

LK149 manual

Product Features

1、Intelligent Coin Recognition System (User settable)

This device is a memory-type coin acceptor capable of learning and saving parameters and signals of coins according to user's requirements. It also supports custom settings for "1-coin multi-scores" and "1-score multi-coins", such as "ONE 1-euro gets TWO scores" or "TWO 50-cents get ONE score", allowing flexible adaptation to diverse operational scenarios. Customers can configure these settings without returning the device to the factory or using specialized tools, greatly improving deployment efficiency and convenience.

2、Dual-Mode Communication System ("Standard Pulse Mode" and "Data Protocol Mode")

Standard Pulse Mode:Compatible with most machine communication modes

Data Protocol Mode:

- (1) Achieves accurate and efficient data communication;
- (2) Prevents false scores caused by interference signals;
- (3) Eliminates score theft by "score stealers"

3、High-Precision Interference Detection System

Controlled by a 32-bit CPU program, it performs multidimensional feature analysis of coins (material, diameter, etc.) achieving accurate recognition and error-free scoring.

15-level dynamic sensitivity is adjustable to accommodate coins of different ages, effectively balancing coin recognition rate and return rate.

4、Enhanced Active Defense Mechanism

Built-in advanced algorithms, including anti-phishing and other cheating prevention methods, monitor abnormal coin insertion behavior in real time. Dynamic analysis based on coin insertion behavior features can effectively distinguish normal operations from cheating methods, ensuring revenue security.

5、Industrial-Grade Stable Structural Design

The core circuitry adopts industrial-grade intelligent chips and high-precision SMT patch technology, ensuring long-term continuous operation stability and durability.

Key components undergo rigorous selection and aging tests, withstanding high-intensity and high-frequency usage scenarios.

6、Intelligent Operation and Maintenance with Status Indicators and Convenient Human-Machine Interaction

Through a user-friendly setting menu with buttons and digital display, core configurations such as coin programming, score setting, signal mode selection, and precision adjustment can be conveniently completed.

Supports device self-check and fault diagnosis with indicator lights providing real-time feedback on the coin acceptor's operating status.

All programmed coin values are retained after power loss, and the modular design facilitates installation and future maintenance, reducing operational costs.

Steps for usage

- 1.Coin Learning & Storage (see Attachment 1).
- 2.Select Credit Signal Type ,the communication interfaces for the two signal types are shown in the table below:

Credit Signal	Signal 1	Signal 2
Protocol Signal①	TXD	RXD
Pulse Signal②	WHITE COIN SIGNAL	GRAY COUNTER

- 3.Adjust Precision Based on Coin Type, The factory default precision is optimized.

(For adjustment steps, refer to Attachment 1)

- (1)Small coin deviations: Decrease the precision value to enhance recognition accuracy.
- (2)Large coin deviations: Increase the precision value to prevent valid coins from being rejected.

- 4.Mount the coin acceptor and connect the power and signal cables.

Annotation①:Protocol Signal

- 1)The credit signal transmits "credit value" data to the machine.

- 2)Protocol Signal Specifications:

a)UART serial protocol: Baud rate: 9600bps, 8-bit data, 1 stop bit, no parity.

b)TTL level (weak noise resistance): Add a 10KΩ pull-up resistor to the TXD line. Recommended to use RS232 level for better noise immunity.

(For experts only; commands and data frames are detailed in Attachment 2)

Annotation②:Pulse Signal

- 1)The credit signal sends pulses to the machine (traditional interface).

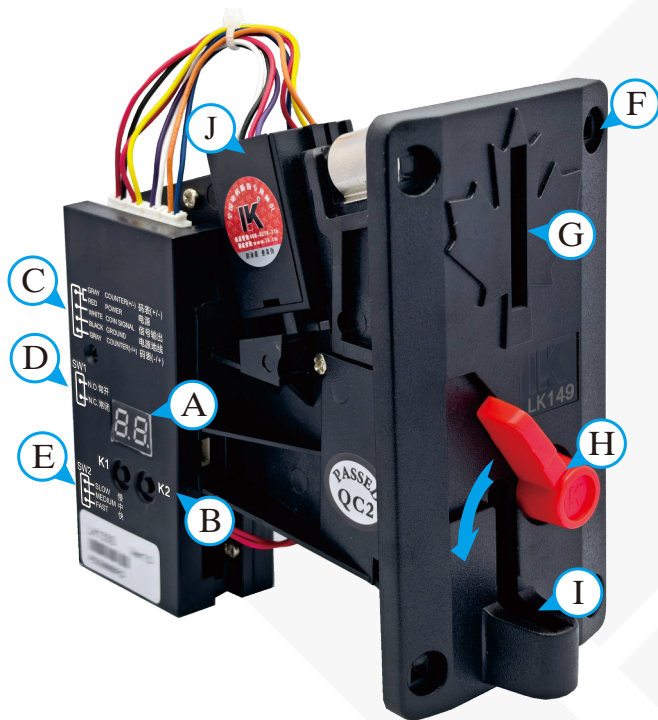
- 2)Pulse Signal Specifications:

a)SW1: Select NO/NC mode (default: NC).

b)SW2: Set pulse width (20ms/40ms/100ms, default: 100ms).

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Product Introduction



4 pin connector wire can be option



A Digital Tube:
Displays menu
information



D Set SW1
output mode, select
NC/NO, the factory
setting is NC.



G Coin slot:
Please use metal coins when inserting coins.
With general inductors (factory default),
coins with a diameter of $\Phi 20 \sim \Phi 30 \text{mm}$ and
a thickness of 1.2~3.0mm can be inserted.

B Function Keys:
K1/K2 for menu
navigation



E Set SW2, select the
output pulse switch(20 ms/
40ms/100 ms), the factory
setting is 100ms.



H Coin bar:
When a larger diameter coin or a foreign body
stuck, flip the level to exit the foreign coin.

C Protocol Signal Port:
12V (red)
TXD (white)
GND (black)
RXD (gray)



F Mounting holes: With
a square neck screw
diameter of 4mm



I Coin mouth:
False coin/foreign body from here to exit.

J Inductor:
This coin acceptor uses a general
inductor by default.

Communication circuit

Coin detected "real coin", when the circuit gives a pulse signal (the pulse signal can be selected by the switch SW1, normally closed or normally open output; SW2 switch to select pulse width, see Figure 1)

The circuit output of this product is a triode collector or MOS tube drain open output, When it is used, users are advised to use optocouplers to receive signals when designing the interface circuit (see Figure 2).

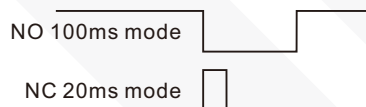
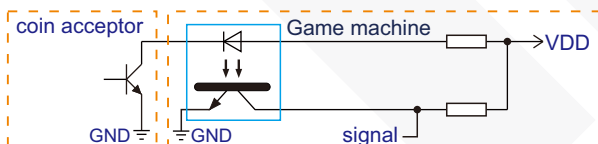
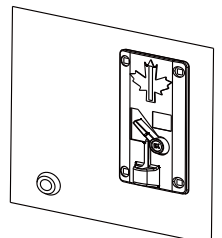
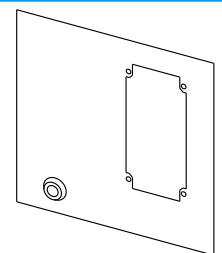
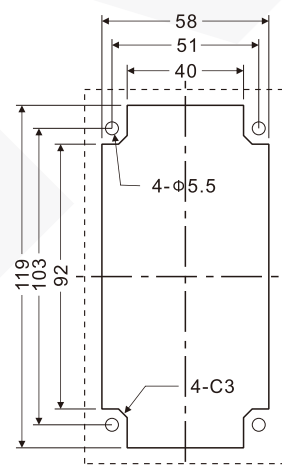


Figure 1

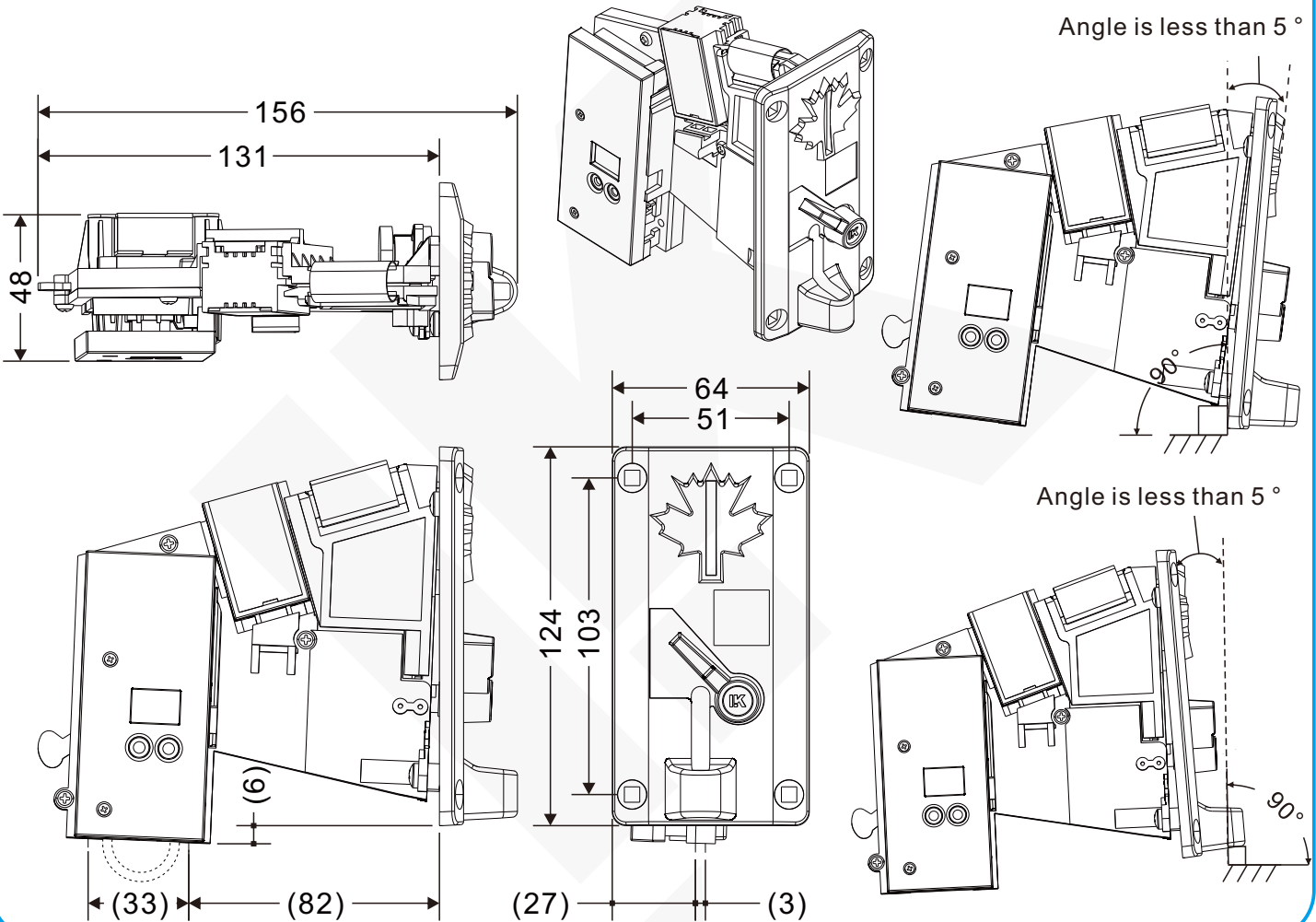
Figure 2



The size diagram and effect diagram Unit:mm



Note: Band () is the relative size of the coin slot



Common abnormalities handling

A. Coin not passed

- 1.If there is poor contact in the coin power outlet;
- 2.If the wiring is correct;
- 3.If there is a foreign body in the coin track;
- 4.If power supply 12V is normal;
- 5.If the out mouth of coin is smooth;
- 6.If mounting depth is enough;
- 7.If there is a foreign body in the coin track, such as electric eye position is blocked.

B. Coin not score

- 1.If SW1 NO/NC is set matched;
- 2.If SW2 plus width is matched;
- 3.If the signal is connected well,if connection method is correct;
- 4.Coin signal and open collector output,if the target board is connected with pull-up resistor.

C. Coin not smooth

- 1..If coin slot is smooth,such as hopper tank depositing port and slot machine outlet slot are aligned;

D. Code mode doesn't move

- 1.If the wiring is correct(An end of the code table is connected with code table line , the other end of DC+12V);
- 2.If the code mode is bad;
- 3.Cable resistance is too large, resulting in power is below standard;
- 4.The power supply voltage and rated voltage code table required are the consistent.

If product technology improved, it will be edited in the new manual without notice.
The ultimate interpretation of this manual is up to
GuangzhouLikang Electronic Technology Co.,Ltd.

Basic parameters

Operating voltage		DC12V±10%
Standby currency		< 50mA
Operating currency (Maximum current)		< 650mA
Operating temperature		-15°C~65°C
Output mode		OC.
Output signal		20ms/40ms/100ms
Coin diameter (General inductor)		Ø20~Ø30mm
Coin thickness		1.2~3.0mm
Angle assembly		-5°~5°
Individual packaging	Meas	161*69*131mm
	Gross weight	Without wire 286g
		With wire 295g
Carton packaging	Package	30PCS/SET
	Meas	51*37*28cm
	Gross weight	Without wire 9.4KG ±5%
		With wire 9.7KG ±5%

Assemble requirements

To prevent interference from adjacent signals, the adjacent mounting distance should be greater than 15mm.

