

RS232-MDB Coin Validator Simulator Converter Manual

(This manual for Coin validator simulator, not for cashless interface)

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Updates will not be communicated actively.

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Introduction:

RS232-MDB Coin validator simulator is used to connect the PC to MDB interface of vending machine and working as a simple coin validator. And makes it easy to integrate with MDB interface vending machines by the RS232.

This simulator adapter is most useful when you want to connect your PC or com port device to exist old vending machine and it even doesn't have the cashless payment interface.

Also sometimes, so old vending machine must have a coin acceptor to work, but you want to connect a cashless payment to it. Then you can use this adapter box to simulate it.

Simulator will reply the VMC Poll command automatically, so user don't need to consider the Poll command. Any data from VMC except the poll command will be redirected to RS232 port.

Any data if you want to send the HEX data to VMC, just send to adapter box together with checksum, then the adapter box will send to VMC during the VMC poll request.

So for user only need to be familiar with simple "Add credit command", "payment return command", "change return command" and some simple necessary setup command.

For technical details and the protocol specification, please refer to <http://www.waferlife.com>

Any other questions, you can add wafer online service skype: wafer-service

MDB Adapters and interfaces description:

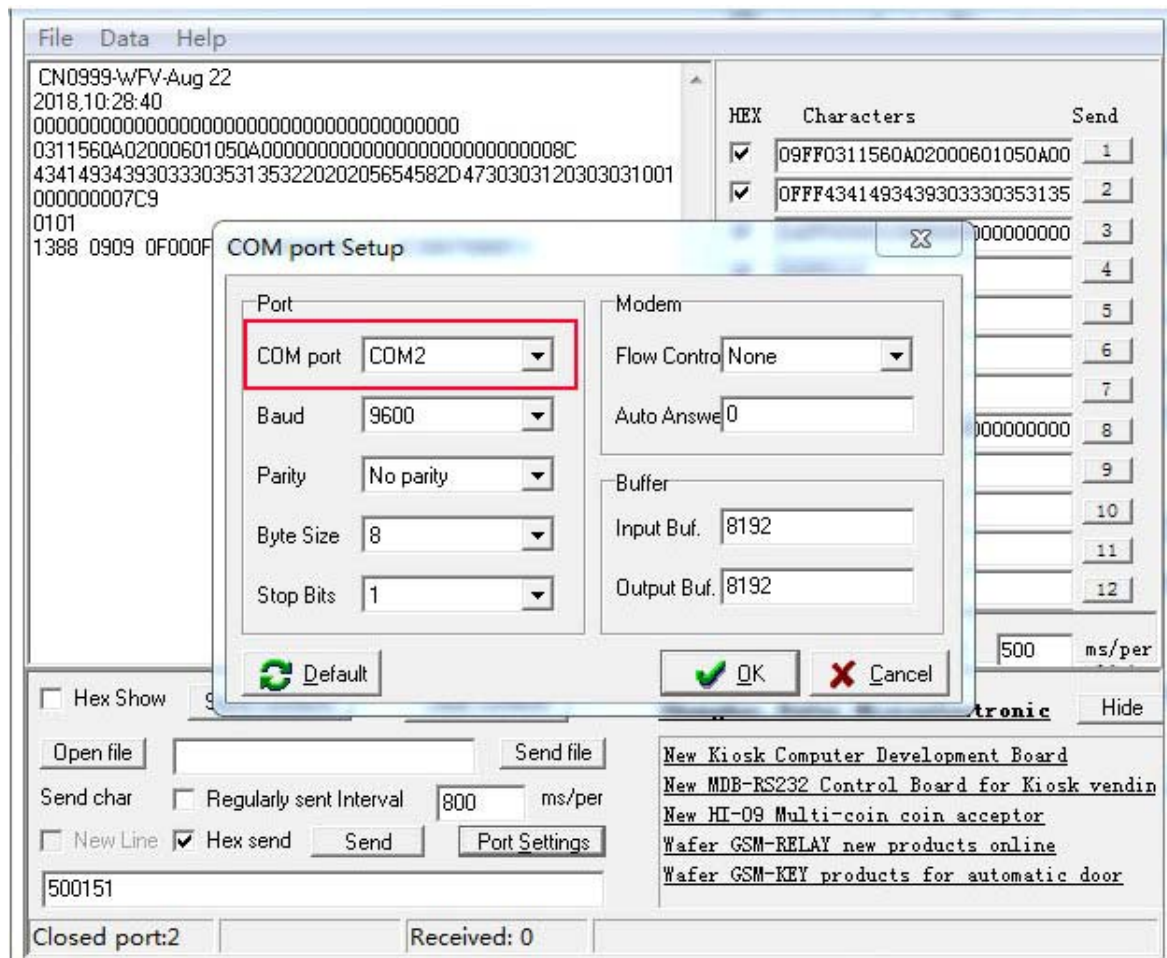


- (1) MDB connector (male or female connector) should be connected to VMC
- (2) DB9 Com port need to be connected to RS232 port of PC or other devices
- (3) Function input can be configured to work as "Credit add button"

Now we start the MDB adapter Test:

1. Know your Vending machine
 - a) Vending machine must support the MDB payment interface
 - b) User must be familiar with RS232 and know how to use the com port tools to send command data
 - c) Disconnect other MDB payment devices before test the MDB adapter box
2. Connect the Adapter box to VMC and PC
Simply plug the RS232-MDB to VMC (Vending machine controller) and the PC RS232 port.
3. Open the COM port tool (SerialTool.exe)

Firstly check in the PC device manager or make clear which is the right com port that can be used. And then Select the right Com port in the SerialTool and select the “Hex Send” as the following picture

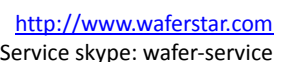


4. Power on the VMC (RS232-MDB adapter box will be powered on at the same time through the MDB bus)
After powered on, keep to look at the RS232-MDB adapter box status LEDs, when the adapter box can be connected to the VMC, the MDB Master LED will flash some times

If No “ MDB Master LED” flashing happen,then Please check:

5. If MDB Master LED flash some times and that means VMC has found this MDB simulator
**After power on the Simulator, Serial tool will get a self ID data:” Firmware version
 and the config data Report”**

If you can get the data "0C0007000013" Or maybe others data,if the two bytes following 0C are not all zero, Then Now Congratulations, Simulator adapter has successfully connected to VMC and also has been enabled by VMC



Following is the Prototype VMC test data brief explanation:

(1) 09FF0311560A02000601050A000000000000000000000000008C

VMC Setup – Config data

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Very import and must know well

(2) 0FFF4341493439303330353135322020205654582D473030312030303100100000007C9

VMC Setup – Identification data

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(3) 0AFF00000100000000000000000000000000000000000001

VMC Setup – For tube status

(4) 05FF0101

VMC Setup – For function input command

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When user press the button ,will send the pre-set data to VMC. Normally,we use the function button to act as the “Payment return button” to send “0101” command.

After payment to start the vend and before dispense the goods,user and press this button to ask the payment refund and end the vend.The payment return data will be send to PC.

(5) 0C0007000013

Validator COIN TYPE enable

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----- After powered on,if you want to change the config data -----

(6) 500151 or 510152 or 530153

This is the Add credit to VMC

If we don't need the “payment return function” and also want to preset the function input as a pulse payment input channel. Then can pre-set the credit value for every button pressing. Command is “05FFxxxxxx” the “xxxxxx” is the data you want to pre-set. For example ,you can preset it as “05FF510152” or others.

Note: For the command, last data byte is Checksum of the Meaningful data bytes, don't include the start bytes for example “05FF, 09FF, 0AFF, 0FFF”

When you compile your data during test and not sure the Checksum,then just send the first 8 bytes,the adapter box will reply you the checksum data,the you put the Checksum data at the end of the data group,then the adapter will reply you “ 00 “

6. Now you need to read the “ Mdb_version_4-2.pdf “ file carefully, especially about the MDB cashless device (From 7.1 ,page 117/313)

7. What adapter box has done by itself ?

(1) Adapter box will reply the poll command from VMC automatically.

(2) When power on, Adapter box will reply the Config data that is saved in the memory to VMC

(3) You can change the config data by yourself,and next time VMC power on again will read the new config data

8. Now we test to add the credit value to VMC

Press the test Line 3 button to send the data : 03FFFF01

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This command is to add the credit to VMC,just the same action as someone insert the coin

After user select the goods,then:

VMC will send the validator disabled command: `0C000000000C` (Page: 69/313)

If no change to return, then validator will send the command `0C0007000013`

If need to return the change. Then VMC will send the command data: `0F020A1B` to tell the PC what value need to be returned and wait the PC to reply the change already returned and the returned value amount.

For example, PC send the data : `0000FF000000000000000000000000FF` to Aprove the change and VMC will be returned to main menu.

We can use a exact value returned data or bigger data to reply the VMC.

VMC send the Enable command after vending success: `0C0007000013`

9. **MDB adapter simulate MDB coin acceptor or MDB bill acceptor supported**

(This is very important when some vending machine don't support MDB cashless device interface)

Also if you still want to use your real coin acceptor, but your machine don't support cashless interface, then we provide the data insertion module. That can work together with the coin acceptor