



Leading with purpose and passion



For more than 75 years, our specialisation in video door entry and access control systems has been our added value. Our track record positions us as leaders in the industry, offering communication and connectivity solutions adapted to any type of project anywhere in the world.

Being part of the Leading Brands of Spain Forum reinforces our commitment to excellence and international projection, highlighting our pride in our roots and contributing to the global recognition of Made in Spain brands.

Connecting people and homes with the world

Our presence in more than 85 countries reflects the trust our customers place in us, which motivates us to grow, learn and constantly improve.

Our greatest achievement is the team of more than 500 people who are part of Fermax and whose work drives our mission and values every day.

Integrity and respect **Customer and result** oriented

Effort and teamwork

**Corporate Social** Responsibility

Sense of belonging and identification with the company's culture

Versatility and a permanent attitude of adaptability to change Commitment to equality, safety, health and environment



# The security behind every connection



We work to contribute to the **transformation of cities**, **leveraging the connectivity of our products** to offer new services and businesses to different stakeholders that interact with buildings and homes on a daily basis.

Our technology guarantees **secure communications** through the use of advanced protocols, and our cloud infrastructure allows our products to be updated with new features. In addition, our **manufacturing processes**, **certified with ISO 9001**, and the use of approved components support the quality and reliability of our products.

But our commitment goes beyond technology: we create connected solutions so that everyone can protect their home from anywhere, providing them with security, peace of mind and confidence at all times. This purpose is what defines us as a brand.

Connecting people and homes with the world

Secure communications

Quality and reliability of the production process



Experts in communication, leaders in innovation



Innovation and manufacturing are carried out in our 2 production centres in Valencia, Spain, which allows us to guarantee supply in all circumstances and maintain a permanent stock of spare parts.

Our technological solutions allow for the updating of existing installations without the need for major changes, with new functions to bring connectivity to all homes.

In-house R&D + 40 engineers Manufacturing of electronic circuits

Mechanical manufacturing: plastic injection, panel laser-cutting

Assembly and testing

+85% of orders shipped within 24 hours



#### A green footprint on our path



As manufacturers, we are committed to a circular economy and a production process with the least possible environmental impact through prevention, recycling, reuse of materials and the use of renewable energy.

Our Special Employment Centre (CEEME) guarantees the professional, social and personal inclusion of people with disabilities, promoting their independence through equal and inclusive employment.

With every step we take towards the connectivity of our products, we contribute to the development of more sustainable cities, reducing the carbon footprint through technologies that minimise, for example, bounce rates in home parcel deliveries.

Through social, environmental and inclusive initiatives, we work to build a responsible present and a better future for all.

**CEEME. Special Employment** Centre since 2000

**Equality** and diversity

Training and talent

Reduction of environmental impact



The world's first 100% digital Smart System in 2 wires





The most powerful and fastest 2-wire system to install and program.



Consistent quality throughout the installation.



Up to 10 panels and 10 guard units at the general entrance.



Maximum point to point distance without regeneration: 500m.



Installation using existing wiring.



Up to 100 blocks and sub-blocks.



Up to 10 panels and 10 guard units in each building or block of apartments.



2 communication channels within the same block.



Smart accessories for installations of all sizes.



Maximum distance between extremes of the installation: 3.000m.



A simplified 2-wire installation without polarity throughout the entire installation. DUOX PLUS is a highly flexible system that can be installed with most of the existing cables. It is a digital system and hence it enables to avoid electrical interferences or noise, and maintains the same optimum audio and video quality throughout the entire installation, from the first apartment in the project to the most distant one.

The DUOX PLUS system is installed in the same way for both audio and video, allowing the users to choose which terminal they prefer to have it at home. Additionally, it is the only 2-wire system that can allow two communication channels in the same block, i.e. two panels calling two different apartments at the same time. It has a built-in voice guided programming system in pushbutton outdoor panels and configuration via graphic menu in digital panels and monitors. Its digital technology adapts to all types of topologies and distances, making it possible to successfully install any project: from small individual buildings to large residential projects.

All these features make DUOX PLUS the **fastest** system to quote, install and program.

A system that can be perfectly adapted to all situations, both for new construction and retrofit.



# A system designed for the professional installer ...

## Wiring flexibility

#### **2 NON-POLARISED WIRES**

Compatible with a wide variety of wiring.

In retrofit installations, DUOX PLUS can be installed using existing wiring.

Reduced errors, simplified installation on only 2 non-polarised wires.

# Simplicity of installation

It saves time during installation and maintenance.

## Easy programming

**Monitors:** one person can program the installation in a few seconds directly from the OSD menu.

**Panels:** digital panels are programmed from the keypad, while on our pushbutton panels, the amplifier includes a voice-guided programming system.

## Scalable system

For all kinds of projects; large or small, simple or complex, vertical structures or horizontal installations.

## **Digital** transmission

**FULL DIGITAL.** All information (audio, video and data) is fully digital, ensuring the same audio and video quality throughout the installation.

# ... and for the end-user







### Connectivity

Our Wi-Fi video door entry systems open up the world of connectivity to every type of building and home, with call forwarding to mobile phones built into even the most basic monitors.

# **Security** Photocaller

The video intercom automatically captures an image of the caller on the monitor, and on the mobile phone in case of Wi-Fi models.

# **Accessibility**

Adapted and accessible products for everyone, both inside and outside the home.

#### Convenience

Access to the video intercom from any device, mobile or tablet, to answer calls and open the door with a single click or with voice.

# PRODUCT range

FERMAX









It has 2 digital MEMS microphones (Micro Electro Mechanical System), which dynamically and adaptively capture and filter out environmental noise and guarantee clean audio on the monitor or handset so that the user hears no background noise, echoes or cuts.







#### **FEATURES**

Duox Plus technology, 100% digital two wires.

Free **call divert** for all apartments in the installation with a Wi-Fi monitor.

Made in strong and durable anodised aluminium.

**Ultra-slim**, only 1 cm thick when flush mounted and 3 cm when surface mounted.

Highly watertight and robust: IP65 IK08.

Simple and intuitive installation with 1 screw.

720p wide-angle camera (vertical=80°, horizontal=120°).

**5" LCD screen** customisable by the installer (images and messages).

Light and presence sensor.

Wave of LEDs with illumination and movements that signal status.

**Backlit mechanical keypad** with a dot on the key 5 and embossing on the bell key.

Advanced processor with 4-core CPU+GPU.

**Multi-language voice synthesiser** (32 languages), bilingual message configuration and **customisable** language.

**Mirror mode (retroview).** It allows the visitors to see their own image and thus to position themselves to be seen correctly.

Assisted alphanumeric dialling.

**Possibility to create backup copies** of users and configuration.

**High-quality audio** thanks to the **CDS (Cora Dynamic Sound)** system, which includes a speaker and 2 digital MEMS microphones.

**Access control** via keypad and integrated (EM 125Khz) proximity reader.

**Postman access code** via keypad or proximity readers restricted by hours and days.

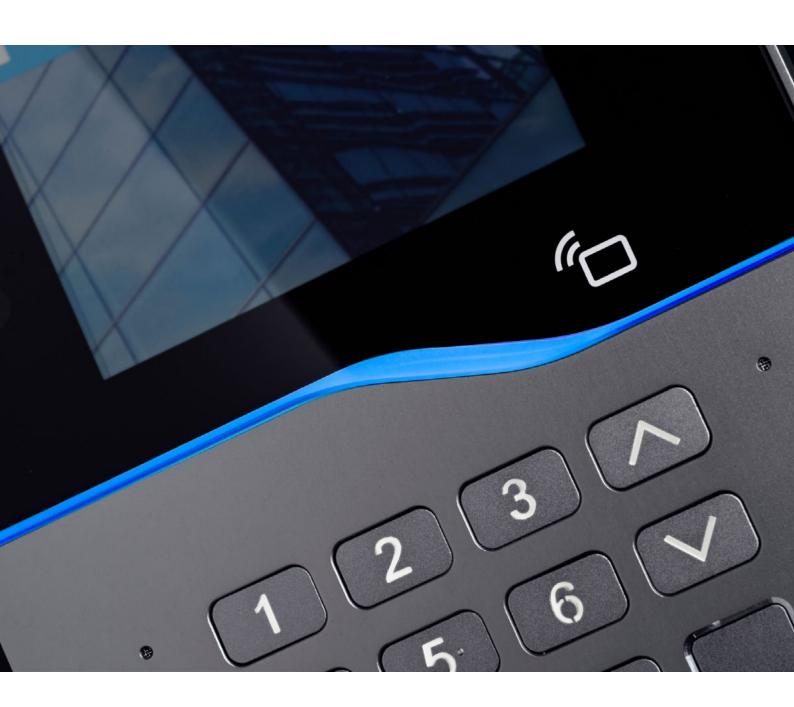
**Configuration from mobile**, **tablet or computer**, via a web server without having to open the panel.

An optional  $\mbox{\bf inductive loop}$  can be connected for people with hearing aids.

Built-in **DUOX PLUS installation tester.** 



CORA represents the excellence and evolution of Fermax's DUOX PLUS outdoor panels, not only for its elegant aesthetics, but also for being one of the most interactive entrance panels on the market, both for the user and the installer.



# **CORA** Panel

#### **CAMERA**

It includes a wide-angle 720p colour camera (Vertical=80°, Horizontal=120°) with integrated scene lights on both sides of the camera as well as a camera zoom adjustment system. The camera image adjustment is done from a mobile, tablet or computer using a web browser.

#### **DISPLAY**

It is a very high-tech panel with a **4-core CPU+GPU** processor.

Its **5" LCD screen with 640 x 480px resolution is customisable** by the installer (messages and images).

The display is activated by **presence sensors** or by pressing a key.

The display brightness can be set to adjust automatically according to the ambient light level.

It includes the **Retroview function**, which allows the visitors to see the video captured by the camera during calls and conversations in real time and thus better position themselves in front of the panel to be seen perfectly.

User interface with iconography for guided and intuitive use.

Calls can be made in two ways:

- by entering the corresponding code assigned to the home + the "bell" kev.
- by searching in the electronic directory of the resident or concierge and once found, by pressing the "bell" key.

The call can be numerical, alphanumeric, by blocks, etc.

It is possible to call the concierge directly by pressing the BELL key. If there is more than one, the list is displayed for selection.

#### **WAVE**

A wave of leds separates the display from the keypad. It is not only a decorative element, but it also **interacts** with the user by reinforcing the status that appears on the display, giving personality to our panel.

**Status**: Calling, In communication, Door Open, Channel Busy and In maintenance.



High-quality audio thanks to the CDS (Cora Dynamic Sound) system.

It incorporates a speaker and 2 digital MEMS microphones, which dynamically and adaptively capture and filter out environmental noise and guarantee clean audio on the monitor or handset so that the user hears no background noise, echoes or cuts. The speaker volume can be self-regulated to adapt to different environment noise sound levels (day-night).







#### **KEYPAD**

Backlit mechanical keypad with embossing on the key 5, so that blind people can locate themselves in the centre of the keypad, and a counter-embossing on the Bell to identify the call key.

The illumination of the Call 👩 and Cancel 💢 keys changes colour depending on the status.

#### CONFIGURATION AND PROGRAMMING



The configuration is very simple and can be done from a mobile/tablet/PC, using a browser and without having to open the panel. To do this, the installer must stand close to it and connect to the Wi-Fi access point generated by it. In this way, it will be possible to set it up:

- Configuration parameters.
- Directory of residents and concierges.
- · Access control (keypad codes, proximity key fobs).
- Installation test.
- Firmware version update.
- Uploading and customising images, logos, text and voice messages (2 languages can be selected to be played consecutively).
- Possibility to configure a postman access code, for the configured days of the week and timetable.
- Possibility to create backup files of users (on mobile/ tablet/PC via browser) and configuration.

#### **ROBUSTNESS**

CORA is made in anodised aluminium with no visible screws. It has an IP65 degree of watertightness and maximum protection against dust and rain. It has a very high mechanical impact resistance rating of IKO8, making it practically vandal-proof.

#### ACCESS CONTROL

- Door opening via keypad code (up to 10,000 different users / codes).
- Door opening using RFID (EM 125Khz) proximity key fob via the proximity reader included as standard in the panel (up to 10,000 fobs).
- Combination of the previous two for greater security.

#### **VILLA MODE**

It is possible to configure the panel to operate as a villa panel. In this case, the call will be made by pressing the BELL key directly. This makes CORA the video door entry solution for villas that look for distinction, elegance and technology, as well as security, as the access control functions by keypad code, proximity key fobs or a combination of both will still be available.





#### **MOUNTING**

CORA is installed with only 1 screw.

Ultra-slim, only 1 cm thick when flush mounted and 3 cm when surface mounted.

The installation boxes for the CORA panel must be ordered separately.

Its size fits perfectly into the Fermax S6 flush box of the Cityline and CityClassic panels.

Its small size allows for replacing older installations with more advanced technology and with virtually no work.

For retrofits, an existing City/Skyline flush box (S6 or S8 depending on the CORA size) can be adapted by ordering a separate flush mounting set ref. 7708.

Other accessories are also available, such as decorative frame, angular complement, hood and directory panel (the latter only for CORA S6). It is possible to combine two or more panels, as long as they are from the same series. In the case of flush mounting, to fit them perfectly, you must use a set of joining bolts ref. 8829 for every two panels that are installed.

#### **ACCESSIBILITY**

CORA offers visual and audible notifications, and there is also the possibility to connect an inductive loop (ref.7722) for people with hearing aids or hearing impairment.



# **SKYLINE** Panel





Modular panel.



Made in anodised aluminium (IP43 IK07).



Chromed zamak pushbuttons and reinforcements.



Wide angle colour camera (Vertical=80°, Horizontal=120°).



Illumination for vision in low-light conditions.

#### 3.5" graphic display on digital panels:

- Display activation by presence sensors.
- Electronic directory agenda of residents.
- Menu-driven configuration from the keypad.
- Information pictograms (One-To-One) with the communication status (calling, in communication, door open, channel busy).
- Upload images, logos and personalised messages.
- Alphanumeric call to apartment.

#### Keypad:

- The metallic keys are made of zamak. It has permanent backlighting.
- Through the keypad it is possible to activate the installation's electric lock with a previously programmed PIN. 10,000 different users/ codes in DUOX PLUS system.

#### Proximity reader:

- 125KHz (EM) or 13,56MHz (Mifare / Desfire) technology. Recommended: Desfire.
- Two configuration modes: standalone (up to 400 users).
- Wiegand-26 (up to 10,000 users if connected to the display).



**SKYLINE** consists of 9 different-sized frames where different modules can easily be fitted. Modules come in 2 sizes, designated V and W. W is twice the size of V.











#### **ACCESSIBILITY**

Voice synthesiser with the "The door is open" message in 32 languages.

Integrated One-To-One. Visual information of the communication status (calling, in communication, door open, channel busy). In the One-to-One module with inductive loop, the induction system included in this module allows to transform the audio signal into a magnetic field adapted to the hearing aids or prostheses of hearing impaired persons.

**Numeric keypad backlighted** in blue, with marking for blind people on the keys (5) and (4).





# IP65 IK09



# **MARINE** Panel



IP65 IK09 vandal-proof door entry panel.

Made in **stainless steel**, 2.5mm-thick.

AISI 316L AISI 316L steel, of high quality and resistant to extreme or adverse climatic conditions, wet or corrosive climates.









Wide angle colour camera (Vertical=85°, Horizontal=125°).



Illumination for vision in low-light conditions.

#### 3.5" graphic display on digital panels:

- Display activation by presence sensors.
- Electronic directory agenda of residents.
- · Menu-driven configuration from the keypad.
- Information pictograms (One-To-One) with the communication status (calling, in communication, door open, channel busy).
- · Upload images, logos and personalised messages.
- Alphanumeric call to apartment.

#### Keypad:

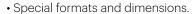
- The metallic keys are made of zamak. It has permanent backlighting.
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#### Proximity reader:

- 125KHz (EM) or 13,56MHz (Mifare / Desfire) technology. Recommended: Desfire.
- Two configuration modes: standalone (up to 400 users).
- Wiegand-26 (up to 10,000 users if connected to the display).

# **MARINE ELITE** Panel

Our differentiating proposal to make your projects unique



- Available in all RAL colours.
- · Laser logo or text marking. The engraving is only available on the panels in stainless steel colour.



















#### **ACCESSIBILITY**

Voice synthesiser with the "The door is open" message in 32 languages.

Integrated One-To-One. Visual information of the communication status (calling, in communication, door open, channel busy).

**Numeric keypad backlighted** in blue, with marking for blind people on the keys (5) and (4).



# **VEO** monitor

4.3" (16:9) colour screen With handset



# **VEO-XS** monitor

4.3" (16:9) colour screen Hands-free



Made of high-impact ABS white plastic.

Silicone buttons.

Surface installation.

Additional configurable functions such as activating second access, courtesy light, etc. (DUOX PLUS relay required). Colour screen with OSD menu.

Do not disturb function.

Settings: contrast, brightness, colour and volume.

Date and time settting.

Apartment entrance doorbell.

Automatic image capture per call (memory up to 150 photos).

Auto-on: activate the outdoor panel and switch the display to another panel or camera.

Doormatic function (VEO-XS y VEO-XL): Automatic door opening for professionals (offices, clinics, etc.).

The same wall mounting connector is used for all monitor models. This makes the installer's job easier and provides great flexibility, allowing each resident in the building to choose the monitor they prefer.

# **VEO-XL** monitor

7" (16:9) colour screen Hands-free



185x185x21 mm



# BLUE is now....





# Call divert to mobile

All Wi-Fi monitors are equipped with Wi-Fi connection that allows forwarding calls to mobile devices to enjoy the DuoxMe service free of charge.

The **DuoxMe** application allows end-users to manage the functions of the video door entry system and much more directly from their smartphone or tablet.





#### **ACCESIBILIDAD**

Mechanical buttons allow visually impaired people to locate the buttons to talk and open the door before pressing them. All Duox Plus monitors are available in a model with inductive loop. In this case, the induction system included in the monitors transforms the audio signal into a magnetic field adapted to the hearing aids or prostheses of the hearing impaired people.





# Call divert to mobile/tablet

Free application

DuoxMe





With the DUOX PLUS Wi-Fi monitors, the **call divert to** mobile phones comes as standard.

It allows to establish communication with the outdoor panels and open the door.

It allows to **see who is calling** before answering and **open a second auxiliary door.** 

Automatic image capture of the caller and their register in the call log.

Up to **8 smartphones/tablets in the same apartment** can receive the call **simultaneously**.

It is as simple as downloading the **DuoxMe** app from Google Play or the Apple Store.



# Pretend you are at home.

Answer calls from the video intercom on your smartphone.



# Activate the camera.

See what is happening outside your house whenever you want.



# See who called.

Check the images of those who called while you were away. Download and share them.



# Share the access.

Invite family, friends or tenants to receive calls and open for you.



# Open without keys.

Open the door directly from the app.



# Open with your voice.

DuoxMe is compatible with Android, Siri and Apple Watch widgets.

# **Smart speakers**

By connecting to **Alexa and Google Home**, you can receive call notifications from the video intercom on a smart speaker or display.

You can also **use your voice to open the door**, either with smart speakers or displays or with Siri from your iOS device (iPhone, iPad or Apple Watch).









# DuoxMe



Door opening without the keys

Change the camera

Hang up the call



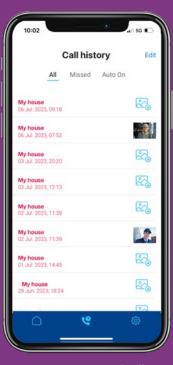


Image capture and call history

Answer the call

Open the door



More information about **DuoxMe** 







# Your voice is the key!

Open the door without stopping what you are doing.



# Don't wait for the delivery man!

Open the door with DuoxMe and don't miss that package you've been waiting for.



#### No one will know you're away

No matter where you are. You'll always have your intercom with you on your smartphone.

# **Telephones**

Made of high-impact ABS with a texturised finish for easy cleaning and ultraviolet protection.















**VEO** and **LOFT** telephones have a coiled cord with telephone plug connectors. A magnet located within the handset facilitates correct hangup position.

**iLOFT** telephone allows communication with the outdoor panel in hands-free mode.

#### VEO, LOFT and iLOFT telephones include the

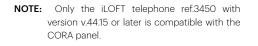
following features:

- Door opener button and call to guard.
- 5 selectable ringtones.
- Ring volume control and "do not disturb" function.
- Doorbell.

### Loft Extra and iLOFT phones include buttons

for additional functions:

- Lights on, 2<sup>nd</sup> door opening.
- Loft Extra: 2 additional buttons.
- iLOFT: 1 additional button.





# Video Guard Unit 🛜

Duox Plus Wi-Fi video guard unit has a multifunctional 4,3" capacitive touch screen and quick function access buttons for easy and convenient management.

Its unique handset design incorporating a magnet enables the end-user to put it back into position correctly. It includes a stainless steel desktop support. It allows a surface installation.



# Call divert to mobile/tablet













In addition to all the standard functions of a DUOX PLUS audio guard unit, this new Wi-Fi video guard unit allows:

- Visualise video upon receiving a call from the entrance panel (both in preview and in conversation).
- Visualise video when selecting a panel to connect with (Auto-on).
- Switch the camera during image visualisation.
- Receiving and answering calls from the households.
- · Easy agenda transfer from mobile/tablet/PC/Mac (web server) by uploading a file with the agenda.
- · Call divert to mobile/tablet (DuoxMe App) as in DUOX PLUS Wi-Fi monitors.
- · Automatic image capture (Photocaller).
- Manual image capture.
- Reception of Panic calls (configuration as guard unit in Panic mode).
- Warning at the guard unit of a forced outdoor panel (only with CORA outdoor panel), via door sensor.

# References





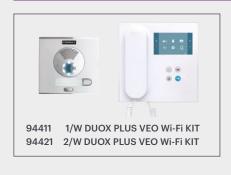






#### Video kits for residences and businesses

#### STANDARD SOLUTION







#### **ACCESSIBILITY FOR ALL**





#### WITH VANDAL-PROOF PANEL MADE IN STAINLESS STEEL





#### WITH KEYPAD ACCESS CODE









#### **Audio kits**









# Outdoor panels and accessories references

#### **Cora Panels**



ref.7701



ref.7711

#### **CORA PANEL S6**

7701 DUOX PLUS CORA PANEL S6

Dimensions S6: 130x295,5x27,6 mm

7702 CORA DIRECTORY PANEL S6

Dimensions S6: 130x295,5x27,6 mm

It can be mounted on both sides of the CORA panel, even several together (up to 3).

1 directory can be powered from the panel. If there are 2 or 3 directory panels, these must be supplied with an additional power supply.

A directory panel can be installed together with CORA S6 panels in order to record the name corresponding to each apartment code or any other additional information. It includes LEDs for illumination.

#### **CORA PANEL S8**

CORA in size SERIE 8 facilitates retrofits in existing Cityline/Skyline S8 flush boxes (in this case, the CORA PANEL FLUSH MOUNTING SET ref.7708 must be ordered separately).

It can also accommodate the DESFIRE SKYLINE PROXIMITY READER (ref.7463) or RFID proximity readers from other manufacturers, if required.

The black front part can be replaced by the front display with proximity iconography (ref. 7720), which includes a fixing element for these additional readers.

The additional proximity reader can be connected to an external door controller or the Wiegand input of the panel, or send the identifiers read from the integrated EM 125KHz reader to an external controller, such as AC-MAX (ref.5223 or ref.5224).

7711 DUOX PLUS CORA PANEL S8

Panel dimensions S8: 130x390,5x27,6 mm

7720 CORA PROXIMITY FRONT VISOR

7722 CORA PANEL INDUCTIVE LOOP

7708 CORA PANEL FLUSH MOUNTING SET

Only necessary when retrofitting into standard City / Skyline S6 (ref.8856) or S8 (ref.8858) flush boxes. This accessory is NOT necessary when using the CORA S6 (ref.7703) or S8 (ref.7713) flush boxes.

#### 8829 JOINING BOLTS SET

It allows to combine two or more frames. One set is required for each additional frame installed on flush box













			HOOD	FRA	ANGULAR	
	вох	BOX	SINGLE	SINGLE	DOUBLE	COMPLEMENT
S6	<b>ref.7703</b> 115x280x45	<b>ref.7709</b> 130x295,5x20	<b>ref.7705</b> 130x12x31	<b>ref.7706</b> 225x415x3	<b>ref.7707</b> 355x415x3	ref.7704
\$8	<b>ref.7713</b> 115x375x45	<b>ref.7719</b> 130x390,5x20	<b>ref.7705</b> 130x12x31	<b>ref.7716</b> 225x510x3		ref.7714

**NOTE:** Only the iLOFT telephone ref.3450 with version v.44.15 or later is compatible with the CORA panel.

# Outdoor panels and accessories references

#### **Skyline Panels**



SKYLINER The wizard to create your SKYLINE

#### **FRAMES**



#### **VIDEO**

#### **DOUBLE PUSHBUTTONS**



ref.73911 Vídeo W

ref.73902 Audio W



ref.7371 8 PUSH. 2x4 W



ref.7372 4 PUSH. 2x2 V



ref.7376 2 PUSH. 2x1 V

#### SIMPLE PUSHBUTTONS



ref.7367 4 PUSH. 1x4 W

ref.7368 2 PUSH. 1x2 V

ref.7375 1 PUSH. 1x1 V

#### **INFORMATIVE MODULES**



ref.7445 Panoramic cardholder W



ref.7444 Panoramic cardholder V



ref.7448 One-To-One V



ref.7452 One-To-One V w/inductive loop

#### **ACCESS CONTROL**



ref.7438 Memokev keypad W



ref.7463/7440 Proximity reader V Desfire / EM

#### **DIGITAL MODULES**

#### **DIRECT PANEL DIGITAL PANEL** ref.7439 ref.7470 ref.7457 Direct keypad W Graphic display W Digital keypad W

#### **ACCESSORIES**



ref.7443 Metallic complement W



ref.7442 Metallic complement V

# Outdoor panels and accessories references

#### Skyline panel













				-					
	FLUSH	SURFACE	HOOD		MODULAR	CITY FRAME		ANGULAR	
	вох	вох	SINGLE	DOUBLE	FRAME*	SINGLE	DOUBLE	COMPLEMENT	
S1	<b>ref.8851</b> 115x114x45	<b>ref.7061</b> 130x128x33	<b>ref.8400</b> 135x130	-	<b>ref.9191</b> 211x210	<b>ref.8251</b> 225x310	-	ref.8378	
S2	<b>ref.8852</b> 115x138x45	<b>ref.7062</b> 130x151x33	<b>ref.8401</b> 135x155	-	<b>ref.9192</b> 211x234	<b>ref.8252</b> 225x310	-	ref.8379	
S3	<b>ref.8853</b> 115x162x45	<b>ref.7063</b> 130x175x33	<b>ref.8402</b> 135x177,5	-	<b>ref.9193</b> 211x257	<b>ref.8253</b> 225x375	-	ref.8380	
S4	<b>ref.8854</b> 115x185x45	ref. <b>7064</b> 130x199x33	<b>ref.8403</b> 135x203	<b>ref.8411</b> 265x203	<b>ref.9194</b> 211x281	<b>ref.8254</b> 225x375	<b>ref.8427</b> 355x385	ref.8381	
S5	<b>ref.8855</b> 115x233x45	ref. <b>7065</b> 130x246x33	<b>ref.8404</b> 135x250	<b>ref.8412</b> 265x250	<b>ref.9195</b> 211x329	<b>ref.8255</b> 225x375	ref.8428 355x385	ref.8382	
S6	<b>ref.8856</b> 115x280x45	ref. <b>7066</b> 130x294x33	<b>ref.8405</b> 135x300	<b>ref.8413</b> 265x300	<b>ref.9196</b> 211x376	<b>ref.8256</b> 225x450	<b>ref.8429</b> 355x460	ref.8383	
S7	<b>ref.8857</b> 115x328x45	ref. <b>7067</b> 130x341x33	<b>ref.8406</b> 135x345	<b>ref.8414</b> 265x345	<b>ref.9197</b> 211x424	<b>ref.8257</b> 225x450	<b>ref.8430</b> 355x460	ref.8384	
S8	<b>ref.8858</b> 115x375x45	<b>ref.7068</b> 130x389x33	<b>ref.8407</b> 135x393	ref.8415 265x393	<b>ref.9198</b> 211x471	<b>ref.8258</b> 225x450	<b>ref.8431</b> 355x460	ref.8385	
S9	<b>ref.8982</b> 115x420,5x45	ref. <b>7069</b> 130x436,5x33	<b>ref.8480</b> 135x440,5	<b>ref.8483</b> 265x440,5	<b>ref.9199</b> 211x519	<b>ref.8259</b> 225x495	<b>ref.8474</b> 355x500	ref.8386	
S10	<b>ref.8983</b> 115x471x45	ref.7081 130x486x33	<b>ref.8481</b> 135x488	-	-	<b>ref.8264</b> 225x543	-	ref.8387	

<sup>\*</sup> To make DOUBLE modular frames, add to the SINGLE frame a DOUBLE PANEL MODULAR FRAME KIT (ref.9200). Horizontal: 341mm. \* To make TRIPLE modular frames, add to the SINGLE frame a TRIPLE PANEL MODULAR FRAME KIT (ref.9201). Horizontal: 471mm.

#### If the configuration requires more than one panel









#### 8829 JOINING BOLTS SET

It allows to combine two or more frames. One set is required for each additional frame installed on flush box.

A cable is required per each additional frame in order to connect the pushbutton modules between both frames (70 cm).

2541 DUOX PLUS/VDS CONNECTION CABLE (6W) 2542 DUOX PLUS/VDS CONNECTION CABLE (5W)

Dimensions: (width) x (height) x (depth) mm.



#### Marine panel







ref.44438 1 Pushbutton

ref.44338 1 Pushbutton

ref.44348 2 Pushbuttons

Dimensions: 150x180mm



ref.55261 ref.5471 Dimensions: 150x360mm







ref.55289 Dimensions: 150x485mm



#### **PUSHBUTTON PANELS**

The MARINE outdoor panels with pushbuttons (except 1 and 2 ways panels), always require a call extension module, depending on the number of pushbuttons. (ref. 2008 - 8 call extension module, ref. 2441 - 16 call extension module).

	FLUSH BOX	SURFACE BOX (with hood)	SIMPLE HOOD (for flush box)	
ST1	<b>ref.4641</b> 130x160x55	<b>ref.4645</b> 154x184x96	ref.4701	

#### **DIGITAL PANELS**

- The DIGITAL MARINE panel includes a keypad to call the apartments by dialling the door number or the corresponding code.
- The DIRECTORY DISPLAY allows the user to search for residents and their door number.
- Once the code is dialled, press the BELL KEY to call.
- The metallic keys are made of zamak. It has permanent back lit keys.
- Through the keypad it is possible to activate the installation's electric lock with a previously programmed PIN. 10.000 different users/codes in DUOX PLUS system.

55261 DUOX PLUS DIGITAL MARINE VIDEO PANEL ST3

5471 DIRECTORY PANEL ST3

55282 DUOX PLUS DIGITAL MARINE VIDEO PANEL DESFIRE ST3+
55289 DUOX PLUS DIGITAL 1/W MARINE VIDEO PANEL DESFIRE ST4

If the configuration requires more than one panel, they will need to be connected together with a connection cable (ref. 2541) (1 cable for each additional panel) and a set of joining bolts (ref. 2289) to attach them to unite the flush boxes.

	FLUSH BOX	SURFACE BOX (with hood)	SIMPLE HOOD (for flush box)
ST3	ref.4643 130x340x55	<b>ref.4647</b> 154X364x96	ref.4703
ST3+	<b>ref.4653</b> 130x400x55	<b>ref.4654</b> 154X423x96	ref.4655
ST4	<b>ref.4644</b> 130x465x55	<b>ref.4648</b> 154X489x96	ref.4704

#### Marine Elite panel

31728 DUOX PLUS MARINE ELITE PANEL

4579 MARINE ELITE RAINHOOD FOR FLUSH BOX PANEL

4580 MARINE ELITE FLUSH BOX

4581 MARINE ELITE SURFACE BOX WITH HOOD

## Indoor terminals and complements references

VEO and VEO-XS 4.3" colour monitors and VEO-XL 7" colour monitors are made from high-impact ABS plastic. They include automatic capture of images with the call (memory up to 150 photos), adjustment of contrast, brightness, colour, audio volume and call tone volume, "do not disturb" function, doorbell, date and time settings, silicone door opener buttons to activate the door opener, access the on-screen OSD menu, activate the outdoor panel camera or any another additional function that can be configured as for example activate a second access, courtesy light, etc. Available in white and surface installation.





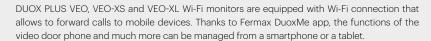








#### VEO, VEO-XS and VEO-XL Wi-Fi monitors



9446 DUOX PLUS VEO Wi-Fi MONITOR

9456 DUOX PLUS VEO Wi-Fi MONITOR WITH INDUCTIVE LOOP

Dimensions: 200x200x23mm (44 mm with handset).

9449 DUOX PLUS VEO-XS Wi-Fi MONITOR

9459 DUOX PLUS VEO-XS Wi-Fi MONITOR WITH INDUCTIVE LOOP

Hands-free. Dimensions: 125x165x21 mm.

9469 DUOX PLUS VEO-XL Wi-Fi MONITOR

9479 DUOX PLUS VEO-XL Wi-Fi MONITOR WITH INDUCTIVE LOOP

Hands-free. Dimensions: 185x185x21mm.

#### 9447 DUOX PLUS CONNECTOR

The same wall mounting connector is used for all monitor models. This makes the installer's job easier and provides great flexibility, allowing each resident in the building to choose the monitor they prefer.

Note: The Wi-Fi option does not require additional power supply compared to the non-Wi-Fi alternative.

#### VEO, VEO-XS and VEO-XL monitors

9445 DUOX PLUS VEO MONITOR

9455 DUOX PLUS VEO MONITOR WITH INDUCTIVE LOOP

Dimensions: 200x200x23mm (44 mm with handset).

9448 DUOX PLUS VEO-XS MONITOR

9458 DUOX PLUS VEO-XS MONITOR WITH INDUCTIVE LOOP

Hands-free. Dimensions: 125x165x21 mm.

9468 DUOX PLUS VEO-XL MONITOR

9478 DUOX PLUS VEO-XL MONITOR WITH INDUCTIVE LOOP

Hands-free. Dimensions: 185x185x21mm.

#### 9447 DUOX PLUS CONNECTOR

The same wall mounting connector is used for all monitor models. This makes the installer's job easier and provides great flexibility, allowing each resident in the building to choose the monitor they prefer.



Note: In models with inductive loop, the induction system included in the monitors allows to transform the audio signal into a magnetic field adapted to the hearing aids or prostheses of hearing impaired persons.

Dimensions: (width) x (height) x (depth) mm.

#### **TELEPHONES**















DUOX PLUS VIDEO Guard Unit has a multi-functional 4,3" capacitive touchscreen and quick function access buttons for easy convenient management. Its unique handset design incorporating a magnet enables the end-user to put it back into position correctly. It includes a stainless steel desktop support. It allows a surface installation.

NOTE: Only the iLOFT telephone ref.3450 with version v.44.15 or later is compatible

#### 9424 DUOX PLUS VEO WI-FI VIDEO GUARD UNIT

Dimensions: 200x200mm

3444 DUOX PLUS VEO TELEPHONE

**DUOX PLUS LOFT EXTRA TELEPHONE** 

DUOX PLUS ILOFT TELEPHONE

Dimensions: 82x214x43mm

Dimensions: 85x220x40mm

Dimensions: 90x146,5x20mm.

with the CORA panel.

#### **Monitors and telephones COMPLEMENTS**





ref.9420



ref.5636



ref.3749

9410 VEO MONITOR DESKTOP SUPPORT

9420 VEO-XS AND VEO-XL MONITOR DESKTOP SUPPORT

3749 VEO/LOFT TELEPHONE DESKTOP SUPPORT

5636 ILOFT TELEPHONE DESKTOP SUPPORT

FERMAX desktop supports allow to answer a call to the entrance panel from the office desktop. Made of stainless steel (AISI 316L).

3388 UNIVERSAL DECORATIVE FRAME, 120X240 3389 UNIVERSAL LARGE DECORATIVE FRAME, 210X240

FERMAX Decorative Frames are aesthetic complements. Useful in retrofitting applications or replacement of previous equipment.





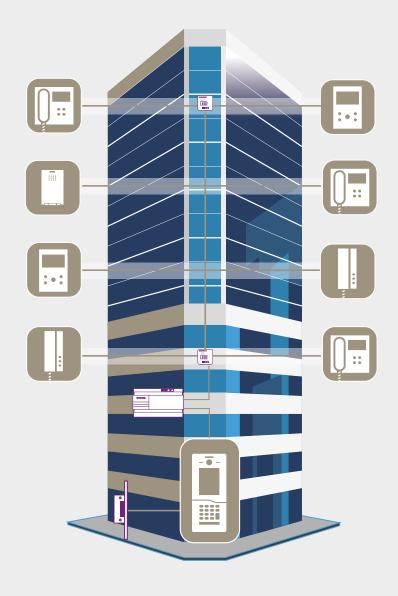


LOFT HANDSET WITH INDUCTIVE LOOP 3443 VEO HANDSET WITH INDUCTIVE LOOP

Dimensions: (width) x (height) x (depth) mm.

## **SIMPLE INSTALLATION (1 Building)**

# LESS COMPONENTS REQUIRED FOR INSTALLATION. NO FLOOR DISTRIBUTORS. NO DECODERS. NO SWITCHERS



The only materials required are:

- Panel
- Power Supply
- Monitors and telephones
- Line adaptors

Apartments are easily connected at each level using simple terminal strips.

NOTE: Depending on the type and condition of cable and distances, additional regenerators, decoders or power supply might be required.

Easy to install, program and maintain. Save time during the installation and maintenance. Judge for vourself!

#### **Power supply and Adaptors**

#### For most common cases

In the most common installations, DUOX PLUS does not require any installation devices other than the power supply and a pair of line adapters per riser. The maximum number of monitors that can be connected to each power supply ref. 4825 depends on the installation topology, cable type and monitor model, as shown in the tables below.





3255 DUOX PLUS LINE ADAPTOR

Necessary at the beginning and the end of every riser.

POWER SUPPLY + FILTER 24Vdc-2.5A DIN10 4825

TERMINAL CONSUMPTION TABLE PER POWER SUPPLY IN DISTRIBUTION (6 PER FLOOR)

	NO Wi-Fi			Wi-Fi			
	VEO	VEO-XS	VEO-XL	VEO	VEO-XS	VEO-XL	
1.0mm	40	40	34	28	28	24	
0.5mm <sup>2</sup>	40	38	30	24	24	18	
0.2mm <sup>2</sup>	32	26	20	18	18	12	

TERMINAL CONSUMPTION TABLE PER POWER SUPPLY IN CASCADE

	NO Wi-Fi			Wi-Fi		
	VEO	VEO-XS	VEO-XL	VEO	VEO-XS	VEO-XL
1.0mm	40	38	30	26	22	20
0.5mm <sup>2</sup>	32	28	22	20	18	14
0.2mm <sup>2</sup>	16	14	10	12	10	8

#### For specific cases







ref.3289

POWER SUPPLY DIN-6 100-240VAC/24VDC-2A

To be used exclusively with the filter ref. 3289 or with the 2-way regenerator ref. 3269.

#### **DUOX PLUS FILTER 24VDC**

In case the ref. 4825 cannot be installed due to lack of space. This filter can be used only with 24Vdc power supply (ref. 4840). Do not use it with 18Vdc. power supply.



ref.4802



ref.4800

4802 POWER SUPPLY DIN4 230VAC 12VAC/1A

12Vac for altern current lock release.

POWER SUPPLY DIN4 230VAC 12VAC/1,5A 4800

12Vac for altern current lock release.

#### Door lock release





UNIVERSAL DOOR LOCK RELEASE

67501 UNIV. LOCK RELEASE 990N-P22 MAX 10-24Vac/dc

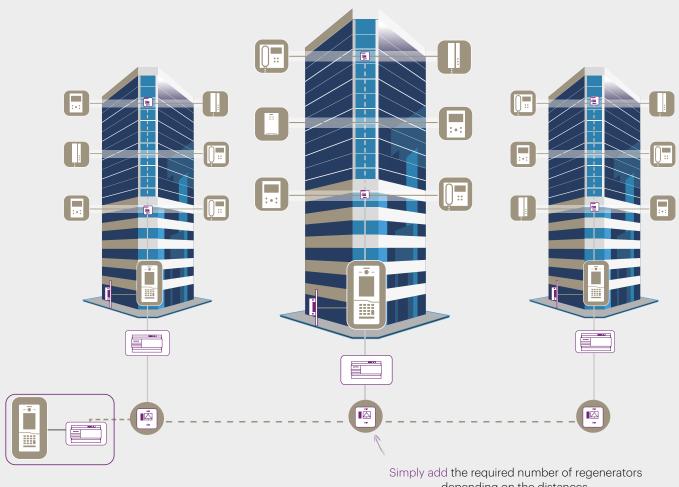
UNIVERSAL ELECTRIC STRIKE

6750 UNIV. ELECTRIC STRIKE 990N MAX 10-24Vac/dc 6752 UNIV. ELECTRIC STRIKE 990A MAX 12-24Vac/dc

Note: If other models of door lock release are used and their power consumption is greater than 250mA, an additional separate power supply must be used.

#### **EXTENDED INSTALLATION** (multiple buildings or longer distances)

#### FOR ALL KINDS OF PROJECTS WITH LONGER DISTANCES, VERTICAL STRUCTURES OR HORIZONTAL INSTALLATIONS



# depending on the distances.

#### DUOX PLUS allows you to push the boundaries of digital technology.

Thanks to the digitalisation of the system, it can now be used in all kinds of installations. The more complex the installation is, the more powerful DUOX PLUS will be.

Regenerators and decoders are the only elements to be added for large installations or long distances.



#### Regenerators and Decoders

Regenerators and decoders take scalability to the next level. No installation, no matter how large, can resist DUOX PLUS.

#### **REGENERATORS**

It allows to regenerate and amplify the signal in both ways, as well as amplify distances and number of indoor terminals. Moreover, the connected sections to input and output protect against short-circuit, charge and signal reflections mutually. Maximum 5 units in cascade. Up to 99 if connected in parallel.

#### 3269 2/W DUOX PLUS REGENERATOR

It has 1 input and 2 outputs. By having 2 outputs (also isolated from each other) it enables the number of risers to be increased. Requires 24Vdc power supply without filter (ref. 4840).

For more information: https://fermax.com/intl-en/documents

#### 1/W DUOX PLUS DUAL REGENERATOR 3268

It has 1 input and 1 output. As per factory default settings, electrical energy does not flow, but this can be configured via a dipswitch so that the data (which regenerates) as well as the power supply can pass through. That way there is no need to always install a power supply at the output. The number of devices that can be fed at the output without an additional power supply units will depend on the power that reaches the regenerator. For more information: https://fermax.com/intl-en/documents

	3269	3268
Number of inputs	1	1
Number of outputs	2	1
Regenerates	YES	YES
Isolates	YES	YES
Incorporates power supply filter	YES	NO
Additional conversation channel per riser	NO	YES
		(in multichannel mode)

#### **DECODERS**

#### 9419 10/W DUOX PLUS DECODER/ISOLATOR

10-outputs floor decoder. One output per home, allowing up to 3 terminals (monitors/telephones) per home. Multiple decoders can be installed on each floor. Each output allows to increase the diversion distances on a floor up to 100 m.

In the event of a malfunction (short circuit) of any of the decoder's outputs, both the input DUOX PLUS bus and the rest of the outputs will continue to operate normally. In addition, when a shortcircuit occurs on an output, the red LED associated with the output will light up, indicating the output on which the fault has occurred.

It is not necessary to enter a house to program the address of the terminal since the decoder includes a group of microswitches (dipswitches) to program the addresses of each of its outputs (sequential programming). Also, the decoder addresses can be programmed non-sequentially (open programming).

The decoder is powered directly from the DUOX PLUS bus. With DIN10 rail mounting and removable terminal strips for easy wiring and installation.

#### 4/W DUOX PLUS DECODER/ISOLATOR 9425

Same as ref. 9419 but this is a 4-outputs floor decoder (DIN4) and the terminal strips are not removable.

# FOOO S CHIMINED

- ONLINE - COMMISSION ref.3269



ref.3268





ref.9425

#### WHEN IS IT RECOMMENDED TO INSTALL THE SMART DECODER?

- When we have to install more than 6 terminals per floor in the building.
- When the distance between the terminals and the riser is greater than 25 metres or when this distance is unknown.
  When different types of wires are mixed in the same installation or all the cables go to the same point.

### **Installation** devices

#### ADDITIONAL FUNCTIONS

#### MORE SECURITY

Add IP cameras to monitor specific areas of the building

**Bring security** to all your installations!



#### 9453 IP/DUOX PLUS INTERFACE+CAMERA KIT



It includes the IP/DUOX PLUS camera interface (ref.9454) and the IP camera (ref.9985) already pre-configured for the most common case of an outdoor panel and an additional camera. It also includes the camera power supply (ref.9982) and its adapter (ref.9984).

IMPORTANT: Check compatibility with the technical department.



#### 9454 IP/DUOX PLUS CAMERA INTERFACE

Allows the integration of IP video CCTV cameras into a DUOX PLUS installation. It transforms the IP video signal (standard RTSP) into a DUOX PLUS signal that is connected directly to the DUOX PLUS bus.

- Generally, one interface will be required for each camera installed in the DUOX PLUS installation. However, in the particular case of 2 cameras in the same block, up to 2 cameras can be configured on the same interface (in this case a PoE switch is required).
- Each camera will be powered externally with its additional power supply (ref. 9982+ref. 9984) or via a PoE switch.
- The interface is powered directly from the DUOX PLUS bus.

An outdoor panel can be associated to the interface, so that, while the IP camera is being viewed, it is possible to activate the opening of this panel.

DIN 6 rail mounting (including lateral fixing brackets for screws, width 106 mm). If the lateral fixing brackets for screws are removed, the width is 89 mm (DIN 5).

IMPORTANT: Check compatibility with the technical department.



ref 9985 ref 9984 ref 9982

ref 9982





ref1586

#### 9985 PERIPHERAL IP DOME CAMERA

IP minidome camera (ceiling mount), 2MP resolution, 2.8mm fixed lens, IR LEDs, 30m range.

#### 9982 POWER SUPPLY PERIPHERAL CCTV CAMERA

Power supply for analogue or IP auxiliary cameras.

#### POWER ADAPTOR PERIPHERAL CCTV CAMERA 9984

Power adapter, with a jack plug to connect the power supply to the camera.

#### 1586 4 POE PORTS SWITCH

#### **MORE FUNCTIONS**

Activate a second gate, garden gate, or garage entrance door with DUOX PLUS relays that connect directly to the system bus, without additional wiring



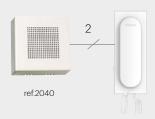


#### 3233 DUOX PLUS BASIC RELAY

Basic functions. Allows you to activate an additional function from F1 or F2 of the DUOX PLUS terminals, without additional wiring. The relay can also be activated by the call or by activating the lock release. It can be connected at any point of the bus.

#### 3267 DUOX PLUS RELAY MODULE

Advanced functions. Allows you to pair 2 relays, 1 as a transmitter and other as a receiver, to perform remote activations. An address can be programmed with the address assistance (001-999) using the DUOX PLUS Programmer ref. 3254 via the relay's telephone connector.



#### CALL ACCESSORIES

#### 2040 ELECTRONIC CALL EXTENSION BELL



CABLES

5925 DUOX PLUS PARALLEL CABLE 2x1mm2

#### **TESTER**



#### 9404 DUOX PLUS TESTER

The DUOX PLUS Tester is the ideal tool for the installer. It is used to assess the operation of each outdoor panel with the DUOX PLUS terminals in an installation, without the need to enter the apartments.

A test is initiated from a panel to one or more terminals and the operation of that panel with those terminals is checked.

This action is performed from a user interface on a web browser. From a mobile phone, tablet or computer we can connect to the installation through the Wi-Fi generated by the TESTER DUOX PLUS.



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