INSTALLATION AND OPERATION GUIDE

COINCO UTB 400-C TEST BOX
The UTB 400-C is a fully functional Vending machine simulator with configurable settings. It supports MDB, Executive and BDV protocol peripherals, plus has the ability to interface with a PC.

These instructions contain information on the UTB 400-C Test box. Taking time to read and become familiar with functions and operations of the test box will aid in obtaining the best performance from your COINCO UTB 400-C TEST BOX.

Unpacking
After unpacking the unit, inspect it for any possible shipping damage. If the unit is damaged, notify the shipping company immediately. Keep the packing material to reuse if you need to transport or ship the test box in the future.

Power Requirements
UTB $400-\mathrm{C}-220 / 240 \mathrm{~V}, 50 / 60 \mathrm{~Hz}$
The UTB 400-C Test box is built with a universal equipment power receptacle integrated into the line filter and power switch module. A standard equipment power cord compatible with the local mains receptacle is included.

CAUTION:
When plugging in a changer ensure the correct Voltage is used. For example an MDB Changer has a supply voltage of either $12 / 34 \mathrm{VDC}$. There are two connectors on the test box for MDB with the voltages marked.

## Test Box Service Menu

The Test box Service menu is used to configure the Test box to act similar to a Vending machine, plus also has features to configure the Coin Changer.
The list below details the menu structure of the Test box.
The service-menu consists of 6 menu-points:

Menu 0
Menu 1
Menu 2
Menu 3
Menu 6
Menu 8

Filler Information’s
Machine-Configuration
Sales Counter readings
Cash Counter from Coin Mechanism, Credit card-readers Price Settings
Coin changer programming
Every menu-point consists of several sub-menus.
Firstly to enter the Service menu press ' $A$ ' on the keypad, and to exit press ' $B$ '. Navigating through the addresses is performed by the buttons ' 2 ' and ' 3 ' on the keypad and to enter an address use button ' 4 '. Also to exit a sub menu key button '1'.

## Initial Setup

On initial power up the Test box is configured to it's Factory default setting's and will need to be configured before testing of a changer commences.

The following Menu setting's will need to be configured to allow the Test box to function correctly as a Vending machine:

1. Menu C.1.A. - Language selection (default setting 'German').
2. Menu C.6.1. - Standard Price Setting (Default setting 000.50). This Address program's all Vend Prices, if you require to set individual prices go to addresses C.6.2.1 - C6.2.n and change values as required.
3. Menu C.8.5. - Coin Acceptance Determination, ensure all coins required are enabled. Note only used in MDB.
4. Menu C.8.6. - Coin acceptance inhibit at low change. Ensure all tube coins are enabled.

Function:
Note:

## Menu C 8.B

Function:

## Menu C 8.B

Function:

## Menu C 8.D

Menu C 8.E
Function:

## Menu C 8.F

Function:

Enables/Disables token vending.

Function: Enables and Disables configured bills. Bill enable / disable without change
Bill's accepted at low change condition.

Executive coin Scaling factor setting. This function is not active in MDB

## Reload Card (MDB mode)

Load card with or without revalue.

## With/Without token vend (EXE mode)

## Bill enable / disable

## Park Bill / Escrow

Park bills in escrow or stack bills.

## Coin acceptance determination

Function:
Operation:

## Menu C 8.6.

Function:

Menu C 8.7.
Function:
Menu C 8.8.
Function:

Note:

## Menu C 8.9.

Function:

## Menu C 8.A.

Function:

Note:
MDB Mode:
Executive Mo

Setting of the coin-returns at "obligation to buy". At the setting "coin-return at vendor error" the credit can be returned to the customer by using the escrow-lever when the activated selection is "sold out" or faulty. At the setting "no escrow at vendor error" the function "obligation to buy" is still kept.

## With/without credit card-reader

Disables the acceptance of particular coins. The coins A-N can be 1=disabled or $0=$ enabled by this setting
Button 4 => enter or leave coin-acceptance determination.
Button 2 => 1=disabled.
Button 3 => 0=enabled.

## Coin acceptance inhibit at low change

Disables the coin-acceptance of particular coins, at the message "low change" from the coin mechanism This message is given out by the coin mechanism, if the con tents of certain tubes fall below a minimum. At which tubes this message is shown, can be set in menu 8.8. The coins A-N can be $1=$ disabled or $0=e n a b l e d$ by this setting.

## Keypad on Coin mechanism

Locks and unlocks Coin mechanism keypad.

## Notice low change

Setting of the combinations at the message "No change" Combinations displayed in Executive mode: 0=A or ( B and C ), $1=A$ and $B$ and $C, 2=A$ and $B, 3=A$ and ( $B$ or $C$ ) , $4=A, 5=A$ or $B, 6=A$ or $B$ or $C, 7=A$ and $C, 8=A$ or $C, 9=B$ and $C, 10=B$, $11=B$ or $C, 12=C$.
In MDB mode a total amount is displayed.

## Coin-returns at vendor-error

This function is necessary to connect a combination of a BDVCoin mechanism and a Credit-Card-Reader. BDV Mode: If there is only a coin mechanism in use and the setting is "With CCR" the controller recognizes an error Using MDB this function is not active. :In Executive Mode this function is not active.

## Test Mode (MDB mode only)

Test mode is used to test the acceptance of coins without performing a vend. You also have the ability to test the payout of a changer.

To enter Test mode key ' $D$ ' in normal operating mode, followed by one of the following numbers.

Key 1- Display's coin credit
Key 2— Display's value of last coin inserted
Key 3- Display's Changers tube content
Key 4- Empty all tube coins
Key 5- Empty individual coin tubes
Key 7- Display's changer details
Key 8- Display's Bill Validator details
Key 9— Display's Card reader details
Key 0-Enters Download mode

## Communication Interface

The Test box has the ability to interface with a PC. The instructions below detail the set-up process.

1. Firstly before powering up the Test box, ensure the changer is plugged into MDB.
2. Connect a serial communication cable from the PC to Com2 port, if using the Test box to communicate to the changer.
3. Ensure the Com's switch is set to 'Link', pointing downwards
4. While applying power to the Test box, press and hold down ' 1 ' for MDB on the keypad. This switches the Test box to MDB
5. When using the test box to communicate to a PC, ensure the Test box is firstly in 'Download Mode' (Refer to Test box instructions). Note Changer should be in MDB mode first
6. Also note that communicating to an Executive changer is performed by, connecting a Dex Computer lead from a PC to the Dex harness of the changer.

## Service Menu Descriptions

## All menu's are available in MDB and Executive mode otherwise stated.

Menu $0 \quad$ Filler-informations
Menu C 0.1. Actual coin-tube content

| Function: | Shows the actual coin-tube content of the MDB-coin mechanism. <br> Note: |
| :--- | :--- |
|  | BDV and MDB Mode: Shown is a calculated value of coins insert at |
| the coin mechanism and coins payout from the tube. Therefore this |  |
| value can only be exact if the value of menu 0.1 was reset after |  |
| each payout or fill operation from the coin mechanism. All the coin- |  |
| tubes of the coin mechanism must be always filled by using the |  |
|  | menu 0.3. You can reset the menu 0.1 by menu 0.4 "empty coin- <br> tube" or "Clear Init". |

## Menu C 0.2. Value of paid vends

Function: Shows the amount of all vends in Currency since the last reset by menu 0.C.
Operation: Call counter as well as leave counter.

## Menu C 0.3. Filling coin-tubes

Function: The ability to fill the coin-tubes by inserting coins.
Note: $\quad$ This function is only available in BDV and MDB mode.

## Menu C 0.4. Empty coin-tubes

| Function: | Payout of coins from the coin-tubes. By the function, "Clear 0.1" the tubes are automatically paid out and the tube count, menu 0.1, is reset. |
| :---: | :---: |
| Note: | Executive Mode: In Executive Mode this menu is not active. |
| Menu C 0.5. | Total pay-vends |
| Function: | Shows the number of vends since the last reset. |
| Menu C O.C. | Exit Service menu |
| Function: | Exits Service-mode and returns to the Vending mode. Also Clears menu 0.2 and 0.5 when button 4 is entered. | menu 0.2 and 0.5 when button 4 is entered.

## Menu 8 <br> Coinchanger-programming

## Menu C 8.1. Single/Multi-vending

| Function: | Single/Multi-vending setting. When in single vend the <br> over-paid money will be given back after each valid <br> vend. When in multi-vend the credit is saved and shown <br> after the vending process. |
| :--- | :--- |
| Operation: | Button 4 $=>$ Enter or leave single/multi vending. <br> Button $2=>$ "Multi V. ". <br> Button $3=>~ " S i n g l e ~ V . " . ~$ |
| Display 1Z: | Single V |
|  | Multi V. |

## Menu C 8.2. Obligation to buy/change

Function: Setting of obligation to buy/change. At the changefunction, a coin-return before the first vend is possible. At the obligation-to-buy-function a coin-return is only possible after the first vend. If there is any vendor-error, a coin-return at obligation to buy is also possible before the first vend.
Operation: $\quad$ Button 4 => Enter or leave obligation to buy/change. Button 2 => "NoCha ". Button 3 => "WithCha".

## Menu C 8.3

## Maximum credit

Function:

Operation
Setting of the Max Credit, which is accepted by the coin-mechanism. After crossing this max credit, the coin acceptance is disabled.

Menu C 8.4

## Maximum change

Function: Setting of the maximum change. If the over-paid money is lower than the maximum change, it can be given back. This function is only active in multi-vend.
Operation:
Menu C 3.8.

## Value of vends by credit card-readers

Function: credit
Operation:
Shows the total value of vends, which were counted from the card-reader.
Button 4 => call counter as well as leave counter.

## Menu C 3.9.

Function:
Operation:

## Value of vends without change

Shows the total value of vends which happened, while there was "no change" (message at the display "No change"). Button 4 => call counter as well as leave counter.

## Menu C 3.A.

Function:

Menu C 3.B.
Function:

## Value of vend with/without token vend

Shows the total value of vends performed with and without a free vend token.

## Number of Tokens

Shows number of tokens used to performed a vend.

## Menu C 3.C.

Function:

Operation:

Function:

## Counter-reset in menu 3

All counters will be cleared in menu 3 after entering the pass word.
Button 4 => call delete-function enter password after the message
"PW ????". Press button 4 to enter the password.

## C 3.D

Revalue Card
Shows the value of revalue to a cashless card.

Menu 6 Price-settings

## Menu C 6. $1 \quad$ Standard Price

Function: Vending-price-setting for all selections. The lowest coin value of the coin-mechanism represents the lowest step of price-setting.
Operation: Button 4 => enter or leave price-settings. Button 5 => reset the price (price=0)

Menu C6.2-6.2.n Individual Prices
Function: Individual vending price setting

Menu 1 Machine-configuration
Menu C 1.1. Time- and date-setting
Function: Setting of date, time and weekday.

## Menu C 1.2. Changing summer-/winter-time

Function: After entering the menu, you can change the time +- 1 hour by pressing button 2,3 . By changing from summer to winter, the time will be changed -1 hour. By changing from winter to summer, the time will be changed +1 hour. Before you set the clock in menu 1.3, the setting of summer/winter must be correct

## Menu C 1.7 Coin in the Tube

Function: Setting for the amount of coins in each tube.

## Menu C 1.9 Free Vend Mode

Function: Setting to allow vends to be free.

## Menu C 1.A. Language-selection for the display

Function: $\quad$ Setting the language for the messages shown on the display. Setting the language to "English", all messages in the service-menu and the test program are displayed in English.
Operation: Button 4 => enter language-selection as well as leave after the selection.
Button 2 => language selection forward.
Button 3 => language selection backward.
Display: German Display's German messages English Display's English messages
French Display's French messages

## Menu C 1.B. Reserved

## Menu C 1.C. Reserved

## Menu C 1.D. Executive Price Holding

Function: Displays the selected vend price, and has the function to store the price.

## Menu C 1.E

Function:
Setting of Vend price lines.
Menu C 1.F. Machine / Product number

Menu 2 Sales Counter

## Menu C 2.1. Paid vends per selection

Function: Shows the number of vends (including free-vends) of selection (since the last clearing).
Operation: Button 4 => call counter as well as leave counter.
Note: $\quad$ In the setting in menu 1.1 the counter refers to the selection. You can clear the counter in menu 2.C or with "Clear Init" function.

## Menu C 2.2 Free Vend selections

Function: Shows the number of free-vends in each column (since the last clearing).
Operation: $\quad$ Button 4 => call counter as well as leave counter.

## Menu C 2.3 Number of Vends

Function: Display's the number of vends performed.
Menu C 2.4 Total-vends-counter
Function: Shows the number of vends of all columns (incl. free-vends)
Operation:
Button 4 => call counter as well as leave counter.

Note: This counter can not be cleared by menu 2.C. The counter can be cleared by the "Clear Init" function.

Menu C 2.C Counter-reset
Function: All counters in menu 2 will be cleared after entering the password.
Operation: Button 4 => call delete-function. Enter password after the message "PW ????". Press button 4 to enter the password.

Menu 3 Cash-counters from coin-mechanism or creditcard-

## Menu C 3.1. Money to the tubes

Function: Shows the total value of coins, which are counted in the coin mechanism to the tubes (including menu 3.6)
Button 4 => call counter as well as leave counter

## Menu C 3.2. Money to cashbox

Function: Shows the total value of coins, which are counted to the cashbox in the Coin mechanism
Operation: Button 4 => call counter as well as leave counter.

## Menu C 3.3

Change returned
Function:
Shows the total value, which was paid out as change from the coin-mechanism
Operation Button 4 => call counter as well as leave counter.

## Menu C 3.4

## Manual payout

Function:

Operation
Shows the total value of the manual payout from the tubes of the coin-mechanism with menu C 0.4 or with the coin-mechanism-keypad Button 4 => call counter as well as leave counter.

## Menu C 3.5

## Amount over-paid

Function: Shows the amount, which couldn't be paid out from the coin-mechanism, when the vend-price was over-paid and the tubes were empty.
Operation Button 4 => call counter as well as leave counter.

## Menu C 3.6.

Function:
Operation

## Menu C 3.7. Value of paid vends

Function: Shows the total value of vends, which are counted from the coin Operation
mechanism Button 4 => call counter as well as leave counter.

