

SYSTEM RF RANGE

Wireless devices



COMMAND AND CONTROL SYSTEM

The SYSTEM RF command and control system consists of radiofrequency communications devices that integrate with the traditional electrical system, allowing the expansion of functionality without recourse to working in walls.

The range of products, available in BLACK or WHITE versions, allows total functional and aesthetic integration with the TOP SYSTEM and VIRNA plates.

SYSTEM RF RANGE



The addition of a control point, the control of temperature and the adjustment of the light of a lamp by remote control, are among the most common needs in both residential and commercial systems, to which the innovative GEWISS system responds.

It is also possible to design exclusive comfort solutions through the realization of scenarios (configuration of lights and shutters depending on the time of day) that contribute to providing added value to the electrical system.

CHARACTERISTICS AND ADVANTAGES

WIRELESS SWITCH

The control can be positioned where it is needed, without the need of working in wall. Management of the system with SYSTEM RF can be achieved using a push-button or a remote control device. You only need to decide the position for the actuator in your electrical boxes or in the junction box and it is accomplished!

PUSH-BUTTON



◀ The push-button can be installed on any wall surface using two way tape or using its specific holes to dowel it.

SYSTEM RF RANGE

ACTUATOR

The actuator is inserted in the existing boxes, in the junction boxes or even in behind the false ceiling. ▶



APPLICATION EXAMPLES



THE PROBLEM:

By moving a wardrobe in the children's room, the light switch is seen to be behind the wardrobe.

◀ THE SOLUTION:

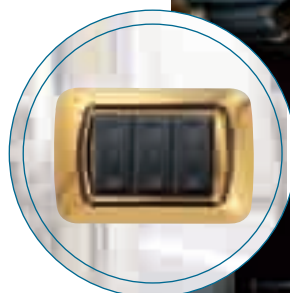
Apply the push-button near the bed and place the actuator in the position needed.

THE PROBLEM:

In the restructuring of an ancient villa, a control point needs to be positioned but without working in walls.

THE SOLUTION:

Apply the button directly on the wall covering or wall and position the actuator. ▶



APPLICATION EXAMPLES

SYSTEM RF RANGE

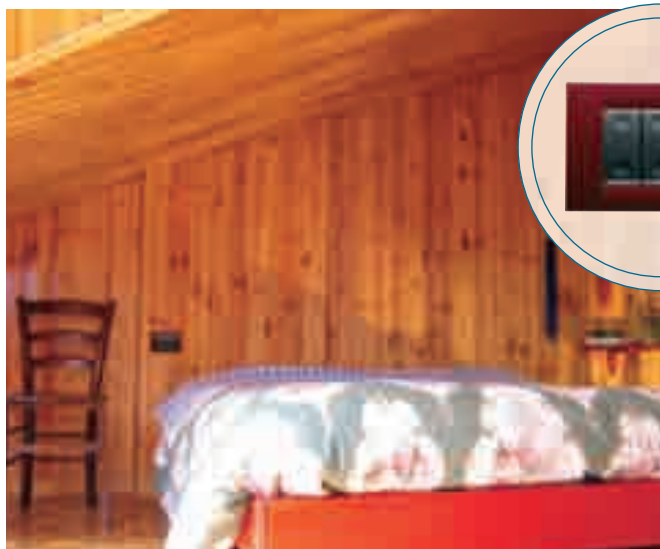


THE PROBLEM: There is a need for temperature management in a recently added room.

THE SOLUTION: Freely choose the position for the RF timer thermostat and put the actuator in the boiler room.

THE PROBLEM: Sun screens for the sun porch need to be commanded but the wall surfaces are all glass.

THE SOLUTION: Apply the push-button directly on the glass wall and position the actuator.



THE PROBLEM: An attic has been made livable but it has a sloping matchboarded ceiling and you don't know where to put the commands.

THE SOLUTION: You can apply the push-button even on the ceiling and then position the actuator.

CHARACTERISTICS AND ADVANTAGES

TOTAL INTEGRATION WITH THE SYSTEMS

With the devices offered, you can manage a variety of functions:

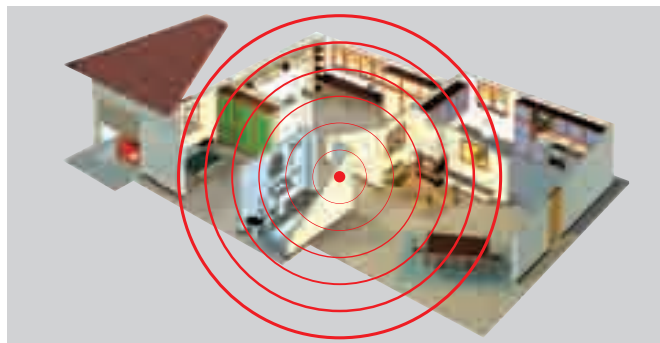
Manual controls: management of controls free from the electric network.

Electrical loads: direct or timed ON/OFF controls.

Temperature adjustment: management of heating/cooling systems and management of weekly temperature profiles.

Management of inputs: management of generic contact inputs without potential.

Shutters: motor control for raising/lowering shutters and awnings.



SYSTEM RF RANGE

EXTREME SIMPLICITY OF CONFIGURATION

It is not necessary to use any programming software to associate the various devices to each other, just manual adjustments made directly on the devices themselves. Thanks to their functional and installation simplicity, the use of the RF command and control system is particularly suitable for the completion or modification of existing electrical systems.



MULTIPURPOSE ACTUATORS - RECEIVERS RX

The RX actuators - receiver are multipurpose; for the generic actuators, it is possible to select a configuration from the MONOSTABLE, BISTABLE and TIMED range, and for the actuator for the motor control, a pre-set timer can be selected.



DESIGN

The push-button and movement detector are provided complete with the TOP SYSTEM or VIRNA plate (cloud white or metallic titanium). For perfect integration in all installation environments, the plate supplied can be replaced with another of the 14 colours available.



RELIABILITY AND SAFETY

The system uses impulse data transmission: the devices exchange information using low power radio frequencies and only for brief transmission periods, with the saving of batteries and a very limited time occupying the frequency band. The charge status of the battery is indicated by the flashing of the LED which, in addition, allows displaying the successful transmission of the RF signal.



AMPLE COVERAGE

The open field distance in meters in a free field for radio transmission between devices is a maximum of 100 meters. Given that the system devices communicate with each other using radio waves, it is important to evaluate the installation context. In the case of structural obstacles or distances greater than the allowed limits, it is called for the use of a signal repeater (GW 20 985 - GW 21 985), which will guarantee the exchange of radio information, even under extreme conditions, and makes the command and control system applicable to any environment.



RF COMMAND AND CONTROL SYSTEM

APPLICATION EXAMPLES

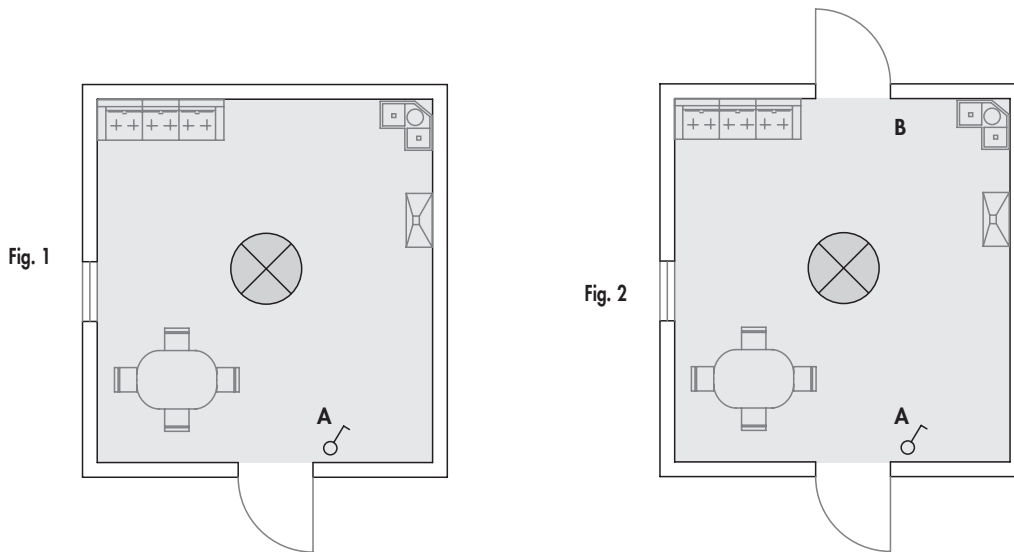
With RF technology, it becomes simple to offer small automation solutions oriented to domotics or to make significant improvements to the existing electrical system. Below, we show some application examples that only summarize a few of the many solutions offered by the system.

1) ADDITION OF A CONTROL POINT

Situation to be solved (Fig. 1 and 2):

In the generic room shown in the figure, the light load is controlled by the single switch indicated by "A".

For reasons of convenience, after the opening of a passage for the adjacent room, you would need to add another control device indicated by "B".

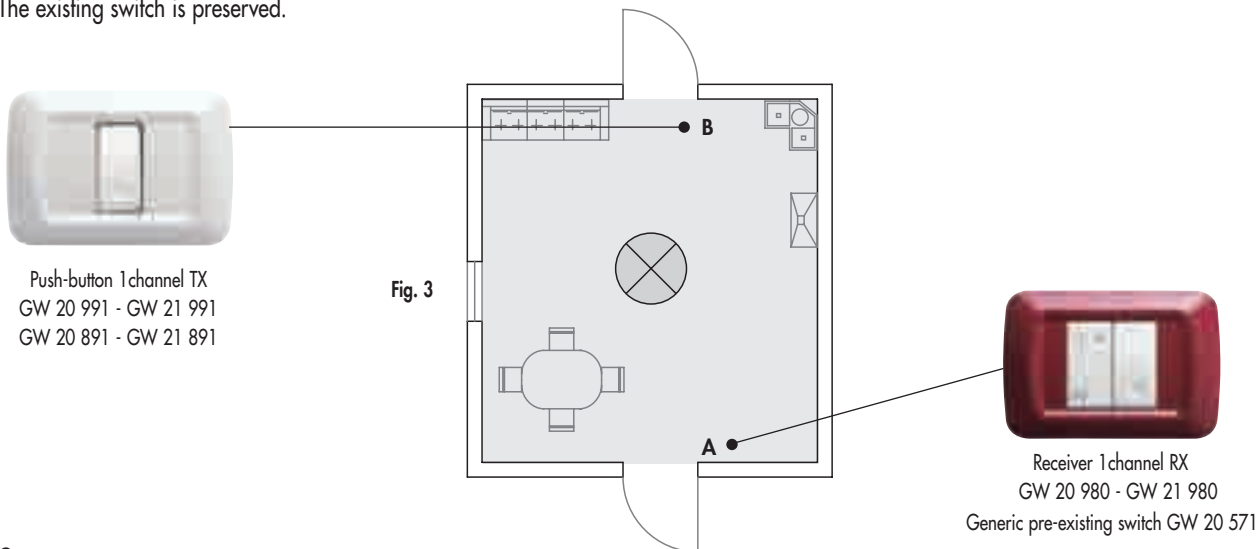


Solution with RF Command and Control devices (Fig. 3):

The problem is solved by adding the following devices without having to perform wall work:

- Push-button 1channel TX GW 20 891 - GW 20 991 - GW 21 891 - GW 21 991 (position B) for the transmission of the radio-frequency command to the receiver;
- Receiver 1channel RX GW 20 980 - GW 21 980 (position A) for the receiving of the radio-frequency command and turning on the light load.

The existing switch is preserved.



Comment:

With the addition of the above mentioned devices, you avoid any change to the walls, because the TX push-button is installed on the surface while the RX receiver is installed in the box that is already there. The connections to be made have only to do with the RX receiver, connected to the line of the load and to the previously installed control device. The 230V power supply required for the receivers is easily provided by the existing electrical system.

2) CREATION OF A CONTROLLED SOCKET-OUTLET POINT

Situation to be solved (Fig. 4):

In the room shown in the figure, the generic power socket-outlet indicated by "A" must be used to control a floor lamp. In addition to ON/OFF control, it must also be possible to dim the lamp. The operations must be performed with a control device located in area "B" and with the use of a remote control.

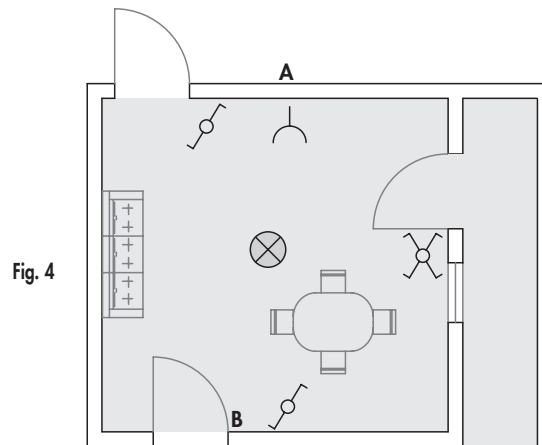


Fig. 4

Solution with RF Command and Control devices (Fig. 5):

The problem is solved with the addition of the following devices:

- Push-button 1channel TX GW 20 891 - GW 21 891 - GW 20 991 - GW 21 991 (position B) for control and adjustment;
- Receiver 1channel RX GW 20 980 - GW 21 980 (position A) for managing the dimmer;
- Electronic push-button dimmer GW 21 814 (position A) traditional dimmer connected to the power socket-outlet;
- Remote control - TX GW 20 963 for control and adjustment of the floor lamp.

The previously installed power socket-outlet is preserved for connection to the lamp.

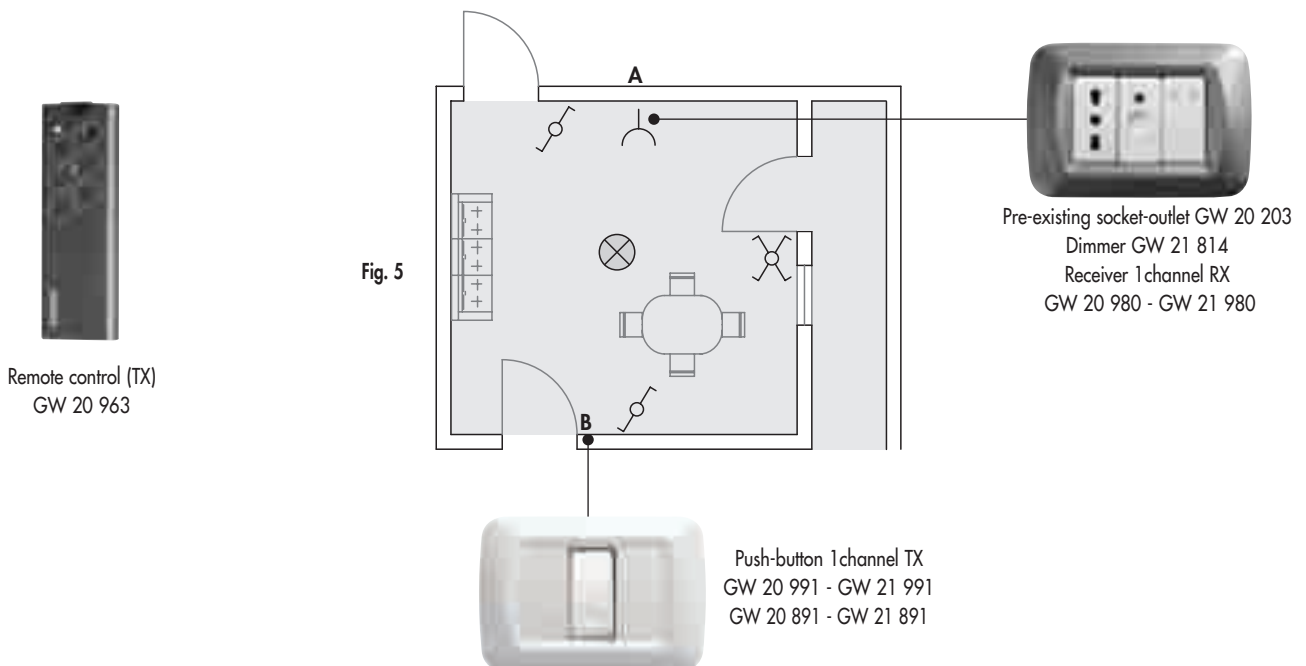


Fig. 5

Comment:

With the addition of the above mentioned devices, you avoid making any changes to the walls, because the TX push-button is installed on the surface, while the RX receiver and traditional dimmer are installed in the already existing box. In flush-mounting box "A", the RX receiver is connected to the traditional dimmer which, in turn, manages the controlled socket-outlet. The 230V power required for these devices can easily be obtained from the pre-existing system. Using a simple self-learning procedure, it is possible to combine the RX receiver and the TX remote control.

Note: in the socket-outlet, the light load must be compatible with the electrical characteristics of the dimmer and RX receiver.

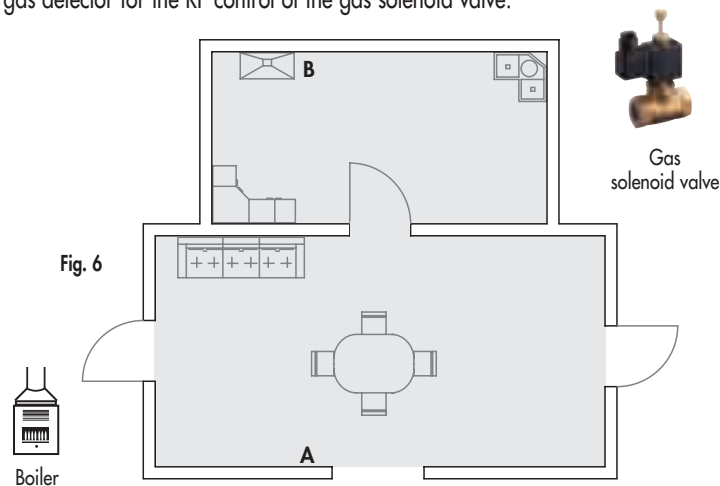
APPLICATION EXAMPLES

3) ADDITION OF THE PROGRAMMABLE ELECTRONIC TIMER THERMOSTAT AND GAS DETECTOR

SITUATION TO BE SOLVED (Fig. 6):

The rooms represent a kitchen and a living room where the following changes are needed:

- living room: addition (position A) of a programmable electronic timer thermostat for controlling the boiler by RF;
- kitchen: addition (position B) of a gas detector for the RF control of the gas solenoid valve.



Solution with RF Command and Control devices (Fig. 7):

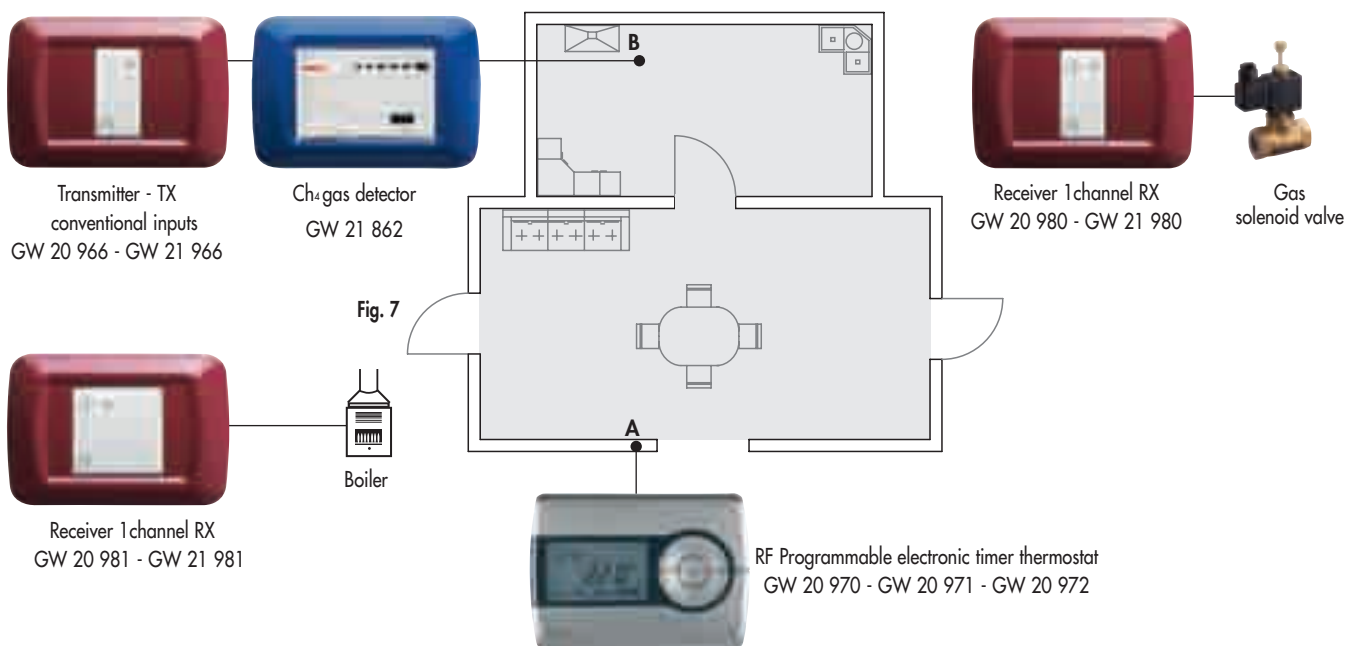
The problem is solved with the addition of the following devices:

- 1 wall-mounted programmable electronic timed thermostat
- 2 receivers 1 channel RX

- 1 traditional Ch₄ gas detector

- 1 TX transmitter for conventional inputs

- GW 20 970 - GW 20 971 - GW 20 972 (position A) for managing the climate and action on the receiver;
- GW 20 980 - GW 21 980 for connection to the gas solenoid valve;
- GW 20 981 - GW 21 981 for connection to the boiler;
- GW 21 862 (position B);
- GW 20 966 - GW 21 966 (position B) to interface the gas detector to the RF system.



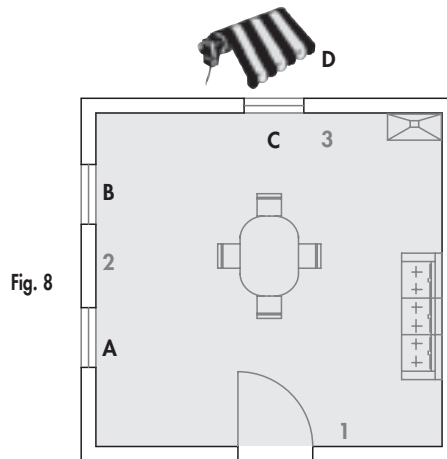
Comment:

With the addition of the above mentioned devices, you avoid making any changes to the walls, because the programmable electronic timer thermostat is installed on the surface, while the RX receivers can be installed in the wall or external box already present in the system. After a simple configuration, based on the events recorded, the programmable electronic timer thermostat and the gas detector control the respective RX receivers for the activation of the boiler and the solenoid valve.

4) CENTRALIZED MANAGEMENT OF MOTORIZED SHUTTERS - ELECTRONIC SUNSHADES

Situation to be solved (Fig. 8):

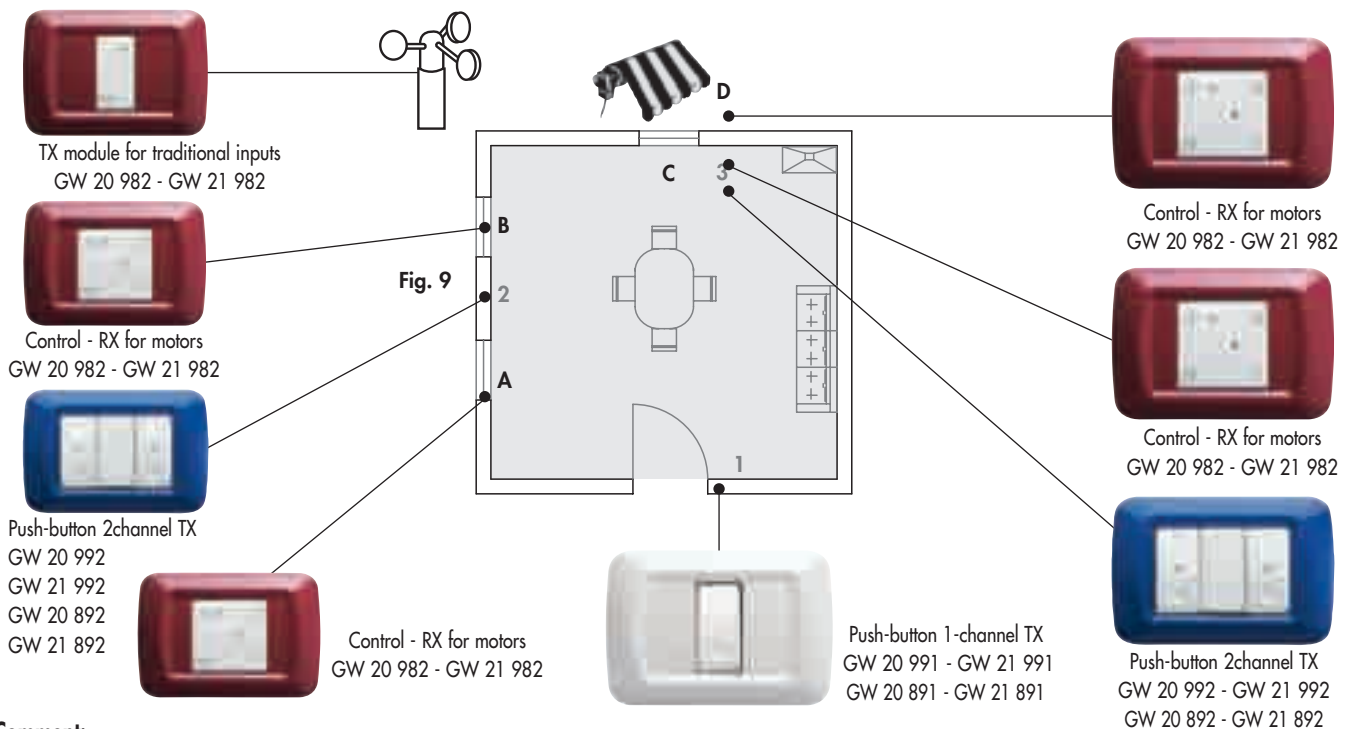
In the room shown in the figure, there are three motorized shutters, indicated as A, B and C, and an awning indicated by D. As regards the shutters, the request is to install, in addition to the local controls (position 2 and 3), a centralized control with the function of "ALL DOWN" in the position indicated by 1. The awning requires a local control (position 3) in addition to the automatic protection against the wind provided by the anemometer.



Solution with RF Command and Control devices (Fig. 9):

The problem is solved with the addition of the following devices:

- | | |
|-------------------------------------|---|
| 1 push-button 1 channel TX | GW 20 891 - GW 21 891 - GW 20 991 - GW 21 991 (position 1) for centralized control; |
| 2 push-button 1 channel TX | GW 20 892 - GW 21 892 - GW 20 992 - GW 21 992 (position 2) for controlling shutters A and B; |
| 1 push-button 2 channel TX | GW 20 892 - GW 21 892 - GW 20 992 - GW 21 992 (position 3) for controlling shutters C and awning D; |
| 4 controls for motors - RX | GW 20 982 - GW 21 982 (position A-B-C-D) for switching the relative motors; |
| 1 TX module for conventional inputs | GW 20 966 - GW 21 966 (position D) for interfacing the anemometer to the RF system. |



Comment:

With the addition of the above mentioned devices, you avoid making any changes to the walls, because the TX push-button is installed on the surface, while the RX module for controlling the motors and the TX module for conventional inputs can be installed in the box for the shutters. Once the RX modules for the motors and the TX interface module are connected (this latter connects to an anemometer that is available on the market) you proceed to the self-learning phase, and the devices are ready to operate immediately after.

APPLICATION EXAMPLES

5) START THE HEATING BY PHONE WITH FIXED LINE

Situation to be solved

The apartment is located in a building where the owners have decided to replace the old centralized heating system with an independent heating system. The request also contemplates the need to remote control the electronic timer thermostat using the fixed telephone line.

SOLUTION WITH FIXED TELEPHONE LINE



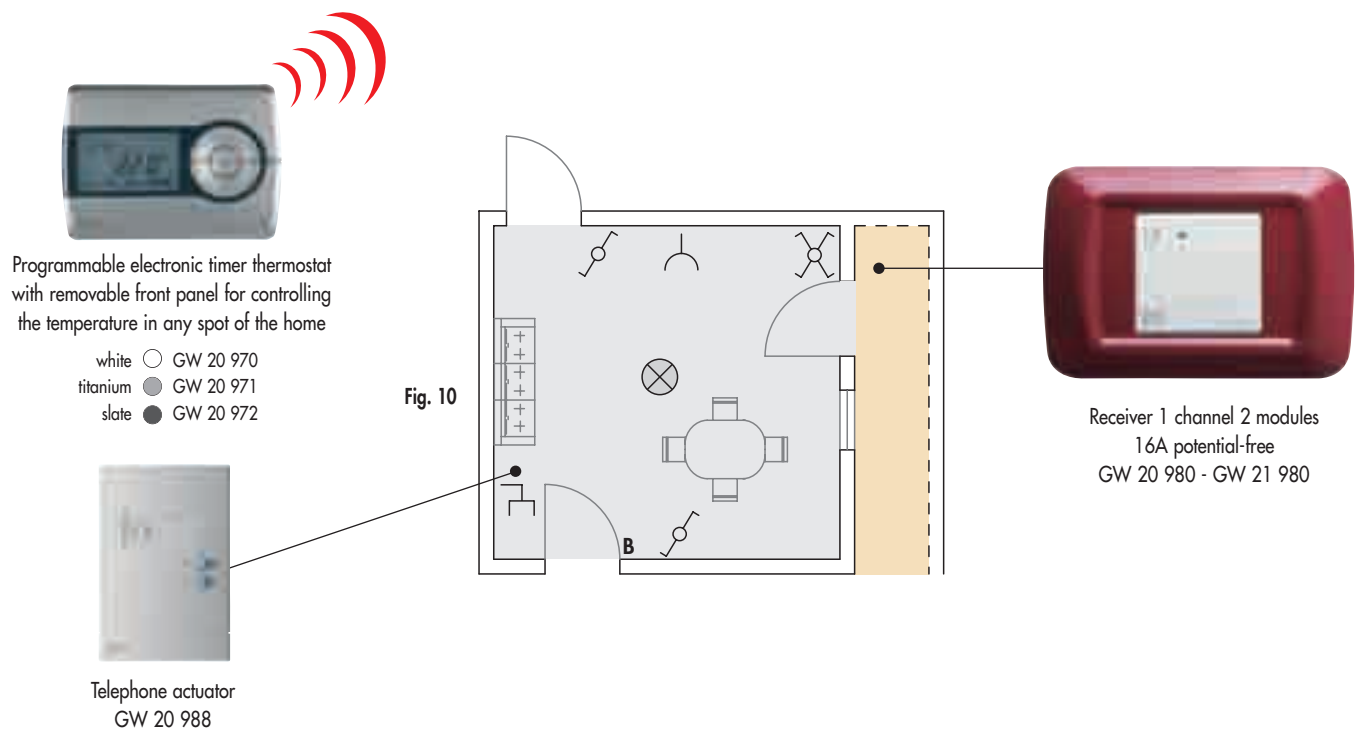
Solution with RF Command and Control devices (Fig. 10):

- 1 wall-mounted programmable electronic timer thermostat
- 1 RX channel receiver
- 1 line telephone actuator

GW 20 970 – GW 20 971 – GW 20 972

GW 20 981 – GW 21 981 for connection to the boiler

GW 20 988 for remote control of the timer thermostat

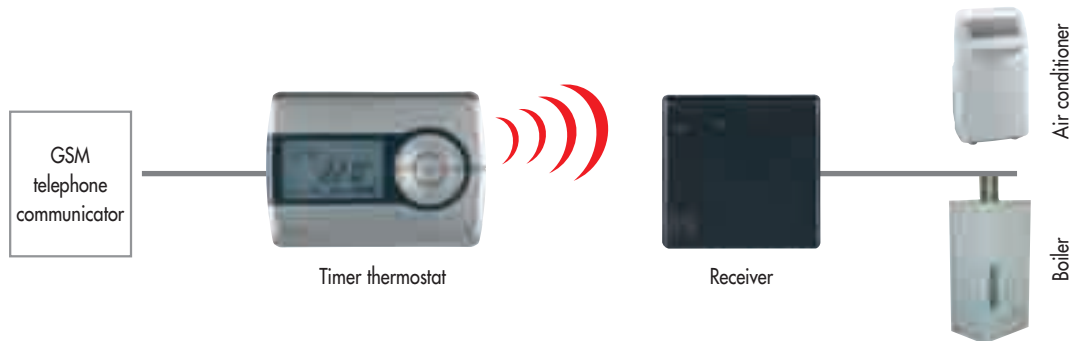


6) START HEATING/AIR CONDITIONING BY TELEPHONE WITHOUT FIXED LINE

Situation to be solved

The demand to remote control the heating /air conditioning system is rising considerably, but the conventional telephone line is not always available (e.g. holiday home). Today it is possible to turn the heating/air conditioning system on and off using a GSM telephone communicator.

SOLUTION WITHOUT FIXED TELEPHONE LINE



Solution with RF Command and Control devices (Fig. 11):

- 1 wall-mounted programmable electronic timer thermostat
- 1 RX channel receiver
- 1 GSM telephone communicator

GW 20 970 – GW 20 971 – GW 20 972

GW 20 981 – GW 21 981 for connection to the boiler/air conditioner found on the market

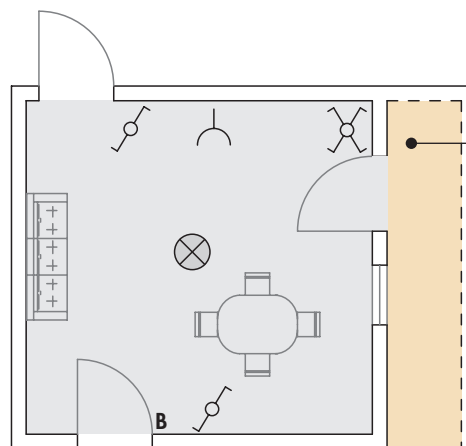


Programmable electronic timer thermostat with removable front panel for controlling the temperature in any spot of the home

- white ○ GW 20 970
- titanium ● GW 20 971
- slate ● GW 20 972

GSM telephone communicator that can be installed anywhere in the home

Fig. 11

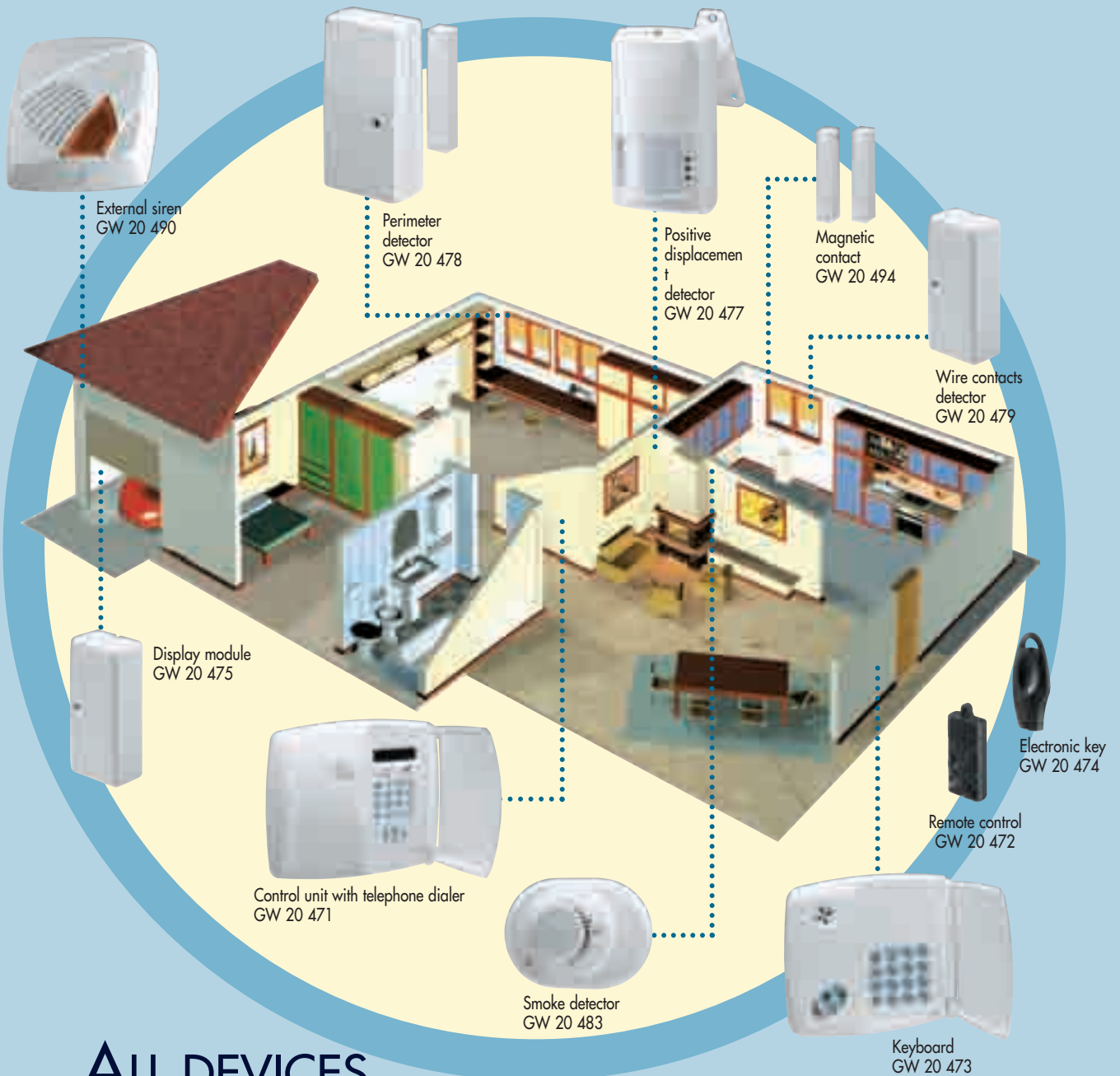


Receiver 1 channel 2 modules
16A potential-free
GW 20 980 - GW 21 980

RADIO ANTI-BURGLARY SYSTEM

The new RF anti-burglary radio system, with security and safety functions, is the ideal solution for every installation context, thanks to the careful design of all components. Safe, reliable operation, even in complex systems, is provided by double frequency radio transmission: one frequency is reserved for communication between the sensors and the control unit, while the other is for communication with the siren. The installation of the components of the wireless anti-burglary radio system is particularly simple, and, in fact, the system can be installed in a few hours without the need to break the walls.

SYSTEM RF RANGE



ALL DEVICES ARE SUPPLIED WITH BATTERIES

CHARACTERISTICS AND ADVANTAGES

CHARACTERISTICS OF THE CONTROL UNIT

The control unit is the heart of the system, available in two different models, and capable of managing 16 sensors (GW 20 470) or 32 (GW 20 471) sensors. The communication between devices is provided by a microprocessor that selects a random code on the basis of 34 million billion possible combinations. The control unit has a meter to measure the intensity of the radio signal (RF), to verify the transmission efficiency of each individual device to the control unit. In addition, all the information related to "system status" is displayed on the control unit by LEDs (GW 20 470) or by a display (GW 20 471).



DEVICES FOR ACTIVATING THE SYSTEM

With the remote control (GW 20 472) it is possible to completely manage the system: the total turning on and off of the system, partially turning it on, such as in a daytime or nighttime area, and activating the anti-panic function.



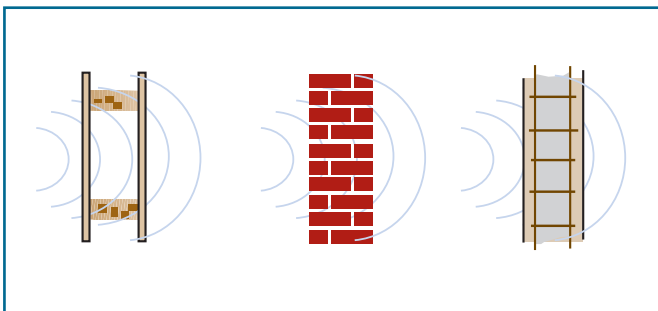
On the other hand, the keyboard (GW 20 473) is used to activate the system by typing a security code, to then perform same operations from the remote control.

With the proximity key (GW 20 474) it is possible to avoid typing the security code in case a keyboard is present in the system.



INSTALLATION CHARACTERISTICS

The system devices communicate with each other by radio waves (RF), and for this reason it is important to evaluate the type and location of the rooms to be monitored and operate so as to obtain excellent reception of the radio signals. In particular, given that the radio waves are attenuated (their range is diminished) by the characteristics of the physical medium that they must pass through, it is useful to keep in mind the type of wall and any other obstacles present in the rooms.



The maximum distance (range) in an open field between the control unit and the devices (sensors, siren and controls) is 100 m. This value allows handling all normal living units, while for special situations, the use of a signal repeater device is required (GW 20 480).



SYSTEM RF RANGE