PROXIMITY CARD ARM/DISARM DEVICE
INT-CR

int-cr_en 09/10

The INT-CR proximity card arm/disarm device enables arming / disarming and alarm clearing in many partitions by means of proximity cards, key fobs and other 125 kHz passive transponders (wherever used in this manual, the word "card" means a 125 kHz passive transponder, which can have many forms and shapes). The device can work together with SATEL made control panels: INTEGRA (with firmware version 1.07 or newer) and VERSA. The manual applies to the device with firmware version 2.00.

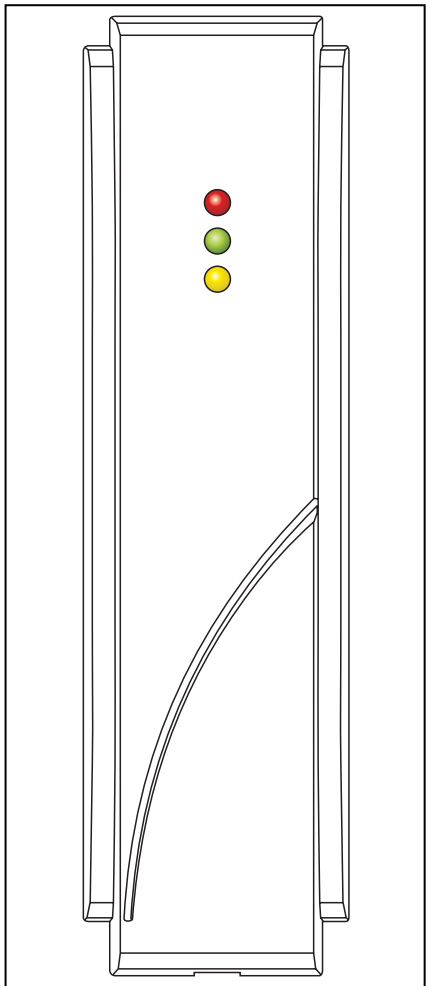

Fig. 1. INT-CR device.

1. Installation and connection

All electric connections may only be made with power supply disconnected.

The device is designed for indoor installation. When selecting the installation place, remember that the distance between two appliances fitted with the proximity card reader should be greater than 50 cm.

Note: *If the INT-CR device is mounted on metal surface, the reading range of proximity card will be decreased.*

The device is connected directly to the control panel expander bus. The respective device wires should be connected to the control panel terminals, as indicated in Table 1. The distance to the control panel must not exceed 1000 meters, when the device is used with the INTEGRA control panel, and 600 meters, when used with the VERSA control panel. Wherever the distance between control panel and device does not exceed 300 m, the device can be power supplied directly from the control panel. Where distances to the control panel are greater, the device should be provided with an independent source of power supply.

Wire color	Function	Control panel terminal	
		INTEGRA	VERSA
brown	power supply	+EX / +EX1 / +EX2	KPD
white	common ground	COM	COM
gray	clock	CK / CK1 / CK2	CLK
green	data	DT / DT1 / DT2	DTA

Table 1. Way of connecting wires to control panel terminals.

1.1 Setting the device address

Each device which is to be connected to the expander bus must have its own individual address. Depending on the control panel type:

- for INTEGRA: you can either set any unused address from 0 do 31 range;
- for VERSA: you should set an address from 16 (10h) to 21 (15h) range.

To set the address, use the DIP-switch set on the device electronics board. A numerical value is assigned to each DIP-switch. For OFF position, the value is always 0. The numerical values assigned to individual DIP-switches in ON position are presented in Table 2. Using a screwdriver, set the selected DIP-switches to ON position. Sum up the numerical values assigned to them to get the address set in the device.

DIP-switch number	1	2	3	4	5
Numerical value (for switch in ON position)	**1**	**2**	**4**	**8**	**16**

Table 2. Numerical values assigned to the DIP switches.

1.2 Identification

After completing the installation work and activating the alarm system, start the identification function in the control panel (see the installer manual for the corresponding control panel). Only after identification, the device will be properly supported. **The device is identified as INT-IT.**

2. Programming device parameters and options

Described below are the device parameters and options. They can be programmed using the DLOADX program or LCD keypad. Shown in square brackets are the names displayed in the LCD keypad of INTEGRA system.

Name – individual name of the device (up to 16 characters).

Tamper alarms in partition [Tamper in part.] – the partition in which alarm will be signaled if the keypad is disconnected from the control panel.

Master users / Users **INTEGRA only** – the master users (administrators) and users authorized to use the device.

LED R [Partit. LED R] – way of partition reaction after removal of the card when the red LED is lit. The partition can be fully armed or its status can remain unchanged.

LED G [Partit. LED G] **/ LED Y** [Partit. LED Y] – way of partition reaction after removal of the card when the green LED (mode A) or the yellow LED (mode B) is lit. The partition can be armed in one of available armed modes, it can be disarmed **VERSA only** or its status can remain unchanged.

Alarm signaling [Alarm (time)] – the device can audibly signal alarms during the KEYPAD'S ALARM TIME [VERSA] / GLOBAL ALARM TIME [INTEGRA].

Alarm signaling until canceled [Alarm (latch)] – the device can audibly signal the alarm memory.

Signaling entry delay [Entry time] – the device can audibly signal the entry delay countdown.

Signaling exit delay [Exit time] – the device can audibly signal the exit delay countdown, and in case of the VERSA control panel also the auto-arming delay.

Auto-arm delay countdown [Auto-arm delay] **INTEGRA only** – the device can audibly signal the auto-arming delay countdown.

Signaling card (hardware) [Hardw. signal] – the device can signal by a single beep that the card code has been read out or the LED has lit up (the code is sent to the control panel after removal of the card and only then the panel reaction to the read code is audibly signaled).

3 wrong cards alarm [Al. 3 unk .cards] – reading the unknown card code three times will trigger alarm.

No auto-reset after 3 tampers [No autorst.3t.] **INTEGRA only** – you can disable the feature limiting to three the number of tamper alarms from the expander.

Second code wait signaling [INT-IT-wt.2cd.] **INTEGRA only** – the device can signal by means of LEDs that it is waiting for the second card. This is a global option (i.e. it is available in DLOADX program for each INT-CR device, but if enabled in any device, it will be enabled in all of them).

3. Use

Using the proximity card you can:

- fully arm the partitions;
- arm the partitions in mode A or B (the partition behavior in case of arming in mode A or B is defined by the installer – see section PROGRAMMING DEVICE PARAMETERS AND OPTIONS);
- disarm the partitions;
- clear alarm.

The installer will determine the partitions to be controlled by the device. The user can only control the partitions which he is authorized to access.

Note: *The INTEGRA control panel does not allow to toggle between the armed mode in partitions. The partition must be disarmed first, and only then can be armed in another mode.*

3.1 Full arming

1. Present the card to the device and hold up until the red LED comes on.
2. Remove the card from the device.

3.2 Arming the system in mode A

1. Present the card to the device and hold up until the green LED comes on.
2. Remove the card from the device.

3.3 Arming the system in mode B

1. Present the card to the device and hold up until the yellow LED comes on.
2. Remove the card from the device.

3.4 Disarming / alarm clearing

Present the card to the device and remove it after a while (approx. 0.5 second).

3.5 Audible signaling

If the SIGNALING CARD (HARDWARE) option is enabled, the device will generate a single short beep after the card has been read and – if the card is held up – after each successive LED comes on.

After removal of the card, the device may generate the following sounds:

3 short beeps – confirmation of arming / disarming, alarm clearing.

3 long beeps – denial of arming / disarming, alarm clearing (the user does not have required rights, or execution of the operation is impossible for other reasons, e.g. there no partitions which can be disarmed or where alarm can be cleared).

2 short beeps [only when interacting with the INTEGRA control panel] – awaiting the second card (the partition requires two codes for arming / disarming).

2 long beeps – unknown card.

The following audible signals can be generated in response to events in partitions served by the device:

Continuous beep – alarm.

Long beeps separated by short pauses – alarm memory.

Long beep every second – fire alarm.

Short beep every 2 seconds – fire alarm memory.

2 short beeps every second – entry delay countdown.

Long beep every 3 seconds, followed by a series of short beeps for 10 seconds and 1 long beep – countdown of exit delay (if the time is shorter than 10 seconds, only the final sequence of short beeps will be generated).

A sequence of 7 beeps of diminishing duration, repeated every few seconds – countdown of auto-arming delay.

3.6 Signaling by means of LEDs

Signaling when the proximity card is presented to the device:

Red LED lit – after removal of the card, the partitions specified by the installer will be fully armed.

Green LED lit – after removal of the card, the partitions will be armed in A mode (the installer defines which partitions and in what mode will be armed).

Yellow LED lit – after removal of the card, the partitions will be armed in B mode (the installer defines which partitions and in what mode will be armed).

Statuses indicated by LEDs (when the proximity card is not presented to the device):

All LEDs extinguished – none of the partitions controlled by the device is armed and there is no alarm.

Red LED lit, the other LEDs extinguished – all the partitions which are to be armed after removal of the card when the red LED is lit are fully armed.

Red and green LEDs lit – partitions controlled by the device are armed in A mode.

Red and yellow LEDs lit – partitions controlled by the device are armed in B mode.

Red LED lit, dimming momentarily, the other LEDs extinguished – at least one of the partitions controlled by the device is armed.

Red LED lights up every 2 seconds, the other LEDs extinguished – alarm or alarm memory, when none of the partitions is armed.

Red LED blinking slowly – alarm or alarm memory, when at least one of the partitions controlled by the device is armed.

Red and yellow LEDs blinking alternately [only during interaction with INTEGRA] – awaiting the second code enter.

All LEDs blinking steadily – no communication with VERSA control panel.

Red, yellow and green LEDs blinking in turn – no communication with INTEGRA control panel.

4. Specifications

Supply voltage	12 V DC ±15%
Standby current consumption	65 mA
Maximum current consumption	75 mA
Transmit frequency	125 kHz
Supported card standards	UNIQUE, EM4001, EM4002, EM4003, EM4102
Environmental class according to EN50130-5	II
Working temperature range	-10...+55 °C
Maximum humidity	93±3%
Housing dimensions	127 x 35 x 21 mm
Weight	140 g

Latest EC declaration of conformity and product approval certificates are available for downloading on website **www.satel.eu**

CE

SATEL sp. z o.o.
ul. Schuberta 79
80-172 Gdańsk
POLAND
tel. + 48 58 320 94 00
info@satel.pl
www.satel.pl