



Brilliant Technology Co.

Genius CA168 Coin Acceptor

User's Manual



Brilliant Technology Co.

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A. Features :

- 1、Intelligent Multi-Coin Validation
- 2、Varieties Size and Thickness Coins
- 3、High Speed, Patenting Validation System
- 4、Compact Size easy Installation
- 5、Support Fast Coin Drop
- 6、Size : 118mm(H) X 63mm(W) X 111.3mm(D)
- 7、Supper Wide Range Power Supply : DC 7.5V-36V
- 8、Low Power Consumption, Standby Current < 10mA.
- 9、On-Line Upload Firmware and Coin data.

B. Specifications :

Coin Validation	Worldwide major Coins
Validation time	4 coins per Second.
Insertion direction	Up and Front
Maximum Width	Diameter: 30 mm, Thickness: 3.2mm
Validation Rate	>98 %
Acceptance Rate	>98 %
Firmware upgrade	On-Line Upload
Dimension	118mm(H) X63mm(W) X 111.3mm(D)
Weight	210g

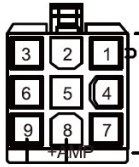
C. Electronic Specifications :

Operation voltage	DC 12V, 24V (7.5VDC-36VDC)
Operation current	< 0.5 A
Standby current	<10mA
Operation temperature	0°C to +60°C (32°F to 140°F)
Storage temperature	-20°C to +70°C (-4°F to 158°F)



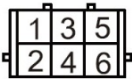
D. Wire Hardness

1. Pulse : 12VDC Power+ Data wire



AMP 172340-1
Back View

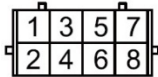
PIN 1	Yellow	Inhibit+
PIN 2	Green	Inhibit-
PIN 5	Red	+12VDC
PIN 7	Blue	Credit Relay (NO)
PIN 8	Purple	Credit Relay (COM)
PIN 9	Orange	GND



JST PHD 2.0 mm
2 x 3 Back View

PIN 1	Orange.....	GND
PIN 2	Red	12VDC
PIN 3	Green.....	Inhibit -
PIN 4	Yellow.....	Inhibit+
PIN 5	Purple.....	Pulse out -
PIN 6	Blue.....	Pulse out +

2. COMMUNICATION RS-232 TTL



JST PHD 2.0 mm
2 x 4 Back View

PIN 1		RESERVED
PIN 2		GND
PIN 3		ccTalk
PIN 4		RESERVED
PIN 5		VDD +3.3V
PIN 6		RESET
PIN 7		TXD
PIN 8		RXD



3. 6 PIN Power Connection and 8 PIN Data Connection。

POWER	Pin No.		
CREDIT RELAY(COMMON)	1		
CREDIT RELAY(N.O)	2		
INHIBIT-	3		
INHIBIT+	4		
GROUND	5		
POWER (+12V ~ +24V)	6		
COMMUNICATION	Pin No.		
RS-232 TXD TTL	1		
RS-232 RXD TTL	2		
VDD +3.3V	3		
RESET	4		
ccTalk	5		
RESERVED	6		
RESERVED	7		
GROUND	8		



E. Installation

In/Out circuit

(1) Pulse Interface connection, See figure 1、2.

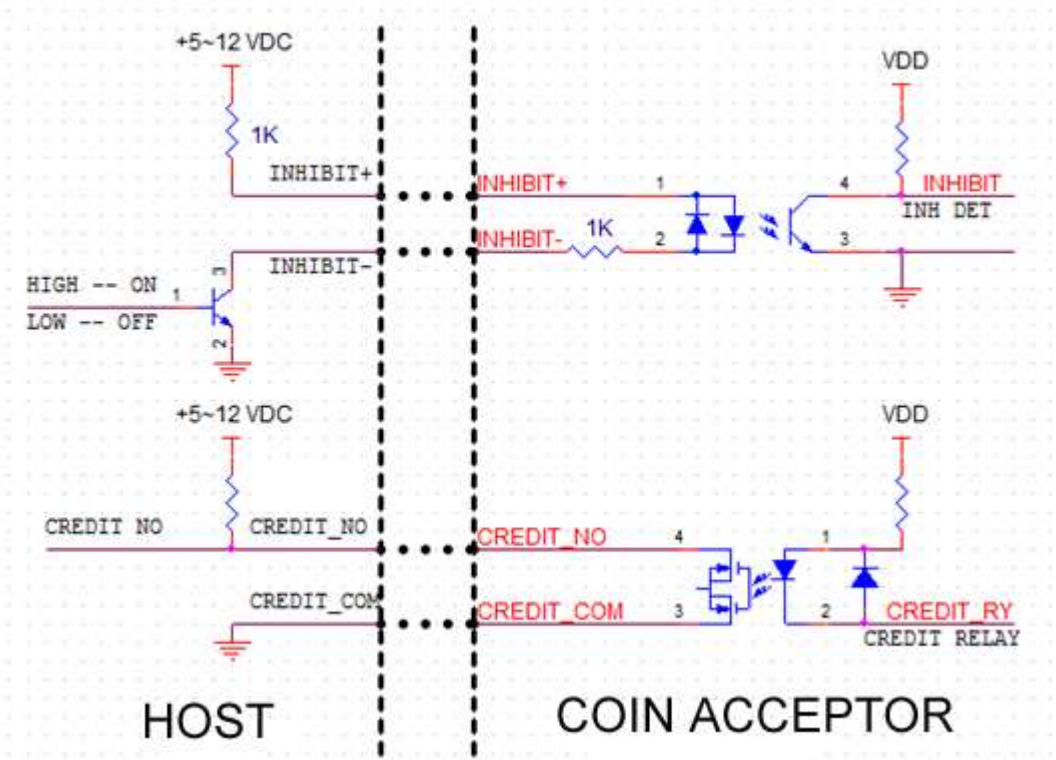


Figure 1



(2) TTL Interface, See figure 2、3.

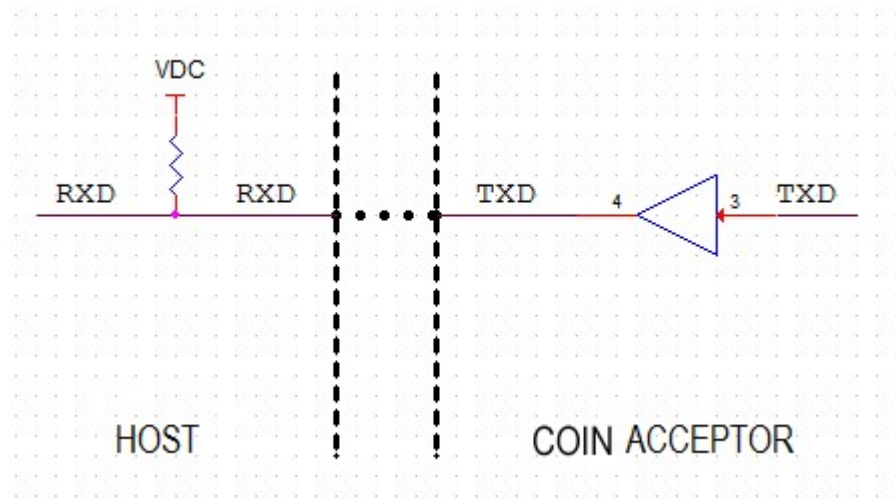


Figure 2.

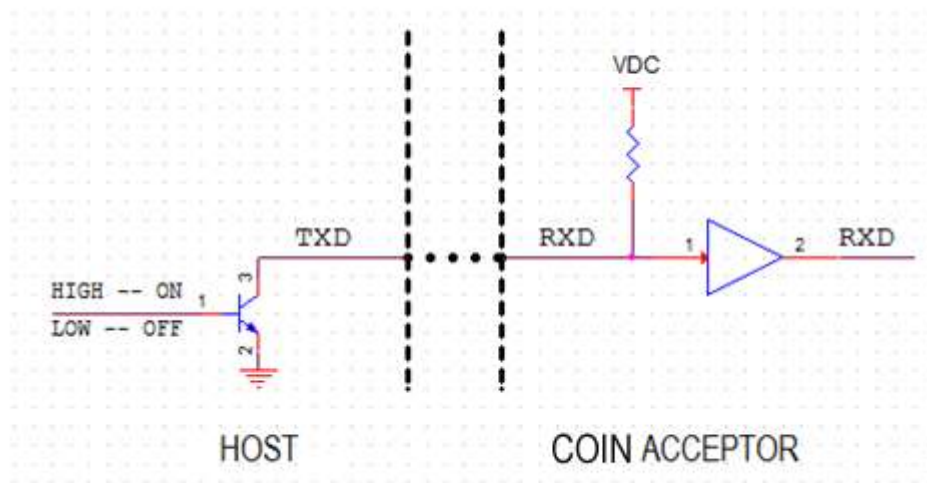


Figure 3.



Genius168 DIP Switch Setup

F. DIP Switch Setup

Mode Selection

Switches SW3, SW4, SW5, SW6, SW7, SW8 select the operation modes. Turn power Off before setting switches.

Change settings only valid after the next power turns On.

Currency	DIP Setting		
	SW3	Off, Off, Off, Off,	Learning Mode
	SW4	Any of these switch is in On position	Normal Mode
	SW5		
	SW6		
	SW7, SW8	Off, Off	In Learning Mode, Record Coin Parameters
		On, On	In Learning Mode, Setting Coin Values.

● Normal Mode

Any of the switch SW3, SW4, SW5, SW6 is in On position.

Currency	DIP Setting		
COIN	SW1,SW2	Off, Off	Pulse width 25 mS
		On, Off	Pulse width 45 mS
		Off, On	Pulse width 60 mS
		On, On	Pulse width 100 mS
	SW3	Off	COIN 1 Reject
		On	COIN 1 Accept
	SW4	Off	COIN 2 Reject
		On	COIN 2 Accept
	SW5	Off	COIN 3 Reject
		On	COIN 3 Accept
	SW6	Off	COIN 4 Reject
		On	COIN 4 Accept
	SW7	Off	RS232 mode
		On	Pulse mode
	SW8	Off	RS232 mode(ccTalk):Checksum 8bit Pulse mode: Normal Close
		On	RS232 mode(ccTalk): CheckCode CRC16 Pulse mode: Normal Open



● Learning Mode

- 1, In learning mode. When power is on, select the switch SW3, SW4, SW5 for different channel to be learned.
- 2, Set the DIP switch SW7, SW8 in OFF position.
- 3, Prepare 10 coins for relative channel that set by above selection. This channel will automatically saved for this coin after 10 coins learning completed.
- 4, Bezel indicator Blue LED flashing during first coin dropped, Blue LED turns steady light after completed learning.
- 5, Set the DIP switch SW7, SW8 in ON position, Red LED flashed. Put the number of coins to set the value of such coin channel. The value is the number of coins multiplication of the basic value. For example, the basic value of Thai Baht coin is one dollar, one coin means set this channel to one dollar; five coins set to five dollars etc. The pulse output number is also accordingly.
- 6, Any coin returns will not be counted during this operation.
- 7, To complete the value setting by switches any of the channel setting switches SW3, SW4 and SW5 or wait around 3 seconds for time out.
- 8, Bezel indicator Red LED flashing during first coin dropped for channel setting, Red LED turns steady light after completed channel learning.

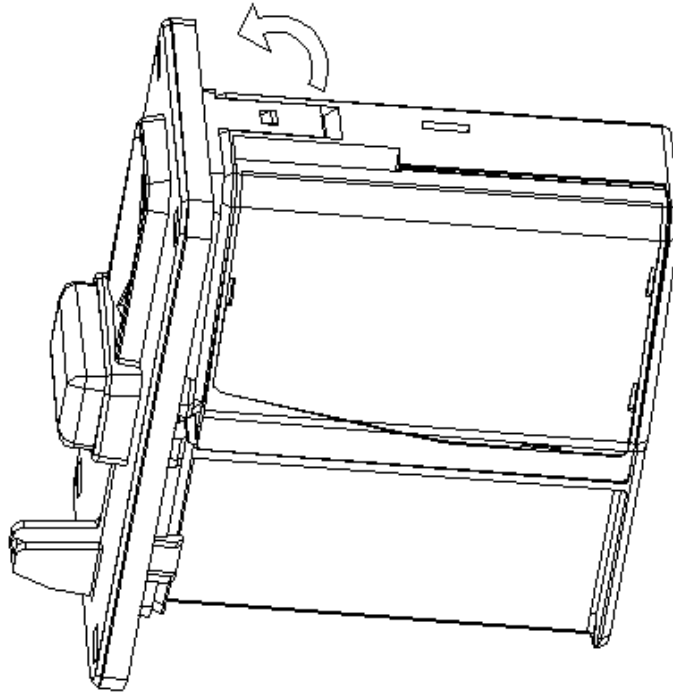
Currency	DIP Setting		
	SW3	Off, Off, Off	Channel 【1】
	SW4	On, Off, Off	Channel 【2】
	SW5	Off, On, Off	Channel 【3】
		On, On, Off	Channel 【4】
		Off, Off, On	Channel 【5】
		On, Off, On	Channel 【6】
		Off, On, On	Channel 【7】
		On, On, On	Channel 【8】



G、Maintenance and Replacement

1. Install and uninstall coin acceptor

Seat the unit on the lower front bezel bar, and push the unit forward to hook up in the upper hook automatically. Hold the unit and lift up upper hook to release and remove the unit from panel bezel





H、Troubleshooting

Error message will displayed in front bezel LED flashing count by Red and Blue alternatively.

BEZEL LED error message

Bezel LED flashing red/blue sequentially error messages. Red/Blue LED flashing number of counts :

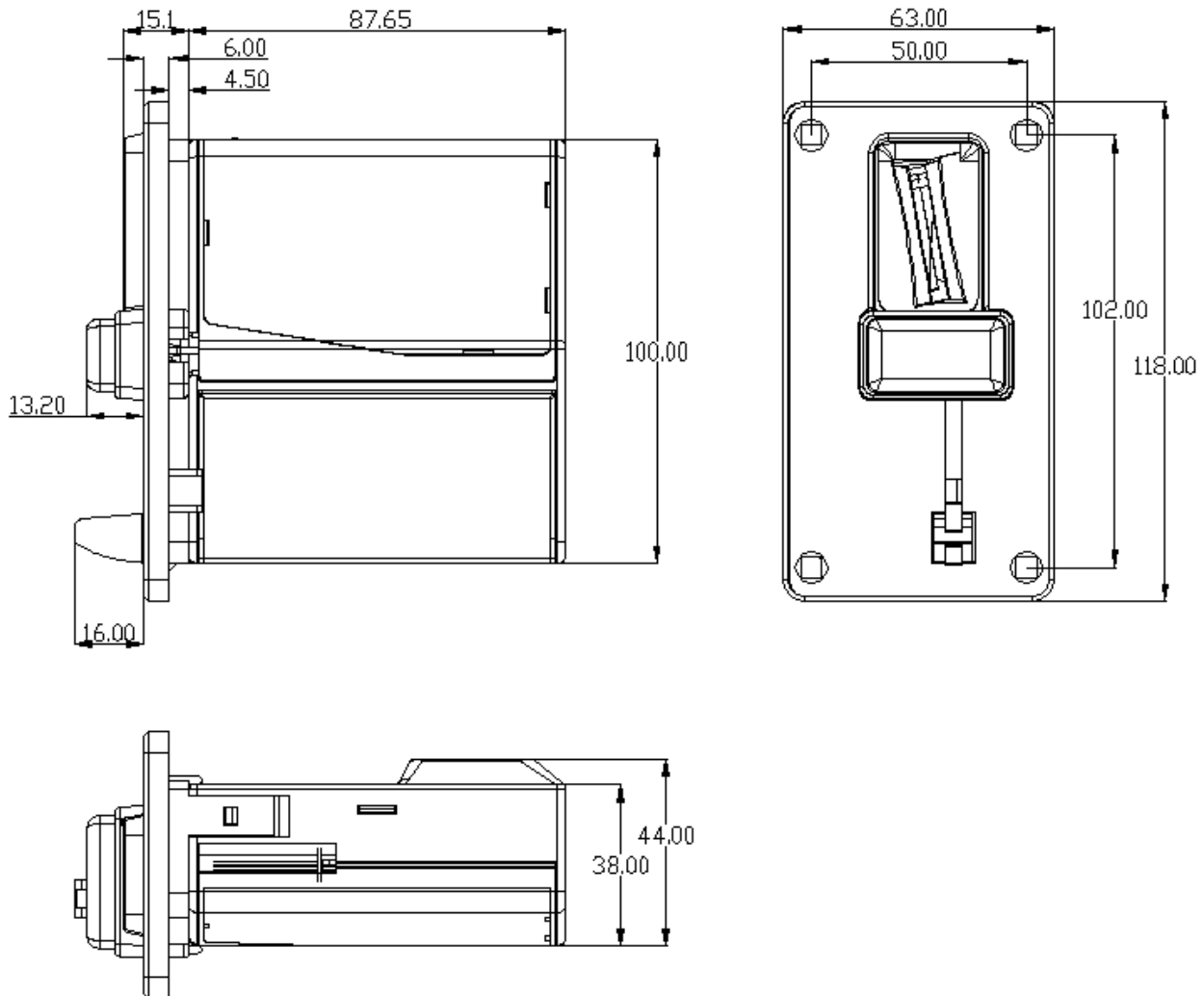
Red LED	Blue LED	Error message	Remarks
0	1	Unit inhibited	
1	1	Initial state, Not connected with Host	Contact technical support
2	1	1# Coil error	Clean coin path or Contact technical support
3	1	2# Coil error	
4	1	Input Sensor error	
5	1	Size Sensor error	
6	1	Credit Sensor error	
7	1	Reject Sensor error	
8	1	Solenoid error	
9	1	Data base error	Contact technical support



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I、Dimension and Assembly Drawing

1.Dimension





序号	代号	零件名称	数量	备注
24	PH3.0*3	2		
23	PH2.0*5.0(带垫圈)	1		
22	PH2.0*5	7		
21	COVER-BASE	1		
20	PCBA	1		
19	COVER-PASSAGE	1		
18	MAGNET-L	1		
17	HSG-MAIN	1		
16	FLIP	1		
15	SPRING	1		
14	COVER-FLIP	1		
13	SOLID-PIRE	1		
12	CLIP-SOLID	1		
11	NOVIER	1		
10	SPRING-ANTI	1		
9	anti	1		
8	PUSH-BUTTON	1		
7	SPRING-BUTTON	2		
6	PIVOT	1		
5	SHAFT	1		
4	FFC	1		
3	PC-MAGNET-UP	1		
2	PLATE-BUMF	1		
1	MAGNET-R	1		

制图日期	审核	设计	0-6	±0.05	±0.05	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	±1.0	±2.0	±5.0	±10.0	±20.0	±50.0	±100.0	±200.0	±500.0	±1000.0	±2000.0	±5000.0	±10000.0	±20000.0	±50000.0	±100000.0	±200000.0	±500000.0	±1000000.0	±2000000.0	±5000000.0	±10000000.0	±20000000.0	±50000000.0	±100000000.0	±200000000.0	±500000000.0	±1000000000.0	±2000000000.0	±5000000000.0	±10000000000.0	±20000000000.0	±50000000000.0	±100000000000.0	±200000000000.0	±500000000000.0	±1000000000000.0	±2000000000000.0	±5000000000000.0	±10000000000000.0	±20000000000000.0	±50000000000000.0	±100000000000000.0	±200000000000000.0	±500000000000000.0	±1000000000000000.0	±2000000000000000.0	±5000000000000000.0	±10000000000000000.0	±20000000000000000.0	±50000000000000000.0	±100000000000000000.0	±200000000000000000.0	±500000000000000000.0	±1000000000000000000.0	±2000000000000000000.0	±5000000000000000000.0	±10000000000000000000.0	±20000000000000000000.0	±50000000000000000000.0	±100000000000000000000.0	±200000000000000000000.0	±500000000000000000000.0	±1000000000000000000000.0	±2000000000000000000000.0	±5000000000000000000000.0	±10000000000000000000000.0	±20000000000000000000000.0	±50000000000000000000000.0	±100000000000000000000000.0	±200000000000000000000000.0	±500000000000000000000000.0	±1000000000000000000000000.0	±2000000000000000000000000.0	±5000000000000000000000000.0	±10000000000000000000000000.0	±20000000000000000000000000.0	±50000000000000000000000000.0	±100000000000000000000000000.0	±200000000000000000000000000.0	±500000000000000000000000000.0	±1000000000000000000000000000.0	±2000000000000000000000000000.0	±5000000000000000000000000000.0	±10000000000000000000000000000.0	±20000000000000000000000000000.0	±50000000000000000000000000000.0	±100000000000000000000000000000.0	±200000000000000000000000000000.0	±500000000000000000000000000000.0	±1000000000000000000000000000000.0	±2000000000000000000000000000000.0	±5000000000000000000000000000000.0	±10000000000000000000000000000000.0	±20000000000000000000000000000000.0	±50000000000000000000000000000000.0	±100000000000000000000000000000000.0	±200000000000000000000000000000000.0	±500000000000000000000000000000000.0	±1000000000000000000000000000000000.0	±2000000000000000000000000000000000.0	±5000000000000000000000000000000000.0	±10000000000000000000000000000000000.0	±20000000000000000000000000000000000.0	±50000000000000000000000000000000000.0	±10000000000
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