



All-in-one card reader and telemetric



VPOS Touch Manual

Last updated: 17-Jan-2018

Table of Contents

1	Introduction.....	2
2	Safety & Handling Instructions.....	3
2.1	Environmental Guidelines.....	3
2.2	VPOS Touch	3
2.3	Cleaning Instructions	3
2.4	Repairs.....	3
3	Specifications.....	4
4	Device Components	6
4.1	Front Panel	6
4.2	Back side.....	6
4.3	Cables	7
4.4	VPOS Touch Connector Scheme	7
4.5	Additional Accessories	8
5	Packaging.....	9
6	Installation Instructions.....	10
6.1	Uninstall	10
7	Operating and Testing.....	11
8	Technician Mode	12
8.1	Technician Mode Commands	12
9	Appendix 1 - FCC & IC Regulations.....	14

1 Introduction

A complete telemetry and cashless payment solution ideally suited for the unattended machines' market.

Device accepts all cashless payments and processing method in real time:

- Debit and Credit Cards
- Mobile, NFC Payments
- Prepaid cards and Closed environment solutions
- Swipe, Contact and Contactless



Benefit from easy installation, clearance, monitoring and management.

Nayax develops a complete management system that includes:

- Transaction monitor
- Machine management
- Inventory Management
- Alert and Event system
- Report Suite
- BI system

2 Safety & Handling Instructions

IMPORTANT: Please read this manual carefully before using the VPOS Touch.

2.1 Environmental Guidelines

- Do not use in locations when you have a risk of burnout or direct, intense sunlight
- Do not expose the product to corrosive gas/liquids of any type
- Deploy in non-condensing conditions

2.2 VPOS Touch

Additional features:

- The VPOS Touch has no battery and receives power via its connection to the vending machine
- Strong shock or vibrations to the device may cause failure
- Disassembly is strictly prohibited

2.3 Cleanning Instructions

- Use a soft, dry cloth
- Use a small amount of alcohol if the case is very dirty
- Please do not use organic solvents such as thinner and benzene

2.4 Repairs

- To maintain the warranty, do not try to fix it yourself
- if the device does not work properly, for any reason, please contact Nayax support: support@nayax.com

3 Specifications

Installation environment		
Operating Temperature	-20 °C - 55 °C	-22°F - 122°F
Storage Temperature	-30 °C - 85 °C	-40°F - 142°F
Humidity	25% - 95% (non-condensing)	
Dust & Water Resistance	IP 55	
Flammability	V-0 3MM UL-94 V0	
Physical Dimensions		
Height	105 mm	4.1 inch
Width	84.7 mm	3.3 inch
Depth	48.1 mm	1.9 inch
Weight	285 grams	10 ounces
Interface & Management		
Display Screen	Color Touch LCD Display 2.4 inch IPS 320 x 240 Pixels + 4 LEDs + 6 soft touch buttons	
Voice	Speaker + Buzzer + Built-in Microphone	
Power Supply	Operating Voltage: DC 12-40V, AC - Option Power < 10 Watt From Vending Machine	
Power consumption	From Vending machine Max: 400mA @ 24V DC Recommended External Power Supply: 24V DC / 2Amp.	
RF Contactless Interface	Frequency - 13.56 MHz, MIFARE, NFC, HID	
Camera	3M Pixels	
External Interface	Mini USB (Host/Device), Ethernet Internal Flash 64MB+32MB, Micro SD Card, SDRAM 32MB Optional: Bluetooth & WiFi	
Antenna	Frequency = 13.56 MHz Operation Temperature = -20°C to 85°C Humidity = Non Condensing 65°C 95% RH RoHS compliant	
Glass	Anti-Vandal with Gorilla Glass	
RS232	2 * RS232 TTL level manageable (software)	
Pulse Input/Output	6 in/out interfaces + 1 input (Inhibit)	
LAN	RJ11	
Sensors	1 Door open & 1 Temperature	
3G Modem	GSM / GPRS / CDMA	
Vending Machine Protocols	MDB (+DEX/DDCMP) / Pulse / VCCS / ccTalk / JVMA	

Reader Writer	
Contact	100,000 insertion cycles
	EMV Level 1 - Certified, Level 2 - Under certification
	Contact EMV L2 4.3f - Visa, MC, JCB, Amex, CUP
Contactless	EMV Level 1 - Certified FeliCa - Certified
	EMV Level 2 - Under certification: Visa PayWave 2.1.3b MasterCard PayPass 3.1.1 JCB - J/Speedy 1.3 Discover D-Pass 1.0 UnionPay QuickPass 1.0.2 AmEx ExpressPay 3.1 Interac Flash 1.5
Magnetic Stripe	ISO 7811 and JIS I Tracks 1,2,3 JIS II
Other Cards Supported	NFC, MIFARE, HID-iClass
Warrenty	
Time frame	1 year
Touch Screen	60,000 [Hours]
Contact	100,000 [Hours]
Magnetic Stripe Head	1,000,000 passes

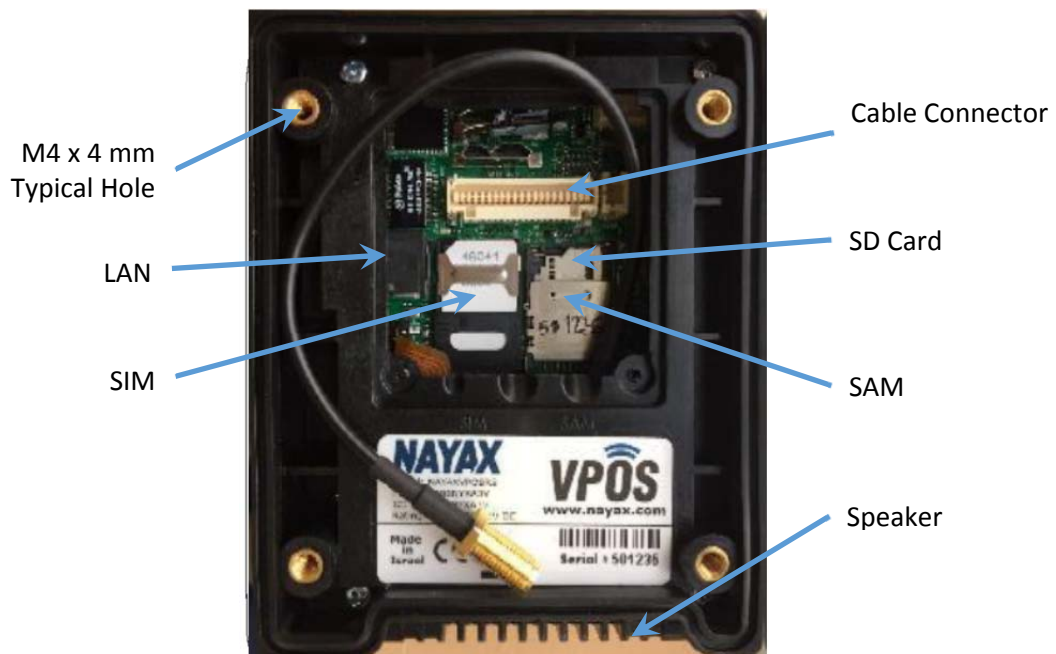
4 Device Components

4.1 Front Panel

Front Panel Color - Yellow / Black



4.2 Back side



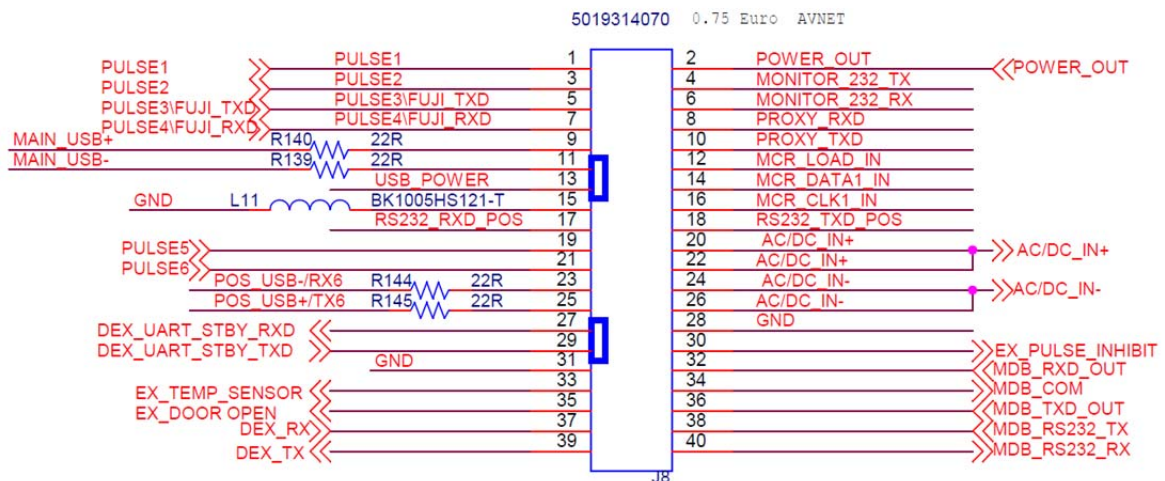
4.3 Cables

There are many configurations to the VPOS Touch cables. Nayax develops different cables to fit different machines

Please view the different cable options:

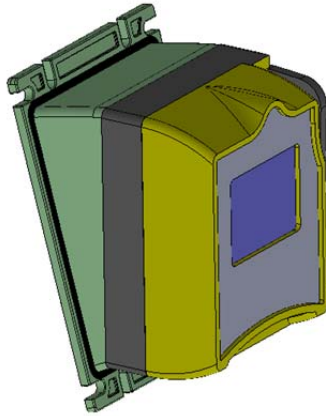
Image	Description	Connect to
	MDB	MDB at vending machines
	Dex	Dex
	RS232 DB9 Female	Serial
	VPOS Touch	Nayax VPOS Touch

4.4 VPOS Touch Connector Scheme

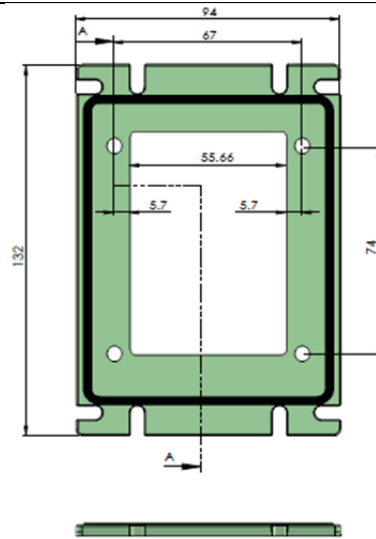


4.5 Additional Accessories

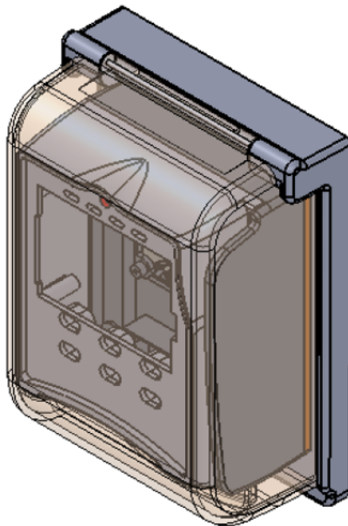
Reclining Spacer
Angle = 7.5 degrees



Back Plate & Drilling Template



Protective Box



5 Packaging

VPOS Touch Components:

- VPOS Touch in Bubble Wrap
- Cable
- Package

	
VPOS Touch Open Package	VPOS Touch Close Package

6 Installation Instructions

There are two installations' options: inside and outside the machine door.

Option 1 - Installation inside the machine

In the event the machine has a window in the door in which the VPOS Touch can be placed:

1. Open machine door
2. Remove the window
3. Remove the bolts
4. Place the provided plastic plate on machine door
5. Replace the bolts on the plastic plate
6. Place the VPOS Touch on the window from outside
7. Screw the screws from the inside while securing the VPOS Touch
8. Connect the cable - click it in

Option 2 - VPOS Touch installed outside the machine door

In the event the machine doesn't have a predefined location for installation of a card reader:

1. Select a flat location for the installation
2. Drill 4 holes into the machine door using the plastic plate for the screws
3. Drill a hole into the machine door of minimum 14 mm for the cable
4. Open machine door
5. Place the VPOS Touch on the door
6. Screw the screws from the inside while securing the VPOS Touch
7. Connect the cable - click it in

General Note: Screw is Phillips M4, use tightening torque = Level 3.

6.1 Uninstall

Warning: When un-plugging the VPOS Touch connector, you must press both sides of the releasing bridge in the same time to avoid damaging the releasing bridge.

7 Operating and Testing

1. Turn-on the Machine:
 - a. Make sure products are available in the machine before the vend test
 - b. Make sure prices are set up before the vend test
 - c. Make sure the door switch does not interfere with the working of the machine
2. Once the machine is powered up, a system Self-Test is automatically initiated, performing the following checks:
 - a. SIM card
 - b. GPRS communication
 - c. Server connectivity
3. When the LCD displays "Swipe Card / Dial" - test the device with a card
 - a. Sound and communication checks are performed
4. Test the device via the following transactions:
 - a. Cash Purchase
 - b. Credit Card Purchase
 - c. Card Vend Cancel - check that credit is not retained on transaction cancel

Once all tests are successfully completed the VPOS Touch is fully installed and ready to be used.

8 Technician Mode



To enter the “Technician Mode” use one of the following options:

- Present the Technician Card on idle mode
- Navigate from Menu:
 - Click the Hamburger button (three horizontal lines)
 -  - Click the technician mode button
 - Enter the technician code and click OK green button

8.1 Technician Mode Commands

There are 3 screens:

- First screen - two buttons that can be configured by logging-in to Nayaxvend (back office)
- Next two screens - predefined collection of options listed below:

Icon	Icon Name	Description
	Cash Collection	Indicates to the server that cash was collected
	Poll	Initiate keep alive communication with the server
	Reboot	Check for updated device version in the boot server
	Inventory Fill	Indicates to the server that the machine inventory was filled
	Fee	Define the extra charge (convenience fee) for payment methods
	Reset	Restart the VPOS Touch firmware

	Read Audit File	Initiate DEX read from the machine and send to server
	Advanced Settings	Show additional parameters of Nayax / FeliCa device
	Modem Info	Show modem details, version info, reception level, etc.
	View Audit	Show DEX file on screen
	Volume	Adjust audio volume level
	Language Settings	Set the audio language and text language

9 Appendix 1 - FCC & IC Regulations

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. such modifications could void the user's authority to operate this equipment

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The distance between user and products should be no less than 20cm

This device complies with Industry Canada RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) il ne doit pas produire de brouillage et

(2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The VPOS Touch IDs are:

- FCC ID: 2AK6L-VPOST
- IC: 10840A-VPOST

The VPOS Touch is available with two cellular modules.

These are the 2 options:

- Contain FCC ID: RI7LE910NAV2, Contains IC: 5131A-LE910SNAV2
- Contain FCC ID: RI7LE910SVL, Contains IC: 5131A-LE910SVL