



# EKB2

LCD KEYPAD/ LCD KLAVIATŪRA/ LCD КЛАВИАТУРА

**User Manual v1.2**  
**Compatible with:**

- ESIM264 v7.09.02 and up.
- ESIM364 all versions.
- ESIM384 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.eldesalarms.com](http://www.eldesalarms.com)

## 1. CONTENTS OF PACK

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

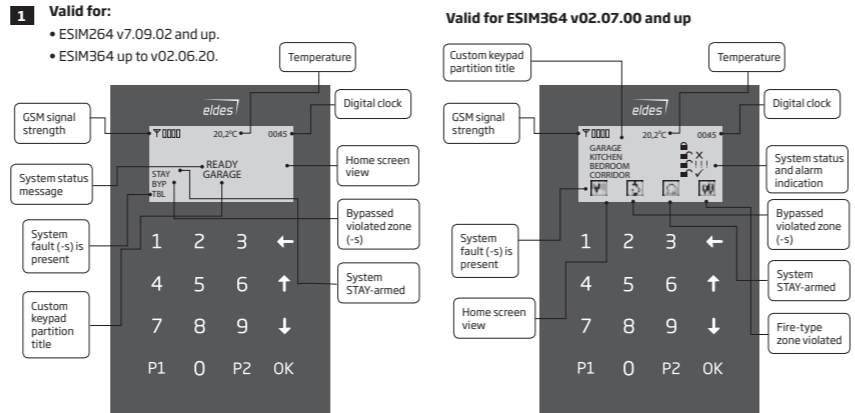
## 2. TECHNICAL SPECIFICATIONS

### 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	P2	Additional menu / minus character to enter negative temp. value
	Confirm (enter) value		



### 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

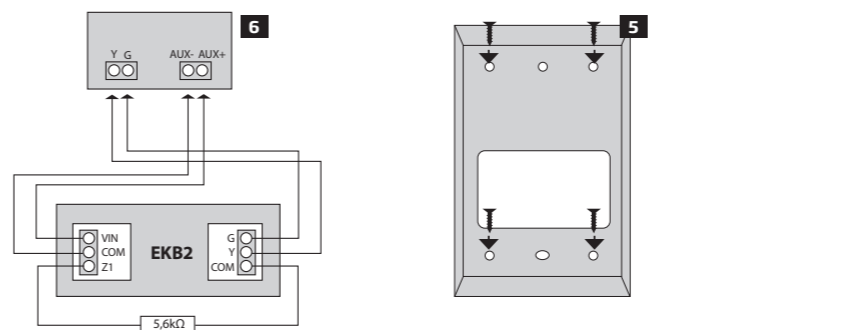
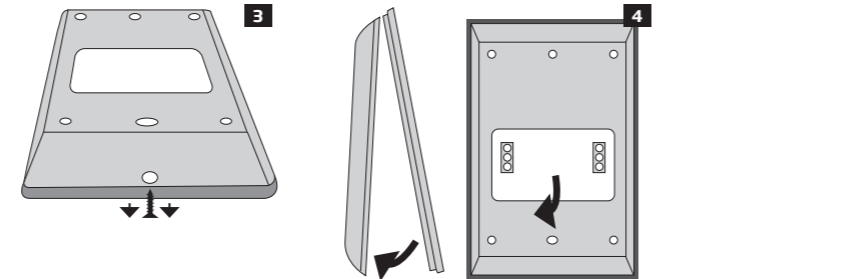
A0 and A1 pins located on the back side of the keypad are intended to set keypad address. The keypad address is set by putting the jumper (-s) on the pins. ELDES alarm system allows to connect up to 4 EKB2 keypads - each set under different address. Jumper combinations for different keypad address configuration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

Address	Keypad 1	Keypad 2	Keypad 3	Keypad 4
<b>Jumper position</b>				

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.
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. 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

- DO NOT use the system where it can 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 --- 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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### Vartotojo vadovas v1.2

**Suderinama su:**

- ESIM264 v7.09.02 ir vėlesne.
- ESIM364 visomis versijomis.
- ESIM384 visomis versijomis.

### Pagrindinės savybės:

- Apsaugos įjungimas ir išjungimas
- Apsaugos įjungimas ir išjungimas „Nakties“ režimu
- Sistemos nustatymų konfigūravimas
- PGM išėjimų valdymas
- Sistemos informacijos atvaizdavimas
- Garsinė indikacija įmontuotui mini signalizatoriumi
- Belaidžio įrenginio informacijos atvaizdavimas
- Temperatūros atvaizdavimas
- Laiko atvaizdavimas

EKB2 - tai klaviatūra su LCD (skystųjų kristalų) ekranu, skirta naudoti kartu su ELDES apsaugos sistemomis. Sistemos konfigūravimas ir valdymas EKB2 klaviatūra yra atliekamas judant meniu skyrių sąrašui, vaizduojamu LCD ekrane, ir įvedant reikalaujamas reikšmes. ELDES apsaugos sistema palaiko iki 4 EKB2 klaviatūras.

**PASTABA:** Išsamiu apie sistemos konfigūravimą ir valdymą naudojant EKB2 klaviatūrą, prašome skaityti ELDES apsaugos sistemos montuotojo vadove adresu [www.eldesalarms.com](http://www.eldesalarms.com)

## 1. PAKUOTĖS SUDĖTIS

1. EKB2.....	1 vnt.	4. Trumpikliai .....	2 vnt.
2. Vartotojo vadovas.....	1 vnt.	5. Varžtai.....	4 vnt.
3. 5,6kΩ varža .....	1 vnt.		

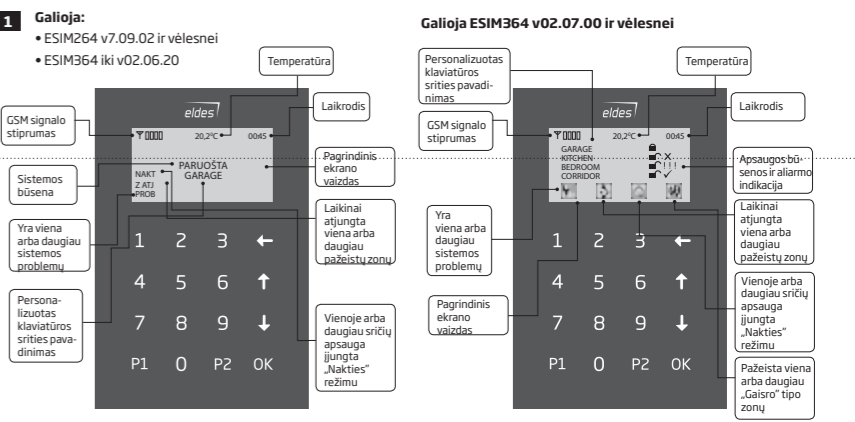
## 2. TECHNINĖ SPECIFIKACIJA

### 2.1. Elektrinės ir mechaninės charakteristikos

Maitinimo įtampa	12-14V --- 150mA maks.
Maksimalus klaviatūros prijungimo laido ilgis	100m
Matmenys	133x89x19mm
Darbo temperatūros diapazonas	0...+55°C

### 2.2. Mygtukų paskirtis

	Grįžti vienu meniu lygiu atgal / atšaukti	0 ... 9	Įvesti reikšmę
	Meniu navigacija - aukštyn	P1	Klaviatūros srities jungiklis (ESIM264 v7.09.02 ir vėlesnė; ESIM364 iki v02.06.20) / minuso ženklas neigiamai temperatūros reikšmei
	Meniu navigacija - žemyn	P2	Papildomas meniu / minuso ženklas neigiamai temperatūros reikšmei
	Patvirtinti įvestą reikšmę („Enter“ mygtukas)		



### 2.3. Gnybtų ir pagrindinių mazgų paskirtis

Vin	Teigiamas 12-14V maitinimo kontaktas
COM	Neigiamas 12-14V maitinimo kontaktas
G	RS485 ryšio sąsaja (žalias laidas)
Y	RS485 ryšio sąsaja (geltonas laidas)
COM	Bendras Z1 zonos kontaktas
Z1	Apsaugos zona
A0	Klaviatūros adreso kontaktas
A1	Klaviatūros adreso kontaktas
Buzzer	Mini signalizatorius
Tamper	Tamperio jungiklis

### 2.4. Klaviatūros adresas

A0 ir A1 kontaktai, esantys klaviatūros nugarinėje pusėje, skirti nustatyti klaviatūros adresą. Klaviatūros adresas nustatomas ant kontaktų uždedant trumpiklį (-ius). Prie vienos ELDES apsaugos sistemos galima prijungti iki keturių EKB2 klaviatūrų, sukonfigūruotų skirtingais adresais. Galimos trumpiklių kombinacijos, skirtingo adreso nustatymui, pateiktos lentelėje.

### Adreso konfigūracija

Trumpiklio padėtis	A0 A1	A0 A1	A0 A1	A0 A1
<b>Adresas</b>	Klaviatūra 1	Klaviatūra 2	Klaviatūra 3	Klaviatūra 4

Taip pat, kiekvienos prijungtos klaviatūros adresą galima pamatyti „ELDES Configuration Tool“ programine įranga.

## 3. MONTAVIMAS

1. Atsukite varžtą, esantį klaviatūros korpuso apatinėje dalyje (žr. 3 pav.).
2. Atskirkite klaviatūros laikiklį nuo priekinės dalies, švelniai traukdami laikiklį nurodyta kryptimi (žr. 4 pav.).
3. Varžtais prisukite klaviatūros laikiklį prie sienos (žr. 5 pav.).
4. Išjunkite ELDES apsaugos sistemos pagrindinį maitinimą ir rezervinę bateriją.
5. Prijunkite klaviatūros kontaktus prie ELDES apsaugos sistemos gnybtų atitinkamai - **Vin** prie **AUX+**, **COM** prie **AUX-**, **Y** prie **Y**, **G** prie **G** (žr. 6 pav.).
6. Prijunkite daviklį ir rezistorių prie **Z1** ir **COM** gnybtų, vadovaudamiesi zonos jungimo „Tipu 1“ arba „Tipu 2“ (žr. ELDES apsaugos sistemos montavimo vadovą). Kadangi pagal gamyklinę konfigūraciją, klaviatūros Z1 zona yra išjungta, ją įjungti galima SMS žinute, klaviatūra ir „ELDES Configuration Tool“ programine įranga. Klaviatūros Z1 zona privalo būti įjungta ir rezistorius prijungtas, net jei naudojamas tik tamperio mygtukas.

