By-me for outdoor.
Inside: By-me system
Outside: new video door entry systems.

The By-me system is growing again, and from today it leaves the house with an external video entry station: two new plates with one to four buttons, equipped with Elvox.

By-me home automation control unit.
The By-me control unit dialogues with the external plate thanks to Due Fili technology and also manages household video control and intercommunication. The home automation also manages scenes, burglar alarm, climate, energy-saving and remote communication. It is available in flush or table mounting for the Eikon and Plana series or surface mounting for the Idea series.
New By-me video door entry plate. The new By-me video door entry plates are equipped with Due Fili technology and designed for installations with from one to four users. An ideal solution for high-profile detached and semi-detached residences, in two different finishes: brushed and polished stainless steel and bronze.
By-me signs the welcome.

In the new By-me video door entry system, good looks and functionality go hand in hand. The external plates welcome visitors with a simple, rigorous design, in two different brushed and polished finishes: stainless

The severity of brushed and polished stainless steel.
A finish that reinterprets the solution in most demand on the market: the brightness of stainless steel and the severity of the brushed polished finish. For those who want an external plate with a definite aesthetic quality.

The refinement of brushed and polished bronze.
A finish that is absolutely new on the market thanks to the PVD coating in a warm shade of bronze and the effect of the brushed polished finish. For those who want an out of the ordinary external plate.

The simplicity of Elvox Due Fili technology.
Speed, simplicity and versatility of installation and programming: audio, video and power run on the Elvox Due Fili system. The simplest way of making a video door entry system, with the possibility of household video control and intercommunication.
Flush mounting. Surface mounting.

Mounting accessories.

Single-piece control panel in AISI 316 stainless steel (V4A).
LED with white light.
Electronic unit programmable by means of push buttons or by PC with Vimar “EVCom” software.
IP44 protection degree.

From 1 to 4 backlit name plates with white light and tinted glass.
Button cursors in transparent polycarbonate with stainless steel protection.

Colour camera with 1/4” CCD sensor, 3 mm fixed lens, horizontal and vertical manual tilting.
Set-up for flush and surface mounting with rain-proof frame.

Flush mounting box
Surface mounting box with built-in rainproof frame
By-me.
Bringing home automation within easy reach.

Why install the By-me home automation system? Simple: it offers you the best in terms of communication, comfort, safety and savings. Managed by a single control unit, which enables all the parts of the system to dialogue together and with radiofrequency system. And it speaks to you in a language that you know well: that of your mobile phone.
**Safety.**
Burglar alarm system and all alarms supervised.

**Energy saving.**
Power consumption and load control.

**Communication.**
Total control from Windows Media Center® and via mobile phone by Vimar By-phone.

**Automation and burglar alarm.**

**CCTV.**

**By-me control unit.**
Simple and intuitive control of all functions via the control panel.

**Radiofrequency system.**

**Video door entry.**
Two-family house: home automation, household video control and intercommunication.

The new Vimar video door entry system is the ideal integration of a By-me automation system in two-family homes. From the control unit, by switching from one camera to another you can control the children’s bedrooms and other internal areas. And intercommunication between different areas of each of the two semi-detached homes is always available even when there is a call from the external plate to the other house, without any interference between the two communications.
Detached house: video door entry system and intercommunication.

The new Vimar video door entry system is the ideal solution for household video control and intercommunication. By switching from one camera to another you can control the children’s bedrooms and other internal areas, while intercommunication keeps all parts of the house in contact. From the control unit you can also activate auxiliary functions, such as opening the gate and switching on the outside lights.
Condominiums: integration of the video door entry system.

Everything runs on two wires, both inside the pillar of the property and in the system of each apartment. With the new Vimar video door entry system it is possible to create systems for up to 4 users, integrating outdoor plates, internal stations in a single installation project. An ideal solution for both traditional and home-automated areas.

External plate
Video door entry control unit
Intercommunicating speakerphone
## Video door entry guideline

### External products

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plates</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Entrance plate  
Audio/video entrance plate, Due Fili system, 1 or 4 name plate buttons, with videocamera, phonic unit, subject light, stainless steel | 02001 02002 02003 02004 | 02011 02012 02012.BR 02013 02013.BR |
| **Flush mounting** | **Rainproof frame** | **Surface mounting box** |

### Internal products

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flush mounting</strong></td>
<td><strong>EIKON</strong></td>
</tr>
</tbody>
</table>
| Color monitor  
Color monitor, LCD 3.5", to complete with built-in 8-module (4+4) flush mounting box and Due Fili video door entry module | 20550 grey 01963 | 14550 white 01963 |
| Speakerphone  
Speakerphone with door opening and stair lights switching on functions for Due Fili system, 3 modules | 20557 grey 01963 | 14557 white 01963 |
| Video camera  
Inner color video camera with vertical adjustment, 1 module | 20560 grey 01963 | 14560 white 01963 |
| Video camera with microphone  
Inner color video camera with vertical and horizontal adjustment, built-in microphone, 2 modules | 20565 grey 01963 | 14565 white 01963 |
| Light  
Inner light with high-efficiency LED for color video camera, supply voltage 12-24 V d.c. (SELV), 1 module | 20570 grey 01963 | 14570 white 01963 |
| Call button  
Call button for the landing with luminous name-plate, built-in microphone and speaker, for Due Fili system, 3 modules | 20577 grey 01963 | 14577 white 01963 |
| **Surface mounting** | | |
| Video door entryphone  
Video door entryphone with color monitor, LCD 3.5", for Due Fili system | 01965 white | 01965.14 Anthracite 01965.20 Silver |
# System devices

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devices for DIN rail (60715 TH35)</td>
<td></td>
</tr>
<tr>
<td><strong>28 V d.c. 60 VA power supply</strong></td>
<td>02030</td>
</tr>
<tr>
<td>Due Fili power supply unit with 28 V d.c., 60 VA output, supply voltage 230 V–50-60 Hz, occupies 8 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Additional 28 V d.c. 15 VA power supply</strong></td>
<td>02031</td>
</tr>
<tr>
<td>Due Fili additional power supply unit with 28 V d.c. 15 VA output, supply voltage 230 V–50-60 Hz, occupies 4 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Additional 35 VA power supply</strong></td>
<td>02032</td>
</tr>
<tr>
<td>Additional Due Fili supply unit for LEDs and videocameras for CCTV system with 10,5 V d.c., 13,5 V d.c., 18 V d.c, 35 VA output, supply voltage 230 V–50-60 Hz, occupies 4 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Relay actuator, 1 output, 12 V–</strong></td>
<td>02021</td>
</tr>
<tr>
<td>Actuator with 3 A 230 V– change-over relay output, occupies 4 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Digital actuator, 2 outputs</strong></td>
<td>02022</td>
</tr>
<tr>
<td>Due Fili digital actuator with 2 NO 3 A 230 V– relay outputs, occupies 4 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Switching module</strong></td>
<td>02019</td>
</tr>
<tr>
<td>Due Fili switching module for the parallel connection up to 4 video entrance panels, occupies 4 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Video splitter for 4 video cameras</strong></td>
<td>02018</td>
</tr>
<tr>
<td>Due Fili video splitter, 4-output, for the distribution and the impedance matching of the video signal on unbalanced connection lines, occupies 4 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Video selector for 4 video cameras</strong></td>
<td>02016</td>
</tr>
<tr>
<td>Due Fili video selector for 4 videocameras 20560, 20565 or 14560, 14565 or for CCTV-system, occupies 8 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Additional video selector for the connection up to 4 video entrance plates</strong></td>
<td>02017</td>
</tr>
<tr>
<td>Due Fili video selector for the connection up to 4 video entrance plates, occupies 4 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Splitter</strong></td>
<td>02020</td>
</tr>
<tr>
<td>Due Fili splitter for talk areas partitions, occupies 4 17,5 mm modules</td>
<td></td>
</tr>
<tr>
<td><strong>Cables and software</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cable for inner cabling</strong></td>
<td>02037</td>
</tr>
<tr>
<td>Due Fili cable for inner cabling, twisted pair wire 2x1 mm², 100 m</td>
<td></td>
</tr>
<tr>
<td><strong>Cable for underground cabling</strong></td>
<td>02038</td>
</tr>
<tr>
<td>Due Fili cable for underground cabling, twisted pair wire 2x1 mm², 100 m</td>
<td></td>
</tr>
<tr>
<td><strong>EVCom software with USB interface</strong></td>
<td>02024</td>
</tr>
<tr>
<td>EVCom programming software with Due Fili USB interface</td>
<td></td>
</tr>
</tbody>
</table>

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11
Video door entry

General features

Scope
The By-me system permits making video door entry system with Due Fili technology. The Due Fili system use a single Bus cable (with 2 wires) for the connection between video door entryphone (flush or surface mounting) and the other devices. This type of technology means that a simple, flexible architecture can be used to create even very complex installations as neither coaxial or return cables are needed between appliances and video door entry units. Another advantage is the integration to the video door entry system the automation and burglar alarm systems manage from a single control unit.

Main functions
• Call answering
When a call is made from an outdoor station (outdoor plate or call button from landing), the video door entry unit emits an audible warning and the LCD monitor lights up to display the person calling.

• Self-start
This function is used to activate audio/video communication on the outdoor station without a call being received; this function is useful, for example, to check the area outside the dwelling.

• Confidential conversation
This function is used to communicate with the outdoor station when a call is arrived or in self-start mode. It is not possible to listen to other communications in progress or activate the self-start while conversation is in progress.

• “Open door” signal
This function is used to display a LED signal on the video door entry, indicating that the door or gate is open.

• Lock control
This function can activate the relay for lock opening of the gate/door, in order to permit the access in dwelling.

• Stairs light control
This function make it possible the activation of the relay connected to a or more lights to switch on.

• Auxiliary function
This function can activate external devices or services such as, for instance, courtesy lights, automation, etc.; to use it a relay must be installed.

• Outdoor call
Through the wiring to dedicated terminal in the video door entryphone, it is possible to differentiate the sound of a call from the outdoor button (for example, from landing or a secondary entrance, etc.) to distinguish it from a call from the outdoor station.

• Intercommunicating call
Enables the audio communication between video door entryphones, speakerphones and video door entryphones and speakerphones.

• Additional bells
If there is the necessity to transmit the call signalling to different points of the system (for example, in very large dwellings), it is possible to install outdoor bell repeaters.
General features

Wiring diagram with intercommunicating call and baby-watch.

Devices for By-me video door entry system

- **Plates**, (02001, 02002, 02003, 02004) as audio-video devices that identify the subject requesting access to the dwelling. All the programmation parameters (call time, bell type, electric lock opening, indoor station identification, etc.) are set and memorized in the plate.

- **Flush mounting monitor**, (for flush mounting: 20550 or 14550 with 01963 units or surface mounting: 01955) it is able to interact images and sound for viewing and communicating with the person at the outdoor station.

- **Speakerphones**, (20557 and 14557) for flush mounting, that enables communication with the outdoor station (plate or call button).

- **Call buttons**, (20577 and 14577) for landing, enable the calling and communication to the indoor station (flush mounting monitor or surface mounting entryphone or speakerphone).

- **Video cameras**, for flush mounting (20560 and 14560) and with built-in microphone (20565 and 14565) enable filming the subject that will then be displayed on monitor.

- **Light**, (20570 and 14570) for indoor (shared with the three systems) that, installed with the videocameras, enables lighting the subject to film so that the image displayed on the flush or surface mounting monitor is clear and sharp.

- **Supply units**, (02030, 02031, 02032) which manage the audio and video communication between the indoor and outdoor stations.

- **Switches**, (02016 and 02017) which manage the audio-video signal exchange from one outdoor station to another one.

- **Distributors**, (02018) enable duplicating video signal in order to be received from many monitors.

- **Concentrators**, (02019) for installations with more than one entrance panel wired in series and for units with more than one pillars.

- **Separator with power supply**, (02020) enables inter-communicating ‘zone’ units.

- **Relay actuator**, (02021) it activates an auxiliary contact (e.g. stairlights) or as a relay repeater for entrance plate or intercom call.

- **Digital relay actuator** (02022) programmable device with 2 NO relays for two operating modes, it can be used as a timed relay for activating 2 independent auxiliary contacts (e.g. stairlights) or as a relay repeater for entrance plate and intercom call.
System architecture
There are different ways to create video door entry systems. The most common layouts are those where there are one or more internal answering panels. These layouts can differ according to the functions and services required (connection of a number of video door entry units in series, intercom services, call repeaters, actuators for external services, etc.) for which specific supplementary modules are needed (supplementary power supplies, external relays, etc.). In the figures we can see a single main power supply (AL) in the systems that use a single outdoor panel (TE). If it is necessary to build a network of intercommunicating audio/video door entry units isolated from the main system; if there are several external sources of audio-video signals (outdoor panels with video camera and voice unit) or if you want to create separated communication sectors or if there are systems already installed in a building complex, then further supplementary modules will be needed such as:
- concentrators (02019)
- additional power supplies (02031, 02032)
- separators (02020)
- video distributors (02018)

Characteristics
- Bus cable: two twisted and non-polarised 02037, 02038;
- system topology: linear (input-output) or star-shaped;
- devices: up to 200 internal panels and up to 15 entrance panels;
- max distance between two devices (entry units, video entry units or entry panels) in video system is: 75 m;
- audio intercom between entry units and video entry units or groups of audio units and video units: up to 6 different calls;
- single call that can activate up to 8 monitors at the same time;
- different call tone per entry panels, outdoor button and intercom;
- additional supply it is not necessary in system where it is installed up to 2 video door entry panels that activate at the same time (in addition to the entrance plate).

Devices and their use
The installation applications and use of devices are as follows.

Concentrators (02019):
- for installations with more than one entrance panel wired in series;
- for units with more than one pillars;
- whether there is a landing call button on the unit and an audio/video 02016 interface depends upon the installation.

Separator with power supply (02020):
- for a unit on a building;
- for inter-communicating ‘zone’ units;
- up to a maximum of 16 separators can be used.

Audio/video (02016) interface:
- for baby-watching with internal cameras: allows 4 cameras to be connected while a maximum of 16 can be achieved using the appropriate expansion modules (02017 - up to 3);
- for each landing call (audio/video).

Additional power supplies (02031, 02032):
- for installations with more entrance panels;
- for installations with more concentrators wired in series;
- for installations with more than 2 video door entry systems wired in series;
- for installations with a control unit at reception.
- for inner video cameras supply (20560, 20565, 14560, 14565).

Video distributors (02018):
- for star-layout installations;
- can be ‘active’ (for colour systems) or ‘passive’ (for black and white systems).

Relay (02021):
- programmable device with 2 NO relays for two function modes;
- can be used as twin timer relays to operate two independent auxiliary services (e.g. stair lighting) or as relays to repeat calls from the entrance panel or intercom.

Digital relay actuator (02022):
programmable device with 2 NO relays for two operating modes, it can be used as a timed relay for activating 2 independent auxiliary contacts (e.g. stair lights) or as a relay repeater for entrance plate and intercom call.
**Configuration**

The functions configuration is realized as described:
- directly through the entrance plate buttons;
- through PC with 02024 USB interface and “EVCom” software. The “EVCom” software is necessary when:
  - more than 4 entrance units call at the same time;
  - there is the 02016 video selector;
  - there are up to 4 call groups.

**Specifications**

The Due Fili system enables the construction of systems with digital identification of devices and controls. The most important advantage compared to other video door entry systems (classic “8 Wire + n” analogue or digital with multi-wire Bus) is that the whole system is wired with just two twisted, non-polarised conductors, on which the data, audio signal, video signal and necessary power supply are carried to the connected devices. The system makes wiring operations considerably simpler and is ideal for use on both small and medium residential systems (up to 4 housing units) and potentially on large building complexes (up to a maximum of 200 indoor panels).

Another advantage is its extreme flexibility: new indoor panels can be added by simply shunting them from the riser without having to wire new cables to the power supply if the system is later enlarged. The digital management of all the commands (ring tone duration, type of tone, call duration, answer duration, entry with password or programmed key, etc.) allows all the parameters for devices to be customised to meet individual users’ needs. Depending on the configuration of the system, each of the connected devices is characterised by a numerical code and is able to receive and send data packets containing all the information related to the management of the communication; all the control operations typical of a video door entry system such as calling, electrical unlocking, stair lighting, etc., are therefore coded. Voice communication and video signals are still sent in analogue form. If the Due Fili system is combined with the home automation system (monitor 20550 + modules 01960 and 01963 or wall-mounted control panel 01965), it is possible to activate given functions in the video interphone system (for example lock release, switching on video cameras, etc.) starting from the commands the automation system sends (for example from the 2 or 3-module control devices, from the Windows Media Center® application, etc.). Control panel operation will be in automated mode and will switch to video door entry system mode whenever an external call is received or when it is activated by a user via the automation menus that are shown in the following figures:
Detached house with Due Fili video door entry system

The example in the figure illustrates the system managed by the flush mounting video entry system with LCD monitor. The control unit allows the user to see and talk to the caller via the external plate, to open the lock of the pedestrian gate and switch on the lights on the path. From the control unit it is also possible to switch on the flush mounting video camera and view the room where it is installed (a useful application, for instance, to check the children’s bedroom). The flush mounting speakerphone (installed in the double bedroom) allows the user to communicate with the outside and to open the lock without having to go to the room where the control unit is installed (a useful application in large locations) and, thanks to the NO push button, to communicate internally with the control unit. The system is very versatile from the point of view of installation; the page alongside shows two types of connection: enter/exit and star with the addition of the Due Fili concentrator 02019.

(Example with Eikon)
Examples of installations

Wiring diagram

Star-connection with 02019 concentrator
Video door entry

Examples of installations

Two-family house with Due Fili video door entry system

The example in the figure shows an application of a video door entry system in a two-family house using the Due Fili system. The flush mounting LCD monitor allows the user to see and talk to the Due Fili hands-free speakerphone has also been installed at the entrance to the two homes. By means of the speakerphone it is therefore possible to communicate with whoever is outside the house and, by connecting a NO contact on the lock to the plate, receive a “door open” signal indicated by the lighting of the green LED. Thanks to the installation of the separator 02020, with the buttons 20008 combined with the speakerphones 20577 in the various rooms, intercommunication is possible between different areas of the home, even when a call is in progress from the outside plate, without any interference between the two communications.

(Example with Eikon)
Examples of installations

Wiring diagram

Flat A

Flat B

Outdoor

Electric lock

Pedestrian gate electric lock

Light on the path

02002.BR

02021

02020

02030

020577

020557

02019

01955.14

20550 + 01963

(2) 20008

(2) 20008

02002
Video door entry

Examples of installations

Condominium with Due Fili video door entry system
The example in the figure shows an application of a video door entry system in a condominium using the Due Fili system. With the video door entry system, the user can see and talk to the caller on the external plate, open the lock of the main entrance to the condominium and switch on the stair light. There is a call button at the entrance to each home. By means of the speakerphone it is therefore possible to communicate with whoever is on the landing and, by connecting a NO contact on the lock to the plate, receive a “door open” signal indicated by the lighting of the green LED (this is useful in case the door of the main entrance is accidentally left open). If the video entry system is integrated with the automation system, it will be possible to manage some functions of the Due Fili system from the control unit (monitor 14550.SL with control unit module 01960). For example, the user can set a “Going Out” scene which, as well as switching off the lights in the apartment, closing the shutters and activating the burglar alarm system, also opens the vehicle entrance gate.

(Example with Plana Silver)
Examples of installations

Wiring diagram

Family 1

14550.SL + 01963

Family 2

14550.SL + 01963

Family 3

14550.SL + 01960 + 01963

BUS

Family 4

14550.SL + 01963

Outdoor

Electric lock

Pedestrian gate

02018

02018

02030

02018

02030

02018

02030

02018

02030
Due Fili video entrance panels
The stainless steel outdoor panel enables the party requesting entry to the dwelling to be identified. It is available in the versions with one to four call buttons, with backlit name tags in stainless steel and bronze finishes. It consists of the plate and electronic unit complete with video module, colour video camera and conventional buttons; The video camera has a 1/4" CCD sensor, fixed 3 mm lens and white light LED and can be manually directed vertically and horizontally depending on the installation needs.
The panel is designed to operate both alone and together with other panels in the same system.
In this case, one must be defined as the MASTER panel and the others as SLAVE panels. In the Two-Wire video interphone system, all the configuration parameters (such as, for example, call time, electrical lock release, type of bell, code numbers of the indoor stations, etc.) are set and saved in the electronic unit on the panel.
The panel is programmed without installing the front plate so as to have free access to all 8 buttons of the electronic unit, or from a PC with Vimar “EVCom” software via the USB interface (02024).
The panel can be flush-mounted with rainproof trim or installed on a surface-mounting wall box with built-in rainproof trim.

The electronic unit has wiring for connecting the terminal board. It can manage a maximum of 4 calls and has the possibility to generate different call codes for each button with values from 1 to 200. The following controls are located on the front of the electronic unit (see figure at the side):
- balance;
- external volume;
- internal volume.

Technical specifications
- one-piece panel made of AISI 316 stainless steel (V4A);
- two different brushed finishes: bronze and stainless with surface buffing for improved shine and fingerprint resistance;
- backlit name cards with white backlighting, protected by tinted glass.

Conformity to Standard
EMC Directive
EN 61000-6-1,  EN 61000-6-3 Standards
Due Fili video entrance panels

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02001.BR</td>
<td>Audio/video entrance panel, Due Fili system, 1 button, with videocamera, phonic unit, subject light</td>
</tr>
<tr>
<td>02002.BR</td>
<td>As above, 2 buttons</td>
</tr>
<tr>
<td>02003.BR</td>
<td>As above, 3 buttons</td>
</tr>
<tr>
<td>02004.BR</td>
<td>As above, 4 buttons</td>
</tr>
</tbody>
</table>

Audio/video electronic unit detail

Side views show the overall dimensions and the flush depth in mm
02011 - Entrance panel flush mounting box

Technical specifications
Flush mounting box in thermoplastic material (ABS) for 02001, 02002, 02003, 02004 entrance plates installation. To be completed with rainproof frame.

02012 - Rainproof frame
The rainproof frame is made of AISI 316 (V4A) 15/10 stainless steel. It protects the entrance panels against atmospheric agents. It is available in two brushed finishings: bronze and stainless steel (with PVD treatment and exterior shining). Fitting for 02011 flush mounting box.

02013 - Entrance panel surface mounting box
The surface mounting box with built-in rainproof frame is made of AISI 316 (V4A) 15/10 stainless steel. It is available in two brushed finishings: bronze and stainless steel (with PVD treatment and exterior shining).
Accessories

Entrance panel accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02011</td>
<td>Flush mounting box for video door entry plate</td>
</tr>
<tr>
<td>02012</td>
<td>.BR Rainproof frame for video entryphone flush mounting box</td>
</tr>
<tr>
<td>02013</td>
<td>.BR Surface mounting box with built-in rainproof frame for video entryphone</td>
</tr>
</tbody>
</table>

Side views show the overall dimensions and the flush depth in mm
Flush mounting monitor
The LCD monitor is equipped with a built-in microphone and speaker, 4 buttons for the video door entry functions (communication, auxiliary circuit, door opening and stair lights), 6 push buttons for navigation, selection and setting of the menus, a signalling LED and trimmer to adjust the colour of the video. On the back of the device there are two connectors for connecting:
- 01963 video door entry modules or 01964 CCTV module, in the upper seat;
- 01960 control unit module, in the lower seat.

The LCD monitor must be installed on 8-module (4+4) mounting box V71318.

Technical specifications
- LCD: 480x234 dot, RGB Delta, 0.150x0.216 (mm) dot pitch.
- Speaker: 16 Ω, 1W, 500 Hz – 20 KHz.
- Microphone: 2 KΩ, 3 V d.c., 0.5 mA, 50 Hz – 16 KHz, S/N 58 dB.
- Operating temperature +5 °C - +40 °C (for indoor).

Operating
The LCD monitor operates in three separate modes, depending on the combinations of 01960 and 01963.
- Automation control unit mode: monitor 20550 or 14550 + 01960 module.
- Due Fili video door entry mode: monitor 20550 or 14550 + 01963 module.
- Automation control unit and Due Fili video door entry mode: monitor 20550 or 14550 + 01960 module + 01963 module.

Conformity to Standards
See for 01960 and 01963.
### Devices

#### Flush mounting monitor

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20550  .B .N</td>
<td>Color monitor, LCD 3,5&quot;, to complete with control unit module, video door entry or CCTV modules, with built-in 8-module mounting frame for 8-module (4+4) flush mounting box</td>
</tr>
<tr>
<td>14550  .SL</td>
<td>As above, for Plana</td>
</tr>
</tbody>
</table>

**EIKON**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20550  grey</td>
<td></td>
</tr>
<tr>
<td>20550.B  white</td>
<td></td>
</tr>
<tr>
<td>20550.N  Next</td>
<td></td>
</tr>
</tbody>
</table>

**PLANA**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14550  white</td>
<td></td>
</tr>
<tr>
<td>14550.SL  Silver</td>
<td></td>
</tr>
</tbody>
</table>

#### Accessories for color monitor mounting

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V71318</td>
<td>8-module (4+4) flush mounting box, GW 650 °C, light blue</td>
</tr>
<tr>
<td>20788  .B .N</td>
<td>Table mounting box for 3,5&quot; LCD monitor. Delivered with frame for 8-module Classic or Round cover plate</td>
</tr>
<tr>
<td>14788  .SL</td>
<td>As above, for Plana</td>
</tr>
</tbody>
</table>

- **20668...** 8-module (4+4) Classic cover plate: Bright (varnished metal), Galvanic (galvanic metal), Inox (stainless steel), Stone (natural stone), Wood (solid wood), Glass (crystal) and Reflex (technopolymer)
- **20698...** 8-module (4+4) Round cover plate: Bright (varnished metal), Galvanic (galvanic metal), Inox (stainless steel), Wood (solid wood), Glass (crystal) and Reflex (technopolymer)
- **14668...** 8-module (4+4) Plana cover plate: technopolymer and Reflex

**Side views show the overall dimensions and the flush depth in mm**
**Video door entry**

**Devices - TECHNICAL CHARACTERISTICS**

**01963 - Due Fili module operating**
The modules, suitably integrated to the color monitor 20550 or 14550, enable converting the latter into a flush mounting speakerphone. The video door entry module is an audio/video interface through which it is possible to interact with voice and images; the module is equipped of outputs/inputs that enable connecting the video door entry unit to the other system appliances (power supply, stair light, electric lock, etc.).

**Funzionamento**
The Due Fili video door entry system features units in which device identification and control are digitally managed. Depending upon settings, control operations typical of a video door entry system such as calling, electrical lock opening and stair lighting, etc., are coded. The greatest benefit of the Due Fili system is that the whole unit is wired with just two twisted non-polarised conductors that carry audio and video signals as well as power supply. The system also allows internal calls to be made between video door entry systems, between video door entry systems and entry phones and between entry phones.

**Terminals:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Type</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>+12</td>
<td>-</td>
<td>Tone supply/additional relay</td>
</tr>
<tr>
<td>CH</td>
<td>Output</td>
<td>Tone control/additional relay</td>
</tr>
<tr>
<td>1</td>
<td>Input/Output</td>
<td>BUS digital line</td>
</tr>
<tr>
<td>2</td>
<td>Input/Output</td>
<td>BUS digital line</td>
</tr>
<tr>
<td>E+</td>
<td>Input</td>
<td>Additional supply (+28 V c.c., 24 V a.c.)</td>
</tr>
<tr>
<td>E-</td>
<td>Input</td>
<td>Additional supply (GND, 24 V a.c.)</td>
</tr>
<tr>
<td>FP</td>
<td>Input</td>
<td>NO outdoor call button (bell)</td>
</tr>
<tr>
<td>M</td>
<td>-</td>
<td>NO outdoor button mass</td>
</tr>
</tbody>
</table>

**Conformity to Standards**

EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards
Note: The normative conformity concerns with 01963 connected to 20550 or 14550 monitor.

**01955 - Due Fili video door entryphone**
The Due Fili surface mounting video door entry unit permits audio-video interfacing through which communication is possible between the device and the outdoor station. The video door entry unit is equipped with inputs and outputs that allow the bus on the Due Fili system to be connected with power supply devices (Elvox power supply units).

**Operating**
The Due Fili video door entry system features units in which device identification and control are digitally managed. Depending upon settings, control operations typical of a video door entry system such as calling, electrical lock opening and stair lighting, etc., are coded. The greatest benefit of the Due Fili system is that the whole unit is wired with just two twisted non-polarised conductors that carry audio and video signals as well as power supply. The system also allows internal calls to be made between video door entry systems, between video door entry systems and entry phones and between entry phones.

**Terminals:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Type</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>+12</td>
<td>-</td>
<td>Tone supply/additional relay</td>
</tr>
<tr>
<td>CH</td>
<td>Output</td>
<td>Tone control/additional relay</td>
</tr>
<tr>
<td>1</td>
<td>Input/Output</td>
<td>BUS digital line</td>
</tr>
<tr>
<td>2</td>
<td>Input/Output</td>
<td>BUS digital line</td>
</tr>
<tr>
<td>E+</td>
<td>Input</td>
<td>Additional supply (+28 V d.c., 24 V a.c.)</td>
</tr>
<tr>
<td>E-</td>
<td>Input</td>
<td>Aliment.ne supplementare (GND, 24 V a.c.)</td>
</tr>
<tr>
<td>FP</td>
<td>Input</td>
<td>NO outdoor call button (bell)</td>
</tr>
<tr>
<td>M</td>
<td>-</td>
<td>NO outdoor button mass</td>
</tr>
</tbody>
</table>

**Conformity to Standards**

EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards
Due Fili video door entry module

01963 Due Fili video door entry module for 20550 and 14550 monitor. The menu of the software is available in English (.EN), French (.FR), Spanish (.ES), German (.DE) and Greek (.EL) languages, adding to the basic code the respective preference.

Due Fili surface mounting video door entryphone

01955... Video entryphone with 3.5 in LCD color monitor for Due Fili system, for surface mounting.

01955 White

01955.14 Anthracite

01955.20 Silver

Side views show the overall dimensions and the flush depth in mm.
02030 - Additional Due Fili Power Supply Unit
28 V d.c. 60 VA
Main power supply unit for Due Fili audio and video door entry systems. The power supply unit feeds up to 3 units at the same time, beyond which a 02031 power supply unit is needed for each additional unit. If consumption exceeds 3 units, it is necessary to use type 02031 to supply the panels and video entry systems and dedicate the 02030 power supply unit to the other devices of the system.

Technical specifications
• supply voltage: 230 V~ 50-60 Hz
• max absorbed power: 60 VA
• output voltage: 28 V d.c. 1,3 A for Bus, 1 28 V d.c. 200 mA output (intermittent) or 100 mA (continued) from PTC protected for auxiliary services
• inner protection against short circuits by PTC
• technopolymer enclosure, V0 class, 8 17,5 mm modules
• dimensions: 140x115x65 mm

Conformity to Standards
LV Directive, EMC Directive
EN 60065, EN 61000-6-1, EN 61000-6-3 Standards

02031 - Additional Due Fili Power Supply Unit
28 V d.c. 15 VA
The additional power supply unit is to be used in Due Fili systems to supply electronic panels and video entry systems in support of the 02030 main power supply unit. The power supply unit is required when there are several video panels and/or several video interphones that switch on at the same time with the same call. The power supply unit can supply only one specific device, panel or video interphone.

Technical specifications
• supply voltage: 230 V~ 50-60 Hz
• output voltage: 26 V d.c. with load 0,5 A (intermittent) from da PTC protected for auxiliary services
• inner protection against short circuits by PTC
• technopolymer enclosure, V0 class, 4 17,5 mm modules
• dimensions: 75x100x65 mm

Conformity to Standards
LV Directive, EMC Directive
EN 60065, EN 61000-6-1, EN 61000-6-3 Standards

02032 - Additional Due Fili Power Supply Unit 35 VA
The power supply is a programmable power supply unit for surface or panel mounting with omega bar size 4 modules by 17,5 mm. It is equipped with an input (+I), an output (+U) and terminals (A,B,C,D) that, appropriately connected together, determine different voltages at the output. The power supply unit is used for:
• Power supply of video camera and video distributors.

Technical specifications
• supply voltage: 230 V~ a.c. 50-60 Hz
• max absorbed power: 35 VA
• output voltage 10,3 V d.c. and 13,5 V d.c. 250 mA (continued) or 18 V d.c. 800 mA (intermittent) or 400 mA (continued)
• inner protection against short circuits by PTC
• technopolymer enclosure, V0 class, 4 17,5 mm modules
• dimensions: 75x100x65 mm

Conformity to Standards
LV Directive, EMC Directive
EN 60065, EN 61000-6-1, EN 61000-6-3 Standards
<table>
<thead>
<tr>
<th>02030</th>
<th>Due Fili power supply unit with 28 V d.c. 60 VA output, supply voltage 230 V– 50-60 Hz, on DIN rail (60715 TH35) installation, occupies 8 17,5 mm modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>02031</td>
<td>Due Fili additional power supply unit with 28 V d.c. 15 VA output, supply voltage 230 V– 50-60 Hz, on DIN rail (60715 TH35) installation, occupies 4 17,5 mm modules</td>
</tr>
<tr>
<td>02032</td>
<td>Additional Due Fili supply unit for LEDs and videocameras for CCTV system with 10,5 V d.c., 13,5 V d.c., 18 V d.c. 35 VA output, supply voltage 230 V– 50-60 Hz, on DIN rail (60715 TH35) installation, occupies 4 17,5 mm modules</td>
</tr>
</tbody>
</table>
02021 - 1 output relay actuator

The relay contacts enable:
• for example, it is used to transmit the call signal to additional chimes installed in different points of the system (large buildings);
• the control of electric lock;
• the activation of an auxiliary service (stairlight).

Terminals description

| 1 | positive for 7-13 V d.c./a.c. or electronic calls |
| C | connect to 2 for a.c. supply or electronic calls |
| 2 | 0 V d.c. or 0 V a.c. relay coil supply |
| 3 | common relay contact |
| 4 | NO relay contact |
| RC | connect to 4 or 5 terminal per inductive loads |
| 5 | NC relay contact |
| 15 | positive for 14 - 20 V d.c./a.c. |

Conformity to Standards
LV Directive, EMC Directive
EN 60065, EN 61000-6-1, EN 61000-6-3 Standards

02022 - Due Filì digital actuator, 2 outputs

It is a device equipped with two relays with normally open contacts, which can perform two distinct functions depending on the setting assigned by the user in one simple operation.

The two operating modes are:
• relay mode: relay for auxiliary services (switching on stair lighting, for example);
• repeater mode: programmable call repeater (combined with a chime, for example).

To recognise whether the device has been programmed to operate in repeater mode or is not programmed, meaning it is in relay mode, simply look at the LED on the printed circuit when the device is switched on (see L1 figure at the side). The device is programmed using special configuration devices (jumpers) supplied.

Terminals description

| 1A, 1B, 2A, 2B | Bus line (2 pair of terminals connected in parallel) |
| 1, 2 | 1st NO contact, max load: 3 A 230 V a.c. |
| B1, B2 | 2nd NO contact, max load: 3 A 230 V a.c. |
| TEMP. ATTUAT. 1 | trimmer for 1st contact activation time (relay mode) |
| TEMP. ATTUAT. 2 | trimmer for 2nd contact activation time (relay mode) |
| ID0-ID1-ID2 | identification device jumper (relay mode) or groups identification (repeater mode) |
| S1 | groups programming/delete button (repeater mode) |
| L1 | LED to verify operating mode verifica and groups programmin/delete (repeater mode) |
| ABC | jumpers for Bus terminations |

Conformity to Standards
LV Directive, EMC Directive
EN 60065, EN 61000-6-1, EN 61000-6-3 Standards
Devices for DIN rail (60715 TH35) installation

Relay actuator - 1 output

02021  Actuator with 3 A 230 V~ change-over relay output, on DIN rail (60715 TH35) installation, occupies 4 17,5 mm modules

Due Fili digital actuator - 2 outputs

02022  Due Fili digital actuator with 2 NO 3 A 230 V~ relay outputs, on DIN rail (60715 TH35) installation, occupies 4 17,5 mm modules
02019 - Due Fili concentrator
The concentrator is used for connecting several outdoor panels in parallel. At least one of these panels is the video type and/or there are several riser lines (as an alternative to the video distributor). The concentrator has 4 inputs for 4 panels; more than one concentrator can be connected in series (up to 3 at the most) to increase the number of panels in parallel.

Terminals description
1, 2 Bus line to entry and video entry panel's pillar
1A, 2A Bus line to 1st audio/video entry panel's connection
1B, 2B Bus line to 2nd audio/video entry panel's connection
1C, 2C Bus line to 3rd audio/video entry panel's connection
1D, 2D Bus line to 4th audio/video entry panel's connection
+ / - additional supply, to connect to 02031 power supply

Conformity to Standards
EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards

02018 - Due Fili video splitter
The active video splitter is a device which is able to amplify an input signal and make it available on two or more outputs separated from each other. In practice it distributes the signal to a certain number of simultaneous destinations. One example of its use is when a call signal has to be transmitted to several video interphones at the same time (star connection).

Jumper position
For signal level:
- position H: high
- position M: medium
- position L: low
For Bus terminations
- position A: no terminations
- position B: termination 100 Ohm
- position C: termination 50 Ohm

Conformity to Standards
EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards

02016 - Due Fili video selector for 4 video cameras
This is the audio-video interface necessary for making both the audio-video landing call and for self-starting any additional video cameras installed in the system with the video surveillance function.

Up to 4 video cameras can be connected to the video selector. The number of video cameras controlled can be increased using expansion module 02017, which can be connected to a maximum of 4 video cameras at a time. Up to three modules art. 02017 can be connected to art. 02016 to give a maximum of 16 video cameras. Up to three modules 02017 can be installed to art. 02016 to give a maximum of 16 video cameras. Up to 14 selectors (02016) can be installed in a Due Fili video entry system.

The art. 02016 parameters are set on a PC with Vimar “EVCom” software via a USB interface (02024).

Conformity to Standards
EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards
<table>
<thead>
<tr>
<th>Model</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>02019</td>
<td>Due Fili switching module for the parallel connection up to 4 video entrance panels, on DIN rail (60715 TH35) installation, occupies 4 17.5 mm modules</td>
</tr>
<tr>
<td>02018</td>
<td>Due Fili video splitter for 4 video cameras, 4-output, for the distribution and the impedance matching of the video signal on unbalanced connection lines, on DIN rail (60715 TH35) installation, occupies 4 17.5 mm modules</td>
</tr>
<tr>
<td>02016</td>
<td>Due Fili video selector for 4 video cameras 20560, 20565 or 14560, 14565 or for CCTV-system, on DIN rail (60715 TH35) installation, occupies 8 17.5 mm modules</td>
</tr>
</tbody>
</table>
02017 - Additional Due Fili video selector
This is an additional selector for video cameras used in Due Fili video entry systems. It is an expansion module for 4 video cameras to be used with video selector art. 02016. Up to 4 video cameras can be connected to the base module art. 02016. Four video cameras at the most can be managed using the expansion module art. 02017. Up to three modules art. 02017 can be connected to video selector art. 02016 to give a total of 16 video cameras. Articles 02016 and 02017 are fitted with both video and audio sections.

Conformity to Standards
EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards

02020 - Due Fili separator
The device is an accessory used in Due Fili systems to create separate communication islands, and is combined with power supply unit art. 02030. It is to be used in the following cases:
- in building complex systems, in which there is one or more main panels, one and more buildings with one or more secondary panels inside. One separator for each building;
- in systems in which landing panels are connected to the audio or video interphone. One separator for each landing panel;
- in systems where there are intercommunicating audio and video interphones that must not tie down the communications of the other devices during a conversation;
- up to 16 separators at the most can be installed in the system;

Terminals description
1, 2 (Bus_P) principal Bus line: to main entrance plate or global branch of the system
1, 2 (Bus_D) secondary Bus line: to entry and video entry units or isolated branch of the system
A, B, C, D video signal stabilizer
0, 1, 2, 3 ID (physical address) progrmamation

Conformity to Standards
EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards
### Devices for DIN rail (60715 TH35) installation

**Additional Due Fili video selector**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>02017</td>
<td>Due Fili video selector for the connection up to 4 video entrance plates, on DIN rail (60715 TH35) installation, occupies 4 17,5 mm modules</td>
<td>4 x 17.5 mm</td>
</tr>
</tbody>
</table>

**Due Fili splitter**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>02020</td>
<td>Due Fili splitter for talk areas partitions, on DIN rail (60715 TH35) installation, occupies 4 17,5 mm modules</td>
<td>4 x 17.5 mm</td>
</tr>
</tbody>
</table>
02024 - EVCom software with Due Fili USB interface
To connect a PC to Due Fili systems through the entrance plate 02001, 02002, 02003 and 02004 it is necessary to use the USB interface.
From PC, thanks to Vimar EVCom software and USB interface, it is possible to program and control all the devices of the system.

Technical specifications
• CD with EVCom software;
• USB cable to PC connection;
• 6-wire cable for the interface connection to entrance plates 02001 - 02004;
• 4-wire cable to connect the interface.

Conformity to Standards
EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards

02037 - Due Fili cable for inner cabling
Due Fili cable for inner cabling, twisted pair wire 2x1 mm², 100 m.

Conformity to Standards
LV Directive
CEI 20-22/2, EN 60228, EN 60332-1-2 Standards

02038 - Due Fili cable for underground cabling
Due Fili cable for underground cabling, twisted pair wire 2x1 mm², 100 m.

Conformity to Standards
LV Directive
CEI 20-22/3-5, EN 60228, EN 50266-2-4 Standards
EVCom software and cables

EVCom software with Due Fili USB interface
02024  EVCom software with Due Fili USB interface

Due Fili cables
02037  Due Fili cable for inner cabling, twisted pair wire 2x1 mm², 100 m
02038  Due Fili cable for underground cabling, twisted pair wire 2x1 mm², 100 m
Due Fili speakerphone
The speakerphone is only to be installed on Due Fili digital systems and allows communication with an external unit (Due Fili entrance panel or 20577 - 14577 landing call unit). The device has three buttons for speakerphone communication, auxiliary and door opening functions. There are also two trimmers for adjusting the audio and bell volume as well as a code button. The following items are accessible on the back of the unit (terminal side): line Bus jumper, expansion connector for intercom call buttons, connector for parameter programming using a computer and interface USB 02024 with “EVCom” software.

Technical specifications
• Max absorption (in call): 150 mA
• Absorption (in stand-by): 5 mA
• Speaker: 16 Ω, 1 W, 500 Hz – 20 kHz
• Microphone: 2 kΩ, 3 V d.c., 0.5 mA, 50 Hz – 16 kHz, S/N 58 dB
• Operating temperature: +5 °C - +40 °C (indoor use).

Operating
• When a call is made from the outdoor station (plate or landing button) the speakerphone unit turns on the bell, to communicate with the person outside, press button A and keep it pressed throughout the entire conversation.
• The auxiliary function enables controlling an external service, via dedicated terminals, such as for instance stair lights (through an appropriate connection to an external relay) or other loads in general; to activate the function, press button B.
• The door opening function enables controlling an external service, via dedicated terminals, such as for instance the electric lock of a door (through an appropriate connection to an external relay) or other loads in general; to activate the function, press button C.
• The entryphone can be enabled for receiving/sending intercommunication call, just cabling one or, more NO push buttons (20008 or 20066) with the supplied cable and configuring the entryphone for this purpose.

Due Fili landing call button
This device, to be installed only on Due Fili digital systems, enables calling and communication with the indoor station (speakerphone 20557 - 14557 or monitor 20550 - 14550 with Due Fili 01963 video door entry module and indoor appliances of Due Fili). The device is equipped with a button with a lightable name plate, two trimmers on the back to adjust the speakerphone volume and the sensitivity of the microphone, the Bus jumper, the configuration jumper for the type of call, the connector for programming parameters via PC and the button for coding device.

Technical specifications
• Rated supply voltage: Bus 29 V;
• Max absorption (in call): 150 mA;
• absorption (in stand-by): 5 mA;
• speaker: 16 Ω, 1 W, 500 Hz – 20 KHz;
• microphone: 2 kΩ, 3 V d.c., 0.5 mA, 50 Hz – 16 kHz, S/N 58 dB;
• operating temperature: +5 °C - +40 °C (indoor use).

Operating
To make a call, press the button on the plate; the indoor station that will receive it will, when applicable, enable the conversation. For optimal acoustic output for the communication it is recommended to speak at a maximum distance of approximately 40 cm from the device. The Due Fili landing call button, via terminals “+12” and “S” allows connecting an appropriate external relay to 12 V d.c. for opening a local lock. The volume adjustment of the speaker and the sensibility of the microphone are made by the trimmers on the back of the device.

Conformity to Standards
EMC Directive
EN 61000-6-1, EN 61000-6-3 Standards

Connections and front view
Due Fili speakerphone
Speakerphone for Due Fili system with door opening and stair lights switching on functions - 3 modules

EIKON

PLANA

Due Fili call button
Call button for the landing with luminous name-plate, built-in microphone and speaker, for Due Fili - 3 modules

EIKON

PLANA

Side views show the overall dimensions and the flush depth in mm
1-module video camera
The video camera with vertical adjustment (± 12°) and automatic focusing allows filming the subject that will then be viewed on the monitor.

Technical specifications
• supply voltage: 12 V d.c. ± 20%.
• absorption: 50 mA, 0.6 W.
• color sensor: CCD 1/4”
• scanning system: 525 lines (NTSC); 625 lines (PAL).
• horizontal resolution: 330 TV lines.
• signal/noise ratio: 45 dB.
• video output: 1 Vpp composite video on load of 75 Ω.
• operating temperature: -5 °C - +40 °C (indoor use).

2-module video camera
The video camera with vertical and horizontal adjustment and automatic focusing allows filming the subject that will then be viewed on the monitor.

It is equipped with a LED to signal it has been switched on and has a built-in microphone.

Technical specifications
• supply voltage: 12 V d.c. ± 20%.
• absorption: 70 mA, 0.8 W.
• color sensor: CCD 1/4”
• scanning system: 525 lines (NTSC); 625 lines (PAL).
• horizontal resolution: 330 TV lines.
• signal/noise ratio: 45 dB.
• diaphragm: electronic.
• video output: 1 Vpp composite video on load of 75 Ω.
• microphone: 2 KΩ, 3 V d.c., 0.5 mA, 50 Hz – 16 KHz, S/N 58 dB.
• operating temperature: -5 °C - +40 °C (indoor use).

Light
This device, installed with the video cameras 20560, 14560, 20565 and 14565 enables lighting the subject to film from the front to have an optimal view of the image on the monitor 20550.
The light is equipped with a high-efficiency LED with a white light, reflecting dish and diffuser.

Technical specifications
• supply voltage: 12 - 24 V d.c. ± 20%.
• absorption: 70 mA.
• luminous flux: 9 lm.
• power on LED: 0.35 W.
• lighting level: 20 lux for average 40 cm.
• operating temperature: -5 °C - +40 °C (for indoor use).
1-module video camera
Inner color video camera with vertical adjustment

**EIKON**
- 20560 grey
- 20560.B white
- 20560.N Next

**PLANA**
- 14560 white
- 14560.SL Silver

2-module video camera
Inner color video camera with vertical and horizontal adjustment, built-in microphone - 2 modules

**EIKON**
- 20565 grey
- 20565.B white
- 20565.N Next

**PLANA**
- 14565 white
- 14565.SL Silver

**Light**
Inner light with high-efficiency LED for color video camera, supply voltage 12-24 V d.c. (SELV)

**EIKON**
- 20570 grey
- 20570.B white
- 20570.N Next

**PLANA**
- 14570 white
- 14570.SL Silver

Side views show the overall dimensions and the flush depth in mm
By-me radio frequency.
Home automation anywhere.
A subtle difference.
No wiring and total freedom of installation: radiofrequency technology makes the difference, extending the possibilities of implementing control devices both in By-me automation systems and in traditional systems. The optimum solution where you do not want to or cannot install a Bus system, to avoid masonry work and respect architectural restraints.
New RF automation.

Maximum freedom of installation.
No wires to connect, no battery power supply, extremely limited thicknesses: radiofrequency means freedom of installation on any surface.

For system extensions.
The new radiofrequency automation is the ideal solution when it is necessary to extend an existing system, whether it is a By-me home automation system or a traditional one.

For partial restructuring.
Also excellent in the case of partial restructuring, when you do not want to involve considerable masonry work.

For changes to the furnishing.
Extremely practical in the presence of changes to the furnishing that require new light controls on the wall or on wood and glass.
New RF burglar alarm system.

Maximum safety in the home. Contacts, presence sensors and alarm sirens transmit at dual frequency and are constantly supervised by the two-way interface, to offer maximum safety reliability.

For system extensions. To extend an existing system and control new areas, without requiring masonry work. Or to add a mini burglar alarm system to a system initially designed for automation alone.

Total control. A multi-function remote control with feedback LED for the user manages the activation and deactivation of the system and the panic function.

With supervision of water leaks. The radiofrequency burglar alarm system also supervises the technical alarms and trips in the event of water leaks.
The comfort of radiofrequency automation.

New Vimar radiofrequency automation offers the reliability of EnOcean technology, the practicality of controls without batteries, the simplicity of plug&play installation.

For home automation or traditional systems.

By means of the actuators, the radiofrequency can dialogue both with the By-me home automation system and with a traditional electric system. A solution that responds to all installation requirements.
It has been designed to offer you maximum flexibility of installation and is available for the Eikon and Plana series.

**Controls without batteries.**
The controls do not use batteries, they exploit the energy generated by pressing the button to power the appliance. So they do not need any maintenance and they respect the environment.

**On glass, wood or wall.**
The system is designed for application in all contexts, both residential and tertiary, and on any material.

**With minimum protrusion.**
The supports offer minimum protrusion of the light control and maximum flexibility of installation.

**With the reliability of EnOcean technology.**
For automation the new radiofrequency system adopts an absolutely reliable transmission protocol and can dialogue with other devices that use EnOcean technology.

**For maximum integration in the By-me system.**
The radio interface receives commands and transfers them to the actuators both over the Bus and by two-way radio.
The safety of radiofrequency burglar alarm.

New Vimar radiofrequency burglar alarm system offers the reliability of dual-band technology, the safety of supervision of the siren and sensors, the convenience of remote control management.

Extension of an existing system.

The system has been designed for extending a burglar alarm system to new areas to be controlled, without requiring masonry work. But with a control unit and a Bus interface it can also be an autonomous mini system.
Transmission without interferences.
New Vimar radiofrequency burglar alarm uses 433 MHz and 868 MHz dual-band technology to offer maximum reliability thanks to better immunity to transmission interference.

Safety without compromise.
The new system has been designed and made to offer excellent safety levels. The siren and all the sensors are supervised. And there is two-way communication between interface, remote control and siren.

Remote control with feedback LED.
The new remote control contemplates 4 functions: 2 switching on, 1 switching off, 1 customisable function (anti-panic, silent anti-panic). One LED performs the function of a luminous feedback for the user.

It has been designed for extensions of existing systems or for mini systems. It is available for Eikon, Idea and Plana.
By-me. Bringing home automation within easy reach.

Why install the By-me home automation system?
Simple: it offers you the best in terms of communication, comfort, safety and savings. Managed by a single control unit, which enables all the parts of the system to dialogue together and with radiofrequency system. And it speaks to you in a language that you know well: that of your mobile phone.
Safety.
Burglar alarm system and all alarms supervised.

Energy saving.
Power consumption and load control.

Communication.
Total control from Windows Media Center® and via mobile phone by Vimar By-phone.

Video door entry.

Automation and burglar alarm.

CCTV.

By-me control unit.
Simple and intuitive control of all functions via the control panel.

Radiofrequency system.
Examples of installation

Automation

Row house

The example in the figure illustrates a residential application in which the control unit of the By-me system manages both the automation system and the burglar alarm system.

Focussing our attention on the automation system, we can see that, besides the commands and actuators on the Bus, there is a radiofrequency interface with EnOcean module (20508) which allows the controls with EnOcean module (20505+20506) and the radiofrequency actuators (01796) to be integrated in the system.

Thanks to the radio interface (20508), all the devices with the EnOcean module can be involved in scenes, scheduled actions, etc., in an entirely similar manner to that of the other Bus devices; this is a fundamental advantage because these controls can be installed on any flat surface (for example, glass) or where it is not possible to perform invasive masonry work on the walls.

The control with EnOcean module (20505+20506) installed in the corridor allows the stair light and corridor light to be switched on and off, by means of the relay actuator (01851.2); with the three rocker push buttons it is possible, by means of the radiofrequency relay actuators (01796), to control the lights of the library area of the living room.

As can easily be seen, these new devices complete the By-me system, offering a further added value in terms of flexibility and functionality.

The radiofrequency interface with EnOcean module (20508-20508) can control up to a maximum of 50 devices with EnOcean module and a maximum of 15 interfaces can be installed in a system; it is therefore possible to manage a total of up to 350 devices in radiofrequency.

(Example with Eikon)
Stand-alone application
The example alongside illustrates an application in which, in a traditional electric system, the radiofrequency controls with EnOcean module are integrated in stand-alone mode. The main light may be controlled either by the switch (20005) or by the first rocker push button of the radiofrequency control (20505), thanks to the combination between the radiofrequency actuator (01796) and a suitable change-over relay. The second rocker push button of the radio frequency control (20505) controls the other actuator (01796) for switching the secondary light on and off.
Detached house
The example in the figure illustrates a typical residential application in which the control unit of the By-me system manages both the automation system and the burglar alarm system. Focussing our attention on the burglar alarm system we can see that, thanks to the radiofrequency interface on the Bus 20508-14508, it is possible to integrate the following radio devices in the system:

- infrared detectors 01737;
- detectors with magnetic contact 01738;
- water detectors 01744;
- siren for outdoor use 01747.

The detectors 01737 and 01738 offer maximum flexibility, since they have a NC contact that can be used to connect additional wire sensors; in the example in the figure, a metal magnetic contact 01823 has been connected to the infrared detector installed in the garage to protect the door while a cord-operated contact for protecting the blinds has been connected to the detectors 01738 installed on the windows of the kitchen and living room respectively.

These devices therefore allow optimisation of the system components without reducing their functionality and versatility. The radiofrequency interface on Bus 20508-14508 can control up to a maximum of 40 devices in radiofrequency and a maximum of 4 interfaces can be installed in a system; it is therefore possible to manage a total of up to 160 devices in radiofrequency. Still thanks to the interface 20508-14508, it is possible to switch the burglar alarm system on and off or to partialize it with the radio remote control 01819; the remote control also allows the anti-panic alarm to be generated in the event of sudden aggression. To conclude, the communicator GSM 01942, as well as transmitting alarms (intrusion, flooding, etc.), allows remote management of the automation and burglar alarm system by means of simple text messages (SMS).

(Example with white Eikon)
Wiring diagram
Radiofrequency home automation

Devices - TECHNICAL CHARACTERISTICS

20505 - Flat control with EnOcean
The flat control with EnOcean module (PTM200) is used to obtain a radio lighting point in order to carry out all the functions of automation (lights, roller shutters, scenarios, etc.), in positions where no building work is possible, such as a conventional By-me control appliance. To be completed with a pair of buttons 20506 or 14506. The control can dialogue with other devices that use EnOcean technology.

Operation in stand-alone mode
The 20505 control can also function in stand-alone mode without the aid of the By-me control panel and radio interface with the EnOcean module 20508-14508; the commands sent via its tilt buttons can be intercepted directly by the relay actuators with the EnOcean module 01796. This permits using the devices with the EnOcean module also in conventional systems that have to be extended without any building work.

Technical specifications
- operation without batteries
- transmission frequency: 868 MHz
- 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 radio
- operating temperature: -5 - +45 °C (for indoor use)

Conformity to Standards
R&TTE Directive
EN 301 489-3, EN 50371, EN 300 220-2 Standards

Installation: flush or surface mounting with mounting frame (20507 or 20507.B). It can be installed on smooth surfaces, for instance wood, glass, etc.

- the 20505 control can communicate with other products that use EnOcean

Customizable buttons pair
- 1 module

- Flat control with EnOcean - 2 modules
- Customizable buttons pair - 1 module

20505 - Front view

20505 - Flush mounting
The mounting can be possible also in 3, 4 and 7 modules frame.

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

20505 - Surface mounting (also for flat mounting with adhesive strip)
Installation can be performed also with the cover plate with 2 central modules thanks to the special knockouts on the mounting frame 20507 (available in grey and white versions).

The distance from flush with the wall mounting frame + cover plate + control + buttons is 13 mm for Eikon and 14 mm for Plana.
Flat device with EnOcean module

20505 Two-rocker-buttons flat device with EnOcean wireless connection, no battery, powered by built-in electrodynamic generator, to complete with dedicate 20506 Eikon or 14506 Plana buttons - 2 modules

Interchangeable buttons for EnOcean module

Buttons pair for 20505 EnOcean device, customizables

EIKON

20506 grey
20506.B white
20506.N Next

PLANA

14506 white
14506.SL Silver

Frame for EnOcean module device

Frame for the surface mounting of EnOcean device 20505, to complete with Eikon or Plana 2-central-module cover plates

20507 grey
20507.B white

Side views show the overall dimensions and the flush depth in mm
01796 - Actuator with EnOcean module 1 relay
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 toggle button (20505) 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.

Technical specifications
- 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
  - 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 W (cos Φ =1)
  - incandescent lamps (tungsten): 400 W
  - ballast (fluorescent lamps): 360 W (cos Φ =0,4-0,6)
- maximum number of radio commands that can be saved on the relay: 30

Conformity to Standards
R&TTE Directive, EN 60669-2-1, EN 301 489-3, EN 300 220-2, EN 61000-6-2 Standards

Bus interface with EnOcean
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, scenarios, etc. The interface manages all these functions via pairs of configurable radio buttons such as toggle switches, dimmer switches, roller shade and scenario controls and radio relay actuators. The interface moreover receives the messages from the bus devices and controls the actuators by radio-frequency.

Technical specifications
- rated supply voltage (Vn): Bus 29 V d.c.
- protection class: IP30
- operating temperature: -5 - +45 °C (for indoor use)
- installation: recess mounting
- consumption: 20 mA
- Frequency of reception and transmission: 868 MHz
- Configuration button
- Indicator LED
- has 2 terminals for the polarized connection to the bus (+ and -)
- maximum number of radiofrequency devices that can be stored:
  - 32 toggle switches (each toggle 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 scenarios, at most;
  - 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

Conformity to Standards
R&TTE Directive
EN 50428, EN 301 489-3, EN 300 220-2 Standards
Actuator with EnOcean module 1 relay
01796  EnOcean actuator with relay output, supply voltage 230 V~ 50 Hz

Bus interface with EnOcean
EnOcean Bus interface - 2 modules

EIKON
20508  grey
20508.B  white
20508.N  Next

PLANA
14508  white
14508.SL  Silver

Side views show the overall dimensions and the flush depth in mm
01737 - Infrared detector

The supervised infrared presence detector 01737, installed in the rooms to surveil, is able to generate an alarm message when it detects motion of heat-emitting bodies in its areas of coverage. In addition, it is equipped with a NC input that is used to connect another sensor (magnetic contact, for instance) to protect a nearby frame.

Supervision function: capacity of the control panel to check the correct operation of the device.

Technical specifications
- Power supply: alkaline battery 9 V type 6LR61
- Transmission: double frequency (dual-band)
- Coverage: angle 90°, distance 10 m
- Angle of detection: 17 sectors on 3 floors (with a range of 10 m) and 11 sectors on 2 floors (with a range of 5 m)
- Radio range: 100 m in an open field
- Maximum length of cables for connecting the contacts to the NC terminal: 2 m (with shielded cable)
- Anti-sabotage protection against opening
- Operating temperature: from -5 °C to +45 °C
- Protection class: IP30
- Operating life: 2 years under conditions of normal use
- Dimensions: 120x35x33 mm

Conformity to Standards
R&TTE directive, EN 60950-1, EN 50130-4, EN 301 489-1, EN 301 489-3, EN 300 220-2, EN 50371 Standards
## Detectors and contacts

| Infrared detector | 01737 | Supervised IR presence detector, in dual band radiofrequency, powered by 1.9 V 6LR61 alkaline battery (supplied). |
01738 - Detector with magnetic contact for doors and windows

The supervised magnetic contact detector enables surveilling the opening of a door and/or window in the room. It is equipped with a NC input that allows connecting another sensor, for instance a roller shutter detector, to increase the protection of the opening (protecting, for example, both the shutter and the window itself).

Supervision function: capacity of the control panel to check the correct operation of the device.

Technical specifications
- power supply: alkaline battery 9 V 6LR61
- transmission: double frequency (dual-band)
- radio range: 100 m in an open field
- maximum length of cables for connecting the contacts to the NC terminal: 2 m (with shielded cable)
- anti-sabotage protection against opening
- operating temperature: from -5 °C to +45 °C
- protection class: IP30
- operating life: 2 years under conditions of normal use
- dimensions: 120x25x45 mm

Conformity to Standards
R&TTE directive
EN 60950-1, EN 50130-4, EN 301 489-1, EN 301 489-3, EN 300 220-2, EN 50371 Standards

01738 - Example of NC-contact use

Recessed-contact Cord-operated contact
## Detectors and contacts

**Detector with magnetic contact for doors and windows**

| 01738  | Supervised detector with magnetic contact for doors and windows protection, in dual band radiofrequency, powered by 1.9 V 6LR61 alkaline battery (supplied) |

![Diagram of detector and contact](image-url)
Radiofrequency burglar alarm

Detectors and contacts - TECHNICAL CHARACTERISTICS

01744 - Water detector for protection against flooding
The supervised detector installed in the rooms to protect activates the alarm when it detects a level of water on the ground greater than 2 mm.
Supervision function: capacity of the control panel to check the correct operation of the device.

Technical specifications
• power supply: alkaline battery 9 V type 6LR61
• transmission: double frequency (dual-band)
• radio range: 100 m in an open field
• tube length for sensor 140 mm
• anti-sabotage protection against opening
• operating temperature: from -5 °C to +45 °C
• protection class: IP30
• operating life: 2 years under conditions of normal use
• dimensions: 120x25x33 mm

Conformity to Standards
R&TTE directive
EN 60950-1, EN 50130-4, EN 301 489-1,
EN 301 489-3, EN 300 220-2, EN 50371 Standards
Water detector for protection against flooding
01744  Supervised water detector for flooding protection, in dual band radiofrequency, powered by 19 V 6LR61 alkaline battery (supplied)
Radiofrequency burglar alarm

Devices - TECHNICAL CHARACTERISTICS

Radiofrequency interface
The radio interface allows using the radiofrequency devices to extend coverage in places or accesses where it is not possible to add any cables and devices via Bus. In addition it permits using one or more radio controls as a key to switch the burglar alarm system on/off. The device turns the system on and off (completely or the associated partitioned zones) after receiving the code emitted by the remote controls.

Technical specifications
- rated supply voltage (Vn): Bus 29 V d.c.
- frequency of reception and transmission: dual at 433 MHz and 868 MHz
- consumption: 20 mA
- the receiver is governed, for turning the system on and off and partitioning it, by one or more remote controls with over 65,000 possible combinations
- maximum number of radiofrequency devices that can be stored: 40 for each radio interface
- maximum number of radio interface that can be installed in a system: 4
- connection terminals: TP bus
- Indicator LED
- configuration button
- type of protection: against opening and removal with passive infrared sensor built in
- operating temperature: -5 - +45 °C (for indoor use)

01819 - Two-way radiofrequency remote control
The remote control has 4 keys to transmit 4 different commands to the radio interface. The radio interface communicates these commands to the control panel. Command transmission is indicated by the orange LED of the remote control lighting up.

Technical specifications
- power supply: 2 alkaline batteries 3 V CR2016
- radio range: 100 m in an open field

Operation
Pressing the 4 keys on the remote control provides 4 different functions.
- OFF button 1: turning the system off (according to the partitions associated with the remote control code).
- ON 1 button 2: Turning the system on (according to the partitions associated with the remote control code).
- PANIC button 3: used to manage the configurable panic signal. The PANIC button can be used to:
  - turn on the siren (function with audible warning);
  - pilot an actuator (function without audible warning).
- ON 2 button 4: Switches the system on (according to the partitions associated with one of the circuits in the control panel).

Conformity to Standards
R&TTE directive
EN 60065, EN 50130-4, EN 61000-6-3, EN 301 489-1, EN 301 489-3, EN 300 220-2 Standards

Conformity to Standards
R&TTE directive
EN 60065, EN 50130-4, EN 61000-6-3, EN 301 489-1, EN 301 489-3, EN 300 220-2 Standards
Devices

Radiofrequency interface
Interface for remote control, outdoor siren and detectors in two-way dual band radiofrequency - 2 modules

EIKON

IDEA

PLANA

Two-way radiofrequency remote control
01819  Two-way radiofrequency remote control, powered by 2 x 3 V CR2016 lithium batteries (supplied)
Radiofrequency burglar alarm

Devices - TECHNICAL CHARACTERISTICS

01747 - Outdoor siren
The siren for outdoor use enables audible (can be heard far away) and visual warning of all alarm conditions. The radio transmission is two-way so the siren receives messages on the system status and sends alarm messages to the control panel.

Technical specifications
- power supply: alkaline battery pack 9 V 12 Ah (00912)
- transmission and reception: dual frequency
- radio range: 100 m in an open field
- sound pressure level at 1 m: 110 dB
- anti-sabotage protection against opening and ripping off the wall
- operating temperature: from -25 °C to +55 °C
- protection class: IP32
- operating life: 4 years under conditions of normal use
- dimensions: 270 x 203 x 73 mm

Conformity to Standards
R&TTE directive,
EN 60950-1, EN 50130-4, EN 301 489-1,
EN 301 489-3, EN 300 220-2, EN 50371 Standards
Outdoor siren

01747  Supervised outdoor siren with flashing light, in dual band radiofrequency, powered by 1.9 V 12 Ah battery (supplied)

Siren battery

00912  9 V 12 Ah alkaline battery, spare part for siren 01747