

# NIRVA

## Control keypad for intrusion detection control units


 Addressee for this information:  User |  Installer

### 1 DESCRIPTION

NIRVA is a control keypad for intrusion detection control units.

It allows controlling system zones, viewing its state and programming its functions.

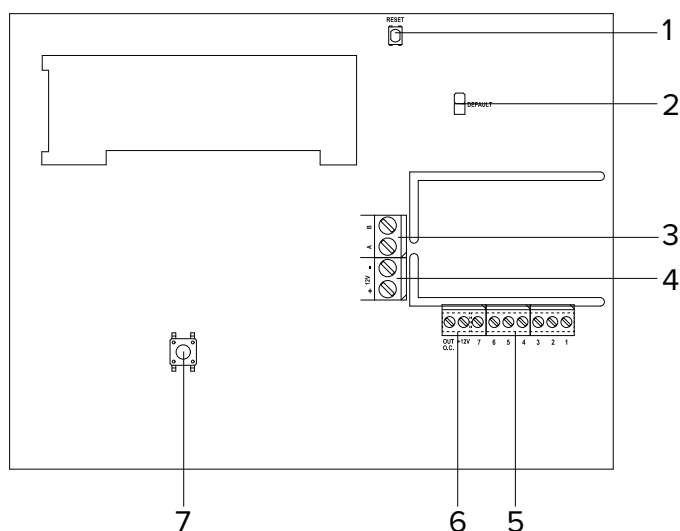
Keypad elements:

- proximity keys reader for M4 keys
- I66 connector for connection of an external reader

It features a LCD display and backlit keys.

The keypad can be connected over ULTRABUS RS-485 serial line and is compatible with all the EL.MO. control units equipped with such technology.

### 2 PCB



- 1 Reset button
- 2 default jumper
- 3 RS-485 serial line connection terminals
- 4 Power supply terminals
- 5 I66 reader connection terminals (1 - 7)
- 6 Open collector output connection terminals
- 7 Switch for protection against removal

### 3 TECHNICAL DATA



Model	NIRVA		
<b>General features</b>			
<b>Operating voltage</b>	Power supply	12	V
	Minimum power supply	5.0	V
	Maximum operating voltage	15.0	V
<b>Consumption at power voltage</b>	With control unit armed	37.0	mA
	With control unit disarmed	24.0	mA
	With control unit armed, backlight enabled	60.0	mA
	With control unit disarmed, backlight enabled	41.0	mA
<b>Protection class</b>	IP3X		
<b>Working temperature</b>	+5 / + 40		°C
<b>Dimensions</b>	W 166 × H 136 × D 33		mm
<b>Weight</b>	290		g
<b>Standards</b>	Certified IMQ-Alarm EN50131-3, EN50131-6 grade 2-3 (according to the system it is installed in)		
<b>Environmental class</b>	II		

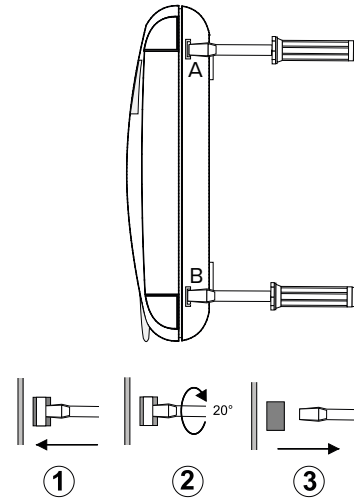
- For wall fastening, choose a height in order to allow comfortable display reading.

**!** The electronic board may be damaged by electrostatic discharges. The installer must avoid any presence of electrostatic discharges.

### 5 DEVICE MOUNTING



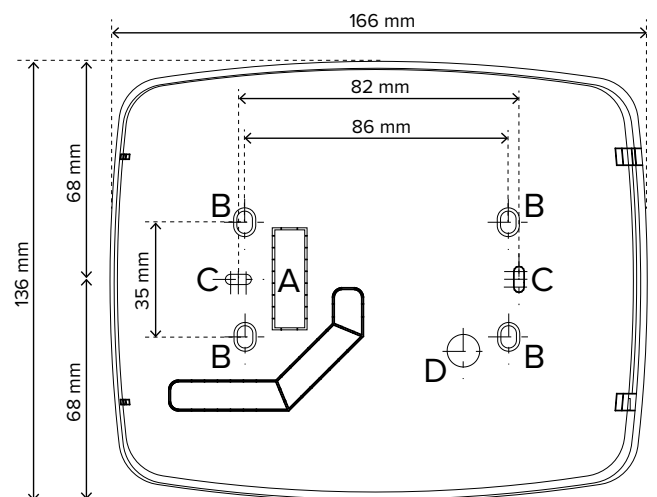
#### Opening the housing



**!** use a slotted screwdriver

- insert the screwdriver tip inside hole A
- slightly rotate the tip until release
- repeat the operations for hole B
- lift the cover to reach the board

#### Base wall mount



- feed system cables through hole A
- use the three external holes B for standard wall mounting
- use the two central holes C for installation on 503 recessed box

#### Current draws with I66 reader

With control unit disarmed	36 mA
With control unit armed	52 mA
With control unit disarmed, backlight enabled	65 mA
With control unit armed, backlight enabled	82 mA

#### Parts supplied

Screws, inserts, 680 Ω resistor, technical manual.

### 4 PRECAUTIONS BEFORE DEVICE MOUNTING



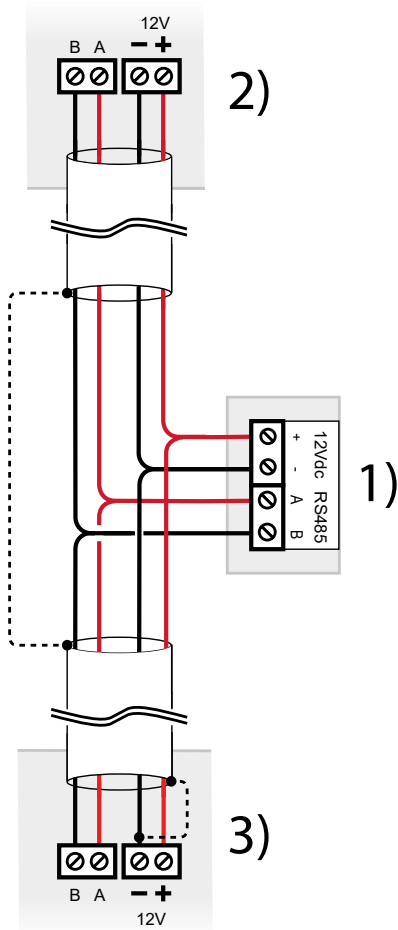
**!** General warnings are at the end of this manual.

- Avoid installing the keypad where it may be directly lit by sunlight.
- Check the mounting surface is perfectly flat and smooth, in order to prevent base deformation during assembly.

## Protection against removal from the mounting surface

- insert a screw with S4 dowel into the hole D
- adjust screw penetration so that it enters 2 mm into the hole on case bottom

## Wirings



- 1 Terminal board NIRVA
- 2 Previous device over serial line
- 3 Next device over serial line

– wire terminals

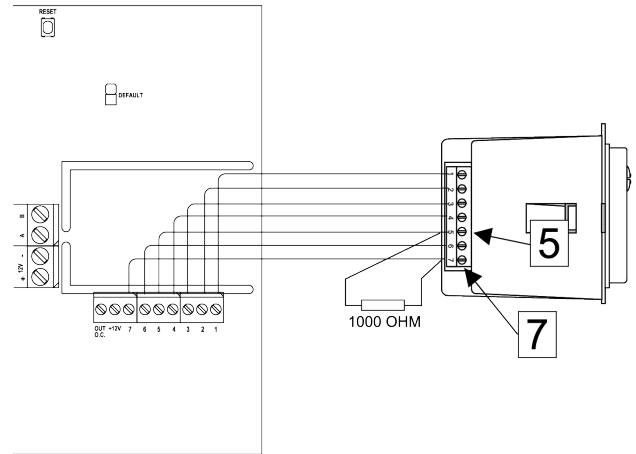
Use shielded cables with the following section:  $2 \times 0.75 \text{ mm}^2$  (power) +  $2 \times 0.22 \text{ mm}^2$  (signal).

**!** Wire cable screen as indicated in picture (dashed line)

The serial line may be extended with branches, provided that the following rules are followed:

- the sum of the lengths of the branches must not exceed 1 km
- $680 \Omega$  termination resistors must be connected to the ends of the two longest branches

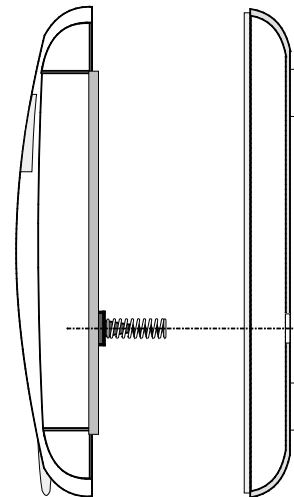
## I66 reader connection



Compliance with the EN 50131 standard requires:

- the configuration of reader presence recognition;
- the connection of one reader only;
- the generation of the "keypad tamper" general event within 100 s from any disconnection of the reader from the keypad.

## Closing the housing



- hook the catchers on the left

**!** make sure the tamper protection spring fits correctly to the hole on bottom

- snap the catches on the right




Power the keypad.

### 6.1 Address setup

When powered for the first time, the keypad is already operating with address 1.

If you want to change the address:

- hold keypad key  pressed to enter setup menu
- use arrow keys to go to **Advanced Options** option

 *access code required*

- press OK
- use number keys to enter the new address

Once finished, press OK to save changes.

**Note:** the address set locally using the previous instructions has to be the same as the address set in BrowserOne (see paragraph 6.2 p. 4). Any difference between the two addresses will make the communication between the control unit and the keypad fail.

### Control unit communication loss

In case of control unit communication loss, the following message appears on screen after 4 minutes:

\* **COMMUNIC. ERROR** \*  
Addr: 001 [EL.MO.]

It displays the currently set address and the brand.


Check that:

- the electrical wiring to the control unit has been performed correctly;
- the addresses set on keypad and in BrowserOne are the same;
- there are no other connection anomalies.

### 6.2 Setup via BrowserOne

The device can be set using BrowserOne.

- connect the control unit to BrowserOne
- read control unit setup
- with Villeggio, Pregio, Proxima control units: enter page **Control devices**
- with Titania control units: enter page **Devices**
- click on **Keypad** tab
- select the grid row corresponding to the keypad

 *make sure the address set in field **Address** is the same as the address set on keypad (see paragraph 6.1 p. 4)*

- from **Type** drop-down menu select "Nirva/Midas/Tattilo/Anima"
- set the keypad parameters (presentation and pertaining areas) as indicated in the control unit programming manual

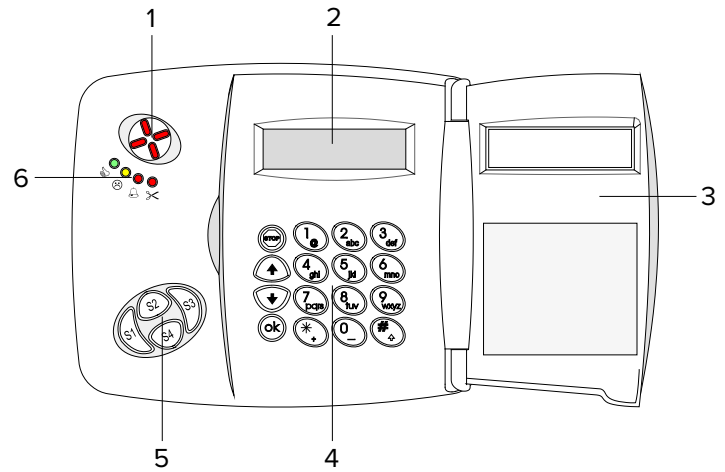
Once all changes have been done, write the new setup to

the control unit.

## 7 KEYPAD OPERATING MODE



### 7.1 Front panel elements



- 1 Proximity keys reader
- 2 Display
- 3 Door
- 4 Number and control keys
- 5 Sector buttons
- 6 Status LED indicators

#### Proximity keys reader

The keypad features a proximity key reader.




Place the M4 key near the keypad reader (or the reader connected to the keypad) to arm or disarm the system.

#### Idle display: main menu

The main menu shows data coming from the control unit. Information is displayed on two rows.

#### Number and control keys

The keypad features number keys and the following keys:

-  To enter a menu/submenu or confirm an operation.
-  To exit a menu/submenu.
-  To browse among menu pages and options

#### Sector buttons

The keypad features 4 sector keys to select sectors to arm/disarm.

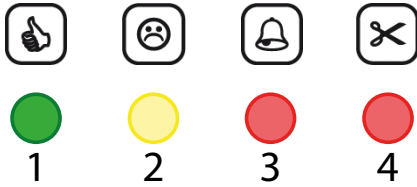
The sector key lights up red if the sector is armed.

#### Status LED indicators

Four LEDs indicates system arming status and anomalies, alarm events and related memories.

The 4 LEDs will blink simultaneously in case of setup from

keypad or system locked.




- 1 Zones status (GREEN)
- 2 Anomaly (YELLOW)
- 3 General alarm (RED)
- 4 Tamper (RED)

For further information, please see control unit manual.

## 8 SETUP MENU



Hold  key pressed for long.  
The keypad will enter setup mode.

- use arrow keys to browse menu items
- press OK to enter a menu item

### Menu tree

#### Version

#### Options

Buzzer

#### Advanced Options

Addr

Tamper Exclude

Tamper I66

Buzzer to All.

New Secure Code

Memory default

Exit from Advanced

### 8.1 Version

It shows information about the keypad.

### 8.2 Options

#### ▼ Buzzer

Press OK key repeatedly to activate / deactivate the buzzer.

If deactivated, all acoustic signals (included those due to keys pressing or control unit commands) will be disabled.

If **Buzzer to All.** function is enabled, the signals will be enabled anyway in case of alarm.

**N** = buzzer disabled


**Y** = buzzer enabled

Once done, press STOP to exit this menu.

### 8.3 Advanced Options

This menu allows changing some system settings.

Access code (default: 88888888) required to access this menu.

 *Warning: the access code is not the same as the control unit installer code.*

- use arrow keys to browse menu items
- press OK to enter a menu item

#### ▼ Addr

This menu allows changing the communication address of the keypad on RS-485 ULTRABUS serial bus.  
Enter the three-digit address.

Once finished, press OK to save changes, STOP to exit without saving changes.

#### ▼ Tamper Exclude

Press OK repeatedly to exclude tamper protection.

**N** = tamper enabled (default)

**Y** = tamper excluded

Once done, press STOP to exit this menu.

#### ▼ Tamper I66

Press OK repeatedly to enable or disable the reader presence control.

**N** = tamper excluded (default)

**Y** = tamper enabled

Once done, press STOP to exit this menu.

#### ▼ Buzzer to All.

Press OK key repeatedly to activate or deactivate the buzzer in case of alarm.

**N** = buzzer disabled

**Y** = buzzer enabled

Once done, press STOP to exit this menu.

#### ▼ New Secure Code

This menu item allows changing the keypad access password.

Enter the new password.

Once finished, press OK to save changes.

#### ▼ Memory default

This menu item allows resetting the configuration to factory default.

Press OK to enter the menu.

Press 1 to proceed with the operation, or # to cancel it.

#### ▼ Exit from Advanced

Press STOP and then OK to exit the menu.

## 9 MAINTENANCE




### 9.1 Factory default

To restore keypad factory settings, click on **Memory default** button inside **Advanced Options** menu (see paragraph 8.3 p. 5).

Alternatively:

- open the keypad cover as illustrated in the mounting procedure
- close DEFAULT jumper on board bottom side
- press and release RESET button
- open the jumper

The default configuration will be loaded to the keypad.

 *If the jumper is left closed, the message "DEFAULT JUMPER" appears on keypad display. Open the jumper.*

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## EU DECLARATION OF CONFORMITY

The product complies with current European EMC and LVD directives.

The full text of the EU declaration of conformity is available at the following internet address: [www.elmospa.com](http://www.elmospa.com) – registration is quick and easy.



## GENERAL WARNINGS



This device has been designed, built and tested with the utmost care and attention, adopting test and inspection procedures in compliance with current legislation. Full compliance of the working specifications is only achieved in the event the device is used solely for its intended purpose, namely:

### Control keypad for intrusion detection control units

The device is not intended for any use other than the above and hence its correct functioning in such cases cannot be assured. Consequently, any use of the manual in your possession for any purpose other than those for which it was compiled - namely for the purpose of explaining the product's technical features and operating procedures - is strictly prohibited.

Production processes are closely monitored in order to prevent faults and malfunctions. However, the components adopted are subject to an extremely modest percentage of faults, which is nonetheless the case with any electronic or mechanical product.

Given the intended use of this item (protection of property and people), we invite you to adapt the level of protection offered by the system to suit the actual situation of risk (allowing for the possibility of impaired system operation due to faults or other problems), while reminding you that there are specific standards for the design and production of systems intended for this kind of application.

**We hereby advise you (the system's operator) to see that the system receives regular routine maintenance, at least in accordance with the provisions of current legislation, and also check on as regular a basis as the risk involved requires that the system in question is operating properly, with particular reference to the control unit, sensors, sounders, dialler(s) and any other device connected. You must let the installer know how well the system seems to be operating, based on the results of periodic checks, without delay.**

Work involved in the design, installation and maintenance of systems incorporating this product should be performed only by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply.

If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

## INSTALLER WARNINGS



Comply strictly with current standards governing the installation of electrical systems and security systems, and with the manufacturer's directions given in the manuals supplied with the products.

Provide the user with full information on using the system installed and on its limitations, pointing out that there are different levels of security

performance that will need to suit the user's requirements within the constraints of the specific applicable standards. See that the user looks through the warnings given herein.

Work involved in the design, installation and maintenance of systems incorporating this product should be performed only by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply. If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

## USER WARNINGS



Check the system's operation thoroughly at regular intervals, making sure the equipment can be armed and disarmed properly.

Make sure the system receives proper routine maintenance, employing the services of specialist personnel who meet the requirements prescribed by current regulations.

Ask your installer to check that the system suits changing operating conditions (e.g. changes in the extent of the areas to be protected, change in access methods, etc...)

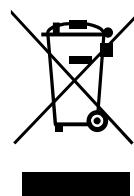
## MAIN SAFETY RULES

The use of the device is forbidden for children and unassisted disabled individuals.

Do not touch the device when bare footed, or with wet body parts. Do not directly spray or throw water on the device.

Do not pull, remove or twist the electric cables protruding from the device even if the same is disconnected from the power source.

## DISPOSAL WARNINGS



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In accordance with Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), please be advised that the EEE was placed on the market after 13 August 2005 and must be disposed of separately from normal household waste.