## MULTI-COIN SELECTOR * HI-09UCS / HI-O9FCS for elro coîn (Drop inserting type) (Front inserting type) V2.9 (500)



## Feature

*Support 8 channels (coins) self-programming without PC.
*With an inhibit wire for game board.
*With 6 ch. Parallel output for each channel (coin) control.
*Support one coin then multi pulse output (impulse out ratio).
*With narrow or wide impulse width select ( 100 ms and 50 ms ).
*Adjustable 4 kinds of coin thickness

## Specifications:

| Parameter | Specifications |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Power | Input |  | DC 10~15V, 300mA max standby 50mA. |  |  |  |
|  | Consumption |  | 5.0 Watts max standby 0.6 watts. |  |  |  |
| Signals | Impulse | Output | Multi pulse (normal "High" level) |  |  |  |
|  | Inhibit | Input | High enable( $+3 \mathrm{v} \sim+15 \mathrm{v}$ ) |  |  |  |
|  | Out1~6 | Output 1 | 1 pulse/coin |  |  |  |
| Connector | Con2 | Input/output 4 | 4 pin male |  | Extend connect port |  |
|  | Con3 | Input/output 09 | 09FCS 5 pin male |  | General I/O port |  |
|  | Con5 | Input/output 09 | 09UCS 6 pin male |  | General I/O port |  |
| User con trols | $\begin{array}{\|l\|} \hline \begin{array}{l} 5-c h \\ \text { dip-switch } \\ \hline \end{array} \\ \hline \end{array}$ | Sw1, sw2, sw3 for channel or impulse ratio select. Sw4, sw5 for mode and other function select. |  |  |  |  |
| Overall Dimension (HXWXD) | $\begin{aligned} & \text { HI-09UCS: } 102 \times 99 \times 55 \mathrm{~mm} \\ & \text { HI-09FCS: } 124.5 \times 120.5 \times 64.5 \mathrm{~mm} \end{aligned}$ |  |  |  |  |  |
| Speed of acceptable | Max. 3 coins/second. |  |  |  |  |  |
| Coin size (mm) | Diameter <br> Thickness <br> Adjust | $18 \mathrm{~mm} \sim 30 \mathrm{~mm}$ |  |  |  |  |
|  |  | Position | 1.8 | 2.2 | 2.6 | 3 |
|  |  | Thickness Range | 1.2~2.0 | 1.2~2.4 | 1.2~2.8 | 1.2~3.0 |
| Working temperature | $5^{\circ} \sim 50^{\circ}$ |  |  |  |  |  |
| Weight | $\begin{aligned} & \hline \text { HI-09UCS: 240g } \\ & \text { HI-09FCS: 300g } \\ & \hline \end{aligned}$ |  |  |  |  |  |

Operation mode: Before switching on the dc power, Set DIP4,DIP 5 to the "OFF" position.
Impulse and channel ratio table (500)


- DIP SW "X" means off, "O" means on

Accessory
HI-09UCS or HI-09FCS
Control board (pcb-09-2)
10p Signal cable
User manual
X1

Screw bag (HI-09FCS only) X1
$5 \mathrm{P}(09 \mathrm{~F})$ or 6P (09U) Signal wire X 1

## Installation

Case 1:
Using 10p signal cable connect HI-09UCS/HI-09FCS to control board (pcb-09-2). And need 4 wires connect control board (pcb-09-2) to game board.
The 4 wires define as below:

1. +12 V : for dc power ( 12 volt)
2. GND: fordc power (ground)
3. IMPULSE: forcredit signal (outputsignal).
4. INHIBIT: control by game board for enable or disable coinselector (input).

## Case 2

Record mode: Before switching on the dc power, setDIP 4, DIP 5 to the "ON" position.

| DIP SW | Function | Select | Action |
| :---: | :--- | :---: | :--- |
| DIP Sw4 | Coin signal <br> width <br> (impulse) | X | Record 50ms impulse |
|  | O | Record 100ms impulse |  |
| DIP Sw5 | Blank | O | Normal |
|  |  | $\mathrm{O}->\mathrm{X}->\mathrm{O}$ | Makes channel data Blank |




Using 5P or 6P signal wire connect to HI-09UCS/HI-09FCS
another end connect to game board and meter.
The 5P wire define as below (HI-09FCS only)

1. +12 V
2. Counter (Meter)
3. GND
4. Impulse (Credit)
5. Inhibit
6. Counter (Meter)
7. Impulse (Credit)
8. Inhibit


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## THICKNESS ADJUSTMENT

If you need to adjust the thickness of coins to be accepted, just use a small slotted screwdriver, plug into the slot and rotate to fitthe thickness you want.


## RECORD MODE

If you want to enter the record mode, set DIP4, DIP5 of the DIP SWITCH to "ON" positions. Then turn on the power.

## SELECT OUTPUT PULSE WIDTH

If you want to appoint the pulse width ( 50 ms or 100 ms , defaultsetting is 100 ms ), you must enter the "RECORD MODE" first. Then set DIP4 to the following position.

$$
1.50 \mathrm{~ms}: ~ \mathrm{DIP} 4 \text { to "OFF" }
$$

2.100ms DIP4to "ON"


After appointing the pulse width. Enter the "MEMORIZE COINS" item to begin memorizing the coins.

## CLEAR RECORD FOR SINGLE CHANNEL

The multi coin selector has 8 channels to record. Its 8 channels represent it can record 8 kinds of coins separately. If you want to clear a channel, please proceed as follows:

| Steps | Channel 1 <br> (Coin 1) | Channel 2 <br> (Coin 2) | Channel 3 <br> (Coin 3) | Channel 4 <br> (Coin 4) | Channe1 5 <br> (Coin 5) | Channel 6 <br> (Coin 6) | Channe1 7 <br> (Coin 7) | Channel 8 <br> (Coin 8) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 00011 | 10011 | 01011 | 11011 | 00111 | 10111 | 01111 | 11111 |
| B | Switch on | Switch on | Switch on | Switch on | Switch on | Switch on | Switch on | Switch on |
| C | 00010 | 10010 | 01010 | 11010 | 0010 | 1010 | 0110 | 1110 |
| D | 00011 | 10011 | 01011 | 11011 | 00111 | 10111 | 01111 | 11111 |
|  | OK | OK | OK | OK | OK | OK | OK | OK |

Turn off the power for the next operation as soon as steps A,B,C,D is complete.

## MEMORIZE COINS

1. You must enter the "RECORD MODE" first. Then make sure which channel you want to saveby setting DIP1, DIP2, DIP3 tothe appropriate positions. Then insert 10 coins of the same currency and makings. The coin selector magnet will operate three times to indicate a correctoperation. Then be sure to turn the power off for the next operation.
2.If another different coins is necessary to memorize, please repeat the operation above- mentioned again.
3.If some channels of the set were memorized some time ago, please clear the records for all channels first.

| Steps | Channel 1 | Channel 2 | Channel 3 | Channel 4 | Channel 5 | Channel 6 | Channel 7 | Channel 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 00011 | 10011 | 01011 | 11011 | 00111 | 10111 | 01111 | 11111 |
| B | Coin 1 | Coin 2 | Coin 3 | Coin 4 | Coin 5 | Coin 6 | Coin 7 | Coin 8 |
| C | 3 clicks | Insert 3 clicks | $\frac{\text { Insert } 10 \text { coins }}{3 \text { clicks }}$ | Insert 10 coins | $\frac{\text { Insert } 10 \text { coins }}{3 \text { clicks }}$ | Insert 10 coins | $\frac{\text { Insert } 10 \text { coins }}{3 \text { clicks }}$ | $\begin{array}{\|l\|l\|l\|l\|l\|l\|} \hline \text { Insert coins } \\ \hline \end{array}$ |
| D | Switch off | Switch off | Switch off | Switch off | Switch off | Switch off | Switch off | Switch off |

## RATIOLIST CHOICES

1.Under "OPERATION MODE", the switch DIP3, DIP2, DIP1 positions are assigned to 8 ratio lists. 2.Under "RECORDMODE", the switchDIP3, DIP2, DIP1 positions are assigned to 8 coin channels.

| Operation Mode |  | List 1 | List 2 | List 3 | List 4 | List 5 | List 6 | List 7 | List 8 | OtherOutputTerminal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 00000 | 10000 | 01000 | 11000 | 00100 | 10100 | 01100 | 11100 |  |
|  |  | Pulse Output Count | Pulse | Pulse | Pulse | Pulse | Pulse | Pulse | Pulse | 1 Pulse Output |
|  |  | Output | Output | Output | Output | Output | Output | Output |  |
|  |  | Count | Count | Count | Count | Count | Count | Count |  |
|  | Coin 1 |  | 1/2 | 1/4 | 1 | 1 | 1/2 | 1/2 | 1/2 | 1/4 | Output ch1 |
|  | Coin 2 |  | 1 | 1/2 | 1 | 1 | 1 | 1 | 1 | 1/2 | Output ch2 |
|  | Coin 3 | 1 | 1/2 | 2 | 2 | 1 | 3 | 2 | 2/3 | Output ch3 |
|  | Coin 4 | 2 | 1 | 4 | 2 | 2 | 6 | 5 | 3 | Output ch4 |
|  | Coin 5 | 4 | 2 | 8 | 4 | 5 | 12 | 6 | 6 | Output ch5 |
|  | Coin 6 | 5 | 2 | 8 | 4 | NA | NA | 10 | 7 | Output ch6 |
|  | Coin 7 | 8 | 4 | 10 | 10 | NA | NA | 12 | NA | Output ch6 |
|  | Coin 8 | 10 | 5 | 10 | 10 | NA | NA | NA | NA | Output ch6 |

3.Insert one coin of the first kind, the value " $1 / 2$ " will be memorized in the set. Then insert one coin of the first kind again, the new value " $1 / 2$ " will be added to the previous " $1 / 2$ ", hence the set outputs " 1 "pulse. To this analogizes. Insert one coin of the 8thkind, the setoutputs " 10 " pulses.
4.The pulses generated above-mentioned output via "IMPULSE" from the control board(pcb-09-2). Besides, one coinbeing inserted willoutputs "one" pulse via "output ch" corresponded to its coinchannel(see Impulse and channel ratio table). For example: Under "channel 5" with "ratio list 3 ". Insert one coin will result in outputting 8 pulses via "IMPULSE" from the control board, and outputting 1 pulse via"output ch5" simultaneously.
※If the ratiotable can't meetcustomer requirements, please contact the original factory.

## OPERATION MODE

1.Set DIP4, DIP5 to the "OFF" position when the power is off. 2.Turn on the power, and set the DIP3, DIP2,DIP1 positions to correspond the ratiolist you need.
(1)
3.Now youcan start using the multi coin selector.

## THREE OUTPUTINTERFACE

(1) 10 p signal cable + control board for $\mathrm{HI}-09 \mathrm{FCS} / \mathrm{HI}-09 \mathrm{UCS}$
(2) $5 p$ signal wire use for $\mathrm{HI}-09 \mathrm{FCS}$ connecting to $\mathrm{game}^{\text {board }}$ andmeter.
(3) 6 p signal wire use for HI-09UCS connecting to game board and meter.
(2)

(3)
$\qquad$
5. Tounter (Meter)

