CHANGE EURO

OPERATING MANUAL

CONTENTS

VIEW OF THE CHANGE MACHINE

Token dispenser

Metallic front panel available for different types of readers, of token dispensers and electronic key

Display

Banknotes reader

Selection button.

Payout button

Back-lit panel

CHANG€

Coin and recepit bin

Payment system

Fuse

Main switch

Card group

Programmer

Hoppers

WARRANTY

Our Autocoin change machine is guaranteed for a period of 12 months. The date and the serial number on the label represented below mark the beginning of the warranty period. The label is positioned inside the change machine.

The warranty cannot be applied in the following cases:
- Tampering with the label containing the serial number of the device.
- Breakage or malfunctioning caused by transportation.
- Breakage or malfunctioning due to vandalism, natural events or fraudulent acts.
- Incorrect installation of the product.
- Neglect or inability to use the product.
- Non-compliance with the operating instructions.
- Intervention for alleged defects or convenient and unnecessary controls.

Repair interventions are carried out in our laboratory in Gessate, where the parts arrive free-of-charge. COMESTERO group shall not carry out any intervention operations at the customer's premises without prior agreement with the customer.

Any piece that is returned to be repaired shall have to enclose a clear description of the defect found. The piece will be delivered carriage forward.

At the end of the warranty period the service center will remain at your disposal. Furthermore, the head of the Call Center service is at your complete disposal for any problems or clarifications.

ETICHETTA DI GARANZIA

S.E.C.I. -Via M, Curie 8, Gessate (MI) - teL 02/95781111 MADE IN ITALY

Modello: MULTICOIN Alimentazione: 230V /50HZ ; 100VA CE

Matricola: ▢▢▢▢ — ▢▢▢▢   FUSE T 1A-250V

INSTALLATION

Installing the machine:	**The change machine must be installed in protected areas. The Change Euro was designed to be installed in different ways: wall, table or on a stand fixed with the relevant screws. This is possible by using the three holes on the stand and the two holes and the hole on the back wall.**
NOTE:	**IF WHEN THE CHANGE MACHINE IS SWITCHED ON THE HOPPERS ARE EMPTY THE DISPLAY WILL SHOW: "MACHINE OUT OF ORDER".**
Power supply:	**230 VAC - 50 Hz**

CORRECT USE

BANKNOTE READER:

- do not touch the switches if not necessary, this will permanently erase all the data in the memory, thus blocking the money changer.
- Make sure worn out banknotes or banknotes with adhesive tape on them are not introduced in the machine it may cause jamming.
- Make sure artificial or sun light does not directly hit the opening of the reader, to guarantee an appropriate validation of the notes.

Coin/Token hopper:

Be very careful while loading the coins/tokens, make sure all external objects such as screws, metal tips, etc. are removed because they could damage the machine.

PURCHASING CODE OF THE CHANGE MACHINE

Please read the table below to simplify all purchasing procedures. By knowing the type of change machine you need, we can easily find the exact product code.

S	-	2	0	S	1	G	0	S

MODEL
S=CHANGE SIMPLYCOIN
M=CHANGE MULTICOIN

N. OF HOPPERS
1=WITH 1 MK4 UNIV. HOPPER
2=WITH 2 // // //
3=WITH 3 // // //
3=WITH 4 // // //

N. EXTENSION FOR HOPPER
0=WITHOUT EXTENSION
1=WITH 1 EXTENSION
2=WITH 2 EXTENSION

BANKNOTE READER
S=SMILEY NV5
I=IVO
E=EBA

PRINTER
0=WITHOUT PRINTER
S=PRINTER

ELECTRONIC KEY
0=WITHOUT KEY
E=EUROKEY
F=FAGE-GIOTTO
Z=ZANUSSI-CONPAS

FRONT PANEL COLOR
A=SKY-BLUE
C=CHANGING
G=GRAY
O=ORANGE
V=GREEN

TOKEN DISPENSER
0=WITHOUT TOKEN DISP.
1=RM4/5-V00-F1

POSITION OF HOPPERS

Change Euro with 2 hoppers

Hopper 2 Hopper 1	Payment system Banknote and coin cassettes

Change Euro with 2 hoppers and 2 expansion

Expansion 2 Expansion 1 Hopper 2 Hopper 1	Payment system Banknote and coin cassettes
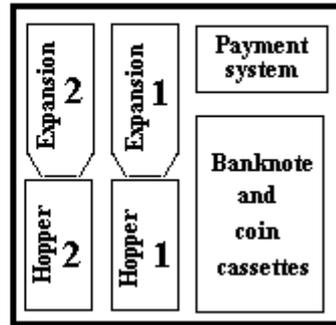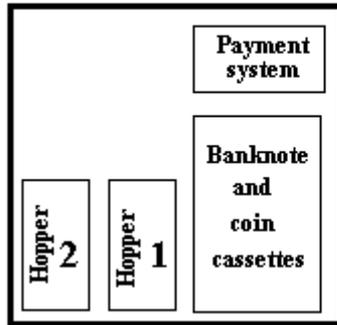
Change Euro with 3 hoppers and 1 espansion

Expansion 2 Hopper 3 Hopper 2 Hopper 1	Payment system Banknote and coin cassettes

Change Euro with 4 hoppers

Hopper 4 Hopper 3 Hopper 2 Hopper 1	Payment system Banknote and coin cassettes
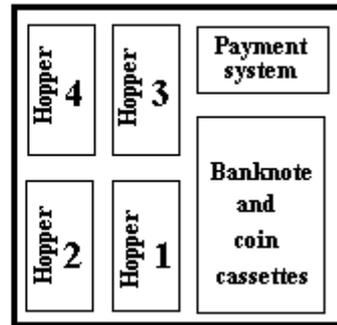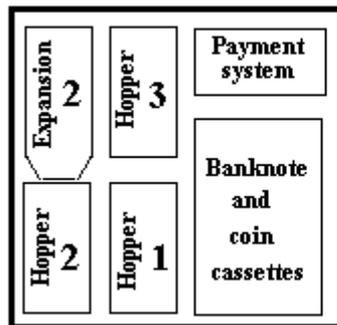
PROGRAMMER

The Change Euro Multicoin can be programmed by using the relevant external programmer supplied.

CHANGE MACHINE

S.E.C.I

+	−	OK

PROGRAMMER
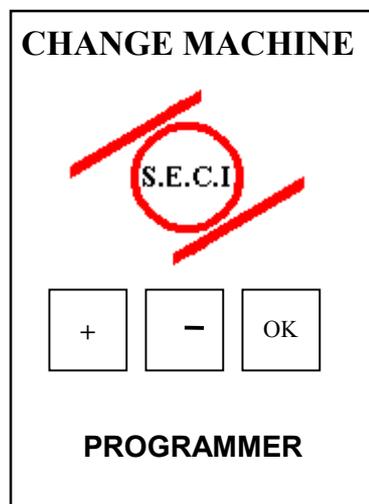
CORRECT OPERATING MODE

Switch on the change machine by using the red switch inside the machine. When the machine is switched on, the program version and the serial number of the machine will appear on the display.

They will disappear automatically after a few seconds.

When the change machine is operating, the display can show 4 lines with 20 characters each, it is updated every 3 seconds in order to cyclically display all the data. The first time you can use the display to show an advertising message, the second and even the third time you can use the display to indicate that the change machine is in service.

EXAMPLE:

```
┌────────────────────────┐
│      AUTOCOIN          │
│   COMESTERO GROUP      │
│   VIA MARIE CURIE, 8   │
│   20060 GESSATE (MI)   │
└────────────────────────┘
            │
            ▼
┌────────────────────────┐
│    CHANGE MACHINE      │
│    COINS   100 LIT     │
│    COINS   200 LIT     │
│    COINS   500 LIT     │
└────────────────────────┘
            │
            ▼
┌────────────────────────┐
│    CHANGE MACHINE      │
│  TOKENS      1000  LIT │
│  EXT VEND    10.000 LIT│
│                        │
└────────────────────────┘
```
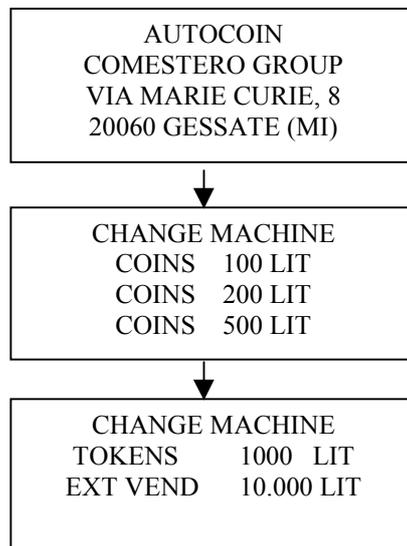
TRANSACTION HISTORY

Autocoin allows you to control and print the audit reports. To access this function keep the "OK" button of the programmer pressed. Choose the relevant function, that will start flashing on the display, use the "+" or "-" keys to move between the functions, and press "OK" to confirm. Choose "EXIT" to return to the normal operating mode.

```
┌────────────────────────┐
│  TRANSACTION HISTORY   │       Choose "EXIT" to
│  READ                  │       return to normal
│  PRINT                 │       operating mode
│  EXIT            ◄──────┼──────
└────────────────────────┘
```
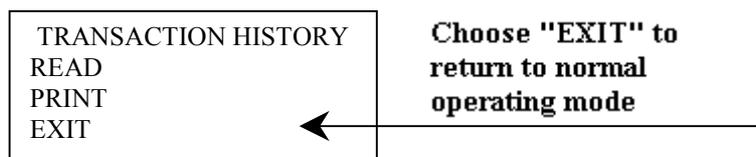
READ Menu:
Press "OK" to move between the functions of the menu below
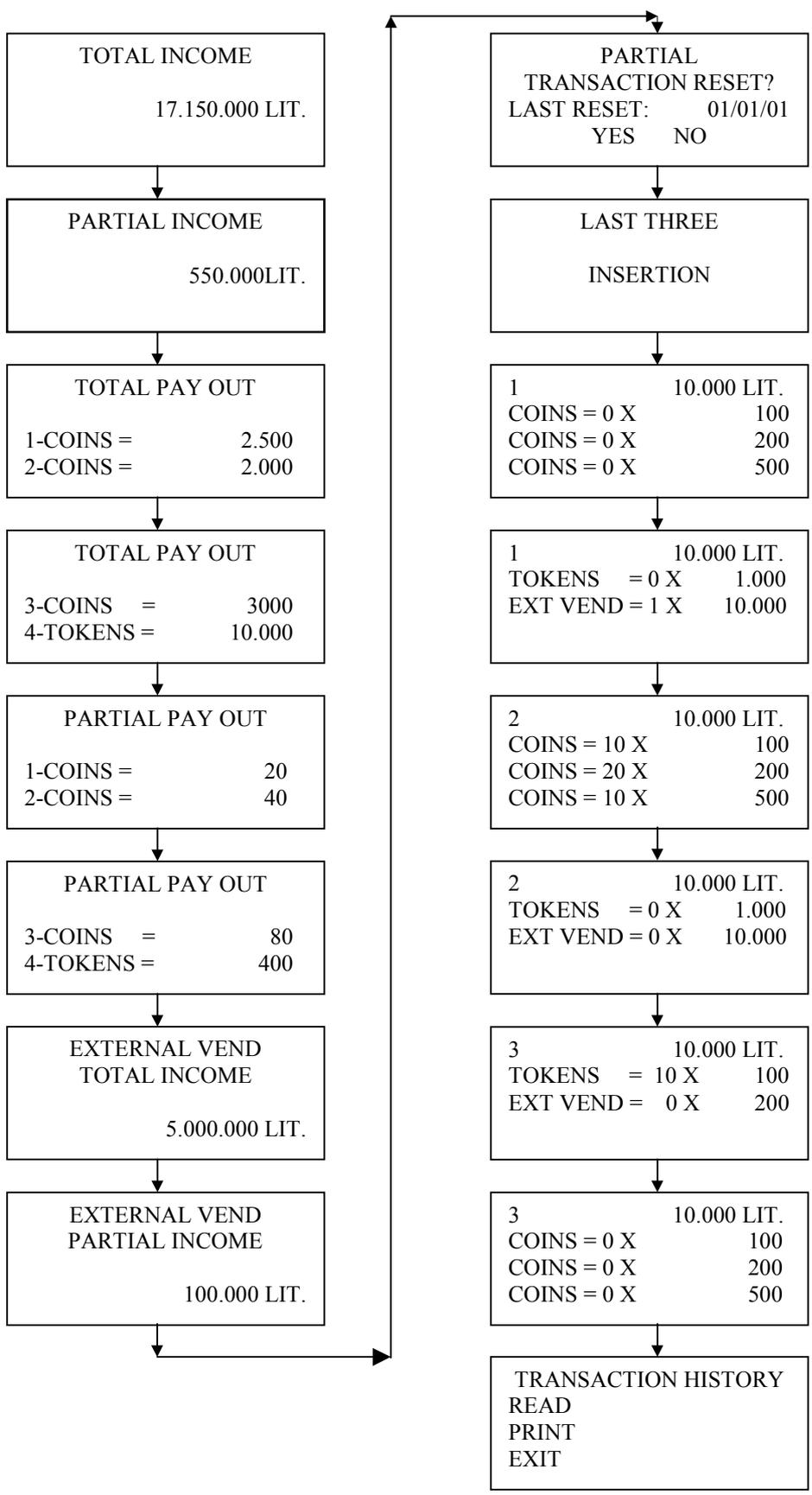
```
┌─────────────────────────┐       ┌─────────────────────────┐
│   TOTAL INCOME          │       │       PARTIAL           │      ←──────
│                         │       │  TRANSACTION RESET?     │        NOTE:
│       17.150.000 LIT.   │       │  LAST RESET:   01/01/01 │      To reset the audit press
│                         │       │        YES     NO       │      "+" to move to "YES"
└─────────────────────────┘       └─────────────────────────┘      and press "OK" to
            │                                 │                     confirm.
┌─────────────────────────┐       ┌─────────────────────────┐
│   PARTIAL INCOME        │       │     LAST THREE          │
│                         │       │                         │
│       550.000LIT.       │       │     INSERTION           │
│                         │       │                         │
└─────────────────────────┘       └─────────────────────────┘
            │                                 │
┌─────────────────────────┐       ┌─────────────────────────┐
│   TOTAL PAY OUT         │       │ 1            10.000 LIT. │
│                         │       │ COINS = 0 X         100  │
│ 1-COINS =      2.500    │       │ COINS = 0 X         200  │
│ 2-COINS =      2.000    │       │ COINS = 0 X         500  │
└─────────────────────────┘       └─────────────────────────┘
            │                                 │
┌─────────────────────────┐       ┌─────────────────────────┐
│   TOTAL PAY OUT         │       │ 1            10.000 LIT. │
│                         │       │ TOKENS  = 0 X      1.000 │
│ 3-COINS  =     3000     │       │ EXT VEND = 1 X    10.000 │
│ 4-TOKENS =    10.000    │       │                          │
└─────────────────────────┘       └─────────────────────────┘
            │                                 │
┌─────────────────────────┐       ┌─────────────────────────┐
│   PARTIAL PAY OUT       │       │ 2            10.000 LIT. │
│                         │       │ COINS = 10 X        100  │
│ 1-COINS =        20     │       │ COINS = 20 X        200  │
│ 2-COINS =        40     │       │ COINS = 10 X        500  │
└─────────────────────────┘       └─────────────────────────┘
            │                                 │
┌─────────────────────────┐       ┌─────────────────────────┐
│   PARTIAL PAY OUT       │       │ 2            10.000 LIT. │
│                         │       │ TOKENS  = 0 X      1.000 │
│ 3-COINS  =       80     │       │ EXT VEND = 0 X    10.000 │
│ 4-TOKENS =      400     │       │                          │
└─────────────────────────┘       └─────────────────────────┘
            │                                 │
┌─────────────────────────┐       ┌─────────────────────────┐
│  EXTERNAL VEND          │       │ 3            10.000 LIT. │
│  TOTAL INCOME           │       │ TOKENS  = 10 X      100  │
│                         │       │ EXT VEND =  0 X     200  │
│       5.000.000 LIT.    │       │                          │
└─────────────────────────┘       └─────────────────────────┘
            │                                 │
┌─────────────────────────┐       ┌─────────────────────────┐
│  EXTERNAL VEND          │       │ 3            10.000 LIT. │   ←──────
│  PARTIAL INCOME         │       │ COINS = 0 X         100  │      NOTE:
│                         │       │ COINS = 0 X         200  │    Press "OK" to
│       100.000 LIT.      │       │ COINS = 0 X         500  │    return to main
└─────────────────────────┘       └─────────────────────────┘    menu
            │                                 │
            └──────────────────→    ┌─────────────────────────┐
                                    │  TRANSACTION HISTORY    │
                                    │  READ                   │
                                    │  PRINT                  │
                                    │  EXIT                   │
                                    └─────────────────────────┘
```

PRINT Menu:

Select "Yes" at
the end of printing,
the message below
will appear. Select
"NO" to return to
main menu

```
+-----------------------------+
|      ARE YOU REDY           |
|       TO PRINT ?            |
|                            |
|      YES      NO           |
+-----------------------------+
```

```
+-----------------------------+    +-----------------------------+
|      END OF PRINT           |    |  TRANSACTION HISTORY       |
|                            |    |  READ                      |
|  REMOVE YOUR REPORT         |    |  PRINT                     |
|                            |    |  EXIT                      |
+-----------------------------+    +-----------------------------+
```
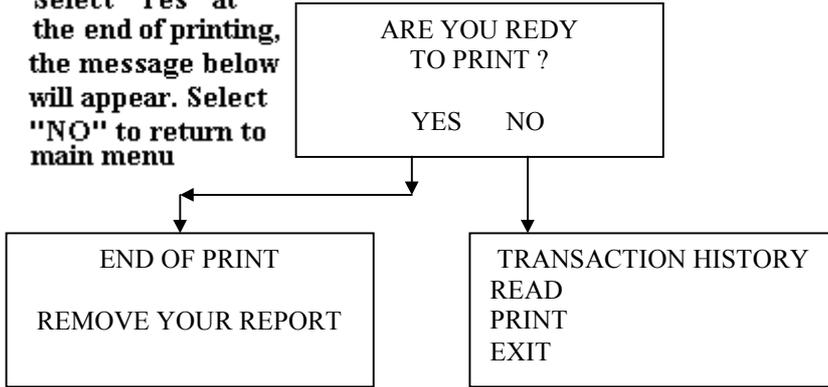
Example of print report

```
           REPORT
- - - - - - - - - - - - -
Appar. N.
             15
- - - - - - - - - - - - -
LAST RESET :
         25/04/01
- - - - - - - - - - - - -
     TOTAL ICOME
         90.000
   PARTIAL ICOME
         43.000
- - - - - - - - - - - - -
    TOTAL PAYOUT
1- TOKEN    =        0
2- TOKEN    =       10
3- TOKEN    =       30
EXT VEND    =   57.000
   PARTIAL PAYOUT
1- TOKEN    =        0
2- TOKEN    =       10
3- TOKEN    =       10
EXT VEND    =   31.000
- - - - - - - - - - - - -
Time:
         12:07
Date :
         25/04/2001
```

GENERAL PARAMETER SETTING-UP PROCEDURE

Enter the relevant menu and select the relevant function to set the operating parameters of the change machine. This paragraph explains how to set the parameters.

- Just select the relevant function to enter the various functions. The function chosen will start flashing. Use "+" and "-" to move between the functions and "OK" to confirm.

Press "OK" to confirm the values, the display will show the figures of the value, use "OK" to move from left to right, use "-" to move from right to left. Once you have reached the desired position, marked by the flashing characters, use "+" to determine the figure from 0 to 9. Press "OK" to confirm and move. After you confirm the last figure, the set value will appear on the display. At this point if you need to change the other parameters continue programming by pressing "OK", otherwise you can return to the Programming menu by keeping "-" pressed.
Example of value modification:

Example:

Press "OK" to move from left to right →

0   0   0   0   1   0   0

Use "+" to select
the desidered
number

← Press "-" to move from right to left
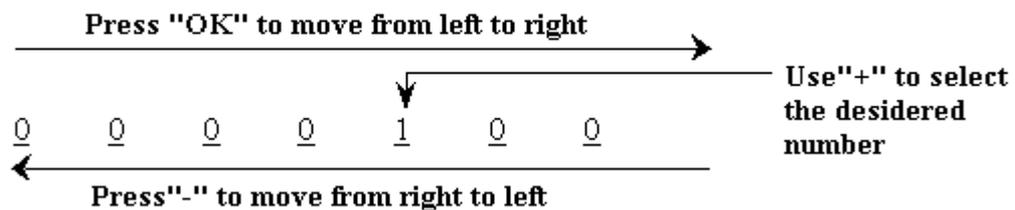
OPERATING PARAMETERS SETTING-UP MENU

Press "+" and "OK" simultaneously to access the operating setting-up parameters menu of the Autocoin change machine. The following window will appear.

| PROGRAMMING |
| CONFIGURATION |
| MAINTENANCE |
| EXIT ← |

Choose "EXIT" to return to normal operating mode
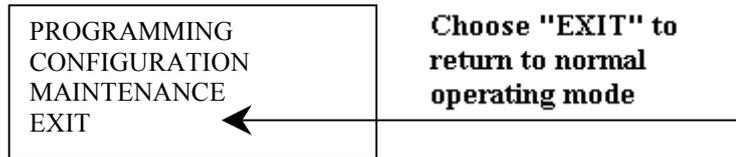
PROGRAMMING

You can set or change the operating parameters of the machine from the programming menu. The functions you can program in the various sections of the programming menu are listed and described below.

Press "+" and "-" to scroll the various functions, press "OK" to confirm the selected item highlighted by the flashing characters.

PROGRAMMING:

HOPPER VALUE
EXTERNAL VEND VALUE
PAYOUT PROGRAMMING
MASTER HOPPER
AUTOMATIC PAYOUT
MAX VEND VALUE
RESIDUAL CREDIT
TRANSACTION RESET
EXIT

- HOPPER VALUE:

The values of the tokens, coins or cards that the change machine must pay out are set in this section of the menu:

Example:

VALUE OF PIECES DISPENSED:

NR	1	COINS	100
NR	2	COINS	200
NR	3	COINS	500
NR	4	TOKEN	1000

Identification of the position
of the hopper and type of content.
See internal diagram on page 6

Field of values of pieces
to payout.

The field of the assignment of the values of the pieces to pay out should be set according to the monetary value of each piece. In other words, if you decide that Hopper 1 of the change machine must pay out 100 lira coins, you just need to set value 100 on line NR1. Please refer to paragraph "Parameter setting general procedure" on Page 9.

-EXTERNAL VEND VALUE:

The change machine has one relay exit, that can be used for any external application to the machine. The value of the transactions can be set in this section (relay contact), both in terms of prices and duration. After the price has been defined and programmed, you can decide the duration of the service in 3 ways, a 100 msec impulse, the time in seconds or minutes. Please refer to paragraph "Parameter setting general procedure" on Page 9.

Example:

```
┌─────────────────────────────┐
│    EXTERNAL VEND VALUE       │
│        LIT = 10.000          │
│          TIMING              │
│  100ms          SEC/MIN=90   │
└─────────────────────────────┘
```

-PAYOUT PROGRAMMING

You can program 9 levels of change in this section. Five different combinations are available for each level. The level of change is the value at which we want the machine to make the change. The value in brackets is the value that will be paid out, if it equals the value outside of the brackets the change machine will make an equal change, for example: Lit.1000 = 10 pieces of Lit. 100.
If when you introduce a Lit. 10,000 banknote you want the machine to pay out 12 tokens of Lit.1000, i.e. we want to give a BONUS, the set value will be L. 10,000, where as the value paid out will be L. 12,000.

Example: You want to program the change machine to make the change using only L.100 coins
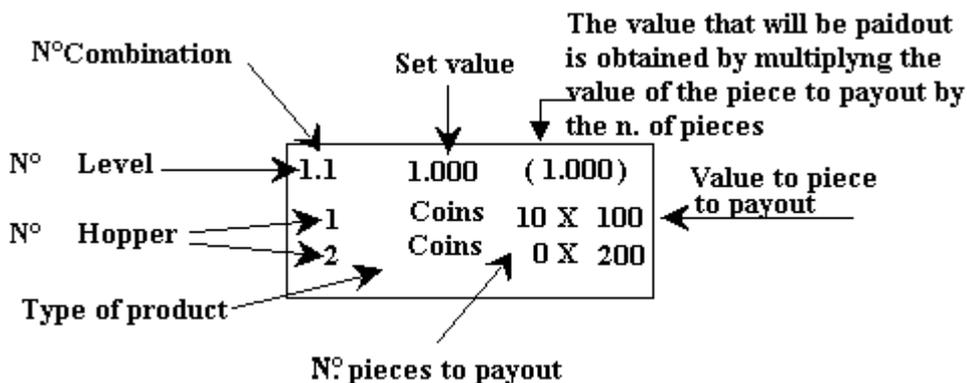
Note: By setting the change according to the banknote or the smallest coin, you don't need to set the changes of the others because they will be considered a multiple number of the others.

- MASTER HOPPER

If necessary, you can decide to make one hopper the primary one. In this case, if that dispenser is empty or broken, the entire change machine will be blocked.

```
                    NONE
       1 COINS         3 COINS
       2 COINS         4 COINS
```

Simply highlight the function to access it, the function will be displayed by the flashing character, press "OK", then choose the desired option by shifting with "+" and "-", to confirm press "OK".

- AUTOMATIC PAYOUT

You can use this function to set a figure, and after it has been reached, the change machine will automatically pay out the value.

If you set the value of the automatic threshold to Lira 10,000 for example, the change machine will give you the possibility to manually choose the payout among the set tables up to a value of Lire 9,900, press the payout key to obtain the change. By introducing a 100 Lire coin, after reaching the threshold, the change machine will automatically pay out the coins.

```
   AUTOMATIC PAYOUT                  If you select "NO"
      THRESHOLD                      you return to the
      YES         NO                 previus menu
```

If you select "YES"
you need to set the
desired value.
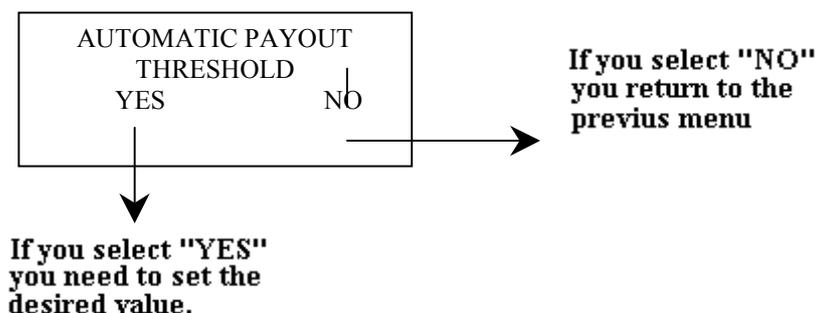
Please refer to paragraph "Parameter setting general procedure" on Page 9, to set the automatic threshold value

- MAX VEND VALUE

Use this function to set the maximum introduction limit. After reaching this value, the change machine can accept only one note or coin.

After exceeding the Maximum Limit number, the change machine will send off a signal, and it will block all payment systems. The only operations possible will be the change operation.

You cannot set a value lower than the highest banknote nor lower than the highest level. If this happens accidentally the set figure will be ignored and the limit will be the one of the highest banknote or table value.

-RESIDUAL CREDIT

The residual credit function allows you to choose three different ways to manage the residual credit, which is the fraction of the smallest entity that can be paid out..

```
RESIDUAL CREDIT?

YES
YES FOR X MINUTES
NO
```

By selecting "YES", the change machine will memorize the possible residual credit that cannot be physically paid out and it will take it into account during the next change operation.
By selecting "NO" at the end of the change operation the possible residual credit would be set to zero.
By selecting "YES" for "X" minutes you can set a time, after which the change is automatically set to zero.

-TRANSACTION RESET

Use this function to reset the counters .

```
TOTAL
TRANSACTION RESET?
LAST RESET:01/01/01
YES          NO
```

NOTE:
Press "+" to move on to "YES" to reset the counters and press "OK" to confirm

CONFIGURATION

The configuration menu is the menu that includes all the Hardware settings of the machine. These functions are directly set by qualified Technicians of Comestero during the production phase. Hence, before changing anything in this menu we suggest contacting the Head of the Call Center who will assist you during these operations.
The functions you can program in this menu are explained below.
The configuration menu is a scroll menu, use "+" and "-" to move between the various functions and "OK" to confirm the choice.

CONFIGURATION:

SELECT LANGUAGE
VALUE TABLE
HOPPERS INSTALLED
OPTIONS
TIME/DATE
PROMO – INFO MESSAGE
RECEIPT HEADING
EXIT

-SELECT LANGUAGE

The change machine is programmed to operate in different languages: Italian, English, French,
Spanish, German. There is also another function "ALL", which can be enabled only from the version 2.xx., which cyclically displays the status of the machine in all languages. Press the payout or selection button to define the language that will be kept for the entire change phase.
Please refer to paragraph "Parameter setting general procedure" on Page 9

```
ITALIAN      ENGLISH
         FRANCH
SPANISH      GERMAN
           ALL
```

-VALUE TABLE

You can choose different parameters in the function Table of Values. The functions that you can program in this menu are explained below.
Please refer to paragraph "Parameter setting general procedure" on Page 9

```
CURRENCY
COINS
NOTES
EXIT
```

*CURRENCY

```
   CURRECY SELECTION
EURO ————————————————▶
LIRE ————————————————▶   Pre-set values
OTHER
   │
   ▼
```

By secting "Other" you need to set the name of the currency and its decimal point

*COINS VALUE

Use this function to set the six coins accepted by the electronic validating device. To properly set this function use the programming label on the token dispenser as a reference.

```
         COINS  VALUE
1        50       2       100
3        200      4       500
5        1000     6        0
```

N° channel   Value of currency

*NOTES

Use this function to set the 4 notes accepted by the machine. To properly set this function use the programming label on the token dispenser as a reference..

```
         NOTES VALUE

1        1.000    2      2.000
3        5.000    4     10.000
```

N° channel   Value of notes

-OPTION

You can set different parameters in the option function. The functions you can program in this menu are explained below.

```
           OPTION
DISPLAY
RECEIPT
KEY
EXIT
```

*DISPLAY

Use this function to set an internal display, if needed.
NOTE: If you change this set-up you need to switch the machine off and then back on.

```
        INTERNAL DISPLAY
            PRESENT

       YES            NO
```

*RECEIPT

Use this function to print out the receipt. When this function is set, the change machine automatically prints the number of tokens paid out or the transactions made, i.e. it prints only the difference between the cash introduced and the cash paid out. To set the heading of the receipt see page. 17.

```
        PRINT RECEIPT?


       YES            NO
```

Example of print

```
        RECEIPT
    COMESTERO GROUP      ← Customizzable heading
    VIA MARIE CURIE 8
       GESSATE (MI)
- - - - - - - - - - - -
Appar. N. 15
- - - - - - - - - - - -
     LIT. 1000
- - - - - - - - - - - -
   Cash payment
- - - - - - - - - - - -
  Non fiscal receipt
- - - - - - - - - - - -
Time:
       12:07
Date:
     24/04/2001          ← Progressive printing
- - - - - - - - - - - -     number
Nr. 00027
- - - - - - - - - - - -
     Thank you
     Good-bye
```

*KEY

Use this function to set a payment system with electronic key. Available in version 3.

```
        ELECTRONIC KEY ?


       YES            NO
```

-INSTALLED HOPPERS

You need to set the quantity, the type and contents of the hoppers. This will help the machine manage the different hoppers and make all change operations. If the change machine operates with only one hopper you just need to set the item "NON PRESENT" on hopper 2.

```
N° 1          COINS
N° 2          TOKENS
N° 3          CARD 1
N° 4          CARD 2
```

By setting **Coins or Tokens** you define the relevant set-up that pilots **Hopper Mod. MK4 Produced by Coin Control.**

By setting **Cards 1** you define the relevant set-up that pilots the **Card Dispenser Mod. CD3/12 Produced by Innovative.**

By setting **Cards 2** you define the relevant set-up that pilots the **Card Dispenser Mod. CD200 Produced by Asahi Seiko.**

-TIME / DATE

In this section you can set or change the date and time of the internal clock of the change machine.

```
┌─────────────────────────┐
│        SETTING          │
│                         │
│   TIME:        16:25     │
│   DATE:      01/01/01    │
└─────────────────────────┘
              ↓
        (dd/mm/yy)
```

Please refer to paragraph "Parameter setting general procedure" on Page 9.

-PROMO - INFO MESSAGES

This function can be used to program an information or promotional message on 4 lines with 20
characters each. Select "YES" to display the window in which you can enter the sentence or advertising
message that you want to show the customer when the machine is on.
After entering the promotional message, press "OK" for a few seconds to confirm and exit the function.

```
┌─────────────────────────┐
│  PROMO - INFO MESSAGE   │
│                         │
│   YES          NO        │
└─────────────────────────┘
```

Please refer to paragraph "Parameter setting general procedure" on Page 9.

-RECEIPT HEADING

This function is used to program an instructional or advertising heading. Choose "YES" to display the window in which you can enter the sentence or the advertising message that you want to program as receipt heading.
After entering the heading, press "OK" for a few seconds to confirm and exit the function.

MAINTENANCE

The service menu includes the diagnostic functions of the machine. To access this menu just press "+" and "OK" simultaneously for a few seconds, then move with "+" until the word "SERVICE" appears flashing on the display. Then confirm with "OK".
The diagnostic functions are generally used by the Technicians to check the correct functioning of the machine. In fact this menu displays the type of errors of the machine. We suggest contacting the Head of the Call Center who will assist you during the control operations. The functions that can be programmed in this menu are explained below.

MAINTENANCE   :   ↑ ALARM LIST
                              EMPTYING
                              TEST
                              RESET
                          ↓ EXIT
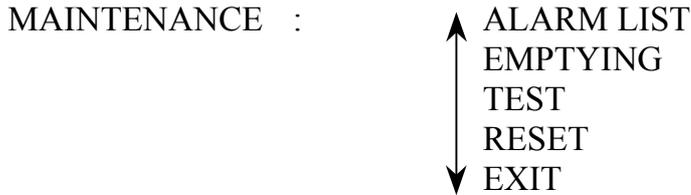
-ALARM LIST

The change machine can detect the different types of anomalies that are registered in the memory together with the date and time. This function can memorize up to 10 anomalies, the display will show the n. of alarm, the content and what caused it. And then the date and time of the recording.

ALARM LIST
ALARM EMPTY= HOPPER EMPTY
ALARM 2 = HOPPER BLOCKED
ALARM 3 = PAYOUT WITHOUT COMMAND
ALARM 4 = EXIT SENSOR BROKEN
ALARM 5 = TOKEN JAMMED UPON
                    MACHINE SWITCH ON
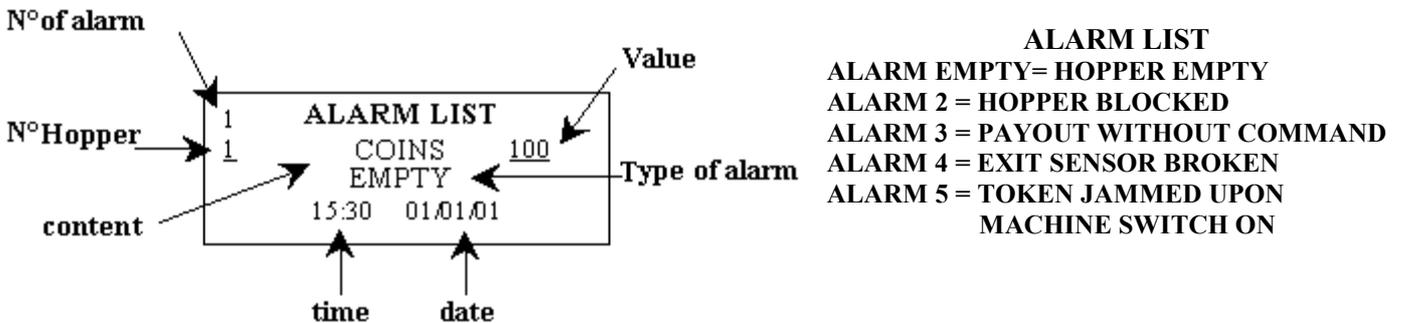
-EMPTYING

Use this useful function to empty out one or more than one hopper.

EMPTYING OUT	
1 COINS	2 COINS
3 COINS	4 TOKENS
ALL	
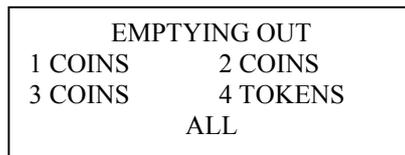
-TEST

Use the test function to check the correct functioning of the machine without in any way changing the audit report. To access the test mode use "+" to move to "YES" and then confirm with "OK". Then exit the menu and return to the general display. The machine signals the enabling of the test mode by emitting a sound and showing the word Test on the display. To exit this function just return to the SERVICE menu, select TEST and confirm NO. Or switch off the change machine for a few seconds.

```
┌─────────────────────────────┐
│    ENTER TEST FUNCTION      │
│    ( TRANSACTION WILL       │
│      NOT BE BOOST )         │
│    YES            NO        │
└─────────────────────────────┘
```
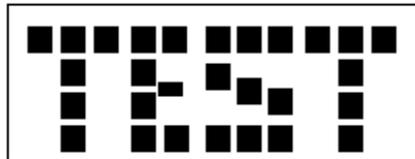

-RESET

Use the reset function to partially or completely reset the machine. If you confirm the choice "ONLY PROGRAMMING" all the values in the programming menu will be set to zero. If you confirm "CONFIGURATION + PROGRAMMING" the machine will emit a three second sound (BIP). This is the time needed to reset all the values contained in the programming and configuration menu. At the end of the reset process the change machine will have only the basic configuration which includes: a Display, a Hopper, Euro currency, Date and Time. The machine is not programmed hence its display will show "OUT OF ORDER". To reset the operating parameters refer to the Configuration Menu described on page 10 and to the Programming Menu described on page 13.

```
┌─────────────────────────────┐
│          RESET              │
│                             │
│    PROGRAMMING ONLY         │
│    CONFIG + PROGR.          │
└─────────────────────────────┘
```

NOTE: BE VERY CAREFUL WHEN USING THIS FUNCTION

CPU CONNECTION DIAGRAM

CONNECTOR SPECIFICATIONS

EXECUTIVE

Connector executive

Pin	Direzione	Segnale
1	-	24 Vac
2	OUTPUT	TX Master
3	OUTPUT	TX+ Slave
4	OUTPUT	TX - Slave
5	GND	0 V Master
6	INPUT	RX Master
7	INPUT	RX+ Slave
8	INPUT	RX- Slave
9	-	24 Vac

RM4/5

Connector coin validator RM4

Pin	Direzione	Segnale
1	-	GND
2	-	+12 VDC
3	INPUT	CHANNEL 5
4	INPUT	CHANNEL 6
5		
6	INPUT	ENABLE
7	INPUT	CHANNEL 1
8	INPUT	CHANNEL 2
9	INPUT	CHANNEL 3
10	INPUT	CHANNEL 4

KEY/PARALEL
Connector key S.E.C.I.

Pin	Direzione	Segnale
1	-	+12 VDC
2	-	GND
3	OUTPUT	OUT1
4	OUTPUT	AVAILABLE
5	INPUT	CREDIT
6	INPUT	CSA
7	INPUT	KEY ON

NV4/5
Connector note reader NV4/5

Pin	Direzione	Segnale
1	INPUT	CHANNEL 1
2	INPUT	CHANNEL 2
3	INPUT	CHANNEL 3
4	INPUT	CHANNEL 4
5	INPUT	ENABLE 1
6	INPUT	ENABLE 2
7	INPUT	ENABLE 3
8	INPUT	ENABLE 4
9		
10	INPUT	ALARM
11	-	+12 VDC
12	-	GND
13		+12 VDC
14		
15		

IVO/125
Banknote reader connector IVO (SIGNAL)

Pin	Direzione	Segnale
1		
2	-	GND
3		
4		
5	INPUT	CHANNEL 1
6		
7	INPUT	CHANNEL 4
8	INPUT	CHANNEL 3
9	INPUT	CHANNEL 2
10		

IVO/125
Banknote reader connector IVO (POWER)

Pin	Direzione	Segnale
1		
2	OUTPUT	ENABLE
3		
4		
5		
6		
7	-	+24 Vdc
8	-	GND
9		
10		

DISP1, DISP2
Connctor DISPLAY 1, 2

Pin	Direzione	Segnale
1	-	GND
2	-	+ 5 Vdc
3	-	CONTRAST
4	OUTPUT	RS
5	OUTPUT	RW
6	OUTPUT	E
7…14	I/O	D 0…7
15	-	BACKLIGHT
16	-	BACKLIGHT

BOX PROG
Programming panel connector

Pin	Direzione	Segnale
1	INPUT	"-" KEY
2	INPUT	"+" KEY
3	INPUT	"OK" KEY
4	-	COMMON

TASTI
Keyboard connector

Pin	Direzione	Segnale
1	INPUT	"+" KEY
2	-	COMMON
3	INPUT	"OK" KEY

RS232/PRINTER

Print connector

Pin	Direzione	Segnale
1		
2		
3	OUTPUT	TX
4		
5	-	GND
6		
7		
8	INPUT	CTS
9		

SERVIZIO, LIBERO

Relé connector

Pin	Direzione	Segnale
1	-	COMMON
2	-	NC
3	-	NO

IN ALIM

Connector trasformer

Pin	Direzione	Segnale
1	-	26 Vac
2	-	26 Vac
3	-	18 Vac
4	-	18 Vac

RESET CARD

Hopper interface connector

Pin	Direzione	Segnale
1	OUTPUT	RESET CARD
2	-	GND

AL-HP1, AL-HP2, AL-HP3, AL-HP4

Four hopper power supply connectors

Pin	Direzione	Segnale
1	-	+ 12 Vdc
2	-	GND
3	-	+ 24 Vdc

HP1, HP2, HP3, HP4

Four hopper interface connectors

Pin	Direzione	Segnale
1	INPUT	EMPTY
2	INPUT	COIN OUT
3	INPUT	ALARM
4	OUTPUT	ENABLE

PC/TERMO

Terminal connector

Pin	Direzione	Segnale
1		
2	OUTPUT	TX
3		
4		
5	INPUT	RX
6	OUTPUT	TX
7	-	GND
8	-	+ 5 V

GENERAL MAINTENANCE

HOPPER MAINTENANCE OPERATIONS

PROBLEM: THE CHANGE MACHINE SIGNALS THE MESSAGE "EMPTY" ON THE DISPLAY, ON ONE OR MORE THAN ONE HOPPER

SOLUTION:

- **Make sure there are enougth coins in the hopper.**
- **Empty out the hopper by following the procedure on page 15, afterwards switch off the machine and remove the hopper.**
- **On the top of the hopper there are two brass plates, these are basically coin detection sensor.**
- **Take a cloth, spray on some alcohol, clean the two plates to remove the grease and oxidation build up.**
- **If the message still persist after you have filled up the hopper contact the Comestero service office.**

PROBLEM :   THE CHANGE MACHINE SIGNALS THE MESSAGE "ALARM" ON THE DISPLAY, ON ONE OR MORE THAN ONE HOPPER

SOLUTION:

- **Make sure the hopper is installed correctly, if the message persist switch off the machine and remove the hopper.**
- **Empty out the hopper by turning it upside down on a table, check if any unusual object fall out li corpi estranei presenti nello stesso.**
- **Fill up and re-assemble the hopper**
- **If the message persist contact the comestero service office.**

MAINTENANCE OF THE BANKNOTE READER
NV4/NV5

PROBLEM: THE READER DOES NOT ACCEPT THE BANKNOTES

SOLUTION: INITIALIZATION PROCEDURE OF READER NV5

This procedure could be necessary when the efficiency of the reader has decreased considerably. For instance, if it rejects too many banknotes due to dust. In this case you need to both mechanically and electronically clean the reader. Open the reader very carefully, use a paper tissue, clean the lenses and dry them immediately to remove any halo.
Take a piece of white paper, like the one used for printers and copiers, to carry out this operation. The quality of the paper and its cleanliness are the factors that count most in this operation.
Cut the sheet of paper to the size of a L. 100,000 banknote, now follow the procedure below.

1-   Put the black switch on "TEACH", after switching off the machine.

2-   Press the "CHANNEL" button near the switch and keep it pressed.

3-   Release the button.

4-   The Led above the switch will light up (3 and 4 or all).

5-   Put switch on "RUN" and press "CHANNEL".

6-   Wait for the reader to finish the test.

7-   The light on the front will start flashing.

8-   Press the button and introduce the sheet of paper.

Finally switch the reader or the machine off and then back on.

NOTE

The technical manual for the SMILEY banknote reader is enclosed with this manual in case you need to reprogram it.
For any other problem regarding any kind of reader attached to machine and marketed by Comestero, before completely blocking the machine due to incorrect operations, we suggest directly contacting the Comestero phone service for further information.

CARATTERISTICHE TECNICHE

SIZE OF CHANGE MACHINE WALL OR TABLE VERSION	530 mm x 650 mm x 350 mm overall dimensions
SIZE OF CHANGE MACHINE ASSEMBLED ON STAND	530 mm X 1550 mm X 350 mm
WEIGHT OF CHANGE MACHINE:	40 Kg
COOIN/TOKEN HOPPER:	Up to two Universal Hopper MK4 Coin Controls Coin Diameter: from 20 mm to 30 mm (or from 16 mm to 20 mm)
QUANTITY OF COINS OR TOKENS:	1600 pieces x hopper, or 1600 + 3000 in case of one hopper plus extension
BANKNOTE READER:	SMILEY NV5 – Innovative Technology, EBA 02-ITA8,0 IVO
CARD DISPENSER	Up to four Card Dispensers Mod. CD3/12 Innovative or up to four Card Dispensers Mod. CD200 Asahi Seiko
NUMBER OF CARDS	185 cards per hopper. Type IDI 0.76 mm thick
ELECTRONIC TOKEN DISPENSER	RM4 / V00 –SECI 12 coins/tokens (if available)
ELECTRONIC KEY **POWER SUPPLY**	Eurokey S.E.C.I. 230 VAC - 50 Hz
ABSORPTION	100 VA max - 25 VA in stand-by
OPERATING TEMPERATURE:	From 0° to 50° C humidity from 10% to 90% non condensate
STORAGE TEMPERATURE:	From 0° to 70°C
PROTECTION LEVEL:	IP 30
EC CONFORMITY DECLARATION	EN 50081-1, EN 50082-1, EN 61000-3-2, EN 60950 EN 61000-3-3, EN 60335 II EDIZIONE
ACCESSORIES	- Two different STAND models are available, one is in wood and one in metal with object holder. - Front panel with reader and token dispenser - Front panel with reader and electronic key - Extension for hopper - Funnel for easy hopper filling up operations - Programmer - Banknote/coin collector - Internal or external printer