

# Roger Access Control System

## OSR80M-BLE Installation Manual

Firmware version: 1.0.8.205 and newer

Document version: Rev.E



This document contains minimum information that is necessary for initial setup and installation of the device. The detailed description of configuration parameters and functionalities is specified in respective Operating Manual available at [www.roger.pl](http://www.roger.pl).

### INTRODUCTION

The terminal is designed for operation with controller which is equipped with OSDP interface. Therefore, the terminal can be applied in third party systems. In case of RACS 5 system the terminal can be connected to MC16 access controller via MCI-3 interface. Factory new terminal is configured with default settings including OSDP ID=0 address.

### CONFIGURATION WITH ROGERVDM PROGRAM

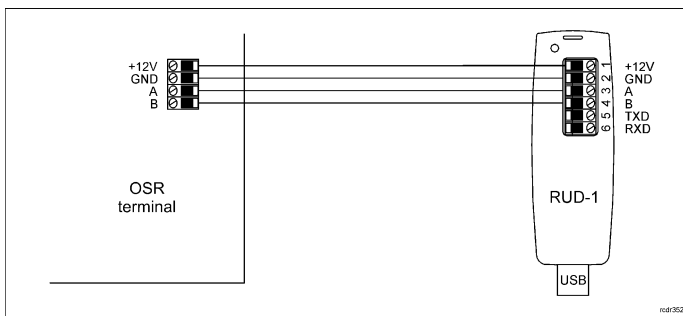


Fig. 1 Connection of OSR terminal to RUD-1 interface.

#### Programming procedure:

1. Connect the device to RUD-1 interface (fig. 1) and connect the RUD-1 to computer's USB port.
2. Remove jumper from MEM contacts (fig. 2) if it is placed there.
3. Restart the device (switch power supply off and on) and orange LED SYSTEM will pulsate. Then within 5 seconds place jumper on MEM contacts.
4. Start RogerVDM program, select OSR device, v1.0 firmware version, RS485 communication channel and serial port with RUD-1 interface.
5. Click *Connect*, the program will establish connection and will automatically display *Configuration* tab.
6. Specify unoccupied OSDP address in range of 0-126 and other settings according to requirements of specific installation.
7. Click *Send to Device* to update the configuration of device.
8. Optionally make a backup by clicking *Send to File...* and saving settings to file on disk.
9. Disconnect from RUD-1 interface and leave jumper on MEM contacts.

**Note:** Do not read any cards when reader is configured with RogerVDM.

### MANUAL ADDRESSING

Manual addressing procedure enables configuration of new OSDP address with all other settings unchanged.

#### Manual addressing procedure:

1. Remove all connections from A and B lines.
2. Remove jumper from MEM contacts (fig. 2) if it is placed there.
3. Restart the device (switch power supply off and on) and orange LED SYSTEM will pulsate. Then within 5 seconds place jumper on MEM contacts.
4. Enter 3 digits of OSDP address in range of 0-126 with any MIFARE card.
5. Leave jumper on MEM contacts.
6. Restart the device.

Terminals without keypad can be addressed with multiple card readings where the N number of readings emulates digit of the address. Three series of readings with any MIFARE proximity card are necessary to set the address. After each series wait for two beeps and proceed with the next digit. Zero digit is emulated with 10 readings.

#### Example:

Programming of ID=001 address with card readings:

1. Read card 10 time and wait for two beeps.
2. Read card 10 times and wait for two beeps.
3. Read card 1 time and wait for two beeps.
4. Wait till reader is restarted with the new address.

### MEMORY RESET

Memory reset procedure resets all settings to factory default ones including ID=0 address.

#### Memory reset procedure:

1. Remove all connections from A and B lines.
2. Remove jumper from MEM contacts (fig. 2) if it is placed there.
3. Restart the device (switch power supply off and on) and orange LED SYSTEM will pulsate. Then within 5 seconds place jumper on MEM contacts.
4. Read any MIFARE card 11 times.
5. Wait till device confirms reset with long acoustic signal.
6. Leave jumper on MEM contacts.
7. Restart the device.

### FIRMWARE UPDATE

The firmware of device can be changed to newer or older version. The update requires connection to computer with RUD-1 interface (fig. 1) and starting RogerVDM software. The latest firmware file is available at [www.roger.pl](http://www.roger.pl).

**Note:** Backup configuration with RogerVDM software before firmware update because the update will restore factory default settings.

**Note:** If MCI-3 type interface is connected to the terminal then it must be disconnected during firmware update.

#### Firmware update procedure:

1. Connect the device to RUD-1 interface (fig. 1) and connect the RUD-1 to computer's USB port.
2. Place jumper on MEM contacts (fig. 2).
3. Restart the device (switch power supply off and on).
4. Start RogerVDM program and in the top menu select *Tools* and then *Update firmware*.
5. In the opened window select device type, serial port with RUD-1 interface and path to firmware file (\*.frg).
6. Click *Update* to start firmware upload with progress bar in the bottom.
7. When the update is finished, disconnect from RUD-1 interface. Additionally, it is recommended to start memory reset procedure.

### APPENDIX

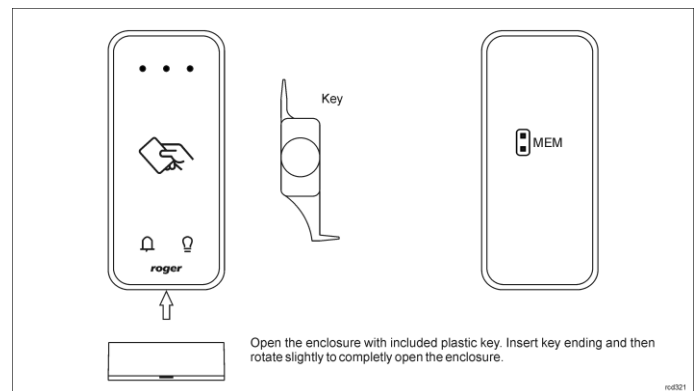


Fig. 2 Enclosure opening and location of service contact.

Table 1. Wires		
Name	Wire colour	Description
12V	Red	Supply plus
GND	Black	Ground
A	Yellow	OSDP bus, line A
B	Green	OSDP bus, line B

Table 2. Specification	
Supply voltage	Nominal 12VDC, min./max. range 10-15VDC
Current consumption (average)	~70 mA
Tamper protection	Enclosure opening reported to access controller
Identification methods	13.56MHz MIFARE Ultralight, Classic, Plus and DESFire (EV1, EV2, EV3) proximity cards Mobile devices (Android) with NFC Mobile devices (Android, iOS) with BLE (Bluetooth Low Energy) v4.1

Reading range	Up to 7 cm for MIFARE cards and NFC Up to 10 m for BLE – depends on ambient conditions and particular mobile device. Terminal's radio power can be increased within low level configuration.
Distance	Up to 1200 m bus length between controller and terminal (OSDP)
IP Code	IP65
IK Code	IK06
Environmental class (according to EN 50133-1)	Class IV, outdoor general conditions, temperature: -25°C to +60°C, relative humidity: 10 to 95% (no condensation)
Dimensions H x W x D	100 x 45 x 16 mm
Weight	~100g
Certificates	CE, RoHS

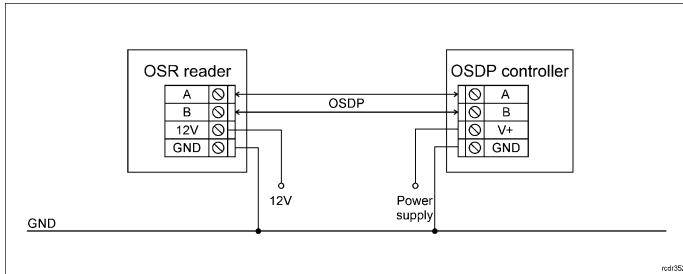


Fig. 3 Typical connection of reader to controller

## INSTALLATION GUIDELINES

- The terminal should be mounted on a vertical structure (wall) away from sources of heat and moisture.
- Front panel should be attached in such way as the tamper detector would firmly press the back panel.
- All electrical connections should be done with disconnected power supply.
- If the terminal and controller are not supplied from the same PSU, then GND terminals of both devices must be connected with any wire.
- Device can be cleaned by means of wet cloth and mild detergent without abrasive components. In particular do not clean with alcohols, solvents, petrol, disinfectants, acids, rust removers, etc. Damages resulting from improper maintenance and usage are not covered by manufacturer warranty.
- If the device is installed in a place exposed to conductive dust (e.g. metal dust), the MEM pins should be protected with plastic mass, e.g. silicone, after installation.
- If the reader is installed in EU countries, the BLE radio power level (parameters: BLE broadcasting power [dBm] and BLE transmission power [dBm]) should be set to 1(-18dBm).



This symbol placed on a product or packaging indicates that the product should not be disposed of with other wastes as this may have a negative impact on the environment and health. The user is obliged to deliver equipment to the designated collection points of electric and electronic waste. For detailed information on recycling, contact your local authorities, waste disposal company or point of purchase. Separate collection and recycling of this type of waste contributes to the protection of the natural resources and is safe to health and the environment. Weight of the equipment is specified in the document.

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