The BV IV Satellite Vendor (Model 3131) can be connected to a host that will run a Universal Satellite Device (USD) machine. Use these instructions in place of the Specifications, Installation (Connecting to the Host), Set Prices and Wiring Diagrams sections of the Satellite Can/Bottle Vendor Service Manual (P/N 4208379).

Please read all instructions before proceeding.

**SPECIFICATIONS**

All specifications are the same with the exception of Pricing, which is now controlled at the BV IV Satellite Vendor.

$.05 to $99.99 (controlled at the BV IV Satellite)

**INSTALLATION**

**Connecting to the Host**

To connect the Satellite Vendor to the host machine:

1. Remove power from both the host machine and the Satellite Vendor.
2. Remove the hole plug from the back of the host machine’s cabinet.
3. Insert the umbilical cord from the Satellite Vendor through the hole in the back of the host machine and secure the plate attached to the umbilical cord. See Figure 1.
4. Connect the umbilical cord from the Satellite Vendor to the MDB harness from the host’s control board.
   
   Verify that all harnessing and cables have been properly routed to clear all moving parts and will not interfere with the delivery of the product.
5. The Delivery Hopper is taped inside the bottom area of the door. Remove and assemble as shown in Figure 2. Secure with the four (4) bolts and wing nuts provided.
6. Plug both the host machine and the Satellite Vendor into the building power source.
7. Set vend prices for the Satellite Vendor. (Refer to the Set Prices section of controller functions in this addendum.)
8. Load vending compartments and live display. (Refer to the “Loading Instructions” and “Live Display” sections.)
9. Verify display items in the live display are visible to the buying customer and agree with the products loaded in the specific columns.
10. Test vend both machines for proper operation.

Refer to the Wiring Diagrams of the Satellite Vendor and the host Snack Mart for proper identification of the connections and components.
CONTROLLER FUNCTIONS

To program the BV IV, you must be in Service Mode. Table 1 indicates the various functions that can be accessed in each of the service mode levels.

<table>
<thead>
<tr>
<th>DISPLAY</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SaLE</td>
<td>Allows the total sales attributed to each individual selection to be displayed</td>
</tr>
<tr>
<td>CaSH</td>
<td>Allows the total cash attributed to each individual selection to be displayed</td>
</tr>
<tr>
<td>PrIC</td>
<td>Allows the vend price of each selection to be changed</td>
</tr>
<tr>
<td>Test</td>
<td>Allows each selection to be test vended without affecting MIS totals</td>
</tr>
<tr>
<td>Addr</td>
<td>Allows the MDB satellite address to be set</td>
</tr>
<tr>
<td>Ho</td>
<td>Error code displays if the motors are not at home position</td>
</tr>
</tbody>
</table>

Table 1: Service Mode Functions

To Enter and Exit Service Mode

To enter Service Mode, push the Mode Button on the backside of the display board, which is mounted near the top right side of the door of the BV IV. See Figure 1. The message SaLE should appear in the front panel display. The SaLE message indicates that the controller is in the first level of Service Mode.

To exit Service Mode, press and hold the Service Mode Button until the accumulated credit is shown on the display. The display should now show either .00 or the amount of credit accrued in the master controller (CD16MDB). Service mode will also be exited automatically if the controller does not detect any keypad activity for a period of approximately 30 seconds.

Sale Mode

The Sale mode (View number of sales) allows an operator to view the number of sales attributed to each product selection in the BV IV. To enter sales mode, enter the Service Mode by pushing the mode button on the display board once. The message SaLE should appear in the front panel display.

To view the number of sales for a particular selection, push the selection button associated with the item you wish to view. The front panel display will show the number of sales value of that particular selection. To clear out the sales total for a particular selection, push and hold the selection button for five seconds.

Cash Mode

The Cash mode (View cash sales) function allows an operator to view the cash sales attributed to each product selection in the BV IV. To enter view cash sales mode, enter the Service Mode by pushing the mode button twice. The message CaSH should appear in the front panel display.
To view the cash sales of a selection, push the selection button associated with the item you wish to view. The display will show the cash sales value of that particular selection. To clear out the cash sales total for a particular selection, push and hold the selection button for five seconds.

Set Price Mode

The set price mode function allows selections to be priced. To enter set price mode, enter Service Mode by pushing the mode button on the display board three times. The message PrC should appear in the front panel display. This indicates that the controller is in set price mode. Selections on the BV IV can be priced from $00.00 (free vend) to $99.99 (depending on the coin scaling factor).

To change the price of a selection, push the selection button associated with the item you wish to price. The first time the selection button is pushed, the display will first show the selections current price. If the same selection button is pushed and held for more than 3 seconds, the price will increase by the coin scaling factor (five cents in the US) and will continue to increase until the button is released. If the selection button is released and then again pushed, the selection price will decrease by the coin factor and will continue until the selection button is released.

Test Vend Mode

The test vend mode is used to test vend selections. To test vend a selection or multiple selections, enter Service Mode by pushing the mode button on the display board four times. The message tESt should appear in the front panel display. This message indicates that the controller is in the test vend mode.

To test vend one selection, push the product selection button associated with that item. The associated vend motor will run 90 degrees to the vend position and return to the home position while the selection identifier is shown in the display. When the motor has returned to home position, the display will show tESt again. You may now test another selection by pushing another selection button.

Address Mode

The address (set address) mode allows the user to set the address to which the BV IV (Universal Satellite Device) responds to when communicating with the host control board. The available satellite addresses are 40, 48 and 50. If two satellites are connected to a single host machine, each of the satellites must have a unique address or both satellites will attempt to respond to the host at the same time.

To set the BV IV’s address, enter Service Mode by pushing the mode button on the display board five times. The message Addr should appear in the front panel display. This indicates the controller is in set address mode.

To view the current address of the BV IV, momentarily push and release any of the first three selection buttons. The current address will be displayed.

To change the address of the BV IV, push and hold for five seconds, any of the first three selection buttons. To select address #40, push and hold selection button #1. To select address #48 push and hold selection button #2. To select address #50, push and hold selection button #3. The BV IV is set to address #40 at the factory.

Ho (Error Code)

**WARNING:**

Pushing a selection button to return a motor to home position may vend a bottle from that selection. Bottle will drop to floor if door is open at the time.

Pushing the mode button a sixth time will either exit Service Mode or display the Error code Ho. Error code Ho indicates one or more of the motors are not at home position or there is a motor wiring problem. Push any selection button to return motors to home position.