

**CHANGEGIVER
SIX**

User's Guide

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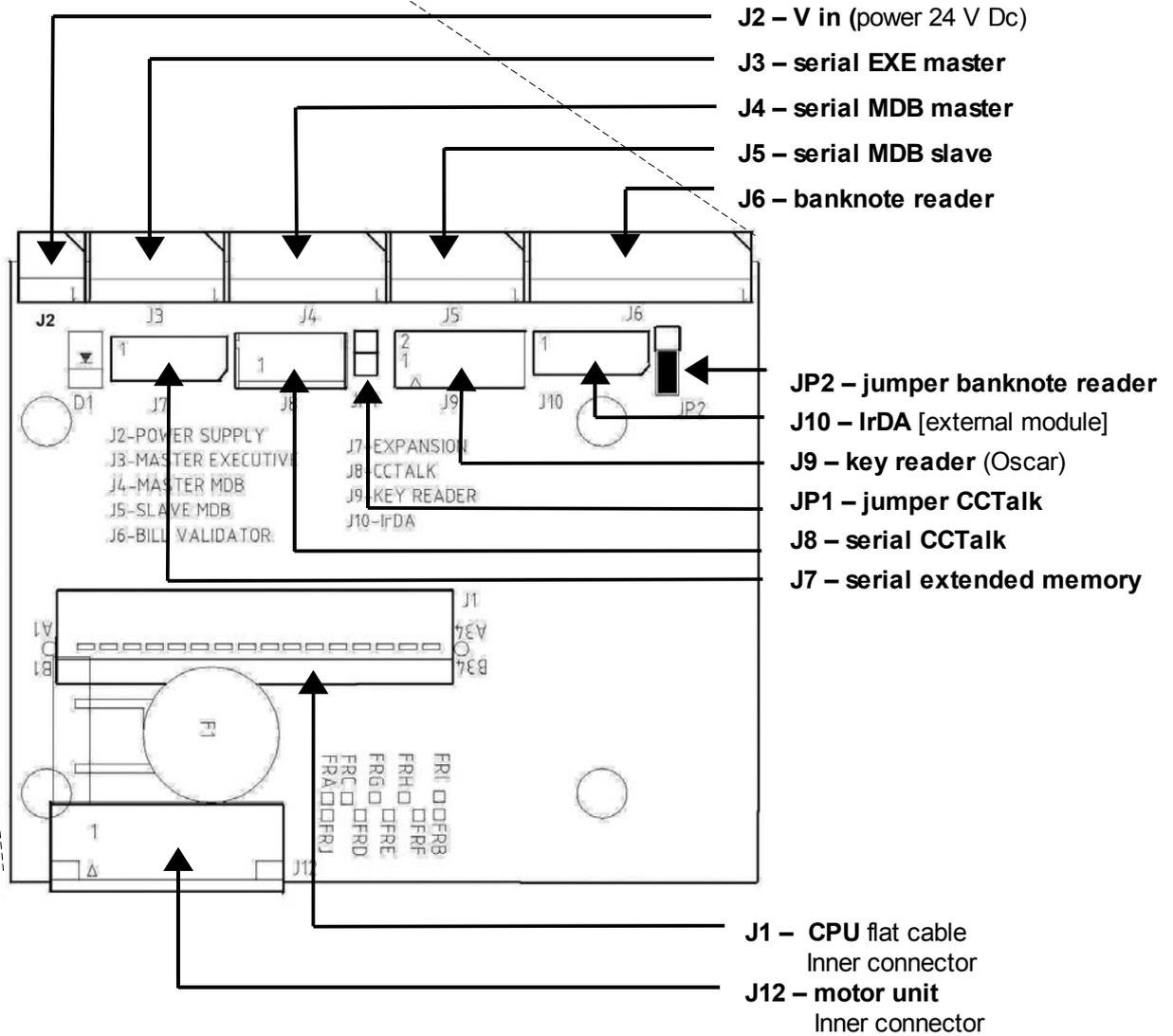
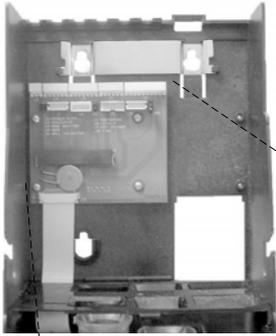
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Foreword

This User's Guide has been updated to sw. rev. 2.00.00

- Read this manual carefully before use.
- This guide is only valid for the model SIX – Change giver
- Instructions about system configuring are mostly referred to Programmer P3000. In order to simplify configuring operations, we suggest you should use “PC Configurator” (fully compatible with Win95/98/00/xp)
- Before the validator is installed, check voltage compatibility with Vending Machine. Read the nominal values on labels (tolerance $\pm 10\%$).
- Change giver SIX is a product for internal electrical equipment for Vending Machines.
- Do not use the product in water or near liquids or in places where it may become wet.
- Do not use the product near smoke or inflammable gases.
- Cut power before working on electrical and/or mechanical parts.
- Dispose of the device in accordance with environmental laws (DO NOT burn).
- Always read labels.
- Do not tie the system main cables or cables belonging to slave units.
- Periodically check cables are correctly plugged on connectors.
- Do not use extension cables.
- Cut power before maintaining and/or cleaning.
- Use a damp cloth to clean plastic parts. Be careful not to scratch the lens of the Laser reader.
- Keep the surface of the money chute clean.

Connectors



Connectors and plugged-in devices

See Fig.1 and 2 (p.5)

J1 (68 pins Flat)

CPU connection to CPU (MCB2 Main Control board)

J2 (2 pins)

V in (supply)..... power IN (24V AC/DC rated)

- serial ICP/MDB: 34V DC (20-40V DC)
- serial EXE: 24V AC
- BDV: 24V DC

J3 (5 pins)

Serial EXE serial connector (Master)

- Executive: cable CB.01060
- BDDV001: cable CB.01803

J4 (6 pins)

MDB Master connector for an external MDB slave unit: Banknote reader, Cashless reader (cable CB.01915)

J5 (5 pins)

Serial MDB serial connector MDB (Slave); cable CB.01824

J6 (9 pins)

Banknote reader connector for a Banknote reader [select model by means of P3000 (Fn 00) or click on “Bill Validator” on PC Configurator main window].
Power supplier is not included (extra). Read instructions by the Reader manufacturer.

JP2 (jumper)..... Banknote reader operating mode

- Pin 1-2: power supply to banknote reader (34V DC nom.; rating: 20-40V DC).
- Pin 2-3: inhibit signal to the banknote reader.

NOTE: read Banknote reader User's Guide before the jumper is plugged.

J7 (4 pins)

Serial extension connector for Serial extended memory (printer...)

J8 (10 pins)

Serial CCTalk serial connector for devices working with CCTalk protocol.

JP1 (jumper)..... serial CCTalk device operating mode

- jumper open: serial mode with separate TX and RX (level TTL).
- jumper closed: serial mode CCTalk bus (TX and RX on a single thread)

J9 (10 pins)

Key reader connector for the following Oscar Key readers:

- standard cable CB.02638
- standard IrDA cable CB.02639
- mifare® IrDA cable CB.02489
- mifare® cable. CB.02396

J10 (4 pins)

IrDA serial IrDA with Protocol DDCMP EVA-DTS

- external IrDA module on demand (item code AL40.426)

J12 (18 pins Flat)

Motor unit connector for motor unit electronic board (CECB2)

J13 (4 pins)

P3000 serial connector for

- Programmer P3000
- PC (VECOP, Configurator); cable CB.01491

J14 (6 pins, red)

SIB connector for SIB (optional).
Plug the SIB for software upgrade and/or system configuring.

J15 (4 pins, red)

LCD connector for graphic Display EYE (optional)

- item code AJ000005300

Installation

1. Cut power.
2. Press the latch and remove the front cover (*Fig. 1*).
3. Press the release lever (*Fig. 2*), then pull the selector forward.
4. Unplug the flat cable (press release latches on both sides) and remove the selector (*Fig. 3*).
5. Hang the Change giver on the rear panel (*Fig. 4*).
6. Tighten snugly.
7. Plug flat cable and position the selector in its seat (the latch must click shut).

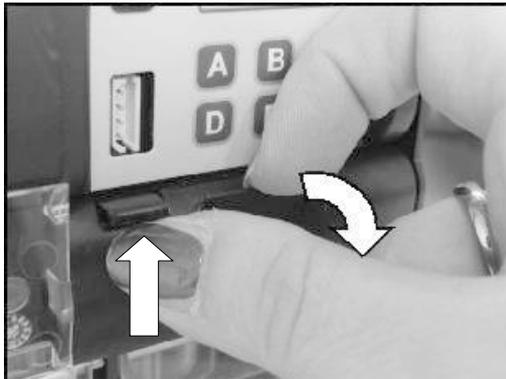


Fig. 1

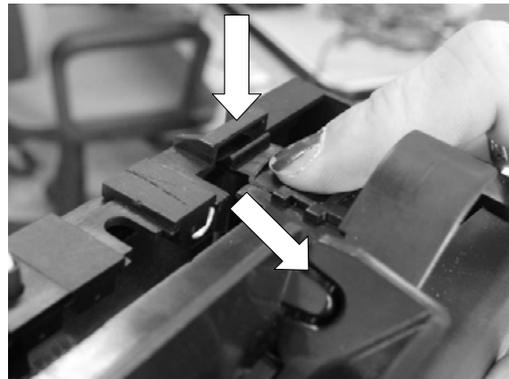


Fig. 2

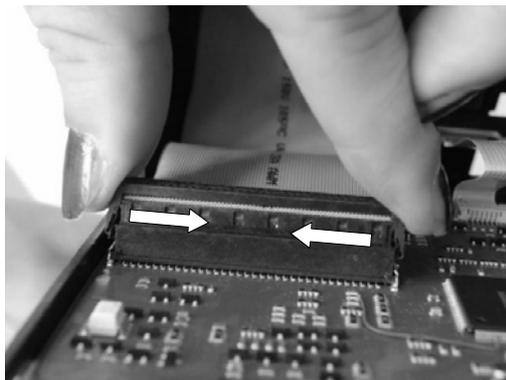


Fig. 3

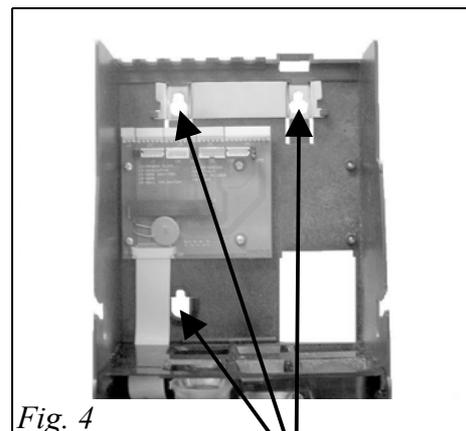


Fig. 4

Mounting holes

ATTENTION

- The entry coin chute must be in line with the machine's. Insert a few coins (power OFF) and check they fall in the coin recovery channel.
- Check the payout channel is in line with the payout module on the machine.
- The coin recovery lever must be free. Check there is a gap of 2 mm. at least between the return lever of the machine and the validator. Adjust, if necessary.
- Press the coin recovery lever/button on the machine and check the lever on SIX has been pressed right down. The validator door must be opened wide (che coin entry slot opens up to 25 mm ca.)

Starting the system

When giving power, the following messages are displayed:

-,-,-,-	software release
Euro	Euro configuration
CAL	system self-calibrating
P3000	connecting with P3000
0,00	starting credit, system ON
No link	no serial link has been established with the machine

Configuring the system

The product is configured with the selected protocol; you simply have to fill the tubes and the System is ready for use. Check the main functions:

- General parameters (Fn00)
- Unit Scaling Factor (USF) and Changegiving parameters (Fn01)
- Prices (Fn04)
- Adjust empty/min./max. level in tubes (Fn09)
- Adjust key parameters, when necessary (Fn06)
- Install an MDB slave unit, when necessary

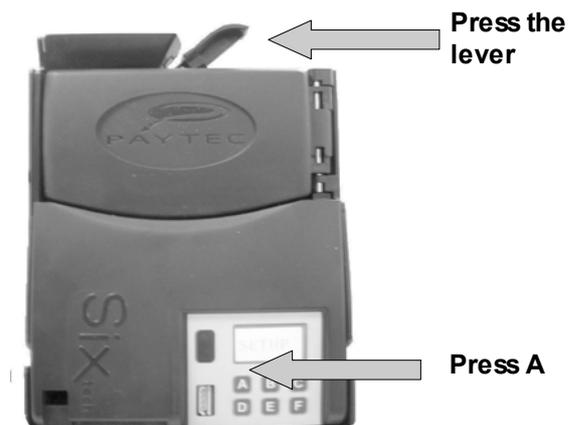
Filling the tubes

SIX is configured with a max. level in tubes by default (the level is different for each group of tubes). The max. level can be customized in **Fn09** (with a P3000).

In Fn16 you can reset the coin counter for each tube. Reset counter just in case a tube is emptied and changed.

Filling procedure:

1. Change giver ON.
2. Press the recovery lever and, while keeping it pressed, press **A**, too.
3. Release both lever and button A: the message "**FILL**" is displayed.
4. Drop one coin at a time; you needn't follow the tube order. When the max. level has been reached in a tube, no more coins are accepted.
5. If you wish to exit "fill mode", you can choose one the the following procedures:
 - press **LEVER + A**
 - wait 30 secs.
 - Switch **SIX OFF** and **ON** again



NOTICE: in "FILL" mode, the number of coins in the tube is displayed; if the tube is being emptied, the number displayed is gradually reduced

Installing an MDB slave unit

SIX is equipped with an output cable for connection to an MDB slave unit (either a Bill Reader or a Cashless System); when the banknote reader is equipped with a double connector, slave units can be connected in parallel.

The slave unit is automatically recognized.

Adjust the following parameters in Fn00 (when an MDB unit is connected)

The parameters in Fn00 must be configured, otherwise the MDB slave unit won't be working correctly.

The system can be configured so that coins and banknotes are only accepted after inserting the key – no matter if the validator is either an MDB slave unit or an Oscar Reader plugged on J9.

Coins enabled with
Key-Card ?

- N Coins are always accepted
- Y Coins are only accepted when a key/card has been inserted in Cashless MDB or Key reader

Bills always
enabled ?

This option allows you to inhibit banknotes if the key has not been inserted in the reader (MDB unit, Oscar Reader or any other Paytec reader connected).

- N Banknotes are only accepted when a key/card has been inserted.
- Y Banknotes are always accepted.

Notice

Select « Y » when no Cashless System has been installed, otherwise banknotes are not accepted.

Bills Validator
On in Ex-Ch? ?

- N Banknotes are not accepted with Exact-Change condition ON
- Y Banknotes are also accepted with Exact-Change condition ON

Programmer P3000

The P3000 is a programming/servicing unit which must be plugged on the 4-pin connector on the front panel (fig.4). Cut power before plugging/unplugging the P3000 flat cable.



Fig. 5

P3000 keyboard

- F** > Enter function menu
> Confirm a setting
> Scroll down parameter list
- E** > **EXIT**_Exit a Function
- C** > **CLEAR**_Delete a setting (back to previous setting)
- A** > Scroll down Function list
- B** > Scroll back Function list
- 1** > **YES** (or **1**)
Press 1 for "Y", when a Y/N setting is required
- 0** > **NO** (or **0**)
Press 0 for "N", when a Y/N setting is required

P3000 specifications

- Power supply: rechargeable battery (8.4V - 120mAh NiMH)
- Power consumption: 60 μ A (standby); 20 mA ca. (infrared ON)
- Display: LCD backlighted (16x2) with function menu
- Use without battery: programming functions
- Use with battery: programming functions, data readout via infrared device
- Battery charger: model CHARGE-05 (optional)

Battery

Recharge batteries with battery charger CHARGE-05. When the message "BATTERY LOW" is displayed, recharge batteries as soon as possible. Insert a recharged battery within 30 seconds, otherwise data will be lost.

Entering Function menu: plug the P3000 on the special connector (System OFF), give power and wait till the password is required.

Messages on P3000 LCD

ENTER
PASSWORD: -----

Enter the password within 5 seconds, then press F

If the password is not entered within 5 seconds, connection is cut with the P3000 and a new connection established with the changeover.

PAYTEC SIX900S
*** Ver. .-.-.-.-. ***

"SIX" software release

Language:
English

Select a language (press **A** or **B**), then press **F** to confirm (multi-language models).

00 General
Parameters

Press **F** to enter the function, or press **A** (next) or **B** (back) to scroll the function list.

Function List

Configuring instructions are mainly referred to Programmer P3000. If you wish to simplify the configuring procedure, we suggest you should use "PC Configurator" (fully compatible with Win95/98/00/xp)

Function list

00 General Parameters

This function contains the main parameters: operating mode (select serial protocol), max. credit cash/on key, Banknote reader parameters, date/time, machine code, currency description (Euro / N.C.U.).

01 Unit Scaling Factor

Enter the smallest credit unit (Euro = 001) and adjust changegiving parameters.

03 Coin Values

This function enables users to read/modify configuration for each coin channel, select coin destination (tube/cashbox), adjust inhibit parameters and tolerance values on coin discrimination, etc.

04 Prices and discounts

Enter prices and discounts.

05 Bill Values

Enter the value of the banknotes accepted by the bill reader connected.

06 Cashless Parameters

(Adjust parameters when Oscar Key reader is connected).

Enter PINs for Keys and other checking parameters for credit on key.

07 Time bands

This function contains timed functions: 4 timed ON/OFF, 2 hours for discounts, 1 hour for FreeVends, 1 hour for Free Credit.

08 Coins programming

This Functions is used to configure coin channels.

09 Level in Tubes

Adjust coin level in tubes: minimum, maximum and Exact-Change; number of coins in tubes.

10 Security

Safe mode can be activated here: PINs on keys are only programmed by inserting an AccessKey (PINs can be no longer modified with Configurator / P3000 - unless the system is reset).

11 Fidelity

Either credit or points can be given for each purchase to fidelize clients.

12 Audit (password required)

The function includes options for extended audit, audit reset key, readout of extended audit, no. readouts, modify audit password and audit reset.

13 Cash Credit Overpayment

You can decide whether residual cash credit must be displayed for 3 mins or not (when lower than the lowest price). This option can be further modified in Fn15 ("Timeout cash Off?").

15 Miscellaneous Options

Here is an option preventing users to load keys with cash. More options: Exact change signal OFF, price increase with cash (the price is increased when a product is paid with cash), timeout cash OFF, FreeVends only with key, audit 0 to 99.

16 Adjust Level in tubes

This special Function gives users the opportunity to reset the number of coins in tubes (after this value has been reset, tubes must be emptied).

17 Price Holding Setting

Associate selection number on Vending Machine with price number on SIX

Prices are thus controlled by the payment system – discounts can be given for each price.

18 Cashless options

A fictitious credit can be created to give Free Vends (Executive Protocol) to those keys with no credit left. Next is an option to inhibit check on Location Code (both PIN and Operator Code are checked, though). Finally is an option to enable unlimited credit on Test Key.

19 99 selections

99 prices can be activated (with 99 discounts).

Enter “Y” to control up to 99 prices in Executive Price Holding or BDV001.

20 Selection options

You can decide here to inhibit either Free Credit or Free Vends for one or more selections (1 to 99).

21 Cash Test and Max. Change

Here are an option to adjust max. change in single vend and a special option to test acceptance for coins/banknotes (insert Test Key, first): whenever a coin/banknote is inserted, its value is displayed for 3 secs.

22 Free Credit and Free Vends

Here are options about Free Credit, Free Vends and Special Discounts for Key 1 (only options about Free Credit are available for Key 98).

23 Diagnostics

Special function to read/reset system errors, or read status optical sensor.

26 Country code

Enter the international phone code (MDB protocol only).

27 Conversion keys

This is a special function permitting users to modify Key codes from the system.

30 – 31 – 32 – 33 Black List

Fn 30 to 33 give users the opportunity to inhibit/re-activate keys, view key codes, reset Black List.

35 Token

Here are options about mixed credit (Coins+tokens); you can, for instance, inhibit change when a token has been inserted.

36 Discounts & Free Vends Key98

Here are options about Special Discounts and Free Vends with Key 98.

38 Euro Parameters

Adjust parameters to start automatic conversion to the Euro (change rate, conversion date, NCU validity deadline, mix coins in tubes, etc.).

39 Euro Conversion

Euro conversion started by operator. When the system has already been configured in Euro (currency description = 978), the function is inhibited.

Fn00 – General Parameters

All the parameters in this Function must be set (a parameter being omitted might cause a malfunctioning).

DataBox : N=P3000 Y=EVA-DTS	Select databox for Audit readout. N Programmer P3000. <i>PSION can also be used (P3000/Slave mode) and plugged on RS232 port (cable CIC1 - item code CB.01491).</i> Y Standard Protocol EVA-DTS (<i>PSION in EVADTS/Master mode</i>)
Start DDCMP/Irda at 9600 bauds ? N	Adjust IrDA speed N Standard. Communication is started at 2400 bauds and is later synchronized with the terminal speed (38400 max.) Y Communication is started at 9600 bauds (only with terminals starting communication at 9600 bauds).
External IrDA interface ?	N No external IrDA has been connected. Y Either an external <i>IrDA module</i> or an Oscar reader with IrDA has been connected. <i>External IrDA is an optional unit (item code AL40.426)</i>
Executive Protocol ?	N Protocol inhibited (next). Y Executive protocol enabled.
Price Holding mode ?	N Executive standard (prices are controlled by the Vending Machine). Y Executive Price-Holding (prices are controlled by SIX). Enter prices in Fn04, then match prices to selection numbers in Fn17 (<i>up to 99 prices - Fn19</i>). The corresponding Price Holding mode must be set on the Vending Machine.
Send price to VMC ?	Option valid in Price Holding mode N Standard Y The price is transmitted and displayed on the Vending Machine when a selection button has been pressed (no credit available yet).
MDB-ICP Protocol ?	N Protocol inhibited (next). Y Protocol "MDB slave" activated.
BDV-Master Protocol ?	N Protocol inhibited (next). Y Protocol "BDV001 master" activated.
Charger mode ?	N Charger mode inhibited (next). Y Give power and all coins/keys are accepted (without serial protocol).

Machine code 1234567	Enter identification number (1 to 9999999). The number appears both on paper printouts and in DDCMP audit file.
Machine type 1	Enter a number (1 to 99) for machine type. The number does not appear on Audit printouts but is present on DDCMP audit file.
Currency description 978	Enter "978" for EURO-configured systems. <i>Once you have entered "978", the value cannot be modified (unless the whole system is reset).</i> Enter any number from 1 to 100 for those countries that have not joined the Euro zone.
Coins only with Key-Card ?	<i>This option is only valid when either an MDB Cashless Reader or "Oscar" Key Reader is connected.</i> N Coins are always accepted. Y Coins are only accepted after a key has been inserted
Bill Validator connected ?	<i>Enter "Y" when a Banknote validator has been plugged on inner connector (J6 – 9pins). Leave "N" when an MDB Reader has been plugged on the external cable.</i> N The system won't check whether a bill reader is connected. Y Banknote validator plugged on J6 (<i>contact PAYTEC for the connecting cable</i>). Select a banknote validator and consult Table3 for inhibit level.
Coges LMB ?	N Coges "LMB" is not connected (next). Y Coges "LMB" in parallel mode.
Coges Eureka or Edue F30 ?	N Coges "Eureka" is not connected (next). Y Coges "Eureka" in binary mode.
Smiley NV4-5 or Edue Primo V10 ?	N Smiley NV4-5 is not connected (next). Y Smiley NV4-5 in parallel mode. "Smiley" readers enable users to inhibit single banknotes.
Binary mode ? N	N Smiley reader with parallel outputs. Y Smiley reader with binary outputs. <i>Data-valid signals are not controlled.</i>
CBV IVO/B2 ? N	N "CBV IVO/B2" is not connected (next). Y "CBV IVO/B2" in parallel mode (only valid with 100 msec. outputs).
CBV 125 JO1/A25/A2A ?	N "CBV/125" is not connected (next). Y "CBV/125" in parallel mode (only valid with 100 msec. outputs).
JCM EB-100 or ICT-A7 pulse mode	N JCM EB-100 or ICT-A7 are not connected (next). Y JCM EB-100 or ICT-A7 in pulse mode.

Enable single bill ?

- N All the banknotes are accepted.
- Y Every banknote channel can be dynamically enabled/inhibited (compatible readers only). All those banknotes are inhibited whose value - added to the credit displayed - is higher than the max. credit programmed.

Enable all bills high ?

- N Signal "enable" low (0.4V/50mA max.)
- Y Signal "enable" high (PVcc/50mA/Pull-Up 1K)

Enable single bill high ?

- N Signal "enable" low (0.4V/50mA max.)
- Y Signal "enable" high (PVcc/50mA/Pull-Up 10K)

Table 3 – possible configurations Bill Reader with Cashless connected

		JCM EB-100 or ICT-A7 pulse mode	COGES LB8 24V	COGES EUREKA 24V	CBV 125/J01 125/A2A 24V	CBV IVO/B2 24V	SMILEY T1/NV4 12VDC	SMILEY NV4 inhibit single bill
Function 00	Bills always enabled ?	N	N	N	N	N	N	N
	Enable single bill ?	N	N	N	N	N	N	Y
	Enable all bills high ?	N	Y	N	Y	Y	N	-
	Enable single bill high ?	N	N	N	N	N	N	N

PAYTEC is not responsible for any change on product specifications.

After banknote reader parameters have been set, go to Fn05 and enter banknote values (Euro banknote1=5.00 banknote2=10.00)

The two parameters here below must be also set when an MDB Bill Reader is connected as a slave unit (plugged on the external cable).

Bills always enabled ?

- N Banknotes are only accepted after a Key has been inserted.
- Y Banknotes are always accepted (with/without Key).

Bill Validator ON in Ex-Ch ?

- N Banknotes are only accepted when tubes are full.
- Y Banknotes are also accepted when tubes are empty (no change can be given, though).

Decimal Point
Position LCD 0

Decimal Point position on LCD.
0 = credit is displayed without decimals
2 = credit is displayed with cents (EURO).

Maximum credit
Cashless: 10000

Max. credit that can be loaded on the key.
Max. value: 65535 (€ 655.35)

Maximum credit
Cash: 10000

Maximum credit accepted with cash (coins and/or banknotes)
Max. value: 65535 (€ 655.35)

Graphic display
connected ?

N Graphic display "EYE" is not connected.
Y Graphic display "EYE" connected.

New Password:
 12345

Either press **F** to confirm the present password, or enter the new password and press **F** to confirm (65535 max.)

Date
dd/mm/yy 010906

Adjust date (day, month, year).

Time
hrs/min 1230

Adjust time (hours, minutes).

Fn01 – Changegiving Parameters and Unit Scaling Factor (USF)

Unit Scaling
Factor 001

This is the smallest credit unit transmitted to the Vending Machine in Serial Protocol. Enter the value of the smallest coin accepted.

USF EURO = 001

Max. value with Executive protocol = 255

Change without
vend ?

N STANDARD (committed to vend)

Once some money has been inserted, it won't be given back; change is only given after a vend.

Y Money is only given back without a vend (money changer) if the credit amount is equal to or lower than the max. change value. Press the opening lever to get your money back.

NOTE: the system stops giving change when tubes reach the empty level.

Multivend ?

N SINGLE VEND

Change is automatically given after a vend. *You can enter a value for max. change in Fn21; if you don't, change is given till tubes are completely empty.*

Y MULTIVEND

Customers can make more vends and then press the return lever to get their change. Max. credit is set in Fn00.

Delay change
after vend: 0

Standard = 0

(This option is only valid in Single-Vend).

Up to 30 secs. may pass before change is given after a vend. This option enables a Cashless system connected¹ to load credit on the key (in that case, no change is given).

Maximum change
 1000

Max. change after a multivend. For higher values, the difference is

displayed for 3 minutes, then it is cleared and stored in Audit as "overpay".

Max. value : 65535 (€ 655.35)

Enter Fn21 to limit max. change in single vend.

Custom Change
amount: 100

Custom Change

Both the change amount and the number of coins to be paid out from each tube can be customized.

(0 = change is automatically calculated and given by SIX)

Custom Change
Tube 1: Coins 0

Enter the number of coins that must be paid out from each tube; if the change value is higher than the default value, SIX automatically gives the exceeding change.

¹ Here is meant a Cashless system by a different manufacturer (master/slave configuration)

No. selections
Exact-Change ? 0

- N** Option inhibited (default).
Y This is the number of cash vends available with Exact-Change ON. When more vends are made and the Exact-change condition is still ON, time/date of Exact-change ON is stored in the Audit. When the Exact-Change condition is over, the counter is reset.

Example: enter “3” and the Exact-Change condition will only be registered in the Audit file from the fourth vend made in Exact-Change.

Here is the record:

EA1*OBK_ON*yymmdd*hhmm Time when event in ExCh has started
EA1*OBK_OFF*yymmdd*hhmm Time when event in ExCh has terminated

Notice

If you wish to limit the max. change in Single Vend, adjust the following option in Fn21

Max. change in
single vend ?

- N** STANDARD. Change is given with the coins still in the tubes.
Y Change is limited to max. value in Fn00.

Fn01 – Automatic “Exact-change”

SIX automatically fixes a combination of tubes at MIN. level starting the “exact-change” condition. The Exact-Change condition is determined by the following elements:

- Coin with the lowest value in tubes
- Minimum change unit
- Maximum change programmed

The Exact-change condition is started when:

1. the minimum change unit is lower than the lowest value of coins in the tubes
2. the total amount in tubes is lower than the max. change payable

Fn03 – Coin Parameters

Parameters can be read/modified for each coin in **Function 03** (up to 30 coin channels).
 Enter a channel and press **button F** if you wish to scroll down and read the list of parameters.
 Press **button E** to exit a function.

Adjust coin parameters with the utmost care; an incorrect setting might prejudice coin discrimination level.

- | | |
|-------------------------------|--|
| Select coin No. 1 | Enter the number of the coin channel, then press F to confirm. |
| Coin No. 1
Euro ? | N The tube selected contains other coins than EURO.
Y The tube selected contains EURO coins.
<i>EURO coins are only accepted by "currency description" = 978 (Fn00)</i> |
| 1^ Coin value: 50 | Coin value (65500 max.)
Enter the coin value, then press F to confirm.
This value must be equal to or a multiple of USF in Fn01. |
| List coin options 1 ? | N The first coin parameter is displayed (diameter)
Y Scroll down the whole menu list |
| Coin No. 1
inhibit ? | N The coin is accepted.
Y The coin is NOT accepted.
<i>When the same coin type has been set in more channels, each channel can be inhibited/enabled separately. All coin channels are checked when a coin is inserted.</i> |
| Coin No. 1
FAGE Coin Set ? | N The channel is either free or re-programmable.
Y The channel is not available (only-read parameters).
<i>Channels set as "Y" usually contain default values. Don't edit parameters in these channels because these are reference values in the case of servicing/repairing. An FCS channel can be inhibited but never modified.</i> |
| Coin No. 1
Black Coin ? | N The coin is always accepted.
Y BLACK COIN channel (the coin is rejected).
<i>The standard setting is "N"</i> |
| Coin No. 1
Tube 1 ? | Coin destination (to be programmed for each tube)
N The coin DOES NOT fall in tube 1
Y The coin falls in tube 1 (tube A)

> If you leave " N " for all the tubes, the coin falls in the cashbox.
> When the destination tube is full, the coin falls in the cashbox.
> A coin can be routed to more tubes (check compatibility in diameter) |
| Coin No. 1
Tube 2 ? | |
| Coin No. 1
Tube .. ? | |
| Coin No. 1
Tube 6 ? | |

Coin No. 1
Exact-Change ?

- N The coin is ONLY accepted when tubes are full (Exact Change OFF).
- Y The coin is ALWAYS accepted (even when tubes are empty).

- > Select "Y" for coins which are supposed to fall in tubes.
- > Select "Y" for low-value coins, which are used to pay a vend in Exact-Change.

Coin No. 1
with Cashless ?

- N The coin is always accepted (following parameters previously set).
- Y The coin is ONLY accepted when a key has been inserted in the reader (J6); Exact-Change condition is ignored. When the max. credit on key has been reached this coin is no longer accepted.

Coin No. 1
token ?

- N STANDARD.
- Y This coin is handled as a token (you can configure the system so that change is not given for payments with tokens – more info on change/token in Fn35).

> Here starts the list of coin parameters <

DELTA values are calculated automatically and they are an average value of the measures of all the coins inserted. EURO coins can be automatically configured with VECOP.

Coin No. 1
Diameter: ----

Diameter.
This is the coin diameter automatically measured by the system.
Do NOT modify.

Coin No. 1
D-Diameter: ----

Delta Diameter.
Tolerance on "diameter".

Coin No. 1
Thick.Ind.: ----
D-Thick.Ind.: ---

Thickness inductive (inductive value on coin thickness).
Do NOT modify.

Delta thickness.
Tolerance on coin thickness.

Coin No. 1
AlloyAmpl.+ : ----
D-AlloyAmpl.+ : --

DLX (instant measure on coin alloy).
Do NOT modify.
The measure is taken by "Enab.AlloyBord = Y"

Delta DLX.

Coin No. 1
AlloyPhase- : ----
D-AlloyPhase- : --

Alloy Phase Negative (alloy value).
Do NOT modify.

Delta Alloy Phase Negative.

Coin No.	1
AlloyPhase+ : ----	
D-AlloyPhase+ : --	

Alloy Phase Positive (alloy value)
Do NOT modify.

Delta Alloy Phase Positive.

Coin No.	1
Enab.AlloyBord. : Y	

Enable Alloy Border. Select "Y" to measure the following parameters:
AlloyAmpl.+(DLX); AlloyBord.1 (DL70); AlloyBord.2 (DL10)
Y The parameters here above are measured (**standard**)
N The parameters are not measured.

Coin No.	1
AlloyBord.1 : ----	
D-All.Bord.1 : --	

DL70 (instant measure on coin alloy).
Do NOT modify.
The measure is taken by "Enab.AlloyBord = Y"

Delta DL70

Coin No.	1
AlloyBord.2 : ----	
D-All.Bord.2 : --	

DL10 (instant measure on coin alloy).
Do NOT modify.
The measure is taken by "Enab.AlloyBord = Y"

Delta DL10

Coin No.	1
Parameter F : ---	
D-Parameter F : --	

Parameter F
Do NOT modify.

Delta Parameter F.
Do NOT modify.

DELTAs on COIN PARAMETERS (and coin acceptance)

"DELTA"s are tolerance values on coin parameters. When a coin is being programmed, the system automatically calculates the DELTA for each parameter.

DELTA values can be modified to adjust coin acceptance.

Example : when the parameter "AlloyPhase+" of a coin is 150 with a delta of 10, that coin is recognized with a value between 140 and 160.

In the case of a poor acceptance, try programming the coins rejected in a free channel and compare their nominal values to default ones (you can check here which value is not within the nominal \pm delta); when a new channel is added, tolerance is increased (when a coin is inserted, the values are searched which correspond to nominal values among all coin channels).

Fn04 – Prices and discounts

Executive Standard Protocol – 10 prices

Prices must be programmed if you wish to get sales data (audit) for each selection price; a sale is memorized when its price has been set in Fn04; if a price is not included in the price list in Fn04, the vend price is added anyway to the total. Prices are controlled by the Vending Machine.

Discounts are only given when they are associated to a selection (a discount is given to all vends with the same price). Discounts are only given to vends with *Key*.

For cash vends two hours with discounts can be enabled in Fn07.

Discounts are given differently according to the key/card in use:

- Key 1: a discount for each price
- Key 98: four discounts for each price. Discount options can be found in Fn36 (*discount every “x” days; enable discounts; check discounts; no. discounts*). Fn36 is only enabled with Key98 (Fn06).

We suggest you should select Price-Holding mode to manage discounts correctly (up to 99 prices with different discounts for each price).

Price Number	1
--------------	---

Enter a price line (1 to 10), then press **F** to confirm.

1^ Price	
value	100

Enter price 1 and press **F** to confirm.

1^ Pr./Disc.	1
value	0

Enter discount 1 for price 1, then press **F** to confirm.
Keys type 1 are only given discount 1.

1^ Pr./Disc.	2
1^ Pr./Disc.	3
1^ Pr./Disc.	4
value	0

Do the same for all discounts.

Executive Price Holding - 10 prices

Prices are controlled by the payment system ("SIX"). Proceed as described in **Table 4** to configure the system according to the base table (10 prices)

Table 4

Function 00	" Executive Protocol ? "	Y	Executive protocol enabled
	" Price Holding mode ? "	Y	Price Holding mode enabled
	" Send price to VMC ? "	Y/N	Select at your wish (see description)
Function 01	Unit Scaling Factor	001	Enter "1" (up to 64 selections)
Function 04	" 1^ Price value: - - - - - "		Up to 10 prices (match each price to a selection)
	" 1^ Pr./Disc. 1 value: - - - - - "		Up to 4 discounts for each price
Function 17	" Selection number (1-64) 1 "		Enter selection no. on Vending machine (up to 64 selections are available)
	" 1^ Selection price line no. - - "		Enter the price no. (1 to 10) corresponding to a selection

Send price to VMC – Enter "Y" to display prices when a selection button has been pressed and no money has been inserted yet. Prices can be thus checked on display before a purchase is made.

Price Holding with 99 prices

Up to 99 prices are possible (extended memory). This option is useful for multi-product Vending Machines. All 99 prices are set in Fn04 (price number = selection number) and you needn't adjust parameters in Fn17. In that case one discount is given for each price. Proceed as described in **Table 5**

Table 5

Fn00 / Fn01	see Table 4		
Function 19	" 99 selections ? "	Y	List 99 prices enabled
	" Reset prices and discounts ? "	Y	The present table (10 prices) is reset
	" Confirm reset ? "	Y	Reset is confirmed
Function 04	" 1^ Price value: - - - - - "		Enter 99 prices
	" 1^ Pr./Disc. 1 value: - - - - - "		Enter a discount for each price

Audit is only extended to 99 prices in the DDCMP file (the first 10 prices only appear in the printout via ST3000 Interface).

Fn05 – Bill values (parallel)

“SIX” can be either connected with a banknote validator MDB slave or a parallel banknote validator (select banknote validator with P3000 - Fn00 - or with *Configurator PC*).

Here below the list of cables for each banknote validator (optional):

CB.01397 Validator CBV
CB.01395 Validator Eureka
CB.01428 Validator JCM vmv
CB.01396 Validator Smiley NV4 or NV5
CB.02084 Validator JCM EB-100 or ICT-A7 pulse mode
CB.02741 Validator JCM DBV301 pulse mode / 24VAC

Cables are plugged on J6 (9 pins); also plug jumper JP2 as described on p.5

Adjust as follows:

- Fn00: select “**Bill Validator connected = Y**” and then adjust the other parameters (see Fn00)
- Fn05: enter banknote values (Euro b1 = 5.00 and Euro b2 = 10.00)
Read user's guide before configuring a banknote validator (configuration can be modified depending upon the operating mode selected)

Key Reader

“SIX” can be connected to one of the following Key Readers OSCAR “Paytec/FaGe”:

- OSCAR – IrDA cable CB.02639 (with key)
- OSCAR cable CB.02638 (with key)
- OSCAR STAR – IrDA cable CB.02489 (with key & card mifare®)
- OSCAR STAR cable CB.02396 (with key & card mifare®)

Here below the functions containing parameters for key readers:

Fn 06 Key reader parameters and Key codes

Fn 22 Free Credit

Free Vends and Special discounts for Keys 1 (daily/monthly Free Vends and Special Discounts)

Fn 36 Free Vends and Special Discounts for Keys 98 (daily/monthly/periodical Free Vends and Special Discounts).

More functions:

Fn 18 Fictitious credit (keys can be given Free Credit in Executive Protocol)

Fn 20 Inhibit Free Vends / Free Vends connected to selection number

The functions above are only valid when a Key Reader has been plugged on J9.
They are not valid when a Key Reader has been connected as MDB slave unit.

Connecting a Key Reader and an MDB slave unit

When an Oscar Key Reader (J6) and an MDB Cashless Reader (MDB master cable) are both connected to a Vending Machine, remember that the Vending Machine will only accept the credit on the key which is introduced first.

Formatting Keys

Key formatting tools:

- “Oscar Programmer” for keys
- “Oscar Programmer mifare®..... for keys and cards mifare® “*KeyStar*” and “*CardStar*”

Credit on Keys

Credit can be loaded on keys (either with banknotes or coins) up to the max. value programmed in Fn 00

The maximum credit that can be loaded is 65535 units (or € 655.35).

Each key is configured with a PIN and two more security codes (operator code / location code); the same codes must be programmed in Fn06, otherwise keys are not accepted.

Key format

Keys can be configured in two different formats: Key 1 or Key 98.
Select key format in Fn06. When the key format selected is different from the key format circulating in a location, keys are not accepted (the error message *CAR 10* is displayed).
Here below are details about the two key formats.

	Key 1	Key 98
Credit	One credit memory. Free Credit is either added to or taken from credit on the key	Two credit memories. Cash Credit and Free Credit are stored in two separate memories. Cash Credit is only used when no more Free Credit is left.
Date	Either day or month is written on keys, depending on the Free Credit selected (daily or monthly Free Credit)	Date is written in full (dd/mm/yy), that enables operators to optimize the use of periodical bonuses.
Free Credit	Daily / monthly / up to 4 levels. All the systems in a location must contain the same configuration.	Daily/monthly/periodical/up to 4 levels. The systems in a location can be differently configured.
Free Vends	Daily / monthly / up to 4 levels	Daily/monthly/periodical/up to 4 levels.
Special Discounts	Daily / monthly	Daily/monthly/periodical/up to 4 levels.
Currency	Type 1, Euro 1	Type 98, Euro 98

Currency format

Keys can be formatted either with NCU or Euro credit; Euro Keys bear a code identifying Paytec Payment Systems.
Euro-configured systems (currency description = 978 - Fn 00): noEuro Keys are automatically converted in Euro when inserted in the reader (according to the change rate in Fn 38).

LEDs (Oscar Reader)

LED messages (Oscar front panel)

OFF	Reader OFF
Flashing green every 5 secs.	Reader ON ... ready for use
Green ON	Key inserted and accepted ... the key can be pulled out
Red ON	Writing ... don't pull out the key
Yellow ON	- Key error - System ON with sensor dulated
Flashing yellow + Err 2	Extended Audit full

Fn06 – Cashless Parameters

The instructions here below are valid for the Contactless Key reader connected.

Cashless system connected ?	<p>Select "Y"</p> <p>Y Key reader connected.</p>
Key-Card 98 ?	<p>Select key format</p> <p>N Key 1 with one credit memory.</p> <p>Y Key 98 (or type2) with two separate credit memories (Cash and Free Credit). Free Credit can be either increased or replaced with a new credit without modifying Cash Credit on the key.</p> <p>Once the Key format has been selected, ALL the keys and payment systems in a location must have the same format.</p>
Operator code 0	The same Operator Code must be set on SIX and on keys (0 to 65500).
Location code 0	The same Location Code must be set on SIX and on keys (0 to 32000).
Write new keys ? N	<p>N Key automatic encoding inhibited.</p> <p>Y A virgin Key is automatically formatted when first introduced in the reader. Keys are formatted as Key1 or Key 98 and are given the same codes (Operator/Location/PIN) as the ones in the reader. The formatting procedure takes 3 minutes (red Led ON – DON'T pull out the key). If the key is pulled out before the red Led is OFF, the key is invalidated and must be replaced.</p> <p>Formatted keys are given a user code each, or you can create a group of user codes (read following paragraphs). In order to reduce the number of keys that must be formatted, select "Y" in the option "write user code", then enter the first and the last code.</p>
Credit on key 0,00	Enter the credit amount you wish to write when formatting keys.
Write user code? N	<p>N User codes are automatically written till no more keys are left.</p> <p>Y A limited number of keys are encoded. OSCAR stops formatting keys when the last user code is reached.</p> <p>If one more key is inserted, the yellow Led is ON (diagnostic message "Car1" is displayed)</p>
First User (1-32000)	Enter the first user code
Last User (1-32000)	Enter the last user code

PIN 1 -----

PIN 1 (Personal Identification Number).

How to modify PIN 1: enter the present code (***** is displayed on the P3000) and press **F** to confirm; then enter the new PIN1 and press **F** again to confirm.

PIN 2 -----

PIN 2 (the same instructions are valid as for PIN 1).

PIN 1 + PIN 2 give a 10-digit PASSWORD (max. security).

If you prefer a 5-digit password, instead, leave PIN 2 on 00000. The system will recognize keys with PIN 1 only.

In order to make PINs harder to decrypt, read the paragraph about Security (Fn10) in the present guide. For more info, please e-mail to info@paytec.it

Single vend with
Cashless ?

N Multi-vend. More vends can be made after the key has been inserted. Credit on the key is reduced after each vend.

Y Single vend. *Pull out the key after each vend (wait till the green Led is ON). If the key is not pulled out after a vend, no more vends can be made.*

Check max credit
on Key-Card ?

N Max. credit is not checked. A key is accepted up to 65535.

Y Check on max. credit. A key is not accepted when its credit is 50% higher than the max. credit amount set in *Fn00*. Coins are still accepted but credit cannot be loaded on keys.

Check last
digit ?

N Keys are accepted by any credit value on them.

Y Keys are only accepted when their credit is a multiple of 5.

Warning : if this option has been set on "Y", prices and discounts must be a multiple of 5, otherwise keys are no longer accepted after the first vend.

EURO systems: select "N"

Credit
survey ?

Read next paragraph.

Fn06 – Credit survey

This function is present in all the models belonging to the lines SIX-JF8900-Giody-Giotto and gives the opportunity to read total credit on the keys circulating in a location (credit is read on every key inserted in the reader while the function is activated).

How to activate credit survey: first select “Y” in the option “credit survey”, then enter a survey code (**the code must be the same for all the systems in the location/s you wish to survey**).

Each key is automatically updated with the new credit survey code when first inserted in the reader: credit on the key is memorized and added to the Audit totals (in a special section).

As a matter of fact, the total amount of credit stored depends on the number of keys that have been inserted in the reader while the “credit survey” option is ON – the amount might be a partial value.

When credit has been surveyed on all keys, you can either modify the survey code and repeat the operation, or inhibit the option (“N”).

Credit Survey ?

- N** Credit survey inhibited.
- Y** Credit survey activated: credit is surveyed on all keys.

Survey Code: 123

Enter survey code (1 to 255). All the keys will be updated with this code when inserted in the reader. Credit on every key is memorized and added to the total credit associated to that survey code.

Survey code updating procedures :

- Update configuration with “Configurator” (“audit” window)
- Insert a Special ServiceKey (ServiceKey configured with “GIOTTO/PC-Programmer”)
- Automatic updating after audit readout (see option)

The credit amount surveyed is stored in the audit memory under the label EA2 and data are divided as follows: EA2*093 Credit on Keys *Number of keys inserted *code*credit surveyed

Data string is present in the audit file generated by DDCMP. When the file is opened with “**DDCMP Data Transfer**” data are displayed in the window “**Key Credit Survey**” :
 Survey Code = code identifying credit survey
 Num of keys = no. keys inserted
 Credit value = amount of credit surveyed on the system containing the audit file.
If you sum up all credit amounts surveyed in a location with the same survey code you’ll get the total credit amount on keys circulating in that location.

Auto-increment code ?

- N** Code can be modified by operator (**recommended**).
- Y** The system automatically moves to the next code after each audit readout (a vend must have been made after last data readout).
Leave this option on “N” (highly recommended).

Fn07 – Time bands

The following timed functions daily can be enabled on “SIX” :

- 4 timed ON/OFF
- 2 time bands with discounts
- 2 time bands with Free Vends
- 1 time band with Free Credit

You can set the time when each time band is started/stopped (leave “N” if you don't wish to enable timed functions).

First user OFF (0-32000)

A group of user keys can be enabled during a timed OFF (enter the first key code). Leave “0” if you don't want to enable any key.

Last user OFF (0-32000)

Enter the last key code (32000 max.)

Power ON 1 hrs/min 0

First ON
Default = 0

Power OFF 1 hrs/min 0
--

First OFF
Default = 0

... up to 4 timed ON/OFF

Start discount 1 hrs/min 0

1st ON timed discounts. During this interval, discounts are given to all vends, both with key and coins.

End Discount 1 hrs/min 0

1st OFF timed discounts.

Start FreeVend 1 hrs/min 0

1st ON timed Free Vends.
FreeVends are only given with a fictitious credit (enter a value in Fn18 for fictitious credit).

+ Fn 18: Fictit. credit value: 5,00
--

All vends are free during this interval (fictitious credit is displayed on LCD).

End FreeVend 1 hrs/min 0

1st OFF timed Free Vends.

Start Free Cred 0 hrs/min 0
--

Timed Free-Credit ON (enter Free Credit value in Fn22). Free Credit is only loaded on keys within this interval (all the options about Free-Credit are valid).

+ Fn 22: Free Credit value: 0,50

End Free Cred 0 hrs/min 0
--

Free Credit OFF.

Fn08 – Coins Programming

Up to **30 coin channels** can be programmed in with a P3000: enter **Fn08**, select a coin channel and adjust parameters, then insert coins.

Also adjust the following parameters in **Fn03**: coin destination (cashbox / tubes), coin accepting parameters (accept yes/no with empty tubes, inhibit) and tolerance (Delta).

Programming coins with a Personal Computer

"SIX" can be configured with a EURO coin set by means of "VeCoP" (sw. application available on demand, compatible with Windows 98/2000). Serial cable CB.01491 is also necessary for connection to the PC.

Don't enter coin values in the channels that have already been programmed (use free channels!).

Programming coins with a P3000

Programming coin 1

Enter the number of the channel that must be configured and press **F**. When the message "channel not available" is displayed, try with another channel (remember the number of channel no. you are programming).

Progr. coin 1
n. passages 10

No. coins that have to be inserted when programming that coin type. Enter a number (4 to 99), then press **F** to confirm.
No. passages recommended = 10

Progr. coin 1
increase delta 2

Enter the "Delta" increase (0 to 15), then press **F** to confirm.
Delta increase recommended = 4

After coin channels have been configured, delta values can be modified in Fn03 (if necessary).

Programming 1
in progress 0/10

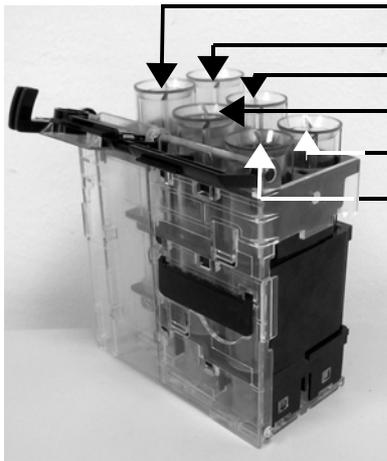
*Insert coins **slowly one by one**. Coins should fall into the recovery channel. The menu of the P3000 goes back to the opening line of Fn08 after the last coin has been inserted.*

LCD 1-10

> **Note:** the number of coins that have been inserted so far and the overall number of coins that must be inserted is displayed on LCD.

After all coins have been inserted, you need to adjust their parameters in Fn03.

Fn09 – Level in tubes



4 = D
1 = A
2 = B
5 = E
3 = C
6 = F

Fig. 6

Select tube No.	1
-----------------	---

Select a tube : 1=A 2=B 3=C 4=D 5=E 6=F
(see Fig.6 or legend on tube group).

Tube No.	1
No. coins	0

No. coins in the tube selected.
This value can be either modified or reset in Function 16. When the counter is reset, remember the tube must be emptied.

The current level of coins in each tube can be read by pressing the relative button (see Fig. 6)

Tube No.	1
min. Coins	10

Min. level starting "exact change" condition.

When the number of coins in a tube reaches this level, the exact change condition is ON, (the signal "no change available" is transmitted to the Vending Machine).

As a matter of fact, SIX keeps on giving change till "empty" level is reached. Read paragraph "Automatic Exact-change" (p.19).

Enter a value, then press **F** (recommended value = 10)

Tube No.	1
empty coins	3

Empty Level.

This level can be equal to or lower than min. level. When you enter "0" (zero), change is given till the tube is empty.

Enter a value, then press **F** to confirm (recommended value = 3)

Tube No.	1
max. coins	80

Max. number of coins in a tube.

DO NOT enter a higher value than the one by default.

A tube is full when it contains the max. number of coins programmed here. When this level has been reached, all the coins inserted go to the cashbox. As soon as the level lowers, coins fall into the tube again. Enter a value (you can leave the value by default), then press **F**.

Adjust min./max./empty levels in each of the six tubes. If all the coins are to be routed to the cashbox, you don't have to adjust options in *Function 09*.

Fn10 – Security

This function has been introduced to make PINs on keys harder to decrypt: PINs are not even known to the servicing personnel (they can only be programmed by means of a ServiceKey).

After this function has been enabled, insert the « access key »: PINs are automatically updated with the PINs on the key.

PINs on all the user-keys circulating must be updated now, either with a «Giotto-Converter» (it can be installed on spot) or with a Giotto Programmer (after inserting an «access key»).

After Fn10 has been activated, the system PIN can be read/modified either with an access key or a P3000 (in this case the old PIN is needed, though). The PIN can no longer be read/modified with PC-Configurator.

This function can be activated either to modify the PIN of an already operating system, or to protect new systems with safer PINs.

Security ?

- N Standard.** PINs are checked as usual (access keys are not accepted).
- Y** The system is ready to accept an AccessKey (the system PINs will be updated to the ones transmitted by the key).
Notice: PINs on user keys are not automatically updated (they must be updated either on spot with a “Giotto-Converter” or with a “Giotto-Programmer” at the Operator’s headquarters).

Once Fn10 has been activated, it cannot be inhibited.

If you need to inhibit Fn10, reset the whole system (PINs are also reset).

Fn11 – Fidelity

You can win Customers' loyalty by giving them points or credit after each vend, which are accumulated and later redeemed when an amount has been reached.

The validity period for Fidelity points starts from the last vend paid in full with points. When you don't have enough Fidelity points/credit to pay a vend, the standard credit on the key is reduced (the validity period for Fidelity credit/points is not prolonged starting from that vend).

You can decide whether to accumulate Fidelity points/credit (different options are set in the programming menu). When you decide to give a credit, enter the credit value accumulated for each of the ten prices; when you give points, enter the number of points corresponding to each of the ten prices (as a matter of fact, that is the price in points), then enter the number of points accumulated for each price.

Giving credit.

After a vend, customers are given a credit for each price, which is added to the "Fidelity Credit" already on the key. When a price is lower than/equal to the total "Fidelity Credit" on the key, a free vend can be made (the price of the vend is deducted from the Fidelity credit).

The "Fidelity Credit" has a validity deadline, after which the amount on the key is deleted.

Giving points.

After a vend, customers are given a number of points (Fidelity Points) for each price.

When the price of a product (in points) is higher than "0" (zero) and lower than/equal to the total "Fidelity Points" on the key, a customer can make a free vend (the price is deducted from the amount "Fidelity Points"). "Fidelity Points" have a validity deadline, after which the amount on the key is deleted.

FIDELITY OPTIONS

Fidelity unused ?	Y Fidelity OFF N Fidelity ON
Fidelity with credit ?	Y Clients are given Fidelity credit after each vend N Fidelity credit OFF
Fidelity days (0-255)	Enter "Fidelity Credit" validity period after the last vend paid with Fidelity credit (0 = Fidelity credit is always valid)
1^ Fidelity credit: - , --	Enter "Fidelity Credit" amount given for each price and added to the "Fidelity Credit" total on the key.
Fidelity with points ?	Y Clients are given Fidelity points after each vend N Fidelity points OFF
Fidelity days (0-255)	Enter "Fidelity Points" validity period after the last vend paid with Fidelity points (0 = Fidelity points are always valid)
Number Fidelity	Enter no. price/Fidelity
1^ Fidel/Price points:	Enter the value of Fidelity points required for each price
1^ Fidelity points:	Enter the number of Fidelity points loaded on the key for each price

ABOUT FIDELITY CREDIT/POINTS

Fidelity Credit

Inserting key.

1. When the validity period for "Fidelity Credit" has expired [(date last vend with Fidelity credit + validity period) < current date], the amount of "Fidelity Credit" still on the key is reset.
2. "Fidelity Credit" is displayed for 2 seconds in "Fxx,xx" format. After that, standard credit is displayed.
3. Executive Protocol: when "Fidelity Credit" on the key is higher than "0" (zero), the amount is transmitted to the Vending Machine and displayed for 2 seconds. After that, standard credit is displayed.

Making a purchase.

When the price of the product selected is lower than/equal to the total "Fidelity Credit" on the key :

1. "Fidelity Credit" on the key is reduced by the selection price.
2. The current date is stored on the key as the date when "Fidelity Credit" was last redeemed.

When the price of the product selected is higher than the total "Fidelity Credit" on the key :

1. The vend is paid with the standard credit on the key.
2. "Fidelity Credit" on the key is increased by the Fidelity Credit associated with the selection made.

Fidelity Points

Inserting key.

1. When the validity period for "Fidelity Points" has expired [(date last vend with Fidelity points + validity period) < current date], the amount of "Fidelity Points" still on the key is reset.
2. The total "Fidelity Points" is displayed for 2 seconds in "Fxx,xx" format. After that, standard credit is displayed.
3. Executive Protocol: when the total "Fidelity Points" on the key is higher than "0" (zero), the amount is transmitted to the Vending Machine and displayed for 2 seconds. After that, standard credit is displayed.

Making a purchase.

When the number of points required for the product selected is higher than "0" (zero) but lower than/equal to the total "Fidelity Points" on the key:

1. The total "Fidelity Points" on the key is reduced by the number of points required for the product selected.
2. The current date is stored on the key as the date when "Fidelity Points" were last redeemed.

When the number of points required for the product selected is higher than the total "Fidelity Points" on the key:

1. The vend is paid with the standard credit on the key.
2. The total "Fidelity Points" on the key is increased by the number of points given for the product selected.

UPDATING AUDIT

Fidelity Credit

Purchase with “Fidelity Credit”

Whenever a purchase has been made with “Fidelity Credit”, the following data are updated in the Audit file:

1. The number of vends is increased for that price line under LA8.
2. The amount of “Fidelity Credit” redeemed for the purchase is added to the total for that price line under LA8.
3. The list LA8 is transmitted.
4. An operation “type 11” is memorized in extended Audit containing details about the purchase.

“Fidelity Credit” reset.

When the total “Fidelity Credit” on the key has been reset because it has expired, the following data are updated in the Audit file:

1. The number of resets is increased under identifier “EA2*092”.
2. The amount of “Fidelity Credit” reset is added to the total credit reset under identifier “EA2*092”.

Fidelity Points

Purchase with “Fidelity Points”.

Whenever a purchase has been made with “Fidelity Points”, the following data are updated in the Audit file:

1. The number of vends is increased for that price line under LA9.
2. The amount of “Fidelity Points” redeemed for the purchase is added to the total for that price line under LA9.
3. The list LA9 is transmitted.
4. An operation “type 12” is memorized in extended Audit containing details about the purchase.

“Fidelity Points” reset.

When the total “Fidelity Points” on the key has been reset because its validity period has expired, the following data are updated in the Audit file:

1. The number of resets is increased under identifier “EA2*092”.
2. The amount of “Fidelity Points” reset is added to the total points reset under identifier “EA2*092”.

Fn13 – Credit cash overpayment

Cash overpayment
displayed 3m' ?

- N** Residual credit is only displayed for three minutes when it is higher than the lowest price.
- Y** Residual credit is always displayed for three minutes.

After credit has been displayed for three minutes, it is stored as “overpay”. Enter “**Y**” in the option “Timeout cash Off” (Fn15) to reset three minutes’ timeout.

Fn15 – Miscellaneous Options

Inhibit reload Cashless ?	<p>N Standard: whenever a coin is inserted, its value is loaded on the key. Coins/bills are accepted with/without key following the parameters in Fn00.</p> <p>Y Keys cannot be recharged with cash. Either coins/banknotes or a key are accepted; if a coin/banknote is introduced first, no keys are accepted (and viceversa).</p>
Reset cash with reload Inh ?	<p>N Cash credit is available for " x " minutes (timeout).</p> <p>Y Cash credit is reset and stored in "overpay".</p>
Exact-Change Signal OFF ?	<p>N "Exact-Change" signal is transmitted to the Vending Machine (standard).</p> <p>Y "Exact-Change" signal is not transmitted to the Vending Machine (no message is displayed).</p>
Timeout cash OFF ?	<p>N Residual credit is displayed for three minutes, then it is cancelled and stored in AUDIT as "overpay".</p> <p>Y Residual credit is displayed without any time limit (no timeout).</p>
Free Vend only with key ?	<p>N FreeVends are always given during their time band ON (standard).</p> <p>Y FreeVends are only given after the key has been inserted.</p>
1st Selection is number 0 ?	<p>Only valid with BDV001</p> <p>N The 1st selection is No.1 (standard).</p> <p>Y Only valid for BDV systems with 100 selections (selection 0 = price 1; selection 100 = price 99).</p>
Price increase with cash ?	<p>N The price is not increased when paying with cash (standard).</p> <p>Y The price is increased when paying with cash.</p>
Price increase value 0,00	<p>Enter price increase value for cash payment (the same for all prices).</p>
Inhibit manual ejection ?	<p>N Manual ejection (via keyboard).</p> <p>Y Keyboard inhibited.</p>
Inhibit Set-Up menu ?	<p>N Standard: set-up via keyboard (LEVER+B).</p> <p>Y Set-up inhibited via keyboard.</p>
Inhibit display level in tubes?	<p>N Standard: the number of coins in the tube is displayed while ejecting coins manually.</p> <p>Y The number of coins in the tubes is not displayed.</p>

Fn16 – Set level in tubes

You can either modify or reset the number of coins in each tube.

If you decide to reset coin level in a tube, remember to empty that tube; on the other hand, if you decide to modify this value, check the new value corresponds to the number of coins actually present in the tube.

Select tube No.	1
--------------------	---

Select a tube (No.1=tubeA; No.2=tubeB ...), then press F to confirm. The number of coins in the tube selected is displayed (you can now modify this value).

Fn17 – Price Holding setting

This function must be configured together with Fn04 when SIX is working in Executive Price Holding mode (each price is associated to a selection no.).

Read paragraph “Executive Price Holding 10 prices”.

Fn18 – Cashless Options

Fictitious credit enabled ?

Valid with Executive Protocol.

Since all vends are inhibited with “0” (zero) credit, enter “Y” if you want to give Free Vends to all keys (even those keys with no credit left on them).

Fictitious credit being no real credit, it is not printed in the Audit list.

- N** Fictitious credit inhibited.
- Y** Fictitious credit activated (enter a value which is equal to/higher than the max. price – check compatibility with USF)

Fictit. credit value:	0
--------------------------	---

Enter a value ≤ max. price.

Location code untesting ?

(The same PIN/Operator Code must be set on the key and on the Vending Machine).

- N** Standard check on location code : keys are only accepted if their location code is the same as the one set in Fn06.
- Y** Location code is not checked : all keys are accepted

Test Key unlimited ?

This option is referred to ServiceKeys for “Test Vends”.

- N** Credit on a *TEST* Key is reduced whenever a Test vend is made. *Test Keys* can be only recharged with *Oscar Programmer* (no cash allowed).
- Y** Credit on *TEST* Key is never reduced (endless vends are allowed with Test Key).

*TEST vends are stored in the following Audit records:
VA201, VA202, VA203, VA204*

Fn22 – Free Credit

A predefined Free Credit amount can be automatically loaded on the key on the first vend of the day/period. Options about Free credit may be differently set according to the key you are using:

- Free Credit is either added to the present credit or overwritten
- Free Credit is either given on the first vend of the day or when the key is first introduced in the reader
- Up to 4 different Free Credits (each associated to a different user code).

Notice

We recommend you should enable Free Credit with Keys98 only:

- Keys98 are compatible with periodical Free Credit (FreeCredit every “X” days).
- Free credit and cash credit are written in two separate memories (Free credit is left untouched when cash credit is reset).

Avoid Free Credit with Keys type 1.

Free Credit can be inhibited in *Function 20* (read paragraph) for one or more selections.

Free Credit options

Free Credit enabled ?	N Free Credit inhibited. Y Free Credit enabled (adjust the options about Free Credit).
Free Credit value : 0,00	Enter Free Credit (€ 655.35 max.)
Restricted Free Credit ?	N Free Credit is given to all Keys. Y Free Credit is only given to enabled Keys (Keys are enabled to Free Credit with <i>Oscar Programmer</i>).
Free Credit monthly ?	N Free Credit daily: Free Credit is given once a day, on the first vend with the key. Y Free Credit monthly: Free Credit is given once a month, on the first vend in the current month. Notice: with Keys type 1, all the systems must be configured with the same operating mode.
Y Fractionated Free Credit?	N Option inhibited Y Free Credit is given with proportional value to the days left to the end of the month ($X/31^{st}$ of whole credit is given - X is the number of days to the end of the month). <i>This special option has been created to load only a portion of credit on the keys that are given to the customers in the running month. Such a portion is proportional to the number of days to the end of the month.</i>
Free Credit every (days): 1	Option valid with Keys 98 (see Fn06) Enter how often you wish to give Free Credit (once every 1 to 255 days). Enter “1” for daily Free Credit.
Substitute Free Credit ?	N Free Credit is added to the current credit on the key. Y Free Credit overwrites the current credit on the key. <i>Notice: with keys “type 1” the whole credit (both Free Credit and Cash Credit) is deleted (option recommended for keys type 98 only).</i>

About Free Credit with "Keys 98"

- New Free Credit either overwrite old Free Credit or it is added (cash credit is left untouched);
- Free Credit is used before cash credit;
- When a key is inserted in a system where no Free Credit has been programmed, Cash credit is only displayed

Immediate
Free Credit ?

- N Free Credit is loaded on the key on the first vend of the day/month
- Y Free Credit is loaded on the key when it is first introduced in the reader during the current day/month (no need to buy a product).

4 Levels
Free Credit ?

- N The same Free Credit amount is given to all keys (standard).
- Y 4 different Free Credits are given. You can configure up to 4 *User groups* and give them different Free Credits (you need to know the key user codes, though); customers will be given different free credits according to the user code group they belong to.

Y

Level 1: from
user no. 0

Enter the 1st user code of the 1st level (1 to **32767**), then press **F** to confirm.

Level 1: to
user no. 0

Enter the last user code of the 1st level (1 to **32767**), then press **F** to confirm.

Free Credit
level 1: 0,00

Enter the amount of Free Credit belonging to the 1st level.
(€ 655.35 max.)

.... do the same for the 4 Free Credits

Fn22 – Free vends with Keys98

Up to 15 Free Vends can be set in Function 22.

Free Vends can be associated to any selection during the day; when a key has reached the max. number of Free Vends, vends are paid at their usual price.

Free Vend options

(skip the options about special discounts)

Free Credit
enabled ?

Leave "N" here, otherwise Free Vends are inhibited.

Free Vends
enabled ?

N The option "special discounts" is displayed.
Y Free Vends enabled.

4 Levels
Free Vends ? N

N The same number of Free Vends is given to all keys (**standard**).

Free Vends
number: 0

Enter the number of Free Vends given daily (**15 max.**).
Each key is given Free Vends, no matter the product selected.

4 Levels
Free Vends ? Y

N The option about Key User codes is skipped.
Y Free Vends on 4 levels. You can configure up to 4 *User Code* groups (with a different amount of daily Free Vends for each). You need to know UserKey codes, for this option.

Level 1: from
user no. 0

Enter the 1st user code of the 1st level (**1 to 32767**), then press **F** to confirm)

Level 1: to
user no. 0

Enter the last user code of the 1st level (**1 to 32767**), then press **F** to confirm)

Lev.1 Freevends
number 0

Enter the number of Free Vends belonging to the 1st level.

Restricted
FreeVends ?

N All keys are given Free Vends.
Y **Enabled** keys **ONLY** are given Free Vends. Keys are enabled to FreeVends with *Oscar Programmer*.

Fn22 – Special Discounts with Keys1

NOTICE

This option is specially recommended with Keys 98 (the date is not written in full on Keys1 and this might be a problem when giving bonuses).

For special discounts with Keys98, read paragraph about Fn36.

Special Discount options

Free Credit
enabled ?

N Leave **N**, otherwise Special Discounts are inhibited

Free Vends
enabled ?

N (Select **Y** if you wish to give both Special Discounts and Free Vends – 3 maximum each)

Special Discounts
enabled ?

Y Special Discounts are given

No. Special
Discounts: 0

Enter how many discounts are given daily (**15 max.**)
Select Price Holding Mode to associate a discount to a specific selection.

Fn26 – Country Code

Only valid for MDB/ICP models

Country code
(MDB only) 39

Enter the international phone code

Password
counters -----

This password permits users to display and reset conversion counters.

New Password
counters -----

Enter new password.

Converted
keys -----

No. keys that have been converted (65,535 max.)

Total credit

Total credit on converted keys.

Total Free
credit -----

Total Free Credit on converted keys.

N.B.: all the counters can be only reset manually.

Fn30-31-32-33 – Black List

ServiceKeys and keys that have gone lost can be inhibited here to prevent unauthorized use. Enter the User Code in the **Black List** and the key will no longer be accepted.
The message "Car 7" means you have inserted a key that has been inhibited.

All the keys circulating in a location must be programmed with different User Codes (and all systems must contain a Black List). The Black List can contain up to 150 codes.

The User Code must be a number between 1 and 32767.

Enter code in Black List (Fn30)

Disable user code: 0
--

Enter the key code you wish to inhibit, then press **F** to confirm.
Enter all the codes you wish to inhibit.

When a code has already been written in the Black List, the message " **User code ... already disabled**" is displayed.

When the Black List is full, the message "**Black List full**" is displayed: no more codes can be written.
Reset the Black List in *Fn33* before inserting the very first code (the starting memory must be empty).

Delete code from Black List (Fn31)

User code : 0

Enter the code of the key you wish to re-enable, then press **F** to confirm.
When a code is not present in the Black List, the message "**User Code ... not found**" is displayed.

If the Black List is empty, the message "**Black List empty**" is displayed.

Search code in Black List (Fn32)

Black List max. elements: 150

Only-read value: max. number of codes in Black List.
The number may be different following the HW and SW revision.

Search user code: , 0

In order to **read the Black List** from the beginning, press **F** and then **A** to scroll down the list. Press **B** to scroll the list back.

If you are searching a single code, enter the key code and press **F**; if the number is present in the list, the system will start reading from that code.
If the Black List is empty, the message "**Black List empty**" is displayed.

Reset Black List (Fn33)

Confirm reset ?

Enter **Y**, then press **F** to reset the Black List

Fn35 – Token

You can either prevent the system from giving change for payment with tokens, or you can accept both coins and tokens.

If you wish change to be given for payments with token, a token channel must be programmed (a "token" channel is recognized through a special option in Fn03).

This option avoids misuse as a money changer.

Configuring a token channel

Coin No.	--
token ?	Y

Function 03

After the token has been programmed in one of the 30 channels, select the channel no. in Fn03 and set **Y** in the option "Token" (press **F** to confirm). Enter Fn35 to customise the options about token.

Function 35 : customising options

No change with token ?

N

Block change with token ?

- N** The system delays giving change (see option "block change").
- Y** Residual credit is cancelled and no change given.
The credit cancelled is stored in Audit as "overpay".

Notice: if you enter "Y" here, the option "Block change" is inhibited.

- N** The system always gives change (even when a vend has been paid with tokens).
- Y** Change is not given for payment with tokens; residual credit is either cleared or displayed for three minutes.

Inhibit Mix Coins/Tokens ?

- N** Both coins and tokens are accepted.
- Y** Either coins or tokens are accepted. If a coin is inserted first, no tokens are accepted (the opposite is also true).
Starting condition is restored by credit = 0.

Inhibit reload with token ?

- N** Standard: when inserting tokens and then a key, credit is automatically loaded on the key.
- Y** Tokens are not accepted to recharge a key; tokens/coins are not accepted after a key has been inserted and viceversa.
Keys can be recharged with cash only (no tokens mixed with coins).
Go to Fn15 to inhibit key recharge with cash.

Fn36 – Discounts and Free Vends with Keys98

This function is only available when key format “Key98” has been selected in Fn06.

Special discounts.

The term “Special discounts” is referred to a number of discounts programmed on the key and given daily, monthly or every “x” days. The number of discounts can be added to the current value on the key, or overwritten. Up to 250 discounts can be programmed on a key.

Customers are given a discount if they buy at least one product with a discount on the day when discount counters are planned to be reset. Discounts are always linked to prices (up to 4 discounts per price); the discount counter is decreased after each vend, whether a discount is given or not.

Free Vends.

The term “Free Vends” is referred to the vends for which customers do not have to pay, and which are given daily, monthly or every “x” days. The number of Free Vends can be added to the current value on the key or overwritten. Up to 250 Free Vends can be programmed on a key.

Free Vends can be linked to any selection during the day; when no more Free Vends are available on a key, vends are made at their usual price.

Special Discounts and Free vends can be programmed together on a key; discounts are only given when no more Free Vends are available.

Configuring Special Discounts and/or Free Vends with Keys98

Monthly FreeVend &
Discounts ?

N

FreeVends&Disc.
every (days): 1

The number of Special Discounts is loaded (on the key) on the first vend of the period/month programmed.

N Discounts are given daily or every “x” days.

Y Discounts are given monthly.

Enter how often you want to give Special Discounts (once every 1 to 255 days). Enter 1 for daily discounts.

Add spec. discs.
& FreeVends ?

Discounts can be added/overwritten to the ones available on the key.

N Special discounts are overwritten.

Y Special discounts are added.

Discounts are only loaded on the key after a vend has been made during the programmed interval.

Immediate Spec.
Discs & FreeVend ?

Special Discounts and/or FreeVends can be loaded when the key is inserted in the reader or after a purchase has been made.

N Special Discounts and/or FreeVends are loaded on the first purchase of the day/month with key.

Y Special Discounts and/or FreeVends are loaded when the key is first inserted in the reader during the current day/month (no need to make a purchase).

Free Vends
enabled ? N

N

(select “Y” to give Free Vends, too).

Restricted
Free Vends ?

N Free Vends are given to all keys.

Y Free Vends are only given to **enabled** keys (Keys are enabled with *Oscar Programmer*).

Free Vends
displayed secs. 0

Indicate how long the number of Free Vends on the key will be displayed on LCD (no. seconds).

When a graphic display EYE has been connected, the number of Free Vends is displayed until the key is pulled out (no timeout).

Options:

0 No. FreeVends is not displayed;

1-99 No. FreeVends displayed for the no. seconds programmed;

The number of FreeVends displayed is updated on a specific date when the key is introduced, even if no vend has been made yet.

4 Levels
Free Vends ?

N The same number of Free Vends is given to all keys.

Y Free Vends on 4 levels.

Up to 4 User Code groups can be programmed (with a different number of daily Free Vends for each group).

Y

Free Vends
number: 0

Enter the number of Free Vends given daily (250 max.).

Each key will be given the same number of Free Vends (no matter the product selected)

Level 1: from
user No. 0

Enter the 1st user code of the 1st level (1 to **32767**), then press **F** to confirm.

Level 1: to
user No. 0

Enter the last user code of the 1st level (1 to **32767**), then press **F** to confirm.

Lev.1 FreeVends
number 0

Enter the number of Free Vends belonging to the 1st level.

Discount 1
enabled ?

Up to **4** discounts can be enabled in Fn04; when no discount has been enabled, discount 1 is automatically given.

N Discount inhibited

Y Discount enabled

Any discount can be enabled on *Keys98* with *Oscar Programmer*. When no discounts have been enabled on a key, discounts are given anyway if the option "restricted discount" is inhibited.

Restricted
discount 1 ?

N Discount 1 is given to all keys.

Y Discount 1 is ONLY given to enabled keys.

Discount 1
number (0-250) 0

Enter no. discounts (250 max.)

.... do the same for all discounts.

Restricted
discount ?

When no discount has been selected, discount 1 is always given.

This option enables a check on discounts.

About Audit

Audit data (no. sales and payments with cash/key) are automatically memorized in *EVA-DTS Protocol*.

Data readout tools :

- P3000 or DB4000 via optical interface "IR5000" - item code AG50.018 (on demand).
- Audit-Key AG50.030 (on demand) inserted in **Oscar key reader** (on demand).
- PalmTop via external IrDA port (external IrDA module AL40.426 on demand).
- PC ("Configurator")

The IR5000 interface is plugged on J13 (P3000 connector), while the external IrDA is plugged on J10.

Either Standard Audit or Extended Audit can be selected. Since Extended Audit takes rather a long time, we recommend you should use a Palmtop (EVA-DTS) plugged on the IrDA port. The Audit file is fully compatible with "Audit View" (dates in extended audit are stored in no. seconds from 01.01.1998 at 00:00 to the operation time).

Partial counters (UP) are always reset after Audit readout, whereas totals (IN) can be only reset in *Fn12* with a P3000.

Data processing tools

- **Audit Control**
This is a Windows application to display audit data from an EVA-DTS file. Audit Control enables users to display/print details about vends, totals in cashbox, and check whether data are correct. Audit Control can be downloaded from our website www.paytec.it.
- **AuditView**
AuditView is a PC software created to process data from "Extended Audit" in Paytec systems. Data are downloaded with an AuditKey, a Palmtop, or a PC and then transferred on a PC where they are stocked in a database for later processing.
Warning: all the systems from which data are downloaded must be updated with a recent sw. release and Audit View must have been implemented (dates expressed in seconds).
A demo version is available on www.paytec.it. If you want to install the entire application, you need an activation key (contact PAYTEC)

Data readout tools

P3000 – Optical Interface IR5000

Position the *P3000* so that its optical sensors are facing sensors of the *IR5000 Interface*, then press **A**. Keep the P3000 in that position and wait till Audit transfer has been successfully completed.

PalmTop – External IrDA interface

In order to use a PalmTop, an IrDA module must be plugged on J10 (p.5).

First install "Data Transfer" on your PalmTop (contact PAYTEC), then select "Databox = Y" in Fn00.

Compatible PalmTops: PSION workabout mx (sw. Paytec DT); PocketPC (sw. Paytec DTCE); for other models, please contact PAYTEC. In order to complete readout successfully, keep the sensors of your PalmTop facing the IrDA port (at a distance of 10-20 cms).

Read User's Guide for more information on PalmTop use.

Audit Service Key

The key must be programmed with the same Password as the one on SIX (keys are programmed with *OscarProgrammer*).

Fn12 – Audit

You can reset here the whole Audit of a system or read information about Audit readouts (password required).

Reset audit
Password -----

Enter access Password

Default password: 00000.

How to modify password: enter 00000, then press F.

Enter the new password, then press F again to confirm.

Price list
EVA-DTS 6.0? N

Adjust storage mode Identifiers LA1_ as from standard EVA-DTS.

N Standard: LA1_0 = Cash; LA1_1 = Card (standard Audit in Italy)

Y EVA-DTS 6.0: LA1_0 = full price; LA1_1-LA1_4 = 5 lists reduced prices

Notice: when passing from a configuration to the other, you need to reset the Audit memory, first.
In the AUDIT file, "MA5*0*AUDIT FILE REVISION 0102" is the identifier for audit lists LA1 in no/EVA-DTS mode; while "MA5*0*AUDIT FILE REVISION 0002" is the identifier for audit lists LA1 in EVA-DTS 6.0 mode.

Enable Service
reset key ?

N Standard: reset key inhibited.

Y Audit can be reset with a ServiceKey (Location Code = 65510)

Send extended
audit ?

N Standard Audit

Y Extended Audit (up to 4,300 operations ca.)

Data from Extended Audit can be processed with "Audit View"

Test Ext. audit
full ?

N When the memory is full, old data are overwritten.

Y When the memory is full, SIX is inhibited (yellow Led flashing)

Ext. Audit elem.
10 of 4300

No. operations that have been stored in extended audit so far.

No. Readouts:
1

No. readouts completed so far.

Confirm
reset ?

N Audit reset aborted.

Y Audit reset confirmed: data are cancelled (counters are reset since initialisation).

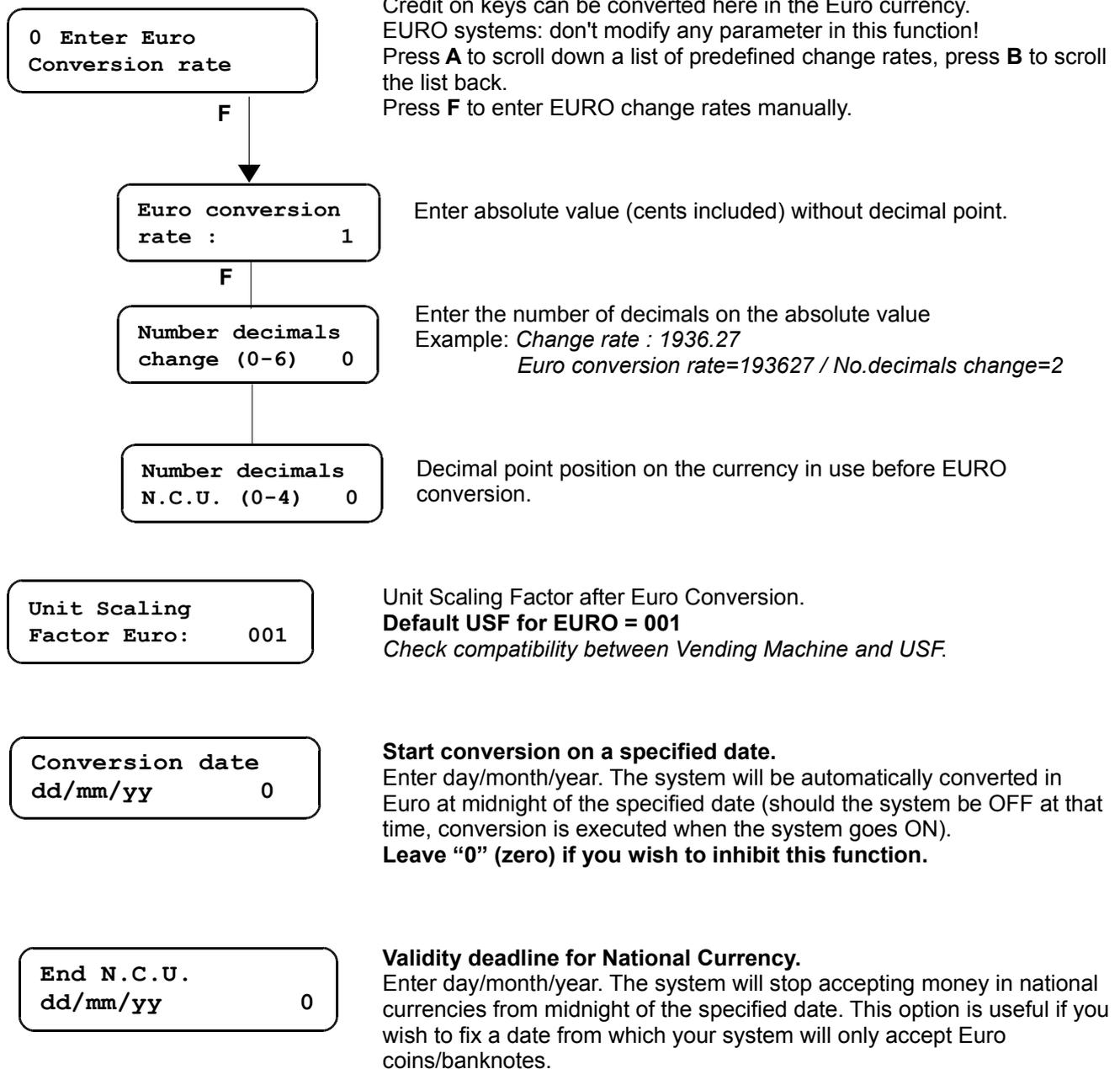
Fn38 – Euro Parameters

Euro configured systems : DON'T modify the parameters in this function!

NCU configured systems in countries that are planned to join the Euro area in the future: you can enter the change rate that will be adopted when the system will be converted.

All the SIX systems distributed in Euro countries have already been configured in Fn00 with “currency description=978” (Euro keys/coins are only accepted). When a noEuro key is inserted in the reader, credit on that key is converted according to the predefined change rate in Fn38 (the key is automatically formatted as a “Euro key”).

Here below is a part of the whole menu in Fn38 (predefined change rates). Other parameters must be left either on “N” or on “0” (zero).



Mix coins
in tubes? N

MIX coins in tubes (National currency + Euro)

N Standard. Tubes are automatically emptied when the system is converted in Euro, so that tubes can be replaced. Select "N" if you DON'T want change to be given with coins in National Currency still in the tubes (you wish to start giving change with Euro coins only).

Y MIX. Tubes are NOT emptied when the system is converted; the Euro coins routed to the tubes fall on the NCU coins still there. Change is calculated in Euro currency and rounded off to the third decimal till no more NCU coins are left in the tubes.

Whether you select "Y" or "N", any NCU coin inserted after conversion is no longer routed into a tube but falls in the cashbox (EURO coins only fall in tubes).

The option "Mix coins in tubes" is inhibited after conversion has been executed.

Tube No. 1
max. coins 0

The max. number of EURO coins in each tube can be adjusted here. This option is useful when you are going to replace a tube or when a tube is already compatible with a Euro coin type.

Enter new values
in Euro? N

Programming a predefined EURO price list

N Select "N" when:

- you don't want to create new values in Euro (you simply want to convert current values/prices following the change rates programmed)
- you wish to create new values/price lists with a *Euro Conversion Key*

Y New values/price lists in EURO. This option allows operators to enter the following new EURO values : Max. credits, Prices, Discounts, Free Credit, Fictitious credit, Additional Cash.

When the system is converted with Fn39 (or *Euro Service Key*), old credits/prices will be replaced with new ones.

Y

Maximum Cashless
credit: 0,00

Enter max. credit on key/card (see Fn00), then press F to confirm.

Max. value : € 655.35

Maximum cash
credit: 0,00

Enter max. amount accepted for payment with coins and/or banknotes (see Fn00), then press F to confirm.

Max. value : € 655.35.

Max. change
Euro: 0,00

Enter max. change that can be given with Euro money, then press F to confirm (**€ 655.35 max.**)

Price increase
value 0,00

Enter the price increase value in EURO (see Fn15), then press F to confirm.

Max. value : € 655.35

Fictit. credit
value: 0,00

Enter fictitious credit in EURO (see Fn18), then press F to confirm.

Max. value : € 655.35

Free Credit
value: 0,00

Enter Free Credit in EURO (see Fn22), then press F to confirm.

Max. value : € 655.35

Free Credit
Level 1: 0,00

Enter Free Credit on 4 levels in EURO (see Fn22), then press F to confirm

Max. value : € 655.35

... do the same for the 4 levels.

Enter Price
Euro list(1-10) 1

Enter price no. (1 to 10), then press F to confirm.

1^ Price Euro
value: 0,00

Enter price 1 in EURO, then press F to confirm.
Max. value : € 655.35

1^Pr./Discount 1
value: 0,00

Enter discount 1 for for price 1 in EURO, then press F to confirm.
Max. value : € 655.35

... do the same for the 4 discount levels. Then pass to the next price

When the configuration here above has been completed, your system is ready to be converted in Euro (see next paragraph for converting procedure).

Fn39 – EURO Conversion

EURO conversion can be executed following one of the procedures here below:

- Insert a ServiceKey “Euro Conversion” (Oscar Key reader or Jedy Key reader must have been connected)
- Automatic conversion at a predefined date (Fn38)
- Conversion with P3000 (Fn39)

This function enables you to convert the system with a P3000 (parameters in Fn38 must have been set, though)

Start Euro
conversion ?

N Exit the function (the system is not converted).
Y The system is converted to EURO
Press **F** to confirm and start conversion...

Converting...

Waiting ...
If conversion has been completed with success, the title of Fn39 is displayed!

Euro conversion
already existing

This message is displayed when trying to repeat a successful conversion procedure, or when your SIX has already been configured in EURO.

Euro conversion
failed

This message is displayed when a conversion procedure was not completed with success.

Diagnostic messages P3000

After conversion procedure has been completed with success, the option “Currency Description” (Fn00) is automatically set with value “978”.

Currency type is registered in the Audit list under ID403 (Currency Code): “Currency type=978” identifies Euro currency in any Paytec system; any other value than 978 identifies a national currency (not Euro).

User keys

- NCU keys: credit on this key is expressed in national currency (other than Euro)
- EURO keys: credit on this key is expressed in EURO

When an "NCU key" is inserted in a reader after Euro conversion has been executed, credit on that key is converted in Euro. **Remember that:**

- **Euro keys** are NOT accepted by NCU-configured systems (Currency description ≠ 978)
- **NCU keys** are always accepted. When such keys are inserted in EURO-configured systems (Currency description = 978), credit on those keys is converted following the change rate programmed in Fn38.

Euro keys can be formatted with Oscar Programmer (either key "Euro 1" or "Euro 98" can be enabled).

Diagnostic errors

Should an error occur during the converting procedure, the messages here below are displayed:

- CAR 4 Invalid conversion key (or conversion already executed)
- Err 9 Euro conversion aborted

Reinitialising system in NCU

If you wish to reinitialise a system with NCU configuration, the system memory must be partially reset. Connect a P3000, enter password "99999" and confirm (do NOT reset coin parameters!): the coin channel configuration is not reset. The option "Currency description" is automatically set as "001", coins are accepted again in National Currency and Euro channels are all inhibited.

Notice: this procedure is only valid when coin channels have not been reset.

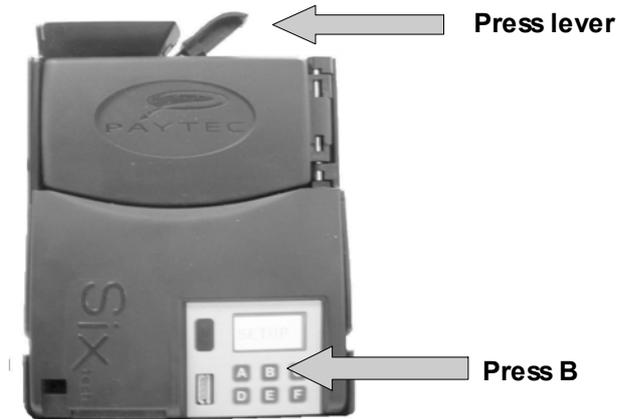
After memory has been reset, functions have to be reconfigured because their parameters have been reset.

SETUP with keypad

SETUP menu: press opening lever and keep it pressed while pressing on **B**. The message "SETUP" is displayed. Release the lever.

The following functions are available:

- no. coins in tubes **TubeL**
- adjust max. level in tubes **Tube**
- enter prices **Price**
- coin destination **Dest**
- reset errors **Erclr**
- filling tubes **Fill**



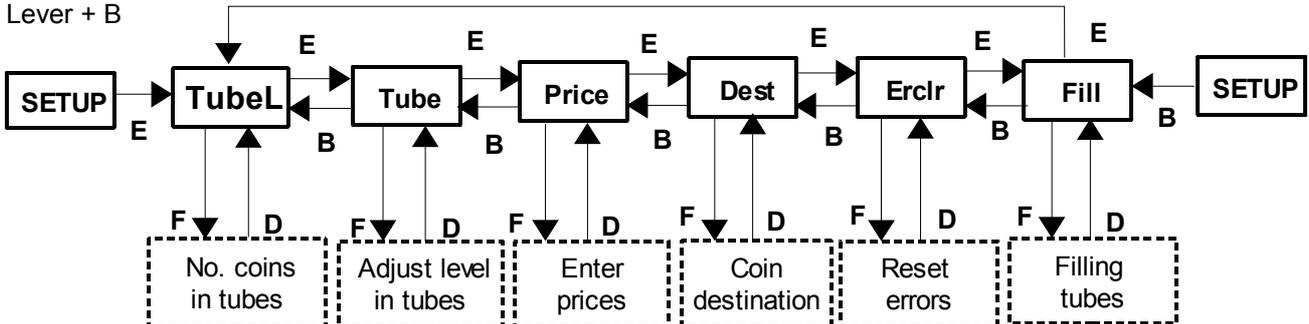
Button functions

- A** > decrease value (channel, price ...)
- B** > previous menu / decrease value
- C** > increase value (channel, price ...)
- D** > back to higher menu / escape
- E** > next menu / increase value
- F** > enter menu / confirm / execute

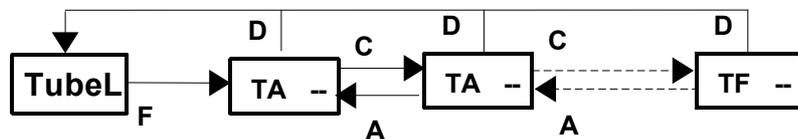
When you haven't pressed any button for 30 seconds, you exit setup mode.

Main menu

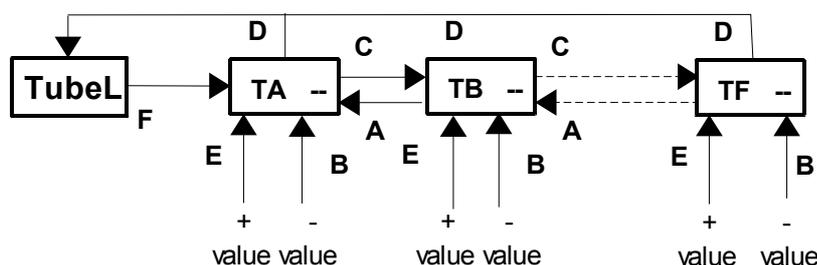
Lever + B



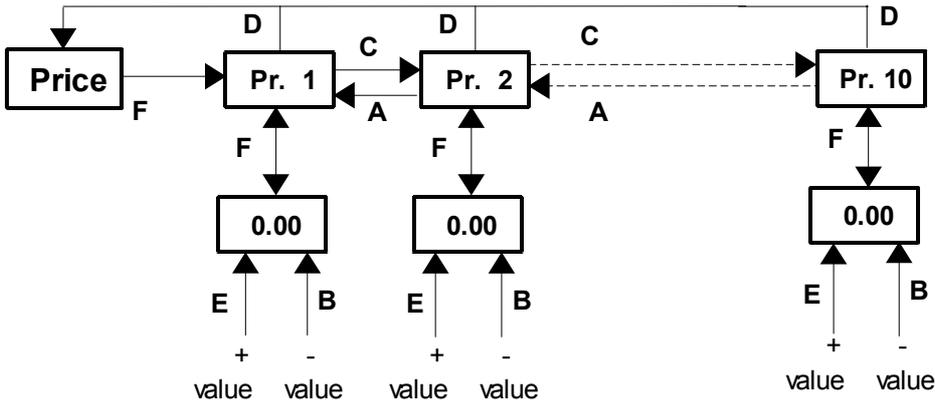
No. coins in tubes



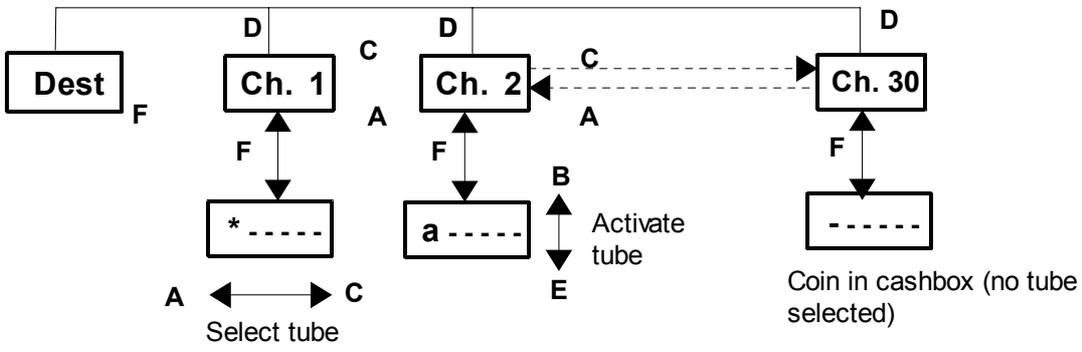
Adjust level in tubes



Enter prices



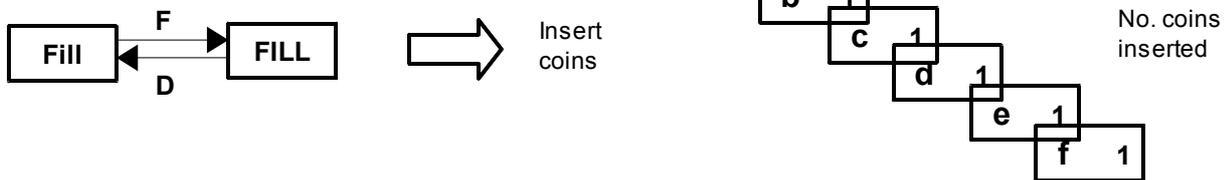
Coin destination



Reset errors



Filling tubes



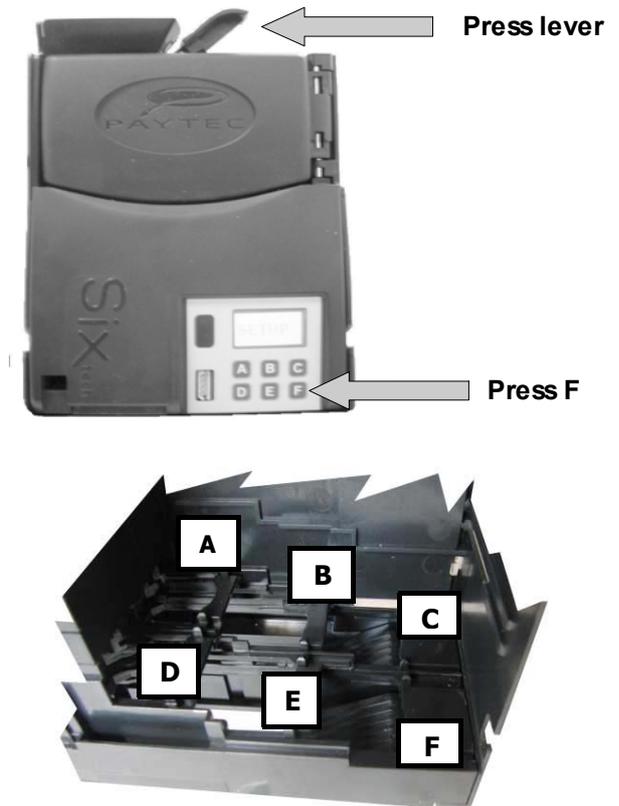
Function MOVE

This function helps operators reposition pullers if they get stuck (motor is made to rotate step by step).

Press opening lever and button **F** simultaneously. The message "Move" is displayed. Release the lever.

In **MOVE** mode:

- press **A** and **D** to rotate with short steps the pivot moving the upper pullers A and D
 - A back puller
 - D front puller
- press **B** and **E** to rotate with short steps the pivot moving the upper pullers B and E
 - B back puller
 - E front puller
- press **C** and **F** to rotate with short steps the pivot moving the upper pullers C and F
 - C back puller
 - F front puller



Example:

press C to move puller C forward with small steps; press F to invert movement and move puller C backward; if you keep on pressing F, puller F is moved forward. Remove the tube module to reach the pullers.

Maintenance

Coin Validator clean-up

Coin chutes must be frequently cleaned to prevent dust or grease build up and keep the system efficient (dust might slow the coin run).

Be sure the Change giver is OFF before cleaning the validator.

Use a soft, damp cloth with water. do NOT use solvents or aggressive detergents that might damage plastic components (degreasing fluids for PCB, oils, benzene or trichloroethylene). Avoid ethyl or isopropyl alcohol, too.

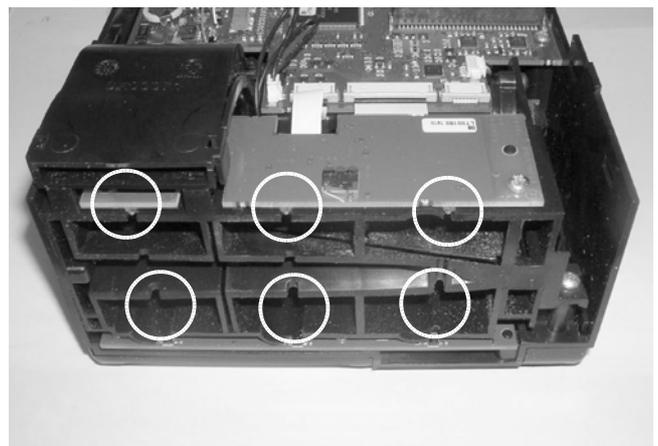


Fig. 7

Cleaning tube upper sensors

The 6 optical sensors on the lower and upper ends of the validator channels (see Fig.7) and on the upper end of each tube. Always use a soft damp cloth; blow away dust from the sensors with compressed air.

Removing tube group

Unlock the tube group upper tongue (fig. 8).

Lift up the tube group and pull it out (fig. 9).

When inserting the tube group, push it on the sliding guides on the lateral walls within the tube group housing.

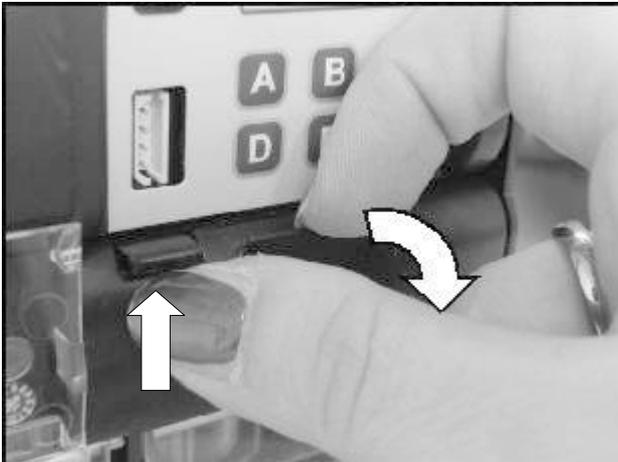


fig. 8

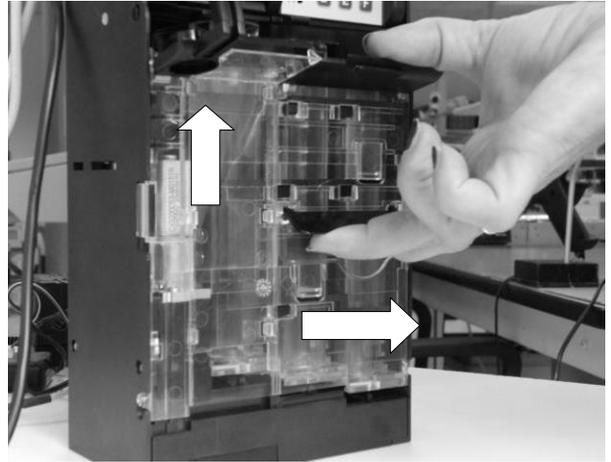


fig. 9

Before the tube group is inserted

- 1) all the extractors must be aligned (fig.10)
- 2) all the pullers must be in starting position

The pullers teeth must fit into the extractors lateral carvings.

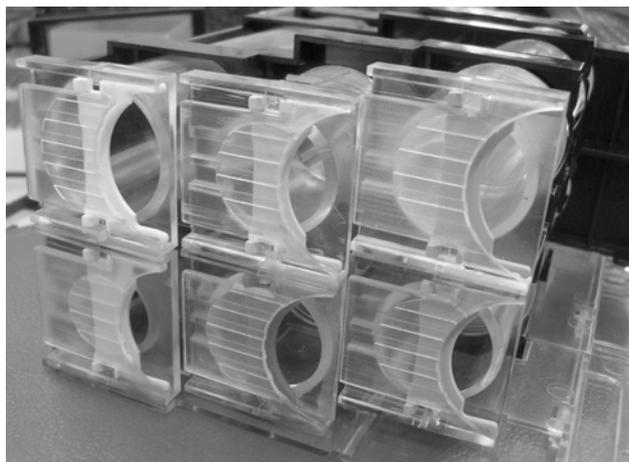


fig. 10

Fn23 - Diagnostics

Error messages

A list of error messages is available in **Fn23** (see *table below*).

“**Y**” means a system error has occurred.

Read next paragraph to reset errors.

Fn23	LCD	Description
Test Separator		The separator door can be opened manually for 1 second. Enter Y to test separator and F to confirm.
Ignore errors separation ?		N : errors have been detected. Y : errors have been detected but the device causing the errors is not inhibited.
Validator error:	U	A number of coins have been accepted but their value has not been not loaded : the sensor in cashbox may be damaged. If the error is repeated, all coins are permanently inhibited (solve the problem as soon as possible)
Separator error:	S	Six coins in a row have been routed to the cashbox and not to the tubes. Letter " S " is displayed on the first digit.
Full Sensors error:	F	Error in tube upper sensors. Coins fall in the cashbox. Letter " F " is displayed on the first digit .
Tube 1 error: Y	F -----	Error upper sensor in tube 1: coins might have fallen in the wrong tube. When such an error is detected, coins are routed to the cashbox (or to a different tube). Letter " F " is displayed on the blocked position. <i>ABCDEF correspond to 2-3-4-5-6-7 on the display.</i> The message is repeated for each tube.
Ejector 1 error:	E -----	A coin has not been ejected correctly – its puller is blocked. Letter " E " is displayed on the blocked position. <i>ABCDEF correspond to 2-3-4-5-6-7 on the display.</i> The message is repeated for each ejector.
Reset errors ?		<i>Select Y to reset all errors, press F to confirm.</i>

Resetting errors

A system error can be reset with one of the following procedures:

- P3000** Enter Fn23 and set “**Reset errors = Y**”
- Quick keypad** Switch the system OFF and ON again while keeping button **A** pressed. Release button **A** when “0” (zero) is displayed.
- SetUp menu from keypad** Enter setup menu and go to [**Erclr**], the press **F** to confirm.

Diagnostics optical sensors

Fn23 also contains options to display optical sensors voltage. When a value is far from average values, sensor circuits might be damaged. Displayed measures are updated in real time.

Status sensor F5:4,79 F4:0,15	Status sensors in cashbox
Status Separator S1 4,.. S2 4,..	Status separator sensors 1-2 (S1, S2)
Full tubes AD 0 BE 0 CF 0	Sensor “tubes full”. A sensor for each pair of tubes: 0 = tubes empty 1 = tubes full
Motors AD 1 BE 1 CF 1	Ejector motor sensors. A motor for each pair of ejectors: 1 = motor in correct position 0 = motor in wrong position
Extractors A 1 B 1 C 1	Position extractors tubes A, B, C, D, E, F 1 = extractor in standby position 0 = extractor in the wrong position (see “function MOVE”)
Extractors D 1 E 1 F 1	

Diagnostic messages

Coin validator diagnostic messages

Should an error be detected in the *coin validator* circuit, a message is displayed followed by the error code.

[**Ser** - -] coin diagnostics error
 [**Acc** - -] coin channels inhibited

If more errors are detected, their codes are summed up

Code	Error	
	S e r	A c c
1	Cashbox sensor	Coin channels inhibited
2	Offset thickness	Channels inhibited from Vending Machine
4	Offset alloy phase	DDCMP input channels inhibited
8		DDCMP output channels inhibited
16	Offset diameter	
32	Error parameter 'F'	
64	5 consecutive errors in cashbox	

Notice:

the message "SERxx" is only displayed when an error is repeated for more than 10 seconds;
 the message "ACCxx" is displayed when coin channels have been inhibited for 2 minutes.

Temporary messages on LCD

When switching the system ON, an error message might be displayed about pullers' position (the message is displayed for a few seconds, then the system automatically tries to restore pullers to their correct position).
 When a puller is not restored to its correct position, letter « E » is displayed on the puller blocked.
 Here below are the messages displayed (both about temporary errors and system status)

Message	Error
<i>G - - -</i>	Acceptor and puller error
<i>H - - -</i>	Error displayed when switching ON: pullers are not in correct position
<i>a - - -</i>	Error displayed when switching ON: puller's run interrupted at the very start
<i>b - - -</i>	Error displayed when switching ON: puller's run back interrupted
<i>P3000</i>	Connecting with P3000..., or P3000 connected
<i>InH</i>	System inhibited, or inhibited by Vending Machine
<i>Audit</i>	Transmitting audit ...
<i>Conf</i>	Transmitting/Receiving configuration ...
<i>CLEAR</i>	Resetting audit ...
<i>FREE</i>	Test Key inserted
<i>OFF</i>	Timed OFF
<i>Euro</i>	Starting message when SIX is configured in Euro
<i>MM-NN</i>	Message displayed while programming coins: MM = no. coins already inserted; NN = total no. coins required
<i>FILL</i>	Filling tubes (from setup menu)
<i>CAL</i>	Calibrating Coin Validator ... (wait, please)
<i>CFGCh</i>	Coin parameters have been modified
<i>Setup</i>	Access to SETUP menu from keypad
<i>TubeL</i>	Setup menu: read level in tube
<i>Tube</i>	Setup menu: adjust max. level in tubes
<i>Price</i>	Setup menu: enter prices
<i>Dest</i>	Setup menu: coin destination
<i>Erclr</i>	Setup menu: reset errors
<i>Fill</i>	Filling tubes
[] []	Calibration phase

System errors

Should system errors be detected, the message [**Err --**] is displayed followed by error code. In that case SIX is inhibited and no longer works (solve the problem to start SIX again). Here is a list of system errors

Err 2 + Led yellow ² flashing	Extended audit full.
Err 6	Executive Price Holding: selections have not been associated with prices in Fn17.
Err 8	Configuration transfer aborted. Either repeat transfer or enter P3000 mode.
Err 9	Euro conversion aborted.

Key errors

With a Key Reader plugged on J9 : should an error be detected when using a key, the message [**CAR --**] is displayed, followed by an error code (see table below)

Code	Error
CAR 1	A key has NOT been accepted. Why? 1) Credit on key > 65535 2) "Check last digit =Y" (but the last digit of credit is neither 0 nor 5) 3) "Check max credit on Key-Card = Y" (but credit on key is 1.5 times > max. credit) 4) Access/Master Key inserted in a system which is not in safe mode (or invalid PWD) 5) oldPIN1 or oldPIN2 on Access/Master key are different from system PINs
CAR 2	Invalid Operator code
CAR 3	Invalid Location code
CAR 4	Invalid Euro Conversion key / System already converted
CAR 5	Invalid PIN
CAR 6	A key has NOT been accepted. Why? 1) Vending Machine inhibited 2) No serial link with Vending Machine 3) "Inhibit reload Cashless =Y" (an attempt has been made to load key with cash) 4) "Test Vend" key inserted with cash credit 5) "Enable Service reset Key = N" (but an "Audit reset" key has been inserted)
CAR 7	The Key has not been accepted because its code has been written in the Black List
CAR 8	Invalid Data/Configuration key
CAR 9	Error while reading/updating key
CAR 10	The Key inserted is different from the Key Type configured in the system (Type1/Type98)
CAR 11	Key invalidated (anti-copying). Invalid credit.
CAR 12	Key/Card "mifare" no MAD or no application Paytec
CAR 14	Euro key inserted in NCU-configured system

LEDs on Oscar reader front panel (connector J9)

OFF	Reader OFF
Green flashing every 5 secs.	Reader ON (ready for use)
Green ON	Key inserted and accepted (you can pull it out)
Red ON	Writing ... (don't pull out the key)
Yellow ON	- Key has not been recognized - Sensor dulled when giving power
Yellow flashing + Err 2	Extended Audit full

2 Led on Key Reader front panel

Configurator

The images in this paragraph refer to "Configurator rev. 3.27"

"CONFIGURATOR" enables operators to create/transfer configurations with a PC (Windows).

Minimum requirements:

1. Processor Pentium
2. Windows 95/98/Me
3. Serial port RS232 (COM)
4. Cable CB.01491

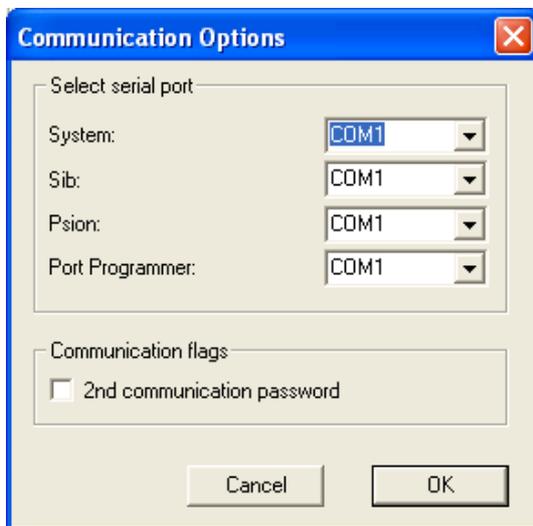
The following operations are possible with "CONFIGURATOR":

- You can configure a system and save the configuration file
- You can transfer a file (.cfg) containing an entire configuration
- You can read a configuration file
- You can read/modify a configuration file
- You can read Audit data from the system
- You can transfer a software revision to the SIB (software updating device)

Setup

"**Configurator**" can be downloaded free from our website www.paytec.it (signup in "download" area). Copy the file on disc "C" and click on setup; the file is unzipped and a folder called "CONFIGURATOR" is automatically created. Click on "config.exe" to install "Configurator".

COM Ports



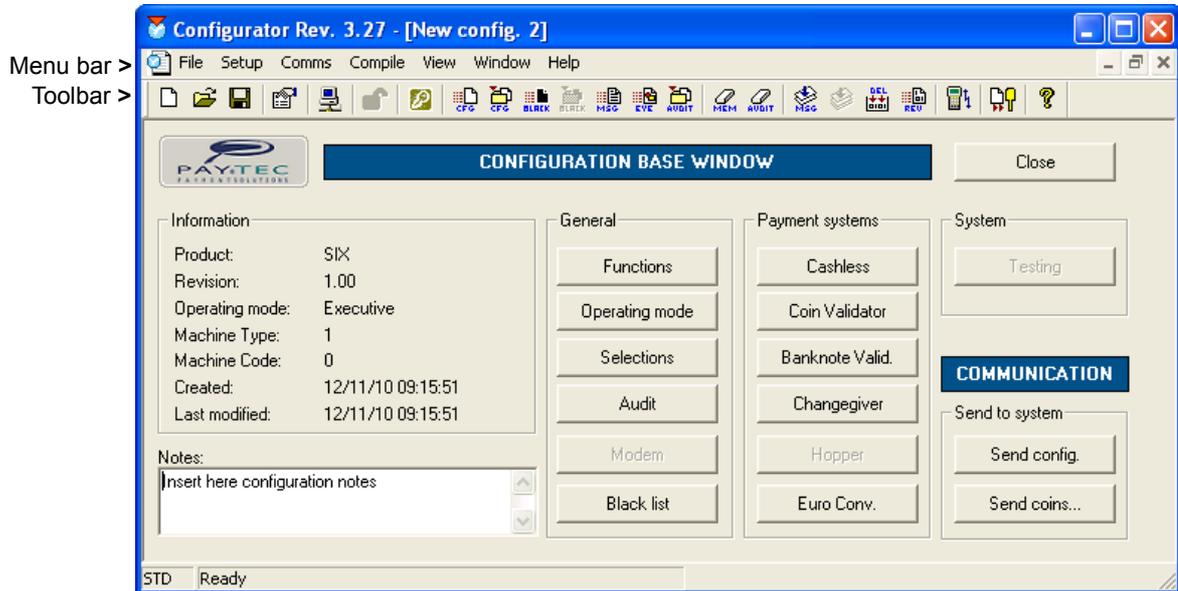
Click on " Comms ", then on " Options " : the window on the left is displayed.

Select the COM Port on which cable CB.01491 has been plugged, then click on " **Confirm** " to save the setting.

Quick Guide

Plug SIX on a PC serial port (cable CB.01491), then give power. Click on "config.exe" to install the application (create an icon on the desktop): the opening window is displayed.

Click on **File ... New** in the Menu bar to create a new configuration (or click on the icon "white sheet" in the Toolbar), select "SIX" in the list and click on **OK** (the window here below is displayed)



Every button recalls a function block: click on a button and enter the data required, then click on **Close** and save your configuration in a folder (you can save the file by clicking on **File ...Save As...**).

Sending a configuration



If you wish to transfer a configuration from your hard disc, click on the menu bar "Comms\System\Send Configuration..." (or click on CFG in the Toolbar). When the window in Fig. A is displayed, select a file from the product folder and click on "Apri": the window in Fig. B is displayed (click on "confirm" to send the configuration)

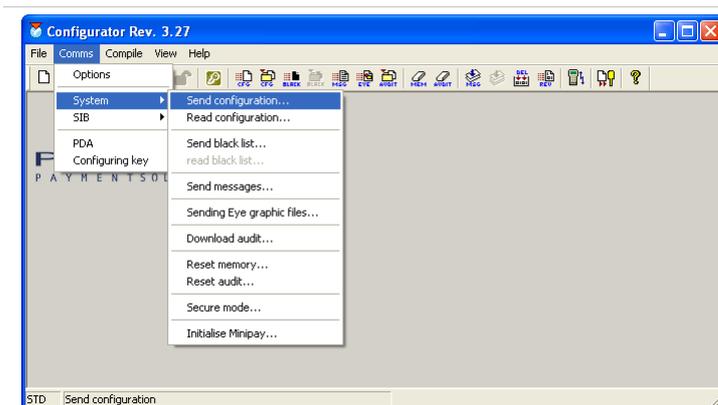


Fig. A

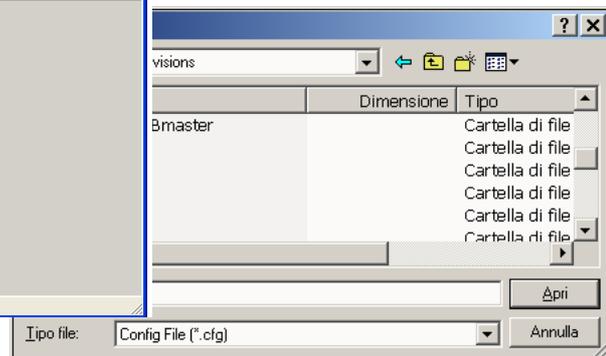


Fig. B

SIB (Serial Interface BDM)

Firmware upgrading device

This device allows users to upgrade any PAYTEC product equipped with one of the following payment systems: SIX / JF8900 / JEDY / GIODY / OSCAR / Mini / CV2406.

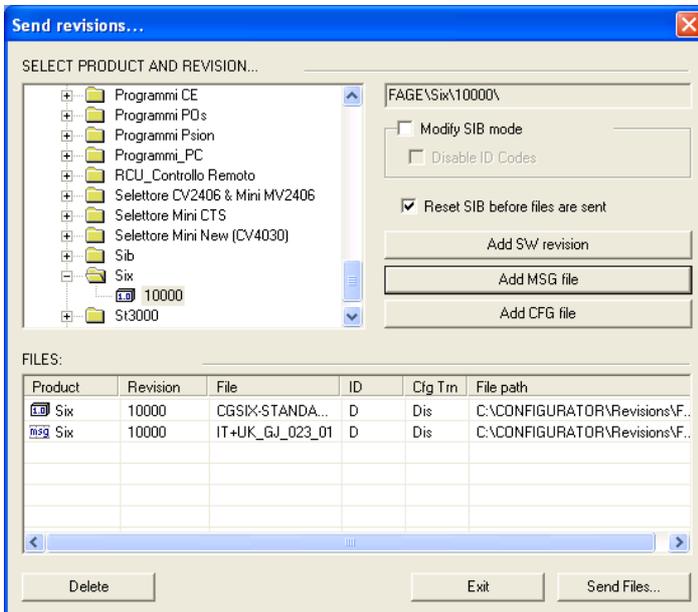
The following elements can be updated in SIX:

- system software (.s19)
- programming messages on P3000 (.msb)
- system configuration (.cfg.)



Loading files onto the SIB

On our website www.paytec.it ("download" area) you'll find the latest software revision for each product; download the software file you need and click on Setup (a new folder will be created following the path: C:\CONFIGURATOR\Revisions\SIX\Rev---).

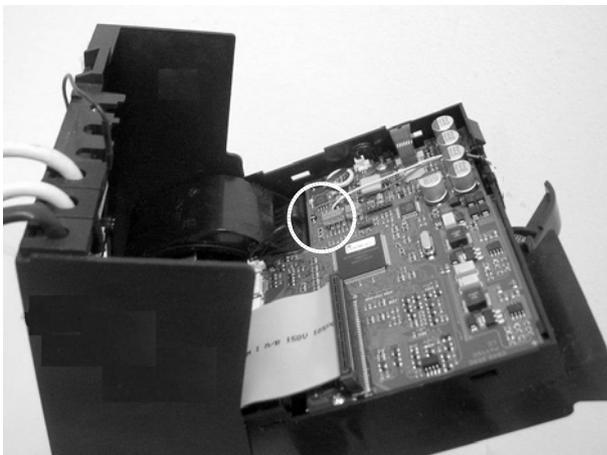


Load all the files you need from this folder onto the SIB (with Configurator).

Select **Comms/SIB/send files ...** on the menu bar and the window here on the left is displayed. Select the product folder (SIX), then click on "Add SW revision" and "Add MSG file" to add both sw. release and the message file in the language you need.

Tick the flag "Reset SIB before files are sent". Check the SIB is plugged on a serial port of the PC, then give power (Power supplier 24VDC_item code MC.02691). Click on "**Send files...**" to transfer all the files selected to the SIB; wait till the green Led is ON (that means files have been successfully transferred).

Software upgrade with a SIB unit



Switch "SIX" off and plug the SIB unit on J14 (red connector_6 pins), then switch SIX on again and wait till software upgrade has been completed (green Led steady ON). Switch SIX off, now, and unplug the SIB unit.

SIB connector (cable CB01441).
Connecting cable is part of SIB equipment

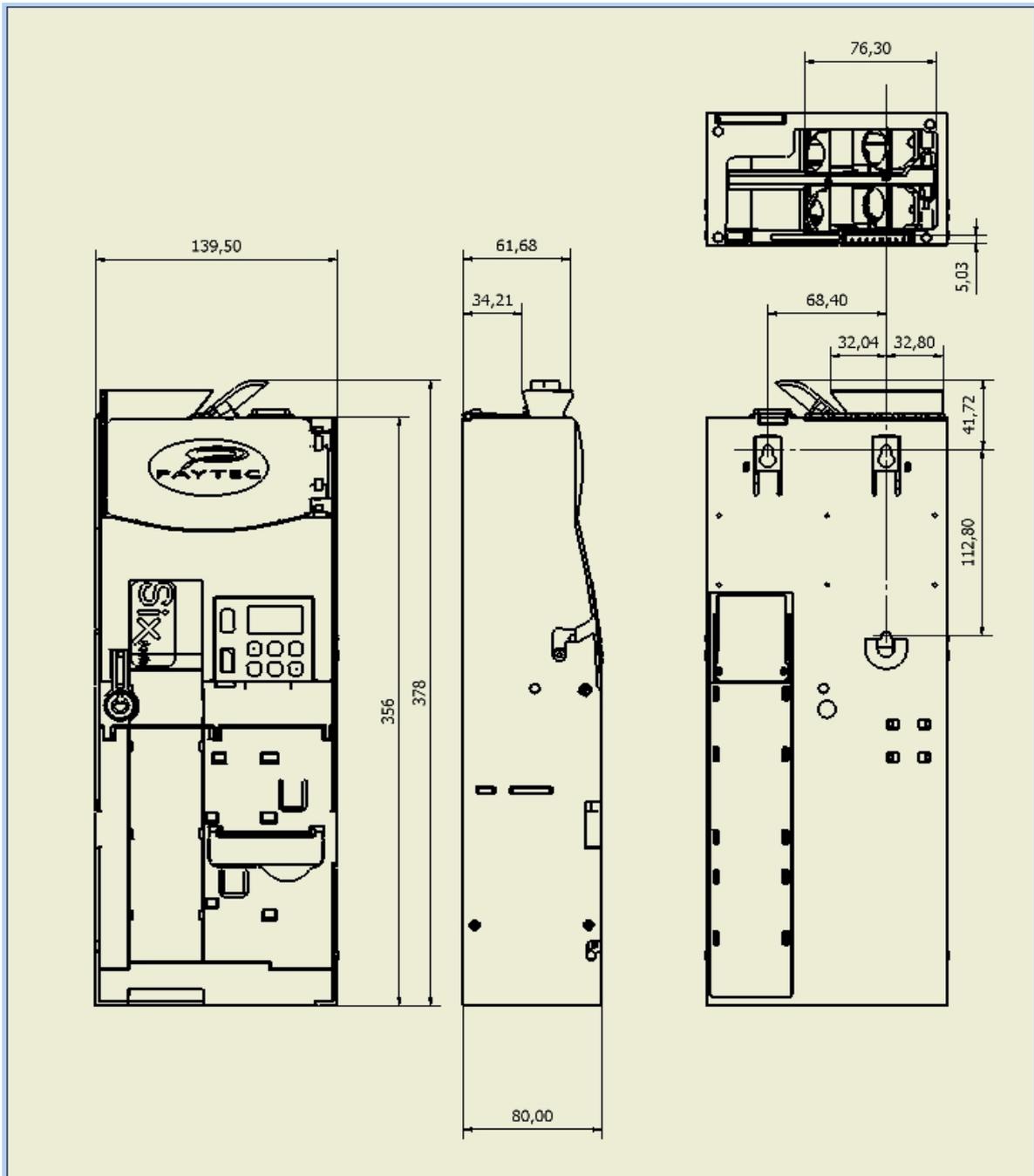
Specifications

Model	Changegiver SIX
Serial Master Protocol	Executive BDV001 MDB
Serial Slave Protocol	MDB
Power requirements	24V AC EXE/BDV 34V DC MDB
Rating	24V AC $\pm 10\%$
Wattage	P = 20W nom.
Absorption	0.5A nom. / 1.2A max
Temperature	0° - 50° C
External IrDA	(•)
Connector <i>Key</i> reader	•
Connector <i>KeyStar/CardStar³</i> reader (<i>mifare</i>)	•
Connector banknote reader (parallel)	•
Cable for connection with an MDB Slave unit	•
Coin channels	30
Programming on spot with P3000	•
Adjust coin discrimination tolerance	•
Tubes	6
Replace single tubes	•
Prices	100 max.
Discounts	up to 4 discounts
LCD integrated / external	• / -
Free Vends / Special discounts / Free Credit	•
Graphic display EYE (external)	(•)
Audit (EVA-DTS protocol)	•
Data readout with P3000 / Psion mx	•
Audit Service Key	•
System configuring with P3000 ⁴	•
Languages	2
Quick SetUp from keypad	•
Quick tube fill-up from keypad	•
Configuring with PC / Psion (external IrDA)	• / •
Software upgrade via SIB	•
Diagnostics on LCD/P3000	• / •
Dimensions (lxhxp)	136 x 385 x 80 mm
Weight	1,7 Kg

³ Keys and Cards mifare

⁴ Programmmer P3000 is available on demand

Dimensions





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