

MEI 1301 Wilson Drive West Chester, PA 19380 Technical Support 1(800)345-8172 Customer Support 1(800)345-8215

P/N 252641003\_R1





**Coin Dispenser** 

### **Discriminator Assembly**



**Coin Cassette** 



### GENERAL INFORMATION CONLUX MCM5

This document contains information for installing the MEI Conlux MCM5 coin mechanism.

The features of the Coin Mechanism include:

- MDB interface
- Disable coins by denomination
- Token supported
- Additional Float opptions
- Sturdier return lever

This product fits into the standard coin changer channel provided by vending machine manufacturers. It mounts on the existing three mounting studs/screws located in the vending machine.

#### INTERFACE

MEI Conlux MCM5 coin mechanism operates in machines that support the MDB interface\*.

Rated Operating Voltage Voltage: 34v d.c. 12W 0.92A at DC34V peak

The operating voltage of a MEI Conlux coin mechanism is stated on the label of each product. The label is located on the left side of the coin mechanism.

Weight 3.5 lbs.

Compliance UL standard, FCC standard

\*Note: MDB (Multi drop bus) interface information can be found on

NAMA's website located at www.vending.org

### **INSTALLATION INSTRUCTIONS**

### Before you begin...

• Remove the coin mechanism from the packaging material. Inspect unit for physical damage.

**Tools Needed:** 

Phillips screw driver Wire Tie wraps Wire Tie wrap adhesive anchors

Wire cutters Mild deteregent

• Turn **OFF** the power supply to the vending machine.

• Lift up on the White lever on the top left side of the coin mechanism and tilt the Discriminator assembly forward.



**PUSH UP** 



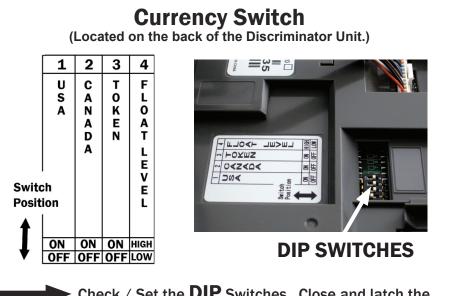
TILT OUT

3 Mounting Holes

#### HANG SECURELY

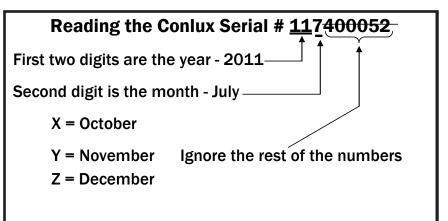
Once open, the mounting holes are accessible. Hang the coin mechanism on the mounting studs/screws, ensuring that the coin mechanism is mounted vertically with no tilt on all three studs/screws
Tighten the screws (if required),

1



Check / Set the DIP Switches. Close and latch the discriminator assembly.

	Switch Number	Function
#1	USA On/Off	On - Accept United States Coins
#2	Canada On/Off	On - Accept Canadian Coins
#3	Token On/Off	On - Accept Tokens
#4	Float Low/High	Set Float either Low (\$34.00) or High (\$52.00)



# ALIGNMENT

• Once the coin mechanism is installed, check that there is a small gap (2 mm) between the lever on the vending machine and the return lever on the coin mechanism.

Confirm that when you press the coin return lever on the machine door, it opens the acceptor gate on the coin mechanism enough to release the coin, then returns smoothly without holding the gate open.

• Check the alignment of the coin input chute and cashbox chute. Insert some coins to check that they enter the coin mechanism properly and exit into the return cup. Ensure that the coin chute does not rest on or open the acceptor gate.

Most machines allow you to adjust the return lever, coin chute, and the return cup to align with the coin mechanism. Align, adjust, and test as necessary to ensure coins are properly routed before continuing with these instructions.

## CONNECTION

If the vending machine has a bill validator, connect the MDB harness coming from the coin mechanism to the bill validator's "Y" connector. If there is no bill validator, connect the coin mechanism harness to the harness coming from the vending machines control board.

Tuck any excess length of harnessing inside the machine. Make sure no harness is pinched or trapped when the coin return lever is pressed or when the vending machine door in closed.

• Now you may switch "**ON**" the power to the vending machine.

# **COIN CASSETTE**

The coin mechanism can be ordered with one of two cassette configurations for both the USA and Canada. The USA and CANADA use the same cassettes.

 Remove cassette by using your thumb to depress the white latch and tilt the cassette forwards and lift upwards as shown.





**COIN CASSETTE** 

The cassette type will be recognized automatically by the coin mechanism.

	Types of cassettes and the denomination configurations							
Type Feature			Tube A	Tube B	Tube C	Tube D	Tube E	
1	US-1	Denomination	25 ¢	5¢	25 ¢	<b>10</b> ¢	25 ¢	
		Auto Storing	No	Yes	Yes	Yes	No	
		Empty Qty (Note 1)	6	8	8	10	5	
		Full Oty (Note 2)	71	64	71	97	71	
				_				
2	US-4	Denomination	1\$	5¢	25 ¢	<b>10</b> ¢	25 ¢	
		Auto Storing	Yes	Yes	Yes	Yes	No	
		Empty Qty (Note 1)	5	8	8	10	5	
		Full Qty (Note 2)	63	64	71	97	71	

Types of acceptes and the denomination configurations

Note 1: If lower sensor detects coins, then there are coins to at least the Empty quantity.

Note 2: If the coins reach the upper sensor, the tube is considered full.

# LOADING THE COIN CASSETTE

You can load the coin cassette using either of these two techniques: By manually removing the cassette, placing it front down on a firm surface, opening the latches and filling it or manually inserting coins from the front.

Loading Manually by Removing Cassette

1. Remove the cassette. Place it front down on a firm surface. Open the back by pinching the two tabs together and levering it open on the hinge. Fig 1.

2. It is recommended that you fill each tube (nickel, dime, guarter, and dollar) if available, with at least 15 coins. Each tube will hold 2 rolls of coins.

Note: Insure that coins are inserted into the proper tubes. Do not fill above the MAX FILL line. Fig. 2





Loading Manually from the Front

Fig. 2

1. Press down on the white Cassette Latch in front and tilt the top of the cassette out until you can lift the cassette from the coin changer. Stand the cassette on a firm surface.

2. From the front, manually load the coins into tubes A, B, C, D, and E. 8

# **DIAGNOSTIC LED's**

Error status will be reported to the main controller, and LEDs will flash as below:

"DIS": Error of discriminator (Upper part of body)

"C/C": Error of coin changer (Lower part of body)



### **User Interface Buttons**

DIS	C/C	Check Light	Status		
	0	$\otimes$	Ready		
*	0	$\otimes$	Check Discriminator for ERROR		
•	X	$\otimes$	Check Coin Changer for ERROR		
*	×	×	Check and CLEAN the Discriminator		
OFF	ON	FLASHING	Press the unmarked button to		
$\otimes$	•	*	clear the Check Light		

# **TOKEN TEACH**

Token teach mode is entered by pressing the Mode and B button simultaneously for longer than 2 seconds. When this mode is entered, the C/C LED will flash rapidly. The user must then drop 10 tokens with at least 1 second intervals between tokens. The mode will automatically end after the  $10^{th}$  token is dropped. If successful, the C/C LED will illuminate continuously.

## **REJECTION OF COINS**

Coins will not be accepted under the following conditions:

- Power off .
- During coin dispensing.
- If there is an Error. The DIS or C/C LED flashing.
- Boot-up status. (Approx. 2 seconds after power-on).
- The coin denomination is set to be rejected.
- There are not enough change coins in the tubes.

## **INVENTORY CONTROL**

#### **Float Down**

The Float Down mode is entered by pressing the F $\downarrow$  button for 3 seconds or longer. When active, the C/C LED will blink rapidly and the coin mechanism will automatically dispense coins from all the tubes until the float level for that tube is reached. If the number of coins in a tube is equal or less than the float level, no coins will be dispensed. When the float levels have been reached, the mode will exit automatically.

The coin mechanism will blink the C/C light slowly for 5 seconds on exit if one or more tubes have less than the float level and requires filling.

#### How to Utilize the Float/Par Factory Settings

The user must start with an empty cassette.

- The DIP switch should be set to either Float High \$52.00 (ON) or Float Low \$34.00 (OFF) depending on which value will be utilized.
- Remove the empty cassette from the MCM5. Place it on a hard surface and fill it with the coins indicated on chart #1.
- Press and HOLD the "F<sup>↑</sup>" button for three (3) seconds. The C/C light will flash rapidly.
- Place the filled cassette back into the MCM5. The C/C light will continue to flash rapidly, then flash 3 times slowly and return to steady ON. You have successfully set the Float/Par.

#### AFTER A PERIOD OF OPERATION:

To empty excess coins from the changer and return it to the Float value, press and HOLD the "Fi" button for (3) seconds. The excess coins will be sent to the return cup. If a tube does not have coins up to the Float/Par level, no coins will be dispensed from that tube.

## FLOAT / PAR

These Float / Par levels are pre-programmed in the factory to the following values:

- Float 1 Switch Position Cassette	Low (ON)	Float 2 - \$52 Switch Position High (OFF) Cassette US-1
Tube A – 25¢	40 coins = \$10	Tube A - 25¢ 60 coins = \$15
Tube B - 5¢	40 coins = \$ 2	Tube B - 5¢ 60 coins = \$ 3
Tube C – 25¢	40 coins = \$10	Tube C - 25¢ 60 coins = \$15
Tube D – 10¢	40 coins = \$ 4	Tube D - 10¢ 60 coins = \$ 6
Tube E – 25¢	32 coins = \$ 8	Tube E - 25¢ 52 coins = \$13
Cassette	e US-4	Cassette US-4
Tube A - \$1	10 coins = \$10	Tube A - $$1$ 30 coins = $$30$
Tube B – 5¢	40 coins = \$ 2	Tube B - 5¢ 40 coins = $$2$
Tube C – 25¢	40 coins = \$10	Tube C - 25¢ 40 coins = $$10$
Tube D – 10¢	40 coins = \$ 4	Tube D - 10¢ 40 coins = $$4$
Tube E – 25¢	32 coins = \$ 8	Tube E - 25¢ 24 coins = $$6$

## **USER FLOAT / PAR PROGRAMMING**

The default Float /Par levels can be set to different values by a user. To set a user determined float level, follow this procedure:

- The user must empty the current cassette.
- The DIP switch must be set to either Float High (Off) or Float Low (ON) depending on which value will be re-programmed.
- Press the Mode and C buttons simultaneously. If one of the low level sensors is covered, the C/C LED will flash slowly for 5 seconds and the coin mechanism reverts to its normal operating mode. If all the low level sensors are uncovered, the C/C LED will blink rapidly and the next step can be performed.
- The user must insert coins through the coin funnel for discrimination purposes until the desired float level is reached.

#### The following conditions will apply:

- Unrecognized coins will be rejected.
- If the cassette contains coin tubes of an equal value, the coins will alternately be routed to each tube in turn.
- The mode will automatically exit if no coins are dropped for a period of 2 minutes.
- •
- Coins will be reported on the MDB protocol as Manual Fill.
- The mode can be exited at any time without saving any data by pressing the Mode button for 2 seconds or longer.
- The cassette can be removed and replaced at anytime without affecting the current tube counts.
- •
- When the cassette has been filled to the desired level, the user must press the Mode and C buttons simultaneously to save the tube levels.
- To return the float levels to the default factory programmed values, the User Par Programming mode may be entered as described above by pressing the Mode and C buttons simultaneously.

When the C/C LED is flashing rapidly, the user must press the F  $\downarrow$  button and the F  $\uparrow$  button simultaneously.

This page left blank intentionally.



#### MEI, Inc. Standard Limited Warranty

MEI, Inc. (**MEI**) warrants to you, the purchaser of the products accompanying this limited warranty, only that at the time of delivery and for a period of twenty four (24) calendar months after delivery, the products shall be free of defects in workmanship and materials, provided, that, this limited warranty shall **not** apply:

(a) to damage caused by your or any third party's act, default or misuse of the products or by failure to follow any instructions supplied with the products (including but not limited to, misuse of the products through vandalism, fraudulent acts, or any other kind of malicious interference);

(b) where the products have been used in connection with or incorporated into equipment or materials the specification for which have not been approved in writing by MEI;(c) to products which are altered, modified or repaired in any place other than an MEI

(c) to products which are altered, modified or repaired in any place other than an MEI facility or by persons not expressly authorized or approved in writing by MEI; or (d) to modifications required because of coin or currency changes mandated by any governmental agency; provided that during the Warranty Period, the product shall be eligible to receive, any currency recognition

software or firmware updates (subject to any applicable license pursuant to which such software or firmware is provided) issued by MEI for such product to address any coin or currency changes mandated by any governmental

#### agency (each an Update).

(e) To No fault founds, vandalism, clean/tune/test, damages, vandalism, salting, currency upgrades, software updates and missing parts.

THE LIMITED WARRANTY SET FORTH HEREIN IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY MEI WITH RESPECT TO PRODUCTS SOLD OR PROVIDED BY MEI. MEI GIVES AND MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, OTHER THAN THAT EXPRESSLY SET FORTH HEREIN. NO REPRESENTATIVE OF MEI IS AUTHORIZED TO GIVE OR MAKE ANY OTHER REPRESENTATION OR WARRANTY OR MODIFY THIS WARRANTY IN ANY WAY EXCEPT IN A WRITTEN AMENDMENT OF THIS WARRANTY SIGNED BY A DULY AUTHORIZED REPRESENTATIVE OF MEI WHICH MAKES SPECIFIC REFERENCE TO THIS LIMITED WARRANTY. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, MEI EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT, AS WELL AS ALL WARRANTIES ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OF PERFORMANCE. THE LIMITED WARRANTY SET FORTH HEREIN RUNS TO YOU, THE RECIPIENT OF PRODUCTS. If the products do not conform to the warranty set forth herein, MEI's sole liability and obligation shall be to replace the specific nonconforming products or refund the purchase price actually paid for such nonconforming products, as MEI may elect. MEI reserves the right to inspect returned Goods to reasonably determine whether such returned Goods are nonconforming. If after MEI's inspection MEI determines such Goods to be conforming in all material respects, MEI will return such Goods to Buyer at Buyer's cost, and MEI may impose a service fee for MEI's inspection services. Authorization to return products must be obtained from MEI prior to any such return by calling MEI's toll free Customer Service Department at 800-345-8215. For repairs, please contact MEI's Customer Service Department at 800-345-8215 or by visiting MEI's web site at http://www.meigroup.com for an MEI Authorized Service Center. In MEI's sole discretion, credit may be granted with respect to returned products, less an appropriate restocking charge, depending on the reason for the return and the condition of the products. Any returned products must be shipped to MEI, freight prepaid, at your risk and otherwise in accordance with MEI's instructions, and must be accompanied by an 14

#### MEI, Inc.

#### Standard Limited Warranty (continued)

explanation of the nature of the nonconformity that is satisfactory to MEI. MEI's liability under this warranty or otherwise with respect to the products or their use (including liability for negligence or otherwise) is limited solely and exclusively to the remedies provided above and no other right or remedy will be available to you or to any other person. You hereby acknowledge that no guarantees or assurances have been made as to the results that may be obtained from the use of the products provided hereunder whether used singly or in combination with other items. You hereby acknowledge that you do not rely on, and you hereby waive, any claim relating to, any recommendation or instruction given to you by MEI or any of its representatives regarding the specifications, storage, handling or use of products provided to you, which recommendation or instruction shall be followed or acted upon by you entirely at your own risk. MEI'S LIABILITY, AND YOUR EXCLUSIVE REMEDY IN CONNECTION WITH THE SALE OR USE OF PRODUCTS PROVIDED HEREUNDER (WHETHER BASED ON CONTRACT, NEGLIGENCE, BREACH OF WARRANTY OR OTHERWISE), SHALL BE STRICTLY LIMITED TO MEI'S OBLIGATIONS AS SPECIFICALLY AND EXPRESSLY PROVIDED IN THE LIMITED WARRANTY AND LIMITATIONS ON REMEDIES SET FORTH HEREIN. IN NO EVENT SHALL MEI HAVE ANY LIABILITY TO YOU, ARISING OUT OF OR IN CONNECTION WITH THE SALE OR USE OF THE PRODUCTS SOLD HEREUNDER. THE TRANSACTIONS CONTEMPLATED HEREBY, OR MEI'S OR YOUR CONDUCT OR ACTIONS IN RELATION TO ANY OF THE SAME OR TO EACH OTHER. IN AN AMOUNT IN EXCESS OF, AND MEI'S LIABILITY SHALL BE STRICTLY LIMITED TO, THE LESSER OF THE AMOUNT(S) ACTUALLY RECEIVED BY MEI FROM YOU (IF APPLICABLE) FOR THE PRODUCTS WHICH GIVE RISE TO MEI'S LIABILITY OR \$100 DOLLARS (US). MEI SHALL HAVE NO OTHER LIABILITY, OBLIGATION OR RESPONSIBILITY OF ANY KIND, IN ANY WAY OR TO ANY EXTENT FOR ANY LOSSES, EXPENSES, COSTS, DAMAGES OR LIABILITIES FOR ANY REPRESENTATION OR WARRANTY OF ANY KIND WITH RESPECT TO THE PRODUCTS (OR THE PERFORMANCE THEREOF), OR ARISING IN ANY WAY OR IN CONNECTION WITH THE PURCHASE BY OR USE OR SALE OF THE PRODUCTS BY YOU, EVEN IF MEI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL MEI HAVE ANY LIABILITY, OBLIGATION OR RESPONSIBILITY FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, OR EXEMPLARY DAMAGES ARISING IN ANY WAY IN CONNECTION WITH THE PRODUCTS OR THEIR SALE OR USE, INCLUDING BUT NOT LIMITED TO DAMAGE TO PROPERTY, INJURY TO PERSONS, LOSS OF USE OF THE PRODUCTS OR ANY ITEM WITH WHICH SUCH PRODUCTS ARE USED, LOST PROFITS, OR DELAYS OR INCONVENIENCE.

Not withstanding any custom of trade or course of dealing between MEI and you, your failure to give notice of any claim for breach of warranty within five (5) days after expiration of the applicable warranty period (which five-day period the parties agree is a reasonable time) shall constitute an unqualified waiver by you of all claims with respect thereto, including the right to receive a refund of the purchase price or replacement of the products.