

1. Key Functions

"M" Function Key: Press the "M" key once: Displays the preset value (setting range: 1-999999).
 Long-press the "M" key for 4 seconds: Sequentially displays: R1, R2, R3, R4, R5;

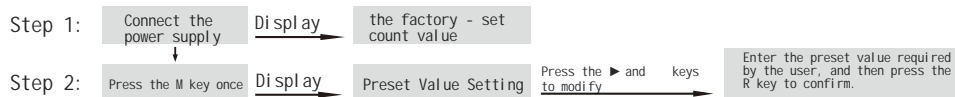
Explanations: R1: R1--1 multiplier (displays 1 for every 1 input pulse).
 R1--10 multiplier (displays 1 for every 10 input pulses).
 R1--100 multiplier (displays 1 for every 100 input pulses).
 R2: R2--L Low-frequency counting (counting frequency 30 pulses/second).
 R2--H High-frequency counting (counting frequency 1000 pulses/second).
 R3: R3--U Up-counting (display increments: 1, 2, 3, 4, 5...)
 R3--d Down-counting (display decrements: 100, 99, 98, 97...).
 R4: R4--N represents N mode R4--R represents R mode
 R4--C represents C mode R4--H represents X mode
 R4--F represents F mode R4--T represents T mode
 R5: R5-00.0 represents automatic reset time (setting range: 0.1 - 99.9 seconds, only for C and R modes);
 R5-000 represents the advance quantity of T mode (only for T mode);

"▶" Shift Key: Press this key to move the digit position, such as moving from the hundreds place to the tens place or to the units place;

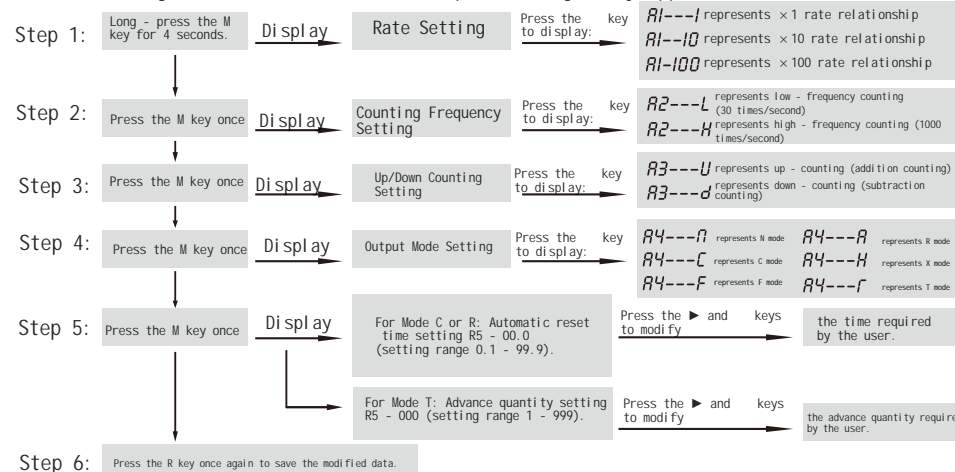
"+" Add Key: Press this key to add numbers to the selected digit (the flashing digit);

"R" Reset Key: Press this key to reset the displayed number and the counting output state, restoring to the initial state.

2. Preset Value Setting:



3. Parameter Setting (Modes N, F, X have no Step 4 setting; only applicable to Modes C, R, T):



Example: The preset value is 126888, the counting rate is ×1, the counting signal is high - frequency counting, the counting method is up - counting, the output modes are N, F, and C respectively, and the automatic reset time is 15.8 seconds. Its display codes are as follows:

N-mode	126888	R1--1	R2--H	R3--U	R4--N	Finally, press the R key once to save the data.
F-mode	126888	R1--1	R2--H	R3--U	R4--F	Finally, press the R key once to save the data.
C-mode	126888	R1--1	R2--H	R3--U	R4--C	R5-15.8 Finally, press the R key once to save the data.

VIII. Instructions for Use

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

2. When inputting contact signals, if there is mis - counting, first adjust the counting frequency to low - frequency counting. If the result is not satisfactory, then connect a 4.7 μF/50V electrolytic capacitor between the counting signal input CP terminal and the 0V terminal. Connect the positive pole of the capacitor to the CP terminal and the negative pole to the 0V terminal (Connecting the capacitor is ineffective when the dial switch is set to NPN).

3. The counting signal input wire and the reset control wire should be as short as possible. Avoid running them in the same conduit/twisted pair as power lines or power cables. When necessary, use shielded wires. Moreover, do not input voltage to the reset terminal to avoid damaging the product.

IX. Order Instructions (Products with T mode need to be customized; the regular factory - default modes are N, C, F, R, X)

When placing an order, the product model, working voltage, output mode, and quantity must be specified. Examples: When placing an order, the product model, working voltage, output mode, and quantity must be specified.

Examples: 1) JDM9 - 6 AC/DC100 - 240V Modes N, C, F, R, X 600 pieces
 2) JDM9 - 6 AC/DC24V Modes N, C, F, R, X, T 600 pieces



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使用说明书
 Products Instructions

JDM9-6

Counting Relay

Modes: N/C/F/R/X/T

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

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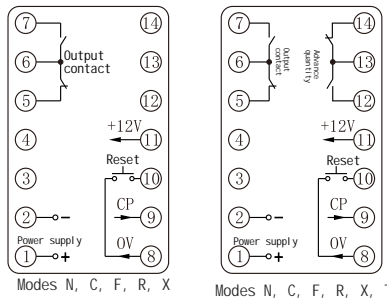
I. Overview

The JDM9 - 6 counting relay is applicable to control circuits with AC 50/60Hz, rated operating voltages of AC380V, AC/DC100 - 240V, and AC/DC24V. It serves as a counting element in these circuits to connect or disconnect the circuit as per the preset number. It adopts a single - chip microcomputer circuit and EEPROM memory, with photoelectric isolation of counting signals, 6 - digit LED digital display. It supports rate setting, and features a wide counting range, multiple counting signal inputs, multiple output working modes, up/down counting, power - off memory for up to 10 years, and stable counting performance, etc. This product complies with the requirements of GB/T 14048.5.

II. Main Technical Data

- Working Voltage (Control Power Supply Voltage): AC380V, AC/DC100-240V, AC/DC24V 50/60Hz. Allowable voltage fluctuation range: (85%-110%) Ue.
- Counting Range: 1-999999 ($\times 1$, $\times 10$, $\times 100$ multiplication factors).
- Counting Signals:
 - Contact Signals: Relay contacts, limit switches, etc.
 - Level Signals: Pulse level (H: DC4V-30V effective, L: 0-DC2V ineffective).
 - Sensor Signals: Photoelectric switches, proximity switches, Hall switches.
- Counting Frequency:
 - Low-Frequency Counting: 30 times/second, minimum signal pulse width 15ms.
 - High-Frequency Counting: 1000 times/second, minimum signal pulse width 0.5ms, signal duty cycle 50%.
- Counting Method: Forward/reverse counting.
- Reset Method: Button reset or short-circuit reset of terminals.
- Ue/Ie: Rated working voltage Ue/rated working current Ie for each use category: AC-15: AC250V/0.75A; AC-12: AC250V/3A.
- Output Mode: N, C, F, R, X, T types (T type requires customization).
- Contact Capacity: 3A AC250V (resistive load).
- Rated Heating Current (Ith): 5A.
- Rated Insulation Voltage (Ui): 400V.
- Rated Impulse Withstand Voltage (Uimp): 2.5kV.
- Pollution Grade: 3.
- Protection Grade: Front panel IP20.
- Ambient Temperature: -5 ~ +40
- Relative Humidity: 90%.
- Altitude: 2000m.
- Installation Method: Panel mounting.

III. Wiring Diagram

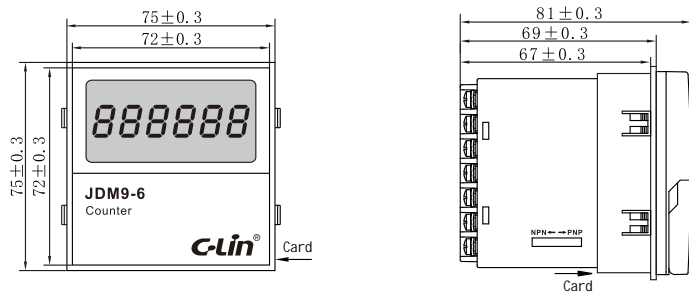


Notes: ① and ② are power input terminals (for direct current, ① is the positive pole and ② is the negative pole); ③ and ④ are normally closed contacts, and ⑤ and ⑥ are normally open contacts; ⑦ is 0V (i.e., ground); ⑧ is the counting signal input terminal; ⑨ is the reset terminal; ⑩ is the DC12V 30mA (max) sensor auxiliary power output terminal; ⑪, ⑫, and ⑬ are advance quantity output contacts (only for limit types), among which ⑫ and ⑬ are normally open contacts, and ⑪ and ⑭ are normally closed contacts.

Outline and Installation Dimension Diagram (mm)

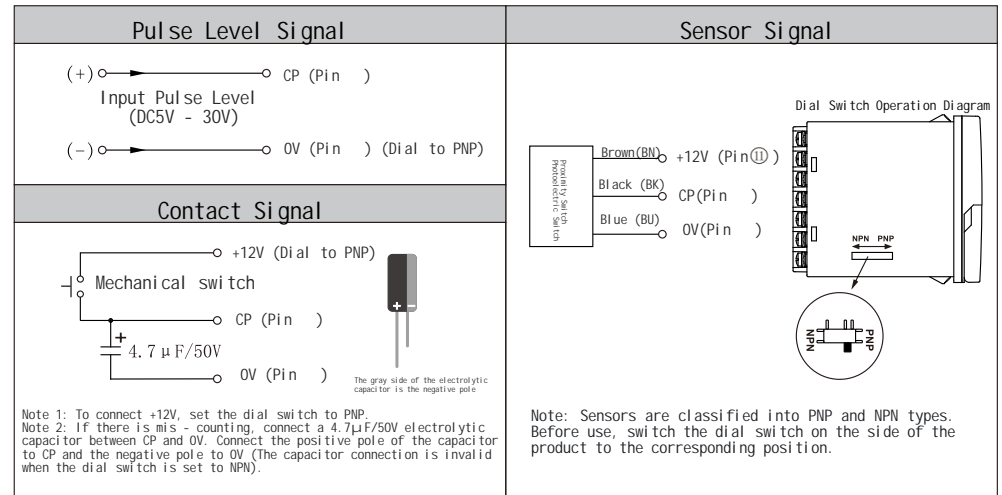
Installation Hole Dimensions:

- $67.5^{+0.5} \times 67.5^{+0.5}$ mm (No card cover is needed for this dimension);
- $71^{+0.5} \times 71^{+0.5}$ mm (For users with old - sized installation holes, a card cover is required during installation).



①

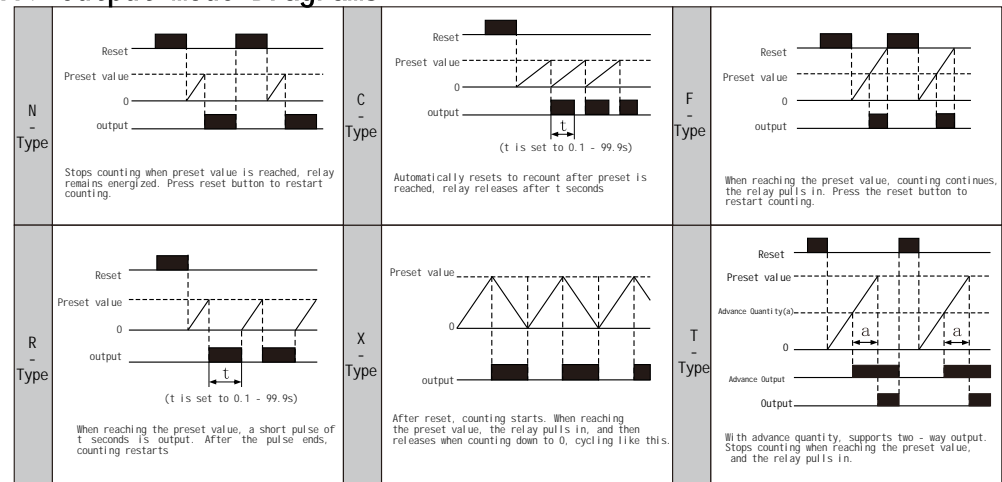
V. Counting Signal Input



Note 1: To connect +12V, set the dial switch to PNP.
 Note 2: If there is mis - counting, connect a 4.7 μ F/50V electrolytic capacitor between CP and 0V. Connect the positive pole of the capacitor to CP and the negative pole to 0V (The capacitor connection is invalid when the dial switch is set to NPN).

Note: It is recommended to use our company's DC (DC10 - 30V) normally - open type photoelectric/proximity/Hall switches. Each counter is provided with a 4.7 μ F/50V electrolytic capacitor as a gift when leaving the factory.

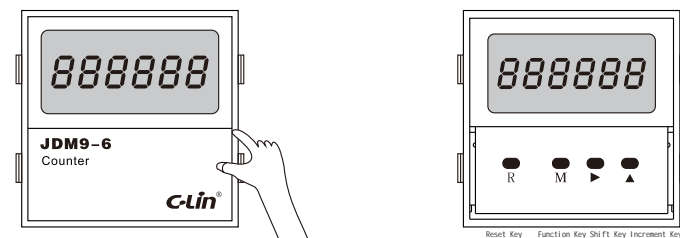
VI. Output Mode Diagrams



Note: Modes N, F, X, and T require manual reset; Modes C and R are automatic reset.

VII. Function Setting

First, hook the concave part on the right side of the cover with your hand (as shown in the left figure below) and gently pull it outward. After opening the cover, it will be as shown in the right figure below (note: do not use excessive force to avoid breaking the cover). Then set the numbers as required.



②