

Operation Instructions

Make your choice...

M-518R Automatic Door Electronic Tag For Robots



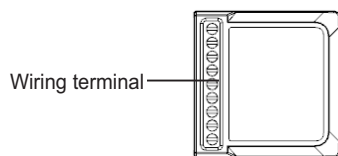
1 Safety Instructions



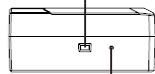
Thank you very much for purchasing this product, in order to use this product correctly, please be careful read this operating manual before using it.

2 Product Overview

Controller:

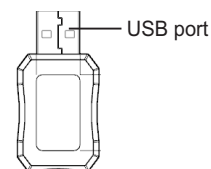


Learning button



LED indicator

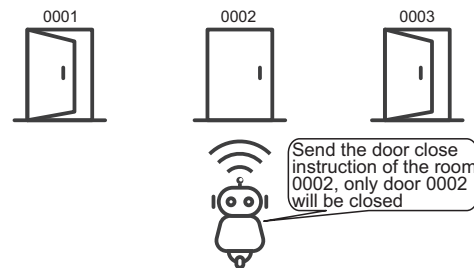
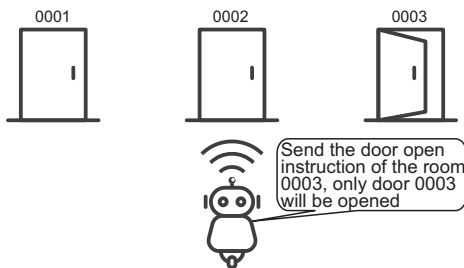
Robot smart tag:



LED indicator



3 Product Use Instructions



4 Data transfer protocol between robot and smart tag

1.Data communication protocol

Communication protocol: RS232/RS485/USB
Encoding mode: Hexadecimal code, high byte first
Baud rate: 9600BPS

Data bit: 8
Check bit: NONE
Stop bit: 1

Communication protocol format

DH	LEN	TYPE	CMD	DATA	CHECK
2 bytes	1 byte	1 byte	1 byte	(LEN-4) bytes	1 byte

Frame header: fixed for: 0x57 0x4A;
Data length: the total number of bytes from LEN to CHECK;
Device type: 0x01- Robot; 0x02- Electronic Tag; 0x03- Controller;
Command: 0x00 to 0xFF. For details, see the Command Type section.
Data: See related command type definition for details;
Check: The "checksum" of LEN to DATA (take the lowest byte).

5 Command Type

1. Open instruction(CMD:01H)

NOTE: The following numbers are in hexadecimal format

	DH	LEN	TYPE	CMD	DATA		CHECK	REMARK
					Room NO.	Response		
Robot transmitting	57 4A	09	01	01	01 00 00 00	00	0C	1000 room for example
Electronic tag receiving	57 4A	09	02	01	01 00 00 00	xx	xx	Response definition: 01: receiving the instruction; xx: data error
Controller receiving	57 4A	09	03	01	01 00 00 00	xx	xx	Response definition: 02: execute the instructions to open the door; xx: data error

2.Close instruction(CMD:02H)

NOTE: The following numbers are in hexadecimal format

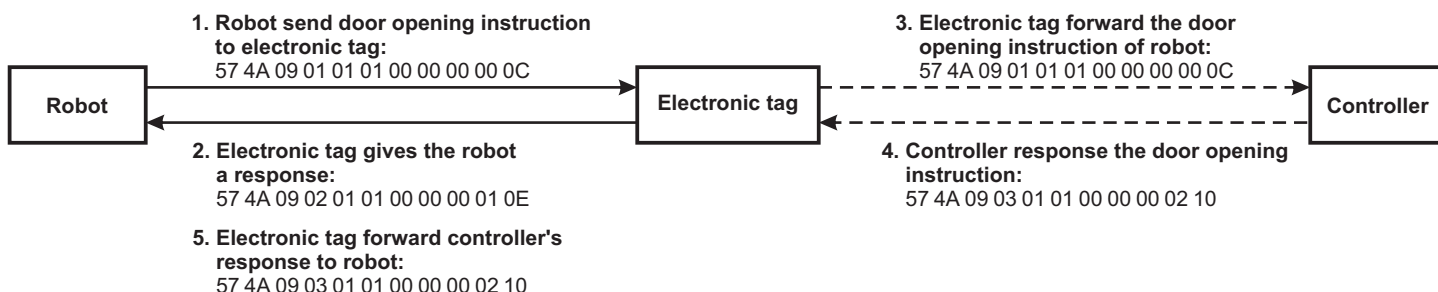
	DH	LEN	TYPE	CMD	DATA		CHECK	REMARK
					Room NO.	Response		
Robot transmitting	57 4A	09	01	02	01 00 00 00	00	0C	1000 room for example
Electronic tag receiving	57 4A	09	02	02	01 00 00 00	xx	xx	Response definition: 01: receiving the instruction; xx: data error
Controller receiving	57 4A	09	03	02	01 00 00 00	xx	xx	Response definition: 02: execute the instructions to close the door; xx: data error

3.Matching instruction(CMD:03H) The maximum value of each digit of the room number is 9

	DH	LEN	TYPE	CMD	DATA		CHECK	REMARK
					Room NO.	Response		
Robot transmitting	57 4A	09	01	03	01 00 00 00	00	0E	1000 room for example
Electronic tag receiving	57 4A	09	02	03	01 00 00 00	xx	xx	Response definition: 01: receiving the instruction; xx: data error
Controller no response								

6 Command Execution Process

Take the robot sending the door opening command successfully as an example:



7 Function Instructions

1, Match the controller and the room NO.

Method 1: Robot instruction is matched with room number

- 1) Push controller's learning button, LED indicator is off, entering the matching mode.
- 2) Robot send matching instruction, BLUE indicator of controller is on, room number matched successfully. Until the RED indicator is on, return to the standby state.

Method 2: Remote control is matched with room number

- 1) Push controller's learning button, LED indicator is off, entering the matching mode.
- 2) Push remote's button, the ABCD button of the remote controller corresponds to the four-digit room number. Press the button once, and the number is cycled from 0 to 9. The blue indicator light of the receiver will flash for corresponding times. No operation and red LED indicator is on, match successfully and return to the standby state. (Note: The interval between pressing the remote control button continuously must be more than 500ms)

2, Open and close door

- 1) Robot send the door opening operation to electronic tag, tag periodically send instruction to controller, controller received instruction, then output and hold the door opening signal, until received door closing instruction or door open signal missed.
- 2) Robot send the door closing operation to electronic tag, controller received instruction, then stop output door opening signal, and output door closing signal for 1 seconds.

3, Delete the controller's room number

Push and hold the controller's learning button for 3 seconds, blue indicator light flashes quickly, release the button and the room number is deleted.

The four keys of the remote control ABCD and the room numbers corresponding to the command format are as follows:

.....	CMD	DATA				Response
		Room Number					
		A	B	C	D		
	xx	01	00	00	00	xx	

