Roger Access Control System

PRTxxLT series readers Installation Manual

Firmware version: n/a

Document version: Rev. D

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 PRTxxLT reader is designed for operation in RACS 4 and RACS 5 systems where it functions as slave reader connected to master access controller via RACS CLK/DTA bus. Alternatively, the reader can be installed in third party systems and connected via Wiegand and Magstripe interfaces. Factory new reader is configured with RACS mode ID=0 address and in most cases it can be connected to access controller without additional configuration. Configuration of device can be done manually with reader's keypad or proximity card.

MEMORY RESET PROCEDURE

Memory reset procedure enables configuration of operating mode. The address of reader on RACS CLK/DTA bus is configured by selection of operating mode.

Memory reset procedure:

1. Remove all connections from CLK and IN1 lines.
2. Connect CLK and IN1 lines.
3. Restart the reader (switch power supply off and on).
4. When LED SYSTEM ⚡ (orange) pulsates enter 3 digits of operating mode with reader keypad or with any EM125kHz proximity card e.g.
   [000] - RACS mode with ID=0 address,
   [001] - RACS mode with ID=1 address,
   [002] - RACS mode with ID=2 address
   [003] - RACS mode with ID=3 address,
   [100] - standard Wiegand 26bit mode.
5. The reader will restart with new settings when mode is specified. In case of Wiegand mode wait 9 s to finish the procedure.

Note: The list of all operating modes is given in the Operating Manual which is available at www.roger.pl.

In case of readers without keypad the operating mode is entered with multiple card readings. In this method, N number of any EM125kHz card readings emulates digit. After each series of readings wait for two beeps and proceed with the next digit. Zero digit is emulated with 10 readings.

Example of [001] operating mode programming with multiple card readings:

1. Read card 10 times 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.

APPENDIX

Table 1. Terminals and wires

Screw terminal	Wire colour	Description
12V	Red	Supply plus
GND	Blue	Ground
IN1	Yellow	IN1 input line
IN2	Pink	IN2 input line
CLK	Green	CLK line
DTA	Brown	DTA line
TMP	White	Tamper switch
TMP	Grey	Tamper switch

Table 2. Specification

Supply voltage	Nominal 12VDC, min./max. range 10-15VDC
Current consumption (average)	PRT12LT PRT64LT: ~65 mA PRT12LT-BK PRT62LT/PRT66LT: ~45 mA
Tamper protection	Isolated 50mA/24V contacts, shorted when enclosure is closed
Proximity cards	EM 125 kHz UNIQUE according to EM4100/4102
Reading range	Up to 12 cm for PRT62LT, up to 15 cm for remaining readers. Note: Reading distance is defined for good quality proximity cards placed in optimal position against the reader. For all readers the optimal position for card reading is in the front of the device (card surface parallel to the front).

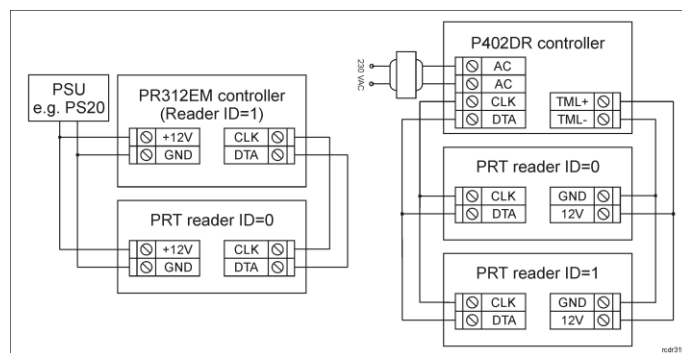| Distances	150m maximal cable length for RACS CLK/DTA bus between controller and reader
IP Code	PRT12LT/PRT62LT/PRT64LT/PRT66LT: IP65 Note 1: The IP65 rating is guaranteed if the bottom of the housing is tightly adhered to the surface on which the device is installed. It is the installer's responsibility to seal the space between the bottom of the housing and the surface on which the device is mounted
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) Class I, indoor general conditions, temperature: +5°C to +40°C, relative humidity: 10 to 95% (no condensation) PRT12LT/PRT62LT/PRT64LT/PRT66LT :Class IV
Dimensions H x W x D and weight	PRT12LT: 152,5 x 46 x 23(35) mm; 150g PRT62LT: 100 x 45 x 25 mm; 100g PRT64LT: 115 x 80 x 35 mm; 120g PRT66LT: 85 x 85 x 27 mm; 120g
Certificates	CE

Fig. 1 Connection of PRT readers in RACS 4 system (examples)
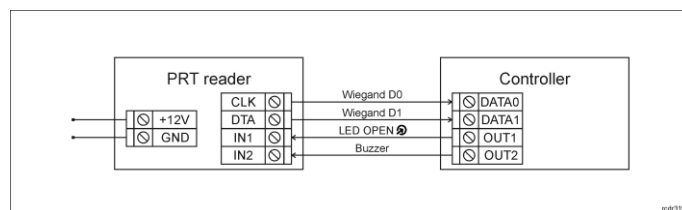

Fig. 2 Connection of reader to controller via Wiegand interface

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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