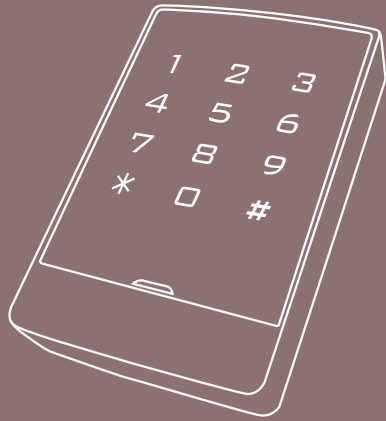# KB INOX
CAPACITIVE NUMERIC KEYPAD

INSTRUCTION MANUAL

SMINN
innovative in electronics

DESCRIPTION

The KB INOX is a stand-alone capacitive keypad with integrated relay output and Wiegand output for integration with access control panels.

It is developed with state-of-the-art electronic devices that offer a high degree of reliability and operational safety.

It provides the activation/movement order to manoeuvre control devices, alarm control, access control, home automation, etc.

It is suitable for industrial, commercial and/or residential environments.

OPERATION

The **KB INOX** touch keypad can store up to 500 numerical codes in its internal memory, and has a relay that will be activated when a valid code is entered. In addition, it can be connected to another device via Wiegand to transmit the code with which the access request has been made.

INSTALLATION

Check the integrity of the product to be installed. Carry out the following steps:

- Place the back piece of the keypad on the wall where it will be installed and drill the top and bottom holes using the back piece as a template.
- Pass the cables through the cable gland hole and screw the back piece to the wall.
- In the indoor version, wire the equipment as shown in the wiring section. In the outdoor version, the keypad will be pre-wired.
- Place the front piece of the keypad over the rear piece, using the top flange as the initial fastening. Once both pieces are correctly fitted top and bottom, use the included screw to close it.

THE MANUFACTURER SHALL NOT BE LIABLE FOR ANY DAMAGE CAUSED BY INCORRECT INSTALLATION OR IMPROPER OR NEGLIGENT USE.

WIRING

Connect the cables according to the table below in the case of the indoor model. The outdoor model will use the cable colour scheme described below.

Terminal	Colour	Note
1 - Positive (+)	Red or Brown	Apply the positive pole of the +12VDC power supply.
2 - Negative (-)	Black or Grey	Apply the negative terminal of the power supply
3 - D1	Yellow	Data 1 Wiegand connection
4 - ⏚		Wiegand Ground
5 - D0	Green	Data 0 Wiegand connection
6 -	Blue	Activation relay
7 -	White	

LIMITATION OF THE USE OF KEYPADS

They are not warranted for use when installed on equipment other than that specified.

THE INSTRUCTIONS FOR USE OF THIS EQUIPMENT MUST BE GIVEN TO THE USER, WHO WILL ALWAYS HAVE THEM IN HIS POSSESSION. IF LOST, THE USER MAY REQUEST A COPY OR DOWNLOAD THEM DIRECTLY FROM THE WEBSITE WWW.SMINN.COM.

The manufacturer reserves the right to change the specifications of the equipment as well as this manual without prior notice. The equipment may only be operated by trained and/or suitably instructed personnel.

WARRANTY

This product has been subjected during its manufacturing process to a complete TEST that guarantees its reliability and proper functioning.

The manufacturer grants the product a warranty of 24 months from the date printed on the product and against any anomaly that the product may present in its appearance or functionality. Excluded from this guarantee are damages caused by third parties, natural causes (flood, fire, lightning, etc.), improper handling or installation, vandalism and, in general, any cause not attributable to the manufacturer.

The scope of the guarantee is limited to the repair or replacement of the damaged element. Excluded from the guarantee are the expenses that could be derived from assembly, displacement, transport, parts subject to wear and tear, etc. and in general any expenses that are not for the repair or replacement of the damaged element of the equipment. The installer/distributor must request from the manufacturer an **RMA** number or authorisation to send the equipment under warranty. Without this prerequisite, the manufacturer will not be able to process or attend to said warranty.

WARNING

The product must be used for its intended purpose and any other use is considered inappropriate.

Packaging and containers must **NOT** be disposed of in the environment. Keep products, packaging, containers, documentation, etc. out of the reach of children Observe local, national and European regulations.

The information contained in this document may contain errors which will be corrected in subsequent editions. The manufacturer reserves the right to modify the contents of this document or the product without prior notice.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

In accordance with the European directive 2012/19/EU on waste electrical and electronic equipment (WEEE), the presence of the symbol (see symbol at the end of this text) on the product or on the packaging indicates that this item must not be disposed of in the municipal unsorted waste stream.

It is the responsibility of the user to dispose of this product by taking it to a designated collection point for the recycling of waste electrical and electronic equipment. Separate collection of this waste helps to optimise the recovery and recycling of any recyclable material and also reduces the impact on health and the environment.

For more information about the correct disposal of this product please contact the local authority or the distributor where you purchased this product.

TECHNICAL SPECIFICATIONS

Power supply	12V/24 VDC
Standby consumption	< 30 mA
Maximum consumption	< 150 mA
Communication	Wiegand
Memory	500 codes
Touch system	Capacitive
Illumination	PWM backlight
Operating temperature	-20 / +70 ºC
Housing	Polycarbonate and Aluminium
Dimensions	H80 x W121 x Z22 mm
Protection rating	IP65 depending on model

CE DECLARATION OF CONFORMITY

The company	ELSON ELECTRÓNICA, S.A. Pol. Ind. Torrelarragoiti, P6 · A3 48170 Zamudio - Vizcaya (SPAIN)
Declares that The product Manufactured by Under the trademark For use in	**KB INOX** keypad ELSON ELECTRÓNICA, S.A. **SMINN** Environments such as Residential, Commercial or Light Industry.

Complies with the relevant provisions insofar as it is used as intended and has been subjected to the application of the following standards:

Directive 2014/35/EU - Low Voltage
Directive 2011/65/EU - RoHs
Directive 2012/19/EU - WEEE

Zamudio, 2022.03.02

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RELAY ACTIVATION

To activate the relay, enter a previously registered numerical code and press the **#** key to confirm. To cancel we will use the ***** key, which will allow us to re-enter the code from the beginning. After a few seconds of inactivity the keypad automatically discards the digits entered.

If access is granted, the keypad will emit a short beep and the LED will turn green for a few seconds, provided these functions are enabled. If access is denied, the beep will be longer and the LED will turn red.

CODE**#**
E.g.: 123456#

CONFIGURATION MENU

To enter the menu, where you can manage users and modify the configuration parameters of the device, enter the **MASTER** code, by default 12345678, and press the **#** key.

The bottom LED will remain lit in orange, indicating that you are in the menu. Once inside, you must enter the 3-digit code associated with the function you wish to perform. After any operation, the keypad will emit a double confirmation beep, or a long beep if you have entered any parameter incorrectly, and will return to the main menu, allowing you to enter another code again. Pressing the ***** key will exit the menu and return to its normal state, turning off the LED. It will also exit the menu automatically if no operation has been performed for 120 seconds. The available operations are described below.

MASTER CHANGE

Allows you to change the **MASTER** password used to access the configuration menu. It must be a numerical code of between 8 and 12 digits, and cannot be the same as that of any other user.

001#PASSWORD**#**REPEATPASSWORD**#**
E.g.: 001#12345678#12345678#

LATCHING RELAY

It is possible to configure the relay in latching mode. By default it is disabled.

Enable: **011#**
Disable: **012#**

SET RELAY TIME

Time in seconds that the relay will remain actuated when it is not in latch mode, between 1 and 120 seconds.

013#TIME**#**
E.g.: 013#2#

KEYPAD LOCK

The keypad will be locked for a configurable time if a user enters an incorrect code 5 times in a row. The bottom LED will remain red while the keypad is locked. By default it is disabled.

Enable: **021#**
Disable: **022#**

LOCKING TIME

Time in minutes during which the keypad will not accept entry codes if the user enters his code incorrectly 5 times in a row and the keypad lock is enabled. Between 1 and 30, default 5 minutes.

023#TIME**#**
E.g.: 023#5#

KEYPAD BACKLIGHT

The keypad will remain slightly illuminated when idle, and will light up to 100% for a few seconds when any key is pressed. By default it is enabled.

Enable: **031#**
Disable: **032#**

DOWNTIME

Time in seconds from the last key press required for the automatic dismissal of the digits entered and for the dimming of the backlight if enabled. Between 1 and 240, default 60 seconds.

033#TIME**#**
E.g.: 033#5#

LED LIGHTING IN ACCESS

The bottom LED will illuminate green when access is granted by entering a code, or red if access is denied. By default it is on.

Enable: **041#**
Disable: **042#**

BEEP ON KEY PRESSES

The keypad will beep each time a key is pressed. By default it is enabled.

Enable: **051#**
Disable: **052#**

BEEP ON ACCESS

The keypad will emit a short confirmation beep when access is granted, or a long beep when access is denied. By default it is enabled.

Enable: **053#**
Disable: **054#**

USER REGISTRATION

It is possible to register up to 500 different access codes. The code will consist of numbers from 0 to 9, and will be between 1 and 12 digits long. To register, after the 3-digit function code and the **#** key, enter the new access code, press **#**, repeat the code again to confirm the operation and finish with a new **#**.

101#CODE**#**REPEATCODE**#**
E.g.: 101#123456#123456#

DELETE USERS

To delete a user from the memory, enter the numerical code to be deleted in the same way as the registration, repeating the code as confirmation so that the user is no longer available.

102#CODE**#**REPEATCODE**#**
E.g.: 102#123456#123456#

FORMAT USER MEMORY

All access codes will be deleted from the user memory.

Operation: **103#**

WIEGAND FORMAT

Configuration of the Wiegand format to be used for outgoing keyboard communication. Defaults to mode 2.

201#MODE**#**
E.g.: 201#2#

The parameter shall be chosen from one of the following:

Mode **0**: Wiegand 26

	Facility code								16 bits		
P	F	F	F	F	F	F	F	F	N	... N	I
1	2	3	4	5	6	7	8	9	10	... 25	26

Mode **1**: Wiegand 30

	Facility code				24 bits		
P	F	F	F	F	N	... N	I
1	2	3	4	5	6	... 29	30

Mode **2**: Wiegand 34

	32 bits			
P	N	...	N	I
1	2	...	31	32

Mode **3**: Wiegand 37

	Facility code				31 bits		
P	F	F	F	F	N	... N	I
1	2	3	4	5	6	... 36	37

P corresponds to the even parity bit, **F** to the Facility Code bits, **N** is the numeric code entered by the user and **I** is the odd parity bit.

WIEGAND OUTPUT TYPE

The system can be configured to send all codes entered by Wiegand or only those that are registered in the memory. By default, all codes are sent.

All entered codes: **202#**
Only registered codes: **203#**

FACILITY CODE WIEGAND

Fixed code to be sent in some of the Wiegand formats described above. Between 0 and 255, default 0.

204#FACILITYCODE**#**
E.g.: 204#0#

RESTORE TO FACTORY SETTINGS

By entering this function, the device will reset all parameters to default values, clear the user memory and reset the **MASTER** password.

Operation: **999#**

RESET MASTER PASSWORD

If you have forgotten the **MASTER** password, it is possible to reset it to the factory setting using the inner switch. To access it you will have to detach the rear casing. Remove the power supply to the keypad and turn the switch to the **ON** position. Power it up again and wait 7 seconds until the buzzer starts to beep, at which point the switch should be turned down to the **OFF** position. After 2 seconds it will beep again, turn the switch back to the **ON** position to finish the operation, the keypad will stop beeping for a few moments and will beep again for 2 seconds as confirmation. Lower the switch back to the **OFF** position to return it to its normal position.

Fig. 1
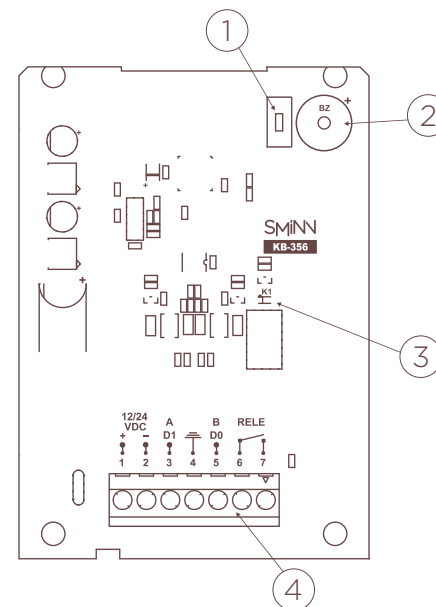
COMPONENTS

1. Switch for MASTER deletion
2. Buzzer
3. Relay LED
4. Power supply, Wiegand and relay terminal block