LU250 MDB to logic mech converter

Installation and operation

Machine Model:

The LU250 will work and any 12 or 15 pin logic MECH MACHINE. It gets its low voltage from the machine control system. It does not use the 110v or 24v in the 12 or 15 in plug.

If the machine does not have source of 24VAC an optional transformer (V253-24V) is needed. Almost any 24V transformer from scrap machine can be used.

INSTALLATION:

Turn off the machine power. Find a source of 24VAC in the machine and attach the red and black power wires. Unplug the logic mech and plug in the LU250. Attach the MDB coin mech and power the machine.

TRICK:

If you machine has a 15 pin plug you may use the 24VDC that feeds pins 13 and 15. Since the LU250 has a internal bridge rectifier, it does not matter about the black and red leads "matching" plus or minus.

Coin Mechanism:

The LU250 has been tested with 3,4,5 and 7 tube coin mechs.

Note: 1'st generation MDB coin mechanisms are NOT recommended for use with the LU250. They lose their internal coin count when power fails. (They are generally solenoid payout units).

Bill Acceptor:

There are 3 cases:

1- If you machine already has a usable acceptor, continue to use it.
2- If you what to accept a higher denomination bill than your machine currently supports, use the LU250 and an MDB acceptor.
3- If the machine has no acceptor, used the LU250 to add bill acceptance. If the bill acceptor is not mounted close to the coin mechanism an optional door harness may be need! Order VH254 15' harness for the door mounted BV.

    The LU250 converts bill values into dollar coins. It supports $5 (and higher) bills. The LU250 will take bills and send $1 coin messages until the machine tells it to stop. If you have inserted a $5 and say the highest price in the machine is $2.75, $3.00 will go to machine and the box will immediately tell the changer to dispense the balance of $2.00. You no longer need to set a phantom price. Legend says there are some machines which never turn off the changer, test for proper operation using $1 coins. (Rowe4900 and 448 see las page!)
    Note: If chine vend payout commences before balance payoff is complete, the payoff will pause while payout value is accumulated. This value is added to any remaining payoff and the total will then be paid. This would probably only occur if paying quarters.

The bill acceptor will not be enabled until we know the coin count which is sent from the coin mechanism. With some (early) coin mechanisms coins must be "vended in" to count. Manually filled coins are not always counted. In the MDB coin mechanism the count of coins is sent to the control system. We convert 4 or more to a covered low tube sensor.

$5(all bills + coupons) acceptance will not be enabled until the LU250 knows the more than $12.75 in coins is in the coin tubes. The BV enable led will blink (fast – alternates with MDB poll flash) if the $5 (all bill) is disable. $1 (low bill) acceptance will not be enabled unless there are more than 4 quarters and nickels. The led will blink slowly (1/4 fast) if disabled by low tubes. If on steady the BV is fully enabled. If off the BV is disable.

When coins are inserted, the BV enable led becomes an activity indicator. If no BV is present the BV enable shows the accept enable condition.

*T**he LU250 does not support bill escrow.***

With BV installed:	BV	BVLED
Over $12.75 in change	*All bills*	*ON*
Less than $12.75 but .25 ok	*$1 only*	*Blink – fast*
Low .25 or .05	*No bills*	*Blink – slow*
Over credit	*No bills*	*off*

No bill acceptor
Accept money   ----   On
Over credit   ---   OFF

When in a vend cycle (credit on machine or in a payout cycle) the BV LED will blink with each coin payout from the machine. Then there will be a pause and a blink as each payout is sent to the MDB changer.
The product now supports coin token and coupon free vend. A free vend cycle begins with the coupon or token. The LU250 will then begin to but credit on the machine turns off accept enable. Since some machines don't AE off and become confused with too much credit, the dip switches may set to limit the amount to credit. When the vend is completed no change is paid. If coin return is pressed credit is lost.

Tested with:
.05, .10, .25, $1.00, $2.00 coins and token.
$1 and $5 bills and coupon. Now with 1,2,5,10,20 and coupon.

Coins mechanisms:
Mars 6512(not recommended), 4510,7512, Mars 560(Mexican), Coinco coinpro 3, 9302 CGX, Vortex; JDM coin mechanism and bill recycler.
Bill Acceptor:
Mars VN2512, AE2602, Coinco Billpro BP4SX and BA30.

Really Important!!!!
MDB Coin mechanisms count coins. You most fill them using the manufactures instructions (mars- float up etc.) So, the changer Knows the coins are present. MDB coin mechanisms will not pay out air! No .25's and you say payout .25's there will be no activity. If you are having a star up problem, vend in at least 20 of each coin before you call.

Service Coin payout:

All machines have a method of paying out coins. Since MDB coin mechanisms have the same ability please use those buttons. If you try to pay 5 nickels from the machines, the LU250 will accumulate the value and pay a quarter rather than 5 nickels.

Suggested testing:
Credit each coin value< do coin return for each coin. Establish .95 in credit, do coin return.

If bill acceptor*:*
Establish credit at highest bill type. Confirm credit. Do low value vend. Confirm change.
The product now supports coin token and coupon free vend. Contact your distributor for information.

Possible uses:
Accept $5 in food machines.
Payout $1 coins.
Eliminate change makers in low volume account.

Model V270 Mexican coinage.
Model V271 Jamaican coinage>
Model V272 Australian coinage.
Model V273 Hungarian coinage.

LU250 New Feature:
Rowe 448 users
If the 2 switches are on and a $5 bill is inserted, the coin mech will immediately pay out the $5in change. If a $1 is inserted it will credit the machine.

The 448 (and 4900) never turn off the coin mech so the full $5 will go to the machine as credit. The machine payout (in quarts) is very slow. This feature should speed operation. Yes, it turns the machine into a change maker. If you don't want it leave the switches off (or set for token highest value).

Now handles $20 bills.
Testing for slow payout:
The system works to first accumulate the payout value, then send that value as coins to the coin mechanism. I've added visual indications to help "see" the steps.

Here's how to test the CM, LU250 and machine as a system.

The BV led is also an activity indicator. Insert 1 quarter, see BV led blink as coin message is sent to the machine. Insert a second quarter and see a blink. Do coin return. Now see 1 longer blink for each coin paid. Then a pause, and a faster blink as the coin payout is sent to the CM. And finally hear the coin payouts. There can be a delay of up to .8 sec between coins. I wait .25 sec more. So 2 coins will be .8+ 1.25=2 sec then I start payout. Some coin mechs take several second to pay (from my blink to payout).

I have been surprised as to how long it takes some coin mechanisms to pay. The LU250 has a new microprocessor. It's features are the same as the LU250B.