

VERSA-MCU

433 MHz WIRELESS SYSTEM CONTROLLER

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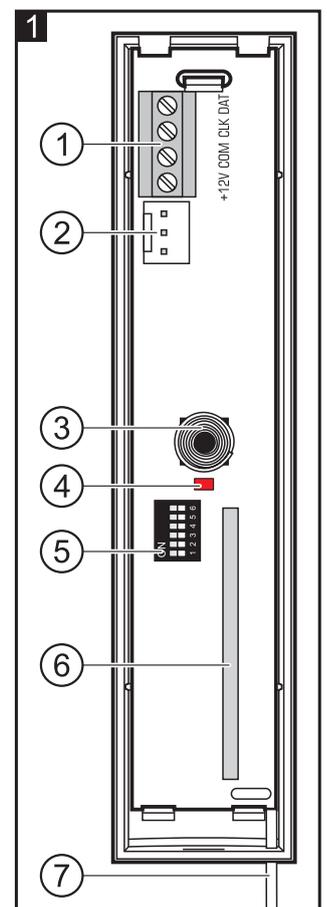
The VERSA-MCU controller works with the VERSA control panels having firmware version 1.03 or later. It enables operation of the alarm system using the 433 MHz keyfobs as well as expansion of the system with wireless zones.

1. Features

- Superheterodyne radio receiver.
- Support for up to 30 433 MHz remote control keyfobs manufactured by SATEL:
 - transmissions from keyfobs secured by the KeeLoq code hopping.
 - capability to run up to 6 functions with the keyfob.
- Support for up to 30 433 MHz wireless detectors manufactured by SATEL.
- Controller 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 controller firmware. The controller can be connected to the computer using the cables included in the DB9FC/RJ-KPL set, offered by SATEL.
- 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-switch package (not used).
- ⑥ high-sensitivity superheterodyne receiver, immune to spurious signals.
- ⑦ antenna.



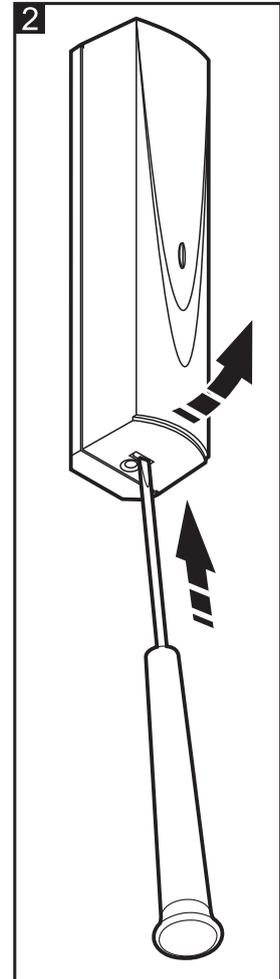
3. Installation



Disconnect power before making any electrical connections.

The controller 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 controller be mounted high above the floor. This will allow you to get a better range of radio communication and avoid the risk of the controller being accidentally covered by people moving around the premises. Mounting the controller near electrical installations is not advisable, as this may cause malfunction of the device.

1. Open the enclosure of the controller (Fig. 2).
2. Make the opening in the enclosure base for the communication bus and power cables.
3. Pass the cables through the opening. It is recommended to use a straight-through unshielded cable. When using 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 VERSA 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 controller can be supplied directly from the control panel. If the distance to the control panel is higher, the controller 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. Close the controller enclosure.
8. Turn on the power of the alarm system.
9. Start the identification function in the control panel. The controller will be identified as two devices: INT-RX (address 7) and VERSA-MCU (address 8).



3.1 Keyfobs

The data relating to keyfobs are stored in the controller. After a controller containing keyfob data is connected to the control panel, keyfobs will be automatically assigned to the existing users.

See the VERSA control panel manuals for information on the functions that can be run with the keyfobs. After adding a keyfob, the functions provided for by the user schedule will be automatically assigned to the buttons. The assigned functions may be replaced with other ones.

The user manual for VERSA control panels describes the procedures for adding and editing the user by means of the keypad, during which you can add or remove the keyfob and determine what functions will be available from the keyfob.

Adding a 433 MHz keyfob by means of the DLOADX program

Adding a keyfob is possible 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 you make changes, click on the "Write" button (the data relating to the keyfobs are not read upon clicking on the  button or saved upon clicking on the  button in the DLOADX program main menu).

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 confirm by pressing 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 new function to the keyfob button (combination of buttons)

1. Click on the field corresponding to the button (combination of buttons) to which you want to assign a new function.
2. Right click on your mouse. A drop-down menu will appear in which you are to select the new function.

3.2 Wireless detectors

The data relating to the wireless detectors are stored in the controller. After connecting the controller containing the detector data to the control panel, the detectors will automatically be assigned to the control panel zones.

For information on adding and removing the 433 MHz wireless detectors please refer to the VERSA control panel installer manual.

4. Specifications

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

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

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