

# WAVE



WAVE500 / WAVE500-B  
**User Manual**

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## Important safety instructions



Disconnect the power supply before handing the unit.

In compliance with the European Directive low-voltage electrical equipment, we hereby inform users of the following requirements:

- For units which are permanently connected, an easily accessible circuit-breaker device must be built into the wiring system.
- This unit must always be installed in a vertical position and firmly fixed to the structure of the building.
- This unit must only be handled by a specialised installer, by his maintenance staff or by a duly trained operator.
- The instruction manual for this unit must always remain in the possession of the user.
- Terminals of maximum section 3,8mm<sup>2</sup> must be used for the power supply connections.
- Use time delayed fuses.

## Use of the receiver

These receivers are designed for use as remote controls for garage doors. Their use is not guaranteed for directly activating any other equipment different to that specified.

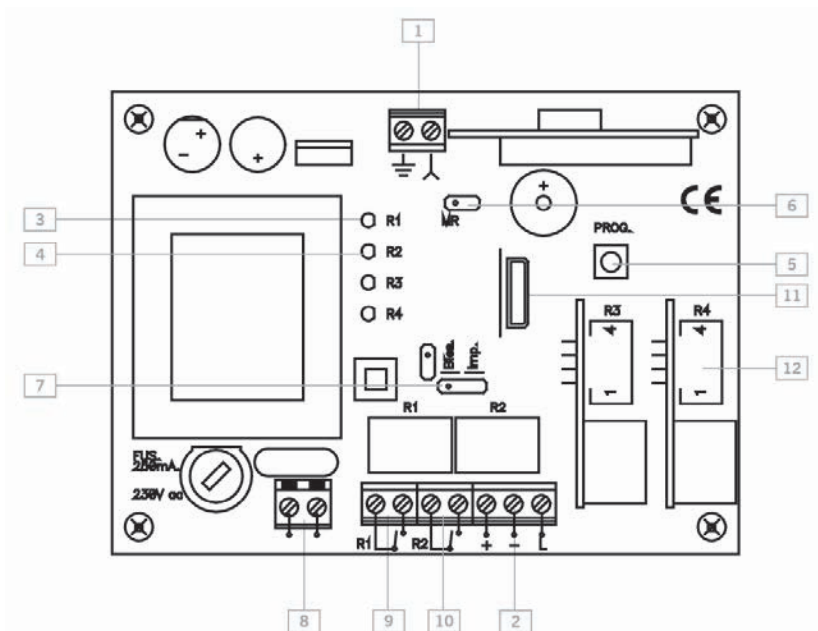
The manufacturer reserves the right to modify equipment specifications without prior notice.

## Technical characteristics

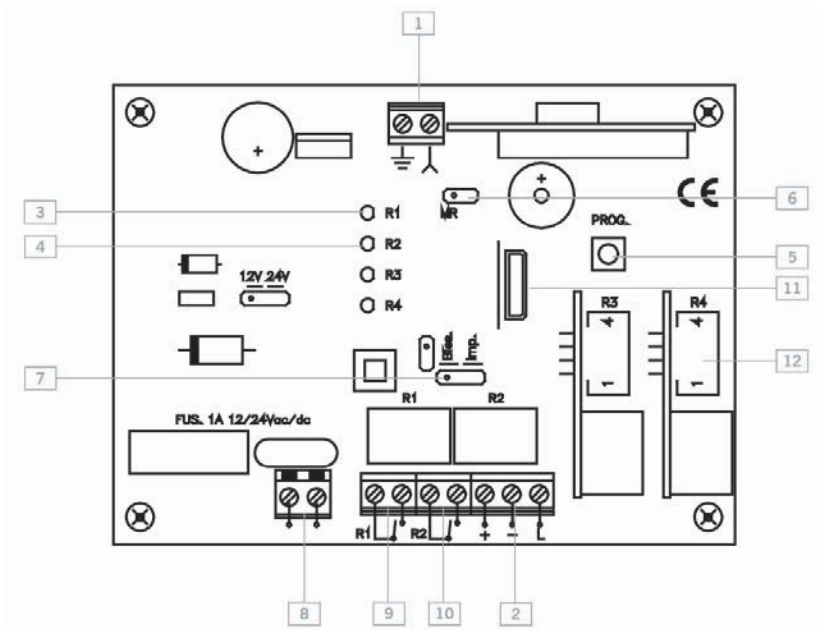
	WAVE500	WAVE500-B
Frequency	868,35MHz	
Coding	High security rolling code	
Memory	500 codes	
Number of relays	1/2 relays (expandable up to 4)	
Supply	230V ac	12/24V ac/dc
Power supply range	± 10%	9-23 / 22-35V dc 8-16 / 16-27V ac
Relay contacts	1A	
Standby/Op. consumption	35mA / 50mA	60mA / 350mA
Access control output	BUS-L	BUS-L 12v (3 readers max. without external power supply) / 24v (1 reader max. without external supply)
Op. temperature	-20°C to +55°C	
Watertightness	IP54 (with glands IP65)	
Size	115x85x40mm	
Box dimensions	140x220x55mm	

- |                            |                           |                            |
|----------------------------|---------------------------|----------------------------|
| 1- Antenna connection      | 5- Programming pushbutton | 9- Relay 1 output          |
| 2- BUS-L (+, -, L)         | 6- Jumper reset           | 10- Relay 2 output         |
| 3- Channel 1 operation LED | 7- Microswitch Imp/Bies   | 11- Memory card connection |
| 4- Channel 2 operation LED | 8- Power supply           | 12- TR0 connection         |

## WAVE500



## WAVE500-B



## Installation and connections

Attach the rear part of the housing to the wall using the plugs and screws supplied. Pass the cables through the bottom of the receiver. Connect the power cables to the terminals marked in the mother board, as indicated. Fix the receiver front to the rear part using the screws supplied.

## Operating

The pilot lights are activated every 5 seconds to indicate the correct supply of power to the equipment.


Upon receiving a code, the receiver checks whether it is in its memory, activating the corresponding relay. The relay activation mode is selected in either impulse or ON/OFF using the Imp/Bies jumper (only with the relay 2).

## Programming

### Manual programming

Press the receiver programming button for 1 sec. and an acoustic signal will be heard. The receiver will enter standard programming (see table). If the receiver programming button is held pressed down, the receiver will enter special programming, cyclically passing from one configuration to the next. Once the programming configuration for the transmitter to be registered has been chosen, send the code to be programmed by pressing the transmitter. Every time a transmitter is programmed, the receiver will issue an acoustic signal for 0.5 sec. After 10 seconds without programming or pressing the first two transmitter buttons, the receiver will exit programming mode, issuing two acoustic signals of 1 sec. If upon programming a transmitter the receiver memory is full, it will issue 7 acoustic signals of 0.5 sec. and exit programming.

Configuration of transmitter programming in the receiver	Led R1	Led R1
<b>Standard Programming</b> (default option, the receiver is always configured on pluri-channel)		
The relays are activated 1st relay by channel 1 and 2nd relay by channel 2 (3rd relay by channel 1 and 4th relay by channel 2)	Flashing	Flashing
<b>Special programming</b>		
By pressing any transmitter channel, relay 1 on the receiver will be activated	ON	OFF
By pressing any transmitter channel, relay 2 on the receiver will be activated	OFF	ON
By pressing any transmitter channel, the two relays will be activated at the same time*	ON	ON

 \* If working in ON/OFF activation mode, relay 1 will act as impulse and relay 2 as ON/OFF. Therefore, on the first press relay 1 will close and open the contact and relay 2 will only close. On the second, relay 1 will close and open the contact and relay 2 will open.

 **Note:** Each transmitter can be configured independently on the receiver.

## Total reset

In programming mode, the programming button is held down and the “MR” reset jumper is bridged for 3 secs. The receiver will issue 10 short acoustic warning signals followed by others at a faster pace to indicate that the operation has been successful. The receiver is now in programming mode.

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## Regulatory Data

### UKCA Declaration of conformity

The manufacturer **JCM TECHNOLOGIES, SAU** declares that the product **WAVE500 and WAVE500-B** complies with the relevant fundamental requirements of the Radio Equipment Regulations 2017 and of the RoHS Regulations 2012.

### EU Declaration of conformity

The manufacturer **JCM TECHNOLOGIES, SAU** declares that the product **WAVE500 and WAVE500-B** complies with the relevant fundamental requirements of the RED Directive 2014/53/EU and of the RoHS Directive 2011/65/EU.

See website <https://www.jcm-tech.com/declarations/>

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