Roger Access Control System

MCT68ME Installation Manual

Firmware version: 1.0.4 and newer

Document version: Rev. A

CE

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.

INTRODUCTION

The MCT reader is designed to operate in RACS 5 system as peripheral device connected to RS485 bus of MC16 access controller. Factory new reader is configured with default settings including ID=100 address. Before connecting to controller, the reader should be assigned with unoccupied address in range of 100-115. Programming of other parameters depends on the individual requirements and is not obligatory. Addressing of the reader can be done from computer by means of RogerVDM program or manually within memory reset procedure. Configuration of the reader with RogerVDM requires RUD-1 interface. MCT68 reader is available in indoor and outdoor versions. The latter one is equipped with additional, protecting, metal enclosure.

CONFIGURATION WITH ROGERVDM PROGRAM

The configuration requires connection of a reader to computer with RUD-1 interface (fig. 1) and starting RogerVDM software.

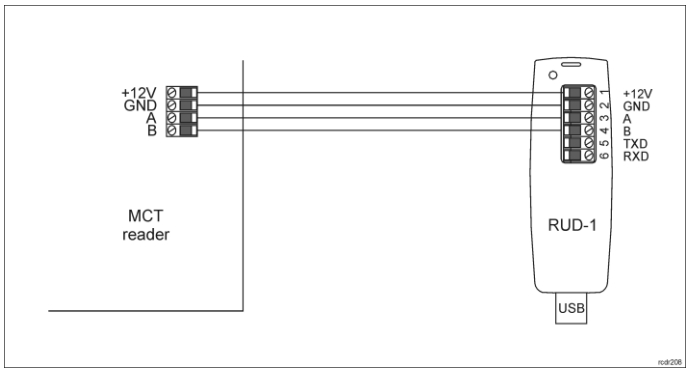

Fig. 1 Connection of MCT reader to RUD-1 interface

Programming procedure:

1. Connect the reader to RUD-1 interface (fig. 1) and connect the RUD-1 to computer's USB port.
2. Start RogerVDM program, select *MCT* device, firmware version, *RS485* communication channel and serial port with RUD-1 interface.
3. Click *Connect,* the program will establish connection and will automatically display *Configuration* tab.
4. Enter unoccupied RS485 address in range of 100-115 and other settings according to requirements of specific installation.
5. Click *Send to Device* to update the configuration of reader.
6. Optionally make a backup by clicking *Send to File…* and saving settings to file on disk.
7. In the top menu select *Device->Disconnect.*
8. Disconnect reader from RUD-1 interface.

Note: Do not read any cards nor press reader keypad when reader is configured with RogerVDM.

MEMORY RESET PROCEDURE

Memory reset procedure enables configuration of RS485 address and resets all other settings to factory default ones.

Memory reset procedure:

1. Remove all connections from A and B lines.
2. Place jumper on MEM contacts (fig. 2)
3. Restart the reader (switch power supply off and on or short RST contacts for a moment).
4. When 'CONFIG RESET' is displayed by reader then remove jumper from MEM contacts.
5. When 'ID:' is displayed by reader then enter 3 digits of RS485 address in range of 100-115 with reader keypad.
6. When the third digit is defined then the reader will restart with the new address.

FIRMWARE UPDATE

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

Firmware update procedure:

1. Connect the reader to RUD-1 interface (fig. 1) and connect the RUD-1 to computer's USB port.
2. Place jumper on FDM contacts (fig. 2).
3. Restart the reader (switch power supply off and on or short RST contacts for a moment).
4. Start RogerISP program.
5. Select serial port with RUD-1 interface and *USB-RS485 Converter* option.
6. Specify path to firmware file (*.hex).
7. Click *Program* and proceed according to displayed messages.
8. Remove jumper from FDM contacts and restart the reader.

APPENDIX

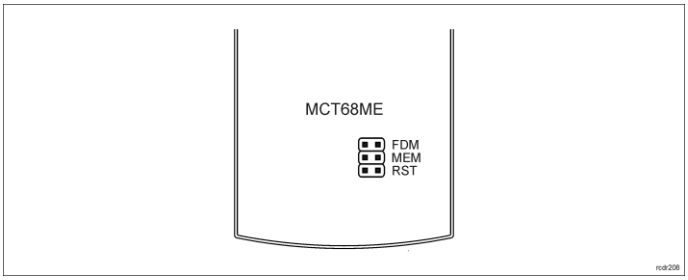

Fig. 2 Service contacts

Table 1. Terminals

Screw terminal	Description
12V	Supply plus
GND	Ground
IN1	IN1 input line
IN2	IN2input line
IN3	IN3 input line
RS485 A	RS485 bus, line A
RS485 B	RS485 bus, line B
CLK	Not used
DTA	Not used
TMP	Tamper contact
TMP	Tamper contact
IO1	IO1 output line
IO2	IO2 output line
REL1-NC	REL1 relay output (NC)
REL1-COM	REL1 relay common terminal
REL1-NO	REL1 relay output (NO)

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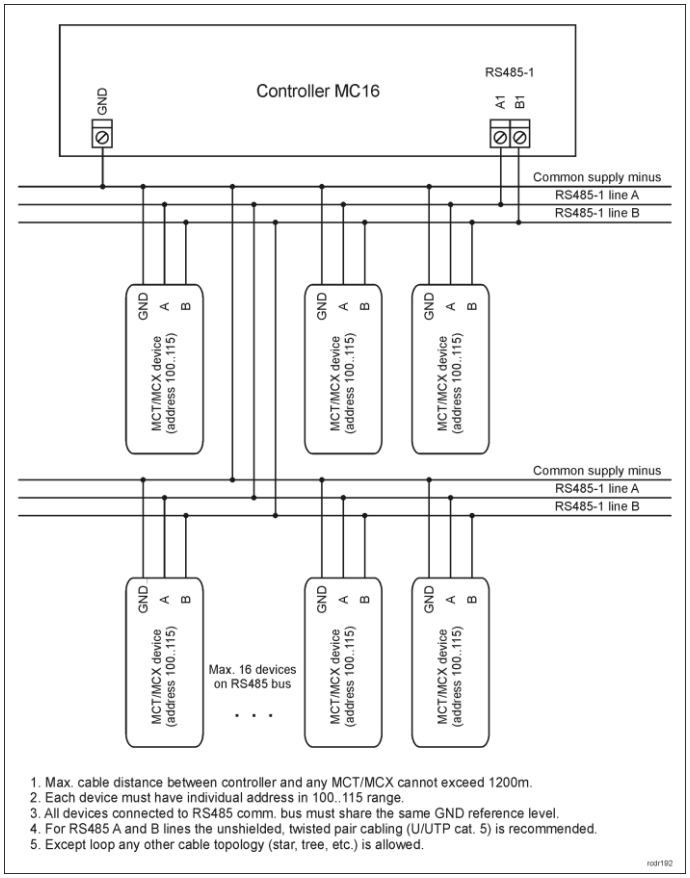


Fig. 3 Connection of readers and expanders to MC16 access controller

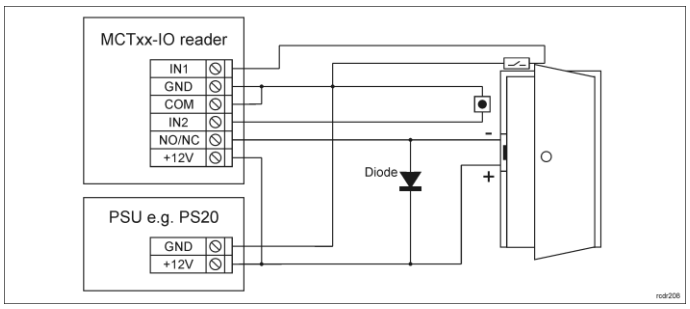
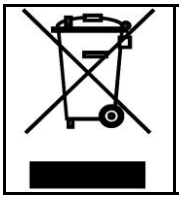


Fig. 4 Connection of door lock, door contact and exit button

Table 2. Specification	
Supply voltage	Nominal 12VDC, min./max. range 10-15VDC
Current consumption (average)	~100 mA
Inputs	Three NO/NC inputs (IN1..IN3) internally connected to the power supply plus through a 15kΩ resistor, approx. 3.5V triggering level
Relay output	Relay output (REL1) with single NO/NC contact, 30V/1.5A DC/AC max. load
Transistor outputs	Two (IO1, IO2) open collector outputs, 15VDC/1A max. load
Reading range	up to 10 cm
Tamper protection	Isolated 50mA/24V contacts, shorted when enclosure is closed
Proximity cards	EM 125 kHz UNIQUE according to EM4100/4102 and 13.56MHz according to ISO14443A and MIFARE
Zasięg odczytu	up to 10 cm for EM125kHz up to 7 cm for MIFARE
Distance	1200m maximal cable length for RS485 bus between controller and reader
IP Code	MCT68ME-IO-I: IP41 MCT68ME-IO-O: IP54
Environmental class (according to EN 50133-1)	MCT68ME-IO-I: Class I, indoor general conditions, temperature: +5°C to +40°C, relative humidity: 10 to 95% (no condensation) MCT68ME-IO-O: Class IV, outdoor general conditions, temperature: -25°C to +60°C, relative humidity: 10 to 95% (no condensation)
Dimensions H x W x D	MCT68ME-IO-I: 170 x 110 x 42 mm MCT68ME-IO-O: 220 x 156 x 104 mm
Weight	MCT68ME-IO-I: ~410g MCT68ME-IO-O: ~1150g
Certificates	CE



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