

**eldes**

**EKB2**

LCD KEYPAD

**Compatible with:**

- ESIM264 v7.09.02 and up.
- ESIM364 all versions

**Main features:**

- Alarm system arming & disarming;
- STAY-arming & disarming;
- System parameter configuration;
- PGM output control;
- System information display on LCD screen;
- Audio indication by built-in mini buzzer;
- Wireless device information display;
- Keypad partition switch (for ESIM264 v7.09.02 and up; ESIM364 up to v02.06.20).

EKB2 is an LCD keypad intended for using with ELDES alarm systems. The system configuration is performed by accessing EKB2 menu and entering the required values. ELDES alarm system allows to connect up to 4 EKB2 keypads.


**NOTE:** For complete system configuration & control using EKB2 keypad, please refer to ELDES alarm system installation manual located at [www.eldes.it/en/download](http://www.eldes.it/en/download)

## 1. CONTENTS OF PACK




Item	Quantity
1. EKB2.....	1
2. User manual.....	1
3. 5,6kΩ resistor.....	1
4. Jumper.....	2
5. Screws.....	4

## 2. TECHNICAL SPECIFICATIONS

### 2.1. Electrical & Mechanical Characteristics

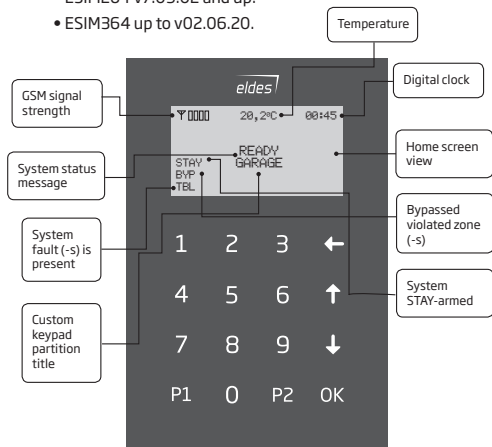
Power Supply	12-14V  150mA max.
Maximum Keypad Connection Cable Length	100 m.
Dimensions	133 x 89 x 19 mm
Range of Operating Temperatures	0...+55°C

### 2.2. Keys Functionality

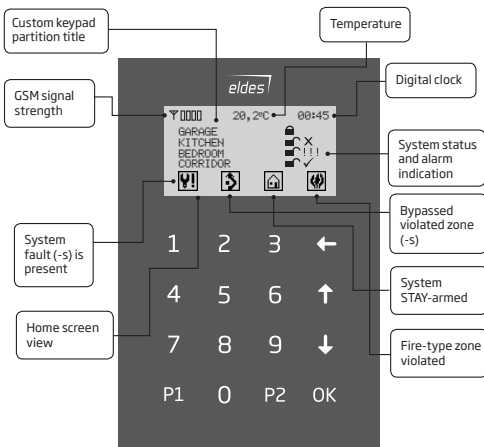
	One menu level back / cancel	0 ... 9	Value typing
	Menu navigation - up	P1	Keypad partition switch (for ESIM264 v7.09.02 and up; ESIM364 up to v02.06.20) / minus character to enter negative temp. value
	Menu navigation - down		
OK	Confirm (enter) value	P2	Additional menu / minus character to enter negative temp. value

## 1 Valid for:

- ESIM264 v7.09.02 and up.
- ESIM364 up to v02.06.20.

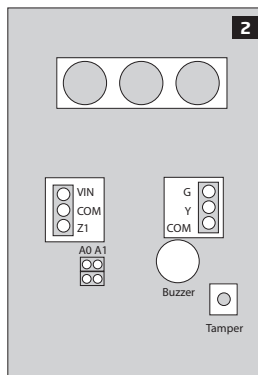


## Valid for ESIM364 v02.07.00 and up



## 2.3. Connector and Main Unit Functionality

Vin	Positive 12-14V power supply terminal
COM	Negative 12-14V power supply terminal
G	RS485 interface for communication (green wire)
Y	RS485 interface for communication (yellow wire)
COM	Common terminal for Z1
Z1	Security zone terminal
A0	Keypad address pin
A1	Keypad address pin
Buzzer	Mini buzzer providing sound signals
Tamper	Tamper-button for EKB2 enclosure status monitoring



## 2.4. Keypad Address

A0 and A1 pins located on the back side of the keypad are intended to set keypad address. The keypad address is set by putting the jumper (-s) on the pins. ELDES alarm system allows to connect up to 4 EKB2 keypads - each set under different address. Jumper combinations for different keypad address configuration are indicated in the table below.

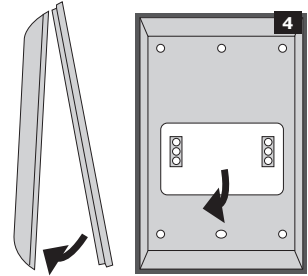
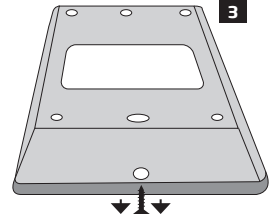
### Address Configuration

Jumper position	A0 A1	A0 A1	A0 A1	A0 A1
Address	Keypad 1	Keypad 2	Keypad 3	Keypad 4

The address of each connected keypad is also indicated in *ELDES Configuration Tool* software.

### 3. INSTALLATION

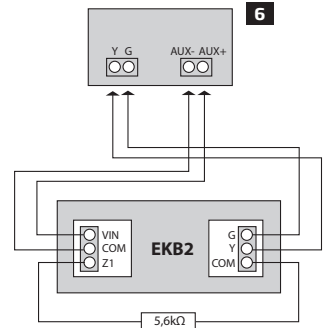
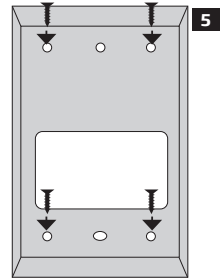
1. Remove the screw located on the bottom side of the enclosure (see Fig. No. 3)
  2. Detach keypad holder from EKB2 keypad by gently pulling the holder towards yourself (see Fig. No. 4).
  3. Fix the keypad holder on the wall using the screws. (see Fig. No. 5)
  4. Disconnect ELDES alarm system main power supply and backup battery.
  5. Wire up keypad terminals to ELDES alarm system respectively - **Vin to AUX+**, **COM to AUX-**, **Y to Y**, **G to G** (see Fig. No. 6).
  6. Connect a sensor and the resistor across Z1 and COM terminals in accordance with zone connection **Type 1** or **Type 2** (see alarm system installation manual). As keypad zone **Z1** is disabled by default, it can be enabled by SMS, *ELDES Configuration Tool*, EKB2, EKB3 and EKB3W keypad. Keypad zone Z1 must be enabled and resistor connected even if the tamper button alone is required (see Fig. No. 6).
  7. Set the keypad address by putting the jumper on A0 and A1 pins (see chapter **2.4 Keypad Address**).
  8. Fix the keypad into the holder.
- ATTENTION:** Before fixing the keypad into the holder please, make sure that the tamper button is properly pressed (see Fig. No. 2).
9. Screw up the bottom side of the enclosure. (see Fig. No. 3)
  10. Power up ELDES alarm system.
  11. EKB2 keypad is ready.



### 4. EKB2 ZONE & TAMPER

Keypad EKB2 has one wired zone **Z1** and one tamper button. By default, the keypad zone **Z1** is disabled. The keypad zone can be enabled by SMS, keypad and *ELDES Configuration Tool*. When Z1 is enabled, it operates like any other system zone, therefore a sensor can be connected to it. In addition, **Z1** and **COM** terminals must be connected with resistor of 5,6kΩ nominal.

The tamper button is intended for monitoring the enclosure status of EKB2, therefore the system causes alarm if the enclosure is illegally opened. Keypad zone Z1 must be enabled and resistor connected even if the tamper button alone is required.



## 5. ADDITIONAL INFORMATION

### Limited Liability

The buyer must agree that the system will reduce the risk of fire, theft, burglary or other dangers but does not guarantee against such events. "ELDES UAB" will not take any responsibility regarding personal or property or revenue loss while using the system. "ELDES UAB" liability according to local laws does not exceed value of the purchased system. "ELDES UAB" is not affiliated with any of the cellular providers therefore is not responsible for the quality of cellular service.

### Manufacturer Warranty

The system carries a 24-month warranty by the manufacturer "ELDES UAB". Warranty period starts from the day the system has been purchased by the end user. The warranty is valid only if the system has been used as intended, following all guidelines listed in the manual and within specified operating conditions. Receipt must be kept as a proof of purchase date. The warranty is voided if the system has been exposed to mechanical impact, chemicals, high humidity, fluids, corrosive and hazardous environment or other force majeure factors.

### SAFETY INSTRUCTIONS

Please read and follow these safety guidelines in order to maintain safety of operators and people around:

- DO NOT use the system where it can be interfere with other devices and cause any potential danger.
- DO NOT use the system with medical devices.
- DO NOT use the system in hazardous environment.
- DO NOT expose the system to high humidity, chemical environment or mechanical impacts.
- DO NOT attempt to personally repair the system.



Keypad EKB2 is a device mounted in limited access areas. Any system repairs must be done only by qualified, safety aware personnel.



The system must be powered by 12-14V  $\overline{\text{---}}$  150mA max power supply and must be approved by LST EN 60950-1 standard and be easily accessible.



Main power must be disconnected before any installation or tuning work starts. The system installation or maintenance must not be done during stormy conditions.



The WEEE (Waste Electrical and Electronic Equipment) marking on this product (see left) or its documentation indicates that the product must not be disposed of together with household waste. To prevent possible harm to human health and/or the environment, the product must be disposed on in an approved and environmentally safe recycling process. For further information on how to dispose of this product correctly, contact the system supplier, or the local authority responsible for waste disposal in your area.

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