



# MPXRQ1MWS

## USER'S AND INSTALLER'S MANUAL








# 00. CONTENT

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# 01. SAFETY INSTRUCTIONS

## ATTENTION:

	This product is certified in accordance with European Community (EC) safety standards.
	This product complies with Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
	(Applicable in countries with recycling systems). This marking on the product or literature indicates that the product and electronic accessories (eg. Charger, USB cable, electronic material, controls, etc.) should not be disposed of as other household waste at the end of its useful life. To avoid possible harm to the environment or human health resulting from the uncontrolled disposal of waste, separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Home users should contact the dealer where they purchased this product or the National Environment Agency for details on where and how they can take these items for environmentally safe recycling. Business users should contact their vendor and check the terms and conditions of the purchase agreement. This product and its electronic accessories should not be mixed with other commercial waste.
	
	This marking indicates that the product and electronic accessories (eg. charger, USB cable, electronic material, controls, etc.) are susceptible to electric shock by direct or indirect contact with electricity. Be cautious when handling the product and observe all safety procedures in this manual.

# 01. SAFETY INSTRUCTIONS

## GENERAL WARNINGS

- This manual contains very important safety and usage information, very important. Read all instructions carefully before beginning the installation/usage procedures and keep this manual in a safe place that it can be consulted whenever necessary.
- This product is intended for use only as described in this manual. Any other enforcement or operation that is not mentioned is expressly prohibited, as it may damage the product and put people at risk causing serious injuries.
- This manual is intended firstly for specialized technicians, and does not invalidate the user's responsibility to read the "User Norms" section in order to ensure the correct functioning of the product.
- The installation and repair of this product may be done by qualified and specialized technicians, to assure every procedure are carried out in accordance with applicable rules and norms. Nonprofessional and inexperienced users are expressly prohibited of taking any action, unless explicitly requested by specialized technicians to do so.
- Installations must be frequently inspected for unbalance and the wear signals of the cables, springs, hinges, wheels, supports and other mechanical assembly parts.
- Do not use the product if it is necessary repair or adjustment is required.
- When performing maintenance, cleaning and replacement of parts, the product must be disconnected from power supply. Also including any operation that requires opening the product cover.
- The use, cleaning and maintenance of this product may be carried out by any persons aged eight years old and over and persons whose physical, sensorial or mental capacities are lower, or by persons without any knowledge of the product, provided that these are supervision and instructions given by persons with experienced in terms of usage of the product in a safe manner and who understands the risks and dangers involved.
- Children shouldn't play with the product or opening devices to avoid

the motorized door or gate from being triggered involuntarily.

## WARNINGS FOR TECHNICIANS

- Before beginning the installation procedures, make sure that you have all the devices and materials necessary to complete the installation of the product.
- You should note your Protection Index (IP) and operating temperature to ensure that is suitable for the installation site.
- Provide the manual of the product to the user and let them know how to handle it in an emergency.
- If the automatism is installed on a gate with a pedestrian door, a door locking mechanism must be installed while the gate is in motion.
- Do not install the product "upside down" or supported by elements do not support its weight. If necessary, add brackets at strategic points to ensure the safety of the automatism.
- Do not install the product in explosive site.
- Safety devices must protect the possible crushing, cutting, transport and danger areas of the motorized door or gate.
- Verify that the elements to be automated (gates, door, windows, blinds, etc.) are in perfect function, aligned and level. Also verify if the necessary mechanical stops are in the appropriate places.
- The central must be installed on a safe place of any fluid (rain, moisture, etc.), dust and pests.
- You must route the various electrical cables through protective tubes, to protect them against mechanical exertions, essentially on the power supply cable. Please note that all the cables must enter the central from the bottom.
- If the automatism is to be installed at a height of more than 2,5m from the ground or other level of access, the minimum safety and health requirements for the use of work equipment workers at the work of Directive 2009/104/CE of European Parliament and of the Council of 16 September 2009.
- Attach the permanent label for the manual release as close as possible

# 01. SAFETY INSTRUCTIONS

to the release mechanism.

- Disconnect means, such as a switch or circuit breaker on the electrical panel, must be provided on the product's fixed power supply leads in accordance with the installation rules.
- If the product to be installed requires power supply of 230Vac or 110Vac, ensure that connection is to an electrical panel with ground connection.
- The product is only powered by low voltage safety with central (only at 24V motors)

## WARNINGS FOR USERS

- Keep this manual in a safe place to be consulted whenever necessary.
- If the product has contact with fluids without being prepared, it must immediately disconnect from the power supply to avoid short circuits, and consult a specialized technician.
- Ensure that technician has provided you the product manual and informed you how to handle the product in an emergency.
- If the system requires any repair or modification, unlock the automatism, turn off the power and do not use it until all safety conditions have been met.
- In the event of tripping of circuits breakers or fuse failure, locate the malfunction and solve it before resetting the circuit breaker or replacing the fuse. If the malfunction is not repairable by consult this manual, contact a technician.
- Keep the operation area of the motorized gate free while the gate is in motion, and do not create strength to the gate movement.
- Do not perform any operation on mechanical elements or hinges if the product is in motion.

## RESPONSABILITY

- Supplier disclaims any liability if:
  - Product failure or deformation result from improper installation

use or maintenance!

- Safety norms are not followed in the installation, use and maintenance of the product.
- Instructions in this manual are not followed.
- Damaged is caused by unauthorized modifications
- In these cases, the warranty is voided.

## SYMBOLS LEGEND:



• Important safety notices



• Useful information



• Programming information



• Potentiometer information



• Connectors information



• Buttons information

# 01. SAFETY INSTRUCTIONS

## PRODUCT DESCRIPTION

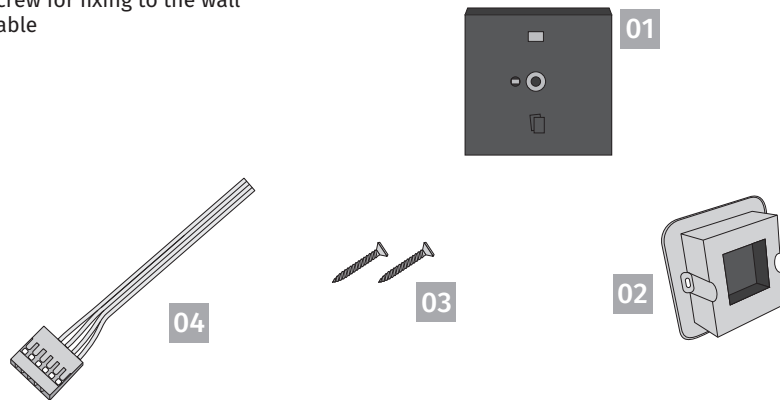
Reader for internal use with QR Code reader and previously registered cards that is part of the control and management of access of a given location.

## TECHNICAL CHARACTERISTICS

• Power Supply	12V DC
• Current	300mA (max)
• Communication	RS485
• Technologies	QR Code and Mifare Card
• Card Reading Format	Mifare (13.56 MHz)
• Read Range	>3 cm
• ID Setting	DIP Switch
• Operating Temperature	-25° C a 55° C
• Operating Humidity	20% ~ 80%
• Dimension	Plate: 86x86x14mm Embedding:86x86x38mm (LxAxP)

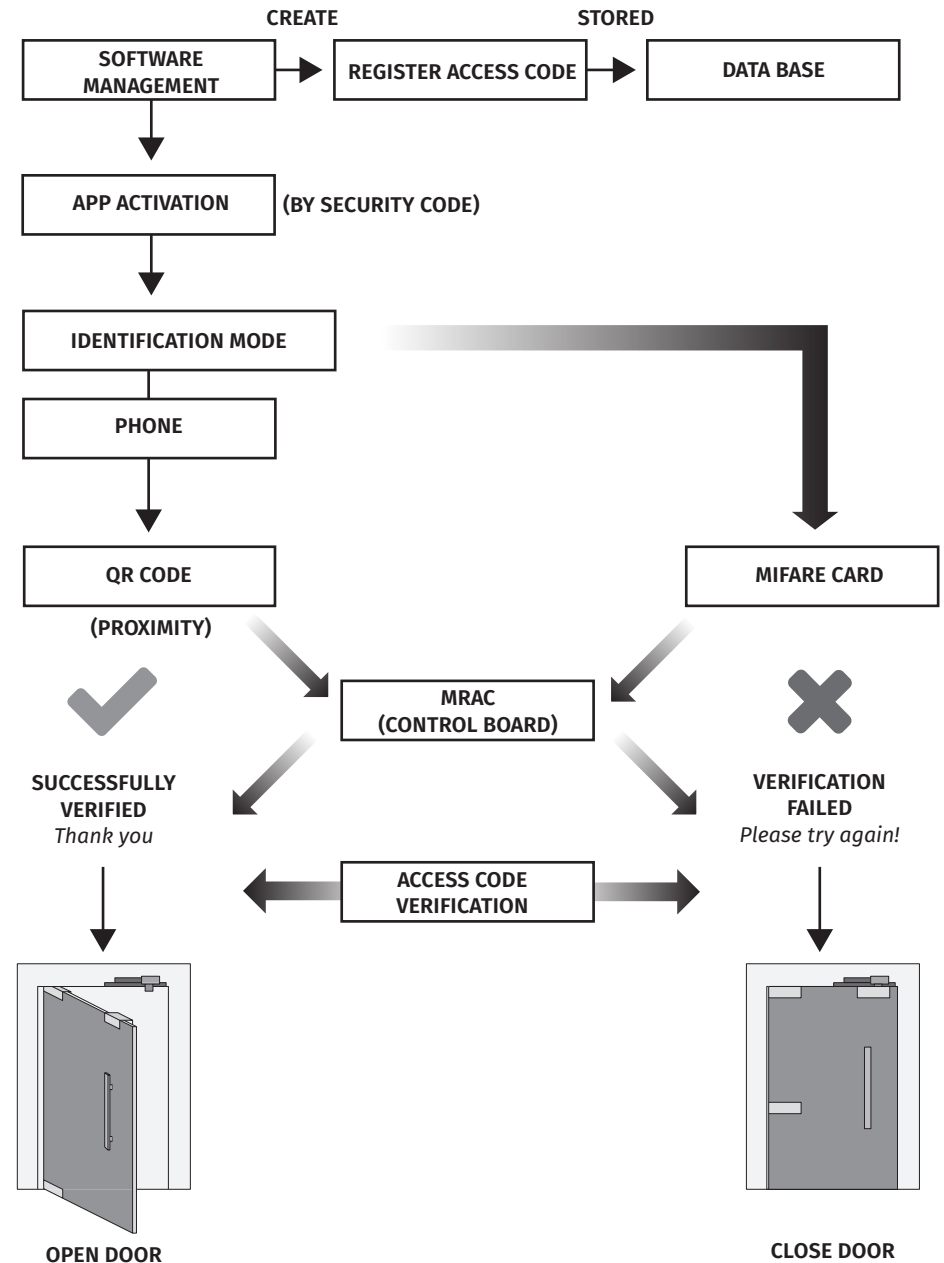
## BASIC CONTENT

- 01 • 01 MPXRQ1MWS
- 02 • 01 Embedding MPXRQ1MWS
- 03 • 02 Screw for fixing to the wall
- 04 • 01 Cable



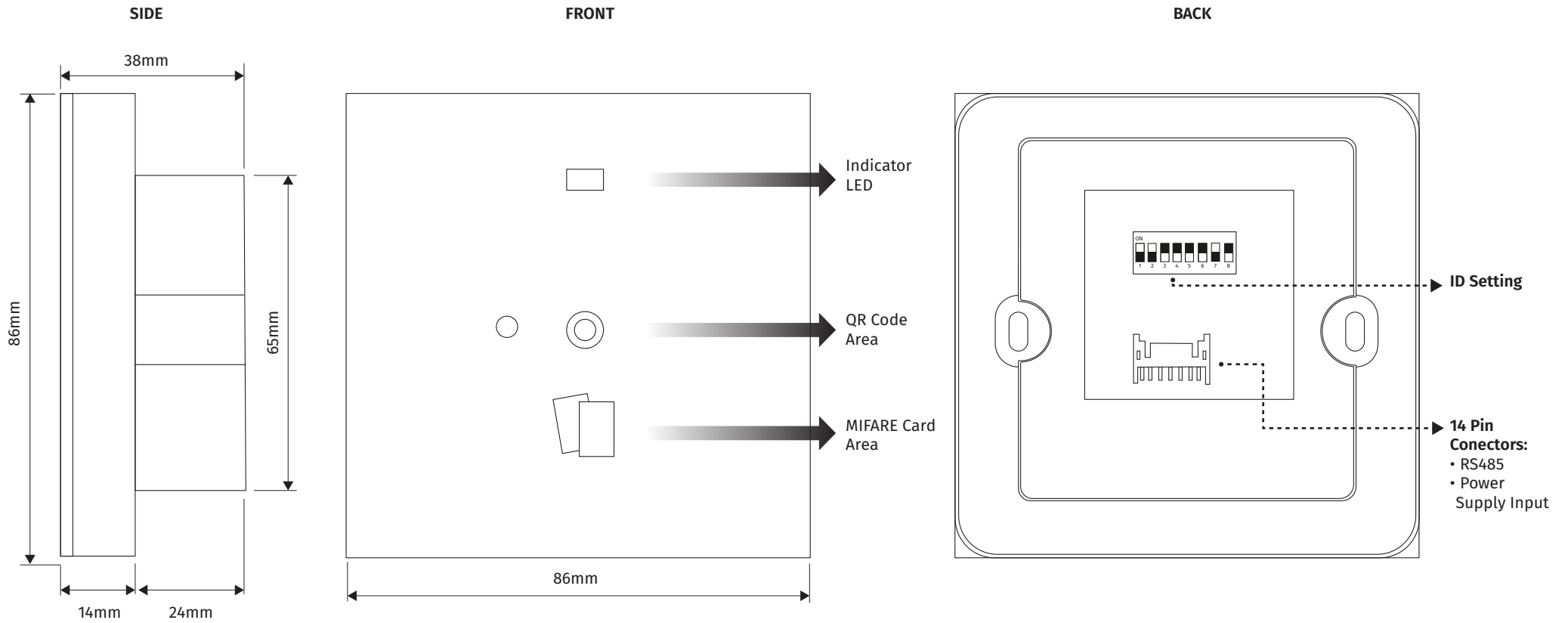
# 02. PRODUCT

## OPERATING SCHEME



## 02. PRODUCT

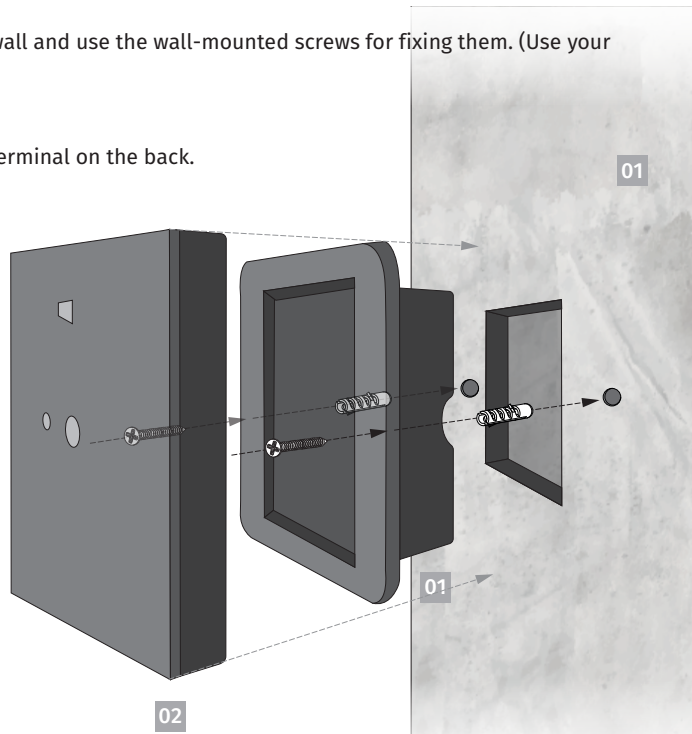
### DIMENSIONS AND PRODUCT DIAGRAM



## 03. INSTALLATION

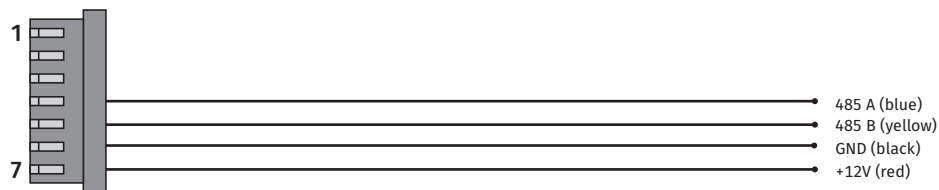
### INSTALLATION OF WALL-MOUNT

- 1 Screw the back into the wall and use the wall-mounted screws for fixing them. (Use your own bushings)
- 2 Mount the MPXRQ1MWS terminal on the back.



### CABLES DESCRIPTION

RS485 output and power input:



## 04. DIP SWITCH

### DIP SWITCH CONFIGURATION

In order for the control centre to be able to identify the task of each of the interconnected readers in an access control system, each of these devices must have a unique identification ID. This ID is crucial to identify the task that each device performs and which port/access is installed.

The definition is made through the existing dip switch frame on the back of each reader, according to the following table:

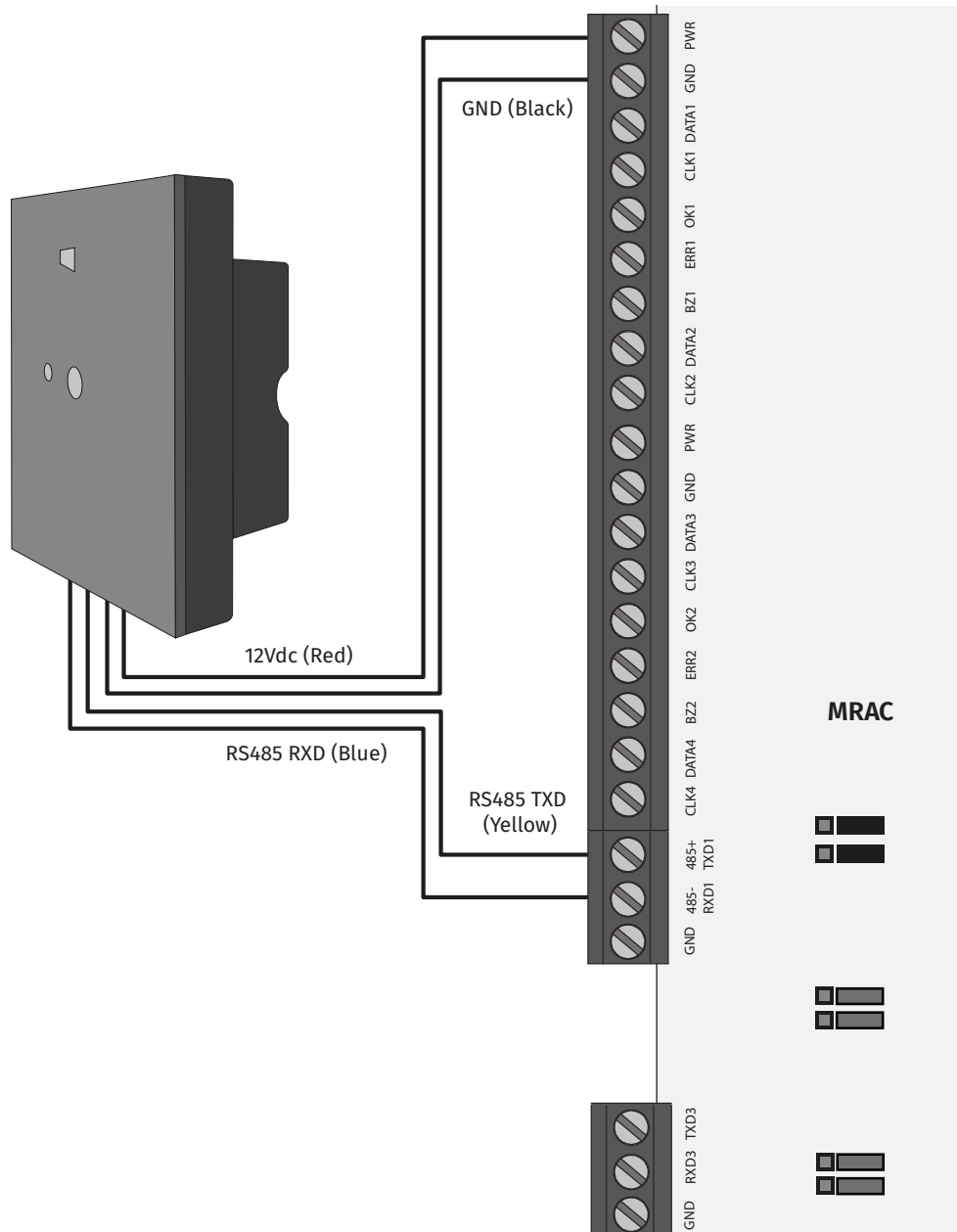
ID	Dip switch	Door	Function
No ID	ON 1 2 3 4 5 6	-	-
1	ON 1 2 3 4 5 6	Door 1	Entry
2	ON 1 2 3 4 5 6		Exit
3	ON 1 2 3 4 5 6	Door 2	Entry
4	ON 1 2 3 4 5 6		Exit
5	ON 1 2 3 4 5 6	Door 3	Entry
6	ON 1 2 3 4 5 6		Exit
7	ON 1 2 3 4 5 6	Door 4	Entry
8	ON 1 2 3 4 5 6		Exit



If you connect two or more devices with the same ID in a central, it will create a communication conflict and none will work correctly.

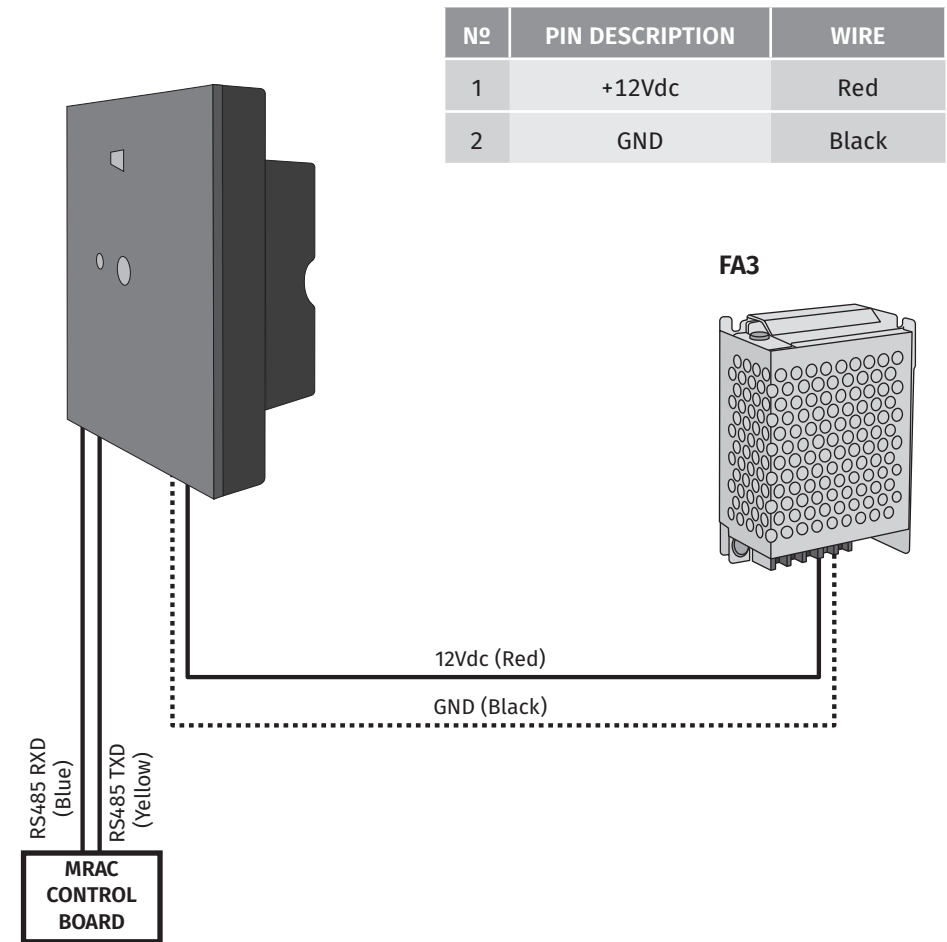
# 05. CONNECTION SCHEME

## CONNECTION TO MRAC CONTROL BOARD



# 05. CONNECTION SCHEME

## EXTERNAL POWER CONNECTION



**Warning:**

**Recommended power supply:**

- 12Vdc  $\pm 10\%$ , at least 500mA;
- Comply with IEC / EN 60950-1 standard;
- To share power with other devices, use a power supply with higher current ratings.

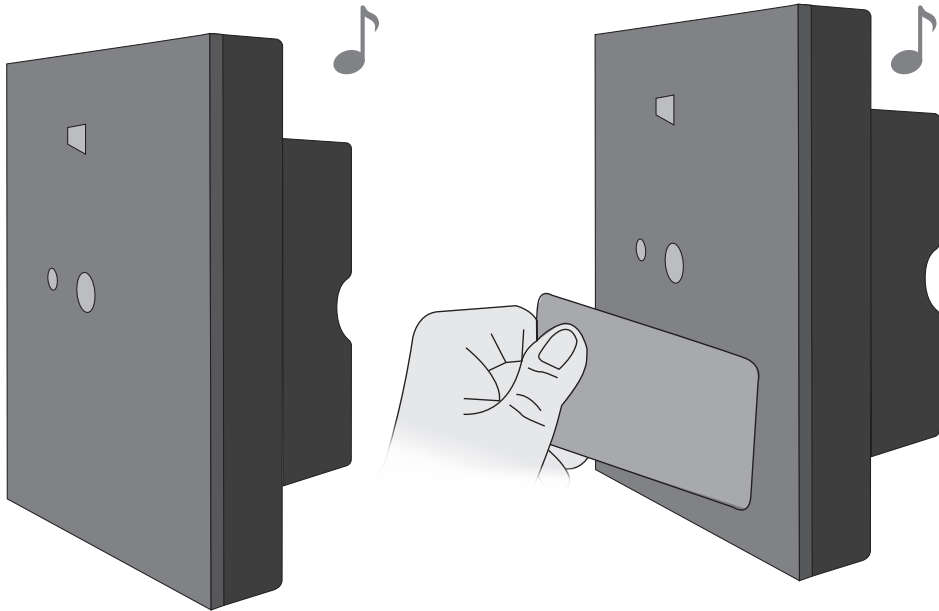


## 06. COMPONENT TEST

### DEVICE TEST

To avoid self-sensing interference from the touch sensor, please do not touch the sensor when turning on the device power.

- 1 • When the power is on, the reader will flash the green LED and hear the audible tone simultaneously.
- 2 • Place the supplied card close to the reader. The reader should beep simultaneously.



## 07. TROUBLESHOOTING

### INSTRUCTIONS FOR FINAL CONSUMERS / SPECIALIZED INSTALLERS

PROBLEM	SOLUTION
I do not hear the beep in the card reading.	Please contact our technical support department.