Roger Access Control System

MCI-7 Installation Manual

Firmware version: n/a

Document version: Rev. B

$C\epsilon$

INTRODUCTION

MCI-7 interface functions as adjusting-separating module which is applied in case of electrical incompatibilities or interferences concerning Wiegand 26-66bit interface when third party devices are connected to Roger devices. The interface boosts and improves stability of data transmission in Wiegand standard. MCI-7 is a successor of previously offered PR-GP-BRD module.
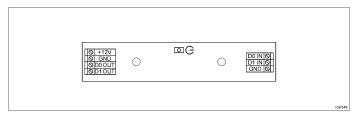
APPENDIX

Fig. 1 MCI-7 interface

Table 1. MCI-7 screw terminals

Name	Description
+12V	12VDC power supply
GND	Ground
D0 OUT, D1 OUT	Wiegand bus (output)
D0 IN, D1 IN	Wiegand bus (input)

Table 2. Specification

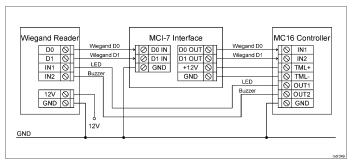|	
Supply voltage	Nominal 12VDC, min./max. range 10-15VDC
Current consumption (average)	10mA
Inputs	Two (D0 IN, D1 IN) inputs with 3.5V triggering level.
	Two (D0 OUT, D1 OUT) open collector outputs with 5mA max load in low state
Distances	Up to 150 m between interface and Wiegand reader The distance between interface and controller should be as short as possible. It is recommended to install the interface inside metal box of controller.
IP Code	IP00
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	80 x 17 x 35 mm
Weight	~20g
Certificates	CE

Fig. 2 Connection of MCI-7 interface to Wiegand reader and controller

Notes:

- MCI-7 is electrical interface and it does not require any configuration.
- The interface is equipped with plastic bracket for the installation of device on DIN35 rail.
- MCI-7 can be applied in various scenarios including connection to MCX4020BRD expander and PR402DR series controller (RACS 4 system). In both cases the connection diagram is similar to the fig. 2.
- The interface is dedicated to operation with single Wiegand reader. Each Wiegand terminal connected to controller's inputs must be equipped with own MCI-7 interface.
- MCI-7 can be supplied from TML+/TML- lines of controller or expander, from AUX+/AUX- lines of controller of expander and from own power supply unit. If devices are not supplied from the same power supply then their GND terminals must be connected with any wire.
- Additional information on Wiegand terminals is given in AN001 application note.