Roger Access Control System

MCI-3/MCI-3-LCD

Installation Manual

Firmware version: 1.0.0.11 and newer

Document version: Rev. B

CE

INTRODUCTION

MCI-3 interface is a converter between OSDP v2.2. protocol and RS485 (EPSO3) protocol. The interface is mainly used to connect third party OSDP readers to MC16 controller. Additionally the MCI-3 interface can also be used to connect two OSR80M-BLE readers to MC16 controller while MCI-3-LCD interface can be used to connect single OSR80M-BLE or OSR88M-IO reader to MC16 controller. Factory new device usually does not require low level configuration and can be operated with default settings. Low level configuration of the MCI-3 interface with RogerVDM program requires RUD-1 interface.

CONFIGURATION WITH ROGERVDM PROGRAM

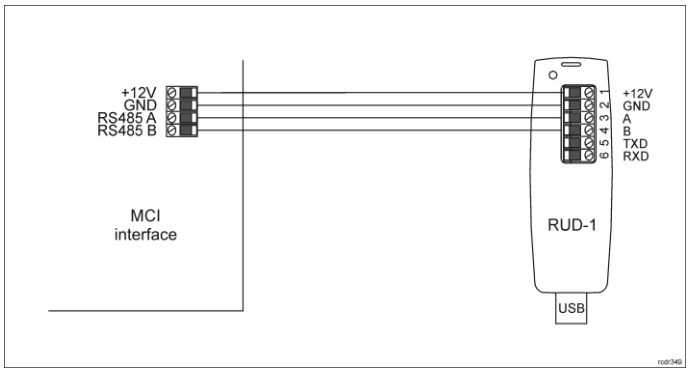


Fig. 1 Connection of the MCI-3 to RUD-1 interface for configuration

Programming procedure with RogerVDM software:

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. 3) if it is placed there.
3. Restart the device (switch power supply off and on or short RES contacts for a moment) and orange LED SYSTEM will pulsate. Then within 5 seconds place jumper on MEM contacts.
4. Start RogerVDM program, select *MCI-3 v1.x* 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. If necessary, define RS485 address, baud rate, enable OSDP terminal(s) and specify other settings according to requirements of specific installation.
7. Click *Send to Device* to update the configuration.
8. Optionally make a backup by clicking *Send to File…* and saving settings to file on disk.
9. Remove jumper from MEM contacts and disconnect device from RUD-1 interface.

It is necessary to start detection procedure in order to ensure proper operation of OSDP terminal(s) with MCI-3 interface.

OSDP detection procedure:

1. Disconnect power supply and connect OSDP terminal(s) to MCI-3 interface (fig. 4/5)
2. Place jumper on MEM contacts.
3. Connect power supply and wait at least 10 sec.
4. Disconnect power supply and remove jumper from MEM contacts.

Note: In case of MCI-3 interface the jumper cannot be placed on MEM contacts all the time.

FIRMWARE UPDATE

The update requires connection of MCI-3 to computer with RUD-1 interface (fig. 2) and starting RogerVDM software. The latest firmware file is available at www.roger.pl.

Note: After firmware update it may be necessary to restore factory default settings. Current configuration of device can be exported to file using RogerVDM program.

Firmware update procedure:

1. Connect the device to RUD-1 interface (fig. 2) and connect the RUD-1 to computer's USB port.
2. Place jumper on FDM contacts (fig. 3).
3. Restart the device (short RES contacts for a moment or 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 (*.hex).
6. Click *Update* to start firmware upload with progress bar in the bottom.
7. When the update is finished, remove FDM jumper and restart the device.
8. If orange LED SYSTEM indicator slowly pulsates after restart then place jumper on MEM contacts, wait 5 seconds and restart device to restore factory default settings.

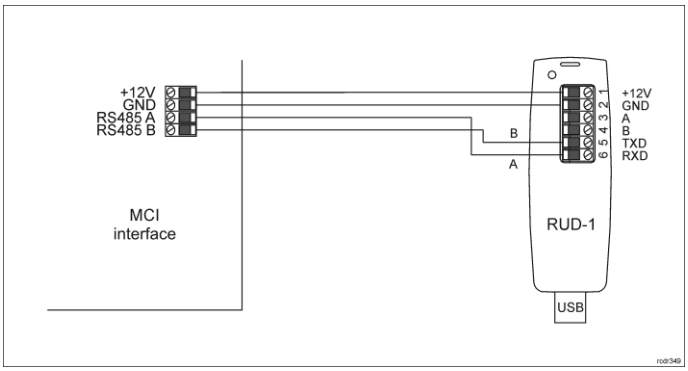


Fig. 2 Connection of the MCI-3 to RUD-1 interface for firmware update

APPENDIX

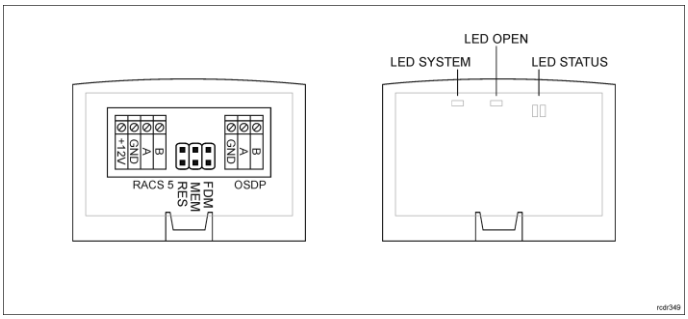


Fig. 3 MCI-3 interface

Table 1. MCI-3 screw terminals	
Screw terminal	Description
+12V	12VDC power supply
GND	Ground
A (RACS 5)	RS485 bus, line A
B (RACS 5)	RS485 bus, line B
A (OSDP)	OSDP bus, line A
B (OSDP)	OSDP bus, line B

Table 2. MCI-3 indicators		
Name	Colour	Description
LED SYSTEM	Orange	3 pulses: Device started properly Pulsing: Communication lost on OSDP bus Quick pulsing: Device in configuration mode
LED OPEN	Green	Pulsing: Communication lost on RS485 (EPSO3) bus
LED STATUS	Red Green	Pulsing: Communication lost on RS485 (EPSO3) bus

Table 3. Specification	
Supply voltage	Nominal 12VDC, min./max. range 10-15VDC
Current consumption (average)	25mA
Distances	Up to 1200 m between interface and MC16 controller (RS485) Up to 1200m between interface and terminal (OSDP) for 9600bps
IP Code	IP20
Environmental class (according to EN 50133-1)	Class I, indoor general conditions, temperature: +5°C to +40°C, relative humidity: 10 to 95% (no condensation)
Dimensions W x S x G	36 x 55 x 47 mm
Weight	~16g
Certificates	CE

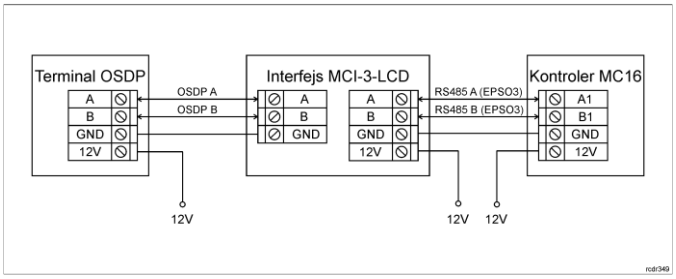


Fig. 4 Connection of MCI-3-LCD interface to OSDP reader and MC16 controller

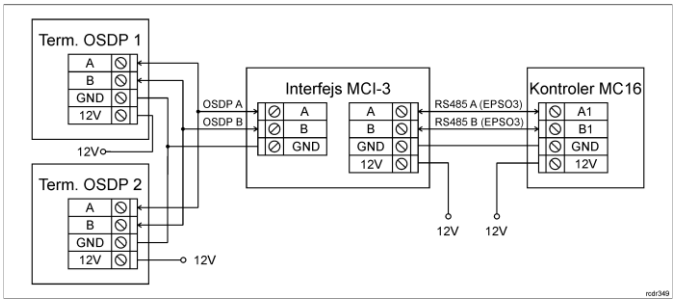
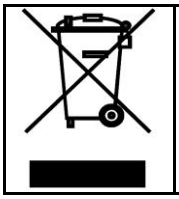


Fig. 5 Connection of MCI-3 interface to OSDP readers and MC16 controller

Notes:

- If devices are not supplied from the same power supply then according to fig. 4 and fig.5 their GND terminals must be connected with any wire.
- All devices on RS485 bus of MC16 controller, including MCI-3 interface must have unique addresses.
- If RS485 bus encryption is enabled then both MCI-3 and MC16 must be configured in the same way.
- LED indicators and Speaker in high-level configuration (VISO) can only be controlled as on/off. Unlike MCT readers, flashing or cyclic activation is not supported.



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.

Contact:
Roger Sp. z o. o. sp. k.
82-400 Sztum
Gościszewo 59
Tel.: +48 55 272 0132
Fax: +48 55 272 0133
Tech. support: +48 55 267 0126
E-mail: support@roger.pl
Web: www.roger.pl