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PRACTICAL GUIDE AND GENERAL DIAGRAMS FOR INSTALLERS OF FERMAX DOOR PHONE AND VIDEO DOOR PHONE SYSTEMS
Third Edition: May 2003 (Cod. 94727-ING V 05/03).

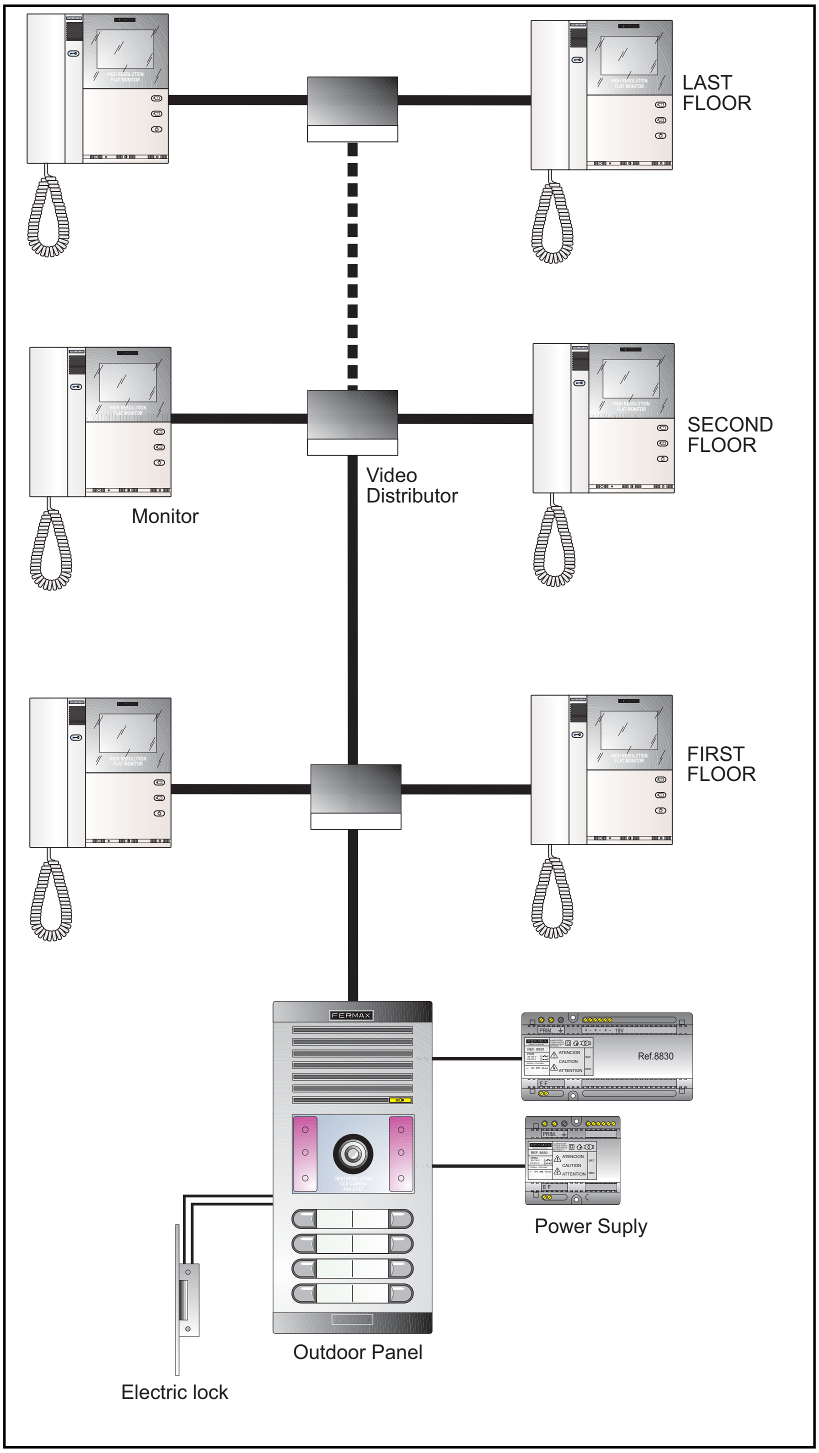
An item employed in practically all urban constructions, the **door phone** is basically comprised of **outdoor panel** which is installed in the area of the hall or vestibule of the building and connected to a telephone installed in each of the dwellings.
The **outdoor panel** comprises of a number of **pushbuttons**, each of which produces a call tone in the **telephone** of a specific dwelling. By lifting the receiver it is possible to hold a conversation with the caller. By pressing a button incorporated in the **telephone** the **electric lock** is activated, thus allowing the hall door to be opened.
In the case of the **Video Door Phone**, the outdoor panel incorporates a telecamera, and **monitors** are installed in the dwellings instead of **telephones**, which allows us, as well as the aforementioned features, to see the caller.

Door phone and **Video Door Phone** systems can also include a **guard unit**, with which the inhabitants of the building can contact the concierge through their own **telephone** or **monitor.** In certain cases, the calls made from the outdoor panel can be filtered by the concierge.

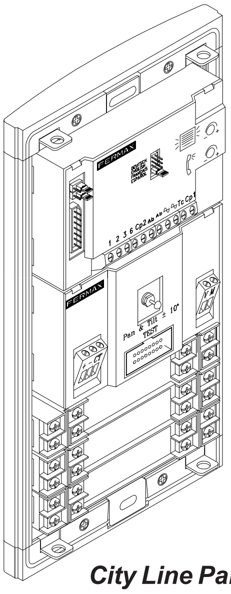
Other components essential to the correct functioning of a **Door Phone** or **Video Door Phone** system are the power supplies which convert the supply from the mains supply to the characteristics neccessary for correct functioning of the system.They are usually installed in the hall or commun area of the building.

Video distributors are neccessary whenever the video signal has to be split.

In more complicated installations, generally where there is more than one entrance (or estates with one main entrance and one or more internal blocks), it is possible to install an **outdoor panel** in each of the entrances (both the main entrance and each of the blocks). This type of installation is achieved by the use of components which are called **automatic switchers**, which select the panel from which the call has been made.



Components of a Basic Door Phone installation



City Line Panel

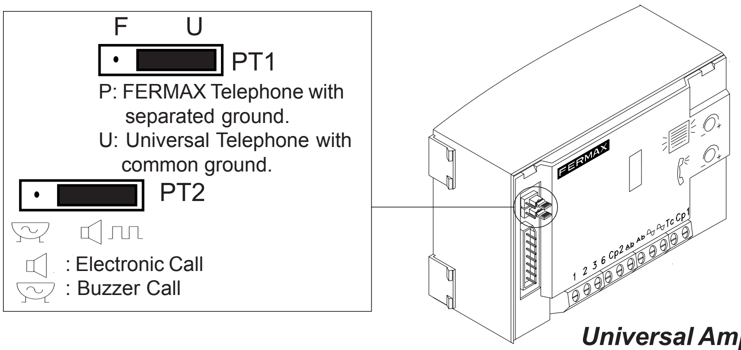
OUTDOOR PANEL

Depending on the number of dwellings and the characteristics of the installation, the door phone or video door phone systems need one or more **outdoor panels**. These include the pushbuttons used to call each of the dwellings and an **amplifier** which incorporates the neccessary electronics to be able to establish the acoustic communication with the telephones. In video door phone installations there is a **telecamera** which allows the recollection of the video signal.
In the outdoor panels there exists the option of installing a **Memokey Pack** (an electronic keypad), a **Proximity Reader Pack**, which allows the residents of the building to open the door without having to use the key, or a **Panoramic Cardholder**, which gives it a pleasant touch of distinction.
On pages 8, 9 and 10, you will find a complete description of all the combinations and possibilities of the outdoor panels from **FERMAX'S** City Line series, suitable for application with ***CityMax*** telephones and monitors.

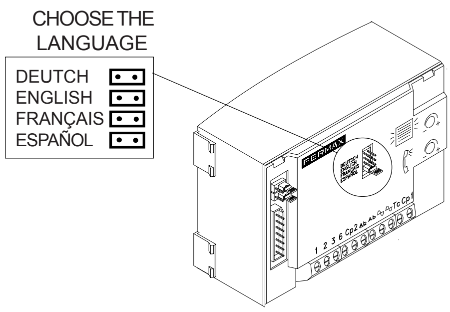
The components which are fitted or can be fitted in a outdoor panel are the following:

Amplifier

It is the module which incorporates the neccessary electronic circuits to make the audio system work.
The **Universal Amplifier Cod.98589** used in the ***City Line*** panels features volume controls, both outdoor-dwelling and dwelling-outdoor so that the installer can obtain the optimum volume, depending on the background noise and to avoid feed-back from the other telephones. It works with **FERMAX** telephones as well as any other brand, so that you could also use them for replacing.
The amplifier also includes a call tone generator that is sent to the called telephone when the corresponding push button is being pushed. The **Universal Amplifier Cod.98577** offers the same technical characteristic as the previous version, but includes also a **speech synthesizer** that reminds the visitor to close the door after entering, by means of a message in French, English, Spanish or German.



Universal Amplifier
Cod.98589



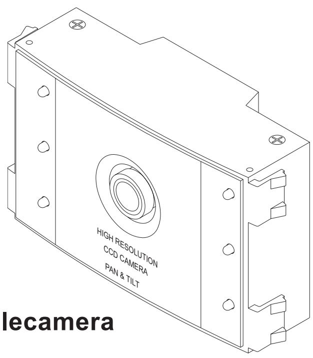
Universal Amplifier
Cod.98577

Pushbutton

The outdoor panel incorporates a pushbutton for each of the dwellings in the building.
As the call tone generator forms part of the amplifier, the function of the pushbutton is that of sending that signal to the corresponding dwelling.

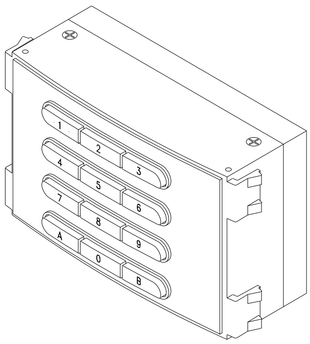
Telecamera

In video door phone installations, it is neccessary to install a telecamera module.
The **Telecamera Ref. 8028**, used in the ***CityMax*** systems, features a wide range of vision as it incorporates a 3,6 mm wide angle lens.
The highly sensitive CCD sensor module which it incorporates works even in complete darkness, thanks to some LED infra-red diodes which are invisible to the visitor.
A manual control called "pan & tilt" lets you focus on the best viewing point once the camera is installed.

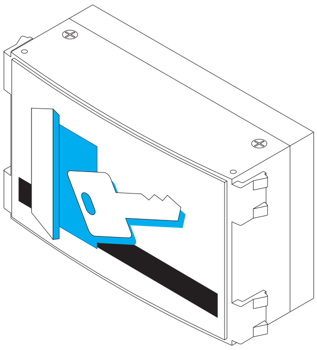


Telecamera

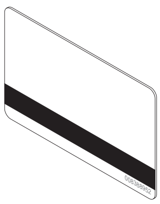
Optional components for the outdoor panels:
It is possible to enhance ***City Line*** panel installations with any of the following accessories:



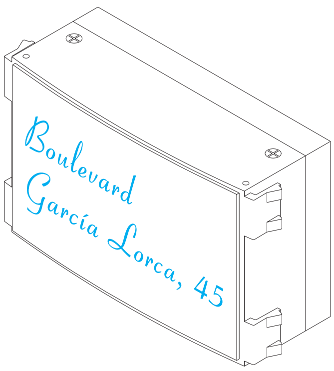
Memokey Pack
Numeric keyboard that allows residents of the building (or anybody authorised) to open the hall door by entering a 4,5 or 6 digit code.



Proximity Reader Pack
In a similar way to the Memokey Pack, it allows the door to be opened, but using a Proximity Card that only has to be placed near the sensor (physical contact is not neccessary). However it is neccessary for the proximity sensor to have been previously programmed with card code.



Proximity Card
Similar in size and thickness to a credit card, each maintenance-free proximity card has a unique and unrepeatable code which will only be recognised by the sensor if it has been previously programmed.



Panoramic Cardholder
This feature allows for a display sign with the name of the building, the address, or any other information of interest. The panoramic card window is backlit.
The text or logotype to be inserted in the panoramic cardholder can be ordered from our Publicity Department.

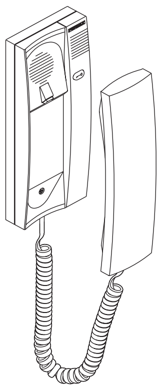
More informatiom about these products in our General Catalogue. Ask your usual dealer for it.

TELEPHONES

FERMAX's ***CityMax*** series includes a wide range of telephones. Depending on their appearance (number of buttons) they are divided into three classes. Within each class there are different models, each with certain technical characteristics.
The three classes are:

CityMax Basic Telephones

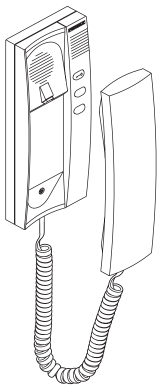
Featuring one pushbutton (to open the door).



CityMax Basic

Citymax Extra Telephones

Featuring, besides the door release button, two further buttons. One of them is generally used for calling the concierge (in installations with concierge unit) and the other is for special applications.

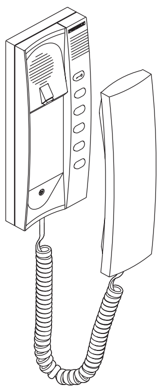


CityMax Extra

CityMax Complet Telephones

Featuring, in addition to the door release button, a further five buttons that can be used for various applications: calling the concierge, light activation etc. The installation of these phones depends on the specific application to be used. See useful additions on pages 61-64 of this book.

Certain models of ***CityMax*** telephones feature a volume control and/or an indicator light, which advises that it is set at minimum level. Consult our General Catalogue.



CityMax Complet

Depending on its technical characteristics, but not on the class, ***CityMax*** telephones for normal installations can be:

Standard Telephones

For basic installations. Lifting up the receiver it is possible to hear a conversation between the outdoor panel and another telephone. If a telephone is left off the hook unintentionally then acoustic interference may be produced.

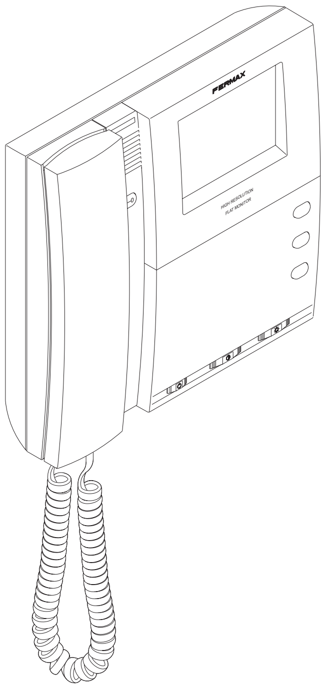
Privacy Telephones

These have their audio system blocked whilst not in use and so do not allow other conversations to be heard. A telephone off the hook would not affect the rest of the installation in any way.

The most common characteristics of the ***CityMax*** telephones are shown in the table below.
Ask for our General Catalogue to see the characteristics of the rest of the range.

REF.	NAME	CHARACTERISTICS	WIRES IN THE INSTALLATION
8044	CityMax Basic	Standard	4 common + 1 for calls in each telephone
8043	CityMax Basic Privacy 4 + n	Privacy	4 common + 1 for calls in each telephone (*)
8036	CityMax Basic Privacy 5 + n	Privacy	5 common + 1 for calls in each telephone
8045	CityMax Extra	for Guard Units with retention light	4 common + 1 for calls in each telephone + 1 for calls to the concierge in each telephone

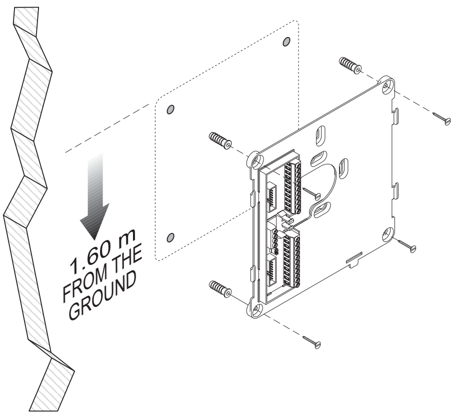
(*)An additional module, Ref.8042, is required. This is installed inside the outdoor panel.



MONITORS

In video door phone installations there has to be a monitor in every dwelling. The ***CityMax*** series monitors, in addition to the normal functions, allow you to see the caller.
The brightness and contrast controls allow you to adjust the image as neccessary.
The monitor must be kept on at all times, except when the dwelling is going to be empty during a long period of time. To this end, it features an on-off button.
All ***CityMax*** monitors have three buttons on the front, two of which are for turning on the main and secondary cameras (if installed) and a third one for special applications (normally for turning on the stair light).

As with the normal telephones, the ***CityMax*** monitors can be divided into three different groups : **Basic**, **Extra** and **Complet**, according to whether, in addition to the three buttons mentioned before, they feature one, two or three buttons more next to the receiver.
In other way, and deppending on the electronic features, monitors can be **standard** or **privacy**. See previous page.



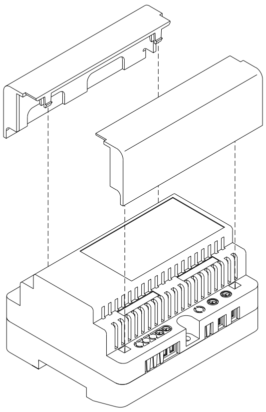
The Installation Connector

Once mounted on the wall, this is the part upon which the installer connects the cables and mounts the monitor. The monitor is supplied with a cable which allows it to be connected after the initial wiring is completed.
The principal characteristics of **FERMAX's *CityMax*** monitor series are shown in the following table.

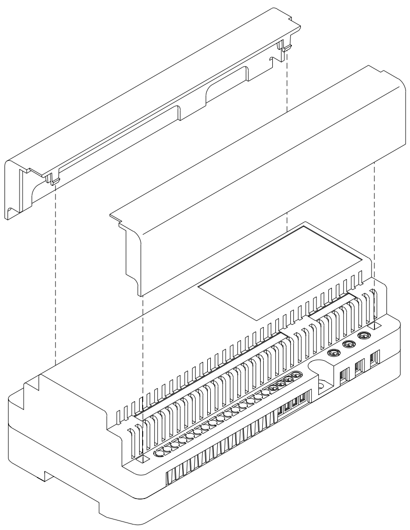
MAIN CHARACTERISTICS OF THE CITYMAX MONITOR

REF.	TYPE	CHARACTERISTICS	AUDIO WIRES IN THE INSTALLATION (*)
8023	CityMax Export	Basic	4 common + 1 for calls in each monitor
8026	CityMax Extra Privacy 5 + n	Secret	5 common + 1 for calls in each monitormonitor
		For Guard Units with retention ligts.	5 common + 1 for calls in each monitor +1 for calling the guard unit in each monitor
8027	CityMax Extra	For Guard Units with retention lights.	5 common + 1 for calls in each monitor +1 for calling the guard unit in each monitor

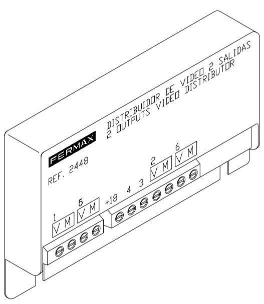
Apart from the wiring indicated above, one coaxial and three common wires are required for the video section.



6 elements rail DIN format



10 elements rail DIN format



Video distributor

POWER SUPPLIES

The door phone and video door phone systems need power supplies to be able to work. These units take care of converting the building's mains supply to the energy requirements of the system, (which depends on the type of installation: door phone, video door phone or with concierge unit).
Here follows a description of the characteristics of the different power supplies which can be used in ***CityMax*** installations. All of them work from 220 volts. For other voltages consult our table in page 64.

Audio Power Supply ref. 8787

This is neccessary in all installations from door phone to video door phone. 12Vac output to feed the amplifier.
Only one amplifier ref. 8787 is needed for the whole audio system in buildings with one entrance. For systems with several entrances or in estates, the corresponding installation diagrams must be consulted.
6 elements rail DIN format.

Video Power Supply Ref. 88302

Required in all video door phone systems. Supplies 18Vdc to feed the telecamera and the monitors.
10 elements rail DIN format.

Emergency Audio Power Supply Ref. 8791

Neccessary so that the audio and lock opening systems work if there is a power failure. 12 Vac output in normal conditions and 12 Vdc in a power failure. It includes a quick recharging battery.
10 elements rail DIN format.

Distributor Power Supply Ref. 88231

Required in installations where there is an automatic switcher, concierge unit with retention line or with an LED volume control indicator. 12 Vac and 12 Vdc output.
6 elements rail DIN format.

AUTOMATIC SWITCHERS

Neccessary in installations where there are two or more outdoor panels (entrances). Their job is to automatically select the panel from which the call has been made.
10 elements rail DIN format.

There are two models:

Audio Switcher Ref. 8811

For door phone systems.

Video Switcher Ref. 8812

For video door phone systems.

VIDEO DISTRIBUTORS

All splits in the video signal are made using these distributors. This allows the impedance to be maintained constant throughout the installation whatever the number of monitors and thus avoiding defects in the image, such as double image, loss of contrast etc.

There are two types of video distributor:

Video Distributor Ref. 2448

With two outputs.

Video Distributor Ref. 2449

With four outputs.

DENOMINATION OF THE CITY LINE PANELS

The **City Line** series panels are divided into 9 **Series**, all of the same widht, but varying height.

Within each series there are various models depending on whether they incorporate amplifier, window for the camera, the number of pushbuttons etc.

As it is possible to combine different types of panels (as long as they are from the same series), and given the diversity of existing types, it is possible to obtain the most appropriate combination depending on the characteristics of the installation, (number of dwellings, door phone or video door phone etc.) and thus achieving an excellent aesthetic finish.

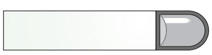
In order to provide its clients with a simple system for choosing the panel or combination of panels neccessary for a specific installation, **FERMAX** has designed a code system called PICTORIAL, which is comprised of:

A. A number from one to nine that indicates the **series**.

B. A combination of letters that define the **type** of panel, and which can be:

- A: Indicates a panel with **Amplifier**.
- V: Indicates that it includes **a Window**.
- W: Indicates that it contains **two Windows** (also called a double window).
- P1: Indicates that the panel contains **Single Pushbuttons** (with one call button).
- P2: Indicates that the panel contains **Double Pushbuttons** (with two call buttons).

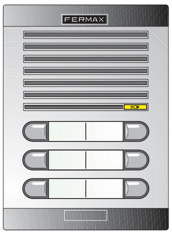
C. Two numbers which indicate the number of **Pushbuttons** (if there are any).



Single Pushbutton

Double Pushbutton

Examples of panels according to the pictorial code:



Panel type 3AP203

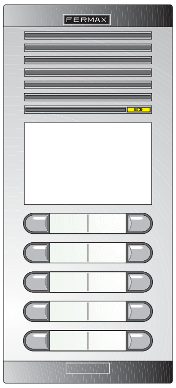
3 It is a panel from **Series 3** (175 x 130 mm.).

A It includes **Amplifier.**

P2 It includes **Double Pushbuttons.**

03 It has 3 pushbuttons, wich being doubles, allow six dwellings to be called.

To be used in a door phone installation with six dwellings.



Panel type 6AVP205

6 It is a panel from **Serie 6** (294 x 130 mm.).

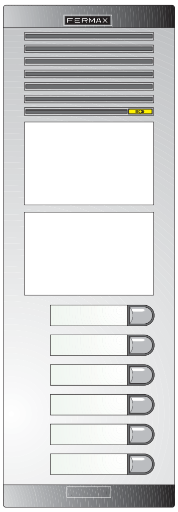
A It includes **Amplifier.**

V It includes **Window.**

P2 It includes **Double Pushbuttons.**

05 It has 5 pushbuttons, wich being doubles, allow ten dwellings to be called.

If we place a telecamera in the window we have a video door phone for ten dwellings or a standard door phone if we place something like a panoramic cardholder or a Memokey in the window.



Panel type 8AWP106

8 It is a panel from **Serie 8** (389 x 130 mm.).

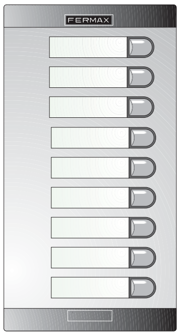
A It includes **Amplifier.**

W It includes **Double Window.**

P1 It includes **Single Pushbuttons.**

06 It has 6 pushbuttons, wich being singles, allow six dwellings to be called.

This can be used for a six dwelling video door phone installation. In one window we can place a telecamera and in the other we can place another accessory such as a Panoramic Cardholder, a Memokey etc.



Panel type 5P109

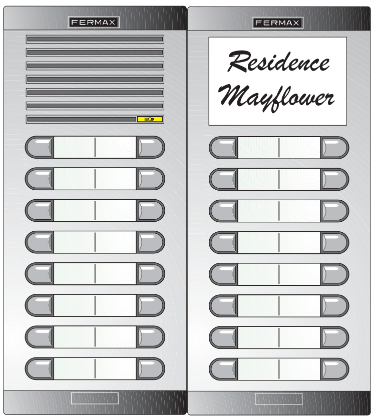
5 It is a panel from **Series 5** (246 x 130 mm.).

P1 It includes **Single Pushbuttons.**

09 It has nine pushbuttons, wich being singles, allow nine dwellings to be called.

This panel cannot be used itself, as it has no amplifier. Therefore it will have to be combined with some other panel or panels.

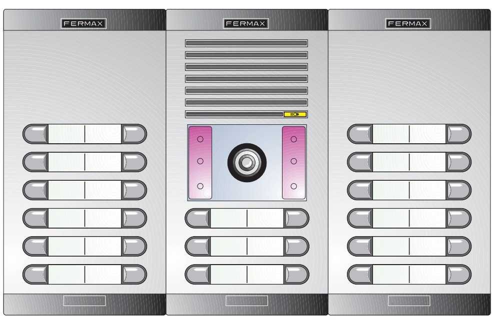
Examples of panel combinations:



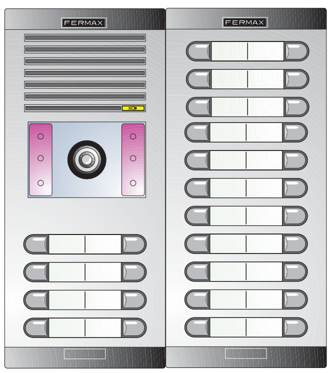
6AP208 6VP208

A door phone installation for 30 dwellings, with 4 on each floor, and where the pushbutton configuration corresponds to the distribution of dwellings.
In the window on the right hand panel we would install a panoramic cardholder.

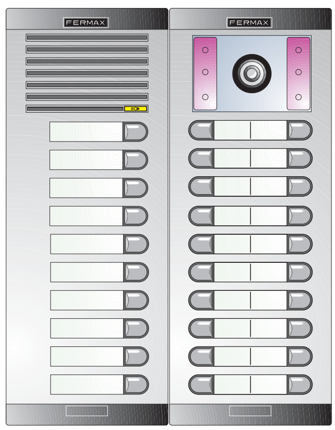
Measurements of the combination: 260 x 294 mm.



5P206 5AVP203 5P206



6AVP204 6P211

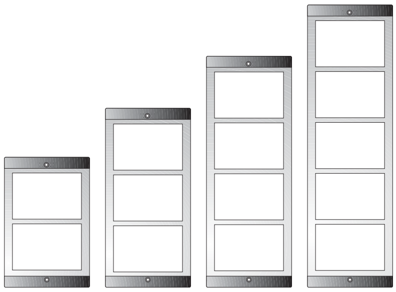


7AP110 7VP210

Three different possibilities for a 30 dwellings video door phone installation.
The choice of one or another combination depends on the space available, the grouping of buttons by floor, aesthetic reasons etc.

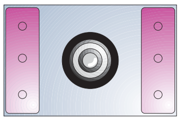
CityMax Modular Panels

CityMax is an outdoor panel for audio and video door entry systems with a continous profile and a modular composition. The design and characteristics are similar to CityLine panel, the main difference of this panel is the flexibility offered by the modular format.
The assembly of the panel is very easy. It's just needed to choice the combination of avalaible modules and to fit them into the frames.



CITYMAX FRAMES (PANELS)

The line has four frames (with 2, 3, 4 or 5 windows) where modules can be inserted to assembly the panel. They match with 3, 5, 7 and 8 series of Cityline panels.

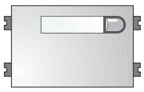


Réf. 8028

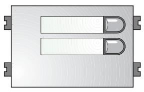
CITYMAX CAMERA MODULE

Réf. 2500

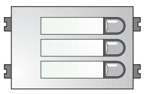
CITYMAX AMPLIFIER MODULE
Includes the cable connection to first pushbutton module.



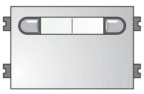
Réf. 2502



Réf. 2503



Réf. 2504



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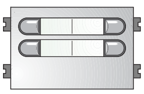
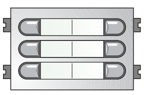


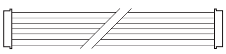
Réf. 2506



Réf. 2507

CITYMAX BUS PUSHBUTTON MODULES.

With bus pushbutton modules there is no need to use anymore the call extension modules.
Every module includes the cable connection to next one.



Réf. 2515

PANEL CABLE CONNECTION

Required for connection between the modules when there are more than one panel. One for each additional panel.

* **Bear these points in mind before deciding on what material you are going to need for the installation:**

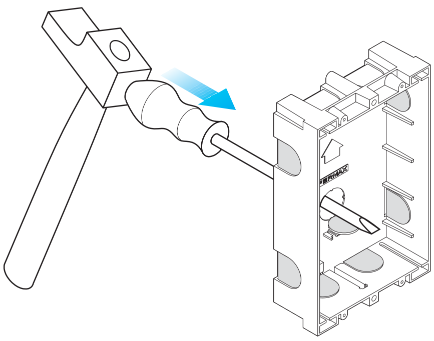
Choose the panel or group of panels neccessary depending on the number of dwellings, space available for the installation etc.

Do not forget to keep a window free for the telecamera if it is a video door phone installation. The telecamera is not included, so remember to order it apart (ref. 8028 in ***CityMax*** monitor installations).

The panels are supplied without mounting boxes, so do not forget to order them separately.

Where there is a combination of panels you will have to aquire seperaters for a perfect union between the mounting boxes. A set of Joining Bolts Ref. 8829 will be neccessary for each additional panel.

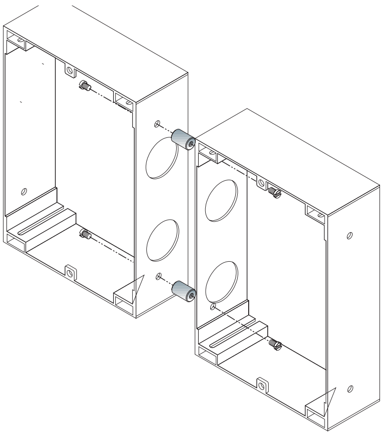
The monitors have to be mounted on Installation Connectors which have to be bought apart.



* **Before installing the mounting box make whatever holes are neccessary to introduce the wires.**

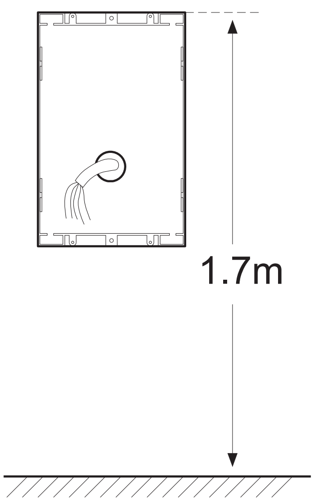
The mounting boxes have various holes indicated for introducing wires. Pierce those neccessary by giving them a sharp tap with a hammer.

Bear in mind that the panels always have to be mounted in **vertical**, so position the boxes according to the arrow engrave in the base.



* **In combinations of panels, assemble the boxes with the seperaters before installing them.**

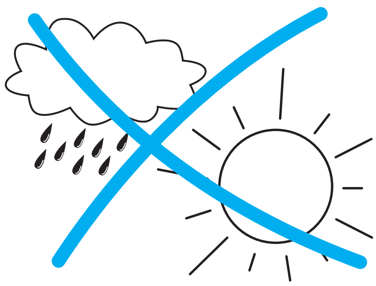
Remember that you will have to pass wires from one box to the other, so the neccessary holes will have to be pierced before assembling them.



* **Install the corresponding mounting box at a height of 1m 70cm from the top of the box to the ground and flush with the wall.**

Make sure that each box is left completely vertical, otherwise the panel will end up twisted.

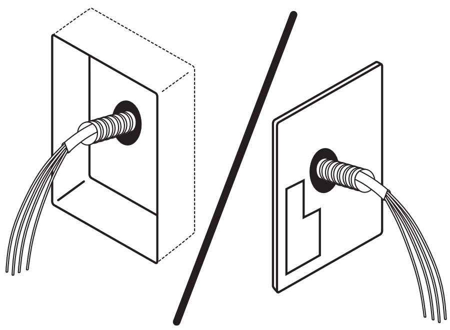
Bear in mind, especially in new constructions, that the height of the floor may change, for example if the pavement or curb has not been laid.



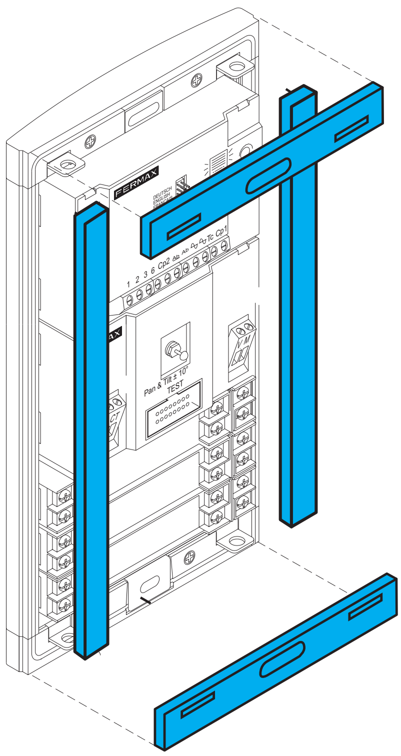
* **Bear these points in mind when choosing where the outdoor panel is going to be placed:**

The panel is well protected against humidity, rain and other adverse weather agents. However, to prolong the life of the apparatus, we advise that it be installed in a place where it is not directly open to the rain, especially where the air is very salty or there is a lot of humidity (buildings on the seafront etc.).

If it is a video door phone installation, then choose a place where it is not in direct sunlight so as to avoid problems of background light in the camera.

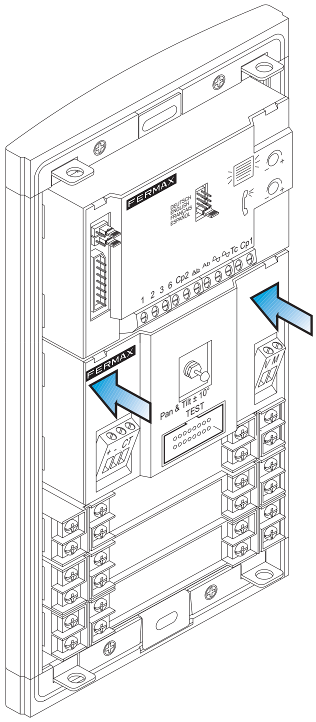


* **When you place the installation cables, leave them long enough to be able to work with them easily afterwards.**



* **Before positioning the panel, stick the self-adhesive cellular foam strips in place.**

This will make the panel completely waterproof, thus avoiding infiltrations of water.

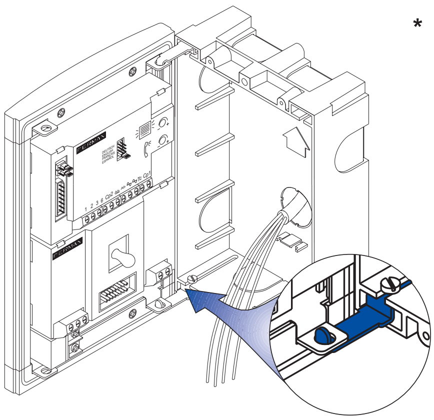


* **How to mount the telecamera (or any other accessory for the window).**

Ensure the correct positioning of the telecamera by facing it straight in the window and pushing it hard until the securing flanges are firmly in place (you will hear a “click”).

The telecamera or whatever accessory installed must be fitted completely flush with the front surface of the panel.

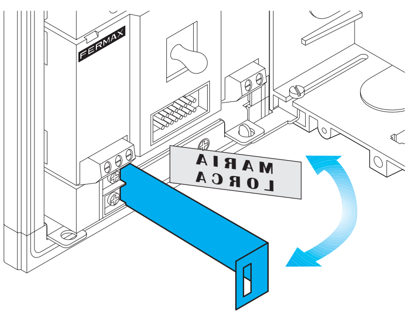
If the telecamera has to be removed, loosen the flanges with a screwdriver and push backwards.



* **Use the folding hinges to wire the electrical connections more easily.**

These hinges, which remain hidden once the box is mounted, allow the panel to be hinged in any direction: to the left, to the right, upwards and even downwards.

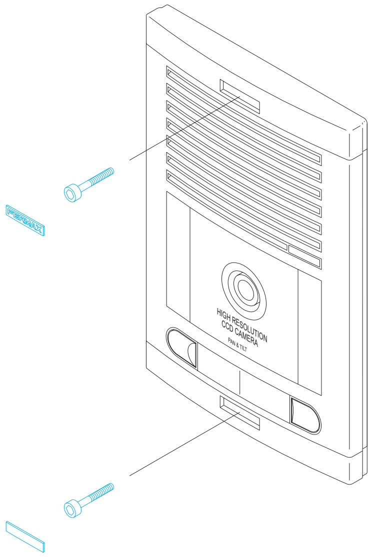
Choose which is the most convenient.



* **How to insert the button identification labels.**

Using a flat screwdriver, lift up the button’s plastic flap and insert the corresponding label, once this has been completed with the relevant information for that dwelling.

FERMAX supplies standard labels with each panel. You can use these or some personalised ones, as long as they are the same size.



* **Close the panel firmly using the Allen key provided. Position the protective covers.**

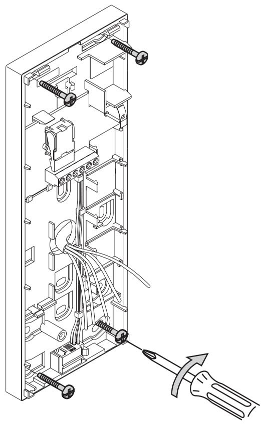
In video door phone installations you can now remove the plastic strip protecting the telecamera.

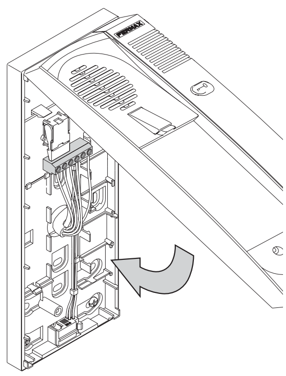
If you have to remove the panel again (for example to adjust the volume or to position the camera etc.) you can remove the protection covers with the help of a screwdriver.

* **Installing CityMax telephones.**

The telephone base features multiple fixing points. Use the four most convenient ones (we advise using the four corner ones). Check that it is vertical.

After wiring in the telephone, fit the outer cover as shown in the diagram.



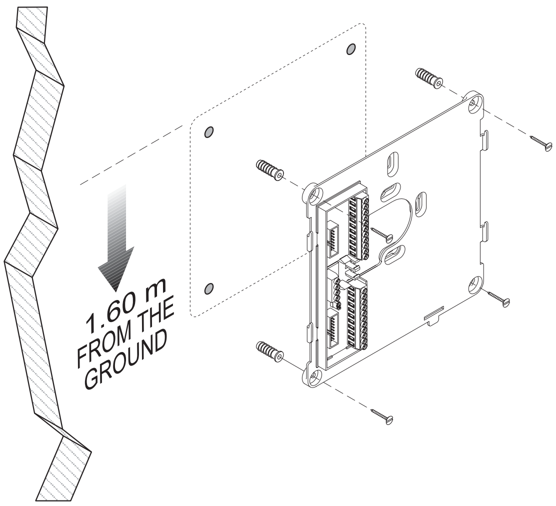


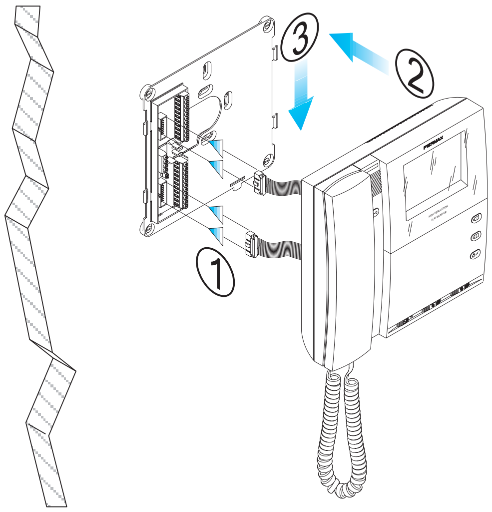
* **Installing CityMax monitors**

Mount the Installation. Connector on a hard, flat surface at a height of approximately 1m 60cm from the ground.

Use four of the multiple fixing points provided.

Look at the arrow indicating the correct position and check that it is vertical.





* **Attaching the monitor**

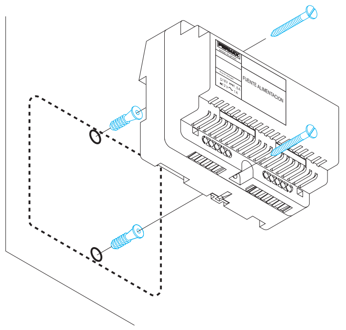
The monitor can be attached at any other time following the steps shown in the diagram.

1. *Plug in the connectors*
2. *Align the four fixing holes*
3. *Push down carefully*

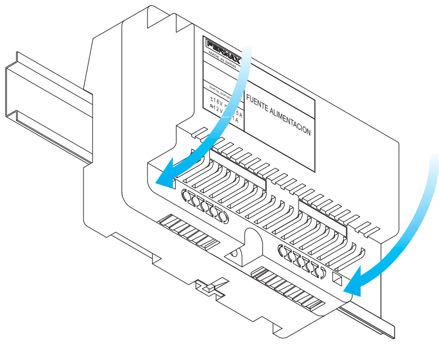
* **Install power supplies, automatic switchers etc., in the interior of the building.**

By law these elements have to be protected by an electromagnetic switch.

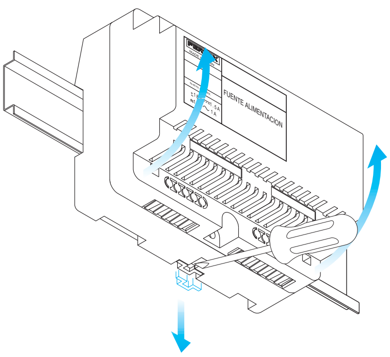
They can be mounted on a DIN rail or directly on the wall using the screws and plugs provided.



Wall mounting



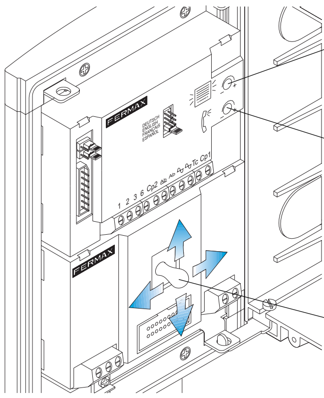
Mounting on a DIN rail



Dismounting from DIN rail

* **Once installation is completed the optimum audio level can be achieved with the controls provide for this purpose.**

In video door phone installations, use the telecamera's "pan & tilt" control to obtain the focus desired.



In this section we outline the most common door phone and video door phone wiring diagrams, as well as a brief description of how it works and the materials needed.
Bear in mind that these are general diagrams and so the number of telephones and monitors will vary according to the number of dwellings.
Outdoor Panels refers to the combination neccessary depending on the number of dwellings, type, pushbutton distribution etc., (see pages 9 & 10).
There are two types of diagrams:

A. UNIFILAR DIAGRAM

This shows the number and type of cables to be run between different elements of the installation.
It is useful at the pre-wiring stage.

B. WIRING DIAGRAM

This shows the wiring in more detail. It is useful when wiring in the different components.
All FERMAX pieces have a symbol (letter, number etc.) on their terminals. These symbols are general for all the pieces and for all the diagrams. See table below.

We also use the same symbol on each wire. And so, for example, we call the wire that connects **terminal number 2** on the **amplifier** to **terminal number 2** on the **telephones**, wire **number 2**.

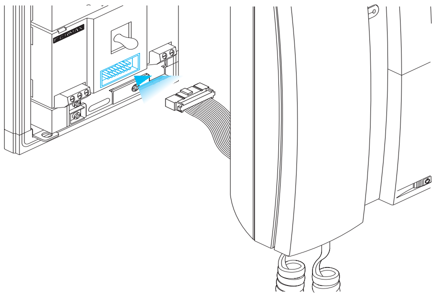
SYM.	USED	USE
1	All diagrams	Power supply for the telephone microphones Activating the electric lock (joining 1 & 3, the electric lock is activated).
2	All diagrams	Audio from the dwelling to the street.
3	All diagrams	Common negative.
call (4)	All diagrams	Call wire. Through the pushbutton, it sends a signal to the corresponding telephone.
6	All diagrams	Audio from the street to the dwelling.
Cp1	All diagrams	Common to all pushbuttons. It is the originating terminal for the call signal (a tremolo generated in the amplifier). the panels leave the factory pre-wired in such a way that the pushbuttons are connected to this terminal. When pushed, they send a call signal to the corresponding telephone.
Ab,Ab	All diagrams	Conections for the electric lock.
+S	Diagrams with privacy	Additional supply for the telephones or monitors type "privacy".
CT	Video diagrams	When the monitor receives the call signal it automatically sends a 12 Vcc supply through this terminal to activate the telecamera.
V. M	Video diagrams	Video signal. A 75 ohms coaxial cable is required (RG-59).

Before starting up the installation, it is always a good idea to check that all the wires are correctly connected as shown in the corresponding diagram.

Make sure that the power supplies are suitable for the building's power supply.
The power supply Ref. 88302 function at any voltage between 85 and 270 Vac, but have a programming jumper to set the appropriate voltage. Make sure that this is set correctly (see the instructions of the apparatus).

If there is an audio problem in any (or all) the telephones, we advise you to check that the problem is not with the installation by connecting one of the telephones that is not working directly to the amplifier (terminals 1,2,3 and 6 of the amplifier to 1,2,3 and 6 of the telephone). If it works then the problem is in the installation, almost certainly due to a lack of sections in the cables used (see gauge table below).

If it is a visual problem in a video door phone installation, you can see if it is working properly using the test connector incorporated in the telecamera.
If the visual problem no longer exists then you can reject any problem with the equipment.



The most common problems that are encountered are the following:

The monitor does not light up when there is a call , although the call is heard

When a call is made to the monitor, the LED indicator, which is normally on, should be off all the time that the image is on screen.
If the LED goes out but there is no image, follow the CT signal that leaves the monitor and is used to activate the telecamera and all of the distributors through which the video signal passes. It is possible that the CT cable is cut or badly connected somewhere. If the CT signal is okay, check that the video coaxial is correctly connected to all of the distributors, at the same time making sure that there is no short circuit in the coaxial between live and mesh anywhere in the installation.
The maximum number of monitors that can be on at the same time is six. If they call a lot of monitors at the same time, the power supply cuts off automatically as a protection against overloads. It connects itself again automatically a few minutes later.

The image is of poor quality

Make sure that the 75 ohm charge resistors have been cut out in all the distributors except the last one. See installation diagrams.
Make sure there are no more than six monitors connected at the same time.
Make sure there is no contact between the live and mesh of the coaxial anywhere in the installation.

To solve any problem contact FERMAX's Technical Department on 96 3783413, or our extensive Technical Assistance Service network where we will be pleased to help in any way.

TABLE OF SECTIONS NECCESSARY DEPENDING ON THE LENGHT OF CABLE

DISTANCES	0-300m	300-500m	500-1000m	1000-1500m	1500-2000m
fine lines in the diagrams	0.5 mm^2	1 mm^2	1 mm^2	1.5 mm^2	2.5 mm^2
thick lines in the diagrams	1 mm^2	1 mm^2	1.5 mm^2	2.5 mm^2	4 mm^2

In video doorphone installations over long distances it is neccessary to add a video signal amplifier ref. 4110 every 250 mts.

General Diagram for a basic door phone installation in a building with one entrance.

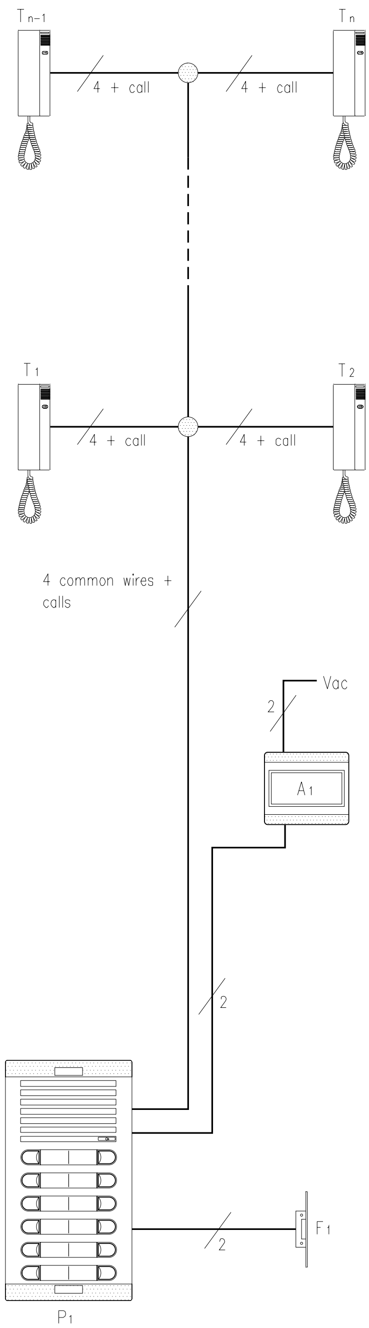
BASIC FUNCTION

Pressing a determined button on the outdoor panel causes a call signal **Cp1** to be generated by the amplifier and sent along the call line to the corresponding telephone, which will then ring with the characteristic tremolo tone.

When the receiver is picked up a switch connects the telephone with the common audio cables (2 and 6), thus establishing communication with the outdoor panel.

When the telephone door release button is pressed, wires 1 and 3 of the installation are joined which makes the amplifier open the door.

SCHEMATIC DIAGRAM



MATERIALS NEEDED

In the dwellings

T1, T2, ...Tn **CityMax Telephone** **Ref.: 8044**

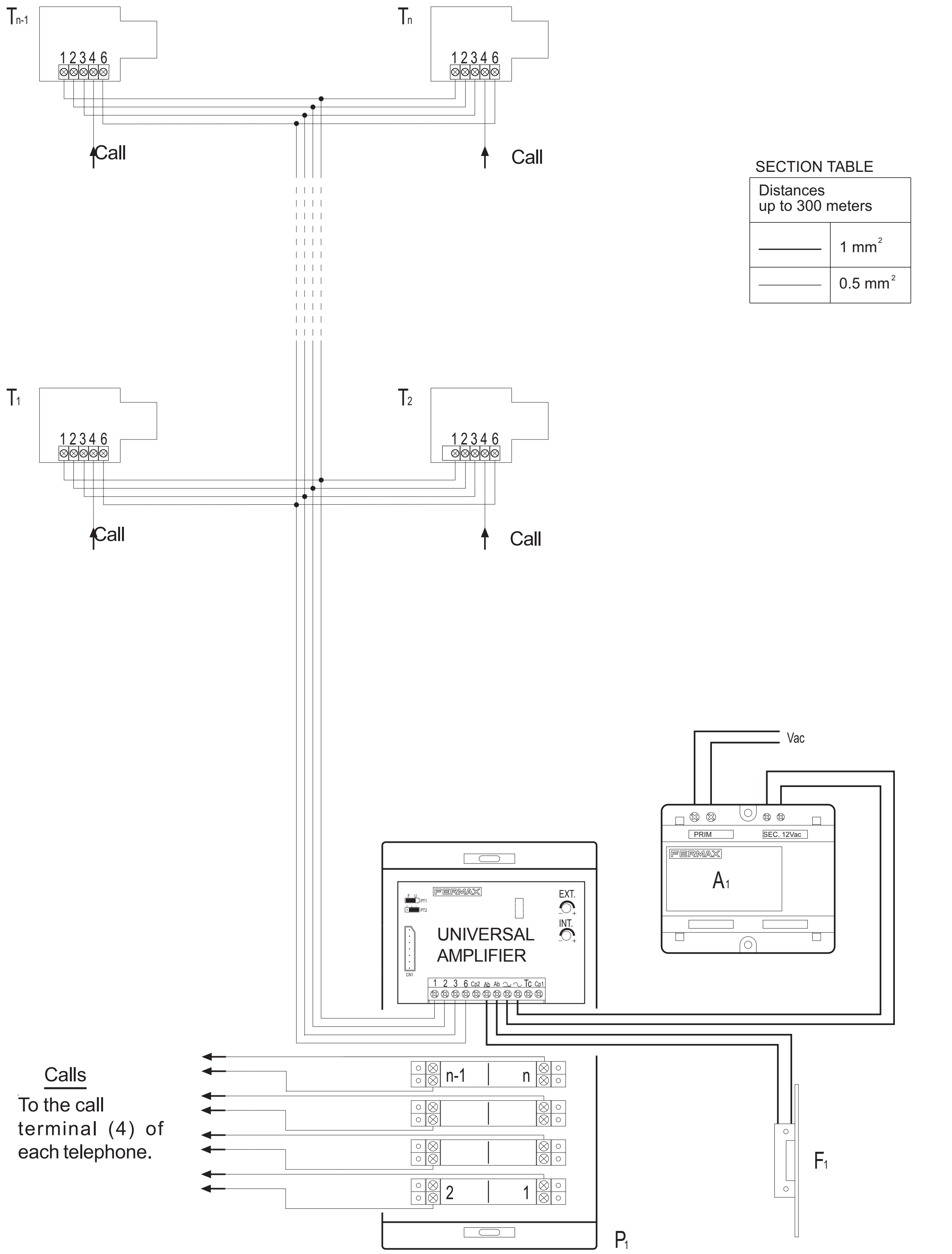
In the communal interior area

A1 **Audio Power Supply** **Ref.: 8787**

In the street

P1 **Outdoor panels**
Neccesary combination
F1 **Electric lock** **Ref.: 2911**
For other types consult catalogue

WIRING DIAGRAM



SECTION TABLE

Distances up to 300 meters	
————	1 mm^2
————	0.5 mm^2

Calls

To the call terminal (4) of each telephone.

General diagram for Door Phone installations with secret communication in buildings with one entrance. The telephones will only be able to communicate with the outdoor panel if they have been previously called. This prohibits calls to other telephones being heard by lifting up the receiver and also helps avoid acoustic problems if any telephone has been accidentally left off the hook.

BASIC FUNCTION

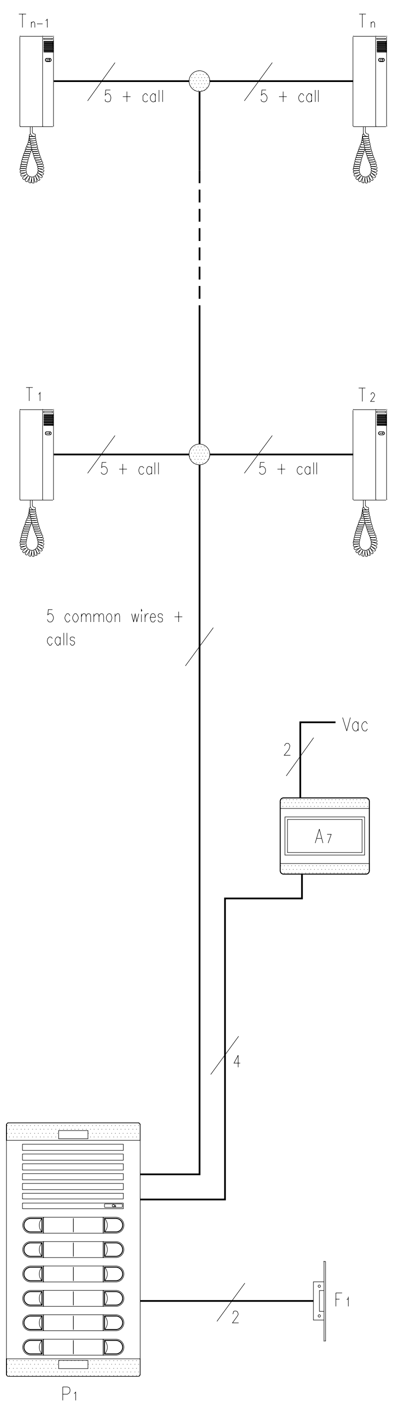
Pushing a button on the outdoor panel causes a call signal **Cp1**, generated in the amplifier, to be sent along the call line to the corresponding telephone, which produces the typical tremolo call tone. At the same time it will enable the telephone audio circuits. Therefore the telephones that have not been called will have their audio circuit disabled.

Upon picking up the receiver, a switch connects the telephone to the common audio cables (2 & 6), making contact with the outdoor panel.

Upon pushing the door release button on the telephone, this joins the wires 1 & 3 of the installation, which in turn causes the amplifier to activate the electric lock.

An additional common wire is required. See diagram.

DIAGRAM SCHEMATIC



MATERIAL NEEDED

In the dwellings

T1, T2, ...Tn Citymax Privacy Telephone Ref.: 8036

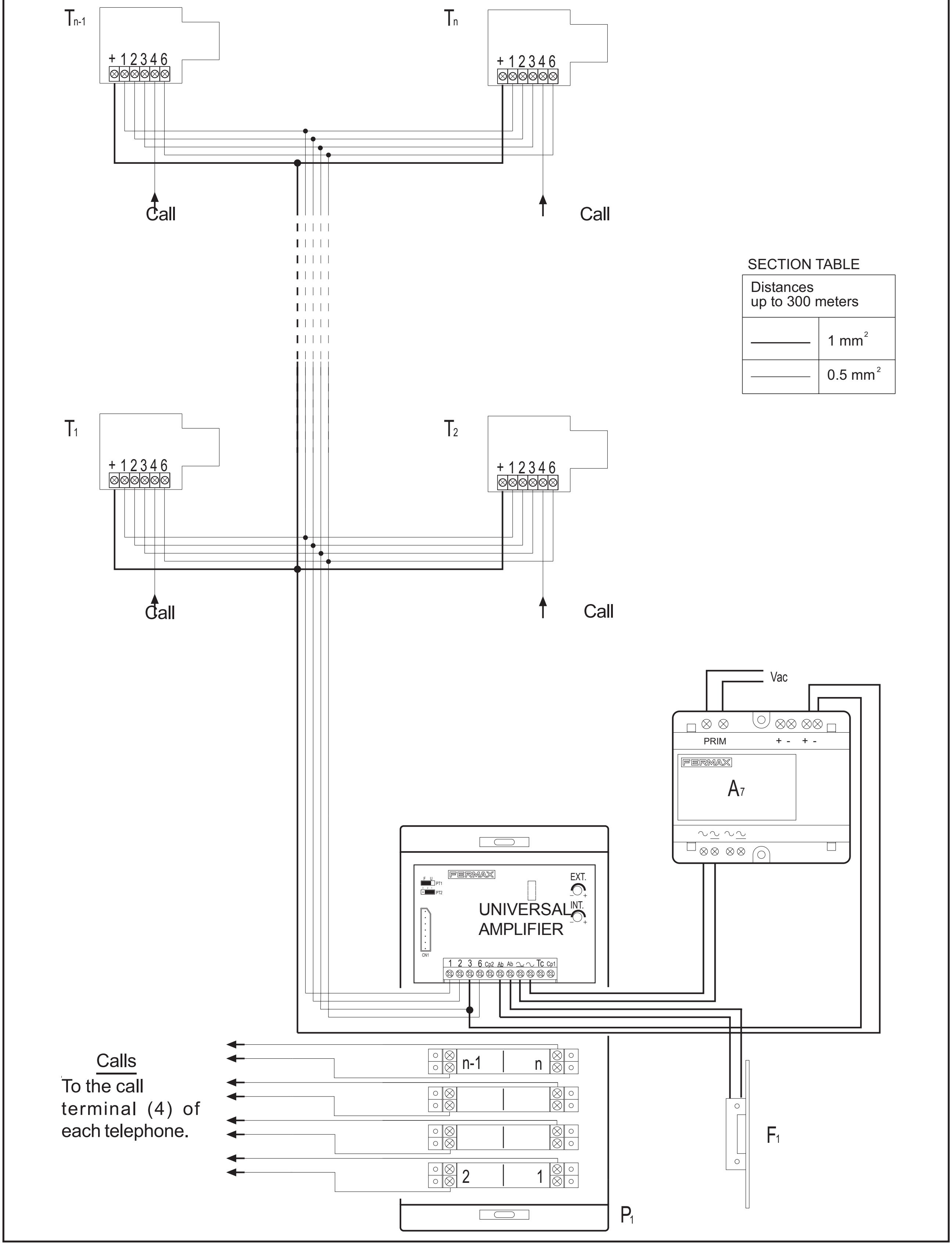
In the communal interior area

A7 Distributor Power Suply Ref.: 88231

In the street

P1 Outdoor Panels
Neccessary combination
F1 Electric lock Ref.: 2911
For other types consult catalogue.

WIRING DIAGRAM



SECTION TABLE

Distances up to 300 meters	
———	1 mm^2
———	0.5 mm^2

General diagram for Door Phone installations with secret communication in buildings with one entrance.
The telephones will only be able to communicate with the outdoor panel if they have been previously called.
This prohibits calls to other telephones being heard by lifting up the receiver and also helps avoid acoustic problems if any telephone has been accidentally left off the hook.

BASIC FUNCTION

Pushing a button on the outdoor panel causes the call signal **Cp1**, generated in the amplifier, to be sent along the call line to the corresponding telephone, which produces the typical tremolo call tone.
The **Secret Module** ensures that only the telephone that has been called has access to the audio channel.

Upon picking up the receiver, a switch connects the telephone to the common audio cables (2 & 6), thus establishing communication with the outdoor panel.

Upon pushing the door release button on the telephone, this connects the wires 1 & 3 of the installation, which causes the amplifier to activate the door release.

OBSERVATIONS

A Secret Module is needed, which is installed in the outdoor panel.
It is very important that the connection cables from this module to the amplifier are as short as possible so as to avoid problems with noise.

MATERIAL NEEDED

In the dwellings

T1, T2, ...Tn	**Citymax Privacy Telephones**	**Ref.:**	**8043**

In the communal interior area

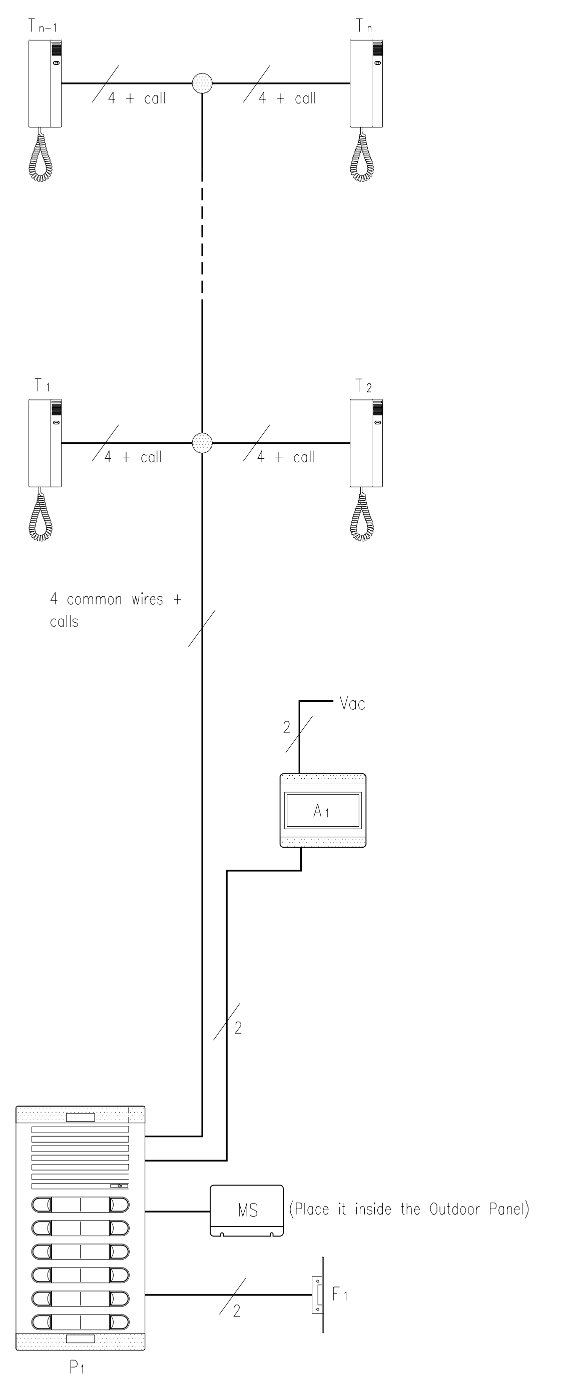
A1	**Audio Power Supply**	**Ref.:**	**8787**

In the street

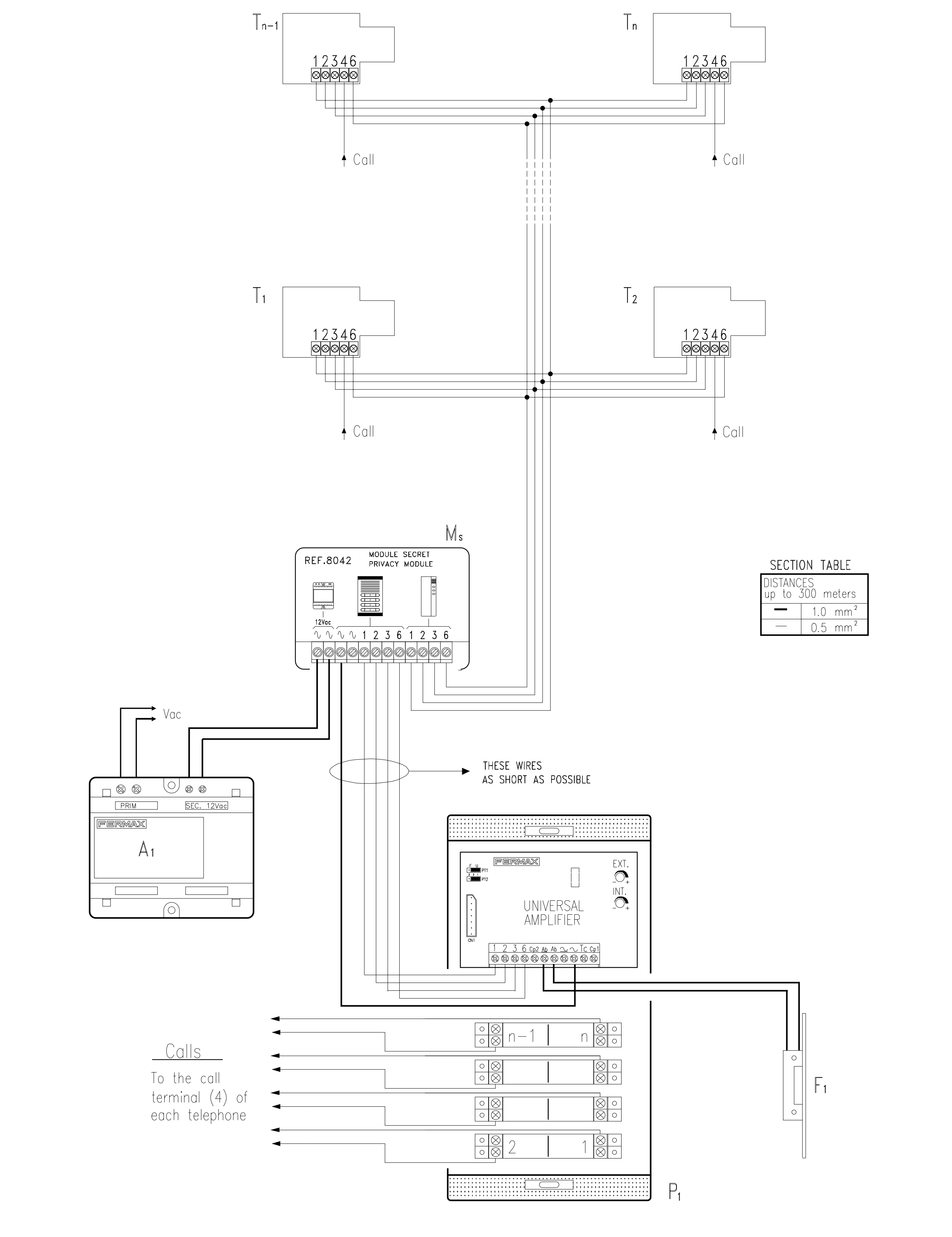
P1	**Outdoor panels**		
Neccessary combination			
MS	**Secret Module**	**Ref.:**	**8042**
F1	**Electric lock**	**Ref.:**	**2911**

For other types consult catalogue

DIAGRAM SCHEMATIC



WIRNG DIAGRAM



General diagram for a basic door phone installation in a building with two entrances.

BASIC FUNCTION

Pushing a button on the outdoor panel causes the call signal **Cp1**, generated in the amplifier, to be sent along the call line to the corresponding telephone, which produces the typical tremolo call tone. Upon picking up the receiver, a switch connects the telephone with the common audio cables (2 & 6), thus establishing communication with the outdoor panel from which the call was made.

Pushing the door release button on the telephone joins wires 1 & 3 of the installation which makes the amplifier activate the door release of the panel from which the call was made.

The automatic switcher has two positions: "at rest", which is the normal condition and "activated".

P1 is the panel which is connected to the telephones when the automatic switcher is in the "at rest" position, while P2 is connected when the automatic switcher is in the "activated" position. So we will call P1 the "at rest" panel and P2 the "activated" panel.

To take the switcher to the "activated" position, the current on the common wire of Cp is made to pass through the pushbutton common P2 and through the activations terminals I-K in the switcher. The current on the common wires of P1 to pass through the activation terminals H-J would force it into the "rest" position.

However, the switcher will change from "activated" to "at rest" once 90 seconds have passed.

OBSERVATIONS

Conversations held throught the "activated" panel limited to ninety seconds or until a call is made from the other panel while the conversation being held through the "at rest" panel will only be cut off if a call is made from the other panel.

MATERIAL NEEDED

In the dwellings

T1, T2, ...Tn	**Citymax Telephones**	**Ref. :**	**8044**

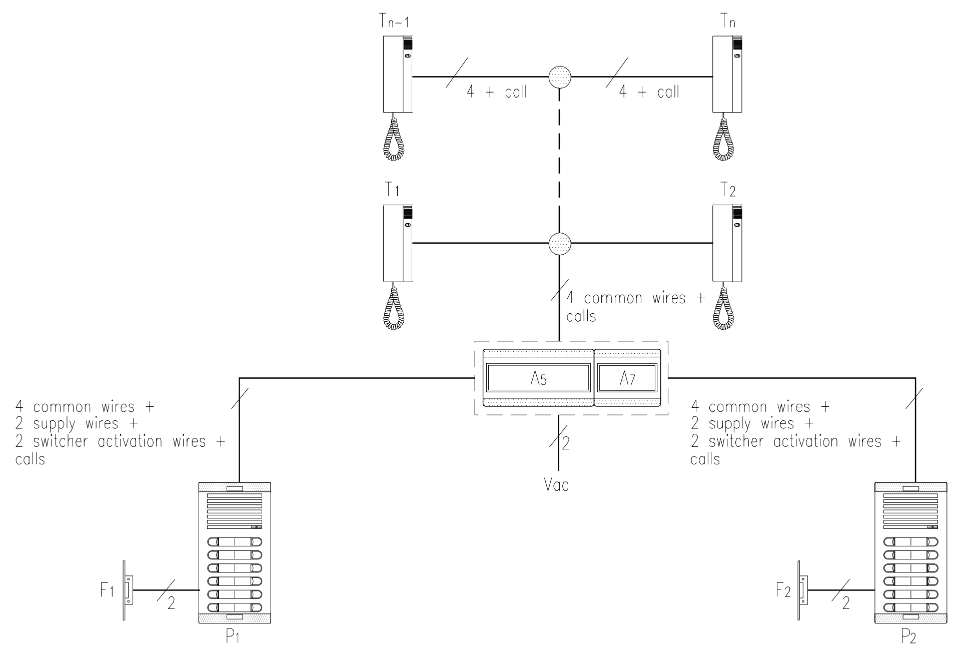
In the internal common area

A7	**Distributor Power Supply**	**Ref.:**	**88231**
A5	**Audio Switcher**	**Ref.:**	**8811**

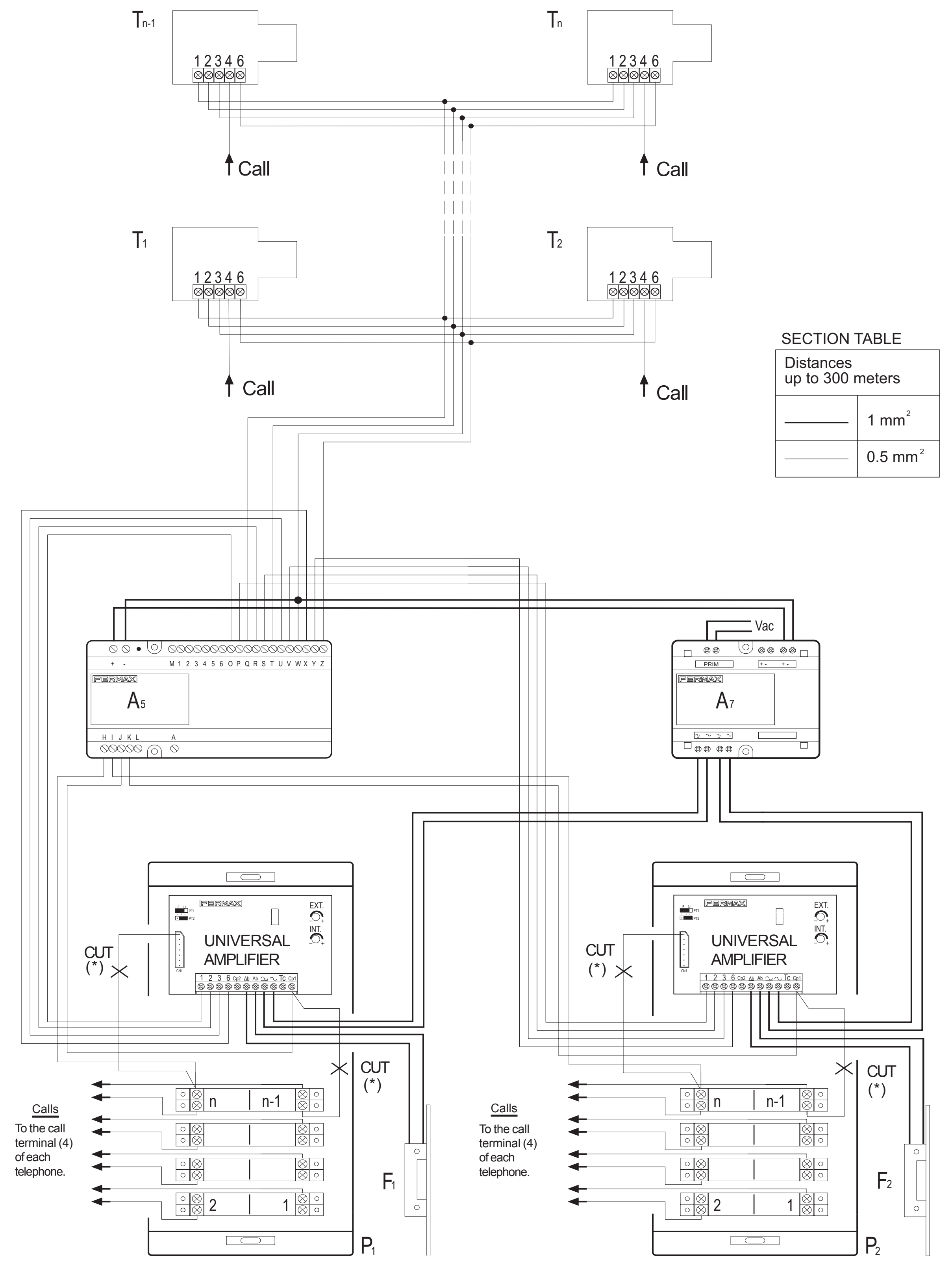
In the street

P1	**Outdoor panel**		
Neccessary combination			
F1	**Electric lock**	**Ref.:**	**2911**
For other types consult catalogue			

SCHEMATIC DIAGRAM



WIRING DIAGRAM



SECTION TABLE

Distances up to 300 meters	
————	1 mm^2
————	0.5 mm^2

(*) Cut the common pushbutton wire (according to the panel model).

General diagram for a basic door phone installation in a building with three entrances.

BASIC FUNCTION

Pushing a button on the outdoor panel causes the call signal **Cp1**, generated in the amplifier, to be sent along the call line to the corresponding telephone, wich produces the typical tremolo call tone. At same time, on pass into the excitation terminal (I-K) of the automatic switcher this causes the common wires of the installation to be connected to the corresponding outdoor panel.

Upon picking up the handset, a switch connects the telephone to common audio cables (2 & 6), thus establishing communication with the outdoor panel from which the call was made.

Upon pushing the door release button on the telephone this connects the wires 1 & 3 of the installation, which causes the amplifier to activate the door release.

OBSERVATIONS

The communication is limited to 90 seconds, whatever panel the call is made from. After this time the call is ended.
For a greater number of entrances we advise the Digital Systems (MDS).

MATERIAL NEEDED

In the dwellings

T1, T2, ...Tn	**Citymax Telephones**	**Ref.:**	**8044**

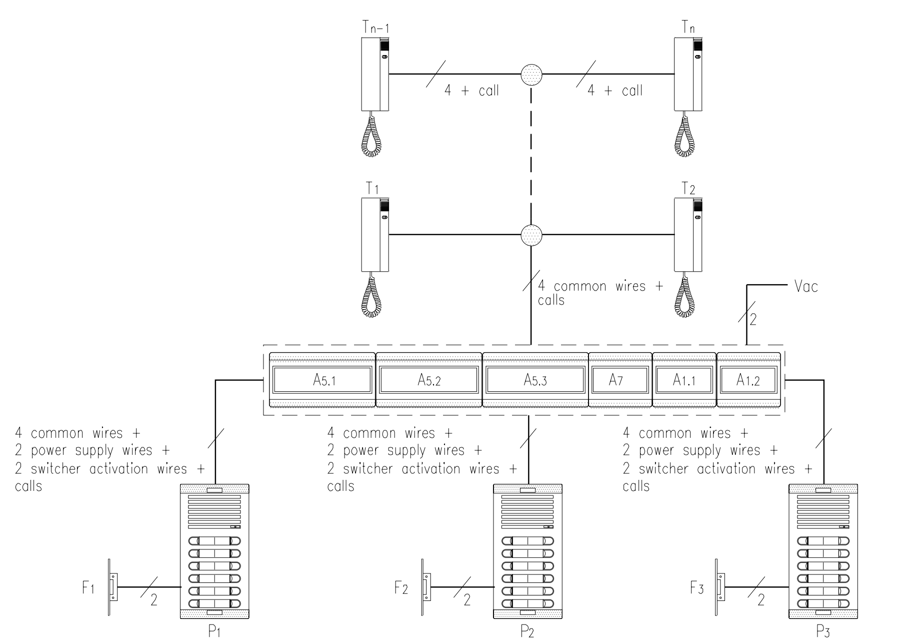
In the communal interior area

A1.1, A1.2	**Audio Power Supply**	**Ref.:**	**8787**
A7	**Distributor Power Supply**	**Ref.:**	**88231**
A5.1, A5.2, A5.3	**Audio Switcher**	**Ref.:**	**8811**

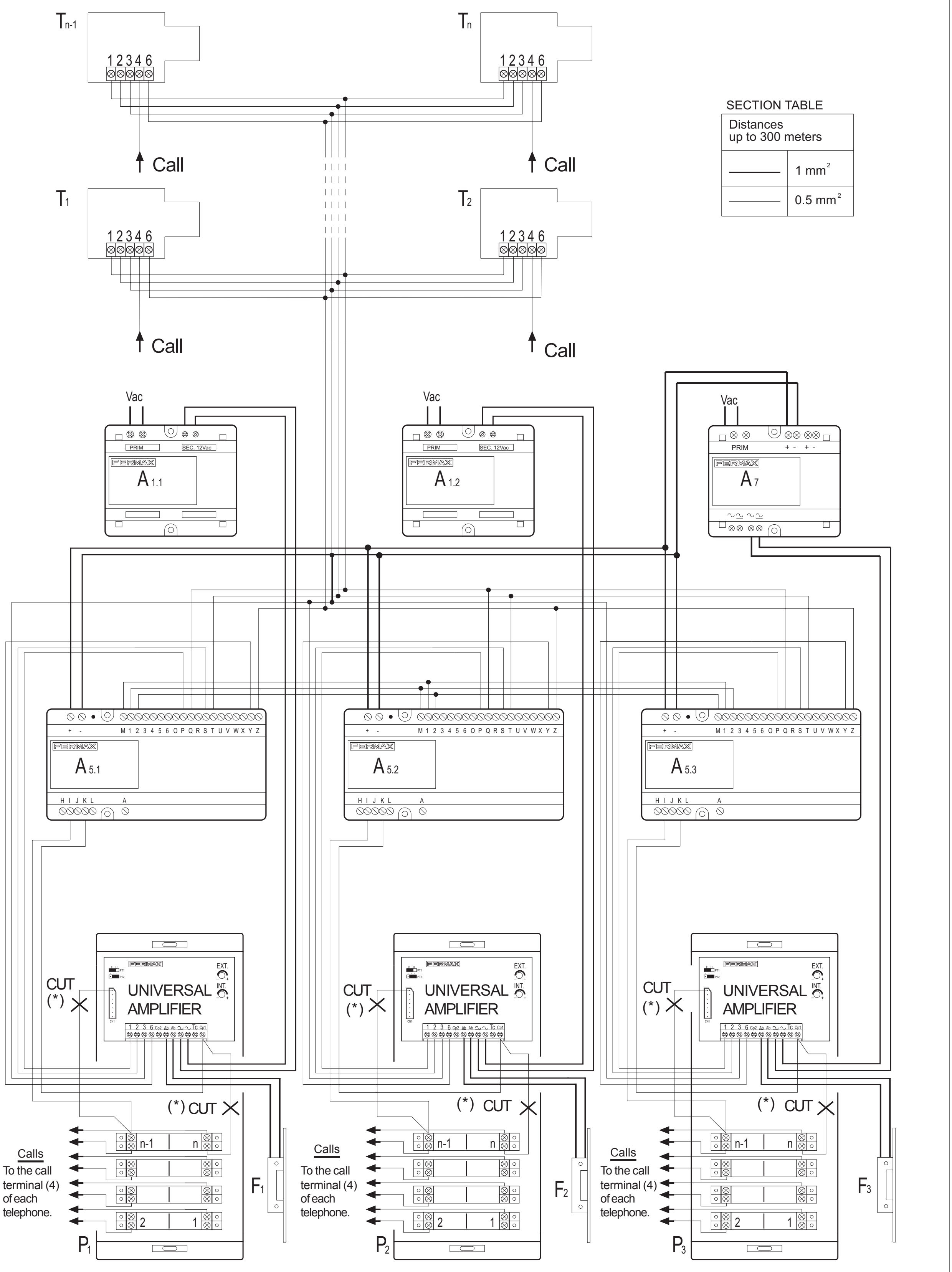
In the street

P1, P2, P3	**Outdoor panels** (*neccessary combination)*		
F1, F2, F3	**Electric lock**	**Ref.:**	**2911** *(for other types consult catalogue)*

DIAGRAM SCHEMATIC



WIRING DIAGRAM



SECTION TABLE

Distances up to 300 meters	
———	$1\ mm^2$
———	$0.5\ mm^2$

(*) Cut the common pushbutton wire (according to the panel model).

General diagram for basic door phone installations in enclosures or estates with one main entrance and several interior blocks with one entrance each .
There is no limit on the number of blocks, however, the greater the number of blocks the more complicated is the installation and so it is not advisable for installations with more than three interior blocks.
For more blocks we reccomend the use of digital systems (MDS).

BASIC FUNCTION

This system works as if it were made up of several independent basic door phone systems with two entrances (see diagrams E 1.4), but with the peculiarity that the main entrance panel shares the same amplifier.
So we have to install an automatic switcher in each block in such a way that when a call is made from the main entrance panel the automatic switcher selects this entrance. If the call is made from the entrance to the block then the automatic switcher will select this block.

OBSERVATIONS

As the installations with two entrances with an automatic switcher have an "activated" position, in which the conversation time is limited to 90 seconds (or until a call is produced from another panel) and another "at rest", in which the conversation will only be cut off if there is a call from another panel, the cables from the main entrance panel will be connected to the "at rest" terminals and those from the block will be connected to the "activated" terminals so that priority in the duration of conversation will be given to the calls made from the main entrance panel.

The main entrance panels must contain as many pushbuttons as there are on the interior block panels.

MATERIAL NEEDED

In the dwellings

T1, T2, ...Tn	**Citymax Telephones**	**Ref.:**	**8044**

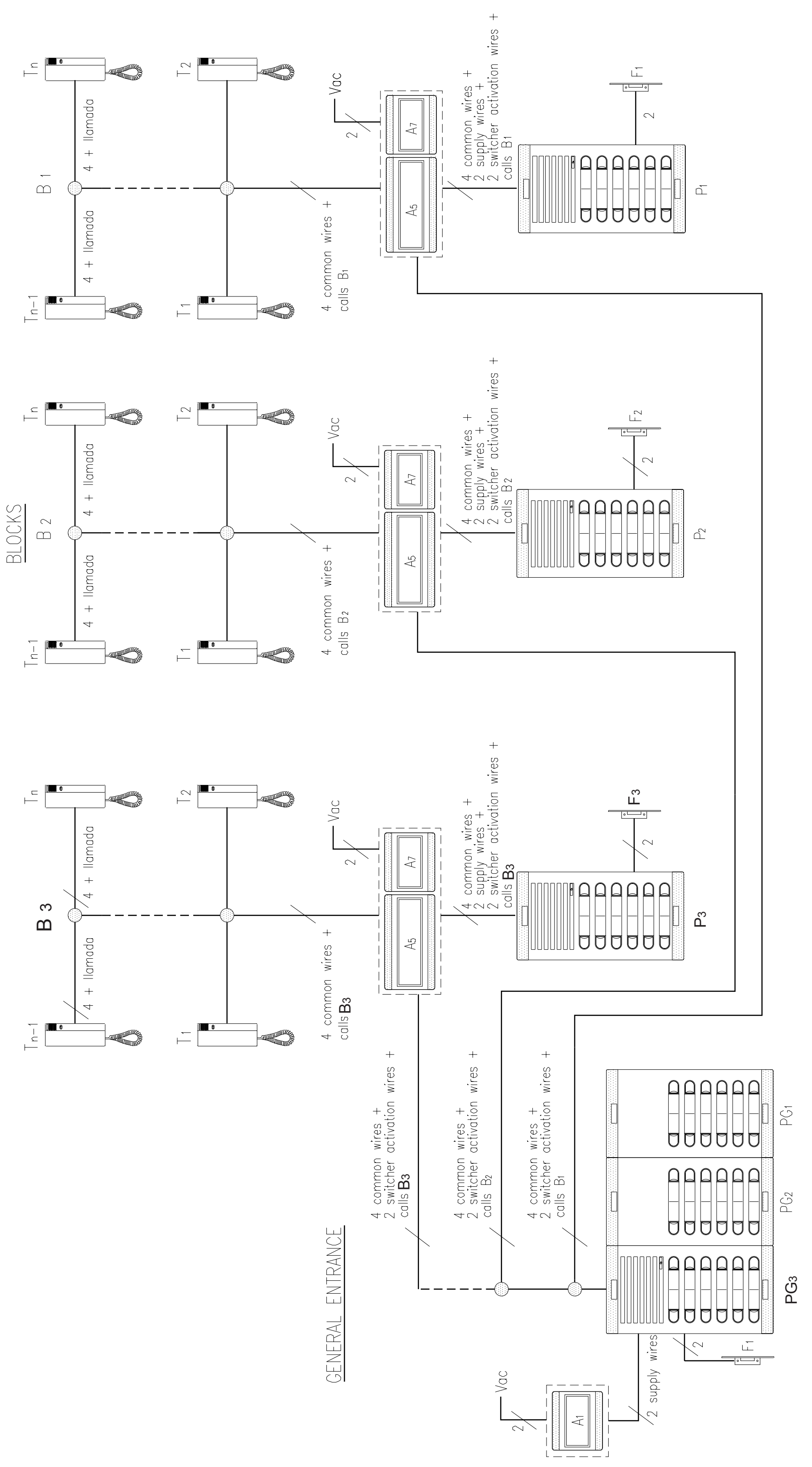
In each internal block

A7	**Distributor Power Supply**	**Ref.:**	**88231**
A5	**Audio Switcher**	**Ref.:**	**8811**
P	**Outdoor panels** *(neccessary combination)*		
F	**Electric lock**	**Ref.:**	**2911** *(for other types consult catalogue)*

In the main entrance

A1	**Audio Power Supply**	**Ref.:**	**8787**
PG1	**Outdoor Panels** *(to call dwellings in block 1)*		
PG2	**Outdoor Panels** *(to call dwellings in block 2)*		
...			
PGn	**Outdoor Panels** *(to call dwellings in block n)*		
F1	**Electric lock**	**Ref.:**	**2911** *(for other types consult catalogue)*

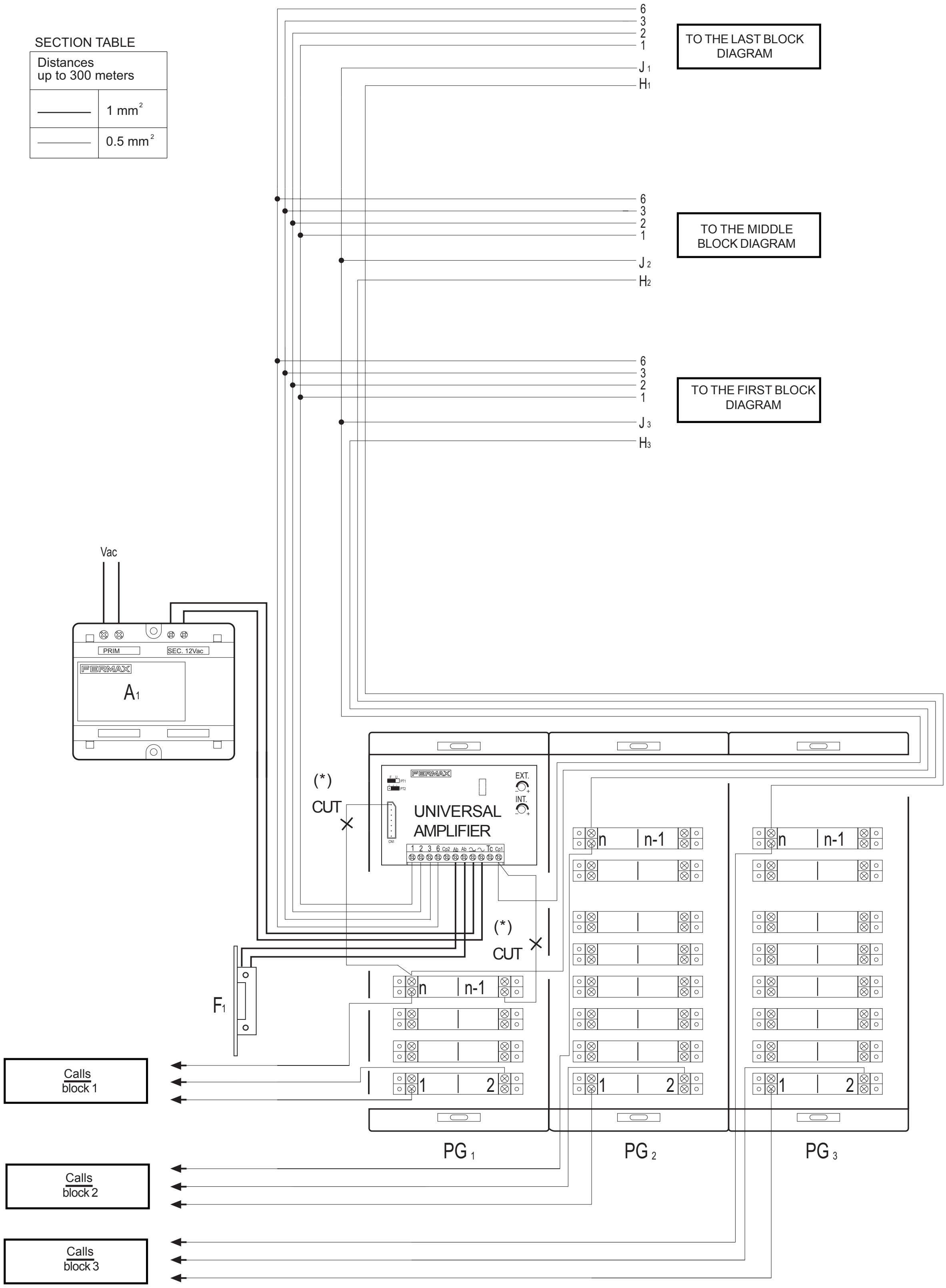
SCHEMATIC DIAGRAM



WIRING DIAGRAM
GENERAL ENTRANCE

SECTION TABLE

Distances up to 300 meters	
———	1 mm²
———	0.5 mm²

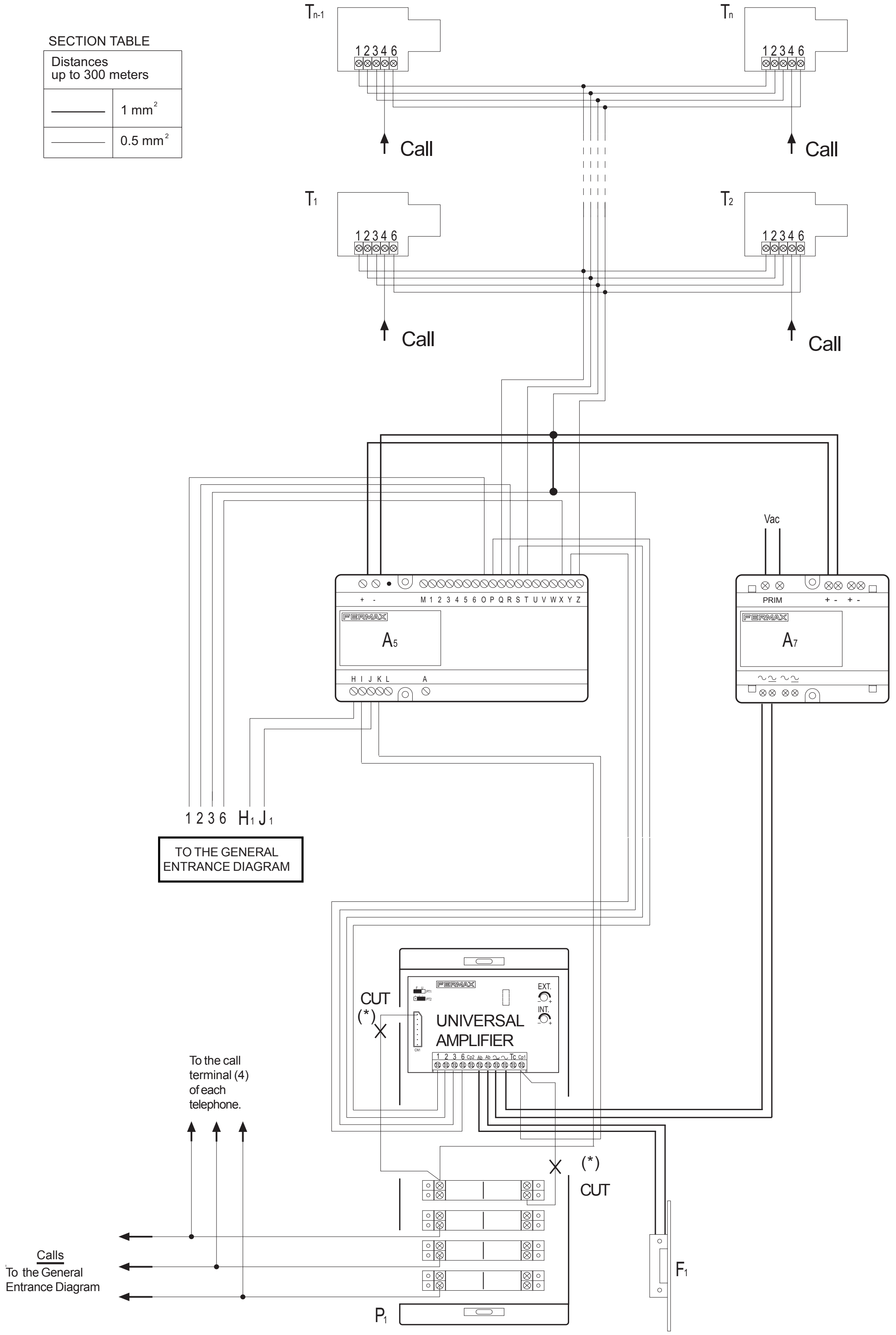


(*) Cut the common pushbutton wire (according to the panel model).

WIRING DIAGRAM
FIRST BLOCK

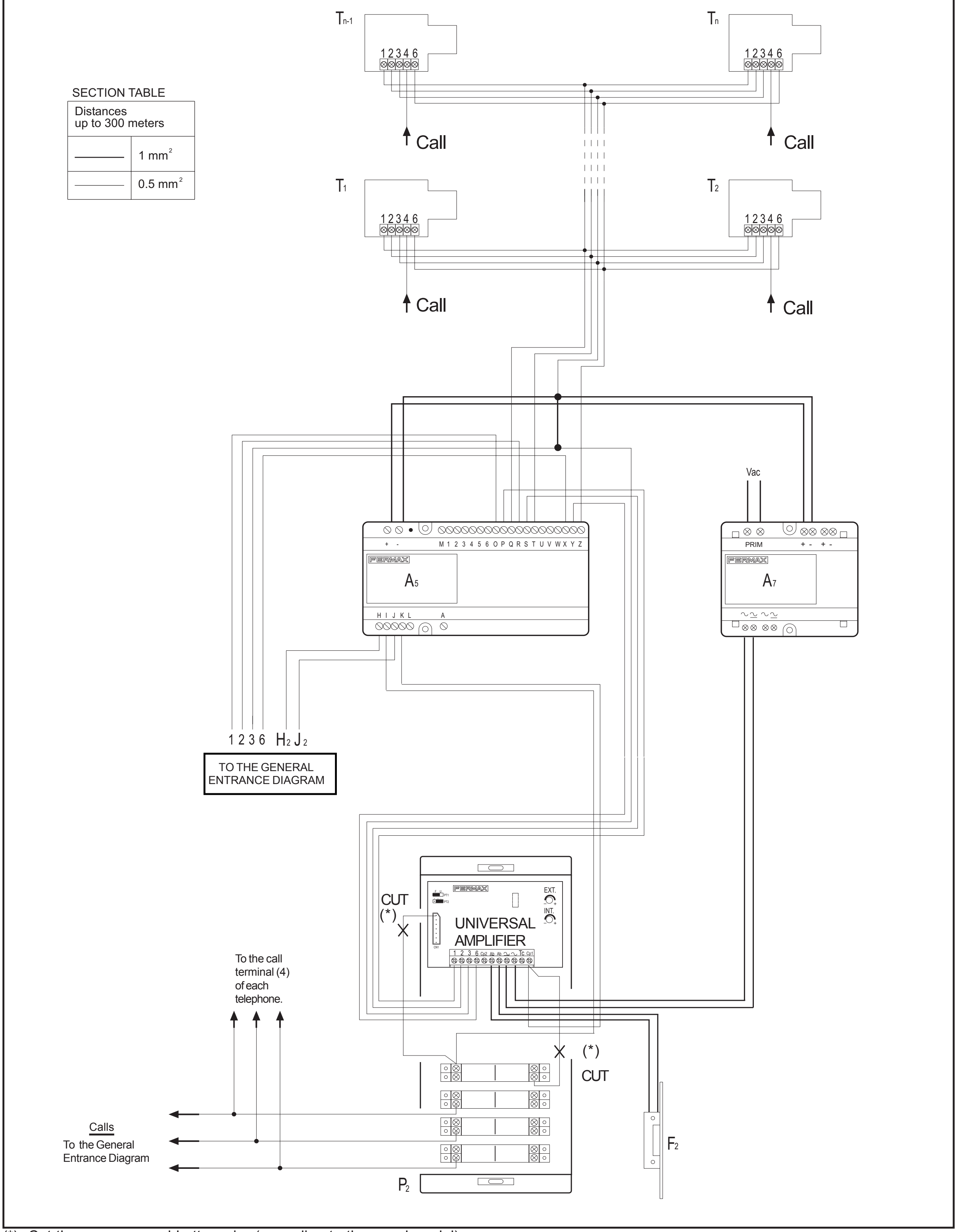
SECTION TABLE

Distances up to 300 meters	
———	1 mm²
———	0.5 mm²



(*) Cut the common pushbutton wire (according to the panel model).

WIRING DIAGRAM SECOND BLOCK

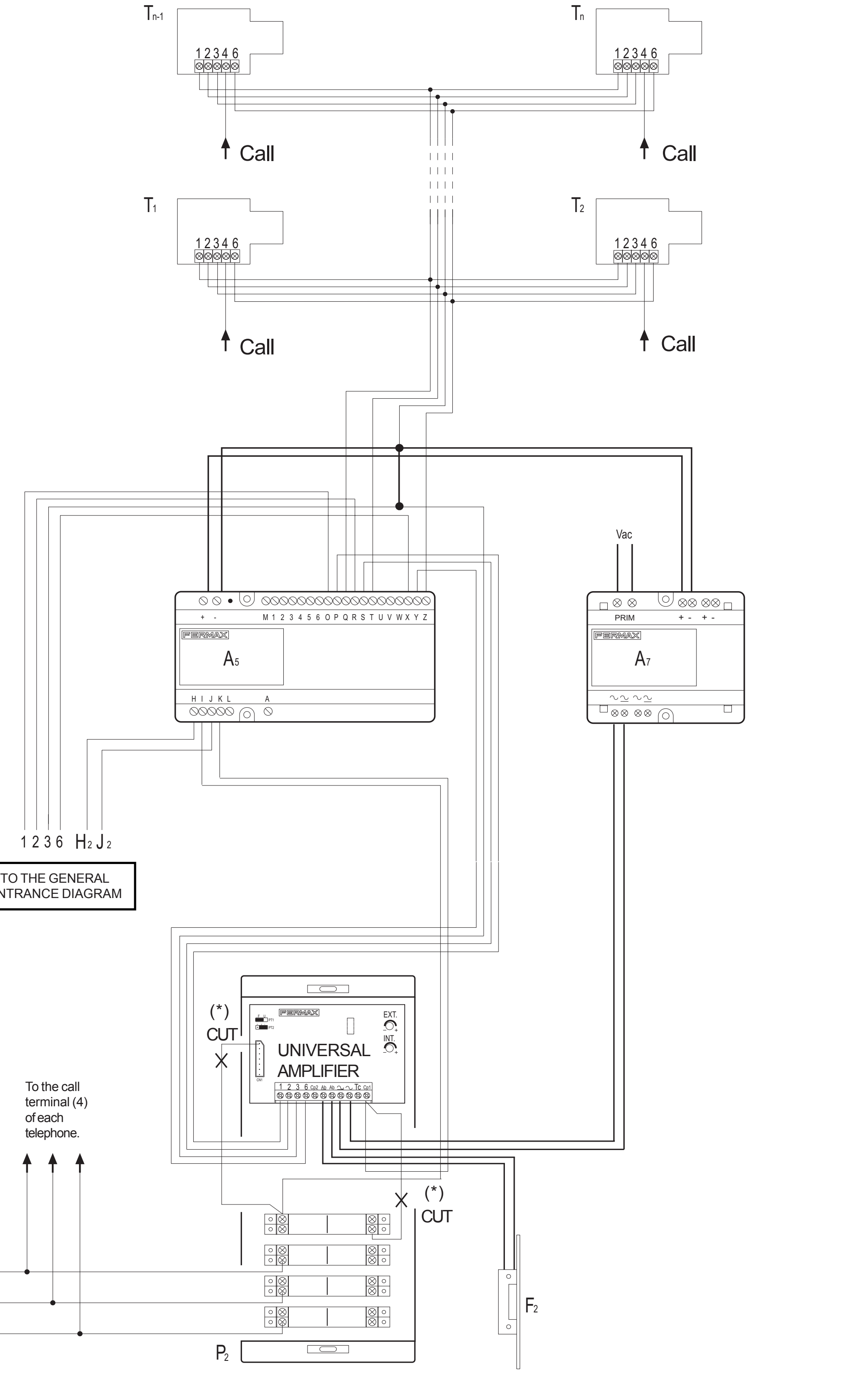


(*) Cut the common pushbutton wire (according to the panel model).

WIRING DIAGRAM
LAST BLOCK

SECTION TABLE

Distances up to 300 meters	
————	1 mm²
————	0.5 mm²



(*) Cut the common pushbutton wire (according to the panel model).

Door phone diagram with a City Line Guard Unit.

BASIC FUNCTION

The **City Line Guard Unit** consists of the guard's phone and a panel with the same number of pushbuttons as there are on the outdoor panel, in fact each pushbutton on the outdoor panel has its corresponding button on the guard's panel (see diagram).

It has a key for its activation and disactivation.

When it is on ("day mode") the outdoor panel is left disconnected (without power), and there is only a connection between the telephones and the guard unit. It is therefore impossible to call directly from the outdoor panel to the dwellings. Only the concierge can call directly to the dwellings from his panel with his phone.The residents can call the concierge by picking up their phone and pressing the door release button, which produces an audible signal in the guard unit.The concierge can talk to the residents by simply picking up the telephone.

When it is off ("night mode") the outdoor panel is again connected to the telephones, working in the normal way. From the guard unit it is impossible to make or receive calls from the dwellings.

MATERIAL USED

In the dwellings

T1,T2,..Tn CityMax Telephones Ref.: 8044

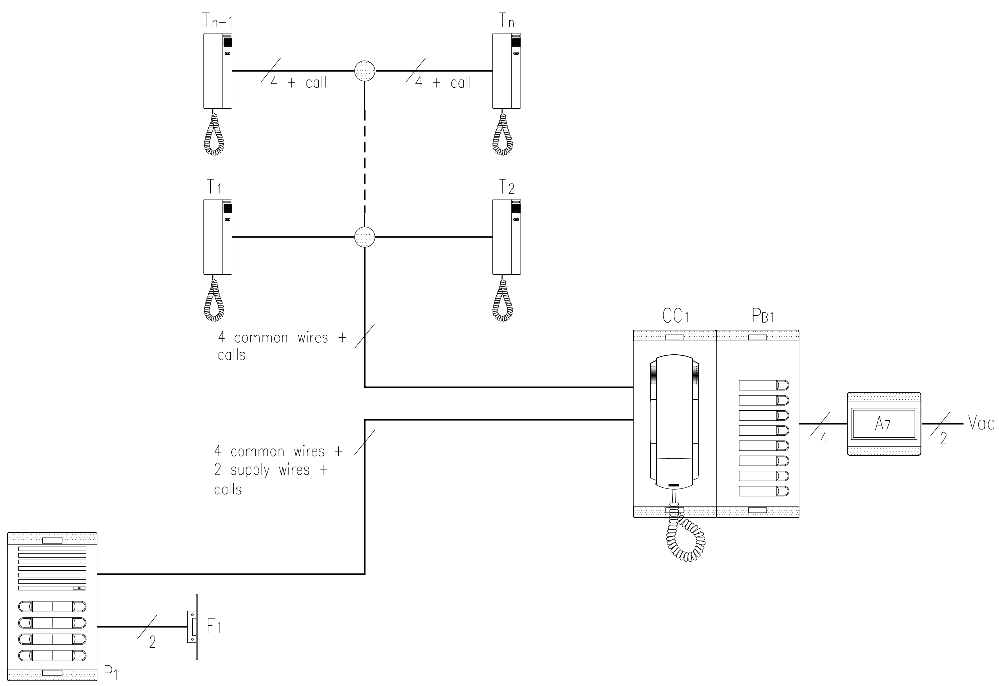
In the communal interior area

A7 Distributor Power Supply Ref.:88231
CC Guard Unit Ref.: 8699
PB1 Basic Pushbutton Panel
(Neccessary combination. The number of pushbuttons must coincide with the outdoor panel).

In the street

P1 Outdoor Panels
Neccessary combination.
F1 Electric lock Ref.: 2911
For other types consult catalogue.

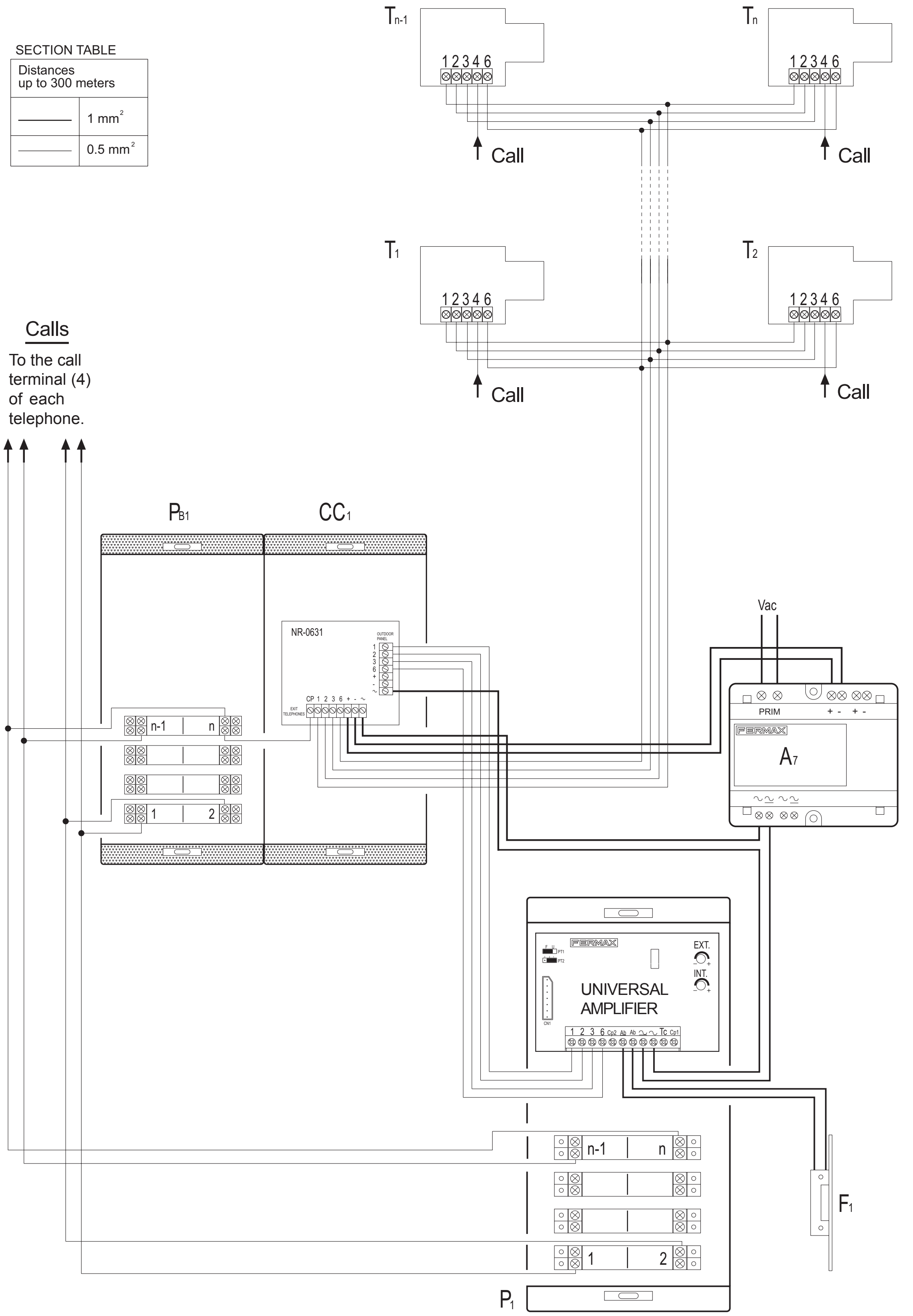
DIAGRAM SCHEMATIC



WIRING DIAGRAM

SECTION TABLE

Distances up to 300 meters	
———	1 mm²
———	0.5 mm²



Door phone diagram with a CityCom III basic Guard Unit.

BASIC FUNCTION

The **CityCom III Guard Unit** consists of a special guard's phone and a panel with the same number of pushbuttons as the outdoor panel. In fact, each pushbutton on the guard unit corresponds to a button on the outdoor panel, (see diagram).

It has a key to activate and disactivate it.

When it is on ("day mode") the calls made from the outdoor panel are passed through the concierge, who can then transfer them to the dwelling called.The residents can call the concierge by picking up the phone and pressing the door release button, which produces an audible signal in the guard unit. The concierge can speak to the resident by simply picking up his receiver.

When it is off ("night mode") the calls made from the outdoor panel are sent directly to the telephone called, the system working in the normal way. From the guard unit it is not possible to receive or make calls to the dwellings.

The CityCom III Guard Unit features other functioning modes, which can be configured with the bridges CN5-CN8.
See the installation manual with the Guard Unit.

MATERIALS USED

In the dwellings

T1,T2,...Tn **CityMax Telephones** **Ref.: 8044**

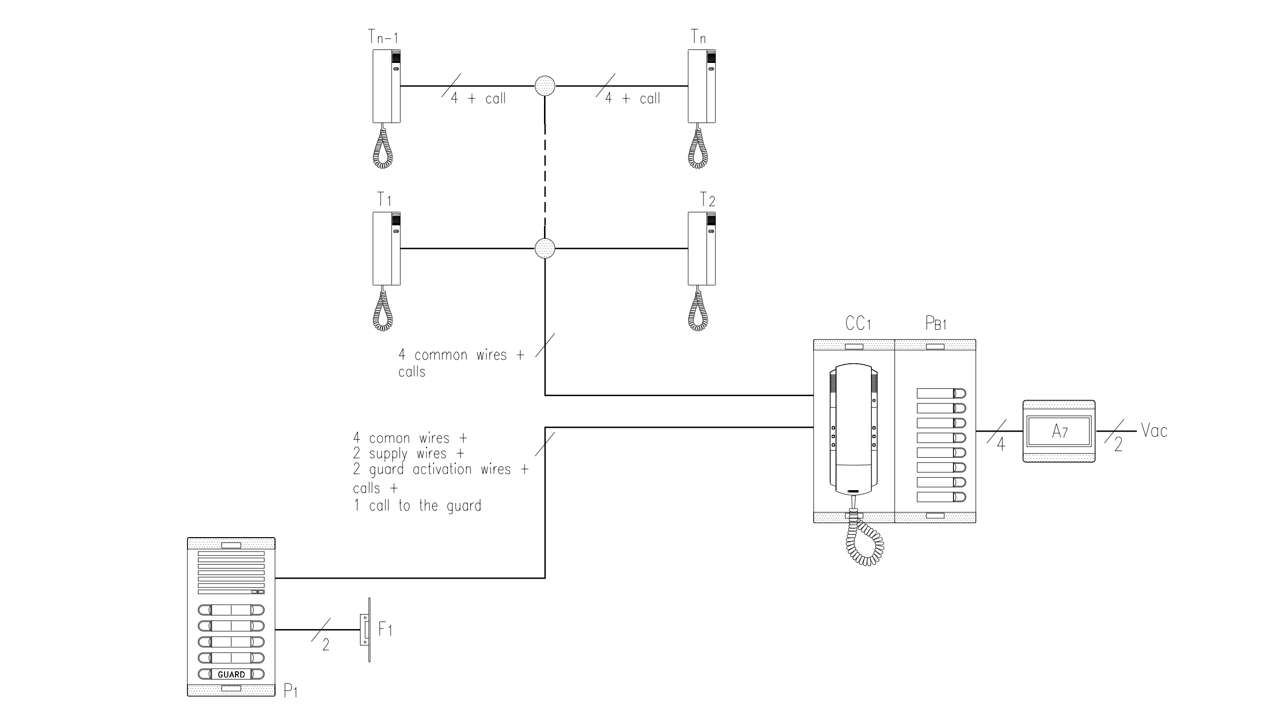
In the communal interior area

A7 **Distributor Power Supply** **Ref.: 88231**
CC1 **Guard Unit** **Ref.: 84601**
PB1 **Basic Pushbutton Panel**
Combination neccessary. The number of pushbuttons signal in the Guard Unit has to coincide with those on the outdoor panel.

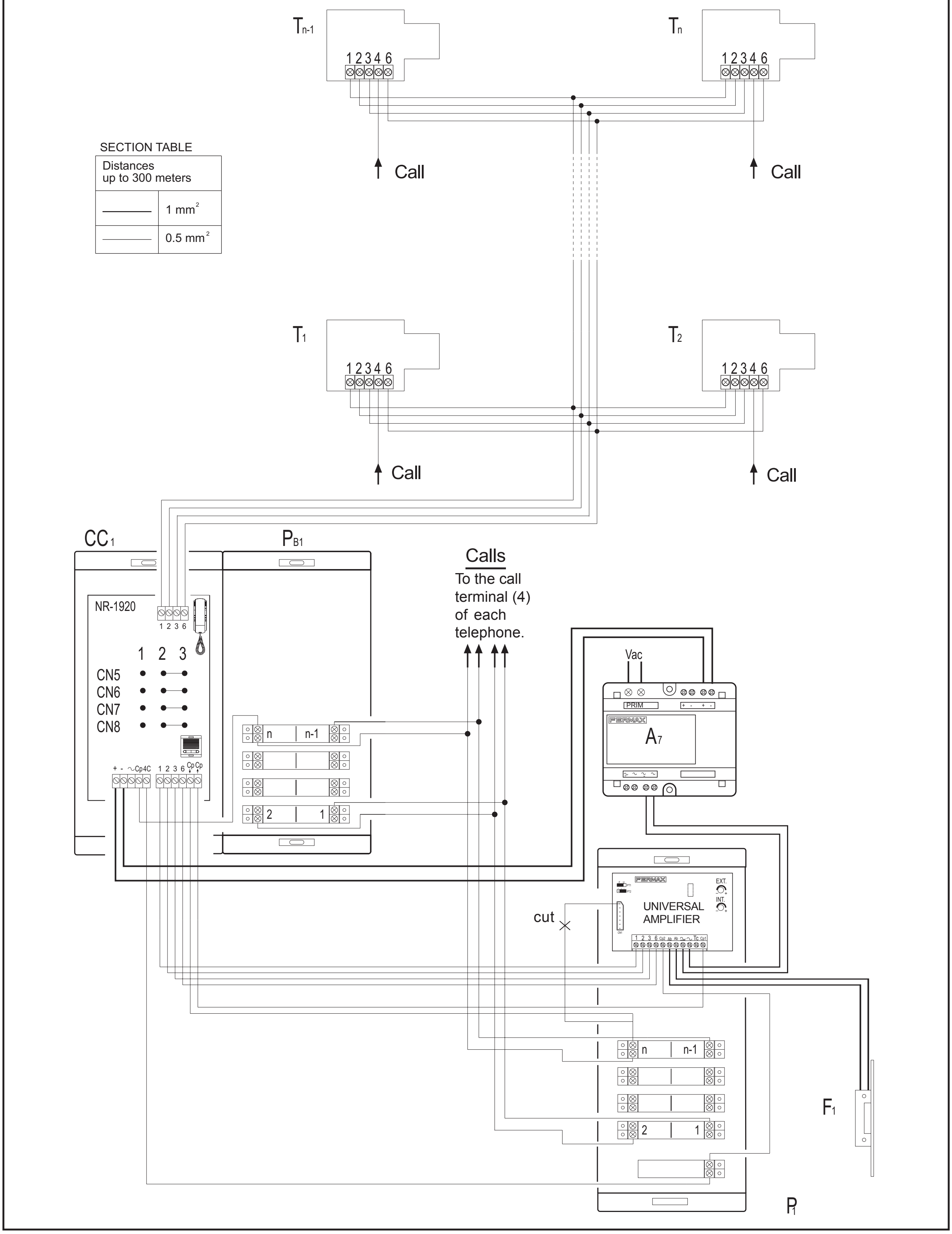
In the street

P1 **Outdoor Panels**
Combination neccessary.
F1 **Electrick lock** **Ref.: 2911**
For other types consult catalogue.

SCHEMATIC DIAGRAM



WIRING DIAGRAM



Door phone diagram with a CityCom III Guard Unit featuring retention line.

BASIC FUNCTION

The **CityCom III Guard Unit** consists of a special guard telephone and a panel with the same number of pushbuttons as the outdoor panel. In fact, each button on the outdoor panel is connected to a button on the concierge's panel, (see diagram). Each button has a small LED diode incorporated.

It has a key for its activation and disactivation.

When it is on ("day mode") the calls made from the outdoor panel are passed through the concierge, who can pass it on to the dwelling called. The residents can call the concierge by pressing the call concierge button, which produces an audible signal in the guard unit and also makes the corresponding LED light up. The concierge thus knows who is calling him and so can return the call at an time. A reset button allows the concierge to put out all the lights.

When it is off ("night mode") the calls from the outdoor panel are sent directly to the dwelling called, the system thus working in the normal way. From the guard unit it is not possible to make or receive calls from the dwellings.

The CityCom III Guard Unit features other functioning modes, which can be configured using the bridges CN5-CN8.
See the installation manual supplied with the Guard Unit.

MATERIAL NEEDED

En las viviendas
T1, T2,..Tn Citymax Extra Telephone Ref.: 8045

In the communal interior area

A7	**Distributor Power Supply**	**Ref.: 88231**
CC1	**Guard Unit**	**Ref.: 84601**
PRL1	**Retention Pushbuttons Panel**	

Combination neccesary. The number of botton to coincide with those on the outdoor panel.

In the street

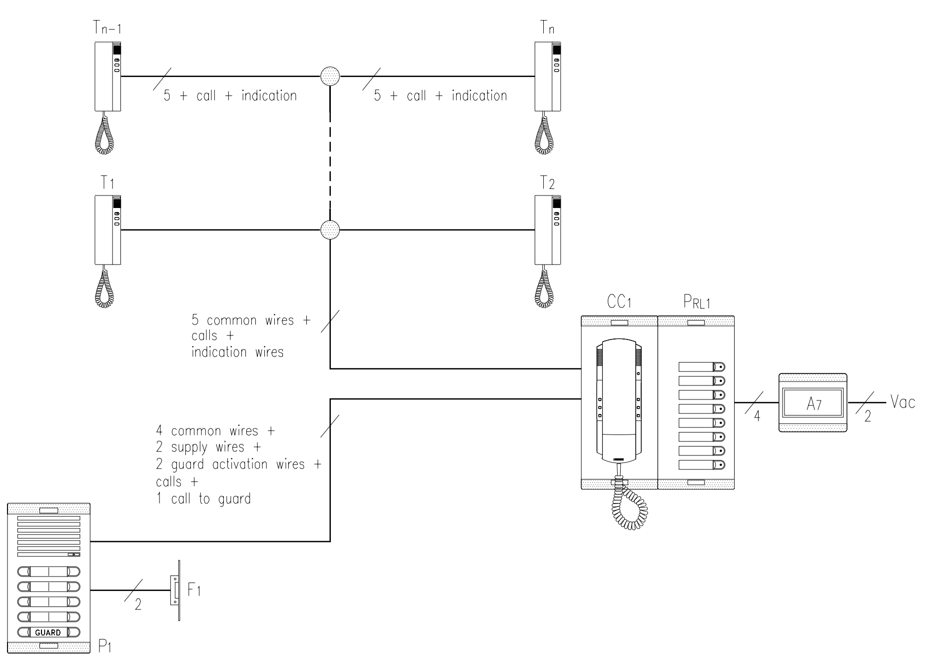
P1	**Outdoor Panels**	

Combination neccessary.

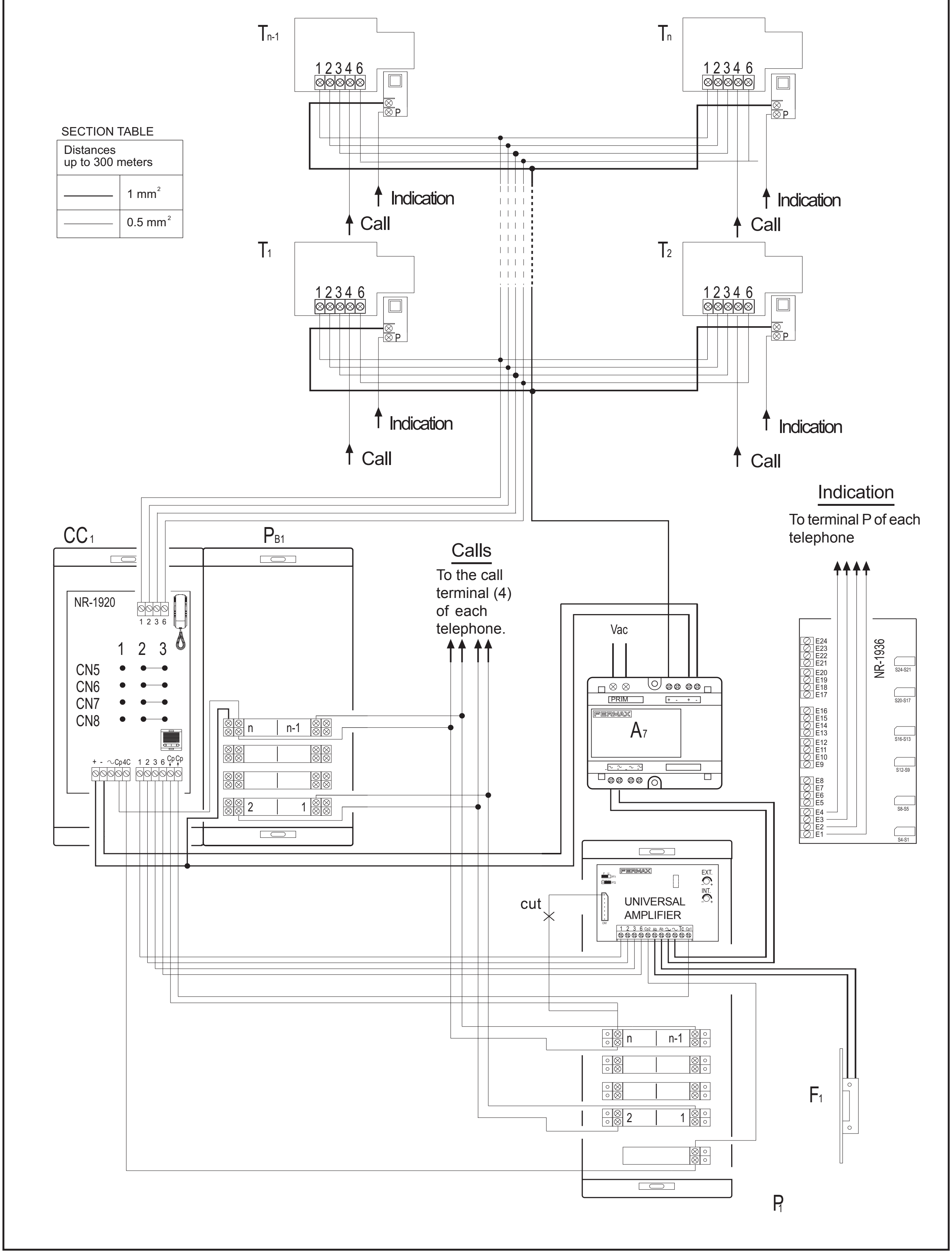
F1	**Electric lock**	**Ref.: 2911**

For other types consult catalogue.

SCHEMATIC DIAGRAM



WIRING DIAGRAM



General diagram for a basic video door phone installations in a building with one entrance.

BASIC FUNCTION

Pushing a determined button on the outdoor panel causes the call signal Cp1, generated in the amplifier, to be sent along the call line to the corresponding monitor, which produces the typical tremolo call tone. At the same time the screen will switch itself on, showing the image captured by the telecamera.

Upon picking up the handset, a switch connects the telephone to the common audio cables (2 & 6), thus establishing communication with the outdoor panel.

When the door release button on the monitor is pressed this joins wires 1 and 3 of the installation, which makes the amplifier activate the door release.

REMEMBER THAT

The connectors Ref. 8033 are supplied seperately from the monitor.
A telecamera Ref. 8028 has to be installed, therefore a panel with window must be chosen.
It is neccessary to cut out all the 75 ohm resistors in the video distributors except the last one. See wiring diagram.

MATERIAL NEEDED

In the dwellings and on the floors

M1, M2,...Mn	**Citymax Export Monitor**	**Ref.: 8023**
D2.1,... D2.n	**Video Distributor**	**Ref.: 2448**

A distribution of two monitors per floor is assumed

In the communal interior area

A1	**Audio Power Supply**	**Ref.: 8787**
A3	**Video Power Supply**	**Ref.: 88302**

One Video Power Supply for each 60 monitors.

In the street

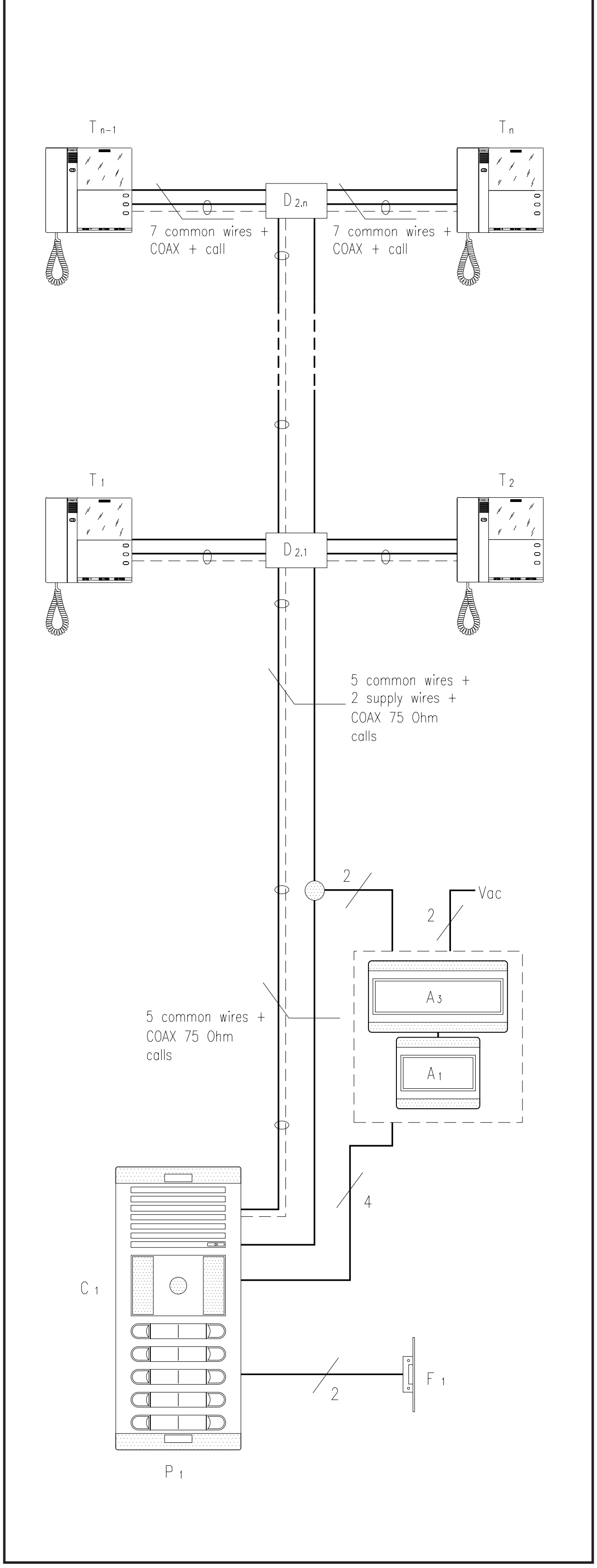
P1	**Outdoor Panels**	

Neccesary combiantion.
Do not forget the telecamera Ref. 8028.

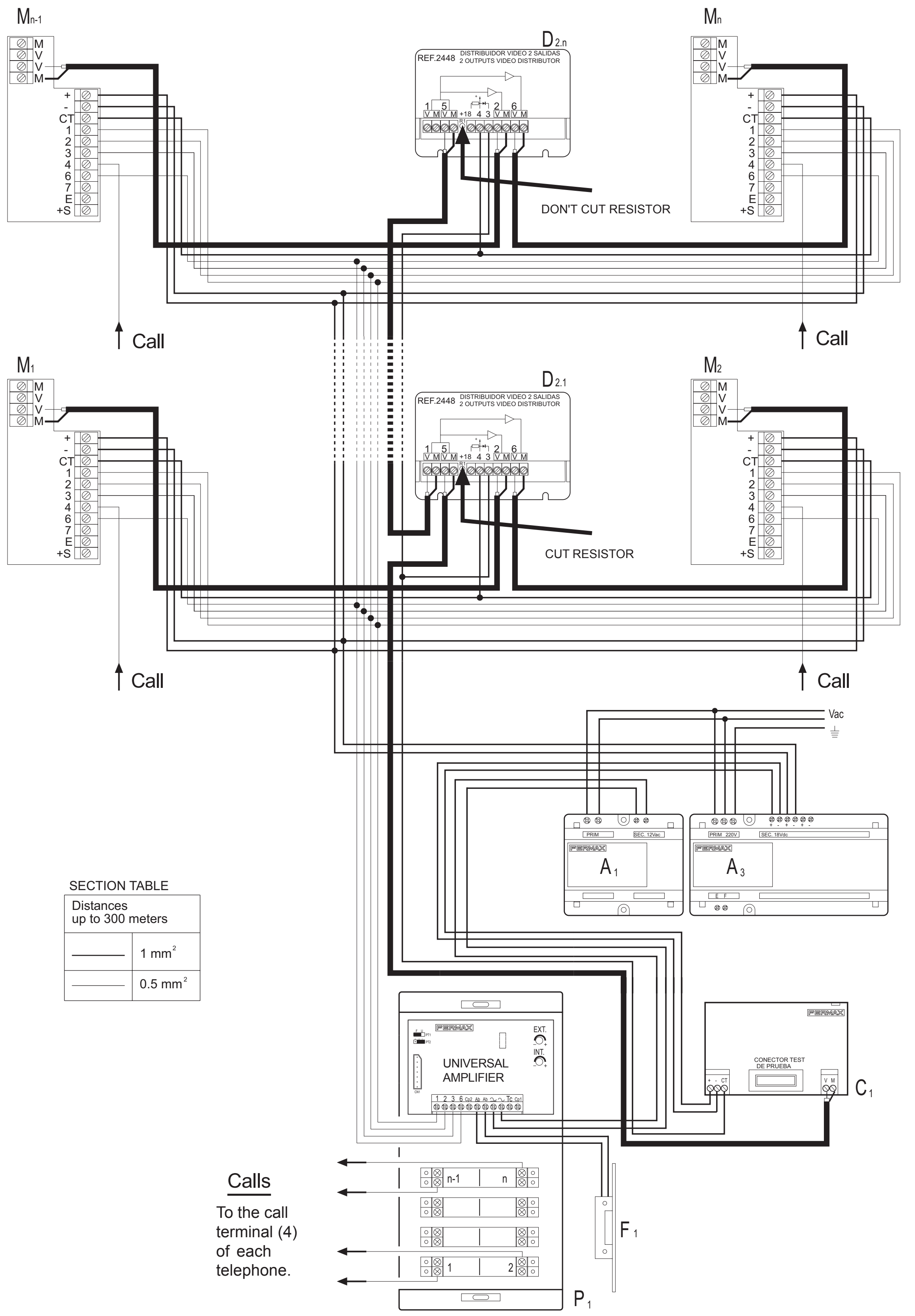
F1	**Electric lock**	**Ref.: 2911**

For other types consult catalogue.

SCHEMATIC DIAGRAM



WIRING DIAGRAM



SECTION TABLE

Distances up to 300 meters	
————	1 mm²
- - - - -	0.5 mm²

General diagram for video door phone installations with secret communication in buildings with one entrance. The monitors can only communicate with the outdoor panel if they have been previously called. This avoids conversations with the street being overheard by other monitors and also avoids acoustic problems if a telephone has been accidentally left off the hook.

BASIC FUNCTION

Pressing a determined button on the outdoor panel causes the call signal **Cp1**, generated in the amplifier, to be sent along the **call wire** to the corresponding monitor, which will produce the typical tremolo call tone. At the same time it will enable the telephone audio circuits and will switch on the screen showing the image captured by the telecamera.

The monitors that have not been called will have their audio circuits disabled, although they will be able to see the telecamera image by pressing the on button.

Upon picking up the handset, a switch connects the telephone to the common audio cables (2 & 6), thus establishing communication with the outdoor panel.

Pressing the door release button on the monitor unites the wires 1 & 3 of the installation, which causes the amplifier to activate the door release.

A 12 Vdc supply and an additional common wire are neccessary. See diagram.

REMEMBER THAT

The connectors Ref. 8033 are supplied seperately from the monitor.
A telecamera must be installed Ref. 8028 so a panel with a window has to be selected.
The 75 ohm charge resistor has to be cut out in all the video distributors except the last one. See wiring diagram.

MATERIAL NEEDED

In the dwellings and on the floors

M1, M2, ...Mn	**Citymax Privacy Monitor**	**Ref.:**	**8026**
D2.1, ...,D2.n	**Video Distributor**	**Ref.:**	**2448**

A distribution of two monitors per floor is assumed

In the communal interior area

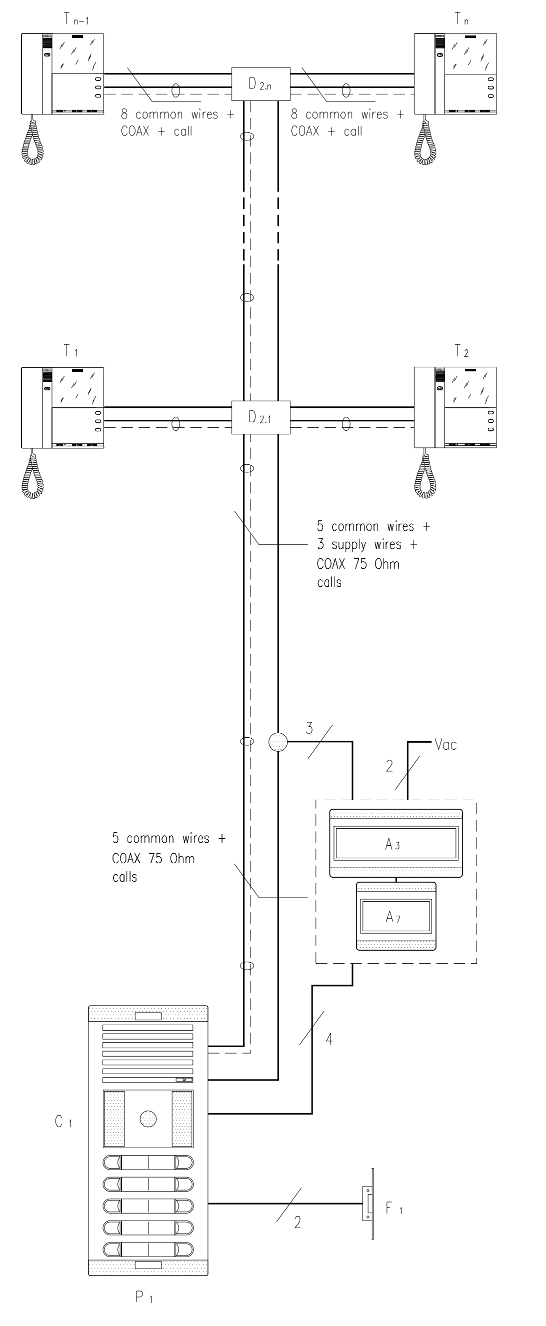
A7	**Distributor Power Supply**	**Ref.: 88231**
A3	**Video Power Supply**	**Ref.: 88302**

One Video Power Supply for each 60 monitors.

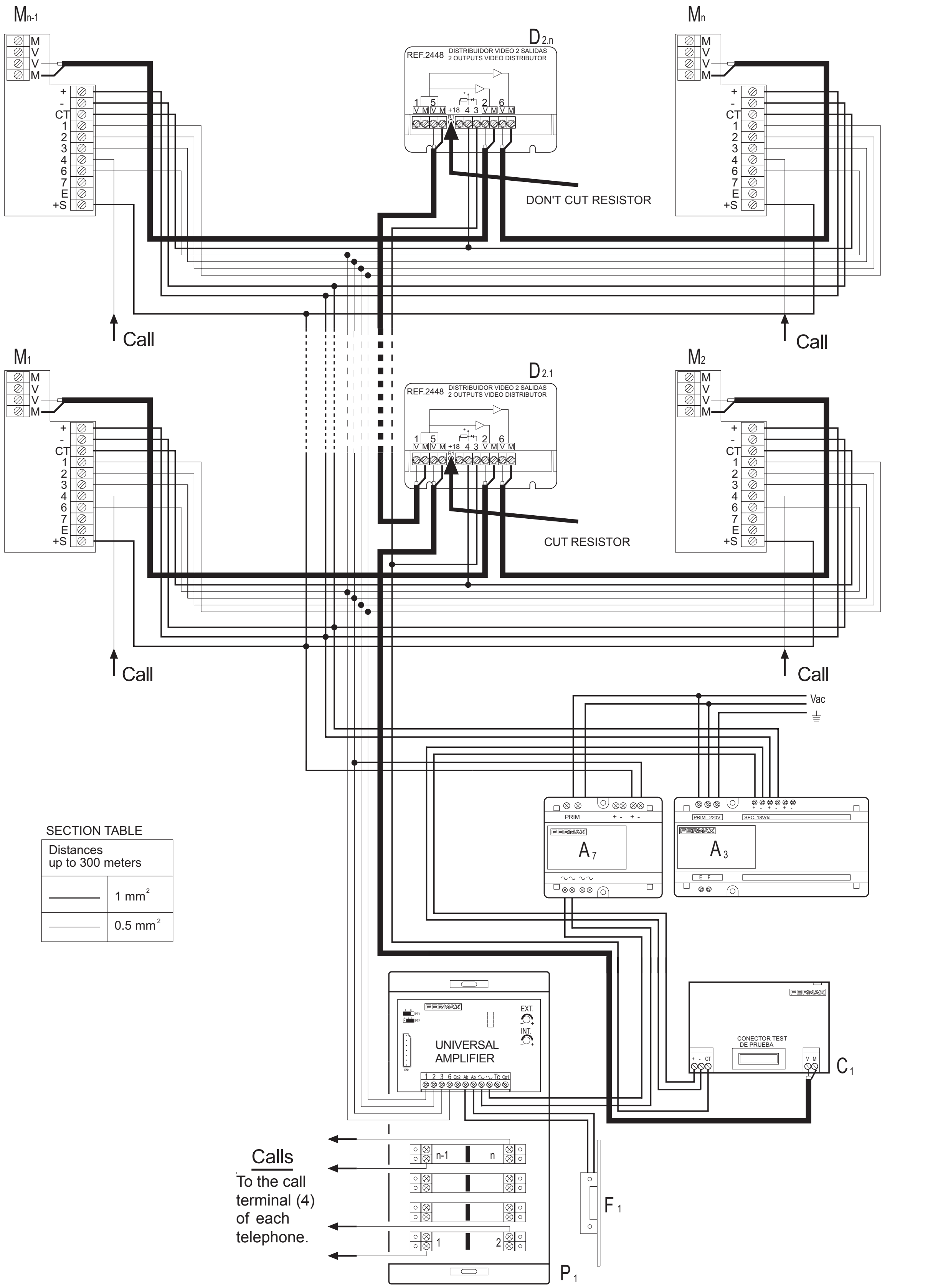
In the street

P1 **Outdoor Panels**
Neccesary combiantion.
Do not forget the telecamera Ref.: 8028.
F1 **Electric lock** **Ref.: 2911**
For other types consult catalogue.

SCHEMATIC DIAGRAM



WIRING DIAGRAM



SECTION TABLE

Distances up to 300 meters	
————	1 mm²
————	0.5 mm²

General diagram for Video door phone installations in a building with two accesses.

BASIC FUNCTION

Pushing a button on the outdoor panel causes the call signal **Cp1**, generated in the amplifier, to be sent pasing along the call wire to the corresponding monitor, wich produces the typical tremolo call tone.

Upon picking up the handset, a switch connects the monitor to the common audio wires (2 & 6) thus establishing communication with the outdoor panel from where the call was made.

Upon pressing the door release button on the monitor the amplifier activates the electric lock. The automatic switcher has two positions: "at rest", its normal position, and "activated".

P1 is the panel wich is connected to the monitors when the automatic switcher is in the "at rest" position, whilst P2 is connected when the switcher is in the "activated" position.

So we call P1 the "at rest" panel and P2 the "activated" panel.

To take the switcher to the "activated" position, the current on the common wire of Cp is made to pass through the pushbutton common P2 and through the activations terminals I-K in the switcher. The current on the common wires of P1 to pass through the activation terminals H-J would force it into the "rest" position. However, the switcher will change from "activated" to "at rest" once 90 seconds have passed.

OBSERVATIONS

Conversations held through the "activated" panel are to 90 seconds or until a call is made from the other panel, while conversation through the "at rest" panel will only ended if there is a call from the other panel.

To make things clear, the wiring diagram is divided in two sections which are presented together: ENTRANCES and FLOORS.

Two types of FLOOR diagram are shown: distribution in 2 or 4 dwellings per floor.

MATERIAL NEEDED

In the dwellings

M1, M2, ...Mn	**CityMax Export Monitor**	**Ref.: 8023** *(do not forget the connector Ref. 8033)*
D2.1, ..., D2.n	**Vídeo Distributor**	**Ref.: 2448** ó **2449** *(depending on the distribution)*

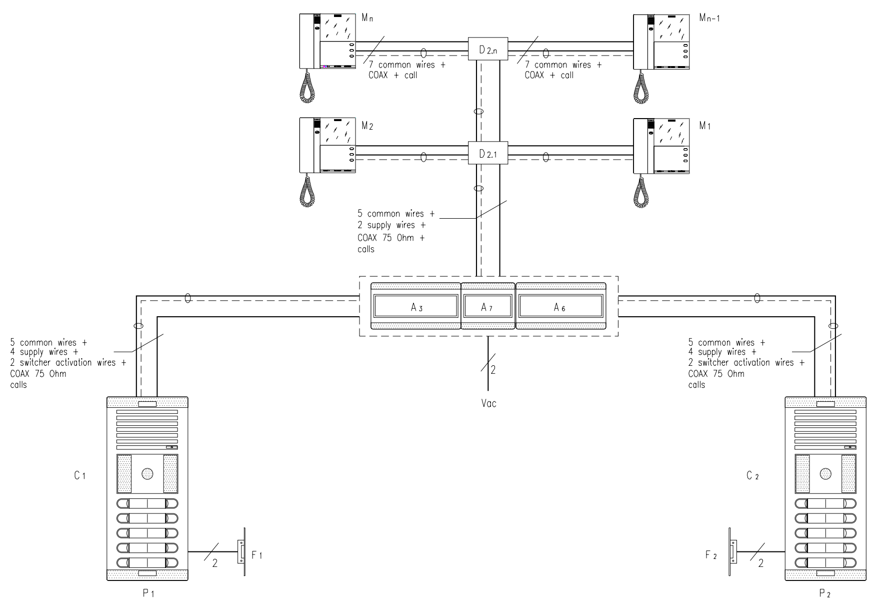
In the communal interior area

A7	**Distributor Power Supply**	**Ref.: 88231**
A3	**Video Power Supply**	**Ref.: 88302** *(one Power Supply every 60 monitors)*
A6	**Video Switcher**	**Ref. 8812**

In the street

P1	**Outdoor Panels** *(combination neccesary.Do not forget telecámara Ref. 8028)*	
F1	**Electric lock**	**Ref.: 2911** *(for other types consult catalogue)*

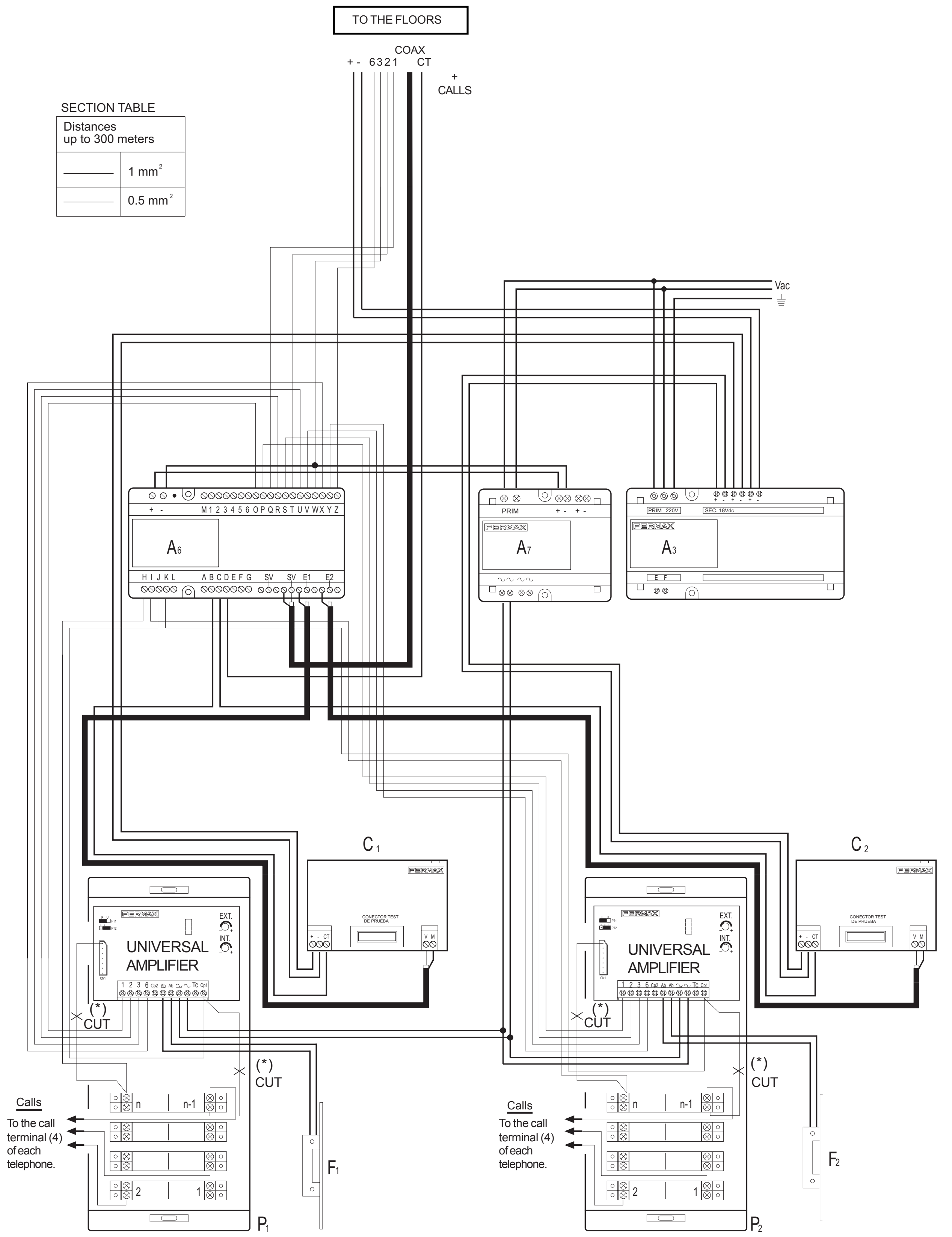
SCHEMATIC DIAGRAM



WIRING DIAGRAM
ENTRANCES

SECTION TABLE

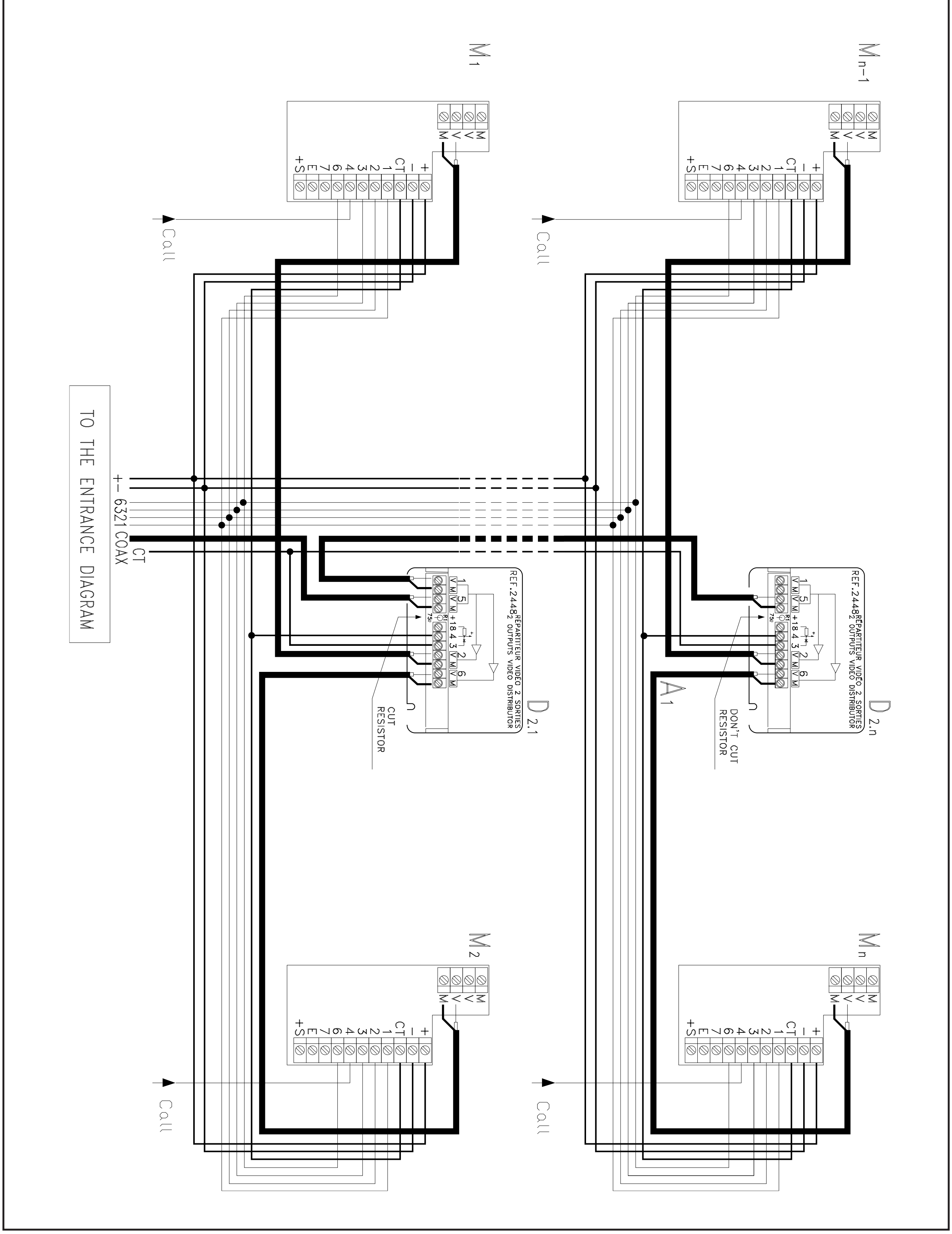
Distances up to 300 meters	
———	1 mm²
———	0.5 mm²



(*) Cut the common pushbutton wire (according to the panel model).

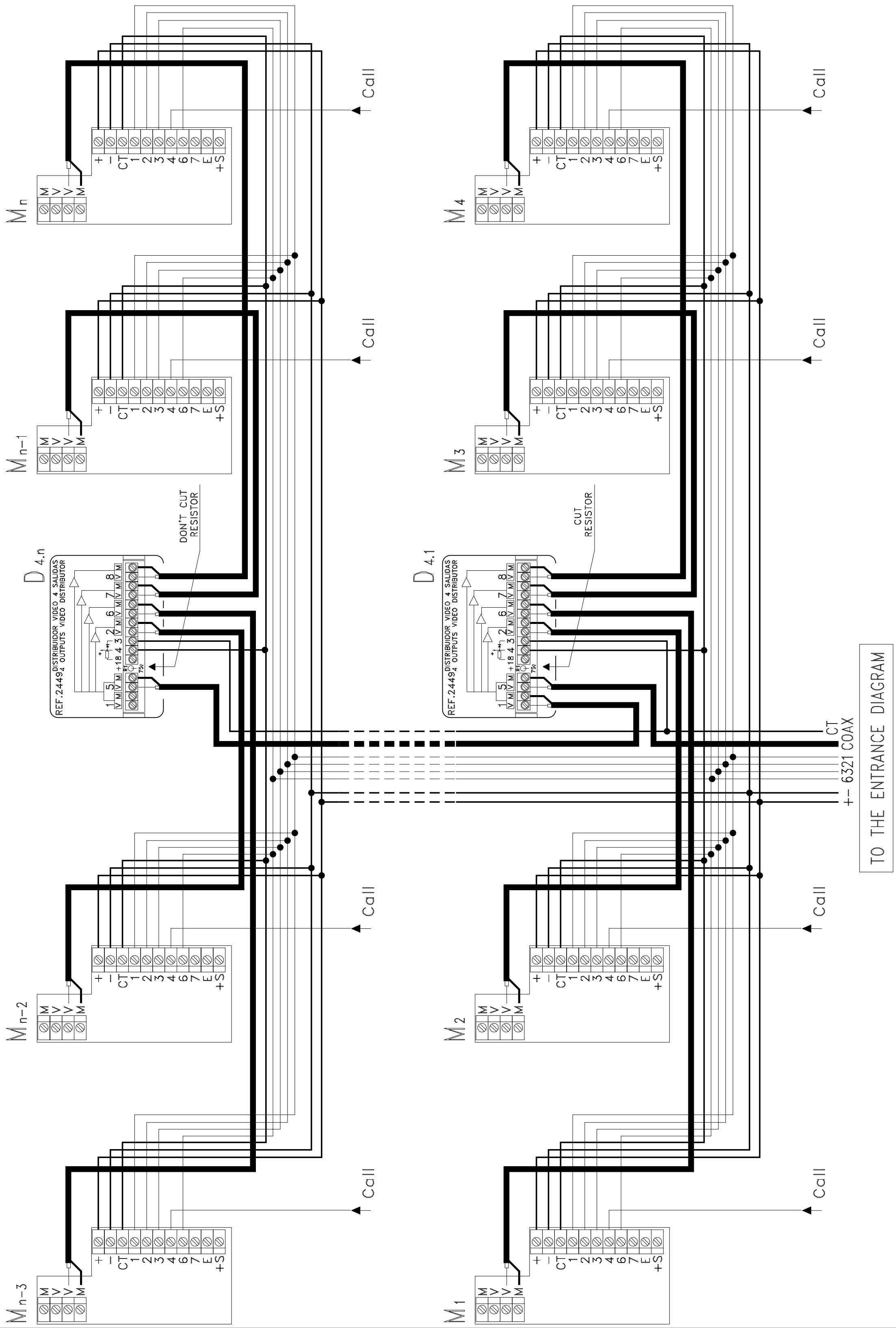
WIRING DIAGRAM

FLOORS: 2 DWELLINGS PER FLOOR DISTRIBUTION



WIRING DIAGRAM

FLOORS: 4 DWELLINGS PER FLOOR DISTRIBUTION



General diagram for a video door phone installation in buildings with three entrances.

BASIC FUNCTION

Pressing a button on the outdoor panel causes the call signal **Cp1**, which is generated in the amplifier, to be sent along the call line to the corresponding monitor, which produces the typical tremolo call tone. As it passes through the excitation terminals (I-K) of the switcher, at the same time it connects the corresponding outdoor panel.

Upon picking up the receiver, a switch connects the monitor to the common audio wires (2 & 6), thus establishing communication with the outdoor panel from which the call was made.

Pressing the door release button on the monitor connects wires 1 & 3 of the installation, making the amplifier activate the door release of the panel from which the call was made.

OBSERVATIONS

Communication is limited to 90 seconds whichever the panel originating the call. After this time, the call is ended.

This diagram shows an installation with three entrances. For an installation with more entrances we advise the use of Digital Systems (MDS).

To make things clear, the wiring diagram is divided in two sections which are presented together: ENTRANCES and FLOORS.
Two types of FLOOR diagram are shown: distribution in 2 or 4 dwellings per floor.

MATERIAL NEEDED

In the dwellings

M1, M2, ...Mn	**CityMax Export Monitor**	**Ref.: 8023** *(do not forget the connector Ref. 8033)*
D2.1, ..., D2.n	**Video Distributor**	**Ref.: 2448** ó **2449** *(depends on the distribution)*

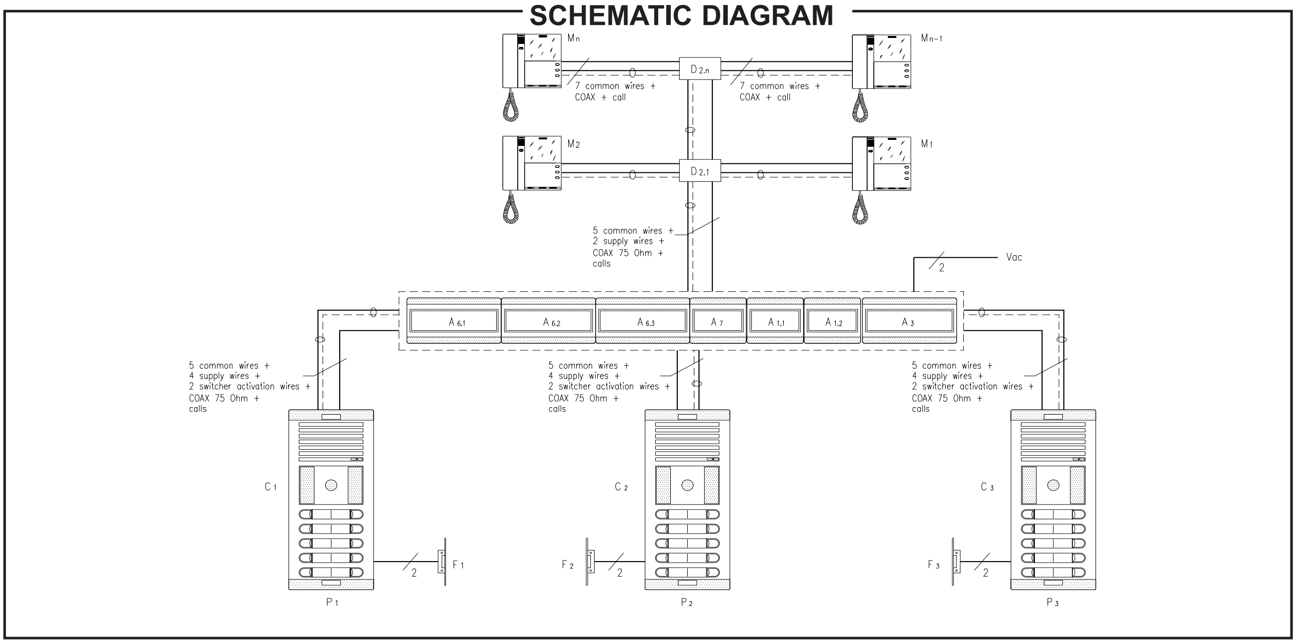
In the communal interior area

A1.1, A1.2	**Audio Power Supply**	**Ref.: 8787**
A7	**Distributor Power Supply**	**Ref.: 88231**
A3	**Video Power Supply**	**Ref.: 88302** *(un alimentador cada 60 monitores)*
A6.1, A6.2, A6.3	**Vídeo Switcher**	**Ref.: 8812**

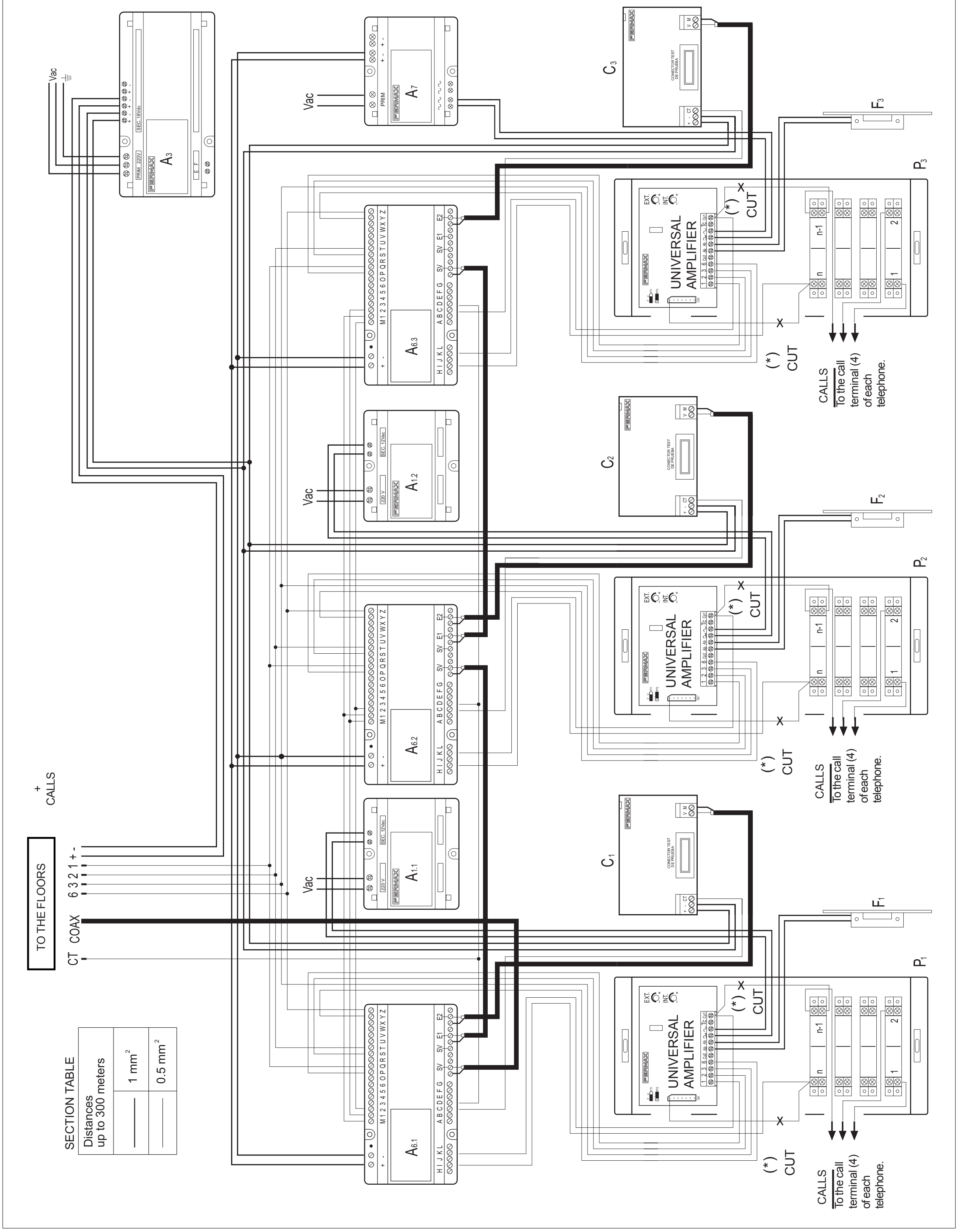
In the street

P1, P2, P2	**Outdoor Panels** *(combination neccessary. Do not forget telecameras Ref. 8028).*	
F1, F2, F3	**Electric lock**	**Ref.: 2911** *(for other types consult catalogue.)*

SCHEMATIC DIAGRAM

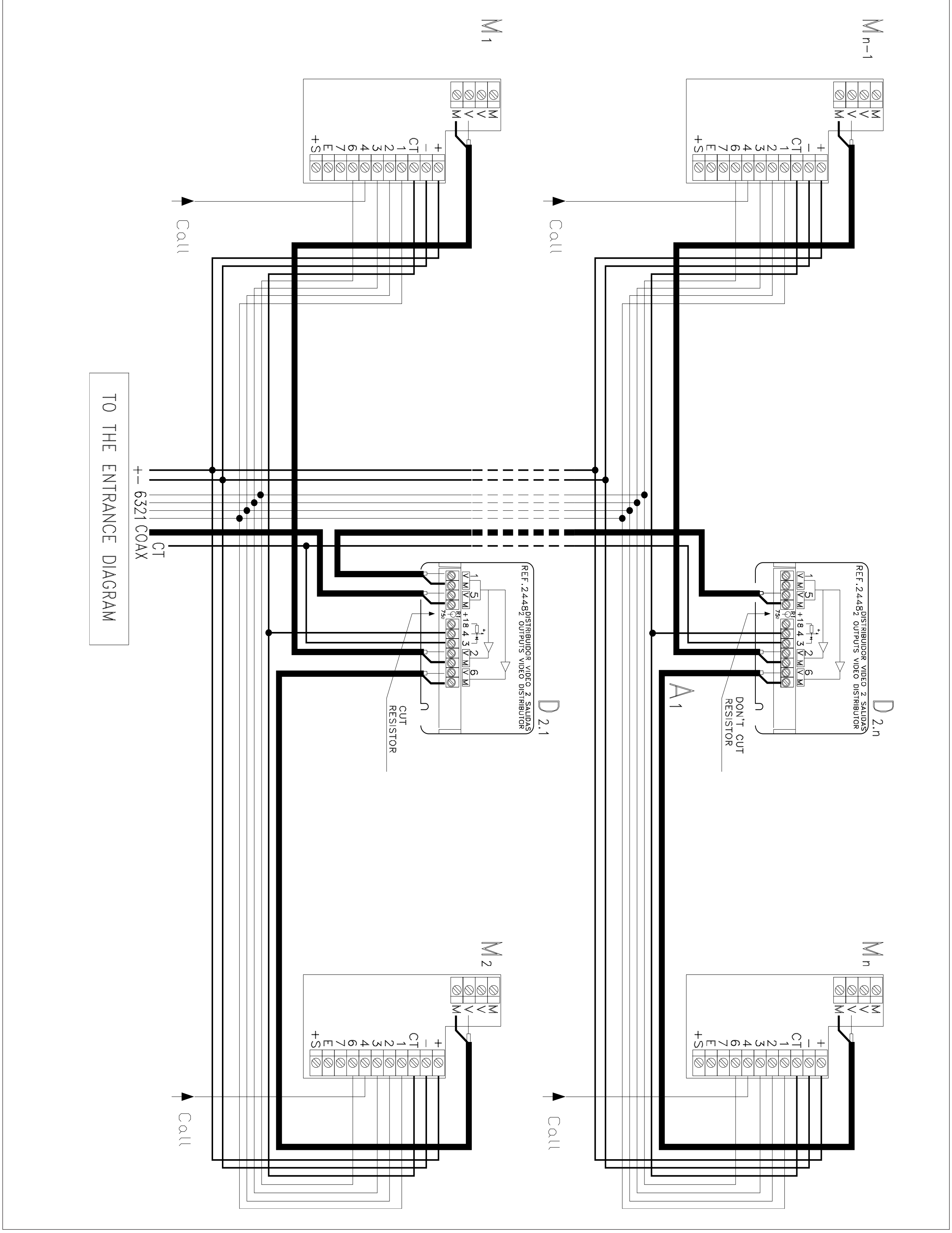


WIRING DIAGRAM
ACCESES



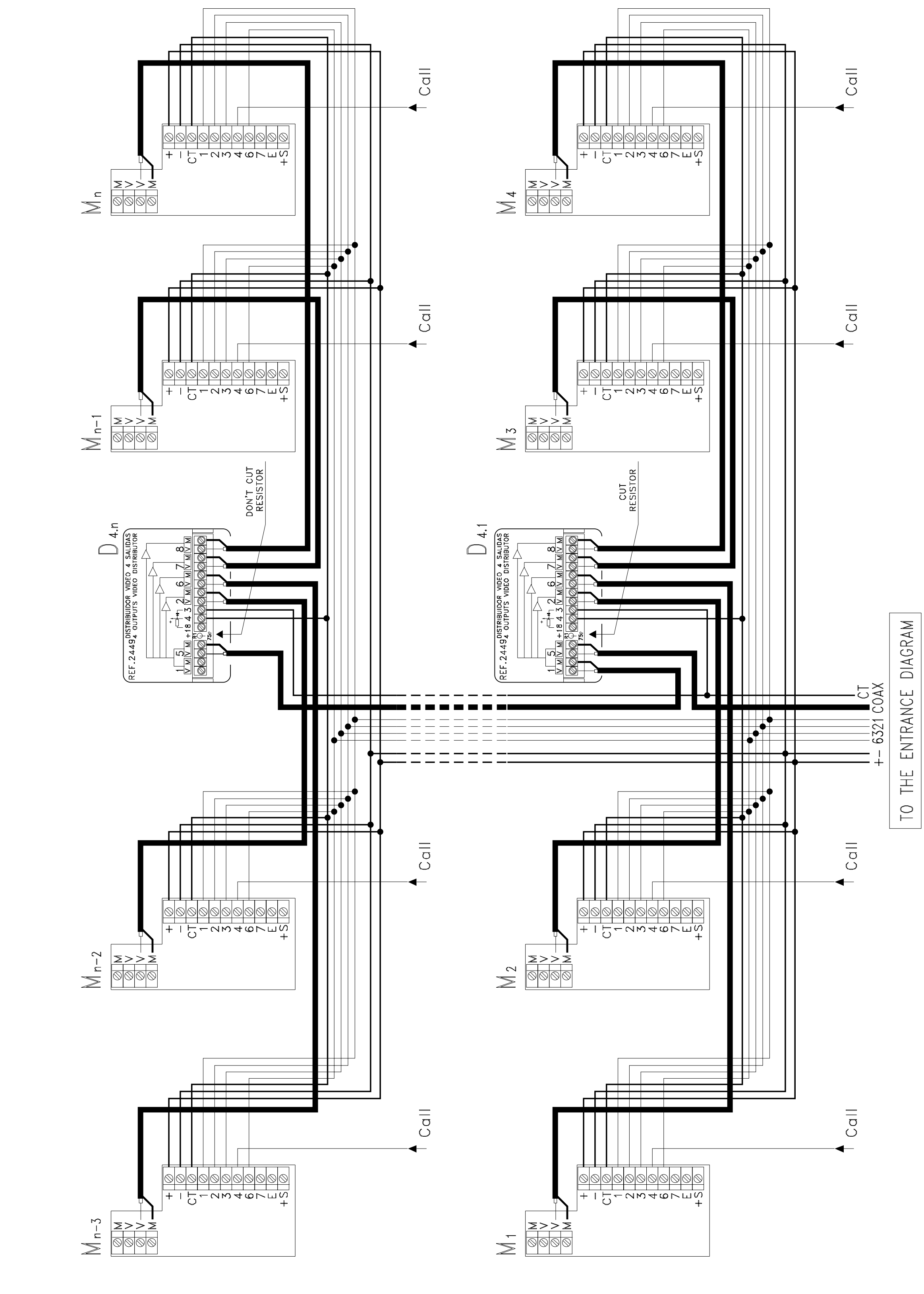
(*) Cut the common pushbutton wire (according to the panel model).

WIRING DIAGRAM
FLOORS: DISTRIBUTION IN 2 DWELLINGS PER FLOOR



WIRING DIAGRAM

FLOORS: DISTRIBUTION IN 4 DWELLINGS PER FLOOR



General diagram for basic video door phone installations in condominiums with one main entrance and several interior blocks with one entrance each.
There is no limit on the number of blocks, however, the greater the number of blocks the more complicated the installation, so it is not reccomended for installations of more than three interior blocks.
For more blocks we recomend the use of digital systems (MDS).

BASIC FUNCTION

This system works as if it were formed of various independent basic video door phone installations with two entrances, (see diagrams E 2.1), but with the peculiarity that the main entrance panel shares the same amplifier and telecamera. Therefore an automatic switcher is installed in every block in such a way that when a call is made from the main entrance, the switcher selects this main entrance. If the call is made from the block panel, then the switcher selects the block panel.

OBSERVATIONS

As the two entrance installations with an automatic switcher have an "activated" position, in which the time allowed for conversation is limited to 90 seconds (or until a call from another panel is made), and another "at rest" in which the conversation is only ended if there is a call from the other panel, the cables from the main entrance are connected to the "at rest" terminals and those of the block to the "activated" terminals so as to give priority of conversation length to calls made from the main entrance panel.

The main entrance panels must have as many buttons as the total of the interior block panels.

MATERIAL NEEDED

In the dwellings and floors

M1, M2, ...Mn	**CityMax Export Monitor**	**Ref.: 8023** *(do not forget the connector Ref. 8033)*
D2.1, ..., D2.n	**Video Distributor**	**Ref.: 2448** *(assuming two monitors per floor)*

En each internal block

A3	**Video Power Supply**	**Ref.: 88302**
A7	**Distributor Power supply**	**Ref.: 88231**
A6	**Video Switcher**	**Ref.: 8812**
D2.1	**Video Distributor**	**Ref.: 2448** *(except in the last block)*
P	**Outdoor Panels** *(neccessary combination. Do not forget telecamera Ref. 8028)*	
F	**Electric lock**	**Ref.: 2911** *(or other type. See catalogue)*

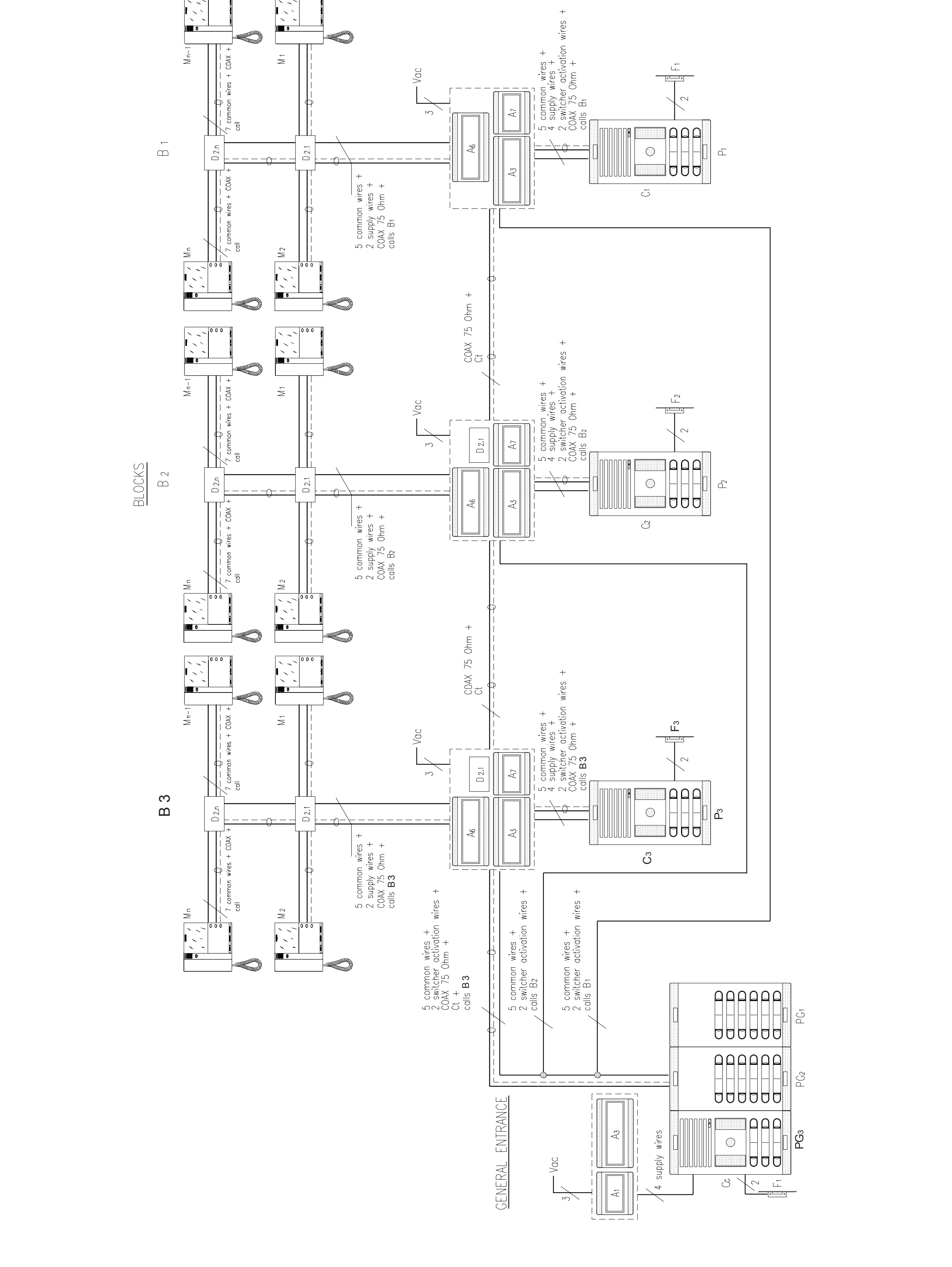
In the main entrance

PG1	**Outdoor Panels** *(to call block 1)*
PG2	**Outdoor Panels** *(to call block 2)*
...	
PGn	**Outdoor Panels** *(to call block n)*

The panel in the main entrance must have as many monitors as the total of all the buttons in the internal blocks. One of the panels must include the common amplifier and telecamera.

F1	**Electric lock**	**Ref.: 2911** *(for other types consult catalogue.)*

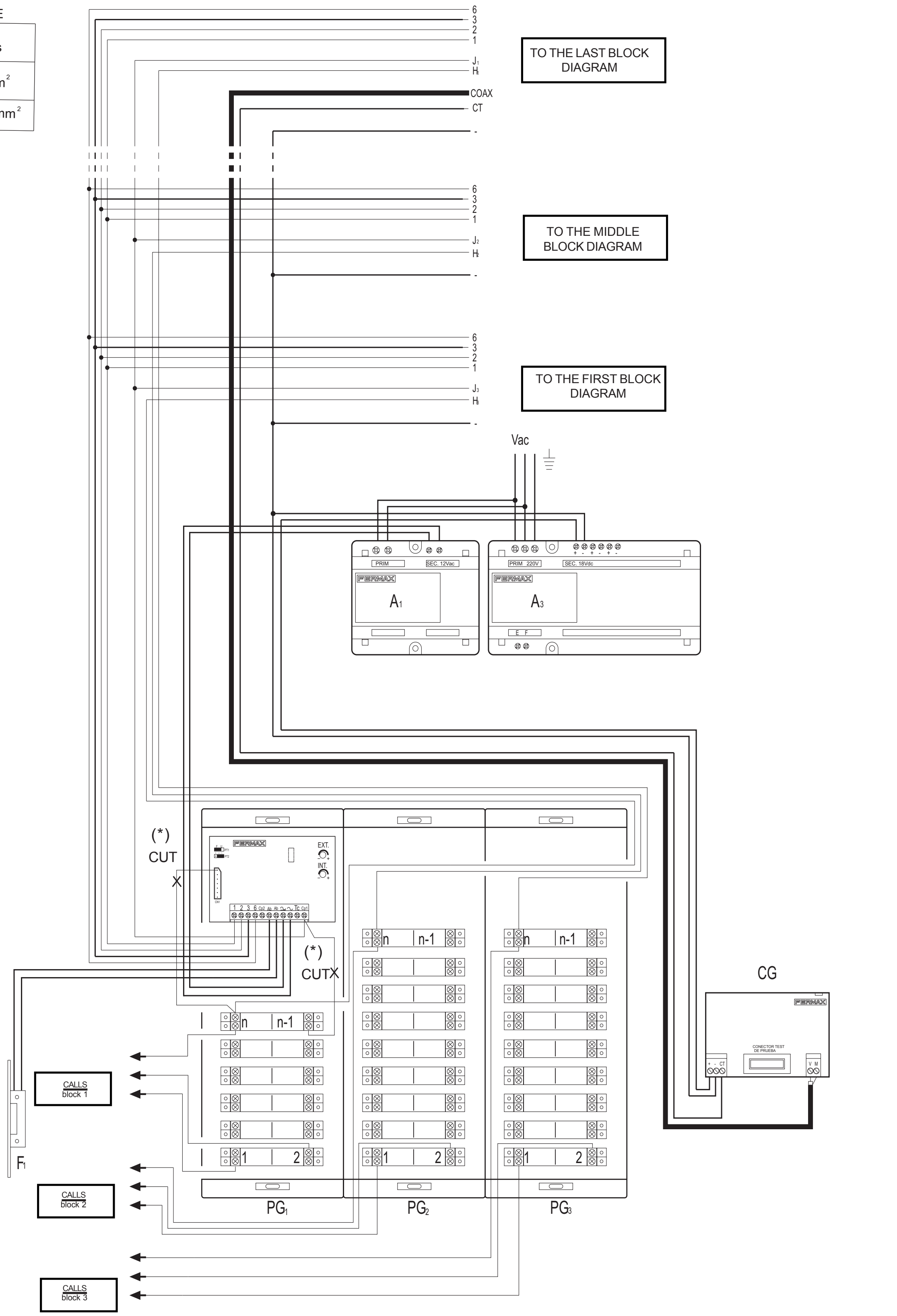
SCHEMATIC DIAGRAM



WIRING DIAGRAM
GENERAL ENTRANCE

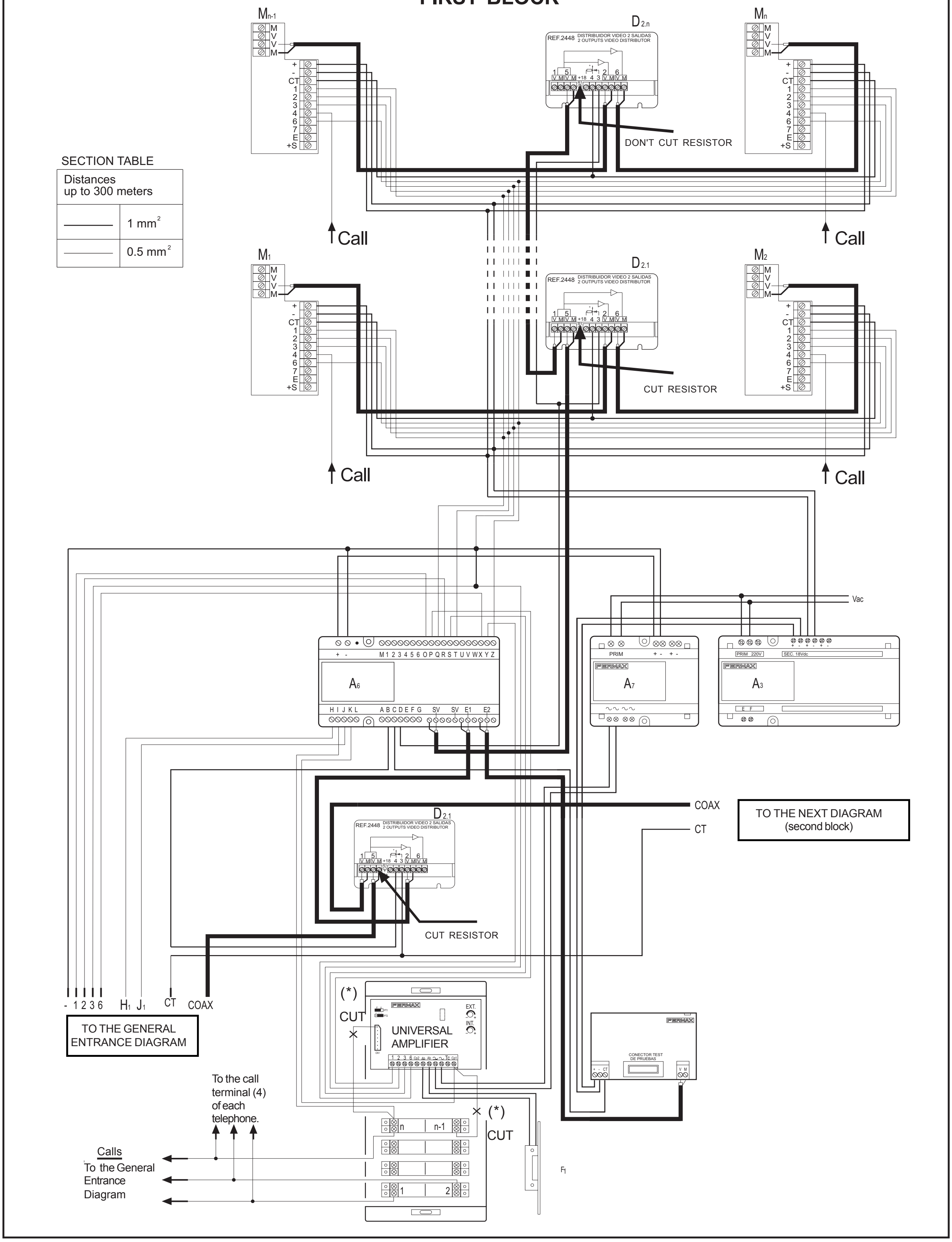
SECTION TABLE

Distances up to 300 meters	
———	1 mm²
———	0.5 mm²



(*) Cut the common pushbutton wire (according to the panel model).

WIRING DIAGRAM
FIRST BLOCK

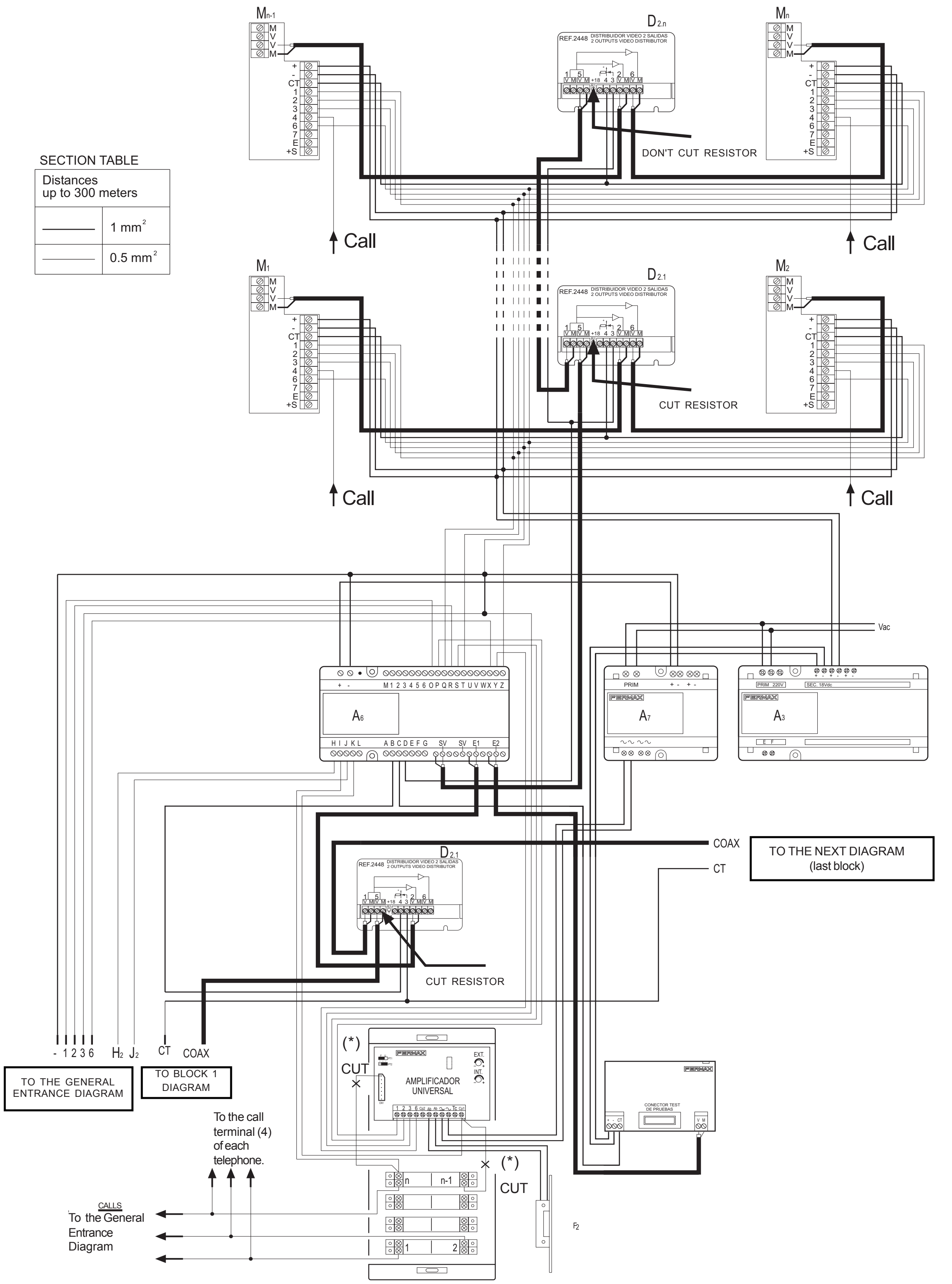


(*) Cut the common pushbutton wire (according to the panel model).

WIRING DIAGRAM
SECOND BLOCK

SECTION TABLE

Distances up to 300 meters	
———	1 mm^2
———	0.5 mm^2

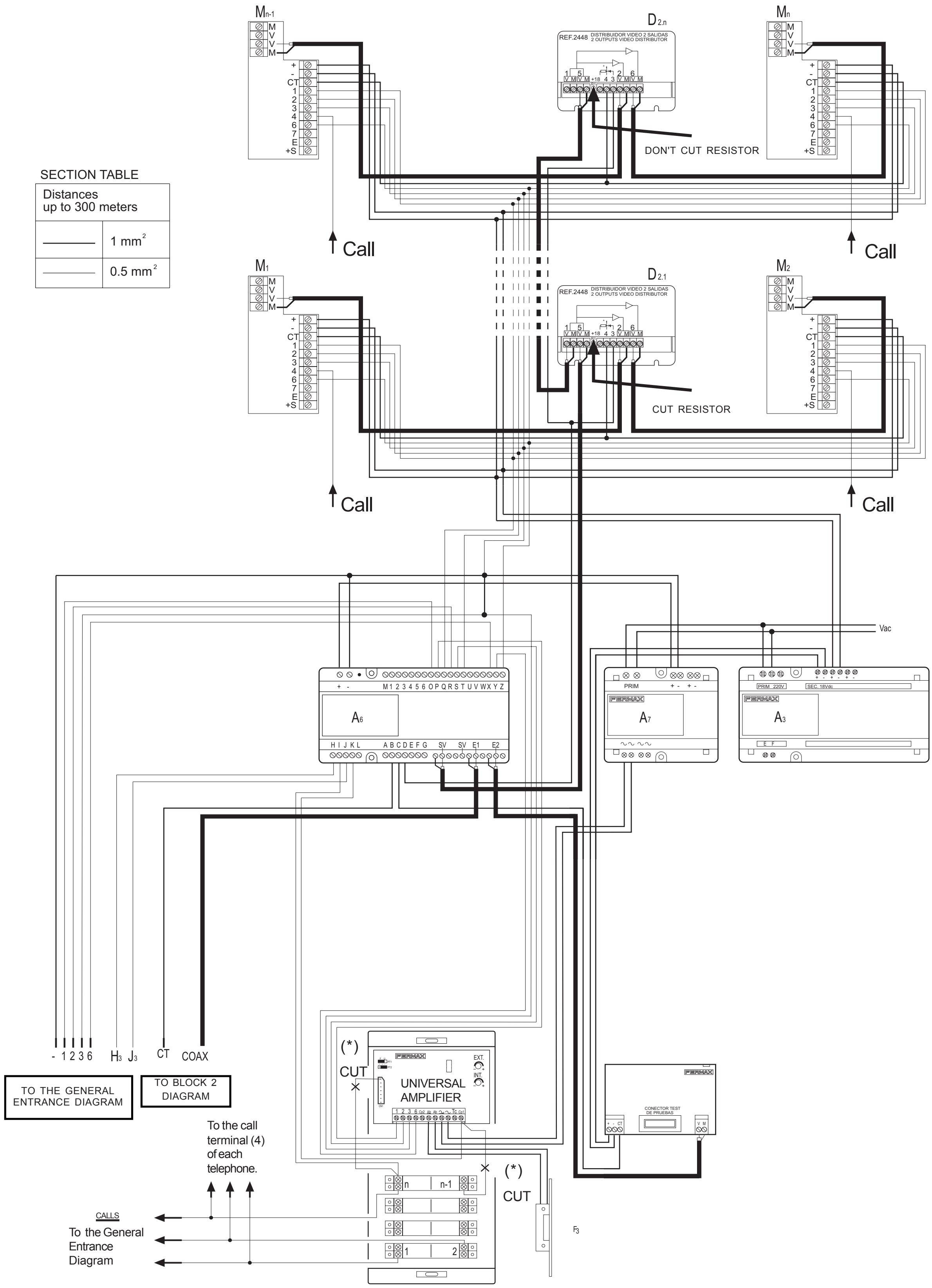


(*) Cut the common pushbutton wire (according to the panel model).

WIRING DIAGRAM
LAST BLOCK

SECTION TABLE

Distances up to 300 meters	
——	1 mm^2
——	0.5 mm^2



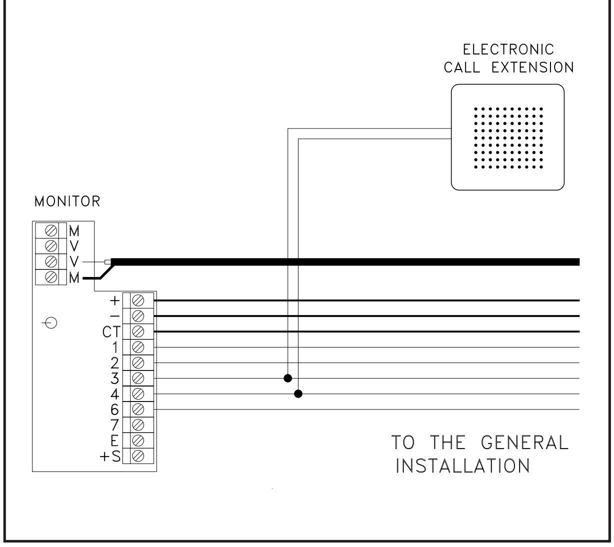
(*) Cut the common pushbutton wire (according to the panel model).

Connection of a call extension

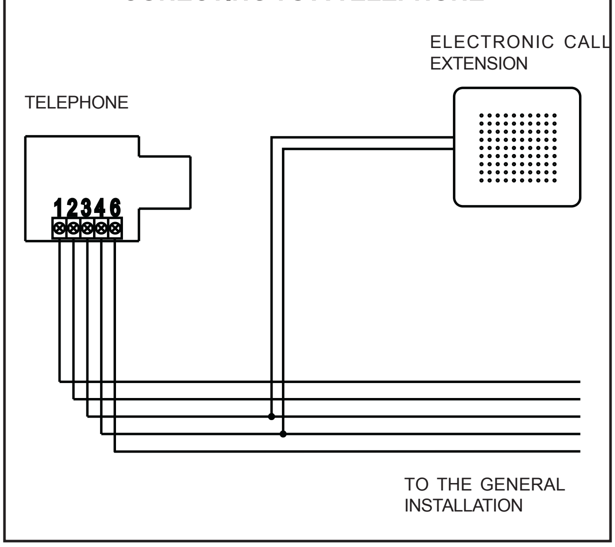
USE
Allows us to hear the telephone or monitor call tone when we are in a different place to where it is installed.

MATERIAL NEDED
Call Extension Ref. 2040.

CONECTING TO A MONITOR



CONECTING TO A TELEPHONE



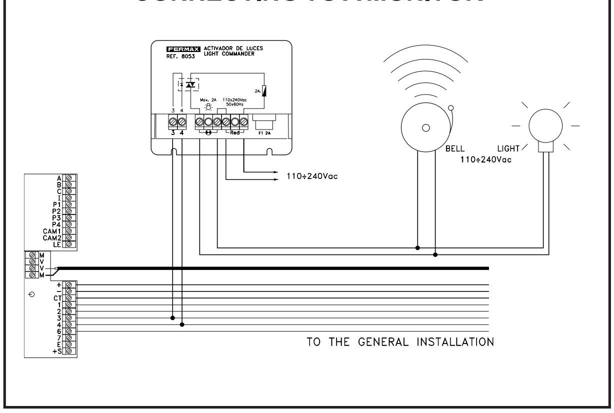
Activation of additional lights or bells

USE
For places with a lot of background noise (factories, shows, etc.) in which the normal call tone cannot be heard or to help people with hearing difficulties.

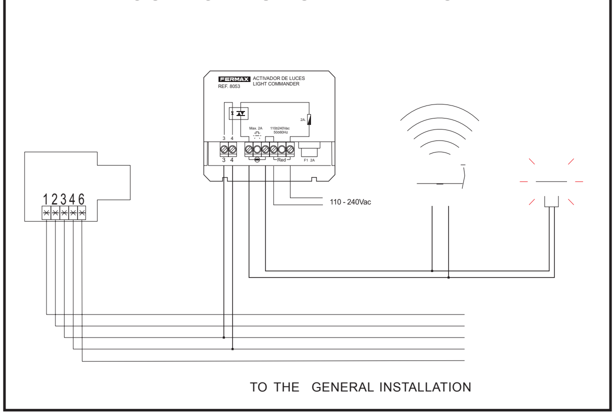
MATERIAL NEEDED
Light activator Ref. 8053.

OBSERVATIONS
Any item which works off the mains supply, maximum consumption 2 A (400 watts if using the 220 supply) can be connected to the outlet of this equipment.

CONNECTING TO A MONITOR



CONECTING TO A TELEPHONE



Enlarging the installation with additional monitors and/or telephones

USE

To enlarge a door phone system with additional telephones spread out through the dwelling. In video door phone installations an additional monitor can be installed without the need to add transformers. (See observations).

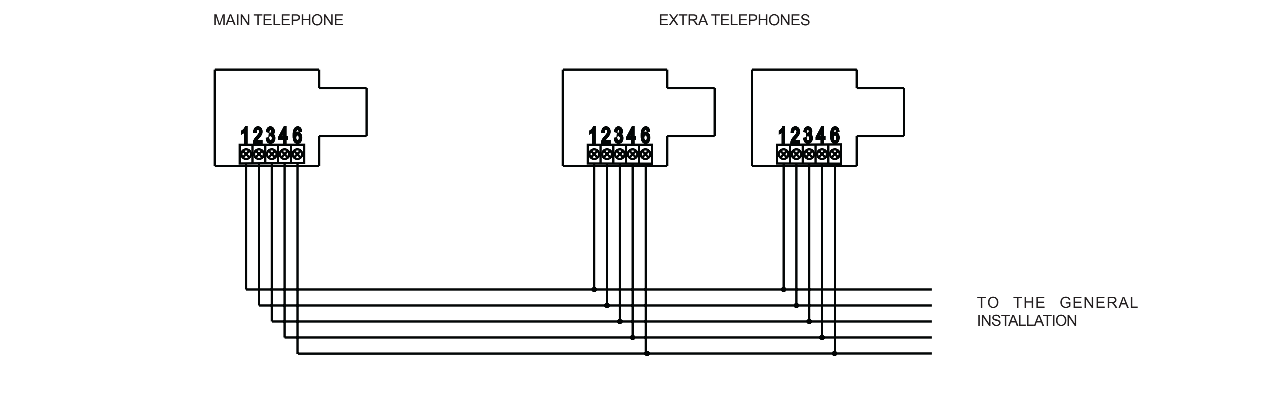
MATERIAL NEEDED

For additional telephones in a door phone system: CityMax Basic Telephone Ref. 8044.
For additional monitors in a video door phone system: CityMax Export Monitor Ref. 8023.

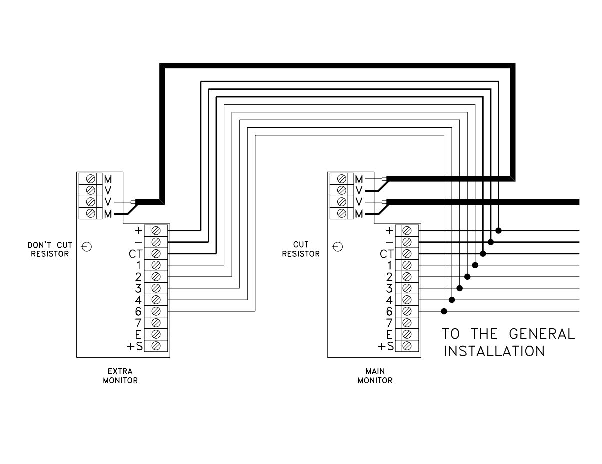
OBSERVATIONS

To enlarge a video door phone system with more than two monitors would require the installation of additional power supplies, (1 power supply Ref. 6062 for each additional monitor).

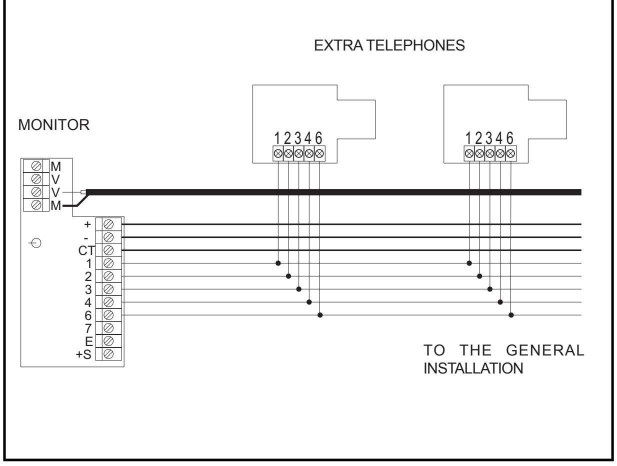
ADDING EXTRA TELEPHONES IN AUDIO PHONE INSTALLATION



ADDING AN EXTRA MONITOR



ADDING EXTRA TELEPHONES IN VIDEO PHONE INSTALLATION



IMPORTANT NOTE:

If extensions or additional telephones or monitors are installed then you must bear in mind that the call signal is shared between all the applications and so the volume in each one will decrease. This decrease also depends on the section of cable used in the original installation. The greater the section the less the decrease. If one of the additional items is very far from the rest, then the loss of volume may be quite noticable. In general, three additions can be made in the dwelling.

Activating the "stair light"

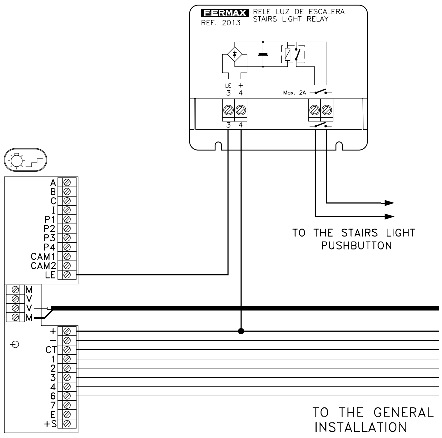
USE

For activating the stair light timer from the monitor.
It can also be used to activate another light from the monitor (for example to increase the amount of light in the place where the telecamera is installed).

MATERIAL NEEDED

Stair light relay Ref. 2013.

ACTIVATING THE STAIR LIGHT TIMER



Seeing the monitor image and hearing the sound with a television set

USE

To be able to see the image captured by the telecamera (and hear the sound) on the television screen.

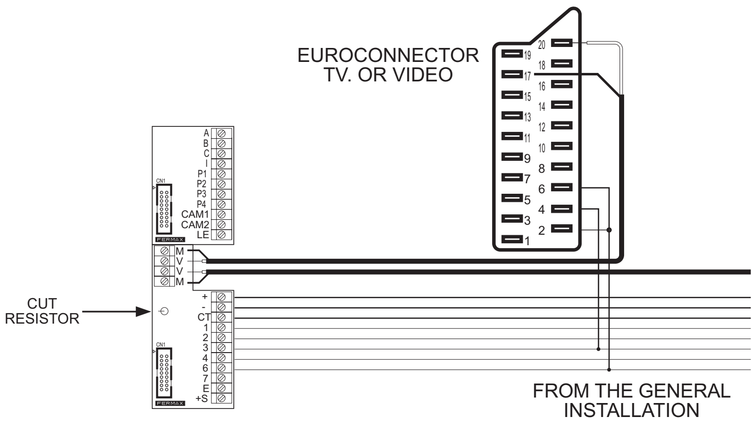
MATERIAL NEEDED

A cable with a male Euroconnector to which a cable must be soldered as shown in the diagram below to be connected to the monitor. The television must have a Euroconnector socket.

OBSERVATIONS

When someone calls, select the AV channel to be able to see and hear the visitor.
Use the monitor if you want to speak with the caller or open the door.

CONNECTING THE MONITOR TO A T.V. SET



Opening the hall door from inside

USE

When the hall door has no handle to open it from inside an electronic device is neccessary to activate the door release.

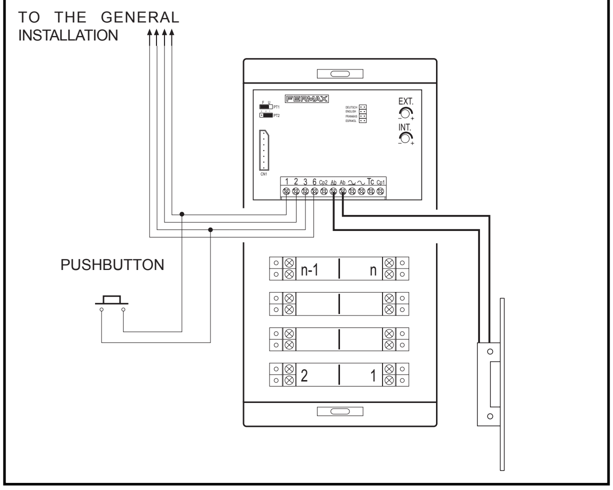
MATERIAL NEEDED

No electronic device as such is needed, only a switch tough enough to support the hard wear it will probably be subjected to.

OBSERVATIONS

It is neccessary to install the switch near to the door so as you can open the door whilst pressing the switch (the time in which the door release is unblocked). If this is not possible then it will be neccessary to install a different type of door release Ref. 2909 which stays unblocked once activated until the door is opened.

TO OPEN THE DOOR FROM INSIDE



Opening a second door

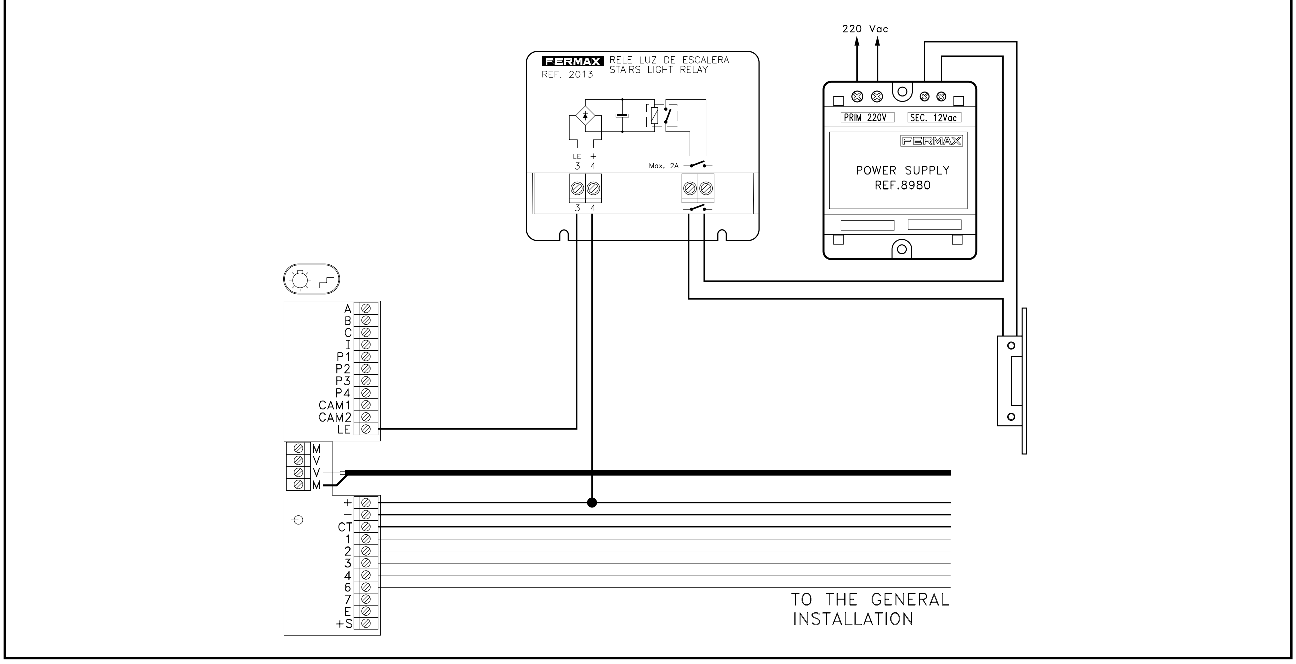
USE

When it is neccessary to have control over a second door where there is, for example, an iron gate in front of or behind the main hall door.

MATERIAL NEEDED

Relay Ref. 2013. The monitor or telephone has to be provided with an additional button for this purpose.

OPENING A SECOND DOOR



Opening a common door to two entrances

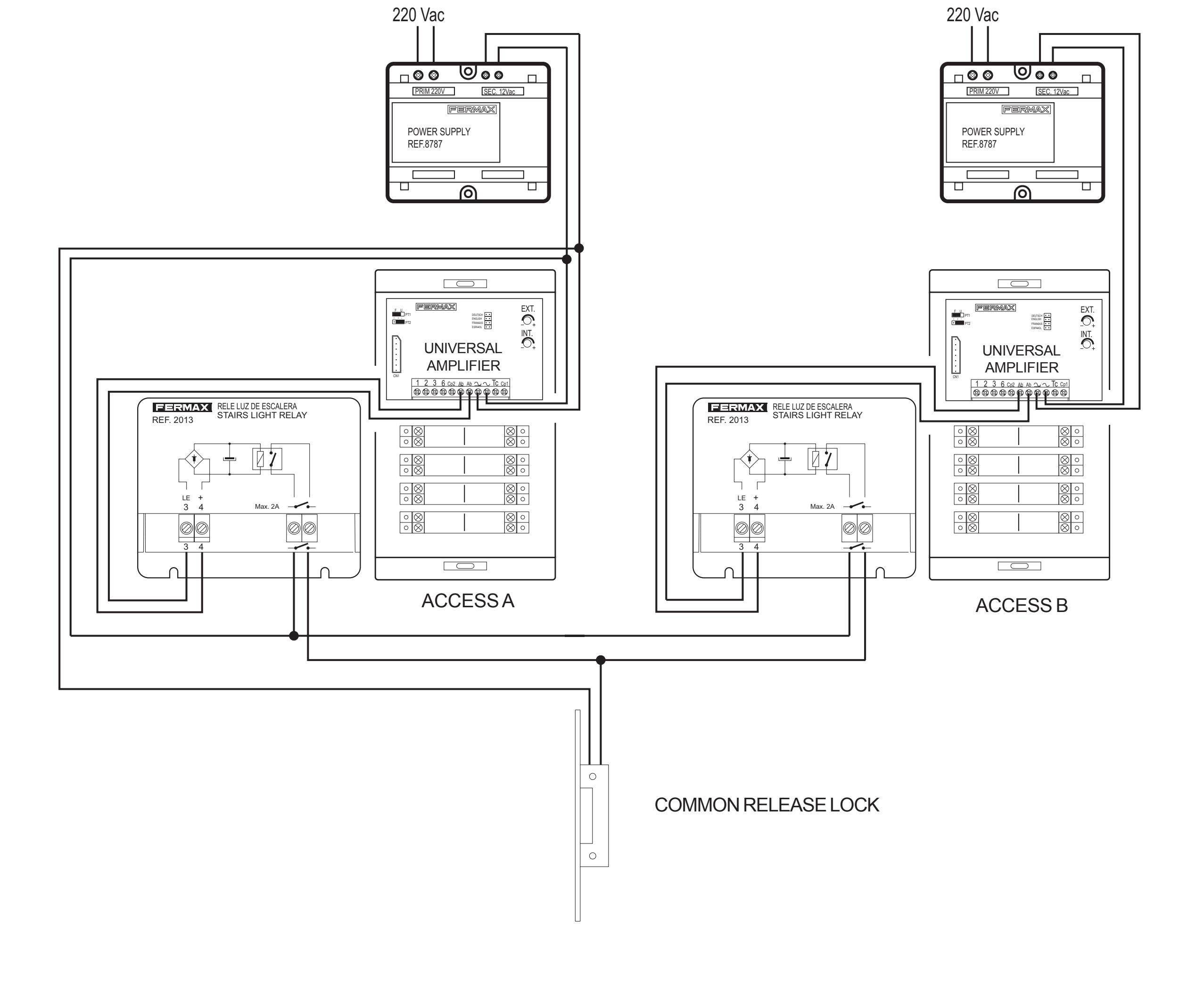
USE

When there is one door shared by two accesses, as, for example, in halls with two stairways with the same entrance.

MATERIAL NECCESSARY

A relay Ref. 2013 for each entrance.

ELECTRIC LOCK SHARED BY TWO ACCESSES



ANNEX

Reference of the Power Supplies used in City installations, depending on the mains supply.

	AUDIO POWER SUPPLY	DISTRIBUTOR POWER SUPPLY	VIDEO POWER SUPPLY
110 Vac	8785	88211	88302
125 Vac	8786	88221	88302
220 Vac	8787	88231	88302
240 Vac	8788	88241	88302