

I9

Addressable proximity key reader for intrusion detection systems


 Addressee for this information: User | Installer

1 DESCRIPTION

I9 is a proximity key reader.

The reader features four LEDs for control unit or system state visualization and two LEDs to indicate proximity key approach.

It is equipped with an input, an open-collector output and a dip switch for addressing.

It can be directly wired to the serial line of control units equipped with RS-485 ULTRABUS interface (among them, ETR512, ETR256, ETR128 require firmware version 2.0 or higher; ETR100 1.0 or higher).

I9 is compatible with Keystone adapters.

Install I9 inside a recessed box with Keystone interface. I9 occupies the room of one module.

- Do not install it near other readers that generate magnetic fields at 125 kHz frequency (e.g. badge readers).
- Use non-conductive plastic material wallplates. Avoid using metal plates or plates composed of another conductive material.

! *Disassembling the detector body will invalidate the warranty.*

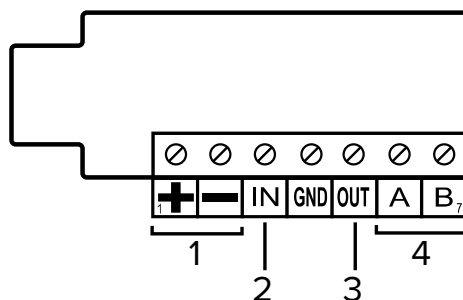
2 TECHNICAL DATA



Model	I9		
General features			
Operating voltage	Power supply	12 (10 ÷ 15)	V
Consumption at power voltage	Maximum	30	mA
O.C. output maximum current		40	mA
Working temperature		-10 / +45	°C
Conformity		EN 50131-3: grade 2	
Environmental class		II	
Dimensions and weight		W52 × H27 × D17 mm, 15 g	

3.1 Wirings

Terminal board



- 1 12 V power supply
- 2 General input
- 3 Open-collector output (to command an electric lock)
- 4 A, B serial line

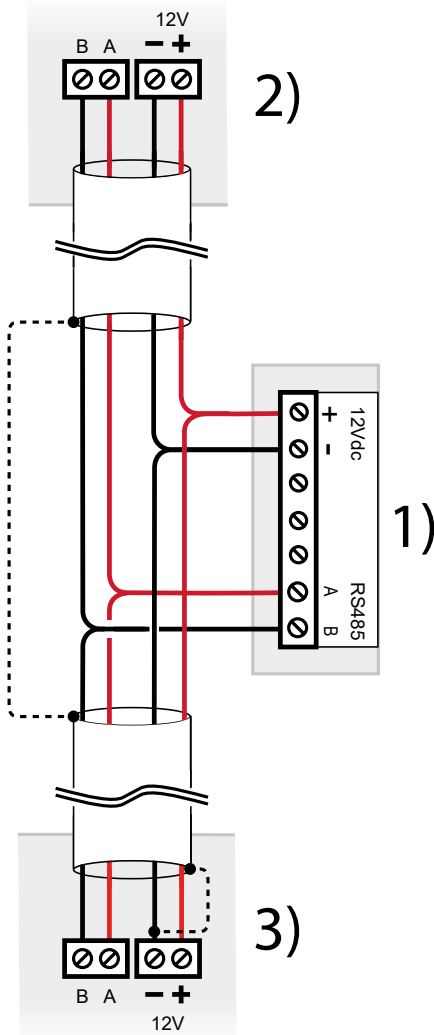
! *The open collector output can be used only with compatible control units.*

3 INSTALLATION



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

Connection to the serial line



- 1 Terminal board I9
- 2 Previous device over serial line
- 3 Next device over serial line

– wire detector power and serial line terminals
 Use 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
- 680Ω termination resistors must be connected to the ends of the two longest branches

4 STARTING THE DEVICE

4.1 Address setup

For correct communication with the control unit, it is necessary to set an address for the reader.

Set device address over serial line using dip switches.

! Operate with a properly sharp tool to prevent dip

damage.

Addr.	dip ON	Addr.	dip ON	Addr.	dip ON
1	-----	2	1-----	3	-2-----
4	12-----	5	--3-----	6	1-3-----
7	-23-----	8	123-----	9	---4----
10	1--4----	11	-2-4----	12	12-4----
13	--34----	14	1-34----	15	-234----
16	1234----	17	----5---	18	1---5---
19	-2--5---	20	12--5---	21	--3-5---
22	1-3-5---	23	-23-5---	24	123-5---
25	---45---	26	1--45---	27	-2-45---
28	12-45---	29	--345---	30	1-345---
31	-2345---	32	12345---	33	-----6--
34	1----6--	35	-2---6--	36	12---6--
37	--3--6--	38	1-3--6--	39	-23--6--
40	123--6--	41	---4-6--	42	1--4-6--
43	-2-4-6--	44	12-4-6--	45	--34-6--
46	1-34-6--	47	-234-6--	48	1234-6--
49	----56--	50	1---56--	51	-2--56--
52	12--56--	53	--3-56--	54	1-3-56--
55	-23-56--	56	123-56--	57	---456--
58	1--456--	59	-2-456--	60	12-456--
61	--3456--	62	1-3456--	63	-23456--
64	123456--	65	-----7-	66	1-----7-
67	-2----7-	68	12----7-	69	--3---7-
70	1-3---7-	71	-23---7-	72	123---7-
73	---4--7-	74	1--4--7-	75	-2-4--7-
76	12-4--7-	77	--34--7-	78	1-34--7-
79	-234--7-	80	1234--7-	81	----5-7-
82	1---5-7-	83	-2--5-7-	84	12--5-7-
85	--3-5-7-	86	1-3-5-7-	87	-23-5-7-
88	123-5-7-	89	---45-7-	90	1--45-7-
91	-2-45-7-	92	12-45-7-	93	--345-7-
94	1-345-7-	95	-2345-7-	96	12345-7-
97	-----67-	98	1----67-	99	-2---67-
100	12---67-	101	--3--67-	102	1-3--67-
103	-23--67-	104	123--67-	105	---4-67-
106	1--4-67-	107	-2-4-67-	108	12-4-67-
109	--34-67-	110	1-34-67-	111	-234-67-
112	1234-67-	113	----567-	114	1---567-
115	-2--567-	116	12--567-	117	--3-567-
118	1-3-567-	119	-23-567-	120	123-567-
121	---4567-	122	1--4567-	123	-2-4567-
124	12-4567-	125	--34567-	126	1-34567-
127	-234567-	128	1234567-		

Note: the number to set must not be already used by another serial device. The maximum number of readers that can be wired depends on the control unit in use.

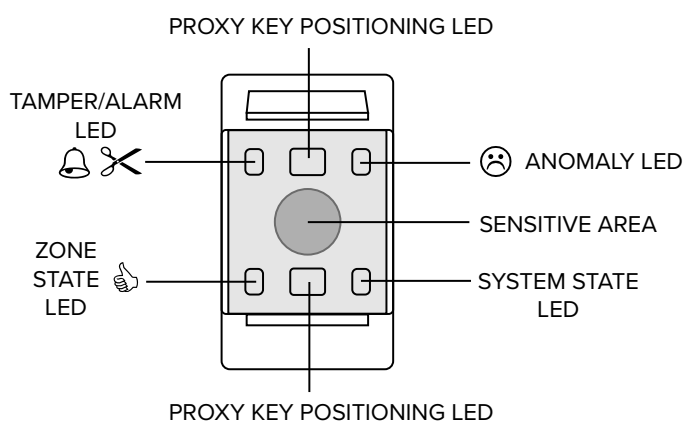
Dip 8 is not used for the encoding. For information on its usage see paragraph 4.2 p. 3.

4.2 Control unit state signalling activation

It is possible to configure the visualization of the control unit state on the related LED using dip 8.

DIP 8	State LED indication
ON	Control unit state always displayed on state LED.
OFF	Control unit state displayed on state LED only when the proximity key is placed on the reader sensitive area.

5 OPERATING MODE



Place the proximity key at the center of the sensitive area. The white LEDs, that are weakly lit in normal conditions, will lit more strongly when the key is placed on the reader.

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 – 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:

Addressable proximity key reader for intrusion detection 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.