

RX-20

Receiver of wireless and addressable detectors

Operating Guide



MAXIMUM Security
Alarm Systems & all types of detectors

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Introduction

RX-20 receiver is designed to receive 8 wireless and wired-addressable detectors of MAXIMUM Security and to supply the received signals to any burglar alarm control panel.

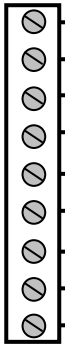
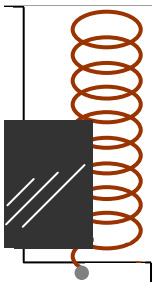
Whilst doing so, the received RX-20 turns any wired control panel into wireless.

RX-20 receiver alerts in the following events: detection, anti-masking, shock or vibration detection, low battery and loss of communication with the detector.

The relay operation time is standard (2 seconds) nevertheless it can be programmed between 1 second and 60 minutes.

The communication between the Receiver and its linked wireless detector is which enables to display the following information for each wireless detector linked to the receiver the following information: reception strength, battery level and loss of communication with the detector.

The receiver RX-20 is capable to work with 20 remote controls (model RX-5) that can be purchased separately.



Low battery

Communication for Addressable detectors

12V DC Power Supply

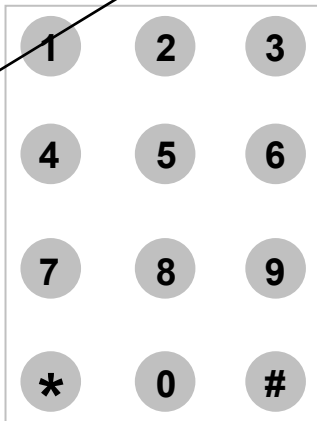
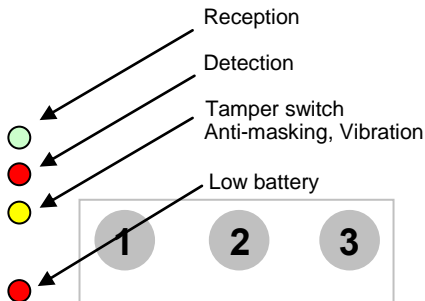
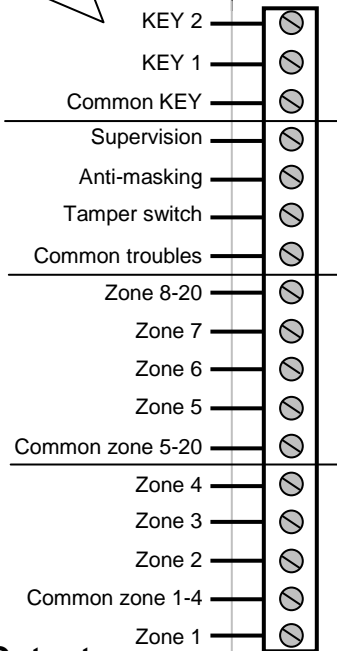
To operate accessories wirelessly

Tamper switch

Input

Wiring

Open/Close relays
by Remote Control
Model RM-5



Output

Reaction of the receiver to events received from the wireless detectors

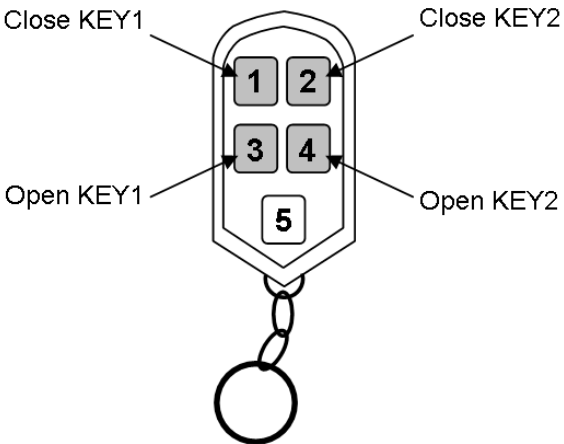
- **Detection-** the appropriate zone output will open for 2 seconds (the time can be programmed up to 60 minutes, see page 19). The "Detection" LED will glow for a few seconds.
- **Open tamper switch-** Tamper switch output and the appropriate zone will open for 2 seconds (the time can be programmed up to 60 minutes, see page 19). The "Tamper switch" LED will glow for a few seconds.
- **Anti-masking (covered detector)-** Anti-masking output will open for 2 seconds (the time can be programmed up to 60 minutes, see page 19). The "Anti-masking" LED will glow for a few seconds.
- **Vibration detection-** Anti-masking output will open for 2 seconds (the time can be programmed up to 60 minutes, see page 19). The "Vibration" LED will glow for a few seconds.
- **Low battery-** Low battery output will open and the appropriate LED will glow for as long as the voltage level is low.

Remarks

- In addition, upon each of the above mentioned events, an appropriate message will be displayed on the screen.
- If the screen is switched off, press any key to switch it on.

Remote control RM-5 (can be purchased separately)

The remote control can control two outputs of the receiver
KEY1 and KEY2 (See page 7, 16, 17).



Programming of the receiver

Remark: Entering the programming mode will open all zone outputs.

In normal working mode, the receiver's screen is switched off. Pressing any key will switch the screen on, and then the following message will be displayed:



Press on any key of the keyboard, and then you will be required to enter a code and after that to confirm by keying asterisk (*). The default code is 1234.

Should you wish to reset the code for any reason and at any stage, press and hold the asterisk button (*) and in the same time connect the power supply to the receiver. After that, release the asterisk button (*).

The navigation in the programming menu is done by four keys:

- 2 - Up ▲
- 8 - Down ▼
- * - Enter
- # - Esc (exit)

Detectors

Automatic learning of the wireless detectors by the receiver

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Detectors**".
3. Select "**Learn wireless detectors**".
4. Select "**Autolearn of wireless detectors**".
5. On the screen will appear the message "**Waiting for detector**".
6. **Press momentarily on the tamper switch** of the wireless detector you wish to be learned.
7. Once the detector's tamper switch is pressed, the **receiver's screen will display momentarily the zone that was learned by the receiver.**
8. To exit, key # .

Manual learning of the wireless detectors by the receiver

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Detectors**".
3. Select "**Learn wireless detectors**".
4. Select "**Manual learn of wireless detectors**".
5. On the screen will appear the message "**Enter zone number and *** ".
6. **Enter the zone number** you wish the wireless detector will be saved in the receiver **and *** .
7. On the screen will appear the message "**waiting for detector**".
8. **Press momentarily on the tamper switch** of the wireless detector you wish the receiver will learn.
9. Once the detector's tamper switch is pressed, the **receiver's screen will display momentarily the zone that was learned by the receiver.**
10. To exit, key **#** .

Automatic learning of wired-addressable detectors by the receiver

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Detectors**".
3. Select "**Learn wired detectors**".
4. Select "**Autolearn of wired detectors**".
5. The message "**Learning in progress**" will appear on the screen.
6. **The number of the learned detectors** will appear momentarily on the screen.
7. To exit, key # .

Manual learning of wired-addressable detectors by the receiver

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Detectors**".
3. Select "**Learn wired detectors**".
4. Select "**Manual of wired detectors**".
5. The message "**Enter zone number and *** " will appear on the screen.

6. **Enter the zone number** you wish the wired-addressable detector to be saved in the receiver and then key * .
7. The message "**Waiting for detector**" will appear on the screen.
8. **Press momentarily on the tamper switch** of the wired-addressable detector you wish to learn.
9. Once the detector's tamper switch is pressed, the **receiver's screen will display momentarily the zone that was learned by the receiver.**
10. To exit, key # .

Deleting detectors linked to the receiver

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Detectors**".
3. Select "**Delete detectors**".
4. The message "**Enter deleted zone num. and *** " will appear on the screen.
5. **Enter the detector number you wish to delete and then confirm by keying * .**
6. **The screen will show momentarily the deleted zone.**

Reception strength check

This feature allows you to receive information about the reception strength of any wireless detector linked to the receiver, and the noise level in the receiver's vicinity.

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Detectors**".
3. Select "**RSSI test**".
4. The message "**Waiting for detector**" will appear on the screen.
5. **Generate a detection event** in the wireless detector of which you wish to receive reception information.
6. Upon detection, **the receiver will display the detector reception strength and the noise level in the receiver's vicinity.**

Remote control

Learning of the remote controls by the receiver

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Remote controls**".
3. Select "**Learn Remote controls**".
4. The message "**Waiting for Remote controls**" will appear on the screen.
5. **Press momentarily on one of the remote control buttons** you wish to be learned.
6. Once the remote control button is pressed, **the receiver will display momentarily the remote control number learned.**

Deleting remote controls that linked to the receiver

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Remote controls**".
3. Select "**Delete remote controls**".
4. The message "**Enter deleted remote control and *** " will appear on the screen.
5. **Enter the number of the remote control you wish to delete** at the receiver, and confirm with asterisk (*).
6. **The receiver will display momentarily the deleted remote control.**

System

Manager code programming

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**System**".
3. Select "**Set a manager code**".
4. **Enter a new code** (of up to 8 digits) and confirm with asterisk (*).

Note

Should you will want to reset the code, for any reason and at any stage, press and hold the asterisk button (*) and in the same time connect the power supply to the receiver. After that, release the asterisk button (*).

Communication supervision

In case the communication between the receiver and the detector has been lost, the "Supervision" output will open. The time window between loss of communication and "Supervision" output open can be programmed between 15 minutes to 24 hours.

The programming procedure is the following:

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).

2. Select "**System**".
3. Select "**Supervision time**"
4. **Enter time** between 15 minutes to 24 hours and confirm with asterisk (*).

Acknowledgement of wireless detector transmission

Upon detection and transmission by a wireless detector, its green LED blinks for a moment. If the receiver received the transmission from the wireless detector, the red LED in the wireless detector will blink immediately after the green LED.

Programming of activation time of output relays

The receivers' outputs are represented by relays. You can program the activation time for these relays in the following way:

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**System**".
3. Select "**Relay Time**".
4. Enter time (between 1 second and 60 minutes) and confirm with asterisk (*).

What is my receiver system version?

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**System**".
3. Select "**System Version**".
4. On The receiver system version will appear on the screen.

Reset of the receiver

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**System**".
3. Select "**Reset System**".
4. The message: "RESET will erase ALL memory!!! To continue press asterisk (*), to cancel key #"" will appear on the screen.

Language

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**System**".
3. Select "**Language**" and select your language. Then confirm with asterisk (*).

Reports

Report of 20 recent events except for detection events

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Reports**".
3. Select "**Event Report**".
4. Move up/down (buttons 2 and 8) to review all events.
5. To exit, key # .

Battery report for all the wireless detectors, on one screen

Remark: Zones with low battery will blink.

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Reports**".
3. Select "**Battery Report**".
4. To exit, key # .

Zone status report

Here you will be provided with a detailed report for each zone: detector type, battery voltage and reception strength.

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**Reports**".
3. Select "**Zone Status Report**".
4. Move up/down (buttons 2 and 8) to review all zones.
5. To exit, key # .

GSM

Programming the detectors by smartphone adaptor

You can program the detectors linked to the receiver by means of a smartphone adaptor.

The smartphone adaptor can be purchased separately.

1. **Enter the manager code** (default 1234) then confirm with asterisk (*).
2. Select "**GSM**".
3. Select "**Learn GSM**".
4. Send SMS to GSM card or activate by the application.

To delete, go to "**GSM delete**".

Programming menu

1. Detectors

- 1.1. Learn wireless detectors
- 1.2. Learn wired detectors
- 1.3. Delete detectors
- 1.4. RSSI test

2. Remote controls

- 2.1. Learn remote controls
- 2.2. Delete remote controls

3. System

- 3.1. Set manager code
- 3.2. Supervision time
- 3.3. Relay time
- 3.4. System version
- 3.5. Reset system
- 3.6. Language

Certificate of warranty

MAXIMUM Electronics (1984) Security Ltd. thanks you for buying its products, which have proven their reliability and effectiveness over many years.

To ensure proper operation and functioning of the product and benefit from its features to the utmost, read the Installation & Operating instructions carefully and follow them step by step.

MAXIMUM Electronics Security (1984) Ltd. (hereinafter – the “Manufacturer”) hereby warrants/guarantees the products manufactured by it (hereinafter – “Product” or “Products”) against defects in production or in materials discovered during their reasonable use and servicing, in accordance with the Manufacturer’s instructions, recommendations and limitations and subject to the provisions of this Certificate of Warranty.

This Warranty is for a limited period of 12 months from the last day of the week and the year whose number is printed on the electronic card (PCB) and/or electronically encoded in one of the Product’s components.

This Warranty is limited to the repair of a defective Product, or its replacement at the Manufacturer’s option, during the Warranty period, subject to reasonable use and servicing in accordance with the Manufacturer’s instructions, recommendations and limitations.

To realize the Warranty rights, the Product must be sent to the Manufacturer securely packaged and accompanied by a document describing the problem, with insurance and freight prepaid by the sender.

The Manufacturer's products boast a high standard of reliability, proven in tens of thousands of products over many years. The percentage of problems encountered in them is virtually nil, therefore a Product must be carefully checked (according to the operating instructions) before sending it to the Manufacturer for examination and/or servicing in the Warranty framework.

In the event that the installer and/or user and/or customer and/or operator of a Product (hereinafter – the "Customer") returned the Product to the Manufacturer on the grounds that it is defective and received in exchange from the Manufacturer a functional product, and upon examination the Manufacturer found that the returned Product was not defective – the Customer will be charged the Product's full value as consideration for the resources invested by the Manufacturer in its examination.

The Manufacturer shall in no case be liable for damage or loss (including monetary loss), whether direct, indirect, accidental, circumstantial or otherwise, entailed in the dismantling or reinstallation of the Product.

In case the Manufacturer decides to replace a returned Product that was found to be defective, the Customer hereby gives its consent to receiving – at no added cost – also a higher version of the Product.

This Warranty is not valid in the following cases: incorrect installation, installation and/or operation not in accordance with the Manufacturer's instructions, alteration, misuse, accident, sabotage, repair or servicing by someone other than the Manufacturer and/or Force majeure.

The Customer must take all necessary precautions to prevent and eliminate any discharge of static electricity or other interference that could affect the Product's functioning.

This Warranty is exclusive and explicit and replaces any other warranty, commitment or guarantee – whether written, oral or implied.

The Manufacturer will in no case be liable toward anyone for a breach of this Certificate of Warranty or of any of its foregoing provisions.

This Certificate of Warranty may not be altered, exchanged or expanded, and the Manufacturer does not authorize anyone to do so on its behalf – including

any distributor, dealer, agent, representative or employee of the Manufacturer operating by its authority or on assignment from it.

This Warranty applies to the Product only!

Any other product, accessory or adjunct used together with the Product (including batteries) will be covered solely by its exclusive warranty, if such exists.

The Manufacturer shall in no case be liable for damage or loss, whether direct, indirect, accidental, circumstantial or otherwise, caused by the proper and/or improper functioning of the Product due to use of other products, accessories or adjuncts (including batteries) together with the Product.

The Manufacturer does not claim that the Product is immune to malicious neutralization, bypass, sabotage or deception, or that it will prevent in every case death or physical and/or mental injury due to burglary, robbery, fire or the like, or that the Product will provide in all cases adequate and/or suitable warning or protection.

The Customer understands that correct installation and maintenance, in accordance with the Manufacturer's instructions, recommendations and limitations, merely reduces the risk of failure to give warning in cases such as burglary, robbery and fire, but in no way ensures or guarantees that such cases will not occur or will not result in death or physical and/or mental injury and/or damage to property.

The Manufacturer shall in no case be liable for death or physical and/or mental injury and/or damage to property and/or loss of any kind, whether direct, indirect, accidental, circumstantial or otherwise, on the grounds that the Product did not operate/function properly and/or as expected and/or according to the description in its specification or in any other documentation.

The Manufacturer shall in no case be liable for damage or loss (including death or physical and/or mental injury and/or damage to property), whether direct, indirect, accidental, circumstantial or otherwise, caused through use of and/or reliance upon the Product.

In the event that the Manufacturer is held liable, directly, indirectly, circumstantially or otherwise, for any loss or damage according to the terms of this limited Warranty or otherwise (irrespective of its cause or origin), the maximum amount of the Manufacturer's warranty and/or guarantee shall not exceed in any case the Product's price, and it shall be payable as full and final consideration, and not as a penalty, and shall constitute the entire and sole compensation by the Manufacturer.

It is hereby clarified that the Warranty under this Certificate of Warranty does not cover anything not explicitly and specifically referred to herein.

It is hereby agreed that the Customer waives in advance any claim or contention against the Manufacturer.

Should the Customer and/or a person on his/her behalf nevertheless file suit against the Manufacturer, the Customer and/or that person in such case shall bear all their costs and the Manufacturer's costs arising therefrom, including lawyer's fees, and shall indemnify the Manufacturer for the full amount adjudicated against it in a decision, if any, rendered by any court or arbitrator.

Warning!

The Customer must make sure that the Product meets all his/her requirements, and he/she must comply fully with the installation and operating instructions and *inter alia* check the Product and the entire system at least once a week including under field conditions.

For various reasons (but not only those set out below), changes in environmental conditions and/or electric or electronic interference and/or malicious damage to the Product could cause the Product to function in an unforeseen manner.

The Customer must take all precautions to ensure his/her own safety and security and that of his/her property.

The Customer confirms that he/she read all the conditions of this Certificate of Warranty and he/she agrees thereto.

Installation and/or operation of the Product shall be deemed as the Customer's agreement to all the conditions of this Certificate of Warranty.



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