

INT-RX-S

433 MHz KEYFOBS RECEIVER EXPANSION MODULE

int-rx-s_en 07/19

The INT-RX-S expansion module allows you to control devices by using 433 MHz keyfobs. This manual applies to the module with firmware version 1.04. The expansion module is supported by:

- INTEGRA (firmware version 1.05 or newer) / INTEGRA Plus / VERSA / VERSA Plus / VERSA IP / PERFECTA 16 and PERFECTA 32 (firmware version 1.02 or newer) alarm control panel,
- ACCO-NT access control panel.

1. Features

- Superheterodyne radio receiver.
- Support for up to 248 433 MHz keyfobs (the number of supported keyfobs depends on the control panel).
- Transmissions from keyfobs secured by the KeeLoq code hopping.
- Up to 6 control functions available from keyfob.
- Expansion module firmware update capability.
- Tamper protection in 2 ways – cover removal and tearing enclosure from the wall.

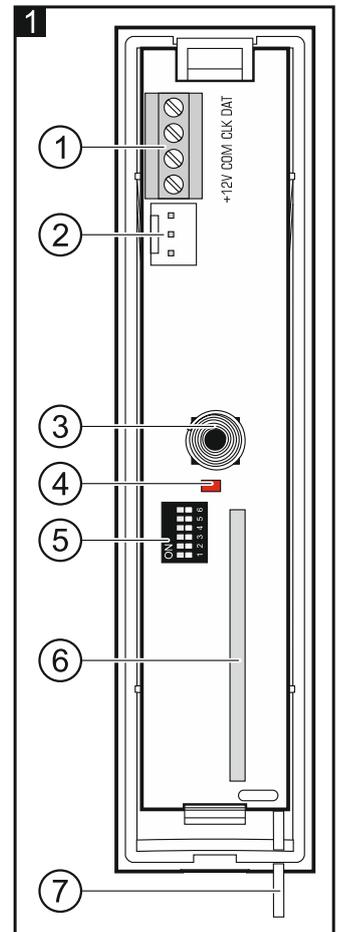
2. Electronics board

- ① terminals:
+12V - power input;
COM - common ground;
CLK - clock;
DAT - data.
- ② RS-232 port (TTL standard) for updating the expansion module firmware. The device can be connected to the computer by using the SATEL USB-RS converter.
- ③ tamper switch.
- ④ LED indicator of communication with the control panel:
– blinking – data exchange with the control panel;
– steady light – no communication with the control panel.
- ⑤ DIP-switches. **The DIP-switches 1-5** are used for address setting. The switch in OFF position has a value of 0. The values assigned to the switches in ON position are presented in Table 1. The address is the sum of values set on switches 1-5. It must be different than that in the other devices connected to the communication bus of the control panel.

DIP-switch number	1	2	3	4	5
Numerical value	1	2	4	8	16

Table 1.

- ⑥ high-sensitivity superheterodyne receiver, immune to spurious signals.
- ⑦ antenna.



3. Installation



Disconnect power before making any electrical connections.

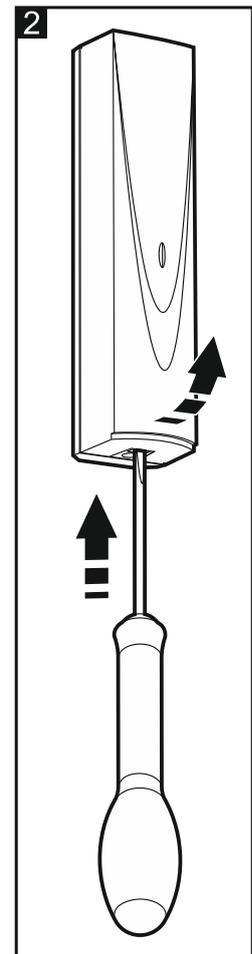
The expansion module should be installed indoors, in spaces with normal air humidity. When selecting the installation place, remember that the thick walls, metal partitions, etc. will reduce the range of the radio signal. It is recommended that the expansion module be mounted high above the floor. This will allow you to get a better range of radio communication and avoid the risk of the expansion module being accidentally covered by people moving around the premises. Mounting the expansion module near electrical installations is not advisable, as this may cause malfunction of the device.

1. Open the enclosure of the expansion module (Fig. 2).
2. Make the opening in the enclosure base for the communication bus and power cables.
3. Pass the cables through the opening. Use an unshielded non-twisted cable. If you use the twisted-pair type of cable, the CLK (clock) and DAT (data) signals must not be sent through one twisted pair.
4. Using wall plugs (screw anchors) and screws, fasten the enclosure base to the mounting surface.
5. Connect the CLK, DAT and COM terminals with wires to the communication bus of the control panel.
6. Connect the power leads to the +12 V and COM terminals. If the distance to the control panel is less than 300 meters, the expansion module can be supplied directly from the control panel. If the distance to the control panel is higher, the expansion module must be supplied from another power source, which is located at a closer distance (a power supply unit or an expander with power supply).
7. Using the DIP-switches, set the expansion module address. If the module is connected to the VERSA / VERSA Plus / VERSA IP / PERFECTA 16 / PERFECTA 32 control panel, set the address 7 (the switches 1-3 in ON position, the other ones in OFF position).

Note: If you connect the module to the INTEGRA / INTEGRA Plus control panel, to which the INT-RX / INT-RX-S module is already connected, the address set on the new module must be higher than that on the module already connected to the control panel.

8. Close the expansion module enclosure.
9. Power up the expansion module.
10. Depending on the control panel type:
 - alarm control panel: run the device identification function (for more information, refer to the alarm control panel manual),
 - access control panel: add the expansion module to the system (for more information, refer to the ACCO SOFT program manual).

Note: The keyfobs data are stored in the expansion module. If you connect to the alarm control panel an expansion module in which keyfob data are stored, keyfobs will be assigned automatically to the existing users.



4. Work with the INTEGRA / INTEGRA Plus control panel

If two or more INT-RX-S / INT-RX expansion modules are connected to the control panel, the keyfob is supported by all of them. The keyfobs data are written automatically to all the expansion modules.

If you connect the expansion module to a control panel to which the INT-RX-S / INT-RX expansion module is already connected, the keyfobs data must be unified. You can do it using:

- DLOADX program – in the “Keyfobs INT-RX” window, click on the “Read” button and, immediately after the data are read, click on the “Write” button (after reading the data, you must not make any changes),

- LCD keyfob – use COPY RX KEYFOBS function (service mode ►STRUCTURE ►HARDWARE ►EXPANDERS ►COPY RX KEYFOBS).

Using the keyfob, the user can control up to 6 zones of the alarm system. These zones should not exist physically and the wiring type programmed for them must be different from NO DETECTOR and FOLLOW OUTPUT. You can select any type for these zones. Pressing a keyfob button(s) will violate the zone.

To manage the keyfobs, you can use a keypad (refer to the control panel user manual) or the DLOADX program.

4.1 433 MHz keyfob management using the DLOADX program

You can manage the keyfobs in the “Keyfobs INT-RX” window. The window opening command is available in the "Users" menu. Before making any changes, click on the “Read” button, and after making the changes – on the “Write” button (the data related to keyfobs are not read and saved after

clicking on the  in the program main menu).

Notes:

- *Removing a keyfob only clears its serial number, but not its settings. If a new keyfob is added to the user, it will have the same settings as the removed one.*
- *You can delete all keyfobs, including their settings, using the REM. RX KEY FOBS function, available in the keypad service mode (►STRUCTURE ►HARDWARE ►EXPANDERS ►REM. RX KEY FOBS).*

Adding a 433 MHz keyfob by means of the DLOADX program

Entering the serial number manually

1. Click on the field in the "S/N" column next to the name of the user to whom you want to assign a keyfob.
2. Enter the keyfob serial number and press ENTER.

Reading the serial number during transmission

1. Click on the field in the "S/N" column next to the name of the user to whom you want to assign a keyfob.
2. Click on the "New" button. The "New" window will open.
3. According to the command which will appear in the window, press the keyfob button.
4. When the keyfob serial number is displayed in the window, click on the "OK" button. The "New" window will close. The serial number of the new keyfob will be shown in the "S/N" column.

Assigning a zone to keyfob button (combination of buttons)

1. Click on the field corresponding to the button (combination of buttons) to which you want to assign a zone.
2. Enter the zone number and press ENTER.

Removing a 433 MHz keyfob by means of the DLOADX program

1. Click on the field in "S/N" column next to the name of user whose keyfob is to be removed.
2. Click on the "Delete" button.
3. In the window which will be displayed, click on the “Yes” button to confirm that you want to remove the keyfob. The keyfob serial number shown in the "S/N" column will be erased.

5. Work with the VERSA / VERSA Plus / VERSA IP control panel

Using a keyfob, the user can run up to 6 functions. For the list of available function, refer to the control panel manuals. After adding a keyfob, default functions are assigned to its buttons (according to the given user schedule). You can change them to other ones.

To manage the keyfobs, you can use a keypad (when adding or editing a user – refer to the control panel user manual) or the DLOADX program.

5.1 433 MHz keyfob management using the DLOADX program

You can manage the keyfobs in the "Versa – Structure" window, "Hardware" tab, after clicking on the INT-RX in the list of devices. Before making any changes, click on the "Read" button, and after making the changes – on the "Write" button (the data relating to keyfobs are not read after clicking on

the  or saved after clicking on the  in the DLOADX program main menu).

Notes:

- *Removing a keyfob only clears its serial number, but not its settings. If a new keyfob is added to the user, it will have the same settings as the removed one.*
- *You can delete all keyfobs, including their settings, using the REM.RX K-FOBS function, available in the keypad service mode (►2. HARDWARE ►1. KPDS. & EXPS. ►9. REM.RX K-FOBS).*

You can add or delete keyfobs in the same way as when using the expansion module with the INTEGRA / INTEGRA Plus control panel.

Assigning a function to keyfob button (combination of buttons)

1. Right click on the field corresponding to the button (combination of buttons). The list of functions will be displayed.
2. Click on the function to be run by the keyfob button (combination of buttons).

6. Work with the PERFECTA 16 / PERFECTA 32 control panel

Using a keyfob, the user can run up to 6 functions. After adding a keyfob, default functions are assigned to its buttons. You can change them to other ones.

To manage the keyfobs, you can use a keypad (when adding or editing a user – refer to the control panel user manual) or the PERFECTA SOFT program ("Users" tab).

7. Work with the ACCO-NT control panel

For information on how the expansion module works with the ACCO-NT control panel and how keyfobs can be added and removed, refer to the ACCO NET system documentation.

For keyfob management info, refer to the ACCO-WEB application documentation.

8. Specifications

Supply voltage	12 V DC ±15%
Standby current consumption	24 mA
Maximum current consumption	29 mA
Operating frequency band for keyfobs	433.05 ÷ 434.79 MHz
Number of supported keyfobs	248
Supported keyfobs.....	MPT-350, MPT-300, P-2, P-4, T-1, T-2, T-4
Environmental class according to EN50130-5.....	II
Operating temperature range	-10°C...+55°C
Maximum humidity.....	93±3%
Enclosure dimensions	24 x 110 x 27 mm
Weight	30 g

The declaration of conformity may be consulted at www.satel.eu/ce