

# MDB-RS232 Data Format Introduction

MDB-RS232 V4.2 compatible	4D 44 42 2D 52 53 32 33 32 20 56 34 2E 32 20 63 6F 6D 70 61 74 69 62 6C 65 0D 0A
08 00	30 38 20 30 30 0D 0A
30 00	33 30 20 30 30 0D 0A
10 FF	31 30 20 46 46 0D 0A
40 FF	34 30 20 46 46 0D 0A
60 FF	36 30 20 46 46 0D 0A

[illegible]

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

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PC Send: 0CFFFFFFF
PC Receive: 00 30 30 20 0D 0A
```

PC Send: 09

PC Receive: 03 11 56 05 01 00 03 01 02 00 00 00 00 00 00 00 00 00 00 00 00 76

30 33 20 31 31 20 35 36 20 30 35 20 30 31 20 30 30 20 30 33 20 30 31 20 30 32 20 30 30 20 30 30 20 30  
30 20 30 30 20 30 30 20 30 30 20 30 30 20 30 30 20 30 30 20 30 30 20 30 30 20 37 36 0D 0A

PC Send: 31

PC Receive: 01 00 86 00 0A 01 00 C8 FF FF FF 01 05 0A 14 00 00 00 00 00 00 00 00 00 00 7B

[illegible]

PC Send: 34FFFF0000

PC Receive: 00 30 30 20 0D 0A

### 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

If a payment is received, the device automatically reports the data to the PC.

When Bill acceptor received a Bill currency payment:

30 81 33 30 20 38 31 0D 0A

When Coin validator received a Coin payment:

08 51 01 30 38 20 35 31 20 30 31 0D 0A

From the above description, we can see that in order to better understand the data, we need to pay attention to a few points:

1. VMC don't need to poll each MDB device. This is done by the MDB-RS232
2. Any data string to PC ends with **0D 0A**
2. The data sent from PC is in the HEX format, Corresponding to the MDB protocol
3. The PC received data is converted according to the ASCII format and then corresponds to the MDB protocol , **For example, the hex data corresponding to ASCII 08 is 30 38**
4. The data or status actively reported by the MDB device will be prefixed with the device ID: 08, 30, 10, 60 to indicate that the data comes from the coin acceptor, the bill acceptor, the cashless device 01 or the cashless device 02
4. The PC sends the query command. Because it is a response method, the data returned by the device is not prefixed with 08, 30, 10, 60
5. About the Parity byte:

Status automatically reported by MDB devices, Credit data, without parity bytes **08 51 01**

The single-byte 00 returned by the MDB device does not require a check byte **00**

When the MDB device replies to the PC command, if it is multi-byte data, the last byte is the sum check byte **03 11 56 05 01 00 03 01 02 00 00 00 00 00 00 00 00 00 00 00 00 00 76**

( the above ASCII data needs to be summed in hexadecimal format )

**$03+11+56+05+01+00+03+01+02+00+00+00+00+00+00+00+00+00+00+00+00+00 = 76$**

**----- Additional note Added October 7, 2023**

6. All reply type data, starting with no device identification attached and ending with a Hex:20. All actively reported types of text or data have a device ID, such as 08, 30, 10, 60, and there is an additional Hex:20 in front of 0D0A at the end of the data
7. It is important to note that all query commands need to wait for a reply, which may be just a ACK "00", it may be data, it may be FF. If FF, that means the command failed to be sent and VMC needs to resend it.

## Customer service:

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

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