"COIN MECH PLUS" MODULE FOR MDB COIN MECH

Release 2.3 – February 2005

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1. CHARACTERISTICS

1. Makes it possible to connect an MDB Coin Mech and an MDB banknote acceptor to the ZIP.
2. The ZIP reader with the "Coin Mech Plus" module can be connected to Executive or MDB vending machines.
3. Connection to MDB vending machines is with the new MDB wiring. The MDB module code 958928 is no longer required.
4. Statistical collection of the MDB Coin Mech and the MDB banknote acceptor is performed directly by the ZIP reader.
5. Statistical collection is carried out with the Maxi Key, Data Box or the PSION terminal.

2. INSTALLATION AND CONNECTION TO THE MACHINE

The Coin Mech Plus module is available in two versions:

- for Executive vending machines (Executive Coin Mech Plus module, Fig. 1)
- for MDB vending machines (MDB Coin Mech Plus module, Fig. 2)

For installation, proceed as follows:

1. Perform statistical collection from the ZIP.

2. Turn off the machine and install the Coin Mech Plus module, following the instructions shown in Fig. 1 and 2 depending on whether it is an Executive or MDB vending machine.

3. Install the RAM expansion (compulsory for use of the Coin Mech Plus module), and connect the Coin Mech to the Coin Mech Plus module.
   The RAM expansion is applied on the special plinth, located on the CPU module, following the instructions provided with the article.

4. Supply power to the ZIP and install release SW Z 2.4.1T0 or later.

5. Enter the menu "OTHER PARAMETERS", select the sub-menu "INITIALIZATION" and press Enter .

ATTENTION

- With the Initialisation, all parameters and codes of the ZIP are initialised to the default values (Department Code = 001, Customer Code = 00001, Operator Code = 00000001, Reader Code = 000000, Machine Code = ZIP001, Coin Mech Code = 000000).
- The Coin Mech Plus module includes a red LED. When removing the module, it is necessary to disconnect the power supply and wait for the LED to go off.

3. HOW TO PROGRAM THE ZIP SYSTEM TO WORK WITH AN MDB COIN MECH

3.1. ACTIVATION OF THE MDB COIN MECH

1. Enter the menu "COINS" (Fig. 4)

2. Enter the sub-menu "VALIDATOR TYPE", select "COIN MECH MDB" (new parameter that was not in the previous SW) and access the menu in Fig. 5.

3. Enter "COINS ENABLED" and set the first 8 coins to ON (the values will automatically be read by the Coin Mech).

4. Disconnect the programmer.

ATTENTION

The values of the coins are not known in advance. They are written after the Coin Mech is activated and starts working. If you wish to de-activate coins of one or more values, proceed as follows:

- After carrying out the procedure described above, check that the Coin Mech is working. If it is not, it means that the procedure has not been properly carried out and needs to be repeated.
- Enter the menu "COINS ENABLE" (by using the programmer you will now see the value of the coins) and set the desired values to OFF.

4. Enter "ESCROW LEVER" and set the parameter to ON or OFF, default = OFF). This parameter makes it possible to de-activate the "money changer" function of the escrow lever (that is, pressure on the lever immediately after inserting a coin but prior to sale). After the vend, change is in any case given even if the parameter is set to OFF.

5. Enter "MAXIMUM CHANGE" and set the desired value (default = 2.00). Change is not given if it is more than the programmed MAXIMUM CHANGE.

6. Enter "MIN. TUBES LEVEL": suggested value 7 (default=7). This parameter defines the number of coins below which the message appears which indicates that there are not enough coins to make change.

ATTENTION

If the Coin Mech has 2 coins programmed as the safety value and you program the "MIN. TUBES LEVEL" to 7, the message will appear when there are less than 9 coins.

3.2. LOADING THE TUBES OF THE COIN MECH

To load the tubes of the Coin Mech and show the amount loaded in the statistic "manual fill", proceed as follows:

1. Insert a programming key in the ZIP reader (it is produced by means of the PC Interface) with the correct operator code. The LED of the ZIP reader will flash red-green intermittently. If the machine contains credit due to insertion of coins, the programming key will not be accepted (use the credit or transfer it to a key or turn off and turn on the machine).

2. Insert the coins in the Coin Mech and remove the programming key.

4. HOW TO PROGRAMME THE ZIP FOR OPERATION WITH AN MDB NOTE LOADER

4.1. ACTIVATION OF THE MDB NOTE LOADER

1. Enter the menu "BANKNOTES" (Fig.6).

2. Enter the sub-menu "NOTE LOADER TYPE", select "MDB" and access the menu in Fig. 7.

3. Enter "BANKNOTES ENABLED" and set the first 4 banknotes to ON.

ATTENTION

The values of the banknotes are not known in advance. They are programmed after the acceptor is activated and starts working.

If you want to de-activate the banknotes of one or more values, proceed as follows:

- After carrying out the procedure described above, check that the banknote acceptor is working. If it is not, it means that the procedure has not been properly carried out and needs to be repeated.
- Enter the menu "BANKNOTES ENABLED" again: the value of the banknotes will now be visible.

- Set the desired values to OFF.

4. Enter "SECURITY LEVEL" (banknote security level, default = HIGH).
   Program HIGH or LOW for each banknote.

ATTENTION
If the high level is programmed, the note loader checks more thoroughly, but acceptance of worn banknotes will be poor.

4.2. OTHER USABLE NOTE LOADERS

The ZIP system allows for the following combinations:
- MDB Coin Mech and MDB note loader, connected to the Coin Mech Plus module.
- MDB Coin Mech connected to the Coin Mech Plus module and parallel note loader, connected to the ZIP coins + banknotes module (code 958931).

5. MACHINE MENU PROGRAMMING

In the machine menu, in the sub-menu **"**SYSTEM TYPE", "MDB NEW" has been added (Fig. 8). Here below the possible choices when using the module "MDB Coin Mech Plus" to connect to an MDB Coin Mech and/or an MDB banknote acceptor:

- EXECUTIVE, for connection to machines with Executive protocol;
- MDB NEW, for connection to machines with MDB protocol.

ATTENTION
In this case, connection to the machine must be made only with the NEW MDB WIRING. The MDB module code 958928 cannot be used.

The remaining parameters are programmed as usual.

6. CONNECTION TO MDB VENDING MACHINES

Connection to MDB vending machines can be made:
- With the MDB module code 958928. In this case program "MDB" in the menu "MACHINES" in the sub-menu "SYSTEM TYPE". This connection does not permit use of the " Coin Mech Plus" module.
- With the new MDB wiring (Fig. 3). In this case in the sub-menu "SYSTEM TYPE" you will program "MDB NEW". This connection is mandatory when using the " Coin Mech Plus" module.
-

7. DATA COLLECTION

7.1. PROGRAMMING OF THE MENU "OTHER PARAMETRES"

To ensure compatibility with past versions, to permit the collection SW to be used with palmtops, and to allow the use of the existing operating software, enter the menu "OTHER PARAMETERS". The sub-menu "AUDIT MODE" presents the following options:
- **MAXI KEY**: allows collection of all data (130 fields) with Maxi Key, Data Box, PSION or other palmtops.
- **STANDARD:** allows collection of only 110 fields (data is missing for the Coin Mech and the reader code), while saving compatibility with past versions. Collection may be performed with Maxi Key, Data Box, PSION or other palmtops. The Data Key can also be used for reduced collection (same data currently collected).

- **EXTENDED:** extended data collection (not yet implemented).
- **EVA-DTS A/B/C**: data collection with EVA-DTS protocol (see ZIP User Manual).

7.2. DATA COLLECTION WITH THE MAXI KEY

The Maxi Key can collect data either by inserting the key in the ZIP reader (without opening the door of the vending machine) or by connecting it to the 9-watt connector of the ZIP CPU module (as the Data Box).

7.3. DATA COLLECTION WITH EVA-DTS PROTOCOL

The same modes of the previous SW versions should be applied, with the sole difference being that it is no longer necessary to insert any key in the reader to enable connection with the data collection terminal (see ZIP User Manual).

8. NOTES ON DATA COLLECTION

Refer to the "Software Box 32" instructions. It may, however, be useful to provide some further explanations concerning the historical data and the data of the Coin Mech.

8.1. HISTORICAL DATA

These are updated after a purchase with a delay with respect to all other data.

Example:
Suppose you have a purchase with the following data:

Item 1 : CASH = 65.50
Item 11: HISTORICAL DATA : cash proceeds = 123,100
In the historical data "cash" the value of 65.50 for this purchase is not recorded.

For the next purchase you will have:

Item 1 : CASH = XXXX
Item 11: HISTORICAL DATA : cash proceeds = 123,100 + 65.50 =123,165.50

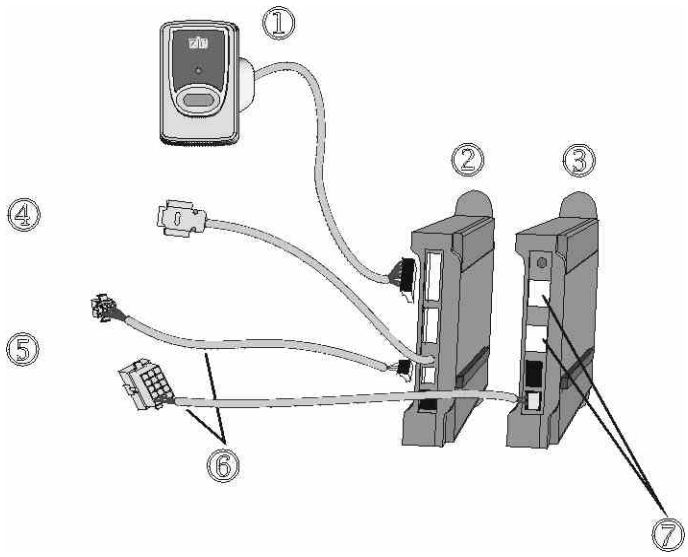
8.2. COIN MECH DATA

To cashbox: represents the amount sent from the Coin Mech to the cashbox, through the latest audit.
To tubes: represents the amount of coins sent to the tubes, through the latest audit.
Change: represents the amount which has left the tubes as change, through the latest audit.
Inside tubes: represents the total amount present in the tubes, minus the amount of the "safety" coins in the Coin Mech.
Manual fill: represents the amount loaded manually through the latest audit.
Manual dispensed: represents the amount of coins returned using the manual controls of the Coin Mech. If coins are removed, but the tubes remain above the safety level, all returned coins are counted. If the Coin Mech is completely emptied, the value shown does not include the safety coins.
Concerning the **safety coins** on the Coin Mech, it is a value which depends on the type of Coin Mech. In the Mars Coin Mech it is programmable, while in the Sanden and COINCO it is fixed (3 coins per tube +/-1).

9. KIT CONFIGURATION

9.1. CONNECTION TO AN EXECUTIVE MACHINE

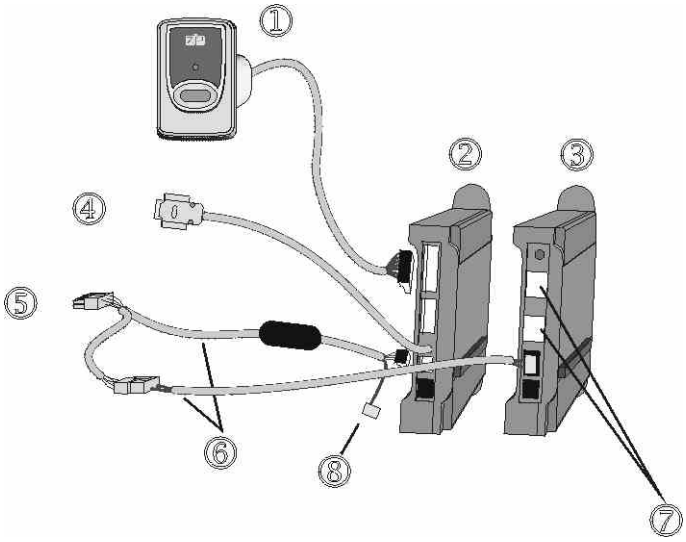
FIG. 1



1. Reader
2. CPU module
3. MDB Coin Mech Plus module
4. To Programmer, Maxi Key, Data Box, PSION, IRDA
5. To Executive vending machine
6. Executive wiring
7. Connection to MDB Coin Mech and/or MDB note laoder with their wires (in any of the 2 connectors).

9.2. CONNECTION TO AN MDB MACHINE

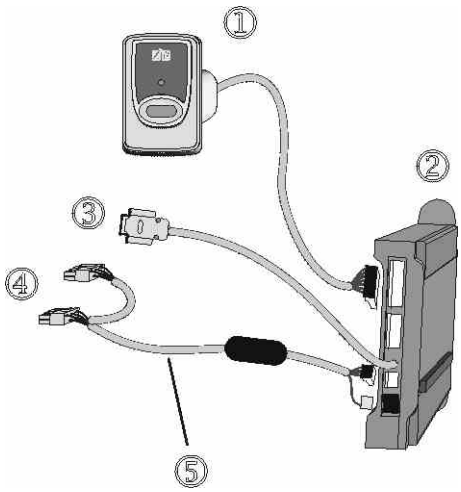
FIG. 2



1. Reader
2. CPU module
3. MDB Coin Mech Plus module
4. To Programmer, Maxi Key, Data Box, PSION, IRDA
5. To MDB vending machine
6. New MDB wiring
7. Connection to MDB Coin Mech and/or MDB note loader with their wires (in any of the 2 connectors).
8. Leave disconnected

9.3. NEW MDB WIRING

FIG. 3

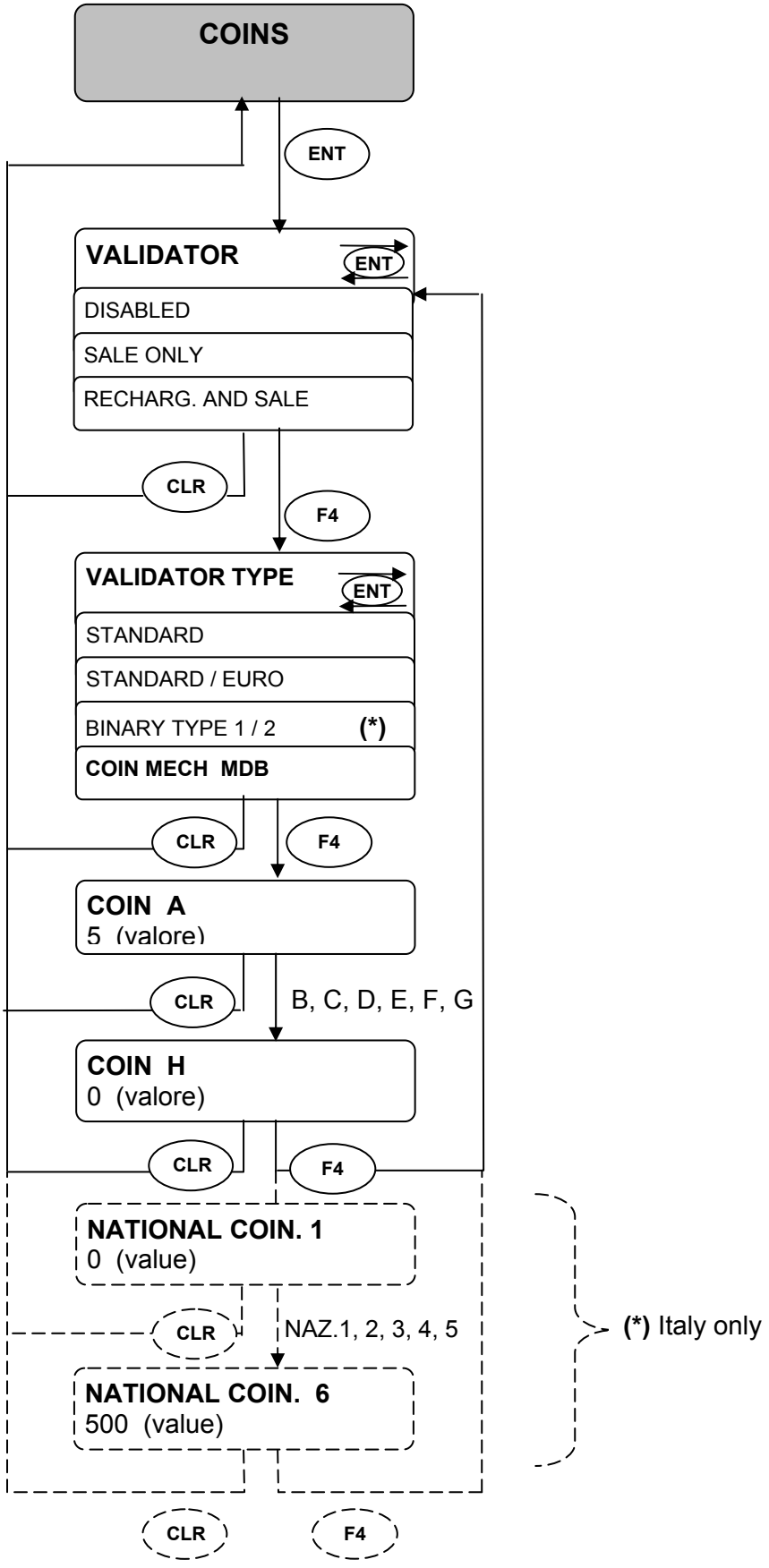


1. Reader
2. CPU module
3. To Programmer, Maxi Key, Data Box, PSION, IRDA
4. To MDB vending machine
5. New MDB wiring

10. PROGRAMMING

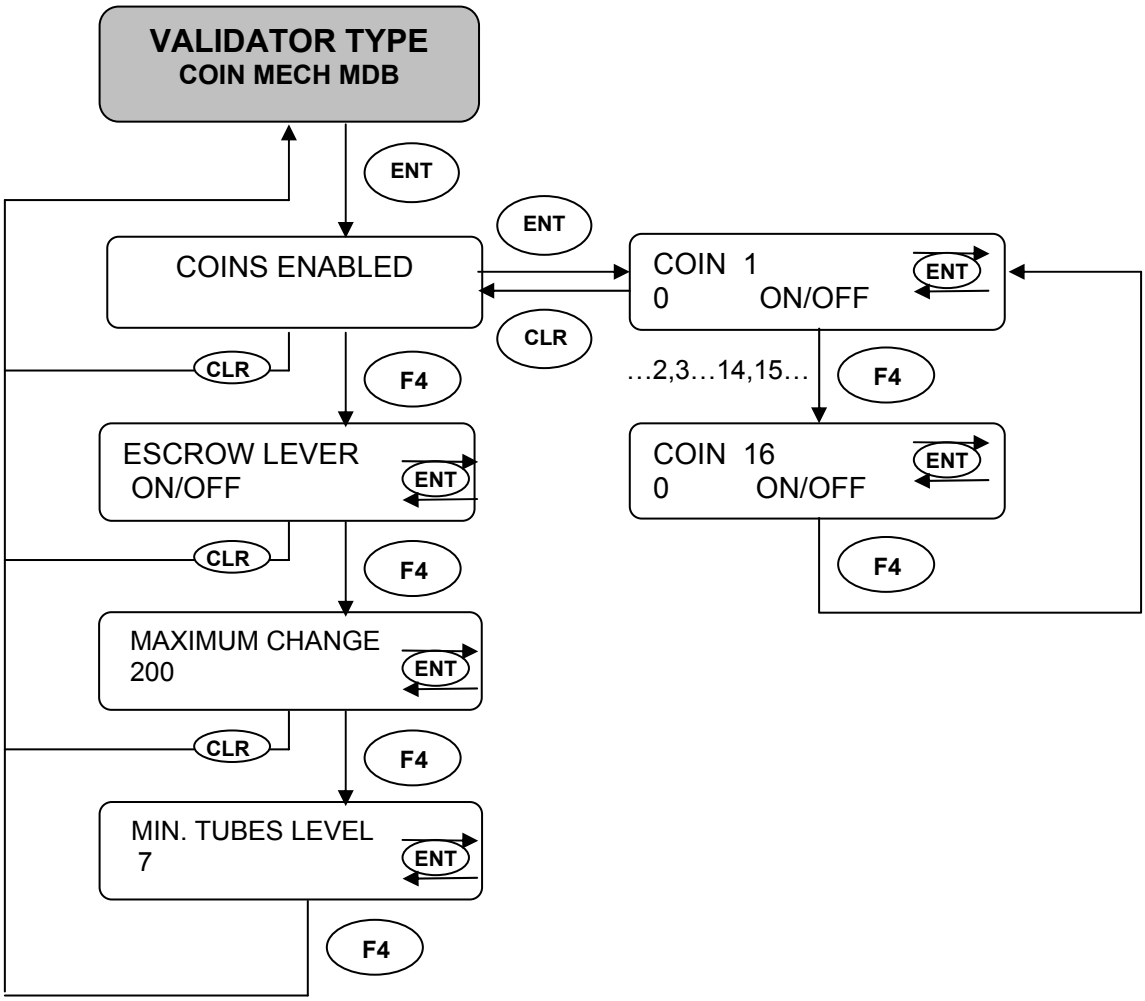
10.1. COINS

FIG. 4



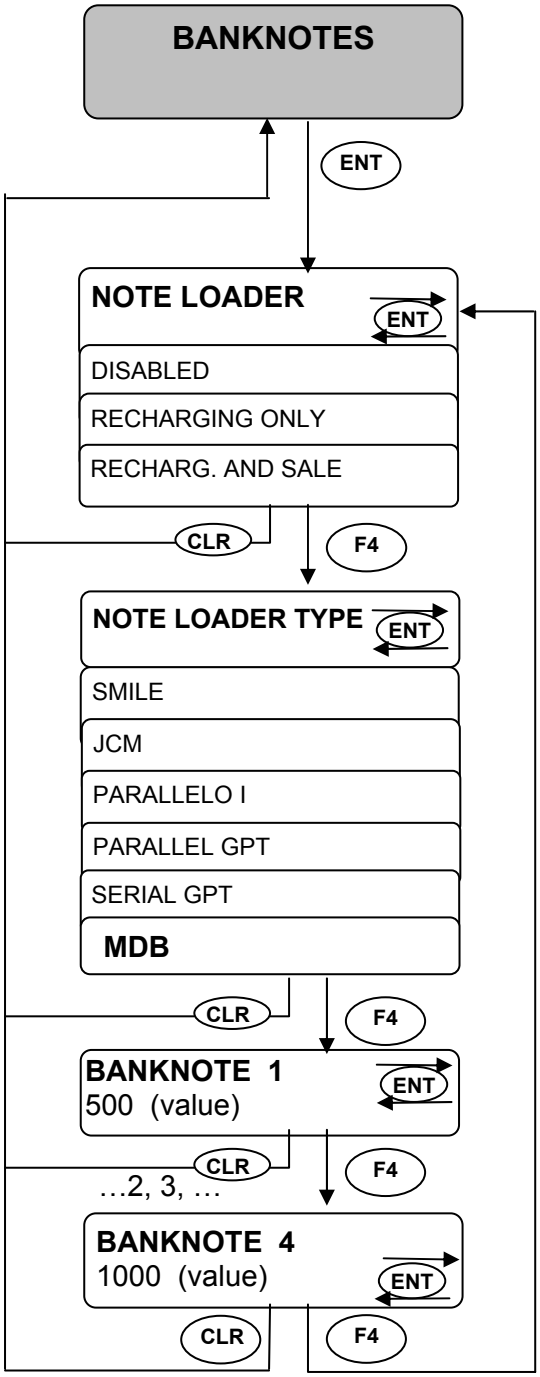
10.2. VALIDATOR TYPE COIN MECH MDB

FIG. 5



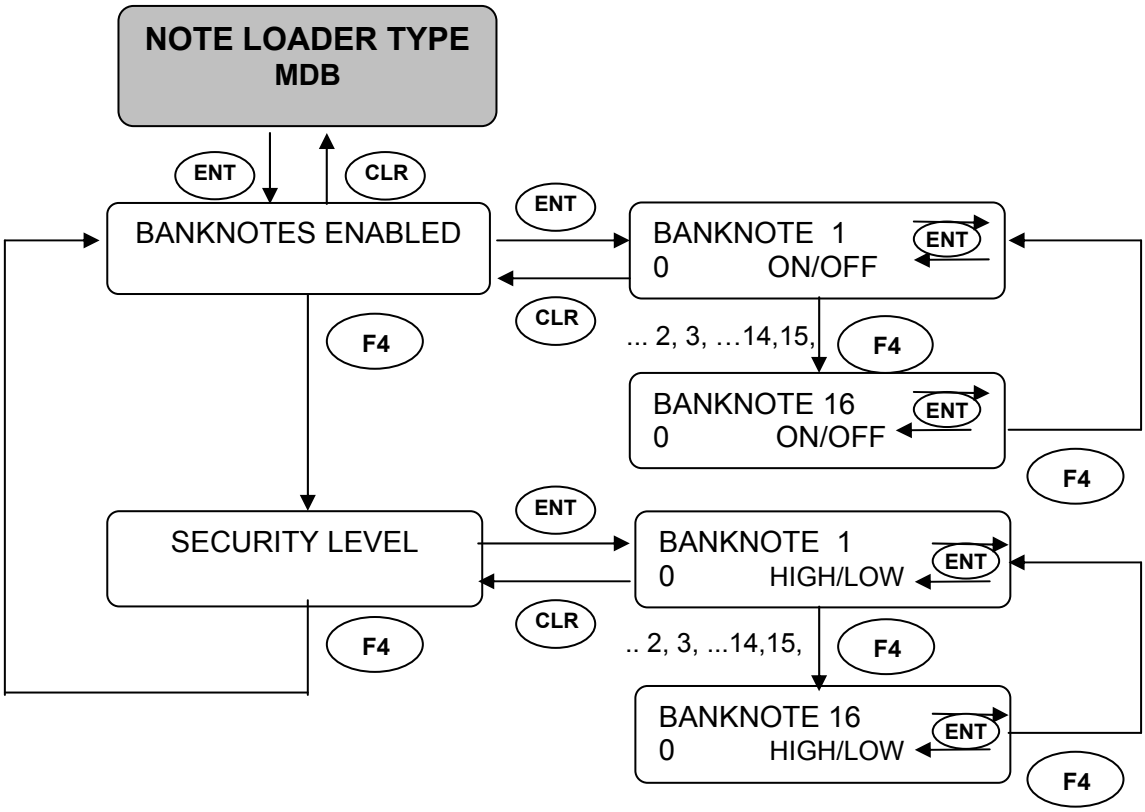
10.3. BANKNOTES

FIG. 6



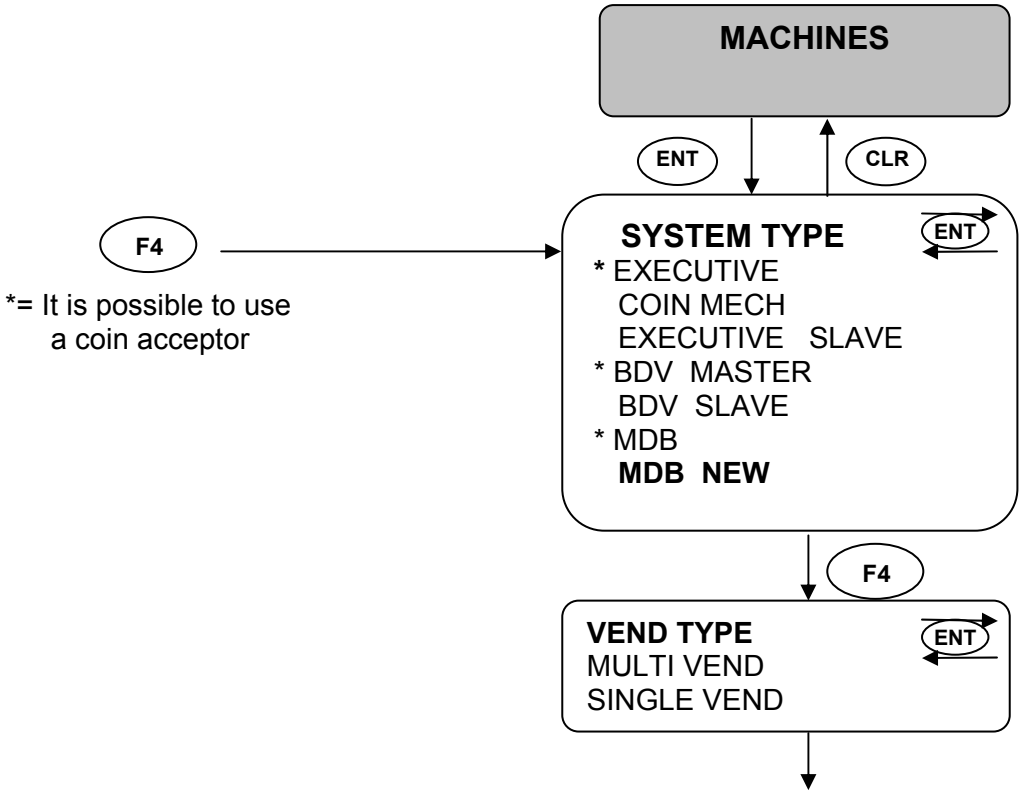
10.4. ACCEPTOR TYPE MDB

FIG. 7



10.5. MACHINES

FIG. 8



10.6. OTHER PARAMETERS

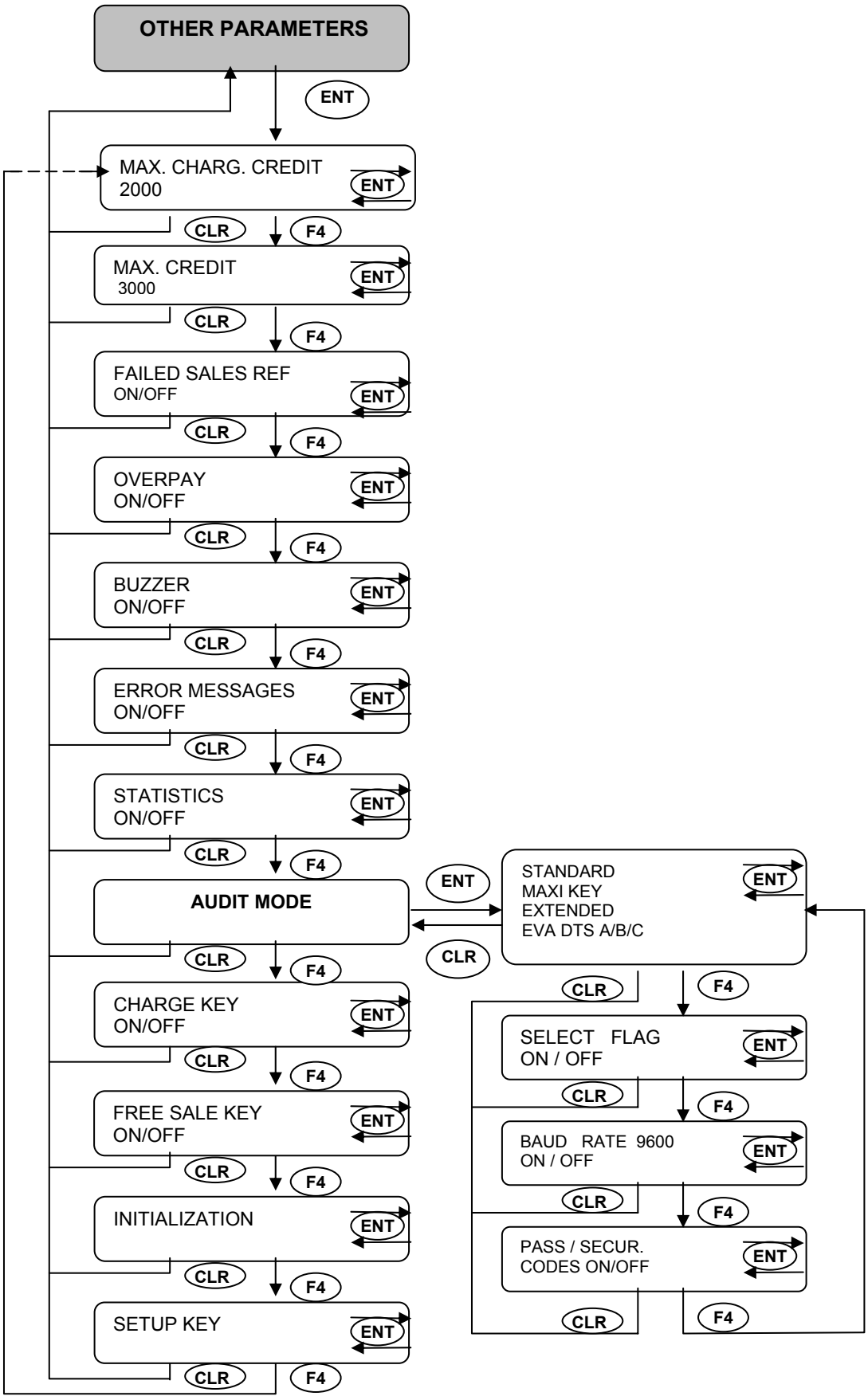



FIG. 9