User guide

Ingenico 3070

RoHS compliant

2002/95/EC

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1 Presentation

The Ingenico 3070 is a compact PIN-pad designed to accept payment using magnetic and smart cards and able to be use as handheld or countertop device.

It has the following features:

- Keyboard of 18 keys (15 + 3 function keys).
- Graphic LCD backlight display (128 x 64).
- Smart Card reader.
- Magnetic stripe reader.
- RS232 Interface.
- USB Interface (Option).
- Ethernet interface (Option).

The terminal box contains:

- the terminal,
- the connection cable,
- this manual
- An optional removable privacy shroud.

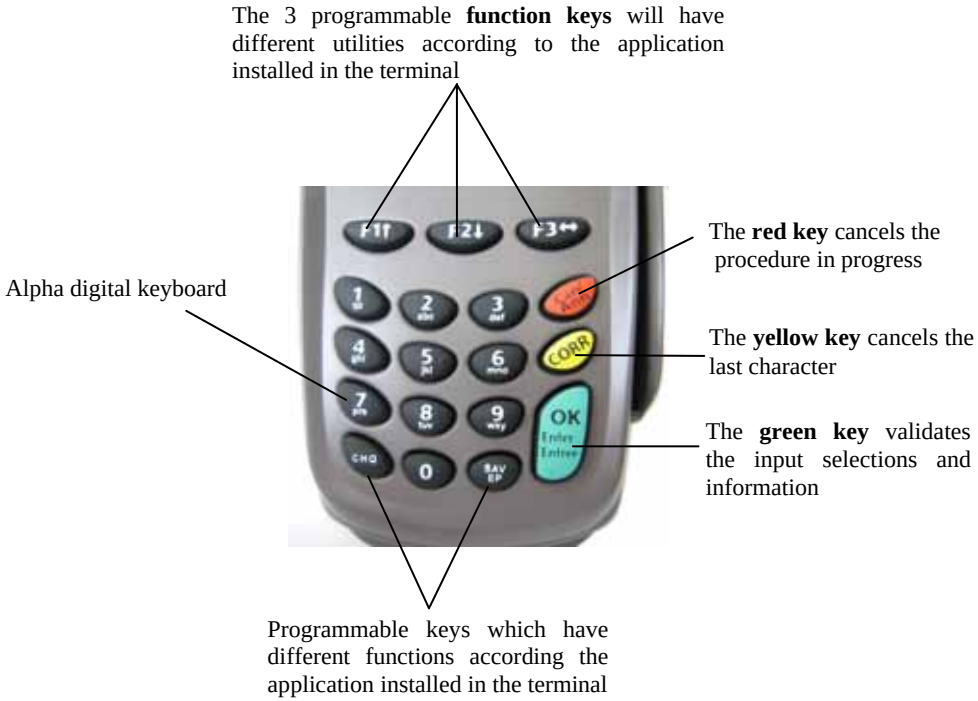
1.1 Overview of Ingenico 3070

The Ingenico 3070 is a very compact and light hand-held PIN Pad for EMV migration.

- Dimensions: **H**: 35mm x **W**: 80mm x **D**: 146mm
- Weight: 200 g (without cable)

1.2 Keyboard details and functionality

This chapter describes the key functions for a terminal with no specific application. Some keys can have other functions according to the applications that are present in the terminal.



2 Use

2.1 Card reading

Magnetic stripe card

The card can be read either from bottom to top or from top to bottom, with the stripe facing the terminal. Use a regular movement in order to ensure a reliable card reading.

Smart card

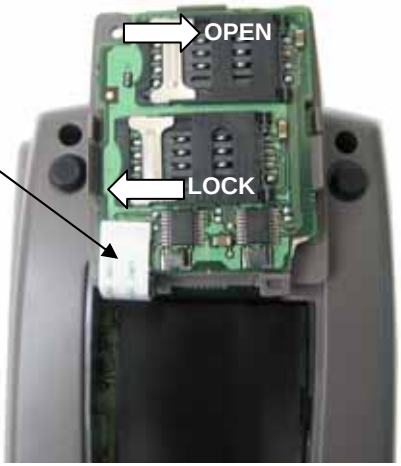
Insert the card horizontally with the metal chip facing upwards, slide the card until the top and leave in position throughout the transaction.

2.2 SIM interface

There are up to 3 internal Sims connectors, accessible once the protection cover has been removed.

- **The terminal must be powered off while inserting or removing SIM!**

Installing a SIM card



- Remove the cover,
- **Pay attention not to disconnect the flat cable connected to the PIN-pad!**
- Unlock the connector by sliding the metallic part in the direction of the **OPEN** arrow,
- Lift the card housing up,
- Insert a SIM card into the housing,
- **Make sure you put it in the right way, follow the foolproof lug!**
- Put the housing back down again,
- Lock the connector by sliding the metallic part in the direction of the **LOCK** arrow.

2.3 Terminal maintenance

The following points should be observed to ensure correct function of the terminal:

- Avoid lengthy exposure to direct sunlight.
- Avoid cleaning the terminal with abrasive substances, solvents, aggressive products or excessive moisture.
- Do not clean the reader heads with abrasive or aggressive substances or solvents (the technical service department has cleaning cards available).
- Do not enter any element in the smart cards compartment, only the cards for which it has been homologated in this PIN pad.
- The terminal should only be opened by authorized technical personnel.
- Do not push the keys in a violence way.

3 Installation and starting

3.1 Location of the terminal

The terminal should be placed in such a way that the user has easy and simple access without forcing its cables or equipment connections.

Operating Temperature
+0 to +40°C

Humidity
5% to 90% RH non condensing

Storage temperature
0°C to +60°C

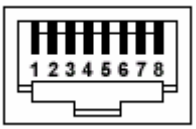
3.2 Terminal connections

Ingenico 3070 can be connected in a number of configurations:

- To a store LAN directly with the Ethernet connection,
- Through a cash register by USB or RS232,
- To another terminal by RS232 or USB.

All the connection are done via the socket on the rear of the unit.

The PINPAD is connected to the terminal by means of a male RJ45-8 connector for RS232, USB, Ethernet Standard and Power Over Ethernet option (with an external Box).



Power requirements

The device has to be powered by the host device where it is connected (Terminal, PC, ECR, etc.). It will draw power via the serial port cable.

Power requirements (RS232, USB SELF-POWERED) are 7 – 9VDC / 0,4A.
For USB Bus Powered is 5VDC / 0,4A.
For Ethernet is 5VDC / 0,45A.

RS-232

- Powered RS232 serial port.
- Signals: TxD, RxD, VCC and GND.
- Maximum port baud rate 115.200.

RJ45 PIN	RS232
1	------
2	------
3	------
4	NEGATIVE
5	POSITIVE
6	RX
7	TX
8	[LOADSW]

USB + RS232

- Powered USB High Power port.
- Signals: D+, D-, Vbus and GND.

RJ45 PIN	USB + RS232	USB + RS232 GERMANY
1		+5V USB
2	D-	D-
3	D+	D+
4	NEGATIVE	NEGATIVE
5	POSITIVE	POSITIVE +(7-9)V
6	RX	RX
7	TX	TX
8	[LOADSW]	[LOADSW]

ETHERNET

- Signals: T+, T-, R+, R-, VCC and GND.

RJ45 PIN	Ethernet
1	TX+
2	TX-
3	RX+
4	GND
5	+5Vdc
6	RX-
7	RXD
8	TXD

Before connecting or disconnecting the communication cable for either machine, both must be turned off (first the terminal and the PIN pad after).

3.3 Turning on the terminal

☞ Connect the correct cable to the terminal.

The sequence the terminal will follow during the start-up is as follows:

1. Connection.

2. Auto-test. The terminal checks the correct function of all of its elements comprising it as well as the integrity of the stored data and programs. During this auto-checking process it is important do not to press any key because it could cause the detection of a keypad anomaly.

4 Recommendations

Safety

Tasks to be done by the installer

As this is a secure PIN device Ingenico advice you to make the following checks prior to installing your PIN-pad and thereafter on a daily basis:

Checking PIN-pad integrity

(1) Check that there is NO external damage to the plastic housing; particularly around the keyboard, display and reader areas.
(2) Ensure that there are NO additional cables protruding from the PIN-pad; there should only be a single moulded cable from the rear of the PIN-pad.
(3) There should be NO holes drilled into any area of the housing.

Selecting the place where the PIN-pad is installed

(4) Ensure that there are NO security cameras focusing the PIN-pad.
(5) Ensure that there are NO close objects where a camera can be hided.
(6) Ensure that the PIN-pad can NOT be observed from outside (any window or door) while PIN entry.

Necessary advertisements for customers

(7) Ensure “wait your turn” sticker is placed to a place where clients in queue can’t observe the keyboard while the PIN entry.
(8) An advertisement must be placed near the terminal. This advertisement must be visible for the customers before the PIN entry. The advertisement must indicate (textual and graphically):

- how to protect the PIN entry from other customers and the cashier (using the hand not used for the PIN entry if necessary)
- that integrity of the PIN-pad must be checked
- Smart card reader must be on the side of the customer while PIN entry.

Training cashiers

(9) Installer must train cashiers to check integrity of terminal on a daily basis (all the points in 0 and 0).
(10) Installer must train cashiers to encourage customers to respect “wait your turn” sticker.

As this terminal does not have a power off switch, the disconnecting device is the main transformer; the power supply plug must therefore be easily accessible.

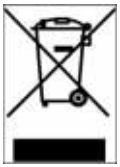
Safety directives concerning the Lithium batteries

- Keep out of the reach of children.
- If any elements of the batteries are swallowed, the person should consult a doctor or seek medical assistance immediately.
- It is important to comply with the "+" and "–" polarities.
- Do not try to reactivate the batteries using a heat source, an electric recharge or any other means.
- Do not throw the batteries into the fire.
- Do not dismantle the batteries.

Generally speaking

- There is a danger of explosion if the batteries are not replaced correctly.
- Replace the batteries with same type elements or similar type elements recommended by the manufacturer only.
- Dispose of used batteries in compliance with manufacturer instructions.
- Do not throw the batteries into the bin; dispose of them in suitable recycling facilities.

WEEE



This symbol on the product or on its packaging means that this product should not be treated as household waste.
To minimise environmental impacts and the disposal of waste, this product should be handed over to a separate collection system in order to facilitate recycling and recovery.
For more detailed information, please contact your reseller.

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