RS232-MDB Coin data Insertion Module

(Only used for working parallel with existing MDB coin validator)

Version: 3.1

Date: 08.20 2019 v2

State: Published

Updates will not be communicated actively.

Company: Shanghai Wafer Microelectronics Co.,Ltd.

Introduction :

Now mobile payment is becoming popular, but many older vending machines have no way to access mobile payment systems due to the lack of the necessary MDB cashless interface. Also many network companies develop mobile payment platforms with convenient services, low service fees. However, these platforms generally only output pulse signals and are only used for simple pulse coin-operated interfaces self-service devices. Then it cann't be connected directly to Vending machine MDB interface.

The RS232-MDB MDB coin data insertion module is an intelligent module that can connect the pulse payment interface to the MDB interface of the vending machine to realize data transfer. Then user can easily select a pulse payment interface, and then use this adapter to connect it to the MDB interface of the vending machine and working parallel with the existing coin validator.

WAFER can provide a variety of MDB payment interface modules, from cashless payment interface, coin operated interface module, coin extension module and so on.

MDB Adatpers and interfaces description:



Use the DC12V with GND to power on the user's payment device and connect the pulse input (White wire) directly to user's payment device pulse output wire.

Must be noted: Do not try or incorrectly short the red and black lines. That will cause the power supply output to be short-circuited, which will permanently damage the circuit board.

Now we start the MDB adapter Test:

- 1. Know your Vending machine
 - (1) Vending machine must support the MDB interface
 - (2) Must already have a existing MDB coin validator for working together
- Connect the Adapter box to VMC and PC Simply plug the Adapter t VMC (Vending machine controller) and the Coin validator. (Must plug the MDB connector according to the picture)
- 3. Simply test

Firstly powered on the vending machine and use the coin to check if the existing MDB coin acceptor can work properly and accept the coin. If MDB coin validator cann't work, then please check if you have plug the right connector.

Secondly, use a copper or metal wire to short the "white" and "black" pins in the pulse input cable, and check the vending machine if have detect a coin inserted and also check if the credit value per pulse is ok for you. If not, then go to next step to adjust.

How to adjust the coin value for every pulse input:

Each time the box is powered up,User can observe the number of flashes of the MDB LED indicator, which represents the type of coin.This MDB box supports three coin types (The types that can finally be supported depends on the type supported by the MDB coin validator itself)

Short the "white" and "black" pins in the pulse input cable before powered on, and then powered on the vending machine, then will change the credit value per pulse.



Red: DC12V output White: Pulse input Black: GND

Connect the Pulse input cable to user pulse interface payment device:

Use the DC12V with GND to power on the user's payment device and connect the pulse input (White wire) directly to user's payment device pulse output wire.

Must be noted: Do not try or incorrectly short the red and black lines. That will cause the power supply output to be short-circuited, which will permanently damage the circuit board.

Connect the serial port device to this adapter box:

Some user's project doesn't want to add the value through pulse interface but want to communicate with the vending machine through USB or RS232 or TTL serial interface. Then Inside box also has designed a

built-in a TTL serial port, that can be used to add the payment value directly through serial port. For example, that can be connected to the user's development board or Raspberry pi board and so on.

Serial Communication Specification:

Buad Rate	9600		
Serial command (hex)	500151,	510152 ,	520153
Payment confirm data(ASCII)	0000FE		

How to get the technical Service:

Please add our online service skype: wafer-service Also can send email to : wafer@waferstar.com