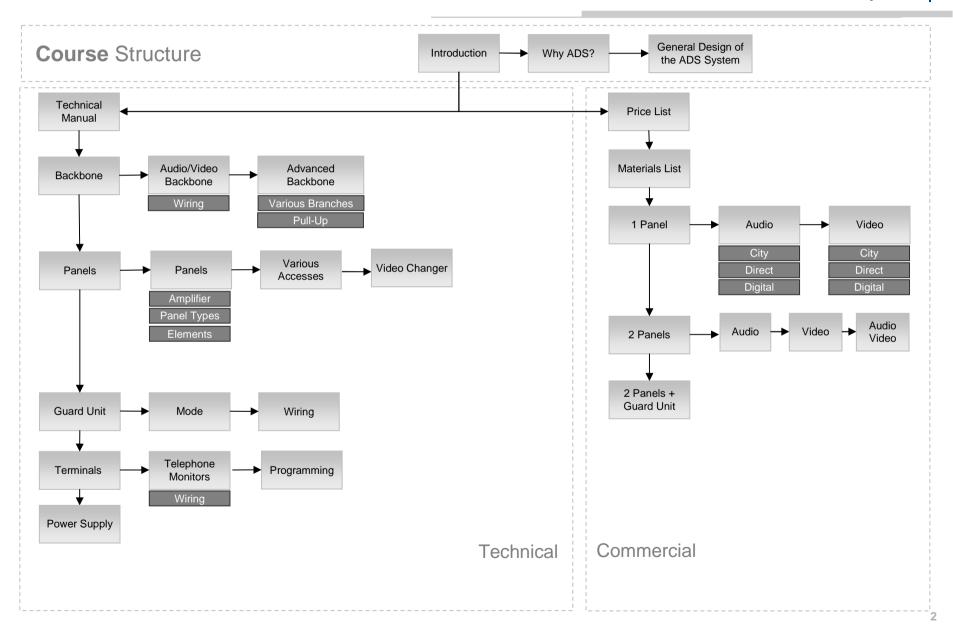




VALENCIA • MADRID • BARCELONA • ALICANTE • MALAGA • BILBAO • A CORUÑA • PARIS • LONDON • SHANGHAI • BEIJING • NEW DELHI • SINGAPORE • MOSCOW • WARSAW • MIAMI • MEXICO CITY • BOGOTA • HO CHI MINH • MANAMA • DUBAI • BRATISLAVA



ADS Course





ADS system

Why ADS?

Why ADS?

ADS system

ADS System

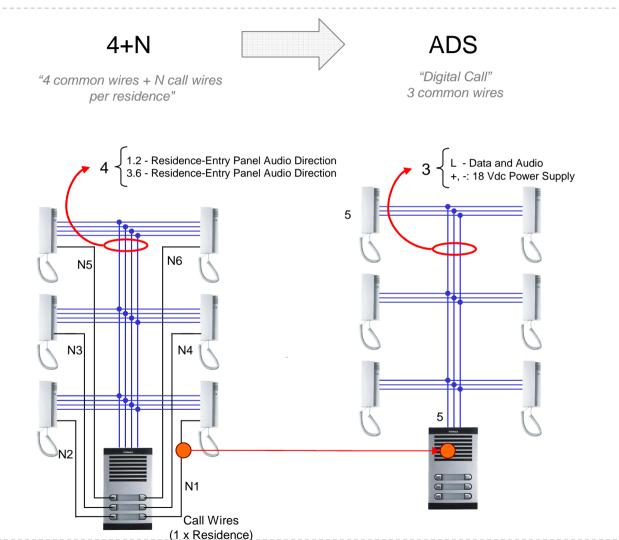
The ADS system is an easily installed door entry and video door entry system.

One of its unique features is the fact that it does not use call wires (4+N system), reducing the number of wires in the system.

The call is made by transmitting a digital call code via the ADS amplifier.

An ideal system for residential buildings (individual blocks) and single family residences:







Why ADS?

ADS system

Main Features

Features

- Up to 199 residences.
- Up to 2 door entry/video door entry accesses + Central Guard Unit.
- Auto-Start.
- Secret Conversation (1 communication channel).
- Programming the door opening time.
- Access control via keypad and proximity reader (on panels with keypads).

Installation

- Audio: 3 wire bus.
- Video: 3 wire bus + coaxial cable (video).
- Maximum distance from the first access point to last residence: 200 m.

Operation

- Panels: with buttons, keypad or keypad with display and electronic directory.
- Panels with keypad: access control via keypad or with auxiliary proximity lector.
- Terminals: ADS telephone and monitors.

Flexibility

- Simple extension to residential terminals.
- Extension to MDS-ADS system (enclosed areas: general entrances to one of various ADS blocks).

Programming

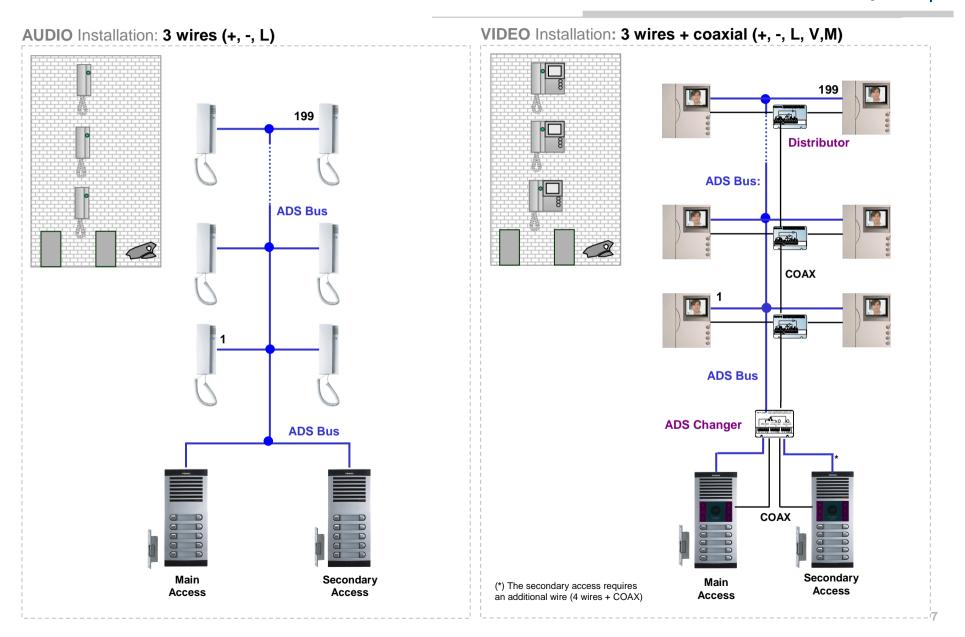
- The residential terminals require simple programming via the entry panel.
- A call code is assigned to each terminal using this programming method.



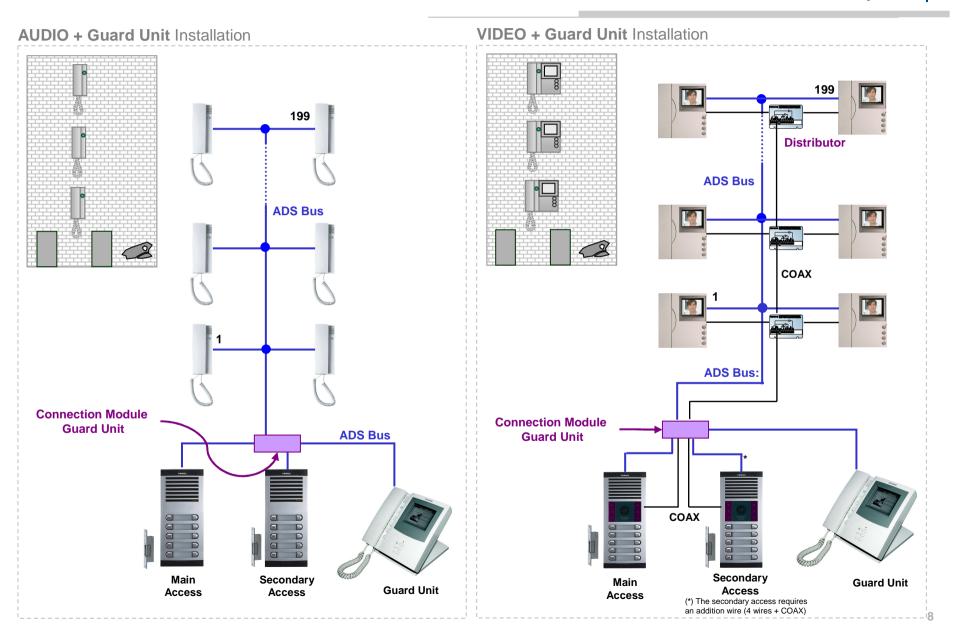
ADS system

General Design of the ADS System





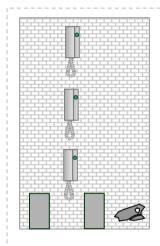


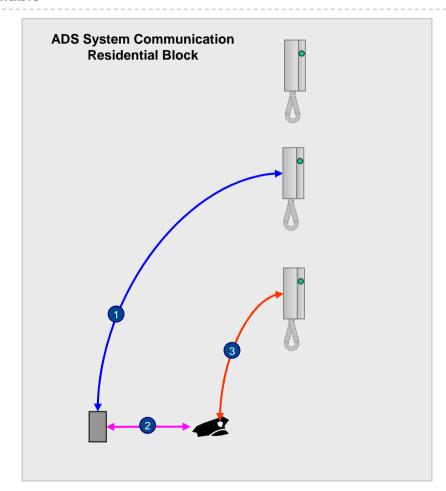




ADS system

Communication Available





- 1 Entry Panel Residence
- 2 Guard Unit Residence
- **3** Entry Panel Guard Unit



ADS system

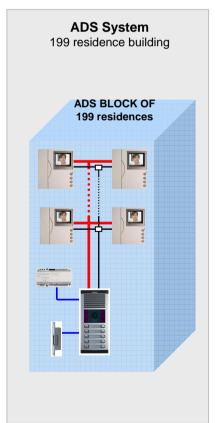
Extensions with MDS Systems

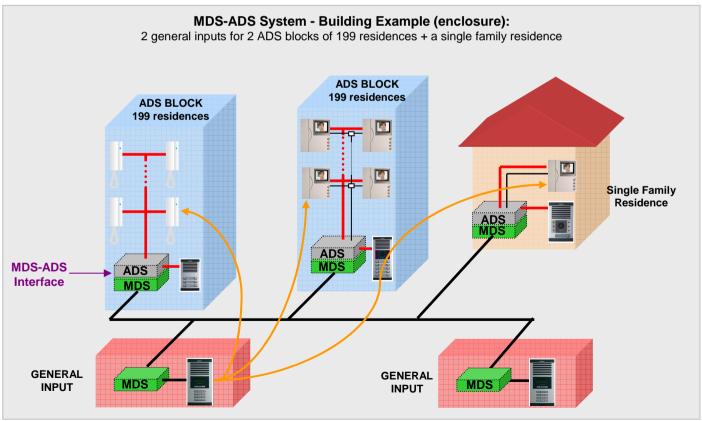
ADS System:

- Individual residential block or single family residences
- Maximum 2 accesses + guard unit.

MDS-ADS System:

- Multiple ADS Blocks or Single Family Residence Enclosures
- Multiple "General Inputs" for all blocks.







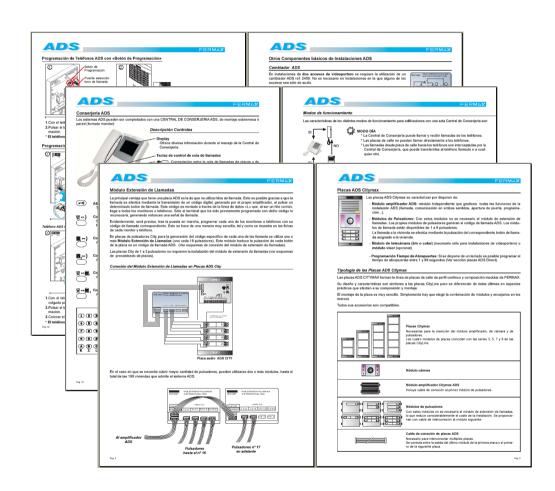
ADS system

Technical Manual



Technical Manual

ADS system



FERMAX edits *Technical Manuals* for each system, which allow the user the possibility to obtain an in-depth knowledge of the system's features and abilities.

The Technical Manuals include detailed installation plans.

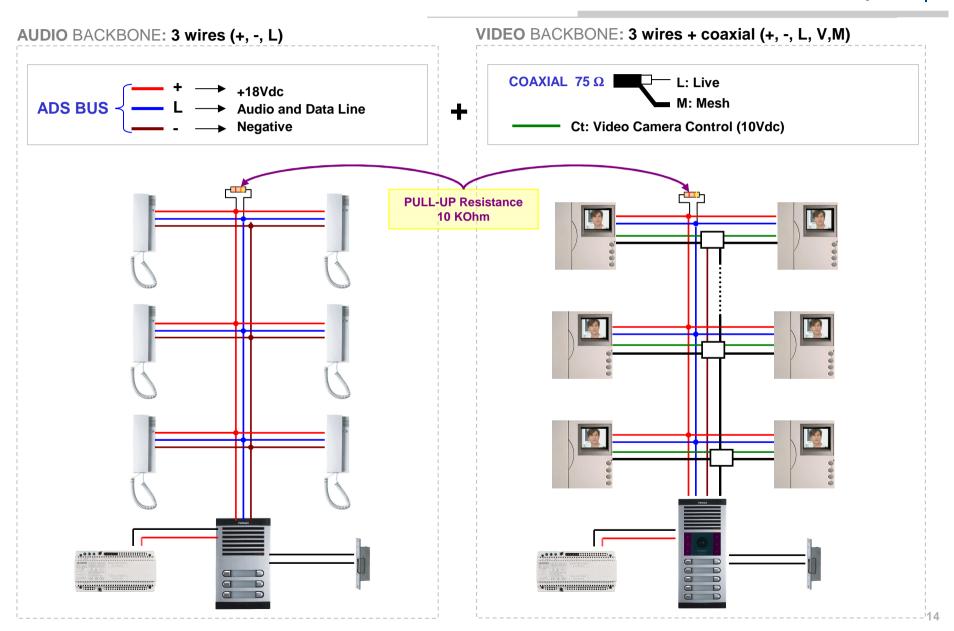
Available in electronic format (pdf) and in hard copy.



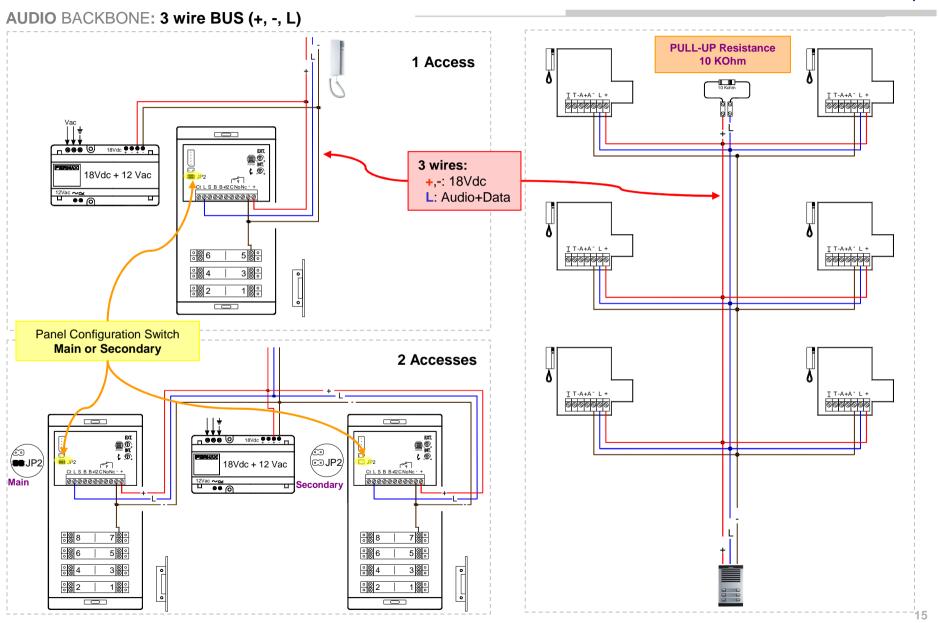
ADS system

ADS System **Backbone**

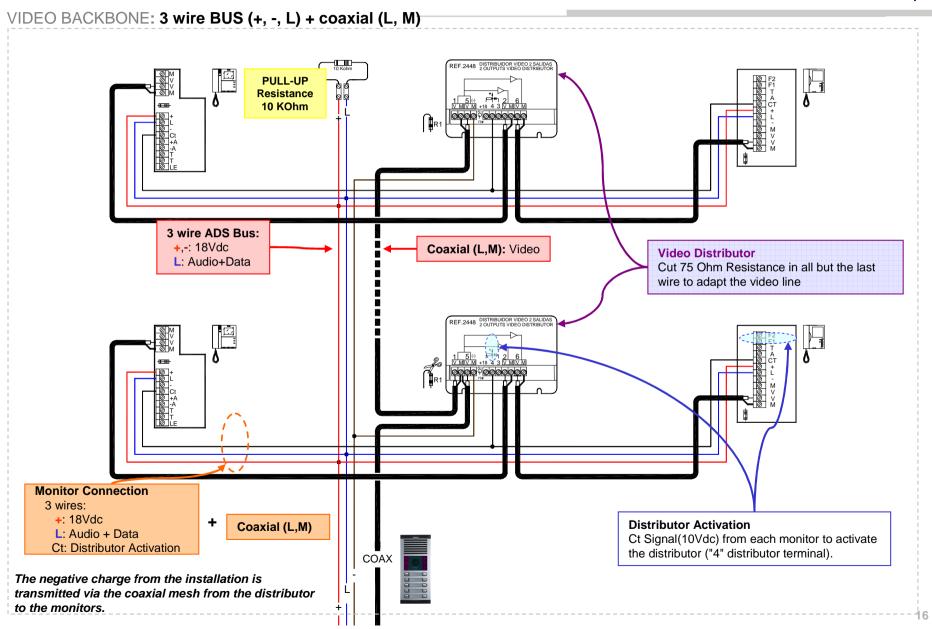














ADS system

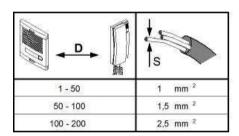
ADS BUS Features

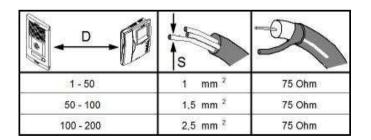
Distribution across various branches

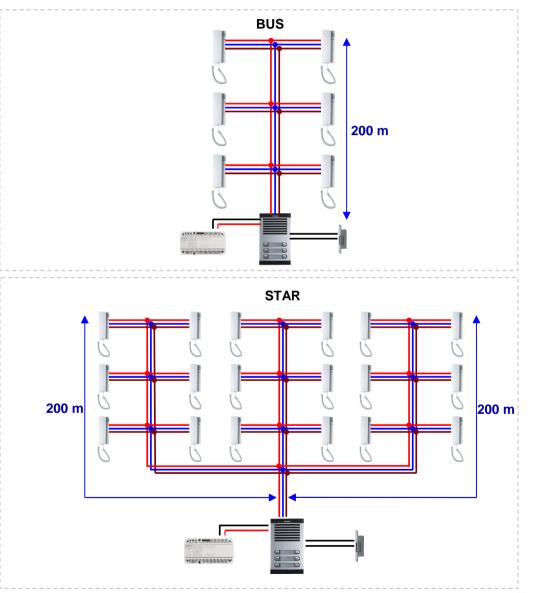
- Bus installation is recommended
- In star connections with a maximum of 4 branches

Distances and Sections

•Maximum distance from the panel to the last terminal on each branch: 200 m.



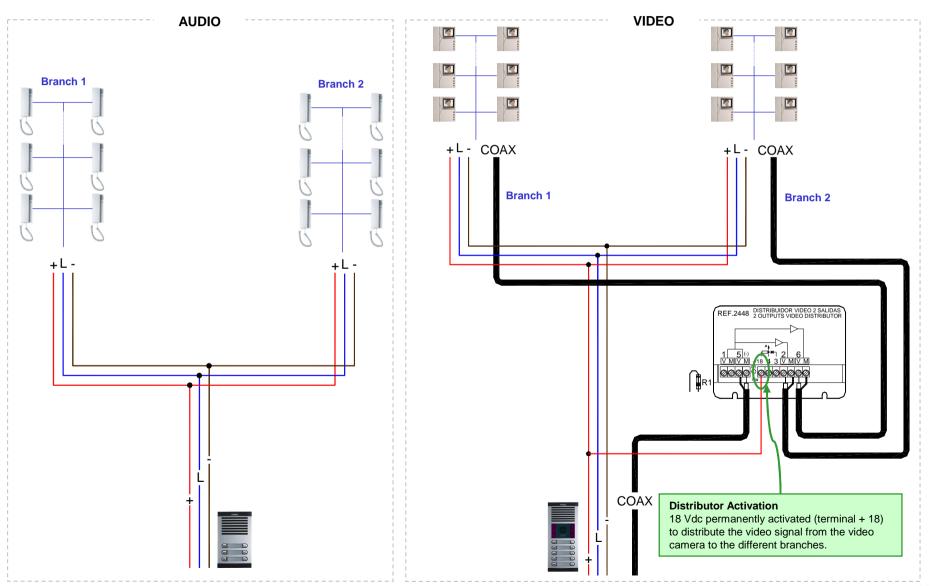






ADS system

ADS BUS Features – Distribution across various branches



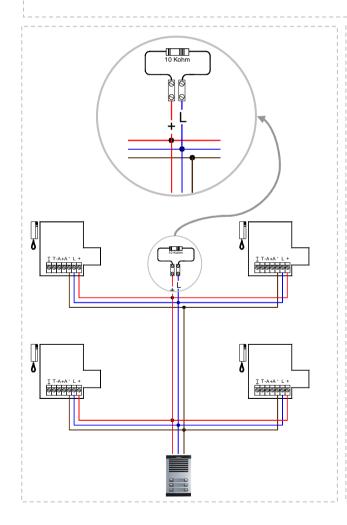


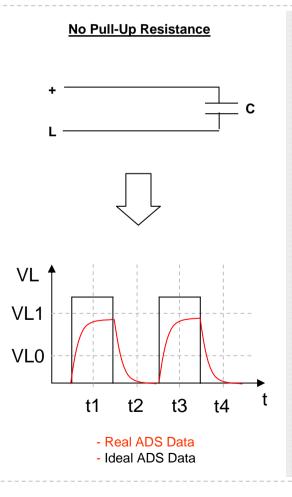
ADS system

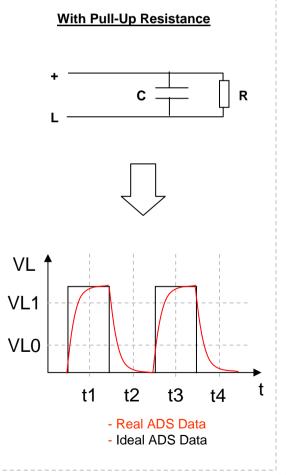
ADS BUS Features

Pull-Up Resistance (end of ADS backbone)

- In ADS systems "pull-up resistance" must be installed between "+" and "L" at the end of each branch, to reduce the capacitive effects of the line.
- Resistance Level: 10 Kohm (depending on the characteristics of the system, this value may vary)









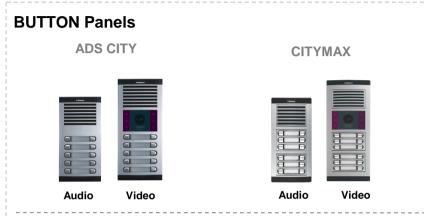
ADS system

ADS Panels



ADS system

ADS PANELS



Type of call: Using the button. Each residence is assigned a call button.





Type of call: Using Keypad.

The call is made by entering the call code assigned to each residence using the keypad



Common characteristics and components of ADS panels

<u>ADS Amplifier:</u> main element of the ADS panels. Manages the installation functions: call, communication, etc.... Video Camera: b/w and colour video camera for video door entry systems. Can be integrated into the panel.

Features

- CITY Panels: Requires a Call Extension Module based on 3 buttons (the rest of the panels do not need one).

- CITYMAX Panels: Independent Button Modules (from 1 to 6 buttons).

- **DIRECT Panels**: Access Control using keypad codes

- **DIGITAL Panels**: Access Control using keypad codes.

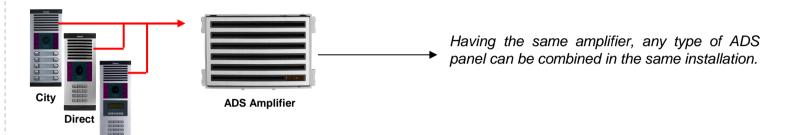
Digital Display with an electronic directory.

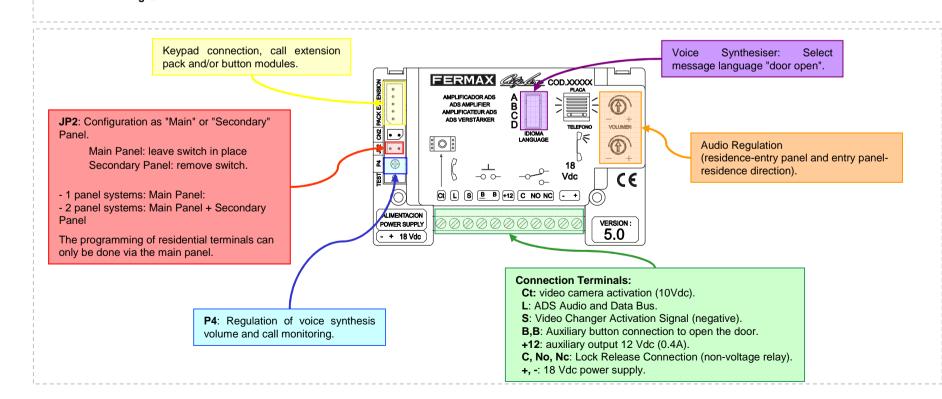


ADS system

ADS AMPLIFIER

Main element in the ADS panels. Manages the installation functions: call, communication, door opening, etc.

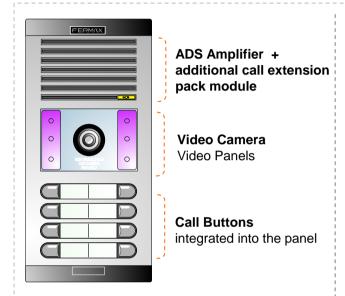






ADS system

ADS CITY PANELS

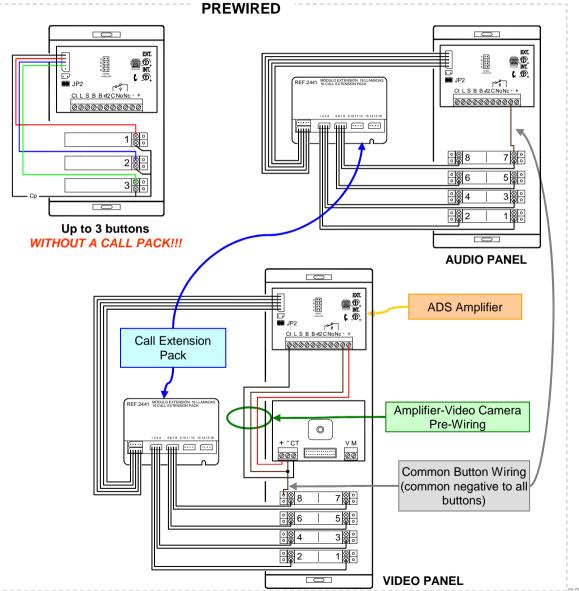


Main Features

- A *call extension pack* is required (1 every 16 buttons) to work together with the ADS amplifier in generating the residential call code.

If the number of buttons is ≤ 3 the call extension pack is not required.

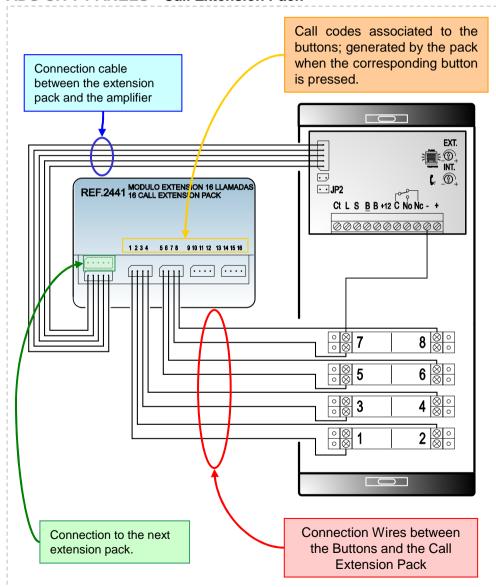
- It is recommended for systems of up to 50 residences (50 buttons) due to the space necessary for its installation.





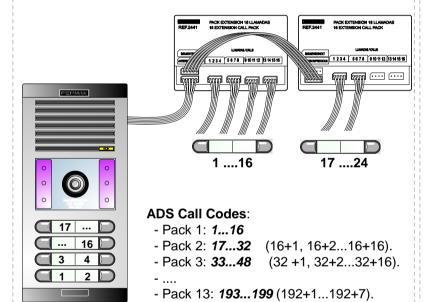
ADS system

ADS CITY PANELS - Call Extension Pack



Connection of various call extension packs

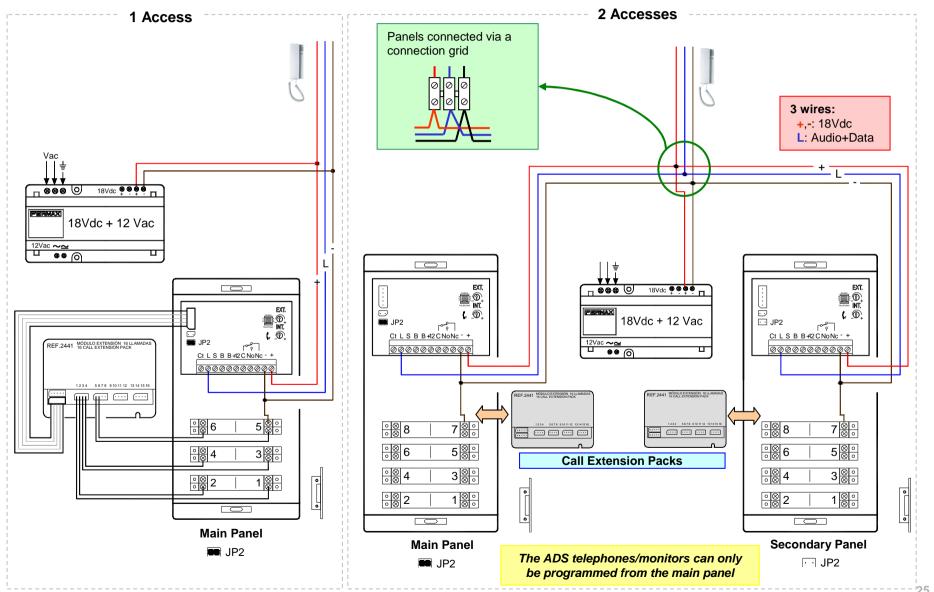
Where there are more than 16 buttons, various call extension packs must be used to cover all the buttons:





ADS system

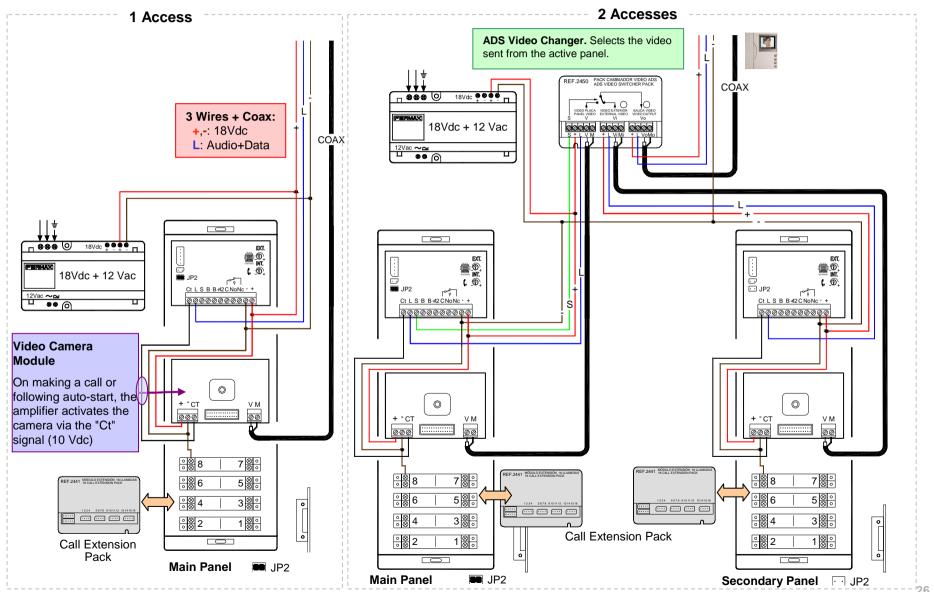
ADS CITY PANELS - AUDIO



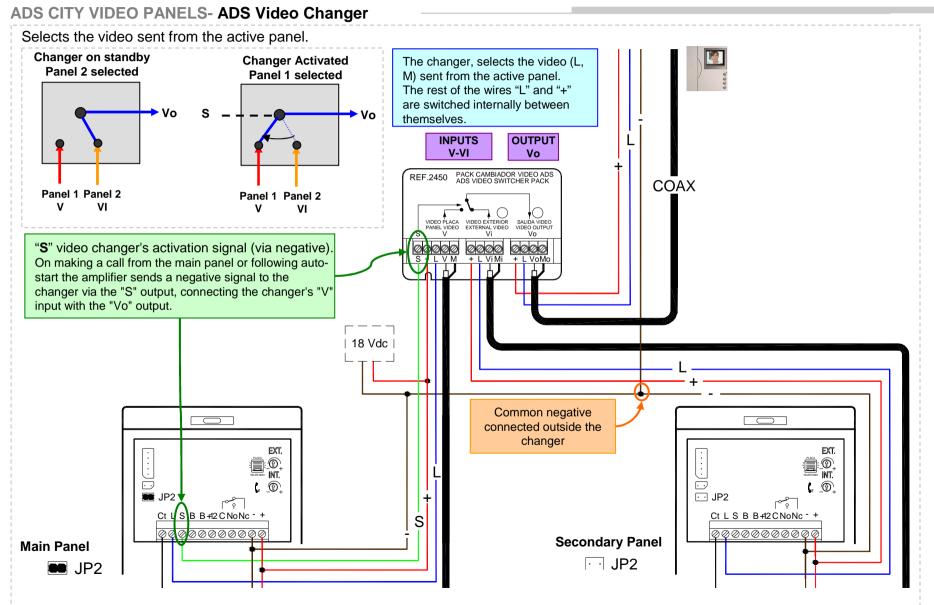


ADS system

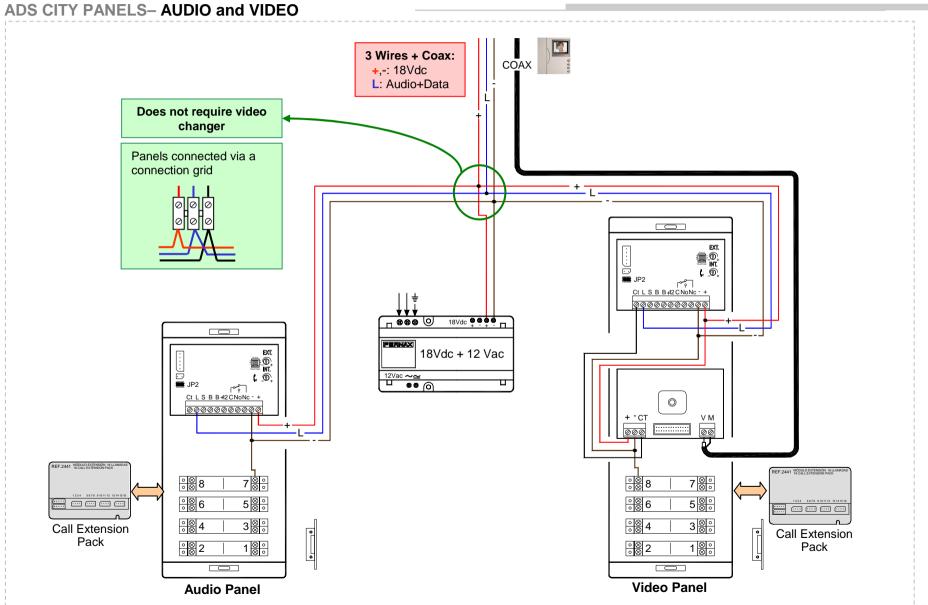
ADS CITY PANELS - VIDEO













ADS system

ADS CITYMAX PANELS

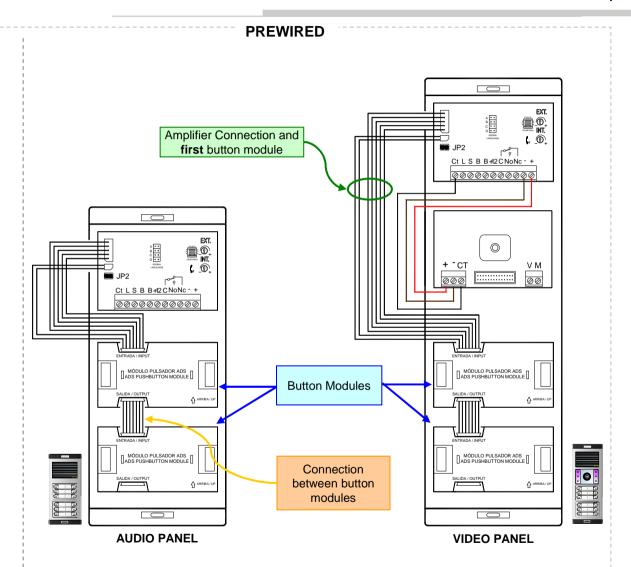


Main Features

- DO NOT require a call extension pack.
- Inter-Connectable Button Modules (from 1 to 6 buttons).

The **button modules** generate the residential call code sent by the amplifier via the "L" data line.

- It is recommended for systems of up to 50 residences (50 buttons) due to the space necessary for its installation.

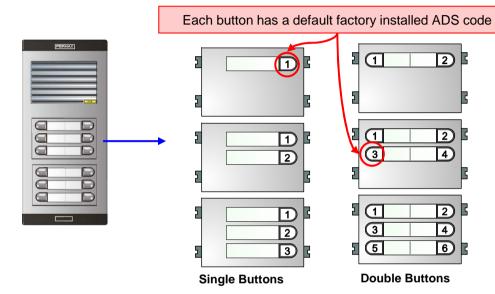




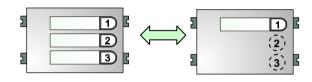
ADS system

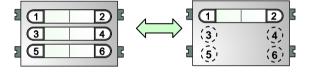
ADS CITYMAX PANELS - Button Modules

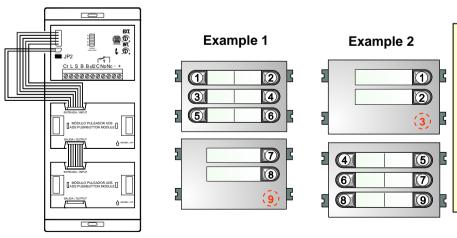
The *button modules* generate the residential call code (without the need for a call extension pack)



Independently of the number of buttons, each module incorporates the same electronics







ADS Call Codes:

Example 1:

- Module 1 (6 double buttons): 1 to 6 → usable 1,2,3,4,5 and 6.
- Module 2 (2 single buttons): 7 to 9 (6+1, 6+2..) → usable **7 and 8**.

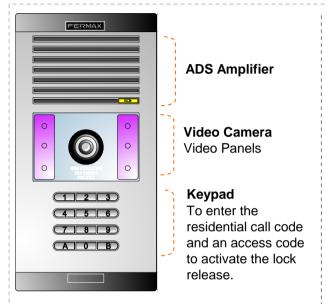
Example 2:

- Module 1 (2 single buttons): 1 to 3 → usable 1 and 2. Call address "3" is not used.
- Module 2 (6 double buttons): 4 to 9 (3+1, 3+2..) → usable **4,5, 6, 7, 8 and 9**.



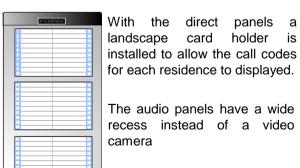
ADS system

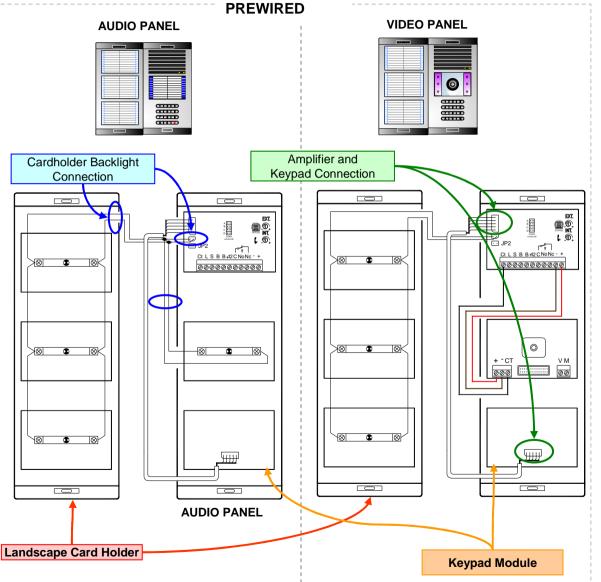
ADS DIRECT PANELS



-DO NOT require a call extension pack.

The keypad generates the residential call code sent by the amplifier via the "L" data line.





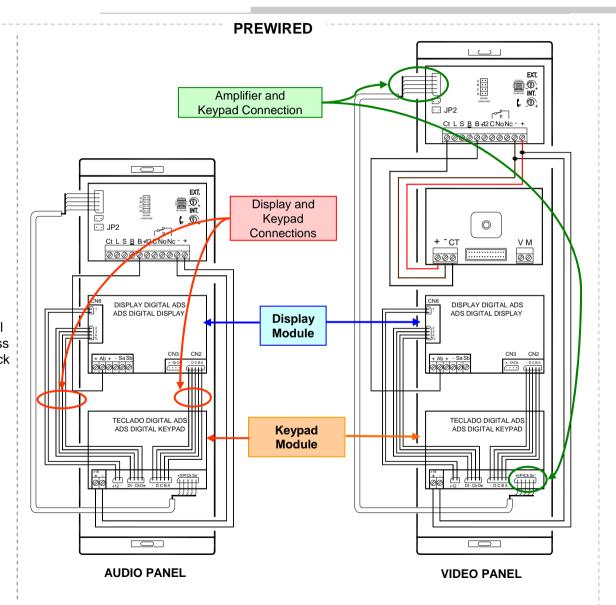


ADS system

ADS DIGITAL PANELS



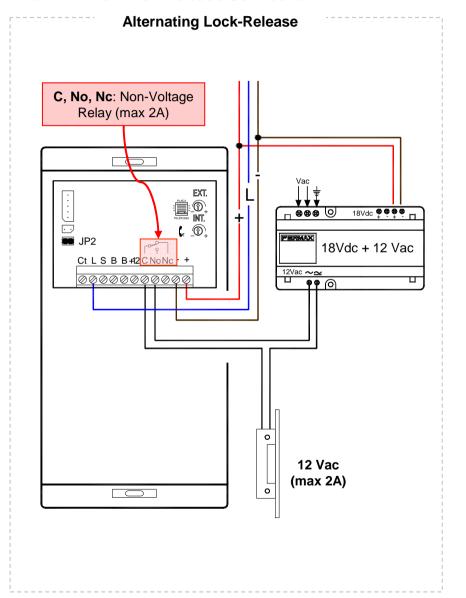
The keypad generates the residential call code sent by the amplifier via the "L" data line.

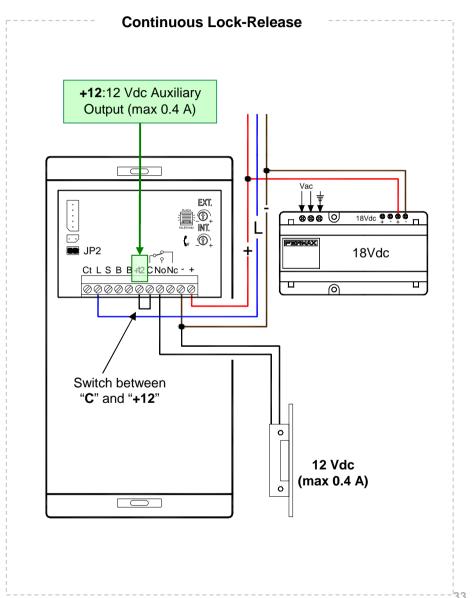




ADS system

ADS PANELS- Lock Release Connection







ADS system

ADS Guard Unit



ADS Guard Unit

ADS system

CENTRAL GUARD UNIT

In ADS systems its possible to install an ADS central guard unit in addition to audio/video accesses.

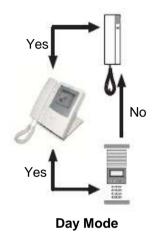


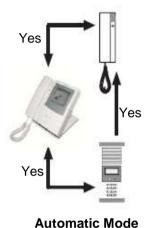
The ADS central guard units have 3 operating modes: Day, Automatic and Night Mode which are configured using the guard unit keypad.

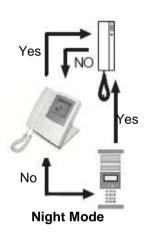
Available Functions:

- Lock Release
- Reception of calls from entry panels and residences.
- Communication with residences.
- Automatic communication between the guard unit and the panels.
- Establish communication between Panels and Residences.

Operating Modes



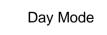




To configure the operating mode:

A333_ _

press the "A" key followed by "3" repeatedly until you have filled all the gaps



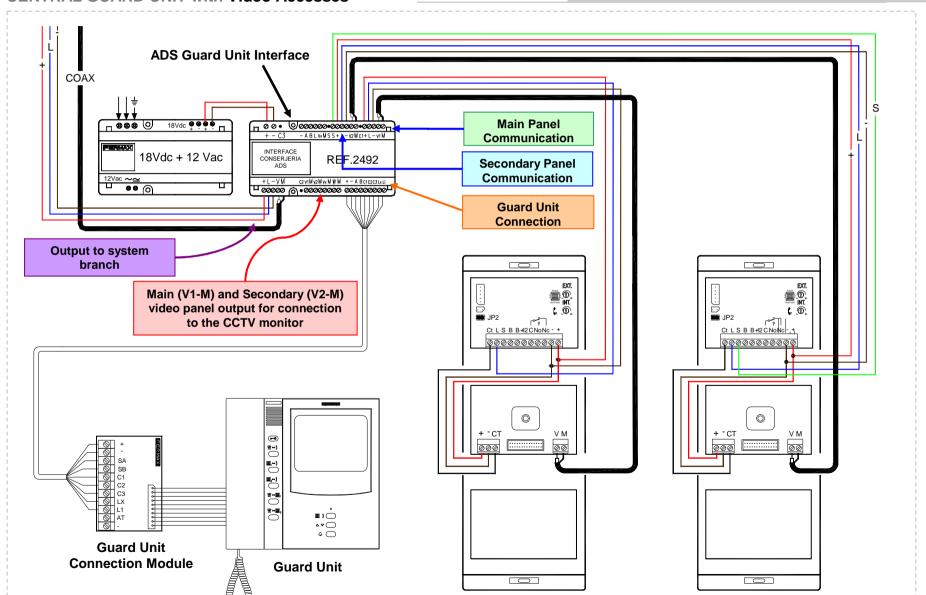
Use the arrow keys (under the display) to select the required mode.



ADS Guard Unit

ADS system

CENTRAL GUARD UNIT with Video Accesses

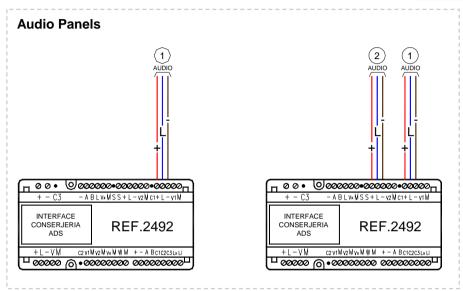


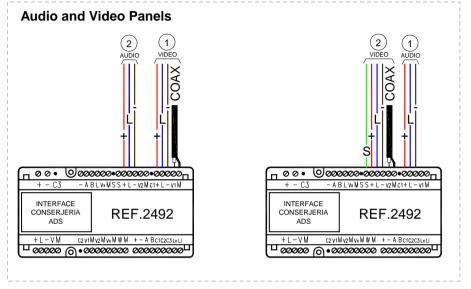


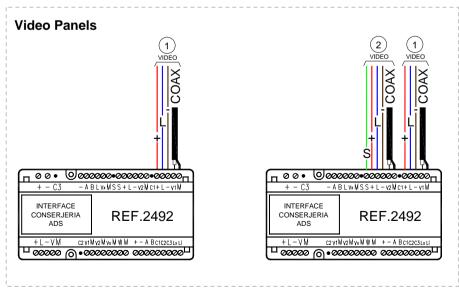
ADS Guard Unit

ADS system

CENTRAL GUARD UNIT - Panel Connections to Guard Unit Module







Main Panel
 Secondary Panel



ADS Guard Unit

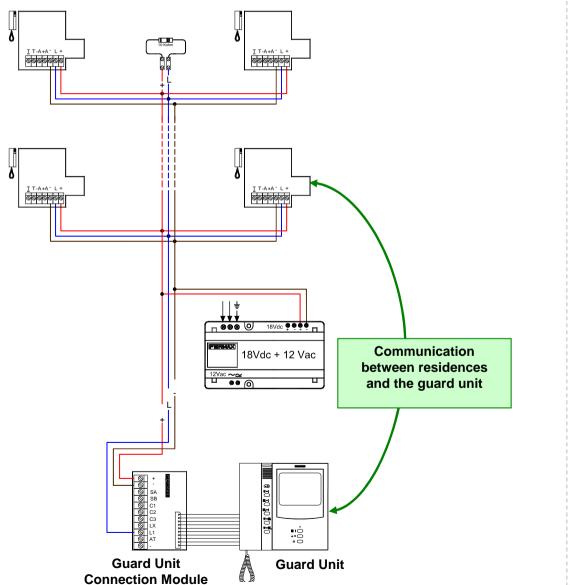
ADS system

CENTRAL GUARD UNIT - Intercommunication

RADIAL INTERCOMMUNICATION

Communication between the guard unit and the residences

Communication between residences is not possible





ADS system

Terminals



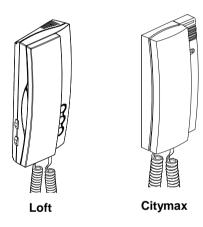
Terminals

ADS system

TELEPHONES and MONITORS

Specific terminals for the ADS system. Requires programming to become operational.

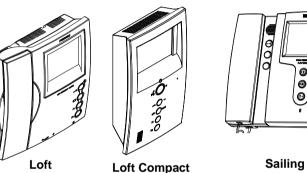
ADS Telephones



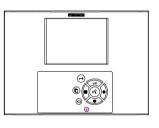
Available Functions:

- Lock Release
- Call Guard.
- Buttons for additional functions (in extra and complet models)

ADS Monitors







Olympo

etc...

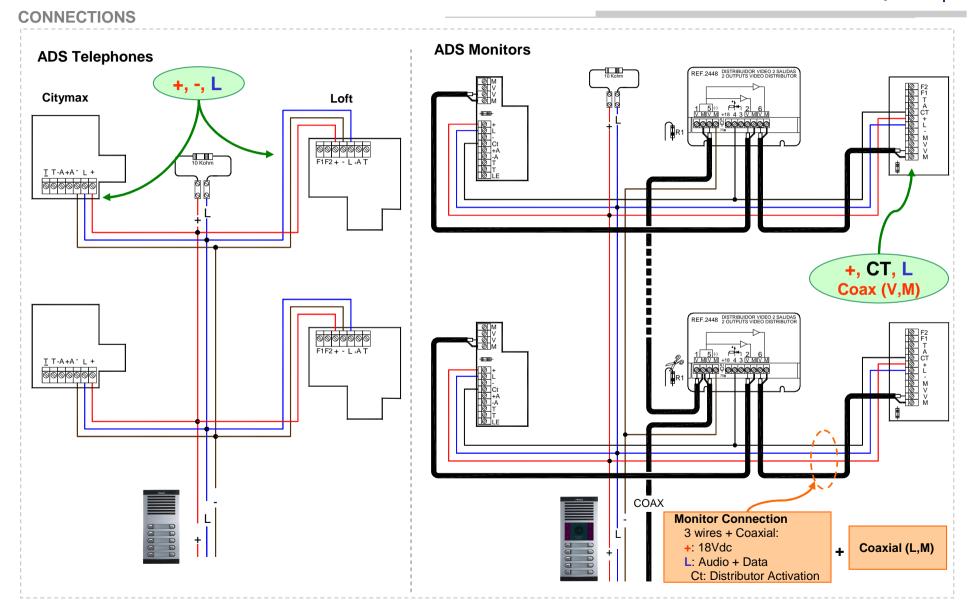
Available Functions:

- Lock Release
- Call Guard
- Main and Secondary Panel Auto-Start
- Buttons for additional functions



Terminals

ADS system



Terminals

ADS system

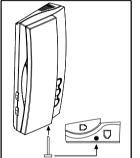
PROGRAMMING THE ADS TERMINALS

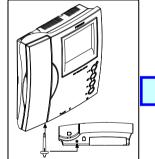
PROGRAMMING STEPS



Put the telephone or monitor into programming mode.

Terminals with a programming button:Press the programming button



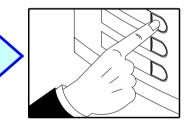


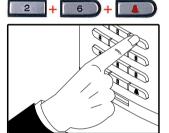


Press the call button or call code (on the keypad panels) that you want to assign to the terminal. Again, a confirmation tone is emitted.

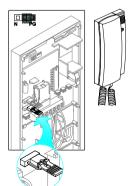


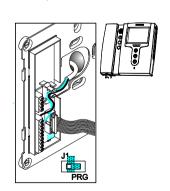
In terminals with a programming switch, you must return the switch to its initial position.





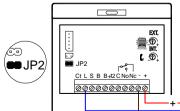
Terminals with a programming switch:Set the switch in the "PRG position

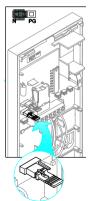


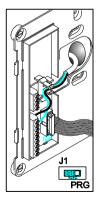


<u>IMPORTANT:</u> The programming of residential terminals can only be done from a panel configured as the main panel (JP2 switch installed).











ADS system

Power Supply



Power Supply

ADS system

Audio Installations

Video Installations

18Vdc

18Vdc

FERMAX Power Sources:

Ref. **4812**: 18Vdc/1.5A (DIN 6) Ref. **4813**: 12Vdc / 2A (DIN6) Ref. **4830**: 18Vdc/3.5A (DIN 6)

Ref. 4800: 12Vac / 1.5A (DIN4) (for alternating lock releases)

Ref. **4810**: 12Vac / 1.5A + 18 Vdc 1.5A (DIN10)

| | 999999 | | 100 Jan | 12 Vdc | 12 Vac | | |
|-----------------------------------------|--------|---|---------|--------|--------|----|----|
| 4830 18Vdc/3,5A | 1 | - | - | 1 | - | 80 | - |
| | - | 1 | - | 1 | - | - | 40 |
| | - | - | 1 | 1 | - | - | 40 |
| | - | - | - | - | - | 80 | - |
| | - | - | - | - | - | - | 40 |
| 4812 18Vdc/1,5A | 1 | - | - | 1 | - | - | - |
| | - | 1 | - | 1 | - | - | - |
| | - | - | 1 | 1 | - | 1 | - |
| | - | - | - | - | - | 60 | - |
| | - | - | - | - | - | - | 30 |
| 4810 18Vdc/1,5A 12Vac/1,5A | 1 | - | - | - | 1 | 48 | - |
| | - | 1 | - | - | 1 | - | 24 |
| | - | - | 1 | - | 1 | - | 24 |
| | - | - | - | - | - | 60 | - |
| | - | - | - | - | - | - | 30 |
| 4800 18Vac/1,5A | - | - | - | - | 2 | - | - |

The model and quantity of sources to be installed depend on the type of installation and the number of devices to be supplied by each source.



ADS system

Calculate a Quote



Calculate a Quote

ADS system

| First Step! Design the Inst | -Mation! | |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First the Inst | Audio Installations | Video Installations |
| Design | Obtain a Quote: | Obtain a Quote: |
| Accesses | - Audio Panel (1 or 2) - Call Extension Module (based on the panel model) - Surface or Flush Mounted Box - Lock Release | Video Panel (1 or 2) (according to Video Panel models = Audio Panel with recess + video camera) Call extension module (according to panel model) Surface or Flush Mounted Box Video Changer (if the two panels are video panels) Lock Release |
| | - ADS Guard Unit - Guard Unit Connection Module | - ADS Guard Unit - Guard Unit Connection Module |
| Backbone | - ADS Telephones | - Video distributors (2/4 outputs) - Monitors (colour or black and white) - Monitor connectors |
| Power Supply Backbone | No of 18Vdc/3.5A Power Sources = ADS/ 60 Telephones 12Vac/1.5A Sources= if a 12 Vac lock release is used | No of 18Vdc/3.5A Power Sources = ADS/ 40 Monitors 12Vac/1.5A Sources= if a 12 Vac lock release is used |



Obtain a Quote:

ADS system

Example – 1ADS Audio Panel **CityLine** to 40 telephones

Accesses

1 x 87015 - CityLine 7 Panel AP 210

<u>Backbone</u>

1 x 8706 - CityLine 7 Panel P 210

40 x 2451 - Basic ADS Telephone

General Power Supply

1 x 4830 – 18 Vdc 3.5 A Power Supply. 1 x 4800 – 12 Vac 1.5 A Power Supply.

3 x 2441 - Call Extension Module

2 x 8857 - S7 Flush Mounted Box

1 x 8829 - Set of Separators

1 x 3071 - 12 Vac Lock Release

Example – 1ADS Audio Panel **Direct** to 90 telephones

Accesses

Backbone

90 x 2451 – Basic ADS Telephone

General Power Supply

2 x 4830 – 18 Vdc 3.5 A Power Supply. 1 x 4800 – 12 Vac 1.5 A Power Supply

1 x 8820 - Landscape Cardholder

1 x 2457 - ADS Direct 1 Recess Panel

1 x 8613 - S5 Directory Panel

2 x 8855 - S5 Flush Mounted Box

1 x 8829 - Set of Separators

1 x 3071 - 12 Vac Lock Release

Example – 1ADS Audio Panel **Digital** to 90 telephones

Accesses

1 x 2416 - ADS Digital 1 Recess Panel

1 x 8820 - Landscape Cardholder 1 x 8857 - S7 Flush Mounted Box

1 x 3071 - 12 Vac Lock-Release

Backbone

90 x 2451 - Basic ADS Telephone

General Power Supply

2 x 4830 – 18 Vdc 3.5 A Power Supply. 1 x 4800 – 12 Vac 1.5 A Power Supply



Obtain a Quote:

ADS system

Example – 1ADS Video Panel CityLine to 40 B/W monitors

Accesses

1 x 8701**5** - CityLine 8 Panel AVP 208

1 x 8706 - CityLine 8 Panel P 212

1 x 8028 - B/W Video Camera Module

3 x 2441 - Call Extension Module

2 x 8858 - S8 Flush Mounted Box

1 x 8829 - Set of Separators

1 x 3071 - 12 Vac Lock Release

Backbone

40 x 3311 – ADS B/W Connector 40 x 3314 – ADS Loft Connector

20 x 2448 – 2 Output Video Distributor

General Power Supply

1 x 4830 – 18 Vdc 3.5 A Power Supply.

1 x 4800 – 12 Vac 1.5 A Power Supply.

Example – 1ADS Video Panel Direct to 90 B/W monitors

Accesses

1 x 2457 - ADS Direct 1 Recess Panel

1 x 8028 - B/W Video Camera Module

1 x 8613 - S5 Directory Panel

2 x 8855 - S5 Flush Mounted Box

1 x 8829 - Set of Separators

1 x 3071 - 12 Vac Lock Release

Backbone

90 x 3311 – Loft ADS B/W Monitor 90 x 3314 – ADS Loft Connector

45 x 2448 – 2 Output Video Distributor

General Power Supply

 $3 \times 4830 - 18 \text{ Vdc } 3.5 \text{ A Power Supply.}$

1 x 4800 – 12 Vac 1.5 A Power Supply.

Example – 1ADS Video Panel **Digital** to 90 COLOUR monitors

Accesses

1 x 2416 - ADS Digital 1 Recess Panel

1 x 2490 — COLOUR Video Camera Module

2 x 8857 - S7 Flush Mounted Box 1 x 3071 - 12 Vac Lock-Release

Backbone

90 x 3313 – Loft ADS COLOUR Monitor

90 x 3314 - ADS Loft Connector

45 x 2448 – 2 Output Video Distributor

General Power Supply

3 x 4830 – 18 Vdc 3.5 A Power Supply.

1 x 4800 – 12 Vac 1.5 A Power Supply.



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ADS system

Example – 2 ADS Audio Panels **CityLine** to 40 telephones

Accesses

2 x 8701**5** - CityLine 7 Panel AVP 210

2 x 8706 - CityLine 7 Panel P 210

6 x 2441 - Call Extension Module

4 x 8857 - S7 Flush Mounted Box 2 x 8829 - Set of Separators

2 x 3071 - 12Vac Lock Release

Backbone

40 x 2451 - Basic ADS Telephone

General Power Supply

1 x 4830 – 18 Vdc 3.5 A Power Supply.

1 x 4800 – 12 Vac 1.5 A Power Supply.

Example – 2 ADS Video Panels **Direct** to 90 B/W monitors

Accesses

2 x 2457 - 1 ADS Direct Recess Panel

2 x 8028 - B/W Video Camera Module

2 x 8613 - S5 Directory Panel

4 x 8855 - S5 Flush Mounted Box

2 x 8829 - Set of Separators

1 x 2450 - ADS Video Changer

1 x 3071 - 12 Vac Lock Release

Backbone

90 x 3311 - Loft ADS B/W Monitor

90 x 3314 – ADS Loft Connector

45 x 2448 – 2 Output Video Distributor

General Power Supply

3 x 4830 – 18 Vdc 3.5 A Power Supply.

1 x 4800 – 12 Vac 1.5 A Power Supply.

Example – 2 Panels, 1 Video and 1 Audio Direct (both) to 90 B/W monitors

Accesses

2 x 2457 - 2 ADS Direct Recess Panels

1 x 8028 - B/W Video Camera Module

2 x 8613 - S5 Directory Panels

4 x 8855 - S5 Flush Mounted Box

2 x 8829 - Set of Separators

2 x 3071 - 12 Vac Lock Release

Backbone

90 x 3311 – Loft ADS B/W Monitor

90 x 3314 - ADS Loft Connector

45 x 2448 – 2 Output Video Distributor

General Power Supply

 $3 \times 4830 - 18 \text{ Vdc } 3.5 \text{ A Power Supply.}$

1 x 4800 – 12 Vac 1.5 A Power Supply.



2 x 3071 - 12 Vac Lock Release

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ADS system

Example – 2 Panels + Central Guard Unit to 90 B/W monitors. Two panels, one Video and one Audio, ADS **Direct** (both) to 90 B/W monitors

| Accesses 2 x 2457 - 1 ADS Direct Recess Panel 1 x 8028 - B/W Video Camera Module 2 x 8613 - S5 Directory Panels 1 x 8820 - Landscape Cardholder 4 x 8855 - S5 Flush Mounted Box 2 x 8829 - Set of Separators 1 x 2563 - ADS Citymax Guard Unit 1 x 2492 - Guard Unit Connection Module | Backbone 90 x 3311 – ADS Loft B/W Monitor 90 x 3314 – ADS Loft Connector 45 x 2448 – 2 Output Video Distributor | General Power Supply 3 x 4830 – 18 Vdc 3.5 A Power Supply. 1 x 4800 – 12 Vac 1.5 A Power Supply |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 1 x 2492 — Guard Unit Connection Module | | |

Example – Central Guard Unit to 40 telephone (like a radial intercommunication system).

| Accesses | <u>Backbone</u> | General Power Supply |
|-----------------------------------|---------------------------------|---------------------------------------|
| 1 x 2563 - ADS Citymax Guard Unit | 40 x 2451 – Basic ADS Telephone | |
| | ' | 1 x 4830 – 18 Vdc 3.5 A Power Supply. |



Questions?

ADS system

How many of you are asleep?