

# Logging board for Nayax Onyx/VPos Touch [COIN+BILL]

User manual

Board version: v1.08

Software version: v1.05d

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by

Bernd Karle

[www.casino-software.de](http://www.casino-software.de)

and

Thomas Schmitz

[www.ts-elektronik.de](http://www.ts-elektronik.de)

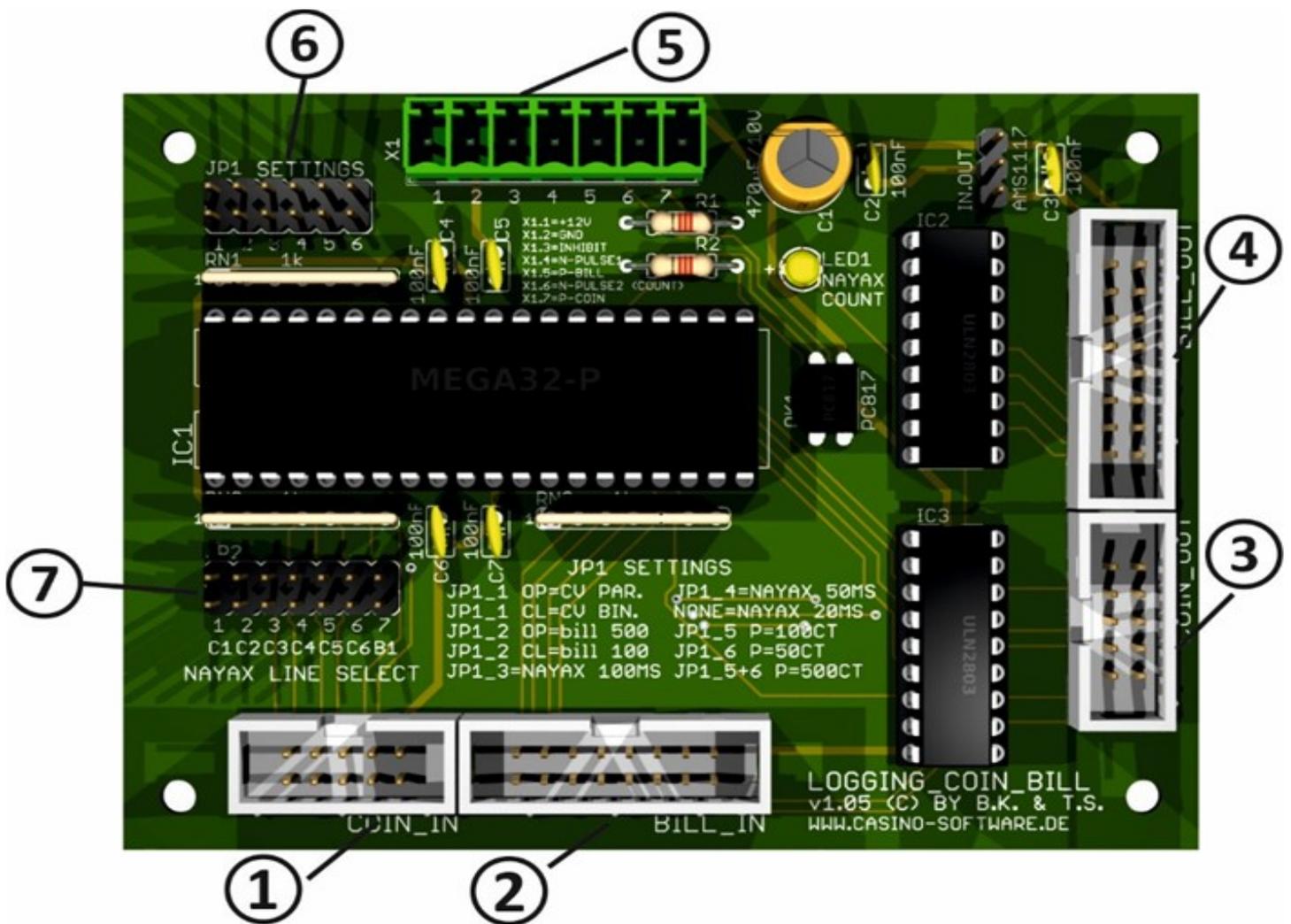
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## 1. FUNCTIONAL DESCRIPTION

The coin and bill logging board was developed to record cash receipts from a machine with a cashless terminal from Nayax and to record them in the logged sales. For this purpose, the signals from the coin or banknote acceptor are passed on to the machine and are then sent to the Nayax terminal, where they are recorded.

Every 45 minutes or during a payment transaction, the Nayax Terminal sends the collected data to the Nayax server.



The board enables in conjunction with the Nayax terminal a reliable recording of cash and non-cash (cashless) deposits as well as a tamper-proof(\*) transfer of data to the Nayax servers.

You can view and export the data at any time in the web interface or the MoMa app. Most tax offices and tax advisors accept these documents.

*(\*) The recording of cashless payments is tamper-proof thanks to system encryption. To record cash deposits, however, external signals must be supplied to the terminal. Vending machine installers and/or operators must adhere to the connection and setting specifications and ensure that the connections between the circuit board, vending machine and Nayax terminal are not interrupted.*

*Ensuring this is the sole responsibility of the installer or operator. For help with setting up the circuit board and the Nayax terminal, please refer to our product manuals.*

***As manufacturer and developer of the board, we are not responsible for incorrect installations and resulting errors and cannot be held accountable for them!***

## 2. CONNECTIONS

- 1 – Connection for electronic coin acceptor
- 2 – Connection for electronic banknote validator
- 3 – Coin acceptor output to the machine
- 4 – Output banknote validator to the machine
- 5 – Connection block for Nayax terminal and printer (\*\*)
- 6 – Pin strip for setting basic functions
- 7 – Pin strip for defining the coin or note channel for cashless payments

*(\*\*) it is possible to connect a ICT SP1 printer to the board in such a way that cash and cashless payments are recorded separately in the accounting system.*

*Please refer to the separate instructions for the printer*

## 3. PRECAUTIONS



Please observe the regulations / recommendations when handling electronic components and assemblies with regard to damage caused by ESD (Electro Static Discharge).

- BEFORE unpacking the circuit board, discharge yourself on a grounded metal part, e.g. heating pipe.
- If you have an ESD wristband, please put it on and connect it to the grounding contact of a socket.
- Touch the board only at the edges
- If possible, wear ESD outerwear or clothing made of 100% cotton

## 4. JUMPER SETTINGS

Various settings can be made using jumper blocks JP1 and JP2.



JP1 is used for general configuration like PARALLEL or BINARY interface, and Nayax Counter signal length and value.

JP1.1: Coin acceptor interface, open=parallel(default), closed=Binary

JP1.2: Banknote validator value #1, open=500 cents(default), closed=100 cents

JP1.3 + JP1.4:Nayax Count signal Signal length

=>JP1.3 open + JP1.4 open = 20ms

=>JP1.3 open + JP1.4 closed = 50ms

=>JP1.3 closed + JP1.4 open = 100ms (default)

=>JP1.3 closed + JP1.4 closed = 250ms

JP1.5+ JP1.6:Nayax count signal value

=>JP1.5open + JP1.6open =10 cents

=>JP1.5open + JP1.6 closed=50 cents (default)

=>JP1.5 closed+ JP1.6 open=100 cents

=>JP1.5 closed+ JP1.6 closed=500 cents

If 10 cents was chosen, Coin #1 starts at a value of 10 cents.

If 50 cents was chosen, Coin #1 starts at a value of 50 cents.

If 100 cents was chosen, Coin #1 starts at a value of 50 cents.

If 500 cents was chosen, Coin #1 starts at a value of 500 cents.



JP2 is an integrated PULSE adapter to convert the Nayax PULSE signal to the corresponding COIN #1- #6 or BILL #1 line to connect.

JP2.1 closed: Nayax signal goes to COIN #1

JP2.2 closed: Nayax signal goes to COIN #2

JP2.3 closed: Nayax signal goes to COIN #3

JP2.4 closed: Nayax signal goes to COIN #4

JP2.5 closed: Nayax signal goes to COIN #5

JP2.6 closed: Nayax signal goes to COIN #6

JP2.7 closed: Nayax signal goes to BILL #1

## 5. CONFIGURATION AND INSTALLATION IN THE MACHINE

First place desired jumper, using jumper block JP2, on which coin or banknote channel the board should transmit the cashless payments to the machine.

Example:

You would like to be able to pay a minimum amount of 1€ with the Nayax terminal.

Look at the label of the coin acceptor to see on which channel the signal is output, e.g. for 1€. Let's assume it was channel 2. Insert the jumper on the pin strip 7 into position C2 (C2 = COIN #2)

Now place, using jumper block JP1 how long the Count-impulses to the Nayax terminal are and what the lowest credit value of the coin acceptor is.

Example:

Normally, the signal length of the coin validator for one coin is 100 ms – i.e. when a coin is detected, the signal is 100 ms low and then again 100 ms high.

Many machines evaluate this time window to suppress manipulation.

To set the count signal to Nayax to the same value, in this case, set the jumper JP1\_3 to 100ms (default setting).

The signal length of the Nayax Count signals (adjustable) is independent of the signal time which is passed on to the machine. The signal length to the machine is always 100ms!

Now for the smallest credit:

Assuming the coin acceptor accepts €0.50, €1 and €2, the smallest credit value is €0.50.

In this case put the jumper JP1\_6 in the default state.

If the smallest credit value is 1€, plug the jumper on1\_5, corresponds to 100CT.

Token:

It is possible to accept tokens with the coin acceptor and NOT log them. Example: Coin acceptor starts at COIN #1 with 0.50 euro, on COIN #2 = 1 Euro, and COIN #3 the value is 2 Euro. Now simply place the token on the coin acceptor COIN #4, e.g. with Teach or SelfProg mode (see manual for coin validator). A coin on COIN #4, #5 and #6 are not logged, but passed on to the machine.

## 6. CONNECTION OF THE NAYAX TERMINAL

You need the following wires of the Nayax connection cable:

- 2x red (AC/DC-IN +)
- 2x black (AC/DC-IN -)
- Green (Pulse 1)
- Blue (Pulse 2)
- Violet (Ex-Pulse-Inhibit)

Connect the above wires to the green connector X1 as follows (from left to right):

- 1 – 2x red (+12V)
- 2 – 2x black (GND)
- 3 – Violet (Inhibit)
- 4 – Green (Pulse 1)
- 5 – not used
- 6 – Blue (Pulse 2)
- 7 – not used

## 7. INSTALLATION IN THE MACHINE

- Turn off the machine and wait about 5 minutes until all capacitors have discharged.
- Find a suitable location for the board. Please make sure that wooden housings may be painted on the inside with conductive paint. Use spacers for mounting. Install the board so that nothing falls or drip on it.
- Avoid strong magnetic fields near the installation (e.g. electromagnets or motors).
- Now disconnect the connectors for the coin and banknote acceptors on the machine side and insert the plugs into ports 1 (COIN IN) or 2 (BILL\_IN).
- Insert one side of the supplied connection cable into the connectors 3 (COIN\_OUT) and 4 (BILL\_OUT) and the other ends into the corresponding connections of the machine.
- Lay the antenna cable of the Nayax terminals as far away from the board as possible and place the antenna as far away as possible.
- Once all cables have been installed, you can now switch on the machine.
- A small LED should now light up on the logging board and the Nayax terminal should start.

## **8. CONFIGURATION OF THE NAXAY TERMINAL**

Next, you need to configure the Nayax terminal accordingly.

To do this, log in to your Nayax account and access the settings for “Pulse/ccTalk” and sSet the following parameters:

✓  Pulse/ccTalk

<input type="checkbox"/> Credit per Pulse 1 (Cents)	100	
<input type="checkbox"/> Credit per Pulse 2 (Cents)	50	
<input type="checkbox"/> Pulse active time in ms	50	
<input type="checkbox"/> Pulse IN2 Counter	1	
<input type="checkbox"/> Pulse inactive time in ms	50	
<input type="checkbox"/> Pulse Increment	1,2,5,10,20,50	
<input type="checkbox"/> Pulse Inhibit	Enabled and Active on logic 1 received from VMC ▾	
<input type="checkbox"/> Pulse Line Welcome Message	Treffen Sie eine Auswahl	
<input type="checkbox"/> Pulse Pull-Up	Pulse 1+2 Pull-Up's ▾	
<input type="checkbox"/> Pulse Title 1-6	1.00;2.00;5.00;10.00;20.00;50.00	

Note:

If the smallest credit is 50 cents, set the value “50” for “Credit per Pulse 2 (cents)” The example shows the configuration for six price buttons (1€, 2€, 5€, 10€, 20€ and 50€). If you want different or fewer buttons, change the settings accordingly.

Now transfer all changes to the terminal.

## 9. SALES QUERY

In order to be able to access the cash and cashless receipts from the machine, proceed as follows:

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- Log in to your Nayax account
- Select yourself as operator
- Click on "Reports"
- Select “Online Reports” and then “Sales Summary”
- Select the operator again
- Set the desired time interval
- You will now receive this overview

Operator Name	Betreiber ID	Prepaid Credit	Cash	Währung	Gesamtanzahl Transaktionen	Gesamtbetrag Transaktionen
Nayax Test	2000044792		608,00	EUR	1.898	1.878,00

### Hint:

As mentioned at the beginning, the terminal only transmits logged cash deposits approximately every 45 minutes, unless a cashless transaction takes place during this time. In this case, the transmission takes place after the cashless payment. In order to transfer any saved cash payments, you can trigger the so-called “cash register cut” both online and directly at the terminal.

## 10. SAFETY REGULATIONS

Read the operating instructions completely and carefully before use. DThe operating

instructions are component of the product and contains important information for correct use.

Only use the product, product parts and accessories if they are in perfect condition. Compare the specifications of all devices used to ensure compatibility. If you have any questions, defects, mechanical damage, malfunctions or other problems that cannot be resolved using the accompanying documentation, please contact the manufacturer.

The Logging [COIN+BILL]The circuit board is designed for installation in a housing.

Use the Logging [COIN+BILL] only in low-voltage circuits (max. 24V). Higher voltage rates are not permitted. There is a risk of death from electric shock and fire!

Make sure that all electrical connections and connecting cables comply with the regulations. The entire product may not be modified or disassembled and be reassembled. Operation is only permitted in dry indoor rooms. Never operate the device immediately after bringing it from a cold to a warm room. The resulting condensation can damage the device. Set the Logging [COIN+BILL]Do not expose the module to high temperatures, strong vibrations, high levels of humidity or chemically aggressive dust, gases and vapors.

Electronic components of the module may heat up during operation. Ensure adequate air circulation to avoid heat build-up and overheating.

In the event of damage caused by non-compliance with these operating instructions, the warranty claim will be void. Liability for all consequential damages is excluded! We assume no liability for property damage or personal injury caused by improper use or non-observance of the safety instructions!

## **11. EDISPOSAL INSTRUCTIONS**

According to the European WEEE Directive, electrical and electronic devices may not be disposed of with household waste. Their components must be recycled or disposed of separately because toxic and dangerous components can cause lasting damage to health and the environment if disposed of improperly.

## **12. DISCLAIMER**

Printing errors and changes to the product, packaging or product documentation. We reserve the right. Please note our warranty conditions.