**Hotel swipe card activator system**

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# Introduction

This system is intended to allow you to disable all payment systems in the machine until activated by an external trigger. This was originally built for a hotel swipe card system, but could be connected to any kind of trigger that can connect two wires together momentarily (e.g. buttons, timer relays, etc).

# Operation

When the payment systems are ‘disabled’, power is cut to the Nayax VPOS (card reader), as well as the MDB connection that connects the top board to the payment systems in the machine. Power is never cut to the DTU, as the DTU takes too long to start up (and would also ruin reporting).

If either function (VPOS power off or MDB power off) is not desired, the applicable relay module and connector can simply be excluded from the circuit. The remaining circuit will still function correctly.

After activation, the payment systems will remain on until one of the following conditions is met:

* Two minutes have passed (configurable delay in programming).
* A product passes through the I-vend sensor.

Note that the MDB power will remain on for five seconds after the I-vend sensor is triggered to allow the coin mechanism to give change. This delay can also be changed in the program if needed.

Opening the door of the machine will trigger an override that will keep the payment systems turned on (for service).

# Setup

To use this in a machine to disable VPOS and MDB, the note reader and coin mechanism must use an MDB connection that is wired via the relay in this circuit. The DTU must then be connected to the second MDB connection on the control board, so that it is always on.

The VPOS (card reader) should be connected via the RJ12 (phone) connectors in this circuit by using two DTU to VPOS cables. It does not matter which cable goes to which plug, as long as the DTU is connected to one and the VPOS is connected to the other.

The circuit piggy-backs off of the I-vend, door switch and power connections to the top control board. Ideally you should source male and female connections for each of the connectors, so that you don’t have to cut and resolder any wires in the machine.

If you need to use different connections or want to change the two minute or five second timers, you can change the settings at the top of the code in the .ino file. Edit this file in the Arduino programmer if needed, so that there are no formatting issues.

# Programming

1. Install the Arduino programming software (IDE).
2. Plug the Arduino board in to the USB port on the PC.
3. Run the Arduino programming software (IDE).
4. Open the ***Tools*** menu and go to ***Boards*** and then select the type of Arduino board you purchased. For the prototype, the ***DuinoTech Pro Mini*** was used, which is an alternative to the official Arduino part. When looking for Duinotech boards, replace ‘Duinotech’ with ‘Arduino’ in the name. So, for the prototype board, we selected ***Arduino Pro Mini***. If in doubt, consult the documentation for the board you purchased.
5. From the ***Tools*** menu, go to ***Port*** and select the COM port that corresponds to your Arduino board (this will generally be the highest COMxx number).
6. Load the ***hotel\_swipe\_card\_v2.ino*** file.
7. Click the ***Upload*** button.
8. If the program did not show any errors, the Arduino module is now ready for use.

Note that if you forget to program the board, it can be programmed after the circuit has been assembled, even if the circuit is not connected to the vending machine (it gets power from USB).