



Programming Guide

EC Declaration of Conformity

We Crane Merchandising Systems (UK),

Of Pipsmore Park, Bumpers Farm Industrial Estate, Chippenham, Wiltshire, UK,
SN14 6NQ

Declare that:

Type of Equipment: Beverage Vending Machine

Model Name: VOCE Media

Has been designed and manufactured to comply with all essential requirements of the following Regulations/Directives:

73/23/EEC ⇒ 93/68/EEC ⇒ The Low Voltage Directive
2006/95/EEC and its amending directives

89/336/EEC ⇒ 91/263/EEC ⇒ The Electromagnetic Compatibility Directive
92/31/EEC ⇒ 93/68/EEC ⇒ and its amending directives
2004/108/EEC

REG. (EC) 1935/2004 on materials and articles intended to come into contact with food
REG. (EC) 1895/2005 on the restriction of use of certain epoxy derivatives in materials
and articles intended to come into contact with food.

DIR. 2002/72 EC relating to plastic materials and articles intended to come into
contact with foodstuffs.

Tests have been performed by accredited certification bodies in accordance to the following specifications:

Low Voltage Directive: EN 60335-1: 2002 + A1+ A11, EN 60335-2-75: 2004+ A1
EN ISO 11201 + EN ISO 3744

EMC Directive: EN 55014-1:2000+A1+A2, EN 55014-2:1997+A1,
EN 61000-3-2: 2000+A2, EN 61000-3-3:1995+A1+A2, EN 61000-4-4,
EN 61000-4-5, EN 61000-4-6, EN 61000-4-11, EN 61000-4-2,
EN 50366:2003 +A1

HMM: Contribution of heavy metal migrants from different parts of the circuits of
machine under in use conditions according to EU directives and guidelines.

With regard to hygiene for foodstuffs in location, the operator must comply with
852/2004/EEC which lays out the general and specific hygiene rules to ensure a high level
of consumer protection with regard to food safety.

Date: 03 January 2012

Legal Representative

Signature:

The following Symbol is used throughout this Manual:



Safety First! Take care, risk of personal injury.

Crane Merchandising Systems accepts no responsibility for damage caused to the equipment through misinterpretation or misuse of the information contained in this manual.

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Introduction

This manual provides you with guidance on the installation, daily operation and basic maintenance of your VOCE Media freestanding vending machine. Crane Merchandising Systems always recommend that a trained technician service its equipment.

Crane Merchandising Systems is committed to continuous product improvement. This means that the information within this document, although correct at time of publication, is for guidance only and may be subject to change without prior notice.

Important Safeguards

Always follow these basic safety precautions when operating or maintaining your machine:

1. Ensure that you and anyone who operates or maintains your machine have this manual available for quick and easy reference, read all instructions carefully before commencing work.
2. **Beware of Electricity** Certain maintenance operations require your machine to remain connected and switched on. Only trained personnel should carry out these routines, and independently of all other operations. Observation of safe working practices in accordance with current regulations is necessary at all times.



Important! Unless otherwise specified, always disconnect your machine from the electricity supply before commencing work.

3. Servicing the Heater Tank/Esspresso pressurised water system



Important! Water in this machine can exceed 99°C. Water at this temperature can cause severe injury. Espresso machines may be fitted with a pressurised water system, under no circumstance should this be dismantled other than by a full trained engineer.

4. Do not operate your machine if any part is damaged until a service technician has carried out necessary repairs and ensured that it is safe.
5. Beware of moving components when servicing the machine.
6. Allow your machine to cool before handling or moving.
7. Never immerse your machine in water or any other liquid and never clean it with a water jet.
8. In machines fitted with carbonator units the CO₂ bottle is filled with gas at up to 800psi and MUST be secured in an upright position. In the event of a leak, ventilate the area in the vicinity

9. Ensure that you are familiar and adhere to the most recent Health and Safety at Work and Electricity at Work Regulations.



Important! This appliance is not intended for use by persons (including children and the infirm) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Your Infinity machine is for indoor use only and because it is a beverage machine, should be sited in a clean and hygienic area.

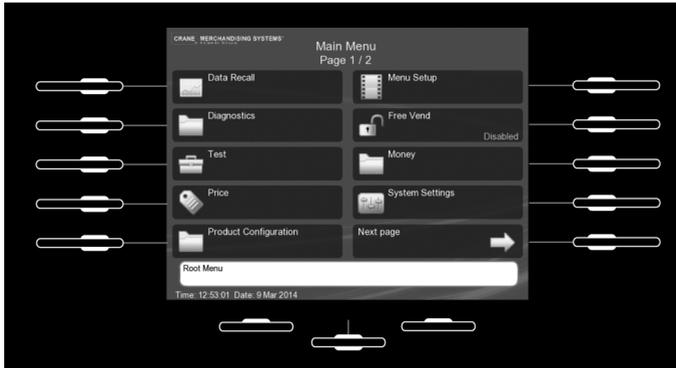
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Section 1 - Programming Mode

1.1 Program Entry

Programming mode utilises the interface seen below and enables the engineer to view and amend the service menus.



1.2 Navigating through the Menu Display

The full colour LCD display with illuminated touch-keys help to make navigating the programming menu structure easy and intuitive.

1. There are two levels of programming mode and both are passcode protected:
 - **Operator** - this menu offers limited access to the software program., enabling drinks to be configured, data to be extracted and timed procedures and events to be programmed.
 - **Engineer** - this menu enables full access to the program to configure and run test procedures within the machine.

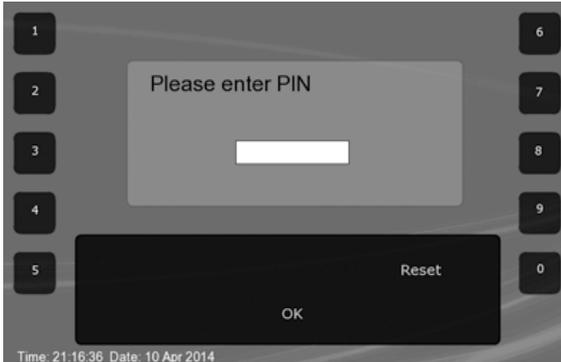
The **Engineer's Program** is fully detailed in **Section 2**.

2. Once access has been gained to the programming mode (see 1.3 Accessing the programming mode), the screen displays the programming Main Menu. Most subsequent menus follow the same format as this root menu.
3. A menu item is selected by pressing the corresponding touch-key found to the immediate left or right of the item. The key flashes briefly and beeps to indicate that it has been selected.
4. The touch-keys are illuminated against active items.
5. The bottom of the screen often displays important information concerning the item selected.
6. In certain configuration menus the current value is displayed against the item.
7. Navigation between multiple pages is via a **Next page** icon and to return to a higher menu via a **Up one level** icon.
8. Where a configuration parameter has been changed a **Save** icon maybe made available to save the setting and return to the previous screen.

1.3 Accessing the Programming Mode

To gain access to the programming mode:

1. Open the front door of the machine.
2. The screen below is displayed.



3. Using the touch-keys enter the correct four digit code PIN to access the required programming mode.
4. Press OK to enter the program, the Main Menu screen is displayed.
5. The factory default Engineer's code is 1111, this maybe changed if required.

1.4 Entering or Updating Parameters

There are various forms of screens to change the configuration parameters of the machine, from Check Boxes, Radio Buttons to Value Increment and Value Entry.

1.4.1 Check boxes

These are used where there is a multiple selection of parameters available, in this example drink selections.

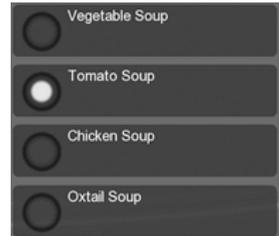
1. Press the illuminated touch-key next to the required selections and a tick appears in the check box. Press again to remove the tick.
2. When all the required selections have been made press the **Up one Level** icon to return to the previous screen.



1.4.2 Radio Buttons

These are used to turn functions On/Off or to Enable/Disable them , where only one of a multiple of selections can be selected. In this example to name the soup that is available.

1. Press the illuminated touch-key next to the required selection, to fill the radio button.
2. When the required selection has been made press the **Up one Level** icon to return to the previous screen.



1.4.3 Value Increment

These screens enable a value to be increased or decreased, in this example setting the Heater Tank Temperature.

1. Using the illuminated touch-keys increase or the decrease the value as required.
2. Select **Save** to save and apply the new value.
3. Select **Previous page** to return to the previous page without saving any changes to the setting.



1.4.4 Value Entry

These screens enable a value to be entered, in this example the selection timer for the Milk 1 ingredient.

1. Using the appropriate illuminated touch-keys add the required value.
2. When the required value is set select **Save**.
3. **Reset** - clears any displayed value.



Section 2 - Engineer's Program

The Engineer's Program enables the machine to be configured, and sales and diagnostic information viewed. The machine is supplied with default configurations for minimum setup time, however some setup is required and certain settings can be adjusted for specific customers and their preferences. To access this program, navigate, select and enter values refer to Section 1 – Programming Mode for detailed information.

The menu structure is laid out below with brief explanations for each screen, with references to more detailed information and tasks.

2.1 Menu Structure Overview

Main Menu Page 1/2 (see para. 2.2)

Data Recall (see Para. 2.3)	enables monetary and sales data to be viewed
Non Resettable Sales Data	the accumulative data values for the life of the machine
Resettable Sales Data	enables data to be viewed and cleared, enabling data to be recorded over a period of time
Events	enables certain events which have happened with the machine to be viewed: power losses, last actions etc..
Identification Numbers	this displays the serial numbers of any the boards and MDB equipment fitted
SureVend™	displays details of SureVend™ activities
Mug Vends	displays a count of Mug vends
Cup Vends	displays a count of Cup vends
Diagnostics (see Para. 2.4)	this displays any errors that have occurred: active and historic with the ability to clear
Test Page 1/2 (see Para. 2.5)	enables operations and components to be tested
Dispense Head	ensures that the dispense head can move to the selected position
Switches & Sensors	displays the current state of all switches and sensors in the machine
Components	enables individual or collective components to be test
Vend Without Cup	enables drinks to be delivered without a cup being dispensed from the machine
Vend With Cup	enables drinks to be delivered into a cup dispensed from the machine
Keypad Test	enables the touch-keys on the drink selection interface and the buttons on the service keypad to be tested

Coin Return Motor	runs the motor
Cup Drop	drops a cup
Test Page 2/2 (see Para. 2.5.9)	
Display	illuminates the screen and touch-key lights
Door Lights	runs a sequence of tests on the door illuminations
Price (see Para. 2.6)	
Individual Prices	enables the price of all the individual drinks to be changed
Entire Machine	set one price for all drinks
Mug Discount	set a discount for customers using their own mugs
View High/Low Price	displays the price range
Product Configuration Page 1/2 (see Para. 2.7)	
Heater Tank Setup	enables the target water temperature, the minimum temperature for a drink and displays the current tank temperature
Selection Timers	enables the recipes of each drink to be adjusted
Custom Selection Names	enables a name to be selected for Still Syrup pump and Soup drinks
Jug Vend Configuration	enables the selection of drinks available, the number of cup vends per jug and to enable/disable SureVend™
Disable Selections	enables individual selections to be disabled
Token Enabled	enables which drinks are available with payment by token
SureVend™	enable or disable SureVend™
Cup Mechanism	can be switched off if mug vend only is used
Product Configuration Page 2/2 (see Para. 2.7.9)	
Cup Size Selection	enables the cup size used in the machine to be selected
Brewer Waste Management	enable or disable and to manage brewer waste capacity
Water Filter Management	enable or disable and to manage filter service intervals
Water Only – No Cup	enables hot and cold water to be dispensed without a cup being dispensed

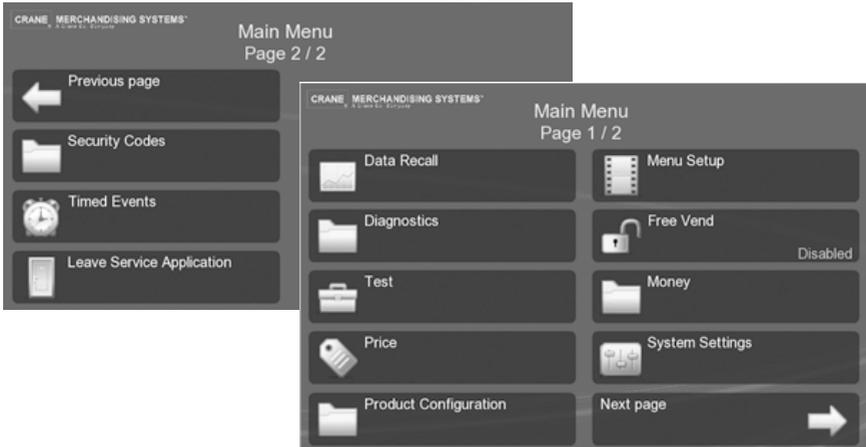
Menu Setup (see Para. 2.8)	enables the drink selection menu layout to be changed
Free Vend (see Para. 2.9)	removes all pricing from the drink selection menu
Money (see Para. 2.10)	controls all aspects of payment from currency to payment methods and change. The options available depend on the equipment fitted
System Settings Page 1/2 (see Para. 2.11)	enables aspects of the machine to be set up.
Machine Information	enables particulars about the machine to be recorded and displayed on the screen if the machine becomes inoperable
Machine Id	enables the machine's Id to be changed
Machine Configuration Id	displays the current configuration and enables selection
Time and Date	enables the time and date to be set
Language	enables individual languages to be set for both the engineer and user
DTS	Data Transfer Standard, enables the method of data transfer from the machine to a device to be specified
Screen Brightness	enables the brightness of the screen in both standard and power save mode to be set
Software Updates	Enables updating of the LE board software.
System Settings Page 2/2 (see Para. 2.11.9)	
Backup/Restore	enables a backup of the current configuration to be made and restored
Copy Configuration	enables the current configuration to be copied to a USB stick and to be restored from a USB stick
Change Operator Logo	enables the customer logo to be changed
Custom Configurations	pre-programmed configurations can be selected
Software Version	displays details of the version currently installed
Temperature Units	enables the selection of Celsius or Fahrenheit
Jug Mode Without Key	a jug vend can be made using a code and a time set when the machine reverts to normal vend mode
Standby Screen	enables the machine to display a standby screen and to set a time between the last vend and when the Stand by screen is displayed

Main Menu Page 2/2

Security Codes (see Para. 2.12)	enables access to the machine to be restricted, codes for both Engineer and Operator access can be set
Timed Events (see Para. 2.13)	enables the setup of procedures that the machine automatically carries out
Time of Day Events	enables prices, free vends and to inhibit vends at certain times/periods
Sanitation Events	enables cleaning procedures and flushing procedures to be created.
Backup Events	enables auto backup of user configurable settings and sales data stored on the machine.
Power Saving Events	enables periods when the machine can enter a power saving mode (the tank water temperature is reduced etc.)
Leave Service Application (see Para 2.14)	exits the Engineer's Program and returns the machine to standby mode

2.2 Main Menu

This is the top level menu in the engineering program and enables access to all programming / configuration sub menus.



2.3 Data Recall

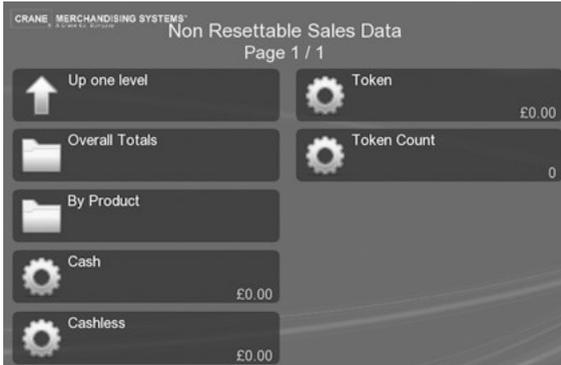
This menu enables the engineer to view Non-Resettable and Resettable Sales Data, view data relating to Events and SureVend™ assisted vend information. The Re-settable Sales Data and SureVend™ data menus contain an extra sub-menu which enables the engineer to delete the current data from the machines memory.

N.B. All sales data is presented in a format required by the latest European Vending Association Data Transfer Standards (EVA DTS). Surcharge data fields are not supported by this machine.



2.3.1 Non Resettable Sales Data

This menu enables the engineer to view and record monetary and sales values. This data cannot be reset and will remain intact for the service life of the control board (unless the back-up battery is removed).



Data is displayed in the following two options:

2.3.1.1 Overall Totals

1. This displays the total sales in a table listed under: **Sales, Discounts, Test Vend, Surcharge, and Free Vend.**
2. The currency column indicates the total monetary value and the # column indicates the total number of actual vends for each data type

2.3.1.2 By Products

1. This enables the total machine sales for each product to be displayed in a table under: **Price, Sales, Discounts, Test Vend, Surcharge, and Free Vend.**
2. The **Price** row indicates the price of the actual product.

The total machine sales for **Cash, Cashless, Token** and **Token Count** are displayed directly on this screen.

2.3.2 Resettable Sales Data

This menu contains similar data to that available from the **Non Resettable Sales Data** menu. However, once viewed, data from this menu can be cleared from the machines memory and enables sales data to be recorded over a period of time.

The options **Clear Data** and **Reset** are available to reset the sales data, a warning is given before the data is reset.



2.3.3 Events

This screen enables certain events which have occurred in the machine to be viewed.



1. **Power Losses** displays a table listing the most recent occasions (10 maximum) when power to the machine was disconnected. Details of the **Date**, **Time** and **Duration** are displayed.
2. Details of when the **Last Data Clear**, **Last Vend**, **Last Clock Set** and the **Last Price Change** were performed are display directly on this screen.

2.3.4 Identification Numbers

This screen displays information about the MDB coin/card device if fitted to the machine. Information such as serial and part number and version types of the **Coin Mechanism**, **Bill Validator** and **Card Reader** are displayed directly on screen.

2.3.5 SureVend™

This screen displays details of SureVend™ activities.

1. The totals of **Cup Drop Failures** and **SV Assisted** vends are displayed directly on the screen.
2. An option to **Clear Data** is available to reset the totals, a warning is given before the data is reset.



2.3.6 Mug Vends

This screen displays the total number of vends the machine has made without dropping a cup.

1. An option to **Clear Data** is available to reset the total, a warning is given before the data is reset.



2.3.7 Cup Vends

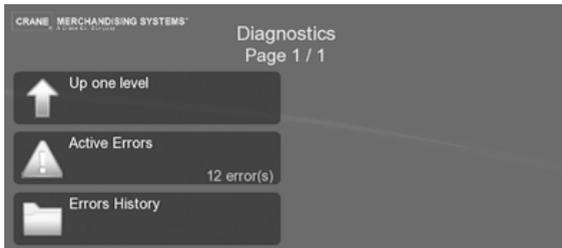
This screen displays the total number of cup drop vends the machine has made.

1. An option to **Clear Data** is available to reset the total, a warning is given before the data is reset.



2.4 Diagnostic

Should a fault occur within the machine an error is logged and a message is displayed. In some cases this may cause the machine to be inoperable.



2.4.1 Active Errors

This details all the active errors, listing them in a table under the headings: a description of the error **Event** and the **Time** and **Date**.

2.4.2 Error History

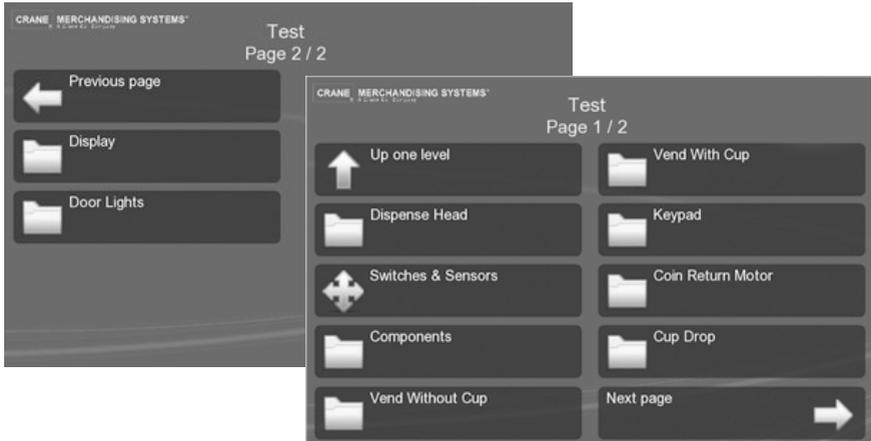
This displays a table of all the active errors, listing them

1. The total of the **Active Errors** is display on screen with the ability to view the fault details (**Event Id**, **Time** and **Date**) in a table.
2. A table of **Error History** can also be viewed with the option to **Clear History Data** from the table, a warning is given before the data is reset.

Description	Time	Date
Cup mechanism peeler motor/switch failure (4)	18:31:58	09 Mar 2014
Mug only mode (4)	18:31:57	09 Mar 2014
Dispense Head Motor Not Enabled (8)	18:09:41	09 Mar 2014
Coin Mech No Comms (4)	21:35:11	27 Feb 2014
No Monetary Device (6)	21:35:11	27 Feb 2014
No Monetary Device (6)	21:35:10	27 Feb 2014
Card Reader No Comms (2)	08:17:54	20 Feb 2014
Bill Validator No Comms (1)	18:06:19	19 Feb 2014
Please insert mug (1)	09:20:12	31 Jul 2013
Mug Sensor SureVend Error (1)	09:20:11	31 Jul 2013

2.5 Test

This menu enables the engineer to test individual components and switch inputs to ensure correct operation.



2.5.1 Dispense Head

This menu enables the engineer to test the operation of the dispense head mechanism, moving through all vend positions before return to its 'home' position.

1. While the test is running the 'test animation' accompanied by a **Test Started** message.
2. On completion of a successful test the screen returns to the **Dispense Head** screen. If the dispense head fails to move a **Moving Failed** message is displayed and you are asked to **Continue**, returning to the **Dispense Head** screen.
3. Four test positions are available; **Home**, **Vend Position 1**, **Vend Position 2** and **Fully Extended**.

2.5.2 Switches & Sensors

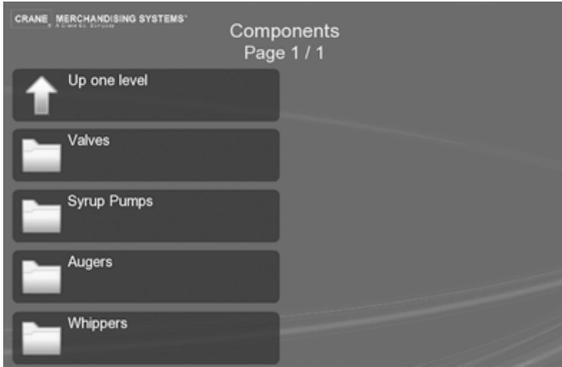
This screen displays the current state of all switches and sensors, this is active information and can therefore change.

1. This information can be used to determine the status of each switch and sensor.



2.5.3 Components

This menu enables the engineer to test the operation of individual or collective valves and motors on the components displayed. While the tests are running the 'test animation' accompanied by a Test Started message, on a successful completion of the test the screen returns to the Components screen.



2.5.3.1 Valves

Use this option to test the correct operation of each individual dispense valve fitted to the heater tank, the dispense head will also move to its fully extended position.

1. Water will be dispensed from the heater tank during the test sequence. Place a suitable container under the dispense position and on completion empty the contents of the container.

N.B. In this test the valves are each energised for 4 seconds, allowing an accurate calibration of volume via the restriction on the valves.

Important: Keep hands away from the dispense area as hot water is dispensed during the test.

Important: After carrying out the valve test on a freshbrew selection the brewer must be run using **Brewer Open**, button **2** on the service keypad.

25.3.2 Syrup Pumps

Use this option to test the correct operation of the syrup pumps if fitted.

2.5.3.3 Augers

Use this option to test the correct operation of each individual ingredient motor. This test causes the ingredient canister auger to turn, remove the canisters before starting the test sequence.

Important: DO NOT place ingredient canisters on the floor.

1. Each **Auger** on the machine is listed and can be tested individually or by using the **Testing** option a test sequence of each can be run.
2. An **Abort** option enables the **Testing** sequence to be stopped at any time.
3. Refit the ingredient canisters on completion of the test.



2.5.3.4 Whippers

Use this option to test the correct operation of each individual whipper motor, each motor is run for 4 seconds.

1. Each **Whipper** on the machine is listed and can be tested individually or by using the **Testing** option a test sequence of each can be run.
2. An **Abort** option enables the **Testing** sequence to be stopped at any time.

2.5.4 Vend Without Cup

This menu enables the engineer to test vend all of the drinks that are available from the machine without dropping a cup, to ensure each drink is correctly dispensed.

A suitable container must be placed under the dispense position to receive the vend. While the tests are running the 'test animation' accompanied by a **Test Started** message, on a successful completion of the test the screen returns to the **Vend Without Cup** screen.

1. Select the required drink to be tested.
2. The ingredient, milk and sugar strengths can be changed using the – and + to change the values as required.
3. Select **Start** to start the vend process.
4. Each drink can be tested as required by repeating the procedure above.

2.5.5 Vend With Cup

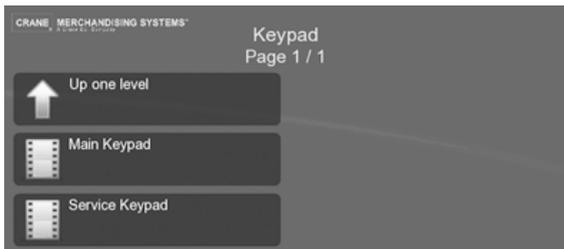
This menu enables the engineer to test vend all of the drinks that are available from the machine into a cup, to ensure each drink and cups are correctly dispensed. While the tests are running the 'test animation' accompanied by a **Test Started** message, on a successful completion of the test the screen returns to the **Vend With Cup** screen.

1. Select the required drink to be tested.

2. The ingredient, milk and sugar strengths can be changed using the – and + to change the values as required.
 3. Select **Start** to start the vend process; drop a cup and dispense the drink.
- N.B.** If the SureVend™ system is turned on the sensors must be activated within 3 seconds of the cup being dispensed (see Para. 2.7.7 SureVend™)
4. Each drink can be tested as required by repeating the procedure above.

2.5.6 Keypad

This menu enables the engineer to test each touch-key on both the drink selection interface and internal service keypad to ensure correct operation.



2.5.6.1 Main Keypad

1. Select **Main Keypad** to test the drink selection keypad.
2. All the touch-keys are illuminated and the screen displays blank menu options.
3. Press each touch-key on the drink selection interface (once only) a bleep and a flag icon appears against the touch-key pressed, indicating that the touch-key is operating correctly.
4. When complete, press the top left touch-key three times to return to the **Keypad** menu screen.



2.5.6.2 Service Keypad

1. Select **Service Keypad** to test the keys.
2. An image of the Service Keypad is displayed.
3. Locate the keypad on the rear of the door and press each key to test its operation.
4. As each key is pressed the corresponding key on the screen is highlighted.

2.5.7 Coin Return Motor

This menu enables the engineer to test the operation of the coin return motor.

1. While the test is running the 'test animation' accompanied by a **Please Wait** message, on a successful completion of the test the screen returns to the **Test** screen.

2.5.8 Cup Drop

This menu option enables the engineer to test the operation of the cup drop unit to ensure a cup is dropped.

While the test is running the 'test animation' accompanied by a **Cup Dropping** message, on a successful completion of the test the screen returns to the **Test** screen.

2.5.9 Display

This menu option enables the engineer to test the **LCD** display screen.

1. Select **Display**, the **LCD** display changes to display a test pattern, revealing any flaw in the **LCD** screen.

N.B. To see a correctly displayed test pattern, in full colour, visit the Tech Zone: website www.cranems.co.uk/technical/

2. When complete, press any touch-key to return to the **Test** screen.

2.5.10 Door Lights

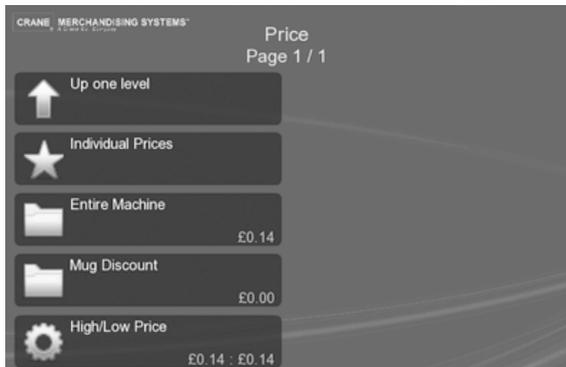
This test illuminates each LED in sequence and the following message is displayed along with the test animation.

Performing door light tests (part 5/7). You should see some changes with door lighting

2.6 Price

This menu allows the engineer to enter individual prices for each drink selection available, one price for all drink selections, set a discount for customers who use their own cup/mug and view the highest and lowest price set in the machines memory.

Tip: If most selections are to be sold at the same price, use the **Entire Machine** menu to quickly set the entire machine to this price, then access the **Individual Prices** menu to adjust prices for individual selections. Entering a single price for the entire machine will over-ride any individual prices previously programmed.



2.6.1 Individual Prices

This option enables the price of each drink to be set. Each drink selection is shown with the current price, select the required drink and enter the new price in the value entry screen.

2.6.2 Entire Machine

This option enables a single price to be set for all drinks from the machine. Enter the new price in the displayed value entry screen.

Tip: If the majority of drinks are the same price use this option to set the price for all drinks. Then select the individual drinks that are priced different.

2.6.3 Mug Discount

This enables a discount value against all drink selections for customers who use their own cup/mug.

1. Select and enter the discount amount in the value entry screen.
2. When a customer places their own cup into the dispense area and selects a drink, the SureVend™ sensors detect the cup and disables the cup drop mechanism. The value set for **Mug Discount** is then subtracted from the price of the drink selected and the appropriate change/credit returned to the customer.

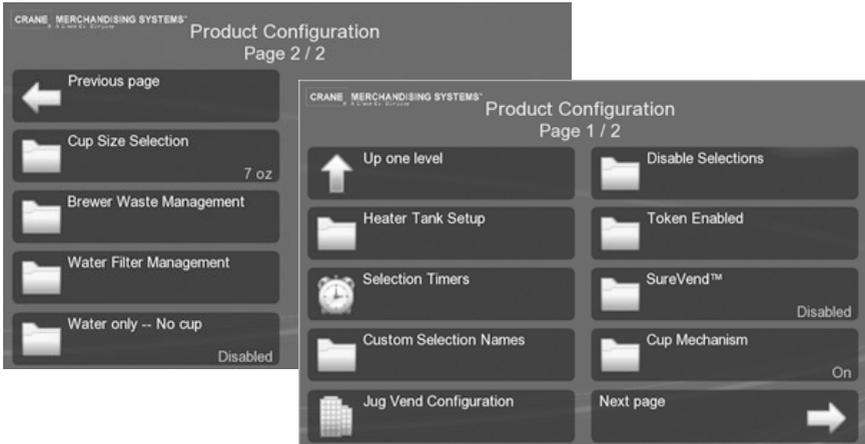
N.B. It is important to ensure that any value entered for a mug discount is supported by the coin mechanism fitted to the machine, e.g. if a mug discount is set at 2p but the lowest coin available from the coin mechanism is 5p, the machine will not be able to return the discount to the customer.

2.6.4 View High/Low Price

This displays the price range, from lowest to highest, on the machine as. If a single price is set across the machine this is indicated by the same price appearing in both fields.

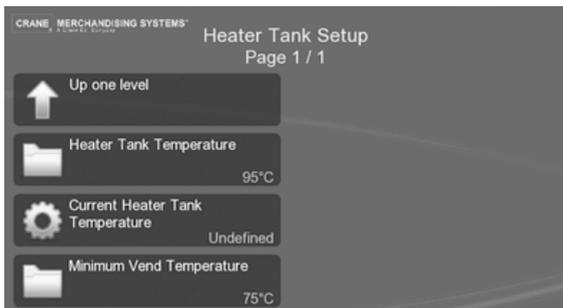
2.7 Product Configuration

This menu enables all aspects of the drinks to be adjusted, from temperature and ingredients to how they are dispensed and the management of water quality and waste.



2.7.1 Heater Tank Setup

This option enables the maximum water temperature in the tank, the minimum temperature for a drink to be set and displays the current tank temperature.



1. **Heater Tank Temperature** – this can be reduced to 75 or raised to 97°C.
2. **Current Heater Tank Temperature**—The current water temperature.
3. **Minimum Vend Temperature** – the default value is 75°C, this cannot be reduced but can be raised to 97°C.

2.7.2 Selection Timers

This menu enables the drink recipes to be adjusted to suit individual preferences. Each drink available on the machine can be adjusted and each has default values. Selecting a drink displays the ingredients that make up the drink and timers to make the drink and are explained below:

1. Select the drink from the **Selection Timer** menu to display the ingredients that make up the drink.
2. **PreVend** – this is factory set to optimal values and should not be changed.
3. **Milk, Sugar and Instant Coffee** – these ingredients can be adjusted to offer different strengths to the user and appear in this menu as for example **Milk 1, Milk 2 and Milk 3**, where **Milk 1** is the least amount of milk and **3** is the most. The strength is measured in seconds and controls how long the ingredient motor is run and is known as the ingredient throw.
4. Each ingredient can be adjusted in this way and the following can also be adjusted to create the drink.
5. **Water Quantity** – how long the water valve is opened.
6. **Product Delay** – to delay the adding of product after a valve opens.
7. **Whipper Time** - how long the whipper is run.
8. **Whipper Delay** – to delay the whipper after a valve opens.
9. **Post Dispense Delay** – this is the length of time the dispense head remains in the extended position after the last ingredient has been vended.



2.7.3 Custom Selection Names

This menu enables syrup based drinks and soups to be given a name that appears on the drink selection screen. The types of drinks available are displayed and selecting the required type displays names that are available.

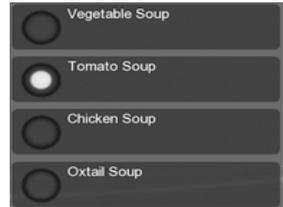
1. If for example soup is available, select **Soup** to display a list of soups.
2. Select the type of soup, in this example **Tomato**.
3. **Tomato Soup** will now be shown on the drink selection screen.



2.7.4 Jug Vend Configuration

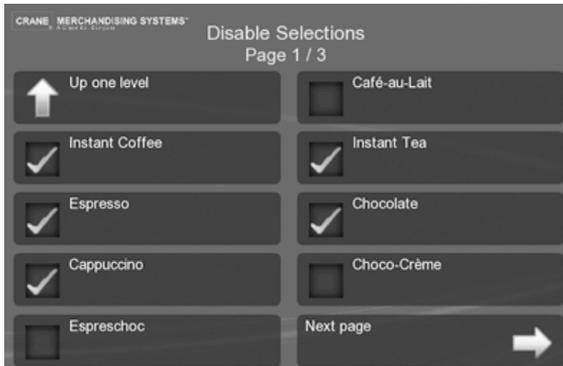
This menu enables the selection of drinks available for jug vend, the number of cup vends per jug and to enable SureVend™.

1. **Enable Selections** – use this option to select the drinks that are to be available for jug vends.
2. **Setup Selections** – use this option to enter the number of vends per jug.
3. **SureVend™ for Jug Vend** – use this option to enable/disable SureVend™ should a glass jug be used.



2.7.5 Disable Selections

This menu enables individual drinks to be temporarily disabled.



2.7.6 Token Enabled

This enables the selection of those drinks that can be dispensed using a token.

2.7.7 SureVend™

This menu enables the SureVend™ product delivery sensor to be **Enabled** or **Disabled**.

SureVend™ Overview:

1. SureVend™ ensures that a cup is always available in the cup station before any money is collected or product delivered. The sensing system is a beam of infra-red light across the cup station that is broken by a cup as it falls into position from the cup drop unit, or by a customer placing his own mug in the dispense area.
2. The SureVend™ software monitors the cup station sensor during the time that the cup ring is operated and for three seconds afterwards. If a cup is not detected the software will then attempt to drop a cup a second and if necessary, a third time, after which the customer's money is returned

3. The machine remains in service and the machine will accept another customers vend request and payment, and will attempt to drop a cup a further three times. If a cup is still not detected the customer's money is again returned.

The machine will now accept a third customers payment and attempts to drop a cup three more times. If these attempts fail, the customer's money is returned and the message "Out of Cups" is displayed.

4. To clear the message and return to standby mode, open the door.
5. Check and, if necessary, clear the cup drop unit. Ensure correct operation before leaving the machine.

2.7.8 Cup Mechanism

This enables the cup drop unit to be switched **On** or **Off**. If user's own cups are to be used set this to **Off** to disable the cup drop unit, SureVend™ can still be used to monitor the dispense area and will not dispense drinks without a cup in the dispense area.

2.7.9 Cup Size Selection

This indicates the cup size used in the machine and must be set to match the cups size used.

2.7.10 Brewer Waste Management

If this feature is **On** it enables the number of fresh brew drinks dispensed to be limited before the brewer waste bucket is emptied, ensuring the bucket is not over filled.

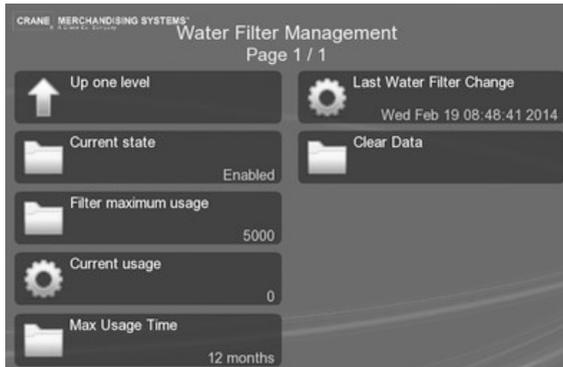


1. **Brewer Waste Capacity** - enter the number of vends before the fresh brew drinks are disabled and the waste bucket emptied.
2. **Current Waste Counter** – this indicates the number of fresh brew drinks dispensed.
3. **Reset Waste** – this resets the counter with a warning.

N.B. If this feature is **On** the operator must press button **12** on the Service Keypad every time the brewer waste bucket is emptied.

2.7.11 Water Filter Management

This enables an indication of when the water filter requires changing, a litre count or time period can be used and whichever is reached first displays an alternating message 'Water Filter Change Required' on the standby screen, although the machine remains operational.



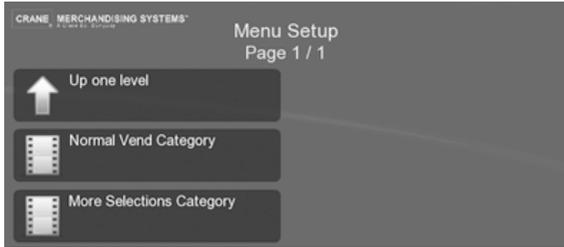
1. **Current State** – Enable or Disable this feature.
2. **Filter Maximum Usage** – specify the maximum number of litres through the filter, the default is 5000.
3. **Current Usage** – this indicates current litre count.
4. **Max Usage Time** – enables a set time period to be entered after which the change filter message is displayed.
5. **Last Water Filter Changed** – this indicates the date and time of the last filter change.
6. **Clear Data** – resets the counter with a warning.

2.7.12 Water Only – No Cup

This disables the cup drop unit and forces the user to dispense Hot and Cold water using their own cup. If SureVend™ is enabled the user's cup must be in the dispense area before the water is dispensed.

2.8 Menu Setup

This menu enables the position of the available drinks on the drink selection menu to be changed. A maximum of ten drinks can be offered on one menu if more are offered further menus (or Page 2/2) are displayed. The following two options display the current order of the drinks on the menu.



1. **Normal Vend Category** – these are the drinks available from the first drink selection menu.
2. **More Selections Category** – if there are more than ten drinks available from the machine they are displayed on this drink selection menu.

Selecting one of the above category options displays the screen below and shows the alternate drink labels that can be placed on the drink selection menu.

1. **Leave unchanged** – leaves the original drink in the menu.
2. **Empty** – clears the drink from the menu leaving an empty slot.
3. All additional drinks are displayed and can be selected to replace the original drink.

2.8.1 To change the menu

1. Select the menu **Category** that is to be changed, the current drink selections are displayed.
2. Select the drink that is to be removed or moved.
3. Select new drink or select **Empty**.
If left as **Empty**, the words **Empty slot** indicate that a blank space will appear on the customer drink selection menu.
4. Select **Up one level** to display the new selection on the **Category** screen.
5. Select **Save** to save the change and return to the **Menu Setup** screen.



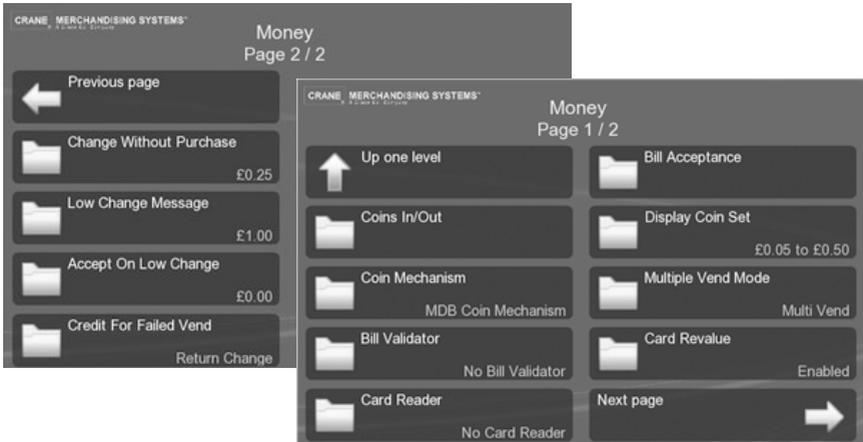
Tip: Using these screens you can group drink types together or if there are less than ten drinks you can leave empty slots at the bottom of the screen.

2.9 Free Vend

This enables the user to dispense drinks free of charge, if enabled it overrides all prices.

2.10 Money

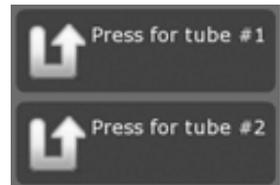
This menu enables the type of coin/card mechanism or note reader fitted to the machine to be selected, to configure the coin set, values for low change, multiple vends and credit for failed vends. The options available on this menu depend on which options are selected.



2.10.1 Coins In/Out

This displays the totals of coins through the coin mech, a table displays: the total **Coins**, **Count** and **Value** of the coins.

1. To load the coin mech tubes with change select the required tube.



2.10.2 Currency Setup

This enables the currency for the machine to be selected from the displayed list when using exec monetary devices.

2.10.3 Coin Mechanism

This enables the coin mechanism fitted to the machine to be selected, including the options:

1. **No Coin Mechanism**, for machines not charging for drinks.
2. **MDB Coin Mechanism** and **Exec Coin Mechanism**.
3. Selecting **Exec Coin Mechanism** requires the Executive kit to be fitted.



2.10.4 Bill Validator

This enables the **MDB Bill Validator** (if fitted) to be selected.

2.10.5 Card Reader

This enables the **MDB Card Reader** (if fitted) to be selected.



2.10.6 Bill Acceptance

This enables which denominations of bills (notes) are accepted.

2.10.7 Multiple Vend Mode

This menu is only applicable when a MDB Coin Mechanism is fitted to the machine and is Enabled on the Coin Mechanism menu. Two options are available:

1. **Multi Vend** - The user can make multiple vends as long as there is sufficient credit entered. In order to get change, the customer must press the coin return touch-key.
2. **Single** - Change is returned to the use automatically as soon as a valid selection is made.



2.10.8 Card Revalue

If the **MDB Card Reader** is fitted, enabling the use of a payment card, it is possible for a user to pay cash into the machine to add credit to their card.

This menu enables this facility to be **Enabled/Disabled**.

2.10.9 Change Without Purchase

This menu is only seen when a MDB Coin Mechanism is fitted to the machine and Enabled on the Coin Mechanism menu.

The **Change Without Purchase** value specifies how and when the machine returns change to a customer. If the customer deposits credit into the machine which is less than or equal to the value set in the **Change Without Purchase** menu, change will be returned without a purchase. However, if the credit is larger, the customer must make a purchase before change will be given. For example:

1. **Value set to 1.00** - Non-escrowed coins less than or equal to £1.00 will be changed without purchase. All escrowed coins are returned.
2. **Value set to 0.00** - Forced Vend. This value forces the customer to make a selection. No change will be returned without a purchase.

N.B. Each coin denomination for which the coin mechanism has a tube is called an Escrowed coin because it can be returned.

2.10.10 Low Change Message

This menu is only seen when a MDB Coin Mechanism is fitted to the machine and is Enabled on the Coin Mechanism menu.

1. When the total value of the coins in the coin mechanism falls below the value set on this menu, the standby message displayed on the screen reads "Use Exact Change".
2. The machine will still accept money with this value set, but may short change the customer if there is insufficient coinage in the coin mechanism.

Tip: Set the Low Change Message and the Accept on Low Change values (see Para. 2.10.11 Accept on Low Change) to the same figure to avoid the customer being short changed.

2.10.11 Accept On Low Change

This menu is only seen when a MDB Coin Mechanism is fitted to the machine and is Enabled on the Coin Mechanism menu.

When the total value of the coins in the coin mechanism falls below the value set on this menu, the machine will stop accepting coins and notes for which it cannot return change. For example, if the engineer sets a value of £1.00, the machine will not accept a £1 coin if there is less than £1 value of coins in the coin mechanism.

2.10.12 Credit For Failed Vend

This menu is only seen when a MDB Coin Mechanism is fitted to the machine and is Enabled on the Coin Mechanism menu.

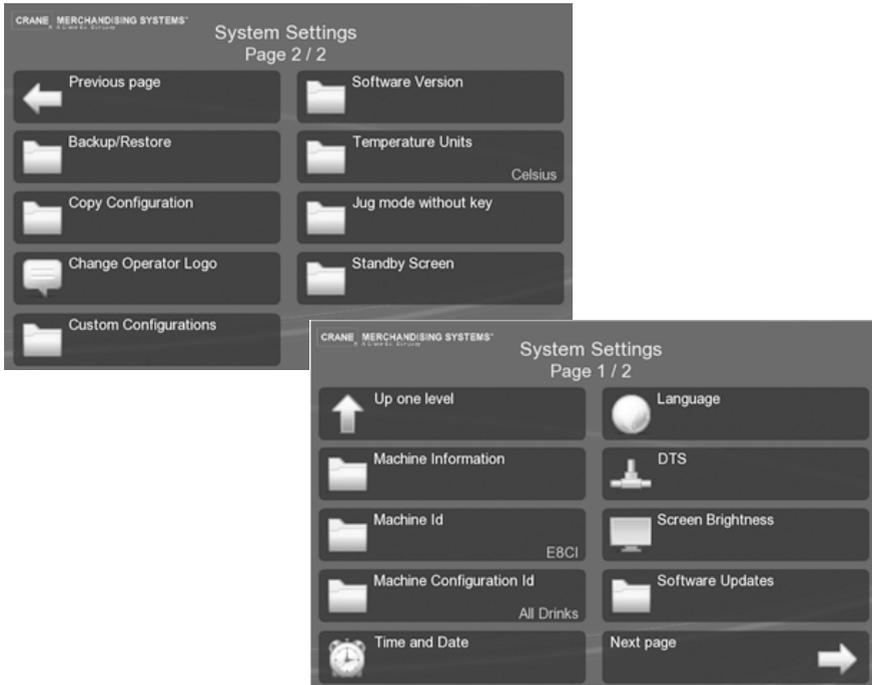
When a vend fails the machine can do one of two things:

1. **Return Change** - The customers change is immediately returned after a failed vend.
2. **Hold Credit** - The customers credit is retained, allowing them to either make an alternative selection or press the coin return.



2.11 System Settings

This menu enables the machine to be set up using the following menus.



2.11.1 Machine Information

This enables details of the machine and contact information to be entered. This information can be displayed on screen if the machine develops a fault and is inoperable. It enables an engineer to be contacted and the machine identified.

1. **Show/Hide Machine Information** – this enables the information entered to be displayed on the screen if required.
2. **Contact Number** – this enables a contact phone number to be entered. New numbers can be added, deleted and any previous numbers used are shown.
3. **Machine Id** – each individual machine can be named to help with identification and is shown in the DEX report.
4. **Machine Location** – the location of the machine can be added to help with identification and is shown in the DEX report.
5. **Custom Configuration Name, Manufacturer ID, Model Number and Board Serial Number** this information is displayed on screen and identifies the machine system set.

2.11.2 Machine Id

This identifies the machine by the configuration of drink types it is setup to vend i.e. Instant, Freshbrew, or B2C. The Id's are as follows:

E8CI—Instant machine.

E6CF—Freshbrew machine (Single, Double and Triple Freshbrew machines based on Zuma paperless Brewer & Paper Brewer).

E5CF—Co-Ex machine (Bean to Cup with Co-Ex brewer and Teapot brewer).

I6CF—Freshbrew machine (Single, Double and Triple Fresh brew machines based on Oltre Brewer).

I5CF—Co-Ex based machine (Bean to Cup based on Co-Ex brewer and Oltre brewer).



2.11.3 Machine Configuration Id

This enables the drink types to be selected that are available based on the Machine Id.



2.11.4 Time and Date

This enables the **Time Zone**, **Time** and **Date** of the machine's location to be selected.

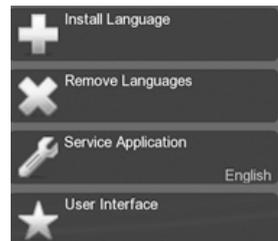
1. In the **Time** menu there is the option to use either a 12 or 24 hour clock display.



2.11.5 Language

This menu enables the selection and installation of different languages on the machine, available languages are displayed, additional languages can be installed from a USB stick. Different languages for the customer (user) and the service engineer can be used simultaneously.

1. **Install Language** – to install a new language it must be available on a suitable USB stick and file format.
2. **Remove Languages** – this removes current languages installed on the machine. As a safe guard you cannot remove all languages from the machine.
3. **Service Application** – this enables the selection of the language that is used on all screens accessed by service engineers.
4. **User Interface** – this enables the selection of languages that are available for selection by the customer (user). A default language can be selected with the option to provide a further four languages that are available for the customer to select on the drink selection screen.



2.11.6 DTS

This menu enables the configuration of the data transfer standard to send audit data relating to sales and events, stored in the machines memory, to a data carrier or other device.

Data Transfer Standard (EVA-DTS): This is the standard that makes it possible to transfer information from vending machines/payment systems to PC-based accounting/management systems and/or the opposite way. It is important that all suppliers of vending machines and payment systems agree to a common standard for the Electronic Data Transfer, because only this way the operator can be sure that all his equipment can be read out and programmed by means of the same handheld device.

2.11.6.1 DTS Standby Mode

This indicates the current mode and is factory set to enable data transfer via:

1. **DDCMP IrDA** - data can be downloaded from the machine using a hand held infra red DDCMP device.
2. **DEX** - data can be downloaded from the machine by plugging a DEX enabled device into the DEX port (J16) on the main control board, located on the rear of the door
3. **DDCMP Wired** - data can be downloaded via a plugged in DDCMP device.



2.11.6.2 DTS Audit List

This menu enables the selection of which data is transferred from the machine to a DEX/DDCMP data carrier. All data and events fields within a vending machine are assigned a unique code determined by the DTS and these fields are available for selection on this screen.



2.11.6.3 CA304 Data Type

This menu determines whether the data will be displayed as **Currency** or **Numeric**.

1. For example, assuming that the value of pound coins in the machine is £3.00, when set to **Currency** CA304 will read 300 in the DEX/DDCMP report.
2. When set to **Numeric** it will read 3.

2.11.6.4 Data Reset Mode

This menu enables all resettable data to be either saved or reset to zero, select:

1. **Auto** - to reset the data after a successful read
2. **Save** - to save the current data values held on the machine.

2.11.6.5 Event Reset Mode

This menu enables all event data to be either saved or reset to zero, select:

1. **Auto** - to reset the event data after a successful read
2. **Save** - to save the current data held on the machine.

2.11.6.7 Printer Baud Rate

This enables the correct baud rate for a serial printer to be set if one is to be used. It is important for this to be set correctly to ensure successful data transfer.



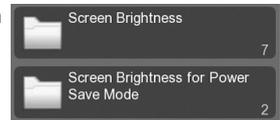
2.11.6.8 Passcode Reset

Data collection is passcode protected, but the machine is able to remember the passcode of the collection device. If a different device is used that the machine does not recognise the passcode must be reset to enable the transfer of data.

This option enables the passcode to be reset, a warning is given to confirm the reset is required.

2.11.7 Screen Brightness

This menu enables the brightness of the drink selection screen to be adjusted when in normal operating mode and when in Power Saving Mode.



2.11.8 Software Updates

This menu enables new software versions to be uploaded onto the machine, via a USB stick.

2.11.9 Backup/Restore

This enables a backup of the current configuration on the machine and the ability to restore the default or available configurations.

1. **Make New Backup** - follow the on screen instructions to save the current machine configuration.
2. **Available Backups** - this enables a default configuration or any available (as listed on this screen) to be used on the machine.



2.11.10 Copy Configuration

This enables the current machine configuration to be copied and used on other machines.

1. **Perform Configuration Clone** - this enables the current configuration on the machine to be copied onto a USB stick. The configuration should be given a name (Clone comment).
2. **Restore Configuration** - this enables the configuration on the machine to be loaded back on to the machine.

2.11.11 Change Operator Logo

This enables a logo to be added to the screen. The logo must be a .png file and available on a USB stick from where it can be selected.

2.11.12 Custom Configurations

This enables a specific configuration available on the machine to be selected and installed.

2.11.13 Software Version

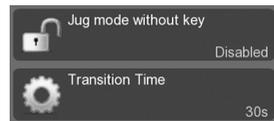
This displays the current software: **Release, I/O Board Version** and the **Kernal** version numbers.

2.11.14 Temperature Units

The enables the temperature to be displayed in either **Celsius** or **Fahrenheit**.

2.11 15 Jug Mode Without Key

This enables the user to vend into a jug without the need for a key, however a passcode is required. This can be **Enabled** or **Disabled** and a **Transition Time** entered after which the machine reverts to normal vend mode.



2.11.16 Standby Screen

This enables standby screen to display after the machine has remained idol for a set time. This can be **Enabled** or **Disabled** and a **Transition Time** (or idol time) entered after which the Standby Screen is displayed.

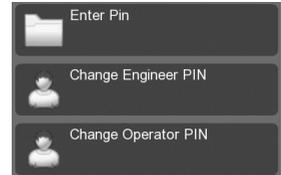
2.12 Security Codes

The security code for entry into the Engineer's Program is factory set so that the operator presses button 1 on the service keypad followed by the sequence 1-1-1-1 on the drink selection interface.

This screen enables these entry codes to be changed.

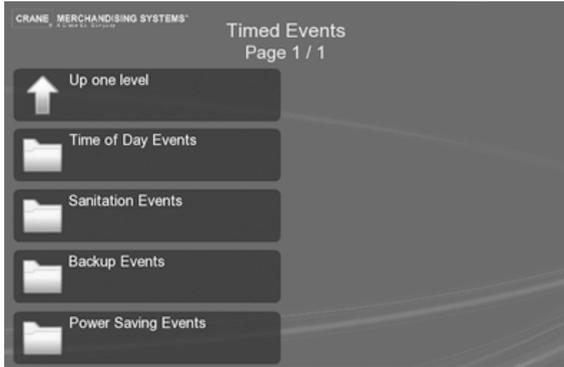
Important: On no account should this code be altered without first consulting your supervisor or manager.

1. **Enter Pin** - this pin enables the following two pins to be changed.
2. **Change Engineer PIN** - this displays and enables the pin to be changed, for entry into the Engineers program.
3. **Change Operator PIN** - this displays and enables the pin to be changed for entry into the Operators program.



2.13 Timed Events

This enables the creation, deletion and update of timed events that are run automatically in the machine via the following menus.

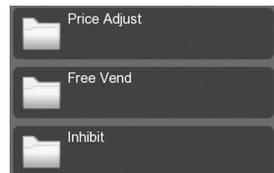


1. **Time of Day Events**—This enables the setup of discounted vend, free vend and inhibited vend periods.
2. **Sanitation Events**—This enables the setup of periods when the machine will automatically flush through the water system.
3. **Backup Events**—This enables the machine to be programmed to perform an automatic backup of all user configurable settings and sales data stored in its memory.
4. **Power Saving Events**—This enables the setup of periods when the machine enters a power saving mode. In this mode the water in the boiler is not maintained at the normal vend temperature, but at a lower temperature of 70°C.

The method for creating/updating a timed event is the same for all four event types. The following example describes how the engineer can program the machine to free vend specific drink selections between 10:30 am and 2:30 pm on week days.

Studying this example will provide an understanding of how timed events are created.

1. Select **Time of Day Events** on the **Timed Events** screen.



2. Select **Free Vend** to display the following screen.



N.B. By default, four empty entries are available for free vend events. Additional events can be created by selecting **Create New Event**.



3. Select **Free Vend #1** to display the following screen.

N.B. By default the state is set to **Disabled** and the **Frequency Type** is set to **Daily**.

4. Select **Enabled/Disabled** and **Enable** to enable the event.
5. Select **Start Time** to display the **Start Time** screen.

N.B. You can switch to either **12hr** or **24hr** mode on this screen.

6. Set the start time to **10:30** and **Save**.
7. Select **End Time** to display the **End Time** screen.
8. Set the end time of **2:30 (14:30)** and **Save**.
9. Select **Days Of Week** and select on which days of the week Free Vend will be available. Individual days or **Select All** options are available.

10. **Frequency Type** - enables the free vend period to be either **Daily** or **Weekly**.
Daily - this enables a free vend period to be available on any selected day or all days of the week.
Weekly - this enables a free vend period to be available on a weekly bases, and can be set to be available over several days. A **Start** and an **End Day** can be selected.
11. Select **Selections**.
12. This screen enables the selection of which drinks are to be available for free vends on the days and between the times entered above.
 The drinks selected here appear with no price against them on the drink selection screen.
13. All the required parameters for the event are now set and the screen below displays the following Free Vend event.



The event is **Enabled** and starts at **22:30** on **Friday** night, it finishes at **02:30** on **Sunday** afternoon and occurs **Weekly** for the selected **Selections** of drinks.

14. From this menu the engineer can quickly and easily set up additional **Time of Day**, **Sanitation**, **Backup** and/or **Power Saving Events** as required.

N.B. When setting a discount price event it is necessary for the engineer to enter a value for the discount as a percentage (%). If the machine is fitted with a coin mechanism, please ensure that the discount value entered is supported by the coin tubes.

2.14 Leave Service Application

This exits the Engineers Program and returns the machine to standby mode. Alternatively the machine door can be closed to exit the program and standby mode.

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