## MULTI-COIN SELECTOR HI-09UCS/HI-09FCS

## Feature

-Support 8 chanenels(coins) self-programming without PC.
-With an inhibit wire gor game board.
-With 6ch. Parallel output for each channel(coin) control.
-Support one coin then multi pulse output(impulse out ratio).
-With narrow or wide impulse select(set sw4 on record mode).
-Adjustable 4 kinds of coin thickness.

## Specifications:

| Parameter | Specifications |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Power | Input |  | DC 10~15V, 300 mA max standby 50 mA . |  |  |  |
|  | Consumption 5 |  | 5.0 Watts max standby 0.6 watts. |  |  |  |
| Signals | Impulse | Output | Multi pulse (normal "High" level) |  |  |  |
|  | Inhibit | Input ${ }^{\text {H }}$ | 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 0 | 09FCS 5 5 pin male |  | General I/O port |  |
|  | Con5 | Input/output 0 | 09UCS 6 pin male |  | General I/O port |  |
| User controls | $\begin{array}{\|l\|} \hline 5 \text {-ch } \\ \text { dip-switch } \end{array}$ | Sw1, sw2, sw3 for channel or impulse ratio select. $\mathrm{Sw} 4, \mathrm{sw} 5$ for mode and other function select. |  |  |  |  |
| Overall Dimension (HXWXD) | HI-09UCS: 102x99x55 mm <br> HI-09FCS: $124.5 \times 120.5 \times 64.5 \mathrm{~mm}$ |  |  |  |  |  |
| Speed of acceptable | Max. 3 coins/second. |  |  |  |  |  |
| Coin size$(\mathrm{mm})$ | Diameter <br> Thickness <br> Adjust | $18 \mathrm{~mm} \sim 30 \mathrm{~mm}$ |  |  |  |  |
|  |  | Position | 1.8 | 2.2 | 2.6 | 3 |
|  |  | Thickness Rang |  1.8 | 1.2~2.4 | 1.2~2.8 | 1.2~3.0 |
| Working temperature | $5^{\circ} \sim 50^{\circ}$ |  |  |  |  |  |
| Weight | $\begin{aligned} & \begin{array}{l} \mathrm{HI}-09 \mathrm{UCS}: 240 \mathrm{~g} \\ \mathrm{HI}-09 \mathrm{FCS}: 300 \mathrm{~g} \end{array} \end{aligned}$ |  |  |  |  |  |

Multi coin mode: Before switching on the dc power, put DIP-SW4 and SW5 on "OFF" position.

## Impulse and channel ratio table

|  | Multi coin mode |  |  |  |  |  |  |  | Out |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sw3-1 | XXX | XXO | XOX | XOO | OXX | OXO | OOX | 000 |  |
| $\triangle$ Ratio | Impulse out Ratio |  |  |  | Impulse out Ratio (bonus) |  |  |  |  |
| Channel(Coin) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
| 1 XXX | 1/2 | 1/4 | 1 | 1 | 1/2 | 1/2 | 1/2 | 1/4 | 1 |
| 2 XXO | 1 | 1/2 | 1 | 1 | 1 | 1 | 1 | 1/2 | 2 |
| 3 XOX 50C | 1 | 1/2 | 2 | 2 | 1 | 3 | 2 | 1+1/2 | 3 |
| $4 \mathrm{XOO} 1 \$$ | 2 | 1 | 4 | 2 | 2 | $5+1$ | 4+1 | 2+1 | 4 |
| $50 X X 2 \$$ | 4 | 2 | 8 | 4 | 4+1 | 10+2 | $5+1$ | 4+2 | 5 |
| $60 X 0$ | 5 | 2 | 8 | 4 | NA | NA | $8+2$ | 5+2 | 6 |
| 7 00X | 8 | 4 | 10 | 10 | NA | NA | 10+2 | NA | 6 |
| 8000 | 10 | 5 | 10 | 10 | NA | NA | NA | NA | 6 |

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


## Accessory

## HI-09UCS or HI-09FCS

Control board(pcb-09-2)
10p Signal wire
User manual
Screw bag(HI-09FCS only)
$5 \mathrm{P}(09 \mathrm{~F})$ or $6 \mathrm{P}(09 \mathrm{U})$ Signal wire

## Installation

## Case 1:

Using 10p signal wire 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 voltage).
2.GND:for dc power(ground).
3.IMPULSE:for credit signal(output signal).
4.INHIBIT:control by game board for enable or disable coin selector(input).

Case 2:
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


The 5P wire define as below(HI-09FCS o

## 1.GND

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


Record mode: Before witching on the dc power, put DIP-SW 4 and SW5 on "ON" position.

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



## HI-09UCS / HI-09FCS TECHNICAL BOOKLET

## BEFORE PROGRAMMING:

1. Select 10 samples of each different coin type to be accepted.Use a variety of years mints to create an accurate representation of each coin.
2. The lowest denomination of coins to be accepted will be the base value of all the others and will equal one or other ratio output pulse for the HI-09UCS/HI-09FCS. -If you want to adjust accaptable coin thickness just using crew driver into slot, push screw driver then scew to set the thickness position.

3. Select a ratio list of 8 kinds of ratio table.Then make sure the channel what you want to record. Select channel or ratio list by 5ch DIP-SW of the sw3~sw1.

Example:If you want select 50 cent ->2 credit signal and 1 dollar->4 credit signal ratio list, you can set impulse out ratio on ratio 3 position(sw3 and sw1 set off and sw2 set on). And then entry record mode set DIP-SW on channel 3(sw3 and sw1 set off and sw 2 set on). And insert 10 coins of 50 cent.And DIP-SW set channel 4 (sw3 set off and sw1,sw2 set on).And insert 10 coins of 1 dollar.If you setting finished,switch power off.And set entry multi coin mode and using ratio 3 (sw1,sw3,sw4,sw5 all set off and sw2 set on).The HI$09 \mathrm{UCS} / \mathrm{Hı}-09 \mathrm{FCS}$ is ready to use

| Multi coin mode |  |  |  |  |  |  |  |  | Out |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sw3-1 | XxX | XxO |  | x00 | OXX | OXO | 00x | 000 |  |
|  | Impulse out Ratio |  |  |  | Impulse out Ratio(bonus) |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
| 1 XXX | $1 / 2$ | 1/4 | 1 | 1 | $1 / 2$ | 1/2 | 1/2 | 1/4 | 1 |
| 2 XXO | 1 | 1/2 | 1 | 1 | 1 | 1 | 1 | $1 / 2$ | 2 |
| $3 \mathrm{XOX} \mathrm{50C}$ | 1 | 1/2 | 2 | 2 | 1 | 3 | 2 | 1+1/2 | 3 |
| 4 XOO 1\$ | 2 | 1 | 4 | 2 | 2 | $5+1$ | $4+1$ | 2+1 | 4 |
| 5 OXX $2 \$$ | 4 | 2 | 8 | 4 | 4+1 | 10+2 | $5+1$ | 4+2 | 5 |
| 6 0xO | 5 | 2 | 8 | 4 | NA | NA | 8+2 | 5+2 | 6 |
| 7 00x | 8 | 4 | 10 | 10 | NA | NA | 10+2 | NA | 6 |
| 8000 | 10 | , 5 | 10 | 10 | NA | NA | NA | NA | 6 |

※ DIP SW "X" means off, "O" means on
4. When HI-09UCS/HI-09FCS on the record mode the 5 ch DIP-SW of the sw3~sw1 will be setting channel what you select want to record.
5. When HI-09UCS/HI-09FCS on the multi-coin mode the 5ch DIP-SW of the sw3~sw1 will be setting impulse output ratio list what you want to use this ratio list.
6. The HI-09UCS/HI-09FCS is designed to accept up to 8 different coins.
7. Once programmed, the HI-09UCS/HI-09FCS will hold its program even when power is removed.

NOTE: The HI-09UCS/HI09/FCS must be installed in the equipment being used to ensure proper programming.

## Programming Instructions:

8. Before switching on the dc power, put 5ch DIP-SW of the sw4 and sw5 on "on" position.

9. Apply dc power to the HI-09UCS/HI-09FCS and wait 10 seconds for the unit to stabilize.
10. Select the right channel(setting sw3~sw1) to be programming.


If set on channel 3
11. Choose 10 coins insert to the HI-09UCS/HI-09FCS(after 10 coins insert, relay gives twice clicks means this channel program done and unused channel must be to clear (make channel data blank), select unused channel put DIP-SW sw5 on "off" position and then put it on "on" position.

12.If you want to program other channel, you must repeat point 8-11.
13. After switching off the dc power, put DIP-SW sw4,sw5 on "off" position and select right ratio to the channel and impulse output ratio be corresponding.
14. Turn on dc power, ready to use.


