

# CASH-Interface2 Nayax Connection

User manual

Board: CASH-Interface2 v1.31

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## 1. INTRODUCTION

With the [CASH-Interface2](#) and [CASH-Interface MC8](#) board it is possible to connect and use the Nayax cashless payment system ONYX or VPOS TOUCH, and add several forms of payment beside the classic cash payments methods like coins and banknotes. Of course it is possible to use all payment methods together, coins, banknotes and cashless.

## 2. NAYAX DEVICE SETUP

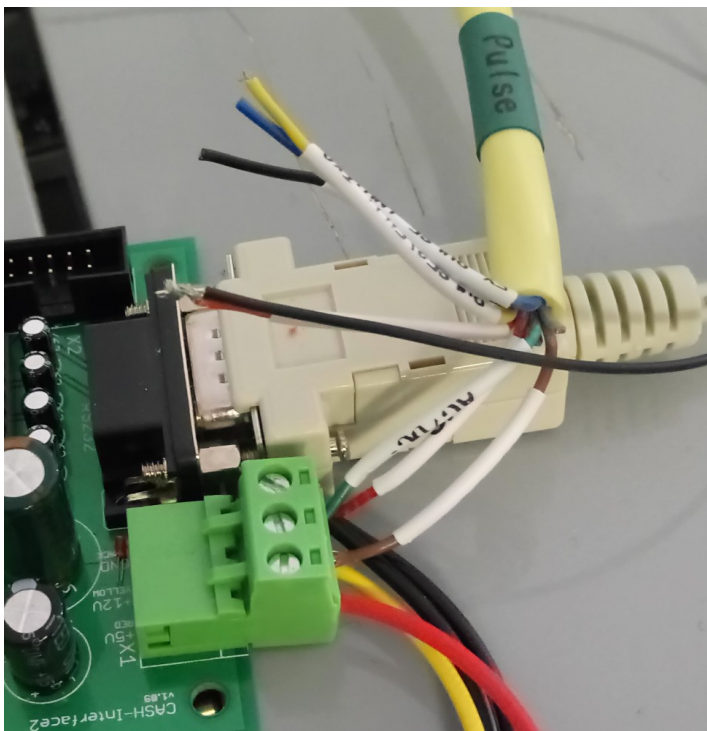
The Nayax device must operate with PULSE interface. All Nayax device setup is done in the Nayax web interface. If you buy the Nayax device from us, we will set up the Nayax for your needs (Plug & Play!).

PULSE interface means Nayax sends out ACTIVE LOW impulse(s) to signal credits. For example set up Nayax to send 1 pulse for each Euro credit. So for 5 Euro there are 5 pulses on the Nayax PULSE output line, normally this is the green PULSE1 wire.

## 3. CASH-Interface2 Connection

The Nayax pulse connection to the CASH-Interface2 are just some wires, power (plus and minus) and the pulse signal itself (ACTIVE LOW). Optional there is a INHIBIT line to enable or disable the device. There are different Nayax devices with different PULSE cables, be sure to use the table that fits for your device!

### 3.1 NAYAX AMIT 3 Connection

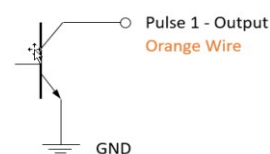


"AC/DC IN +" (Brown)	=> CI2 +12V DC
"AC/DC IN -" (Green)	=> CI2 GND
"PULSE1 RXD" (Orange)	=> CI2 #6 pin (#1 - #6) (ACTIVE LOW)
"VCC" (Black)	=> CI2 +12V
"GND" (Red)	=> CI2 GND
"EX Pulse" (Purple)	=> CI2 INHIBIT, coin plug pin 6 or bill plug pin 9-12

In this example the system works without connecting VCC (Black) cable, just Brown, Green and the Orange cable.

"There is no need of VCC (VCC is the PLUS pole of a circuit's power supply) in case of the Closed-Circuit mode"

Closed Circuit Mode



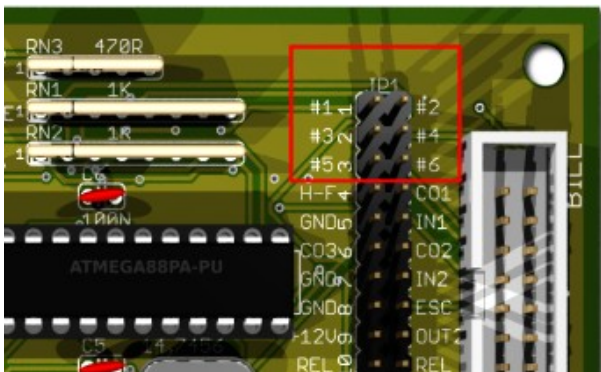
### 3.2 NAYAX ONYX or VPOS TOUCH Connection

- "AC/DC IN +" (Red)       => CASH-Interface2 +12V DC
- "AC/DC IN -" (Black)     => CASH-Interface2 GND
- "PULSE1" (Green)       => CASH-Interface2 #6 pin (#1 - #6 possible, ACTIVE LOW)
- "EX Pulse" (Purple)      => CASH-Interface2 INHIBIT,  
                                  coin plug pin 6, or bill plug pin 9-12

### 3.3 CASH-Interface2 PULSE INPUT Connection

One possible Nayax setup is to set the costs is one pulse, then connect the Nayax pulse line to e.g. #6 of the CASH-Interface 2 and set the value for that #6 in the CI2 software (see CI2 manual how to change # values).

Or set the Nayax pulse to 1 pulse every Euro, and connect the Nayax pulse line to the 1 EUR coin line (normally 1 Euro coin is #4 if you start the coins with the 10 Cent coin, depends on your CI2 setup).



The #1 - #6 pins are located on the CASH-Interface2, JP1 pin header.

Simply use one of the 2 pin cables that was included with the CASH-Interface2.

For an more easy connection of Nayax devices especially we developed a PULSE-Adapter, see chapter 4 below.

### 3.4 INHIBIT

The INHIBIT is controlled via the CASH-Interface2, and working if the TOTALBLOCKING in the software is off (yellow LED on the board on). Or you connect the "EX Pulse" (Purple) cable directly to GND, then it always accepts credit card.

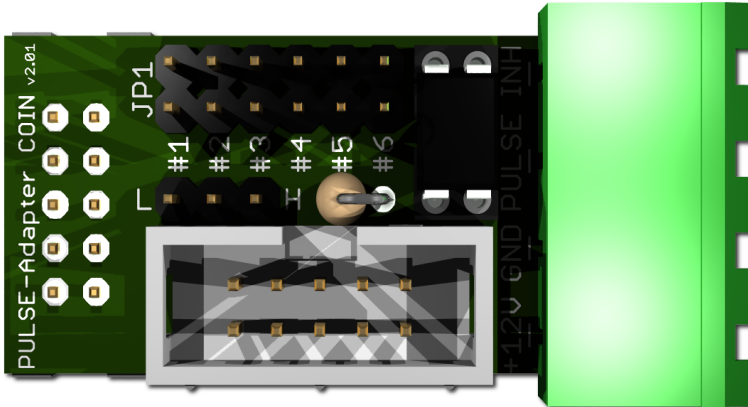
If you get the "Cash only" message on Nayax devices, you need to connect also the INHIBIT (4) line, the "EX Pulse" (Purple) cable!

Be sure to set up the INHIBIT attribute for the Nayax device through the Nayax web-interface, too!

## 4. PULSE ADAPTER

Another possibility to connect the Nayax PULSE wire is to use our PULSE-Adapter. There are two types of the PULSE-Adapter available, a COIN and a BILL version.

### 4.1 PULSE-Adapter COIN



The [PULSE-Adapter COIN](#) has a 10 pin connector that fits to default coin plugs, and offers again a 10 pin coin plug to plug in the originally coin acceptor cable, so you do not lose the coin acceptor connector.

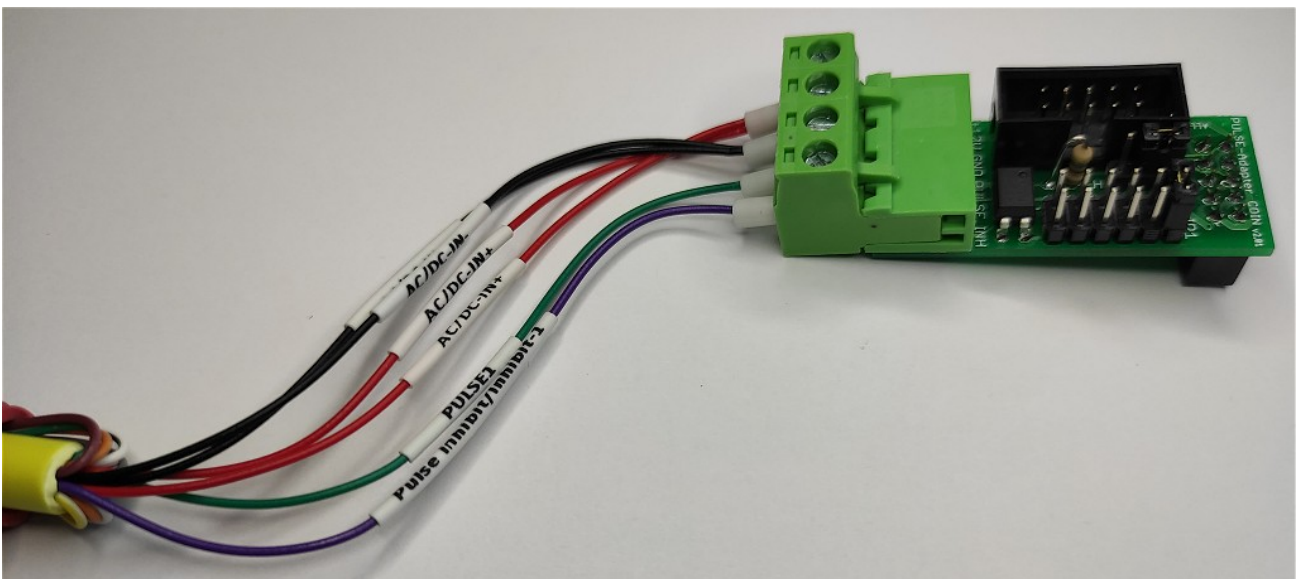
The Nayax device can be connected easily via plugable terminal connector. With a jumper you can select the coin channel on which the

external credit signal is transferred. Additionally there is an INHIBIT out, to control the acceptance of the Nayax device. Occupation of the 4 pole plug:

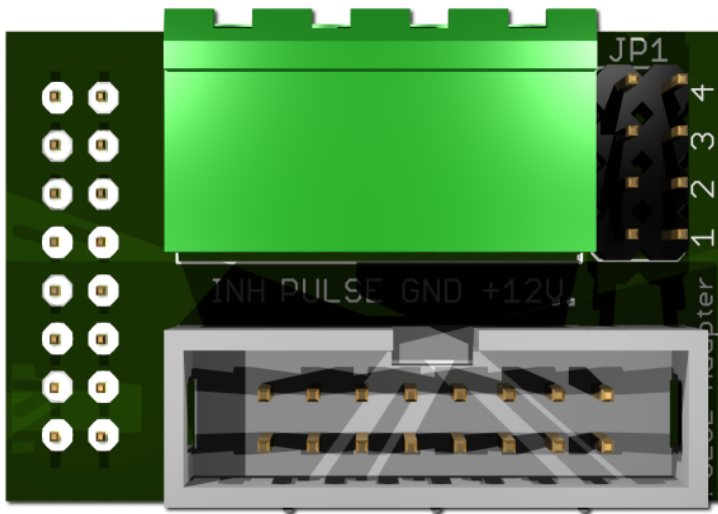
Usage:	NAYAX AMIT3	NAYAX VPOS TOUCH	NAYAX ONYX
1 = +12V DC	"AC/DC+" (brown) "VCC" (Black)	"AC/DC IN +" (Red)	"AC/DC-IN +" (Red)
2 = GND	"AC/DC-" (green) "GND" (Red)	"AC/DC IN -" (Black)	"AC/DC IN -" (Black)
3 = PULSE	"PULSE1" (orange)	"PULSE1" (Green)	"PULSE1" (Green)
4 = INHIBIT	"EX Pulse" (purple)	"EX Pulse" (Purple)	"Inhibit-1" (Purple)

Hint: VCC is optional and normally not needed when using the "Closed-Circuit mode"

#### Example for PULSE-Adapter [COIN] used with Nayax ONYX



## 4.2 PULSE-Adapter BILL



The PULSE-Adapter BILL has a 16 pin connector that fits to default NV9/NV10 plugs, and offers again a 16 pin plug to plug in the originally bill acceptor cable, so you do not lose the bill acceptor connector.

The PULSE-Adapter BILL offers the same options as the above PULSE-Adapter COIN, select the bill channel by jumper and a INHIBIT output.

## 5. NAYAX WEBINTERFACE SETTINGS


Here we show the settings on Nayax web interface side.

First login to your Nayax account. Then click onto Operations, Machines. Now click the Search button to show all machines assigned to your account. On the left side click the machine you want to administrate. Now you should see the General Tab.

### 5.1 Example for single price settings

The price shall be 3 EUR and the pulse value shall be 100 (Cent). With this setup the Nayax device shall send one pulse for each Euro so we can use the 1 Euro line of the coin acceptor. For a price of 3 Euro we receive 3 pulses, each 1 Euro in value.

The setting are made on the Pulse/ccTalk section and look like this:

▼  Pulse/ccTalk

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<input type="checkbox"/> Credit per Pulse 1 (Cents)	<input type="text" value="100"/>
<input type="checkbox"/> Number of Pulses per Vend 1	<input type="text" value="3"/>
<input type="checkbox"/> Pulse active time in ms	<input type="text" value="100"/>
<input type="checkbox"/> Pulse inactive time in ms	<input type="text" value="100"/>
<input type="checkbox"/> Pulse Inhibit	<input type="text" value="03 - Inhibit Enabled and Active on logic 1 rece ..."/>
<input type="checkbox"/> Pulse Line Welcome Message	<input type="text" value="Preis / Price in EUR"/>
<input type="checkbox"/> Pulse Title 1-6	<input type="text" value="1 Photo"/>

- Credit per Pulse 1:** the value of each pulse Nayax sends out.
- Number of Pulses per Vend 1:** the costs for one vending.  
Our price is 3 Euro, so we need **3** pulses a **100** Cent
- Pulse active time in ms:** the duration of a pulse, 100ms default for a coin acceptor.  
for faster processing of more pulses set this to 50
- Pulse in active time in ms:** the duration of a pulse, 100ms default for a coin acceptor.  
for faster processing of more pulses set this to 50
- Pulse Inhibit:** to control card acceptance via the machine
- Pulse Line Welcome message:** The text shown on top of the Nayax screen
- Pulse Title1-6:** The text shown below the Price

The settings are called "Attributes", and can be added or removed on the Attributes page!  
If your Pulse/ccTalk settings section shows different attributes, you need to add/remove the needed attributes on the Attributes page. Hit the Save button when you are done.

If you change settings, you need to check the checkbox of that setting and send a "Update queue" command by using Actions, Update Queue.



Next important settings are done on the **VPOS Touch** section.

VPOS Touch

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Cash Only Image Default ?

Idle Mode Screens Pulse Price Display 0x800 ?

Menu Functions Technician Mode Report a Problem Contact Us Languages Device Info 0x5e ?

Menu Timeout 30 ?

Payment Methods VISA MasterCard Monyx AndroidPay ApplePay 0xdc ?

Payment Methods Display Buttons ?

Support Phone Number  ?

Support WEB www.casino-software.de ?

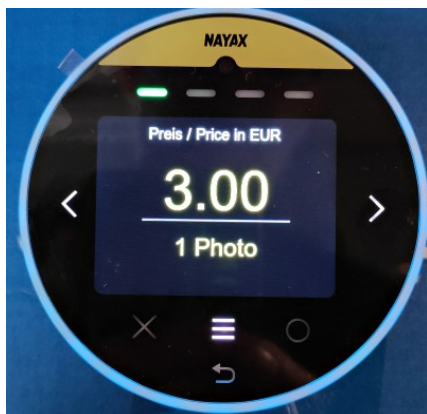
Technician Code  ?

Vend Flow Options No Extra Features ?

Above settings are just an example, you can try some individual settings, e.g. different Idle Mode Screens. For support information enter your data, this is shown within the Service menu on the Nayax screen when the "Hamburger-button" is pressed.

Finally, to get the new settings active you need to reboot the Nayax device. Send a Reboot via the Actions button. This can take some time to take effect, depends on the traffic on the Nayax servers. A quick and dirty method is to remove the power, wait some seconds, and reconnect the power to the Nayax device.

After reboot the screen should look like this:



First line on the Nayax screen is the "Pulse Line Welcome message".


Then it shows the "price", and below the price we have the "Pulse Title 1" text.

Because we use **single price** setup, all needed to charge the amount is to put the credit card in front of the Nayax device and the transaction starts automatically.

## 5.2 Example for multiple price settings

The prices shall be 2, 5, 10 ,20 EUR and the pulse value shall be 100 (Cent). With this setup the Nayax device shall send one pulse for each Euro so we can use the 1 Euro line of the coin acceptor. For a price of 2 Euro we receive 2 pulses, each 1 Euro in value. For the price of 5 Euro we receive 5 pulses, for 10 Euro 10 pulses, and for 20 Euro we receive 20 pulses.

The setting are made on the Pulse/ccTalk section and look like this:

 Pulse/ccTalk

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<input type="checkbox"/> Credit per Pulse 1 (Cents)	<input type="text" value="100"/>
<input type="checkbox"/> Pulse active time in ms	<input type="text" value="50"/>
<input type="checkbox"/> Pulse inactive time in ms	<input type="text" value="50"/>
<input type="checkbox"/> Pulse Increment	<input type="text" value="2,5,10,20"/>
<input type="checkbox"/> Pulse Inhibit	<input type="text" value="03 - Inhibit Enabled and Active on logic 1 rec ..."/>
<input type="checkbox"/> Pulse Line Welcome Message	<input type="text" value="Choose Desired Amount"/>
<input type="checkbox"/> Pulse Pull-Up	<input type="text" value="Pulse 1 Pull-Up"/>
<input type="checkbox"/> Pulse Title 1-6	<input type="text" value="2 Token;5 Token;10 Token;20 Token"/>

- Credit per Pulse 1:** the value of each pulse Nayax sends out.
- Pulse active time in ms:** the duration of a pulse, 100ms default for a coin acceptor. for faster processing of more pulses set this to 50
- Pulse in active time in ms:** the duration of a pulse, 100ms default for a coin acceptor. for faster processing of more pulses set this to 50
- Pulse Increment:** we use this to set up the prices, separated by comma, price is "Credit per pulse" x your price  
e.g. 2x100 (cent) = 2 EUR, 5x100 (cent) = 5 EUR
- Pulse Inhibit:** to control card acceptance via the machine
- Pulse Line Welcome message:** The text shown on top of the Nayax screen
- Pulse Pull Up:** We have a Pull up resistor on the CI2 or CI MC8  
it works also without this setting.
- Pulse Title1-6:** The text shown below the Price, separated by semicolon.

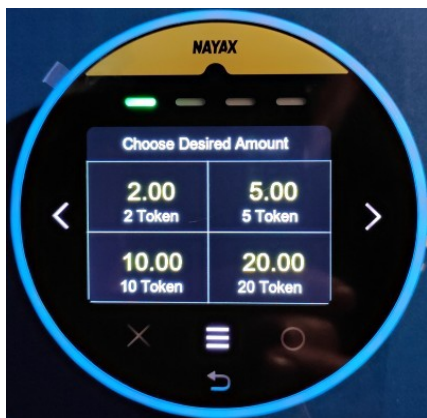
The settings are called "Attributes", and can be added or removed on the Attributes page!  
If your Pulse/ccTalk settings section shows different attributes, you need to add/remove the needed attributes on the Attributes page. Hit the Save button when you are done.

If you change settings, you need to check the checkbox of that setting and send a "Update queue" command by using Actions, Update Queue.

Setting up the **VPOS Touch** section is same than with above single price example.



After reboot the screen should look like this:



First line on the Nayax screen is the "Pulse Line Welcome message".

Then it shows the 4 prices 2, 5, 10 and 20 Euro. Below every price we have the "Pulse Title 1-6" text.

The customer selects by touch screen the desired amount, then it shows all payment methods. All needed to charge the amount is to put the credit card in front of the Nayax device and the transaction starts automatically.

## 6. OTHER

- Pulse length should be set to 100ms (100ms is default with coin and bill validator). The CASH-Interface 2 can also handle pulses lower than 100ms. If you send more pulses simply set the pulse length to 50ms to reduce transmission time.
- A pulse must be LOW (ACTIVE LOW is default with coin and bill validator).
- "Number of Pulses per Vend 1" depends on your settings, see 3.3 example above.
- If the Nayax does not show correct screen after changing settings and rebooting the device, try this: **Actions, Reset Default Parameters**, then again **Actions, Reload Configuration**, and finally **Actions, Restart Device**. After restart it should show the correct settings.
- The Nayax system offers a lot of features, simply log in to your Nayax account and explore all the things.

We offer the Nayax ONYX and VPOS TOUCH in our web shop at:  
<https://www.casino-software.de/shop/en/Hardware/Cashless-Systems>

## 7. CONTACT

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