Roger Access Control System

MCI-2 Installation Manual

Firmware version: 1.0.30.265 and newer

Document version: Rev. A

CE

INTRODUCTION

MCI-2 interface is a converter between RS485 (EPSO3) protocol and RACS CLK/DTA protocol. The interface is used to connect MCT series terminal of RACS 5 system to PR series controller of RACS 4 system or HRC series controller of hotel automation system. Factory new device does not require low level configuration and can be operated with default settings (RACS CLK/DTA address ID0). Low level configuration of the MCI-2 interface with RogerVDM requires RUD-1 interface.

CONFIGURATION WITH ROGERVDM PROGRAM

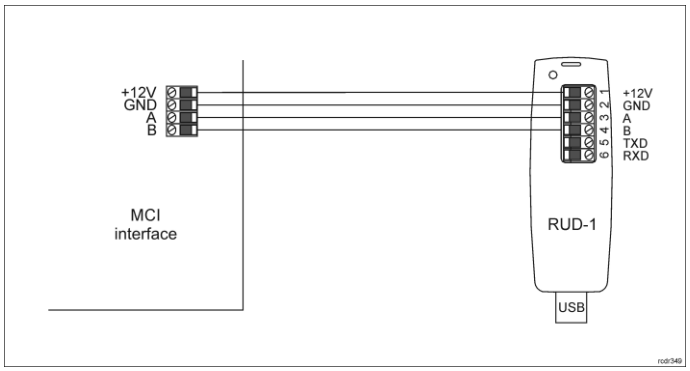


Fig. 1 Connection of the MCI-2 to RUD-1 interface for configuration

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) and restart the device (short RST contacts for a moment or switch power supply off and on).
3. Within 5 seconds when orange LED SYSTEM indicator pulsates twice per second, place jumper on MEM contacts and LED SYSTEM indicator will pulsate quickly.
4. Start RogerVDM program, select *MCI-2 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 address on RACS CLK/DTA bus and 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. Leave jumper on MEM contacts and disconnect device from RUD-1 interface.

FIRMWARE UPDATE

The update requires connection of MCI-2 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 before firmware update.

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 RST 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.

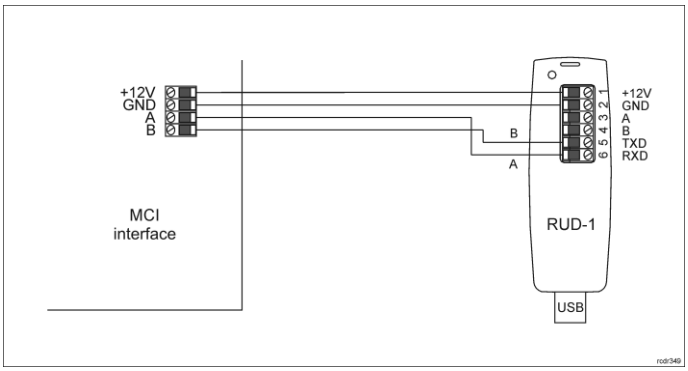


Fig. 2 Connection of the MCI-2 to RUD-1 interface for firmware update

APPENDIX

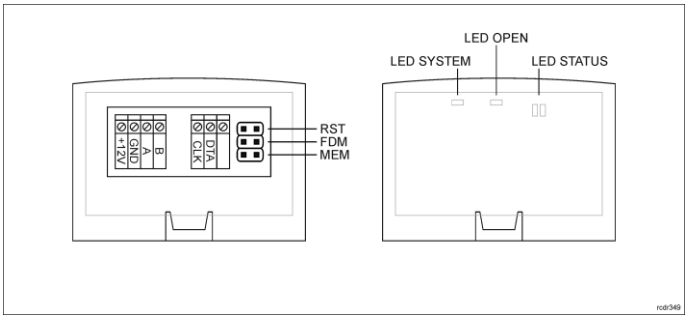


Fig. 3 MCI-2 interface

Table 1. MCI-2 screw terminals	
Screw terminal	Description
+12V	12VDC power supply
GND	Ground
A	RS485 bus, line A
B	RS485 bus, line B
CLK	RACS CLK/DTA bus, line CLOCK
DTA	RACS CLK/DTA bus, line DATA

Table 2. MCI-2 indicators		
Name	Colour	Description
LED SYSTEM	Orange	Pulsing: Configuration error Quick pulsing: Device in configuration mode
LED OPEN	Green	-
LED STATUS	Red	Pulsing: Communication lost on RS485 (EPSO3) bus
	Green	Pulsing: Communication lost on RACS CLK/DTA 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 MCT reader (RS485) Up to 150m between interface and PR or HRC controller (RACS CLK/DTA)
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

roger

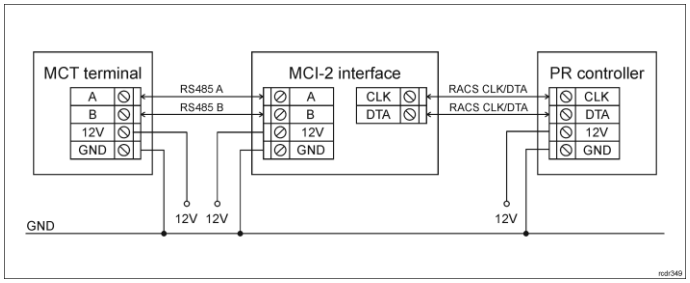
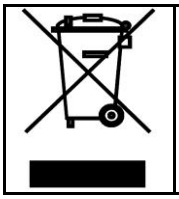


Fig. 4 Connection of MCI-2 interface to MCT reader and PR series controller

Notes:

- If devices are not supplied from the same power supply then according to fig. 4 their GND terminals must be connected with any wire.
- MCT readers must be configured with default ID=100 address.
- If RS485 bus encryption is enabled then both MCI and MCT must be configured in the same way.



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