



Comesterogroup
Competitive Through Innovation

UK Operating instructions



PROGRAMMER



*Design, manufacture, distribution and service of
payment and money control system.
Accessories for coin-operated machines*

Operating instructions

*Dear Customer,
Thank you for buying one of our products.
If you carefully follow the indications included in this manual, we are sure you will appreciate our
quality over time with full satisfaction.
We kindly ask you to carefully read the instructions of this manual about the correct use of our
product in accordance with the basic safety provisions.*

Symbols



CAUTION!



Carefully READ this manual before start up

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1 INTRODUCTION

This manual and its annexes provide all information required for installation and about the components of the product, the use and operation of the machine, as well as a technical introduction for a correct maintenance and appropriate use of the product.

The information contained in this manual will be subject to modifications without notice and will not be binding for Comestero srl.

Any care has been used to collect and to control the documentation included herein; however Comestero srl will not be responsible for any use thereof.

The same will also apply to any individual or company involved in the creation and production of this manual. Unless otherwise specified, any reference to companies, names, data and addresses used in the examples is absolutely fortuitous, having the only purpose of illustrating the use of the Comestero product.

It is absolutely forbidden to reproduce any section hereof, in any form, if not expressly authorized by Comestero srl.

2 WARNINGS



Carefully READ this manual before start up

- The knowledge of the information and provisions contained in this manual is essential for a correct use of the product.
- Upon receipt, make sure that the packaging and the product have not been damaged during transport.
- Pay attention to electric connection.
- No guarantee will be applied to any failure caused by the non-compliance with any warning mentioned herein.

3 GENERAL NOTES

3.1 Checks upon the receipt of the product

Upon receipt of the product make sure that this has not been damaged during transport. If any damage of any kind should be noted, immediately make a complaint to the hauler.

At the end of transport the packing shall be intact, i.e. it shall show:

- No bruise, sign of crash, deformation or breakage of the container.
- No wet areas or signs that may mean that the container has been exposed to rain, freeze or heat.
- No tampering.

Make sure that the content of the container corresponds to the order.

3.2 Types of packing

The "Programmer" is distributed in a special pouch (Fig. 1) containing the whole kit, comprising:

- Portable programmer (Fig. 2)
- "Traco" software CD (Fig. 3)
- RM5 programmer cable or Programming Interface (6-pin adapter) (Fig. 4)
- PC cable (Fig. 5)
- programming interface (Fig. 7)
- ECH3 card programming adapter (Fig. 8)
- one 9-volt battery (Fig. 6)

Types of packing

Pouch



Portable Programmer



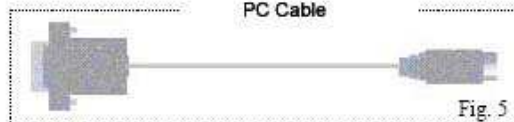
Traco Software CD



RM5 Programmer Cable



PC Cable



Battery



Programming Interface



ECH3 Card Programming Adapter

4 GENERAL TECHNICAL DESCRIPTION

4.1 Label

The label identifies (in sequence):

- Product name
- Language
- Firmware version
- Date of production for guarantee reference.

5 INSTALLATION

5.1 How to connect

- Load the battery in the appropriate position in the programmer.
- Install the program, loading the CD and following the instructions in chapter 6.2.1 “Installing “Traco” software”.

6 OPERATION & PROGRAMMING

6.1 General appliance functions

The programmer can function in the following modes:

PROGRAMMER

To program the following products: RM5 electronic token machine, EuroKey Plus cashless system.

UPGRADER

To update the firmware of other programmers or of the following products:

EuroKey Plus cashless system and Autocoin, Changeuro Multi/Simply/Easy, Dual Coin and Simplycoin coin machines.

6.2 Programming

6.2.1 Installing “Traco” software

As shown in the picture below, the CD contains a self-installing file (Set-up.exe) and a “Firmware” folder. The latter contains four sub-folders called “CAMBIAMONETE”, “EUROKEY”,

“MINIPROGRAMMER” and “UPGRADER” and these contain the files related to the product to be updated.

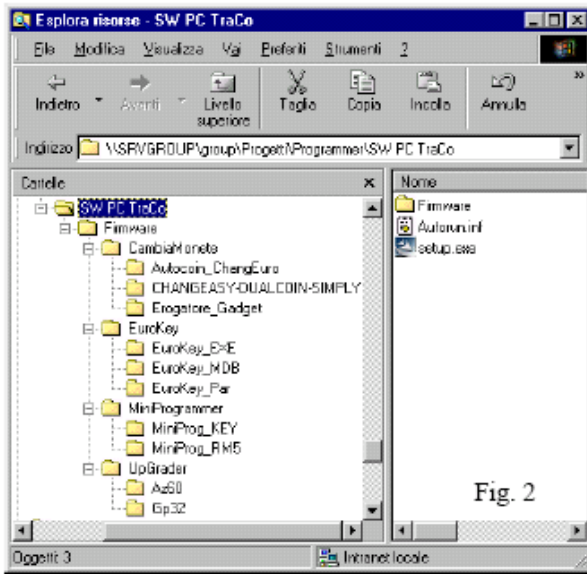
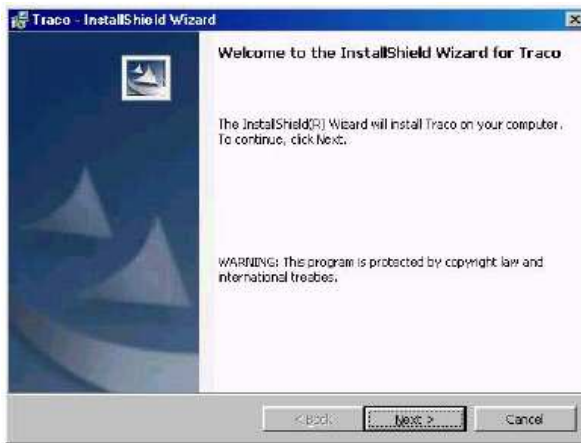


Fig. 2

Installation procedure

1. Load the CD in the drive and the self-installation window printed below will appear.



2. Press “Next” and wait until the operation complete window to appear.



3. Press “Finish”.
4. Run the “explore” function of the DC and copy the Firmware in
C:\Programmi\COMESTERO Group\Traco

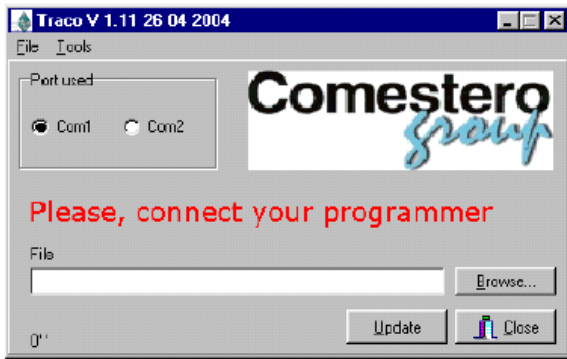
The Traco.exe program enables the download of any firmware update file in the microprocessor, whether mounted on the token machine, the key system, the various cards produced by Comestero or other programmers. Funzione di caricamento file da PC.

6.3 Load file from PC

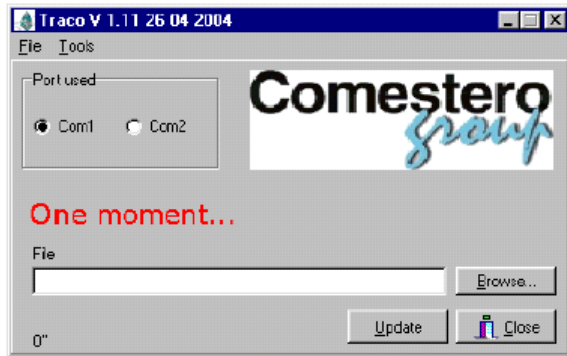
1. Run the “Traco.exe” program and the window printed below will appear.



2. Select port PC COM1 or COM2 and the window printed below will appear.



3. Connect the Programmer using the special cable (C) and the window printed below will appear.



The following messages will appear on the Programmer display:

AZ60 PROGRAMMER
V 2.10 13/04/04

GP32 PROGRAMMER
V 2.10 13/04/04

PC/CARD
CONNECTING



Press “TOOLS” followed by “STATUS” to view the type of upgrader / miniprogrammer in the device (as shown in the previous picture) and so decide how to operate.

Note:

If the GP32 upgrader is identified, the files present can be downloaded into the following folders:

- CHANGE MACHINE / CHANGEASY-DUALCOIN-SIMPLY
- EUROKEY_EXE / MDB / PAR_MONO / PAR_DUAL PRICE / PAR_MULTIPRICE
- MINIPROGRAMMER / MINIPROG_KEY
- MINIPROG_RM5
- UPGRADER / AZ60
- GP32

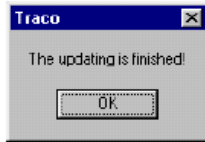
If the AZ60 upgrader is identified, the files present can be downloaded into the following folders:

- CHANGE MACHINE / AUTOCOIN_CHANGEURO

– EROGATORE GADGET (Ceck Eprom)

To change the type of Upgrader (GP32 or AZ60) press “BROWSE” and select the required file from the “UPGRADER” folder; press “TOOLS” followed by “UPDATE PROGRAMMER”.

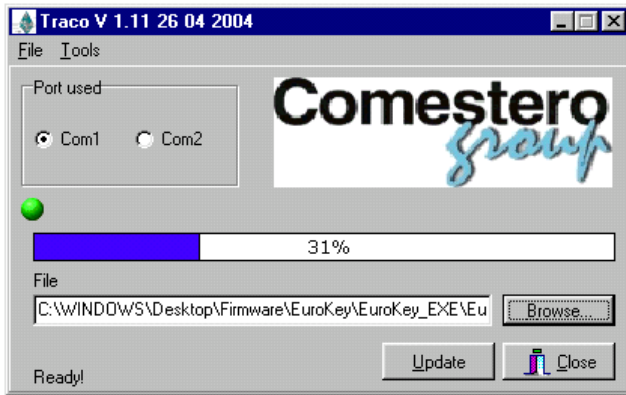
When the update is complete the following message will appear:



4. Press “Browse” to select the required function from the Firmware folder and the window printed below will appear.



5. Press “Update” to download the function selected in the programmer and the window printed below will appear.



The following messages will appear on the Programmer display:

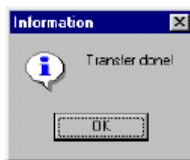
READING DATA
PLEASE WAIT

UPG DOWLOAD
COMPLETE

CHOOSE FUNCTION

NB: do not disconnect the programmer until this message has appeared!

6. When the operation is complete the following message will appear:



7. To ensure that the correct file has been transferred, press "FILE" followed by "IDENTIFICATION" and the window printed below will appear:



Once the decision to use the Programmer as an Upgrader has been made, update the product firmware required as explained below:

- a) Connect the Programmer Cable (cable B) to the Upgrader.
- b) Connect the Programmer Cable to the programming interface (Interface D).
- c) Connect the programming interface to the appropriate adapter (adapter F – See last page) of the product to be updated.
- d) Supply power to the product to be updated.
- e) The following captions will appear on the programmer display:

GP32 PROGRAMMER
V 2.10 13/14/04

CONNECTING
PC/CARDS

CHOOSE FUNCTION
MICRO REGISTRATION

Press “PLUS” and the message at the side will appear:

CHOOSE FUNCTION
EPROM CHECK

- f) Select the EPROM CHECK or MICRO REGISTRATION operation.
- In the first case, the following captions will appear on the display:

CHOOSE FUNCTION
EPROM CHECK

Press “OK”.

EPROM TEST
SIZE READ 64K

EPROM TEST
PLEASE WAIT

POSITIVE TEST
GP32PROG 210 A

Press “OK”.

- In the second case, the following captions will appear on the display:

CHOOSE FUNCTION
MICRO REGISTRATION

Press “OK”

GP32PROG 210 A
ARE YOU SURE? OK

Press “OK”

PHASE 1
DOWNLOAD BOOT

SWITCH OFF AND AFTER
2s SWITCH ON

- g) Switch off and switch back on after about 2 seconds. The following messages will appear on the display:

CHOOSE FUNCTION
MICRO
REGISTRATION

Press “OK”

GP32PROG 210 A
ARE YOU SURE? OK

Press “OK”

PHASE 1
DOWNLOAD BOOT

PHASE 3
DOWNLOAD PROGR.

REGISTRATIONS FINISHED
SWITCH OFF DISCONNECT

- h) Switch off and disconnect the programmer.

As regards Micro Registration for the ECH cards, before connecting the upgrader:

- Remove, where present, the hopper 2 adapters (HP2 and ALHP2).
- Remove the key adapters and insert the ECH card programming adapter (E).

As regards Micro Registration for the RM5 token machines, before connecting the upgrader:

- Disconnect the power supply.
- Connect Programmer A to programming interface D using the appropriate wire B.
- Connect interface D to RM5, after removing the cover, in point F, lining up the square pin of the interface with Pin 1 on the token machine adapter.
- Place Dip Switch 1 in the OFF position and the other five in the ON position.
- Connect the power supply to the token machine.

If you want to use the Programmer as an RM5 or EUROKEY programmer after downloading the correct files into it and proceed as explained.

6.4 Programmer functions for RM5

This enables programming both the RM5 (using cable B) and RM4 (using cable G) electronic token machines.

PART 1:

A general description comprising the instructions on how to connect and the alarm signals for all the token machines.

PART 2:

Contains the “Menu Tables” automatically proposed by the PROGRAMMER depending on the version of token machine connected.

The “Menu Tables” indicated for every function which section of Part 3 of the manual to read .

PART 3:

Contains the description of every function for all the token machines.

PART 4:

Contains the procedure for calibrating the token machines.

6.4.1 General information

Generalities

The Programmer is necessary to read and change the data contained in the token machine, including:

- prices
- bonuses
- times
- meters
- various options
- calibration parameters
- token machine cloning

It has three keys for selecting the various functions:

- “+” key to increase
- “-” key to decrease
- “OK” key to confirm

After making the necessary change, as described in this manual, confirm it and exit by pressing “OK”.

Important:

It is possible to exit any procedure at any time without making any change, leaving everything the way it was. To do so, keep the “OK” key pressed without releasing it and simultaneously press “-”.

How to connect

The device is powered by the token machine, so this must be connected to the machine on which it works or to a test powering device.

The Programmer is connected to the serial adapter on the back of the token machine.

When connected the following captions appear at 2s intervals:

- "COMESTERO GOUP"
- "MINI PROGRAMMER"
- " V.4.0 del 13/04/04 "
- " VALIDATORE -00 "
- " RM5-3 "

The third line indicates the version of software loaded in the programmer.

The last two captions show the configuration of the token machine and relative model.

The configurations available are:

- "VALIDATOR - 00"
- "TWO PRICES - 10"
- "GAMES - 20"
- "TIMER - 30"
- "CREDIT REQ. - 40"
- "CREDIT REQ. - 60"
- "PHOTOCOPIER. - 70"

The models managed by the Programmer are:

- " RM4 "
- " RM5-3"

If the token machine is not recognised, the following will appear "INCORRECT VERSION".

After 2sec, it positions on the first item on the menu "METER READING" use the "+" key to scroll forward, the "-" key to scroll backwards and "OK" to select the function required.

The Programmer automatically proposes the menu of functions, as shown in "Menu Tables", in the second part of the manual, regardless of the version to token machine to which it is connected.

Note:

The programmer contains a 6LR61 9V battery. When the programmer is switched on, if the battery is no longer efficient, the message "BATTERY DEAD" will appear.

In this case replace the battery with a new one.

Change the battery every six months even if the battery dead message does not appear.

Alarm signals

- The error signals during the functions are:
"COMMUNICATION ERROR"
- "CLONING ERROR"

The first refers to incorrect registration in the token machine and the second to an error during the token machine copying phase. In both cases, try switching the token machine off and then back on. If the signal persists, check the Programmer adapter.

Note:

If the Programmer display does not work, check:

- a)** that power is supplied to the token machine
- b)** the connection between programmer and token machine.

6.4.2 Menu Tables

MENU OF FUNCTIONS FOR RMX00: Validator

READ COUNTER	(See section 1.a)
SALE PRICE CHANGE	(See section 2.a)
CREDIT PULSE LEN	(See section 3.a)
conDUCT OPTIONS	(See section 5)
COUNTER RESET	(See section 6.a)
COUNTER ENABLING	(See section 7.a)
OUTPUT TYPE	(See section 11)
CHANNEL ENABLE	(See section 18)
LIMIT CORRECTION	(See section 19)
VALUE TABLE	(See section 20)
CHANNEL ADJUSTment	(See section 21)
SUBSTITUTIVE CH.	(See section 22)
CHANGE CONFIGURation.	(See section 23)
CHange DUPLICATION	(See section 24)
OVERLAPPING	(See section 25)
MULTIPULSE OPTion	(See section 27)
ANTI THIEF OPTion	(See section 28)
SORTER SELECTION	(See section 29)
FAST CASH	(See section 30)
HOLED COIN	(See section 31)

MENU OF FUNCTIONS FOR RMX10: Totalizer with 2 prices for Vending

READ COUNTER	(See section 1.b)
SALE THRESHOLD RD	(See section 1.c)
SALE THRESHOLD +-	(See section 1.d)
SALE PRICE CHANGE	(See section 2.b)
conDUCT OPTIONS	(See section 5)
COUNTER RESET	(See section 6.b)

ENGAGE COUNTERS (See section 7.b)
 CHANGE 1° THRESHold (See section 7.c)
 CHANGE 2° THRESHold (See section 7.d)
 CREDIT COLLECTIon (See section 8.a)
 RESET TIME CHANge (See section 9)
 DISPLAY OPTION (See section 12)
 EXternal RESET QUALification
 (See section 14)
 RESET TYPE SETting (See section 17)
 CHANNEL ENABLE (See section 18)
 LIMIT CORRECTION (See section 19)
 VALUE TABLE (See section 20)
 CHANNEL ADJUSTMent (See section 21)
 SUBSTITUTIVE CHannel (See section 22)
 CHANGE CONFIGURation (See section 23)
 CH. DUPLICATION (See section 24)
 OVERLAPPING (See section 25)
 ANTI THIEF OPTion (See section 28)
 SORTER SELECTION (See section 29)
 FAST CASH (See section 30)
 HOLED COIN (See section 31)

MENU OF FUNCTIONS FOR RMX20:

Impulsive totalizer

READ COUNTER (See section 1.a)
 SALE PRICE CHANge (See section 2.c)
 CREDIT PULSE LEN (See section 3.a)
 conDUCT OPTIONS (See section 5)
 COUNTER RESET (See section 6.a)
 COUNTER ENABLING (See section 7.a)
 ENGAGE CHANNEL (See section 18)
 LIMIT CORRECTION (See section 19)
 VALUE TABLE (See section 20)
 CHANNEL ADJUSTMent (See section 21)
 SUBSTITUTIVE CH. (See section 22)
 CHANGE CONFIGURation. (See section 23)
 CHange DUPLICATION (See section 24)
 OVERLAPPING (See section 25)
 ANTI THIEF OPTion (See section 28)
 SORTER SELECTION (See section 29)
 FAST CASH (See section 30)
 HOLED COIN (See section 31)

MENU OF FUNCTIONS FOR RMX30:

Progressive Timer

READ COUNTER (See section 1.a)
 SALE PRICE CHANge (See section 2.d)
 WARNING NOTICE (See section 4)
 conDUCT OPTIONS (See section 5)
 COUNTER RESET (See section 6.a)
 COUNTER ENABLING (See section 7.a)

EX. counter-3C (See section 15a)
 EX. counter - 3R (See section 15b)
 ECONOMIZER (See section 16)
 CHANNEL ENABLE (See section 18)
 LIMIT CORRECTION (See section 19)
 VALUE TABLE (See section 20)
 CHANNEL ADJUSTMent (See section 21)
 SUBSTITUTIVE CHannel (See section 22)
 CHANGE CONFIGURation (See section 23)
 CH. DUPLICATION (See section 24)
 OVERLAPPING (See section 25)
 ANTI THIEF OPTion (See section 28)
 SORTER SELECTION (See section 29)
 FAST CASH (See section 30)
 HOLED COIN (See section 31)

MENU OF FUNCTIONS FOR RMX40:

Totalizer with issue of credits upon request

READ COUNTER (See section 1.a)
 SALE PRICE CHANge (See section 2.c)
 CREDIT PULSE LEN (See section 3.a)
 conDUCT OPTIONS (See section 5)
 COUNTER RESET (See section 6.a)
 COUNTER ENABLING (See section 7.a)
 CREDIT COLLECTIon (See section 8.b)
 CHANNEL ENABLE (See section 18)
 LIMIT CORRECTION (See section 19)
 VALUE TABLE (See section 20)
 CHANNEL ADJUSTMent (See section 21)
 SUBSTITUTIVE CH. (See section 22)
 CHANGE CONFIGURation. (See section 23)
 CHange DUPLICATION (See section 24)
 OVERLAPPING (See section 25)
 ANTI THIEF OPTion (See section 28)
 SORTER SELECTION (See section 29)
 HOLED COIN (See section 31)

MENU OF FUNCTIONS FOR RMX60:

Totalizer with issue of timed credits upon request

READ COUNTER (See section 1.a)
 SALE PRICE CHANge (See section 2.c)
 CREDIT PULSE LEN (See section 3.b)
 conDUCT OPTIONS (See section 5)
 COUNTER RESET (See section 6.a)
 COUNTER ENABLING (See section 7.a)
 CREDIT COLLECTIon (See section 8.b)
 TIME DISPLAY OPTion (See section 13)
 CHANNEL ENABLE (See section 18)
 LIMIT CORRECTION (See section 19)
 VALUE TABLE (See section 20)

CHANNEL ADJUSTMent	(See section 21)
SUBSTITUTIVE CH	(See section 22)
CHANGE CONFIGURation.	(See section 23)
CHange DUPLICATION	(See section 24)
OVERLAPPING	(See section 25)
ANTI THIEF OPTion	(See section 28)
SORTER SELECTION	(See section 29)
HOLED COIN	(See section 31)

**MENU OF FUNCTIONS FOR RMX70:
Totalizer for photocopiers**

READ COUNTER	(See section 1.a)
SALE PRICE CHANGe	(See section 2.e)
conDUCT OPTIONS	(See section 5)
COUNTER RESET	(See section 6.a)
COUNTER ENABLING	(See section 7.a)
CREDIT COLLECTion	(see section 8.b)
DELAY SETTING	(See section 10)
CHANNEL ENABLE	(See section 18)
LIMIT CORRECTION	(See section 19)
VALUE TABLE	(See section 20)
CHANNEL ADJUSTMent	(See section 21)
SUBSTITUTIVE CH	(See section 22)
CHANGE CONFIGURation.	(See section 23)
CHange DUPLICATION	(See section 24)
OVERLAPPING	(See section 25)

**MENU OF NEW FUNCTIONS FOR RM5xx
of firmware version 3.03**

MULTIPULSE OPTion	(See section 27)
ANTI THIEF OPTion	(See section 28)
SORTER SELECTION	(See section 29)
FAST CASH	(See section 30)
HOLED COIN	(See section 31)

6.4.3 Functions description

Section 1. a

READ COUNTER

Coin counter display (for versions 00 –20 –30 – 40 -60-70)

This function detects the real amount collected by the machine.

Access this item using the “OK” key.

To zero the counter use the **ZERO COUNTERS** function. Activate or deactivate using the **YES/NO COUNTER** function.

Section 1.b

READ COUNTER

Reading vending counters (for version 10)

This function reads the counters associated with the two vending lines.

Press OK to display the counter for the first sales price. Press "OK" again to display the counter for the second price.

Section 1.c

SALE THRESHOLD RD

Reading sales thresholds (for version 10)

This function reads the threshold for the two sales prices.

Press OK to display the value of the first threshold. Press "OK" again to display the value of the second threshold.

Section 1.d

SALE THRESHOLD +/-

Setting sales thresholds (for version 10)

This functions sets the sales threshold. Press OK to set the value of the first sales threshold using the “+” and “-“ keys. Press "OK" again to confirm the setting of the first sales threshold, displaying the second threshold which will be changed using the same procedure used for threshold 1.

Section 2.a.

SALE PRICE CHANGE

Change price limit and P2 (for version 00)

This activates/deactivates the collection limit, sets its value and attributes a value to the token.

Access the function using the OK key and the display will show the limit function status, for instance:

DISENGAGE OPTION if it is disengaged. Use the +/- keys to engage – disengage it, then confirm by pressing OK. The display will indicate the limit value set, which can be changed using the +/- keys. Confirm the limit using the OK key and the attributable value of the token will appear. If tokens are not used, press the +/- keys until the caption DISENGAGE OPTION appears.

Section 2.b.

SALE PRICE CHANGE

Change sale prices (for version 10)

This sets or changes the sales price. Access the function using the “OK” key to display the 1st sale price, which can be changed using the “+” and “-” keys.

After reaching the required price, confirm it using the "OK" key and the display will indicate the 2nd sale price, which can be changed in the same way.

Note:

To enter a free sale price, set "0" using the «-» key. To disengage a price, set "DISABLE OPTION" using the «-» key.

Section 2c
SALE PRICE CHANGE

Set batch price (for version 20-40-60)

Access the function using the "OK" key to display the cost of the individual batch, using the "+" and/or "-" keys to change it. Press "OK" to confirm the cost displayed.

The first bonus threshold value will automatically appear. After changing (if necessary) this value with "+" and "-", press "OK" to confirm and display the number of batches obtainable.

If this number is acceptable, press "OK" to confirm it, otherwise change it using "+" and "-", then confirm by pressing "OK".

At this point the second bonus threshold will appear. Proceed as for the first. Bonus 2 is only shown if bonus 1 is active.

If the first or second threshold is not engaged, the following will appear "DISABLE OPTION"

Section 2.d
SALE PRICE CHANGE

Set price and time (for version 30)

This function sets (in sequence):

- P1 : Basic cost of service
- T : Duration corresponding to basic cost
- u.t.: Unit of time in seconds or minutes.
- P2 : Minimum amount to add to P1 to obtain extra time in addition to the basic time.

Use "OK" to access the function and the basic cost (P1) will appear on the display. It can be changed using the + / - keys and is confirmed with "OK". The time will then appear (T). It can be changed using the + / - keys and is confirmed with "OK". The unit of time will then appear (ut.). Use the + / - keys to choose between "time in seconds" and "time in minutes". Confirm the choice using "OK" and the minimum amount to be added (P2) will appear. If P2 is not set, the words *OPTION DISENGAGED* will be displayed.

Note:

If extra time is required for any amount inserted after the basic cost P1, set P2 at the same value as the smallest coin accepted by the token machine.

Obviously the increase in time obtained is always proportionate to the value of the coins added.

Example

If we set:

- $P1 = 2$
- $T = 60$
- *u.t. = time in seconds*
- $P2 = 0.1$

Inserting 2 euro we obtain a time of 60 sec. and adding 10 cent we increase the time by 3 sec., obtaining a total time of 63 sec.

Section 2.e
SALE PRICE CHANGE

Set sale price (for version 70)

This function defines the cost of the individual sale and it is possible to establish 2 bonus thresholds. For example, in the case of a photocopier it is possible to establish the cost of each copy at 5 cents, the cost of 20 copies at 0.77 euro (equivalent to 4 cents per copy) and the cost of 50 copies at 1.55 euro (equivalent to 3 cents per copy).

The cost of the single copy can be deducted depending on the amount inserted.

Accessing the function using the "OK" Key, the display of the individual sale is displayed and can be changed using the "+" and/or "-" keys. Press the "OK" key to confirm the cost displayed. The first bonus threshold value will automatically appear.

After changing (if necessary) this value using "+" and "-", press "OK" to confirm and display the number of sales obtainable. If this number is acceptable, press "OK" to confirm it, otherwise change it using "+" and "-", then confirm by pressing "OK".

At this point the second bonus threshold will appear. Proceed as for the first.

If the first or second threshold is not engaged, the words *OPTION DISENGAGED* will appear.

Section 3.a.
CREDIT PULSE LEN

Programming credit pulse duration (for version 00 - 20 - 40)

Access the function as explained above and press "OK" to confirm acceptance. The time will appear, expressed in m/sec. related to the duration of the signal.

If this time must be increased or decreased for technical reasons, use "+" and "-" and confirm with "OK". The standard time set by us is 100 m/sec. Use "+" and "-" to increase or decrease by multiples of 10 m/sec.

**Section 3.b.
CREDIT PULSE LEN**

Change duration of credit time (for version 60)

This function programs the duration of the credit signal which can be expressed in seconds or minutes. The duration in seconds can be programmed up to 255 seconds, while that in minutes can be programmed up to 255 minutes. The counting precision is always 1 second.

Use OK to access the function and a number indicating the duration of the credit signal will appear. Use "+" and "-" to change the duration from 1 to 255 and OK to confirm the number. The display will indicate the unit of time used. Confirm and exit with OK.

**SECTION 4.
WARNING NOTICE**

Warning time (for version 30)

The progressive timer can give a warning signal before the time available is up.

This function sets when to give the warning signal. Access the function with "OK" and use "+" and/or "-" to change the time (from 1 to 255 sec.). Confirm any changes using "OK".

**Section 5.
CONDUCT OPTIONS**

Vending conduct: antijam option (multiple activations of the solenoid)

Access the function with "OK" and the status of the *antijam* option will be displayed. The indicated supplied is *OPT. ENGAGED* if it is ENGAGED and *OPT. DISENGAGED* if it is not. Use "+" and/or "-" to change the status and "OK" to confirm it.

Games conduct: PLAY FAST OPTION

Access the function with "OK" and the status of the option will be displayed. The indicated supplied is *OPT. ENGAGED* if it is ENGAGED and *OPT. DISENGAGED* if it is not. Use "+"

and/or "-" to change the status and "OK" to confirm it.

Note:

The conduct setting (vending or games) is programmed in the factory and cannot be changed using the Programmer.

**Section 6.a.
COUNTER RESET**

Cancelled coin counter (for versions 00 - 20 - 30 - 40 - 60 - 70)

This zeroes the coin counter. Access the function using OK and the counter contents will be displayed. Press "-" and confirm with OK to zero.

**Section 6.b.
COUNTER RESET**

Cancelled sales counters (for version 10)

This displays the abovementioned counters and cancels the counter displayed by pressing "-" and confirming with "OK".

**Section 7.a
COUNTER ENABLING**

Engage – disengage coin counters (for versions 00 - 20 – 30 – 40 – 50 – 60 – 70)

This engages or disengages the count of coins collected. Access using OK to display the service status. If "*OPT. DISENGAGED*" appears, the service is DISENGAGED, if "*OPT. ENGAGED*" appears, it is ENGAGED. To pass from one status to the other, press "+" and confirm with "OK".

**Section 7.b
COUNTER ENABLING**

Engage – disengage sales cycle counter (for version 10)

This function engages or disengages the sales cycle counting service.

Access using "OK" to display the service status. If "*OPT. DISENGAGED*" appears, the service is DISENGAGED, if "*OPT. ENGAGED*" appears, it is ENGAGED. The token machine increases the counter related to the lowest price when it collects a sum equal to the lowest price and, in any case, lower than the highest price, and increases the other counter when it collects a sum equal to or higher than the highest price.

**Section 7.c
CHANGE 1st THRESHOLD**

Engage / disengage sale threshold for price 1 (for version 10)

This engages or disengages the sales threshold. Access the function with OK. The words OPT. ENGAGED will appear on the display if the service is ENGAGED, while OPT. DISENGAGED will appear if it is DISENGAGED. Use “+” to change the status and “OK” to confirm it and exit the function. Every time the threshold is activated, the previous threshold and relative cycle counter will automatically be cancelled. The OK key for engaging also displayed the warning limit. The warning limit is a level under which the token machine display flashes to indicate that the products are running out. This limit can be changed using “+” e “-“and confirmed with OK. Once the token machine activation threshold has been ENGAGED, follow the instructions in section 1d to set the threshold value.

N.B.:*To activate this service the cycle counter must also be engaged. See section 7.b.*

Section 7.d
ENGAGE 2nd THRESHOLD

Engage / disengage sale threshold for price 2 (for version 10)

Proceed as for section 7.c to engage the second threshold.

Section 8.a.
CREDIT COLLECTION

Engage recover change (for version 10)

This function engages or disengages the recover change service. i.e.: the maintenance of credit for the next purchase remaining after the first purchase. Access the function using OK and the words OPT. ENGAGED will appear if the service is ENGAGED, while OPT. DISENGAGED will appear if it is DISENGAGED. Use “+” to change the status and “OK” to confirm it and exit the function.

Section 8.b
CREDIT COLLECTION

Recover credits (for version 40 - 60 - 70)

This function engages or disengages the service that prevents the loss of any accumulated credits if the machine is switched off voluntarily or accidentally.

Access the function using OK and the words OPT. ENGAGED will appear if the service is ENGAGED, while OPT. DISENGAGED will

appear if it is DISENGAGED. Use “+” to change the status and “OK” to confirm it and exit the function.

Section 9
RESET TIME CHANGE

Change the reset time (for version 10)

In the case of external reset, this function indicates the minimum duration of the reset signal which arrives from outside so that this is considered as such by the token machine. The time can be set with variations of 10 msec. from 10 msec to 2.55 seconds. The standard time is 100 msec. If the token machine has an internal automatic timed reset, this function sets the time after which the token machine removes the sale signal.

Section 10
DELAY SETTING

Programming the delay (for version 70)

When the token machine engages the last sale cycle, this function delays the release of the sale relay so that the machine can finish the cycle correctly. Access the function with “OK” and a number indicating the duration of the delay in msec. will appear. The time can be set with variations of 10 msec. from 10 msec to 2.55 seconds. It can be changed using “+” and “-” and confirmed using “OK”.

Section 11
OUTPUT TYPE

Collection signal mode (for version 00)

This function enables the choice of the collection signal mode. The choices available are: “parallel”, “binary”, “binary Confida”.

In parallel mode, the channels above the sixth must be redirected to the first six. The binary mode eliminates this restriction. In this case, output six acts as the signal which validates the other five outputs..

Access the function with “OK” and select the option required with + / -, confirming the choice with OK.

Section 12
DISPLAY OPTION

Display forward / back (for version 10)

This function pilots the display increase (from 0 to the sale price) or decrease (from sale price to 0). Access the function with “OK”. If the words OPT. DISENGAGED appear, the display

increases, while if the words *OPT. ENGAGED* appear, the display decreases.

Press "+" and "OK" to change the operating mode.

Section 13

DISPLAY TIME OPTION

Display time option (for version 60)

When the display (RM924) is connected to this type of token machine, the display shows the amount inserted until at least one credit has been acquired, then it displays the accumulated credits. Following the credit issue request, the display will indicate the drop in the credit duration. With this function it is possible to eliminate this last display.

Access the function with OK and the display will show the option status.

Use "+" to change the option status and "OK" to confirm it and exit.

Section 14

EXTERNAL RESET QUALIFICATION

Active or passiv (for version 10)

This function prepares the token machine for use on machines with different types of reset. If the display shows *OPT. DISENGAGED* the token machine works with Passive reset (Line 6), i.e.: with a reset obtained as a lack of availability (low level reset), while if it shows *OPT. ENGAGED*, the token machine works with Active reset (Line 8), i.e.: with a reset actuated with a phase impulse on line 3 of the token machine (high level reset).

Section 15a

EXTERNAL COUNTER – 3C

Repeat collection for external counter (for version 30)

This function engages the output for the activation of the coins collected counter.

Access the function with "OK", then select the option required using + / - and confirm the choice using OK.

Section 15b

EXTERNAL COUNTER – 3R

Engage key for timer by request (for version 30)

This function starts the time only when requested by pressing an external key.

Access the function with "OK", then select the option required using + / - and confirm the choice using OK.

Section 16

ECONOMIZER

Economizer (for version 30)

This function engages the use of the economizer when required by the appliance.

Access the function with "OK", then select the option required using + / - and confirm the choice using OK.

Section 17

RESET TYPE SETTING

Set timed external or internal reset (for version 10)

This function sets the type of reset. The choice is between timed external or internal reset.

Access the function with "OK", then select the option required using + / - and confirm the choice using OK.

Section 18

CHANNEL ENABLE

Engage / disengage token machine channel

This function individually disengages the token machine acceptance channels. With the DIP-SWITCH on the token machine it is possible to engage and/or disengage the first six channels (DIP in ON = corresponding channel disengaged). This function changes the engaged/disengaged status of all the channels; including channels 7 to 12 for RM4 and 7 to 59 for RM5.

Access the function with "OK" and the channel engagement status will appear:

- CHx ENGAGED = the channel is engaged;
- CHx DISENGAGED = the channel is disengaged.

Use the "+" key to scroll the channels and the "-" key to changes the engaged/disengaged status of the channel.

Use the "OK" key to confirm all changes.

Section 19

LIMIT CORECTION

Channel limit correction

This function expands the coin acceptance "bands". For each channel calibrated, the token machine has memorised the acceptance fields, one for each token machine control sensor. The function compares readings of the coins inserted with those memorised, automatically detects any discrepancies, allowing the expansion of the acceptance bands.

Access the function with OK and use the "+" key to select the channel to check. The display indicates the channel number. Confirm the choice with OK and access the coin check procedure for the channel chosen.

The display indicates "INSERT COINS" and the Programmer awaits the insertion of the coins to be checked..

When the coin is accepted by the channel chosen, the display shows the words "COIN ACCEPTED" for 1 second, and the programmer is ready to accept the next coin. If a coin is rejected, the words "OUT OF BAND" appear. Press OK to calculate the error. If the difference between the reading carried out by the token machine and that memorised during the calibration phase exceeds twice the admitted tolerance, the PROGRAMMER will not expand the band. The display will show the words "COIN BEYOND LIMIT". Press OK to exit the function. In this case the rejected coin is too different and it must be calibrated in another channel.

When correcting the channel, the words "CORRECT CHANNEL" appear. Insert another coin or press OK to exit the function.

Important:

The check is performed by inserting coins compliant with the calibration of the channel in question. E.g.: if the channel has been calibrated to accept 2 EURO coins, the check must be performed using 2 EURO coins only.

If no change must be made to the token machine because an unsuitable coin has been inserted or because an improper manoeuvre has been made, proceed as follows:

- keep the "OK" Button pressed without releasing it, then press "-"

Or:

- remove the Programmer or switch off the token machine.

6.4.4 Calibration procedures

General information

The Programmer offers a series of procedures to calibrate new coins.

These are:

- Section 20 Programming table of values

- Section 21 Calibrating a channel
- Section 22 Definition of replacement channel
- Section 24 Duplication

Important:

These procedures are extremely effective and equally dangerous. Consequently they must only be carried out by qualified operators.

The Comestero Group declines all responsibility for damages caused by the improper use of the functions available, such as the cancellation of calibrations, etc.

All calibration or correction operations must be performed with the token machine mounted on the machine on which it works or on the appropriate support.

Section 20

VALUE TABLE

Programming table of values

To perform counting operations the token machine needs to know the value of every coin calibrated.

Access the function with "OK". The basic value 1 will appear. Press OK, where present, to show basic value 2. When OK is pressed, you will be asked whether you wish to edit the first basic value; press "-" to change it or OK to leave it as it is. The change in value is made using "+" and "-".

The programmer will propose a series of values from which to select the new basic value 1.

Use OK to confirm the value required and the display will indicate the value memorised for the first channel. Use "+" and "-" to change the value, choosing from those proposed by the programmer and use "OK" to change channel. When calibrating a token, a value equal to the sale price of the first price or batch value, or equal to the second price or bonus can be attributed.

This is obtained by attributing value P1 or P2.

Note:

To update the table, scroll the channels using the OK key until the words "OK forward ESC -" appear. Only then is it possible to exit using "-".

Only in these points, exiting with "-", will the changes be registered and implemented in the token machine.

The "RM5" token machine can work with two basic values: the first for the first 30 channels

and the second for the others. The programmer displays both, but only the change to the first basic value. **If the first basic value has been changed, the second basic value will automatically be the same as the first** (just one basic value will be used for everything).

Section 21

CHANNEL ADJUSTMENT

Calibrating a channel

This function calibrates a new type of coin or token. It is necessary to have at least 10 pieces of the coin or token to be calibrated and to have the token machine read then using the procedure described below.

Press "OK" to access the procedure. The programmer will ask which channel must be calibrated; use "+" and "-" to scroll the channels, selecting the one in which to calibrate the new coin. Press "OK" to confirm the channel and the number of coins inserted will appear on the display. Now have the token machine read the calibration coins, inserting them one at a time at intervals such as to allow the last coin to leave the machine before the next one is inserted. The display will indicate the number of coins read by the token machine, When all the coins have been read, press "OK" to confirm the calibration. If at least 10 coins have not been inserted, the display will indicate that not enough coins have been inserted and you will be given the chance to insert more coins using the OK key or to exit using "-", cancelling the calibration procedure. If you decide to complete the calibration, inserting more coins, the count will continue. When "OK" is pressed, the Programmer asks you to choose the type of tolerance to allow. The choice is between "NARROW" or "WIDE" and is made using the +/- keys and confirmed with OK. The procedure is now complete and the token machine is able to recognise the coins for which it has been calibrated. The table of values must now be updated using the menu item "TABLE OF VALUES" (see section 20), informing the token machine of the value of the coins calibrated for any totalising or display operations.

If it is necessary, in the case of the validator, to issue the coin recognition signal on an output channel other than that calibrated, use the menu item "REPLACEMENT CHANNEL." (see section 22). This service is used when calibrating

coins with the same value but of "different" types on different channels and it is necessary to maintain a single output. Check the correct acceptance of the calibrated coins and expand calibration if necessary, using the menu item "EXPAND CHANNEL".

Important:

The ten or more pieces used must be a significant sample of the coin to be calibrated. They should be from different years of issue to consider the possible differences in the alloy used during each coining operations; use both new and used coins.

All calibration or checking operations must be performed with the token machine mounted on the machine on which it works or on the appropriate support.

Section 22

SUBSTITUTIVE CHANNEL

Programming the replacement channel

This function assigns a coin a different output channel that that for which it has been calibrated.

This enables the exit of several channels on the same output. It can be used in the case of different coins with the same value, or for coins in counterfeit form which might easily be accepted. The same coin is calibrated on two different channels, one with standard tolerance and the other with narrow tolerance, and one or the other is engaged in accordance with the real problem of acceptance of counterfeit coins. This is possible without changing the electronics of the machine on which the token machine is installed.

Access the function with "OK" and the display will indicate the channel chosen. Use +/- to choose the channel to be deviated. Confirm with "OK". The replacement channel will appear on the display and selection of that required is made using +/-.

The number of the replacement channel varies from 1 to 6 for the RM4 and from 1 to 59 for the RM5, or may be 0 when inactive.

Note:

If the separator is activated, the coins must use the first 4 output channels in parallel mode or the first 15 in binary mode.

Section 23

CHANGE CONFIGURATION

Change token machine configuration

This function changes the configuration of the token machine according to the following table:

- "VALIDATOR - 00"
- "TWO PRICES - 10"
- "GAMES - 20"
- "TIMER - 30"
- "CREDIT REQ. - 40"
- "CREDIT REQ. - 60"
- "PHOTOCOPIER. - 70"

Access the function with OK and change the configuration with + / - choosing on of the possible configurations from the table. Confirm the choice with "OK".

The programmer performs a restart to update the menu in accordance with the new configuration.

Section 24

CHANNEL DUPLICATION

Token machine duplication (RM5 only)

Enables acquisition from a sample token machine or a PC of all the customising and calibration parameters, using them to configure other token machines. The copies made will be absolutely identical to the sample.

The parameters read and copied are:

- channel calibrations
- channel engagement
- channel redirection
- table of values
- price table
- configuration

Access the function with OK and choose what to copy with + / -. The choice is between:

- COPY EVERYTHING (copies everything as listed above)
- COPY CALIBRATION (copies calibration channel + channel engagement + channel redirection)
- COPY VALUES (copies table of values + price table)
- COPY CONFIGURATION (copies configuration)

Confirm with OK and press + / - to choose the data font. The choice is between:

- 1) Miniprogrammer (itself)
- 2) Token machine (token machine acting as sample)
- 3) PC (through RS232 interface)

Confirm with OK and the programmer will ask whether you wish to continue. Press OK to proceed.

In the case of choice 1

(Miniprogrammer) the copy is made immediately and the operation is terminated after about 30 seconds.

In the case of choice 2

(Token machine) the data is read from the token machine connected and it will then ask you to connect the token machine to be copied. Connect the token machine, press OK and wait for termination of the copying operation.

In the case of choice 3

You will be told to connect the PC using the appropriate adapter. Launch the program CLONA5. Click "red file" and choose the file to download. Activate the PC's cloning button.

Press OK on the programmer to confirm the connection between PC and Programmer. It will read the data and, when complete, ask you to connect the token machine to be copied. Connect the token machine and press OK.

If it is necessary to register several token machines, at the end of the first or subsequent copies, press "OK" once and then again to confirm the request "PROGRAM ANOTHER RM5?". When confirming for the second time, it will proceed directly with copying the data chosen previously.

During the copying operation, any overlaps between the channels of the cloned token machine will be indicated.

Confirm with "OK" and again with "OK" upon the request "Make Copy?" if you wish to copy the data. Unwanted overlaps must be corrected later by recalibrating or selectively disengaging them.

Notes:

1) Programmer Memory:

Every time the data is partially or totally duplicated using a sample token machine or PC as the font, the data acquired is also copied in the memory of the programmer.

If it is to be used as a data font, you must be sure that the data has been loaded into it through a previous duplication between token machines or download from PC.

2) Reference channel calibration 60:

Standardisation uses the data memorised on channel 60 as the reference channel. If this is incorrect, you will be asked to proceed with calibration. You must answer yes otherwise the copying phase will abort. The programmer will ask for insertion of the gold reference token followed by the silver token five times. Upon completion the words “Reference Programmed” will appear and you will be asked whether you wish to copy the data. Press “OK” to confirm.

Section 25 OVERLAPPING

Search for overlaps between channels.

This function searches for any overlaps between channels. If any are found, the message indicating the first two will appear. Access the function with “OK”. Every time the “OK” key is pressed the next two overlapping channels will be displayed.

If there are no overlaps the message “No overlap” will appear.

Undesired overlaps must be corrected by recalibrating the channels indicated (see section 21) or selectively disengaging them (see section 18).

Section 27 MULTIPULSE OPTION (for RM5X00)

This function is activated when it is necessary to recognised several sizes/coins.

It associates one or more impulses proportionate to the value of the coin on the basis of its value, up to a maximum of 5 times.

When this function has been activated it is necessary to re-address the coins in the token machine as required.

Section 28 ANTI THIEF OPTION (for all versions)

This option blocks the token machine in the event of attempted fraud.

This option can be managed in two different ways:

- **Timed block:** does not accept coins for a pre-set length of time.
- **Time + code:** the token machine has a timed block and will issue an “alarm” signal on a free pin in the token machine which the user can operate as preferred (choose from the list below).

Vers. 00	The signal is sent to all pins
Vers. 10	The signal is sent to pin 5
Vers. 20	The signal is sent to 5 or 10
Vers. 30	The signal is sent to pin 5 or 10

Section 29 SORTER SELECTION (for all versions)

To set the address of the coins on the required separation code, proceed as follows:

- select the programming channel “select channel”
- than select “select output”.

Here are the output references:

- output 1: cashdesk
- output 2: Ch5
- output 3: Ch6
- output 4: Ch5+6

Section 30 FAST CASH

(for RM5G00 from Firmware vers. 3.06)

Engaging this function increases the level of discrimination of coins. This function is usually engaged when the consecutive drop of coins is very close.

Section 31 HOLED COIN (for all versions)

Activates the recognition of perforated coins (e.g.: Norwegian krone).

6.5 Programmer functions for EuroKey Plus

6.5.1 General information

The Eurokey programmer programs the key systems into the field, in Executive, Parallel or MDB versions, without using the PC program.

How to connect

Power is supplied to the device through the lock, which must be connected to the machine on which it works or to a test power supply device. The Programmer must be connected to the serial adapter on the back of the lock.

6.5.2 Menu of functions

The programmer functions are listed below, each with indication of the implementing lock.

MENU OF FUNCTION FOR EUROKEY

Executive version

PRICE MANAGEMENT	(See section 01)
TIME BRACKETS	(See section 02)
BONUS MANAGEMENT	(See section 03)
VENDING CHOICE	(See section 04)
CREDIT PERMANENCE	(See section 05)
READER CONFIGURATION	(See section 06)
NOTE VALUE	(See section 07)
TOKEN MACHINE CONFIGURATION	(See section 08)
COIN VALUE	(See section 09)
MAXIMUM KEY VALUE	(See section 10)
RECHARGE VALUE	(See section 11)
BASIC VALUE	(See section 12)
TYPE OF CURRENCY	(See section 13)
BLACK LIST	(See section 14)
MACHINE CODE	(See section 15)
COLLECTION READING	(See section 16)
COIN COUNTERS	(See section 17)
NOTE COUNTERS	(See section 18)
PRICE COUNTERS	(See section 19)
TIMER READING	(See section 20)
DATE CHANGE	(See section 21)
TIME CHANGE	(See section 22)
CODE CHANGE	(See section 27)
KEY ENGAGEMENT	(See section 28)
DISCOUNT KEY	(See section 30)

MENU OF FUNCTIONS FOR EUROKEY

Parallel version

PRICE MANAGEMENT	(See section 01)
TIME BRACKETS	(See section 02)
BONUS MANAGEMENT	(See section 03)
VENDING CHOICE	(See section 04)
CREDIT PERMANENCE	(See section 05)
TOKEN MACHINE CONFIGURATION	(See section 08)
COIN VALUE	(See section 09)
MAXIMUM KEY VALUE	(See section 10)
RECHARGE VALUE	(See section 11)
BASIC VALUE	(See section 12)
TYPE OF CURRENCY	(See section 13)
BLACK LIST	(See section 14)
MACHINE CODE	(See section 15)

COLLECTION READING	(See section 16)
COIN COUNTERS	(See section 17)
NOTE COUNTERS	(See section 18)
PRICE COUNTERS	(See section 19)
TIMER READING	(See section 20)
DATE CHANGE	(See section 21)
TIME CHANGE	(See section 22)
KEY TYPE	(See section 23)
RESET CHOICE	(See section 24)
KEY CHOICE	(See section 25)
TIME CHOICE	(See section 26)
CODE CHANGE	(See section 27)
KEY ENGAGEMENT	(See section 28)
DISCOUNT KEY	(See section 30)

MENU OF FUNCTIONS FOR EUROKEY

MDB Version

VENDING CHOICE	(See section 04)
MAXIMUM KEY VALUE	(See section 10)
RECHARGE VALUE	(See section 11)
BASIC VALUE	(See section 12)
TYPE OF CURRENCY	(See section 13)
BLACK LIST	(See section 14)
MACHINE CODE	(See section 15)
CODE CHANGE	(See section 27)
KEY ENGAGEMENT	(See section 28)
FAILED SALE	(See section 29)

6.5.3 Functions description

Section 01

PRICE MANAGEMENT

(Executive and parallel versions)

There are three PRICE MANAGEMENT MODES for Executive mode and one for parallel mode:

- **Prices managed by the distributor (Exe Vers.)**

Executive mode. In this case only the machine knows the sales prices. In this function it is possible to activate discounts which can be expressed as *Fixed Discount* or *Percentage Discount* (active from vers. 2.15).

- **Prices managed by both (Exe Vers.)**

Standard Serial mode. In this case both the machine and key system know the sales process and these prices must be clearly aligned with each other. In this function the sales prices must be set (from Price 1 to Price 10) and it is possible

to activate discounts which can be expressed as **Fixed Discount or Percentage Discount**.

– **Prices managed by the key (Exe / Par Vers.)**

Price Holding mode. In this case only the key system knows the sales prices. In this function the sales prices must be set (from Price 1 to Price 10) and it is possible to activate discounts which can be expressed as **Fixed Discount or Percentage Discount**.

**Section 02
TIME BRACKETS**

(Executive and parallel versions)

This function engages two sales time brackets characterised by discounts (**Fixed Discount or Percentage Discount**) and in the case of working in Standard Serial or Price Holding mode, decides which prices to apply.

For every time bracket it is necessary to establish whether it must be applicable to the Key sale (**Key**)

Or Cash/Key sale (**Cash+Key**); the type of discount (Fixed or Percentage), the start and end times.

**Section 03
BONUS MANAGEMENT**

(Executive and parallel versions)

This function issues bonuses as additional credit. For this function it is necessary to indicate the type of bonus (**Bonus type**), either **Always** or **After recharge** (to be implemented); the **Frequency** of issue - **monthly**, **weekly** (to be implemented) or **daily**; establish whether or not the bonuses must be added together if not used (**Bonus Accumulation: Accumulation /Periodical Reset**); the Value of the bonus (**Bonus value**) and lastly, in the event that accumulation has been selected, the maximum value (**Max bonus value**) of credit which can be accumulated.

**Section 04
VENDING CHOICE**

(Executive, parallel, MBD versions)

This function regards cash sales.

Set the **Individual sale** if you wish to use the full credit inserted for a single sale: set **Multiple sale** if you wish to use the credit inserted for several sales, maintaining the remaining credit.

Section 05

CREDIT PERMANENCE

(Executive and parallel versions)

This function allows the performance of **Timed sales**. It is possible to select **No expiry** so that the unused credit remains without time limits, or to select **Timed sale** to maintain the credit for a certain length of time to be set (**Credit remains for xx sec.**)

**Section 06
READER CONFIGURATION**
(Executive version)

This function sets the type of banknote reader to be used:

Parallel, Binary, Disengaged. Its level of engagement (**Low level** or **High level**) and whether to engage it with the key inserted in the lock (**Only with key**).

**Section 07
NOTE VALUE**

(Executive version)

In this function the values of the banknotes programmed into the reader must be set, paying attention to the correct correspondence between the channels of the reader and those of the table of values of the lock (from **Banknote 1** to **Banknote 7**).

**Section 08
TOKEN MACHINE CONFIGURATION**
(Executive and Parallel versions)

This function sets the type of token machine to be used: **Parallel, Binary, Binary Confida, Disengaged**, and its level of engagement (**Low level** or **High level**).

**Section 09
COIN VALUE**

(Executive and Parallel versions)

In this function the values of the coins programmed into the token machine must be set, paying attention to the correct correspondence between the channels of the selector and those of the table of values of the lock (from **Coin 1** to **Coin 15**).

**Section 11
RECHARGE VALUE**
(Executive, Parallel, MBD versions)

In this function it is possible to set the value of the individual recharge when using the appropriate recharge key.

Section 12

BASIC VALUE

(Executive, Parallel, MDB versions)

In this function it is necessary to set the value of the smallest coin of the currency to be used.

Section 13

TYPE OF CURRENCY

(Executive, Parallel, MDB versions)

In this function it is necessary to set the currency to be used (this field must be set for the MDB system).

Section 14

BLACK LIST

(Executive, Parallel, MDB versions)

In this function it is possible to deactivate up to 20 keys, reporting the serial number in the appropriate fields (from **Black list N 1** to **Black list N 20**).

Section 15

MACHINE CODE

(Executive, Parallel, MDB versions)

In this function it is possible to set a code to encode and identify the machine in which he key system is installed.

Section 16

COLLECTION READING

(Executive, Parallel versions)

In this function it is possible to consult the accounts of the lock, split up into the following items:

- Banknotes
- Coins
- Key charged
- Key discharged
- Sales
- Overpay
- Failed sale
- Bonus
- Discount key
- Free key
- Maintenance key
- Bracket 0
- Bracket 1

Section 17

COIN COUNTERS

(Executive and Parallel versions)

In this function it is possible to consult the accounts in relation to the total coins inserted in

the token machine, divided by programming channel.

Section 18

NOTE COUNTERS

(Executive and Parallel versions)

In this function it is possible to consult the accounts in relation to the total notes inserted in the reader, divided by programming channel.

Section 19

PRICE COUNTERS

(Executive and Parallel versions)

In this function it is possible to consult the accounts in relation to the sales made, divided by price line.

Section 20

TIMER READING

(Executive and Parallel versions)

In this function it is possible to view the **date** and **time** of the timer in the lock.

Section 21

DATE CHANGE

(Executive and Parallel versions)

In this function it is possible to regulate the **date** of the timer in the lock.

Section 22

TIME CHANGE

(Executive and Parallel versions)

In this function it is possible to regulate the **time** of the timer in the lock.

Section 23

KEY TYPE

(Parallel Version)

In this function it is necessary to set the type of system key (Type choice) to use:

- Version 10: Stepper at one price
- Version 20: Impulsive totalizer
- Version 30: Timer

Section 24

RESET CHOICE

(Parallel Version)

For version 10:

Select the Reset type:

- **External reset**
- **Timed reset a tempo**, in this case it is necessary to set the duration (Internal reset for X sec.)

Select the level of the reset signal (**Level choice: Active low or Active high**).

For version 20:
Select the Reset type:

- **Used**
- **Not used**

Select the level of the reset signal (**Level choice: Active low or Active high**).

For version 30:
Select the Reset type:

- **Used**
- **Not used**

Select the level of the reset signal (**Level choice: Active low or Active high**).

Section 25 **KEY CHOICE** *(Parallel Version)*

In this function it is possible to set the presence of a key which can be used to recharge the keys (RECHARGE KEY), or to make the sale (SALE KEY).

Section 26 **TIME CHOICE** *(Parallel Version)*

For version 20:
In this function it is necessary to set the duration of the credit signal in msec. (**Credit duration**).

For version 30:
In this function it is necessary to set the duration of the timing service (**Time choice**) which can be expressed in seconds (**Timer basic time xx sec.**) or minutes (**Timer basic time xx min.**).

Section 27 **CODE CHANGE** *(Executive, Parallel, MDB versions)*

In this function it is possible to change the **Management Code**, the **Location Code** and the **Machine Code** inserting the old code for each of them (**Retype the old code**) followed by the new one (**New code**).

Section 28 **KEY ENGAGEMENT** *(Executive, Parallel, MDB versions)*

In this function it is possible to engage or disengage the various type of key available for the lock:

- Configuration key
- Recharge key
- Discount key
- Free key
- Maintenance key

Section 29 **FAILED SALE** *(MDB)*

In this function it is possible to set how to manage a failed sale:

- selecting CREDIT MAINTAINED the credit inserted in cash or deducted from a key is proposed again.
- selecting CREDIT REMOVED the credit is stored and entered as a failed sale.

Section 30 **DISCOUNT KEY** *(Executive and Parallel versions)*

In this function it is possible to decide whether or not to allow the use of a discount key; in this case it will be necessary to set the Type of discount, i.e.: **Fixed** or **Percentage** (DISCOUNT TYPE) and its value (TYPE IN DISCOUNT % / FIXED).

7 LIMITS OF USE

- Using Programmer make sure that it is not placed near highly condensed or potentially inflammable jets, sprinklings or vapours.
- Do not use extensions or cables different from those included in the supply.

8 MAINTANANCE AND INACTIVITY

Replace the battery every six months even if there is no "battery dead" signal.

9 PRODUCT DISPOSAL

The disposal, if any, of the product shall be carried out in full compliance with the regulations in force.

Separate packing materials (paper/plastic) from the product and separately dispose them in the relevant authorised dumps.

10 GUARANTEE

Our change machines are guaranteed for a period of 12 months. The date and the serial number on the label shown below will apply. The label is placed inside the machine.

The guarantee will not apply in the following cases:

- Damage or breakage caused by transport.
- Damage or breakage caused by vandalism, natural disasters or malicious actions.
- Wrong installation or misinstallation of the product.
- Unsuitable or anomalous electric plants.
- Carelessness, negligence or incompetence in the use of the product.
- Non-compliance with the operating instructions.

Interventions for presumed defects or convenient checks.

The interventions for repairs will be carried out in our Gessate laboratory where the parts will arrive free of expenses. No assistance intervention will be carried out by COMESTERO Group at the customer's premises unless further to previous agreement.

For every piece of goods returned on repair account, a detailed description of the defect found out shall be attached.

The parts will be returned carriage forward.

At the expiry of the guarantee the assistance center will remain at your disposal. Furthermore the After-Sale Manager is at your complete disposal for any question you may have.

APPENDICE A:

Compatibility Map

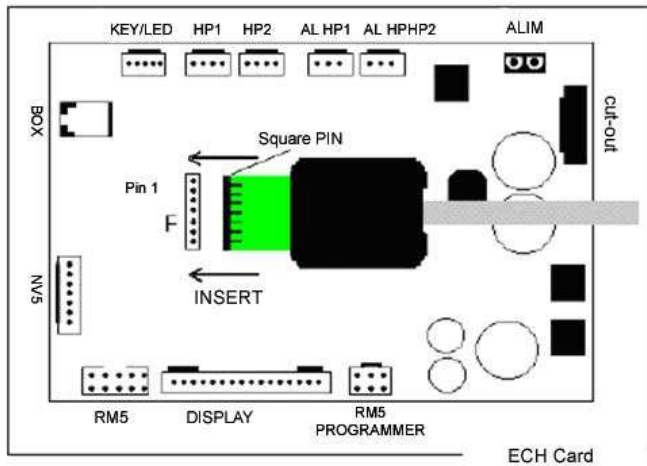
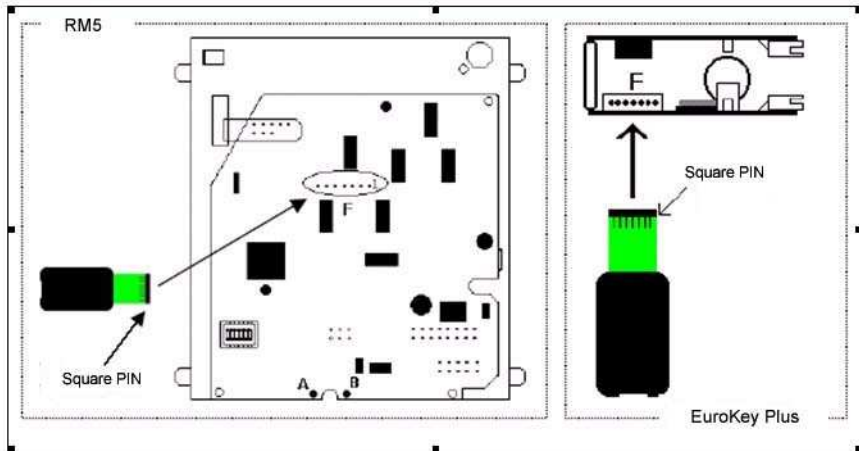
Only uses Traco version 1.11 of 26/04/04

The firmware to use with the program in question in of the *.upp type and comes with the Traco 1.11 installation CD-Rom.

<i>TYPE OF MINIPROG.</i>	<i>MCU</i>	<i>Version</i>	<i>Date</i>	<i>Files managed</i>
UPGRADER	GP32	2_10	07/05/04	ECH IN ALL LANGUAGES(3_02)
				EUROKEY EXE (2_14 E 2_15)*
				EUROKEY MDB (1_00_B)*
				EUROKEY PARALLEL (1_21)
				PROGKEY (1_20)
				MINIPROG_RM5 (4_00)
	AZ60	2_10	30/04/04	AUTOCOIN (3_33)
				BOOBALOO GADGET ISSUER (1_20)
MINIPROG_RM5 (PROGRAMMER FOR TOKEN MACHINES)		4_00		FIRMWARE UPDATE
				TRANSFORMATION TO UPGRADER OR PROGKEY
PROGKEY (PROGRAMMER FOR KEY SYSTEMS)		1_20		FIRMWARE UPDATE
				TRANSFORMATION TO UPGRADER OR MINIPROG_RM5

APPENDICE B:

Pictures of programming adapters





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