

# MDB-RS232 Test with Nayax,PAX MDB cashless reader

MDB card reader has six working status:

## **1.Inactive:**

After powered on or after a Reset command,then device will go to this state.User can use the SETUP command to active the nayax reader

## **2.Disable:**

When card reader received the config data,will go to this "Disable" Status,Also If user send the "Disable" Command,also will go to this state.

## **3.Enable:**

After the "Enable" command and Before detected a valid card,then stay in this state.

## **4.Session Idle:**

When read a valid card,will go to "Session Idle" state to wait the "Vend request"

## **5.Vend request**

When received the "Vend request" from the VMC,will go to vend status

## **5.Vend**

## Command List:

10	Reset	
11003000002	Config the card reader	Return : 01 03 11 56 01 02 28 0D A3
1101FFFF0000	setup the maximum and minimum price	
17004F4557303030303030303030303020204C6574706F73207620200011	REQUEST ID	return
170400000020	Enable the always idle mode	
1401	Enable card reader,	return 00
1400	Diable card reader,	return 00
1402	Cancel card reader,	return 00
130001F40001	REQUEST VEND to notice the card reader to select the goods and how much ,return 00	
1301	VEND CANCEL	
13020001	VEND SUCCESS	return 00
130500640001	CASH SALE	return 00
1304	SESSION COMPLETE	
1500	REQUEST REVALUE	



----- Steps for Testing with the card reader -----

VMC: 110003000002 Config the card reader  
READER: 010311560102280DA3 Card reader reply  
VMC: 1101FFFF0000 Set the maximum and minimum price  
READER: 00  
VMC: 17004E454330303030303030303030302020534F4C4953544120200011 Request ID  
READER: 094E5958333330383233313834313038444D58202D20323031312020010000000020EC  
VMC: 170400000020 Enable the Always idle mode (If need this working mode)  
READER: 00  
VMC: 1401 Enable Reader  
READER: 00

**For the normal working mode: Start with swipe the card**

(For the nayax vpos touch, just press the start button on the card reader touch screen and then swipe the card to start the session)



**Start to swipe the card**



READER: 10 03 13 88 34 31 30 38 00 00 00 (Level2 and Level3 card reader data)  
READER: 10 03 13 88 (Level1 card reader data)

-----  
Reading a Valid card from the Reader and wait the Vend selection  
VMC: 130001F40001 VMC command to card reader with Vend selection  
READER: 00  
READER: 100501F4 Card reader send to VMC, confirm the good dispatch  
VMC: 13020001 VMC tell the card reader,already dispatch the selected goods  
READER: no reply  
VMC: 1304 end the section  
READER: 00  
READER: 1007

**For the normal working mode: Start with swipe the card**

(For the always idle working mode, user can select the goods on the VMC directly to start the session, card reader will receive the price and item number information directly)



**Start with select the goods**



VMC: 130001F40001 VMC command to card reader after Vend selection  
READER: 00  
READER: 100501F4 Card reader send to VMC, confirm the good dispatch  
VMC: 13020001 VMC tell the card reader,already dispatch the selected goods  
READER: no reply  
VMC: 1304 end the section  
READER: 00  
READER: 1007

Note:

1. All data is only for sample, Maybe different with different MDB device
2. Different card reader maybe has little different communication data
3. For the card reader tested, LEVEL01, LEVEL02 or LEVEL03, there may be a slight difference in the data according to the MDB protocol
4. For the VMC (PC) command that is sent, the check byte does not need to be added to the end of the instruction data
5. The above test data, including price, vending item number, and card credit amount, are all test data, and users need to change it to their own data according to the configuration and currency of their card reader

## Important note for Some Reader:

1. Some type MDB credit card reader may be remotely refreshed regularly every day, and after the refresh, the device restarts, but maybe does not send a RESET status report to the host. Because our host may not know that the device has been rebooted, therefore, for such cases, we can send a read configuration 1100... Command, or 12 instructions to confirm that the device can reply, usually once in every 1 minutes. If the device does not reply and is not in the transaction status, VMC need to speed up the frequency of queries, and after the device restarts, VMC will receive an command reply. At this time, you can restart the configuration and enable.

Of course, if every time the card reader restart it can report the 0000 status, then VMC can read this status data and enable the card reader again,.

2. For any MDB card reader, if the function does not exist, and the enable command cannot be sent casually, it is likely that the device cannot respond and stops working. For example, the ALWAYS IDLE function enable command 170400000020, if the device itself does not support this function, this command cannot respond, and even the device may stop working.
3. For card read configuration data **Scale Factor and Decimal Places** :

110001000002 Reply: `01031156 <b>0102</b> 280DA3 <b>(Sample data for following Calculation)</b>
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For the card reader, different country currency may use different parameters, we will use these two parameters to convert the scaled data to exact price and Card balance :

130001F4000109 = Price is 5

(Hex: 01F4 = Dec:500 and then  $500 * 1 / 100 = 5$ )

031388 = card swipe and Card balance is 50

(Hex: 1388 = Dec:5000 and then  $5000 * 1 / 100 = 50$ )

## Important Note:

Some devices, after PC send a command, for example, a query the configuration command, cashless device will reply immediately, but some devices just reply to an ACK first, and then report the configuration data with the next POLL command.

The PC sends a command to query the configuration of the cashless device , and the device will reply

PC Send: 110003000000

Cashless Device type1: reply data: 3031203033203131203536203031203032203539203044204434200D0A

Device type2 PC Send: 110003000000

Cashless Device type2: reply data: 3030200D0A (Reply with ACK( ASCII "00") firstly)

Cashless Device type2: report data: 31302030312030332031342035382030312030322042342030390D0A

## Customer service:

*Both pre-sales and after-sales can receive help and advice through our online skype technical support.*

Email: [wafer@waferstar.com](mailto:wafer@waferstar.com)

Web: <http://www.waferlife.com>

Web: <http://www.mdb-rs232.com> or <http://www.mdb2pc.com>

Tel: 0086-21-51870528

## Online Technical and Service Skype: wafer-service

Download the mdb protocol

<http://www.mdbprotocol.com>

Want to know more about cashless module information:

<http://www.rs232-mdb.com> or <http://www.pc2mdb.com>

Want to know more about VMC and letpos information:

<http://www.letpos.com>