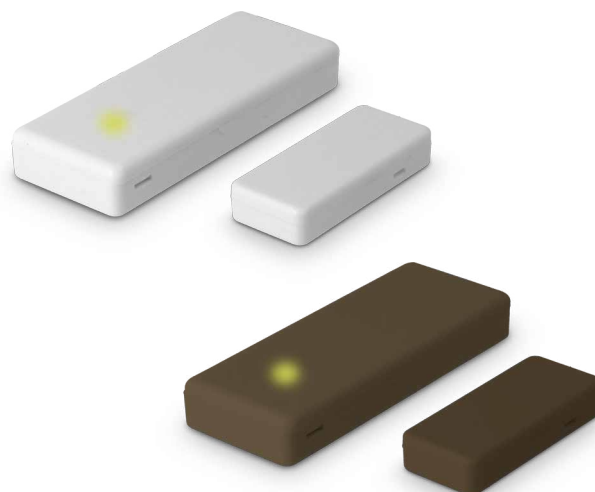


VEGA2K, VEGAM2K

Compact magnetic contacts for NG-TRX systems.



Addressee for this information: User | Installer

1 DESCRIPTION

VEGA2K is a small-sized magnetic contact.

The device is suitable for indoor installations.

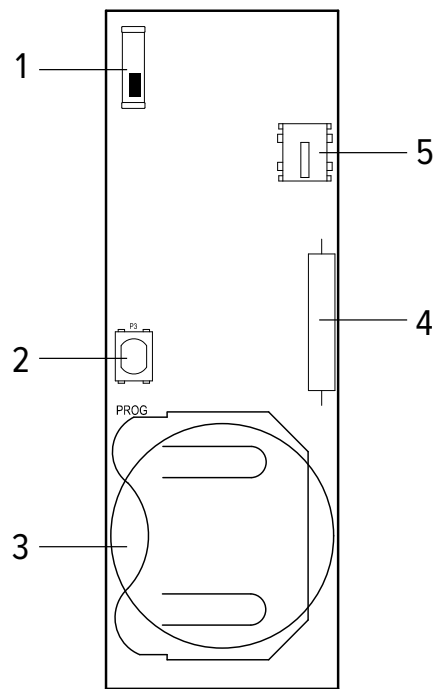
A yellow LED will provide operating indications.

VEGA2K can be programmed using BrowserOne software.

VEGA2K is compatible with Villeggio NG-TRX, Pregio and Proxima series control units. Connection to Pregio and Proxima control units requires use of GATEWAY2K.

Control unit	VEGA2K
PREGIO series	2.6.1.0 or above
VILLEGGIO NG-TRX series	8.4.1.0 or above
PROXIMA series	1.0.2 or above

Available in white (VEGA2K) or brown (VEGAM2K) version.



- 1 RF antenna
- 2 Learning button (**PROG**)
- 3 Battery position
- 4 Magnetic sensor
- 5 Button against opening and removal

Model		VEGA2K	
General features			
Power consumption at 3V	Inactive mode	3.3	μA
	Transmitting	20.0	mA
Operating voltage	Power supply	3	V
	Minimum power supply	1.8	V
	Battery	CR2032	
	Discharged battery threshold	2.1	V
	Battery restore threshold	2.3	V
Wireless range	nominal	400	m
	maximum	450	m
Max power in transmission mode		25	mW
Transmission frequencies		868.120MHz, 868.820MHz, 869.525MHz	
Autonomy		2 years (1)	
Conformity		EN 50131-2-6: grade 2; EN 50131-5-3 (2)	
Protection class		IP3X	
Working temperature		-10/+55	°C
Environmental class		2	
Dimensions and weight		contact: 63 × 25 × 9 mm, 10 g - magnet: 37 × 16 × 7 mm, 5 g	
Parts supplied		Screws, battery, magnet, double-sided adhesive tape	

(1) 2 alarms and 2 reset per day are considered

(2) to comply with EN50131-5-3 grade 1, set supervision time equal to or below 60 minutes; to comply with EN50131-5-3 grade 2, set supervision time equal to or below 20 minutes

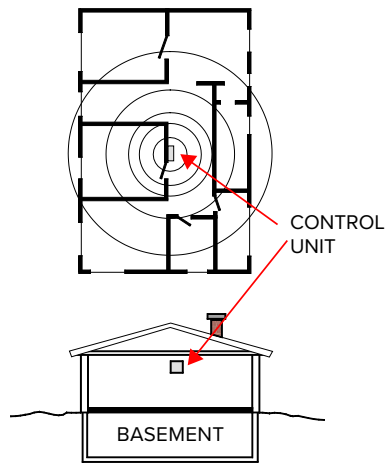
4 PRECAUTIONS BEFORE DEVICE MOUNTING

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

Before installing the product, please read the following indications carefully.

4.1 General considerations

- For a better reception we recommend installing intrusion detection control units in the central area of the building to protect and over the ground level.



- The use of some building materials (concrete walls, metal sheet and plaster) or objects (metal grids, metal gates, glasses) may reduce the detector wireless signal strength.

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

4.2 Definition of installation position

VEGA2K is suitable for indoor installation on wooden fixtures.
Installation on metal fixtures may reduce the radio range.

4.3 Operative distances between magnet and sensor

Approach distance: if the distance between the magnet and the sensor is lower than this value, the contact will close.

Break distance: if the distance between the magnet and the sensor is higher than this value, the contact will open.

	approaching	breaking
on non-ferromagnetic material (wood, PVC, aluminium)	10mm	15mm
on ferromagnetic material	1 mm	2 mm

VEGA2K features two elements: the sensor body and the magnet.

• Housing opening

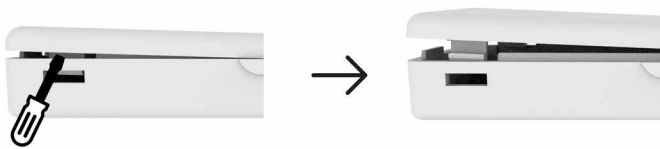
The following opening steps are valid both for sensor body and magnet.

Use a small slotted screwdriver:



- insert the screwdriver tip inside one of the side slots
- press the hook until the cover is lifted

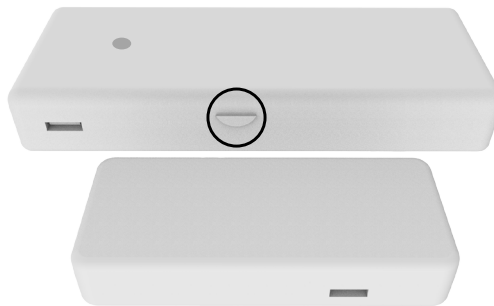
press the hook upwards without rotating the screwdriver otherwise it may brake



- insert the screwdriver between base and cover
- leverage the cover up and remove it

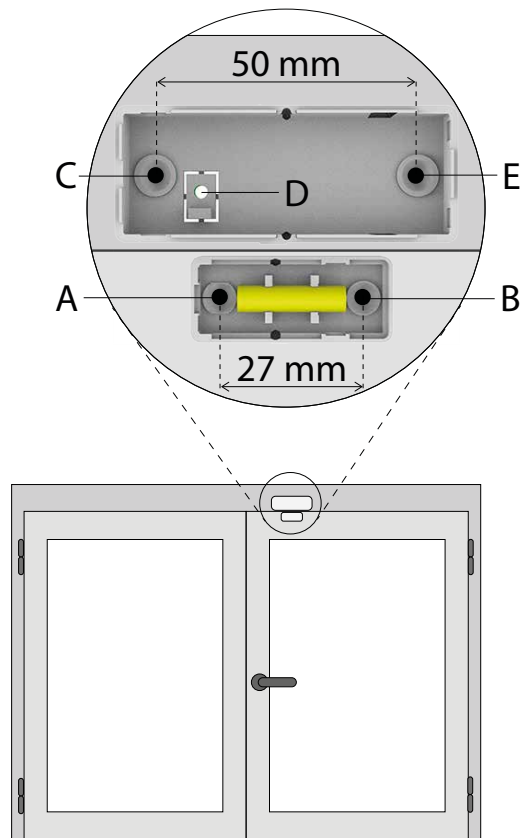
Note: the opening procedure can also be performed on a single side of the detector.

• Fixing the bases



Install the magnet next to the sensor body. A notch on the sensor body indicates the side that must be aimed to the magnet. Each base can be sellotaped (sellotape supplied) or fixed using screws and dowels to its surface.

In case of fixing with screws and dowels:



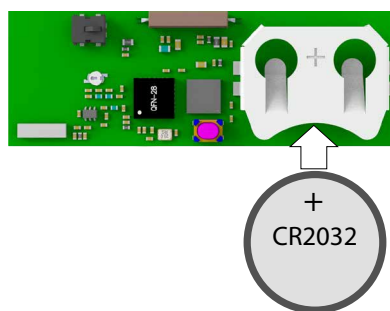
- drill bases at points A, B, C, E
- fix magnet base with screws and dowels using holes A, B
- fix detector base with screws and dowels using holes C, E

Protection against opening and removal

- insert a screw with S4 dowel into D hole

! Fixing with the screw against opening and removal ensures compliance to grade 2, without such screw causes regression to grade 1.

Inserting the battery



- arrange the battery in the indicated slot

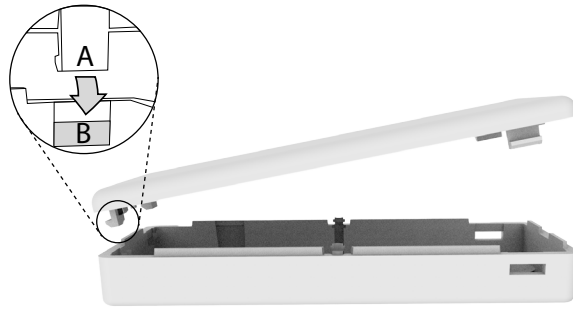
! The positive pole is on the upper side.

• Device setup

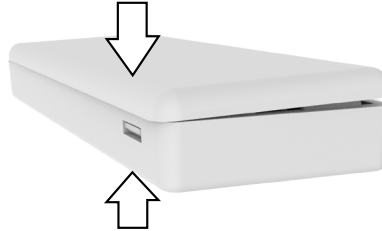
Proceed with device setup (see following chapter).

• Housing closing

The following closing steps are valid both for sensor body and magnet.



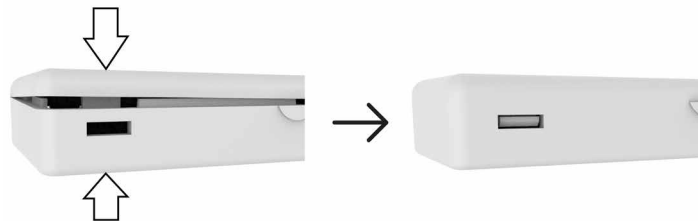
- join cover short side (hook A) and base short side (slot B) together
- lower the cover



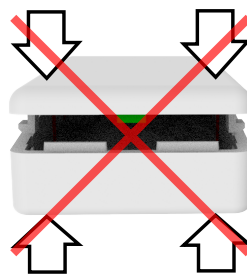
- press on one of long sides until the first hook enters the side slot



- use the screwdriver to push the second hook inside



- press on the second long side until the second hook enters the side slot



! do not close the cover by pressing on the two long sides simultaneously

6 STARTING THE DEVICE



6.1 Device learning to NG-TRX control unit

Before starting learning procedure, remove the front cover (as illustrated in mounting procedure) to be able to access learn key PROG.

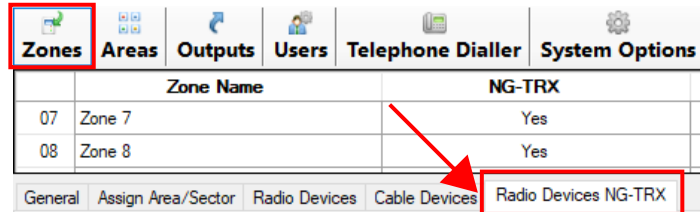
! Verify that the battery is charged otherwise the device will not be learnt.

Device learning procedure:

- on control unit keypad, enter installer code followed by **OK** to go to setup menu
- use arrow keys ↑ or ↓ to go to LEARN RADIO DET. option
- press **OK**
- use arrow keys to go to the zone to which the device will be learned.
- press **OK**
- press key 1 (saved to control unit)
- go to the device
- press and hold device learn key (PROG) for 3 seconds: when the LED blinks twice the device has entered learning mode
- if the detector is not learned correctly, the unit will not confirm the procedure and the detector LED will not switch on: restart the procedure
- if the detector is learned correctly, the unit will beep twice and the device LED will switch on for 1 second
- exit control unit setup menu. When required, press **OK** to save the setup

The device can be set using BrowserOne v3.7.3 or above.

- load the latest module available for the control unit in use
- start control unit connection
- select **Read setup** key to read control unit setup
- select the grid row corresponding to the zone used to learn the device
- select tab **Radio Devices NG-TRX**



7.1 NG-TRX options

Use this section to set detector parameters common to all its channels. For detailed information, please see programming manual of the control unit in use.

▼ **Supervision interval**

Set time intervals for control unit data transmission in order to check device presence and proper working.

▼ **Delay supervision anomaly**

If enabled, the anomaly caused by lack of supervision will be signalled with a delay equal to 6 times the supervision time.

7.2 VEGA2K detector option

Use this section to set specific parameters of VEGA2K device.

▼ **Enable Led**

If disabled, LED indicators will not blink in case of alarm/tamper (they will continue working in walk test or learning mode).

7.3 Options for communication to control unit

To configure communication between NG-TRX devices and control unit:

- on BrowserOne main page, select **System Options**
- select tab **Options NG-TRX**



▼ **Receiving multichannel**

When active, the control unit receives on three channels simultaneously; when deactivated, the control unit receives on one channel only (preset/preferred). We recommend to keep it non active only if a channel has disturbances.

▼ **Default channel**


This is the channel used by the control unit to receive data in case of no interference (default: channel 1). In case of interference, the unit defines a channel (even different from the preset one) according to interference level and uses it for data reception.

▼ **Supervision interval**

It defines supervision time interval common to all system devices: such interval will be valid for all devices that has no specific interval selected (default).

Select **Enable detection RF interference** to allow the control unit to detect any interference on the three radio channels.

For further information about this option and other in this menu, please see programming manual of the control unit in use.

 *Once all changes have been done, write the new setup to the control unit. It will be sent to VEGA2K at the first valid transmission.*

8 OPERATING MODE

Changes in magnetic contact status will be detected and transmitted.

8.1 LED indicators


Condition	Yellow LED
Learning OK	ON 1 s
Setup change	3 fast blinkings
Transmission	ON 0.5 s

9 MAINTENANCE

9.1 Device test

Carry out a simple test regularly to verify the device operating mode.

- go to **SYSTEM TEST > ZONES TEST** menu on control unit
- have the device generate a transmission
- check LED switch on

 *If data transmission is not correct or is difficult, or if the device is not learned correctly, a delay may occur (up to 9 seconds) between alarm/reset and the corresponding LED indication.*

 *A long permanence in zones test mode may reduce battery lifetime.*

9.2 Battery replacement

Replace the battery with a new one of the same type only.

Follow this procedure:

- Open the housing (see mounting procedure).
- Remove the discharged battery.
- position the new battery (see mounting procedure).
- Reset any discharged battery memory on control unit or compatible receiving device.

Discharged batteries shall be disposed of according to current laws and using specific containers.

Materials used are very harmful and polluting if dispersed in the environment.

 **CAUTION! This device contains button cells.**

Do not ingest the battery. Chemical burn hazard.

In case of ingestion, button cells might cause severe internal burn within just 2 hours and could result in death.

Keep new and used batteries away from children's reach.

If the battery slot does not firmly close, suspend product use and keep it away from children's reach.

In case of suspected ingestion or insertion in other body cavities, seek medical attention immediately.

EU DECLARATION OF CONFORMITY

Hereby, EL.MO. Spa declares that the radio equipment VEGA2K - VEGAM2K is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: 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:

Compact magnetic contact for NG-TRX systems.

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...)

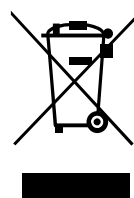
MAIN SAFETY RULES

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



IT08020000001624

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.

This product needs batteries for correct functioning. Exhausted batteries have to be delivered to dumping grounds authorised for battery collection. The materials used for this product are very harmful and polluting if dispersed in the environment.