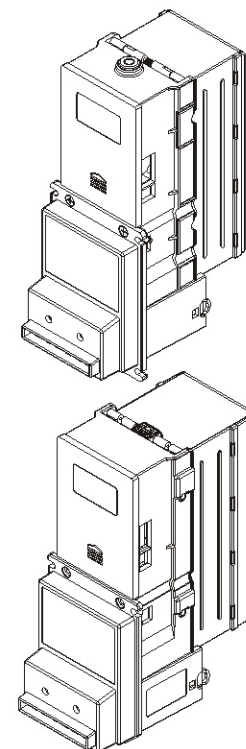


# **Bill Validator**

## **S6 Series Installation Guide**

- 4 - Way Acceptance
- Low Maintenance
- Easy Installation
- Re - Programmable  
Flash ROM
- Auto Self -Adjusting  
Sensor System
- Saving Power





## Contents

S6 Bill Validator Specifications .....	2
The Front LED .....	4
The Back LED Status .....	4
S6 Pin-out Assignments (M.D.B. for 12 V DC) .....	5
S6 Pin-out Assignments (Service Pulse for 12 V DC) .....	6
S6 Wake up Signal .....	7
S6 Service Signal .....	7
S6 Service Signal for ICA Only .....	8
Cable .....	9
Switch Settings .....	(Appendix)

## S6 Bill Validator Specifications

### Acceptance Rate

96% or greater

### Bill insertion

4-way Acceptance

### Acceptance Speed

Approx. 3 seconds (including bill stacking)

### Interfaces

Pulse

### Bill box Capacity

Approx. 300 bills (200~300)  
500 bills (300~500)  
800 bills (750~850)

### Weight

Approx. 2kg (shipping)

### Power Sources

12V DC  $\pm$  10% (9V~15V DC) ★

### Power Consumption

Action mode 12V , 2A (peak), 650mA (average)  
Standby mode 9V~15V DC  
Power saving mode 12V , approx. 40 $\mu$ A

### Environment Range

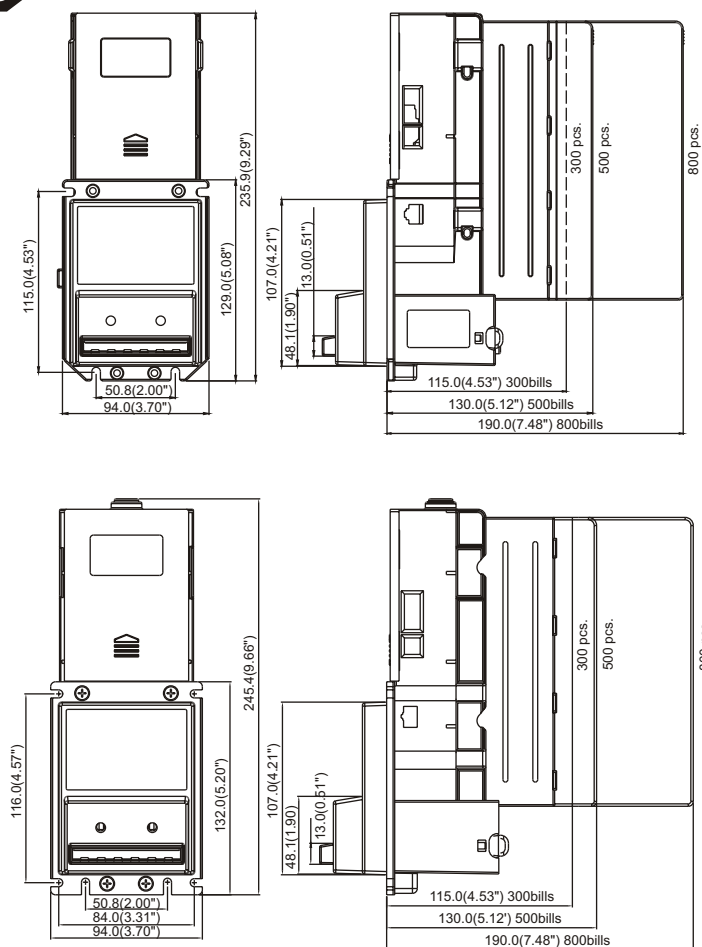
Operating Temperature : -10°C~50°C  
Storage Temperature : -30°C~70°C  
Humidity : 30%~85% RH (no condensation)

(★) We recommend the input has to be 12V DC.

If the input is lower than 9V DC, the machine may be shut down.

If the input is higher than 15V DC, the machine may be break down.

S6



Unit : mm  
( ) : in

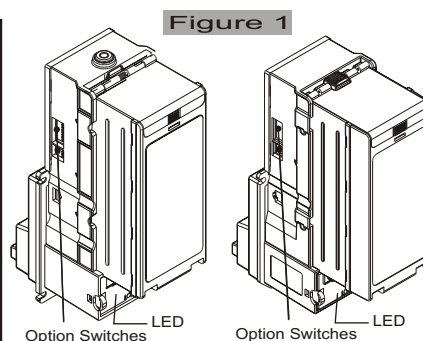
## The Front LED

The two LED lights located at the front of the unit will show the operational status of the bill validator. The LED lights will flash ON and OFF (in 500ms intervals) when the unit is ready to accept bills. The LED lights will be OFF if the unit is disabled, out of service or in power saving mode.

The bill validator can only accept one bill at a time. The LED lights will be OFF and will not accept another bill while a bill is being validated in the unit. The LED lights will start to flash normally when the bill validator is ready to accept the next bill. In power saving mode, although the LEDs are off, the bill validator is still ready for accepting a bill.

## The Back LED Status

<b>DIAGNOSTICS</b> LED ON=OK LED OFF=POWER OFF	
<b>FLASHES</b>	<b>STATUS</b>
1	bill jammed
2	disabled from system
3	sensor problem
4	reserved
5	bill box is removed
6	bill box is full of money



### Note:

In addition to the 30-pin connector, there is also an 8-pin RJ-45 connector on the side of the bill validator designed for the purpose of downloading programs and updating validation software. The connector will be kept open under normal operation of the bill validator. It will only be used when a new software or programs need to be downloaded into the flash ROM. The pin-out assignments of the 8-pin RJ-45 connector are as follows:

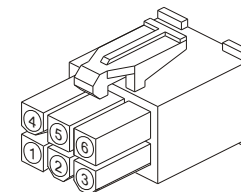
Pin 1 - GND	Pin 5 - /RESET
Pin 2 - TXD2	Pin 6 - VCC
Pin 3 - RXD2	Pin 7 - RXD1
Pin 4 - PROGRAM	Pin 8 - TXD1

## S6 Pin-out Assignments (M.D.B. System for 12V DC)

For the MDB interface S6 bill validator, connect the 30-pin peripheral connector on one end of the harness to the side of the unit and the standard 6-pin MDB connector to the power/interface connector.

◆ The standard 6-pin MDB connector pin-out assignments:

- Pin 1 - +12 VDC (POWER IN)
- Pin 2 - GND (POWER RETURN)
- Pin 3 - WAKE\_UP
- Pin 4 - MASTER RECEIVE (MDB\_MASTER\_RxD)
- Pin 5 - MASTER TRANSMIT (MDB\_MASTER\_TxD)
- Pin 6 - COMMUNICATIONS COMMON (MDB\_GND)



\*Cable Order No. : **WEL-V705(3-BA-A7V7-51)**

◆ Dual-in-line 30-pin peripheral connector (S6, MDB) pin-out assignments:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Pin 1 - Reserved	Pin 16 - Reserved
Pin 2 - Reserved.	Pin 17 - WAKE_UP
Pin 3 - +12 VDC	Pin 18 - Reserved
Pin 4 - Reserved	Pin 19 - Reserved
Pin 5 - Reserved	Pin 20 - GND
Pin 6 - MDB_MASTER_RxD	Pin 21 - Reserved
Pin 7 - Reserved	Pin 22 - Reserved
Pin 8 - Reserved	Pin 23 - Reserved
Pin 9 - Reserved	Pin 24 - Reserved
Pin 10 - Reserved	Pin 25 - Reserved
Pin 11 - Reserved	Pin 26 - Reserved
Pin 12 - Reserved	Pin 27 - Reserved
Pin 13 - Reserved	Pin 28 - MDB_GND
Pin 14 - MDB_MASTER_TxD	Pin 29 - Reserved
Pin 15 - Reserved	Pin 30 - Reserved

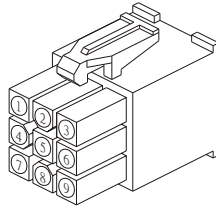
◆ **CAUTION:** Turn off the power before connecting or disconnecting the bill validator.

## S6 Pin-out Assignments (Service Pulse for 12V DC)

For the **12V DC** version of the S6 bill validator, the harness(WEL-V707) has a dual-in-line 30-pin peripheral connector at one end and a 9-pin mating connector at the other end. Connect the 30-pin connector to the side of the bill validator and the 9-pin mating connector to the 12V DC power cable(WEL-V708).

### ◆ 9-pin mating connector pin-out assignments:

Pin 1 INHIBIT +	Pin 6 Reserved
Pin 2 INHIBIT -	Pin 7 CREDIT
Pin 3 SERVICE +	Pin 8 Reserved
Pin 4 SERVICE -	Pin 9 GND
Pin 5 +12V DC (Power In)	(Power Return )



**\* Cable Order No. : WEL-V707(3-BA-A7V7-71)**

### ◆ Dual-in-line 30-pin peripheral connector pin-out assignments:

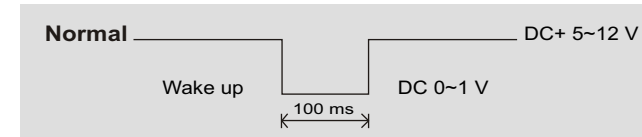
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Pin 1 - SERVICE -	Pin 16 - Reserved
Pin 2 - SERVICE +	Pin 17 - Reserved
Pin 3 - +12V DC(Power In)	Pin 18 - INHIBIT -
Pin 4 - INHIBIT +	Pin 19 - Reserved
Pin 5 - KEY	Pin 20 - GND (Power Return)
Pin 6 - Reserved	Pin 21 - KEY
Pin 7 - Reserved	Pin 22 - CREDIT
Pin 8 - Reserved	Pin 23 - Reserved
Pin 9 - Reserved	Pin 24 - Reserved
Pin 10 - GND	Pin 25 - Reserved
Pin 11 - Reserved	Pin 26 - Reserved
Pin 12 - Reserved	Pin 27 - Reserved
Pin 13 - Reserved	Pin 28 - Reserved
Pin 14 - Reserved	Pin 29 - Reserved
Pin 15 - Reserved	Pin 30 - Reserved

◆ **CAUTION:** Turn off the power before connecting or disconnecting the bill validator.

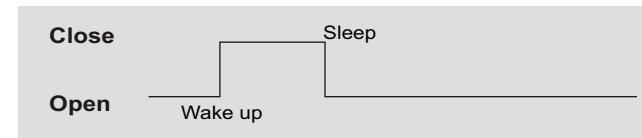
## S6 Wake up Signal

When S6 takes the bill, it sends a signal through "Wake\_up" pin as below:

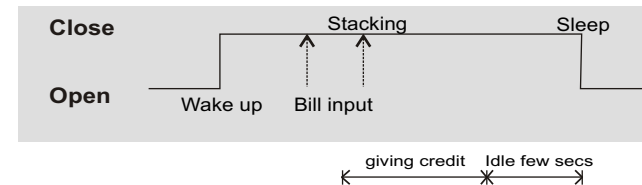


## S6 Service Signal (It works like a switch)

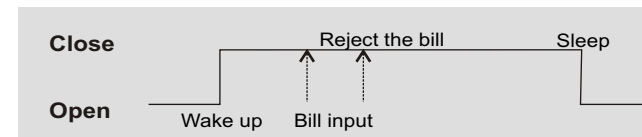
1. Condition 1 : When B.A. wakes up and does not take any bill.



2. Condition 2 : When B.A. takes a true bill.

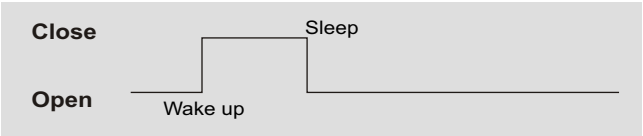


3. Condition 3 : When B.A. rejects a fake note.

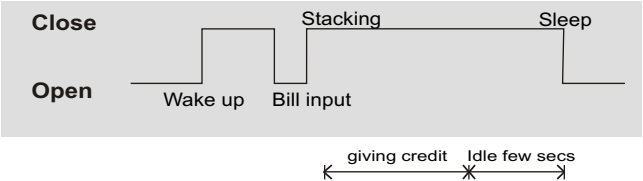


**S6 Service Signal for ICA Only (It works like a switch)**

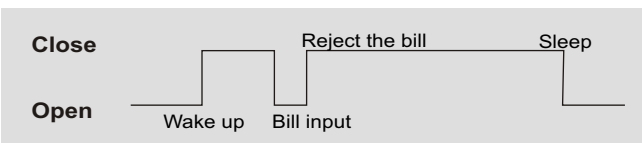
1. Condition 1 : When B.A. wakes up and does not take any bill.



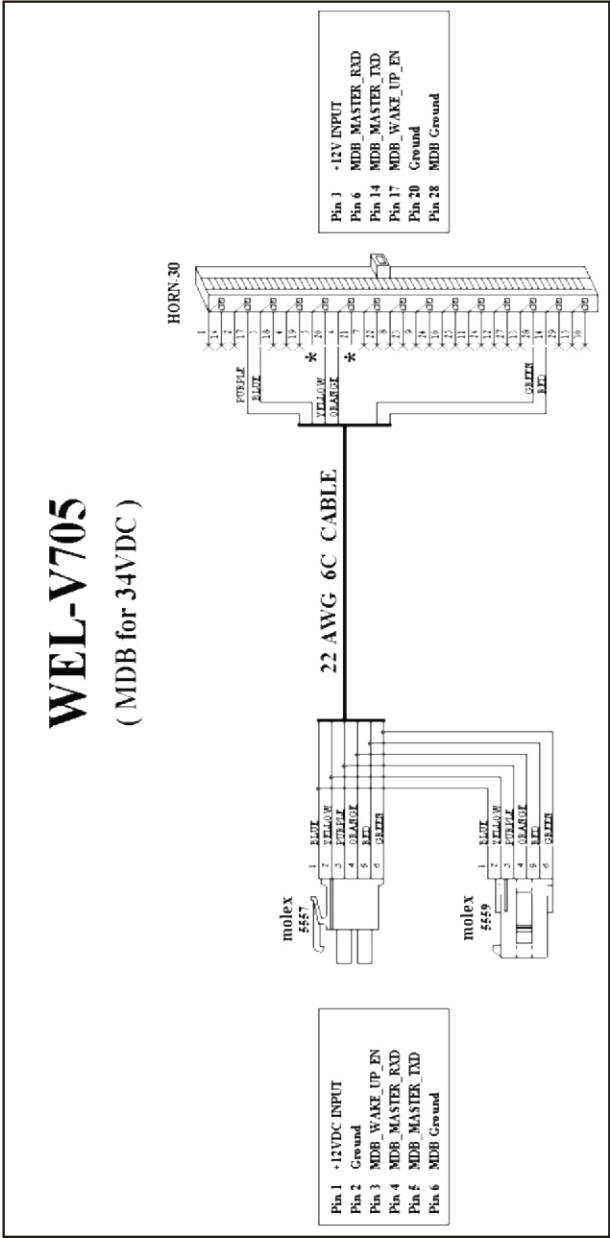
2. Condition 2 : When B.A. takes a true bill.



3. Condition 3 : When B.A. rejects a fake note.



**Cable**



# WEL-V708

(WAKE\_UP pulse For 12V DC)

