1.0 Description

A State-Of-The-Art fully refrigerated Merchandiser suitable for multi-purpose applications. CV-0900 Merchandiser comes with default 6 trays with snack and drink combo configuration however it can be converted into Drink only or Snack only configuration if required. CV-0900 is designed such that it can also accommodate 7th tray if required as optional extra.

Machine's robust construction makes it ideal for many locations. It has superior insulation, double glazed glass window, vend sensors to confirm product delivery and powerful cooling with bottom trays temperature up to 4C and top tray up to 14C.

For added safety an electrical cut out switch (RCD) is built in as standard. Machine comes with MDB protocol and has two controller boards with built in diagnostics.

Vend motors are standard 24 volt operated and spirals can be interchanged easily.

This machine is suitable for indoor use only.

Model		CV-0900
Dimensions(W×D×H)		755X 636×1830 (mm) 29.7 X 25×72(in.)
Weight(N.W/G.W)		162Kg/192Kg 356.4lbs/422.4lbs
Max selections		36
Refrigeration system		R134a (100g)
Power		200W
Power Consumption		1.924Kwh/24h
Lighting (Optional)		12VDC LED Color corrected lighting system
		1 x 1 watt Fluorescent
Power Supply		AC 220V～240V 50Hz/AC 110V～130V 60Hz (based on your actual machine)
Internal temperature	Top	14℃ ~ 25 ℃
	Bottom	4℃ ~ 10 ℃
Coinage system		M.D.B.
Air noise		Less than 60dB
Conditions of use		Ambient temp 0 ～ 35℃ Humidity 70% Not for dairy or perishable goods.

2.0 Installation

Remove all packing materials and dispose of correctly. Once the installation site has been chosen ensure that the machine is level and all four levelers touch the ground. Check that the door can be opened fully and the machine is stable and level.

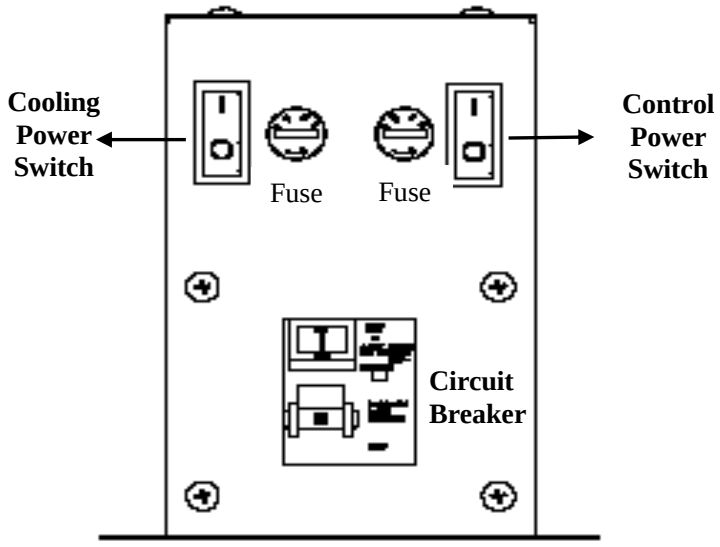
MACHINE MAY MISS-VEND IF NOT LEVEL

Allow 300mm minimum between machine and the wall for air circulation and refrigeration ventilation.

Ensure that a 220~240 volt AC, 13 Amps/ 110~130 volt AC, 26 Amps (based on your actual machine) earthed outlet is within 2 meters of the machine. This machine should not be used with an extension lead.

THIS MACHINE MUST BE EARTHED

Open door and power up machine. The lights, coin mech, LCD display and refrigeration system commence operation.



3.0 Loading of Product

This machines have 6 trays. The top 3 trays are for snack type/size items such as crisps, chocolate, etc.. The bottom 3 trays are for drink type/size items-bottle or can.

To load a tray; with the door fully open, ride over the front tray rollers and pull forward. When the tray is fully forward it can be lowered to an angle

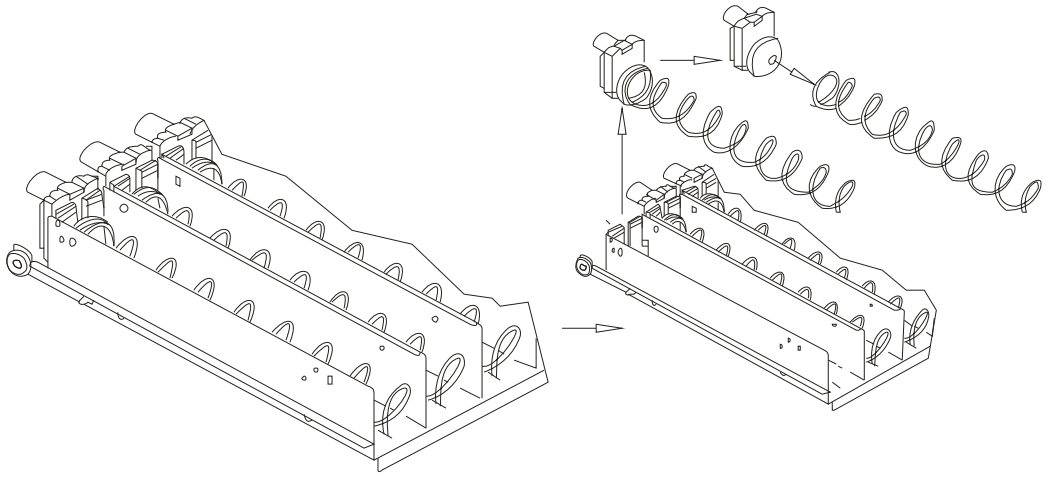
making loading easier.

Ensure products are not too tight or too loose for the spiral. **Load products so they rest on the tray and not the spiral wire**. This helps to ensure correct delivery of product.

The machine is supplied with trays with spirals of different diameters and pitches.

To vary their quantity or their order, proceed as follows:

1) Open the main door.
2) Put out the tray on which you are to vary the spiral.
3) Switch off and take out the group motor-spiral.
4) Take out the spiral from the plastic support (lever between spiral and support) and replace with the other spiral or with the other expeller motor group.
5) Fit up the new spiral group reversing the above operations. After having finished this operation, make sure that the end of the spiral is put on, otherwise modify the end, draw the spiral forward until the base of the spiral support will come out from the pit; then turn the spiral in the wished position and put it again into the pit.



Located on the right hand side of the cabinet are six pull out drawers for storing any excess items. Although the drawers are outside the refrigerated part of the machine, due to the excellent insulation they are protected from high ambient temperatures.

4.0 Coinage

This machine uses **M**ulti **D**rop **B**us protocol for coinage and note validators.

5.0 Refrigeration

1) This system is an air conditioner. Care should be taken not to obstruct the rear air grille or to site the machine too close to a wall. Failure to observe these points may invalidate the refrigeration system warranty.

2) The refrigeration system is operated through the electronic control board. There are two temperature sensors in the cabinet: one control the current temperature, the other control the defrost temperature. When an unusual condition takes place and leads to the fact that the evaporator frosts, the sensor will send out a signal to the controller, then the controller in turn shut off the compressor through the relay.

3) If the temperature is above the setting that has been programmed in by the user, the controller sends a signal to the refrigeration relay. The energized relay closes to complete the high voltage circuit that powers the compressor and the condenser fan.

4) If the compressor should overheat, a thermal overload removes power to the compressor until it is cooled.

5) When the temperature in the cabinet reaches 8℃ (the temperature setting), the controller de-energizes the relay, which in turn breaks the circuit powering the compressor.

6) The controller will also shut off the compressor if the door is opened. This is to prevent the refrigeration unit from freezing up.

After the compressor shut down, the controller will wait until the compressor has been shut down for 3 minutes and if applicable, the door has been closed for 1 minute before restarting the compressor. The delay allows pressure in the system to equalize.

Note: The refrigeration system is pressurized and sealed at the factory. Puncturing or cutting any component in the system will cause refrigerant gas and liquid to be propelled out of the system, and may create an immediate

physical hazard. Use caution to avoid accidentally opening the refrigerant system.

It should also be **noted** that releasing refrigerant to the atmosphere is a federal crime and is punishable by law. Any service work requiring the system to be opened must be performed by a licensed technician using certified equipment. Unauthorized service to the sealed refrigerant system may void the warranty.

1) Never puncture or cut any component in the refrigeration system.

2) Always use licensed service technicians to service the refrigeration system.

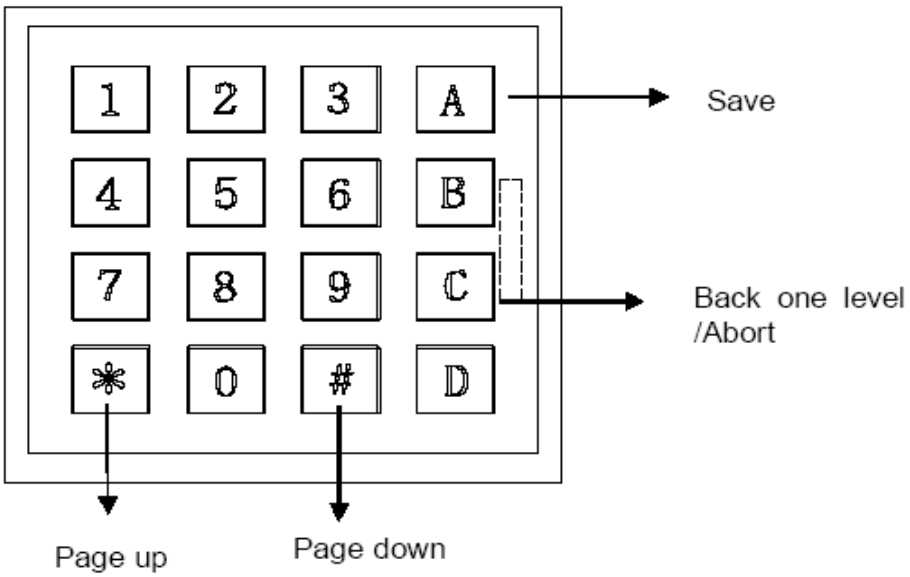
3) Always wear hand and eye protection when servicing the vendor.

The temperature is factory set for optimum performance.

6.0 Programming Options

To enter the configuration program press the 'MODE' button located on the control board. The display will change to show “Configuration” on the top line and scroll through the various options on the bottom line.

There are 9 sub menus which are accessed directly by pressing the associated numeric key on the keypad.



6.1 Language

Press '1' from the main menu to enter the language menu.

The current language setting is displayed in the top left corner of the screen.

Press '1' to set language to ENGLISH - Default

Press '2' to set language to FRENCH

Press '3' to set language to SPANISH

Press '4' to set language to ITALIAN

Press '5' to set language to GERMAN

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the main menu.

6.2 Set Price

Press '2' from the main menu to enter the pricing menu. There are 2 options: -

1. Main Price - Default 1.00
2. Secondary Prc - Default 0.00

Select which set of prices you wish to change. From this point both options work in the same way.

Enter the selection, this can include * as a wildcard.

eg.

1* - sets all items on tray 1 to the same price

*0 - set all items in the first column to the same price

** - sets all items in the machine to the same price

Then enter the required price and press ' Save '.

Repeat until all selections are set, then press 'Abort' to get back to the main menu.

Prices can be viewed by entering a selection number then using '#' and '*' to change the item number up and down.

6.3 Vend Settings

Press '3' from the main menu to enter the vend settings menu. There are 7

options: -

6.3.1. Force Vend

Default Setting – No.

Press '1' from the vend settings menu to select Force Vend mode (once credit is inserted a vend must be made before any refund is possible). The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable Force Vend mode.

Press '2' (No) to disable Force Vend mode.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the vend settings menu.

6.3.2. Multi Vend

Default Setting – No.

Press '2' from the vend settings menu to select Multi-vend mode (multiple selections can be made from the inserted credit, remaining credit can be refunded). The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable Multi-vend mode.

Press '2' (No) to disable Multi-vend mode.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the vend settings menu.

6.3.3. Drop Sensor (Vend assured system)

Default Setting – Nudge.

Press '3' from the vend settings menu to select Drop Sensor options. There are 4 options for the drop sensor. The current setting is displayed at the end of the top line.

6.3.3.1 Disabled

Drop Sensors not used – no refund for failed vend.

6.3.3.2. Detect

Refund is given if product not detected.

6.3.3.3. Retry

The spiral is cycled again if no product is detected. Refund given if no

product seen again.

6.3.3.4. Nudge

Gives the spiral a short 'nudge' a preset number of times, checking for product after each nudge. Refund given if no product seen after all nudges. Press the required number then press 'Save' to keep the new setting or 'Abort' to return to the original setting. If 'Nudge' mode is selected then you will be prompted to set the number of nudges. Select a number 1 – 9 and press ' Save '.

6.3.4. Maximum Credit

Press '4' from the vend settings menu to set the maximum credit. Once this credit value has been exceeded the coin and note acceptors will be disabled. There are 2 options: -

6.3.4.1. Max Credit Val

Default Value - £3.00

Press '1' to set the maximum credit value required. The current value is displayed on the bottom line. Edit this value to the required value.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the maximum credit menu.

6.3.4.2. Active

Default Setting – No.

Press '2' to set the activation. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable the maximum credit feature

Press '2' (No) to disable the maximum credit feature

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the maximum credit menu.

6.3.5. Credit Timeout

Press '5' from the vend settings menu to set the credit timeout. If the credit value remains unchanged and no buttons are pressed, the credit value will be cleared after this timeout. There are 2 options: -

6.3.5.1. Timeout (Mins)

Default Value – 2 minutes.

Press '1' to set the timeout required in minutes. The current value is displayed on the bottom line. Edit this value to the required value.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the credit timeout menu.

6.3.5.2. Active

Default Setting – No.

Press '2' to set the activation. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable the credit timeout feature

Press '2' (No) to disable the credit timeout feature

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the credit timeout menu.

6.3.6. Free Vend

Default Setting – No.

Press '6' from the vend settings menu to select Free Vend mode. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable Free Vend mode.

Press '2' (No) to disable Free Vend mode.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the vend settings menu.

6.3.7. Meal Deals

Default Settings: - All info set to "00".

Press '7' from the vend settings menu to configure meal deals. Combinations of 2 or 3 items may be configured to be sold at a combined price less than the sum of the individual items. The only restriction is that the difference between the individual combined price and the meal deal price may not be greater than or equal to the price of any single item.

The details of Meal Deal 1 will be displayed. The bottom line displays 3 selection numbers and the main price for the meal, the top line displays the secondary price.

Press 'Save' to edit the currently displayed meal deal.

Press '#' to move to the next meal deal

Press '*' to move to the previous meal deal

Press 'Abort' to go back to the vend settings menu

In Edit mode the top line displays 'Edit' instead of 'Meal'. Edit the details of the meal deal, selection numbers may include wildcards by entering '*' in place of a tray and/or column number. Press '#' to move to the next field within the meal deal. If only 2 selections are required in the deal then set the third item number to '00'.

Press 'Save' to save the details of the meal deal and return to view mode.

Press ' Abort ' to cancel any changes.

6.4 Machine Setup

Press '4' from the main menu to enter the machine setup menu. There are 10 options: -

6.4.1. Currency Char

Default Setting - £

Press '1' from the machine setup menu to select the currency character used. The current setting is displayed at the end of the top line. This character can be set to one of the 4 standard ones or any other ASCII character by incrementing or decrementing the current character.

Press '1' to set to '£'

Press '2' to set to '$'

Press '3' to set to '€'

Press '4' to set to NONE (' ')

Press '#' to increment the Currency Character through the ASCII character set .Press '*' to decrement the Currency Character through the ASCII character set.

Eg To select ¥ press '1' then '#', '#' then ' Save '

Once the setting is correct, press 'Save' to keep the new setting and into the ' Force 0 D P ' menu , Press '1' to set to ' Yes ' will go to small digital display hidden.Press '2' to set to ' No ' will show small digital.

Default Setting - No.

Suggest setting for NO state, otherwise it may lead to can't correct action.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort ' to return to the original setting. Both buttons will return you to the machine setup menu.

6.4.2. Audio Feedback

Default Setting – Yes.

Press '2' from the machine setup menu to select Audio Feedback mode (the buzzer will give a short beep for every valid press detected and a longer beep for an invalid key press). The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable Audio Feedback.

Press '2' (No) to disable Audio Feedback.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the machine setup menu.

6.4.3. Inactive Times

Press '3' from the machine setup menu to set up inactive periods (cabinet temperature is maintained but vending is inhibited). There are 4 periods available.

Press '1' to configure period 1

Press '2' to configure period 2

Press '3' to configure period 3

Press '4' to configure period 4

Note:If you need to set up more periods, you'd best ensures that each time does not conflict

All periods have the same 3 parameters: -

6.4.3.1. Start Time

Default Start Time – 00:00

Press '1' to set the start time of the period. The current start time will be displayed at the start of the bottom line. Edit this to the desired start time. Press 'Save' to keep the new time or 'Abort' to return to the original setting. Both buttons will return you to the current period menu.

6.4.3.2. End Time

Default End Time – 00:00

Press '2' to set the end time of the period. The current end time will be displayed at the start of the bottom line. Edit this to the desired end time. Press 'Save' to keep the new time or 'Abort' to return to the original setting. Both buttons will return you to the current period menu.

6.4.3.3. Active

Default Setting – No.

Press '3' to set the activation. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable the inactive period feature

Press '2' (No) to disable the inactive period feature

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the inactive times menu.

6.4.4. Sec Price Time

Press '4' from the machine setup menu to set up the secondary pricing period. This can be used either as a discount period with lower prices or as a premium period with higher prices.

A second price is stored for each individual item. There are 3 parameters:-

6.4.4.1. Start Time

Default Start Time – 00:00

Press '1' to set the start time of the secondary price period. The current start time will be displayed at the start of the bottom line. Edit this to the desired start time.

Press 'Save' to keep the new time or 'Abort' to return to the original setting. Both buttons will return you to the secondary price menu.

6.4.4.2. End Time

Default End Time – 00:00

Press '2' to set the end time of the secondary price period. The current end time will be displayed at the start of the bottom line. Edit this to the desired end time. Press 'Save' to keep the new time or 'Abort' to return to the original setting. Both buttons will return you to the secondary price menu.

6.4.4.3. Active

Default Setting – No.

Press '3' to set the activation. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable the secondary price feature.

Press '2' (No) to disable the secondary price feature.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the secondary price menu.

6.4.5. Shutdown Mode

Press '5' from the machine setup menu to set the shutdown period (the cabinet temperature is set to a new level to save energy, vending is inhibited and the lights are turned off).

Note: you'd better ensures that shutdown period and inactive period does not conflict.

There are 4 parameters: -

6.4.5.1. Start Time

Default Start Time – 00:00

Press '1' to set the start time of the shutdown period. The current start time will be displayed at the start of the bottom line. Edit this to the desired start time. Press 'Save' to keep the new time or 'Abort' to return to the original setting. Both buttons will return you to the shutdown menu.

6.4.5.2. End Time

Default End Time – 00:00

Press '2' to set the end time of the shutdown period. The current end time will be displayed at the start of the bottom line. Edit this to the desired end time. Press 'Save' to keep the new time or 'Abort' to return to the original

setting. Both buttons will return you to the shutdown menu.

6.4.5.3 Active

Default Setting – No.

Press '3' to set the activation. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable the shutdown period feature

Press '2' (No) to disable the shutdown period feature

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the shutdown menu.

6.4.5.4 Temperature

Default Setting - 12°C

Press '4' to set the cabinet temperature during the shutdown period. The current temperature will be displayed on the bottom line. Edit this to the desired temperature. Press 'Save' to keep the new temperature or 'Abort' to return to the original setting. Both buttons will return you to the shutdown menu.

6.4.6. Temperature

Press '6' from the machine setup menu to set the temperature options. There are 2 options: -

6.4.6.1. Temp Units

Default Setting - °C

Press '1' from the temperature menu to set the temperature display units. The current setting will be displayed on the bottom line.

Press '1' to set to °C

Press '2' to set to °F

Press 'Save' to keep the new setting or 'Abort' to return to the original setting.

Both buttons will return you to the temperature menu.

6.4.6.2. Cabinet Temp

Default Setting - 8°C

Press '2' from the temperature menu to set the cabinet temperature. The

current temperature will be displayed on the bottom line. Edit this to the desired temperature. Press 'Save' to keep the new temperature or 'Abort' to return to the original setting. Both buttons will return you to the temperature menu.

6.4.7. Health Guard

Press '7' from the machine setup menu to set up the health guard. If the helath guard is activated, the cabinet temperature is monitored. If the temperature rises above the health guard temperature for longer than the health guard timeout, all items on the trays with a tray number greater than or equal to the health guard top tray will be inhibited. There are 4 parameters: -

6.4.7.1. HG Temperature

Default Setting - 14°C

Press '1' to set the health guard temperature. The current temperature is displayed on the bottom line. Edit the new value to the maximum temperature

required. Press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the health guard menu.

6.4.7.2. HG Timeout

Default Setting – 15 minutes.

Press '2' to set the health guard timeout. The current timeout in minutes is displayed on the bottom line. Edit the new value to the timeout required.

Press 'Save' to keep the new setting or 'Abort' to return to the original setting.

Both buttons will return you to the health guard menu.

6.4.7.3. HG Active

Default Setting – No.

Press '3' to set the activation of the health guard. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable the health guard feature

Press '2' (No) to disable the health guard feature

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to

return to the original setting. Both buttons will return you to the health guard
menu.

6.4.7.4. HG Top Tray

Default Setting – 3.

Press '4' to set the lowest number tray that is included in the health guard. The current tray number is displayed on the bottom line. Edit the new value to the tray number required. Press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the health guard menu.

6.4.8. Time & Date

Press '8' from the machine setup menu to set the time and date. There are 4 options.-

6.4.8.1. Set Time

Press '1' from the time & date menu to set the time. The current time will be displayed on the bottom line. Edit this to the new time. Press 'Save' to keep the new date or 'Abort' to return to the original setting.
Both buttons will return you to the time & date menu.

6.4.8.2. Set Date

Press '2' from the time & date menu to set the date. The current date will be displayed on the bottom line. Edit this to the new date. Press 'Save' to keep the new date or 'Abort' to return to the original setting.
Both buttons will return you to the time & date menu.

6.4.8.3. Date Format

Default Setting – DD/MM/YYYY.

Press '3' from the time & date menu to set the date format. There are 4 options: -

Press '1' to set the date format to DD/MM/YYYY

Press '2' to set the date format to MM/DD/YYYY

Press '3' to set the date format to DD-MM-YYYY

Press '4' to set the date format to MM-DD-YYYY

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to

return to the original setting. Both buttons will return you to the time & date menu.

6.4.8.4. Daylight Save

Default Setting – European rules.

Press '4' from the time & date menu to set the daylight savings mode. There are 4 options: -

Press '1' to set No Daylight Savings

Press '2' to set European Daylight Savings rules

Press '3' to set American Daylight Savings rules

Press '4' to set Australian Daylight Savings rules

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the time & date menu.

6.4.9. Messaging

Press '9' from the machine setup menu to configure the idle mode display. There are 2 options.-

6.4.9.1. Top Line

Press '1' from the messaging menu to setup a custom message for the top line of the idle message. This message will be alternated with the standard welcome message if activated.

6.4.9.1.1. Custom Message

Default Setting - " Have a Nice Day! ".

Press '1' to edit the custom message. The current message will be displayed on the bottom line. Edit each character using the keypad like a mobile phone keypad. Use the '#' key to move the cursor forward, and the '*' key to move the cursor backwards. Once the message is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the messaging menu.

6.4.9.1.2. Active

Default Setting – No.

The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable the health guard feature

Press '2' (No) to disable the health guard feature

Once the setting is correct, press 'Save' to keep the new setting or ' Abort ' to return to the original setting. Both buttons will return you to the health guard menu.

6.4.9.2 Bottom Line

Default Setting – temperature, time and date

Press '2' from the messaging menu to set the format of the bottom line of the idle message. There are 4 options: -

Press '1' to set the bottom line to display time and date

Press '2' to set the bottom line to display temperature and time

Press '3' to set the bottom line to display temperature, time and date

Press '4' to set the bottom line to display time only.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the messaging menu.

6.4.10. Lighting Times

Press '0' from the machine setup menu to set up lighting periods .

There are 2 periods available.

Press '1' to configure period 1

Press '2' to configure period 2

All periods have the same 3 parameters: -

6.4.10.1. Start Time

Default Start Time – 00:00

Press '1' to set the start time of the period. The current start time will be displayed at the start of the bottom line. Edit this to the desired start time. Press 'Save' to keep the new time or 'Abort' to return to the original setting. Both buttons will return you to the current period menu.

6.4.10.2. End Time

Default End Time – 00:00

Press '2' to set the end time of the period. The current end time will be displayed at the start of the bottom line. Edit this to the desired end time. Press 'Save' to keep the new time or 'Abort' to return to the original setting.

Both buttons will return you to the current period menu.

6.4.10.3. Active

Default Setting – No.

Press '3' to set the activation. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable the lighting period feature

Press '2' (No) to disable the lighting period feature

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the inactive times menu.

6.5 Cash Handling

Press '5' from the main menu to enter the cash handling menu.

There are 3 options: -

6.5.1. Manual Fill

Press '1' from the cash handling menu to manually refill the coin changer. The total value of coins input is displayed on the top line.

Each value coin is filled individually. The value of the current coin and the count of those coins in the tubes are displayed on the bottom line.

To change to the next coin value press '#' to move to a higher value coin or '*' to move to a lower value coin.

Press 'Abort' when all tubes are filled to a satisfactory level to return to the cash handling menu.

6.5.2. Coin Accept

Press '2' from the cash handling menu to set which coins the changer will accept. Each value of coin will be displayed with options whether or not to accept that value coin. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable acceptance

Press '2' (No) to disable acceptance

Press 'Save' to keep the new setting and advance to the next coin value. Press '#' to move to the next coin value without changing anything, press '*' to move to the previous coin value.

Press 'Abort' to return to the cash handling menu.

6.5.3. Note Accept

Press '3' from the cash handling menu to set which notes the validator will accept.

Each value of note will be displayed with options whether or not to accept that value note. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable acceptance

Press '2' (No) to disable acceptance

Press 'Save' to keep the new setting and advance to the next note value. Press '#' to move to the next note value without changing anything, press '*' to move to the previous note value.

Press 'Abort' to return to the cash handling menu.

6.5.4.Escrow Active

Default Setting – Yes.

Press '4' from the cash handling menu to set which the last bill accepted in the escrow position to can be returned. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable Escrow.

Press '2' (No) to disable Escrow.

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the vend settings menu.

6.6 MDB Devices

Press '6' from the main menu to enter the MDB devices menu. There are 4 options: -

6.6.1. Coin Changer

Default Setting – Yes.

Press '1' from the MDB devices menu to enable communication with a coin changer. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable a coin changer

Press '2' (No) to disable a coin changer

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the MDB Devices menu.

6.6.2. Cashless

Default Setting – Yes.

Press '2' from the MDB devices menu to enable communication with a cashless device. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable a cashless device

Press '2' (No) to disable a cashless device

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the MDB Devices menu.

6.6.3. Note Acceptor

Default Setting – Yes.

Press '3' from the MDB devices menu to enable communication with a note acceptor. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable a note acceptor

Press '2' (No) to disable a note acceptor

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the MDB Devices menu.

6.6.4. Audit

Default Setting – Yes.

Press '4' from the MDB devices menu to enable communication with an audit device. The current setting is displayed at the end of the bottom line.

Press '1' (Yes) to enable an audit device

Press '2' (No) to disable an audit device

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the MDB Devices menu.

6.7 Audit Info

Press '7' from the main menu to enter the audit info menu. There are 2 options: -

6.7.1. Permanent

Press '1' from the audit info menu to view permanent statistics (values cannot be reset).

There are 9 options: -

6.7.1.1. Sales Total

Press '1' to view the total value of all sales since the machine was installed.

6.7.1.2. Cash Sales

Press '2' to view the total value of cash sales since the machine was installed.

6.7.1.3. Cashless Sales

Press '3' to view the total value of cashless sales since the machine was installed.

6.7.1.4. Revalue Total

Press '4' to view the total amount revalued to cashless devices since the machine was installed.

6.7.1.5. Vend Count

Press '5' to view the total number of vends since the machine was installed.

6.7.1.6. Cash Vends

Press '6' to view the total number of cash only vends since the machine was installed.

6.7.1.7. Cashless Vends

Press '7' to view the total number vends paid for wholly by a cashless device since the machine was installed.

6.7.1.8. Mixed Vends

Press '8' to view the total number of vends paid for partly by cash and partly by cashless since the machine was installed.

6.7.1.9. Cashbox Total

Press '9' to view the total value of coins passed into the cashbox since the machine was installed.

Press 'Abort' to return to the permanent statistics menu.

6.7.2. Resettable

Press '2' from the audit info menu to view resettable statistics. There are 10 options: -

6.7.2.1. Sales Total

Press '1' to view the total value of all sales since the values were last reset.

6.7.2.2. Cash Sales

Press '2' to view the total value of cash sales since the values were last reset.

6.7.2.3. Cashless Sales

Press '3' to view the total value of cashless sales since the values were last reset.

6.7.2.4. Revalue Total

Press '4' to view the total amount revalued to cashless devices since the values were last reset.

6.7.2.5. Vend Count

Press '5' to view the total number of vends since the values were last reset.

6.7.2.6. Cash Vends

Press '6' to view the total number of cash only vends since the values were last reset.

6.7.2.7. Cashless Vends

Press '7' to view the total number vends paid for wholly by a cashless device since the values were last reset.

6.7.2.8. Mixed Vends

Press '8' to view the total number of vends paid for partly by cash and partly by cashless since the values were last reset.

6.7.2.9. Cashbox Total

Press '9' to view the total value of coins passed into the cashbox since the values were last reset.

6.7.2.0. Reset Totals

Press '0' to clear all the resettable totals.

Press 'Abort' to return to the resettable statistics menu.

6.8 Test Vend

Press '8' from the main menu to enter the test vend menu. There are 4

options: -

6.8.1. Test Vend

Press '1' from the test vend menu to do a test vending ,the data of vending will not be recorded..Press 'Abort' to return to the last menu.

6.8.2. Test Item

Press '2' from the test vend menu to do a test vend on a single item.Enter the selection number to be tested and the motor will run.If the motor is not be installed, the display will show ' Motor 0/C '.Press 'Abort' to return to the last menu.

6.8.3. Test Tray

Press '3' from the test vend menu to do a test vend on each item in a tray. The next vend is started as soon as the previous one has completed. The items are vended sequentially starting from item 0 in the tray. The test can be aborted at any time by pressing 'Abort'.

6.8.4. Test Machine

Press '4' from the test vend menu to do a test vend on each item in the machine.

Press '1' (Yes) to enable the machine test.

Press '2' (No) to cancel the test action,exit the menu .

It also can be aborted by pressing ' Abort '.

Each item is vended sequentially starting from item 10.

All motors will be run in turn and the number of the selection motor will be displayed as it is tested. The system will run all motors included not home or jammed and null .When testing,it can not be aborted at any time by pressing ' Abort '.If all motors are tested, auto exit the function menu.

6.8.5 Tray Number

Press '5' from the test vend menu to set the tray number of the machine.

Press '1' (6) if your machine's tray harness has 6 connectors.

Press '2' (7) if your machine's tray harness has 7 connectors.

Default setting is '1' (6).

Once the setting is correct, press 'Save' to keep the new setting or 'Abort' to return to the original setting. Both buttons will return you to the main menu.

6.9 Diagnostics

Press '9' from the main menu to enter the diagnostics menu. There are 6 options: -

6.9.1. Software Ver.

Press '1' from the diagnostics menu to display the current software version. Press 'Abort' to return to the diagnostics menu.

6.9.2. Temperatures

Press '2' from the diagnostics menu to display temperature information. The current cabinet temperature, the cabinet temperature setting and the health guard temperature are displayed on the bottom line. Press 'Abort' to return to the diagnostics menu.

6.9.3. Error Log

Press '3' from the diagnostics menu to display the error log. The error log can hold 31 entries containing a device code, an error code and the time and date. See Appendix A for details.

The first entry shown will be the most recent one. Press '#' to move to the next entry, press '*' to move to the previous entry. Press 'Abort' to return to the diagnostics menu.

6.9.4. Door Open

Press '4' from the diagnostics menu to display the door open log. The door open log can hold 15 entries containing the date and time that the machine door was opened. The first entry shown will be the most recent one. Press '#' to move to the next entry, press '*' to move to the previous entry. Press 'Abort' to return to the diagnostics menu.

6.9.5. Health Gd

Press '5' from the diagnostics menu to display the health guard log. The health guard log can hold 15 entries containing the date and time that the health guard was violated. The first entry shown will be the most recent one. Press '#' to move to the next entry, press '*' to move to the previous entry. Press 'Abort' to return to the diagnostics menu.

6.9.6. Test Motors

Press '6' from the diagnostics menu to run the test motors function. This runs each motor in turn for a short period to check for open circuit or short circuit motors. The results are displayed tray by tray, the trays can be moved through with the '#' and '*' keys. Items 0 to 7 are displayed on the bottom line, items 8 and 9 are displayed on the top line. If a motor is working normally then the column number will be displayed. If a motor is short circuit an 'F' will be displayed. If a motor is open circuit a space (' ') will be displayed. Press 'Abort' to return to the diagnostics menu.

Eg “Tray 1 8 9 “

“0 1 F 3 4 6 7 “

Shows motor on item 12 is short circuit, motor on item 15 is disconnected or open circuit.

Appendix A – Error Codes

The error code is made up of two parts and displayed as xx-yy.

Where: -

xx – The device that caused the error

yy – The specific error code for this device

Device 00 - VMC

Error Number

00 – No Error

01 – Powered Up / Reset

02 – Drop Sensor Failed

03 – No Payment Device Available

Device 01 - Refrigeration Board

Error Number

00 – No Error

01 – Defrost Required

Device 02 - Coin Changer

Error Number

00 – No Error

04 – Defective Tube

06 – Acceptor Unplugged

07 – Tube Jam

08 – Internal Memory Error

09 – Coin Routing Error

12 – Coin Jam

13 – Stringing Attempt

Device 03 - Note Acceptor

Error Number

00 – No Error

01 – Defective Motor

02 – Sensor Problem

04 – ROM Checksum Error

05 – Acceptor Jammed

07 – Note Removed from ESCROW position

08 – Stacker Removed

12 – Attempt to remove note from Stacker

Device 1x –> 6x Spiral Fault

Error Number

00 – No Error

01 – Motor Open Circuit

02 – Motor Over-current / Short Circuit

03 – Product not detected (will not app sensor disabled)

6.9.7. Default Config

Press '7' from the diagnostics menu to implement default setting function .

Press '1' (Yes) to enable the default config.

Press '2' (No) to cancel the action,exit the menu .

It also can be aborted by pressing ' Abort '.

Once allowing the default setting, it will be updated menu set to the default value,and restart your system

7.0 Cleaning

Unplug the machine from the power before any cleaning is carried out.

7.1 Outside Cabinet

Use a soft damp cloth with a mild detergent.

Do not use a jet or water hose to clean the machine. Do not allow water to enter the cabinet.

A propriety glass cleaner can be used on the window. Avoid using highly perfumed products.

7.2 Inside Cabinet

Wipe cabinet and dispensing trays with a damp cloth at least once every week.

Remove all products from trays before cleaning.

Do not use a damp cloth to wipe any cables or connectors.

Use only a DRY cloth for this.

Do not use a perfumed cleaning product as this may taint any snack items.

If any tray or storage drawer requires deep cleaning, remove the tray/drawer from the machine to clean. DO not immerse any tray in water. Do not allow water to touch motors. Ensure that tray is completely dry before re fitting.

8. 0 Maintenance

Disconnect the machine from the power before any maintenance is carried out. Only qualified personnel should carry out maintenance tasks.

If the main cables need being replaced, this must be carried out by the machine manufacturers, its agents or a qualified engineer.

Any damage to internal wiring must be repaired by a qualified engineer.

Do not remove any panel, screws fixing covers or panels. Any repairs must be carried out only by qualified persons.

Cooling unit with coolant R600a must be repaired by a qualified engineer. Please pay attention to fire prevention while repairing!

This vending machine cannot be powered on continuously in a short time. If

there is a loose connection or a power outage of power, please switch on the machine after 4-5 minutes.

9. 0 Noise

This machine has a continuously running fan within. It also has an intermittent running refrigeration system. The noise level from this machine under normal working conditions is slight. Any loud or persistence noise or vibration should be reported to the service providers as this could be a symptom of a fault. Air noise rating for this machine is 60dB.

10.0 Restrictions of Use

This version has an IP24 rating and can be used indoor and outdoors within an ambient temperature range of 0℃～ 40 ℃.

NOTE: Use correct outdoor mains connector if the machine is to be used outdoors.

This machine is NOT intended for dispensing dairy products, any perishable goods, or any flammable/explosive material. See section 11.0

11.0 Important Safeguards

When using or maintaining electrical appliances, basic safety precautions should always be practiced including the following:

If the supply cord, lamp or leads are damaged, these must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. The plug must be inserted into the correct earthed socket-outlet.

The appliance is not intended for dispensing the following food:

-milk, eggs, meat, poultry, shellfish, crustacean, and their products, either raw or heat treated, as well as food of plant origin that is ready for consumption without the need for any further preparation or processing.

-powdered ingredients are mixed with water or food is required to be stored at correct temperature.
-dairy products, or any perishable goods.
-any flammable or explosive material. Ex: butane, sulfuric acid,adhesive, gasoline, alcohol, etc.
-any potentially hazardous food such as food with a capability for supporting rapid and progressive growth of pathogenic or toxin producing micro-organisms
-food having a pH level of not greater than 4,6 or a water activity (Aw) value not greater than 0,85 at 25℃;
-food maintained at a temperature not exceeding 5℃ for periods specified by the producer, but for not more than 5 days;
-food maintained at a temperature above 65℃ or below -18℃;

Food for which the appliance is suitable:
-candy, nuts, gum and similar confectionery;
-cookies, crackers and similar bakery products;
-instant-coffee, chocolate, cocoa and sugar;
-food in hermetically sealed containers;
-food that has been processed to prevent spoilage.

This appliance is not suitable for installation in an area where a water jet could be used.

The appliance has to be placed in a horizontal position.
Do not clean internal wirings using water or damp cloth. Do not pull or push the internal wiring with excessive force during maintenance or cleaning. If internal wiring is damaged it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
To open the door to gain access to the **maintenance area .** Access key should be kept by qualified and trained maintenance person. Before open the door, Switch off unit and unplug the appliance from the outlet. Do not

intend to loosen the screws in the unit and gain access to service area for maintenance person. The **service area** is restricted to persons having knowledge and practical experience of the appliance in particular as far as safety and hygiene are concerned.

The unit is only available for food stored in the temperature of less than 25 ℃ before each loading the clean, check carefully the food and its package and ensure the food is within best before date and well packaged.

If any abnormal situation occurs when machine is on (ex: abnormal noise, smell, smoke), please cut off the power immediately. If you cannot find out the exact cause, please do not fix by yourself. It must be fixed by qualified person.

To wear disinfectant gloves and clothing when loading and cleaning.

Wear protecting hair covering to contain hair

TROUBLE SHOOTING

Symptom	Possible Cause	Remedy
1. Vendor does not accept coins.	1. Not connect the plug of the control board or the plug is loosened. 2. The receive channel jammed or have rubbish in the coin acceptor. 3. Circuit fault. 4. No power supply to the coin acceptor. 5. The coin acceptor is damaged. 6. The main control board fault. 7. Coin incorrect. 8. Defective changer or other M.D.B. Device. 9. The door switch is not be pressed.	1. Check and connect plugs of both end of the conductor. 2. Shut off the power, check if the receive channel jam, and clean the coin acceptor. 3. Check where damage occurred and connect the circuit. 4. Check and connect the plugs of power conductor system. 5. Repair or replace the coin acceptor. 6. Replace the main control board. 7. Use the correct coin. 8. Replace the coin acceptor. 9. Close the door tight.
2. Incorrectly accept coins.	1. If the coin acceptor is level. 2. The intake of the coin acceptor and the coin slot of vendor are not on the line. 3. The refund pole is pressed. 4. The acceptor jammed with dust.	1. Check and readjust the coin acceptor to level. 2. Check and readjust the coin acceptor. 3. Adjust the refund pole. 4. Shut off the power, check and clean the coin acceptor.
3. Accept coins, but not display the right money.	1. The coin acceptor jammed with coins. 2. Receive channel unit jammed or dirty. 3. The main control board fault.	1. Shut off the power and check if the coin acceptor jammed. 2. Check and clean the channel. 3. Replace the main control board.
4. Not refund or incorrectly refund when you don't buy goods.	1. Lack of changes. 2. Change module fault. 3. The vendor is in the FORCE VEND mode.	1. Insert enough coins. 2. Replace the changer. 3. Turn the FORCE VEND option off under the SERVICE mode.
5. No changes refunded after goods are vended.	1. Not enough coins in the tube. 2. Not connect the changer or loose. 3. The refund module fault. 4. The refund channel of the coin acceptor jammed.	1. Insert enough coins. 2. Shut off the power, and check if the changer connects correctly. 3. Check if the refund module working normally. 4. Clean up the refund channel.
6. Accept coins but no goods can be vended.	1. Connection fault between the main control board and the key board. 2. The motor control wires wear and tear. 3. Not set the price. 4. The main control board fault. 5. Motors fault.	1. Check and connect the control board and the key board correctly. 2. Replace the wire. 3. Set the price correctly. 4. Replace the main control board. 5. Replace the motors.
7. Give wrong change or even not give change when vend normally.	1. Label price and setting price is not match. 2. Not enough coins in the tube. 3. Coin acceptor fault. 4. The main control board fault. 5. Changer jammed.	1. Set the price correctly or replace the label. 2. Insert enough coins. 3. Repair or replace the coin acceptor. 4. Replace the main control board. 5. Clear up the changer.

TROUBLE SHOOTING

Symptom	Possible Cause	Remedy
8. Goods vended not match with that be chosen.	1. Connection fault between motors and the main control board. 2. The main control board fault.	1. Check the circuit, and adjust wires. 2. Replace the main control board.
9. Free vend.	1. The detecting sensor fault or its circuit breaks off when the sensor under the“HOME” and “DROP”mode. 2. Coin acceptor fault. 3. The main control board fault.	1. Check and repair the wire of detecting sensor or replace the detecting sensor, if possible, change the sensor mode to “DISABLED”. 2. Check and replace the coin acceptor. 3. Replace the main control board.
10. Vendor does not accept bills.	1. Not enough changes in the tube. 2. The bill box is open. 3. Bill validator has no power. 4. Bill validator fault. 5. Bill receive switch is wrong in the bill validator. 6. Bill validator jammed. 7. Bill is incorrect.	1. Insert enough coins. 2. Close the bill box. 3. Check the circuit and wires. 4. Check and replace the bill validator. 5. Reset bill receive switch. 6. Clean up the waste. 7. Use correct bill.
11. Specific trays not vend after the vendor accepts the coins even there are goods in it.	1. Not reset the motors after restore goods in the trays. 2. Motors jammed or its circuit breaks off. 3. Not enough coins inserted. 4. Forbidden vending for not detect the goods last time. 5. Incorrect product filling, the goods jammed or can not be pushed out.	1. Select the motors and make sure every motor turns to “OK” under the “SINGLE SELECTION” OR “ALL SELECTIONS” mode. 2. Check the motors and their wires. 3. Insert enough coins. 4. Deal as“1”. 5. Choosing correct products and can not just bear it into the spiral, if the dimension of the products is smaller than 2/3 of the spiral diameter, they are not allowed to fill into the spiral, otherwise will get product jam.
12. Multi-goods drop in once vend.	1. The detecting sensor fault or its circuit breaks off when the sensor under the “HOME” mode. 2. Incorrectly install the springs. 3. The main control board fault. 4. The motor switch short.	1. Check and repair the wire of detecting sensor or replace the detecting sensor, if possible, change the sensor mode to “DISABLED”. 2. Install the springs into the right position. 3. Check and repair the main control board. 4. Replace the motor module.
13. The compressor does not start up or stop immediately after start.	1. The circuit breaker trip off or the fuse break off. 2. Socket disabled. 3. The compressor wire is short or abrasion. 4. The temperature sensor fault or its wire is broken off.	1. Repair the circuit and supply power up to the standard. 2. Check if the socket is up to the required standard. 3. Replace the compressor wires. 4. Replace the temperature sensor or check and repair the wire.

TROUBLE SHOOTING

Symptom	Possible Cause	Remedy
14. Sudden off or frequency stop when the compressor normally function	1. The compressor is overload, the heat relay works or the fuse break off. 2. The compressor is too hot.	1. Check the circuit fault. 2. Keep the condenser clean, and keep ventilation.
15. The equipment has noise or shake.	1. The bolt of compressor bottom board is loose. 2. The fan friction with the plate. 3. The gasket of the compressor and fan is worn out.	1. Tighten the bolt. 2. Check and adjust the fan. 3. Check and replace the compressor and fan.
16. The compressor has work for long time or continues working.	1. The ventilation in the cabinet and condenser not well. 2. Cryogen leaks. 3. The temperature sensor not correctly installed.	1. Check the evaporator fan and the condenser fan, and clean the dust on the air heating exchange equipment. 2. Add cryogen. 3. Re-install the temperature sensor.
17. The temperature inside the vendor is high.	1. The compressor has no power. 2. Set temperature too high. 3. The refrigeration system fault.	1. Check and repair the circuit fault. 2. Set the temperature correctly. 3. Request the skill man for maintenance.
18. ALL products in trays of the layers of No.4, 5 and 6 can not be vended. (Health guard on)	1. Evaporator frozen. 2. The temperature sensor fault. 3. The compressor not function or abnormal function. 4. The chill control board fault.	1. Check the air leaks Check for a failed evaporator fan motor. If it has failed replace the evaporator fan motor. Check evaporator fan switch harness connection. The defrost sensor fault or its wire short, replace the sensor or repair the wire. The chill control board fault, replace the board. 2. Replace the temperature sensor. 3. Reference the above clause 13、14、16. 4. Replace the chill control board.
19. Indication temperature not renovate when the refrigeration system works normal.	1. The temperature sensor fault. 2. The chill control board fault. 3. Communication fault between the main board and chill control board.	1. Replace the temperature sensor. 2. Replace the chill control board. 3. Check the communication wire.
20. Can't record the time and temperature when set.	1. Communication fault between the main board and chill control board. 2. The chill control board fault.	1. Check the communication wire. 2. Replace the chill control board.

TROUBLE SHOOTING

Symptom	Possible Cause	Remedy
21. Lamp off	1. No power. 2. LED lamp fault.	1. Check the switch power supply circuit. 3. Replace the LED lamp.

END