ergo-X

BUS outdoor keypad

User and installer manual

KSI2100031.302 - ergo-X black
KSI2100031.303 - ergo-X grey

INTRODUCTION

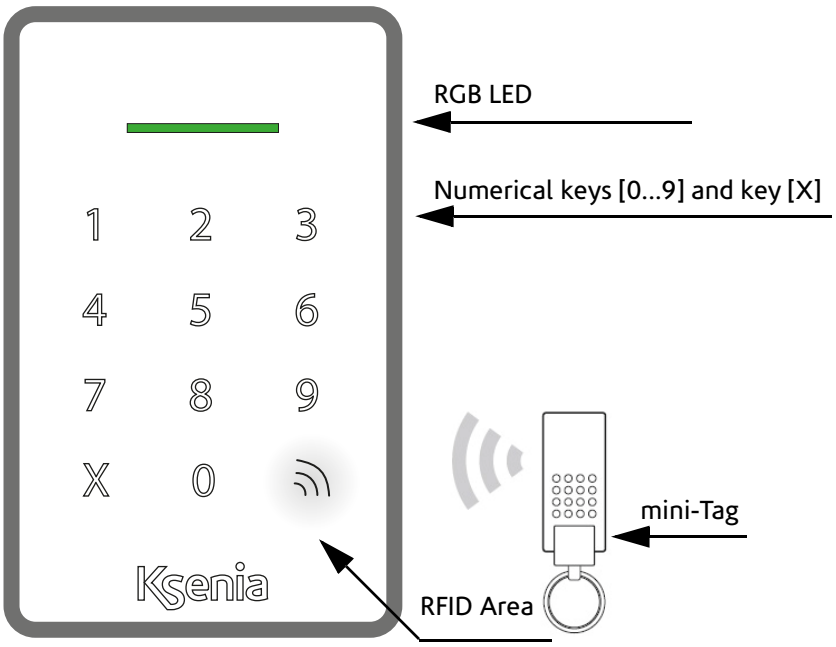
ergo-X keypad is an access control user interface connected to and powered by the BUS of lares 4.0 control panel. The keypad case is compliant with IP65 protection degree so that it can be installed outdoors and does not require additional protection.
ergo-X keypad allows the user to run any type of scenario in the following ways: place your mini-Tag near RFID reader on the keypad and then press the key that activates the desired scenario; enter your code and then press a programmed key (with PIN); long press the programmed key (without PIN).
Scenarios and colors of RGB led associated can be remotely customizable from Installer App.
ergo-X keypad has two I/O terminals that can be programmed as inputs with EOL resistors or as Open Collector outputs up to 500mA each.

TECHNICAL CHARACTERISTICS

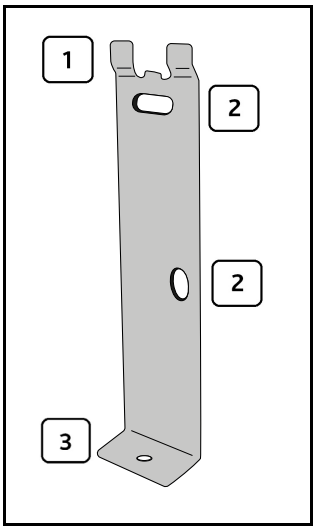
- Power supply 13.8 Vdc
- Consumption max 200mA
- Mechanical membrane keypad
- RFID Tag reader
- Automatic backlight keys
- RGB led with customisable colors for system status signalling
- Feedback sound on operations
- Tamper switch anti-removal
- 2 terminals I/O (OC 500 mA max)
- Protection degree IP65 (compliant with EN 60529:1991 /A1:2000 /A2:2013)
- Resistance impact protection IK09 (compliant with EN 62262:2002)
- Temperature range: from -20°C to +55°C
- Mount adapter plate + 2m unshielded cable (8x0.22)
- Dimensions 72 x 113 x 20.5 mm (LxHxW)
- Color: black, light grey

PRODUCT DESCRIPTION

ergo-X keypad



Mount adapter plate



1 Support hooks

2 Holes for wall mounting with flat head screws (holes distance 40mm)

3 Hole for locking screw

RGB LED multicolor

The led, if personalized, takes the same color as the arming status of the system. The colors associated with the preconfigured scenarios are:
• red = total armed
• blue = partial armed
• green = disarmed
The led lighting timer can be configured (P.V.: 0 = always ON, timer from 1 to 240 seconds).

Important note

When the “Display zones status” option of ergo-X is enabled:

1. the yellow flashing led indicates that a memory alarm is present in case the system is disarmed or there is an alarm in progress/restored in case the system is armed. The flashing yellow alternates with the with the color of the arming state. For example:
   - green/yellow = system disarmed/alarm memory;
   - red/yellow = system armed/alarm in progress or restored.
2. the led OFF indicates that the system cannot be armed due to some zones in alarm. Led can turn ON when you exclude those zones.

RFID Area

The keypad has an antenna on board with which recognizes the user's key/mini-Tag and that allows the installer to enroll the key/mini-Tag.

Keys 0...9

The numeric keys (from 0 to 9) are used to enter the PIN code and to run the scenario associated with the configuration. It is possible to configure each key "With PIN", so that the user must enter the code before pressing the key that runs the scenario, or "Without PIN", in this case the user does not have to enter the code but simply hold down for 3 seconds the key that runs the scenario.
The keys light up automatically the moment your hand approach to enter the code and at the end the light will turn off. Just in case a sabotage occurs, the keys remain lit.

Key X

While entering the PIN code, it is possible to cancel the wrong digits by pressing <X> key.

Buzzer

Feedback sound on operations can be enable/disabled.

INSTALLATION

Contents of the package:

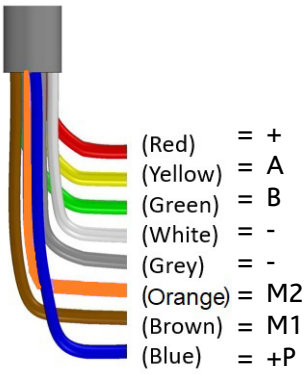
- 1 ergo-X keypad
- 2m unshielded cable (8x0.22)
- 1 mounting adapter plate
- 1 adapter plate locking screw
- 2 wall plugs and screws
- 1 adhesive mounting template size 1:1

BUS and Terminals I/O cabling

The example below shows how to connect ergo-X to lares 4.0 BUS using the 8x0.22mm unshielded cable:

Wired connection		
ergo-X 8 wires cable/color	**lares 4.0**	
RED	+	BUS lares 4.0
YELLOW	A	
GREEN	B	
WHITE	-	

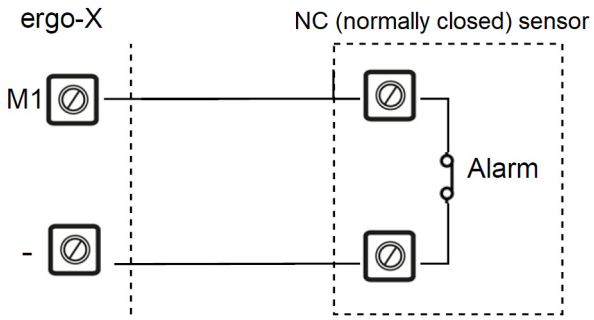
Details of unshielded cable (8x0.22):



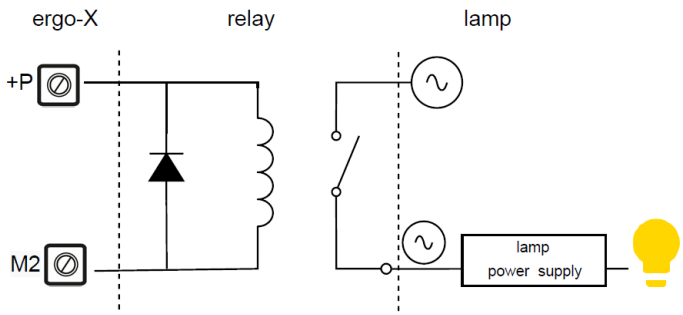
The example below shows how to connect M1 and M2 terminals using the 8x0.22mm unshielded cable. Characteristics of the two terminals are:

- Input (Programmable zones) (connection to the ground terminal)
  or
- Output Open Collector at 500mA each (connection to the positive terminal +P).

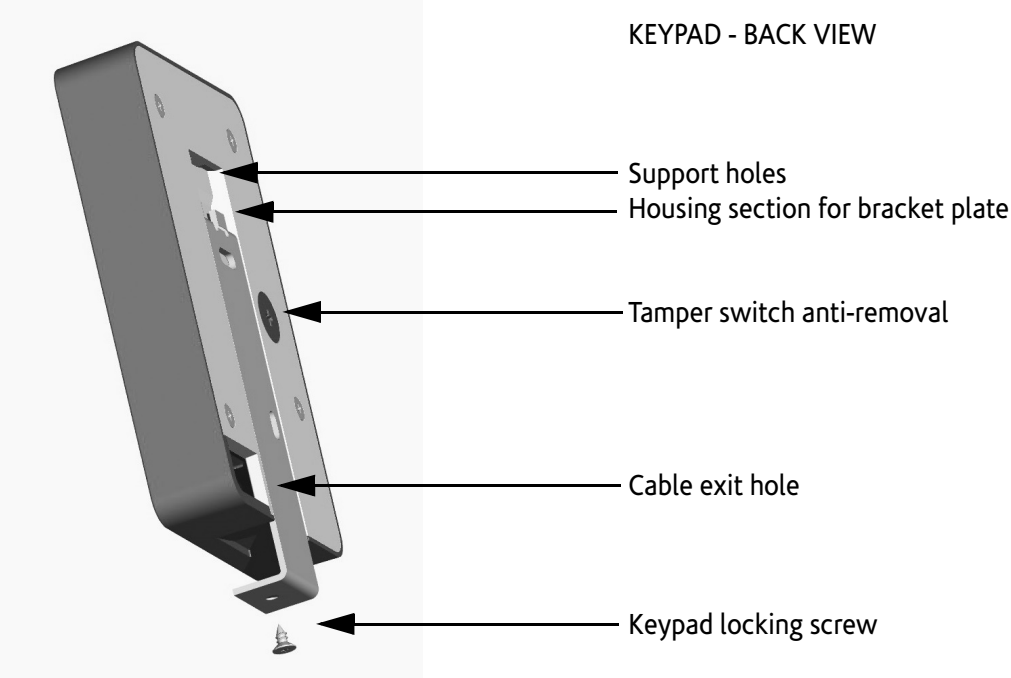
Connect M1 terminal programmed as an input/zone, as the example below:



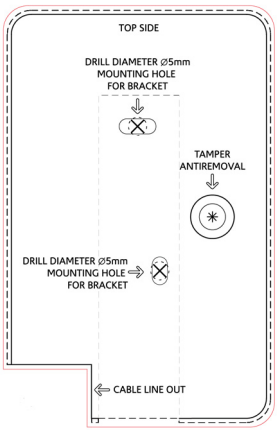
Connect M2 terminal programmed as an output, as the example below:



Mount adapter plate installation



1. Fix the mount adapter plate directly to the wall using two Ø 5mm expansion anchors and Ø 3.5mm flat head screws. To drill the holes, use the supplied adhesive mounting template, size 1:1, and attach it to the wall; place the bracket on the dotted box and drill two holes in correspondence with the X indicated by the arrows (see image below):



2. bring the back of the keypad close to the bracket making it match up with housing section;
3. slid the keypad downwards until the bottom matches the bottom of the bracket;
4. lock the bottom of the keypad using the screw provided.

CONFIGURATION

The software configuration supplied by Ksenia is required.

Keypad programming instructions

Open <BUS peripherals -> User interfaces -> ergo-X> menu, if correctly installed, ergo-X will show its serial number so it can be added in the system configuration by clicking on icon  and then wait for the green icon  as positive feedback. To finish, fill in the optional fields and the numeric keys to run the scenarios, save and apply configuration.
The contextual help describes whatever here is omitted. For all the details, please consult the "lares 4.0 programming manual".

Key/mini-Tag programming instructions

Start recognition procedure of user's key/mini-Tag by clicking "Enroll tags" icon from <System -> Users> menu, then select "ergo-X" device and click on <START> button. Put the tag close to the ergo-X RFID area and wait for a few seconds until you'll see the number code displayed; at this point, select a name from the Users list and click on STOP button to end the procedure. Repeat the procedure for each user with a key/ mini-Tag.

Led RGB programming instructions

In addition to the standard arming color (red, green, blue) of the RGB LED, to display the arming status of the system, it is possible to recognize when one or more specific partitions associated with the keypad are armed, thanks to a further customization of fuchsia, white and cyan led colors.
Open <BUS peripherals -> User interfaces -> ergo-X> menu, there are three fields, one for each led color (*e.g.: "Partitions associated with Fuchsia color"*), program each field by choosing some partitions among those to which the keypad belongs.
In our example the keypad led will turn fuchsia when the armed partitions are exactly the ones customized in this field.
If they do not match, the configuration of the "*Partition associated with White color*" field will be checked and then the one of "*Partition associated with Cyan color*".
Again, if there is no match, then the led takes one of the standard colors (red, green, blue) according to the arming status.

Scenarios/events programming instructions

To enable the user to arm the system by pressing <1> on ergo-X, for example, the installer must program: the "Keypad" event with "Key 1" subtype and associated with the "Arming Mode" scenario.
From <System -> Scenarios> menu you can program any scenario and from <System -> Events> menu the identities (keypad, users, zones, outputs, etc.) that generate the event to run the scenario.

The contextual help for the page describes whatever here is omitted. For all the details, please consult the “lares 4.0 programming manual”.

Terminals I/O programming instruction

Two terminals (M1 and M2) are integrated inside the ergo-X, they can be programmed as inputs (from <System -> Zones> menu) or as outputs (from <System -> Outputs).
The contextual help for the page describes whatever here is omitted. For all the details, please consult the “lares 4.0 programming manual”.

Diagnostic

A useful page for technical operators is available to monitor the status of all the BUS peripherals connected to BUS1 and BUS2 of lares 4.0, from <Installer -> Diagnostic> menu.

USER GUIDE

The user can perform the following functions, the success of them depends on the system configuration.
Note:
a) when you press a key you can hear a beep feedback, if the buzzer is enabled, otherwise you can see a blinking of keys. In case no feedback is received, repeat the operation and increase the pressure on the key;
b) you have 5 seconds between two operations (entering PIN and pressure of key). If the timer expires, just repeat the operation.

Running a scenario from keypad 

With PIN: [PIN + 0...9]

- Enter your code and then press the key to execute the desired scenario. The RGB led will take the same color as the programmed scenario, if it changes the arming status of the system. According to the configuration, the RGB led can be configured always ON or turn off when the timer expires.

Without PIN: [0...9]

- Hold down the programmed key and wait for 3 seconds to execute the scenario desired. The RGB led will take the same color as the programmed scenario, if it changes the arming status of the system. According to the configuration, the RGB led can be configured always ON or turn off when the timer expires.

Incorrect PIN code

- For recovering eventual errors while entering the PIN code, it is possible to cancel the wrong digits by pressing <X> key.
- Incorrect PIN code blocks the keypad for 5 minutes after the third wrong attempt.

Running a scenario from mini-Tag 

Place your mini-Tag near RFID reader on the keypad () and then press the key that activates the desired scenario. The RGB led will take the same color as the programmed scenario, if it changes the arming status of the system. According to the configuration, the RGB led can be configured always ON or turn off when the timer expires.

Cleaning the keypad

Use a soft and moistened cloth with water to clean externally the keypad.

QUANTITY DATA

lares 4.0 models	wls 96	16	40	40 wls	140 wls	644 wls
Maximum number of BUS user interfaces	3	6	24	24	40	64

Technical specification, appearance, functional and other product characteristics may change without notice.

COMPLIANCE

Europe - Rohs, CE
EN 60529:1991 /A1:2000 /A2:2013 (IP65)
EN 62262:2002 (IK09)

Warning! Do not use an ordinary dustbin to dispose of this equipment.

Used electrical and electronic equipment must be treated separately, in accordance with the relative legislation which requires the proper treatment, recovery and recycling of used electrical and electronic equipment.
Following the implementation of directives in member states, private households within the EU may return their used electrical and electronic equipment to designated collection facilities free of charge. Local retailers may also accept used products free of charge if a similar product is purchased from them.*
If used electrical or electronic equipment has batteries or accumulators, these must be disposed of separately according to local provisions.
Correct disposal of this product guarantees it undergoes the necessary treatment, recovery and recycling. This prevents any potential negative effects on both the environment and public health which may arise through the inappropriate handling of waste.
**Please contact your local authority for further details.*

Installation of these systems must be carried out strictly in accordance with the instructions described in this manual, and in compliance with the local laws and bylaws in force. These products have been designed and made with the highest standards of quality and performance adopted by Ksenia Security. Is recommended that the installed system should be completely tested at least once a month. Test procedures depends on the system configuration. Ask to the installer for the procedures to be followed.
Ksenia Security spa shall not be responsible for damage arising from improper installation or maintenance by unauthorized personnel.

The content of this guide can change without prior notice from KSENIA SECURITY.