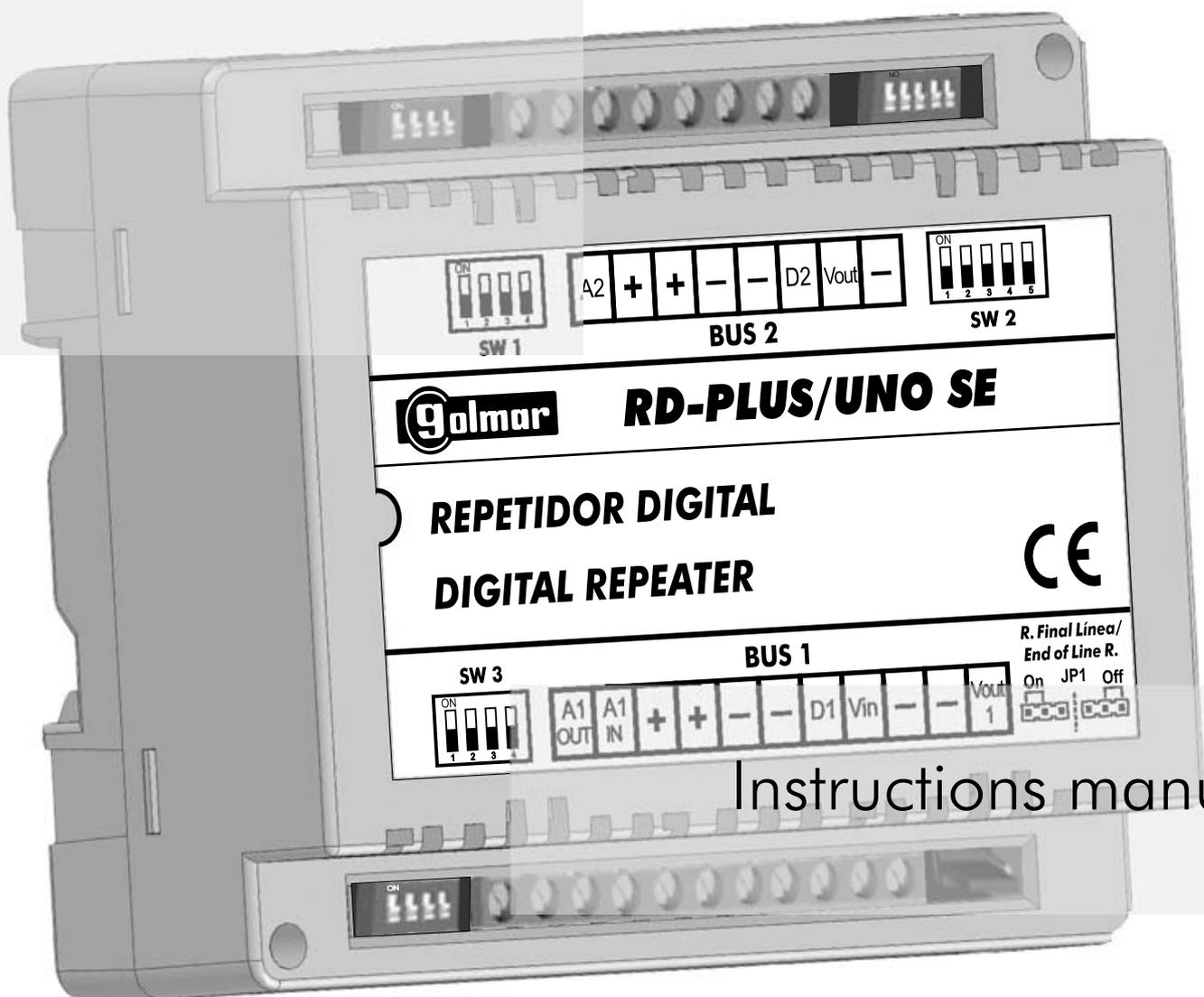




Cód. 50121601

# Digital Repeater

## **RD-PLUS/UNO SE**



Instructions manual

# INTRODUCTION

First of all we would like to thank and congratulate you for the purchase of this product manufactured by Golmar.

The commitment to reach the satisfaction of our customers is stated through the ISO-9001 certification and for the manufacturing of products like this one.

Its advanced technology and exacting quality control will do that customers and users enjoy with the legion of features this system offers. To obtain the maximum profit of these features and a properly wired installation, we kindly recommend you to expend a few minutes of your time to read this manual.

## SYSTEM CHARACTERISTICS

⇨ Digital repeater to plus and Uno system which permits the following functions:

➤ Repeats the digital signal:

Uno System, permits a number of Uno units (monitors/telephones) higher than 200, or to increase the distance between the door panel and the last unit when it is largest than 200 m.

Plus System, permits to increase the distance between the door panel and the last unit when it is largest than 1000 meters.

➤ Regenerates the video signal:

Video door installation Plus with distances largest than 500 meters, you have to place the repeater on a point which divide the global distance in similar portions in order to even up the great distance effects to the quality of the video signal, (Recommended to install a repeater every 300 m.).

➤ Separates the audio:

Large residential complexes with General door panels and with or without Plus/Uno Inner door panels, it allows to solve problems of low volume on the communication with audio feedback due to a large length (summation) of installed cable. **For this application contact with your distributor.**

⇨ The maximum number of repeaters to be connected in daisy chain is three.

## SAFETY PRECAUTIONS

⇨ The installation and handling of the converter must be performed by **authorized personnel** and in the **absence of electrical current**.

⇨ Do not use excessive force when tightening the repeater connection block screws.

⇨ The entire installation must be at least 40cm away from any other installation.

⇨ Install the repeater in a dry and protected place without risk of drip or water projections.

⇨ Avoid placing the repeater near sources of heat, moisture, in dusty locations or smoky environments.

⇨ Do not block ventilation holes of the unit so that air can circulate freely.

⇨ To avoid damage, the converter has to be firmly fixed.

## STARTING RECOMMENDATIONS

⇨ Do not use excessive force when tightening the repeater connection block screws.

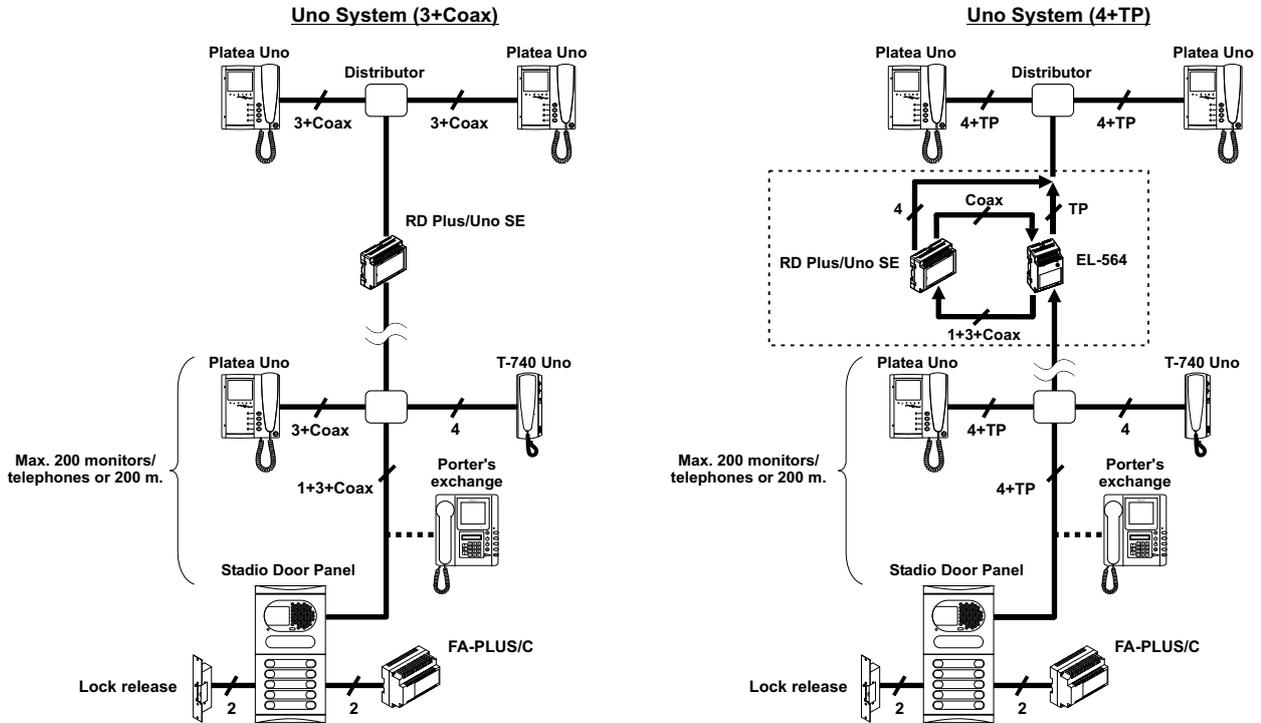
⇨ Before connecting the system, check the connections between door panel, repeater, transceiver, monitors, telephones and the power supply connection.

⇨ The entire installation must be at least 40cm away from any other installation.

⇨ Always follow the instructions of this manual.

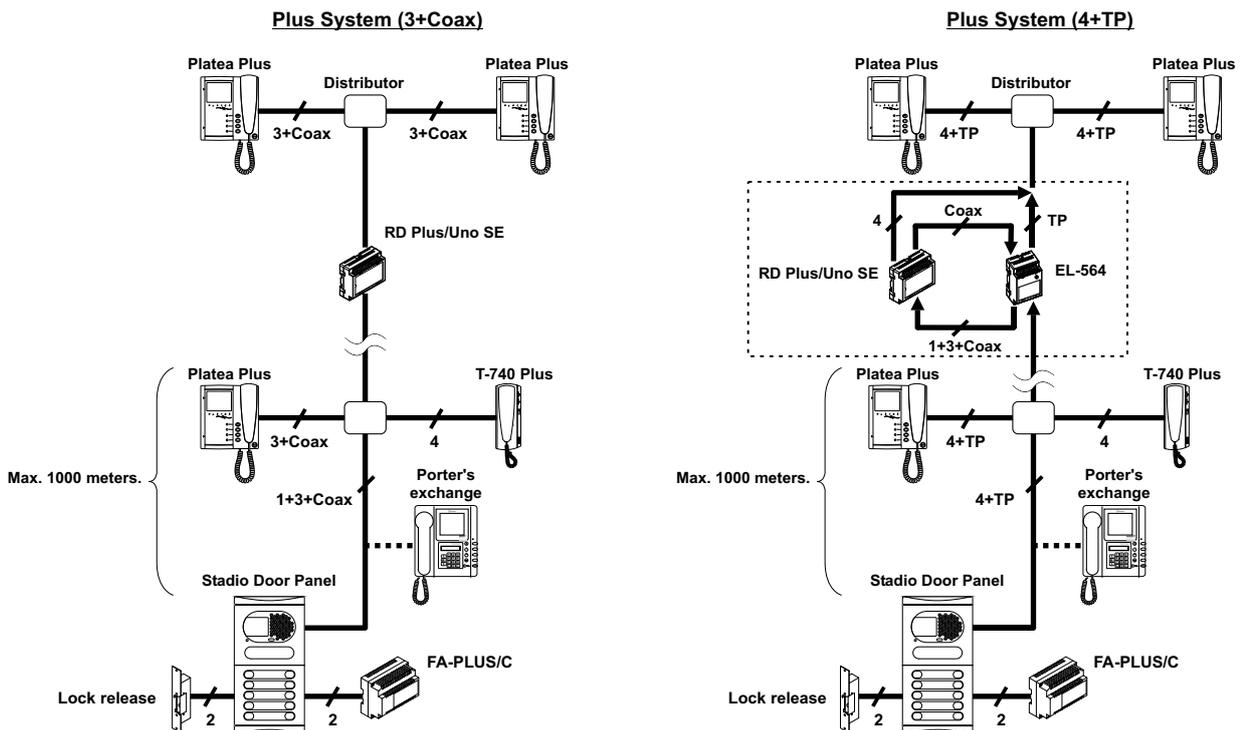
**Uno System.**

Systems with Platea Uno monitors and/or T-740 Uno and T-940 Uno telephones where the number of units is higher than 200, or where the distance from the door panel to the last unit is largest than 200 meters.



**Plus System.**

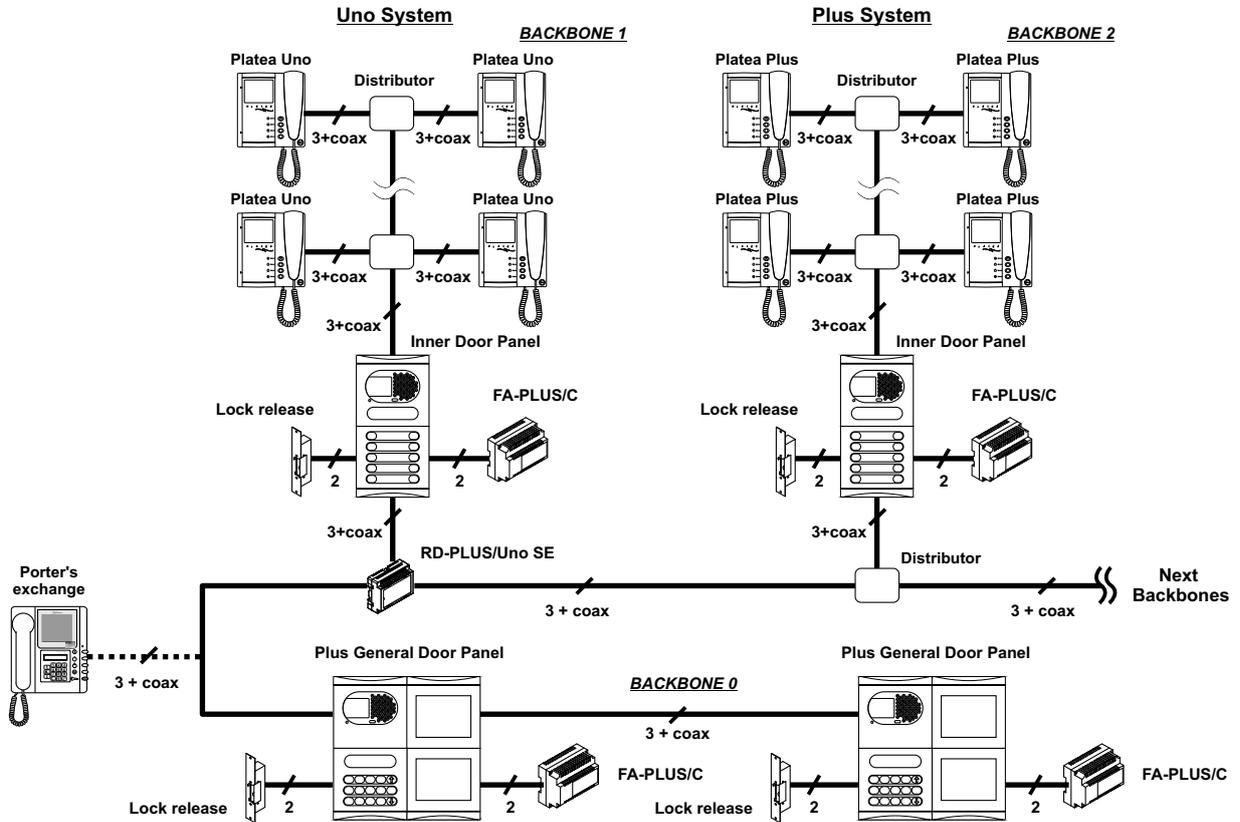
Systems with Platea Plus monitors and/or T-740 Plus and T-940 Plus telephones where the distance from the door panel to the last unit is largest than 1000 meters.



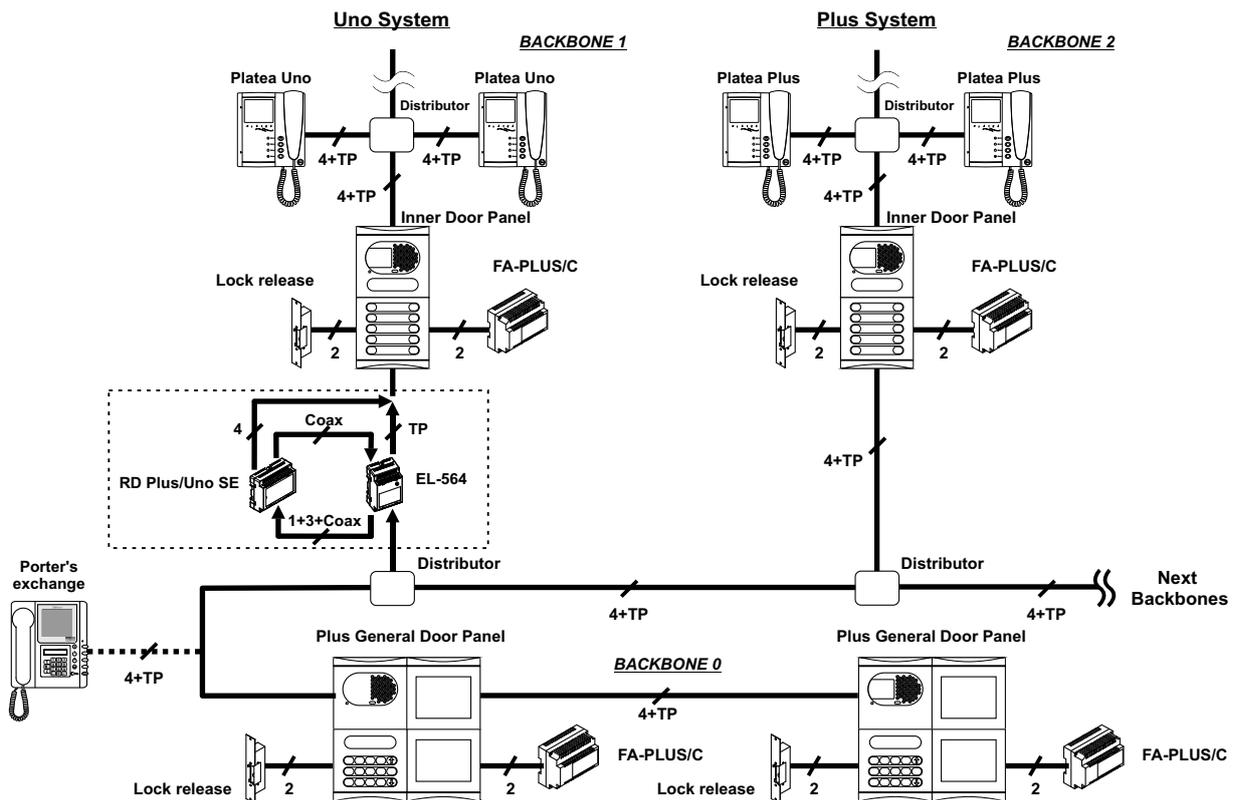
## General door panel Systems.

Systems with general door panels, there must install a repeater RD-Plus/Uno SE before of every inner door panel with Uno installation.

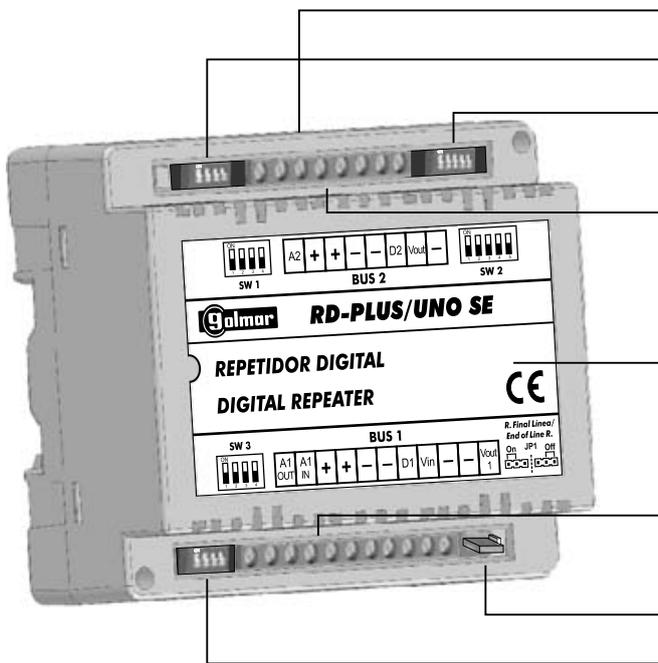
### Installation (3+Coax)



### Installation (4+TP)



## Description of the repeater.



DIN rail latch release.

Configuration dip switch **Sw1**.

Configuration dip switch **Sw2**.

**Bus 2** connection block.

Label.

**Bus 1** connection block.

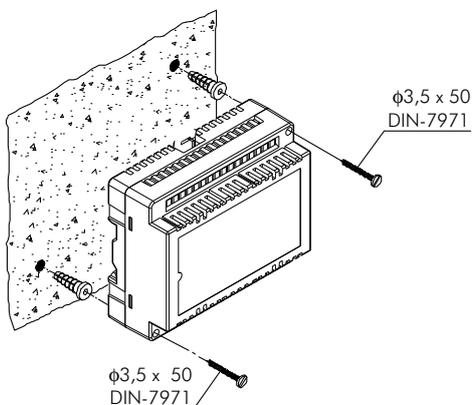
End of line configuration jumper **JP1**.

Configuration dip switch **Sw3**.

## INSTALLATION

### Detail of the repeater installation.

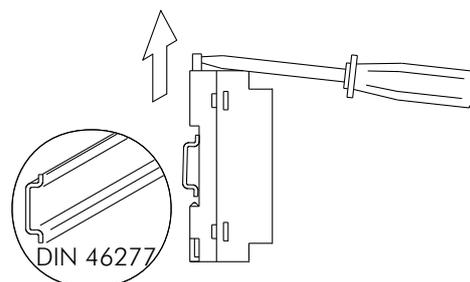
Install the repeater in a dry and protected place without risk of drip or water projections. To avoid damage, the repeater must be firmly fixed.



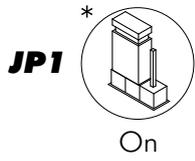
The installation or modification the repeater, must be performed **in the absence of electrical current**. The installation and handling of the repeater must be performed by **authorized personnel**.

To install the repeater directly on the wall, drill two holes of  $\varnothing 6\text{mm}$ . and insert the wallplugs. Fix the repeater with the specified screws.

The repeater can be installed on a DIN guide (6 elements), pressing it lightly. To extract the repeater from the DIN guide, use a plain screwdriver to lever the flange as shown in the picture.

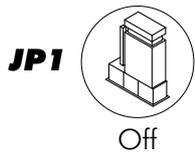


**D**escription of the configuration jumper.



**End of line resistor.**

Set to On if the video cable (coaxial) ends in the "BUS 1" side of the digital repeater.



**Resistencia final de línea.**

Set to Off if does not end the video cable (coaxial) in the "BUS 1" side of the digital repeater.

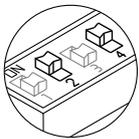
\*Factory default

**C**onfiguration of the repeater.

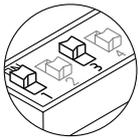
Use dip-switches **Sw1**, **Sw2** and **Sw3** to configure the repeater.

**Dip-switch Sw2:**

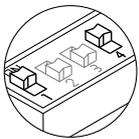
Depend on the type of units connected to the repeater and the function mode of the audio separator (separator or separator with capacitance compensation of the audio line).



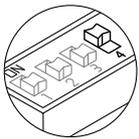
"Uno" units connected to input and output.



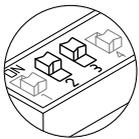
"Plus" units connected to input and output.



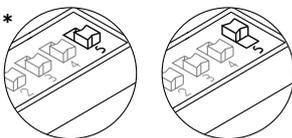
"Plus" units connected to input and "Uno" units connected to output.  
Installation with "Plus" General door panels and "Uno" Inner door panels, configure with this mode **only the repeater of the first "Uno" Inner door panel.**



"Plus" units connected to input and "Uno" units connected to output.  
Installation with "Plus" General door panels and "Uno" Inner door panels, configure with this mode **the repeater of the next "Uno" Inner door panel.**



"Uno" units connected to input and "Plus" units connected to output.



Placed to OFF, the repeater is configured as audio separator mode.  
Set to ON, the repeater is configured as audio separator mode with capacitance compensation of the audio line. (See configuration dip-switches **Sw1** and **Sw3**, page 34).

\*Factory default

**Continue**

**Coming from previous page****Dip-switches Sw1 and Sw3:**

With the Sw2-5 switch set to ON (separator mode with capacitance compensation), it allows to compensate the increase in the capacitance of the audio line, due to installations where there are large distances (summation) of installed cable.

The dip-switch Sw3 compensates the audio line (capacitance) connected in the Bus 1 (A1) of the repeater. Depending on Golmar cable used and the length (summation) of installed cable in the Bus 1 (A1) of the repeater, set the switches, as it is shown on the following chart.

The dip-switch Sw1 compensates the audio line (capacitance) connected in the Bus 2 (A2) of the repeater. Depending on Golmar cable used and the length (summation) of installed cable in the Bus 2 (A2) of the repeater, set the switches, as it is shown on the following chart.

<u>Dip-switches Sw1 and Sw3</u>				<u>Cable / Length</u>		
1	2	3	4	RAP-5130	RAP-8415	RAP-4130
OFF	OFF	OFF	OFF	100 m.	100 m.	100 m.
ON	OFF	OFF	OFF	150 m.	350 m.	350 m.
OFF	ON	OFF	OFF	350 m.	750 m.	750 m.
ON	ON	OFF	OFF	500 m.	1100 m.	1100 m.
OFF	OFF	ON	OFF	700 m.	1500 m.	1500 m.
ON	OFF	ON	OFF	850 m.	1850 m.	1850 m.
OFF	ON	ON	OFF	1000 m.	2250 m.	2250 m.
ON	ON	ON	OFF	1200 m.	2600 m.	2600 m.
OFF	OFF	OFF	ON	1500 m.	3350 m.	3350 m.
ON	OFF	OFF	ON	1650 m.	3700 m.	3700 m.
OFF	ON	OFF	ON	1850 m.	4100 m.	4100 m.
ON	ON	OFF	ON	2000 m.	4400 m.	4400 m.
OFF	OFF	ON	ON	2200 m.	4850 m.	4850 m.
ON	OFF	ON	ON	2350 m.	5200 m.	5200 m.
OFF	ON	ON	ON	2550 m.	5600 m.	5600 m.
ON	ON	ON	ON	2700 m.	5950 m.	5950 m.

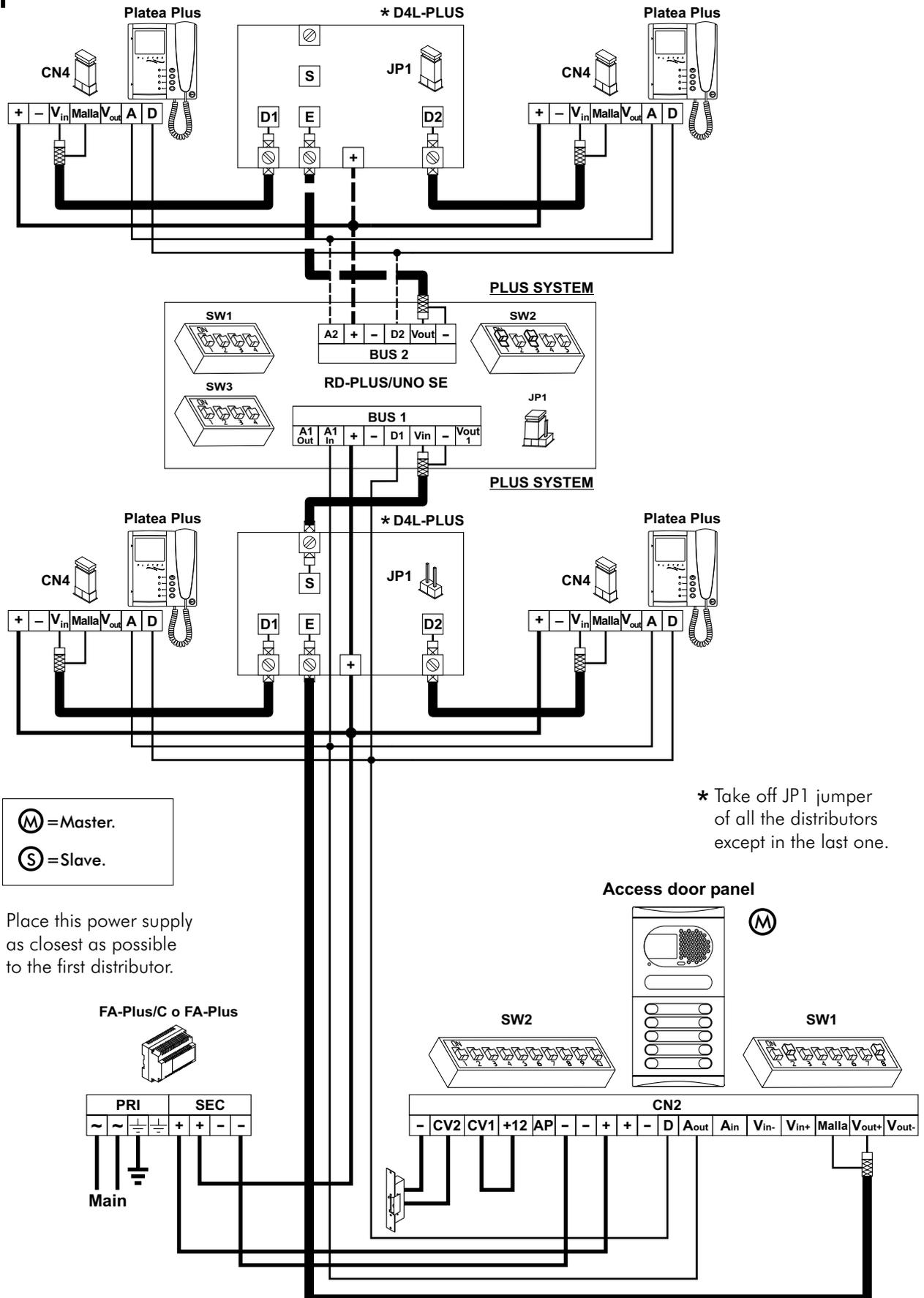
**Golmar cable (capacitance):**

RAP-5130 cable: 10 nF/100 m.

RAP-8415 cable: 4,5 nF/100 m.

RAP-4130 cable: 4,5 nF/100 m.

**P**lus video system with repeater and coaxial cable.



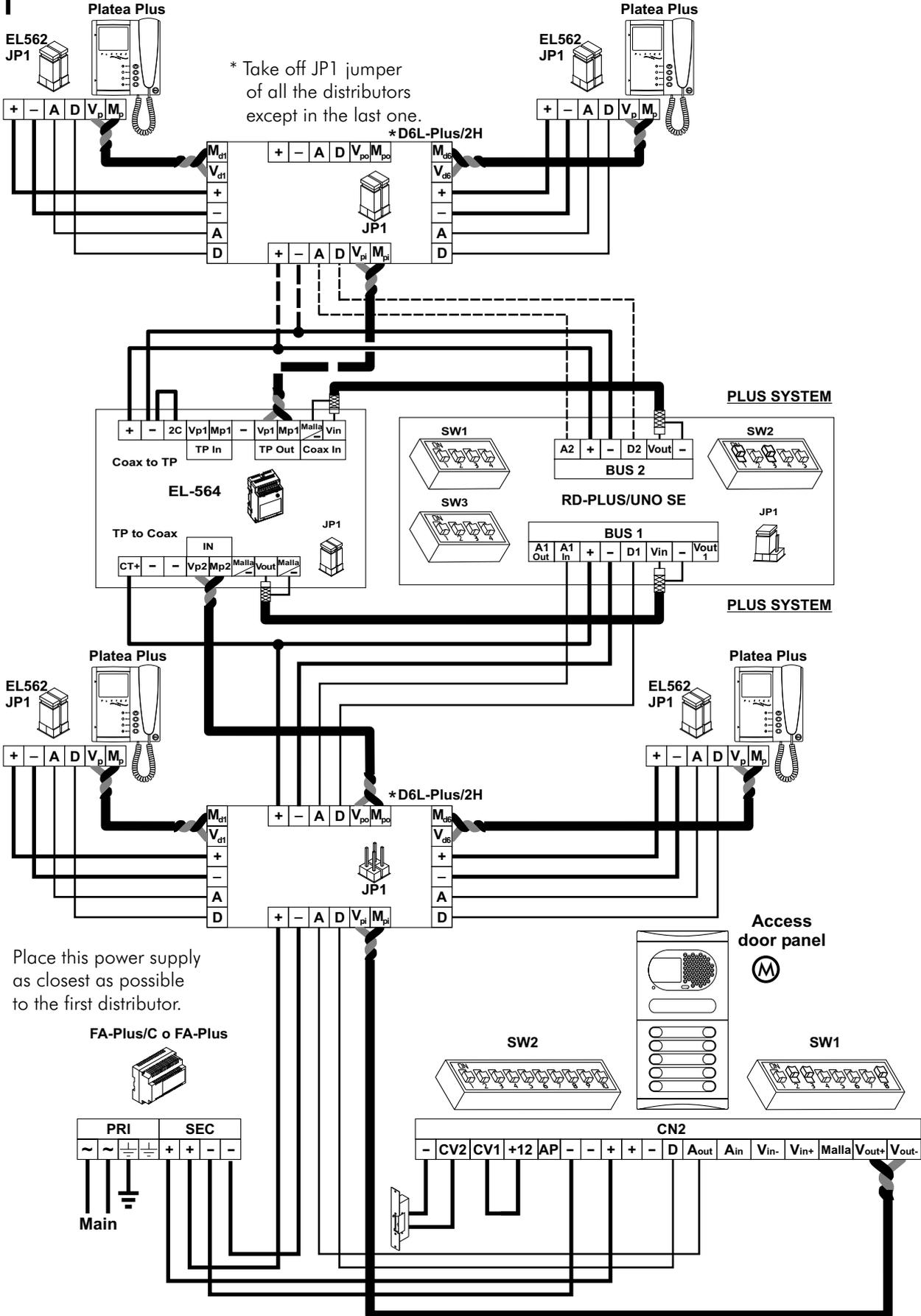
(M) = Master.  
(S) = Slave.

Place this power supply as close as possible to the first distributor.

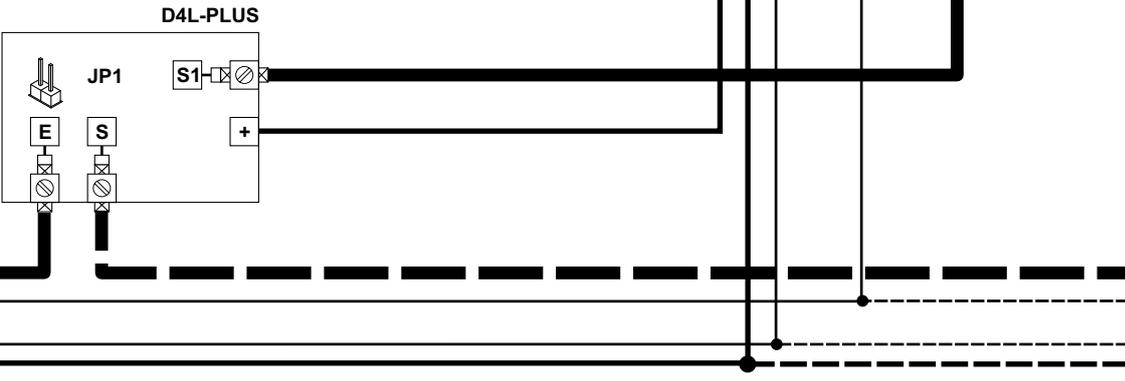
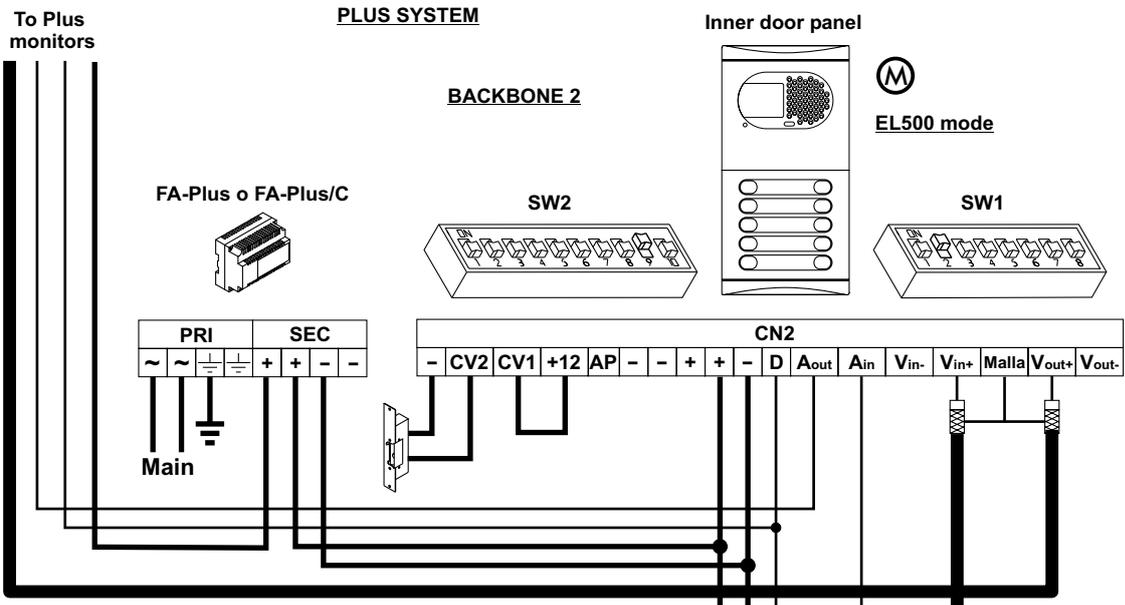
\* Take off JP1 jumper of all the distributors except in the last one.

**IMPORTANT:** To configure and to program each equipment, see the appropriate instruction book.

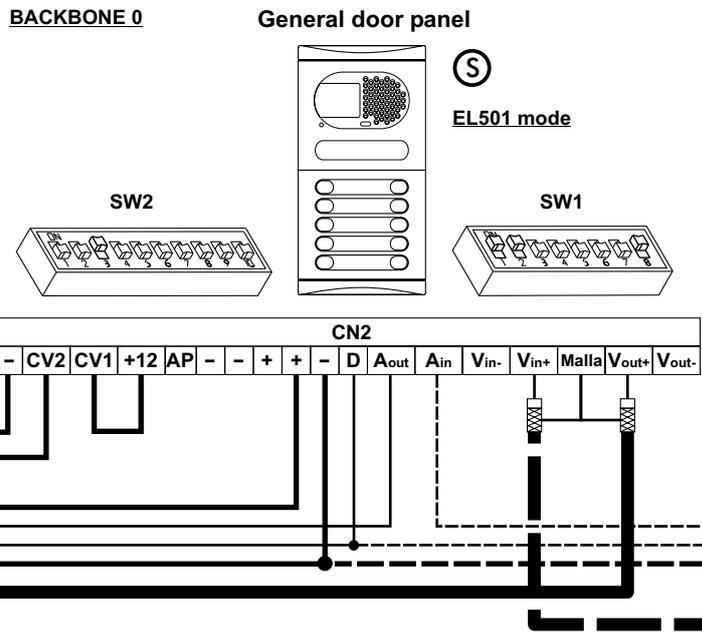
## Plus video system with repeater and without coaxial cable.



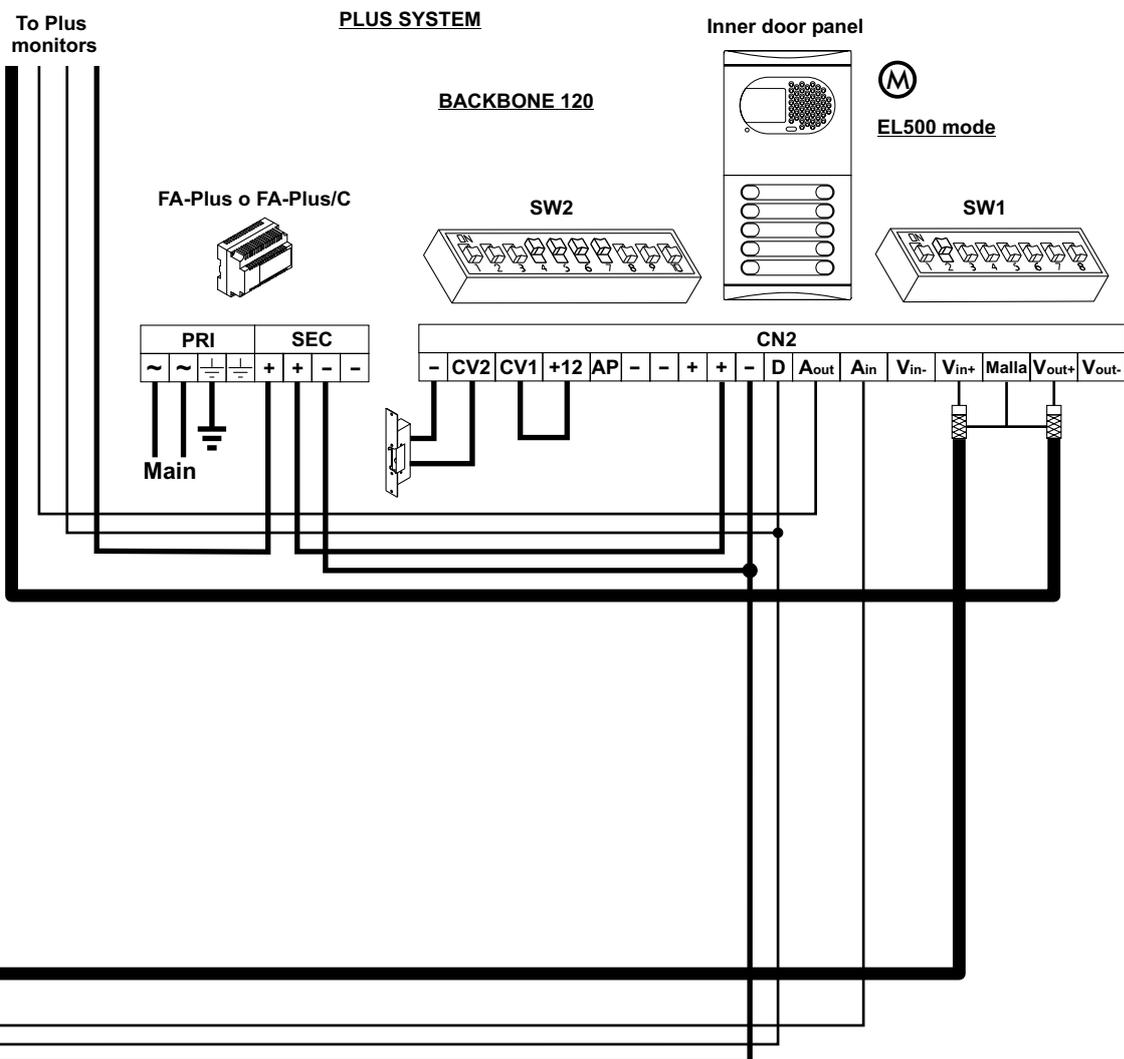




Continues in the following page







## V Video installation with general door panel to large residential complexes.

### IMPORTANT NOTES:

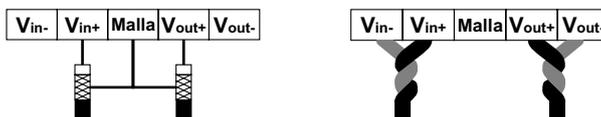
The installation diagram shows the connection of a video system with two general door panels and up to 120 inner door panels (backbones/buildings).

Install a repeater RD-Plus/Uno SE before each Inner door panel with Uno system.

In video systems use a D4L-Plus distributor before each inner building except in the last one. Take off JP1 jumper of all the distributors except in the last one.

In video systems with twisted pair use the D6L-Plus/2H distributor instead of D4L-Plus distributor. Take off JP1 jumper of all the distributors except in the last one. Add a negative in the inner building installation riser, (see page 36).

Below shows the connection of the twisted pair instead of coaxial cable.

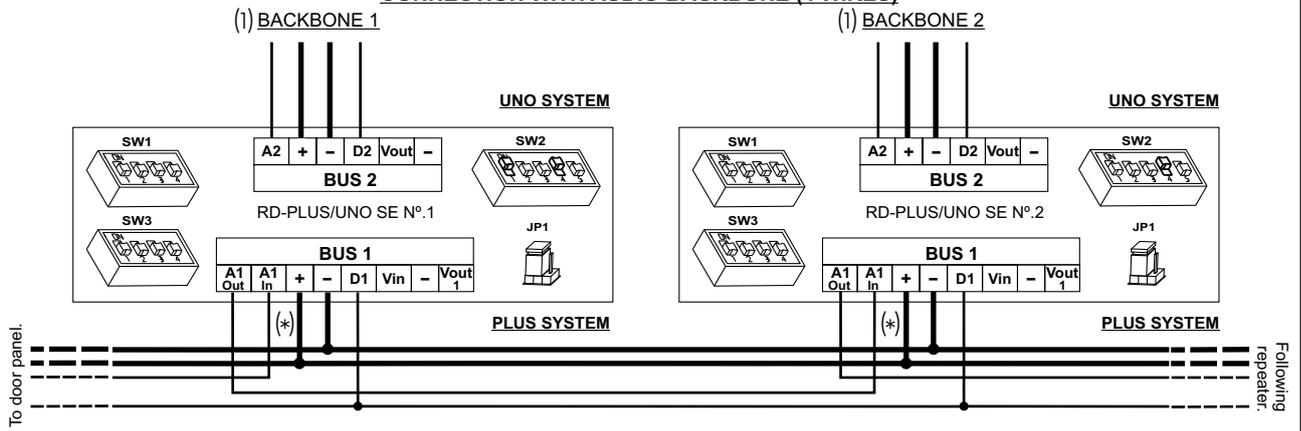


**IMPORTANT:** To configure and to program each equipment see the appropriate instruction book.

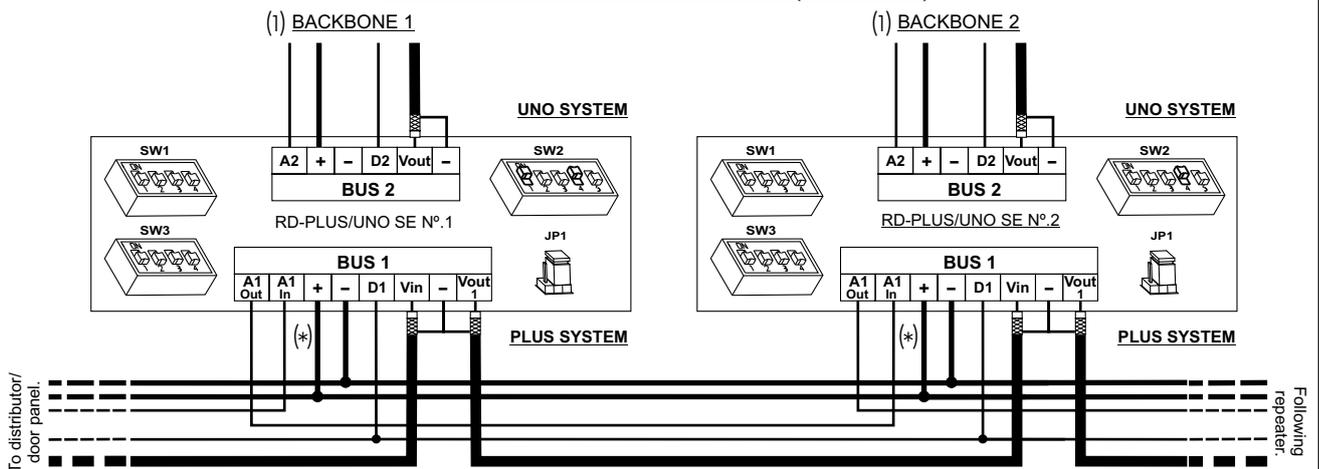
**G**eneral door panels (with repeater for separate the audio line).

Repeater connection (for separate the audio line) in large residential complexes with General door panels with or without "Plus/Uno" Inner door panels like villas, housing development, etc.; it allows to solve problems of low volume on the communication with audio feedback due to a large length (summation) of installed cable. **For these applications contact with your distributor.**

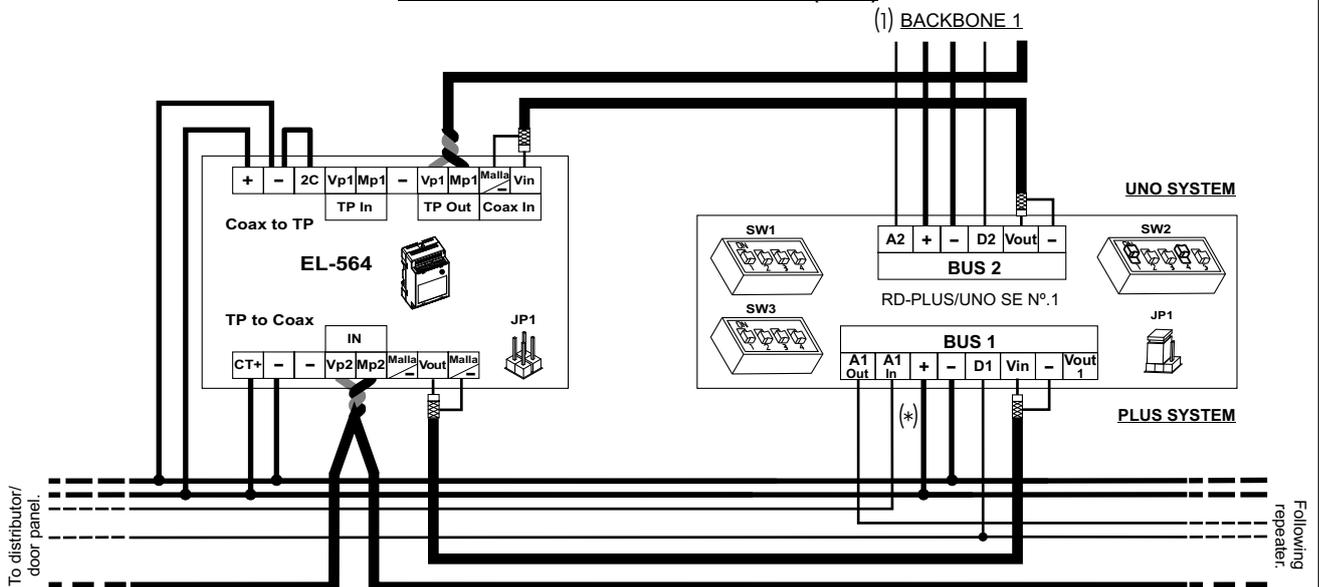
### CONNECTION WITH AUDIO BACKBONE (4 WIRES)



### CONNECTION WITH VIDEO BACKBONE (3+COAXIAL)



### CONNECTION WITH VIDEO BACKBONE (4+TP)



(\*) Do not connect this wire (+) with the repeater if there is in the (1) Backbone an Inner door panel.

**IMPORTANT:** To configure and to program each equipment see the appropriate instruction book.



**1141 Budapest, Fogarasi út 77.**      **1095 Budapest, Mester utca 34.**  
Tel.: \*220-7940, 220-7814, 220-7959,      Tel.: \*218-5542, 215-9771, 215-7550,  
220-8881, 364-3428 Fax: 220-7940      216-7017, 216-7018 Fax: 218-5542  
Mobil: 30 531-5454, 30 939-9989      Mobil: 30 940-1970, 30 959-0930

**[www.golmar.hu](http://www.golmar.hu)**

**E-mail: [info@delton.hu](mailto:info@delton.hu) Web: [www.delton.hu](http://www.delton.hu)**