

## RESTRAINT FUNCTION

- Function: A)As for the number of coins to receive, as for two 1 dollar, 2 dollars are limited in one.
  - B)\$1 coin is not accepted for five minutes after the following operation is done twice within five minutes:  
\$1 coin is inserted but nothing has been purchased and the return lever is pressed.
  - C)\$2 coin is not accepted for five minutes after the following operation is done twice within five minutes:  
\$2 coin is inserted but nothing has been purchased and the return lever is pressed.
- This function is available for \$1 coin and \$2 coin.

- How to set : Switch No.8 set switch from OFF to ON.
- How to release: Switch No.8 set switch from ON to OFF.

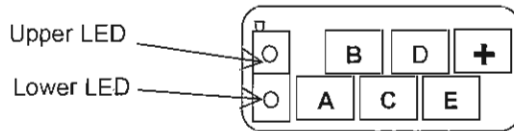
## REJECTION OF FOREIGN FALSE MONEY FUNCTION

- Function: To reject a counterfeit coin which was registered by following method.
- How to register :(1)Press the return lever and "C" key simultaneously to start registering the counterfeit coins that need to be expelled.  
Make sure the upper and lower LEDs are blinking.
- (2)Insert 10 counterfeit coins or ten times of one coin.
- (3)Press the return lever and "C" key simultaneously to finish registering.
- Number of coins registerable: one (Second coins and the after rewrite the first data.)
- How to start expel: Switch No.5 set switch from OFF to ON.
- How to inhibit expel: Switch No.5 set switch from ON to OFF.
- How to erase: (1) Press the return lever and "E" key to start erasing.  
Make sure the upper and lower LED's are blinking.
- (2) Press the return lever and "E" key to finish erasing.  
Make sure the upper and lower LED's turn on.

## 7. Diagnosis LED's

ECC series has self-diagnostics function and 2 diagnosis LED's.  
In case of malfunction, you can determine the appropriate step by confirming diagnosis LED's.

ON · · · ○,      BLINK · · · ☆,      OFF · · · —



Upper LED	Lower LED	Meaning	Action
○	○	Normal	None
—	○	Coin Jam in the Coin Acceptor	Remove Jammed Coins.
○	—	Coin pay out compartment error or cassette compartment error	Remove Jammed Coins. Install coin cassette securely.
☆	☆	Force vend	None
☆	○	Acceptance rate is reduced	Clean coin path on the Coin Acceptor.
○	☆	Speed of pay out is reduced	Clean the Coin PAYOUT compartment.



# SANDEN

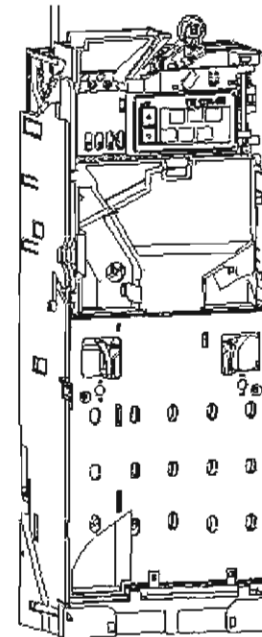
Delivering Excellence

# Quick Reference Guide

## Coin Changer

### MODEL : ECC-USM Series

- To obtain the best performance from your SANDEN Coin Changer, read this Guide first.
- After reading this guide, please keep it in a convenient location so you can refer to it as necessary.

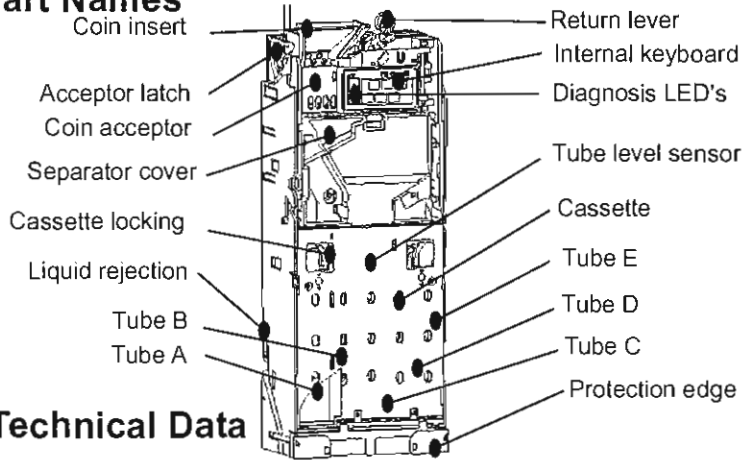


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**SANDEN Corporation**

## 1. Part Names



## 2. Technical Data

Sanden Coin Changer	MODEL						ECC-USM90B1
Protocol	MDB / 34Volt DC						
Coin Tube Position	A	B	C	D	E	box	
Coin Tube USA	25¢ (\$1)	10¢	25¢	5¢	25¢	\$1	
Coin Tube CANADA	25¢ (\$1)	10¢	25¢	5¢	25¢	\$1, \$2	
Coin Capacity	High level	Low level	106	80	73	80	-
	80(70)	31(27)					
No Change Indication Level	7±4	15±5	11±4	11±4	11±4	11±4	-
# of Option Switches	10 (10-pin dip switch x 1)						
Dimensions	Height 380mm(14.96in), Width=140mm(5.51in), Depth=84mm(3.31in)						
Weight	1800g(63.49oz)						
Temperature range	-15°C to + 60°C (5°F to 140°F)						
Power consumption	2.6VA to 7.7VA						

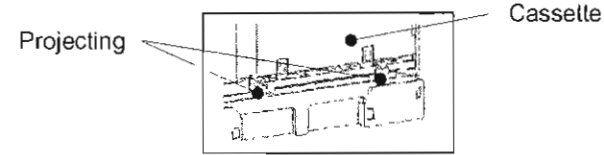
## 3. Installation

1. Turn off vending machine power before installing Coin changer.
2. Rotate the top of the acceptor forward by pushing up the acceptor latch.
3. Position the mounting holes over the mounting studs/screws in the vending machine.
4. Tighten the mounting screws.
5. Set the option switches as desired. For more information, see Option Switch Setting in section 5.
6. Return the acceptor to right position.
7. Make sure that there is no interference with other parts of vending machine.
8. Connect the changer to the vending machine and turn on the power.
9. Make sure that two diagnosis LED's are turning on.
10. Test the changer with a variety of coins to ensure proper operation.

## 4. Handling Caution

To obtain the best performance from your SANDEN Coin Changer, please pay attention to the following:

1. To set a cassette correctly, in two projecting on bottom of the main body, please set it surely.

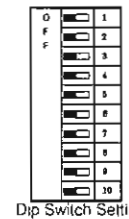


2. Do not carry the Coin Changer by the harness.
3. Store the coin changer in a clean, dry place.

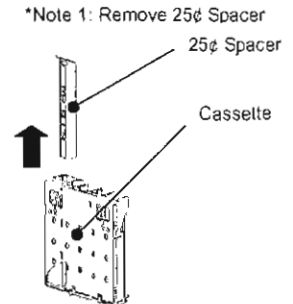
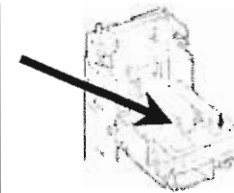
## 5. Option Switch Setting

Turn off vending machine power before changing the option switch setting.

Switch No.	Function	OFF	ON
1	High Value Coins (\$1,\$2) Inhibit	DISABLE	ENABLE
2	Acceptable Coin Type	U.S.	U.S.&CAN.
3	Tube A Setting (*Note 1)	25¢	\$1
4	Acceptance Token	DISABLE	ENABLE
	Programming mode for free-vend token ·While holding the "coin return lever" down, press the "+" button. Both green LED's flash. Insert 10 token in turns. ·While holding the "coin return lever" down, press the "+" button. Both green LED's momentarily flashing.		
5	Rejection of foreign false money	DISABLE	ENABLE
	While holding the "coin return lever" down, press the "C" button. Both green LED's flash. ·Insert 10 foreign currency / false money. ·While holding the "coin return lever" down, press the "C" button. Both green LED's momentarily flashing.		
6	Acceptance band for 25¢	STANDARD	NARROW
7	Acceptance band for \$1,\$2	STANDARD	NARROW
8	Restraint Setting	DISABLE	ENABLE
9,10	Free for future application	N/A	



Dip Switch Setting



\*Note 1: Remove 25¢ Spacer

## 6. Function

### TUBE FILLING VIA THE COIN CHANGER

This function permits easily to fill the tubes.

- Open the door
- Push the Plus key, both LED's flash simultaneous.
- Insert coins in any order.
- After finishing, push the PLUS key or wait for 45 seconds.

### CHECKUP THE PAYOUT MODULE

- By pushing the key's A / B / C / D or E you can dispense coins from each tube.