

*If the images are not visible, download the PDF file to your device.

Direct control of vending machines. Instructions for customers.

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Vendista terminal allows to receive signals from external buttons and directly control the mechanisms of the vending machine. It is also possible to work as a payment device with Pulse interface.

Available for Type 113, 114, 116 terminals (firmware upgrade required). Type 116 terminal requires a 1, 2, or 3 connection.

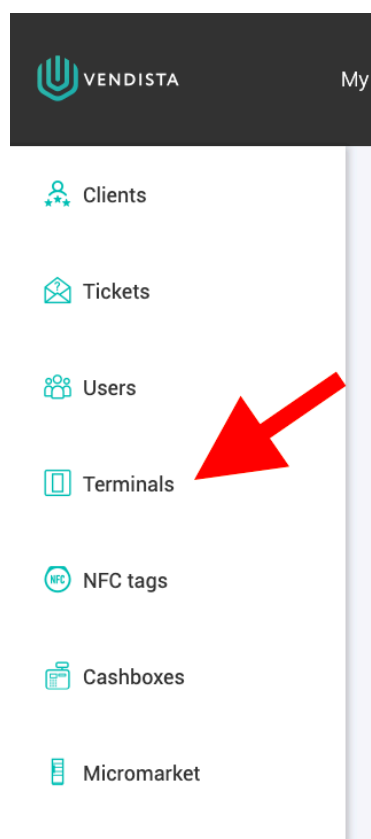
For Type 113, pins 2 and 3 must additionally be connected.

At the same time Vendista will retain full functionality (as if working in MDB): Fiscalization, telemetry, bonuses, payment by QR.

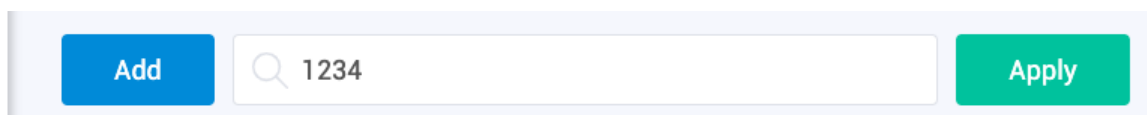
1. Activating Pulse mode

Activation requires:

- go to the "Terminals" section of the portal <https://p.vendista.com>.



- In the menu that opens, enter the terminal number in the search field and click "Apply" button



- in the first column "ID" of the opened table find the terminal number you are looking for and click on the "Airplane" icon

ID	TID	Version	Operator	Online per hour/day	Latest online	Division	GSM signal strength	Client	Partner	Send cash sales	Send cashless sales	Comment	Actions
1	86.0	Movistar (0)	0% / 0%	07.02 08:20				McDonald LLC	Partner	☒	☒	alo2zz	 

- in the opened window select the command "Main operation mode" and in the appeared line "Parameter" specify "3", which means selecting the mode "Pulse" and press the button "Send".

Sending a command to the terminal

Terminal(s) ID

215

Command

Basic mode of operation

0 = MDB, 1 = Slave, 2 = Micromarket, 3 = Pulse / 3- button, 4 = Retail

3

Cancel
Send

2. Customizing price selection

To customize price selection, select the "Customize Price Selection and Pulse" command

Sending a command to the terminal

Terminal(s) ID

53337

Command

▼ Price Selection and Pulse settings

Price Selection (1 = External Buttons, 2 = LCD Buttons, 3 = External Next/Ready Buttons, 4 = LCD Next/Ready Buttons).

0

Pulse (0 = none, 1 = fast speed, 2 = slow speed)

0

Denomination Pulse

0

Cancel Send

The "Price selection" parameter is configured according to the table below

Price Selection (1 = External Buttons, 2 = LCD Buttons, 3 = External Next/Ready Buttons, 4 = LCD Next/Ready Buttons).

0

2.1. Parameter 1 (Price Selection):

Parameter value	Description
-----------------	-------------

1	Price (and product) selection by external buttons (up to 3)**. Buttons are connected to pins 5, 8, 9. The pins are pulled up to VCC, so when the button is pressed, you need to push them to GND The "Select Product" screen is displayed, an animated finger cycles through as many buttons as the prices are filled** When you click, a payment request is made. In case of successful payment - the level on the corresponding pins 4, 7, 10* is inverted.
2	Select with the buttons on the terminal screen (up to 3)**. If only 1 price is filled in, then the "Tap to pay by card" screen is displayed. When you click, a payment request is made. In case of successful payment - the level on the corresponding pins 4, 7, 10* is inverted.
3	Selection by 2 external buttons Forward / Backward. Prices are sequentially oversubscribed (up to 6)**. The "Attach Card" screen is displayed. NFC field is always active (you can attach the card at any time) In case of successful payment - the level on the corresponding pins 4, 7, 10* is inverted.
4	Select with 2 buttons on the terminal screen: Forward / Backward. Prices are sequentially oversubscribed (up to 6)**. NFC field is always active (you can attach the card at any time) In case of successful payment - the level on the corresponding pins 4, 7, 10* is inverted.
5	Cyclic override of the 1st external button (pin 5). Prices are cycled through (up to 6)**. The "Attach Card" screen is displayed. NFC field is always active (you can attach the card at any time) In case of successful payment - the level on the corresponding pins 4, 7, 10* is inverted.
6	Selection by 2 external buttons: - X usd / + X usd. Price increases/decreases by the set value*** The "Attach Card" screen is displayed. NFC field is always active (you can attach the card at any time) On successful payment - the level on pin 4 is inverted
7	Selection by 2 buttons on the terminal screen: - X usd / + X usd. Price increases/decreases by the set value*** NFC field is always active (you can attach the card at any time) On successful payment - the level on pin 4 is inverted

*The level change settings on the external pins are defined by the command "38. External pin settings" command:

Terminal(s) ID	Command
53337	External pin settings (pin 10 on the connector)

Pin value at startup. 0 = Off, 1 = On

0

Trigger. 0 = None, 1 = Vend Request, 2 = Transaction approved, 4 = Goods dispensed, 8 = Coupon inser

0

Pin inversion hold timeout (in seconds). After expiration - the start value will be set

0

Opto-sensor (0 = do not use, 1 = stop pin 10, 2 = stop VendApprove, 3 = stop QR...)

0

Parameter 1. Pin value at startup. 0 = Off, 1 = On. Immediately after sending the command, the pin value will be set to this value. And it will be the same when the terminal is restarted.

Parameter 2. Trigger. Value = 0. If it is necessary to invert the level on pin 10 upon successful payment, set 2 (Transaction approved).

Parameter 3. Pin inversion hold timeout (in seconds). After expiration - the start value will be set. Accuracy: 10 milliseconds

Parameter 4. optic-sensor. Value =0. If it is necessary to reset the signal level on pin 10, set 1 or 5.

If you want to go to the start screen at any time after payment, without waiting for QR check to be shown, set 4.

** Product prices are set with the command "46. Prices for Pulse / 3-button dispenser" command

Terminal(s) ID

53337

Command

▼ Prices for Pulse / 3-button dispenser

Price 1 (in cents)

0

Price 2 (in cents)

0

Price 3 (in cents)

0

Price 4 (in cents)

0

Price 5 (in cent)

0

Price 6 (in cents)

0

Price 7 (in cents). Update the firmware to 87

0

Price 8 (in cents)

0

Cancel

Send

Prices for buttons (up to 6) in cents. If = 0, then there is no product for the corresponding button. You can't skip buttons (1000, 2000, 0, 2000, 0, 0, 0 - you can't. 1000, 2000, 2000, 0, 0, 0 - you can).

*** Price change settings are defined by the command "23. Amount settings in increments":

The screenshot shows a configuration window for the command "23. Amount settings in increments". The window has a light blue background. At the top, there are two main sections: "Terminal(s) ID" and "Command". The "Terminal(s) ID" section contains a text box with the value "53337". The "Command" section contains a dropdown menu with the selected option "Amount settings in increments (Pulse, GiftM...". Below these sections, there are three input fields: "Starting amount / default amount" with the value "100", "Minimum amount" with the value "0", and "Maximum amount" with the value "0". Below these, there are two more input fields: "Amount Step" with the value "100" and "Title text on the screen" with the value "for payment". At the bottom of the window, there are two buttons: "Cancel" (grey) and "Send" (green).

Parameter 1: Start amount / default amount (in cents)

Parameter 2: Minimum amount (in cents)

Parameter 3: Maximum amount (in pennies). This amount must not be greater than the Maximum Credit (see command 4)

Parameter 4: Amount step (in cents), how much the amount will increase/decrease when you press "+" "-"

String parameter. Arbitrary text displayed at the top of the LCD after the "Attach card" caption. For example, "for tip payment". String format: utf8

2.2 Setting Pulse

In addition to the inversion of external pins, the payment amount can be transmitted via the Pulse protocol.

To do this, in the command "54. "Price selection settings and Pulse + DenominationSniff" in Parameter 2 set the value to 1 or 2 depending on the speed of the Pulse bus:

1 = fast speed (50 ms + 50 ms)

2 = slow speed (100 ms + 300 ms)

This will send the payment amount to pin 7 via the Pulse protocol.

The screenshot shows a web-based configuration interface for a terminal. It has two main sections: 'Terminal(s) ID' and 'Command'. The 'Terminal(s) ID' field contains the value '53337'. The 'Command' dropdown menu is open, showing 'Price Selection and Pulse settings' as the selected option. Below this, there is a text label 'Price Selection (1 = External Buttons, 2 = LCD Buttons, 3 = External Next/Ready Buttons, 4 = LCD Next/Ready Buttons)' followed by an input field containing '0'. Further down, there are two input fields: 'Pulse (0 = none, 1 = fast speed, 2 = slow speed)' which contains '0', and 'Denomination Pulse' which also contains '0'. At the bottom, there are 'Cancel' and 'Send' buttons. Two red circles are drawn on the image: one around the 'Command' dropdown and another around the 'Pulse' input field.

Terminal(s) ID

53337

Command

▼ Price Selection and Pulse settings

Price Selection (1 = External Buttons, 2 = LCD Buttons, 3 = External Next/Ready Buttons, 4 = LCD Next/Ready Buttons).

0

Pulse (0 = none, 1 = fast speed, 2 = slow speed)

0

Denomination Pulse

0

Cancel Send

2.2 Denomination Pulse setting.

The denomination of the amount sent via the Pulse protocol. This is the number by which the amount paid is divided to produce the desired number of pulses output.

For example, the price of 1 pulse in the machine is 10usd. We set Denomination Pulse= 1000 (cents) and when paying 50usd (5000 cents) the terminal will send $5000/1000=5$ pulses to the machine.

Terminal(s) ID

53337

Command

▼ Price Selection and Pulse settings

Price Selection (1 = External Buttons, 2 = LCD Buttons, 3 = External Next/Ready Buttons, 4 = LCD Next/Ready Buttons).

0

Pulse (0 = none, 1 = fast speed, 2 = slow speed)

0

Denomination Pulse

0

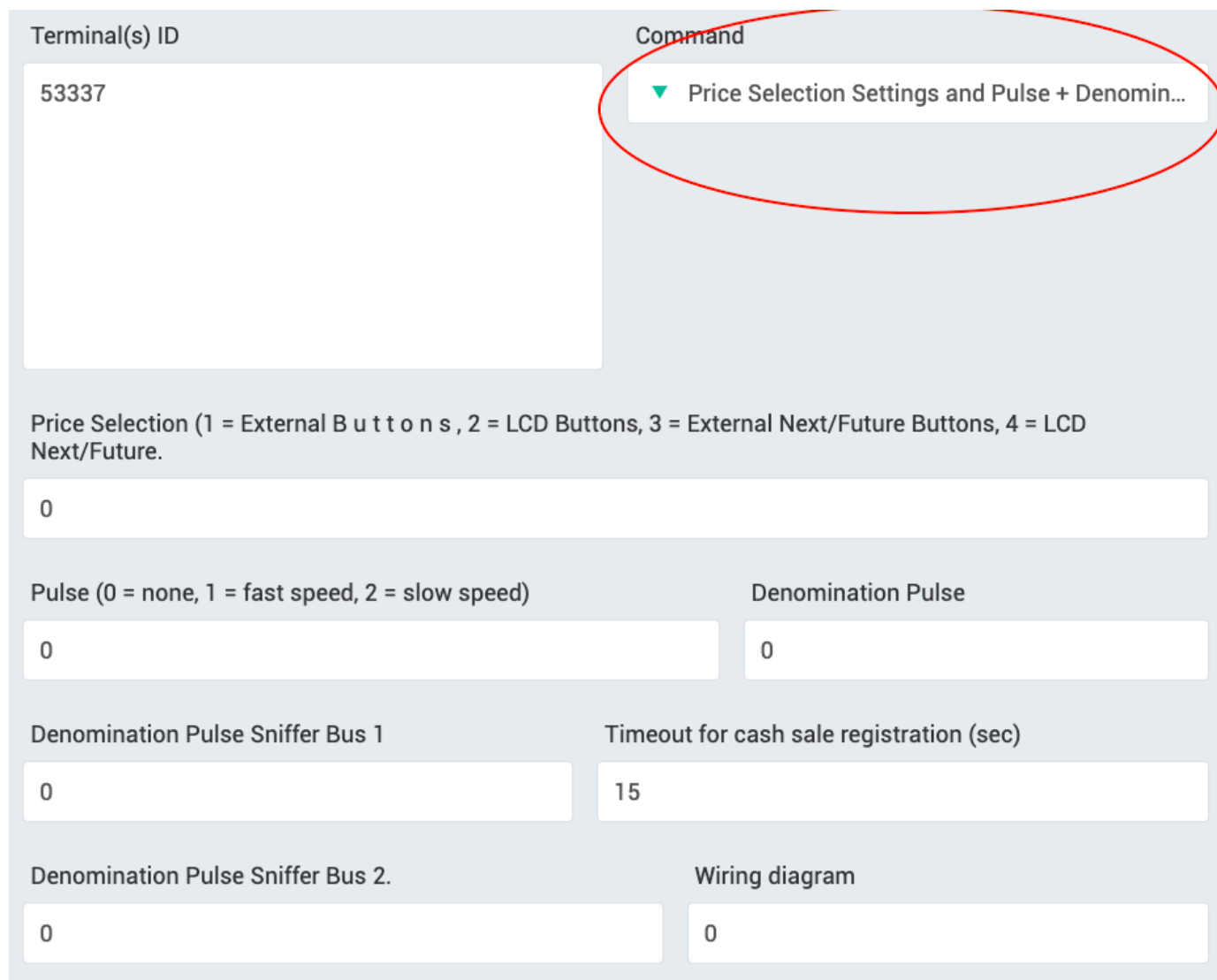
Cancel

Send

3. Pulse protocol and wiretap settings.

3.1. Setting up Pulse

To customize, select the command "54. Price Selection Settings and Pulse + DenominationSniff".



Terminal(s) ID

53337

Command

▼ Price Selection Settings and Pulse + Denomin...

Price Selection (1 = External Buttons, 2 = LCD Buttons, 3 = External Next/Future Buttons, 4 = LCD Next/Future).

0

Pulse (0 = none, 1 = fast speed, 2 = slow speed)

0

Denomination Pulse

0

Denomination Pulse Sniffer Bus 1

0

Timeout for cash sale registration (sec)

15

Denomination Pulse Sniffer Bus 2.

0

Wiring diagram

0

Parameters 1 - 3 are configured in the same way as the "Price Selection Settings and Pulse" command.

Parameter 4. Denomination Pulse Sniffer Bus1. Denomination for Pulse Sniffer Bus1 to convert the pulses back to a monetary amount. This amount is fiscalized and the QR of the receipt is displayed on the screen.

For example, listen to a bill acceptor, the price of the 1st pulse of which is equal to 10usd. We set Denomination Pulse Sniffer Bus1= 1000(cents). At reception of 5 impulses the terminal will fiscalize $1000 \times 5 = 5000\text{kop} = 50\text{usd}$.

This will transmit the payment amount on pin 7 using the Pulse protocol.

3.2. Pulse tire listening.

In Pulse operation mode, pins 6, 8, 9 can be set to listen:

- 6 - When the terminal is connected in scheme 0, 1 and scheme 2 with Den Pulse Snif2 > 0
- 8 - When the terminal is connected according to diagrams 2 and 3.
- 9 - When the terminal is connected according to scheme 0, 1 and scheme 3 with Den Pulse Snif2 > 0

3.3. External pin pull-up

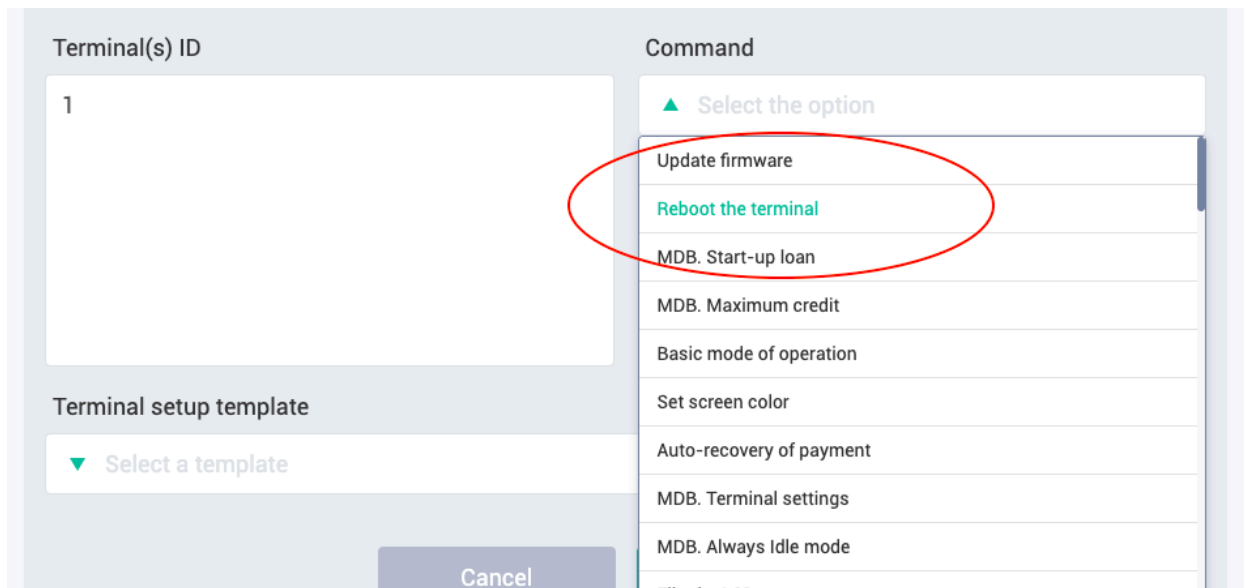
Pin 6 requires an external pull-up resistor to pin 1(+power):

- at +12V supply voltage: 1kOhm
- at +24V supply voltage: 2kOhm (removal of resistor R5 on the Pulse-adapter is required)

Pin 8 requires an external pull-up with a 30kOhm resistor to pin 1 (+power) when connected according to scheme 1 in modes:

- 1 - price selection (and by external buttons) by external buttons (up to 3)
- 3 - Selection by 2 external buttons Forward / Backward.
- 6 - Selection by 2 external buttons: - X usd / + X usd.

After completing the settings - Reboot the terminal, to do this, select the appropriate command and click the "Submit" button.



The screenshot shows a web-based configuration interface for a terminal. It has two main columns: 'Terminal(s) ID' and 'Command'. The 'Terminal(s) ID' column contains a text input field with the number '1'. Below it is a section for 'Terminal setup template' with a dropdown menu labeled 'Select a template'. The 'Command' column contains a list of options. A red oval highlights the 'Reboot the terminal' option, which is currently selected. Other options in the list include 'Update firmware', 'MDB. Start-up loan', 'MDB. Maximum credit', 'Basic mode of operation', 'Set screen color', 'Auto-recovery of payment', 'MDB. Terminal settings', and 'MDB. Always Idle mode'. At the bottom right of the interface is a 'Cancel' button.

Terminal(s) ID	Command
1	Select the option
	Update firmware
	Reboot the terminal
	MDB. Start-up loan
	MDB. Maximum credit
	Basic mode of operation
	Set screen color
	Auto-recovery of payment
	MDB. Terminal settings
	MDB. Always Idle mode

3.4 Inhibit (prohibition to sell if the dispenser is not working / switched off)

To prevent the terminal from accepting payment when the machine is not working (or there is no power supply), you need to send the command

38. External pin settings (pin 10 on the connector).

In the optic sensor parameter set:

7 = Inhibit payment when pin 5 is high (inhibit pulse)

8 = Inhibit payment when pin 5 is low (inhibit pulse)

Leave the rest of the parameters as default.

Connect the inhibit wire to pin 5 of the terminal.

Even if no wire is connected, with these settings the terminal will stop accepting payment in case of external power failure.

4. Appendices

4.1. Pinout of the standard cable:

https://docs.google.com/document/d/1V0gICjsMKf5SKjDT3FKPx7nOpuxIsh2I/edit?usp=drive_link&ouid=101355410812876233511&rtpof=true&sd=true

Example of setting up a dispenser with optic-sensor

https://docs.google.com/document/d/1Mwa6PCbPmdxOXOkzwXkL3x6oZeIhLTMS/edit?usp=drive_link

4.2. 4.2Pin circuitry

