

# **ARBORTRONICS**

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## **Water Dispensing Machine**

### **Model ARB-V21**

#### **DESCRIPTION**

The Water Dispensing Machine or WDM is designed to dispense water. There are two sides to the control board, the user side and the Setup side. From the User side, the controller consists of a large dual line, 16 character LCD. On the Setup side of the WDM a small LCD and keypad are provided to perform machine setup. A coin acceptor with a 212 interface is used for Coin acceptance, three active low, dry contact inputs are available for 'Out of Service' tracking and one 'Meter' input is available for connecting to a closed contact flow meter. There are two 24V outputs; one controls the pump, and the other controls the exterior lights of the machine. When the WDM is in normal operating mode, the lights will be normally on, however, when the machine goes out of service, the lights will turn off.

#### **OPERATION**

The WDM is connected to two buttons, 'Menu' and 'Start'. When the machine is in idle mode coin acceptance is inhibited. Pressing the 'Menu' button will end idle mode and display the first menu selection. The 'Menu' button is used to scroll through the menu options. If there is no user activity (buttons pressed or money deposited) for more than 5 sec. the machine will return to idle mode. Menu items are laid out with the amount of water in both gallons and litres on the first line followed by the price on the second line. Once a menu item is selected, coin acceptance is allowed, and money can be deposited. Once money has been deposited, it is displayed on the top line of the display. When the price of the selection is reached, the display will read "Press Start to fill X Gal" where X is the amount of the menu selection. The WDM will only dispense while 'Start' is held, stopping if 'Start' is released and continuing if 'Start' is repressed, until the selected amount is dispensed. While Start is held the message "Filling X Gal" appears on the display. Once the WDM is finished it will return to the idle state

#### **SETUP**

Setup is performed using the small setup LCD and the keypad. While in idle mode the display will read, "To Enter Setup Press 1". Once 1 is pressed, the setup menu will be displayed with "Dispense Setup - 1" on the first line followed by "Price - 2" and "Audit - 3" on the second.

The Dispense setup menu, will present the following: "Time - 1", "Count - 2" and "Test - 3". If "Time" is selected the controller will dispense the water based on dispensing time and the dispensing times must be entered. If "Count" is selected the controller will dispense the water

based on the pulse count of a flow meter; the pulses per amount of water must be entered. When “Test” is selected, the amount of water to test dispense must be selected, before it will dispense. The test dispense will use the method for dispensing selected previously (“Time” or “Count”) to determine the amount of water dispensed.

Price setup allows the setting of prices for each amount of water (1, 2, 3, 5, 20 Gal). Prices entered are in cents with the \* button being used to clear entries. Once a satisfactory price is entered, press # to accept the price and proceed to the next item. If the price does not require changing, press # to proceed to the next menu item. At the last item pressing # will return the controller to the setup menu.

The Audit menu item, when selected, will display the total amount of money collected by the machine. Pressing the ‘#’ key while in the audit menu, will display the number of product dispenses. Pressing the ‘#’ key repeatedly will proceed through all of the dispense amounts. When the final dispense amount is reached, pressing the ‘#’ key again will exit to the setup menu.