介绍如何把MDB-RS232上报的纸币器数据转为实际的纸币面值

MDB硬币器也是一样处理。通过硬币TYPE，和配置数据结合去计算

例如，我们收到数据：30 81或30 81 09
30为设备ID：30说明数据来自纸币器，然后如果还有数据就是纸币器的状态数据，一共可以最多16个字节
（请参阅MDB协议V4.3第95页）
第一字节数据81，转换为二进制数据方便对比：1000 0001

Z1
(1yyyxxxx)

yyy = Bill Routing;
- 000: BILL STACKED
- 001: ESCROW POSITION[2]
- 010: BILL RETURNED
- 011: BILL TO RECYCLER[1]
- 100: DISABLED BILL REJECTED
- 101: BILL TO RECYCLER – MANUAL FILL[1,3]
- 110: MANUAL DISPENSE[1]
- 111: TRANSFERRED FROM RECYCLER TO CASHBOX[1]

xxxx = Bill Type (0 to 15)

那么81的意思是：有一张纸币被接收压仓了（bill Stacked），纸币类型是01
我们如何才能知道这个纸币的确切面值呢？
1、 主机刚上电，都会通过SETPUP命令读取配置，纸币器是31指令，
例如回复数据为：
01 11 56 00 64 02 00 C8 00 0 FF 01 05 0 a 14 00 00 00 00 000 00 00 00 0 00 00 00 C8
我们需要对照MDB协议31指令回复的配置参数：
Z4 Z5（换算比例系数）=0064 这个值是HEX数值，十进制就是100
Z6（小数移位数）=02 算出来的值需要小数点左移2位
Z12-Z27（纸币类型值）=01 05 0A 14 00 00 00 00 000 00 00 00
2.计算面值
我们的纸币类型是01，对应的纸币类型的值是05
然后计算：05*100/100（小数点移两位相当于除100）=5

For example, we received: 30 81 or 30 81 09
30 is the Device ID: 30 means Data from bill validator
And then followed is the Bill Validator Activity data, maximum 16 bytes
(Please refer the MDB protocol V4.3 PAGE 95)
The first byte data 81, that is bin data: 1000 0001

Z1
(1yyyxxxx)

yyy = Bill Routing; 000: BILL STACKED
001: ESCROW POSITION[2]
010: BILL RETURNED
011: BILL TO RECYCLER[1]
100: DISABLED BILL REJECTED
101: BILL TO RECYCLER – MANUAL FILL[1,3]
110: MANUAL DISPENSE[1]
111: TRANSFERRED FROM RECYCLER TO CASHBOX[1]

xxxx = Bill Type (0 to 15)

Then 81 means： A bill is BILL Stacked and Bill type is 01
How can we know the exact credit value of the bill type:

1. Every time after powered VMC will use SETPUP command 31 Validator Response Data
   01 11 56 00 64 02 00 C8 00 0F FF 01 05 0A 14 00 00 00 00 00 00 00 00 00 00 00 C8
   Z4 Z5(Bill Scaling Factor) =0064
   Z6(Decimal Places) =02
   Z12-Z27(Bill Type Credit) =01 05 0A 14 00 00 00 00 00 00 00 00 00 00 00 00
2. Calcuate the credit
   Our bill type is 01, then Bill type credit is 05
   Bill credit value is : 05 * 100 / 100 = 5