1 - SAFETY WARNINGS

CAUTION – to ensure personal safety it is important to follow these instructions and keep them for future reference.

Read the instructions carefully before proceeding with installation. The design and manufacture of the devices making up the product and the information in this manual are compliant with current safety standards. However, incorrect installation or programming may cause serious injury to those working on or using the system. Compliance with the instructions provided here when installing the product is therefore extremely important.

2 - INTRODUCING THE PRODUCT

RADIO RECEIVERS

Key Automation radio receivers are 4-output receivers for control units with SSQ (RX4Y/RX8) connector and with external terminal board (RXM23Y/RXM28). Receivers accept fixed or variable code transmitters.
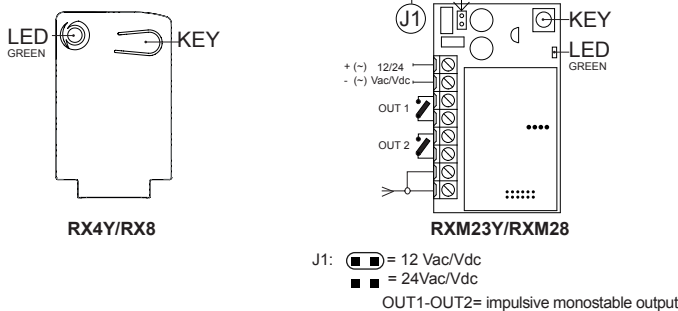
The receivers RX4Y/RMX23Y/RX8/RXM28 can be managed via the software and XR-MANAGER device with firmware versions 2.4 and later (for 868MHz receiver menu only).

Warning: any use other than as specified herein or in environmental conditions other than as stated in this manual is to be considered improper and is prohibited.

CODE	DESCRIPTION
RX4Y	Plug-in receiver, 4 outputs, 433.92 MHz. Maximum memory capacity 1000 codes
RXM23Y	External receiver, 2 outputs 433.92 MHz. Maximum memory capacity 1000 codes
RX8	Plug-in receiver, 4 outputs, 868.3 MHz. Maximum memory capacity 1000 codes
RXM28	External receiver, 2 outputs 868.3 MHz. Maximum memory capacity 1000 codes

TECHNICAL SPECIFICATIONS	900RX4Y	900RX8	900RXM23Y	900RXM28
Decoding	FIX/ROLLING			
Compatible transmitters	SUB/PLAY/ORION	SUB/PLAY	SUB/PLAY/ORION	SUB/PLAY
Frequency	433.92 MHz	868.3 MHz	433.92 MHz	868.3 MHz
Power	5 Vdc		12 ÷ 24 Vac / 12 ÷ 35 Vdc	
Idle consumption	16 mA		41 mA @ 24 Vac / 20 mA @ 24 Vdc	
Max consumption	27 mA		45 mA @ 24 Vac / 27 mA @ 24 Vdc	
Input impedance	50 Ω			
Outputs	4		2	
Relay outputs	-		24 Vdc, 1 A MAX, NORMALLY OPEN	
Sensitivity	-108 dB			
Operating temperature	-20°+55° C			

MAIN COMPONENTS

RX4Y/RX8

RXM23Y/RXM28

J1: ▪▪ = 12 Vac/Vdc
▪ ▪ = 24Vac/Vdc

OUT1-OUT2= impulsive monostable output

3 - PRELIMINARY CHECKS

WARNING - before installing the product, perform the following checks and inspections:

• Check that the intended mounting surface is solid and does not allow vibrations
• Use electrical connections suitable for the currents required
• Check that the power supply conforms to the values in the technical specifications
• Connect a type ANTS433 antenna; without an antenna, the range is cut to a few metres. The antenna must be installed as high up as possible and above any metal or reinforced concrete structures. The antenna cable must be type RG58 and no more than 10 metres long.
• If it is not possible to fit an antenna, the range can be increased significantly by connecting an electric cable and keeping it straight.

4 - INSTALLING THE PRODUCT

Connect the radio receiver with the power supply disconnected and for RX4Y/RX8 models check the connection position following the instructions on the control unit to which the receiver is to be connected.

Warning: in some control units, the cover of the RX4Y/RX8 model must be removed.
Follow the instructions of the control unit concerned.

The first remote control sets the type of encoding (fixed or variable code). When powered up, the receiver flashes to indicate the type of encoding used by the remote controls in its memory:
• 1 long flash = memory empty
• 2 quick flashes = fixed code
• 3 quick flashes = variable code

4.1 MEMORISING A REMOTE CONTROL

WARNING: When the memorisation phase is activated, any transmitter within the reception range may be memorised. To reduce the receiver's range, disconnect the antenna temporarily.

PH.	DESCRIPTION	EXAMPLE
1	Press and release the receiver button a number of times equal to the number of the output to be activated: once for output 1, twice for output 2, three times for output 3, four times for output 4 five times for output PRESET (button 1 = output 1, button 2 = output 2, button 3 = output 3, button 4 = output 4) To find out which function the receiver output activates, refer to the manual of the control unit or device on which the receiver is to be installed	
2	The LED on the receiver will flash a number of times equal to the number of the output selected, with 1 second pauses between flashes	
3	Press the key of the remote control to be memorised within 7 seconds, holding it down for at least 2 seconds	2s
4	If the memorisation has been successful, the receiver will give one long flash	3s
5	To memorise another remote control on the same output, repeat point 3	
N.B.	If no commands are given for 7 seconds, the receiver automatically quits the programming mode	

4.2 DELETING A REMOTE CONTROL

PH.	DESCRIPTION	EXAMPLE
1	Press the button on the receiver until the LED lights up (about 3 seconds)	(>3s)->
2	Press the key of the remote control to be deleted within 7 seconds, holding it down until the LED on the receiver goes out. Release the remote control key	->
3	About 1 second after the key is released, the LED on the receiver starts to flash	0,5s 0,5s
4	Confirm the deletion by pressing the button on the receiver	
5	If the deletion has been successful, the receiver will give one long flash	3s
N.B.	If no commands are given for 7 seconds, the receiver automatically quits the programming mode	

4.3 CLEARING THE ENTIRE RECEIVER MEMORY/ RECEIVER RESET

PH.	DESCRIPTION	EXAMPLE
1	Press the button on the receiver and hold it down until the LED lights up (about 3 seconds) and then goes out (about 3 seconds). Release the key	(>3s)->(>3s)->
2	About 1 second after the key is released, the LED on the receiver starts to flash	(1s)+(1s)+
3	To clear the entire memory, press the receiver button on the third flash, or to reset the 4 outputs and restore the default monostable settings, press the button on the fifth flash	
4	If the deletion/reset has been successful, the receiver will give one long flash	

4.4 REMOTE MEMORISATION OF A REMOTE CONTROL WITH A REMOTE CONTROL ALREADY MEMORISED

A transmitter can be memorised without accessing the receiver. The user needs to have a transmitter memorised previously, after which the procedure is as described below. The remote copy procedure must be carried out in the area served by the receiver.

PH.	DESCRIPTION	EXAMPLE
1	Press the key of the new remote control to be memorised, holding it down for at least 5 seconds	>5s
2	Press the key of the old remote control to be copied (if phase 1 has been successful, the automation system will not respond)	>3s
3	Press the key of the new remote control to be memorised, holding it down for at least 3 seconds	>3s
4	Press the key of the old remote control to be copied, holding it down for at least 3 seconds, to confirm and quit the programming mode	>3s
N.B.	If no commands are given for 7 seconds, the receiver automatically quits the programming mode	

5 - TESTING AND COMMISSIONING

The system may be put into operation after testing by a qualified technician, who must perform the tests required by the relevant standards in relation to the risks present, to check that the installation complies with the relevant regulatory requirements.