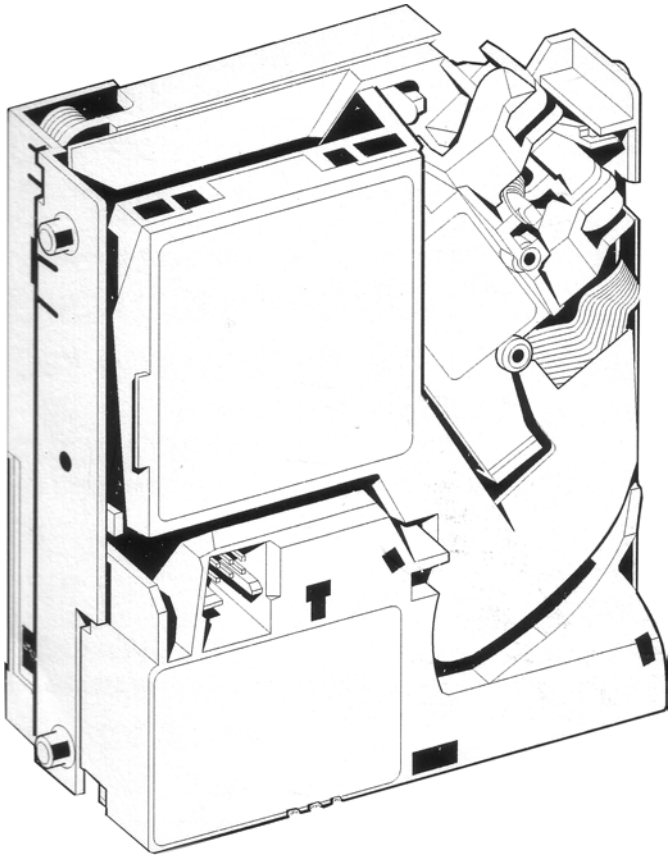
Using The Mars CashFlow 330 Acceptor version 212 or 6 Line NRI G13 with a COFFEtek tabletop machine.

Contents:



General Operation 1

Section 1.1 General Operation

The standard 212 acceptor operates from a +12V supply, and provides six coin outputs lines. An extra input is included to prohibit the acceptance of coins in cases where the vending machine is unavailable to vend such as temperature low, or water system fault.

Each of the price lines will have been pre-programmed for a particular coin/token type. If a coin is accepted the coin output corresponding to this type of coin will drop to 0V for 80ms to 120ms to indicate that the coin has been accepted.

Hardware installation 2

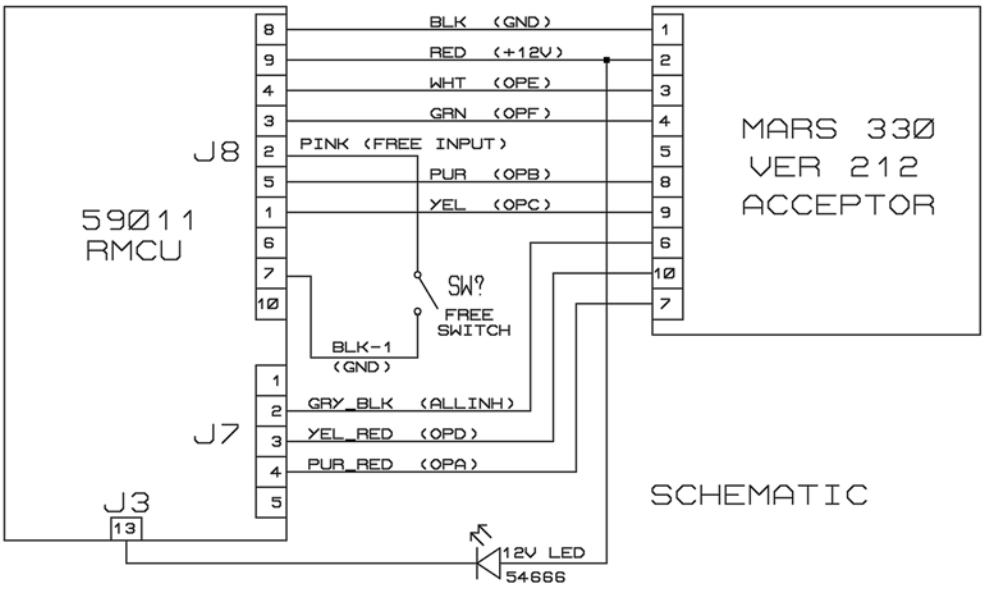
Section 2.1 Hardware Installation

Before beginning this procedure please ensure you have the following items:

1) An RMCU based vending machine
2) A MARS 330 acceptor or a 6 Line NRI G13.
3) The interface cable part number 54938
4) A 12V LED part number 54666 (if required)
5) A Free switch assembly part number 54377 (if required)

This document assumes that the coin acceptor, free switch and LED have been fitted at a position desirable for the customer. On one end of the cable there is a 5 way Molex .1" pitch connector and a 10 way dual row CGRID III connector within about 4" of each other. This end connects to the RMCU at locations J7 and J8. On the other end of the cable there is another 10 way dual row CGRID III connector, which connects to the coin acceptor. If the free switch is not required heat shrink and tie back the pink and black wires, otherwise solder them on to the switch and heat shrink. If the led is not required heat shrink and tie wrap the orange and red wires back. If the led is required connect the red (+12V) to the anode of the led, which is highlighted by a gold contact. Connect the orange to the cathode of the led, which has a silver contact.

The following diagram shows the schematic for the connections between the RMCU and the coin acceptor.



(Figure 1)

Software Installation 3

3.1 Changing the Vending machine's Acceptor settings

Once the hardware is in place, the software needs to be notified so that communication can take place. Check your user manual for the method of entry to the engineer's mode subsystem. Use the PROG button to navigate to the CHANGE SETTINGS menu and press the ENTER key. Use the UP or DOWN keys until the display shows:

CREDIT DEVICE
FREE

Press the enter key, the display will show

CHANGE DEVICE TO
FREE

Press the DOWN key and the display will change to

CHANGE DEVICE TO
MS330 – VER 212

Press the ENTER button to confirm that you wish to use this type of coin acceptor. Press ESC to exit the change settings menu. Selecting this as an active device enables some hidden menus in engineer's mode.

Press the PROG button until the display shows

ACCEPTOR SETUP
MENU

Press the ENTER button to change the acceptor settings. The acceptor setup menu contains the following settings:

SETTING NAME	DEFAULT VALUE
LEAST COIN VALUE	1
EDIT COIN TYPE 1	1
EDIT COIN TYPE 2	2
EDIT COIN TYPE 3	5
EDIT COIN TYPE 4	10
EDIT COIN TYPE 5	20
EDIT COIN TYPE 6	50
OVERPAY CREDIT	1

The least coin value is effectively the coin acceptor's scale factor. Common values for this would be 1 and 5. If the least coin value is set to 5, for instance, no prices which are not exactly divisible by 5 would be allowed.
EDIT COIN TYPE X changes the value seen by the software when price line X is triggered. The software will then update the amount on the display to reflect that a coin of this value has been accepted.

Overpay credit is a variable which by default retains any overpaid money for use with the next vend. If this value is set to zero and a vend is performed, any credit remaining will then be cleared.

3.2 Setting up the drink prices.

Check your user manual for the method of entry to the engineer's mode subsystem. Use the PROG button until the display shows

CHANGE PRICE OF,
OR INHIBIT DRINK

At this point you will have to press the drink button that you wish to set the price for. If a cappuccino drink is selected the display will show:

CAPPUCCINO
Price=0000

Press the UP and DOWN arrow keys to alter the price and press ENTER to confirm or ESCAPE to abandon the changes.

PLEASE NOTE: that the price changes by the least coin value as discussed in the previous section. This is to prevent setting a price that the coin acceptor cannot accept exactly, for instance if the acceptor does not accept anything below 5p then a price of 26p would be unachievable so you will have to set the drink price to 25p or 30p.

3.3 Day to day operation.

Once the acceptor settings and the drink price changes have been completed exit from the engineer's mode. The display will show

PLEASE INSERT
EXACT MONEY

Any priced drink will be inhibited at this point until the correct money has been accepted. If an LED is fitted and there are a mixture of free and priced drinks the LED will start flashing. If all of the drinks are free the LED will stay on, and if none of the drinks are permissible the led will go out.

Once the user starts inserting cash, e.g. a 5p coin, the display will change to:

MAKE SELECTION
CREDIT=£0.05

Once all drinks are permissible the LED will stay on. If a selection is made the drink price will be subtracted from the value displayed. If there is any credit remaining after a vend has taken place, assuming the 'overpay retained' variable mentioned in section 3.1 is not set, that credit will remain available for the next vend.

Troubleshooting 4

Section 4.1 Troubleshooting

Problem	Possible cause	Solution
All coins/tokens rejected	No power to module	Check supply voltage
	Looms dislodged	Check loom installation
	Dirt Build Up	Clean acceptor and retry
	Acceptor re-calibrating on power up	Switch machine off and on again
	All inhibit line has been set by the vending machine.	Check that the vending machine has not asserted the coin inhibit, by being unable to vend due to an error such as temperature low or water system fault.
Poor coin acceptance	Modules not mounted correctly	Check alignment
	Dirt build up	Clean acceptor and retry
Rejects one type/coin/token	Inhibit set	Check coin/token is enabled and not inhibited Check that the coin acceptor supports this kind of coin
Coins accepted but no credit given	Looms not correctly inserted	Check loom installation
	Vending machine software incorrectly set-up	Check that credit device variable in change settings is set to MS330 – VER 212
Coins accepted but incorrect credit given	Vending machine software incorrectly set up	Enter engineer's mode and modify the 'EDIT COIN TYPE' and check the 'LEAST COIN VALUE' Acceptor settings
Price Line Led fitted but does not illuminate	Vending machine software does not support the price line led.	Check that the software supports the price line led
	Wiring fault to LED	Check wiring including +12V supply
	Led fault	Replace LED
Vends are allowed even when no credit has been accepted	Free switch enabled	Check to ensure the free switch is not asserted
	Vending machine software incorrectly set-up	Check that credit device variable in change settings is set to MS330 – VER 212 Check that a price has been asserted for that vend

Appendices
5

Appendix A: Ordering spares

Part	Part Number
Acceptor MS330 GB	55718
Acceptor MS330 Euro	55274
Acceptor MS330 Cyprus	53002
Midi front plate for MS330	55275
Standard front plate for MS330	55719
Acceptor interface loom	54938
Ultra acceptor interface loom	55576
Flush/Free switch assembly	54377
Flush/Free switch cap green	54379
12V Price Line LED	54666