merchant

User Guide

7" Touchscreen





P/N CR0021457 Rev 10.9.9

July 2015

Table of Contents

•	Compliance Requirements	Page 3
•	Specifications	Page 6
•	Cautions & Definitions	Page 8
•	Inspection & Installation	Page 10
•	Daily Cleaning	Page 19
•	Initial Start up	Page 22
•	The Selection Process	Page 34
•	The Touch Screen	Page 29
•	Access Service Mode	Page 41
•	How do I Access the Service Modes	Page 44
•	Service Mode Chart	Page 48
•	Troubleshooting Charts	Page 283
•	Wiring Diagram	Page 293
•	Software License Information	Page 296

Compliance Requirements

LOCATION OF MANUFACTURER:

 All machines are built at the Crane Merchandising Systems manufacturing facility, located at 3330 Crane Way, Williston SC 29853, USA

DATE OF MANUFACTURE:

 Date of manufacture can be determined by viewing the Manufacturing Date on the Serial Number decal, located on the top left rear corner of the back of the machine cabinet.

PERMITTED & NON PERMITTED USES OF THIS MACHINE

- This machine is designed to dispense pre-packaged food, candy, beverage, snack and similar products. Use of unwrapped food products is not permitted.
- It is not permitted to use this machine outdoors, or in an environment where flammable or explosive vapors are present.
- This machine is not designed, nor should it be used to dispense flammable or explosive items, nor any other item that could not be safely dispensed by dropping it into the delivery bin
- This machine is not suitable for installation in an area where a water jet could be used.
- This appliance is not to be used by persons (including children) with a reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children must be supervised not to play with the appliance.

Nutritional Content Information

 Crane Merchandising Systems is providing the nutritional content information, based on information provided by the product manufacturers, and Crane MS is cannot accept responsibility for content created by others.

Compliance Requirements

All models are built to meet or exceed all applicable standards, including but not limited to:

- International (CE) Approvals to meet or exceed the below listed standards:
 - 83/23/EEC (93/68/EEC) Low Voltage Directive.
 - 89/336/EEC EMC Directive
 - EN 60335-1Safety of household and similar electrical appliances.
 - DIN VDE 0700 T224 Safety requirements for Automatic and coin-operated machines and control devices for commercial use.
 - EN 55022 Class B Limits and methods of measurements of Radio interference characteristics of information technology equipment.
 - IEC 801-1 Electromagnetic compatibility for industrial-processing measurement and control. Part 1: General.
 - IEC 801-2 Part 2; Electrostatic discharge requirements for industrial process measurement control equipment.
 - IEC 801-3 Part 3; Radiated electromagnetic field requirements.
 - IEC 801-4 Part 4; Electrically fast transient.
 - IEC 801-5 Draft; Surge immunity requirement.
 - IEC 801-6 Draft; Immunity to conducted disturbances induced by radio frequency.
 - EN 50082-1 Generic immunity requirements; Residential, Commercial, Light industry.
- Machines built for the US Market meet or exceed the requirements for UL751 for ambient machines, and UL541 for chilled machines, and have also been reviewed and passed the NAMA Construction Standard, and are permitted to bear the NAMA Mark.

Compliance Requirments

NOISE LEVEL

This machine operates at less than 70 db (A).

ACCEPTABLE AMBIENT OPERATING TEMPERATURE RANGE.

 This equipment was designed and tested to work properly in a temperature range of 10°C to 32°C (50°F to 90°F) in still air (45% Relative Humidity, non-condensing).
 Usage at ambient conditions outside the range of the testing may cause unacceptable appearance or performance.

STORAGE CONDITIONS

The machine capable of being stored in a temperature range of -18°C to 68°C (0°F to 155°F). Storage temperatures below 0°C (32°F) require that the operator to take the required precautions to ensure that any water is removed from the condensate system prior to storage.

INDOOR USE ONLY

This machine is designed to be used in an Indoor Setting only. Indoor Setting is defined as inside a structure constructed with four walls and a roof, and sufficiently protected from ambient conditions and not subjected to the effects of weathering. Any other usage is in direct violation of these instructions, and will void the warranty of the machine and its components.

Specifications 186 & 187 Ambient Snack

Specifications	Model 186 Domestic 4 wide Ambient	Model 186 Export 4 wide Ambient	Model 187 Domestic 6 wide Ambient	Model 187 Export 6 wide Ambient
Height	72 inches	183 cm	72 inches	183 cm
Width	32.8 inches	83.312 cm	43.75 inches	111.13 cm
Depth	38.5 inches	97.79 cm	38.5 inches	97.79 cm
Floor Space	8.8 Sq ft	.82 Sq Meter	11.7 Sq ft	1.09 Sq Meter
Container Size	52.8 Cu Ft.	1.50Cu Meter	70.2 Cu Ft.	1.99 Cu Meter
Shipping Weight	510 lbs	231 kg	610 lbs	276 kg
Voltage (AC)	120V	230V	120V	230V
Running Amperes	3A	1.5A	3A	1.5A
Refrigerant Charge				
Compressor size Not Applicat		licable	Not App	olicable
High Side Test Pressure	7 P 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
Low Side Test Pressure				

Specifications 471 & 472 Combo

Specifications	Model 471 Domestic 4 wide Combo	Model 471 Export 4 wide combo	Model 472 Domestic 6 wide Ambient	Model 472 Export 6 wide Ambient
Height	72 inches	183 cm	72 inches	183 cm
Width	32.8 inches	83.312 cm	45.5 inches	115,57 cm
Depth	32.5 inches	82.55 cm	32.5 inches	82.55 cm
Floor Space	7.4 Sq ft	.69 Sq Meter	10.3 Sq ft	.96 Sq Meter
Container Size	44.4 Cu Ft.	1.26 Cu Meter	61.6 Cu Ft.	1.75 Cu Meter
Shipping Weight	629 lbs	285 kg	729 lbs	330 kg
Voltage (AC)	120V	230V	120V	230V
Running Amperes	8A	4A	8A	4A
Refrigerant Charge	7.5 oz	.213 kg	9.8 oz	.278 kg
Compressor size	1/3 hp	1/3 hp	Super 1/3	Super 1/3
High Side Test Pressure	250 psi	17.24 bar	250 psi	17.24 bar
Low Side Test Pressure	105 psi	7.24 bar	105 psi	7.24 bar

Cautions & Definitions

It is critical that all cautions and warnings be reviewed and complied with during the unpacking, installation, operation, and repair of this machine



CAUTION: This machine is designed for indoor usage only. Any other usage will void the Manufacturer's Warranty



CAUTION: Any procedure marked with the symbol at left requires that the Machine have the power applied and a shock hazard exists. Only a trained and authorized person should attempt these repairs.



CAUTION: It is important that this machine is hooked up to the proper voltage and polarity for your country. Use a Voltmeter to verify voltage and polarity. Should the reading be any different than a normal reading or if you are unsure of what the reading should be, contact an electrician.



CAUTION: Different countries may have unique plug arrangements. Ensure that the machine is properly grounded before operating. .



CAUTION: The power cord for all machines are of a type X attachment. If the power cord is damaged, it should be replaced by a trained service agent, or a similarly qualified person in order to avoid a hazard.

Cautions & Definitions



CAUTION: The machine is a heavy item. Ensure that sufficient personnel are available for lifting and transporting the machine. Use proper lifting procedures and equipment.



CAUTION: This machine is designed to dispense pre-packaged food, candy, beverage, snack and similar products. Use of unwrapped food products is in direct contradiction to these cautions.



CAUTION: If this machine is used to dispense perishable food, and local health codes require that the machine monitor the cabinet temperature, and prevent vending when the temperature exceeds a defined limit for a period of time, then the Health Code function must be enabled for those affected selections – see Health Code Setup



CAUTION: The electronic system components in this machine utilize static sensitive components. Precautions for handling sensitive devices should be observed when handling these items.

Inspection and Unpacking

The Merchant Media is assembled and packed so that a minimum amount of time is necessary for preparation to install it on location. The following steps are recommended to ensure correct unpacking.

- **Shipping Damage**: Thoroughly inspect the exterior of the carton for damage which may have occurred during shipment. Report any damage to delivering carrier and follow their instructions.
- Remove the remainder of the packing material. On machines shipped with the lock in place, the keys are taped inside the coin return.
- Removal of shipping boards: There are 2 methods available for removal of the shipping boards on the bottom of the machine, and they are dependent upon the style of packaging used: 2 flat shipping boards (Style A), or 2 L shaped assemblies (Style B).

Style A

- a) Using a motorized lifting device (i.e. a forklift) raise the machine to a comfortable working height and remove the leg levelers with the use of a socket or wrench (1 5/16"). Do this on one side at a time. After the front and rear leg levelers are removed, the shipping board can then be removed. Replace the leg levelers in the legs of the machine before lowering to the ground, OR
- b) When using a pallet jack (non-motorized) insert a pry bar into the slit on the front and rear of the wooden boards, and twist the bar to force the boards to split apart, and remove from the machine.
 Screw the leg levelers all the way in before lowering the machine to the ground.

Style B

- a) Each of the 4 legs has a hex head screw securing the leg to the wooden pallet. Remove the screw from each leg, then using either a motorized lifting device, or a pallet jack, raise the machine sufficiently to slide the 2 assemblies out from under the machine and lower it to the floor.
- NOTE: On the machine, the weight concentration is toward the back of the cabinet. Trucking and lifting should be done from the back. CAUTION should be taken when trucking from side.
- On machines with lock in place, first unlock and turn handle to open door. When no lock is furnished, remove clip and turn handle. Swing door to its full open position.
- Remove all additional packing material from the machine.

Unpacking ADA Bin

Attention!

To avoid damage to the ADA delivery bin mechanism, remove the SHIPPING BOLTS from the bin sides prior to operating the ADA delivery bin!!!

The Shipping Bolts must be installed any time the machine is moved or transported. Failure to do so could result in damage to the delivery bin

To tilt the bin down to access the shipping bolts, swing the small latches on the top corners of the bin to release the bin.

Make sure you latch the bin after removing the shipping bolts.





Bin Latch Locations



View of shipping bolt (2 shipped per bin)

Shipping Location

(two bolts – back of bin sides on left and right)



Bin pulled out to access bolts



Installation

Moving the merchandiser through a narrow doorway

Note: If necessary, this Merchandiser can be moved through an opening as narrow as 30 inches (76.20cm) by removing the panels at the top and bottom of the cabinet.

Step 1- Remove the top Panel

- 1. Remove the screws that secure each end of the panel to the cabinet.
- 2. Pull the panel forward to remove it from the merchandiser.

Note: This only applies to an Ambient machines.

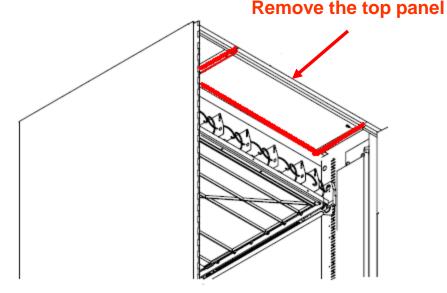


Figure 1



CAUTION: This procedures requires the use of tools, and should only be completed by a trained technician or operator.

Installation

Moving the merchandiser through a narrow doorway

Step 2

REMOVING THE LOWER PANELAND DELIVERY BIN (Refer to Figures 2 and 3 at right.)

- Open the slide-out monetary and the glass door.
 Locate the silver tab of the delivery bin latch on the lower delivery bin side of the monetary wall.
- 2. Lift the latch up to allow the delivery bin assembly to hinge down.
- Lift up the delivery bin slightly and lift up on the drop rods to allow the rods to clear the stop brackets.
- 4. Slide the delivery bin assembly to the right to clear the hinges. The delivery bin assembly will not be attached to the machine.
- 5. Unhook the SureVend[™] harness at the SureVend[™] board, noting the wire routing.
- 6. Remove the screws that secure the bottom panel to the cabinet.
- 7. Pull the panel forward to remove it from the cabinet.

NOTE

To fit the merchandiser through some of the most narrow doorways, you may have to remove the trays. If you do, follow the procedure a outlined on the following page.

| CRANE | MERCHANDISING SYSTEMS

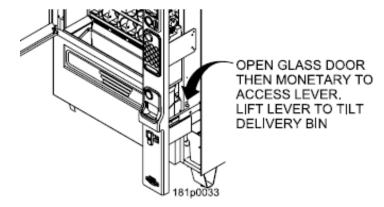


Figure 2

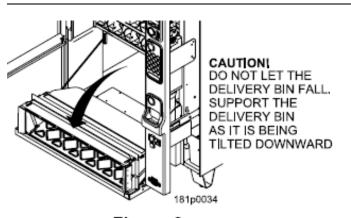
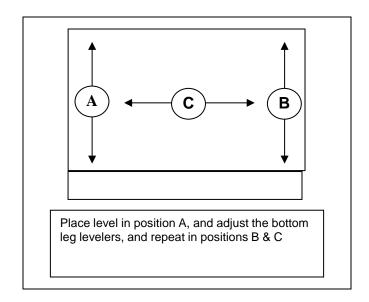


Figure 3

Installation Leveling the unit

Leveling the Machine

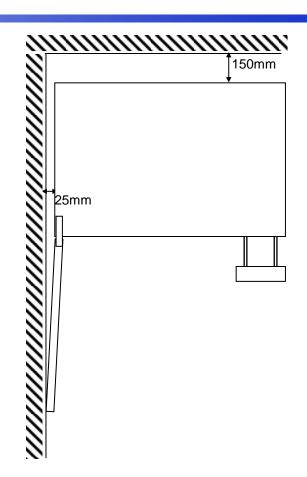
 Leveling the machine on location is important for the proper function of the machine. There are four leveling screws in the legs of the machine to make any necessary adjustments. After positioning the machine, level it from front to rear and right to left directions. After leveling, turn front right (lock side) leveling screw in about one-half turn to drop this corner slightly to make the door easier to close and lock.



Installation Clearances

Clearance Requirements

- It is necessary on all machines to have 25mm (1") clearance on the left side of the machine for the door to properly open to access the shelves.
- All chilled or refrigerated machines require 150mm (6")of clearance behind the machine for air circulation.



Installation Electrical Supply Check



CAUTION: It is important that this machine is hooked up to the proper voltage and polarity for your country. Use a Voltmeter to verify voltage and polarity. Should the reading be any different than a normal reading or if you are unsure of what the reading should be, contact an electrician.

Power Requirements

- The merchandiser is supplied with a service cord for the country of use, and is terminated in a grounding type. The wall receptacle used for this merchandiser must be properly polarized, grounded and of the correct voltage. Operating the merchandiser from a source of low voltage will void the warranty. Each machine should have it's own circuit, and that circuit should be protected with a circuit breaker of fuse to conform to local regulations.
 - Voltage Check Place the leads of the voltmeter across the Line and Neutral sockets of the wall receptacle. The voltmeter should indicate a stable voltage in a range of 110 to 130Vac for 120V 60Hz locations, or 220 to 240Vac for 230V 50Hz locations.
 - 2. Polarity Check Place the leads of the voltmeter across the Line and Ground sockets of the wall receptacle. The voltmeter should indicate a stable voltage in a range of 110 to 130Vac for 120V 60Hz locations, or 220 to 240Vac for 230V 50Hz locations.
 - 3. Noise Potential Check Place the leads of the voltmeter across the Neutral and Ground sockets of the wall receptacle. The voltmeter should indicate zero voltage. A measurement greater than 1.5V could result in operational issues for the merchandiser's electronics caused by electrical noise.

Note: Any deviation from these requirements could result in unreliable performance from your merchandiser.





CAUTION: This procedures requires the use of tools, and should only be completed by a trained technician or operator.

Initial Setup Key Steps

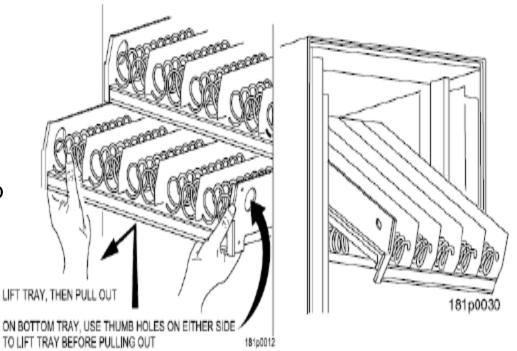
- After unpacking and installing the machine on location the Key steps to setting up the machine the first time are:
 - 1. Load a change fund into the coin mechanism.
 - 2. Set the selection prices in the machine.
 - 3. Test vend at least one selection on each shelf to verify:
 - a. Pricing is correct, and coin mech, bill acceptor and credit card device are working correctly.
 - b. Product and nutrition information are correct.
 - c. Selection delivers products.
 - d. Delivery bin delivers product to customer.

Filling the Machine

Loading the Machine

- Lift the front edge of the shelf and pull the shelf forward until it stops
- 2) Insert products into spirals
- 3) Once the shelf is loaded, push the shelf back into the machine until you feel front edge raise up over the ramp.

Note: If tall product hits the shelf above when restoring the shelf to the normal vend position, raise the upper shelf to provide clearance



Daily Cleaning

Daily Cleaning

Before leaving the machine each visit, the machine should be inspected and cleaned as follows:

- Glass inside and out use glass cleaner and disposable towels
- Front of monetary panel do not use ammonia based cleaners as it may cause premature crazing of the polycarbonate surface. We recommend the use of Novus #1 plastic cleaner &I polish.
 - For units equipped with a touch screen, never spray any cleaner directly on the touchscreen, nor permit liquids to flow onto the screen. Apply cleaner to a disposable towel and then apply to the pill or touchscreen. Treat the touchscreen as you would any sensitive electronic device and never use abrasive cleaning materials.
- 3 Delivery Bin Inside and out clean any spills or residue with a mild soap and water solution, and wipe dry.





Preventative Maintenance

Cashless Devices

- If your machine is equipped with a cashless device, whether it is a credit card reader, or a proprietary closed system pre-paid card, the magnetic head used to read the payment cards needs to be cleaned regularly to insure proper operation.
- The defined tool for cleaning a magnetic head is a pre-saturated cleaning card, which are commercially available from various sources.
- Based on credit card industry standards, the busier a machine is, the more frequently the magnetic head should be cleaned
- For cashless uses more than 100 times per day clean it every day
- For cashless uses between 50 and 100 times per day clean it every other day
- For cashless uses between 10 and 50 times per day clean it one time per week.
- Actual conditions may vary, and be affected by site conditions, for example a machine located outdoors should be cleaned more frequently.
- Follow the instructions provided with the cleaning card, and slide it past the magnetic head as directed.





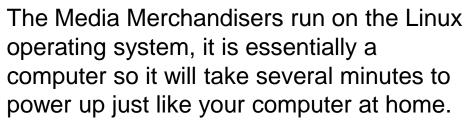
Payment Systems

The Media Merchandisers are capable of accepting multiple forms of payment systems using a Multi Drop Buss or Executive (export only) interface.

- All payment devices are mounted on the slide out assembly. The front of this slide out assembly is called a Pill. There are multiple configurations of the Pill available should you need to add or take away payment peripherals in the future.
- If your payment peripherals were installed at the factory they should already be enabled in the electronics. Currently we enable only \$1 and \$5 bills (notes) in manufacturing. Instructions from the manufacturer for all peripherals installed at the factory are included in the bag assembly in the machine. Please refer to these instructions for information on filling coin tubes, adding bills to recyclers or other pertinent information.
- If your payment peripherals were not installed in manufacturing, please refer to the instructions that came with payment system for set up and installation.
- See the service modes section of this document for information on enabling or disabling different bills and/or additional peripherals.

Initial Start Up Powering up the machine

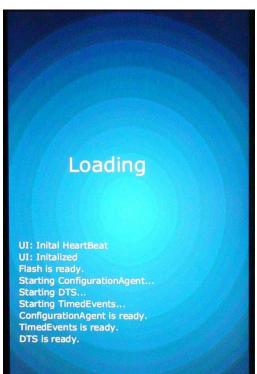
Turn on the power switch located on front of the power box accessible by pulling out the swing panel.











Initial Start Up Features and Benefits

Merchant Media Touch - Key Features

- Merchant Media Touch uses Crane's latest vending electronic platform built on NAMA Open Standards integrating touch screen technology, cashless payments, and telemetry in a seamless solution.
- 7" color touch screen offers the latest capacitive touch screen technology providing scratch resistance, high durability and a rich consumer experience.
- Built-In Credit Card Reader option and communication screens throughout the vending process facilitate the use of credit cards.
- A 2nd Card Reader option (e.g. college campus cards) can complement credit cards offering more options to consumers. With Media you can have both credit cards and another cashless system as long as the second system follows the MDB protocol.
- Shopping Cart makes it easy to buy multiple products and enables promotions. This key feature helps you drive sales especially when using credit cards as consumers tend to buy more.
- Media Touch Main Menu can provide consumers the options of: 1) Make a Selection, 2) View Promotions, 3) Nutrition Facts, and 4) Select Language. If these features are not enabled, the consumer can go directly to the keypad bypassing Main Menu providing just a simple vending experience. Depending on the location, you can decide what's best for your consumers.

Initial Start Up Features and Benefits

Merchant Media Touch - Key Features, Continued

- Built-In Multi-Product Promotions can be selected through the Service Menu. You
 can select the specific promotion and program the discount that will show in the
 screen when the machine is idle. Consumer can also access the promotions from
 the Main Menu. Multi-Product Promotions can help you increase the transaction
 size and improve the consumer value.
- Multiple languages can be selected by the consumer meeting the needs of key locations. As languages become available they can be enabled through the Service Menu letting the consumer select the language for his vending experience from the Main Menu.
- A Built-In Product Library (of 250 products) with images and nutrition facts lets you build a Planogram or enable browsing without a Planogram. If needed, a custom product library can be developed with your specific products – please contact your Crane sales representative for more information.
- Crane's field service support team is here to assist you and make sure you and your customers have a great experience. Please don't hesitate to contact us.

Initial Start Up Programming tips

- This Programming Guide is based on software version 10.9.9 or higher
- The software version is shown on the bottom right of the display anytime you are in the Service mode. The software version can also be displayed by pressing the Firmware Information icon in the service mode and reading the LE board information.
- Earlier or later versions of software may not contain all the same menus and/or options. Some Menus items may also be in different places within the menus & program differently.
- This programming guide is specific about what icons or menu bars to touch within the Modes. When certain Menu items are enabled and disabled additional menu items may appear or disappear. Most of the time this guide will be correct but rely on the display for the correct icons or menu bars to touch.

Initial Start Up Quick Start Tips

Below is a list of Menus that should be set up or checked before operating the Machine:

- 1. When opening the service door on the machine you will be prompted for a PIN, enter 3333 on the touchpad.
- 2. Set the Prices by selecting button Price Icon in the service mode.
- 3. Make sure the Shopping Cart Size (max 3) and Shopping Cart Max Value is set to the cart size times the highest price in Product Configuration. Touch: Product Configuration > Shopping Cart Setup.
- 4. If you have added, moved or removed any motors touch: Product Configuration > Selection Configuration > Perform Auto Configuration > Start Auto Configuration.
- 5. If any motors are being coupled on the candy tray or squat tray Touch: Product Configuration>Couple Motors.
- 6. Verify your Coin Mechanism, Bill Validator and Card Reader are enabled in the Monetary Menu.
- 7. Verify the bills you want to accept are enabled in the Monetary Menu > Bill (Note) Acceptance.
- 8. Set the Time and Date in the System Setting Menu > Set Time and Date.

Initial Start Up Quick Start Tips

If your machine contains a refrigeration unit you must also set the following:

- 1. Verify or set the Configuration Version, go to System Settings > Press the lower half of the down arrow to scroll down and verify the Configuration Version is set correctly.
- To change the Configuration Version touch the Configuration Version menu bar, your options are Ambient, Refrigerated, European Control, Non-perishable and Chilled. Do not choose European Control unless your area is within the region covered by these requirements.
- 3. Press Done to save your choice.
- 4. Next select Refrigeration Settings, this menu does not appear if the machine is set to Ambient.
- 5. Touch Adjust Temperature if required.
- 6. If set to Refrigerated or European Control, Touch Health Control to assign the selections to work with Health Control. The health control menu will not appear if you machine is set to anything other than Refrigerated.
- 7. Effective with the release of 10.8.x software, if Refrigerated or European Control is selected, all selections in the machine are enabled for Health Control. If you are not using perishable products in all selections, non-perishable products should have the Health Code disabled.

Initial Start Up

Quick Start Tips – Loading the Coin Mechanism

Prior to placing the machine in service, you must add an initial amount of change to the coin mechanism to prevent a "Use Correct Change" condition. Initial loading of coins should be done through the menu provided to insure the coin mech accurately counts all change available for payback to the customer. Recommended minimum amount is \$17.00 (1 roll each of 5¢, 10¢, 25¢ coins). This minimum amount of change should remain in the machine at all times.

Adding Initial Change Load

- 1. Enter the required PIN: 3333,
- 2. Touch the Monetary Icon on the screen.
- 3. Touch the Coins In/Out menu Bar
- 4. Increase the amount of Change Available by inserting coins to thru the chute on the top of the coin mech. Totals (count and value) for each coin should increase as coins are added.
- 5. Press the left arrow to exit and return to the main menu.





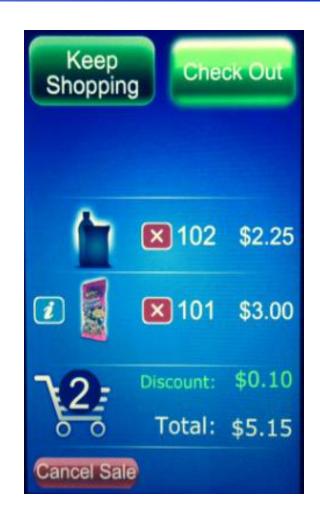
	H	of	(J)	J
Money				1/2
Coins In/Out				>
Bill Validator			MDE	
Bill Validator M	DB Le	evel		
Coin Mechanis				
	MDB	Coin N	1echanis	sm
Coin Mech MDE	3 Leve	el		

Coin	Count	Value
0.05	35	\$1.75
0.25	20	\$5.00
0.50	15	\$7.50
1.00	1	\$1.00
0.05		>

The Touch Screen

The 7 inch Touch Screen

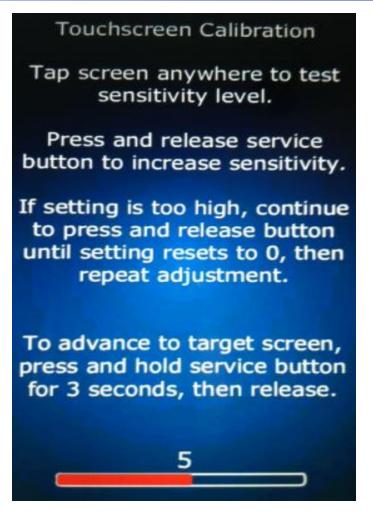
- The 7" color touch screen offers the latest capacitive touch screen technology providing scratch resistance, high durability and a rich consumer experience.
- The touch screen provides instructions and information required by the customer to make a purchase.
- The touch screen is also utilized in the service mode to set up the machine.
- The Touch Screen is an industrial screen that can withstand medium hard hits w/ hammer similar to gorilla glass used in mobile phones.



Should the Touch Screen ever need to be calibrated, follow the instructions on the following four pages.

Touch Screen Calibration

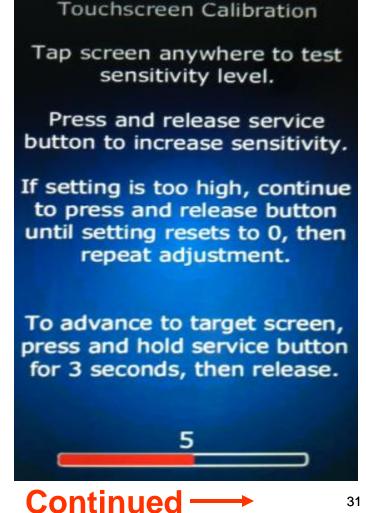
- The Touch Screen in new machines will come from the factory already calibrated.
- To change the sensitivity of the Touch Screen press and hold the green service switch on the board for 4 seconds.
- If the software was just updated, when the machine is booted-up the machine may automatically take you to the Touch Screen Setup Mode.
- This mode consists of two functions:
 - Sensitivity Setting
 - Touch screen Alignment
- These activities must be done in sequence, and completed to ensure proper operation of the touch screen.



Touch Screen Setup Calibration Sensitivity Setting

Setting the sensitivity of the touch screen.

- Press the green switch on the control board, and the Sensitivity Index number will increase.
- Tap the display and listen for a single beep from the controller, indicating that it detected the touch.
- Continue to press the green switch on the board until an acceptable level of sensitivity is achieved over the whole surface of the touch screen.
- It is important to check the sensitivity of the screen throughout the entire Touch Screen, especially along the left and right edge.
- Tap at a speed of approximately 1 tap per second.
- The recommended initial range is 4 to 6.
- When finished, advance to the target screen by pressing and holding the green service button for 3 seconds.

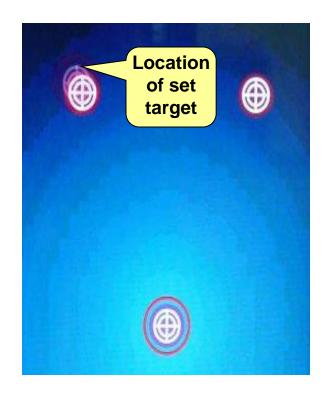


Touch Screen Setup Calibration Touch Screen Alignment

The screen will show 5 targets. Touch each target in the sequence shown on the display. The Sequence is indicated by the larger circle around the target.



After pushing each button a second time the display will show you where it has assigned your touches.







Touch Screen Setup Calibration Touch Screen Alignment

- If the distance between the 5 targets and the indicators are within a reasonable distance (less than 1/8" or 3mm), tap the touch screen twice to accept the settings
- If the distance between the targets and indicators is unacceptable, tap the screen one time to restart the Initial Touch screen Setup Mode.
- After tapping the screen twice the machine will proceed through a normal boot-up sequence.

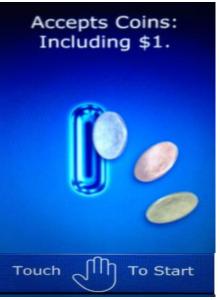


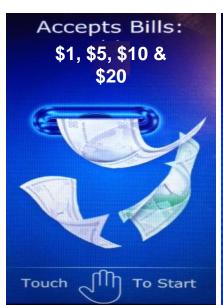


The Selection Process Idle Loop Screens

When the machine is not being used the Touch Screen is showing the Idle loop. The Idle Loop screens will vary depending on what peripherals you have installed and the promotions that are enabled. To enable or disable specific Idle Screens and credit card logos. See System Settings > Advertisements. Touching any of these screens will take you to the Main Menu.







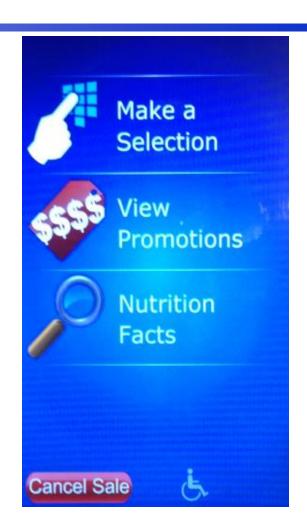




The Selection Process The Main Menu

Main Menu Screen

- The Main Menu allows your customer to view promotions when enabled and view nutritional facts when a Product Library is present.
- When product libraries or multiple promotions are not used this is an extra screen that is not necessary and bypassing it speeds up the vend process.
- When using plan-o-grams the customer can check the nutritional information when making a selection even if this menu is disabled.
- As a default the machine is set to Skip the Main Menu.
 - The menu item to turn the Main Menu on or off can be found in the Special Vend Modes menu.
- When the Main Menu disabled and the idle loop screen is pressed, the screen will immediately transition to the numeric keypad screen.



The Selection Process

Making Selections and Navigating the Shopping Cart

Use the Keypad to make a selection. Your selection will be placed in a shopping cart. The Keep Shopping and Checkout Icons will start flashing. Choose Keep Shopping to add additional selections (maximum 3) to your cart. Press Check Out when finished.

Note: The shopping cart can be disabled by enabling Rapid Vend under the Special Vend Modes Icon and the machine will immediately go to checkout after making a selection.







Making Selections and Navigating the Shopping Cart

If you have a planogram installed an image of the product will appear on the screen



Pressing the information Icon next to the product image will show a popup with nutritional information for that product



Making Selections and Navigating the Shopping Cart

If you do not have a planogram installed, or a product assigned, an image of a generic product will appear on the screen



To remove a product from the shopping cart press the red X



Making Selections and Navigating the Shopping Cart

Any Discounts or Surcharges will be shown to the right of the shopping cart as well as the Total of all products in the cart.



At any time you can press the cancel icon to cancel the entire sale. If nothing happens for 30 seconds (settable) the machine will cancel the transaction and go back to the idle screen



Making Selections and Navigating the Shopping Cart

Any type of payment, cards, coin or bills can be inserted any time during the transaction. Pressing checkout will cause the settlement screen to appear if money has not already been inserted



The settlement screen will communicate to the customer their Monetary payment options



Accessing the Service Modes

When the monetary compartment is opened, the display will prompt the operator to enter a PIN number on the Touch Screen to gain access to the service modes.

- The default PIN for route driver access is 1111 (limited access).
- The default PIN for programming access is 3333.
- If errors exist, an will appear on the bottom right corner of the screen. Pressing the allows the user to view the existing errors without entering one of the pin number above.

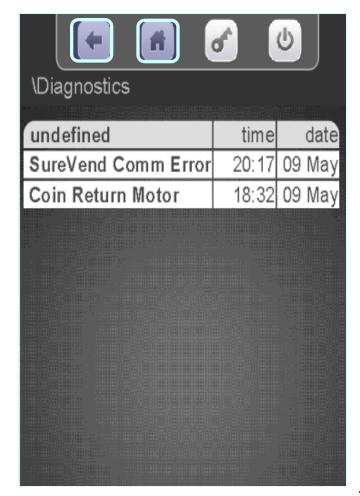


Service Modes Initial Screens

If Errors Exist, an error list will be shown on the display that includes the time and date of each error.

The errors do not need to be cleared, once corrected the error will be erased automatically.

To escape to the home screen press the Back arrow, or the Home Icon



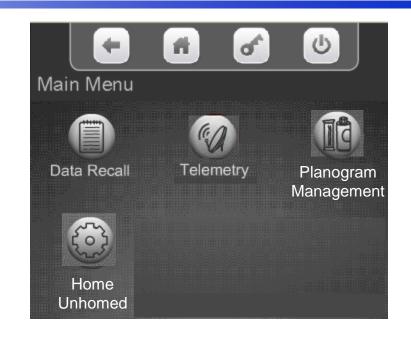
How Do I Access the Service Modes?

If PIN 1111 was entered and No Errors Exist, the home screen for the Driver menu will appear. This menu allows limited access to the service modes. Touching an icon on the screen will provide access to that menu.

Driver access allows you to:

- View Resettable and Non Resettable sales data.
- Send a wireless DEX read.
- Manage or Audit the existing Planogram.
- Home all Un-homed Motors.

For access to all other service modes use PIN # 3333



How Do I Access the Service Modes?

- If PIN 3333 is entered and No Errors
 Exist, the home screen for the
 programming menu appears allowing
 access to the service Icons.
- Each of the icons on the screen represent a tiered menu that provides access to the menus under the corresponding heading.
- Pressing an Icon on the screen provides access to that menu.



How do I use the TouchScreen in the Service Mode?

- For Programming purposes the Merchant Media platform uses the 7" LCD touch screen and a series of icons to provide access to the Service Modes.
- Touching an icon will take you to the top level menu for that Service Mode.
- The concept of the touch screen and the use of icons is similar to many devices that feature touch screen technology.
- A successful touch of an icon will change the color of the icon, and sound a beep to acknowledge acceptance of the touch on the screen before proceeding to the selected menu.



How do I use the TouchScreen in the Service Mode?

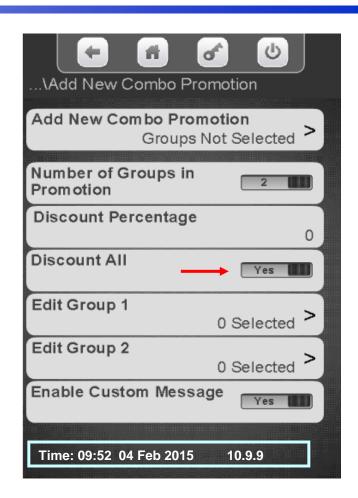
Main Menu

- Across the top of the Main Service Menu is a series of four icons that will always be present when in the service menu.
 - The left arrow returns you to the prior menu
 - The small house icon returns you to the Main Service Menu
 - The Key icon is not currently used.
 - The Power icon is not currently used.
- The content of the Main Menu area will change depending what menu you are in. This helps you remember which menu you are in.



How do I use the TouchScreen in the Service Mode?

- All the features normally associated with a touch screen, its icons and menu bars are possible, including:
 - Touching an icon to toggle it's current state (On to Off, Yes to No, etc), or
 - Touching a menu item to access another level of the tiered menu system.
 - Alpha & numeric keypads will pop up when required for input.
 - Confirmation boxes will appear to confirm an item to be added or deleted.
- Another feature of this screen is that it shows the current time and date, and current Atlas LE board software revision at the bottom of the screen.



Menu Chart

Service Mode Menu Chart Menus 1 to 6



Non Resettable Sales Data Resettable Sales Data Events Identification Number SureVend TM Corrected Shows Errors w Time Date

Test Vend
Coin Return Motor
Surround Lighting Test
Screen Test
Refrigeration System
NFC/MagTeck Head Test
Cashless System Test
Health Control Test
SureVend Calibration
Motor Test Summary
Detailed Motor Test
Lighting Relay
Keypad Test



Individual Selections Entire Machine Price Tray 1 Price Tray 2 Duplicates for all trays Product Configuration

Selection Configuration
Space to Sales (FIFO)
Universal Product Code
Shopping Cart Setup
View Planogram
Remove Product Library
Couple Motors
SureVend
Browse Categories
Browse All Products



Free Vend
Winner Vend
Combo Vend
Token Enabled
Rapid Vend
Multi Vend Discount
Skip Main Menu
Select Theme



Menu Chart

Service Mode Menu Chart Menu 7 to End



Coins In/Out
Bill Validator
Coin Mechanism
Card Reader
Bill Acceptance
Declining Balance
Change Without Purchase
Accept On Low Change
Low Change Message
Credit For Failed Vend
Card Revalue

Machine Information
Time & Date
Language
DTS
Software Updates
Backup/Restore
Copy Configuration
Custom Configurations
Screen Brightness
Led Color
Idol Timeout
Advertisements
Custom Messages
Configuration Version
Refrigeration Settings

Enter Pin Change Route Pin Change Operator Pin



Time of DayEvents
Backup Events
Power Save Events

Telemetry

Send Dex Ping Server Sync Time w Server Get Network Status Send Log Files Update Configuration

Load Network

Get Cashless Terminal Cfg Enable Mesh Assign Unit Un Assign Unit



Peripheral Firmware Info SureVend Version I/O Board Version LE Board





Data Recall Menu

- The Data Recall Menu permits the operator to review a variety of accountability and operational information including:
 - Non Resettable Sales Data
 - Resettable Sales Data
 - Events
 - ID Numbers (boards & peripherals)
 - SureVend Corrected Vends





Data Recall Menu

Non Resettable vs Resettable Sales Data

The Non-Resettable and Resettable data screens are exactly the same and therefore not duplicated in this programming guide. There is one additional menu in the Resettable menu, Clear Data. This menus allow you to reset back to zero the resettable data. As a default the Resettable Data is also reset each time the machine successfully transmits a DEX file. The Non-Resettable Data can not be reset.

Data Recall Non Resettable Sales Data Resettable Sales Data > Events Identification Numbers > SureVend™ Corrected Vends >

Non Resettable Data



Resettable Data





Data Recall Menu Overall Totals

Touch Overall Totals



The screen will show a summary of the Overall Totals

Press the to return to the previous menu

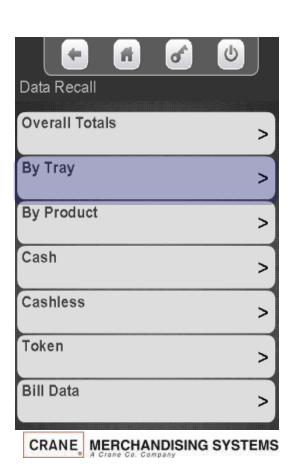
	of l	υ
Data Recall		
		#
Sales	\$50.00	5
Discounts	\$0.00	0
Surcharge	\$0.00	0
Test Vend	\$180.00	18
Free Vend	\$0.00	0
Total	\$230.00	23



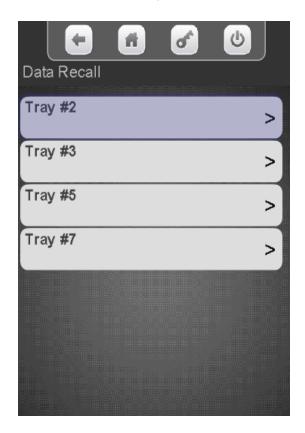


Data Recall Menu Data by Tray

Touch By Tray



Touch a tray number to see the sales data for that tray.



Totals for the tray selected will be shown on the display. Press the left arrow to exit



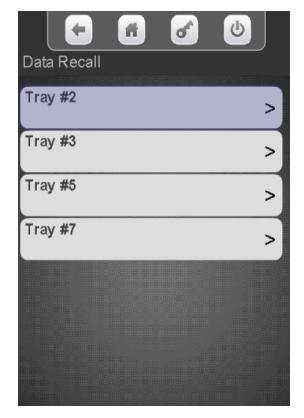


Data Recall Menu Data by Product

Touch By Product to view sales data By Product.



Touch any tray to see the sales data for that tray.







Non Resettable Sales Data Or Resettable Sales Data

Data Recall Menu Data by Product

The UPC code will show up when used, along with the selection number. Touch a selection on the keypad to view Sales Data by Product. Use the arrow on the right to scroll down to additional selections.

> Data Recall 028400070560 101> 028400070560 102> 050668000003 103> 028400070560 104> 028400091565 105> 028400070560 106> 028400047906 107> 028400070560 108> 050668000232 109>

Totals for the selection chosen are shown on the display, including the last vend with the time & date. Press the left arrow to exit

	of	U
Data Recall		
		#
Price	\$10.00	
Sales	\$0.00	0
Discounts	\$0.00	0
Surcharge	\$0.00	0
Test Vend	\$0.00	0
Free Vend	\$0.00	0
Last Vend		
	Time	/Date



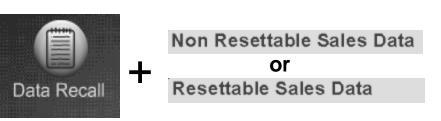
Data Recall Menu Cash Totals

Touch Cash



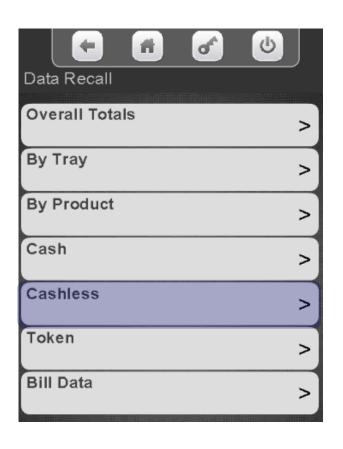
The value and number of cash sales will be shown on the screen below.

	of	b
Data Recall		
		77
Cash In	\$2.00	
To Cashbox	\$0.00	
To Tubes	\$0.00	
Bills In	\$2.00	
Dispensed	\$0.00	
Manual Dispensed	\$0.00	
Sales	\$50.00	5
Discounts	\$0.00	0
Surcharge	\$0.00	0
Overpay	\$0.00	0

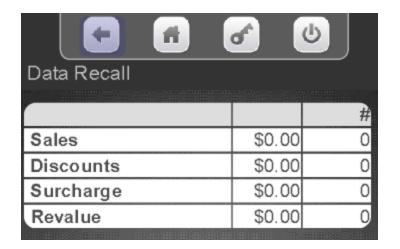


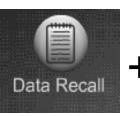
Data Recall Menu Cashless Sales Data

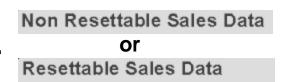
Touch Cashless



The screen will show the Cashless Sales and the number of Cashless Vends by vend type, including Revalue if applicable







Data Recall Menu Token Sales Data

Touch Token to view the Token/Coupon Totals.



This Screen allows you to view Token sales, both by value and number of Tokens/Coupons vends.

Tokens and Coupons are both considered Tokens in accountability and setup. See Token setup in this manual.

Note: This menu only show up if Tokens/Coupons are enabled in the monetary menu under Bill Acceptance.





Data Recall Menu Bills Sales Data

Touch Bill Data



This Screen below allows you to view information about bills by denomination, both accepted and paid out when using a validator or recycler. Also included is the current value of bills stored in a recycler cassette.

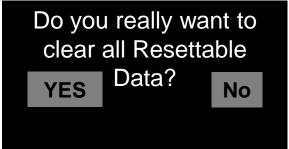
	of (
Data Recall	Minasi in a	
	In	Out
One	\$0.00	\$0.00
Two	\$0.00	-//-
Five	\$0.00	\$0.00
Ten	\$0.00	-//-
Twenty	\$0.00	-//-
Fifty	\$0.00	-//-
Hundred	\$0.00	-//-
Recycler Contents	¢	20 00
	7	28.00



Data Recall Menu Clear Resettable Data

- There is one additional menu in the Resettable Menu that is not in the Non-Resettable Menu, Clear Data.
- This menus allow you to clear the Resettable Data. The Non-Resettable Data can not be cleared.
- The resettable data is also cleared each time the machine successfully transmits a DEX file.







Data Recall Menu Events

Event History

This menu allows the operator to review the most recent times for the following events:

Touch Power Loss or Door Open History to view a historical list of events.

The following information will show without entering a Menu.

- Last Data Clear
- Last Vend Information
- Last Price Change
- Last Clock Set
- Last Health Control Event (if set to refrigerated).

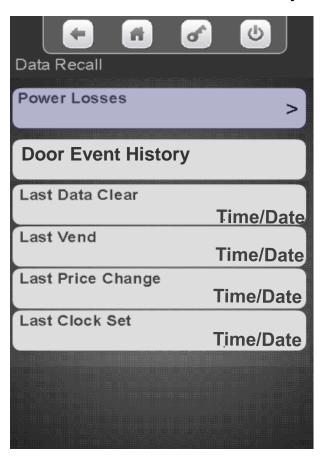






Data Recall Menu Events – Power Losses

Touch Power Loss History



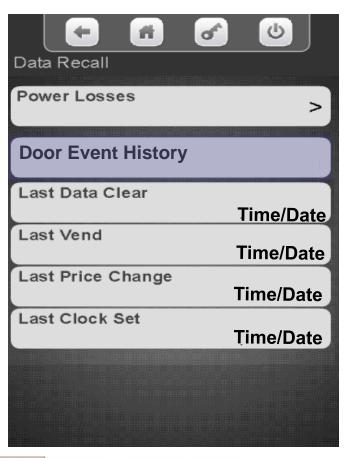
Power Losses are shown on the display including Duration, Date and Time

	of	ڻ ا
Data Recall		
Duration	Date	Time
42 hours 21 min	08/01/13	18:02:46
2 hours 30 min	07/01/13	06:05:21
-		
	_	
	_	



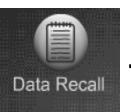
Data Recall Menu Events – Door Events

Touch Door Events History



The Door Events are shown on the display including Date and Time

	of	ம்
Data Recall		
Event	Date	Time
Door Open	08/01/13	18:02:46
Door Close		
Door Open		
Door Close		
Door Open	_	
Door Close	_	



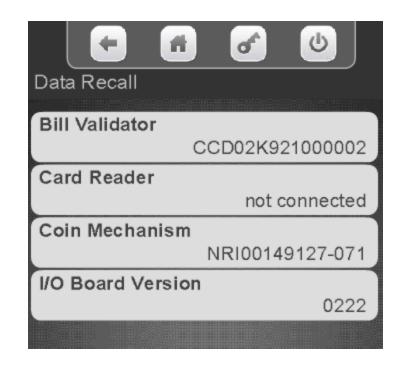
Identification Numbers

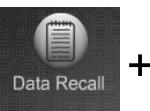
Data Recall Menu Identification Numbers

Touch Identification numbers



All Items attached to the controller using MDB communications will be shown. Press the left arrow to exit.





SureVend™ Corrected Vends

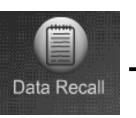
Data Recall Menu SureVend™ Corrected

SureVend™ Corrected

This menu allows the operator to review the number of SureVend™ Corrections by:

- Machine/Tray Totals.
- By product.
- The last corrected vend information is viewable without entering the menu.





SureVend™ Corrected Vends

Data Recall Menu SureVend™ Corrected

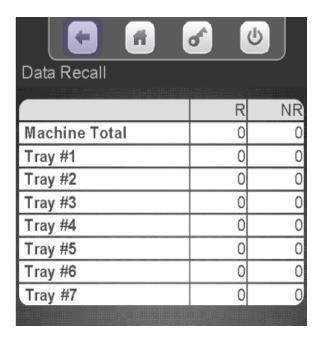
Touch SureVend™ Corrected Vends



Touch Machine/Tray Totals to see overall totals



The display will show resettable & non resettable SureVend ™ corrected totals by Machine and Tray

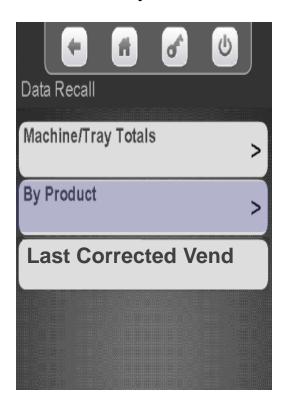




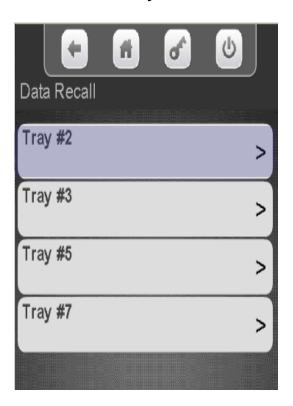
- SureVend™ Corrected Vends

Data Recall Menu SureVend™ Corrected

Touch By Product to view detailed SureVend™ information by selection.



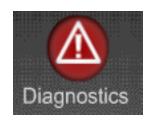
Touch a tray to view SureVend™ corrected information by selection



The display will show resettable & non resettable SureVend ™ corrected totals

by Selection number

	of .	b
Data Recall		
	R	NR
		INIT
201	0	0
202	0	0
203	0	0
204	0	0
205	0	0
206	0	0
207	0	0
208	0	0
209	0	0
210	0	0
211	0	0
212	0	0
		88//



Diagnostics Menu

- Touching the Diagnostics Icon will cause the Diagnostics screen to appear. This screen will show any existing errors along with time and date the errors occurred.
- The Icon will be Red when there are errors, otherwise it will be gray like the rest of the icons.
- The diagnostics screen automatically appears when entering the service mode if errors exist.
- The errors do not need to be cleared, when an error is corrected it will automatically be deleted from the error list.
- If the error screen is full, a down arrow will appear on the right side of the screen allowing the user to scroll down to a second screen of errors.



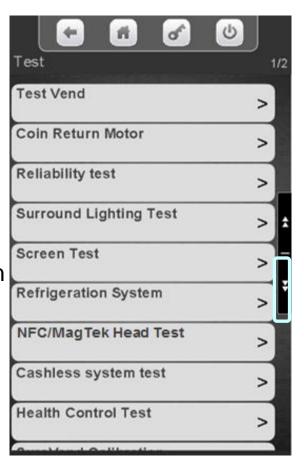
4 6	of	b
\Diagnostics		
undefined	time	date
SureVend Comm Error	20:17	09 May
Coin Return Motor	18:32	09 May

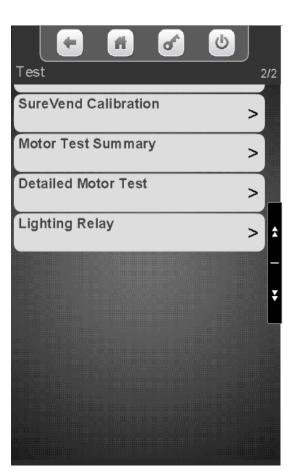




Test Menu

- Touch the Test Icon from the main menu to access the Test Menu.
- Touch any of the menu items listed on the Test Screen to access the test menu for that item.
- Touch the down arrow to the right side of the screen to scroll down to the additional menu items capable of being tested.

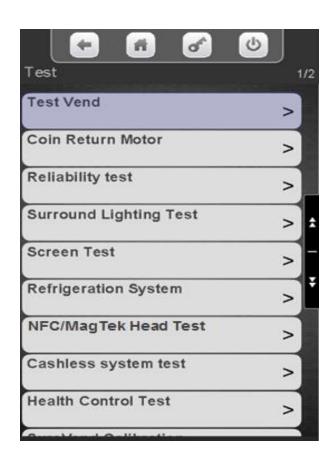






Test Menu
Test Vend

Touch Test Vend



Touch SureVend™ to toggle between enable or disable for the test.

	6 U
Test\Test Vend	
Credit	
	\$0.00
Credit Card	
Token	
SureVend	Disable
Select Product	
	101
Price	Free Vend
Start Vend	1.00 Volid
otait velid	>





Test Menu Test Vend

Touch Select Product and a keypad will appear allowing you to enter the selection number to be tested, followed by Done



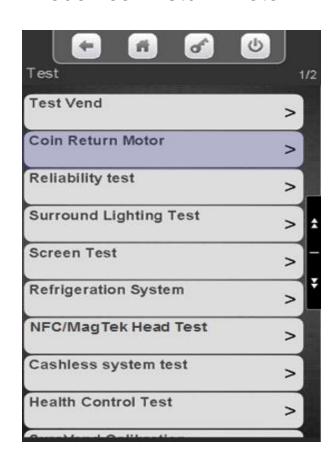
Touch Start Vend to test the selection entered.

(-) (4) (4)	6 6
Test\Test Vend	
Credit	\$0.00
Credit Card	
Token	
SureVend	Disable Disable
Select Product	
	101
Price	
	Free Vend
Start Vend	>



Test Menu Coin Return Motor

Touch coin return Motor



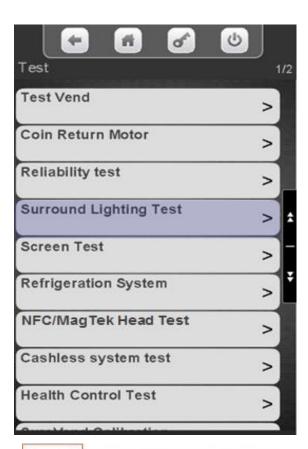
The display will show "Coin Return motor should now be running",



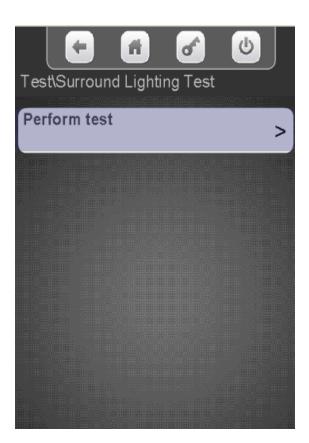


Test Menu Surround Lighting Test

Touch Surround Lighting Test



Touch Perform test to confirm the Lighting Test



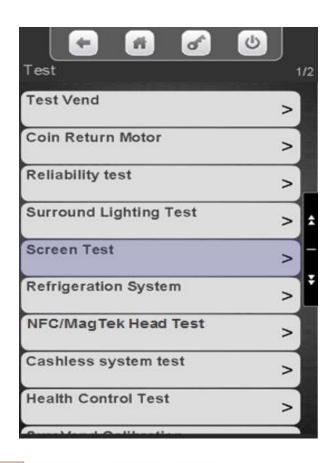
The Surround lights should be changing colors





Test Menu Screen Test

Touch Screen Test



The display will illuminate with Red, Green & Blue.

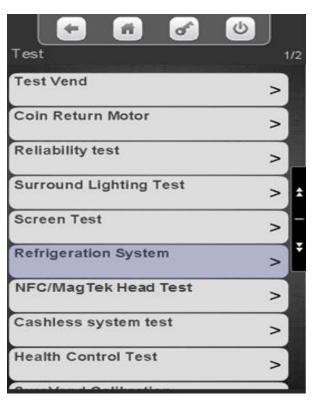
Press X to Exit.





Test Menu Refrigeration System

Touch Refrigeration System Test Note: the refrigeration test menu will not appear if the machine is set to ambient.



The display will show the current temperature for all the sensors in the machine as well as the current refrigeration Status ON/Off/Idle/Defrost and Time left on health if applicable.

\Test\Test		
Cabinet	30 °F	
Return Air	40 °F	
Evaporator Coil	33 °F	
Condenser Inlet	35 °F	
Refrigeration State	ldle	
Refrigeration Deck Test	Idle	
NOTE: Refrigeration Deck Test will only function with the door open.		



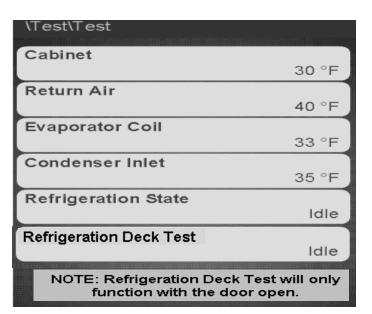




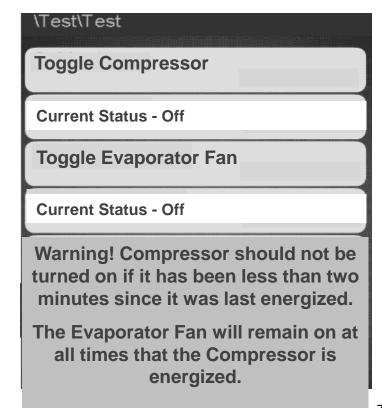
Test Menu Refrigeration System

Touch Refrigeration Deck Test to Start the Test.

Note: The Refrigeration Deck Test will only function with the Monetary door open, and the glass door closed



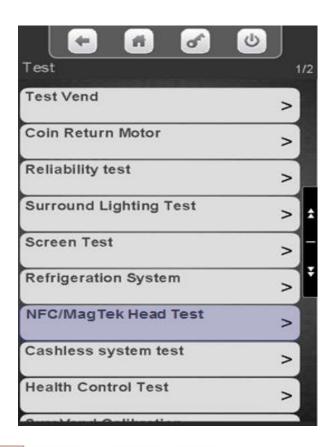
Touch the appropriate menu bar to toggle the Compressor or Evaporator Fan On/Off





Test Menu MagTeck Head Test

Touch NFC/MagTeck Head Test



Swipe or Tap a card to test. The display will keep track of how many good swipes or taps versus bad, 28 good swipes or taps out of 30 is considered passing





Test Menu Cashless System Test

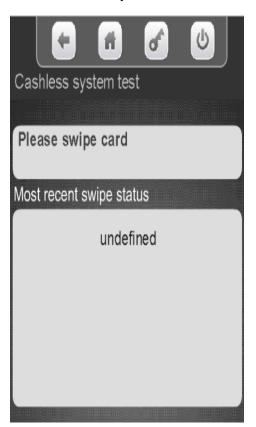
The Cashless System Test detects

- A bad or missing Cashless Terminal Configuration file,
- If the machine is assigned, problems with the card itself and,
- If there is a valid communications path to the credit card processing server.
- This test is limited and is not designed to catch system errors that involve actual card authorization for a vend.
 - (For example, swiping a membership card may gave a 'System is OK' status in the test, but it's not valid as a credit card).

Touch Cashless System Test



Swipe card or view most recent swipe status.

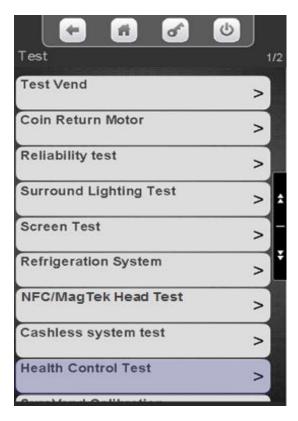




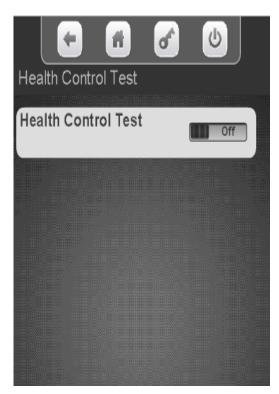
Test Menu Health Control Test

Health Control Test not defined at the time this user guide was written.

Touch Health Control Test



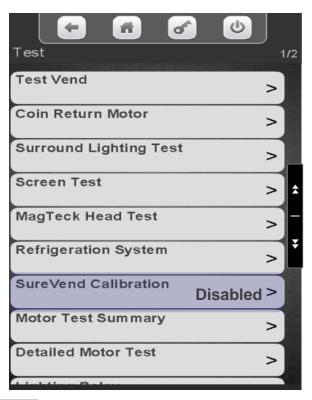
To start the test, touch the menu bar to toggle Health Control Test to on.





Test Menu SureVend™ Calibration

Touch SureVend™ Calibration. If SureVend™ is disabled or disconnected it will show the status on the screen below.



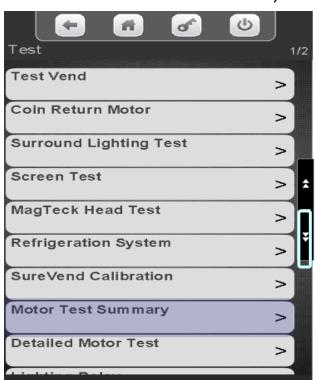
Number 1 is the sensor closest to the trays. Number 9 is closest to the glass. Fours, fives and sixes are all good. When you get into the teens that indicates a partial blockage. Zero indicates a complete blockage or bad sensor.

	of	b
Test Sensor numbe	ſ	
1	4	
2	4	
3	4	
4	4	
5	4	
6	4	
7	5	
8	5	
9	4	



Test Menu Motor Test Summary

Touch Motor Test Summary (in some cases you may have to touch the down arrow to scroll down to the menu bar).



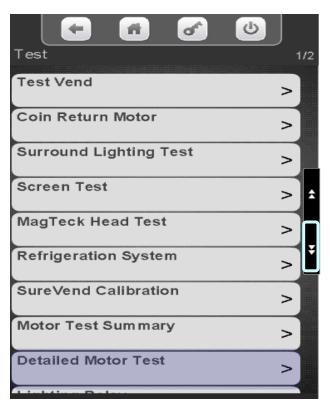
The display will show the status of the Motors. You also have the option to Home All motors or Home the Motors on an individual tray by touching one of the Icons below.

Test	
Present	28
Homed	28
Errors	0
Configured	28
Configured and Present	28
Configured but not present	0
Home All Motors	>
Home Tray	>
	- TEN 1 (1985)

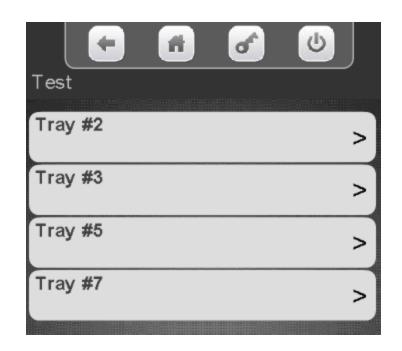


Test Menu Detailed Motor Test

Touch Detailed Motor Test (in some cases you may have to touch the down arrow to scroll down to the menu bar).



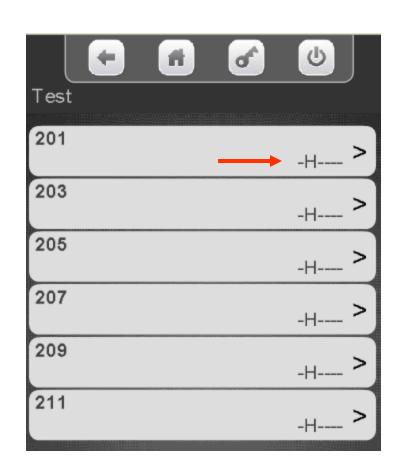
Touch the tray you wish to view





Test Menu Detailed Motor Test

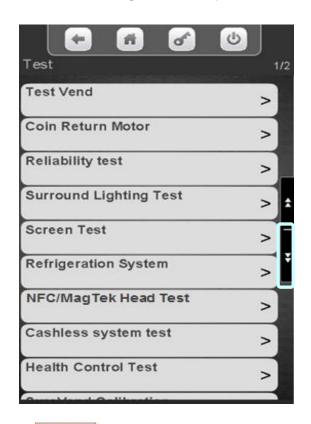
- "H" indicates that spiral is homed
- "X" indicates the spiral is present, but not configured
- "F" indicates spiral is a FIFO member
- "C" indicates spiral is coupled
- "ERR" indicates error is present for the spiral.
- "W" indicates spiral is a Winner member, Token member or a Combo member.
- "T" indicates spiral is a Time of Day event member.



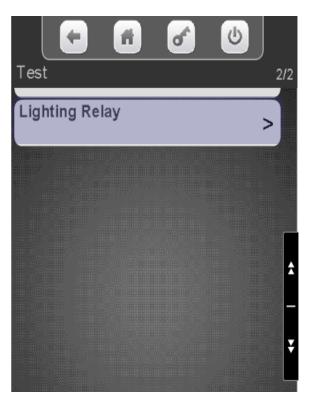


Test Menu Light Relay

Touch the highlighted down arrow to scroll down to Light Relay Test



Touch Light Relay



Touch Toggle Cabinet
Lighting to toggle the light
relay between Off and
On. Press the left arrow
to exit





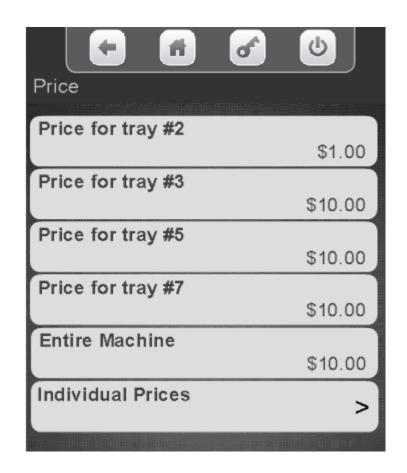


Price Menu

From the Main Menu Touch the Price Icon to access the price setting Menu.

There are three options for setting prices:

- By Tray
- Entire Machine
- Individual Prices

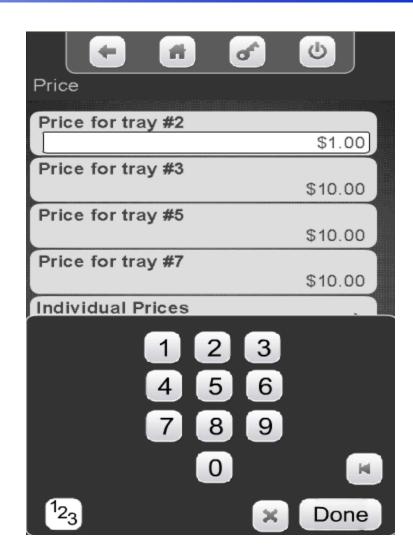




Price Menu Setting Prices by Tray

Setting Prices by Tray

- Touch the tray you wish to Price.
- A numeric keypad will appear on the screen along with a window to enter the price.
- The left arrow above Done is your backspace key.
- Use the numeric keypad to enter the price for the tray being set and press Done to save.





Price Menu Setting Entire Machine Prices

Setting Prices by Entire Machine

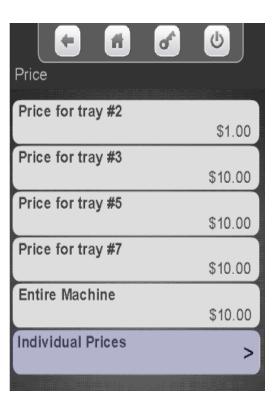
- Touch Entire Machine on the display.
- A numeric keypad will appear on the screen along with a window to enter the price.
- The left arrow above Done is the backspace key.
- Use the numeric keypad to enter the price for the Entire Machine and press Done to save.



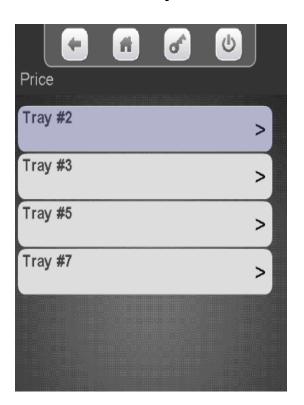


Price Menu Setting Individual Prices

Step 1 – Touch Individual Prices



Step 2 – Touch a Tray



Step 3 – Touch a Selection

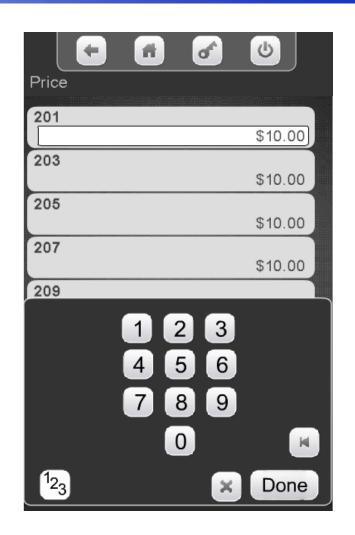




Price Menu Setting Individual Prices

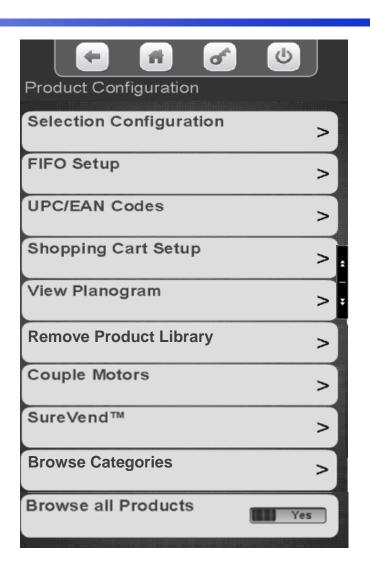
Setting Individual Prices

- A numeric keypad will appear on the screen along with a window displaying the current price.
- The left arrow above Done is your backspace key.
- Use the numeric keypad to enter the new price for the that selection, Press Done to save.





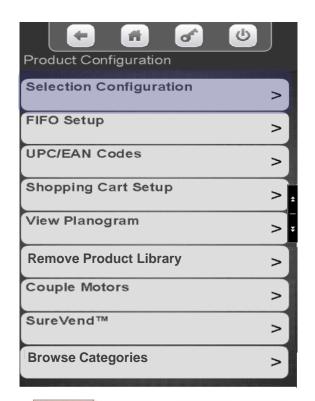
- The Product Configuration menu provides access to the following modes in the machine:
 - Selection Configuration
 - First in-First out (FIFO) Setup
 - UPC Setup (Package UPC)
 - Shopping Cart Setup
 - View Planogram
 - Remove Product Library
 - Couple Motors
 - SureVend™
 - Browse Categories
 - Browse all Products



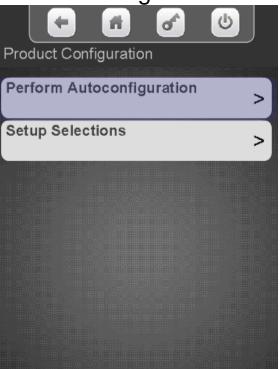


Selection Configuration - Autoconfiguration

Touch Selection
Configuration to enter



To automatically configure the motors Touch Perform Autoconfiguration.



Touch Start Autoconfiguration and the controller will scan all the motors and automatically enable all motors that are detected.





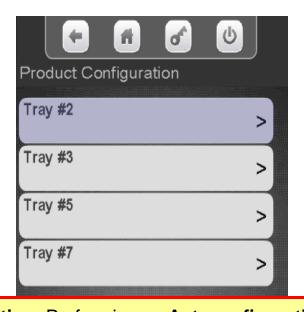
Selection Configuration - Autoconfiguration

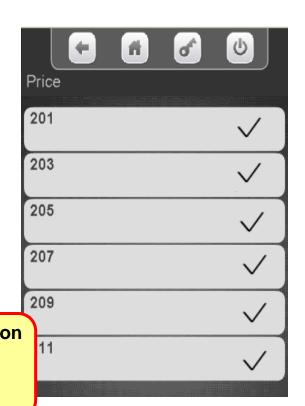
The display will say working then change to Autoconfiguration Finished. Touch View Results.

Choose a Tray to view results

All Selections with a checkmark were found and added to the configuration





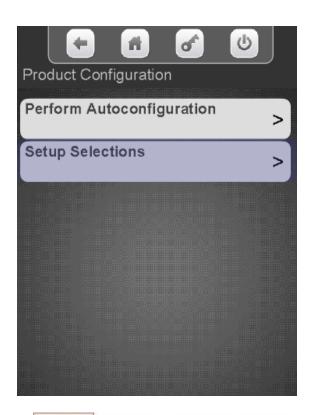


Caution: Performing an **Autoconfiguration** on a machine will reset all prices to the factory default of \$99.95, and remove any existing coupled motors!



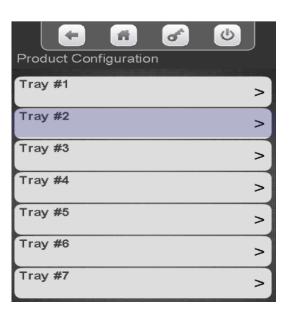
Selection Configuration – Set Up Selections

Touch Setup Selections to manually configure selections.



Select the desired tray to view or change the enabled selections.

Disabling a selection can be used when a bad selection motor is present



Use the keypad to add or remove a checkmark. Motors with a checkmark are part of the configuration. In some cases the down arrow will be lit, indicating you can scroll down for additional selections.

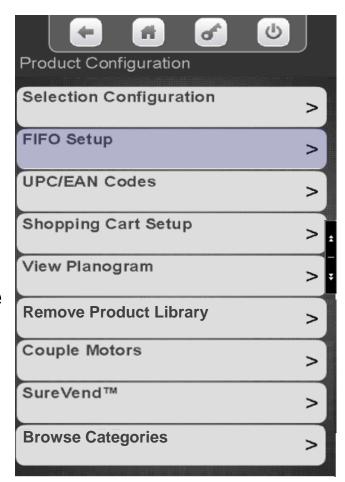
+ # 6	6
Product Configuration	1/2
201	✓
202	
203	✓
204	±
205	✓]=
206	Ť
207	✓
208	
209	✓
040	



Product Configuration FIFO

First In, First Out (FIFO)

- FIFO allows you to program your machine to run multiple selections as a single selection.
- No matter which selection ID of the group is entered, the Merchant[™] will vend roundrobin from the group of spirals, skipping selections that are out-of-service.
- This feature can provide a First-In-First-Out for perishable foods.
- It also helps to prevent one spiral of duplicate selections from going empty before the others of the same selection.
- Note: Ensure that all selections chosen for each FIFO group are the same price. If not, the machine will price all selections to the highest price in the group.





Product Configuration FIFO Continued

The FIFO menu allows you to:

- Add a Group
- Delete a Group
- Edit a Group
- View Existing Groups (Mappings)





Product Configuration FIFO – Add a Group

Touch Add a FIFO Group



Touch the desired tray to add selections to the Group.



All available selections are shown. Touch the selection to add a checkmark to the motors to be part of the Group. In some cases the down arrow will be lit to scroll to additional selections.

+ A	6	
Product Configuration	000000000000000000000000000000000000000	1/2
201	✓	
202		
203	✓	
204		±
205	✓	
206		Ľ
207	\checkmark	
208		
209	✓	
212		



Product Configuration FIFO – Add a Group

All available selections are shown. Touch a selection to add a checkmark to the motors that will be part of the Group. In some cases the down arrow will be lit allowing you to to scroll to additional selections. Press the left arrow to go back and add more selections from another tray or to Create the Group.



Note: It is Important that you Touch Create New Group after you have chosen the selections to be part of the Group or no Group will be created.

FIFO Setup	
Create New Group nothing selected	>
Trays	
Tray #2	>
Tray #3	>
Tray #5	>
Tray #7	>



Product Configuration FIFO – Delete a Group

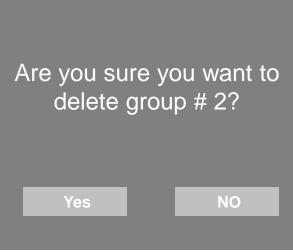
Touch Delete Group to Delete a FIFO Group

Touch the desired Group to be Deleted.

A confirmation box will appear, Touch Yes to confirm or No to cancel









Product Configuration FIFO – Edit a Group

Touch Edit a FIFO Group



Touch the desired group to Edit.





Product Configuration FIFO – Edit a Group

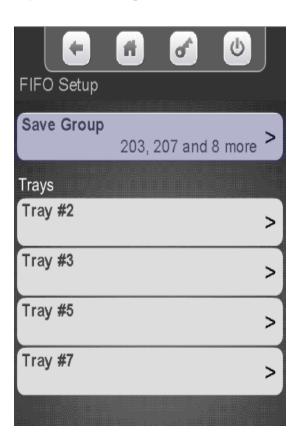
Select the Tray you wish to Edit



Touch selections to check or uncheck them from the group. Press the left arrow when finished to exit.



Be sure to save the changes by Touching Save Group





Product Configuration FIFO – Mappings

Touch FIFO Mappings.



Touch a tray to view the current mappings.



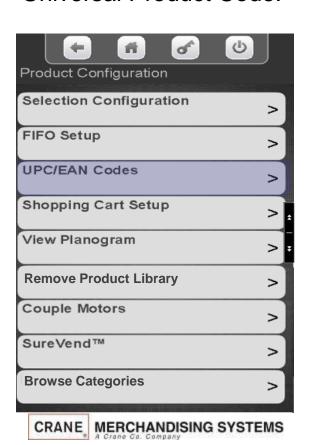
The display will show the current Mapping for the motors on the tray selected.

		A	of	U	
FIF	O Setup				
201	1				
20	'			Group #	2
203	3				
				Group #	1
208	5				
			u	nassigne	d
207	7				
		MOGRAHOOM (1881)		Group #	:1
209	9				`
		***************************************		Group #	2
211	1				
				Group #	1



Product Configuration Universal Product Code

To View or change the current UPC Touch Universal Product Code.



Select the tray that the product is on that you wish to view or change.



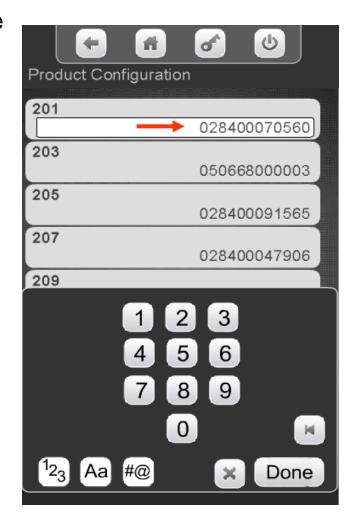
The display shows the current 12 digit UPC assigned to the selections, choose the selection you wish to change.





Product Configuration Universal Product Code

- •For a UPC code to be valid, The UPC Code must be in the Library or Planogram loaded in the machine.
- •Deleting a UPC Code will cause that selection to show a generic picture on the display and no nutritional information will be available for that selection.
- •You can use the same UPC Code for multiple selections if you want two or more selections of the same product.
- •Use the Numeric Keypad to enter the <u>12 digit UPC</u> code you wish to add.
- •The left arrow above Done serves as a backspace key.
- •Press Done to save and X to exit without changes.
- Use the Aa key to switch to Alpha & #@ for symbols.

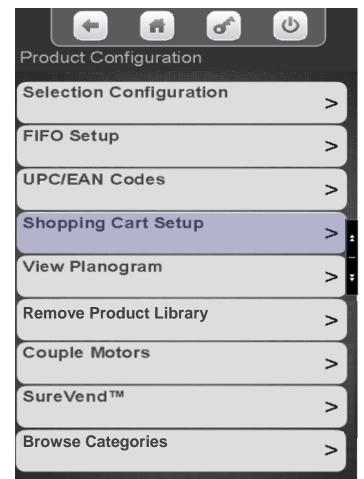




Product Configuration Shopping Cart Setup

- This menu provides access to set up the Shopping Cart.
- Shopping Cart permits the user to select multiple items, and place them into a virtual "Shopping Cart" and purchase them in a single financial transaction.
- Recommended Shopping Cart maximum size is 3 items.
- Max Fund amount can should be calculated by multiplying the highest vend price in the machine times the Shopping Cart size.

Note: When Rapid Vend is turned on under the Special Vend Mode the Shopping Cart function is automatically disabled.





Product Configuration Shopping Cart Setup

Touch Shopping Cart Size. Use the numeric keypad to enter the quantity of items allowed in the Shopping Cart.

Press Done when finished



Select Max Fund Amount to set the maximum amount of funds in the cart. We recommend the cart size times the highest vend price. Press Done when finished.





Product Configuration Shopping Cart Setup

Note: The Max Fund amount menu can also be utilized allow the machine to be used as a bill changer.

For example, if you wish to allow for change of a \$10.00 bill, you can set the Shopping Cart Max Fund Amount to \$10.05, which will allow the machine to stack a \$5 or \$10 bill. When the coin return is pressed, change is returned. The same idea applies to a \$5 or \$20 bill, using \$5.05 or \$20.05 respectively.

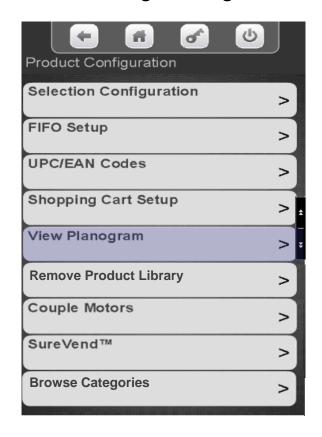
If Rapid Vend is turned on you must turn it off for the shopping cart menu to appear, set the amount to be paid back in this menu, then turn Rapid Vend back on if desired.



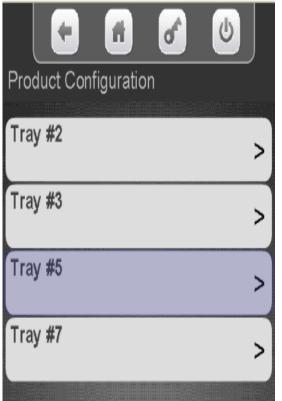


Product Configuration View Planogram

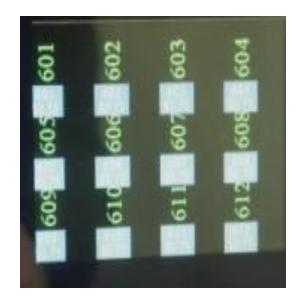
Touch Planogram to View an existing Planogram



Touch a tray to view the existing Planogram



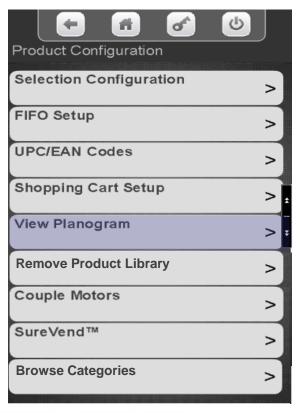
If a Planogram has been loaded into the machine, a picture of the product for each selection will be shown. If not a generic picture will be shown





Product Configuration Remove Product Library

Touch Remove Product Library to remove an existing library.



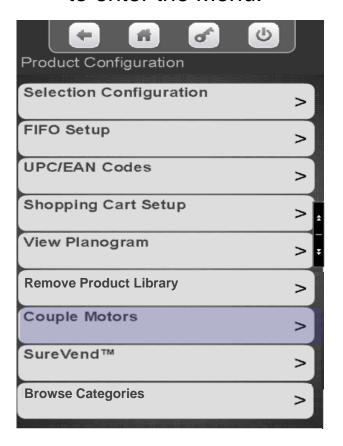
A confirmation box will appear, Touch Yes to confirm or No to cancel





Product Configuration Couple Motors

Touch Couple Motors to enter the Menu.



All available selections that can be coupled are shown. Use the keypad to add a checkmark to the selections to be coupled. In some cases there may be a down arrow on the right side of the key pad to scroll to additional selections.

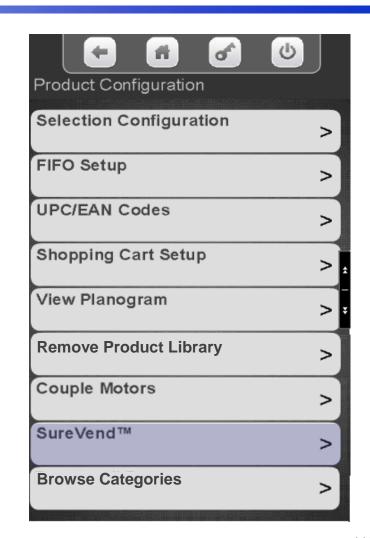
		ń	of .	b
Prod	uct Con	figuratio	on	***************************************
703	704			√
705	706			\checkmark
707	708			
709	710			



Product Configuration SureVend™

SureVend™

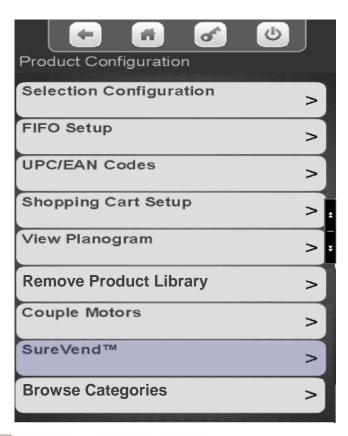
- The SureVend™ Bin Sensor ensures a positive vend every time.
- The sensor is installed in the delivery bin and senses that a product has been delivered.
- If no product was delivered, the spiral will make two additional turns.
- If the product is not delivered after three attempts, the machine will allow the customer to make another selection or press the coin return and receive their change back.





Product Configuration SureVend™ - Current State

Touch SureVend™ to enter the SureVend™ Menu.



Touch current state to toggle between on and off.





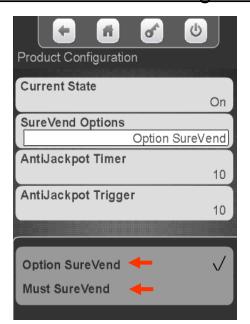
Product Configuration SureVend™ Options

Touch SureVend™ Options to toggle between Must Surevend and Optional SureVend™



Option SureVend™, if the SureVend™ stops working the machine will stay in order and the spiral will turn only once.

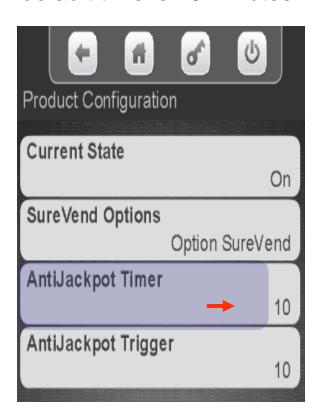
Must SureVend ™, if the SureVend™ stops working, the entire machine will go out of service.



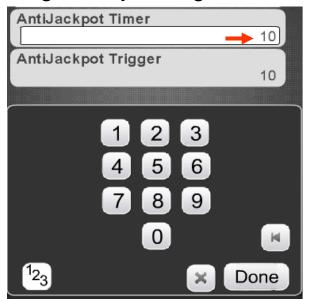


Product Configuration SureVend™

Touch to change the Anti-Jackpot (AJT) timer, the default time is 10 minutes



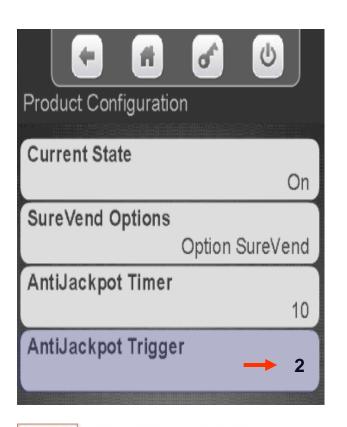
Use the Keypad to enter a new time (in minutes) and press Done. If a spiral turns 3 times and no product is detected by the SureVend™sensor, that selection will be unavailable for the period of time set. After the AJT is expired, the selection will be available for purchase again, The SureVend™ will protect the customer from loosing money during this time.



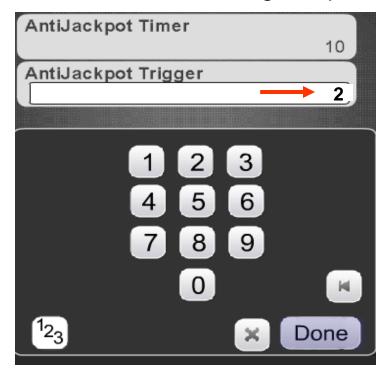


Product Configuration SureVend™

Touch to change the Anti-Jackpot Trigger, the default is 2.



The Anti-Jackpot Trigger is how many consecutive selections the machine will allow to turn 3 times before assuming there is a SureVend™ issue and take the money. The default setting is 2. Use the keypad to enter the new setting and press Done.

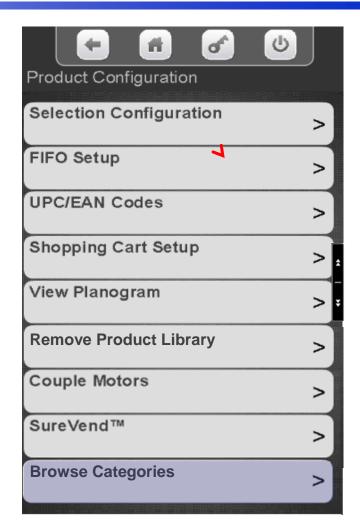




Product Configuration Browse Categories

Browse Categories

- The Browse Categories menus allows your customer to view nutritional information by category.
- This menu will enable nutritional information categories for all selections that have valid UPC code assigned to a selection.
- If you want the customer to browse all products (250) in the library, not just the products assigned to selections page down to the Browse all Products menu to enable.
- The library of UPC codes installed must have had a category associated with that UPC code when the library was created for the Browse Categories option to work.
- The Skip Main Menu option under the Special Vend Modes icon must be set to no for Browse by Categories to work.





Product Configuration Browse Categories

Touch Browse Category to access the menu to enable or disable categories



Touch a menu bar to add or remove a checkmark from the categories you wish to enable/disable

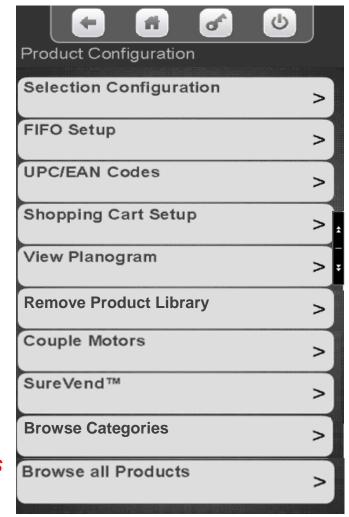




Product Configuration Browse All Products

Browse all Products

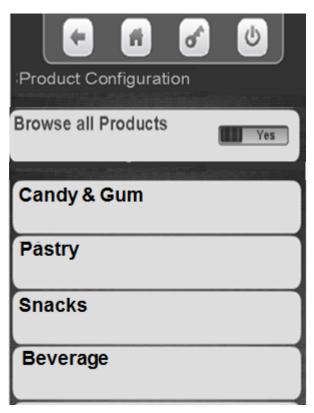
- This feature allows the consumer browse the nutritional information for entire contents of the product library installed, all 250 items as a default.
- You do have the option to go through and enable or disable selections by categories or by specific product.
- If you want the customer to browse only the products in the machine do not enable this menu, use the Browse Categories menu.
- The library of UPC codes installed must have had a category associated with that UPC code when the library was created for the Browse Categories option to work.
- The Skip Main Menu option under the Special Vend Modes icon must be set to no for Browse by Categories to work.





Product Configuration Browse All Products

Toggle Browse all Products to yes to view all product in the Library. Touch a category to enable or disable specific items for browsing.



This screens allows you to enable or disable specific products for browsing

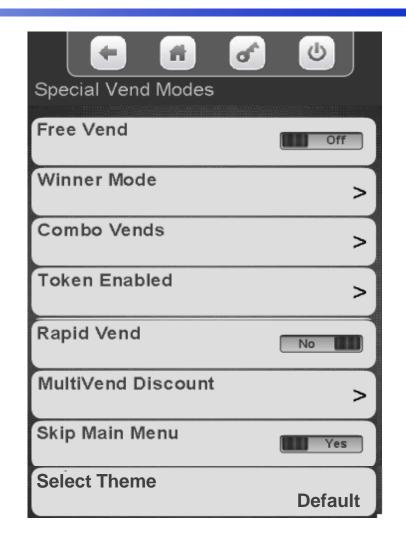




Special Vend Modes

Special Vend Modes provides access to:

- Free Vend
- Winner Mode
- Combo Vend
- Token Enable
- Rapid Vend
- Multi Vend Discount
- Skip Main Menu
- Select Theme

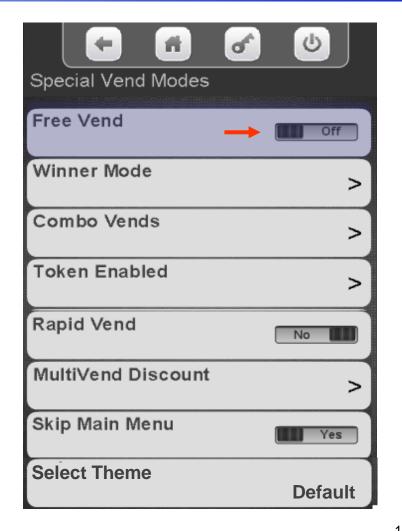


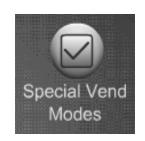


Special Vend Modes Free Vend

Free Vend

- Touch Free Vend to toggle the free vend setting between OFF and ON.
- When set to ON all items will be free until turned off.



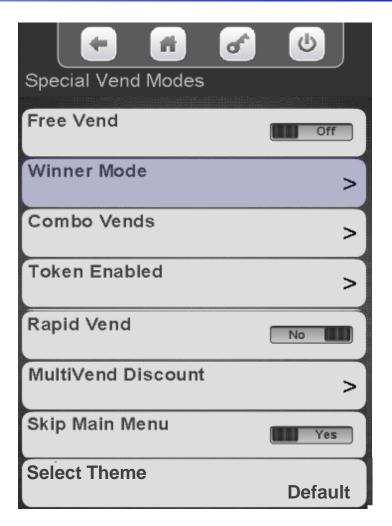


Special Vend Modes Winner Mode

Winner Mode

When Winner Mode is turned on:

- The customer will receive their product and get their money back or an additional item (programmable) at no charge.
- The display will prompt the customer if they are a winner.
- The frequency of a winner is programmable.





Special Vend Modes Winner Mode

Winner Mode

By touching a menu bar on the screen you can:

- Add a Group
- Delete a Group
- Edit a Group
- View the current selections assigned to a Winner Group





Adding a New Winner Group:

- To add a New Winner Group you must first set the Mode, Frequency, Prize and Selections that are to be part of the group.
- Once selections are set, Touch Add a New Winner Group to create the Group Note: You will not be allowed to add a new group without assigning selections first.





Touch Mode to toggle between Prize and Winner. If set to Winner the customer will receive their money back based on the frequency set

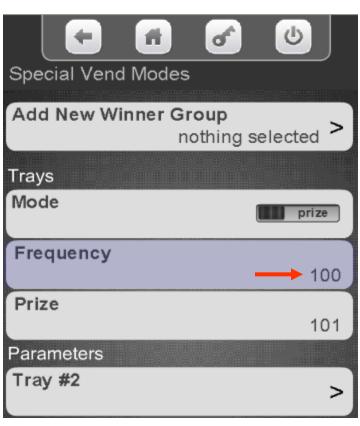


If set to Prize, another menu item will appear on the display. This is where you choose the item the customer will win based on the frequency set.

	6 b
Special Vend Modes	
Add New Winner Gre	oup othing selected >
Trays	
Mode	prize
Frequency	100
Prize	101
Parameters	
Tray #2	>



Touch Frequency to choose how often a customer will be a winner.

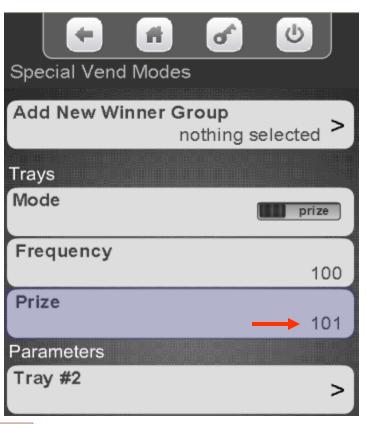


Use the keypad to enter the Frequency of a winner and press Done.

		6	b
Special V	end Modes	;	
Add Nov	· Minner C		
Add New	Winner Gı n	othing se	elected >
2		ounig or	
Trays			
Mode			prize
Frequen	су		
			100
Prize			101
		2 3	
		=	
	4	5 6	
	7	8 9	
		0	H
123		×	Done



Touch Prize to enter the selection number that will contain the prize. This menu will not be shown if winner was selected instead of prize



Use the keypad to enter the selection number that will contain the prize and press Done to save.

	ń	of .	b
Special Ve	nd Modes		
Prize			101
Parameters			
Tray #2			>
Tray #3			>
Tray #5			>
	1 2	3	
	4 5	6	
	7 8	9	
	0		H
123		×	Done



Select the tray containing the selections you want to work with the Winner Mode event.



Use the keypad to Select All, Clear All or add a checkmark to the selections to work with Winner Mode. Press the to exit and choose another tray to add selections to if desired.

Trays	
Set All	winner winner
Clear All	100
Parameters	
501	✓
503	
505	✓



Save your work!

After entering your Parameters and selections for Winner Mode you must touch Add New Winner Group. If you do not touch Add New Winner Group before exiting, your settings will not be saved!



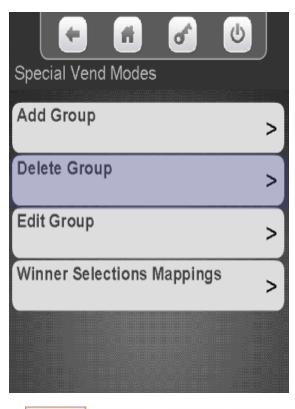


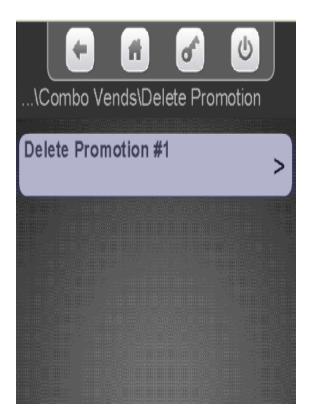
Special Vend Modes Winner Mode – Delete a Group

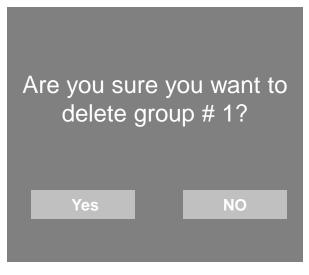
Touch Delete a Group

Touch group to Delete

Touch Yes to confirm or No to cancel

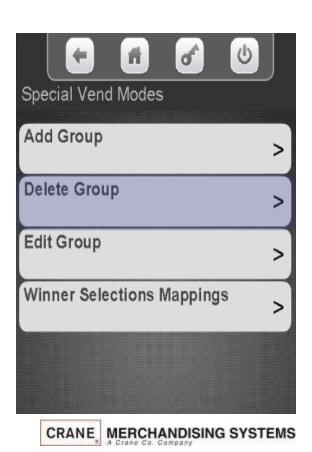








Touch Edit a Group

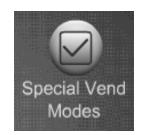


Touch the Promotion you wish to Edit



Touch the item you wish to Edit and press OK. Save the changes when you are done editing by selecting Save Group!

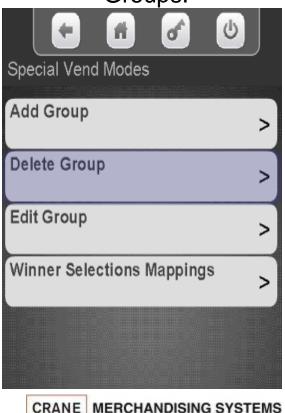
	A	of	6	
Special Vend	Modes			
Save Group	201, 2	203 and	8 more >	
Parameters				
Mode			prize	
Frequency			100	
Prize			101	
Trays				
Tray #2			>	
Tray #3			>	



Special Vend Modes

Winner Mode – Winner Selections Assigned

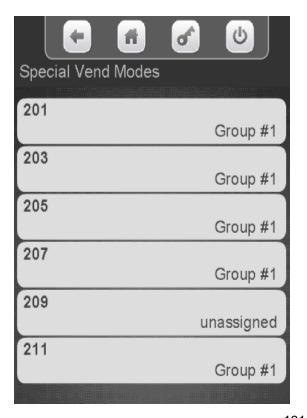
Touch Winner Selections
Mappings to view selections
currently assigned to Winner
Groups.



Touch the tray you wish to View.



The display will show you what groups each selection on the tray is assigned to.

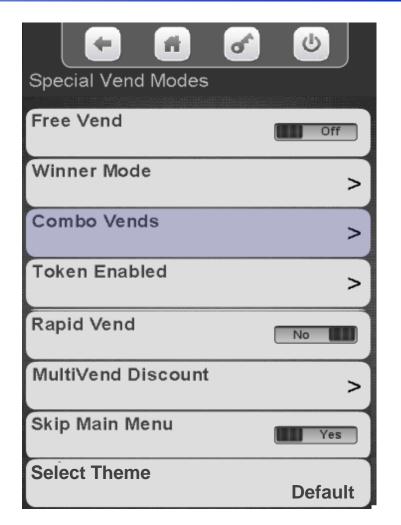




Special Vend Modes Combo Vend

Combo Vend

- The Combo Vend Menu allows you to set up a selection to be offered in conjunction with another selection.
- A combo vend can be a combination of two or three products.
- All products in a combo vend can be discounted or just the last item.
- Items can be discounted by a value or percentage.
- Touch Combo Vend to access the Combo Vend set up mode.





Special Vend Modes Combo Vend

How Combo Vend Works

- 1. Select the first item and place it in the "Shopping Cart" by pressing the shopping cart icon.
- 2. Select the second item and place it in the "Shopping Cart", if a third item is part of the Combo Vend it must be placed in the cart also.
- 3. Insert money and press OK
- 4. All items in the cart will be delivered.
- 5. The discount will be displayed and returned as change.

Rules for setting up Combo Vend

- The Rapid Vend feature must be set to NO, so that the "Shopping Cart" function is activated.
- Both "Shopping Cart" Value & number of items must be set high enough to accommodate the needs of the Combo Vend Promotion.
- Two items from the same group will not get a discount.
- For two of the same item to be discounted that item must be in group 1 & 2.



Special Vend Modes Combo Vend

The Combo Vend Menu allows you to:

- Toggle the discount type between value and percentage.
- Add a new Combo Vend.
- Delete an existing promotion.
- Edit an existing promotion.
- View the existing selections set for a Combo Vend promotion.

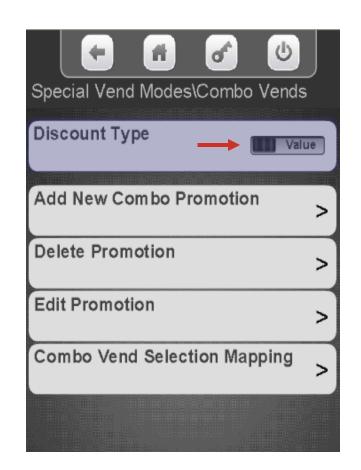




Special Vend Modes Combo Vend – Discount Type

Discount Type

- •Touch Discount Type to toggle the Discount Type between type between Value and Percentage.
- •Based on your selection in this menu the display will say discount percentage or value when you choose the Add New Combo Menu.
- •You can create & save both Discount and Value promotions but you must come back to this screen to change the discount type before you add a new combo vend if the discount type is different.





Special Vend Modes Combo Vend – Add a New Combo Vend

Touch Add New Combo Promotion



Note: You must set up your combo vend options before you can save them by Touching Add New Combo Promotion. See step by step instructions on the following pages.

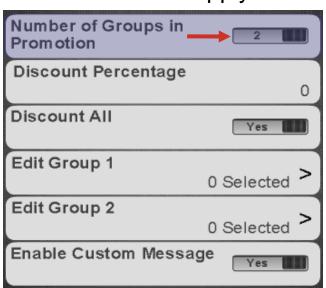
4 6 0				
\Add New Combo Promotion				
Add New Combo Promotion Groups Not Selected >				
Number of Groups in Promotion				
Discount Percentage	0			
Discount All				
Edit Group 1 0 Selected	>			
Edit Group 2 0 Selected	>			
Enable Custom Message				



Special Vend Modes

Combo Vend – Add a New Combo Vend

Your can choose to have 2 or 3 selections as part of a combo vend group. Touch Number of Groups in Promotion to toggle between 2 and 3. If you choose 3, the customer must buy three items that are part of the group for the discount to apply.



Use the keypad to enter the Discount Percentage or Value or of the discount. The screen will say either discount or value based on your choice of discount type in the previous menu. Press Done to save.

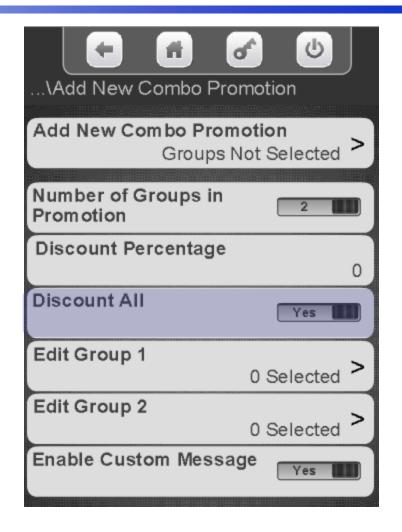




Special Vend Modes Combo Vend – Add a New Combo Vend

Discount All

- Touch Discount All to toggle between Yes and No.
- If you choose Yes all items that are part of a combo vend group will all be discounted by the amount set.
- If you choose No only the last item in the discount group will be discounted.





Special Vend Modes

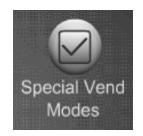
Combo Vend – Add a New Combo Vend

Touch the menu bar set selections for group one, group two and group three. Group 3 will only appear if the number of groups is set to three.



Choose the tray or trays that contain selections to be added to the group.

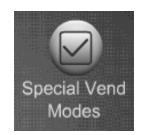
Special Vend Modes	Harry 1
Tray #2	>
Tray #3	>
Tray #5	>
Tray #7	>



Special Vend Modes Combo Vend – Add a New Combo Vend

- To add all selections on the tray to the group Touch Set All.
- To remove all selections on the tray from the group Touch Clear All.
- Touch any selection number to add or remove a checkmark from that selection. A checkmark means that selection will be active for the Combo Vend group.
- In some cases there will be a down arrow on the right side of the screen, touching it will allow you to scroll down to additional selections on the shelf that do not fit on the screen.
- Press the key to exit and choose another tray to add selections to if desired.



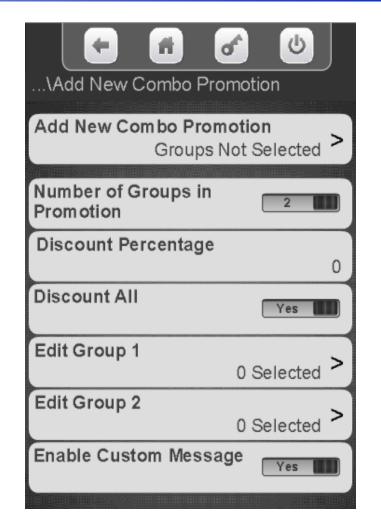


Special Vend Modes Combo Vend – Add a New Combo Vend

After entering all selections for all groups Press the key to go back to the screen on the right.

If you are setting a custom message for Combo vends continue to the next screen.

Important: If you are not setting a custom message, be sure to save your Combo Vend settings by Selecting Add New Combo Promotion. If you fail to do so your settings will not be saved! You must have selections added into all groups before you can save by Touching Add New Combo Promotion.





Special Vend Modes

Combo Vend – Enable Custom Message

Touch Enable Custom Message to toggle to Yes to set a custom message. This message will be displayed when Combo Vend is active.



An additional menu bar will appear, touch Message to create the Custom Message

Add Nov Camba Pramation	U
Add New Combo Promotion Groups Not Sele	
Number of Groups in Promotion	2
Discount Percentage	0
Discount All	Yes 🚻
Edit Group 1 0 Sele	ected >
Edit Group 2	ected >
Enable Custom Message	No
Message	



Special Vend Modes

Combo Vend – Enable Custom Message

- •A keypad will appear on the screen along with a window to enter the Message.
- •Use the keypad to enter the Message.
- Press Done when finished
- is your backspace key.
- is your exit key.
- ¹2₃ switches the keypad to numeric.
- Aa switches the keypad between uppercase & lowercase.
- #@ switches the keypad to symbols and numbers.





Special Vend Modes Combo Vend – Enable Custom Message

After entering your custom message and touching done the display will switch back to the screen on the right.

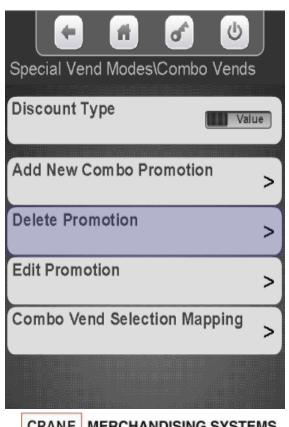
Important: Save your Combo Vend settings by touching Add New Combo Promotion. If you do not save your settings they will be gone!



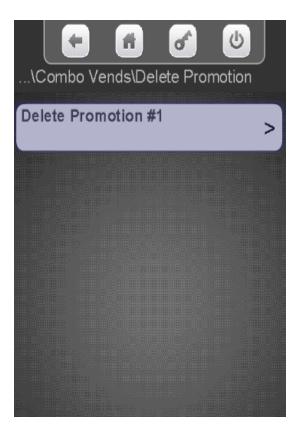


Special Vend Modes Combo Vend – Delete Promotion

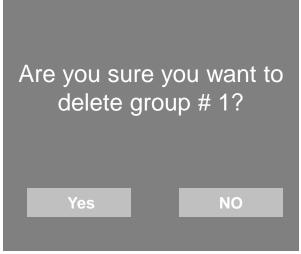
Touch Delete an existing promotion



Select the promotion to Delete



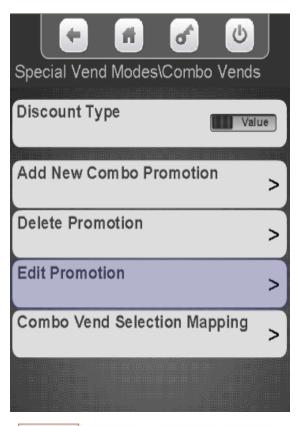
Press YES to confirm or NO to cancel



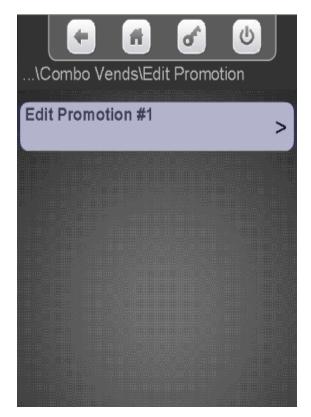


Special Vend Modes Combo Vend – Edit Promotion

Touch Edit Promotion



Select the promotion you want to Edit.



Select the item you wish to Edit. Save the changes when you are done Editing by pressing Save Promotion.

Save Promotion	Save Promotion >
Number of Groups Promotion	s in
Discount Amount	: \$0.00
Discount All	No No
Edit Group 1	2 Selected >
Edit Group 2	1 Selected >
Enable Custom Me	essage No No



Special Vend Modes

Combo Vend – View Assigned Selections

Touch Combo Vend
Selection Mapping to view
selections currently
assigned to a combo Vend



Select the tray you wish to View



The display shows each selection on the tray and the promo # it is assigned to.

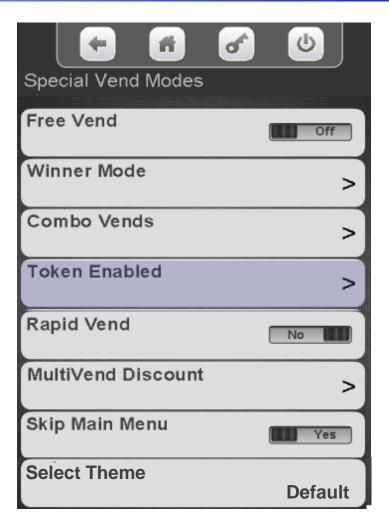
\Tray #1 Combo Selection	u) ns
101	Promo #1
111	Promo #1
112	Promo #1

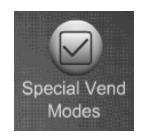


Special Vend Modes Token Enable

Token Enable

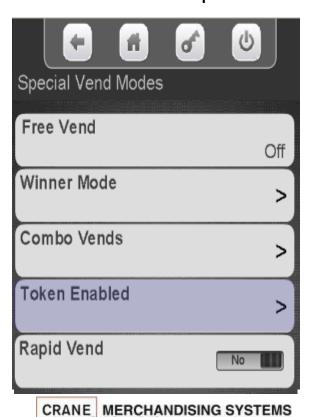
- This Menu allows you to choose the selections the customer is permitted to purchase with Tokens or Coupons.
- Note: Tokens must be enabled in the Monetary menu under Bill Acceptance for Tokens or Coupons to work.
- Your Coin Mechanism or Bill Acceptor must be tuned and/or configured to accept your Token or Coupon.





Special Vend Modes Token Enable

Touch Token Enabled to assign selections to work with Tokens/Coupons



Select the tray you wish to assign selections to work with Tokens/Coupons



Touch select all, clear all or individual selections to add a checkmark to the selections that you want to work with Token/Coupons



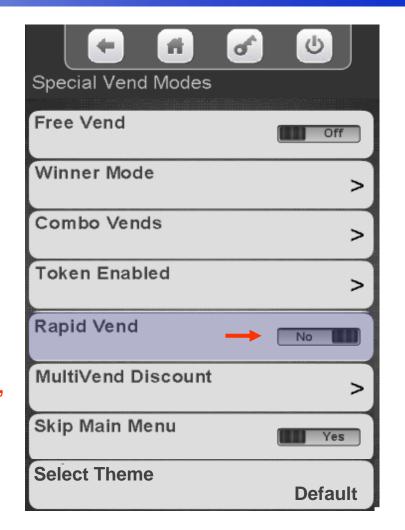


Special Vend Modes Rapid Vend

Rapid Vend Mode

- When Rapid Vend Mode when set to YES the machine will work as a single vend only merchandiser.
- The product will vend as soon as a selection is made without touching Purchase.
- Touch Rapid Vend to toggle between Yes and No

Note: The shopping cart is automatically disabled when Rapid Vend is turned on, and will prevent consumers from making multiple selections during a single transaction.

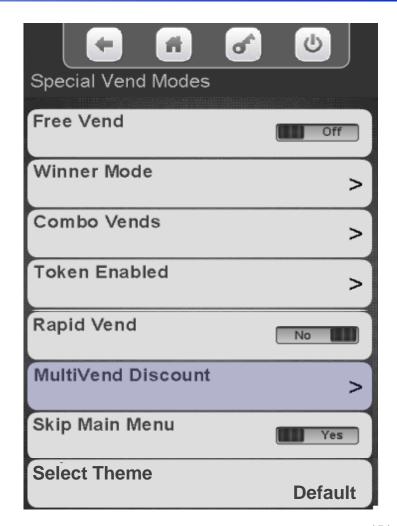




Special Vend Modes MultiVend Discount

MultiVend Discount

- When MultiVend Discount is set to YES all selections in the shopping cart with two or more items are discounted by the percentage specified.
- This discount applies to all selections and is not settable by specific selections.
- This discount, once enabled, will be on until it is turned off, it is not settable by time of day or days of week.
- If you want to set specific selection combinations to be discounted or discounts by time of day see the Combo Vend or Timed Events Menus in this guide.





Special Vend Modes MultiVend Discount

Touch the MultiVend Discount Enable menu bar to toggle to yes.

A Percent Discount menu bar will appear. Touch the menu bar to change the Percentage of Discount.

Use the keypad on the display to enter a new discount percentage. Press Done when finished.







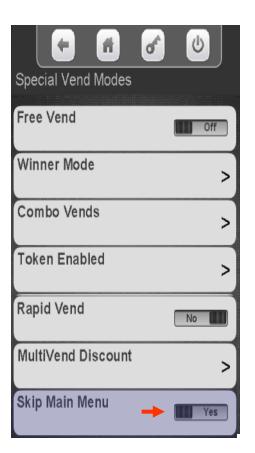


Special Vend Modes Skip Main Menu

Skip Main Menu

- When Skip Main Menu is set to yes (disabled) and the idle loop (standby screens) screen is pressed the screen will immediately transition to the numeric keypad screen bypassing the Main Menu screen shown to the right.
- When plan-o-gram libraries or multiple promotions are not used this is an extra screen that is not necessary and eliminating it speed up the vend process
- The default for Skip Main Menu is Yes, meaning the menu is skipped.
- Touch Skip Main Menu to toggle between Yes and NO.



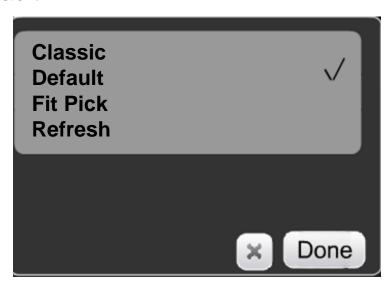


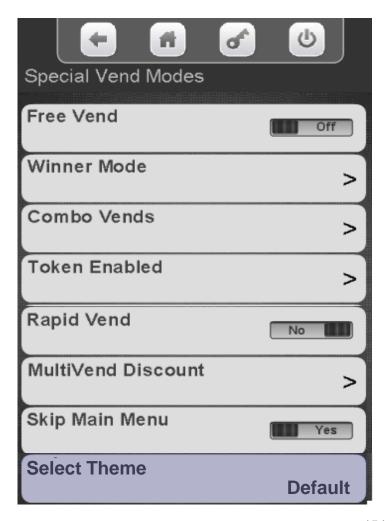


Special Vend Modes Select Theme

Select Theme

- This Menu allows you to choose from a number of different themes preprogrammed into the controller.
- Touch Select Theme and select one of the following Themes. The factory setting is default.







Monetary Menu Icon

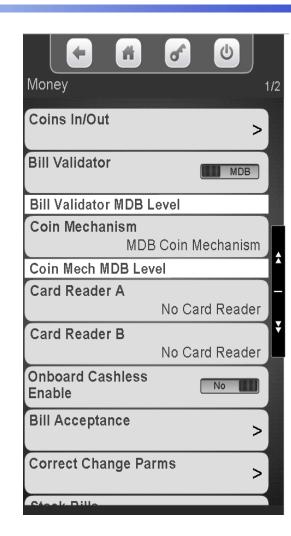
- Allows you to program the settings for all credit devices and related functions.
- Touch Money to enter the Menu.





The Monetary Menu

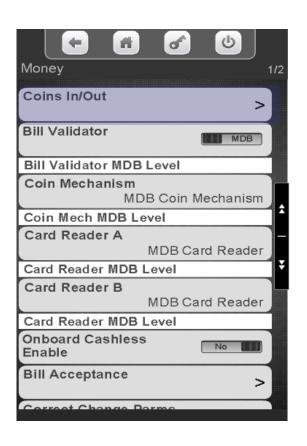
- Coins In/Out
- Bill Validator
- Coin Mechanism
- Card Reader A&B
- Onboard Cashless
- Bill Acceptance
- Correct Change Parms
 - Declining Balance
 - Force Vend
 - Accept on Low Change
 - Low Change Message
 - Credit For Failed Vend
 - Allow Customer Overpay
- Stack Bills
- Card Revalue A&B
- Cash Discount







Touch Coins In/Out menu.



The display will show the coin tube values and counts. Increase the amount of change available by inserting coins to thru the chute on the top of the coin mech. Totals (count and value) for each coin should increase as coins are added.

		2000
Coin	Count	Value
0.05	35	\$1.75
0.25	20	\$5.00
0.50	15	\$7.50
1.00	1	\$1.00
0.05		>
0.25		>
0.50		>
1.00		>

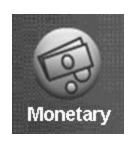


Touch Coins In/Out menu.



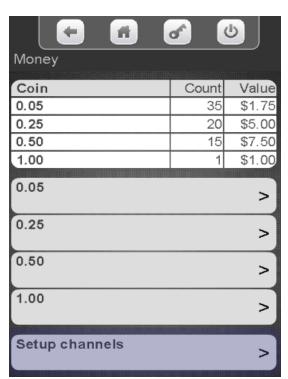
This menu can also be used to dispense coins from coin mechanism by touching the menu bar showing the value of each coin.

Coin	Count	Value
0.05	35	\$1.75
0.25	20	\$5.00
0.50	15	\$7.50
1.00	1	\$1.00
0.05		>
0.25		>
0.50		>
1.00		>
Setup channels		>

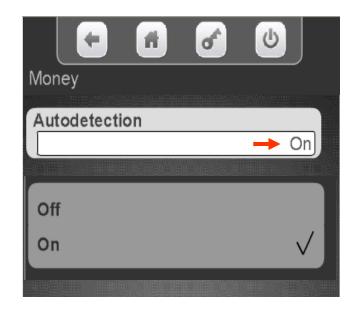


To set up the channels in your coin mechanism press Setup channels.

This setting is not typically changed from the default of auto detect.



Touch Auto Detection to toggle Auto
Detection for the coin tubes from ON to
OFF (not recommended). This will enable
a menu that allows you to turn the coin
mechanism channels on and off
independently





Touch a channel menu bar to add or remove checkmarks from the channels. Removing a checkmark from a channel will disable the coin tuned to that channel.

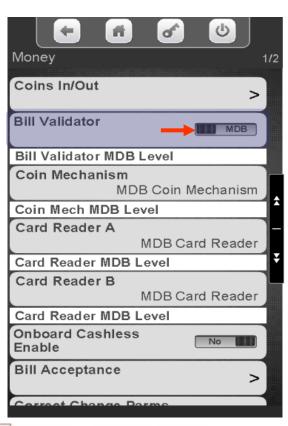
Press down arrow on the right to scroll to the remainder of the 16 channels.





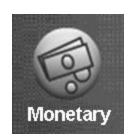
Monetary Menu Bill Validator Enable

Touch Bill Validator to toggle between **MDB** or **No Bill** validator.



Once communication is established the communication level of the Bill Validator will be shown





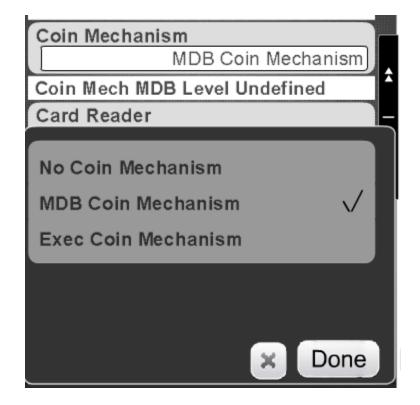
Monetary Menu Coin Mechanism Enable

Touch Coin Mechanism to choose the coin mechanism type. The current setting is shown without entering the menu.



Touch the desired Coin Mechanism option and press Done to save.

Note: Exec is not used in the US.

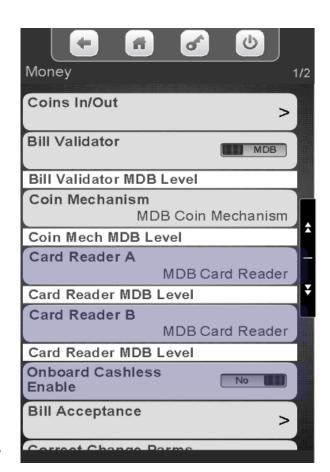




Monetary Menu Card Reader Enable

Card Reader / Cashless Options

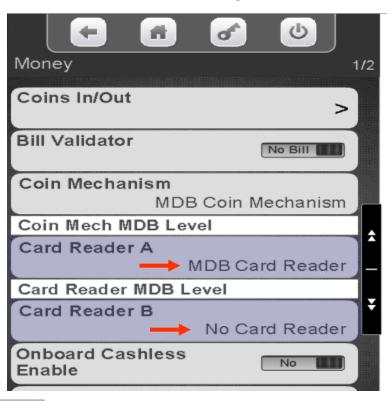
- There are three menu Bars as shown on the right for Card reader and/or cashless options.
- There are two menus for MDB card reader and one for an onboard reader.
- MDB is an add on card reader that plugs into the MDB harness in the machine. Your options in this menu are MDB card reader or no MDB card reader. This option is set under the Card reader Menu Bar.
- Onboard is a swipe built into the front of the machine.
- When using Onboard Cashless an NFC (tap and go) option is available beginning with firmware version 10.9.8.
- Note: It is possible to have two MDB card readers or one MDB and one Onboard reader in the machine at the same time. An example would be a college where you accept both credit cards and a college ID cards that are tied to students accounts.



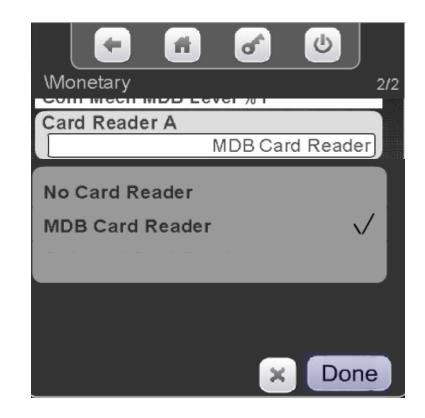


Monetary Menu Card Reader Enable

Touch Card Reader A or B to choose your MDB card reader option. The current setting is shown without entering the menu.



Touch MDB or No Card Reader, Touch Done to save or X to exit without saving.





Monetary Menu Onboard Cashless Enable

Touch Onboard Cashless Enable to toggle between Yes and No. An Onboard card reader is a built in card swipe that plugs directly into the Atlas controller at J42.

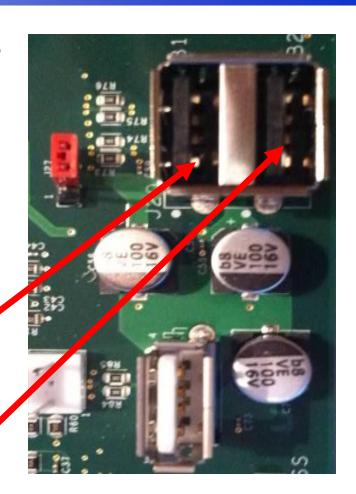






Monetary Menu Onboard Cashless Enable

- Crane Onboard Cashless accepts NFC (tap and go) transactions beginning with firmware version 10.9.8.
- If you have a separate NFC reader installed, as long as the onboard card reader is assigned, enabled and the NFC reader cable is connected to a USB on the controller the NFC reader will work.
- The radio should be plugged into USB 1.
- We recommend connecting the USB cable for the NFC reader into USB 2.



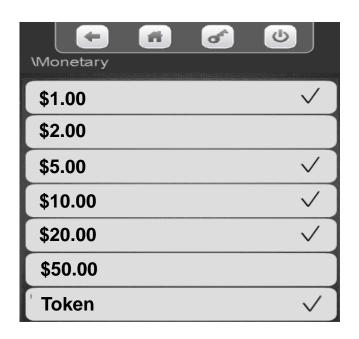


Monetary Menu Bill Acceptance

Touch Bill Acceptance to enter the menu. All denominations the Validator is capable of accepting will be shown.



Touch the value on the display to select or unselect the bill/note denominations you wish to accept/not accept. The switches on the Validator must also be enabled. Token must be enabled to accept Tokens or Coupons. You will also need to choose what selections work with tokens or coupons in the Special Vend Modes Menu.

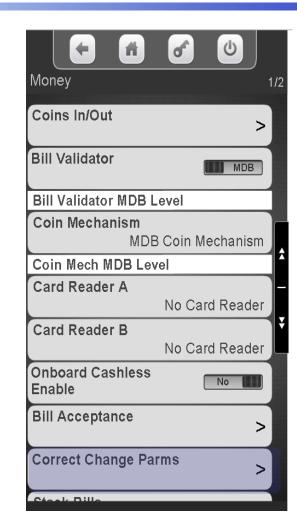


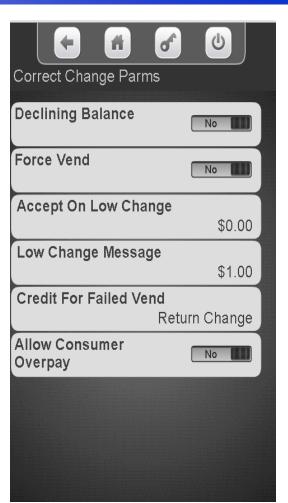


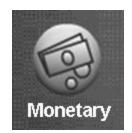
Monetary Menu Correct Change Parameters

The Correct Change Parameters Menu includes the following submenus:

- Declining Balance
- Force Vend
- Accept on Low Change
- Low Change Message
- Credit for Failed Vend
- Allow Customer Overpay



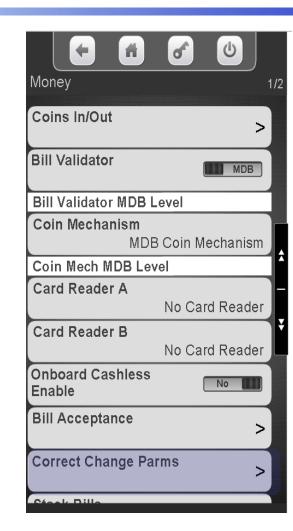


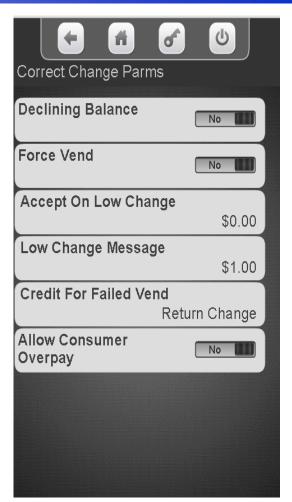


Correct Change Parameters - Declining Balance

Declining Balance

- If Declining Balance is set to Yes the change due back after a vend will remain on the display allowing the customer to add more money to make an additional purchase.
- Note: If set to Yes, customer may touch cancel to return remaining credit.
- Touch Declining Balance to toggle between Yes and No.
- Touch feet to exit.

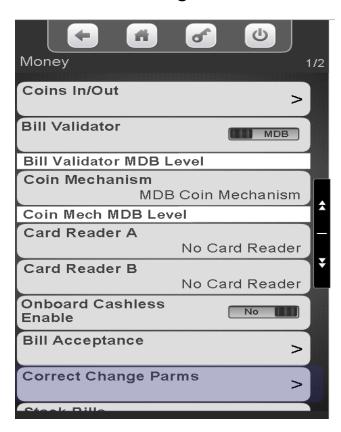






Correct Change Parameters - Declining Balance

Touch Correct Change Parms to access the Declining Balance Menu.



Touch Declining Balance to toggle between No and Yes.





Correct Change Parameters - Force Vend

Force Vend

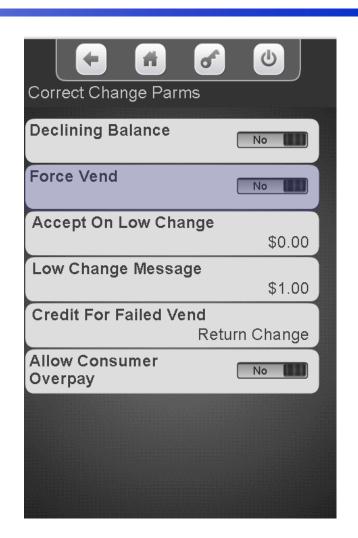
Touch Force Vend to Toggle Between Yes and No.

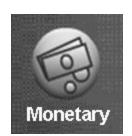
When Force Vend is set to No:

 All money inserted can be paid back by pressing cancel to end the transaction.

When Force Vend is set to Yes, a consumer will not be able to receive their credit back when:

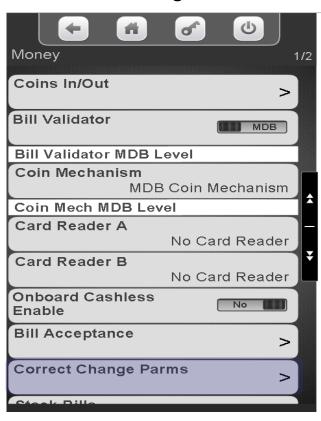
- The established credit meets or exceeds the minimum price of the selections in the machine
- Any bills are stacked in establishing credit.
- Any non-tube coins are inserted in establishing credit
- A "No Change Without Purchase" message will be displayed when a consumer attempts to return credit.





Correct Change Parameters - Force Vend

Touch Correct Change Parms to access the Declining Balance Menu.



Touch Force Vend to toggle between Yes and No.



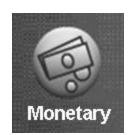


Correct Change Parameters - Accept on Low Change

Accept On Low Change

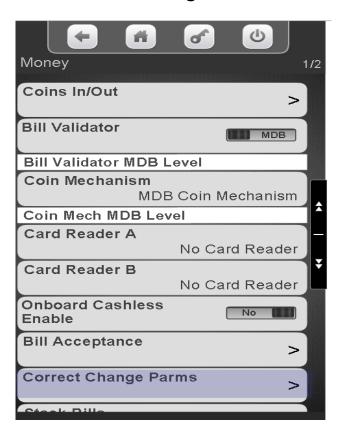
- Used to set acceptance of a bill depending on how much changed is registered in the coin mechanism.
 - If set to default \$0.00, the machine will only accept a bill when the coin mechanism has enough change to pay back full credit.
 - If a value is set to anything other than \$0.00 bills will be accepted to the set value even though change may not be available (customer may get short changed).





Correct Change Parameters - Accept on Low Change

Touch Correct Change Parms to access the Declining Balance Menu.



Touch Accept on Low Change to enter the value of money you wish to accept when no change is available. Setting this to anything other than \$0.00 may cause the customer to get short changed. Touch Done to save.

	fi of	6
Monetary		2/2
Accept Or	Low Change	
		\$0.00
	12	3
		=
	4 5	6
	7 8	9
	0	
123		× Done



Correct Change Parameters – Low Change Message

Low Change Message

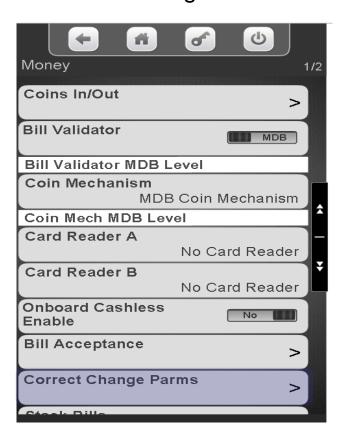
- Used to set the lowest amount registered in the coin mechanism before the display shows "USE EXACT CHANGE"
- Touch Low Change Message to enter lowest value on corresponding line above (default setting of \$1.00 recommended)
- Touch Done to save the setting.
- Touch to exit this menu mode.





Correct Change Parameters – Low Change Message

Touch Correct Change Parms to access the Declining Balance Menu.



Touch Low Change Message, enter lowest value of change available before the display shows the Low Change Message (setting of \$1.00 recommended) Touch Done to save

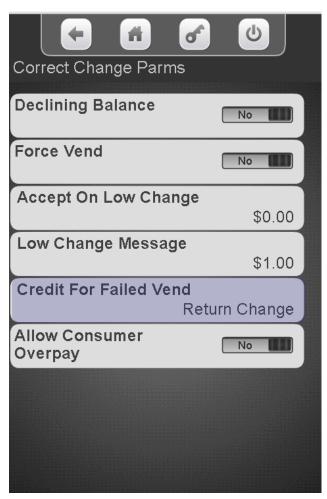


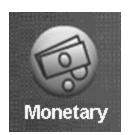


Correct Change Parameters - Credit for Failed Vend

Credit For Failed Vend

- Press the down arrow to view lower screen.
- Press Credit for Failed Vend on the keypad to change between the two settings:
 - Return = In the event of a failed vend, the credit will be returned automatically.
 - Hold = In the event of a failed vend the credit will remain on the machine
- Press Done to save
- Press the button to exit this menumode.





Correct Change Parameters - Credit for Failed Vend

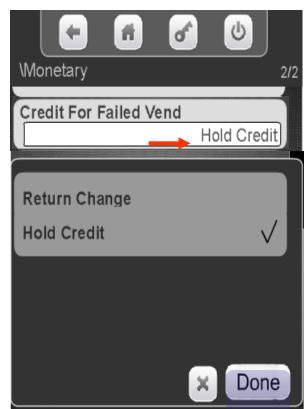
Touch Correct Change Parms to access the Declining Balance Menu.

Money 1/2 Coins In/Out > Bill Validator MDB Bill Validator MDB Level Coin Mechanism MDB Coin Mechanism Coin Mech MDB Level Card Reader A No Card Reader Card Reader B No Card Reader Onboard Cashless Enable **Bill Acceptance** > **Correct Change Parms** >

Touch Credit For Failed Vend to advance to the next screen



Touch to Return Change or Hold Credit after a failed vend. Touch Done to save.

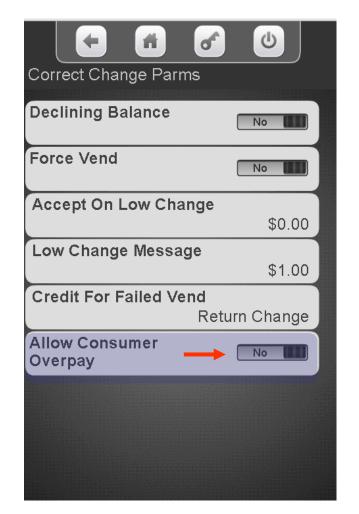




Correct Change Parameters – Allow Customer Overpay

Allow Customer Overpay

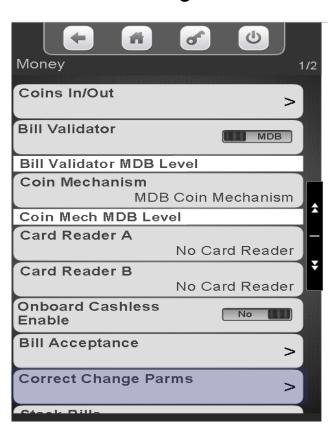
- When Consumer Overpay set to Yes, based on other settings in the machine the customer would be allowed to make a purchase even if change is not available. This could result in a potential situation where the consumer gets short changed.
- When Consumer Overpay set to No, the machine will not accept any currency for which it cannot make change, regardless of Low Change Message setting or Accept on Low Change setting.





Correct Change Parameters – Allow Customer Overpay

Touch Correct Change Parms to access the Declining Balance Menu.



Touch the Menu Bar to toggle Allow Customer Overpay between Yes and No.

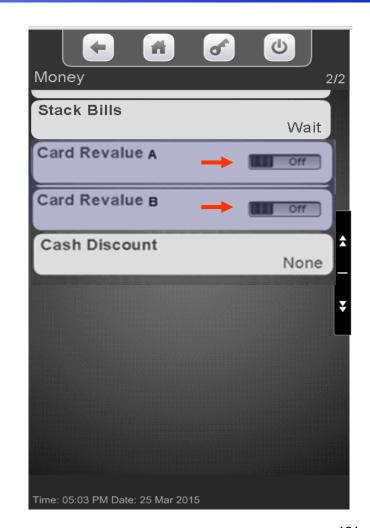
(- f) d	
Correct Change Parms	
Declining Balance	No No
Force Vend	No No
Accept On Low Change	\$0.00
Low Change Message	\$1.00
Credit For Failed Vend Return Change	
Allow Consumer Overpay	No

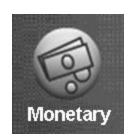


Monetary Menu Card Revalue

Card Revalue

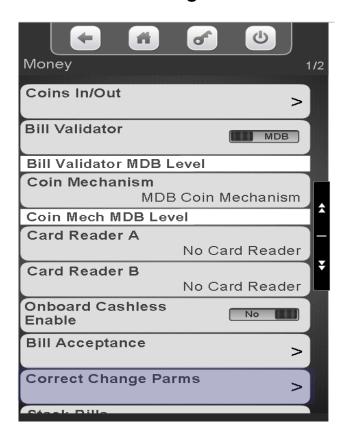
- This Menu will appear when the machine is equipped with a card reader(s) or other monetary device that is capable of having value added.
- Choose the card reader A and/or B that is capable of adding value.
- Touch Card Revalue on keypad to toggle the setting between Off and On.
 - Off = Credit cannot be transferred.
 - On = Allows credit be transferred.
- Touch to exit this menu mode.





Monetary Menu Card Revalue

Touch Correct Change Parms to access the Declining Balance Menu.



Touch Card Revalue to toggle reader A and/or B between Off and On.

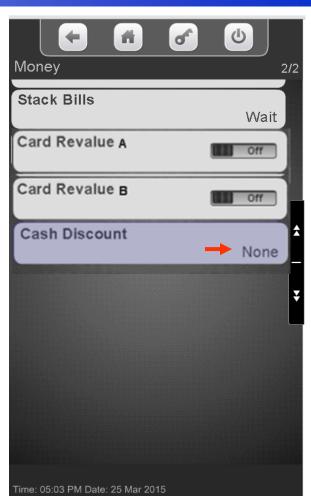




Monetary Menu Cash Discount

Cash Discount

- This menu shows your current discount for cash.
- This only applies to onboard cashless transactions, and is chosen in the forms when you set up your telemetry account.
 - The cash discount can not be changed at the machine.
 - The Cash discount can be configured to charge by the item or by transaction.
 - The Cash Discount can be set as either a percentage or a flat fee.
- To enable or change cash discounts contact your Distributor or CMS sales representative.
- When enabled, Cash Discount applies to all products in the machine.
- No discount is applied if any cashless transaction is involved, even in a mixed tender transaction.
- Both Cash and Credit prices are shown at bottom of the shopping cart screen.
- The prices set in the machine and shown in the consumer and service mode screens are the cash sales prices. In other words, the cash discount has already been applied.





Monetary Menu Cash Discount

Touch Correct Change Parms to access the Declining Balance Menu.



The Value of the Cash Discount is shown on the bottom right corner of the Menu bar







Systems Settings Menu Icon

- Allows you to program the overall systems functions.
- Touch System Settings icon to enter the Menu.

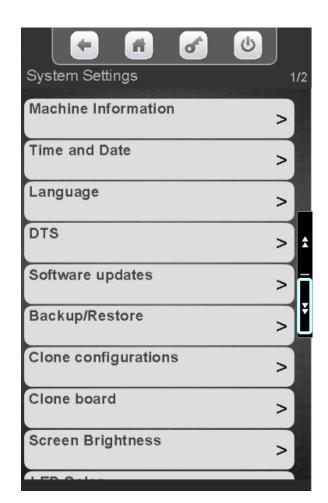


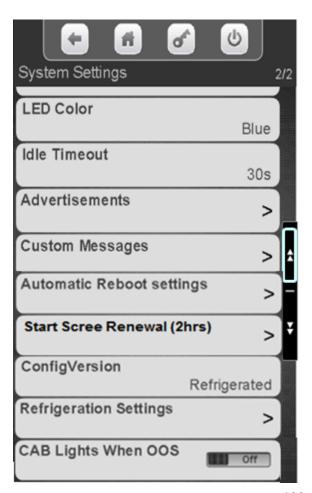


System Settings

System Settings

- •Touching the System
 Setting Icon from the
 home screen allows
 access to the System
 Settings Menus shown on
 the two screens to the
 right.
- •Touch the down arrow to scroll to the next menu screen.
- •Touch the up arrow to return to the previous menu screen.

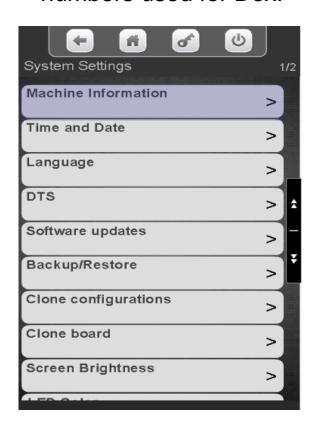






System Settings Machine Information

Touch Machine Information to access Identification numbers used for Dex.



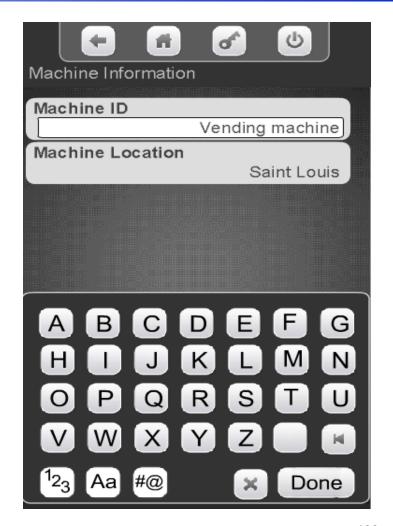
Touch Machine ID or Location ID to assign or change the number. This ID can be text, numeric or a combination both.





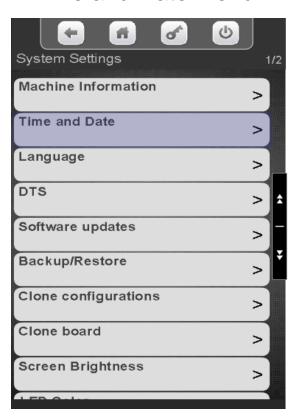
System Settings Machine Information

- A keypad will appear on the screen along with a window to enter the ID or Location information.
- Use the keypad to enter the information.
- Touch Done when finished
- is your backspace key.
- is your exit key.
- 123 switches the keypad to numeric.
- Aa switches the keypad between uppercase & lowercase.
- #@ switches the keypad to symbols and numbers.

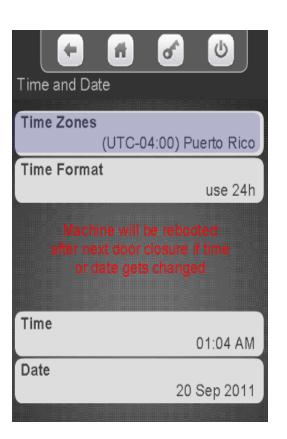




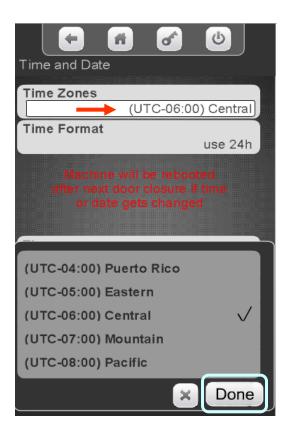
Touch the Time and Date menu bar to access the Time and Date Menu.



Touch to set your Time Zone

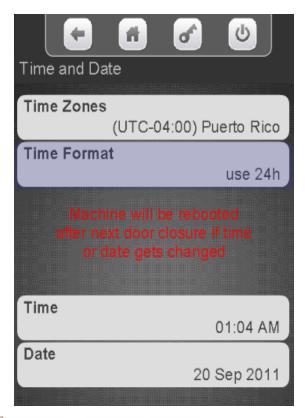


Touch your Time Zone followed by Done.



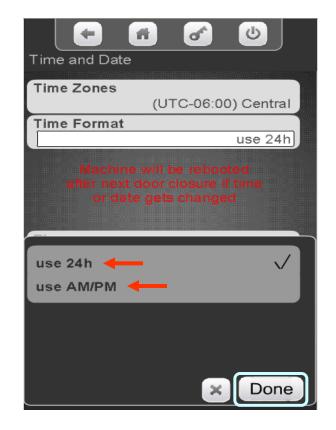


Touch Time Format to change the Format between 24 hours and AM/PM.



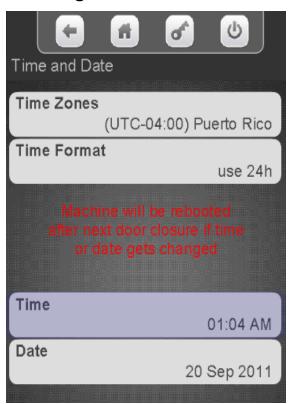
Touch your desired format.

Touch Done to save.

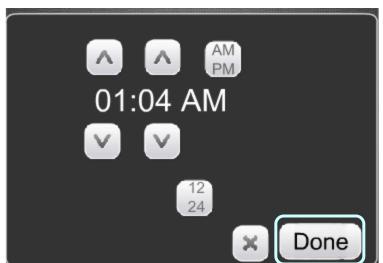




Touch the Time menu bar to change the current time.

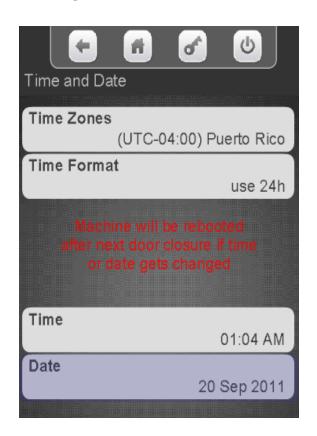


Touch the arrows key above and below the hour or minutes to change the time. Touch the AM/PM or 24 hour icon change your time format. If the format is changed here it will also changed in Time Format menu. Touch Done when finished. Press the door switch after setting the time and/or date, this will cause a reboot and ensure the Time & Date are saved.





Touch the Date menu bar to change the Current Date.



Touch the arrow keys above and below the Day, Month and Year to change the date.

Touch Done when finished.

Press the door switch after setting the time and/or date this will cause a reboot and ensure the Time & Date are saved.





The Language Menu allows you to:

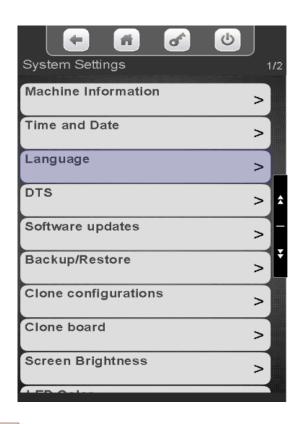
- Customize the Languages available to your customer.
- As shown in the picture to the right, you can enable multiple Languages at one time.
- The Language used in the service menus can also be changed and are independent of the customer languages set.
- Additional Languages can now be uploaded without changing the software, starting with version 10.8.4.

Note: You must have "Skip Main Menu" set to No when multiple Languages are enabled. This menu is located under the "Special Vend Modes" icon accessible from the main menu.





Touch Language to change the Language options.



Touch Service Application or User Interface to change the current Language options.





To change the Language used in the Service Menus Touch the Service Application menu bar.



Touch a Language and Press Done to apply that Language as a default for the Service Menus.





To change the Language used to communicate with the customer press the User Interface menu bar.



This menu allow you to choose which Languages are available to your customer as well as the default Language.





Choosing Enable Languages will bring up a list of Languages available to be used on the screen to communicate with your customer



Touch one or multiple menu bars to enable the Languages that will be available as an option for your customer to choose when using the machine. If there are multiple versions of the same language only one can be selected.

	(b)
Enable Languages	
German-DE	\checkmark
English-UK	
English-US	\checkmark
Spanish-ES	\checkmark
French-FR	\checkmark
Netherlands	\checkmark



Choosing Default Language will bring up a list of Languages available to be used for the idol screen (Standby messages)



Choose a default Language for your idle screen (stand by) messages. Once the idle screen message is touched during vending you will have an option to change to one of the previously enabled languages.





The screenshot below shows the workflow of a customer who has already touched the idle Screen. Note: You must have "Skip Main Menu" set to no. This menu is located under the "Special Vend Modes" icon accessible from the main menu.











Data Transfer Standard (DTS)

- •This Menu allows you to change what data is sent and control what data is reset on a DEX or DDCMP transfer.
- •The defaults for these menus are the standard settings and are typically not changed.
- •Before making changes you may want to contact your DEX provider or your Manufacturer Representative.





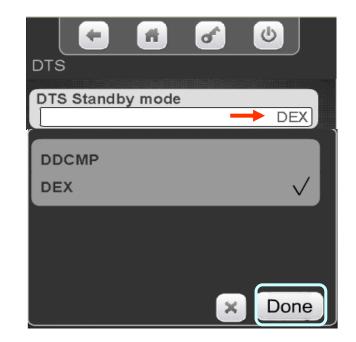


DTS Standby mode to change the transfer type.



Touch DDCMP or Dex on the menu bar to change the transfer type. Touch Done to save.

Note: In the US you will always choose DEX





To Modify the Audit List Touch DTS Audit List.



(- 6)	of	(b)	
DTS Audit List			1/
ID1		✓	
ID2			
ID3			
ID4		✓	
ID5		✓	
VA1		<u> </u>	
VA2		✓	
VA3		✓	
BA1		✓	
0.14			-

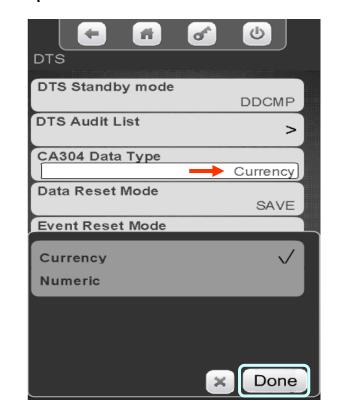
Touch a menu bar to add or remove items from the audit list. This menu gives you the ability to shorten the DEX file. Do not remove items without contacting your DEX provider or your Manufacturer Representative. Touch the down arrow on the right to scroll through the Audit List



Touch CA304 Data Type to change how bills are reported.

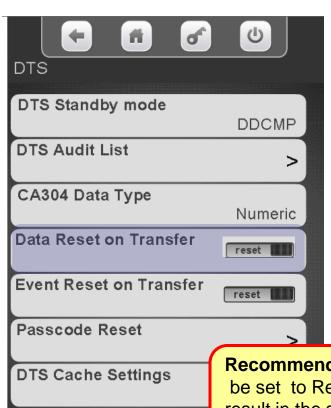


Touch Currency or Numeric on the screen to change how bills are reported. Touch Done to save.



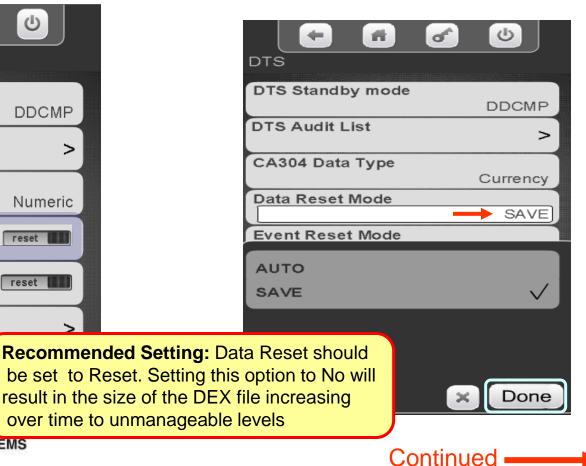


Touch the Data Reset Menu bar to change preference



CRANE | MERCHANDISING SYSTEMS

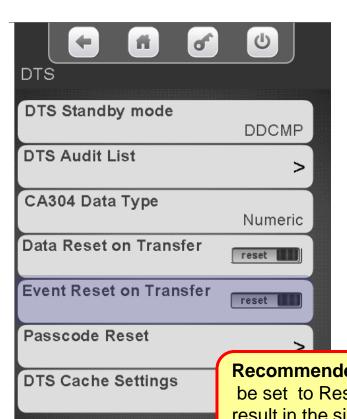
Touch Auto or Save. Touch Done to save.



204

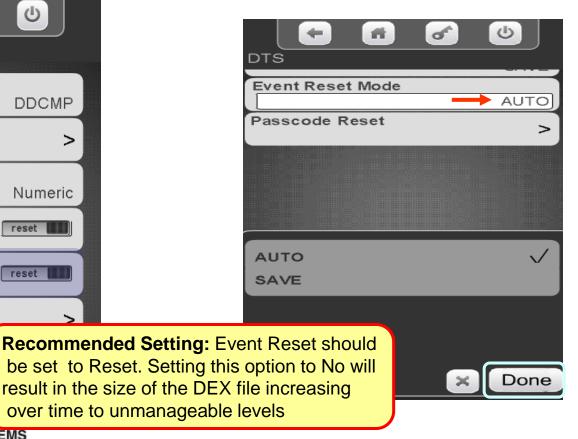


Touch the Event Reset Menu bar to access the menu.



CRANE | MERCHANDISING SYSTEMS

Select Auto or Save. Touch Done to save.





Touch the DTS Cache Settings Menu bar to access the menu.



This setting enables or disables the ability of the Atlas board to prepare a new DEX file every 5 minutes and have it available on demand for quicker DEX reads required for non-Crane telemetry devices.

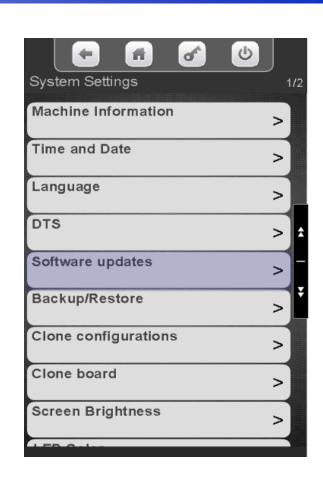




System Settings Software Updates

Software Updates

- ■The Software updates menu provides a means to load firmware updates and other files into the machine.
- ■This menu is used to load new firmware versions if the file type is XXXXX.bin. If the file type is XXXXX.CJFFS2 the file will automatically load if the USB is installed when the machine is powered up.
- There are numerous files that can be updated through this menu, some of the most common are:
 - Plan-o-gram files
 - Custom Library files
 - Advertisements
- ■The example of the following page shows a Planogram file being loaded but all other update files are loaded the same way.





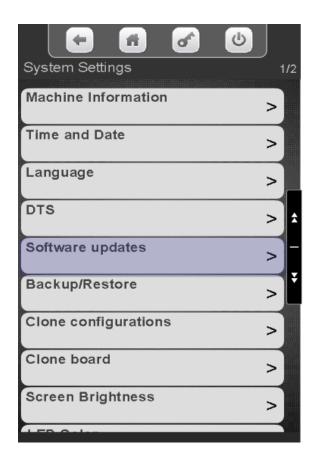
System Settings Software Updates – Planogram

Loading a Planogram into the machine using a memory stick

- Before attempting to load a file you must create a folder on your USB flash drive named atlas. Copy your file into the atlas Folder.
- Plug a flash drive in to an unoccupied USB port an the control board.
- You can have multiple Planograms in the atlas folder.
- Touch Software updates to enter menu.

Note: Crane Merchandising Systems is providing the nutritional content information, based on information provided by the product manufacturers, and Crane MS is cannot accept responsibility for content created by others.

(Planogram Updates)





System Settings Software Updates – Planogram

Touch to access Software Updates (Planogram Updates)



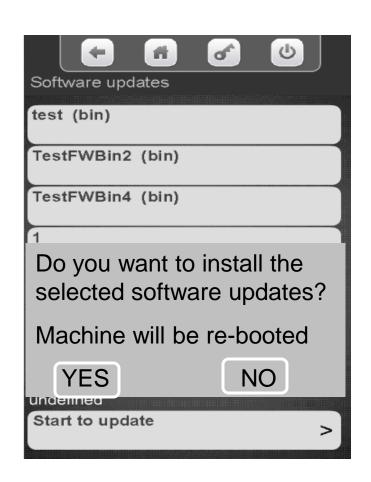
Touch the file you wish to upload to the machine and Touch start update.

Software updates
test (bin)
TestFWBin2 (bin)
TestFWBin4 (bin)
1
2
3
4
undefined Start to update >



System Settings Software Updates – Planogram

- A conformation box will appear if you choose to update the POG.
- Touch YES to continue or No to Cancel.
- If you choose Yes the machine will reboot. The re-boot will take 5-7 minutes.
- It is a good idea to create a backup once the POG file is loaded.

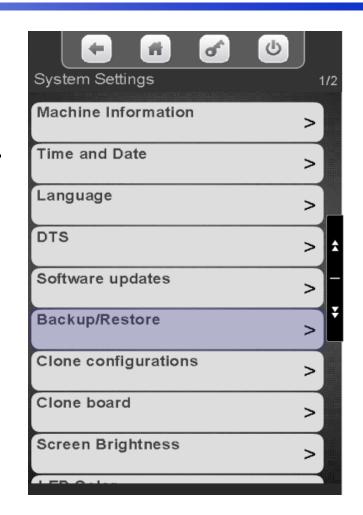




System Settings Backup / Restore

Backup / Restore

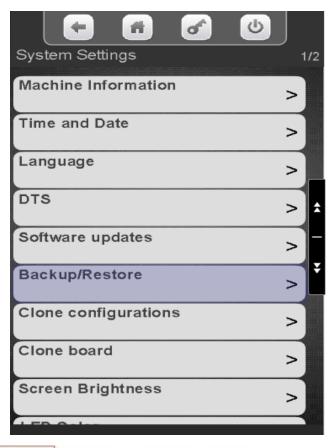
- Allows you to backup your current Configuration for recovery later if needed.
- Allows you to restore the machine to factory defaults.
- Allows you to restore the machine to a previously saved configuration
- Backups are saved with date created.
- Backups are stored on the controller, not removable media.





System Settings Backup / Restore

Touch Backup / Restore to access the menu.



Touch Make New Backup to backup your current configuration for recovery later. All previous backups will be listed. You can touch a backup you want to restore or choose to Restore the Factory Backup. In this case we are choosing make a new backup.





System Settings Backup / Restore

The display show a conformation screen. Choose Yes continue or No to cancel.



Choosing Yes will update the display with the new backup file including the time and date of the backup. This file can be selected at a later date if you want to restore you machine to this backup file.



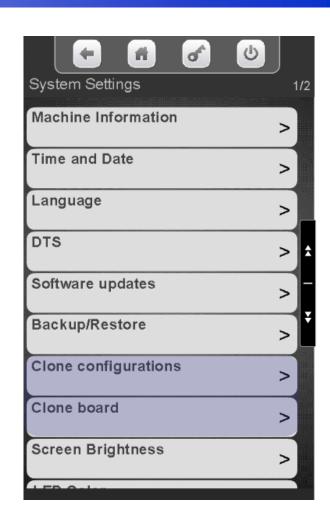


System Settings

Clone Configurations / Clone Board

Clone an Existing Configuration or Board

- This menu allows you to copy a machine that has been previously been set up and save that file on a flash drive.
- The difference between Clone Configurations and Clone Board menu is that clone board also copies the meter readings, this allow you to change a board or update software and keep the same meter readings.
- Once you have copied an existing configuration (set up) you can load it into other machines.
- For ease of use in the future the files can be named.
- You can have unlimited clone files in the atlas folder.

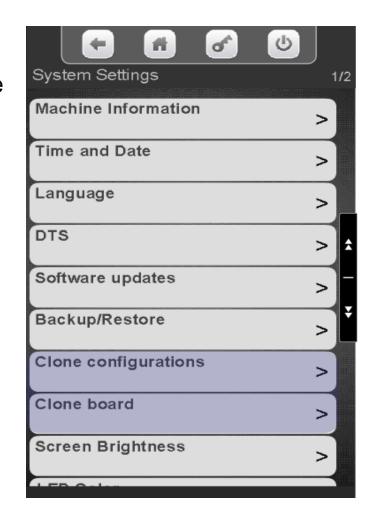




System Settings Clone Configurations / Clone Board

Preparing the Flash drive

- The files size is less than 80kb so you can use any size flash drive.
- Before attempting to clone an existing machine configuration you must create a folder on your USB flash drive named atlas (lower case is important).
- Insert the flash drive into an available USB port on the control board, typically USB3
- 2. Enter PIN 3333
- Touch System Settings, then Copy Configuration.





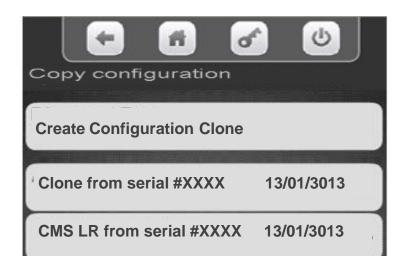
System Settings

Copy Configuration – Create Configuration Clone

If the Flash Drive is not found you will see the screen below.



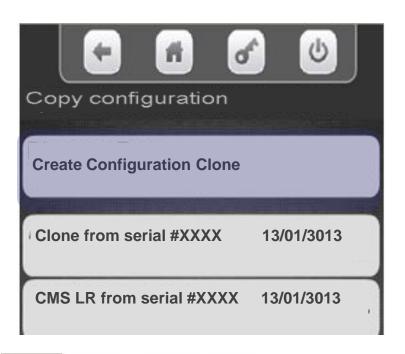
Touch Create a Configuration Clone (from the control board to the stick). If there are existing clone files on the flash drive they will show up below Create Configuration Clone and can be chosen to be uploaded to the machine.





Copy Configuration – Create Configuration Clone

Touch Create Configuration Clone to copy the existing configuration onto a Flash drive. The Flash drive can then be taken to another machine and uploaded.



Touch Clone Name to Name the configuration. Naming the configuration is optional.

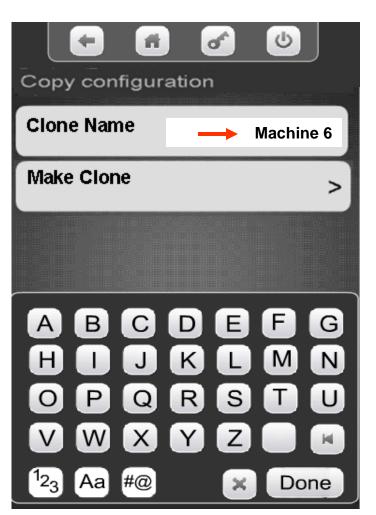
Touch Make Clone to copy without naming.





System Settings Copy Configuration

- A keypad will appear on the screen along with a window to enter the Clone Name.
- Use the keypad to enter the information.
- Touch Done when finished
- is your backspace key.
- is your exit key.
- 123 switches the keypad to numeric.
- Aa switches the keypad between uppercase & lowercase.
- #@ switches the keypad to symbols and numbers.



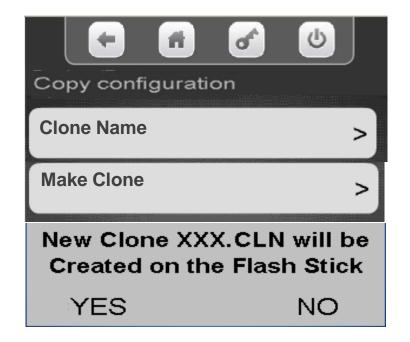


System Settings Copy Configuration

Touch Make Clone, a conformation box will appear



Touch Yes continue No to cancel





Clone Configuration – Uploading from a Flash

All files listed below Create
Configuration Clone are valid
configurations that can be copied
from the flash stick to the control
board. Touch a Clone File to upload
or delete.



Touch Install or Remove clone file from stick. A confirmation box will appear verifying you want to install or remove the file, Touch Yes to continue or No cancel.



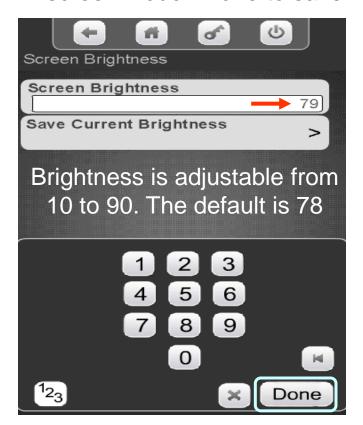


System Settings Screen Brightness

Touch Screen Brightness



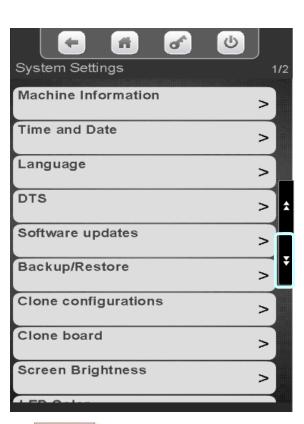
Use the numeric keypad to change the Brightness, the higher the number the brighter the screen. Touch Done to save.





System Settings LED Color

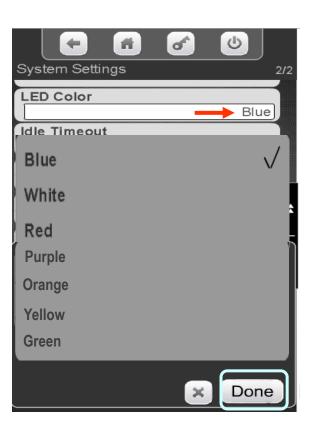
Touch the down arrow on the right to scroll down to LED Color.



Touch LED Color to change the color of the pill surround and payment devices.



Touch a Color. Touch Done to save.

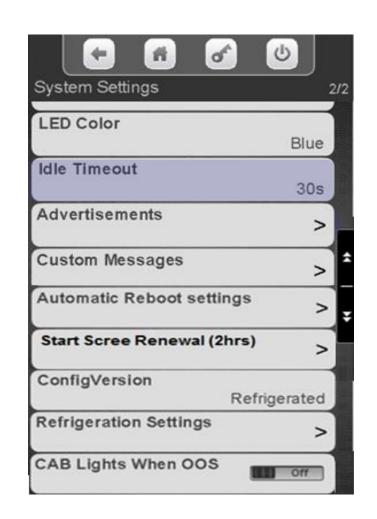




System Settings Idle Timeout

Idle Timeout

- •If a person starts a transaction on the machine and walks away without Touching the Cancel icon, the idle timeout is the amount of time until the machine goes back to it's standby message routine.
- •The Idle Timeout is settable from 2 to 180 seconds.
- •The factory default for the Idle Timeout is 30 seconds.



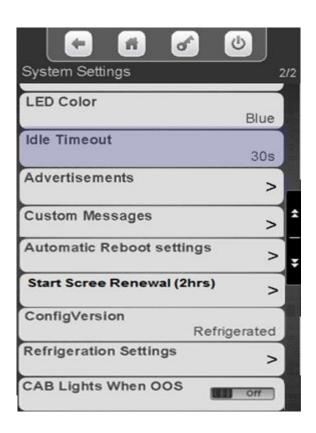


System Settings Idle Timeout

Touch the down arrow on the right side of the display to scroll down to Idol Timeout.



Touch Idle Timeout to enter the menu.



Use the numeric keypad to enter a new time. Touch Done to save!

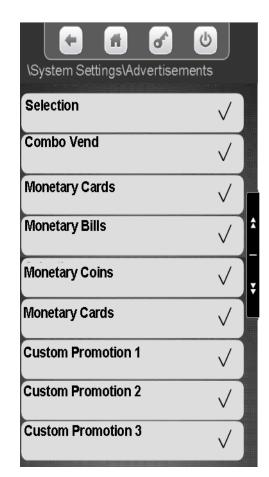


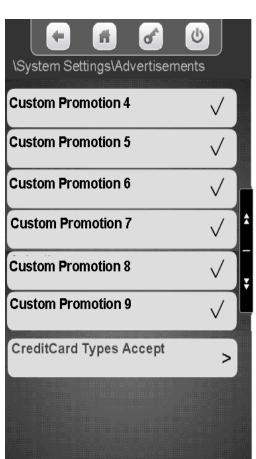


Advertisements

This menu allows the user to turn on and off messages that are shown to the consumer during the idle screen loop.

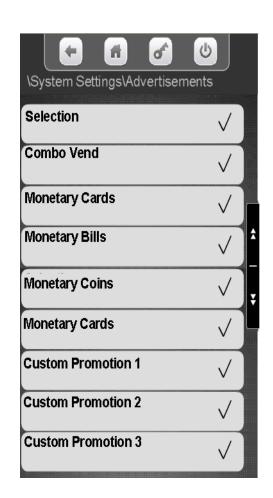
- The idle loop is a series of messages that are shown on the display when no one is using the machine.
- As a default, all messages are enabled so if an item is selected in a menu that message will automatically be shown in the Idle loop.







- On power up the machine will find the coin mechanism and bill acceptor, enable them, and turn on those advertisements.
- The Advertisements will show the values of bills being accepted including 1\$ coins.
- Attaching an MDB card reader or enabling an Onboard Reader will enable the Monetary Card Advertisements
- There are two Menu bars for Monetary Cards, when one is enabled both are enabled. This allows the Monetary Cards Advertisements to be shown more often.
- All Custom Promotions and Combo Vend
 Advertisements must be enabled when you set up
 the promotion in their respective menus.

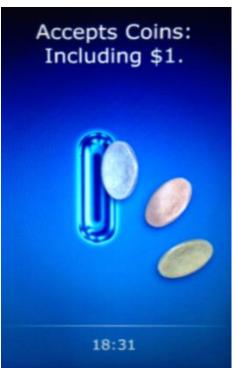






Monetary Idle Screens









Selection

Monetary Coins

Monetary Bills

Monetary Cards

Custom Promotions 1-9 are shown below. These promotions must be created and enabled under Timed Events/Time of Day Events/Promotion.



 $oldsymbol{1}$ Buy any 2 and save X



2 Buy any Snack and any Drink and Save X



Buy any Bar and any Drink and Save X



4 Buy any 2 Snacks and Save X



5 Buy any 2 Bars and Save X



6 Buy any 2 Drinks and Save X



7 Buy any 2 Items and Get 1 FREE



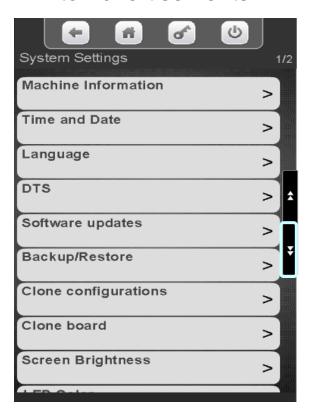
8 Buy any 3 Items and Save X



Buy Any Food Item with a Snack and a Drink and Save X



Touch the down arrow on the right side of the display to scroll down to Advertisements.

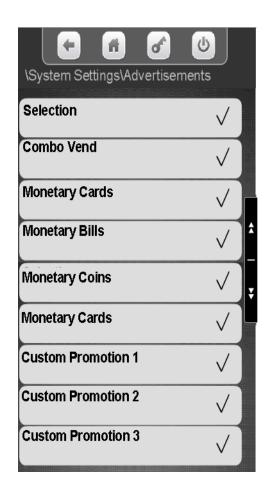


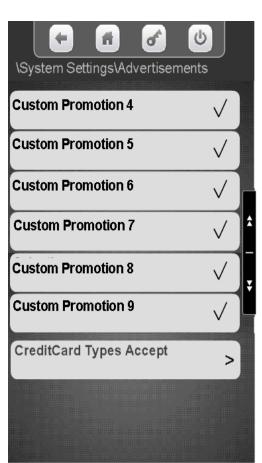
Touch Advertisements to modify what messages are shown on the idle screen loop.

	5
System Settings	2/2
LED Color	Plus
Idle Timeout	Blue
Advertisements	30s
Custom Messages	>
Automatic Reboot settings	>
Start Scree Renewal (2hrs)	>
ConfigVersion	
Refrigeration Settings	erated
Transportation Settings	>
CAB Lights When OOS	Off



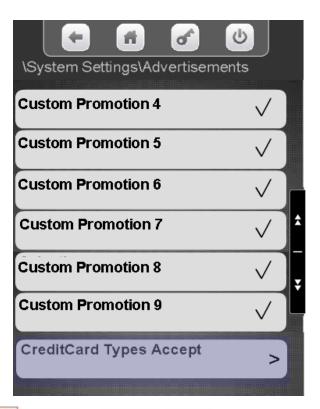
- Touch a menu bar to add or remove a checkmark.
- Items with a checkmark will be shown on the Idle Screen Loop when enabled in the appropriate menu.
- Choose Credit Card Types
 Accepted to enable/disable
 credit and ID card messages.







Choose Credit Card Types Accepted to enable/disable card messages.



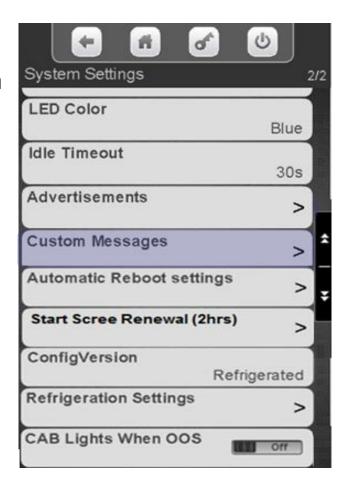
Touch a card type to add or remove a checkmark. Items with a checkmark will be shown on the Idle Screen Loop. Selecting ID will show a generic picture of a credit card in the idle loop.

	(b)
\CreditCard Types Accept	
Visa	\checkmark
Master Card	✓
American Express	\checkmark
Discover	\checkmark
ID	



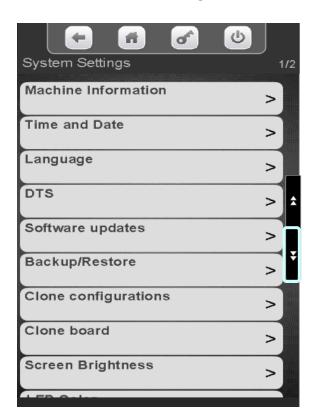
Custom Messages

- This menu gives the user to option to both create and enable messages for both the Idle screen and the vending screen independently.
- These Messages can be mixed Text or Numeric characters.





Touch the down arrow on the right side of the display to scroll down to Custom Messages.

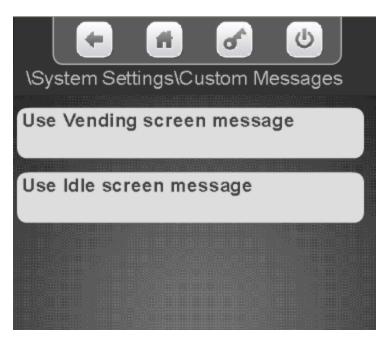


Touch to create, change or assign a Custom Message

System Settings	2/2
LED Color	
Idle Timeout	
Advertisements >	
Custom Messages >	=
Automatic Reboot settings >	Î
Start Scree Renewal (2hrs) >	
ConfigVersion Refrigerated	
Refrigeration Settings >	
CAB Lights When OOS	



Touch a menu bar to add a checkmark to enable a Custom message. Adding a checkmark will automatically bring up the next screen



Touch Vending screen message or Idle screen message to create your Custom Message.





- •A keypad will appear on the screen along with a window to enter the message.
- •Use the keypad to enter the information.
- Press Done when finished
- is your backspace key.
- is your exit key.
- ¹2₃ switches the keypad to numeric.
- Aa switches the keypad between uppercase & lowercase.
- •#@ switches the keypad to symbols and numbers.

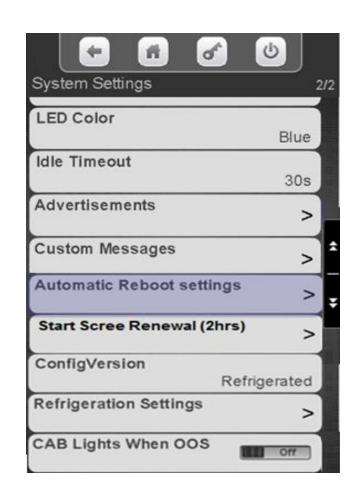




System Settings Automatic Reboot Settings

Automatic Reboot Settings

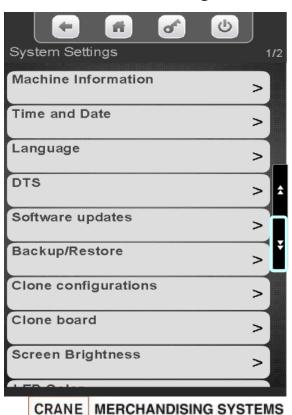
- As a default the machine is set to reboot itself every evening at 2:00 am local time.
- This menu allows you to turn off or change the parameter of the nightly reboot.
- If your machine is equipped with cashless, this setting must be left on the default setting.
- If you find this setting interferes with customer activity, contact the Streamware team to make adjustments to this setting.



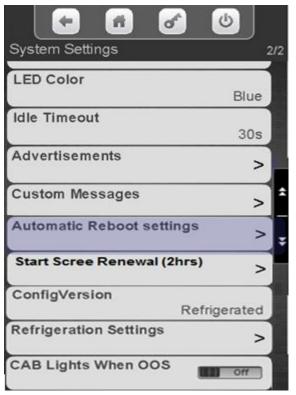


System Settings Automatic Reboot Settings

Touch the down arrow on the right side of the display to scroll down to Automatic reboot settings.



Touch Automatic reboot settings to enter the menu.



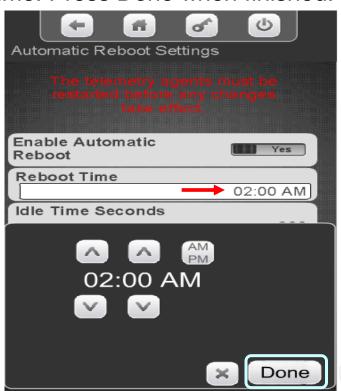
Touch Enable Automatic
Reboot to toggle between
Yes and No. Any changes will
cause the machine to reboot
on door closure.





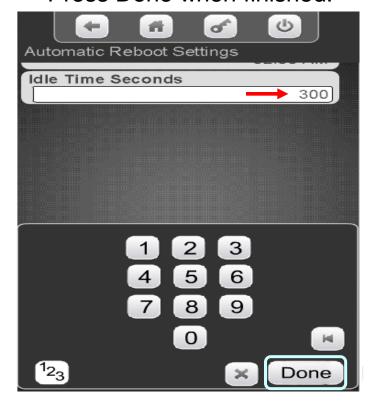
System Settings Nightly Reboot Setting

Touch Reboot time and a keypad will appear on the screen allowing you to use the arrow keys to change the Reboot time. Press Done when finished.



Touch Idle Time Seconds and a keypad will appear on the screen. Use the keypad to enter a new time in seconds.

Press Done when finished.





System Settings Start Screen Renewal

Screen Renewal

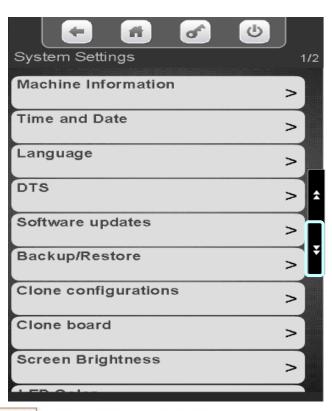
- The Screen Renewal Menu Item allow you to refresh the screen if it has is blurry or has become burned or are seeing image retention from one screen to another.
- One this menu is enabled the screen will go white for 2 hours and prompt Screen renewal in progress, at the end of 2 hours the machine will go back to the normal Idle Screen Messages.
- If you need to interrupt the Screen Renewal process once it has started turn the power switch on the machine off an back on.





System Settings Automatic Reboot Settings

Touch the down arrow on the right side of the display to scroll down to Start Screen Renewal.



Touch Start Screen Renewal to start the 2 hour screen Renewal process

System Settings	2/2
LED Color	Blue
Idle Timeout	30s
Advertisements	>
Custom Messages	> 2
Automatic Reboot settings	>
Start Scree Renewal (2hrs)	>
ConfigVersion Refrige	erated
Refrigeration Settings	>
CAB Lights When OOS	Off

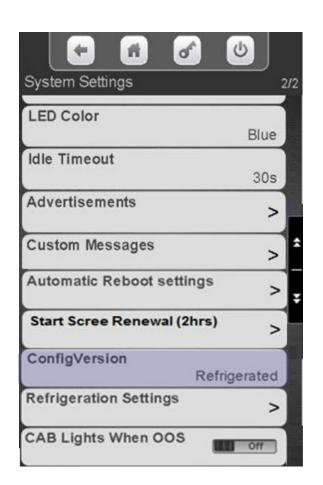


System Settings Configuration Version

Setting the Machine Type

The choices are Ambient, Refrigerated, European Control, Non Perishable or Chilled.

- Ambient will always be selected when a refrigeration unit is not present. When Ambient is selected the Refrigeration Settings Menu Bar will not appear.
- When Refrigerated is chosen the temperature is settable from 33-38°F (1-3°C) and the health control menu will be available.
- When European Control is chosen the temperature is settable from 33-41°F (1-5°C) and the health control menu will be available.
- When Non Perishable is chosen the temperature is settable from 33-45°F (1-7°C) and the health control menu will be not available.
- When Chilled is selected the settable temperature range is from 49-69°F (9-21°C) and the health control menu will <u>not</u> be available.





System Settings Configuration Version

Touch the down arrow on the right side of the display to scroll down to Configuration Version.



Touch Configuration Version to enter the menu.



Touch to select the desired Configuration Setting. Do not use European Control in the US. Touch Done to save!



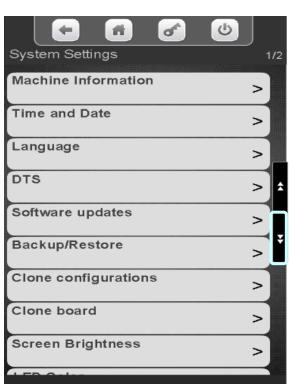


System Settings Refrigeration Settings

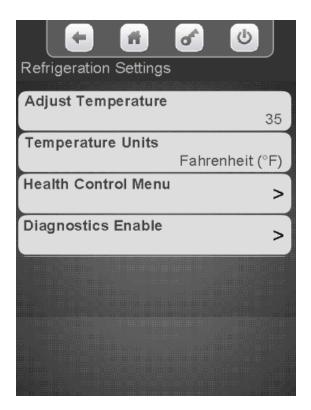
Touch the down arrow on the right side of the display to scroll down to Refrigeration Settings

Touch Refrigeration Settings to enter the menu.

Touch a menu bar below to set the Refrigeration Settings.







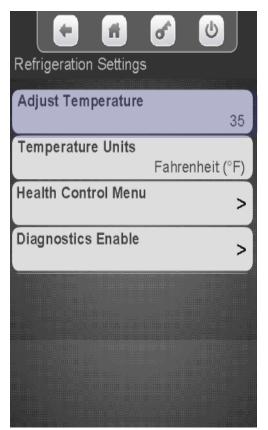


Refrigeration Settings – Adjust Temperature

Setting the Temperature Range

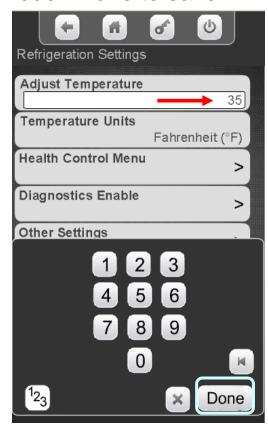
- In Ambient machines this menu will not appear.
- Refrigerated temperature is settable from 33-38°F (1-3°C) and the health control menu will be available.
- Non Perishable temperature is settable from 33-45°F (1-7°C) and the health control menu will not be available.
- Chilled temperature range is from 49-69°F (9-21°C) and the health control menu will not be available.

Touch Adjust Temperature



On the keypad enter the desired Temperature.

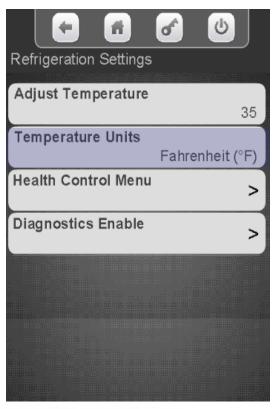
Touch Done to save!



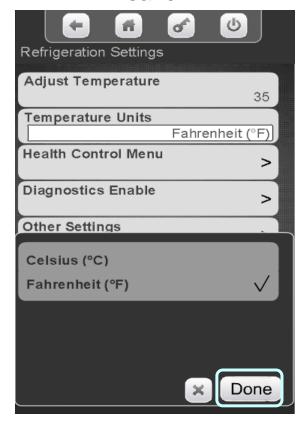


Refrigeration Settings – Temperature Units

Touch Temperature Units to change the viewable Temperature between Fahrenheit and Celsius



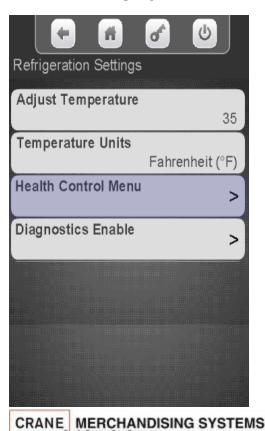
Touch Fahrenheit or Celsius. Touch Done to save!



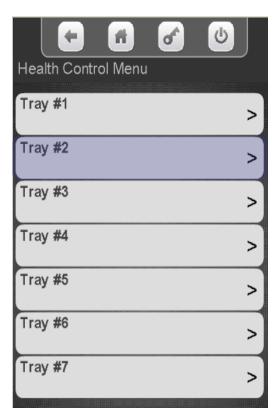


Refrigeration Settings – Health Control

Touch Health
Control to enter the
Menu



On the display Touch the tray number you wish to view or change.



All available selections are shown. Touch a selection to add a checkmark to the selections that are active for Health Control.





Refrigeration Settings – Diagnostics enable

The Diagnostic Enable menu allows you to turn on or off the warning and errors reported by the evaporator sensor and condenser sensor. These errors are reported when the door is opened if they exist. The default is on for both warnings & errors, and an Error is more severe than a Warning.

High Side errors & warnings are created when the Condenser Outlet Sensor is out of Range, most likely due to blocked inlet screen, dirty condenser, or condenser fan failure

- Warning: If the Condenser Outlet Sensor is greater than 125°f (52°c) for the 30 Minutes.
- Error: If the Condenser Outlet Sensor is greater than 150°f (66°c) for 5 minutes, cooling is disabled. The error will need needs to be manually reset.

Low Side errors & warnings are created when the unit goes into Low-Temp Defrost; where the Evaporator Coil Sensor is less than 10°f (-12°c) too frequently. Most likely due to an obstructed evaporator coil, low charge, or an evaporator fan failure.

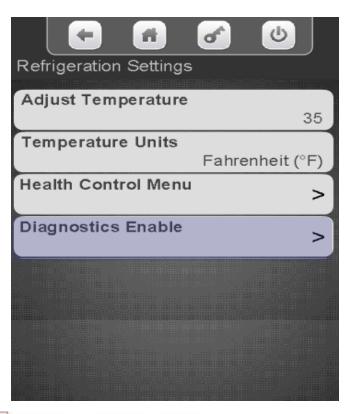
- Warning: If the unit goes into Low-Temp Defrost at 10°f (-12°c) in more than 5 minutes, but less than 75 minutes after a previous defrost cycle.
- Error:, If the unit goes into Low-Temp Defrost 10°f (-12°c) in less than 5 minutes after a previous defrost cycle, cooling is disabled. The error will need needs to be manually reset.





Refrigeration Settings – Diagnostics Enable Menu

Touch Diagnostics Enable to enter the Menu.



Each Warning or Error can be toggled between On and Off individually by touching the any of the menu bars below

	5
Diagnostics Enable	
Cui-le Cide West in the	
High Side Warnings	On
Low Side Warnings	
	On
High Side Errors	
	On
Low Side Errors	
	On



System Settings Cab Lights When OOS

Touch the down arrow on the right side of the display to scroll down to Cab Lights when Out of Service (OOS)



Touch CAB Lights When OOS to toggle between Yes and NO. Choosing Yes will cause the cabinet lights to turn off anytime the machine is out of Service

e 6	(b)
System Settings	2/2
LED Color	Blue
Idle Timeout	
Advertisements	30s
Custom Messages	> =
Automatic Reboot settings	> -
Start Scree Renewal (2hrs)	>
ConfigVersion	rigerated
Refrigeration Settings	>
CAB Lights When OOS	Off
	4



Security Codes

The Security code menu

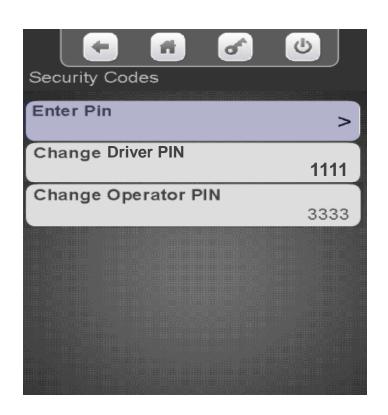
- The first menu allows you to enter an existing PIN number to access other menus.
- The second and third menus allows you to change the existing PIN numbers.
- Warning: If you change the PIN, don't forget it, you won't be able to access the Service Mode.





Security Codes Enter Pin

Touch Enter the existing pin



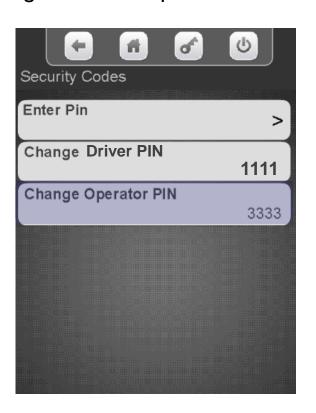
The Pin screen will appear, enter your existing PIN.





Security Codes Change Driver or Operator Pin

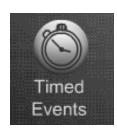
Touch a menu bar to change the existing Driver or Operator PIN number



Enter your new Pin Number using the keypad. Touch Done when finished!

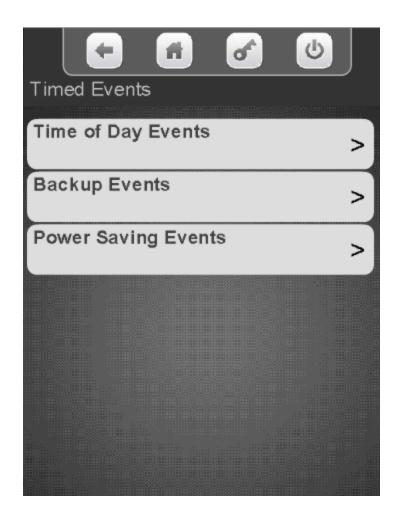


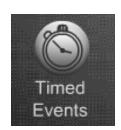




Timed Events Menu allows you to:

- Create Time of Day Events including Promotions.
- Backup your Current Events
- Create Power Saving Events



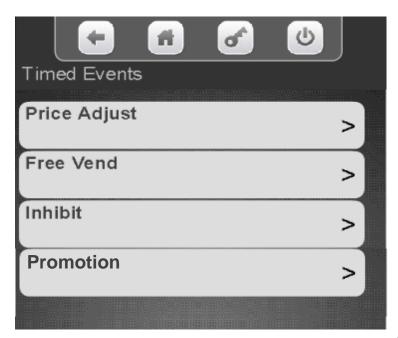


Timed Events Time of Day Events

Time of Day Events

- When you choose Time of Day Events the following four options will appear on the screen.
 - Price Adjust
 - Free Vend
 - Inhibit
 - Promotions

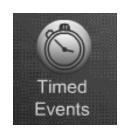






Time of Day Events – Order of Precedence

- Timed events are arranged in an order of precedence, in other words, one has priority over another.
- The hierarchy of Time of Day events is:
 - 1. Inhibit
 - 2. Free Vend
 - 3. Promotion
- This means that if an Inhibit Event affecting all selections is active, and a Free Vend event or a Promotion event are scheduled, when the Inhibit event is scheduled, the Free Vend and the Promotion event are temporarily disabled until the end of the Inhibit event.
- There are other settings within the machine that could affect the value of the discount provided. If you find that the discount amount appears incorrect, check these settings.
 - Multi-Vend Discount is located in the Special Vend Mode menu, and is a percentage discount provided to a customer for purchasing multiple items in a single transaction
 - Cash Discount is located in the Monetary menu, and provides a defined cash discount to customer who purchase a selection using cash (coins, bills or stored value card) instead of a credit card.



Timed Events Helpful Tips

Helpful Tips

- All events will not have the same menus. As an example, a Price Adjust Event will have a discount feature that a Power or Backup event would not have.
- In some cases some menus will not be present until another menu is enabled.
- Events are settable daily or weekly. When daily is chosen you choose the days of the week so the event must not cross over midnight. As an example, if you were to set a power event from 10:00 PM to 6:00 AM that would be two separate events. The first from 10:00 PM to 11:59 PM and the second from 12:00 AM to 06:00 AM.
- All Events will have a Save This Event menu bar. This is used to save the event after you have set all the other menus in an event. Save your changes frequently.
- If your event has a large menu that continues on to a second screen, use the up and down arrow key to scroll back up to the first screen to save. If you use the exit key you will be starting over.



Time of Day Events – Price Adjust

Price Adjust

- The Price Adjust menu allows you to set times and/or day(s) when the prices will adjust automatically.
- The menu bars on the right contain all the options that need to be set and may change depending on your selections.
- Price adjustments can be set by value or discount by changing the Price Adjust Type.
- Price adjust has one menus that is not used in any other event, that menus is:
 - Price Adjust Type This menus allow you to set to either Discount or Surcharge for the event.
- Save your changes often by choosing save this event. If you exit without choosing save this event your changes will be lost!

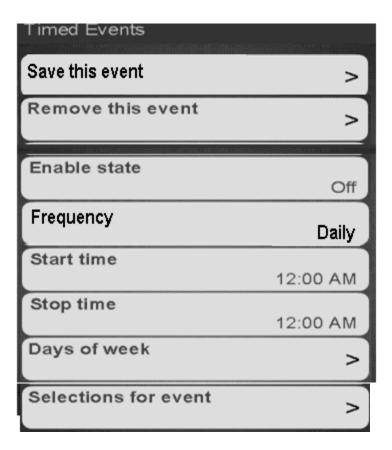




Time of Day Events – Free Vend

Free Vend

- The Free Vend menu allows you to set a time and/or day(s) when the Machine will go on Free Vend automatically.
- The menu bars on the right contain all the options that need to be set up for your event and may change depending on your selections.
- You can choose the selections for your free vend event.
- This Menu is different from Winner mode and all selections chosen will be free for the times and days set.
- Save your changes often by choosing save this event. If you exit without choosing save this event your changes will be lost!

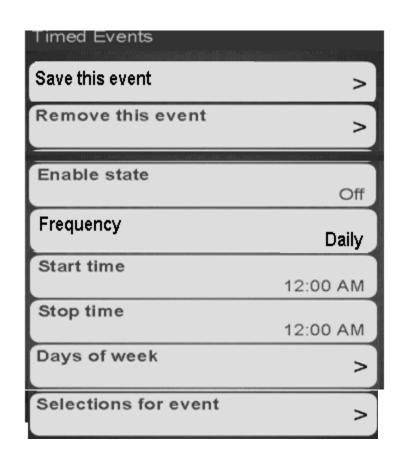




Timed Events Time of Day Events – Inhibit

Inhibit

- The Inhibit menu allows you to set times and/or day(s) when specific selections or all selections in the machine are not available for purchase.
- You can set multiple Inhibit events per day if necessary.
- The menu bars on the right contain all the options that need to be set up for your event and may change depending on your selections.
- Save your changes often by choosing save this event. If you exit without choosing save this event your changes will be lost!





Time of Day Events – Promotions

Promotions

 Promotions allows you to choose one or more pre-defined promotions to offer the customer a discount for purchasing multiple items during a single transaction.

Each promotion has a pre-programmed advertisement that advises the

customer that these promotions are available.

The recommended maximum number of Promotions

stored is six.

Available Pre-Defined Promotions
Buy any 2 and save X
Buy any Snack and any Drink and Save X
Buy any Bar and any Drink and Save X
Buy any 2 Snacks and Save X
Buy any 2 Bars and Save X
Buy any 2 Drinks and Save X
Buy any 2 Items and Get 1 FREE (shown above)
Buy any 3 Items and Save X
Buy Any Food Item with a Snack and a Drink and Save X





Time of Day Events – Promotions

Promotions, continued

- The matrix at the right displays the associated graphic for each of the predefined Promotions.
- The number to the left of each description corresponds to the assigned Custom Advertisement found in the System Settings/ Advertisements menu.
- If the required custom message is disabled, the promotion is still active, but the customer is not advised that a promotion is active, and available.
- When the assigned Custom
 Advertisement is disabled, the View
 Promotions menu item is not shown on the Make Selection idle screen.



1 Buy any 2 and save X



Buy any Snack and any Drink and Save X



Buy any Bar and any
Drink and Save X



4 Buy any 2 Snacks and Save X



5 Buy any 2 Bars and Save X



Buy any 2 Drinks and



7 Buy any 2 Items and Get 1 FREE



8 Buy any 3 Items and Save X



Buy Any Food Item with a Snack and a Drink and Save X

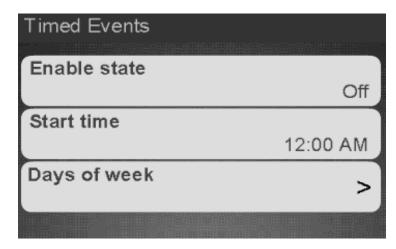


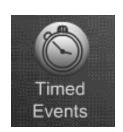
Timed Events Backup Events

Backup Events

- The backup Events Menu allows you to create a backup of the events you have created.
- This Menu also allows you to program the time and day or days you wish to backup the Events.







Timed Events Power Saving Events

Power Saving Events

- The Power Saving Events Menu allows you to create events where the lighting will turn off to save energy.
- This Menu allows you to program the time and day or days you wish the Power Saving Events to be active.
- There is one additional feature that is only in the Power Saving Events Menu. This feature allows you to set the number of minutes of inactivity before the machine goes into Power Saving Mode.
- Inactivity minutes are settable from 1 to 600.

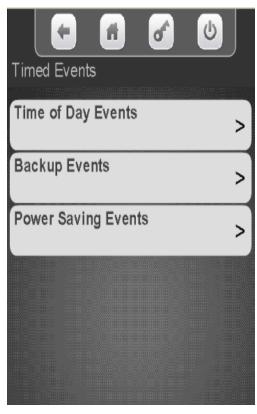






Timed Events Create New Event

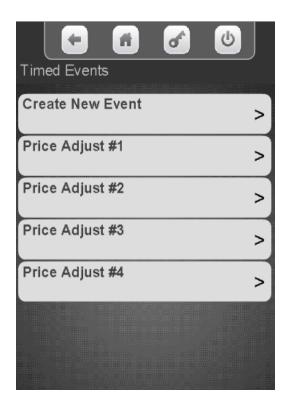
Touch the type of event you wish to Create



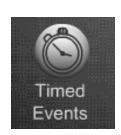
If you choose Time of
Day you will need to
choose the event type, all
other choices will take
you to the next screen



Touch Create New Event or select an existing event to modify.







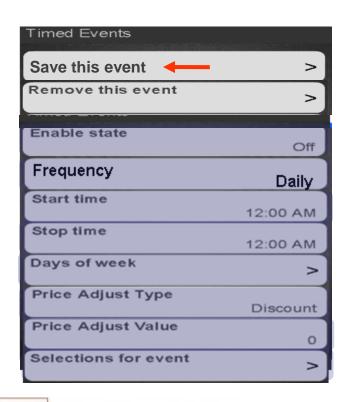
Timed Events Create New Event

Program menu all options before saving.

Once the event details are programmed

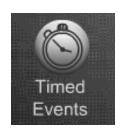
Touch Save this event to save or your

changes will be lost!



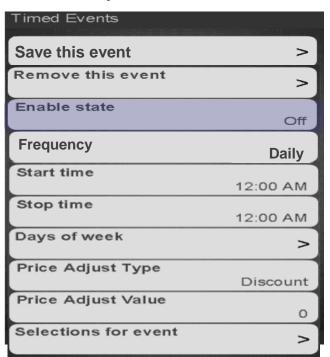
Touch Remove this Event to delete the event you are working on. Be aware if you remove event 1 and you have multiple events, what was event 2, now will become event 1. Also there is no conformation screen for removing an event so be careful!

Timed Events	
Save this event	>
Remove this event	>
Enable state	Off
Frequency	Daily
Start time	12:00 AM
Stop time	12:00 AM
Days of week	>
Price Adjust Type	Discount
Price Adjust Value	0
Selections for event	>



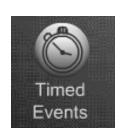
Enabling & Frequency of the Event

Touch Enable State to toggle the state of the event between Off and On. Choosing off allows an event to remain stored in the machine for future use – it is not necessary to remove the event.



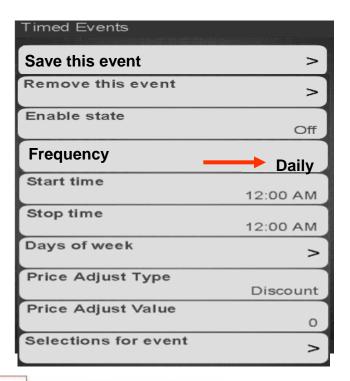
Touch the display to toggle the Frequency of the event between Daily and Weekly.

Timed Events	
Save this event	>]
Remove this event	>
Enable state	Off
Frequency	Daily
Start time	12:00 AM
Stop time	12:00 AM
Days of week	>
Price Adjust Type	Discount
Price Adjust Value	0
Selections for event	>



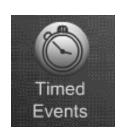
Timed Events Frequency of the Event

Note: When you choose
Daily you have a choice of
a start time, stop time and
days of the week



Note: When you choose Weekly you have a choice of a start day, start time, stop day & stop time. Because there is one additional menu, Price Adjust has moved down.

Timed Events	
Save this event	>
Remove this event	>
Enable state	Off
Frequency	── Weekly
Start Day	Monday
Start Time	00:00
Stop Day	Friday
Stop Time	23:59
Price Adjust Type	
Price Adjust Value	



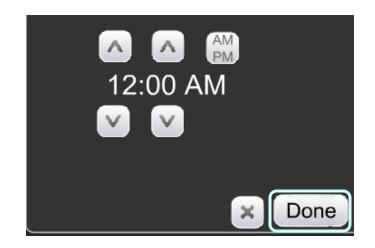
Timed Events Setting Start Time

Touch Start Time on the display to enter the time you want the event to start. As an example, if this is an inhibit event set for all selections, this is the time the machine will stop accepting money.



Touch the arrows key above and below the hour or minutes to change the time. Touch the AM/PM to toggle. If 24 hour clock was selected in the Time/Date menu under System Settings AM/PM will not appear.

Touch Done when finished! Press X to exit without changing the time.







Telemetry

The Telemetry Menu is used to set up your:

- Integrated Wireless Radio
- Cashless
- Remote DEX Alerts
- Mesh Network.
- The Telemetry Menu also allows you to send a DEX file on demand in addition to the scheduled times.
- A welcome packet was sent with your machine that will provide additional information on configuring and setting up your account information for Telemetry.

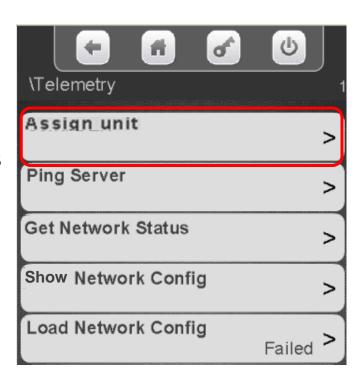




Assigning a Unit

Before assigning the unit, you must establish an account with the card processor and Crane Streamware. All of the information and Applications are included in the Welcome packet that came with the machine. If you have any questions, contact your Crane Distributor or Sales Person.

- When the customer account is established, Crane Streamware will email the customer configuration (VIX) file to upload and assign the Merchant Media.
- Create a folder on your USB flash drive named atlas. Copy your VixConfigData.cfg file to this folder.





Verify the radio is connected to USB1 (top Left USB port). USB1 is the high-power USB port and the only one that will support the radio.





Access the service mode by entering PIN 3333

Insert the Flash Drive with the VixConfigData.cfg file into USB 3 on the control board

Touch Telemetry on the screen

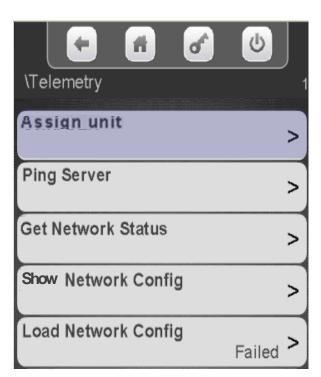




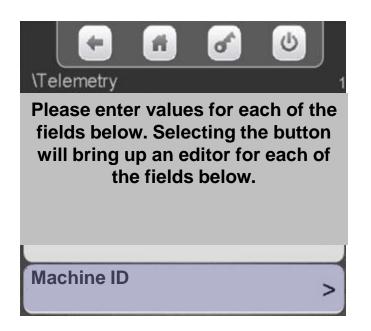




Touch Assign Unit, the VMC will update the customer information from the flash drive. Once this is complete, the Media Merchant will reboot. This will take a few minutes.



When the machine reboots the following screen should appear.
Touch the display to enter a
Machine ID number



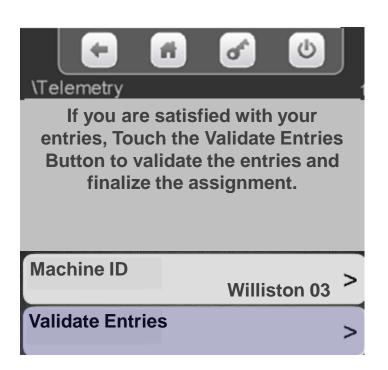


- A keypad will appear on the screen along with a window to enter the Machine ID.
- Use the keypad to enter the information.
- Touch Done when finished
- is your backspace key.
- is your exit key.
- 123 switches the keypad to numeric.
- Aa switches the keypad between uppercase & lowercase.
- #@ switches the keypad to symbols and numbers.



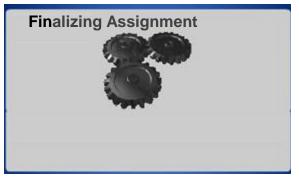


After Touching Done the following screen should appear with the ID number in the right hand corner. Touch Validate Entries to finalize assignment.



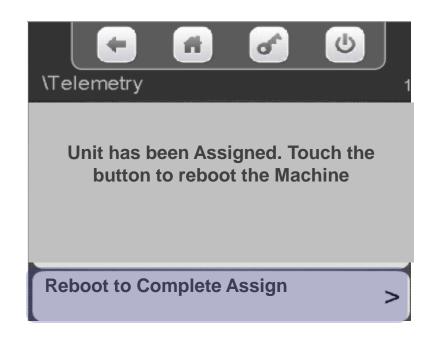
The display will prompt Validating Entries followed by Finalizing Assignment.







- Touch Reboot to complete assignment process.
- Once the reboot process is complete remove the flash drive from the USB port and test.
- The top menu bar in the Telemetry Menu will now become Send DEX.
- You will also now have a menu option to Unassign the unit.
- It is important that if for any reason you change the board you Unassign the unit and assign the new board.

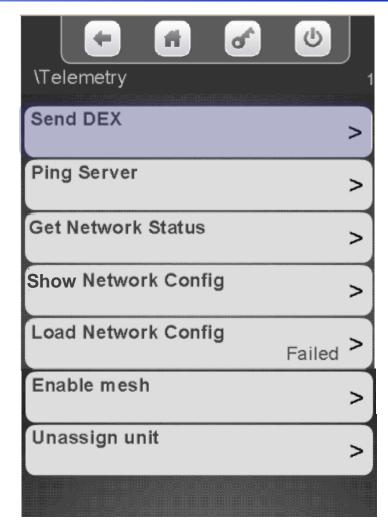




Telemetry Send Dex

Send Dex

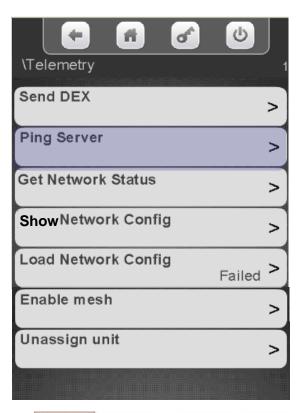
- Once Telemetry is assigned the first menu on the screen will change to Send DEX.
- Send DEX is also available in the route drive access menu by entering PIN 1111 and selecting Telemetry.
- Touch the Send DEX menu bar to send a DEX file wirelessly when servicing the machine.





Telemetry Ping Server

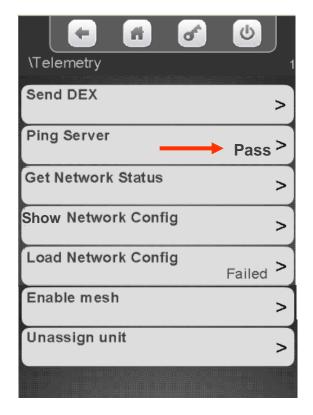
Touch Ping Server to Ping the Server.



The yellow LED on the radio should illuminate and the screen below will show up until Pinging is complete



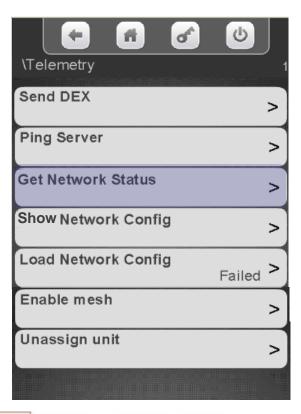
The results Pass/Fail will display to the right of Ping Server



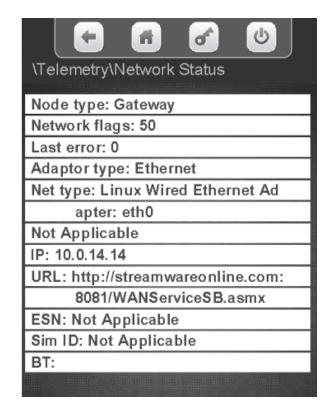


Telemetry Get Network Status

To view the current network status touch Get Network Status.



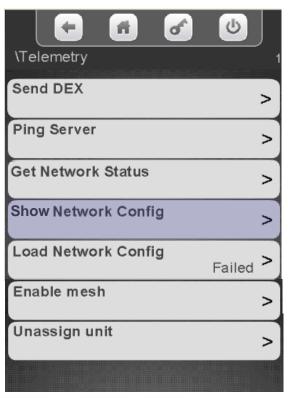
The screen will show the current Network Status.



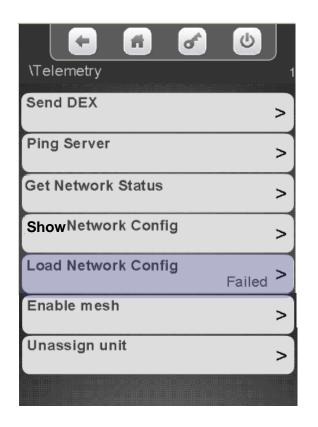


Telemetry Get Network Status

Touch Show Network Config



Touch Load Network Config

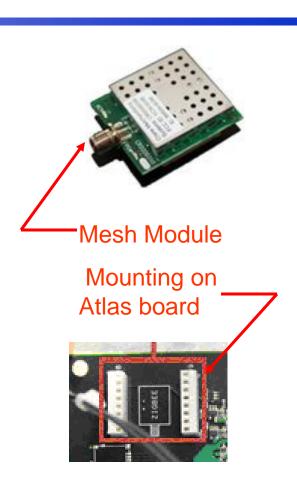




Telemetry Enable Mesh

Mesh Networking

- The Mesh Module is mounted on the top left corner of the Atlas Controller.
- Mesh uses a proprietary wireless network that CMS uses to communicate to other Mesh devices.
- This network is used for Telemetry device, Client to Gateway communication.
- Mesh allows machines in a area with bad cellular signals to send information to a host machine with a radio, the Host machine becomes a Gateway to send the information for the group of machines.
- Mesh can also communicate with any machine that has Navigator installed which includes a Mesh module.

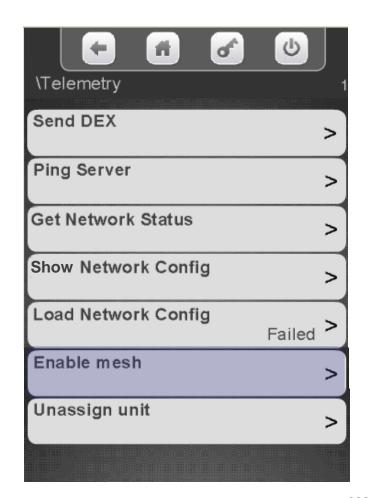




Telemetry Enable Mesh

Mesh Networking

- Once the Mesh and radio are installed you will have an option to Enable Mesh.
- Make sure the antenna used with the Mesh Module has a connector with no pin in the center. Connectors with a pin in the center are for the radios only.
- Gateway units should always be set up first.





Firmware Information

Firmware Information

Touching Firmware on the keypad brings up an information screen that displays the following information:

- All the MDB peripherals in the machine including manufacturer, serial number and software version.
- The software version of the SureVend™ board.
- The software version of the I/O board.
- The software version of the LE board.
- The serial number of the Atlas control board, along with the software version, and kernel file version.

	of	b
Firmware Information		
Bill Validator		
disconnected	-/-	-/-
Card Reader		
disconnected	-/-	-/-
Coin Mechanism		
disconnected	-/-	-/-
LE Board	Ver.	Kernel
120400039	10.2.0	2.6.34_
I/O Board Version		0222
SureVend Version		0103

Error Description	Probable Cause	Possible solutions
tuck Keys Fatal	Stuck keys on keypad or shorted connections/harness	Check connectors to be properly installed Check harness for damage Replace the keypad
No Monetary Device Fatal	The control board has not been able to detect a working monetary device	Check connectors to be properly installed Check harness for damage Check for faulty bill validator/harnessing Retest without the bill validator and harnessing installed Replace the coin mechanism
oin Mech No Comms	No Communications are occuring between the coin mechanism and the control board	Check connectors to be properly installed Check harness for damage Retest without the bill validator and harnessing installed Replace the coin mechanism
Coin Mech ROM Error	Coin Mech ROM Error	Replace the coin mechanism
Coin Mech Acceptor Unplugged	Coin Mech Acceptor Unplugged	Check the connections within the coin mechanism Replace the coin acceptor Replace the coin Mechanism
Coin Mech Acceptor Jammed	Coins or other items are stuck in the acceptor causing the gate to remain open	Remove the coins or other items from the acceptor Replace the acceptor Replace the coin mechanism
Coin Mech Payout Jammed	Coin pay out motor or solinoid is stuck in cycle	Check for and remove bent coins or other items causing the jam Replace the coin mechanism
Coin Mech Sensor Error	Bad coin mechanism sensor	Check for an item causing a blockage and remove Replace the coin mechanism
Coin Mech All Tubes Error	Coin mechanism not sensing any pay out tubes	Check for proper pay out cassette placement Replace the pay out cassette Replace the coin mechanism
Coin Mech Tube Error	Coin mechanism not sensing a pay out tube	Check for proper pay out cassette placement Replace the pay out cassette Replace the coin mechanism
Coin Mech Disabled	Coin mechanism has been disabled by the board	Power down the machine and re-start Remove bill validator and/or card reader from system Replace the coin mechanism Reset the control board Replace the control board
xec Price Error	Executive coin mechanism error	Check for a price set outside of allowed parameters Replace executive coin mechanism

Error Description	Probable Cause	Possible solutions
No Monetary Device	No monetary device detected by the board	Check connectors to be properly installed Check harness for damage Retest without the bill validator and harnessing installed Replace the coin mechanism
Coin Return Motor Not Present	Control board not sensing the presence of a coin return motor	Check the connection J6 on the I/O board to the coin return motor Home the coin return motor Replace the coin return motor Check for damage to harnessing Reset or replace the control board
Coin Return motor Run Time Timeout	The board has determined that the coin return motor should have arrived at home position, but it has not	Check the connections to the coin return motor Home the coin return motor Replace the coin return motor Check for damage to harnessing Reset or replace the control board
Coin Return Motor Short Circuit	Coin return motor has shorted out	Check connections and harnessing for damage Replace the coin return motor
Coin Return Motor Drive Failure	The coin return motor is not engaging the coin return arm on the coin mechanism	Check for damaged or missing drive linkage Check for proper mounting of coin mechanism Check for damage on coin mechanism pay out parts
Low Change	The coin mechanism has reported a low or empty condition in one or more of the coin pay out tubes	Add coins to the tubes using the coins in/out screen in the monetary section of the service modes Do vends with coins to add coins to the tubes Replace coin mechanism
No IO Comm	The control board is not communicating with the I/O board	Check for proper connections on the I/O board Check for proper connections on the control board Check for damage to the harnessing Remove the monetary devices from the system and check for restored communication Replace the I/O board Reset and/or replace the control board
Please Wait	The board is asking you to wait while it completes an ongoing operation	Wait for the board to finish the operation Re-start the machine and let it re-boot Remove monetary devices and re-start the machine Reset and/or replace the control board
No Selections Available	The control board is not sensing any motors available for use	Check for motors to be homed Check for motors and harnesses to be connected Check for power to I/O board Replace I/O board Reset and/or replace control board

Error Description	Probable Cause	Possible solutions
All Selections Disabled	The control board has disabled all the motors in the machine	Check SureVend settings and operation Check motors to be homed and connected properly Check for a timed event to be enabled causing the condition Check/replace I/O board Reset/replace control board
IO Board Voltage	The control board has detected improper voltage for I/O board operation	Check voltage to the machine Check voltage to the I/O board Replace the I/O board
Init Failed	The control board has failed to initialize successfully	Power down and re-start the machine Power down, disconnect monetary devices and re-start the machine Replace the control board
# XXX Motor Error	The board has detected a problem with a selection motor (XXX indicates the selection involved)	Check harness connection Check for damage to the tray harnessing Check for damage to channel harnessing if applicable Replace the snack motor
Health Control Active	The control board has detected a tempereture condition which is outside the allowed parameters and has stopped allowing sales of involved products	Check for clean screens and condenser Check for acceptable clearance behind the machine Check temperature sensor for accurate readings Check refrigeration system for proper function
SureVend Comm Error	The control board is not communicating with the SureVend board system. Can be fatal or non-fatal depending on SureVend settings (optional or must)	Check the harness connections between the SureVend boards and to the I/O board at J3 Check the harnesses for damage (crushed, cut, etc.) Check the right side SureVend board to be an updated board and replace if it is not Replace the SureVend boards
SureVend Is Blocked	The control board has determined that a sureVend sensor is blocked. Can be fatal or non-fatal depending on SureVend settings (optional or must)	Check the delivery bin for items that may have hung up and blocked a beam Check harnesses and connections on the SureVend boards Check calibration on the SureVend boards Replace the SureVend boards
SureVend Calibration Error	The control board has calculated a value which is not possible. Can be fatal or non-fatal depending on SureVend settings. (optional or must)	Check for damage to the SureVend boards or harnesses Replace the SureVend boards
Anti Jackpot Error	The control board has detected multiple attempts to vend a product from a selection and has not seen a successful delivery	Check SureVend calibration Check SureVend function Check motor function

Error Description	Probable Cause	Possible solutions
# XXX Sold Out	The control board has determined that a selection is sold out. (XXX indicates the selection number involved)	Check to see that there is product Check SureVend calibration Check SureVend function Check motor function
Factory Init	An attempt to restore factory default settings has been unsuccessful	Power down, power up and try again Power down, remove monetary devices and try again Replace the control board and reset
Card Reader No Comms	The control board is not able to communicate with the card reader	Check connections for the card reader Check for damage to the harness (cut, pinched, etc.) Replace the card reader Reset the control board Replace the control board
Card Reader Comms Error	The control board is not communicating with the card reader	Check the connections and harness for damage Check the settings on the board and on the reader Replace the reader Reset and/or replace the board
Bill Validator No Comms	Tthe control board is not communicating with the bill validator	Check the connections and settings for the validator Replace the harness Replace the validator
Bill Validator Motor Error	The validator has reported an error to a drive motor within the validator	Check for a broken belt or blockage Replace the bill validator
Bill Validator Sensor Error	The validator has reported an error to a sensor within the validator	Check for a sensor blockage Replace the bill validator
Bill Validator ROM Error	an error has been detected in a main chip in the validator	Replace the bill validator
Bill Validator Acceptor Jammed	A jam in the bill path has been detected	Check the bill path for items that are blocking sensors Check to see that the bill path gates are not open Replace the bill validator
Bill Validator Stacker Error	An error has been reported concerning the bill box	Check the bill box to be mounted to the validator properly Replace the bill box Replace the bill validator
Bill Validator Stacker Full	The bill validator is reporting that the bill box is full of bills	Check for bills and remove them Replace the bill box Replace the bill validator
Bill Validator Disabled	The control board has disabled the bill validator	Check for coins in the payout tubes of the coin mechanism Check for a fault with the bill validator
Check Winner Prize	The control board has detected a failed winner vend	Check for the presence of product Check motor function
POWER OFF	The control board has detected a power outage	Check the power cord and plug Check the circuit breaker Check the On/Off switch in the machine

Error Description	Probable Cause	Possible solutions
DOOR OPEN	The control board is reporting that the door has been opened	Check to see if someone has been in the machine Check the door switch Check switch connections and harnessing for damage
Power Save mode	The machine is in a power save event	Let the event complete Modify or eliminate the event in the software settings
Return Air Temperature Sensor Error	The control board has recorded sensor readings that are outside of allowed parameters	Check the readings for high or low temperatures Check for a defrost event Check for ice buildup on the evaporator
Evaporator Temperature Sensor Error	The control board has recorded sensor readings that are outside of allowed parameters	Check the readings for high or low temperatures Check for a defrost event Check for ice buildup on the evaporator Check for evaporator fan function
Cabinet Temperature Sensor Error	The control board has recorded sensor readings that are outside of allowed parameters	Check the temperature readings against a thermometer, placed at near the same level as the sensor, for accuracy Replace the sensor
Condenser Temperature Sensor Error	The control board has recorded sensor readings that are nearing or outside of allowed parameters	Clean screens and condenser Check to see that the machine has six inches of clearance from the wall Replace the sensor
Condenser High Side Warning	Temperatures at or nearing 150 degrees are being reported	Clean screens and condenser Check to see that the machine has six inches of clearance from the wall Replace the sensor
Condenser High Side Error	Temperatures of an unlikely nature are being reported (such as 999 degrees) Cooling functions are stopped	Check the temperature sensor and connections Replace the temperature sensor
Evaporator Coil Low Side Warning	The control board has recorded sensor readings that are nearing or outside of allowed parameters	Check for evaporator fan function Check for ice buildup on evaporator Check for excessive moisture
Evaporator Coil Low Side Error	The control board has recorded sensor readings that are outside of allowed parameters. Cooling functions are stopped	Check for evaporator fan function Check for ice buildup on evaporator Check for excessive moisture Replace the temperature sensor
IO Even Input Short	The I/O board is reporting that an even input switch has shorted out	Check for motor errors (out of home position) replace the I/O board
IO Odd Input Short	The I/O board is reporting that an odd input switch has shorted out	Check for motor errors (out of home position) replace the I/O board
Sold Out Machine	The control board has determined that all selections in the machine are sold out	Check SureVend settings and function Check for vend motor function Check harnessing connections Check for board function (selection configuration)

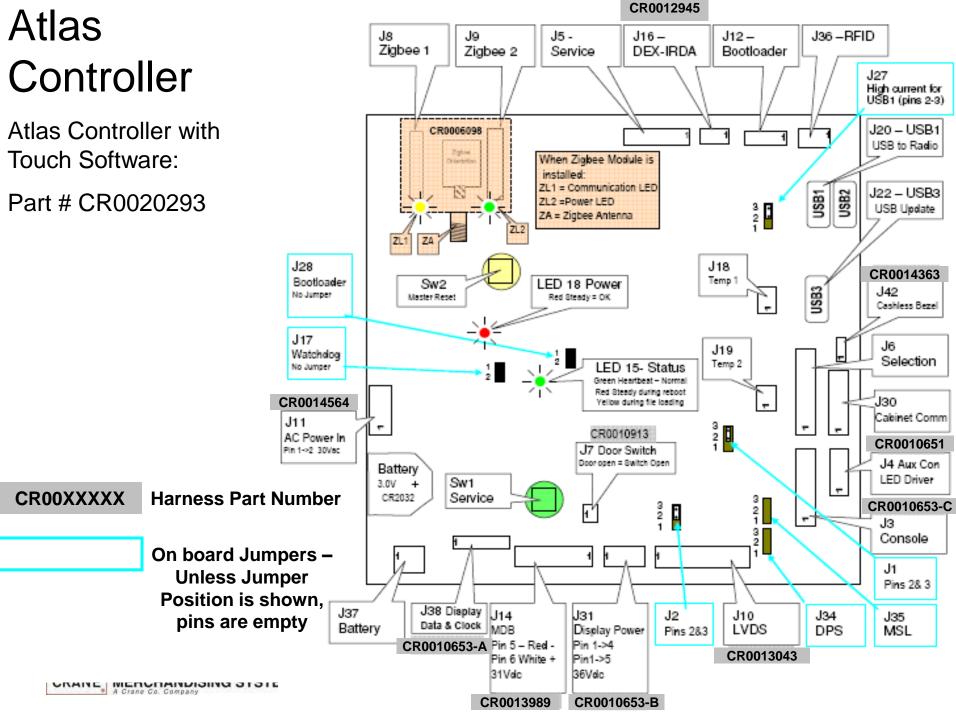
Error Description	Probable Cause	Possible solutions
Recycler Motor Problem	A problem has been detected with a motor inside the bill validator	Check for an obstruction or blockage within the recycler which is stopping the motorfrom completing its cycle Replace the bill validator
Recycler Sensor Problem	A problem has been detected in a sensor within the recycler	Replace the recycler cassette Replace the bill validator
Recycler Jam	The recycler is unable to function	Check for an obstruction or blockage which is preventing the recycler from completing its cycle Replace the recycler cassette Replace the bill validator
Recycler Checksum Error	A communications error has been reported between the recycler and the control board	Check the bill validator harnessing for damage Re-start the system to restore communication Replace the recycler
Recycler Disabled	The recycler has been disabled by the control board	Check for proper function of the recycler unit (errors) Check the recycler cassette for proper installation Replace the bill validator
# XX Coin Mech Tube Empty	The coin mechanism is reporting tha there is an empty payout tube. (# XX indicates which tube is empty)	Check for an empty tube and replenish Check for a bad sensor Replace the coin cassette Replace the coin mechanism
Bill Validator Stacker Motor Error	An error has been reported concerning the stacker motor in the bill validator	Check the bill path for a blockage preventing the proper operation of the bill stacker motor Replace the bill validator
Bill Validator Recycler Gate Error	An error has been detected in the recycler gate	Check for an blockage in the bill path preventing the gate from functioning Replace the bill validator
Bill Validator Recycler Tape Error	An error has been reported in the operation of the recycler tape within the recycler cassette	Check for a blockage in the bill path which prevents the tape from moving backward and/or forward Replace the recycler cassette Replace the bill validator
Optical Sensor Failure	The failure of an optical sensor within the bill validator has been detected	Check the bill path for an obstruction or blockage which prevents the optical sensor from functioning Replace the bill validator
Magnetic Sensor Failure	The failure of the magnetic sensor within the bill validator has been detected	Check the bill path for an obstruction or blockage which prevents the magnetic sensor from functioning Replace the bill validator
Recycler Cass Jammed	The recycler cassette is not able to move	Check for an obstruction or blockage which is preventing the cassette from moving Replace the recycler cassette Replace the bill validator

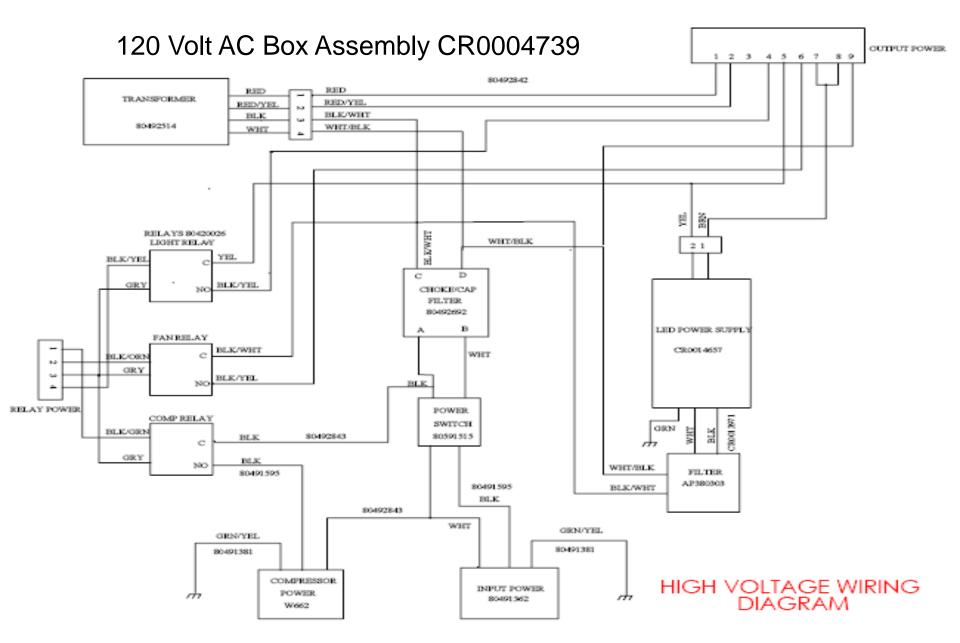
Error Description	Probable Cause	Possible solutions
Bill Validator Path Jammed	A blockage of the bill path has been reported	Check for an obstruction or blockage which is preventing the bills from moving thru the bill validator Replace the bill validator
Bill Validator Cashbox Jammed	The bill box has become jammed and is not allowing the stacker motor to complete its cycle	Check for a full bill box Check for damaged bills blocking the operation of the stacker plate Replace the bill box Replace the bill validator
Stacker Out Of Position	The control board has detected that the stacker has stopped out of its home position	Check for a blockage or obstruction which is not allowing the stacker motor to complete its cycle Check for proper installation of the bill box Replace the bill box Replace the bill validator
Recycler Out Of Position	The recycler is not able to accept bills	Check for proper installation of the recycler cassette Check for an obstruction or blockage which is preventing the cassette from locking into position Replace the recycler cassette Replace the bill validator
Cold Drink X Motor Failure	The control board is reporting that the X motor is not functioning	Check for proper connections to the motor Check for damage to the harnessing Check for proper switch function Check for over tightening of the motor Replace the motor
Cold Drink Y Motor Failure	The control board is reporting that the Y motor is not functioning	Check for proper connections to the motor Check for damage to the harnessing Check for proper switch function Check for over tightening of the motor Replace the motor
Cold Drink Picker Motor Failure	The control board is reporting that the picker motor is not functioning	Use the position test functions to test the picker motor Replace the picker cup
Cold Drink Port Motor Failure	The control board is reporting that the port motor is not functioning	Use the port test functions to test for function Check wiring connections Check switch functions including the position cam Replace the motor
Cold Drink Vend Timeout	The control board is reporting that a successful vend cycle has not been completed in the allowed amount of time	Check for a picker cup that did not return to the home position Check for a port door that did not open/close
Cold Drink Cabinet Failure	An error that has not yet been defined	Should not be seen in a machine Replace the control board

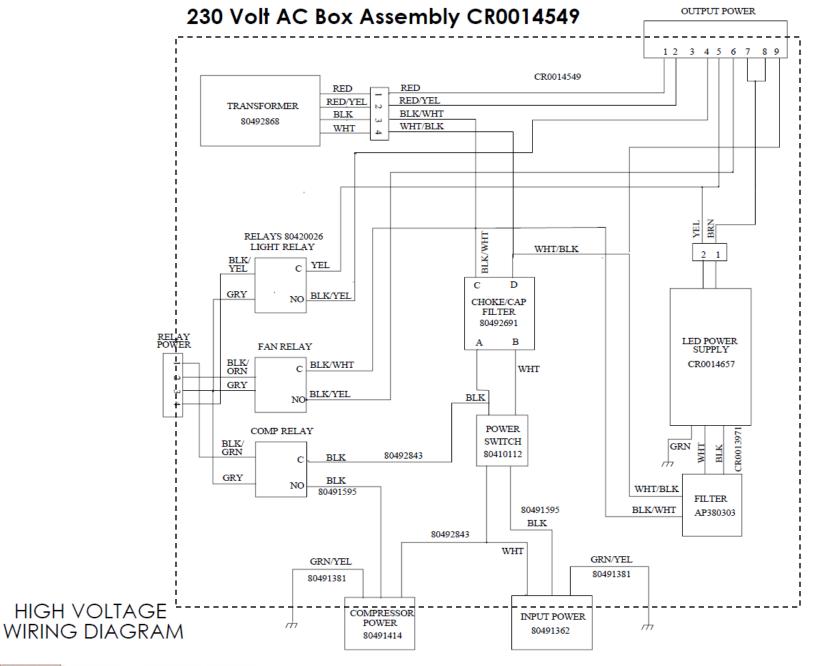
Error Description	Probable Cause	Possible solutions
Cold Drink Coin Return Motor Failure	The control board is reporting that the coin return motor has failed	Check the wiring connections Check for proper mounting of the motor Check for proper mounting of the coin mechanism Replace the coin return motor
Cold Drink Picker Home Failure	The control board has reported that the picker has failed to return to its home position at the end of a cycle	Use the position test functions to test or cycle the picker back to its home position Replace the picker cup
Cold Drink Temperature Sensor Error	the control board is reportingthat the temperature sensor has failed	Compare the reported temperature against a thrmometer Replace the temperature sensor
Cold Drink Cooling System Not Cooling	The control board is reporting that the refrigeration system is not functioning	Check for a bad temperature sensor Check for other errors that would cause the refrigeration system to have been shut down by the board
Cold Drink Cabinet Too Hot	The control board is reporting that the cabinet is operating at three degrees, or more, above the allowed parameter	Check for an accurate temperature reading Check refrigeration system for proper function (clean screens, condenser also distance from rear wall) Check for proper fan operation
Cold Drink Cabinet Too Cold	The control board is reporting that the cabinet is operating at three degrees, or more, below the allowed parameter	Check for an accurate temperature reading Check refrigeration system for proper function (clean screens, condenser also distance from rear wall) Check for proper fan operation
Card Reader Manuf Trans Error	The card reader has reported an error in transmitting data	Check the card reader for proper function Replace the card reader
Card Reader Service Error	An internal error has occurred within the card reader	Reset the card reader and retry Replace the card reader
Card Reader Manufact Error	An internal error has occurred within the card reader	Reset the card reader and retry Replace the card reader
Card Reader Failed OOS Error	An internal error has occurred within the card reader	Reset the card reader and retry Replace the card reader
Card Reader Comms OOS Error	An internal error has occurred within the card reader	Reset the card reader and retry Replace the card reader
Card Reader Jam OOS Error	An internal error has occurred within the card reader	Reset the card reader and retry Replace the card reader
Card Reader Manufact OOS Error	An internal error has occurred within the card reader	Reset the card reader and retry Replace the card reader

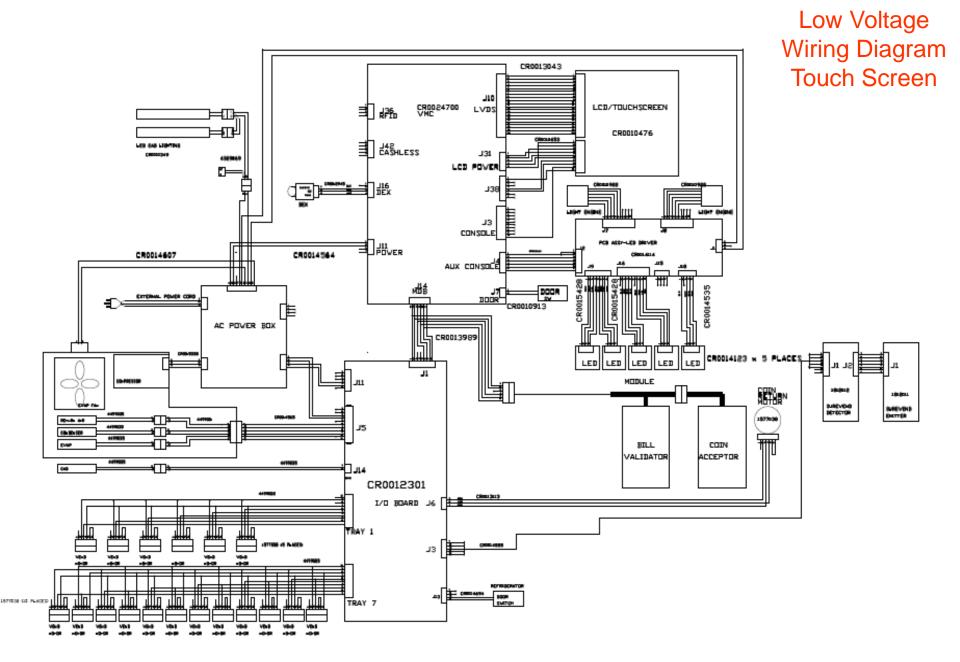
Error Description	Probable Cause	Possible solutions
Health Check Error	The control board is reporting that an error occurred in the proccess of conducting a health check	Check temperature sensors for proper function Check the refrigeration system for function Reset machine for another cool down period to check for proper health control function Reset the control board to default settings and set up for another test Replace the control board and re-test
Heath Timer Error	The control board is reporting that an error has occurred in the operation of the timer during a health check function	Reset machine for another cool down period to check for proper health control function Reset the control board to default settings and set up for another test Replace the control board and re-test
Health Recheck Error	The control board is reporting that an error occurred in the proccess of conducting a second attempt at a health check	Check temperature sensors for proper function Check the refrigeration system for function Reset machine for another cool down period to check for proper health control function Reset the control board to default settings and set up for another test Replace the control board and re-test
Capacity Sensor Failure	An error has been reported with a sensor inside the bill validator	Re-start the bill validator and check function Replace the bill validator
Not Calibrated Sensor Error	An error has been reported with a sensor inside the bill validator	Re-start the bill validator and check function Replace the bill validator











Software Licenses

GNU General Public License (GPL), version 2

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it. For example, if you distribute copies of such a program, whether graits or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations. Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all

The precise terms and conditions for copying, distribution and modification follow. TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

10. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program, below, refers to any such program or work based on the Program" means either the Program or any derivative work under copyright law that is to say, a work containing the Program or a portion of it, either verbalications and/or translated into another language, (Herinantization in the term "modification"). Each licensee is addressed as "your daddressed as" your modification".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). 1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriated copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
2. You may modify your copy or cropies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the whole in a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it. Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program or a volume of a storage or distribution medium does not bring the other work under the scope of this License. 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 5 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange;

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code or all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code destination of the executable interface destination of the executable interface destination of the executable. If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicenses, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate of soling as such parties remain in full compliance. 5. You acrept most required to accept this License. Since you have not signed it. However, nothing else grants you permission to modify or distributing the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program or work based on the Program, you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works accept in the License to do so, and all its terms and and list terms and and list terms and and list terms and and list terms and all its terms and all

6. Each time you redistribute the Program (as the Program (as the Program), the recipients automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing configurations.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validative of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distribution system, which that systems in a license practices that systems, it is up to the author/donor to decide if he or she is willing to distribute driverue through any other system and a license examnor impose examnor impose examnor impose examnor impose examnor impose that choice. This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version over published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version over published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation, write to the Eres Software Foundation, write to the Free So NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS, AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT IN OUT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSEIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source life in most effectively convey the exclusion of warranty, and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the programs name and an idea of what it does. Copyright (C) yyyy name of author This program is free software you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful. but NTHOUT ANY WARRANTY, without even the implied warranty in employed and the implied warranty in the program; if not, write to the Free Software Foundation, inc., 51 Franklin Street, Fifth Floor, Boston, Ma 02:110-1301, USA Also add information on how to contact you by electronic and paper mail.

If the program is interactive, made it interactive mode.

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY for details type "show w." This is free software, and you are welcome to redistribute it under certain conditions; type "show or for details. The hypothetical commands" show with and "show or should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than "show with and show with and show or "they could even be mouse-clicks or menu items—whatever stulls your program.

You should also get your employer (if you work as a programmer) or your School, if any, to sign a "copyright disclaimment" for the program, if necessary. Here is a sample, alter the names: Youdyndyne, Inc., the retrievely disclaims all copyright in increases in the program into proprietary programs. If your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License

Complete text of v2 of the GPL may be found online at http://www.gnu.org/licenses/gpl-2.0.html.



Software Licenses

GNU Lesser General Public License (LGPL), version 2.1

```
Vestion 2.1, Netwary 1999

Copyright (C) 1991, 1995 Pree Software Foundation, br. 5.1 Frankin Street, Fifth Floor, Boston, MA 02110-1301 USA Everyone is permitted to copy and distribute verbatim copies of this locense document, but changing it is not allowed. [This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public Licenses, version 2, hence the version number 2.1.1 Preamble
The Iconses the Lesser General Public Licenses, applies to some specular designed to take away your freedom to share and change at 8.9 contrast, and the successor of the GNU Library Public Licenses, version 2, hence the version number 2.1.1 Preamble
The Iconses, the Lesser General Public Licenses, applies to some specular designed special designed and some special designed and special designed and some special de
       For example, If you distribute copies of the library, whether grains or for a lee, you must give the recipients after fairty to the copy of the library and recompling it. And you must show them these terms so they know their rights.

Represely and in parts with an existance thereof, if we cappilled the library, and the recipients, so that they can refine them with the library after making changes to the library and recompling it. And you must show them these terms so they know their rights.

To protect send distribut, we want to make it very clear that them is no warranty for the firee library. Also, if he library is modified by premove eles and passed on, the recipients should know that what they have in rot the folial undows required to the confident winds to the confident whose in the confident winds to the confi
         Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free program
         When a program is infeed with a library, whether statistically using a shared library, he combination of the two is legally speakings combined work, a definance of the original Platrary. The ordinary General Public Librare between the formation of the size of the extra Company and the state of the state
         For example, on rase occasions, then may be a special mendor mencurage the wides possible used of a certain library, so that it becomes a de-fact standard to a chieve this, non-free programm usus be allowed by use of the library. A more frequent case in that a free library does the as same (a) as widely used another libraries, a finite to gain by limiting the fee library in on-free programs manufactured and the library. A more frequent case in that a free library does the assemple (b) as widely used another libraries, a finite to gain by limiting the fee library in on-free programs manufactured and the library. A more free program on master and the program in the program of the program in the program i
         The precise terms and conditions for copying, distribution and modification follow. Pay does attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run. TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION.
         O. This License Agreement appliests any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you A flatory" means a collection of software in anctions and/ed data perspected as a to be comerating linked with application program (which use some of those line inclinations and data) to join meacutables.
       The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the Library or any derivative work under copyright law: that is to say, a work containing the library or any derivative work under copyright law: that is to say, a work containing the library or any derivative work under copyright law: that is to say, a work containing t
       Source code for a work means the preferred from of the work for making modifications to it. For a library, complete source code means all the source code of all modules is contained, byte and in the code of the
         2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions

    a) The modified work must itself be a software library.
    b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

   9) You must cause the lise model find carry promifers not notices starting that you changed the files and the date of any change.

Or you must cause the lise model find carry promifers not notices starting that you can be desired any change of the file model. The starting of the starting of the file model to the starting of the file model to desire of the starting of the file model to desire of the starting of the file model to desire of the starting of the file model to desire of the starting of the model desired or the promise model to desire of the starting of the model desired or the promise model to desire of the starting of the model desired or the promise model to desire of the special control of the starting of the model desired or the promise model to desire of the starting of the model desired or the promise model to desire of the starting of the model desired or the starting of the starting of the model desired or the starting of the start
A company that company and the contract Poly for them be company (PML) General Public Licenses, per additional or the contract of the property of of the property
       This section is interest training and traini
       14. If you wish to incorporate parts of the Library into other free prior arms whose distribution conditions are incompatible with these, write to the author to ask for permission. For software Foundation, write to the Free Software Foundation, write to the Free Software Foundation was sometimes make exceptions for this, Our decision will be quided by the two possls of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software early
     14. FOUN design to recovery use the control and a set leasy with votal the propert in the proper
```

Complete text of v2.1 of the LGPL may be found online at http://www.gnu.org/licenses/lgpl-2.1.html.

one line to give the library/content used on shed at disease. Copyright (C) pure name of author This Elberry is from substance to a shed at disease. Copyright (C) pure name of author This Elberry is from substance to a shed at disease. Copyright (C) pure name of author This Elberry is from substance to a shed at disease control and the library is from substance to a shed at disease control and the library is from substance to a shed at disease control and the library is from substance to a shed at the library is from substance to the library is from sub



If you develop a new library, and you want it to be of the greatest possible uses to the public, we necommendmaking it the software that everyone can endistribute and change. You can do so by permitting redistribution under these terms (or, alternative), under the terms of the ordinary General Public License). To apply these terms, each the following notices to the license; it is select to start his not source life to most one should be effectively convey the careful and only arranged and each file should have an electate the copyright in each applient or to where the after notice is found.

GNU LESSER GENERAL PUBLIC LICENSE

How to Apply These Terms to Your New Libraries