

PROGRAMMING MANUAL



BOARD SVE01

VENDING MACHINE

SVE DL9 - SVE DL6 - SVE DV9 - SVE DV6 - SVE DM6 - SVE DM9 SVE SDX - SVE SD8 - SVE SD6 - SVE SC8 - SVE SC6 SVE SMX - SVE SM8 - SVE SM6 SVE SSX - SVE SS8 - SVE SS6

– Design Line –

Master / Slave VERSION

()

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▲ <u>CAUTION:</u> failure to follow the instructions contained in this manual may involve damage to the machine and/or personnel.

Should this manual be lost or damaged, you may request a copy from the manufacturer: please enclose the serial number of your vending machine with your request.

1 GENERAL WARNINGS

1.1 Purpose of this manual

The manual contains the correct procedures for programming of the Vending Machine. This manual is an integral part of the machine and must therefore be kept intact and available to hand for the machine's entire productive life.

KEEP INSIDE THE MACHINE

1.2 To whom this manual is addressed

This manual is addressed to those persons in charge of installing, setting, and extraordinary maintenance of the vendor (Installer/Maintenance technician). It is compulsory that all personnel in charge of these operations are familiar with the instructions and abide by the procedures contained in this manual.

Technicians allowed to operate this vending machine

Installer/ Maintenance / Specialized technician

 The intervention of the maintenance technician is required for all those operations where the lower protection cover must be opened: when cover is removed all operations must be done only by SandenVendo personnel or by authorized technicians (trained and informed) and not by general operators because of electrical and mechanical risks.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

1.3 Responsibility

The **manufacturer's** responsibility is confined to the correct use of the machine, in the limits indicated in this manual.

"SandenVendo Europe Spa" declines all responsibility for any damages caused to persons and/or property as the result of:

- Incorrect installation
- Use of unauthorized spare parts
- Execution of changes unforeseen/unauthorized by the manufacturer
- Improper use of the machine
- Connection to inadequate supply systems and non in conformity with the regulations in force

1.4 Manufacturer

"SandenVendo Europe Spa." has over 50 years experience in constructing beverage vending machines, and it is precisely the technological know-how it has developed over many years of research working closely with the production and international marketing, which is the best guarantee that "SandenVendo Europe Spa." can offer.

1.5 Service centers

"SandenVendo Europe Spa." is represented by a valid and prepared sales network in both Italy and Europe (see inner cover page).

1.6 Warranty

The warranty on the Vending Machine components, starting from the date shown on the delivery note, is for 24 months for the cooling system.

The warranty includes exclusively the parts replaced, with labor excluded.

The Warranty does not include, damages to the vending machine caused by:

- Transport and/or handling
- Operator errors
- Lack of maintenance as explained in this manual
- Failures and/or breakages not due to malfunction of the vending machine

1.7 General safety warnings

- Carefully read the manual before starting or loading the vending machine
- Protect the vending machine against weather conditions
- Only maintenance technicians should remove the protective covers
- Always read the programming manual before operating the electronic board settings
- Never position the vending machine in direct sunlight
- Never sell the products with the door open
- Refer to the routine maintenance chapter to clean the vending machine
- Disconnect the power supply cable before investigating or unblocking a blocked product
- Use a special protection system/Residual current device or similar.
- Install the appliance so that the electrical plug can be easily accessed afterwards
- If the power cable is damaged, it must be replaced by the manufacturer or by one of its technical support personnel or by a qualified electrician.
- This machine is not suitable for installation in areas where water jets are used

Instructions for programming SVE01 Board functions

- This machine is not suitable for outside installation
- To prevent hazards due to machine instability, secure the machine according to the instructions
- In case of a failure and/or poor operation, only seek help of the qualified personnel of our service centers.
- Use only spare parts authorized by the manufacturer

The pictures and illustrations in this document are only indicative. **SandenVendo Europe S.p.A.** recalls that the technical and performance of products can change without notice.

"SandenVendo Europe S.p.A.". reserves the right of making changes on their vending machines without any advice; moreover they declare that the vendors listed in this manual are in conformity with the following directives: **2006/42/EC** (EC markings).

"SandenVendo Europe S.p.A." assumes no liability for the correctness of the contents or damages caused by using this manual.

"SandenVendo Europe S.p.A." reserves the right to make changes to this manual without prior notice.

Instructions for programming SVE01 Board

7. Executive

- 13. Output 24 vdc
- 14. Coin return motor

External Slave Board (in the master machine near the main board) used to operate the vend motors with electricity control.

External Slave Board (for slave machine) used to operate the vend motors with electricity control

Optical sensor board (option for master and/or slave machine) used for checking product falling

Elevator control board.

Fluorescent display 256x64

Communication with payment system can be MDB or EXECUTIVE

2.1 Software Features

Service programming routine Credit Accumulation Interface with payment system Interface with Client and management of vend process Emptying tubes manually Filling tubes manually Audit functions Interface display Interface keyboard Payment system USB port to update master & slave software Possibility to have programming and sales messages in many languages Possibility to test all devices inside the machine Possibility to set the HACCP

2.2 Software application for Snack Design Line

2.2.1 Initialization

After connecting the machine to the power supply, turn on the main power switch on the transformer box, and close the door. The machine is now ready to sell. All selections have already been detected, and the prices have already been set by default to 1 Euro.

If the customer did not change drawer configuration, the machine is ready for use.

2.2.2 Product Loading

To load the product, extract each single drawer separately and load the products.

2.2.3 Sold-Out Feature

The optical barrier detects the product fall and if the product is not detected the selection goes into sold-out.

2.2.4 Graphic display

During standby, and in normal sales conditions, on the display of the vending machine, will pass a welcome message. During a selection, the introduced credit and the number of selection will appear. When the product is detected inside the delivery eyelet, the display show the message "thank you and goodbye."

2.2.5 Door switch

For safety reasons 1 door switch controls the correct performance of the vending machine. If the door switch is not pressed or is not working properly, the lift "if present" does not move and the machine will not work. The cooling system is also stopped.

2.2.6 Sales Conditions

The conditions are:

- The door switches are activated
- The shelves are in correct position _
- The optical barrier is ready
- No error was reported -
- The communication works correctly in MDB

2.3 Software application for G-Drink Design Line

2.3.1 Initialization

After connecting the vending machine to the electricity supply and switching on the main power switch on the transformer box, close the door. The lift and the product withdrawal system "Bucket" will cause an initialization, to check the number of shelves and their relative positions. The selections start at the top left with the numbers from 11 to 16 (Model DL6) or from 11 to 19 (Model DL9). The second shelf will begin with 21, the third with 31 and so on. The maximum number of shelves is 7, the minimum is 3

2.3.2 Product Loading

Open the door. Pull out drawers one by one and load the products. To be able to easily load the bottom shelf, with the door open, manually push open the product door and hold it to move the bucket to the right. Opening it a second time, will return the bucket to the left. Once you have loaded the products the bucket will automatically return to its home position when the door is closed.

2.3.3 "Flap" Feature

When a product is detected within the "flap", the LEDs light up, and the "flap" opens. If the product is not removed within 2 minutes the LED turns off and the display shows the message "remove the product." When the product is picked up, the lights flash, and then the "flap" closes.

2.3.4 Sold-Out Feature

The magnetic element in the product door activates a reed switch to allow the detection of the product falling within the "flap". If a selection is made empty, the door will not open and the flap is closed. The vending machine will put the selection in sold-out, until the door is opened and closed (during reloading).

2.3.5 Graphic display

During standby, and in normal sales conditions, on the display of the vending machine will pass a welcome message. During a selection, the introduced credit and the number of selection will appear. When the product is found in the "Flap", the display will scroll the message "Remove the Product."

2.3.6 Door switch

For safety reasons 2 door switches have been installed on the machine, 1 for the main board and for the control board of the slave elevator and 1 for the cooling system. If the switches do not work or are defective, the cooling system will not start and / or the machine does not work.

2.3.7 Sales Conditions

The conditions are:

- The door switches are activated
- The product door is closed -
- The "Flap" is closed
- The initialization of the machine was made correctly
- No error was reported
- The communication works correctly in MDB

3 GENERAL INSTRUCTION

3.1 Selection Button Functions In Programming Mode

1	Selection Button 1	Exit from the submenu, exit without saving the set values
2	Selection Button 2	Increases values, or shifts to the next menu. Keeping pressed increases rapidly.
3	Selection Button 3	Decrease values, or returns to the previous menu. Keeping pressed decreases rapidly.
4	Selection Button 4	Confirms values, or enters the submenu
0	Selection Button 0	Brings the value to zero

3.2 Update the software to version 2.xx

When the vending machine has an old software version installed, i.e. the versions that do not control the connection between the Master models (DL9/6, DV9/6, DC6, DM9/6 and SDX/8/6, SC8/6, SMX/8/6) and the Slave models (SSX, SS8 e SS6), it is necessary to update it, using the following procedure.

To update the vending machine you need the new software version (the default languages of the software is English) loaded onto a formatted USB stick.

- Open the door, and pull out the drawer.
- Press the programming button on the SVE01 board;
- Enter in technician menu by entering the password 4-2-3-1-4;
- Do the "Save file to USB": this procedure is necessary because it save the language file.

11.8 Tecnician Menu07 Load file from USB08 Save file to USB09 Reset Code

- Connect the USB KEY with the 2.xx software version and then do the "SVE01 Update".

11 General Menu
10 Test
11 Technician menu
12 EVA Counters

11.4 Tecnician Menu
03 Cooling
04 SVE01 Update
05 Payment Setting

Now the machine does the software update and when the software is updated to the version 2.xx, the machine will prompt you designate the machine type. You have to press 1 for Snack, 2 for Drink, 3 for Coffee and 4 for load a backup.

> Select machine type 1 : SNACK 4 : LOAD BACKUP 2 : DRINK 3 : COFFE

- If you choose the option "4: LOAD BACKUP" you can load a full backup of the vending machine model, for use with cloning other machines of the same type.

WARNING: Use the backup of the right vending machine model. (i.e. the backup of the Snack model works only with a Snack vending machine)

After the loading of the backup the vending machine is ready to use with all parameters of the original vending machine.

- After you have choose the model the display shows the following screen which show you the selected model (SNACK, DRINK and COFFEE).

Press button 4 to activate the automatically reset to the factory parameter or the button 1 to return to the previously screen.

Machine selected -> XXXX

All data will be reset to factory default Press 4 to continue or 1 to go back

- After the erasing of data the vending machine will ask you to choose between the "European" version (i.e. the degrees in Celsius and the European daylight saving time) or "USA" (i.e. the degrees in Fahrenheit and the American daylight saving time).

- Finally you will need to set the numbering type of the selections. See the paragraph "4.3.9.1.1 ~ Numbering selections type" on page 42 for explanation.

- After the guided installation, previously described, you will have to set all the parameters of the vending machine (only if you don't have used a backup file):

- Set the language (if different form the standard) as shown on page 25;

Snack Model:

- Perform spirals discovery process as shown on page 49;
- Set payment system as shown on page 20;
- Set price as shown on page 37;
- Set the lift parameters (if lift is used) as shown on page 52;

Drink Model:

- Set the number of tray as shown on page 53;
- Set payment system as shown on page 20;
- Set price as shown on page 37;

3.3 Information with door open

On Design Line models, the safety micro switches are no longer activated by the glass door but by the extraction / insertion of the drawer.

When the vending machine is open, i.e. when you pull out the drawer, the display will show in sequence three screens:

4 PROGRAMMING

To enter the programming menu, open the vending machine and push the red Program button that is on the SVE01 board. (See figure)

Once you press the Program button the display will show the programming menu. In programming mode, you have access to a variety of information that allows you to change the configuration of the vending machine.

The selection buttons assume in programming mode the functions described on page 15.

After entering programming mode, the operator can select the following Menus:

- Common setting
- Tube fill/payout
- > Main machine
- > Sec. machine
- > Sel. Combi Product
- Audit USB
- EVA counters

0. General Menu > Common Setting Tube fill/payout

To enter in the "Common setting", you must digit the Password: 4 - 2 - 3 - 1 - 4

The password in that menu is necessary to avoid that non authorized users can program or modify the setting of the vending machine.

4.1 ~ Common setting

In this menu you can setup the parameters that are common with the Master and the Slave machine.

By pressing the button **4** on the menu "Common setting" prompt the display will show a screen that prompts you to enter the password.

To proceed, you must enter the password **4** - **2** - **3** - **1** and then press the button **4** to confirm and enter to the protected menu.

If you insert a wrong password the display turns back to the general menu.

If the password has been entered correctly the display shows the first protected menu "Secondary machine". To scroll thought the submenu, use the button 2 and 3, button 2 for the next and button 3 for the previous. For return to the general menu press the button 1.

4.1.1 ~ Secondary machine

The software is ready to support a Snack Slave vending machine (SSX, SS8, SS6). This function allows you to have a single payment system for two vending machines. In case that a Slave is installed you have to enable this parameter.

4.1.2 ~ Payment setting

This menu allows you to set all parameters of the payment systems.

4.1.2.1 ~ Payment protocol

This submenu allows you to select the protocol type.

MDB:	Standard MDB.
Exe:	Standard Executive.
Exe P.hold Prg,:	Executive price holding programmable.
Exe P.hold Fix.:	Executive price holding not programmable.

4.1.2.2 ~ Max overpay value

Allow you to set the maximum overpay value.

4.1.2.3 ~ Force vend

(Function connected with the parameter 4.1.2.4 ~ Multi Vend)

This parameter is used to prevent the use of the vending machine as a change machine. When this parameter is enabled, you can get the change only in the following cases:

If the Multi vend is disabled:

When you make a sale with coins, if the sale is successful the proper change is returned, otherwise if the sale fails the coin changer gives you back all the money.

If the Multi vend is enabled:

When you make a sale with coins, if the sale is successful the change is retained for a subsequent selection. If you want the change returned, you must press the coin return button. If the sale is not successful, all the credit is retained.

4.1.2.4 ~ Multi Vend

NO = Multiple Sale disabled (the change is paid automatically after selection) [default] YES = Multiple Sale enabled (the change is retained for a subsequent selection). If you want the change returned, you must press the coin return button.

4.1.2.5 ~ Max cash credit

(Function respected only when 4.1.2.4 ~ Multi Vend is Enable)

This function allows you to set the maximum money accepted for a vend cycle.

If the Multi vend is disabled:

This parameter is not respected.

If the Multi vend is enabled:

- If the value set into the submenu "Max cash credit" is equal to 0 the <u>max money</u> <u>accepted</u> is equal to the highest price set in the vending machine.
- If the highest price set in the vending machine is higher than "Max cash credit" the <u>max</u> <u>money accepted</u> is equal to the highest price set in the vending machine.
- If previous condition are not true the <u>max money accepted</u> is equal to the value set into the submenu "Max cash credit".

4.1.2.6 ~ Correct change threshold

(Function respected only when 4.1.2.4 ~ Multi Vend is Enable)

This parameter must be set to the minimum value of the coins that the coinage can contain in the tubes to give change. When the low change condition is reached the machine display "PUT EXACT CHANGE"

4.1.2.7 ~ Changer Keypad

Activate the changer buttons used to dispense the coins. OFF = Disabled ON = Enabled

4.1.2.8 ~ Coin token Enable

If activated generate a FREE vend when a special token is accepted in the coin mechanism. NO = Not accepted YES = Accepted

4.1.2.9 ~ Separate cashless price

If the "Separate cashless price" is enabled:

The "coin" and "cashless" prices can be different.

Example: If selection 11 has set the "coin" price to 0.50 and the "cashless" price set at 0.30, when you make a vend with the money the price will be 0.50 and when you make a vend with the cashless the price will be 0.30.

If the "Separate cashless price" is disabled:

The "coin" and "cashless" prices are equal. In this case the "cashless" prices can't be set. Example: If the selection 11 has set the "coin" price to 0.50 when you make a vend with the money or with the cashless the price will be 0.50.

To know how to set the "coin" prices see paragraph "4.3.4 ~ Coin price [Master & Slave]" on page 37;

To know how to set the "cashless" prices see paragraph "4.3.5 ~ Key price 1 / 2 [Master & Slave]" on page 39.

4.1.2.10 ~ Max cashless revalue

This parameter determines the maximum cashless revalue.

4.1.2.11 ~ Bill Escrow enable

This allows you to give as change also banknotes. If enabled, and the last banknote increases the credit over the maximum price, the bank note is not inserted in the stacker, but remains available to be rendered as change. If the function is disabled, the banknotes go directly into the stacker.

4.1.2.12 ~ Bill token enable

This function allows you to enable or disable the utilization of a special banknotes (token banknotes) that generate a free vend.

4.1.2.13 ~ Bill revalue only

If NO then bill acceptance is managed by coin in tube + bill escrow feature. If YES then bill are accepted only when a cashless key inserted; the key must be able to revalue and the bill type accepted are according to the <u>max revalue - actual key credit</u>.

4.1.3 ~ SVE01 update

It is possible to update the software of SVE01 using a USB key.

Pressing 4 the word "Continue ?" will appear on the display, press 4 again to view the files within the USB stick.

Use the buttons **2** and **3** to scroll through the files/folders on the USB key to find the file "SVE01.bin".

The folders are indicated by a slash "/".

Press the button **4** to enter a folder or to confirm the file to use for the update.

To return to the previous folder you need to press the button 4 when the display shows "/..."

The vending machine to confirm the correct board upgrade will emit a beep for about 4 seconds. In case of failure to update the board will issue 3 beeps in sequence.

4.1.4 ~ Load file from USB

To load a file you need to connect a USB, that contain the file of Language or backup, in the USB port on SVE01 controller (shown in figure):

To perform this procedure you must press the red button on the SVE01 board, scroll through the menu items using the button 2 until the "Common setting", enter the menu and scroll the submenu item until the "Load file form USB".

Enter by pressing the button 4;

The system will display the files within your USB. Scroll through your files using the buttons 2 or 3 until you find the file to be uploaded. To load the file inside the machine press the button 4.

It is possible to load only the Languages file and the backup.

Note: The machine software allows you to upload one file at time, so if you need to load more than one is necessary to repeat the procedure "Load file form USB".

4.1.5 ~ Save file to USB

The vending machine can generate 2 files:

- The full backup file that contain all the operation parameters, the price and various settings
- The language file that contains all the display messages translated inside the board.

This function is very useful when it is necessary to replace a malfunctioning board, because it allows you to create a complete copy of the vending machine.

To save the file you need to connect a USB stick into the USB connector on SVE01 board. By pressing the button 4 this function saves on the USB two files: the full backup of the machine and the language file.

4.1.6 ~ Language

Standard The standard language of the machine set as default is English

Custom International It is the language file inserted on the USB key with normal characters

<u>Custom Cyrillic</u> It is the language file inserted on the USB key, in the desired language with Cyrillic characters

Note: To reset the default language (English) press the programming button on the SVE01 board while turning on the machine, and then confirm by pressing button 4.

To load the file from the USB follow the indication of the paragraph "4.1.4 ~ Load file from USB" at page 24.

Instructions for programming SVE01 Board functions

4.1.7 ~ Set Clock

4.1.8 ~ Set time discount

The function can be enabled in 10 different periods, and will give a discount from the original price of the selection.

To set the time period you have to follow this instruction:

- **Enable**: YES enable the discount (All the periods are now shown in the programming menu); NO disables the discount.
- **Period 0...9**: The discount can be enabled in 10 different periods of the week.
 - Start: The start time of discount request.
 - Hour: Setup the hour.
 - Minutes: Setup the minutes.
 - Stop: The stop time of discount request
 - Hour: Setup the hour.
 - Minutes: Setup the minutes.
 - Day of the week: The day of the week for the discount request.
 - From Sunday to Saturday

After you have set all the periods you must then select which products are to be sold with a discount price. This separate procedure is found on page 39.

4.1.9 ~ Set time age control

0.8. Common settings Set time discount > Set time age control Set time inhibit

The age control validation can be enabled in 10 different periods and allow the vending machine to ask for age validation before allowing purchase of age controlled products.

To set the time period you have to follow this instruction:

- **Enable**: YES enable the age control (All the periods are now shown in the programming menu), NO disables the age control.
- **Period 0..9**: The validation can be enabled in 10 different periods of the week.
 - Start: The start time of age control request.
 - Hour: Setup the hour.
 - Minutes: Setup the minutes.
 - **Stop**: The stop time of age control request
 - Hour: Setup the hour.
 - Minutes: Setup the minutes.
 - Day of the week: The day of the week for the age control request.
 - From Sunday to Saturday

After you have set all the time periods, you must also <u>separately</u>:

- Select which products require an age validation, as explained on page 40;
- Set the age limit into the submenu "Age limit", that is visible only if the time age control is enabled, as explained on page 31.

4.1.10 ~ Set time inhibit

This function allows you to inhibit sales from the machine for maximum 10 different periods.

To set the time periods you have to follow this instruction:

- **Enable**: YES enable the inhibition (All the periods are now shown in the programming menu), NO disables the inhibition.
- **Period 0..9**: The inhibition can be enabled in 10 different periods of the week.
 - Start: The start time of inhibition request.
 - Hour: Setup the hour.
 - Minutes: Setup the minutes.
 - **Stop** : The stop time of inhibition request
 - Hour: Setup the hour.
 - **Minutes**: Setup the minutes.
 - Day of the week: The day of the week for the inhibition request.
 - From Sunday to Saturday

After you have set all the time periods, you must separately:

- Set which selections are inhibited as shown on the paragraph "4.3.8 ~ Set product

inhibit [Master & Slave]" on page 40;

- Set the turning on or off of the light as shown on the paragraph "4.3.10.5 ~ Light [Master & Slave]" on page 57.

4.1.11 ~ Set time combi Sel.

0.9 Common settings Set time inhibit > Set time combi Sel. Reset code

This function will enable (using weekly timer) 10 virtual selections that permit to sell 2 product at special price. The products can be from the same vending machine (Master or Slave) or 1 product from Master vending machine and 1 product from Slave vending machine. These special selections are consider by the vending machine as a single product (even if it is really composed of 2 products). So it has its own price (even discount, age control, inhibit period, etc) and its own counter in cash and sales.

If one of the products that compose the combi is not delivered then the vending machine will consider the vend failed and the money is refunded (if is the first product that fail vend, the second product is not delivered).

The single product that compose the combi can be from a group of vending motors. These combi selections use the key combination from "80" to "89" (10 virtual selection are available).

To set the time period you have to follow this instruction:

- **Enable**: YES enable the combi (All the periods are now shown in the programming menu); NO will disable the combi.
- **Period 0..9**: The combi can be enabled in 10 different period of the week.
 - **Start**: The start time of combi request.
 - Hour: Setup the hour.
 - Minutes: Setup the minutes.
 - Stop : The stop time of combi request
 - **Hour**: Setup the hour.
 - **Minutes**: Setup the minutes.
 - Day of the week: The day of the week for the combi request.
 - From Sunday to Saturday

After you have set all the time periods, you must then separately select which products are to be combined; this procedure is found on page 58.

4.1.12 ~ Reset code

0.11 Common settings Set time combi Sel. > Reset code Door open counter

This function allows you to do a factory reset of the vending machine, setup the machine type and do a full backup of the machine.

To start the reset function you have to:

- Enter in the menu "Reset code" and set one code (see table below) then shut down the vending machine by the button on the box transformer;
- Switch on the machine while you keep the red programming button on SVE01 control pressed, until the buzzer finishes.
- On the display will appear the message "Continue ?" You then press 4;
- Depending on the selected code, the vending machine will provide different results, see the table below.

Code that makes the factory reset of the machine. All the parameters are reset to factory default. This code does NOT change the machine type After the reset with this code you have to re-set all the parameters of the vending machine: Snack Model: 5 - Perform spirals discovery process as shown on page 49; - Set payment system as shown on page 20; - Set price as shown on page 37; - Set the lift parameters (if lift is used) as shown on page 52; Drink Model: - Set the number of tray as shown on page 53; - Set payment system as shown on page 20; - Set price as shown on page 37; Code that allows you to change the machine type. After you have selected the machine type you have to choose also the numbering scheme of the selections. 6 Numbering type of the selections is explained on the paragraph "4.3.9.1.1 ~ Numbering selections type" on page 42. Code that starts a guided procedure to set up the machine, to select machine type, to select daylight saving time and to the numbering scheme of the selections. 7 See the indication at page 16 for a complete guide. Code that make a full backup of the memory (parameters and counters) of the board onto a USB key. 10 When you do a full backup you have to connect a USB key to the SVE01 1 board.

4.1.13 ~ Door open counter

The function allows you to enable or disable the counter visualization with the door open.

4.1.14 ~ Autoclear counter

The function allows you to autoclear the resettable counters after the EVA DTS read out.

4.1.15 ~ Age limit

This parameter can be used only with devices connected in MDB, if connected otherwise it is not necessary to set the age limit.

Submenu visible only if the age control was allowed in the menu " Set time age control " as indicated at the paragraph "4.1.9 ~ Set time age control" on page 27.

According to the set age in this menu the vending machine, after the reading of a identification card, will decide to allow or not allow the sales of the desired product.

4.2 ~ Tube fill/payout

This menu is visible only with MDB coin changer connected.

This function allows you to check the tube status of the coin changer and do the tube filling/payout.

TUBE PAYOUT

If you have to make a tube payout to scroll between the tubes use button 2 and 3, the button 2 for the next tube and the button 3 to the previous tube. To empty the selected tube press the button 4.

TUBE FILLING

To perform the tube filling, when you insert the coins into the coin insert.

The coin changer recognizes them and routes each coin into the corresponding tube to the value of the coin.

The display will then show the number of coins in the tube for coin value inserted.

To return to the general menu press button

4.3 ~ Main / Secondary machine

This function allow you to setup all the parameter of the vending machine.

4.3.1 ~ Historical error [Master & Slave]

This menu displays a list of the errors found during operation of the machine. In the event there are no errors, the display will show "No error";

Otherwise, it will display the errors that the machine has detected.

To scroll through the errors displayed, use button **2** and **3**, the button **2** to display the next error and button **3** to display the above error.

To delete an item from the history error, press the button **4**; the display will prompt for confirmation; to confirm and delete the error press button **4** again. To return to the general menu press button **1**.

Master:

M 2.0. Main machine M 2.0. Historical Error No error > Historical error Cash counter Slave: S 3.0. Historical Error S 3.0. Sec. machine No error > Historical error Cash counter

Shortcut to access the menu of the errors directly by pressing the following buttons:

to access directly the historical error menu of the master model

to access directly the historical error menu of the slave model

G-Snack ERRORS (Master and Slave)		
No error		
Product xx	Error of a single motor, xx is the number of the motor	
Optical barrier error	Error of the optical barrier on the delivery eyelet. Check if the sensor of the optical barrier is covered, the connection of the connector or replace the optical barrier.	
Lift movement error	Error detected if the elevator has some malfunction	
HACCP error	Check the correct setting of the parameters of HACCP and check the correct operation of the refrigerant system.	

G-Drink ERRORS (only Master)

No error	
ERROR SPEED Y	Jamming or speed error on the Y vertical motor
ERROR HOME SWITCH Y	Home switch Y not found or connected
ERROR OPTICAL SENSOR Y	Optical Y sensor doesn't found shelves position
ERROR SPEED X	Jamming or speed error on the X horizontal motor
ERROR HOME SWITCH X	Home switch X not found or connected
ERROR OPTICAL SENSOR X	Optical X sensor doesn't found columns position
ERROR INITIALISATION ERROR SLAVE MEMORY	Slave unit Memory error or initialization corrupted
BUCKET ERROR	Bucket jamming or missing signal
WRONG SHELF NUMBER	Wrong shelves number detected
VEND PROHIBITION	Vend error
No USD	Slave unit error or initialization missing
DOOR SWITCH ERROR	Error detected when the micro on the drawer has some malfunction. Check connecting of the harness or replace
POWER SUPLY ERROR	Slave error power supply 24Vdc
DELIVERY FLAP ERROR	Delivery Flap door remaining open or switch defective
Motor time-out during opening	The micro signal of the opening flap is not detected by the machine. Check if the micro is operated properly, check the connection of the wiring or replace the micro.
Motor time-out during closing	The micro signal of the closing flap is not detected by the machine. Check if the micro is operated properly, check the connection of the wiring or replace the micro
uSw locking not detected	The micro signal of the opening lock motor of the flap is not detected by the machine. Check if the micro is operated properly, check the connection of the wiring or replace the micro.
uSw unlocking not detected	The micro signal of the closing lock motor of the flap is not detected by the machine. Check if the micro is operated properly, check the connection of the wiring or replace the micro
Delivery bucket error	Error of the door switch where pass the product on the cabinet.


4.3.2 ~ Cash counter [Master & Slave]

On the display you can read the quantity of money cashed for each selection and the total. To scroll between the selection use button 2 and 3, the button 2 for the next selection and the button 3 to the previous selection. To return to the general menu press button 1.



08 Product 19 0,00 / 0,00 09 Product 10 0,00 / 0,00

10 Product 21 0,00 / 0,00

18 Product 29 0,00 / 0,00

19 Product 20 0,00 / 0,00

60 Product 71 0,00 / 0,00

68 Product 79 0,00 / 0,00 69 Product 70 0,00 / 0,00 70 Product 81 0,00 / 0,00

78 Product 89 0,00 / 0,00 79 Product 80 0,00 / 0,00 80 All product 0,00 / 0,00



counter can be resettable in two ways:

- Going to selection "80 All Product 0,00 / 0,00" and press button 4 to reset all counters;

- Doing the audit as shown at paragraph "4.5 ~ Audit USB" on page 59.

4.3.3 ~ Sale counter [Master & Slave]

On the display it is possible to read how many times a selection has been sold and the total.

To scroll between the selection use button 2 and 3, the button 2 for the next selection and the button 3 to the previous selection. To return to the general menu press button 1.

Master:



4.3.4 ~ Coin price [Master & Slave]

This submenu allows you to set the cash prices of the selections. The prices are set by default to 1.



When prices are set to 0 (zero), the machine is in "free vend" and the settings of the coinage are not respected

Press the button **2** and **3** to scroll between the prices of the available selections.

Master:



Pressing the button 4 it is possible to change the price of the selection.

To set the price use button 2 for increase the price and button 3 to decrease the price, to confirm press the button 4 otherwise press button 1 to return to the Coin Price menu.

In this menu you can use the button **1** to set the price to 0 (zero). To return at the general menu press button **1**.



4.3.5 ~ Key price 1 / 2 [Master & Slave]



This routine is used only in MDB mode and it is visible <u>only if</u> the separate cashless price is enabled, as shown on the paragraph "4.1.2.9 ~ Separate cashless price" on page 23.

The procedure for modifying the Key (Cashless) Price is the same as for the coin price. Refer to paragraph "4.3.4 ~ Coin price [Master & Slave]" on previous page. Note there are 2 possible cashless prices that can be set - Key 1, and Key 2.



4.3.6 ~ Discount Value [Master & Slave]

In this function you can set the discount value for each selection.



Use the button 2 and 3 to chose the product and press 4 to set the discount value.

Example:

Coin price Discount price Product 11 = 1.00 Product 11 = 0.60

Final price = Coin price - Discount price = 1.00 - 0.60 = 0.40

If the discount price is higher than the coin price, the vending machine is in free vend.

This function is enabled only if you have set correctly the period as shown on page 26.



4.3.7 ~ Set product age control [Master & Slave]

In this function you can set the age control validation for each selection.



Use the button **2** and **3** to chose the product and press **4** to enable the age validation.

During the vend session if you chose a product with the age control the vending machine require a validation, after you have done that the vending machine will allow you to buy the product.

When the vend finishes the validation is kept for 20 seconds; you can make another vend without doing the validation.



To set the age limit use the submenu "Age limit" as shown on page 31.



This function is enabled only if you have set correctly the period as indicated on page 27.

4.3.8 ~ Set product inhibit [Master & Slave]

In this function you can set the product inhibition for each selection.

Master:



Use the button **2** and **3** to chose the product and press **4** to enable or disable the inhibition of the product.



This function is enabled only if you have set correctly the period as indicated on page 28.

4.3.9 ~ Test [Master & Slave]

With this menu you can test various systems and components of the vending machine.



4.3.9.1 ~ Spiral [only G-Snack, Master & Slave]

This function is used to test the operation of the vend motors installed in the machine.

Master:		_	
	M 2.9.0. Test	$\left \right $	Spiral
	> Spiral Keyboard		11
Slave:			
	S 3.9.0. Test		Spiral
	> Spiral Keyboard		11

Using the selection buttons 2 and 3 it is possible to test individually each shelf spiral by pressing each time selection button 4 to start the test (next to the number of motors in tests.) OK will appear if it works correctly or NO in case the motor is not installed or faulty).

Pressing the selection button **5** will automatically start the test program of all spirals.

The spirals can be counted in two different ways according to numbering type of the selections.

See the paragraph "4.3.9.1.1 ~ Numbering selections type" on page 41.

4.3.9.1.1 ~ Numbering selections type

During the first initialization, as described on page 16, or after a reset, as described on page 30, you can set the numbering scheme of the selections.



Selections will be indicated as follows according to the type of numbering set:

Classic mode:

	Selection / Shelf Columns								
Shelf 1	11	12	13	14	15	16	17	18	19
Shelf 2	21	22	23	24	25	26	27	28	29
Shelf 3	31	32	33	34	35	36	37	38	39
Shelf 4	41	42	43	44	45	46	47	48	49
Shelf 5	51	52	53	54	55	56	57	58	59
Shelf 6	61	62	63	64	65	66	67	68	69
Shelf 7	71	72	73	74	75	76	77	78	79
Shelf 8	81	82	83	84	85	86	87	88	89
Max	Ν	/lodel D	L6 - D\	/6 - DC	6 - DM	6			
selection									
of the		Model DL9 - DV9 - DM9							
shelf									

G-Drink

	Selection / Shelf Columns									
Shelf 8	81	82	83	84	85	86	87	88	89	80
Shelf 7	71	72	73	74	75	76	77	78	79	70
Shelf 6	61	62	63	64	65	66	67	68	69	60
Shelf 5	51	52	53	54	55	56	57	58	59	50
Shelf 4	41	42	43	44	45	46	47	48	49	40
Shelf 3	31	32	33	34	35	36	37	38	39	30
Shelf 2	21	22	23	24	25	26	27	28	29	20
Shelf 1	11	12	13	14	15	16	17	18	19	10
Max	Ν	Model S	5D6 - S	C6 - SN	16 - SS	6				
selection		Model SD8 - SC8 - SM8 - SS8								
of the shelf		Model SDX - SMX - SSX								

G-Snack



New mode:

		Selection / Shelf Columns								
Shelf 1	10	11	12	13	14	15	16	17	18	19
Shelf 2	20	21	22	23	24	25	26	27	28	29
Shelf 3	30	31	32	33	34	35	36	37	38	39
Shelf 4	40	41	42	43	44	45	46	47	48	49
Shelf 5	50	51	52	53	54	55	56	57	58	59
Shelf 6	60	61	62	63	64	65	66	67	68	69
Shelf 7	70	71	72	73	74	75	76	77	78	79
Shelf 8	80	81	82	83	84	85	86	87	88	89
Max	Model SD6 - SC6 - SM6 - SS6 Model DL6 - DV6 - DC6 - DM6									
selection		Ν	Aodel S	D8 - S0	C8 - SN	18 - SS	8			
			N	lodel D	L9 - DV	/9 - DM	9			
SITEI	Model SDX - SMX - SSX									-

G-Snack / G-Drink



4.3.9.2 ~ Flap test [only G-Drink]



Within this submenu you can make the tests of flap.

Pressing button 4 on the display appears a submenu with the parts of the flap that can be tested:

<u>Flap lock</u> (by pressing 4 on this menu item puts the flap in the locked position) <u>Flap unlock</u> (by pressing 4 on this menu item you put the flap in position to unlock)

(note: before you do the test opening and closing unlock the flap)

Flap open (by pressing 4 on this menu item opens the door flap)

Flap Close (pressing 4 on this menu item closes the door flap)

<u>Product Detect</u> (by pressing 4 on this menu item on the display appears "NO" if the sensor does not see anything inside the flap, "YES" if inside the flap there is a product)

4.3.9.3 ~ Keyboard [Master & Slave]

This function allows you to check the correct functioning of the keyboard.



The display shows the number corresponding to the button you pressed.

By pressing button **0** the display shows the number 10, ***** the display shows the number 11, by pressing button **#** the display shows the number 12.

To return at the test menu press and hold button **1** for 3 seconds.

4.3.9.4 ~ Output [only G-Snack, Master & Slave]

This function allows you to check the outputs peripherals of G-Snack vending machine.



4.3.9.4.1 ~ Light [only G-Snack, Master & Slave]

Within this submenu you can test the functioning of the light.



Pressing selection button 4, the display shows the word "OFF", by pressing selection button 2 the LEDs light up and the display shows "ON" while pressing selection button 3 the LEDs turn off and the display returns to "OFF".

4.3.9.5 ~ Temperatures [only G-Snack, Master & Slave]

In this function the display will show the actual temperature.



If the probe is disconnected or malfunctioning the display will show an error.



4.3.9.6 ~ Lift [only G-Snack, Master & Slave]

This menu shows the current status of the lift.

Master:



If the lift is installed "Lift Status" will show "OK" If the lift is not installed "Lift Status" will show "KO"

By pressing button 2 and 3 you can increase and decrease the position of the lift; when you press button 4 the lift will move to the position indicated.



This menu is visible only if you enable the lift as shown at paragraph "4.3.10.1.7 ~ Lift enable [only G-Snack, Master & Slave]" on page 52.

4.3.9.7 ~ Optical barrier [only G-Snack, Master & Slave]

This menu display the current status of the optical barrier



To test the optical barrier, drop an object in the delivery eyelet.

If the barrier is working correctly the display show "Detect : YES" for a few moments. If the display will show "Fault : YES" check the proper alignment of the optical barrier.

4.3.9.8 ~ Drink vending test [only G-Drink]



Pushing 4 you can select from 1 to 5 test vends without modifying the set prices or using cash. (Test vends do not affect audit data amounts.)

If you set a value higher than 0 in this submenu, once the drawer is closed and the machine is back in operate mode, you have access to free vends equal to the number set. At the end of the test the machine returns to normal vend.

4.3.10 ~ Technician menu [Master & Slave]

Pressing the button 4 on the menu "Technician menu" the display will show a screen that prompts you to enter the password.

To proceed, you must enter the password **4** - **2** - **3** - **1** and then press the button **4** to confirm and enter to the protected menu.

If you insert a wrong password the display turns back to the general menu.



4.3.10.1 ~ Snack Option [only G-Snack, Master & Slave]



4.3.10.1.1 ~ Spiral detection [only G-Snack, Master & Slave]

This function is used to identify the number and location of the motors installed in the vending machine.



This configuration must be done each time you add or remove one or more motors.

To scan the motors of the vending machine you have to press button 4 and wait a few seconds.

After scanning of the motors, a graphical configuration of the motors installed into the vending machine appears on the display.

For each shelf there is shown a graphic of how many motors have been found using a scheme composed of dots and zeros (where the zeros are the motors found by the machine).

4.3.10.1.2 ~ Syncro spiral [only G-Snack, Master & Slave]

In this submenu you can electronically connect 2 spirals together.

The operation of this function is related to the configuration of the motors of the vending machine:

-They must be connected as 1 equal # and 1 odd #.

-They must be on the same shelf.

If these rules are valid, by pressing button 4 you will be able to access at the menu of spiral selection to be coupled.

The system presents the potential spirals to be coupled; By using the button **2** and

it is possible to scroll through all the possible spiral pairings that the system has detected. Pressing the button 4 you are pairing the two spirals displayed.

Example:

Master:



The system has detected 2 possible pairs: The spiral 12 with the spiral 13 and the spiral 16 with the spiral 17.____

Pressing the button 4 on the first pair of spirals to connect them, the system see it as a single spiral and will assign the value of the selection the first motor (in this example, the number 12).

Once synchro is activated, instead of dashes " - " will be displayed a flashing asterisk " * "

4.3.10.1.3 ~ Lift [only G-Snack, Master & Slave]

Menu is only visible when the lift is enabled, as shown on page 52.

This function determines the positions of the lift stopping positions for each selection.

It is important to consider the following points:

- The first shelf (from bottom) can't use the lift.
- The last shelf (the topmost) should always use the lift to be able to sell products
- In order to load the last shelf (the topmost), it is necessary to lower the lift manually (the safety switch of the lift must not be activated!)
- In general, for tall products, it is better to stop the elevator 50 mm lower than the shelf to avoid that they are "upright"

Pressing button 4 when the menu "Lift" is shown, the machine will display "HOME" pressing selection 2 or 3 it is possible to scroll shelf "01 Tray 2" - "02 Tray 3" (from shelf 2 to 8), pressing selection 4 shows "ALL Spiral" to program the same position for all of the selections of the shelf and in the case of the standby position "HOME" the value of the position is displayed directly.

By pressing selection **2** or **3** it is possible to scroll through the selections of the chosen shelf.

Pressing selection 4 displays the programmed position. The programmable values range from 0 to 128; programming 0 disables the elevator for that selection (the values must be confirmed with selection 4.).

The positioning of the lift for the chosen shelf, can be tested using button 5 (moves the lift to displayed position), it is important to do the test with the lift that starts from the initial position (all the way up) to reset to the initial position press selection 6.

In case of malfunction of the lift, take it to the highest position (machine off), disable it (see paragraph "4.3.10.1.7 ~ Lift enable [only G-Snack, Master & Slave]" at page 52), delete the errors and disable the last shelf using daily sales inhibitions, putting as period of strt1 = 00:00, 23:59 and stop1 = tr6 = 1 (disables Tray 6 from 00.00 to 23.59 on the day).

4.3.10.1.4 ~ SVE02 update [only G-Snack, Master & Slave]

This submenu allows you to upgrade the software of the motor board SVE02 by using a USB stick.

Pressing 4 the word "Continue ?" will appear on the display, press 4 again to view the files within the USB stick.

Use the buttons 2 and 3 to scroll through the files/folders on the USB key to find the file "SVE02.bin".

The folders are indicated by a slash "/".

Press the button 4 to enter a folder or to confirm the file to use for the update. To return to the previous folder you need to press the button 4 when the display shows "/..."

The vending machine will confirm a successful board upgrade by emitting a 4 second beep. In case of failure to update, the board will issue 3 beeps in sequence.

4.3.10.1.5 ~ Extra rotation [only G-Snack]

Menu is only visible when the optical barrier is enabled, as shown on page 52.

This parameter is used to activate an extra rotation (settable in ms) of each spiral if the product fall is not detected by the optical barrier.

Press the selection key 4 in correspondence to the selections to which you want to give an extra rotation in the absence of a sale, or press key 4 on the "All Spiral" to give an extra rotation to all the spirals.

Increase the value using selection button 2, or decrease the value by pressing selection button 3. Confirm by pressing 4

4.3.10.1.6 ~ Sold-out [only G-Snack, Master & Slave]



Menu is only visible when the optical barrier is enabled, as shown at page 52.

This parameter determines the inhibition or not of empty selections. It only works with the barrier enabled.

By setting NO if the spiral does not deliver the product selected, does NOT go in sold-out. By setting YES if the spiral does not deliver the product the selection goes in sold-out.

4.3.10.1.7 ~ Lift enable [only G-Snack, Master & Slave]

This parameter enables the lift, and its programming menu. Set NO if the lift is NOT present. Set YES if the lift is present

4.3.10.1.8 ~ Lift extra movement [only G-Snack, Master & Slave]

Menu is only visible when the lift is enabled, as shown on the previous paragraph.

This parameter, when enabled, adds an upward motion (lift) after the delivery of the product, to facilitate the release of some products if not detected by optical barrier. Set NO if extra lift movement is not desired.

Set YES if extra lift movement is desired.

4.3.10.1.9 ~ Optical barrier [only G-Snack, Master & Slave]

You can enable or disable the barrier for each selection individually, or all of them in the same way.

Using the button 2 and 3 you can scroll through all available spiral and by pressing button 4 you can enable the barrier in 3 different ways:

- Disabled : The optical barrier is disabled / not installed

- Enable : The optical barrier is enabled

- Best effort : The optical barrier is enabled, and in case of malfunctioning the selection is not inhibited.

Once you have selected the desired value press the button 4 to confirm; you can also assign a value for all the spirals by selecting "All spiral".



4.3.10.2 ~ Drink Option [only G-Drink]





> Number of tray Machine selection

4.3.10.2.1 ~ Number of tray [only G-Drink]

This function is used to recognize the type of vending machine.

- * 2 trays for model DL6/DV6/DC6/DM6
- * 3 trays for model DL9/DV9/DM9

4.3.10.2.2 ~ Machine selection [only G-Drink]

This parameter sets the type of machine: 00 DL series (default) 01 DB series

4.3.10.2.3 ~ Adjust release position [only G-Drink]

Adjust the vertical release point of the bucket when releasing the product into the FLAP. Settable from 1 to 10 (mm). (Default is 0)

4.3.10.2.4 ~ MKTG move [only G-Drink]

This function allows you to set the marketing movement of the bucket. Settable from 0 to 255 minutes.

If set, at the prescribed time interval, the bucket will perform an initialization. The movement is intended to attract attention to the machine.

4.3.10.2.4 ~ Vend retry mm [only G-Drink]

This function allows you to set an extra lateral movement of the catcher when the product is delivered into the flap, to ensure the product is released completely. Settable form 0 to 10 mm



Note: Available only with the software version 6.0 of the slave board SVC.



4.3.10.3 ~ Group [Master & Slave]

The Group function allows you to associate some selections loaded in a vending machine in order to group like products. The machine thereafter applies one price/group and to empty the group selections equally, by alternating the sales among the group.

• The maximum number of groups that can be created is 80 (the product can be group of one spiral as well).

The selection of Group function is always the first one of the group (for example, if you create a group of product selections 11-12-13-14, the Group selection number will only be 11 for this Group (Thus, selection numbers 12-13-14 in this Group will no longer be valid.)
All counters, prices, configurations (optic barrier, extra rotation etc. ..) will always refer to the Group selection number, which is the first selection of the group (the above case = 11), *except for the Lift position* which is related to the physical position of the motor.

When you enter the Group function menu, it will display available groups. To form a group, you need to select the first spiral which you wish to <u>start grouping</u> then confirm. Then select the last spiral which you wish to <u>end grouping</u>, then confirm.

Note: When the group function is created, only the first selection number will be displayed. All the selections grouped within will no longer be displayed.

During the vend cycle, when a spiral which is set as a Group function is selected, the machine will sell the product of the spiral. If the sale fails, the system will automatically try to make a sale on the next spiral belonging to the same group; if all the sales are failed (after going through all selection within the group) the machine will display Sold-Out. On contrary, when the product is sold, the display shows "Thank you" and counts as product sold.

When the same selection is made one after another, the machine will automatically sell the next selection of spiral of the same group in order.





4.3.10.4 ~ Cooling [Master & Slave]



4.3.10.4.1 ~ Temperature display [Master & Slave]

Within this submenu you can enable or disable the display of the temperature in vend mode.



4.3.10.4.2 ~ HACCP Enable [Master & Slave]

Within this submenu you can enable or disable the function of HACCP which will make the menu "HACCP Parameter" appear.



4.3.10.4.3 ~ HACCP parameter [Master & Slave]



This menu is visible only when HACCP is enabled.

This function refers to the HACCP regulations to ensure the food products safety sold through the Vending machines.

HACCP standard uses 3 parameters for determining the INHIBIT SELECTION (SALES) of the products (all can be programmed through HACCP parameter).

- (1): Temperature threshold.
- (2): Time (duration) of temperature excess.
- (3): Maximum Temperature threshold.

The first 2 parameters are related to each other, because when the machine detects the temperature exceeds the set threshold temperature (1), it controls (via the parameter (2): Time of temperature excess) for how long it stayed above the set value (1). If the temperature stayed above set value (1) for a longer than the value set for (2) the vending machine inhibits the selections which were programmed with HACCP parameters (see below parameter HACCP Products).

The maximum temperature threshold directly inhibits the selections which are programmed with HACCP parameters if the set value (3) is exceeded.

When the selection related to HACCP parameters are inhibited next to the date and time appears an asterisk (*) to indicate the error of the HACCP. You can view and reset the error in the appropriate menu "<u>Historical Error</u>".

4.3.10.4.3.1 ~ Temperature Threshold [Master & Slave]

In this submenu you can set the temperature threshold that is managed by HACCP parameters.

4.3.10.4.3.2 ~ Overtemperature time [Master & Slave]

In this submenu you can set after how much time you need activate the inhibition of the selections managed by the HACCP parameters.

4.3.10.4.3.3 ~ Max temperature [Master & Slave]

In this submenu you can set the maximum threshold temperature managed by HACCP parameters.



This submenu allows to select which columns (selections) must be managed by HACCP parameters.



4.3.10.5 ~ Light [Master & Slave]



This function manage the lighting system operation.

- Always ON: The light stays always ON.
- Always OFF: The light stays always OFF.
- Use inhibit time: Use the inhibition time to turn OFF the light.



If you put "Use inhbit time" it is necessary to set the period of operation as described in paragraph "4.1.10 ~ Set time inhibit" on page 28.

4.4 ~ Set. Combi Product



After you enter into the menu "Set. Combi Product" use button 2 or 3 to select one of the 10 virtual selections.

After you have choose the virtual combi selection that you want to use press button 4 to enter and the vending machine will ask you to insert the first product (group); do this exactly like making a selection when the door is closed.

Do the same for the 2nd product (if you want to select product on Slave vending machine you have to enter 9 before selection).

During the combi period the vending machine can show a special message.



Press and hold the button **1** to return at the previous menu.

This function is enabled only if you have set correctly the period as indicated on page 29.

After setting the new virtual selections you can set the price as indicated at page 37. The counters are reported on "main machine" submenu as indicated at page 35.

4.5 ~ Audit USB



Before selecting this item on the menu connect a USB stick in the port on the SVE01 board.



After you connect a USB to the board press button 4., the program writes a file "audit.txt" onto the USB.

This function creates a new folder on the USB with the serial name of the SVE01 board. In the created folder, a text file is saved (.txt) with the details of all sales done by the machine.

This file can be read on a PC using any text editor program (such as Notepad.)



The activation of this function will delete all "temporary" counters as indicated in the relevant menus, inside of this manual.



4.6 ~ EVA Counters



Total bills value: 0 Resettable bills value: 0 Total cash tubes value: 0 Resettable cash tubes: 0

Through the programming menu of the machine you can see the following parameters:

Total bills value: 0	Total cash dispensed value: 0
Resettable bills value: 0	Resettable cash dispensed value: 0
Total cash tubes value: 0	Total cashless value: 0
Resettable cash tubes: 0	Resettable cashelss value: 0
Total cash box value: 0	Total cashless sale: 0
Resettable cash box value: 0	Resettable cashless sale: 0

The software installed on SVE01 board is in conformity with the EVADTS protocol 6.1.1. The introduced field are as follows:

- DXS01 Communication id of sender
- DXS02 Functional identifier
- DXS03 Version
- DXS04 Transmission control number
- ST01 Transaction set header
- ST02 Transaction set control number
- ID101 Machine serial number
- ID102 Machine model number
- ID103 Machine build standard
- ID401 Decimal point position
- ID601 Cash bag number
- CB101 Control board serial number
- CB102 Model number or description of the control board
- CB103 Software revision number of the control board
- CA101 Coin mechanism serial number
- CA102 Coin mechanism model number
- CA103 Coin mechanism software revision
- BA101 Bill validator serial number
- BA102 Bill validator model number
- BA103 Bill validator software revision
- DA101 Cashless 1 serial number
- DA102 Cashless 1 model number
- DA103 Cashless 1 software revision
- VA101 Value of all paid vends since initialization
- VA102 Number of all paid vends since initialization
- VA103 Value of all sales vends since last reset
- VA104 Number of all paid vends since last reset
- VA105 Value of all discounted paid Sales since initialization
- VA106 Number of all discounted paid Vends since initialization
- VA107 Value of all discounted paid Sales since last reset

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- VA108 Number of all discounted paid Vends since last reset
- CA301 Value of cash in since last reset
- CA302 Value of cash to cash box since last reset
- CA303 Value of cash to tubes since last reset
- CA305 Value of cash in since initialisation
- CA306 Value of cash to cash box since initialization
- CA307 Value of cash to tubes since initialization
- CA309 Value of bills in since last reset
- CA310 Value of bills in since initialization
- CA401 Value of cash dispensed since last reset
- CA402 Value of manual cash dispensed since last reset
- CA403 Value of cash dispensed since initialization
- CA404 Value of manual cash dispensed since initialization
- CA405 Value of bill dispensed since last reset
- CA408 Value of bill dispensed since initialization
- CA1001 Value of cash filled since last reset
- CA1002 Value of cash filled since initialization
- CA1501 Value of tube contents
- CA1701 Coin type number
- CA1702 Value of coin
- CA1703 Number of coin in the tube.
- CA1706 Coin tube is full
- TA201 Value of vend token vends since initialization
- TA202 No. of vend token vends since initialization
- TA203 Value of vend token vends since last reset
- TA204 No. of vend token vends since last reset
- DA201 Value of cashless 1 sales since initialization
- DA202 Number of cashless 1 sales since initialization
- DA203 Value of cashless 1 sales since last reset
- DA204 Number of cashless 1 sales since last reset
- DA401 Value of credit to cashless 1 since initialization
- DA402 Value of credit to cashless 1 since last reset
- DA501 Value of card discounts since last reset
- DA502 Number of card discounts vends since last reset
- DA503 Value of card discounts since initialization
- DA504 Number of card discounts vends since initialization
- DB201 Value of cashless 2 sales since initialization
- DB202 Number of cashless 2 sales since initialization
- DB203 Value of cashless 2 sales since last reset
- DB204 Number of cashless 2 sales since last reset
- DB401 Value of credit to cashless 2 since initialization
- DB402 Value of credit to cashless 2 since last reset
- DB501 Value of card discounts since last reset
- DB502 Number of card discounts vends since last reset
- DB503 Value of card discounts since initialization
- DB504 Number of card discounts vends since initialization
- PA101 Product number
- PA102 Product price
- PA201 Number of product vended since initialization

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- PA202 Value of product vended since initialization ٠
- PA203 Number of product vended since last reset •
- PA204 Value of product vended since last reset •
- PA205 Number of discounted paid vends since initialization •
- PA206 Value of discounted paid vends since initialization •
- PA207 Number of discounted paid vends since last reset •
- PA208 Value of discounted paid vends since last reset •
- PA701 Product number •
- PA702 Payment device (CA,DA,DB,TA) •
- PA703 Price list number •
- PA704 Applied price •
- PA705 Number of sales since initialization •
- PA706 Value of sales since initialization •
- PA707 Number of sales since last reset •
- PA708 Value of sales since last reset •
- EA301 Number of read with RESET since initialization •
- EA302 Data of this read out •
- EA303 Time of this read out •
- EA305 Data of last read out •
- EA306 Time of last read out •
- EA309 Number of reads with or without reset since init •
- EA310 Number of resets since initialization •
- EA701 Number of power outages since last reset •
- EA702 Number of power outages since initialization •
- SD105 Reset all interval data control •
- G85 Record integrity check •
- SE01 Number of included sets •
- SE02 Transaction set control number •
- DXE01 Transmission control number •
- DXE02 Number of included sets

Instructions for programming SVE01 Board functions

4.6.1 ~ Events

- EA101 Event identification
- EA102 Data of event occurrence (year; month; day)
- EA103 Time of event occurrence (hour; minute)
- EA201 Event identification
- EA202 Number of events since last reset
- EA203 Number of events since initialization
- EA205 Event activity

In the software the "Query audit mode" (Polling with word **DC2**) is implemented for the Event log.

For each polling with the command **DC2** the machine will answer with the door status, and if there are events to be reported.

Error	EVA-DTS Format
ERROR SPEED Y	EJM_A1
ERROR HOME SWITCH Y	EJM_A2
ERROR SPEED X	EJM_A4
ERROR HOME SWITCH X	EJM_A5
ERROR INITIALISATION	EJM_A6
ERROR SLAVE MEMORY	EJM_A7
BUCKET ERROR	EJM_A8
WRONG SHELF NUMBER	EJM_A3
VEND PROHIBITION	EJM_A9
No USD	EJM_A10
X-Y DOOR SWITCH ERROR	EJM_A11
POWER SUPLY ERROR	EJM_A12
DELIVERY FLAP ERROR	EJM_A13
Motor time-out during opening	EJE_A1
Motor time-out during closing	EJE_A2
uSw locking not detected	EJE_A3
uSw unlocking not detected	EJE_A4
Door open	EGS_A
Door close	EGT_A

G-DRINK MACHINE

G-SNACK MACHINE

Error	EVA-DTS format for	EVA-DTS format for	
Enor	master machine	slave machine	
Column_xx error	EJB_AXX (XX Motor number)	EJB_BXX (XX Motor number)	
Lift communication error	EJM_A1	EJM_B1	
Lift movement error	EJM_A2	EJM_B2	
Optical barrier error	EJL_A1	EJL_B1	
HACCP error	EJH_A1	EJH_B1	
Door open	EGS_A	EGS_B	
Door close	EGT_A	EGT_B	



4.6.2 ~ Read-Out Example

	•
DXS*VND-411141*VA*V0/6*1	PA7*4*DA*1*50*0*0*0*0
ST*001*0001	PA7*4*DB*2*50*0*0*0*0
ID1*VND000908067379*G_LINE	PA1*5*50*****
M/S*0221***	PA2*0*0*0*0*0*0*0
ID4*2	PA7*5*CA*0*50*0*0*0*0
ID6*	PA7*5*TA*0*50*0*0*0*0
CB1*VND000908067379*SVE01*0221	PA7*5*DA*1*50*0*0*0*0
CA1*D606288 *SC5EMDBD *5301	PA7*5*DB*2*50*0*0*0*0
BA1***	EA3*0*20160712*1329**19700101*0000***0*0
DA1***	FA7*7*7
DB1***	SD1****SAVE
VA1*1950*31*1950*31*0*0*0	EA1*EGS_A*20160709*0956*
CA2*1950*31*1950*31	EA2*EGS A*12*12**1*
CA3*2200*0*2200*0*2200*0*2200*0*0*0*0	EA1*EGT A*20160709*0956*
CA4*2800*350*2800*350*0***0	EA2*EGT A*11*11**0*
CA10*0*0	C85*3do5
CA10 0 0	G05 50E5 SE*205*0001
CA13 0	
	DXETT
CA17^3^50^0^^0	
TA2*0*0*0*0****	
DA2*0*0*0*0	
DA4*0*0	
DA5*0*0*0	
DB2*0*0*0*0	
DB4*0*0	
DB5*0*0*0*0	
PA1*1*50*****	
PA2*1*50*1*50*0*0*0*0	
PA7*1*CA*0*50*1*50*1*50	
PA7*1*TA*0*50*0*0*0*0	
PA7*1*DA*1*50*0*0*0*0	
PA7*1*DB*2*50*0*0*0*0	
PA1*2*50****	
PA2*0*0*0*0*0*0*0*0	
PA7*2*CA*0*50*0*0*0	
PA7*2*TA*0*50*0*0*0*0	
PA7*2*DA*1*50*0*0*0*0	
PA7*2*DB*2*50*0*0*0*0	
PA1*3*50*****	
PA2*0*0*0*0*0*0*0*0	
ΡΔ7*3*CΔ*Λ*5Λ*Λ*Λ*Λ	
ΡΔ7*3*ΤΔ*Λ*5Λ*Λ*Λ*Λ*Λ	
DA7*2*DA*1*50*0*0*0	
PA/^4^CA^0^50*0*0*0	
PA7*4*TA*0*50*0*0*0*0	

5 DESCRIPTION AND FUNCTION OF CHILLER CONTROL UNIT

5.1 Control Unit EASY CAREL

The electronic control unit EASY CAREL regulates and controls the refrigerant system and all its components: The compressor, the fans, the defrosting, and is independent of the control of the board SVE01, which control the electronics of the vending machine.



On the front of the control unit are: 3 digits, 6 LED indicators that show the operating conditions and 3 buttons.

5.1.1 Display

- 1. Compressor LED
- 2. Fan LED
- 3. Defrost LED
- 4. Auxiliary exit
- 5. Watch
- 6. Alarm
- 7. Numbers

The LED light on the display show the operation of the cooling system.

- > 1 Compressor LED: indicates the status of the compressor.
 - LED is lit, the compressor is ON
 - LED blinks, the compressor is waiting before starting (check ES)
 - LED OFF, the compressor is OFF.
- > 2 Fan LED: indicate the status of the evaporator.
 - $\circ~$ LED is lit, the fans are running
 - $\circ~$ LED blinks, the fans are waiting before starting
 - o LED OFF, The fans are turned off
- > 3 Defrost LED: indicate the status of the defrost.
 - o LED is lit, The defrost mode is ON
 - LED blinks, is in drip mode after defrost
 - LED OFF, defrost is OFF.
- > 4 Auxiliary exit: not used in this vendor.



5.1.2 Key board



Key 1 "UP", in normal function if pushed for more than 1 second, it visualizes the temperature of probe 2 (evaporator). If pushed during the visualization of the set point it increases the set value.

Key 2 "SET", pushed more that 1 second allows the visualization and setting of the set point

Key 3 "DOWN", pushed for more than 3 seconds starts or stops the defrost, and if it is pushed during the visualization of the set point it decreases the set value.

5.1.3 Set the temperature

The setting of the internal temperature is performed via the control unit in the following manner:

Press for more than 1 second the button 2 "SET", the display show the set point temperature setting.

To increase or decrease the value press button 1 "UP" or 3 "DOWN".

Press button 2 "SET" to confirm the new value.

5.1.4 Quick defrost

You can start a defrost without changing the interval set on the controller.

If the gasket is damaged or the delivery door remains open too long (for example is blocked by an object) the hot air enters into the cold store thus creating ice above the evaporator which blocks the passage of air.

To solve the problem you need to initiate an additional defrost action that may be performed in a few steps:

To start the defrost press and hold for 3 seconds the button 3 "DOWN". To stop the process, press again the button 3 "DOWN".



5.1.5 Description of the main signals and alarms

The error codes are displayed on the display alternating with the temperature gauge.

ERROR	DESCRIPTION
ES	The compressor has a timing delay when starting, therefore the LED of the compressor on the display starts to flash.
E0	 Still or flashing means an adjusting probe error: probe not working, the probe signal is interrupted or in short circuit: probe is not compatible with the instrument; The E0 alarm signal is stable if it is the only alarm present (the temperature value is no longer shown), it flashes if there are other alarms or if the second probe is shown
E1	 Flashes evaporator probe error: probe not working, the probe signal is interrupted or in short circuit; probe is not compatible with the instrument;
EE	Visualized during functioning or activation Error in reading of the machine parameters. See memorised data errors.
EF	Visualized during functioning or activation Error in reading of the working parameters. See memorised data errors.
ED	The last defrosting finishes when exceeding the maximum time. The indication disappears if the next defrost is finished correctly.
DF	Defrosting in course: • it is not an alarm signal but an indication that the instrument is doing a defrosting.
DISPLAY BLINKS	 The control unit display and all the LED's are flashing: indicates that the door is open, or that the door switch is not working correctly it is activated when the door remains open for more than one hours

5.1.6 Function

When switching on the control unit for the first times there will be a delay of three minutes in the compressor and evaporator fan starting .

During normal working, the compressor will stop only after reaching the set point temperature and the evaporator fans will work always.

When opening the door (if there is a door switch) both the compressor (if working) and fans will stop.

When closing the door, the fans will start immediately, while the compressor will have a delay of three minutes from the last switching off, even if the door is closed before.

The cooling unit is controlled by various parameters inserted in the software of the control unit and unchangeable by the User, this avoids possible and unwanted modifications to the same parameters, that could cause a malfunctioning of the cooling unit. In any case, for any particular needs it is possible to contact the technical assistance service that will assist you in various problems.

5.2 Control Unit CAREL ir33

The electronic control unit CAREL ir33 regulates and controls the refrigerant system and all its components: the compressor, the fans, the defrosting and is independent of the control of the board SVE01, which control the electronics of the vending machine.

On the front of the control unit are: 3 digits, 7 LED indicators that show the operating conditions and 4 buttons.





ir33, ir33 DIN, ir33 power, powercompact, powercompact small

5.2.1	Dis	play

5.Z.1 D	ispiay	1	1			1
ICON	FUNCTION	DESCRIPTION		Normal operation	า	Start up
			ON	OFF	BLINK	
0	COMPRESSOR	ON when the compressor starts. Flashes when the activation of the compressor is delayed by safety times.	Compressor on	Compressor off	Awaiting activation	
¥s	FAN	ON when the fan starts. Flashes when the activation of the fan is prevented due to external disabling or procedures in progress.	Fan on	Fan off	Awaiting activation	
<u>**</u>	DEFROST	ON when the defrost is activated. Flashes when the activation of the defrost is prevented due to external disabling or procedures in progress.	Defrost in progress	Defrost not in progress	Awaiting activation	
AUX	AUX	Flashes if the anti-sweat heater function is active, ON when the auxiliary output (1 and/or 2) selected as AUX (or LIGHT in firmware version 3.6) is activated.	AUX auxiliary output active(version 3.6 light auxiliary output active)	AUX auxiliary output not active	Anti-sweat heater function active	
A	ALLARM	ON following pre-activation of the delayed external digital input alarm. Flashes in the event of alarms during normal operation (e.g. high/low temperature) or in the event of alarms from an immediate or delayed external digital input.	Delayed external alarm (before the time 'A7' elapses)	No alarm present	Alarms in norm. operation (e.g. High/low temperature) or immediate or delayed alarm from external digital input	

Instructions for programming SVE01 Board functions



ICON	FUNCTION	DESCRIPTION		Normal operation	n	Start up
			ON	OFF	BLINK	
0	CLOCK	ON if at least one timed defrost has been set. At start-up, comes ON for a few seconds to indicate that the Real Time Clock is fitted.	If at least 1 timed defrost event has been set	No timed defrost event set	Alarm clock	ON if real-time clock present
کۆ:	LIGHT	Flashes if the anti-sweat heater function is active, ON when the auxiliary output (1 and/or 2) selected as LIGHT is activated (in firmware version 3.6 it does not _ ash in anti-sweat heater mode and comes on when the dead band output is active).	Light auxiliary output on(version 3.6 dead band auxiliary output active)	Light auxiliary output off	Anti-sweat heater function active(version 3.6 does not flash in anti-sweat heater mode)	
X	SERVICE	Flashes in the event of malfunctions, for example E2PROM errors or probe faults.		No malfunction	Malfunction (e.g. E2PROM error or probe fault). Contact service	
HACCP	НАССР	ON if the HACCP function is enabled. Flashes when there are new HACCP alarms stored (HA and/or HF alarm shown on the display).	HACCP function enabled	HACCP function not enabled	HACCP alarm saved (HA and/or HF)	
*	CONTINUOUS CYCLE	ON when the CONTINUOUS CYCLE function is activated. Flashes if the activation of the function is prevented due to external disabling or procedures in progress (E.g.: minimum compressor OFF time).	CONTINUOUS CYCLE operation activated	CONTINUOUS CYCLE function not activated	CONTINUOUS CYCLE operation requested	
	DISPLAY	Shows temperature in range - 50 to +150°C. The temperature is displayed with resolution to the tenths between –19.9 and + 19.9 °C. The display of the tenths can be disabled by setting a parameter.				

5.2.2 Keyboard



ir33, ir33 power

lcon	Normal operation		Start up	Automatic address assignment request
	pressing the button alone	pressing together with other buttons		
Prg mute PRG/MUTE	If pressed for more than 5 seconds, accesses the menu for setting the type "F" parameters (frequent).Mutes the audible alarm (buzzer) and deactivates the alarm relay	PRG+SET: if pressed together for more than 5 seconds, accesses the menu for setting the type "C" parameters (configuration) or downloading the parameters. PRG+UP/AUX: if pressed for more than 5s, resets any alarms with manual reset	If pressed for more than 5 seconds at start-up, activates the procedure for restoring the default parameters	If pressed for more than 1 second, starts the automatic serial address assignment procedure
aux UP/AUX	If pressed for more than 1s, activates deactivates the auxiliary output.	 UP/AUX+DOWN/DEF: if pressed together for more than 5 seconds, activates/deactivates continuous cycle operation. UP/AUX +SET: if pressed together for more than 5 seconds, starts the report printing procedure (if the controller is connected to the printer interface). UP/AUX +PRG/MUTE: if pressed together for more than 5 seconds, resets any active alarms with manual reset. 		
DOWN/DEF	If pressed for more than 5 seconds activates a manual defrost	DOWN/DEF +UP/AUX: if pressed together for more than 5 seconds activates/deactivates continuous cycle operation. DOWN/DEF +SET: if pressed together for more than 5 seconds, displays a sub-menu used to access the parameters relating to the HACCP alarms ('HA', 'HAn', 'HF', 'HFn').		
Set set	If pressed for more than 1 second, displays and/or sets the set point.	SET+PRG/MUTE: if pressed together for more than 5 seconds accesses the menu for setting the type "C" parameters (configuration) or downloading the parameters. SET+DOWN/DEF: if pressed together for more than 5 seconds, displays a sub-menu used to access the parameters relating to the HACCP alarms ('HA', 'HAn', 'HF', 'HFn'). SET+UP/AUX: if pressed together for more than 5 seconds, starts the report printing procedure (if the controller is connected to the printer interface).		

end
5.2.3 Displaying and setting the set point

Press **SET** for more than 1 second to display the set point;

Increase or decrease the set point using the \blacktriangle or ∇ buttons respectively, until reaching the desired value;

Press **SET** again to confirm the new value.



6 G-SNACK PROGRAMMING MENU STRUCTURE

General Menu	1° Submenu	2° Submenu	3° Submenu		
Common Setting					
	Secondary machine				
		NONE			
		Snack			
	Payment Setting		-		
		Payment protocol			
		Max overpay			
		Force vend			
		Multi vend			
		Max cash credit			
		Correct change threshold			
		Charger keypad			
		Coin token enable			
		Separate cashless price			
		Max cashless revalue			
		Bill escrow enable			
		Bill token enable			
		Bill revalue only			
	SVF update				
	Load file from USB				
	Save file to USB				
	Set clock				
	Set time discount				
	Set time Age control				
	Set time inhibit				
	Set time combi sel				
	Reset code				
	Door open counter				
	Autoclear counter				
	Age limit				
Tube Fill / Payout	/ 90	-			
Main machine	-				
	Cash Counter				
	Sale Counter				
	Key price 1				
	Key price 2				
	Discount value				
	Set product age control				
	Set product inhibit				
	Test				
		Spiral			
		Kevboard			
		Output			
			Light		
		Temperature			

Instructions for programming SVE01 Board functions



General Menu	1° Submenu	2° Submenu	3° Submenu
		Lift Optional houries	
	Techician Menu	Optical barrier	
		Snack Options	
			Spiral detection
			Syncro spiral
			Lift
			SVE02 Update
			Extra rotation
			Lift Enable
			Lift extra movement
			Optical barrier
		Group	
		Cooling	
Soc. machina		Lignt	
Sec. machine	Historical Error		
	Cash Counter		
	Sale Counter		
	Coin Price		
	Key price 1		
	Key price 2		
	Discount value		
	Set product age control		
	Test		
		Spiral	
		Keyboard	
		Output	
		T	Light
		Optical barrier	
	Tecnician Menu	optical same	
	L	Snack Options	
			Spiral detection
			Syncro spiral
			SVEU2 Update
			Sold-out
			Lift Enable
			Lift extra movement
			Optical barrier
		Group	
		Light	
Set. Combi Product		цин	
Audit USB	_		
EVA counter	_		



7 G-DRINK PROGRAMMING MENU STRUCTURE

General Menu	1° Submenu	2° Submenu	3° Submenu	
Common Setting				
	Secondary machine	_		
		NONE		
		Snack		
	Payment Setting			
		Payment protocol		
		Max overpay		
		Force vend		
		Multi vend		
		Max cash credit		
		Correct change threshold		
		Charger keypad		
		Coin token enable		
		Separate cashless price		
		Max cashless revalue		
		Bill escrow enable		
		Bill token enable		
		Bill revalue only		
	SVE01 update			
	Load file from USB			
	Save file to USB			
	Set clock			
	Set time Age control			
	Set time Age control			
	Set time combi col			
	Set time combi set.			
	Door open counter			
	Autoclear counter			
Tube Fill / Payout		-		
Main machine	-			
	Historical Error			
	Cash Counter			
	Sale Counter			
	Coin Price			
	Key price 1			
	Key price 2			
	Discount value			
	Set product age control			
	Set product inhibit			
	Test			
		Flap test		
		Keyboard		
		Drink vending test		
	Tecnician Menu		-	
		Drink Options		
			Number of tray	

Instructions for programming SVE01 Board functions



General Menu	1° Submenu	2° Submenu	3° Submenu
			Machine selection
			Adjust release position
			MKTG move
			Vend retry mm
		Group	<u> </u>
		Light	
Sec. machine		-	
	Historical Error		
	Cash Counter		
	Sale Counter		
	Coin Price		
	Key price 1		
	Key price 2		
	Discount value		
	Set product are control		
	Set product inhibit		
		Spirol	
		Spiral	
		Output	Light
		T	Light
		Iemperature	
		Optical barrier	
	Tecnician Menu		
		Snack Options	
			Spiral detection
			Syncro spiral
			Lift
			SVE02 Update
			Extra rotation
			Sold-out
			Lift Enable
			Lift extra movement
			Optical barrier
		Group	
		Cooling	
		Light	
Set. Combi Product			
Audit USB	-		
EVA counter	-		



Revision	Date	Changes	Page
0	24/03/2015	Manual creation	All
1	30/03/2015	Unified G-Drink and G-Snack MASTER/SLAVE manual	
2	27/04/2015	Added point 3.2	15
3	03/11/2015	Updated point 3.2	15
		Updated point 3.3	17
		Updated point 4.1.12	28
		Added point 4.1.14	29
		Updated point 4.3.1	31
		Updated point 4.3.10.1.3	42
		Added point 4.3.10.1.5	45
		Updated point 4.4.1	49
		Updated point 4.4.10.1.3	58
		Updated point 7	76
		Updated Declaration of conformity page	78
4	19/09/2016	Updated cover	
		Added page " Warnings in case you lose the manual "	4
		Updated point 3.2	16
		Updated point 4.1.4	24
		Updated point 4.1.6	25
		Updated point 4.1.9	27
		Updated point 4.1.10	28
		Updated point 4.1.12	30
		Added point 4.1.15	31
		Joined explanations of the menus of Master and Slave models (point 4.3 forward)	33 ~ 54
		Updated point 4.3.7	39
		Updated point 4.3.9.1	40
		Added point 4.3.9.1.1	41
		Updated point 4.3.10.5	54
		Updated point 4.5	56
		Updated point 4.6	57
		Updated point 4.6.1	60
		Updated point 4.6.2	61
		Updated point 6	69
		Updated point 7	71
		Deleted Declaration of conformity page	