Contactless access control system RP-01

This device works as a reader of chips (PIT) or cards (PIT). You can program it with buttons or PC application. This product provides data connection (RS485), therefore it can be used even for industrial applications.

1.   Technical parameters

Operating Voltage	9 ÷ 16V DC or 8 ÷ 12V AC
Standby current	35mA
*terminals **NO,C,NC***	output relay – switching contact max. 1A/125V

operation:
control unit – II. indoor use (-10°C to +40°C)
reading unit – outdoor use (IP46) (-30°C to +60°C)
dimensions (control unit)   2,99 in (w) x 4,3 in (h) x 1,299 in (d)

JabloPCB s.r.o. declares this product is in an agreement with common requirements and other related EU regulations.
The original of the statement is posted at www.jabloPCB.cz *website in section Technical support.*

2.   Installation and basic functions RP-01
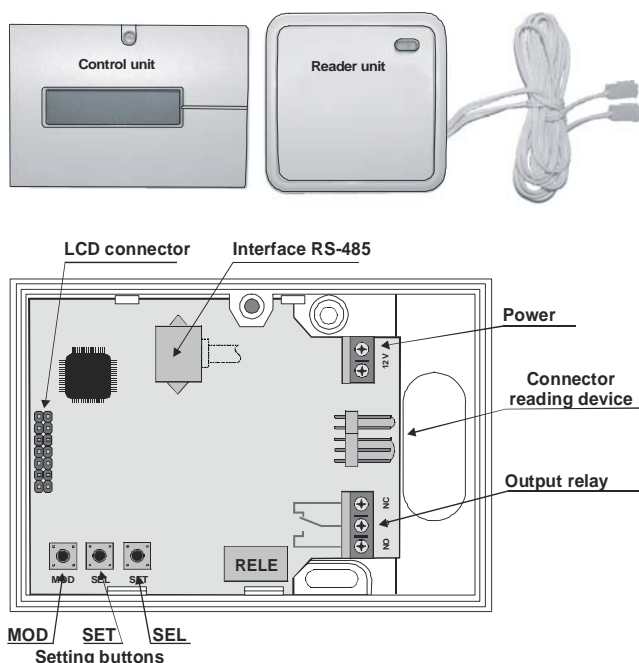
2.1. Device installation

image no 1

The control unit is designed for an indoor installation. During installation please respect placement of the reading unit as it is connected with 1m long wire. The reading unit can be placed outdoors.

Warning: reading unit's wire can be shortened to 0,5m. Replacement with the different one or extension is disabled as device will not function correctly.

- prior to control unit installation remove the plastic cover
- take an LCD off the control unit by pulling it out – display is attached with connector (see image no 1)
- connect the reading unit to the connector (see image no 1)
- check and attach power to the 12V terminals
- place and fit the unit in the desired space
- return LCD back to the original placement (pay extra attention to attaching to the connector)
- switch the control unit's power on
- you will see a basic initialization on the LCD
- and the unit is ready to be used

2.2. Basic setup

Unit was already set in the factory and is ready to learn (program) individual positions. There are 999 position available + master chip position.

2.3. Unit learning (PIT – chips and cards)

Programming is possible either with PC controlling software (you need to connect interface SW-01) or manually with buttons placed under the LCD and instructions on the screen.
The Master Chip necessary to enter the learning mode is included in the package.

Table – reading unit indicator signals

	indicator	Description
learning	No light	Ready to program
	Green light	PIT was identified and successfully learned
	Red light	PIT was already programmed to a different position
Pulse mode	No light	Unit is ready to read PIT
	Green light	PIT authorized to enter – relay ties
	Red light	PIT unauthorized to enter – relay doesn't tie
Switching mode	Green light	Relay OFF
	Red light	Relay ON
	No light	Unknown PIT is read and indicator switches off for 1s

Manual way:

There are **MOD** button and **Master Chip** to enter the programming mode.Press and hold the **MOD** button for at least 2s and display will show „**check MASTER**". On this command place Master Chip on the reading unit. Following that you will gain access into the learning mode and first available position for programming individual PIT will be offered.
If you don't want to start learning individual PITs from this position you can set any position by pressing the **SEL** button.The bottom row on the screen displays the position selection options (with each press of the **SEL** button).
SEL button setting options:
Position +100 and consequently every press of SET button – position is set for hundreds 100, 200, 300...
Position +10 and consequently every press of SET button – position is set for tens 10, 20, 30...
Position +1 and consequently every press of SET button – position is set for ones 1, 2, 3...
(settings can be combined. For example you can set 100 then 10 and 3 = result is learning position 113)
RELAY time – see point 2.5
DELETE ? – current position will be deleted by pressing the **SET** button
Return to the learning mode

Setting of each option is made by pressing the **SET** button (it has got a repeat function when pressed and held). Press **MOD** button to end settings.
To exit learning mode press and hold **MOD** button. Device will go into standby mode.

It is possible to re-program or delete any position except a learning position „**master position**" (see point 2.4).

Programming using PC application is more convenient as you can work with files like CSV (export from Excel). The first column has to be a learning position and the second column needs to be selected PIT´s manufacturing code. Ignore the other possible columns.

Warning:
During learning new PIT chip on an available position or into an empty space (caused by deleted position) follow these instructions.
Access the learning mode (see point 2.3). When first available position is offered, programm PIT by placing it on the Reading Unit. Also you can decide which position to use at this stage. After the process of programming the Reading Unit will offer you the next one up position. **In case this position has already been programmed to a PIT and you use this position to learn a new PIT, the previous one will be deleted.**

2.4. Master position – programming and deleting

The master position has got a privileged status – reprogramming causes deleting all PITs learned so far!!

Master position programming:

Access the learning mode. With **SEL** button select „**position+100**" and by pressing the **SET** button repeatedly select position **9xx**. Press the **SET** button once again and get „**MASTER LEARNING**" programming mode. Place a PIT chip and program or reprogram the master.

Master position´s content deleting:

Access the learning mode. With **SEL** button select „**position+100**" and by pressing the **SET** button repeatedly select position **9xx**. Press the **SET** button once again and get „**MASTER LEARNING**" programming mode. With the **SEL** button select „**DELETE ?**" position and confirm with **SET** button. This is the way to delete the content of the master position.

In case there is no **PIT** programmed on the master position, just press and hold the **MOD** button to access the learning mode.

2.5 Relay tie timing

To set use the **MOD** button. Sign „**(INSERT CARD)**" displays on the LCD when the **MOD** button is pressed for at least 2s. Choose the „**RELAY time**" (on the LCD bottom row) by pressing the **SEL** button repeatedly. Setting is made by **SET** button. Interval is per second **1-9s**. Confirm your choice with **MOD** button. To exit learning mode press and hold **MOD** button. Device will go into standby mode.

2.6. Relay´s switching mode setting

Device can be set into a switching mode where every change of output relay status is conditional on placing programmed **PIT**.
To set use the **MOD** button. Sign „**(INSERT CARD)**" displays on the LCD when the **MOD** button is pressed for at least 2s. Choose the „**RELAY time**" (on the LCD bottom row) by pressing the **SEL** button repeatedly. Setting is made with **SET** button when **0s** value is chosen. Confirm your choice with **MOD** button.To exit learning mode press and hold **MOD** button. Device will go into standby mode.

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