

Instructions manual

20510
16950
14510

Control unit.

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Introduction

The **By-me** automated system provides integrated control of comfort, safety, energy saving, and remote control of residential and tertiary environments.

This manual is arranged in a sequence of sections that provide a complete understanding of the **By-me** system, and allow the user to take full advantage of the available features:

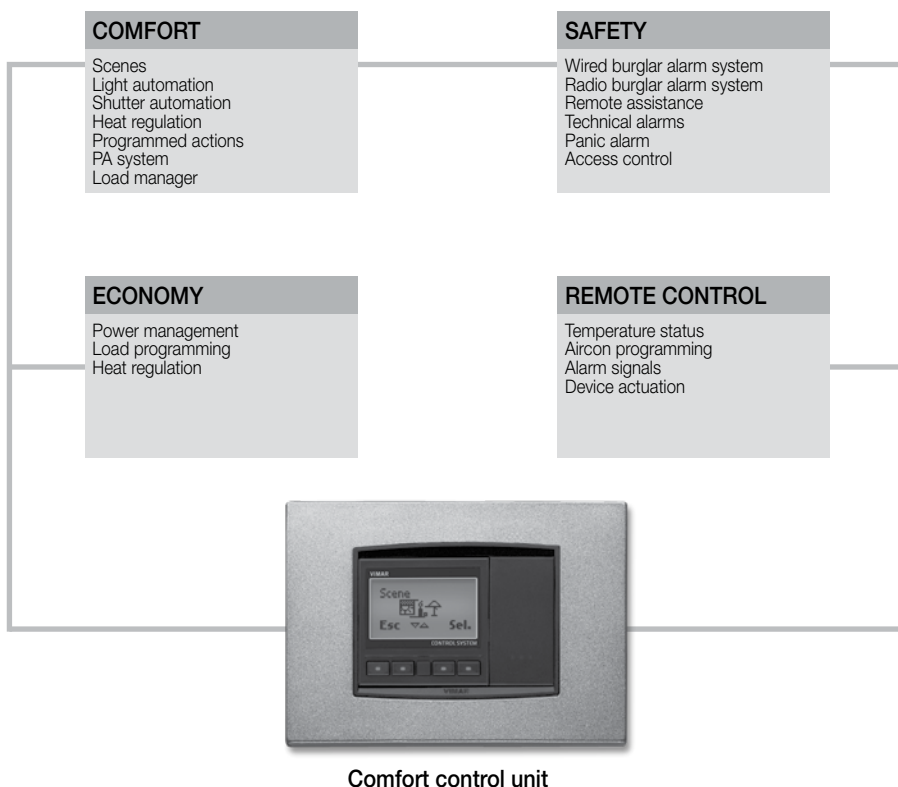
- **Section 1 “Main functions”**: lists the things that can be controlled through the **By-me** system (see page 3);
- **Section 2 “Basic concepts”**: explains some basic concepts necessary for gaining an understanding the system **By-me** (see page 4);
- **Section 3 “Installation topology”**: describes the structure of the **By-me** system, and gives the general rules and information necessary for setting the system structure, and the information necessary for putting into operation (see page 9);
- **Section 4 “Main configurations”**: describes the configuration procedures and main settings of the **By-me system** (see page 16);
- **Section 5 “Air-conditioning control”**: describes the procedures for setting the air-conditioning programs (see page 33);
- **Section 6 “Scenes”**: describes the procedures for creating scenes where a number of functions are actuated at the same time (see page 44);
- **Section 7 “Loadcontrol”**: describes the procedures for controlling the power consumption of the electrical system in order to prevent tripping of the magneto-thermal circuit-breaker due to overload (see page 48);
- **Section 8 “Automated systems”**: describes the procedures for advanced management of the **By-me** system, in order to be able to initiate functions that perform special operations when certain events occur (see page 54);
- **Section 9 “Integration with Burglar Alarm System via Vimar Bus”**: describes the procedures for interactions between the **By-me** system and the Burglar Alarm System via Vimar Bus (see page 64);
- **Section 10 “Diagnostics and maintenance”**: describes the procedures for monitoring the operation of devices and managing their replacement where necessary (see page 66);
- **Section 11 “Remote control”**: describes the procedures for remote control of the **By-me** system through TP interfaces and telephone communicator (see page 69);
- **Section 14 “Example installation”**: an example of installation of the **By-me** system in a bedroom (see page 71).

Main functions

1. Main functions.

The **By-me** system makes it possible to manage the installation using the following controls:

- Ambient temperature management, dividing the installation into up to 4 areas controlled by 4 separate programs;
- Lighting management, with on/off control and light adjustment;
- Shutter control;
- Function centralization and automation;
- Integration of the burglar alarm system;
- Remote control and monitoring of functions;
- Power consumption and load manager.



Basic concepts

2. Basic concepts.

This chapter explains some fundamentally important concepts that are necessary for correctly making full use of the system.

Note.

Some of the examples contain references to the device codes; for more information, please refer to the instruction sheet for the product concerned.

• **Functional unit:** part of a device that can be considered as if it were a separate device. Some examples:

1. Device with **one** functional unit: the functional unit is equivalent to the device itself, for example actuator with transfer relay output 16 A 250 V~ (Eikon 20535 series; Idea 16975; Plana 14535).
2. Device with **two** functional units: in the interface for conventional controls (Eikon 20515 series; Idea 16955 series; Plana 14515 series) each of the two inputs is a functional unit.
3. Device with **three** functional units: in the control appliance with two toggle switches and actuator (Eikon 20526 series; Idea 16966; Plana 14526 series) there are three functional units: left toggle switch, right toggle switch and actuator; for user and configuration purposes, there are therefore 3 separate devices.
4. Device with **four** functional units: in the control appliance with three toggle switches and actuator (Eikon 20547 series; Idea 16987; Plana 14547 series) there are four functional units: left toggle switch, middle toggle switch, right toggle switch and actuator; for user and configuration purposes, there are therefore 4 separate devices. Another example is the device with 4 changeover relays (art.01851 for installation on EN50022 rails) where each output is a functional unit.

Note.

Difference between a toggle switch and simple push-button: a toggle switch can be pushed up or down, a simple push-button can only be pushed down.

During the design phase, each functional unit of any device must be considered as though it were a separate device. It is therefore necessary, during the design phase, to plan the functions to be performed and only then make a list of the devices needed to perform these functions.

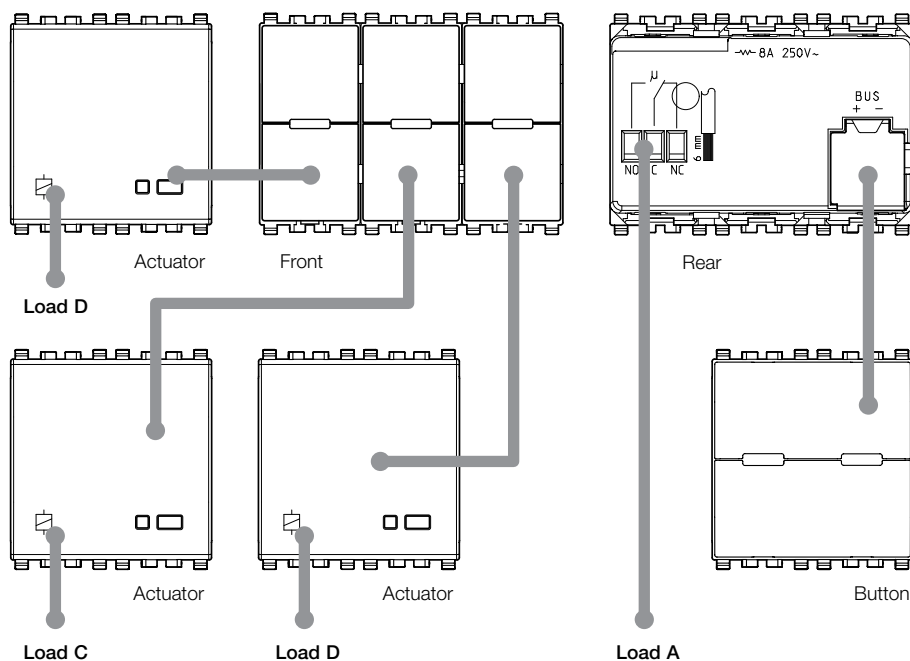
The diagram opposite shows the functional units of a control device with three simple push-buttons and an actuator (Eikon 20545 series; Idea 16985 series; Plana 14545 series).



Basic concepts

For example, during installation, the actuator could be used to control load A through the push-button of another device, the left push-button to control load B through an actuator, the middle button to control load C through a second actuator and the right button to control load D through a third actuator.

**Control appliance with three simple buttons and actuator
(Eikon 20545; Idea 16985; Plana 14545).**



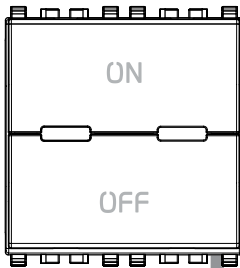
There are no limits on the use of the functional units of a physical device. When a load is to be controlled, it is necessary to provide one control device and one actuator connected to the load.

Basic concepts

- **Connection:** logic link between two functional units, which allows a function to be shared (for example: relay actuator and push-button).
- **Configuration:** operation that can be used to create the logic connection between various functional units (of various appliances).
- **Functional group (or Group):** set of functional units connected to each other logically, which perform a system function (for example: three different push-buttons that control one actuator, and therefore the same load).

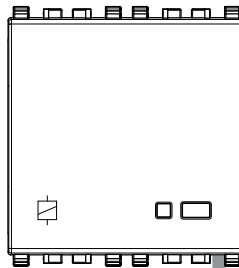
The devices that make up a functional group are connected to each other logically, not by conventional wiring.

Control device with two toggle switches.

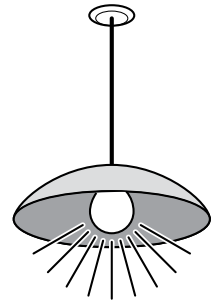


Eikon 20521
Idea 16961
Plana 14521

Actuator with relay output.



Eikon 20535
Idea 16975
Plana 14535



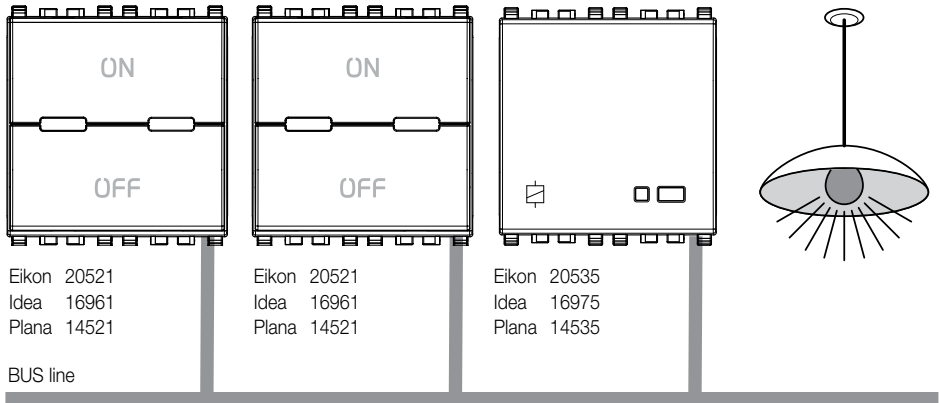
BUS line

IMPORTANT:

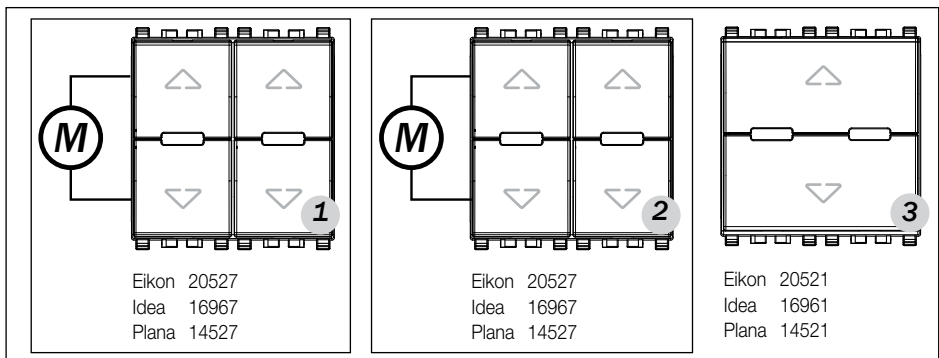
A Group must be made up only of homogeneous functional units: any one group cannot contain an actuator for rolling shutters and an actuator to control the lighting of a lamp.

Basic concepts

To control the switching on of a load from different points, it is sufficient to add more functional units; it is not necessary to modify the wiring.



- **Group depth:** number of groups to which one functional unit can belong to. Each functional unit can belong to a maximum of 4 different groups keeping the same function (for example "dimmer control").



Group **1** = device 1: left button functional unit + device 1 actuator

Group **2** = device 2: left button functional unit + device 2 actuator

Group **3** = device 3: button functional unit + device 1 and 2 actuator functional unit.

Actuators are of group depth 2 since they both belong to two groups.

Basic concepts

- **Scene:** a scene consists of a precise position of the actuators contained in one or more functional units, which can be requested at will from one of the menus of the control unit, or from a push-button configured for this purpose. For example, the rolling shutters could be lowered and a lamp lit in the room at the same time.
- **Parameters:** these can be set at the control unit, and are used to modify and customize the operation of each functional unit. For example, the relay actuator (Eikon 20535 series, Idea 16757-16757.B; Plana 14535 series), during configuration, behaves like a bistable relay. However, it can be configured like a monostable; in this case, the actuation time must also be defined.
- **System:** any set of devices controlled from the same comfort control unit.
- **Command:** functional unit from which commands are sent.
- **Actuator:** functional unit that performs the commands.

The system in general is made up of three main families of functional unit:

- Controls (for example, push-buttons and sensors)
- Actuators (for example, relays and regulators)
- Controllers (for example, the control unit)

Each system can consist of up to **128 devices** and will require one or two power supplies, depending on the number of devices and the length of the bus.

Using line couplers, a number of systems can be connected to each other, up to a maximum of 48; the line couplers allow only authorized messages to pass between one system and another.

System configuration starts with the creation of functional groups (it is better to think in terms of functional groups rather than individual devices), which is the only operation strictly necessary for the system to function. During the installation phase, the first operation is therefore to assume the functions that are to be made available. Subsequent operations, such as placing a number of units together in one scene or setting a number of automated functions, should be treated as a system customization or as the use of advanced functions.

After the units have been created, the control unit no longer has any part to play in the way they operate; the devices and related functional groups are “connected” to each other and do not require any intervention by the control unit (the control unit is still needed, however, for managing functions such as scenes, air conditioning, automation).

Installation topology

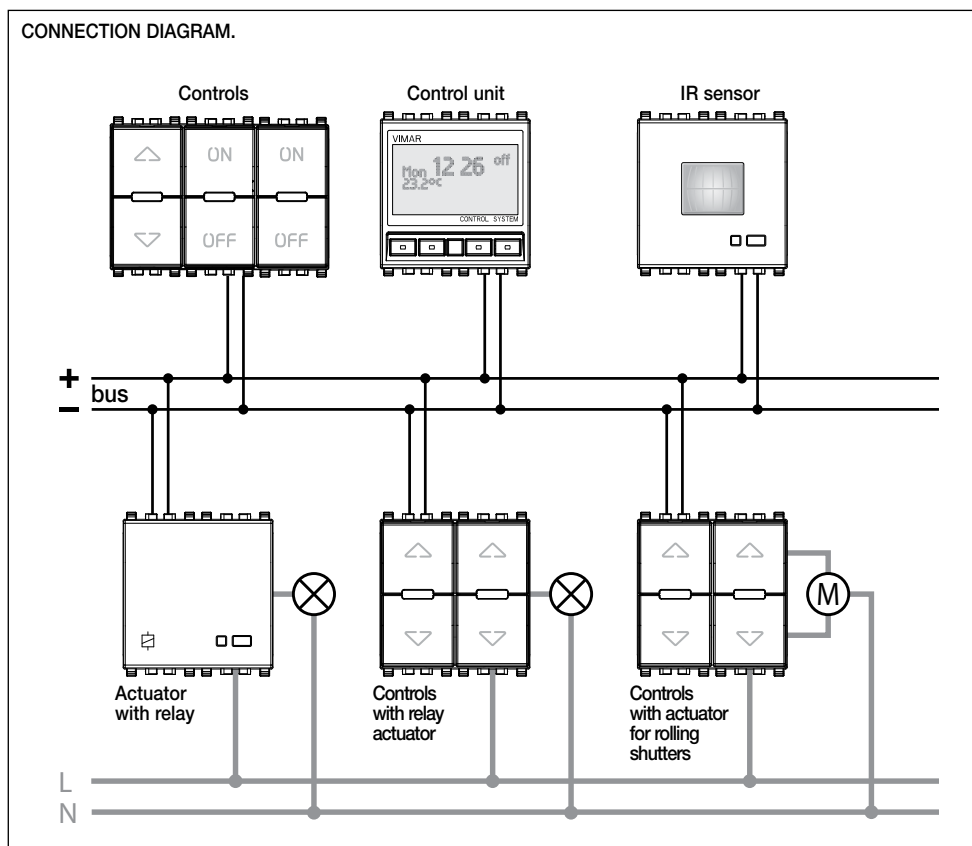
3. Installation topology.

The main characteristic of the By-me **system** is that all devices are connected to each other by a bus system cable (pair) that supplies the devices with the power and the signals carrying the digital control and monitoring data.

Note.

The connecting cable, Vimar item 01840, is the same as the one used in the burglar alarm bus system and Vimar bus entrance control system.

The system is configured through the control unit and the configuration buttons located on the devices.



Installation topology

3.1 System content.

Each system **must** always be made up of at least the following devices:

- one control unit;
- one power supply;
- control devices with or without actuators;
- actuators, such as relays or regulators for example;

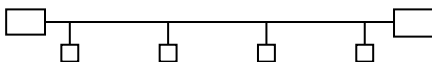
Each system can be controlled by a single control unit, and can consist of up to 128 devices, with a maximum of two power supplies depending on the number of devices installed and the length of the connecting cable (pair).

3.2 Bus system installation.

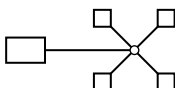
3.2.1 General rules and system topology.

- For the connections use a VIMAR 01840 sheathed and twisted pair (2x0.5 mm², nominal insulation voltage 300/500 V). The wire pair distributes both the power supply voltage (29 V d.c.) and the device control signals, and can be placed inside the same corrugated pipe that carries the electrical mains cables.
- A bus system must be supplied by 1 or 2 power supplies. A single power supply can supply a system with up to 64 devices, and 2 power supplies can supply up to 128 devices.
- If a system is being installed with only one power supply and the number of devices is close to the maximum number allowed, it is advisable to plan for a second power supply to allow for future extensions of the system.
- The devices do not have to be connected in any particular order, maintaining the polarities indicated on the terminals. Linear type connections (figure 3.2.1.1), star type connections (figure 3.2.1.2) or mixed connections (figure 3.2.1.3) are possible (the rectangle in the figures represents the power supply). The ideal configuration is the linear type with only one power supply in the middle of the system, or two power supplies at the ends of the bus cable.

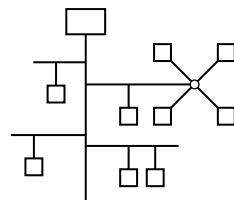
3.2.1.1



3.2.1.2



3.2.1.3



Installation topology

- The total current used by the various devices must not exceed the nominal current of the power supply (or supplies) installed.
- The voltage at all points on the bus, with all devices at rest, must never go below 23 V. Check particularly the points furthest away from the power supply and the sections of cable where the load is highest.
- The voltage at all points on the bus, when the most numerous group of shutter actuators is in operation, must never go below 22 V (check the points furthest away from the power supply). The delayed actuation function can be useful for reducing the number of shutter actuators in operation at the same time.
- It is essential to protect the system from the effects of lightning using surge protection devices (SPD).
As a general rule, the power supply side must be protected using a Class 1 SPD downstream of the power meter, a Class 2 SPD after the magneto-thermal protection device, and a Class 3 SPD at the power supply input. If a telephone communicator is present, it is advisable also to install an SPD on the telephone line.

3.2.2 System setup.

During the design phase, it is essential to arrange for a switchboard with sufficient capacity to hold:

- conventional devices, magneto-thermal protections, circuit-breakers, etc;
- 1 or 2 power supplies with capacity for nine EN 50022 modules;
- EN 50022 driver devices such as the load manager module, the communicator, the interfaces.
- surge protection devices to protect the installation.

It is advisable to use a dedicate cable trough for the corrugated tubes that carry the Vimar 01840 cable for the Bus line; however, the ones that carry the mains power cables can also be used.

3.2.2 Bus length: general rules.

- Maximum distance between power supply and device: 350 m.
- Maximum distance between devices: 700 m.
- Maximum length of the bus cable: 1000 m.
- Minimum distance between 2 power supplies: 40 m. It is important for the load to be well distributed between the two power supplies.

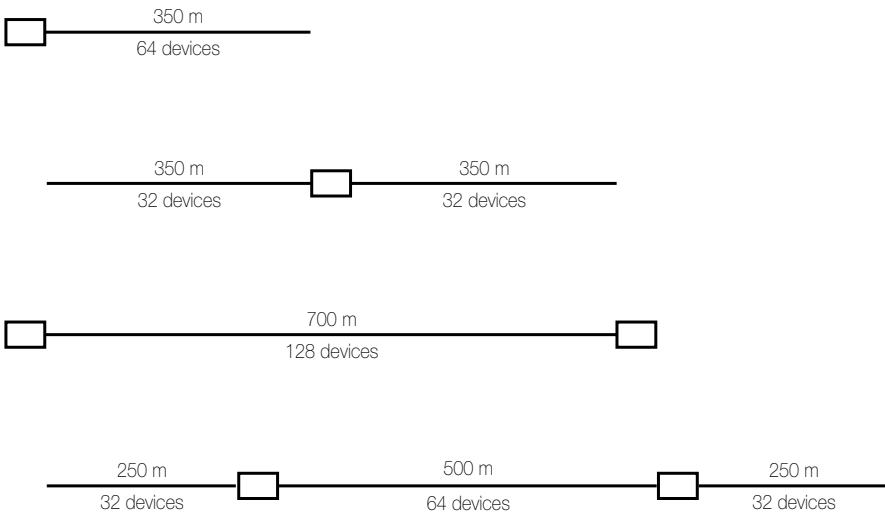
Installation topology

- Essential requirements:
 - the distance between two power supplies must never be less than 40 m;
 - the load must be well distributed between the two power supplies;
 - the two power supplies should be placed at the ends of the one of the circuits of the system that has the largest number of devices or branches.

In all cases, the optimum configuration is where the power supplies are placed as far as possible from each other; this also has a positive effect on the minimum voltage present on the bus.

3.2.4 Length of the BUS line.

The following is a list of the maximum lengths of the BUS line installed in systems with the linear configuration (the rectangle in the figure represents the power supply).



3.2.5 Bus installation: summary table.

- **Installation and system topology:**

- BUS line cable laid in dedicated cable troughs; can also be placed in the corrugated tubes that carry the mains power cable.
- Configurations allowed:
 - Linear configuration
 - Star configuration
 - Mixed configuration
- We recommend using branching boxes
- Type of cable that can be used: sheathed VIMAR 01840 twisted pair (2x0.5 mm², nominal insulation voltage 300/500 V)

- **Devices and distances**

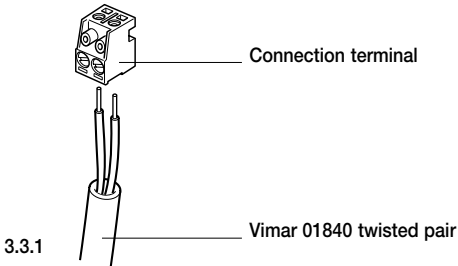
- Logic capacity (number of addresses): 128
- Physical capacity (number of devices): 64 devices on each power supply
- Maximum distance between power supply and last device: 350 m
- Maximum total length of the bus line: 1,000 m
- Maximum distance between two devices: 700 m
- Minimum distance between two power supplies: 40 m (loads must be balanced between the two power supplies)
- Optimum position of each power supply: at the centre of the BUS line
- Optimum position of two power supplies: at the ends of the BUS line
- Minimum voltage on the furthest device: 23 V

Installation topology

3.3 Putting a system into service.

For correct installation of the system, follow the procedure below:

1. Lay out the bus cable and connecting terminals, maintaining the correct polarities (figure 3.3.1).



2. Lay out the cable for the electrical connections of the actuators.
3. Carry out the wiring for the control unit, components and power supply (see the related instructions sheets).
4. Connect the power supply to the system.

3.4 Initial switch-on.

- When switched on for the first time, or after a reset of the control unit [see paragraph 4.3.9 Resetting the control unit, page 27], the system asks for the “Area” and “Line” (subsystem) numbers; this information is essential for identification in cases where a number of systems are installed; the possible values are from 1 to 3 for Area and from 0 to 15 for Line.
The order in which systems are created should start be started by setting the Area number to 1, selecting a Line number from the possible values, then going on to Area 2 and Area 3.
- When the Area and Line numbers have been set, the system asks you to select the type of application (Residential or Hotel/Services); this allows the units to be identified by different names.
- The control unit will then come on, displaying the day of the week and time.
- Press button D (figure 3.4.1)



3.4.1

Installation topology

- Press **Menu** button D (figure 4.3.2) and open one of the following menus:

Menu → Climate control

Scene

Event program

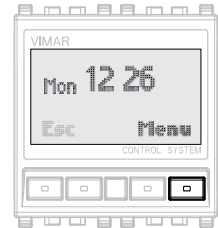
Load Manager

Settings

Configuration

Intr. System

Diagnostics



4.3.2

- Carry out the control unit Reset procedure:

Menu → **Configuration** → **Reset** → **Contr. reset** → **Confirm? Contr. reset** → **Yes**

The control unit performs a reset, then asks for the “Area” and “Line” numbers[see paragraph 3.4 “Initial switch-on”, page 14]

System number → [enter the system number] → **set**

- Create the units [see paragraph 4.3.1 “Creating a new unit”, page 18].
- The system is now ready to use.

If the preconfigured behaviour of the devices is not considered suitable, or to access the advanced functions of the system, the system can be personalized by carrying out one or more of the following operations:

- modify device behaviour [see paragraph 4.3.4 “Modifying the device parameters - page 24];
- create scenes [see Section 6 “Scenes” - page 40];
- aircon control [see Section 5 “Air-Conditioning Control” - page 31];
- load manager (if load manager module 01855 is available) [see Section 7 “Load manager” - page 44];
- automation [see Section 8 “Automated functions” - page 50].

Main configurations

4. Main configurations.

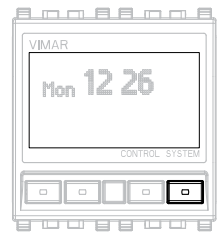
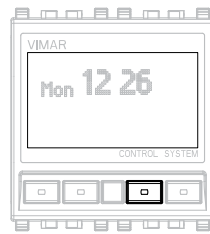
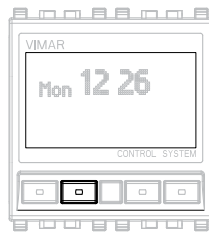
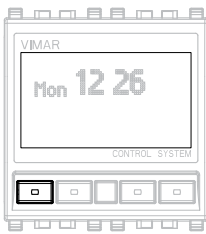
This section describes the configuration procedures and main settings of the system.

All steps can be carried out directly from the control unit menu, except the creation of units, which also requires an operation to be carried out on the individual devices.

The more advanced system functions are discussed in later sections of this manual.

4.1 Navigating through the control unit menus.

To navigate through the control unit menus, use the 4 buttons on the front, which have different meanings depending on the context and the menu currently selected.



BUTTON A

Esc exits the current menu and returns to the previous one;

End terminates an operation;

No rejects a proposed operation;

← move left when setting a program.

BUTTON B

▽ scroll downward on a list on the display, or decrease the value of a parameter being set;

→ move right when setting a program.

BUTTON C

△ scroll upward on a list on the display, or increases the value of a parameter being set;

BUTTON D

Set confirms a parameter that has been selected or set;

ok confirms a selection, closes the confirmation message following a completed operation;

Yes accepts a proposed operation.

Main configurations

4.2 Control unit main screen.

The main screen of the control unit has two possible display modes: **simple mode** and **air-conditioning zone mode**.

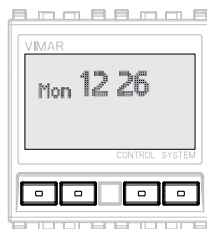
4.2.1 Simple mode.

The display shows the day and time (figure 4.2.1.1).

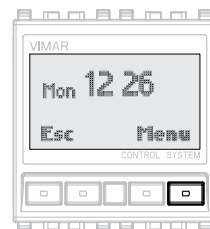
Press one of the four front buttons (figure 4.2.1.1) to display (figure 4.2.1.2):

Esc **Menu**

Press **Menu** button D (figure 4.2.1.2) to open the various menus of the control unit.



4.2.1.1



4.2.1.2

4.2.2 Temperature control mode [see paragraph "Selecting a heating area for display", page 33].

The display shows the day, time, ambient temperature, relay status (if the control unit zone is being monitored) (figure 4.2.2.1) and the aircon program.

- If the displayed aircon zone is in **automatic** mode or **off**, press one of the four buttons on the front (figure 4.2.2.1) to display (figure 4.2.2.2):

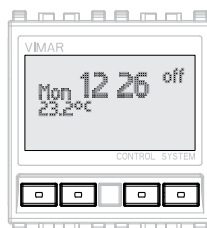
Esc **Menu**

- Alternatively, press one of the four front buttons to display (figure 4.2.2.3)

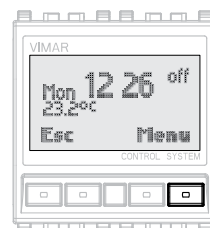
Esc ▽ ▴ **Menu**

Press **Menu** button D (figure 4.2.2.3) to access the various menus of the control unit.

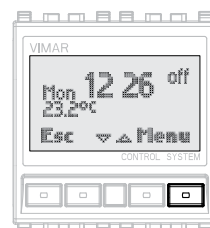
In certain menus, you can press button B ▽ or button C ▴ to modify the temperature set point, and then confirm with **ok** or cancel by selecting **Esc**.



4.2.2.1



4.2.2.2



4.2.2.3

Main configurations

4.3 Configuration menu.

4.3.1 Creating a new functional group.

As explained in Section 2 [Basic concepts, page 4], the functional groups (set of functional units that operate together) are basic elements of the system, so the first operation is to create them.

The procedure to be carried out for each new unit is as follows:

1. Create the new unit (this operation is performed at the control unit);
2. Add the functional units (this operation is carried out at the control unit);
3. Functional unit selection (this operation is carried out at each device).

4.3.1.1 Creating a new group.

Menu → Configuration → Groups → Grp:001 New group? *(the number inside square brackets represents the address of the displayed group; this information is needed for system control and configuration operations) → ok*

Name the group by selecting one of the names prompted from the preset list of names:

Group name → Ligh	→ set
Relay	→ set
Dimmer	→ set
Shutter	→ set
Socket	→ set
Climatic	→ set
Thermostat	→ set
Contacts	→ set
Technical all	→ set
Washing mach.	→ set
Refrigerator	→ set
Oven	→ set
Dishwasher	→ set

Enter a number from 1 to 15 → **set**

Enter the type of room by selecting a name from the present list of names, then press **set** to confirm.

balcony - bath - bedroom - cellar - child bedroom - corridor - dining room - dressing room - entrance - garage - garden - garret - greenhouse - ironing room - kitchen - lab - laundry - library - living room - mansard - media room - office - patio - porch - restaurant - sauna - stairs - storeroom - swimming pool - tavern - veranda - wedding room

Main configurations

Using the buttons Δ and ∇ , enter the area of application (a number from 1 to 7); this information is necessary for distinguishing rooms that have the same name, then press **set**.

Note.

All categories also provide an item with no name.

Confirm by pressing **ok**.

The system asks you to add devices to the functional group.

Device → Add → Add devices? → Yes → Automation
No IR sensor Intr.
Load Manager

- **Automation:** comfort system generic group; this item is selected in almost all cases (temperature, light, shutter control, etc.)
- **IR sensor Intr.:** used to register the IR sensor of the burglar alarm system via Vimar bus (Eikon 20485, Idea 16935–16935.B; Plana 14485) [see paragraph 9.3 “Passive infrared sensor (Eikon 20485, Idea 16935-19635.B; Plana 14485)”, page 65];
- **Load Manager:** dedicated group for load manager [see Section “Load manager”, - page 48]

After selecting, carry out the operations described in the next paragraph to select the functional units that are to belong to the group.

4.3.1.2 Functional unit selection.

Note.

For each device, how to select a functional unit is explained in the special instructions sheets that accompany the product.

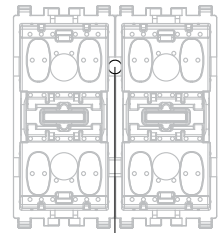
To configure the various functional units, start the procedure on the control unit as described in the previous paragraph, then set the desired devices and wait for the configuration to be completed before going on to the next one; to end the procedure, use the control unit:

1. Press the configuration button and, where necessary, the control button of the device to be included in the group;
2. The device indicates that configuration is in progress by means of a red Led, which goes off when configuration is complete;
3. The control unit indicates the functional unit that has just been configured;
4. Repeat the process for other functional units or press **End** to exit.

Main configurations

Example 1.

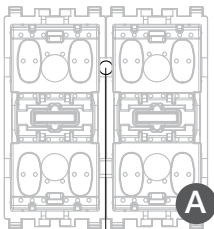
Functional units that can be selected by the control with 2 toggle switches with relay (Eikon 20526, Idea 16966-16966.B; Plana 14526).



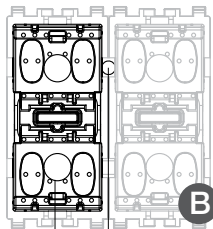
Configuration button

Functional unit selection.

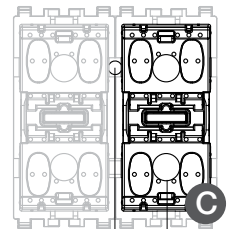
- To select the relay functional unit, press the configuration button (figure A);
- To select the left button functional unit, press the configuration button then the left button (figure B);
- To select the right button functional unit, press the configuration button then the right button (figure C).



Configuration button



Left button



Configuration button

Right button

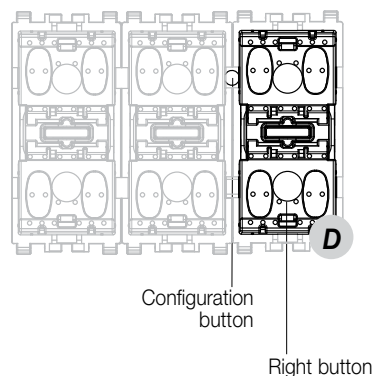
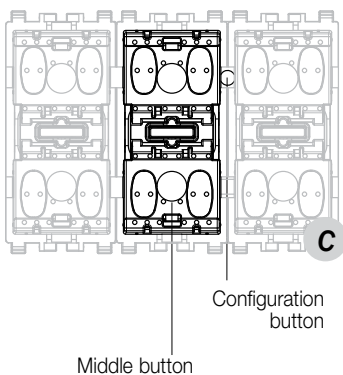
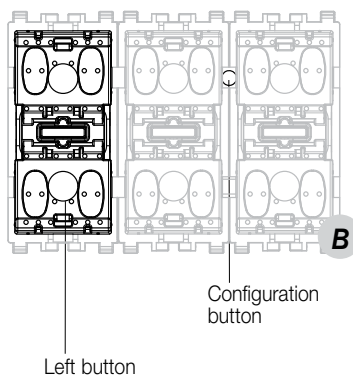
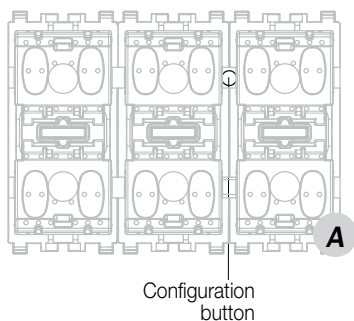
Main configurations

Example 2.

Functional units that can be selected by the control with 3 toggle switches with relay (Eikon 20546, Idea 16986, Plana 14546).

Functional unit selection.

- To select the relay functional unit, press the configuration button (figure A);
- To select the left button functional unit, press the configuration button then the left button (figure B);
- To select the middle button functional unit, press the configuration button then the middle button (figure C).
- To select the right button functional unit, press the configuration button then the right button (figure D).



Main configurations

4.3.1.3 Rules for creating groups.

1. **Groups must contain only homogeneous functional groups:** one group cannot contain one actuator for shutters and one actuator that controls a lamp.
2. **When creating the group, first register the actuators and then the control devices (buttons);** in this way, the control unit can recognize the type of group being created and set the correct parameters for the buttons.

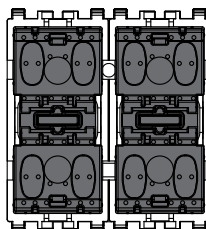
Main configurations

4.3.1.4 Note on built-in controls.

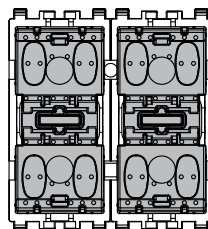
- The built-in controls must be installed with the bus terminal turned upwards (general rule for all built-in devices - figure 4.3.1.4.1).
- “Simple push-button” type controls are identified by the grey colour of the contact surface (figure 4.3.1.4.2); “Toggle switch” type controls are identified by a green colour (figure 4.3.1.4.3).
- The buttons for “toggle switch” devices are identified by symbols or by the plate at the top or bottom (figure 4.3.1.4.4); except for the neutral button, the buttons for the simple push-buttons have symbols or a plate at the bottom only (figure 4.3.1.4.5).
- The buttons for simple push-button controls have an installation side; when mounting the button, align the two slots inside the button with the slots on the lower side of the contact surface of the control (figure 4.3.1.4.2).
- The built-in control devices must be installed without buttons (these have to be attached only when the configuration of the system is complete). This is necessary in order to allow access to the configuration button (for the position of the configuration button, please refer to the instruction sheet for the device).
- Removing the button: using a small screwdriver, apply slight pressure and lever up the top part of the button (this has a small tab) from the body of the device (figure 4.3.1.4.6), then take out the button.
- Attaching the button: position the button in the button-holder and apply slight pressure (figure 4.3.1.4.7).



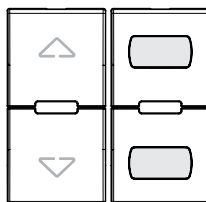
4.3.1.4.1



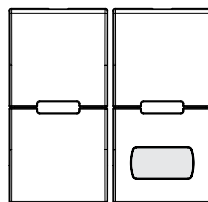
4.3.1.4.2



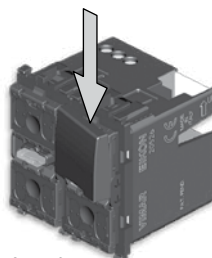
4.3.1.4.3



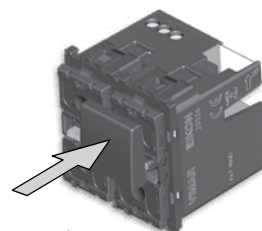
4.3.1.4.4



4.3.1.4.5



4.3.1.4.6



4.3.1.4.7

Main configurations

4.3.2 Add devices to a functional group.

Used to add new devices to an existing functional group.

Menu → Configuration → Group Management → Group: 001 → Device → Add → Add devices? → Yes

Configure the functional units as described in paragraph 4.3.1 [Creating a new functional group, page 18].

N.B.

If a user is to be controlled using infrared remote control 01840, it is necessary to configure the infrared receiver (Eikon 20516, Idea 16956-16956.B, Plana 14516) inside the group that contains the relay actuator (or regulator) connected to the load to be controlled (or regulated).

For example, by creating a group made up of a relay actuator (Eikon 20535, Idea 16795-16795.B, Plana 14535, EN 50022 01850 driver) and infrared receiver (Eikon 20516, Idea 16956-16956.B, Plana 14516) connected to a lamp, the lamp can be controlled using infrared remote control 01840.

The procedure for configuring the infrared receiver is described in the instruction sheet that accompanies the product.

4.3.3 Remove a functional unit from a group.

Used to remove functional units from a functional group.

Menu → Configuration → Group → Group: 001 → Device → Remove group → Set

Select the functional unit to be removed by scrolling through the list of units.

Remove? → Yes (*The control unit indicates when removal is complete*).

4.3.4 Modifying device parameters.

Device parameters can be modified in order to personalize and adapt the characteristics of the system to specific requirements.

Menu → Configuration → Group → Group: 001 → Device → Parameters

Scroll through the list of units and select the functional unit for which parameters are to be modified. The parameters that can be modified for each functional unit depend on the characteristics of the unit concerned.

Main configurations

4.3.5 Device parameters.

- **Functional unit - Left button**
Operation: toggle, only ON, only OFF, push-button (*it sends ON on pressing the button and OFF on releasing it*).
LED control: off, normal, reverse, always on, normal central LED, reverse central LED, central LED always on.
Default parameters: Op. - Toggle, LED manag. - normal
- **Functional unit - Middle button (only for single buttons with 3 modules)**
Operation: toggle, only ON, only OFF, push-button (*it sends ON on pressing the button and OFF on releasing it*).
LED control: off, normal, reverse, always on, normal central LED, reverse central LED, central LED always on.
Default parameters: Op. - Toggle, LED manag. - normal
- **Functional unit - Right button**
Operation: toggle, only ON, only OFF, push-button (*it sends ON on pressing the button and OFF on releasing it*).
LED control: off, normal, reverse, always on, normal central LED, reverse central LED, central LED always on.
Default parameters: Op. - Toggle, LED manag. - normal
- **Functional unit - Left Rocker button**
Operation: ON/OFF, dimmer switch, roll-up blind switch
LED control: off, normal, reverse, always on, normal central LED, reverse central LED, central LED always on.
Default parameters: Op. - on/off, LED manag. - normal
- **Functional unit - Middle Rocker button (only for toggle switches with 3 modules)**
Operation: ON/OFF, dimmer switch, roll-up blind switch
LED control: off, normal, reverse, always on, normal central LED, reverse central LED, central LED always on.
Default parameters: Op. - on/off, LED manag. - normal
- **Functional unit - Right Rocker button**
Operation: ON/OFF, dimmer switch, roll-up blind switch
LED control: off, normal, reverse, always on.
Default parameters: Op. - Toggle, LED manag. - normal
- **Functional unit - Relay**
Operation: one- or two-position stable
ON delay: from 0 to 200 s; then at intervals of one minute from 1 to 50 min.
OFF delay: from 0 to 200 s; then at intervals of one minute from 1 to 50 min.
Default parameters: Op. - two-position stable, ON Delay - 0, OFF Delay - 0.
- **Functional unit - dimmer**
Speed setting: low, medium, high.
Default parameters: Speed setting - medium
- **Command 10 V -**
Speed setting: low, medium, high.
Default parameters: Speed setting - medium
- **Contact interface (with 1 and 2 inputs)**
Input operation: normal, reversed, toggle (*opening or closing*).
Default parameters: Normal op.

Main configurations

- **Interface for conventional commands:**

Rocker operation: normal, reverse

Operation for push-buttons: toggle on up, toggle on down

LED control: off, on (it is enough for one of the two inputs to be active for the LED to come on).

Default parameters: Op. - Normal, LED manag. - On

- **Roll-up blind actuator:**

Off delay: adjustable from 0 to 250 s.

On delay from scenario: adjustable from 0 to 250 s.

On delay from switch: adjustable from 0 to 250 s.

Default parameters: Op. - Toggle, LED manag. - normal

- **Receiver for infrared remote control**

Operation for push-button: toggle, push-button (it sends ON on pressing the button and OFF on releasing it).

Rocker operation: on/off, dimmer switch, roll-up blind switch

LED control: off, on in reception, always on

Default parameters: Op. for Push-Button - Toggle, Op. for Push-Button - on/off, LED manag. - normal

- **Mini passive infrared detector, with dual technology and surface-mounting**

Brightness threshold: settable from 0 to 100 (when the setting is equal to 100, the detector operates in a situation of total darkness).





Default parameters: Brightness threshold - 100

- **Control device with three toggle switches and regulator actuator MASTER 20548, 16988, 14548**

- The regulators also control inductive response electronic transformers 40-200 VA 230 V~ 50 Hz (200 VA max for 2 transformers); do not connect more than 2 transformers.

- Not suitable for controlling motors (eg. fans, ventilators).

- If installing 2 regulators in a single box, the loads that can be controlled by each regulator must be reduced so that their total does not exceed the values indicated in the following table:

Loads that can be controlled	Characteristic of controllable transformer	20548 16988 14548 MASTER
	-	40 - 300 W
	-	40 - 300 VA
		40 - 200 VA

- The rated power level should never be exceeded.

- Overloading, power surges and short-circuits may permanently damage dimmers. Before installation check the circuit carefully and eliminate any of the above causes.

- Do not connect several dimmers in series between each other.

- The dimmer does not have a mechanical circuit breaker in the main circuit and so is not galvanically separated.

The circuit load should be considered always under voltage.

Main configurations

4.3.6 Rename a group.

Used to rename an existing group.

Menu → Configuration → Group → Group: 001 → Rename

- Name the group by selecting from the preset list of names [see paragraph 4.3.1 “Creating a new functional group”, page 18]
- Enter a number from 1 to 15 [see paragraph 4.3.1 “Creating a new functional group”, page 18] or confirm the existing value
- Enter the type of room by selecting from the preset list of names [see paragraph 4.3.1 “Creating a new functional group”, page 18] or confirm the existing value
- Enter the area of application (a number from 1 to 7); this information is necessary in order to distinguish between rooms that have the same name [see paragraph 4.3.1 “Creating a new functional group”, page 18] or confirm the existing value

When this procedure is complete, the Group menu **will be displayed: 001**. This is used to rename another group.

4.3.7 Removing a group.

Used to remove an existing functional group.

Menu → Configuration → Group → Group: 001 → Remove group → Remove?

The control unit removes the functional group, then indicates that the group has been removed.

4.3.8 Device identification.

If the configuration button is pressed during normal operation, the control unit displays the physical address.

4.3.9 Control unit reset.

Used to restore the control unit to the factory settings. All data stored in the device are lost.

Menu → Configuration → Reset → Contr. reset → Confirm? Contr. reset → Yes

The control unit resets itself, then asks for the Area and Line numbers, and Residential/Hotel.

Main configurations

4.3.10 Device reset.

Used to clear the memory of one or more devices.

Menu → Configuration → Reset → Single Reset → Push device button

Press and hold the configuration button of the devices to be reset; the red Led is lit (in some cases after a few seconds).

When the Led goes out, release the configuration button of the device, then press **End** on the control unit.

N.B.

When resetting control devices with two simple push-buttons and actuator (Eikon 20525, Idea 16965-16965.B, Plana 14525) and control devices with two toggle switches and actuator (Eikon 20526, Idea 16966-16966.B, Plana 14526), the relay actuator in the device is always associated with the left button on the device concerned.

4.3.11 Interfaces.

The **Interface Menus** are used to configure **Line coupler 01845 (called “Router” in the control unit)** and the internal communications interface between the BUS system and the 01848 telephone communicators.

- **Interface configuration.**

Menu → Configuration → Interfaces → Configure → Push device button

Press the configuration button on Line Coupler 01845 or the internal communications interface between the BUS system and the 01848 telephone communicators. The red Led lights up on the device. Completion of this operation is confirmed by a message on the control unit and by the red Led going out on the device.

- **Add group.**

**Menu → Configuration → Interfaces → Add group → Device:
Router
Interface**

Select the router or interface concerned, then scroll through the list of groups and select the desired group. When a group is added, the messages sent to that group are no longer blocked by these two devices.

Main configurations

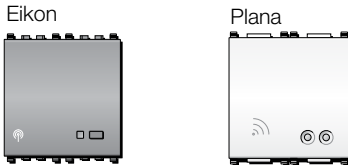
4.3.11.1 Managing BUS interface with EnOcean module

The BUS with EnOcean module radio interface allows using the devices of the radiofrequency system to extend coverage in places or accesses where it is not possible to add any cables and devices via BUS.

It is supplied in the following versions:

20508 : 2 Eikon modules

14508 : 2 Plana modules



The radio interface is combined with the following radio-frequency devices with the EnOcean module:

- 20505: flat control with 2 toggle buttons
- 01796: relay actuator with relay output

• Operation

The device communicates on the one hand via radio wave signals with the radio-frequency devices with the EnOcean module and, on the other hand, with the devices in the system communication bus.

The functions involve the automation operations such as controlling lights, roller shade control and scenario management.

The devices with the EnOcean module are completely integrated with the By-me devices: for example, it is possible to have a By-me push-button in an Automation group governing an EnOcean actuator or an EnOcean button governing a By-me actuator; the devices with the EnOcean module moreover also have a role in creating scenarios.

In a system it is possible to add 1 BUS interface with the EnOcean module and this can control at most:

- 15 control devices with toggle buttons 20505, that is 30 single buttons;
- 15 relay actuators 01796.

Operation of the controls with the EnOcean module is the same as for any By-me toggle control and it is therefore possible to:

- control a relay (on-off);
- control a dimmer (on-off and adjustment);
- control a roller shade (up-down and stop);
- control scenarios.

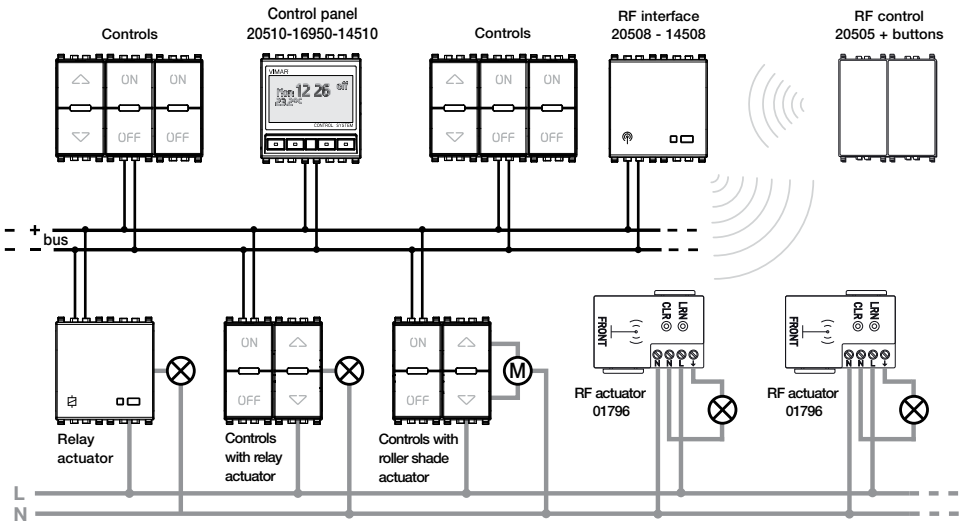
Important:

The relay actuator device with the EnOcean 01796 module can be added to at most 15 groups (or 15 actuators can be configured on different groups) and functions as a two-position stable relay (though it is not possible to specify the on/off delays).

Actuators with the EnOcean module join scenarios when the group to which they belong is associated with a scenario.

The control device 20505 can govern up to 4 different groups for each toggle button or 15 different controls (double) can be configured on one or more groups.

Main configurations



Example of connecting devices with EnOcean module integrated in the By-me automation system.

- **Interface configuration.**

An interface must always be associated with an automation group;

The first operation to be carried out therefore consists in creating the group:

Menu → Configuration → Group Management → select group → set name

The new group is saved in the database.

The second operation consists in associating the interface with the group:

Menu → Configuration → Group Management → select group → Device management → Add → Automated functions

Then press the configuration button in the interface to add it to the created group.

Warning: An interface can be added to one group only.

Note: For practical purposes it is not important in which group the interface 20508-14508 is configured; it is therefore recommended to configure it in one of the first automation groups for faster access to the menus.

Main configurations

- **Removing the interface.**

This option permits removing functional units from a functional group.

Menu → Setup → Configuration → Group Management → Select group → Device management → Remove

After entering the group, select the functional unit related to the interface to be removed by scrolling through the list of units and press **Remove**; the control panel displays:

Remove device? → YES

The control panel indicates when removal is complete; together with the interface, all the devices with the EnOcean module associated with it are removed from the database, and that is the button controls in the Automation groups, the button controls associated with the scenarios and the relay actuators.

Warning: To complete the procedure it is necessary to reset all the relay actuators 01796 (see the manual of the interface 20508-14508).

- **Interface diagnostics.**

This option permits checking the operation of the interfaces with the EnOcean module and managing their replacement.

Menu → Diagnostics → Device diagnostics

Press **Select**; the control panel initiates a scan procedure to check that all the configured devices are functioning correctly.

In case of error and subsequent interface replacement, besides the configuration information, also the related devices with the EnOcean module previously associated with it are restored.

- **Device configuration**

This procedure allows associating the interface with the EnOcean module with the radio toggle buttons (20505 + 20506 or 20505 +14506 and the radio relay actuator 01796.

Select the group where the BUS interface with the EnOcean module has been inserted.

Scroll through the list of devices to the desired interface, select it and enter **Device Parameters**; scroll through the list of parameters to **RF Devices** and select item **Device Management**.

Now the following options are displayed:

- **Add:** used to add a control or an RF actuator to an automation group.
- **Remove:** used to remove a control or an RF actuator from a group.
- **RSSI:** used to check the strength of reception of the **RF controls**.

Main configurations

Adding device:

On selecting the **Add** item you will need to select the automation group in which you want to include the RF device; you will then need to set the type by selecting either **Control** or **Actuator**.

The configuration procedure now depends on the type of control selected:

- **Adding button:** On the control panel, select the **Control** item and press the desired EnOcean button; by using a similar procedure you can configure a number of buttons in succession.
- **Adding Relay:** On the control unit, access the previously specified configuration menu and press the LRN button on the relay actuator with the EnOcean module; lastly press the interface configuration push-button to complete the procedure correctly.

The radio interface sends a message to the control panel that shows the information related to the device code and its description on the display. Then repeat the operation for each device that you want to add.

Pressing the **End** button ends the procedure and you go back to the previous menu.

Warning: for the RF button to perform the correct function within the group, it must be configured only after the actuator has been configured within the group.

For example, if you want to control a roller shade group using a button control with the EnOcean module, it is necessary, in this group, to configure first the roller shade actuator and then the control

Removing the device:

By selecting the **Remove** item it is possible to remove the single device with the EnOcean module from an interface:

Menu → Configuration → Group management → Select group → Device management → Param → Select RF interface → Device management → Remove → Select group

Now, after choosing between **Control** and **Actuator**, it will be possible to select the device to remove.

- **Control:** Press **OK** on the control panel.
- **Actuator:** Press the LRN push-button of the radio actuator to be removed **and afterwards press OK** on the control panel.

RSSI:

By selecting the **RSSI** item it is possible to have a percentage indication of the reception strength of the radio signal of the **controls** with respect to the interface with the EnOcean module. To do this it is sufficient to operate the desired control with the EnOcean module and the control panel will display the serial number of the control and the measured reception percentage.

WARNING: If the reception percentage is constantly below 25% it means that the transmission of the command might not be reliable. It is therefore recommended to evaluate whether it is possible to move the control or the interface so they are nearer to each other.

Obviously, in performing this operation it is necessary to take account of what other controls would be moved away from the interface with the EnOcean module.

Main configurations

- **Changing interface parameters**

Menu → Configuration → Group management → Select group → Device management → Param → Select RF interface

The parameter of the interface with the EnOcean module that can be set by users is the following:

- Interface LED blink mode:
 - Off = the green LED never lights up;
 - Normal = the green LED is off whereas it blinks when it receives an RF message;
 - Inverted = the green LED is on whereas it blinks when it receives an RF message;

- **Scenario management with toggle button control with EnOcean module**

The button control with the EnOcean 20505 module can be used in scenario management as an external button.

The procedure for associating the button with the desired scenario is as follows:

Scenarios → Select scenario → Change → Associate button → RF button

It is now possible to choose whether to associate the scenario with the “UP button” (pressing the top of the button) or the “DOWN button” (pressing the bottom of the button); lastly, on pressing the desired RF button (according to the “UP button” or “DOWN button” just selected) it is associated with the selected scenario.

- **Scenario management with relay actuator with EnOcean module**

The relay actuator with the EnOcean 01796 module is automatically involved in a scenario if the group to which it belongs is included in the scenario. Therefore no further configuration is needed to accomplish this functionality.

4.4 Settings menu.

Used to adjust the control unit clock, set an access password to prevent unauthorized persons accessing the control unit menus, select a national language for the menus (Italian or English), and adjust the contrast on the display.

4.4.1 Setting the clock.

Used to set the day of the week and adjust the clock (hours and minutes).

Menu → Settings → Clock → Set Day (set the day of the week using the buttons ∇ and Δ and confirm with **Set**) → **Set Hour** (set the time using the buttons ∇ and Δ , confirm with **Set**) → **Set Minute** (set the minutes using the buttons ∇ and Δ , confirm with **Set**).

Main configurations

4.4.2 Password management.

Activating the password prevents unauthorized persons accessing the control unit menus.

Menu → Settings → Password → Installer → Change
User Cancel

- **Installer:** used to carry out operations on the system.
- **User:** allows limited access to the system (access is disabled to the **Configuration** and **Diagnostics**) menus, and it is not possible to change the **Installer password**).
- **Change:** used to set a 4-digit password (*select each digit using the buttons ▽ and △ and confirm with **Set***).

If **Delete** is selected on an authorized password, confirmation is requested for password cancellation; press the **Yes** button to confirm the operation.

If the password has not been authorized, the control unit displays the message **Unauthorized password**.

Note.

*If the password is currently active, it must be entered before it can be changed or cancelled. These operations can also be performed on the **User password** by entering the **Installer password**.*

4.4.3 Language settings.

Used to set the national language in which the menus are displayed. The available languages are Italian and English.

Menu → Settings → Language → Italiano
English

The language currently active is indicated by the **★** character; select the desired language with the buttons ▽ and △ and confirm with **Set**; the control unit confirms the operation with

Italiano ★
set

or

English ★
set

4.4.4 Adjusting the contrast on the display.

The contrast can be adjusted on the display in order to improve the legibility.

Menu → Settings → Display → Contrast (*select the desired value using the buttons ▽ and △ and confirm with **Set***) → **Contrast set**

5. Air-conditioning control.

The **By-me** home automation system is used to manage air-conditioning programs (heating and ventilation) using the control unit, which also functions as a timer and thermostat. The control unit can also control up to 3 thermostats in Timer mode (Eikon 20514, Idea 16954-16954.B; Plana 14514), and can manage programs for up to 4 zones.

Note.

- *The functions described below are valid both for when the air-conditioning is controlled from the control unit and for when thermostats are used.*
- *For each operation to be carried out, the control unit asks for the zone to which the operation is applied.*
- *The following examples all select the control unit zone.*

Timer-thermostat functions:

- Automatic operation: 2 separate temperature programs (one for heating and one for air-conditioning) for each of the 4 controlled zones.
- Manual operation: temperature value adjustable from 5.0 °C to 30.0 °C (heating) and from 10 °C to 35 °C (air-conditioning).
- Timed manual operation.
- Reduction: temperature value adjustable from 5.0 °C to 30.0 °C (heating) and from 10 °C to 35 °C (air-conditioning).
- Timed reduction.
- Antifreeze (temperature value adjustable from 4.0 °C to 15.0 °C).
- Timed Off.
- Off.

5.1 General settings.

This paragraph describes the procedures for setting parameters that are modified only occasionally.

5.1.1 Normal or protected operation.

The thermostats (Eikon 20514, Idea 16954-16954.B; Plana 14514) can be used for local control (in each zone). If the operating mode is set to “protected”, thermostat control is limited to switching off the system and setting the set-point within a pre-defined time, in order to prevent any unauthorized operations.

Air-conditioning control

Menu → Climate control → Settings → Controller Zone

Zone 2

Zone 3

Zone 4

Select the zone to be protected.

Normal/protect → Zone (selected)

Normal

Protected

Set the desired operating mode; the control unit displays a message confirming that the operation has been completed.

N.B.

When changing from "Normal" to "Protected" mode and vice versa, the operating mode changes automatically to OFF.

5.1.2. Type of system.

The thermostats for controlling the fan coils (Eikon 20513, Idea 16953, Plana 15413) are used to manage the fan coils via the temperature control system.

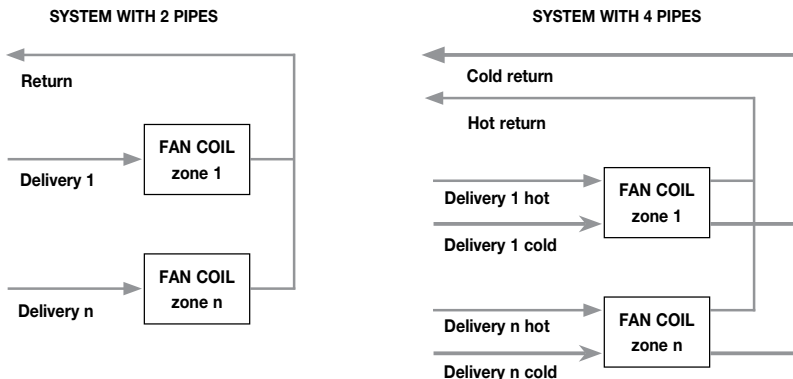
These climate control devices need a control system to govern the speed of the fan and the opening of the valves for hot water (heating) or cold water (air-conditioning) circulation.

With just one type of climate control (heating or air-conditioning), the plumbing system is composed of two pipes, one for delivery and one for return.

With two types of climate control (heating and air-conditioning), the plumbing system is composed of four pipes, one for delivery and one for return for each function.

The main circulation pump/valve must be controlled with the actuator 01850.2 and this must be associated with all the temperature zones (that is it must be configured in all the climate control groups).

On creating the first group the operating mode must be set as circulation pump (it suffices to do this only on the first climate control group created).



Air-conditioning control

Relay actuator operating mode for a 2-pipe system.

- For each temperature zone, install art. 01851.2 using outputs 1, 2 and 3 to control the fan coil, and output 4 for the valve.
- For the main circulation pump/valve, install art.01850.2 selecting mode "P.Circ. (Hot)".

Relay actuator operating mode for a 4-pipe system.

- For each temperature zone, install art. 01851.2 using outputs 1, 2 and 3 to control the fan coil, and output 4 for the "hot" valve; then install art. 01850.2 and use its output for the "cold". valve.
 - For the main circulation pump/valve of the "hot" delivery use art.01850.2 selecting mode "P.Circ. (Hot)".
 - For the main circulation pump/valve of the "cold" delivery use art.01850.2 selecting mode "P.Circ. (Cold)".
- If the temperature zone is associated with a thermostat 20513,16953 or 14513, the control panel automatically suggests the parameter setting that permits selecting the type of system with two or four pipes.

Supposing that the temperature zone has been called "Thermostat 01":

Climate control → Air-con zone settings → Thermostat 01 → Type of installation → Change

Then set the desired type of system using buttons ▲ ▼ and confirm with **Set**; at the end of the operation press the **Save** button last.

The control panel confirms the operation performed and goes back to display the registered temperature zones.

5.1.3 Heating or air-conditioning mode.

Used to set the operating mode of the system and select, for each zone, "Heating" mode for the winter period or "Air conditioning" mode for the summer period.

Menu → Climate control → Settings → Controller Zone

Zone 2
Zone 3
Zone 4

Select the desired zone.

Heat/Air Cond. → Zone (selected)

Heating

Air conditioning

Set the desired operating mode; the control unit displays a message confirming that the operation has been completed.

N.B.

When changing from "Heating" to "Air-conditioning" mode and vice versa, the operating mode changes automatically to OFF.

Air-conditioning control

5.1.4 Temperature differential.

Used to set the temperature differential of the system, and personalize it for each zone.

The temperature differential is the difference between the set temperature value and the temperature at which the system is actually switched on or off. By adjusting the temperature differential, the system can be prevented from continually switching on or off; systems with high thermal inertia (for example, systems with cast iron radiators) require a low temperature differential value, and systems with low thermal inertia (for example, systems with fan coil units) require a high value.

Example.

If the ambient temperature is set to 20 °C and the temperature differential is set to 0.3 °C, the system will come on when the ambient temperature falls to 19.7 °C and will go off when it reaches 20.3 °C (in Heating mode).

Menu → Climate control → Settings → Controller Zone

Zone 2

Zone 3

Zone 4

Select the zone to be set.

Hysteresis → Zone (selected)

Hysteresis

0.1 °C

Set the desired value for the temperature differential; the control unit displays a message confirming that the operation has been completed. The temperature differential can be set to a value between 0.1 °C and 1.0 °C.

5.1.5 Select temperature zone to be displayed.

Used to set the zone to be displayed on the control unit.

Menu → Climate control → Settings → Controller Zone

Zone 2

Zone 3

Zone 4

Select the zone to be displayed.

Zone monitor → Set

The control unit displays a message confirming that the operation has been completed.

Air-conditioning control

5.2 Operating modes.

This section describes the system operating modes that can be selected: Off, Timed Off, Antifreeze, Reduction, Timed Reduction, Manual, Timed Manual, Automatic.

Note.

If a Timed mode is selected, the control unit stores the previous mode and returns to this mode after the set time has elapsed.

From **Automatic** mode, it is possible to switch to timed **Manual**, **Reduction**, **Off** modes.

From **Manual** mode, it is possible to change to timed **Reduction**, **Off** mode.

Menu → Climate control → Operation → Controller Zone

Zone 2

Zone 3

Zone 4

Select the desired zone, then set the operating mode by selecting from the following:

- **Off:** Used to switch off the system;
- **Timed Off:** used to switch off the system for the desired period;
- **Antifreeze:** used to set a minimum temperature level in order to prevent damage to the pipes and so that the temperature will not go below a safe level;
- **Reduction:** (night reduction/energy saving), used to set a lower temperature (heating) or higher temperature (air-conditioning) than the one in the automatic temperature control program, by selecting a value between 5 °C and 30 °C (heating) and between 10 °C and 35 °C (air-conditioning);
- **Timed reduct:** used to set the reduced temperature for the desired period;
- **Manual:** used to switch the system on or off manually; if the zone has been placed in protected mode, the control unit asks for a "Range SetPoint" value, i.e. the number of degrees by which the temperature can vary from the set value;
- **TIMED MAN:** used to set manual mode for the desired period; if the zone has been placed in protected mode, the control unit asks for the **Range SetPoint** value, i.e. the number of degrees by which the temperature can vary from the set value;
- **AUTO:** used to set the temperature according to a pre-selected program in memory [see paragraph 5.4 "Programming" – page 41]

Air-conditioning control

5.2.1 Forced switch-off.

In certain situations, it may be necessary to force the air-conditioning system to switch off (for example, if the windows are opened).

To activate this function, an attachment interface is required (Eikon 20515, Idea 16955-16955.B; Plana 14515,) registered in the same group as the thermostat and the relay. If the system is forced to OFF, the thermostat ignores the temperature values transmitted by the control unit.

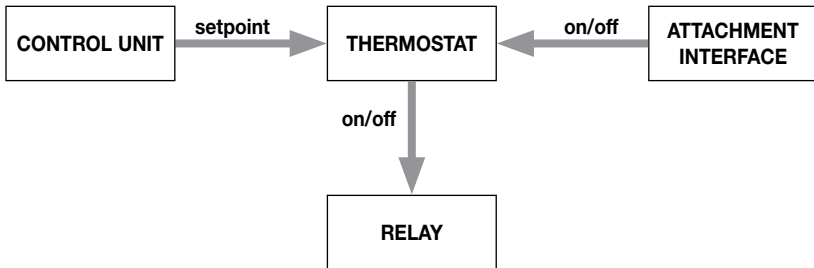


Figura 5.2.1.1: termostato con interfaccia contatti per forzatura in OFF del controllo clima

If the air-conditioning zone is controlled directly by the control unit, the attachment interface must be configured only after associating the zone with the group in which the relay actuator is located.

Menu → Climate control → Controller zone → Control Unit Zones → Group assign.

5.3 Zone management.

This section describes the modes for managing the 4 air-conditioning zones. Select the desired zone.

Menu → Climate control → Zone managem. → Controller Zone

Zone 2

Zone 3

Zone 4

5.3.1 Zone activation.

Used to control the zone concerned from the control unit.

Enable zone

5.3.2 Deactivate zones.

Used to cancel control of the zone concerned from the control unit.

Disable zone

Air-conditioning control

5.3.3 Associated group.

Used to define the 4 air-conditioning zones to be controlled, by selecting the related groups.

For the zone controlled from the control unit:

- First of all, a new group has to be created (the name of which will be **Climate control** or **Thermostat**) following the procedure described in paragraph 4.3.1.1 “Creating a new group” on page 18.
- In the group that has just been created, configure the relay actuator for the air-conditioning zone to be controlled; the configuration procedure is described in paragraph 4.3.1.2 “Functional unit selection” on page 19 (if the control relay block with two buttons is used) or on the instruction sheet the accompanies the product.
- Select the group just created (which contains the relay for the air-conditioning zone to be controlled) for the zone to be controlled from the control unit

To enable the control of air-conditioning zones 2-3-4, after following the group association and zone activation procedure, it is necessary to send a control mode command from the control unit (for example, Manual control).

Associate group

N.B.

For the other 3 zones, select the groups to which the associated thermostats and related relays belong; if a group not containing a thermostat is selected, the control unit displays an error message.

5.4 Programming.

This section describes the procedures for setting personalized air-conditioning programs for the 4 zones.

5.4.1 Zone selection.

The **By-me** system can be used to create personalized programs for automatic air-conditioning control. Personalizing consists in setting a temperature level - which can be selected from three different values (T1, T2 and T3) - every 20 minutes.

Select the zone to be programmed.

Menu → Climate control → Programming → Controller Zone

Zone 2
Zone 3
Zone 4

Select the program to be created.

Modify → Heating → Set
Air Cond.

Select the day to be modified.

Modify
Monday → ok

Air-conditioning control

Select one of the following items:

Modify day

New

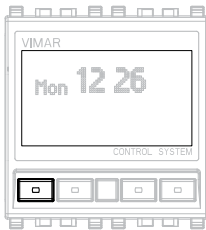
Copy previous

Copy day

- **Modify day:** used to modify the daily program previously stored for the selected day.

Important!

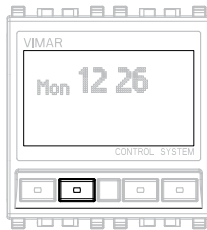
The functions of the buttons on the control unit change according to the state of the program being displayed.



BUTTON A

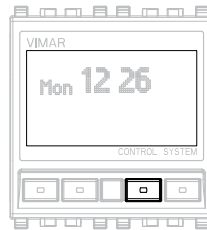
Esc exit the menu (at the start of the program only);

← move left.



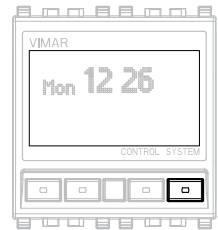
BUTTON B

→ move right.



BUTTON C

△ select the temperature level.



BUTTON D

Set sets the selected temperature level;

ok confirms the program created (only at the end of the program).

Modify the program by selecting the time slot at which to change the temperature level (buttons ← and →), set the desired temperature level from the three available (button △), then confirm with the **Set** button. Repeat the procedure for all time slots to be changed, then go to time slot **23:40-24:00** and press **ok**. Save the new setting by pressing **Yes**.

- **New:** used to modify the daily program previously stored by starting with a new program. Select the new time slot (buttons ← and →), select the desired temperature level from the three available (button △), then confirm with the **Set** button. Repeat the procedure for all time slots to be modified, up to time slot **23:40-24:00**; set the temperature level, then press **ok**. Save the new setting by pressing **Yes**.
- **Copy previous:** used to copy the previous day's program, and assign it to the day being set.

Copy previous → Copy?

Sun > Mon (or Mon > Tues, Tues > Wed, etc.)

Press **Yes**; the control unit displays a confirmation message.

Air-conditioning control

- **Copy day:** used to copy the program from one of the days previously set, and copy it to the day being set.

Copy day → Storing...
Mon > Thur

Select the day of the week from which to copy the program, using the buttons Δ and ∇ . Press **Yes**; the control unit displays a confirmation message.

5.4.2 Temperature level settings.

Used to display and/or modify the value of temperature levels T1, T2, T3, for both the heating and air-conditioning programs.

Menu → Climate control → Programming → Controller Zone

Zone 2
Zone 3
Zone 4

Select the zone to be programmed.

T levels → Heating
Air-condit.

Select the program (Heating or Air-conditioning) for which the temperature levels are to be modified. Select the temperature level to be modified.

Using the buttons Δ and ∇ , set the desired temperature value as described below:

- T1 from 5.0 °C to the value of T2
- T2 from the value of T1 to the value of T3
- T3 from the value of T2 to 30 °C

Confirm the setting with **Set**.

5.5 Restoring initial conditions.

Operating faults, repairs or other technical reasons may require the control unit to be reset, thus cancelling all temperature programs and restoring the factory settings.

Menu → Climate control → Reset → Set → Reset clima → Yes → Storing → Reset clima done → ok

Scenes

6. Scenes.

A scene is made up of a set of events that can be called at any time by means of a single command, for example to switch on the lights in a living room and lower the shutters at the same time.

6.1 Creating a scene.

The procedures for creating a scene are performed using the special menus available on the control unit; they involve the use of a selected number of functional groups (which must be indicated when creating the scene) and their related functional units.

The procedure for creating a new scene is as follows:

1. Select the functional groups involved (this is done at the control unit);
2. Set the users (i.e. actuators) of the groups concerned in the desired state (load ON, load OFF, load dimmed, shutter up, shutter down, etc.). This operation must be carried out directly on the actuators and related controls;
3. Store the scene in memory (this is done at the control unit);
4. Rename the scene (this is done at the control unit).

Note.

The order in which steps 1 and 2 are carried out is not important; simply remember that the scene will store the status of all the actuators in the groups involved.

Note.

The control interface does not control and is not controlled by any of the scenes. Scenes only control the actuators in functional groups, and control interfaces are devices with inputs only.

Procedure for creating a scene.

Open the Scenes menu

**Menu → Scene → Scene: 01 → Name of scene
New scene?**

Enter the name of the scene using the buttons Δ and ∇ to select the letters, and confirm each letter with **Set**. If the name has fewer letters than the allowed minimum, press **Set** until the message **ok** appears. Confirm, then select **Normal** or **Reserved**.

Important.

- Select **Normal** if the scene contains functional groups belonging to one system only
 - Select **Reserved only** if the scene contains functional groups belonging to different systems. In this case, the “Create Scene” operation must be performed on all the systems and the same Reserved scene must be selected on each of them.
- If **Normal** is selected, the procedure is as follows:

Normal → Modify → Learn

If **Learn** is selected, the control unit displays the list of groups present. Scroll through the list using the buttons Δ and ∇ and select by pressing the **Mod** button; the selected groups are marked by a **★** character. Press **End** to complete the operation.

Store the settings by pressing **Yes**.

Using the buttons on the groups involved in the scene, set the users by placing them in the desired state (ON or OFF, shutter raised or lowered, thermostat ON, etc.); during this phase, the green Led of the devices belonging to the functional groups flash so that they can be identified clearly.

Press the **ok** button on the control unit to confirm the operation.

- If **Reserved** is selected, the procedure is similar:

Reserved → Modify → Learn

When **Learn** is selected, the control unit displays the list of groups present. Scroll through the list using the buttons Δ and ∇ , and select by pressing the **Mod** button; the selected groups are marked with the **★** character. Press **End** to complete the operation.

Store the settings by pressing **Yes**.

Using the buttons of the groups involved in the scene, set the users by placing them in the desired state (ON or OFF, shutter raised or lowered, thermostat ON, etc.); during this phase, the green Led of the devices belonging to the functional groups flash so that they can be identified clearly.

Press the **ok** button on the control unit to confirm the operation.

Example.

We want to create a scene involving a number of functional groups in two different systems (example: system 1 with Area = 1 and Line = 1, System 2 with Area = 1 and Line = 2). Follow the procedures described above to create two separate scenes for the two systems, taking account of the constraints listed below:

- the scenes must have the same number;
- the two scenes must be defined as **Reserved**

Scenes

6.2 Activating a scene.

When a scene is activated, it retrieves the states stored in memory for all the actuators in the functional groups involved; the operation can be performed at the control unit, or through a control device.

6.2.1 Activating by a control unit.

If the scene is activated from the control unit, the procedure is as follows:

Menu → Scenes → Scene: 01 → Enable → Scene: 01
Cinema Cinema
New scene? Enabled

6.2.2 Activation through a button control.

- As well as from the control unit, a scene can be activated from an appropriately configured control device, **which must never belong to any group and which must never be configured from the control unit**. The control devices that can be used are:
 - simple push-button control: can be associated with one scene only;
 - toggle switch control: can be associated with two scenes, one for the up position and one for the down position; if it is associated with one scene only, the unused position can be activated only for controlling a new scene, and not for any other functions (for example, on/off).

Menu → Scenes → Scene: 01 → Modify → Link button → Push confirmy button of device
Cinema
New scene?

On the control device to be used for activating the scene, press the configuration button and the button to be associated.

If a push-button control is being configured, the control unit confirms the operation; if a toggle switch control is being configured, it is necessary to indicate which button is to be associated with the scene (use the buttons \triangle and ∇ to select, press **ok** to confirm).

Link to: → Busy → Link clone

Button up

Button down

- A scene can also be activated using infrared remote control 01849 with an infrared receiver (Eikon 20516, Idea 16956-16956.B; Plana 14516) suitably configured; the procedure is as follows:

Menu → Scenes → Scene: 01 → Modify → Link button → Push confir. button of device
Cinema
New scene?

Press the configuration button on the infrared receiver; this allows two buttons on the remote control to be associated with each functional unit of the device, and the remote control can then be used to select the functional unit that will activate the scene; finally, associate the desired button on the remote control. The same procedure can now be used to associate the other button on the remote control (the one beside the first) with the same functional unit, in order to activate a different scene.

If you attempt to configure a different device, the control unit displays an error message:

ERROR!!
Invalid
device

6.3 Renaming a scene.

A scene can be renamed and given a new name that can have up to 15 characters.

Menu → Scenes → Scene: 01 → Modify → Rename → Scene name
Cinema
New scene?

Change the name of the scene using the buttons Δ and ∇ and **Set** to select the characters. When the last character has been entered, press **ok** to confirm the operation.

6.4 Cancelling a scene.

To cancel a scene, follow the procedure below:

Menu → Scenes → Scene: 01 → Modify → Erase → Erase?
Cinema **Scene: 01**
New scene? **Cinema**

Press **ok** to confirm cancellation of the scene.

6.5 Remote access to scenes.

The menu can be used to enable remote activation of the desired scenes through a communications interface and telephone communicator. To do this, select the desired scene and then, in the remote access menu, select **Enable**.

Menu → Scenes → Scene: 01 → Modify → Remote Ctrl → enable
disable *

It is then necessary to configure telephone communicator 01941 as described in the instructions manual for this device, in the "General configuration" section.

Load Manager

7. Load Manager.

The **By-me** home automation system can be used to monitor the amount of mains power being consumed, and so prevent the magneto-thermal circuit-breaker from being tripped due to overload, by disconnecting the controlled loads if necessary.

To monitor the amount of power being consumed, it is necessary to install load manager module 01855, which is managed (like the other system devices) by the control unit.

Load Manager module 01855 can restore disconnected users automatically, as soon as the total consumption of the system returns to a level below that available by contract.

7.1 Functionality.

Load Manager module 01855 can monitor up to 8 groups, which supply the same number of loads, and can have 4 different settings:

- **Auto OFF-ON:** automatic load connection or disconnection depending on the amount of power consumed;
- **Auto OFF Man ON:** automatic load disconnection, followed by manual connection;
- **Always ON:** load always connected irrespective of the power consumed.
- **Always OFF:** load always disconnected irrespective of the power consumed;

One of the 4 settings listed above can be selected for each group, irrespective of the settings of the other groups.

Each group can be associated with a toggle switch, which can be used to force the setting to **Always ON** (by pressing **ON** on the button); the override condition is indicated by the Led on the button, which remains lit continuously. If the **OFF** button is pressed, the load manager returns to the condition set by the control unit.

When in "Auto OFF Man ON" mode, if the load manager module has been tripped, the relay can be reactivated as follows:

- by operating the toggle switch belonging to the group (if present);
- from the control unit, by resetting the desired load manager option [see paragraph "Load management"].

7.1.1 Time slots.

The system Load Manager function **By-me** can be used to manage loads during certain times of the day, i.e. to set the time slots during which one or more of the 8 groups dedicated to load manager will be activated or switched off. To do this, it is necessary to create a special weekly timetable [see paragraph "Example applications", page 60], which indicates the times in the different days of the week at which loads must be set to **Always OFF** and control will be of the type set in the control unit (example **Auto OFF - ON**). The weekly timetable must not contain any input groups; one or two groups in the

load manager must be selected as the program output.

Note.

- If the **Always ON** state is set using a push-button, the timetable is disabled until a new state is selected (using the push-button or by adjusting the device parameters at the control unit).
- The timetable is not disabled if the **Always ON** state is set at the control unit; in this case, the program must be disabled through the programming menu if necessary [see Section “Automated functions”, page 54].

7.1.2 Selecting the loads to be controlled.

Important!

When selecting the loads to be monitored, pay special attention to electrical appliances that have to be continuously connected to the power supply (refrigerators, freezers, etc.); the power outlets for these appliances are not monitored.

7.2 Power management.

The **Power Management** function is used to control the level of power consumption, by setting up to two maximum consumption thresholds, with a validity period for the second threshold.

For systems with a “conventional” electricity meter, it is enough to set a value for the first threshold and leave the validity period of the second threshold at zero. For systems with an electronic meter (for example, Enel in Italy), both thresholds can be set in order to control the loads in the same way as the meter does. In the case of an electronic meter with an Enel domestic contract, set the parameters (referring to the values stated in the contract) as shown in the following example:

- nominal contract power: 3 kW; a level of power 10% higher than the nominal contract power can be consumed for an unlimited period (3.3 kW in this case);
- maximum power usable for a limited period: 4 kW;
- maximum period for which maximum power can be used: 3 hours.

The above information can be used to decide the values to be set in the **By-me** control unit:

- first threshold: 3.3 kW;
- second threshold at the maximum power value: 4 kW;
- validity period for the second threshold: 1.5 hours (half of the contract value).

Note.

- The threshold values must differ from each other by at least 20%.
- If the meter is electronic, the thresholds are set at 110% and 130% of the contract value (these values must always be confirmed with the power provider).

Load Manager

Important!

If in doubt, check the values by contacting the customer assistance service of the power provider.

7.2.1 Displaying the level of power consumed.

The control unit can display the amount of power consumed by the system, at any time.

Menu → Load Manager → Power Manager → Show

Press **ok** to display the power consumed.

7.2.2 Setting the power consumption control.

To set the thresholds for controlling the power consumed, follow the procedure below:

**Menu → Load Manager → Power Manager → Set threshold1
Set threshold2**

Select the threshold to be set (**threshold1** o **threshold2**), then press **ok**.

- **Threshold 1**: set the desired threshold level using the buttons Δ and ∇ . Complete the operation by pressing the **Set** button; the control unit confirms that the operation has been completed.
- **Threshold 2**: set the desired threshold level using the buttons Δ and ∇ . Complete the operation by pressing the **Set** button; the control unit confirms that the operation has been completed.

Important!

When setting threshold2, it is also necessary to set the period for which the threshold applies.

Menu → Load Manager → Power Manager → Thresh. time

Set the desired time value, then press **Set**; the control unit confirms that the operation has been completed.

7.3 Load Manager.

Each group can consist of one or more relays that control the power outlets that supply particular electrical appliances (oven, washing machine, stereo, etc.). Each group can be assigned a priority, which deter-

Load Manager

mines the order in which appliances are disconnected once the power threshold has been exceeded. Each group can also contain a toggle switch, which can be used to force the group relay(s) to ON, irrespective of the priority set in the load conditions.

The load manager groups must be created as described in paragraph 4.3.1 “Creating a new functional group - page 18” selecting **Load Manager instead of Automated functions**. Groups must be created by including the desired relays, and load manager module 01855, which must be selected for each group by pressing the configuration button and the toggle switch if necessary.

N.B.

*In the **Load Manager** group, it is essential to configure load manager module 01855 in order to allow display on the control unit (by default, the control unit displays **Load Manager → Group Manager → No group present**).*

Appliances such as refrigerators or freezers, which need to be powered continuously, must be connected to uncontrolled power outlets.

For other devices, set a priority value of 1 for the more important loads (these will be disconnected last), and higher priority number for the loads to be disconnected first.

Example: **Configuration → Group → New group → Oven → Device → Add → Load Manager**

Press the configuration buttons for load manager module 01855, for the relay actuator that controls the oven, and add an override button if necessary.

7.3.1 Priority settings.

To set or modify the priority value of a group, follow the procedure below:

Menu → Load Manager → Group Manager

Scroll through the list of groups (if present) and their priorities using the buttons Δ and ∇ . After identifying the group concerned, press the **Mod** button.

Set the priority value using the buttons Δ and ∇ , then press **Set**; the control unit confirms that the operation has been completed.

Important!

The control unit assigns priority 1 to the first group created, 2 the second, and so on. However, these priority values can still be changed at any time.

If a priority already assigned is assigned to another group, this group is given the desired priority, and the others are moved to the next higher value.

Load Manager

Example.

- Existing groups:
 - Group A: priority 1
 - Group B: priority 2
 - Group C: priority 3
- New group inserted: Group D (created with priority 4)
- Priority of Group D is changed from 4 to 2
- New order of priority:
 - Group A: priority 1
 - Group D: priority 2
 - Group B: priority 3
 - Group C: priority 4

7.3.2 Load management.

The load manager mode can be decided for each group by selecting **Auto OFF – ON**, **Auto OFF Man ON**, **Forced OFF** or **Forced ON**.

- **Auto OFF – ON**: The load is disconnected automatically depending on the priority assigned, and reconnected automatically when the power consumption falls below the set threshold;
- **Auto OFF Man ON**: the load is disconnected automatically depending on the assigned priority, and must be reconnected manually once power consumption has fallen below the set threshold;
- **Forced OFF**: the power outlet is never supplied;
- **Forced ON**: the power outlet is always supplied.

Menu → Load manager → Group Manager

Scroll through the list of groups (if present) and their priorities using Δ and ∇ . After identifying the group concerned, press the **Mod** button.

Management → Auto OFF – ON → Set

Auto OFF Man ON

Forced OFF

Forced ON

The active type of management is indicated by the ***** character; select the desired type of control then press **ok**; the control unit confirms that the operation has been completed.

7.3.3 Load status.

To check the status of a load, follow the procedure below:

Menu → Load Manager → Group Manager

Scroll through the list of groups (if present) and their priorities using i buttons Δ and ∇ . After identifying the group concerned, press the **Mod** button.

State → Busy... → Present state: On (or Off)

7.4 Associating an indicator group.

The load manager module can be associated with a group that indicates whether one or more loads have been disconnected. This group can consist of one or more relays configured in bistable mode. An ON message is sent to this group each time the load manager module is tripped and disconnects some of the loads, and an OFF message is sent when when all loads are in the normal state.

Menu → Load Manager → Link group

Scroll through the list of groups (if present) and their priorities, using i buttons Δ and ∇ . When the desired group has been identified, press the **Set** button; the group is marked with a ***** character, then the control unit confirms that the operation has been completed.

7.5 LED signals of the module 01855.

The load control module has LEDs to visually signal the load status and phases of device operation.

The eight LEDs signalling the break in the load take on the following meanings:

- LED ON = load OFF
- LED OFF = load ON

The status LED has the following meanings:

- during the configuration phase = red LED ON steady
- during ordinary adjustment (one threshold):
 - LED OFF = normal operation
 - green LED ON = set threshold exceeded
 - red LED blinking = alarm
- during multiple adjustment (two thresholds and threshold time):
 - LED OFF = normal operation
 - green LED blinking = exceeded threshold 1 and maximum drawable limit equal to the value of threshold 2
 - green LED ON = maximum drawable limit equal to the value of threshold 1
 - red LED blinking = alarm.

Automated functions

8. Automated functions.

The **By-me** home automation system can be used to create advanced control functions that perform operations when certain events occur, including interactions with the burglar alarm system over the Vimar bus [see Section 9, “Integration with Burglar Alarm System over the Vimar bus - page 64].

Up to 8 programs can be set; days of the week can be selected for each program, and the program time and duration can be set for each day.

Each program must have an active input or **Timer** function, with a maximum of two inputs and one **Timer** function, and one or two outputs.

The elements that can be used to activate a function are:

- ON message from a group;
- OFF message from a group;
- ON or OFF message from a group;
- scene activation message;
- BURGLAR ALARM SYSTEM VIA VIMAR BUS alarm message;
- BURGLAR ALARM SYSTEM VIA VIMAR BUS activation message;
- BURGLAR ALARM SYSTEM VIA VIMAR BUS disconnection message;
- timer program.

The output commands that can be sent are:

- ON message to a group;
- OFF message to a group;
- ON message when an event occurs, and OFF message when the event has ended (to the selected group);
- OFF message when an event occurs, and ON message when the event has ended (to the selected group);
- scene activation message;
- BURGLAR ALARM SYSTEM VIA VIMAR BUS activation message;
- BURGLAR ALARM SYSTEM VIA VIMAR BUS disconnection message;
- BURGLAR ALARM SYSTEM VIA VIMAR BUS connection & disconnection message.

Automated functions

8.1 Programming.

8.1.1 Creating and modifying a program.

Menu → Event programm. → Program: 1

Select the number of the desired program (example: 1), then select the type of operation to be carried out:

→ **Modify**
Erase

Select **Modify** to create or modify a control program.

*The * character indicates that the program has been used (or created).*

8.1.1.1 Timer.

- To enable the weekly timer function:

**Timetable → Enable → Timetable enabled
activated**

- To create/modify a program:

Timetable → Modify

Select a day of the week (for example, Monday), then set the type of timer control.

Time length
Program
Disable

- **Duration.**

Time length → Time length hh:mm

Used to set the duration of the program in hours and minutes.

This function must always be linked to 1 or 2 inputs and 1 or 2 output groups through an ON/OFF or OFF/ON type message. The control unit sends the first command when the event occurs and the second when the set time has elapsed.

Note.

The Duration parameter has a time resolution of 1 minute; if the time T is set, the effective duration will be between T and T-1 minutes. For example, if a duration of 40 minutes (00:40) is set, the effective duration will be between 39 and 40 minutes.

Automated functions

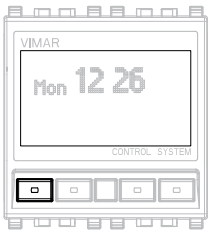
- **Program.**

Program → **Modify**
Copy Previous

- **Modify**

Used to set the activation periods during the day, with possible activation every 20 minutes. The program for the selected day is shown; the button functions change according to the current stage of the program.

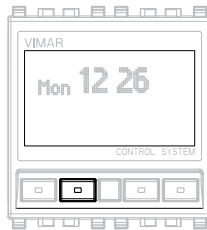
The program is set by selecting the ON or OFF command; the buttons ← and → (A e B) are used to move along the 24-hour axis representing the day. Confirm the command by pressing the **Set** button. At program position **23:40 – 24:00**, confirm by pressing the **ok** button. Save the new program by pressing **Yes**; the operation is completed and a confirmation message displayed.



BUTTON A

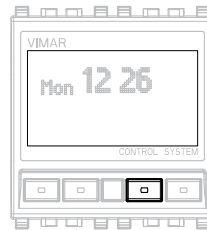
Esc exits the menu (only when at the start of the program);

← move left.



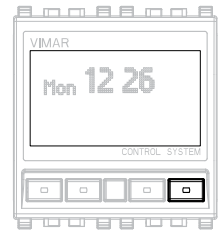
BUTTON B

→ move right.



BUTTON C

△ cyclical selection of the ON or OFF command.



BUTTON D

Set setting of the ON or OFF command selected;

ok confirmation that the program is registered (only if the program is complete).

- **Copy Previous**

Used to copy the program of the previous day to the selected day; the operation is completed and confirmed.

- **Disable.**

Deactivate → **Time table**
disabled

Used to deactivate the timer function for the selected day. The timer function can also be deactivated for a weekly period.

Menu → **Enent programm** → **Program: 1**

Automated functions

Select the number of the desired program (for example, 1)

→ **Modify** → **Time table** → **Enable**
Disable → **Time table**
disabled

8.1.1.2 Inputs.

- Used to program the inputs.

Modify → **Time table**
Cancel **Inputs** → **Input 1**
 Outputs **Input 2**
 Condition

Select the desired input (for example, input 1).

Input 1 → **Enable**
Input 2 **Disable**
Condition

- Enable input.

Enable → **Group**
Disable **Scene**
 Intrusion Sys.

Select the input type to be used:

- Group:** select the group, then the type of command to be sent from the selected group, by selecting ON or OFF, or both (TOGGLE); a “Shutter” group cannot be selected.
- Scene:** set the desired scene; the scene activation command will also be used as a program input;
- Intrusion System:** The BURGLAR ALARM SYSTEM VIA VIMAR BUS activation message can be selected (alarm, BURGLAR ALARM SYSTEM VIA VIMAR BUS ON, BURGLAR ALARM SYSTEM VIA VIMAR BUS OFF).

Input	Command	Operating
Group	ON	Input valid if an ON message is received from the group and until reception of an OFF message from the group.
	OFF	Input valid if an OFF message is received from the group and until an ON message is received from the group.
	Toggle	Input valid if an ON message or an OFF message is received from the group.
Scene	-	Input valid when the scene is activated.
Intrusion System	-	Input valid when an alarm is received from the Burglar Alarm System via VIMAR bus.
Intrusion System	ON	Input valid if the Burglar Alarm System via VIMAR bus is connected.
	OFF	Input valid if the Burglar Alarm System via VIMAR bus is disconnected.
Disabled	-	-

Automated functions

- **Deactivate input.**

Used to deactivate the input.

Enable

**Disable → Input
disabled**

- **Condition.**

If there are two inputs, this is used to determine whether the input signal is valid when both inputs are true (AND), or when at least one of the inputs is true (OR). The selected condition is indicated by the * character.

Input 1

Input 2

Condition → Condition:
OR
AND *

8.1.1.3 Outputs.

- Used to program the inputs.

**Modify → Outputs → Output 1
Output 2**

Select the desired output (for example, output 1).

Output 1 → Enable
Output 2 Disable

- **Activate output.**

Activate → Group
Deactivate Scene
Intrusion Sys.

Select the type of output to use:

- **Group:** select the type of command: only ON, only OFF, ON-OFF or OFF-ON. If ON-OFF or OFF-ON is selected, the first command is sent when the event occurs, and the second is sent when the condition is no longer present or after a time defined by the user.

Note.

A "Shutter" group cannot be selected; if shutters are to be controlled, a scene must be created as the output.

Automated functions

- **Scene:** set the scene to be activated.
- **Intrusion System:** it is possible to decide whether to activate or deactivate the BURGLAR ALARM SYSTEM VIA VIMAR BUS.

Output	Command	Operating
Group	ON	ON message to group if inputs and timer functions are valid.
	OFF	OFF message to group if inputs and timer functions are valid.
	ON-OFF	ON message to group if inputs and timer functions are valid, otherwise OFF message.
	OFF-ON	OFF message to group if inputs and timer functions are valid, otherwise ON message.
Scene	-	Scene activation.
Intrusion System	ON	Connect Burglar Alarm System via VIMAR bus (zones associated with the control unit) with valid program.
	OFF	Disconnect Burglar Alarm System via VIMAR bus with valid program.
	ON-OFF	Connect Burglar Alarm System via VIMAR bus with valid program, disconnection with invalid program.
Disabled	-	-

- **Deactivate output.**

Used to deactivate the output.

Enable

Disable → Output disabled

8.1.2 Cancelling programs.

Used to cancel a selected program.

Menu → Evant program → Program: 1

Select the number of the desired program (for example, 1).

→ **Modify**

Erase → Programme erase?

Press **Yes** to cancel; the control unit confirms that the operation has been completed.

Automated functions

8.2 Example applications.

8.2.1 Switch on outside lights in the evening.

- **Desired program:**

- Switch on outside lights in the evening;
- Switch on the lights depending on light conditions, and in any case not before 18:00;
- Switch off at 24:00.

- **Timer table:** use a program with operations starting at 18:00 and ending at 24:00, which is the same for all days of the week.

- **Inputs:** dusk sensor input through an attachment interface (Eikon 20515, Idea 16955-16955.B; Plana 14515).

Create a group that contains the attachment interface to be used as input 1 of the lighting program. The attachment interface will send an ON message if light intensity is low or an ON message if the light intensity is high.

- **Outputs:** relay actuator (Eikon 20535, Idea 16975-16975.B; Plana 14535; 01850), which must be included in the output group of the lighting program.

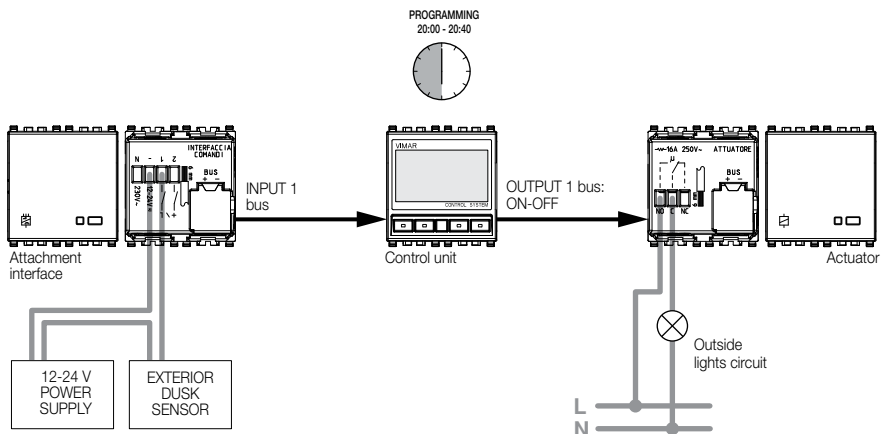
Set the relay in bistable mode. Select "ON-OFF" as output message.

Note.

An attachment interface is used as an external dusk sensor is required, and this is not available in the Vimar catalogue.

Important!

The dusk sensor must be placed in an area where it is not directly exposed to other light sources (for example car headlights), so that the outside lights are not switched off each time another light source is detected.



Automated functions

8.2.2 Daily watering.

- **Desired program:**

- water the garden in the evening;
- start the program at 20:00 hours, but only if the moisture level in the soil requires it;
- water two different areas of the garden at different times, for a period of 15 minutes in each area.

- **Time table:** a timer program is used for the required days.

The timer program is set with operations starting at 20:00 and ending at 20:40. The program will send the “start watering” command to the relay for area 1, and the “stop watering” command will be sent automatically after 15 minutes.

The “start watering” command will be sent to the relay for area 2 after the first 15 minutes of watering, and the “stop watering” command will be sent automatically after 15 minutes.

- **Inputs:**

- input from moisture sensor through an attachment interface (Eikon 20515, Idea 16955-16955.B; Plana 14515).

Create a group that includes the attachment interface to be used for input 1 to the watering program. The attachment interface will send an ON message if watering is required or an OFF message if the level of moisture in the soil means that watering is not required.

Set the interface to “normal” or “inverted” operation, depending on the specifications of the moisture sensor (NO or NC).

- on/off override input from a push-button (for example Eikon 20521, Idea 16961-16961.B; Plana 14521).

This device must be used only if watering is to be forced on or off manually; override is possible only if the timer program is valid.

Register the device in a group and associate it with input 2 of the watering program; configure the operating mode as for an ON/OFF toggle switch.

Set the “Condition” for inputs 1 and 2, selecting AND so that watering starts only if both inputs are ON (i.e. both the moisture sensor and the button); or select OR if watering is to start if at least one or both of the inputs are at ON (i.e. either the moisture sensor or the button is On). The watering function can thus be disabled if the AND condition is set; conversely, if the OR condition is set, the watering function can be forced On using the button.

- **Outputs:**

- Create two output groups; in the first group, configure the relay as a monostable that opens after a 15 minute delay; in the second group, configure the relay as a monostable that closes after a 15 minute delay and opens after a 15 minute delay. Set “ON only” as the output message.

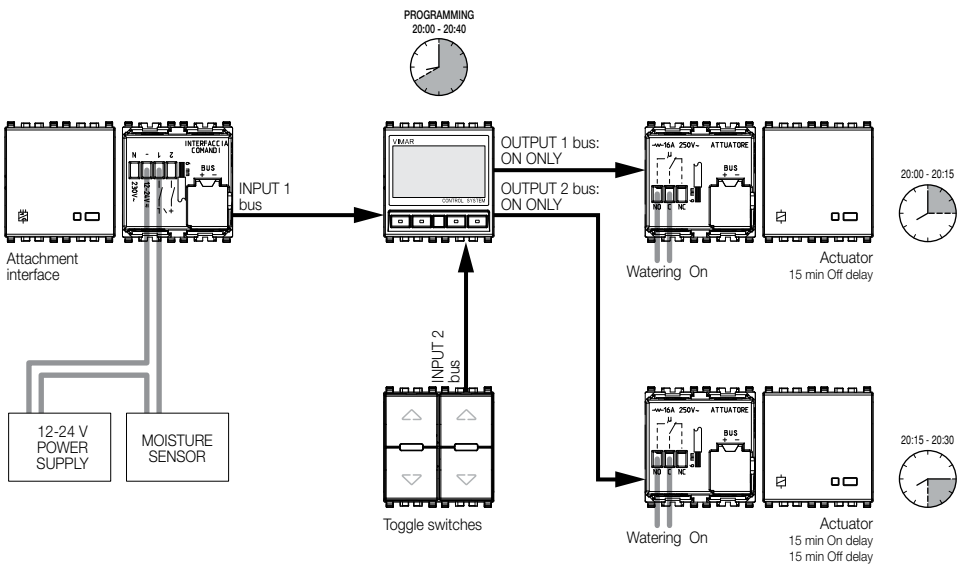
Automated functions

Note.

For the required functionality, the moisture sensor must be placed in an area not affected by the watering, so that the water itself does not cause the sensor to react.

Important!

When first installed, the attachment interface must be made to react at least once, in order to indicate the status to the comfort control unit. This operation can be carried out on the moisture sensor itself, or by closing and then re-opening the contacts on the interface using a jumper.



Automated functions

8.2.3 Shutter automation.

- **Desired program:** lower all the shutters after 21.00, or when it becomes windy.

Create a scene that closes all the shutters; this scene must be called if one of the two conditions is present.

Create 2 programs; the first will be a timer program that calls the scene that closes the shutters at the desired time. The second will be a program that calls a scene when there is activation of an attachment interface connected to a wind sensor.

8.2.4 Load management by time slots.

- **Desired program:** from 8:00 hours to 12:00 hours and from 13:00 hours to 18:00 hours, two load manager groups are to be disabled by load manager module 01855 [see paragraph 7.1 “Functionality”, page 48].
- **Time table:** a timer program is used to enable the groups in time slots: 00:00-8:00, 12:00-13:00 and 18:00-24:00.
- **Inputs:** none
- **Outputs:** select the two groups of the load manager system that are to be controlled, then select “ON-OFF” as the output message.

Integration with the Burglar Alarm system via Vimar bus

9. Integration of Burglar Alarm system via Vimar bus.

The **By-me** home automation system can interact with the Burglar Alarm System via Vimar Bus and share some of its basic functions.

9.1 Installation.

The **By-me** home automation system and the Burglar Alarm System via Vimar bus must be connected to each other through line coupler 01845, which must be configured from the control unit. In the default configuration, the line coupler only allows messages that are strictly necessary to pass between the two systems.

9.2 Messages shared with the Burglar Alarm system via Vimar bus.

The control unit recognizes certain messages from the Burglar Alarm system via Vimar bus control unit, and can process the following information:

- Burglar Alarm system via Vimar bus active;
- Burglar Alarm system via Vimar bus disconnected;
- Burglar Alarm system via Vimar bus alarm present.

The above messages can be used to activate the appropriate functions [see Section 8 “Automated functions”, page 54].

Similarly, the control unit can send the following messages:

- reset alarms and activate Burglar Alarm system via Vimar bus;
- disconnect Burglar Alarm system via Vimar bus.

9.2.1 Direct interaction with the Burglar Alarm system via Vimar bus control unit.

From the control unit, it is possible to interact directly with the Burglar Alarm system via Vimar bus control unit.

Menu → Intr. System → Intr. System ON ✱

Intr. System OFF

The status of the Burglar Alarm system via Vimar bus is indicated by the ✱ character (in the example shown above, the Burglar Alarm system via Vimar bus is ON).

To change the system status, select the desired status and confirm with the **ok** button.

If there is an alarm, or tamper alarm, the messages also appear on the control unit display for about one minute.

Integration with the Burglar Alarm System via Vimar Bus

9.3 Passive Infrared Sensor (Eikon 20485-20486-20487, Idea 16935-16937; Plana 14485-14487).

The passive infrared sensor can be used in three different ways:

1. installed in the Burglar Alarm system via Vimar bus, configured from the related control unit and not visible to the other systems;
2. installed in the **By-me** lighting control system, configured from the related control unit and not visible to the other systems;
3. installed in the Burglar Alarm system via Vimar bus, configured by the related control unit and visible to the **By-me** lighting control system.

Methods 1. and 2. are the normal configurations of the device for the two above systems; with method 3., the sensor is used as follows:

- the IR sensor is installed in the Burglar Alarm system via Vimar bus and configured from the related control unit;
- the IR sensor is configured by the **By-me** control unit as belonging to a comfort system group.

Note.

If using method 3, add a group selected at interface 01845 (see paragraph 4.3.11 “Interfaces”, page 24)

When the Burglar Alarm system via Vimar bus is not connected, the IR sensor sends an ON message to the selected group (if the IR sensor detects a presence and the dusk sensor has detected the appropriate light conditions). The IR sensor parameters are managed by the Burglar Alarm System via Vimar Bus control unit.

To include the IR sensor in a group using the comfort control unit, see paragraph 4.3.1 “Creating a new functional group”, page 18], setting the item **IR sensor Intr.** instead of **Automations**.

Diagnostics and maintenance

10. Diagnostics and maintenance.

10.1 Diagnostics and replacement of devices.

This sections describes the procedures for checking the device functions and how to replace them if necessary.

Menu → Diagnostic → Devices → Failure detect

Press **Yes**; the control unit initiates a scan procedure to check that all the configured devices are functioning correctly; if all devices are functioning correctly, the message **No failure found** is displayed.

If a faulty device is found, the control unit asks you to replace or cancel the device (when the faulty device is displayed, press **ok** to replace or cancel it).

10.1.1 Replacing a device.

Select **Replace**; press **Set** to activate the device replacement procedure:

Replace → Replace ... → Push new
Erase **device** **device**
button

Follow the instructions on the control unit to replace the faulty device, and press the device button(s) to set the correct functional unit and configure it. At the end of the operation, the control unit indicates the result:

- Device replaced: the device has been replaced correctly, press **ok** to finish;
- Invalid device: Replacement was not completed correctly due to problems with the device, or you are trying to configure a different device.

Note.

When a device is replaced, all the parameters of the replaced device are restored to the new device, as these parameters are also stored on the control unit. The only exception to this is the values stored in the actuators, and the data related to scenes.

To recreate the scene as it was before replacement of the device, proceed as follows:

- call the scene, so that all actuators involved go into the statuses stored in the scene;
- place the device in the position desired for the scene;
- save the scene in the control unit again, as described in paragraph 6.1 "Creating a scene", page 44], checking that the actuators are in the desired position.

N.B.

If replacing the infrared receiver (Eikon 20516, Idea 16956-16956.B; Plana 14516), the remote control buttons have to be re-associated.

Diagnostics and maintenance

10.1.2 Cancelling a device.

Select **Erase**, then press the **Set** button; The device is cancelled and the control unit confirms that the operation has been completed.

10.2 Replacing the control unit.

If the control unit develops a fault, it can be replaced without having to reconfigure the system. The new control unit can retrieve the configuration data from the devices.

Replace the control unit, then follow the steps below:

**Diagnostic → Controller → Reconfigure
controller**

Press the **Yes** button; the control unit initializes its internal memory, then asks you to press the configuration button on any device that is already configured (**except the infrared receiver Idea 16956-16956.B; Plana 14516; Eikon 20516**).

**press
the button on a
device**

The control unit scans all the devices of the system to which the device is connected, and reconstructs the related data for the groups and scenes. This operation can take some time, since the control unit has to check for the presence of the 128 possible devices it can control.

**Registration → Reconstruction → Controller
device 3 scenes replaced
of 128**

N.B.

The control unit cannot reconstruct the data listed below, which must therefore be entered again:

- names of groups;
- names of scenes;
- programs for air-conditioning zone;
- groups associated with air-conditioning zones;
- "Programmer" menu.

Diagnostics and maintenance

10.3 Remote communications management.

10.3.1 Remote control.

To enable or disable remote control through the TP interface/telephone communicator 01848, follow the procedure below:

**Diagnostic → Remote → Enable
Disable**

Select the desired item using the buttons Δ and ∇ ; confirm with **Set**. The control unit displays a message confirming that the operation has been completed. To manage the communications, refer to the instruction sheet for the TP interface/telephone communicator 01848.

10.3.2 Control unit software release.

Follow the procedure below:

**Diagnostic → Information → SW: 00.00
ID: 000
Area: 0 Line: 00
Days: 00000**

The control unit displays:

- software (SW) version;
- Control unit address (ID);
- “Area” number (Area) and “Line” number (Line);
- number of days of operation of the control unit since the last reset (Days).

Remote control - Installation rules - Compliance with regulations

11. Remote control.

The system can be connected to remote control devices through a “TP interface/telephone communicator 01848”.

In the case of a number of systems connected to each other through “line coupler 01845 interfaces”, it is sufficient to use a single “TP interface/telephone communicator 01848”, which can be installed in any of the systems.

If the Burglar Alarm System via Vimar Bus is installed, the interface can be installed as a component of the burglar alarm system, as it is also supplied in the event of a power failure (by the back-up battery).

12. Installation rules.

Installation should be carried out in compliance with the current regulations regarding the installation of electrical systems in the country where the products are installed.

13. Compliance with regulations.

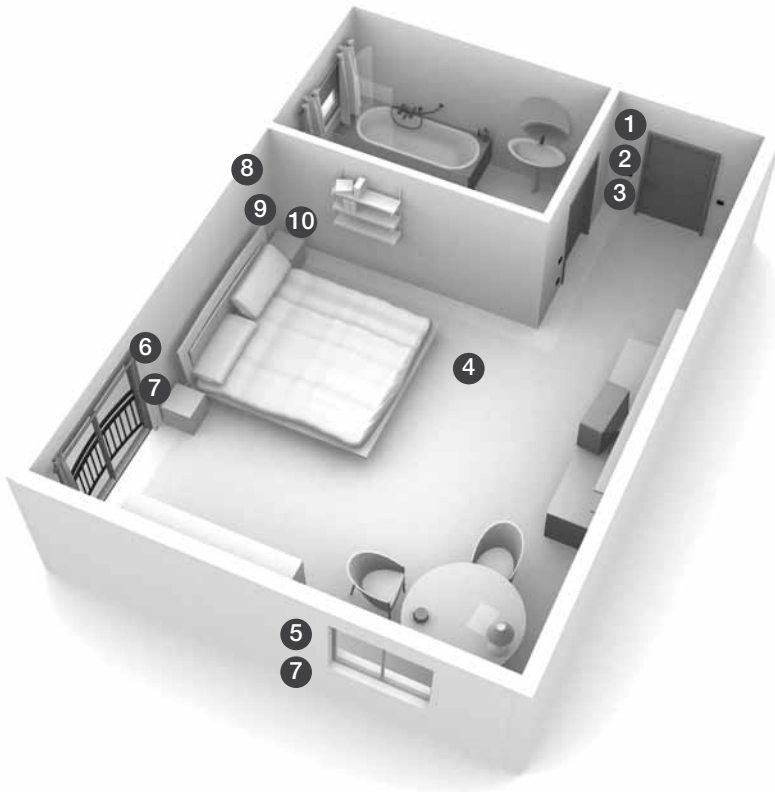
- **By-me** control unit (Eikon 20510, Idea 16950, Plana 14510):
 - EMC directive
 - EN 50090-2-2 Standards
- Other system devices: see the related instructions sheet.

Example installation

14. Example installation.

Example installation of the **By-me** system in a bedroom, for the purpose of controlling:

- lights (switch-on, switch-off, brightness adjustment)
- rolling shutters (raise, lower)
- air conditioning (conditioning/heating).



Legend:

- | | |
|----------------------------------------------------|-------------------------------------|
| 1. Control unit light ON/OFF | 6. Shutter control |
| 2. "Lights off" scenario + "Shutters raised" scene | 7. Control both shutters |
| 3. Aircon control | 8. Control unit |
| 4. Control unit light | 9. Dimmer for bedside light + slave |
| 5. Shutter control | 10. Control unit light ON/OFF |

Example installation

• Functions to be performed:

- Control located near door:
 - Main light ON/OFF
 - Lights OFF scene
 - Shutters UP scene
- Bedside table light control:
 - main light ON/OFF
 - Bedside table light adjustment
- Controls located at shutters: open/close the shutters
- Air conditioning: temperature control

• Creating groups.

To produce the required installation layout, it is necessary to create the groups that will be used to automate the desired functions.

Group name	Function	Group content	Corresponding position in layout diagram	Eikon	Idea	Plana
Light 1 bedroom <small>(light control beside door)</small>	main light ON/OFF "Lights off" scene "Shutters UP" scene	Left toggle switch + relay actuator	1	20526	16966 16966.B	14526
		Right toggle switch	2			
Light 2 bedroom <small>(light control beside bedside table)</small>	Main light ON/OFF Bedside light control	Right toggle switch (connected to relay actuator of "Room light 1" group)	10	20528	16968 16968.B	14528
		Left toggle switch	9			
	Slave controller actuator	9	20536	16976 16976.B	14536	
Shutter 1 <small>(shutter controls)</small>	Open/Close Shutter 1	Control device with two toggle switches and actuator for shutters	5	20527	16967 16967.B	14527
Shutter 2 <small>(shutter controls)</small>	Open/Close Shutter 2	Control device with two toggle switches and actuator for shutters	6	20527	16967 16967.B	14527
Shutter <small>(shutter controls)</small>	Open/Close Shutters 1 and 2	Control device with two toggle switches and actuator for shutters	7	20527	16967 16967.B	14527
Climate	Temperature control Actuator with 16 A switchover relay output	Control unit	8	20510	16950 16950.B	14510
			3	20535	16975 16975.B	14535

Example installation

1. Installation procedure.

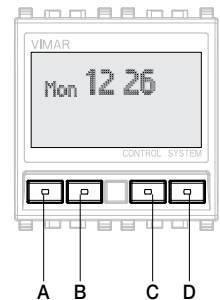
- 1.1 Install power supply 01801 in a built-in switchboard;
- 1.2 Wire up the 01801 power supply using Vimar bus cable 01840, then extend the cable to the bedroom and lay it inside the boxes that will house the devices **By-me**;
- 1.3 For Plana Series devices only: fit the supports to the built-in cases;
- 1.4 Wire the **By-me** devices using the special green terminal (see the related instruction sheets supplied);
- 1.5 Insert the devices in their respective supports;
- 1.6 For Idea Series only: mount the devices in their supports first, then install the supports in the built-in cases;
- 1.7 Connect the 230 V~ power supply to the slave controller actuator (Eikon 20536, Idea 16976-16976.B; Plana 14536) and to the control devices with actuator for the rolling shutters (see the related instruction sheets supplied);
- 1.8 Remove the button caps in order to carry out the configuration.

2. Configuration procedure.

- 2.1 Identify the groups listed in the table on page 72.

3. Create the groups (these operations are performed at the control unit).

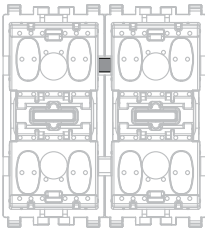
- 3.1 Press **button D** twice;
- 3.2 Press **button B** to display **Configuration**;
- 3.3 Press **button D** to confirm;
- 3.4 Press **button D** to open the **Groups** menu;
- 3.5 When the message **New group?** appears, confirm by pressing **button D**;
- 3.6 Using **button B** and **button C**, name the group by selecting one of the available options, then press **button D** to confirm. If the group exists already, select the next group, then select **Devices → Add**
- 3.7 Press **button D** twice; the control unit displays the message; **Add devices?**; confirm by pressing **button D**;
- 3.8 The control unit displays the message: **Automations → Add**;
- 3.9 Press **button D**;
- 3.10 The control unit displays the message: **push device button**.



Example installation

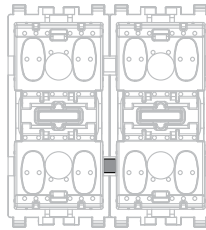
4. Create the “Light 1 bedroom” group.

- 4.1 Using a screwdriver, press the configuration button on the control device with two toggle switches and actuator with relay output (Eikon 20526, Idea 16966-16966.B; Plana 14526) (figure 4.1.1);
- 4.2 Wait till the red Led comes on on the device (figure 4.1.2); the control unit displays the name of the device (in this case, the relay) and its physical address;
- 4.3 When the red Led goes off, device configuration is complete;
- 4.4 Still using the screwdriver, add the left toggle switch to the group, by pressing the configuration button (figure 4.1.3), and pressing the left button immediately afterward (figure 4.1.4);
- 4.5 Add the right button on the control device with two toggle switches and actuator for the slave controllers (Eikon 20528, Idea 16968-16968.B; Plana 14528), by pressing the configuration button on the control with a screwdriver (figure 4.1.5) and pressing the right button immediately afterwards (figure 4.1.6).
- 4.6 End the procedure by pressing **End (button A)** on the control unit (figure 4.1.7).



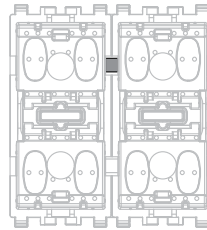
4.1.1

①



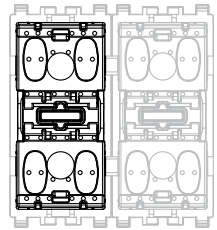
4.1.2

①



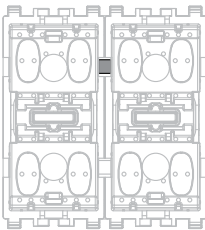
4.1.3

①



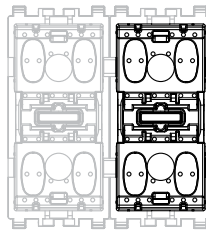
4.1.4

①



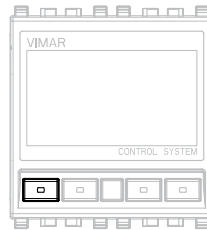
4.1.5

⑩



4.1.6

⑩



4.1.7

⑧

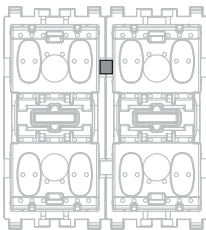
Note.

The circled number under each figure indicates the corresponding position in the layout diagram on page 71.

Example installation

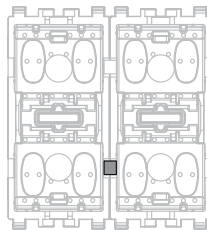
5. Create the “Light 2 bedroom” group.

- 5.1 Using a screwdriver, press the configuration button on the control device with two toggle switches and actuator for slave controllers (Eikon 20528, Idea 16968-16968.B; Plana 14528) (figure 5.1.1);
- 5.2 Wait until the red Led comes on on the device (figure 5.1.2); the control unit displays the name of the device (in this case, “dimmer”), along with its physical address;
- 5.3 When the red Led goes off, device configuration is complete;
- 5.4 Add to the group the left toggle switch on the control device with two toggle switches and actuator for slave controllers (Eikon 20528, Idea 16968-16968.B; Plana 14528) by pressing the configuration button with a screwdriver (figure 5.1.3) and pressing the left button immediately afterwards (figure 5.1.4);
- 5.5 When this button has been configured, configuration of the device is complete;
- 5.6 End the procedure by pressing **End (button A)** on the control unit (figure 5.1.5).



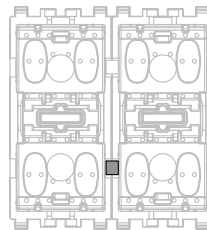
5.1.1

9



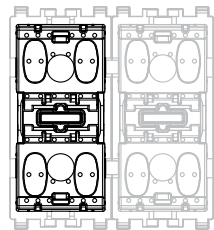
5.1.2

9



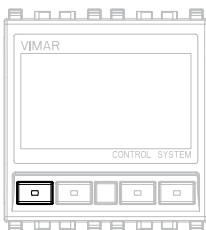
5.1.3

9



5.1.4

9



5.1.5

8

Note.

The circled number under each figure indicates the corresponding position in the layout diagram on page 71.

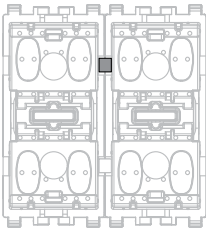
Example installation

6. Create the “Shutter 1” group.

- 6.1 Using a screwdriver, press the configuration button on the control device with two toggle switches and actuator for rolling shutters (Eikon 20527, Idea 16967-16967.B; Plana 14527) (figure 6.1.1);
- 6.2 Wait until the red Led comes on on the device (figure 6.1.2); the control unit displays the name of the device (in this case, “shutters”), and its physical address;
- 6.3 When the red Led goes off, configuration of the device is complete;
- 6.4 Add the left toggle switch to the group by pressing the configuration button (figure 6.1.3) and pressing the left button immediately afterwards (figure 6.1.4);
- 6.5 End the procedure by pressing **End (button A)** on the control unit (figure 6.1.5).

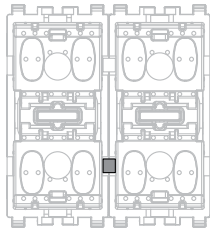
7. Create the “Shutter 2” group.

Follow the same procedure for the “Shutter 1” group, applying it the devices that are to control “Shutter 2”.



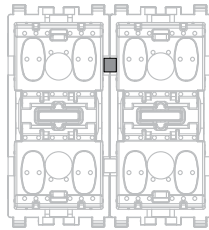
6.1.1

5



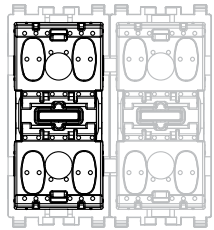
6.1.2

5



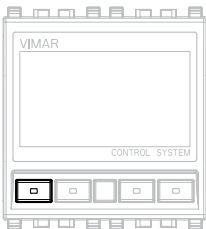
6.1.3

5



6.1.4

5



6.1.5

8

Note.

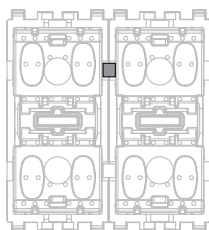
The circled number under each figure indicates the corresponding position in the layout diagram on page 71.

Example installation

8. Create the “Shutter” group.

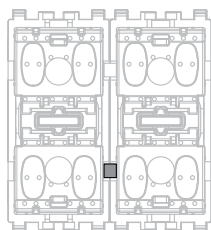
- 8.1 Using a screwdriver, press the configuration button on the control device with two toggle switches and actuator for rolling shutters (Eikon 20527, Idea 16967-16967.B; Plana 14527) (figure 8.1.1);
- 8.2 Wait until the red Led comes on on the device (figure 8.1.2); the control unit displays the name of the device (in this case, “shutters”), and its physical address;
- 8.3 When the red Led goes off, device configuration is complete;
- 8.4 Add the right toggle switch to the group by pressing the configuration button again with a screwdriver (figure 8.1.3) and pressing the right button immediately afterwards (figure 8.1.4);
- 8.5 Repeat the procedure described in paragraphs 8.1 to 8.4 for the second shutter actuator.
- 8.6 End the procedure by pressing **End (button A)** on the control unit (figure 8.1.5).

When both toggle switch controls on the right are configured, both the shutters can be operated with either of these controls.



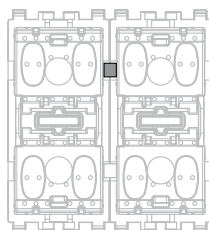
8.1.1

7



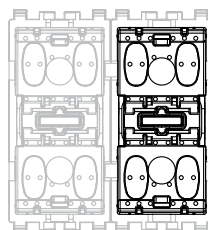
8.1.2

7



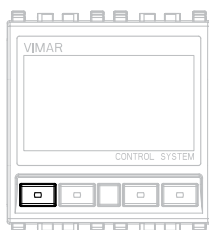
8.1.3

7



8.1.4

7



8.1.5

8

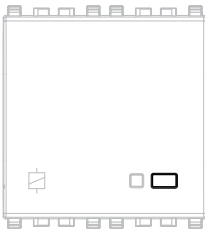
Note.

The circled number under each figure indicates the corresponding position in the layout diagram on page 71.

Example installation

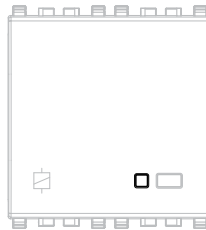
9. Create the “Climate” group.

- 9.1 Using a screwdriver, press the configuration button on the actuator with relay output (Eikon 20535, Idea 16975-16975.B; Plana 14535) (figure 9.1.1);
- 9.2 Wait until the red Led comes on on the device (figure 9.1.2); the control unit displays the name of the device (in this case “aircon”) and its physical address;
- 9.3 When the red Led goes off, device configuration is complete;
- 9.4 End the procedure by pressing **End (button A)** on the control unit (figure 9.1.3).



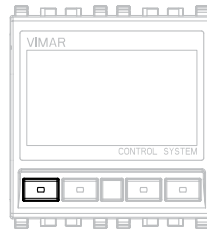
9.1.1

3



9.1.2

3



9.1.3

8

Note.

The circled number under each figure indicates the corresponding position in the layout diagram on page 71.

Example installation

10. Parameter modification procedure.

The **Parameter Modification** procedure is not necessary if, when the groups are created, the actuators are registered first and then the buttons.

If this is not the case (i.e. the buttons were registered before the actuators), it is necessary to modify the parameters for the buttons in groups **Shutter 1**, **Shutter 2**, changing the function of the control button from **dimmer** (default setting) to **Shutter** actuator. The other devices use the default parameters.

All operations must be carried out at the comfort control unit

- 10.1 Press **button D** twice;
- 10.2 Press **button B** to display the **Configuration** menu;
- 10.3 Press **button D** to confirm;
- 10.4 Press **button D** again to open the **Groups** menu;
- 10.5 Using the scroll arrow key (**button C**), select the **Shutter 1** group;
- 10.6 Press **button D** to confirm;
- 10.7 The control unit displays the message: **Devices**;
- 10.8 Press **button D** to confirm;
- 10.9 Using the scroll arrow (**button B**), select the word **parameters**;
- 10.10 Press **button D** to confirm;
- 10.11 Using the scroll arrow (**button C**), select the device **Left switch** for which parameters are to be modified;
- 10.12 Press **button D** to confirm;
- 10.13 The control unit displays two items **operation** (selected) and **Led management**;
- 10.14 Press **button D** per to open the Operation menu; the word **dimmer** is displayed;
- 10.15 Using **button C**, display the word **Shutter act.**, then press **button D** to confirm;
- 10.16 Press **button A**; the control unit displays the message: **Store parameters?**;
- 10.17 Press **button D** to confirm. The parameters have now been modified.

Follow the same procedure to modify the button parameters for the Shutter 2 group.

Example installation

11. Create the “Lights off” scene.

- 11.1 Press **button D** twice;
- 11.2 Press **button B** to display the word **Scenes**; press **button D** to confirm;
- 11.3 The control unit displays the message **New scene?**; press **button D** to confirm, then name the scene **Lights off**;
- 11.4 The control unit displays the words **Normal** (selected) and **Reserved**; press **button D** to confirm **Normal**;
- 11.5 Press **button B** to display the word **Modify**. **Important! The default value Active** is selected; press **button D** to confirm;
- 11.6 The control unit displays the word **Learn**; press **button D** to confirm;
- 11.7 Using **button B**, scroll through the various groups, and use **button D** to select the groups that will be involved in the **Lights Off** scene (when the group is selected, an asterisk appears);
- 11.8 Press **button A (End)**;
- 11.9 The control unit displays the message: **Save? Lights off**; press **button D** to confirm;
- 11.10 The control unit displays the message **Operation in progress**, then the message **Set the devices**;
- 11.11 Switch off all lights, then press **button D** to confirm;
- 11.12 Wait for the procedure to end correctly.

The **Lights Off** scene has now been created.

12. “Shutters Up” scene.

- 12.1 Follow steps 11.1 and 11.2;
- 12.2 The control unit displays the message: **Lights Off**; using **button C**, select a new scene;
- 12.3 Press **button D** to confirm, then name the **Shutter Up** scene;
- 12.4 Follow steps 11.4 to 11.9. **Important! The scene is called Shutter Up**;
- 12.5 The control unit displays the message: **set devices**, then raise both the shutters;
- 12.6 Press **button D** to confirm. Wait for the procedure to end correctly.

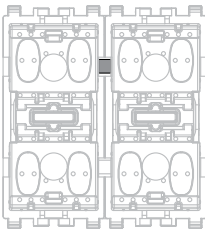
The **Shutter Up** scene has now been created.

These scenes can be activated from the control unit only; they must therefore be associated with a button.

Example installation

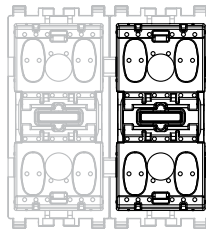
13. Associate a button with the “Lights Off” scene.

- 13.1 Press **button D** twice;
- 13.2 Press **button B** to display the word **Scenes**; then press **button D** to confirm;
- 13.3 The control unit displays the **Lights Off** scene, then press **button D** to confirm;
- 13.4 Press **button B** to display the word **Modify. Important! By default, Active** is selected; press **button D** to confirm;
- 13.5 The control unit displays the word **Learn** (selected); press **button B** to display the message **Link button**; press **button D** to confirm;
- 13.6 The control unit displays the message **Press configuration button of device**;
- 13.7 Using a screwdriver, press the configuration button on the control device with two toggle switches and actuator with relay output (Eikon 20526, Idea 16966-16966.B; Plana 14526) (figure 13.1.1), and the right button immediately afterwards (figure 13.1.2);
- 13.8 The control unit displays the words **button Up** and **button Down**;
- 13.9 Select **button Up**;
- 13.10 Press **button D** to confirm;
- 13.11 Wait for the procedure to end correctly; the control unit then displays the message **Link done**.



13.1.1

2



13.1.2

2

Note.

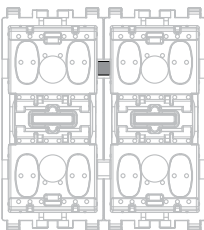
The circled number under each figure indicates the corresponding position in the layout diagram on page 71.

Example installation

14. Associate a button with the “Shutters Up” scene.

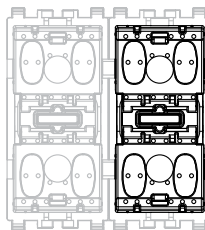
- 14.1 Press **button D** twice;
- 14.2 Press **button B** to display the word **scenes**; then press **button D** to confirm;
- 14.3 The control unit displays the **Lights Off** scene; press **button C** to display the **Shutters Up** scene, then press **button D** to confirm;
- 14.4 Press **button B** to display the word **Modify. Important! By default, Active** is selected; press **button D** to confirm;
- 14.5 The control unit displays the word **Learn** (selected); press **button B** to display the message **Link Button**; press **button D** to confirm;
- 14.6 The control unit displays the message **Press configuration button of device**;
- 14.7 Using a screwdriver, press the configuration button on the control device with two toggle switches and actuator with relay output (Eikon 20526, Idea 16966-16966.B; Plana 14526) (figure 14.1.1), then the right button immediately afterwards (figure 14.1.2);
- 14.8 The control unit displays the messages: **button Up** and **button Down**;
- 14.9 Select **button Up**;
- 14.10 Press **button D** to confirm;
- 14.11 Wait for the procedure to end correctly; the control unit then displays the message **Link done**.

You can now the plastic button caps on the controls [see paragraph 1 “Installation procedure”].



14.1.1

2



14.1.2

2

Note.

The circled number under each figure indicates the corresponding position in the layout diagram on page 71.

Example installation

15. Set Climate control.

- 15.1 Press **button D** three times to open the **Climate control** menu; the word **Settings** is displayed;
- 15.2 Press **button D** to confirm;
- 15.3 The control unit displays the message **Controller zone**; then press **button D** to confirm;
- 15.4 Press **button B** to display **Heat/Air Cond**, then press **button D** to confirm;
- 15.5 Press **button B** to display **Heating**, then press **button D** to confirm;
- 15.6 The control unit displays the message **Heating set**, then press **button D** to confirm;
- 15.7 Press **button A** to display the **Climate control** menu, then press **button B** to display **Operation**; press **button D** to confirm;
- 15.8 The control unit displays the message **Controller zone**; then press **button D** to confirm;
- 15.9 Press **button B** to display the word **Automatic**, then press **button D** to confirm;
- 15.10 Press **button A** to display the **Climate control** menu, then press **button B** to display **Zone monitor**; press **button D** to confirm;
- 15.11 The control unit displays the message **Controller zone**; then press **button D** to confirm;
- 15.12 Press **button B** to display the message **Assign group**, then press **button D** to confirm;
- 15.13 Press **button C** to display the **Climate** group, then press **button D** to confirm; the temperature set points are already set by default, but they can be modified by the user.
- 15.14 Set the weekly and daily operating program using the special menus.

Installation is complete.

15. Manual for configuring radio-frequency devices with the EnOcean module used with the By-me automation system.

Instructions

This manual is necessary in order to configure the radio-frequency devices when used with the By-me automation system through the specific Bus interface with the EnOcean module (Eikon 20508 and Plana 14508).

WARNING: The Bus interface with the EnOcean module Eikon 20508 and Plana 14508 is compatible with:

- By-me 8-module flush and surface mounting control unit ver. 3.0 and later.
- EasyTool Software ver. 4.1 and later.

The Bus interface (Eikon 20508 and Plana 14508) and the flat control with two rocker push buttons (art. 20505) are compatible and therefore can be used with all the devices equipped with EnOcean receivers RCM100, RCM120, RCM122, RCM130, RCM140, RCM152 and RCM250.

Manual

Bus interface with EnOcean module

The Bus with EnOcean module interface allows using the radio frequency devices to extend coverage in places or accesses where it is not possible to add any cables and devices via Bus.

The interface permits integrating the By-me system and the radio-frequency devices with the EnOcean module that allow carrying out all the automation functions such as, for instance, controlling lights and shades, scenes, etc.

The interface manages all these functions via pairs of configurable radio buttons such as rocker switches, dimmer switches, roller shade and scene controls and radio relay actuators.

It is supplied in the following versions:

20508: 2 Eikon modules

14508: 2 Plana modules

Eikon



Plana



Technical characteristics

- Rated supply voltage (Vn): BUS 20-30 V d.c.
- Protection class: IP30
- Operating temperature: -5 - +45 °C (for indoor use)
- Installation: flush or surface mounting
- Consumption: 20 mA typ
- Frequency of reception and transmission: 868 MHz
- Configuration button
- Indicator LED
- It has two terminals for the polarized connection to the Bus (+ and -).
- Maximum number of radiofrequency devices that can be stored:
 - 16 double rocker switches (each rocker switch can be saved to at most 4 different groups, group depth = 4), configurable as:
 - 16 ON/OFF, dimmer or roller shade controls, at most;
 - 32 scenes, at most;
 - 16 ON/OFF-, Dimmer- oder Rolladensteuerungen
 - 32 Szenarien, max.;
 - no limit on the number of RF actuators, provided they belong to at most 32 groups.
- Maximum number of interfaces with the EnOcean that can be installed in a system: depends on the By-me control panel used.

List of radio frequency devices that can be used

VIMAR Code	DESCRIPTION / COMPOSITION
20505	Flat control with two rocker buttons with EnOcean radio transmitter without batteries, power supply from the built-in electro-dynamic generator, to be completed with the dedicated buttons Eikon 20506 or Plana 14506
20506 - 14506	Pair of buttons for control with EnOcean module 20505
01796	Actuator with EnOcean module with relay output, power supply 230 V~ 50 Hz

N.B.: The flat control with two rocker push buttons 20505 is the radio unit on which pair of button must be mounted (Eikon 20506 and Plana 14506); this combination permits obtaining radio-frequency "lighting points".

Operation

The device receives the signals emitted by the radiofrequency rocker push buttons and transmits the commands to the radio actuators.

- Normal operation from radio-frequency to Bus: it receives information from the radio rocker push buttons (pressing and releasing the button) and controls the actuators over the Bus.
- Normal operation from Bus to radio-frequency: it receives the group messages from the devices over the Bus (single push-buttons, rocker switches, etc.) and controls the actuators by radio-frequency.
- Radio interface configuration: in the phase of configuration the control panel passes minimal information to the interface: enabling LED, index of the interface.
- Replacing radio interface: in this phase the By-me control panel transfers the radio devices present in the interface being replaced to the new interface.
- Configuring radio-frequency devices: in the phase of adding radio devices, the interface with the EnOcean module saves the characteristics of the radio rocker button that responded and sends them to the control panel. In addition, the interface saves all the information related to the configured radio actuators.

Indicators

- red LED on steady:
 - during the configuration phase;
- green LED blinking (only if the LED enabling parameter is not Off):
 - the interface is receiving or transmitting a radio-frequency message.

Settings (programmable via the control panel)

- Enabling LED:
 - Normal: the green LED is normally off and blinks when receiving or transmitting a radio-frequency message.
 - Inverted: the green LED is normally on and blinks when receiving or transmitting a radio-frequency message.
 - Off: the green LED never lights up.

Standard compliance

R&TTE directive

Standards EN 50428, EN 301 489-3, EN 300 220-2.

Manual

Pair of buttons for flat control with EnOcean module

The pair of buttons, suitably hooked onto the flat control with two rocker push buttons, permits obtaining the lighting point by radio through which it is possible to carry out all the functions of automation (lights, roller shades, scenes, etc.) in a similar manner to the conventional By-me control appliances.

IMPORTANT: The buttons can be specially customized with any symbol.

The pair of buttons can be supplied in the following versions:

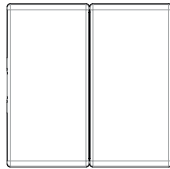
20506: 2 Eikon modules

14506: 2 Plana modules

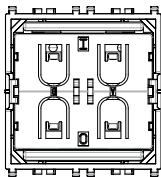
Eikon



Plana



The flat control with the EnOcean module with two rocker push buttons, art. 20505, is supplied in the 2-module version.



20505

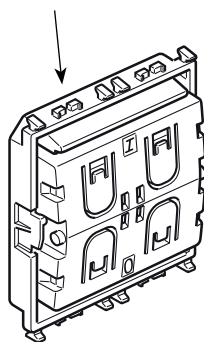
Technical characteristics

- Rated supply voltage (Vn): no kind of power supply is needed.
- Operating temperature: -5 - +45 °C (for indoor use)
- Transmission frequency: 868 MHz
- Installation: flush or surface mounting. Surface mounting installation, thanks to the special mounting frame (art. 20507 or 20507.B), can be on materials such as, for instance, wood, masonry, etc.
- Capacity: 70 m in an open field; this value is less when there are walls and/or metal partitions. Before installing the device, always take care to check the strength of the radio signal.

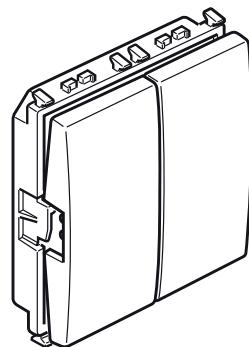
IMPORTANT: When the button is pressed, for the radio control to be transmitted, you must hear a mechanical "click".

Hooking the pair of buttons 20506-14506 onto the flat control with two radio rocker push buttons 20505.

Flat control 20505



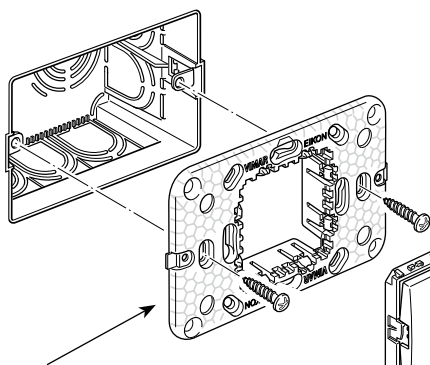
Pair of buttons 20506 -14506



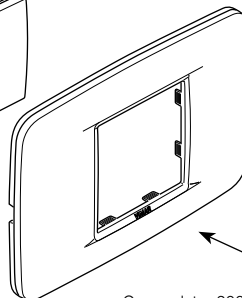
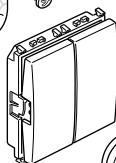
Pair of buttons hooked onto the flat control 20505

Installation on flush mounting box

Warning: Installation can be performed also on mounting frames with 3, 4 and 7 modules (art. 14613, 14614 and 14617) and related cover plates.



Mounting frame 20612-14612



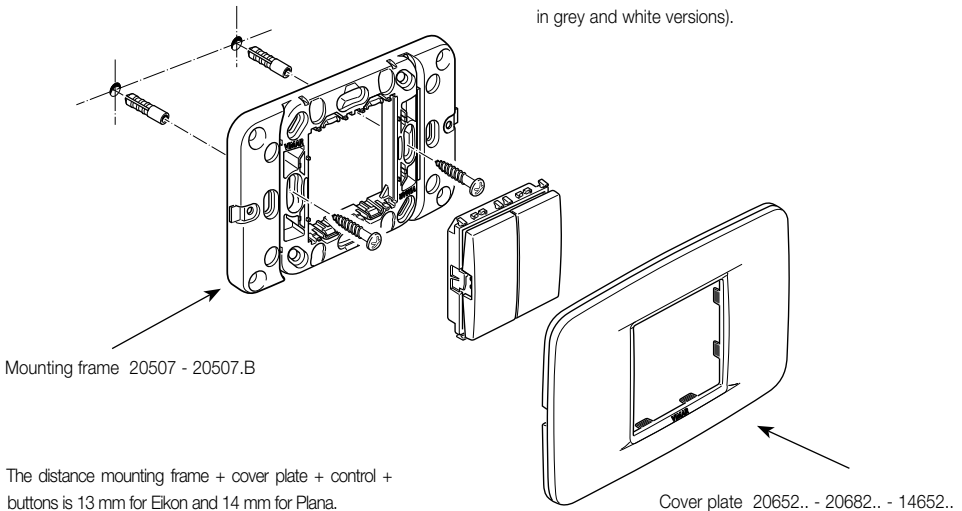
Cover plate 20652.. - 20682.. - 14652..

The distance from flush with the wall mounting frame + cover plate + control + buttons is 9.5 mm for Elkon and 10.5 mm for Plana.

Manual

Surface-mounting installation

Warning: Installation can also be performed with 2-module cover plates (20652.., 20682.. and 14652..) thanks to the special knockouts on the mounting frame 20507 (available in grey and white versions).



Functionality

With the By-me control panel, each single button of the pair can be configured as an On/Off, dimmer switch, roller shade button or scene control button.

For configuring the rocker push buttons with the EnOcean module, see par. "Managing Bus interface with EnOcean module" in the By-me control panel manual.

Warning: When adding a button it is necessary for it to be inserted in the same group as the relay you want to control.

OPERATION AS AN ON/OFF BUTTON.

Pressing the top of the button sends an ON message to the group or groups where this button has been saved; afterwards an actuator in the group will switch over. On the contrary, pressing the bottom of the button sends an OFF message to the group(s) where this button has been saved.

OPERATION AS A DIMMER SWITCH

- Briefly pressing the top of the button: an ON message is sent to the group to which the button belongs.
- Pressing and holding the top of the button: sends a START brightness increase message while pressing the button and a STOP message on releasing it.
- Briefly pressing the bottom of the button: an OFF message is sent to the group to which the button belongs.
- Pressing and holding the bottom of the button: sends a START brightness decrease message while pressing the button and a STOP message on releasing it.

OPERATION AS A ROLLER SHADE BUTTON

- Briefly pressing the top of the button: a STOP opening roller shade message is sent to the group to which the button belongs.
- Pressing and holding the top of the button: a START opening roller shade message is sent to the group to which the button belongs.
- Briefly pressing the bottom of the button: a STOP closing roller shade message is sent to the group to which the button belongs.
- Pressing and holding the bottom of the button: a START closing roller shade message is sent to the group to which the button belongs.

OPERATION AS A SCENARIO BUTTON

Pressing the top of the button calls up the associated scenario (scenario 1) whereas pressing the bottom of the button calls up another associated scenario (scenario 2).

Standard compliance

R&TTE directive

Standards EN 301 489-3, EN 50371, EN 300 220-2.

Customizing buttons 20506 - 14506.

The buttons can be specially customized with any symbol even for minimum quantities; the customizing is done by laser. In addition it is possible to reorder the same customization at different times with identical results since all the customizations are saved to magnetic media.

Buttons 20506 - 14506 can be customized with:

- symbols and text illustrated in the tables on page 11 and 12; for ordering, clearly state the symbols to be put on the right and left buttons and on their bottom and top respectively.
- symbols and text on request.

As regards customizing with symbols and text on request, take account of the following:

- provide a printout or a film of the subject to duplicate, drawn in black and white to a scale 2 or 3 times greater than the finished size;
- the subject can also be supplied on a magnetic medium (DOS or MAC diskette with image in EPS or TIFF format), together with a hardcopy paper printout;
- check that the desired symbol and/or text are not already included in the following tables; in this case it is sufficient to state the relevant code in addition to the article code on the request.

Important:


























- Do not provide photocopies of the subject to duplicate.
- Do not transmit the subject to duplicate by fax since the low resolution of faxes prevents duplicating the transmitted document with the quality of the laser system.

To request customization, follow the instructions given in the specific section of the General Price List.


















For the delivery times, please contact the Vimar sales network.

Manual

Eikon - Library of standard symbols and text

										
64	65	66	67	68	69	70	71	72	73	74
ON	OFF									
75	76	77	78	79	80	81	82	83	84	85
			APRE	CHIUDE	ALARM	DO NOT DISTURB	AVANTI	INDIETRO	LUCE	GENERALE
86	87	88	89	90	91	92	93	94	95	96
ESTERNO	GARAGE	GIARDINO	BAGNO	CANTINA	RIPOSTIGLIO	SCALE	SOLAIO	TERRAZZA		
97	98	99	100	101	102	103	104	105	106	107

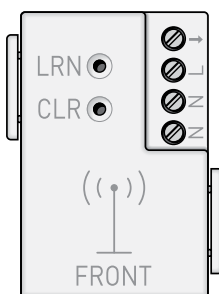
Plana - Library of standard symbols and text

										
51	52	53	54	55	56	57	58	59	60	61
		apre	avanti	bagno	cantina	chiude	esterno	garage	generale	giardino
62	63	22	23	24	25	26	27	28	29	30
indietro	luce	OFF	ON	ripostiglio	scale	solaio	terrazza			
31	32	33	34	35	36	37	38	39	40	41
	alarm	do not disturb								
42	49	50								

Actuator with EnOcean module 1 relay (01796)

The actuator with the EnOcean module is able to receive both the radio signal transmitted by the Bus interface with the EnOcean module following a command made with the button of a By-me device and the radio command of the radio-frequency rocker push button to actuate, via relay output, the load to which it is connected.

If there is no mains power supply, the actuator keeps the previous configuration.



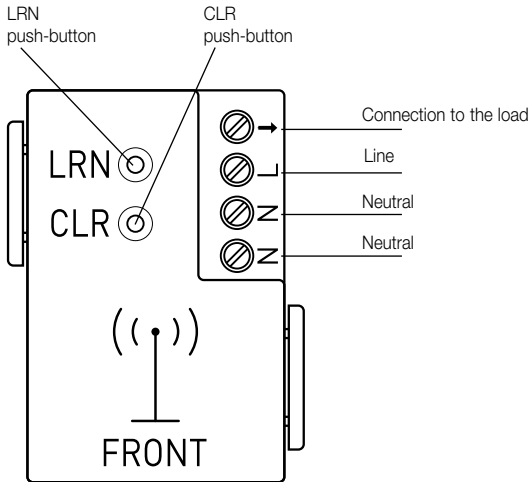
01796

Technical characteristics

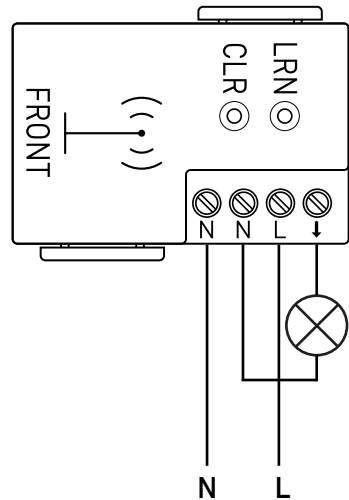
- Power supply: 230V~, 50Hz.
- Reception frequency: 868 MHz
- Operating temperature: -5 - +45 °C (for indoor use)
- Configuration push-buttons:
 - LRN (learning push-button). On pressing LRN the actuator enters the learning phase, signalling this condition with intermittent switchover, every 2 s, of the relay output. When a new button is saved, the output remains active for a few seconds and then starts switching again; on pressing LNR or after approximately 30 s of no activity, the actuator exits the learning phase.
 - CLR (memory delete push-button). Pressing the CLR push-button for a few seconds deletes all the saves made and the actuator directly enters the learning phase (see previous point).
- Two-position stable relay output with the following controllable loads:
 - Resistive loads: 1100 VA ($\cos \varphi = 1$)
 - Incandescent lamps (tungsten): 400 W
 - Ballast (fluorescent lamps): 360 W ($\cos \varphi = 0.4-0.6$)
- Maximum number of radio transmitters that can be saved on the relay: 30.

Manual

Front view



Connection example



Functionality

ADDING RADIO ROCKER PUSH BUTTONS

The configuration procedure is as follows:

- 1) Connect the actuator 01796 to the electric mains.
- 2) Press the LRN push-button using an object with a non-metallic tip; the device is now awaiting a radio message and this standby mode is confirmed by its output continually changing status (intermittent switchover).
- 3) To access the actuator acquisition mode, please see the By-me control panel manual. The code sent by the control panel is saved on the actuator and, to confirm acquisition, the output remains active for approximately 4 s; after this time has elapsed, it starts switching again and the actuator is then ready for saving again.
- 4) To exit the saving phase, simply press the LRN push-button again or wait for a time out of 30 s with no radio activity.

REMOVING A RADIO ROCKER PUSH BUTTON

A previously saved button can be selectively deleted; this operation is performed using the By-me control panel menus, therefore please see the relevant manual.

DELETING ALL THE SAVED BUTTONS

To delete all the buttons saved on the actuator, simply hold down the CLR button for approximately 2 s. Confirmation of deletion is highlighted by the output status changing continually; the actuator is then already in the phase of saving and is ready to acquire new radio transmitters. To exit this phase, simply press the LRN button.

Actuator operation without the By-me control panel

ADDING RADIO ROCKER PUSH BUTTONS

The pair of rocker push button devices (radio transmitter) and actuator with 1 output (receiver) can also function without the aid of the By-me control panel and the interface with the EnOcean module; the controls sent from the rocker push buttons can indeed be intercepted directly by the actuators. The configuration procedure is as follows:

- 1) Connect the actuator 01796 to the electric mains.
- 2) Press the LRN push-button using an object with a non-metallic tip; the device is now awaiting a radio message and this standby mode is confirmed by its output continually changing status (intermittent switchover).
- 3) Then press either the top or the bottom of the toggle button with which you want to control the actuator.
Saving is confirmed by the actuator output remaining active for approximately 4 s after which it starts switching again and the device is then ready for saving again.
- 4) To exit the saving phase, simply press the LRN push-button again or wait for a time out of 30 s with no radio activity.

REMOVING A RADIO ROCKER PUSH BUTTON

A previously saved radio button can be selectively deleted.

- 1) Press the LRN push-button using an object with a non-metallic tip; the device is now awaiting a radio message and this standby mode is confirmed by its output continually changing status (intermittent switchover).
- 2) Then press the button you want to remove from the actuator memory. Deletion is confirmed by the actuator output remaining active for approximately 4 s after which it starts switching again and the device is then ready for deleting again.
- 3) To exit the deletion phase, simply press the LRN push-button again.

DELETING ALL THE SAVED BUTTONS

To delete all the buttons saved on the actuator, simply hold down the CLR button for approximately 2 s. Confirmation of deletion is highlighted by the output status changing continually; the actuator is then already in the phase of saving and is ready to acquire new radio transmitters. To exit this phase, simply press the LRN button.

Standard compliance

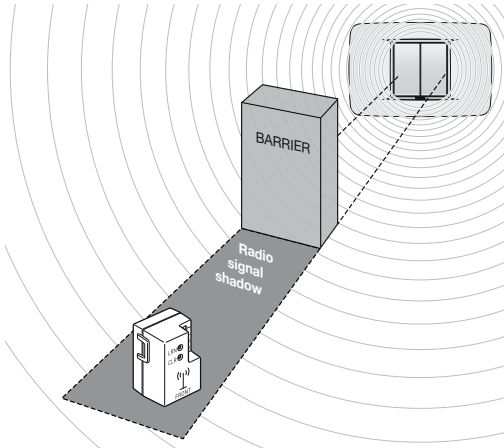
R&TTE directive

Standards EN 60669-2-1, EN 301 489-3, EN 300 220-2, EN 61000-6-2.

Manual

Warning: The following illustrates the situations that reduce the transmission/reception capacity of the radio devices.

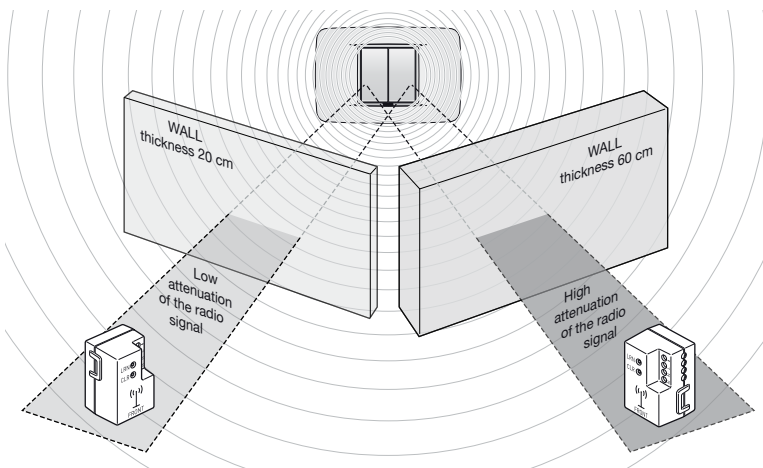
- Radio lighting point installed in a metal casing;
- Plasterboard walls with insulation of wool and aluminium foil;
- False ceilings made of metal or carbon fibre;
- Lead glass or glass with covering of metal, steel jewellery;



Radio signal penetration

<i>Material</i>	<i>Penetration</i>
Wood, plastic, glass	90....100%
Bricks	65....95%
Concrete	10....90%
Metal, aluminium walls	0....10%

- Transmitter or receiver installed on the floor or in a niche in a wall;
- Moisture;
- Devices that transmit RF signals such as computers, audio and video appliances or dimmer switches for lamps: keep at a distance of at least 0.5 m.





WARRANTY CERTIFICATE N°

Your VIMAR product has been subjected to rigorous controls and is covered by a warranty for 36 (thirty six) months from the date of purchase.

The warranty is valid on condition that:

- the warranty card attached to the product has been filled out in full and sent to the VIMAR Distributor/Branch Office indicated below within 15 days of the date of purchase.
- Your copy of the warranty certificate is provided to the service staff specified by the VIMAR Distributor/Branch Office.

VIMAR will repair or replace the product or any part thereof which is found to be defective within the 36 months of warranty coverage.

The analysis of the defect and the repair or replacement will be done by the service staff specified by the VIMAR Distributor/Branch Office.

The warranty does not cover:

- defects due to accidental breakage during shipping, improper use of the product, incorrect installation, connection or power supply, and all other defects not due to the original configuration of the product or any component thereof.
- Any components (leds, keys, control knobs, etc.) which are defective for reasons not due to their original configuration.
- Defects due to degradation of the remote control unit batteries.

The warranty is void if the product is repaired or tampered with by anyone not authorised to do so by VIMAR.

To send to:

Personal data

BY-ME SYSTEM
WARRANTY CERTIFICATE N°

I have read and understood the condition stated in the warranty certificate.

Name and Surname

Address N°

City

Province Postcode Country

Date of purchase

Sign _____

ATTENZIONE! Le dimensioni della 3a anta devono essere 140x210 mm

To send to:



ATTENZIONE! Le dimensioni della 3a anta devono essere 140x210 mm



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