Counting Method: Positive counting and reverse counting.
- 6.Reset Mode: Button switch reset and short - circuit reset at terminals ⑧ and ⑩.
- 7.Setting Mode: Touch switch setting.
- 8.Power - failure Memory: 10 years.
- 9.Contact Capacity: 3A AC250V (resistive).
- 10.Output Modes: N, C, F modes.
- 11.Auxiliary Output Power Supply: DC12V 30mA (max).
- 12.Mounting Method: Panel - mounted.

III. Wiring Diagram



Note: Terminals ① and ② serve as the power source (for DC, ① is the positive pole and ② is the negative pole). Terminals ⑤, ⑥, and ⑦ form a group of normally - open and normally - closed transfer contacts, with ⑤ and ⑥ being normally - closed contacts and ⑥ and ⑦ being normally - open contacts. Terminal ⑧ is 0V (i.e., ground), terminal ⑨ is the counting signal input terminal, terminal ⑩ is the reset terminal, and terminal ⑪ is the auxiliary power output terminal (DC12V 30mA (max)) that supplies power to sensors.

IV. Outline and Mounting Dimensions (Mounting Hole Size: 67.5×67.5 mm)



V. Counting Signal Input

Level Counting		PNP - type Sensor	
Contact Signal Counting		NPN - type Sensor	

Note:The counter is preferably paired with a DC (6~36V) PNP normally-open photoelectric switch or proximity switch. For NPN-type switches, externally add a 2kΩ resistor as illustrated (each counter comes with one 2kΩ resistor and one 4.7μF/50V electrolytic capacitor by default).

VI. Working Timing Diagrams

Mode	Working Timing Diagram	Description
N - Mode		Stops counting when the set value is reached, with the relay energized. Resets to zero and restarts counting after pressing the reset button.
C - Mode		Automatically resets to zero and restarts counting upon reaching the set value. The relay is energized for seconds (adjustable) before de-energizing.
F - Mode		Continues counting after reaching the set value, with the relay remaining energized. Resets to zero and restarts counting after pressing the reset button.

Notes:N and F Modes: Manual reset is required.
C Mode: Automatic reset to zero after reaching the set count.