sistema video 4+n

*video system 4+n*

# SYNTHESI 2000

AMPLYVOX

ED. 1-2004

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| **VIDEO DOOR ENTRY SYSTEM SYNTHESI ( 4+n )** | | |
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**NOTE**

a) AMPLYVOX S.p.A suggests to use original components only.
b) AMPLYVOX S.p.A. reserves the right to modify the design, construction, composition and equipment as it shall think fit without notifying the buyer and to supply products which may not be in strict accordance with agreed specifications.

TO FACILITATE THE READING OF THE DIAGRAM, TERMINAL DATA MAY NOT CORRESPOND TO THE POSITION INDICATED ON THE EQUIPMENT.

TO AVOID DAMAGE TO THE PRINTED CIRCUIT, WE SUGGEST THAT TERMINALS ARE NOT OVER TIGHENED.

# LEGEND :

**Y** DOOR OPENER BUTTON

**J** APARTMENT CALL

**S.E.** ELECTRIC LOCK 12Vac – 18VA

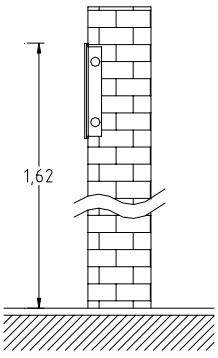
**R** CHARGE RESISTOR 75 ohm ½ W

⊗ NAME LABEL FESTOON BULB 24V – 3W

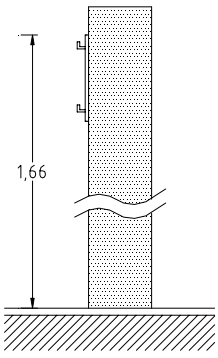
| **Section of wires** | | | | |
|---|---|---|---|---|
| **Distance** | **Monitor** | | | **Power supply** |
| | **+ O** | **R X CP** | **1 2** | **F H +F OH** |
| 50 mt. | 1 mm² | 0.5 mm² | 0.3 mm² | 1.5 mm² |
| 100 mt. | 1.5 mm² | 1 mm² | 0.3 mm² | 2 mm² |
| 200 mt. | 2.5 mm² | 1.5 mm² | 0.3 mm² twisted | 2.5 mm² |

**SUGGESTED INSTALLATION HEIGHTS :**

Video entrance panel
(code 806…/n)
(Mosaico)




Monitor wall mount bracket
(code 8435/5)



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**Suggestions for the Correct installation**

1) Do not execute any connection, replacement or operation with the system powered.

2) Be carefull installing the external video entrance panel to the right indicated height and avoid installing the camera group in direct view of sunlight.

3) Do not run the cables of the video door system in the same duct of the mains network.

4) There are more than one “H” terminals on the equipments, it makes no difference which “H” terminal is used.

5) The CCD video camera is normally supplied with infrared leds built in, to allows a correct vision of the visitor.

6) To supply the name label festoon bulbs in the entrance panel a dedicated trasformer and its wires connection are suggested.

**Preliminary checks**

Before main connections:

1) Check that the connections are made following the drawing supplied with the equipment.

2) Check that no short circuit exists between terminals “H” and “+F”.

3) Check that no short circuit exists between terminals “O” and “+”.

4) The wires “1” and “2” starting from the camera group must present a resistance of about 75 ohms.
Note: this measurement is not valid for the single residence video kit.

**Test of operations**

1) Power the system.

2) Push the call button of the external video entrance panel and check if :
- the electronic call sounds at the monitor.
- the monitors image is clear, stable and defined.
- the image needs regulating (operate on brightness and contrast controls).

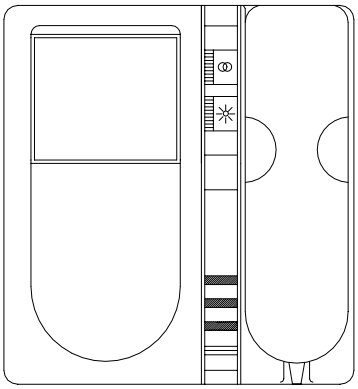
3) Wait for the automatic turn off of the monitor, then repeat the call to the other apartments.
A special circuit in the camera group avoids the simultaneous turn on of more than one monitor.

5) The phonic test must be effected talking at a distance of 30 cms. from the external video entrance panel.
The volume of the amplifiers in the external audio unit is normally factory set, however if the amplification proves to be too high or too low, this can be adjusted accordingly via the two potentiometers “A” and “B” which can be found at the back of the external audio unit.

“A” = regulates the volume from the inside to the outside

“B” = regulates the volume from the outside to the inside

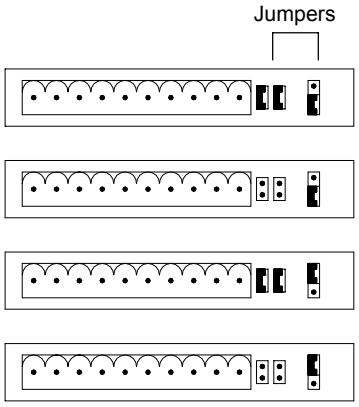
The amplification settings must be carried out with the unit in operation, so as to hear the effects of the settings.
It is important to start the adjustments with potentiometer “A”.
However it is important to avoid increasing the volume to a very high level that will produce the feedback whistle due to the larsen effect.



## MONITOR SYNTHESI Code 8435/5

- Picture tube: flat 4” screen.
- Electronic call: loudspeaker.
- Electronic front door apartment call: loudspeaker (different frequency).
- 1 push-button: electric lock door release.
- 1 push-button: video recall.
- 1 push-button: auxiliary services.
- Controls: brightness – contrast.
- Privacy: built-in (can be excluded).
- Video connection: with video distributor or “ in – out ” system.

Dimensions : 204 x 220 x 50 mm
Housing : technopolymers




**IMPORTANT !**
Use jumpers in the following mode :
Use both jumpers (ref. 75 ohm) in systems with video distributors.
Remove both jumpers (ref. High) in systems without video distributors ( in – out ).

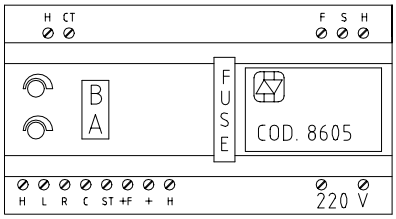
**IMPORTANT !**
All monitors must have the “Privacy” jumper in the same position.

**TERMINAL FUNCTIONS**

**Code 8435/5**

| T. | Value | Function | Note |
|---|---|---|---|
| 1 | | Positive video signal | Composite video signal 1 Vpp |
| 2 | | Negative video signal | Composite video signal 1 Vpp |
| O | 0 V | General earth | All voltage reference level |
| + | +18 V = | Timed voltage | Stand on when timer is working |
| R | +10 V = closed<br>+ 5 V = opened<br>– 5 V =<br>0 V | Phonic input<br><br>Electronic call<br>Electric lock release control | |
| X | +18 V = | Electronic front door call | |
| CP | | Video recall | |
| CL | NO contact | Auxiliary contact at rest | Special function |
| CC | Common contact | Auxiliary contact common | Special function |
| CR | NC contact | Auxiliary contact at rest | Special function |

# POWER SUPPLY Code 8605




Dimension : 185 x 100 x 77 mm
Housing : ABS ( DIN module )

Protections : Fuse T 200 mA ( primary trasformer )
Fuse F 3.15 A ( secondary trasformer )

**TERMINAL FUNCTIONS**

**Code 8605**

| T. | Value | Function | Note |
|---|---|---|---|
| H | 0 V | General earth | All voltage reference level |
| F | 16 V ~ | Camera group supply | Stand on terminal |
| +F | +18 V = | Camera group supply | Stand on terminal |
| CT | | External timer set | Additional supply function |
| + | +18 V = | Timed voltage | Additional supply function |
| ST | +18 V = | Voltage present at rest | Special function |
| L | NO contact | Auxiliary contact at rest | Special function |
| R | NC contact | Auxiliary contact at rest | Special function |
| C | Common contact | Auxiliary common contact | Special function |
| S | 22 V ~ | A.C. voltage-services supply | Stand on terminal |
| 220 | 230 Vac | Input voltage | Main |

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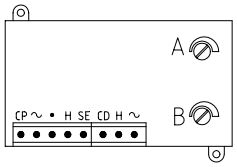
# AUDIO SPEAKER UNIT Code 2055




Dimensions : 94 x 57 x 35 mm
Hosing : ABS

Regolations : Potentiometer **A** (volume from the inside to the outside)
Potentiometer **B** (volume from the outside to the inside)

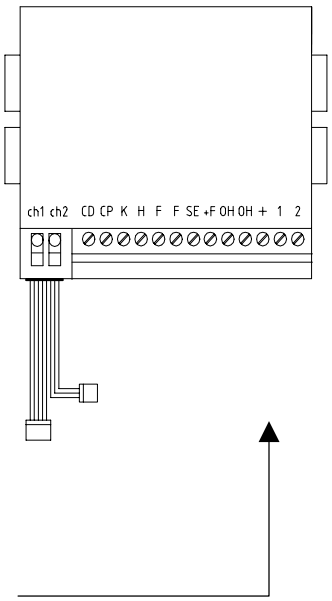
**TERMINAL FUNCTIONS**

**Code 2055**

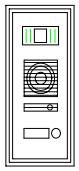
| T. | Value | Function | Note |
|---|---|---|---|
| CP | | Common push button | Yellow |
| ~ | 16 V ~ | Supply | Red |
| • | | Switch set | Green |
| H | 0 V | General earth | Black |
| SE | | Electric lock door release | Blue |
| | | | |
| CD | | Common anode diodes circuits | Brown |
| H | 0 V | General earth | Black |
| ~ | 16 V ~ | Supply | Red |

# CAMERA GROUP

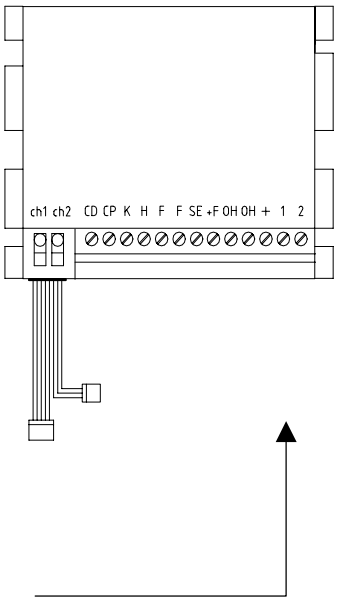
## Cod. 8055/80



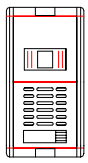

**To use with**
**“COMPONIBILE” entrance panel**



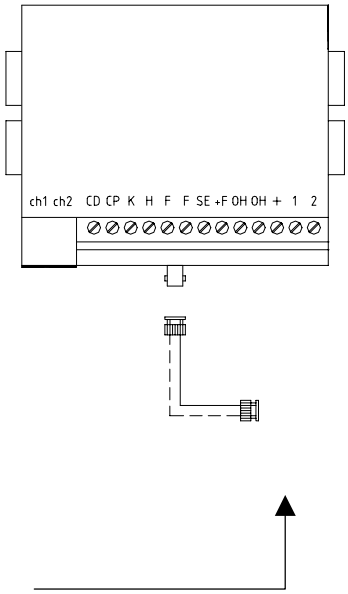
## Cod. 8055/29



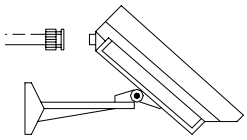

**To use with**
**“MOSAICO” entrance panel**



## Cod. 8055/TX




**To use with**
**External camera**



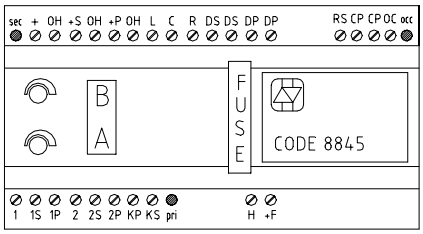
**TERMINAL FUNCTIONS**

**Code 8055 / 80**
**Code 8055 / 29**

| T. | Value | Function | Note |
|---|---|---|---|
| CD | | Common anode diodes circuits | |
| CP | | Common push button | |
| K | +12 V = at rest<br>0 V call | Switch set | |
| H | 0 V | General earth | All voltage reference level |
| F | 16 V ~ | Camera group supply | Stand on terminal |
| SE | 16 V ~ opened<br>0 V closed | Electric lock door release | |
| OH | 0 V | General earth | All voltage reference level |
| +F | +18 V = | Camera group supply | Permanent |
| + | +18 V = | Timed voltage | 60 sec. |
| 1 | | Positive video signal | Composite video signal 1 Vpp |
| 2 | | Negative video signal | Composite video signal 1 Vpp |
| Ch1 | | Cathode diode | Used only in the video kit |
| Ch2 | | Cathode diode | Used only in the video kit |

**Cod. 8055 / TX**

| | | | |
|---|---|---|---|
| K | +12 V = at rest<br>0 V call | Switch set | |
| OH | 0 V | General earth | All voltage reference level |
| +F | +18 V = | Camera group supply | Permanent |
| + | +18 V = | Timed voltage | 60 sec. |
| 1 | | Positive video signal | Composite video signal 1Vpp. |
| 2 | | Negative video signal | Composite video signal 1Vpp. |
| ⏢ | 75 Ω | BNC Coaxial cable core | Composite video signal 1Vpp. |




# AUTOMATIC SWITCH Cod. 8845

Dimensions : 185 x 100 x 77 mm
housing : ABS (DIN module)

Protections : fuse 1 A

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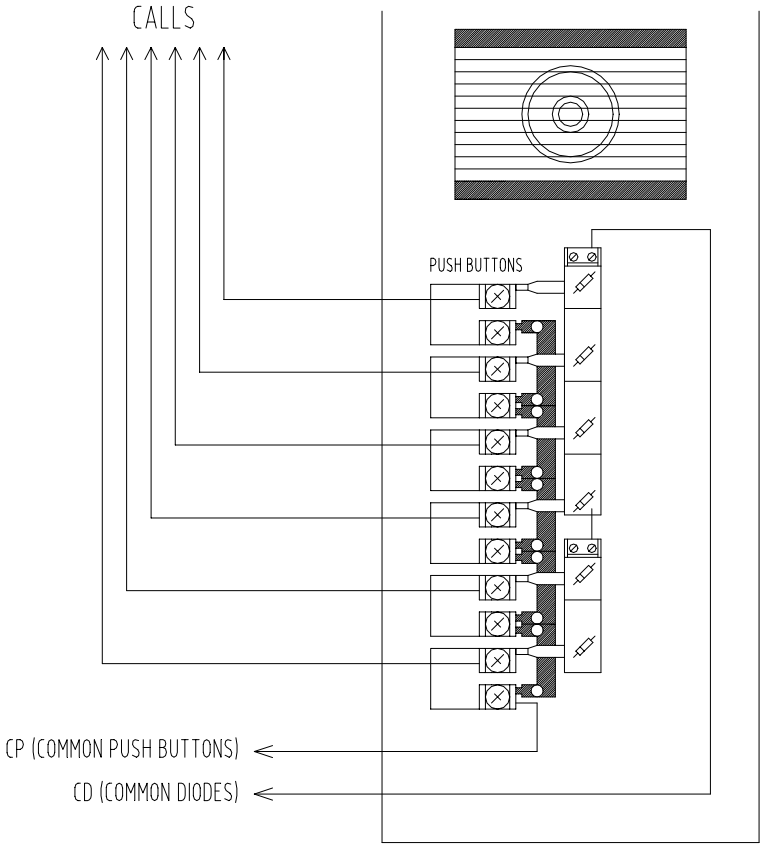
**LEDS :**

**PRI** Common contacts close with NC contacts
**SEC** Common contacts close with NO contacts
**OCC** Busy signal works

**TERMINAL FUNCTIONS**

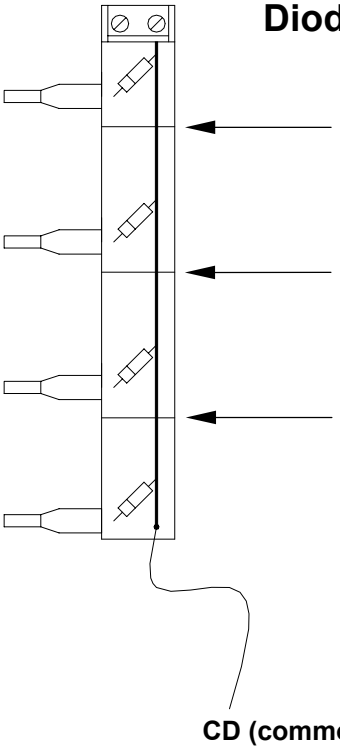
**Code 8845**

| T. | Value | Function | Note |
|---|---|---|---|
| +F | +18 V= | Supply | Stand on terminal |
| OH | 0 V | General heart | All voltage reference level |
| KP | +12 V= at rest<br>0 V call | Reset control | |
| KS | +12 V= at rest<br>0 V call | Set control | |
| RS | | Busy signal | Special function |
| OC | | Busy signal | Special function |
| 1 | | Positive video signal | Common contact |
| 1P | | Positive video signal | NC contact |
| 1S | | Positive video signal | NO contact |
| 2 | | Negative video signal | Common contact |
| 2P | | Negative video signal | NC contact |
| 2S | | Negative video signal | NO contact |
| + | +18 V= | Monitor supply | Common contact |
| +P | +18 V= | Monitor supply | NC contact |
| +S | +18 V= | Monitor supply | NO contact |
| DS | | Common anode diodes circuit | Common contact |
| DS | | Common anode diodes circuit | NO contact |
| DP | | Common anode diodes circuit | Common contact |
| DP | | Common anode diodes circuit | NC contact |
| CP | | Common push buttons | Common contact |
| CP | | Common push buttons | NC contact |
| C | | Auxiliary contact | Common contact |
| R | | Auxiliary contact | NC contact |
| L | | Auxiliary contact | NO contact |



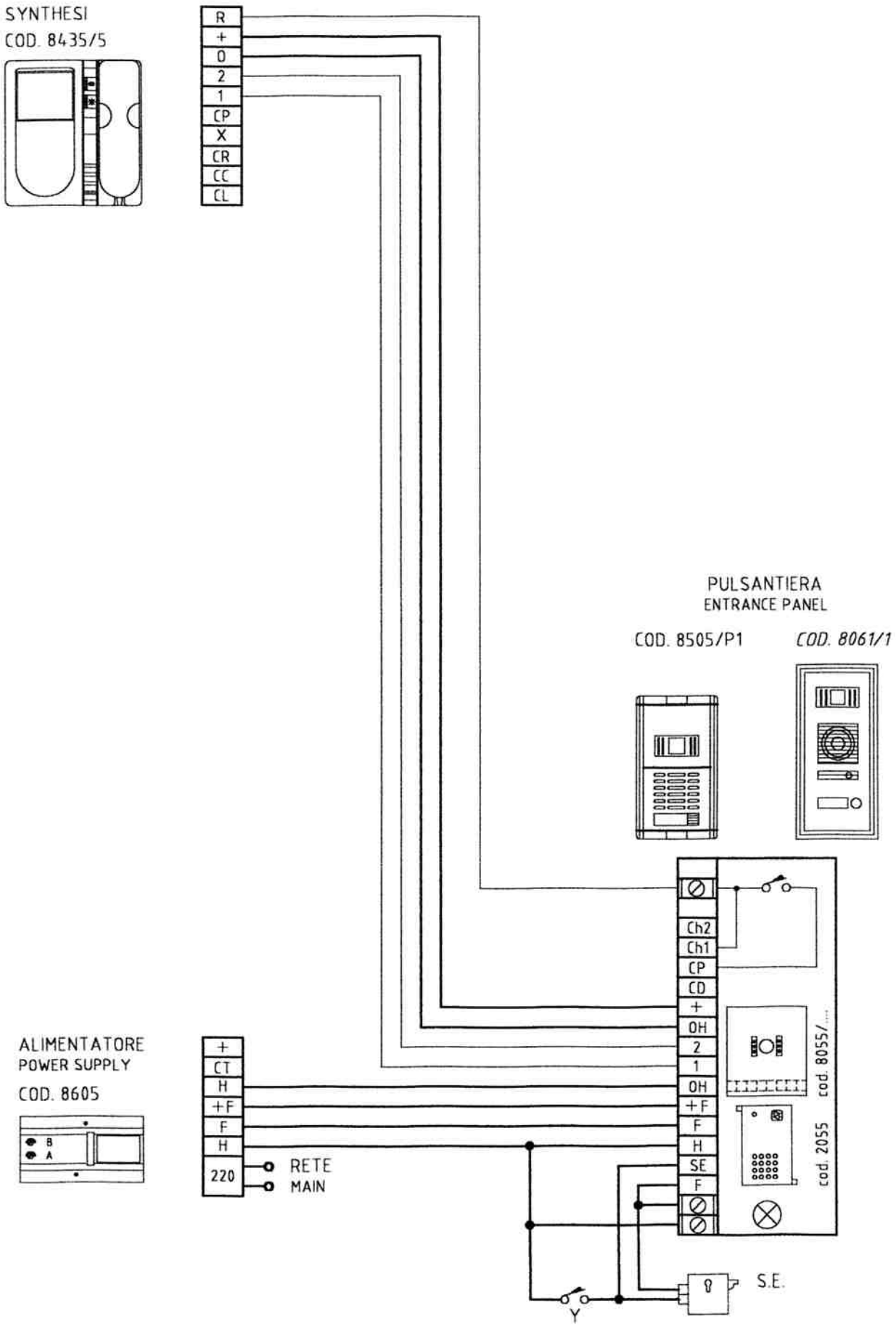

**INTERNAL CONNECTION (ENTRANCE PANEL)**

## Diodes circuit Code 2610/4



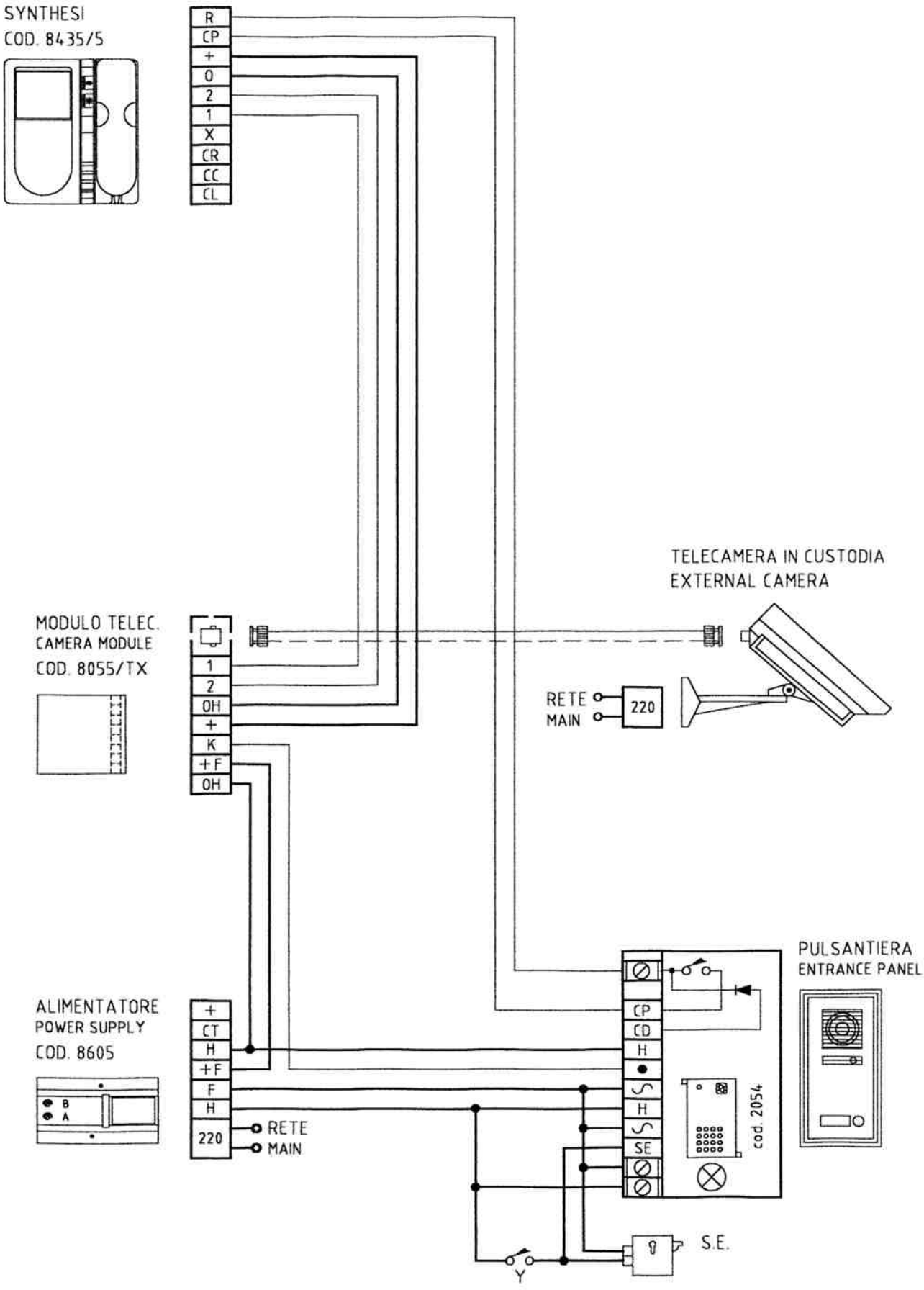
**Scoring lines**

**CD (common diodes)**

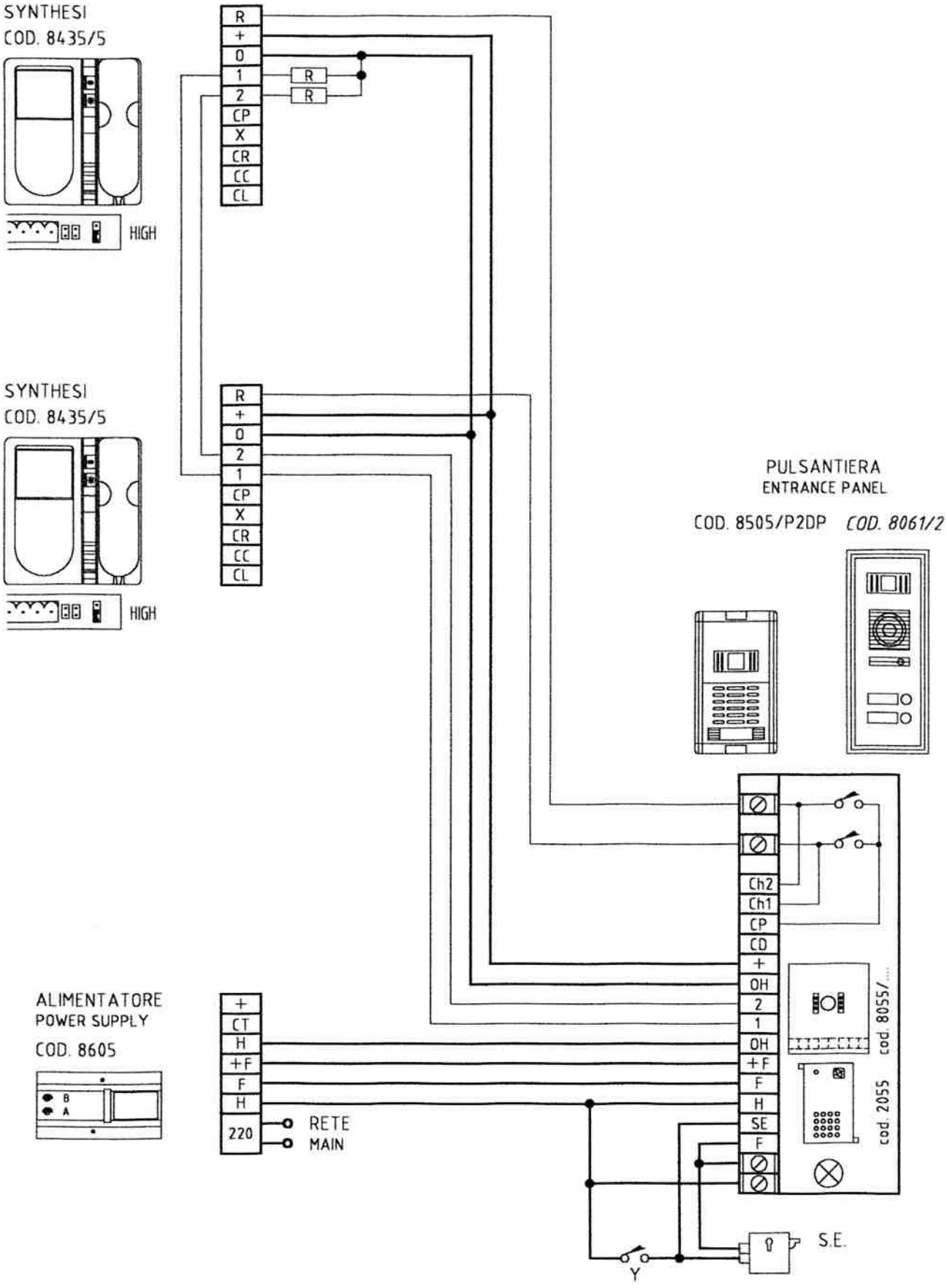



SCHEMI WIRING DIAGRAMS

**Kit unifamiliare** **sch. 5801#**
Single residence kit

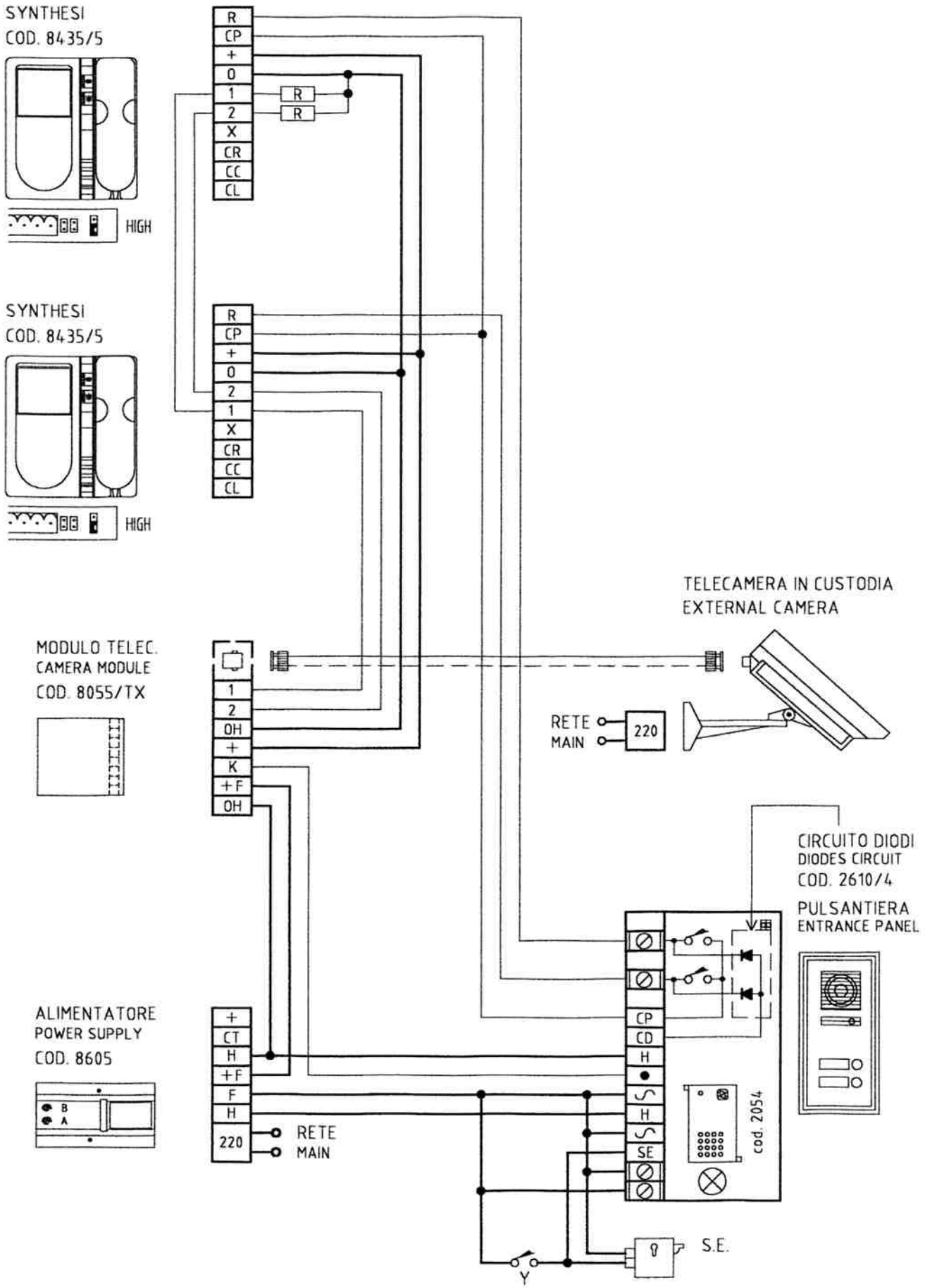



**Kit unifamiliare con telecamera esterna** **sch. 5811#**
Single residence kit with external camera

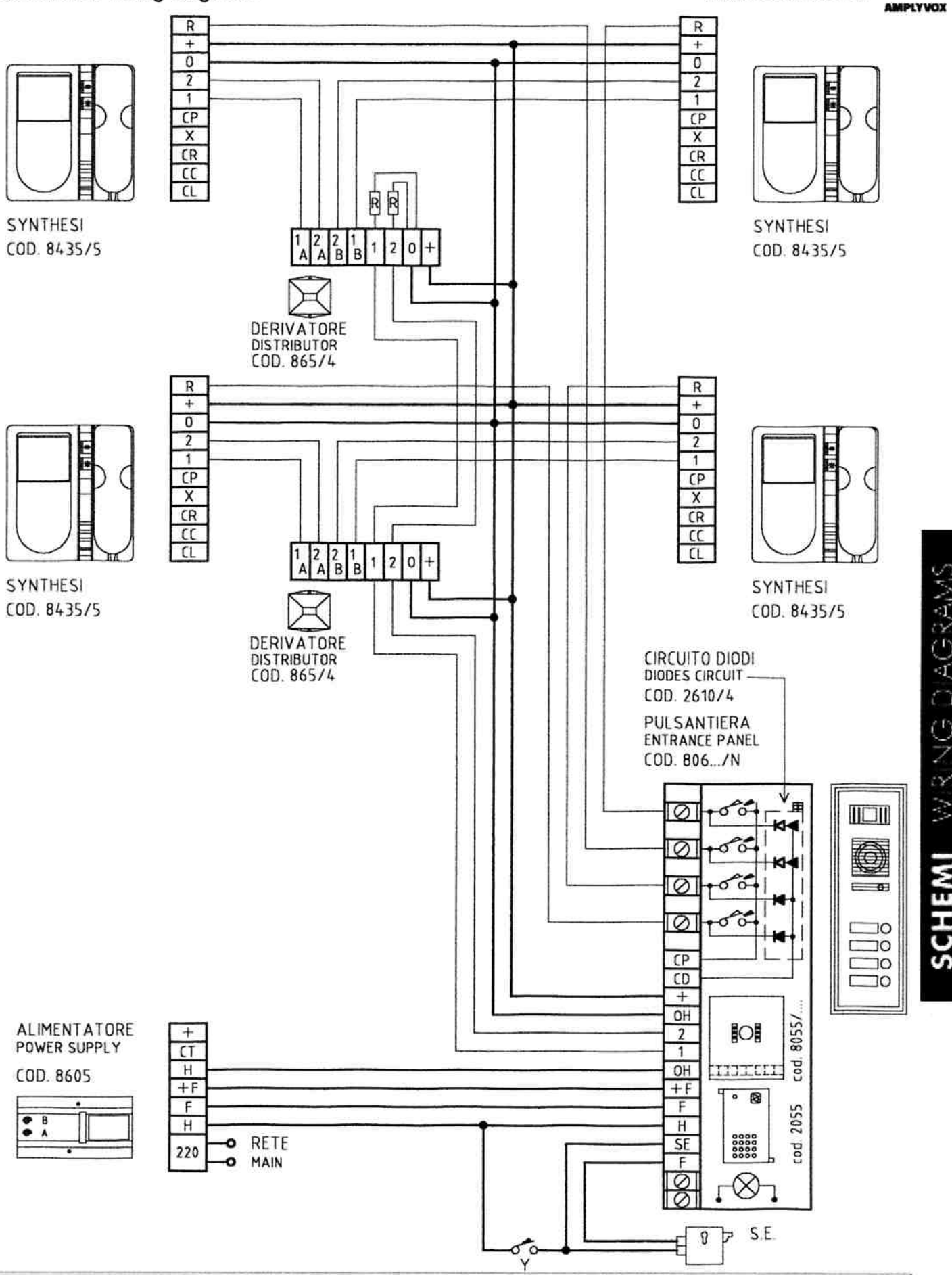



SCHEMI WIRING DIAGRAMS

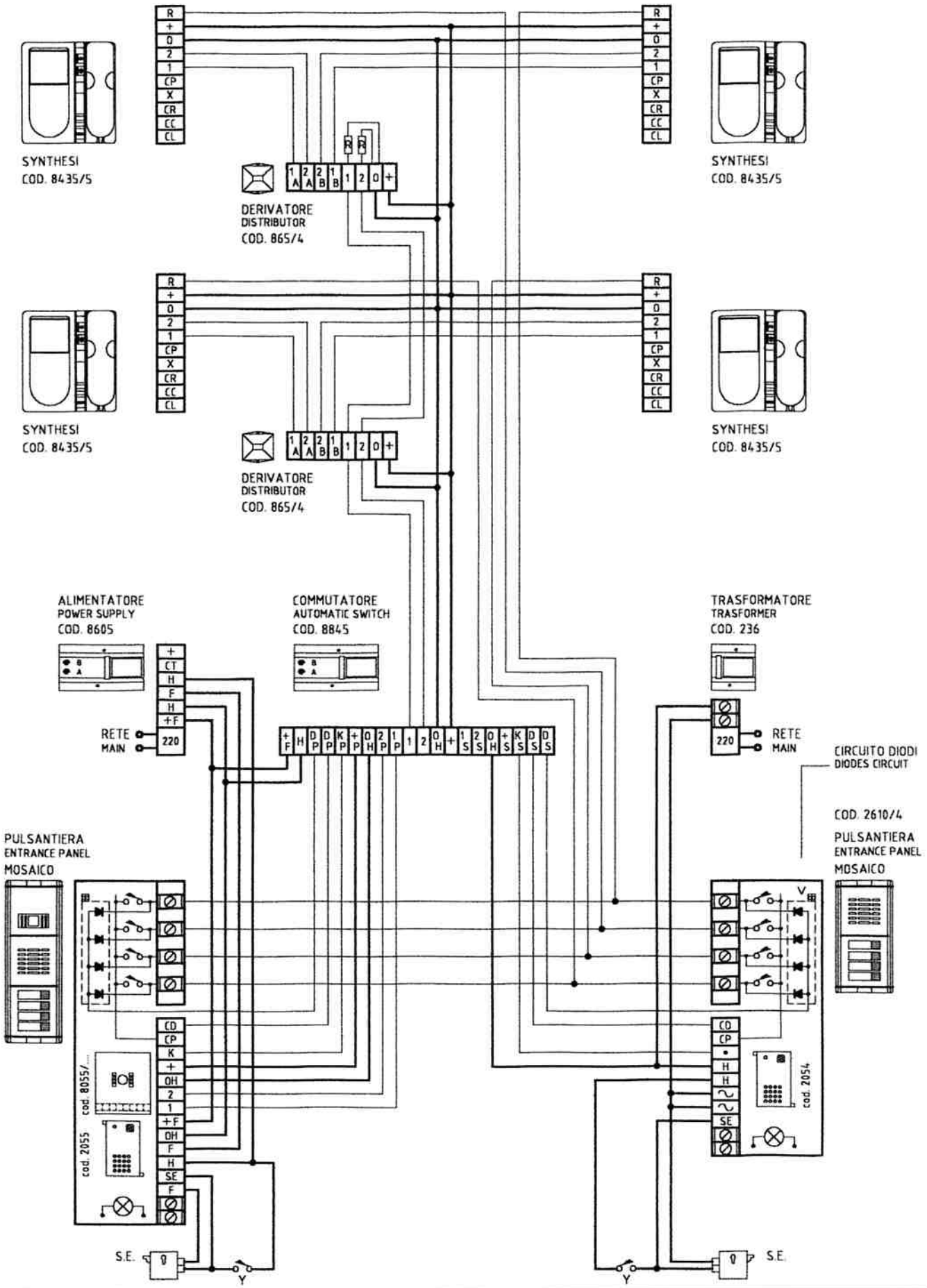
**Kit bifamiliare** **sch. 5802#**
Dual residence kit



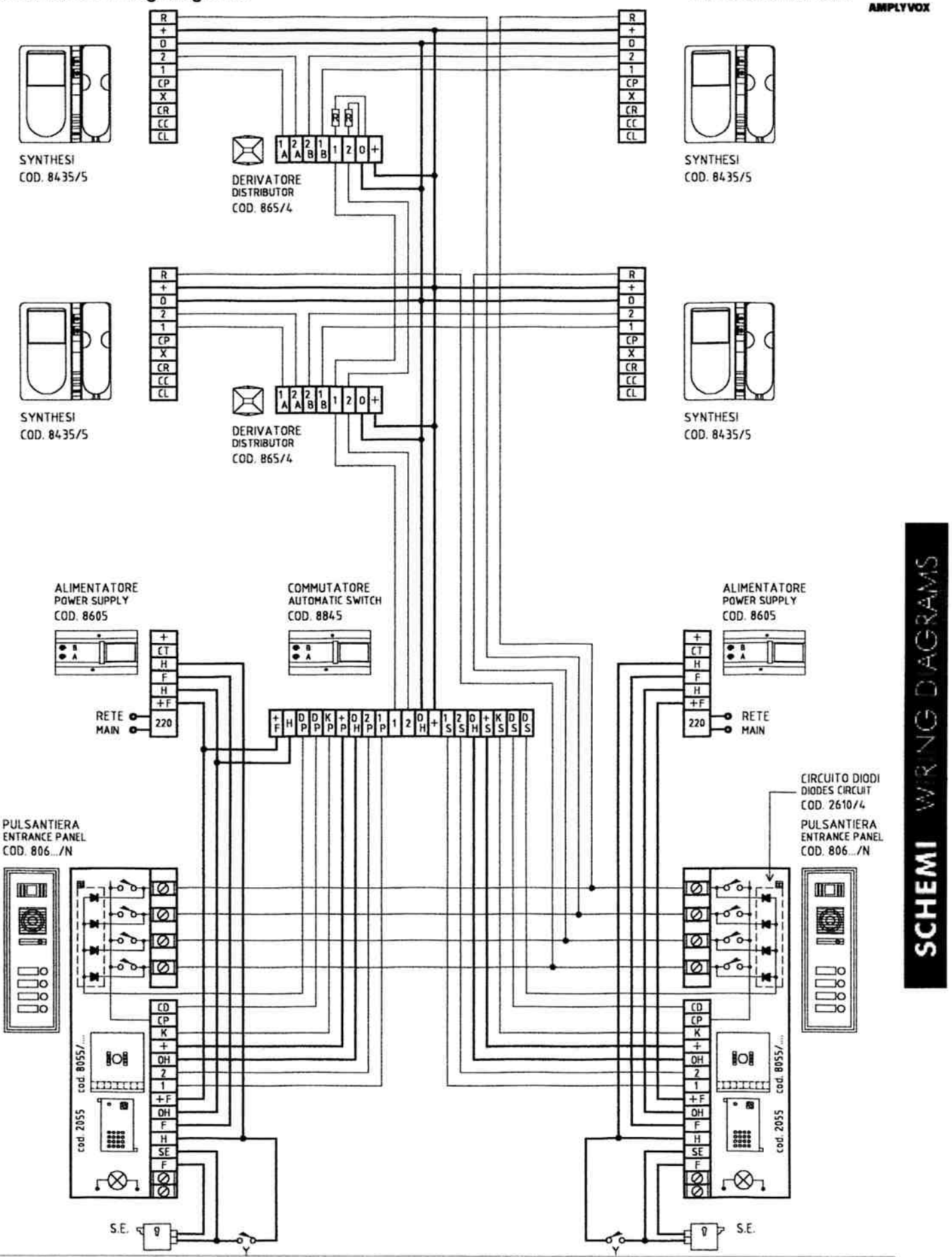

**Kit bifamiliare con telecamera esterna** **sch. 5812#**
Dual residence kit with external camera




**Impianto plurifamiliare** **sch. 5820#**
Multi users video door entry system

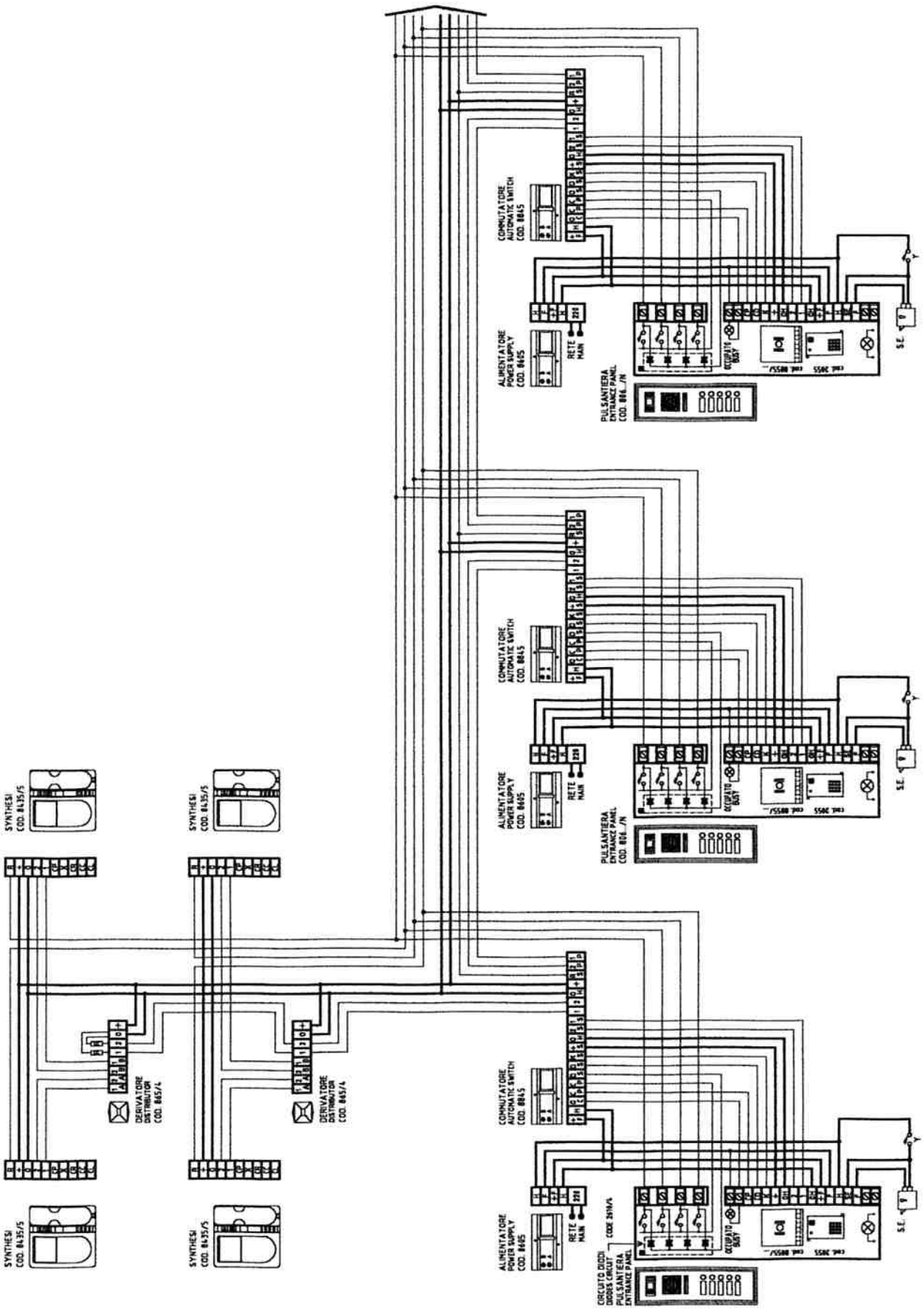



**Impianto commutato : una pulsantiera video e una audio** **sch. 5840#**
Automatic switching for two entrance panel : one video and one only audio



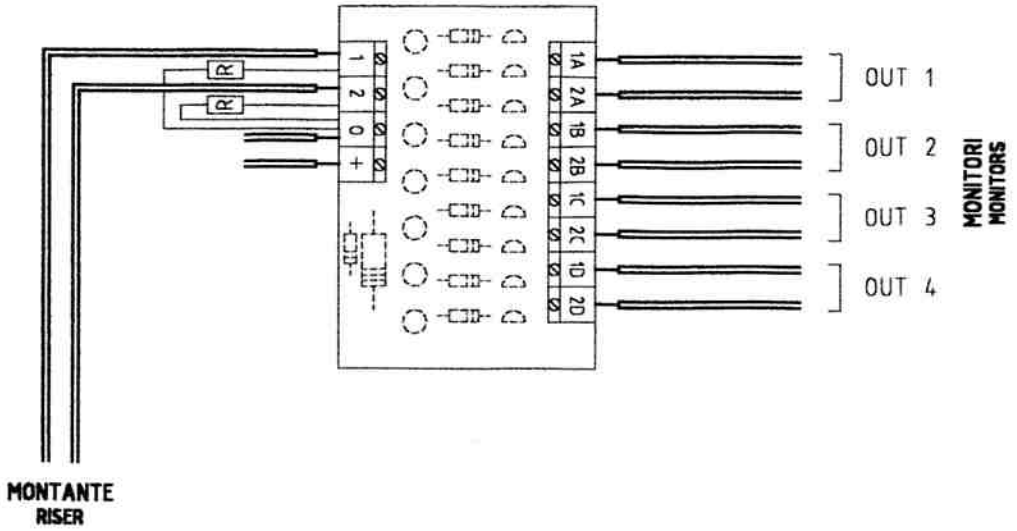

**Impianto commutato : due pulsantiere videocitofoniche** **sch. 5841#**
Automatic switching for two video entrance panel

SCHEMI WIRING DIAGRAMS

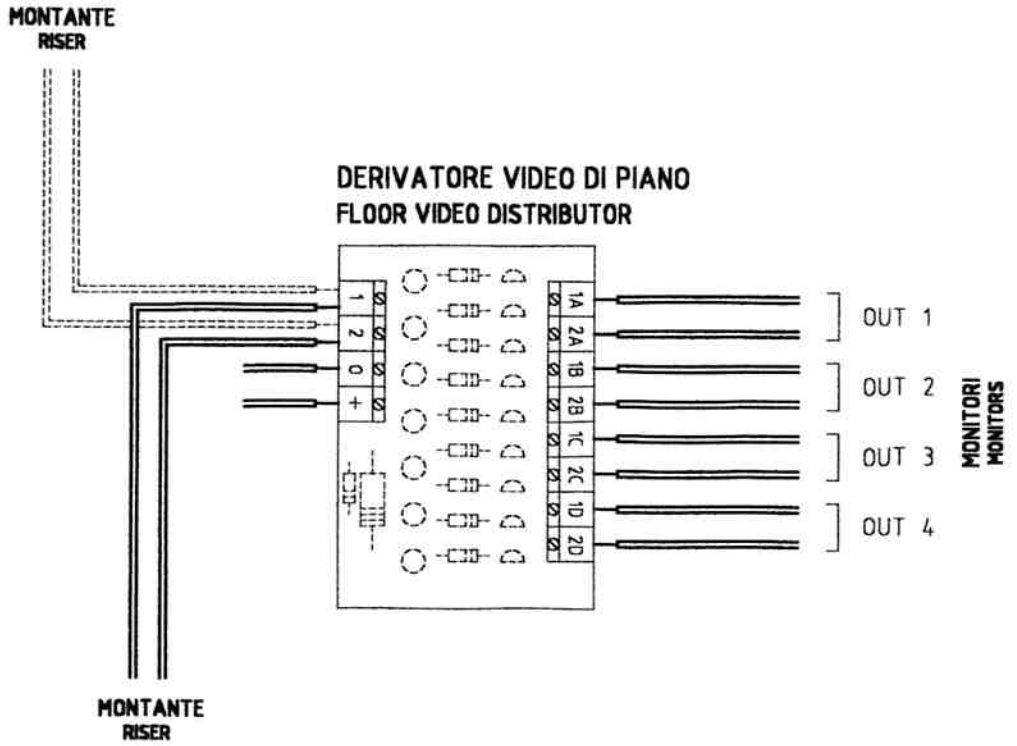



**Impianto commutato : tre o più pulsantiere videocitofoniche principali** **sch. 5851#**
Automatic switching for three or more main video entrance panels

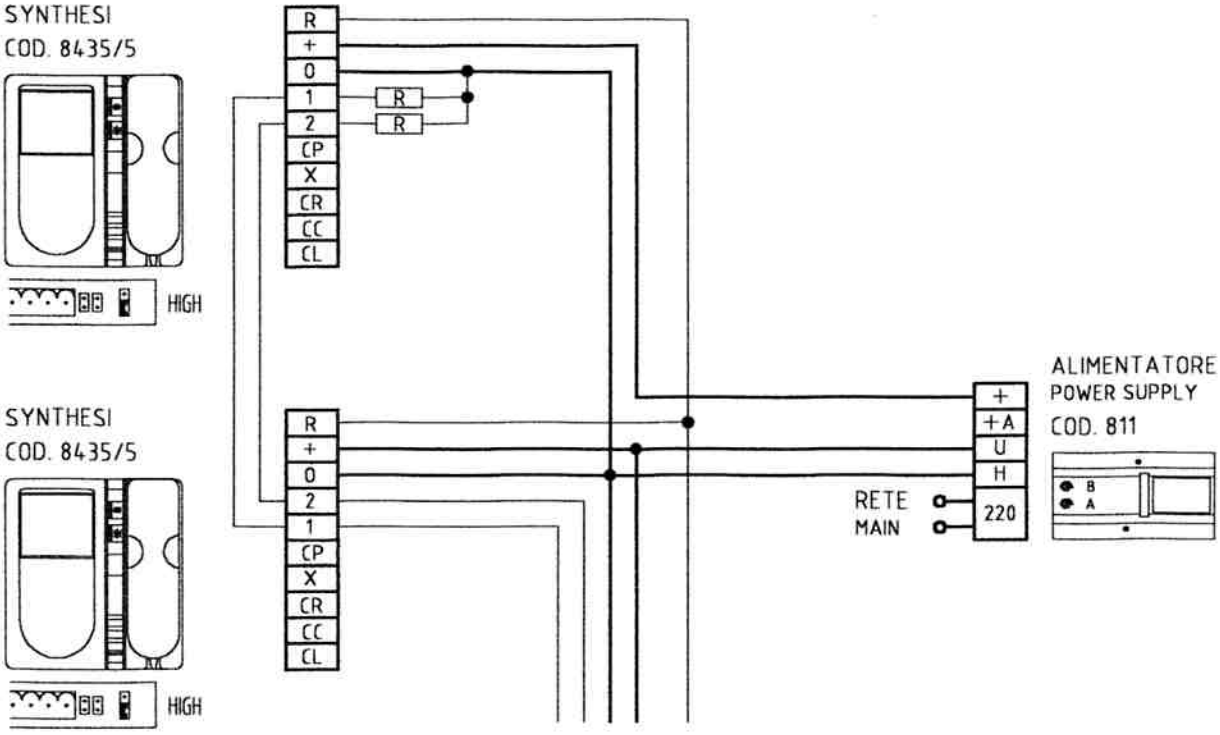
DERIVATORE VIDEO FINALE
FINAL VIDEO DISTRIBUTOR



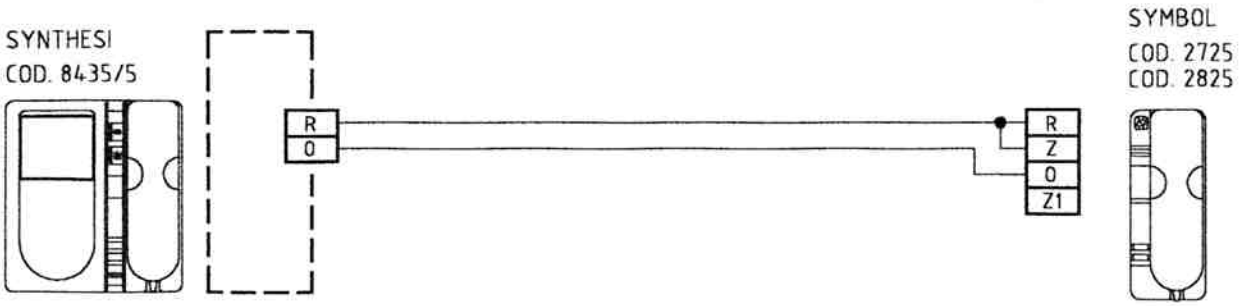



**Collegamento derivatore video** **Cod.865/4**
Video distributor




## Collegamento di un monitore in parallelo
Monitor in parallel




**IMPORTANTE :**

COD. 2725 : CITOFONO 2 FILI SENZA SEGRETO DI CONVERSAZIONE

COD. 2825 : CITOFONO 2 FILI CON SEGRETO DI CONVERSAZIONE

**IMPORTANT :**

CODE 2725 : TELEPHONE 2 WIRES WITHOUT PRIVACY

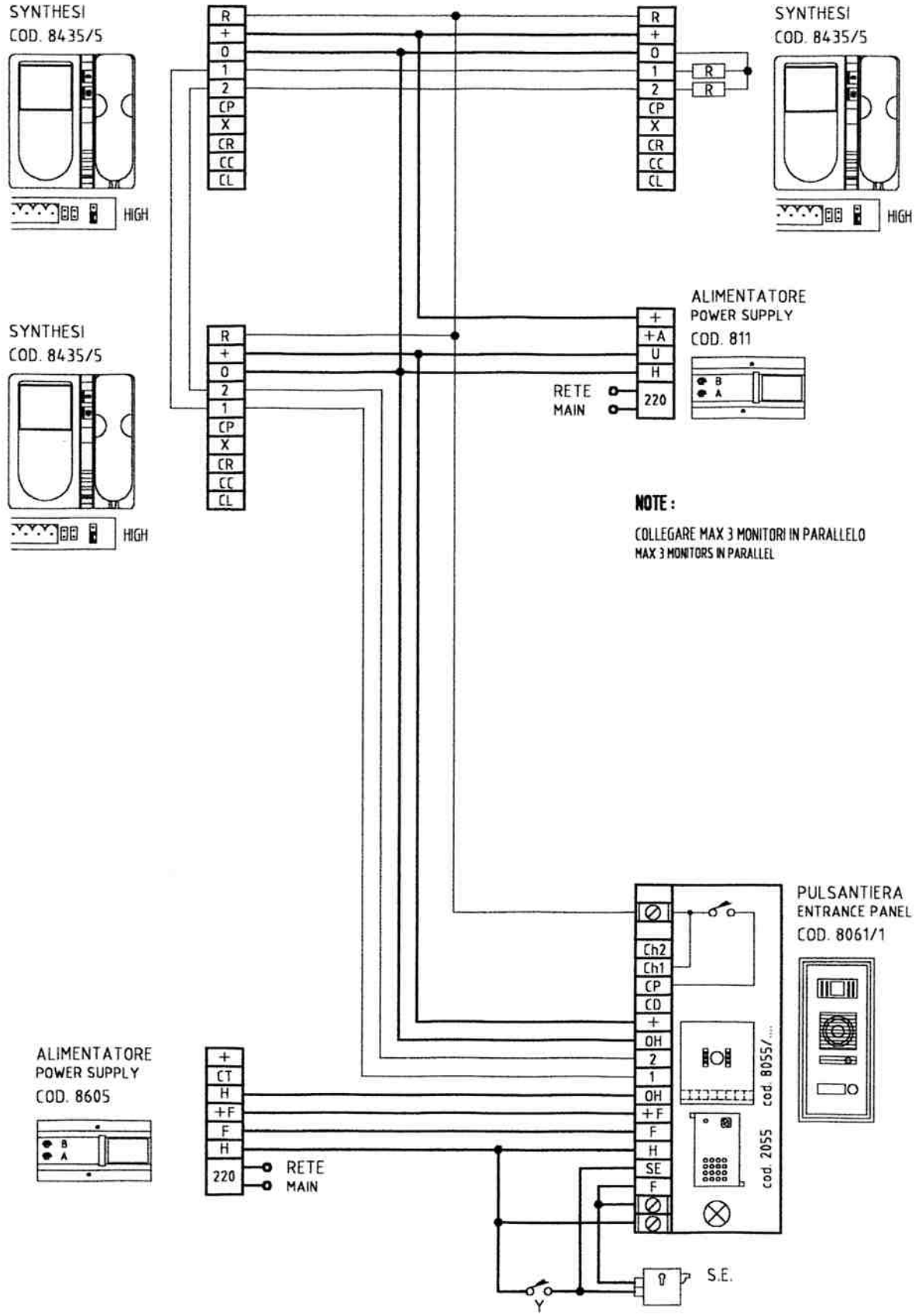
CODE 2825 : TELEPHONE 2 WIRES WITH PRIVACY

**NOTE :**

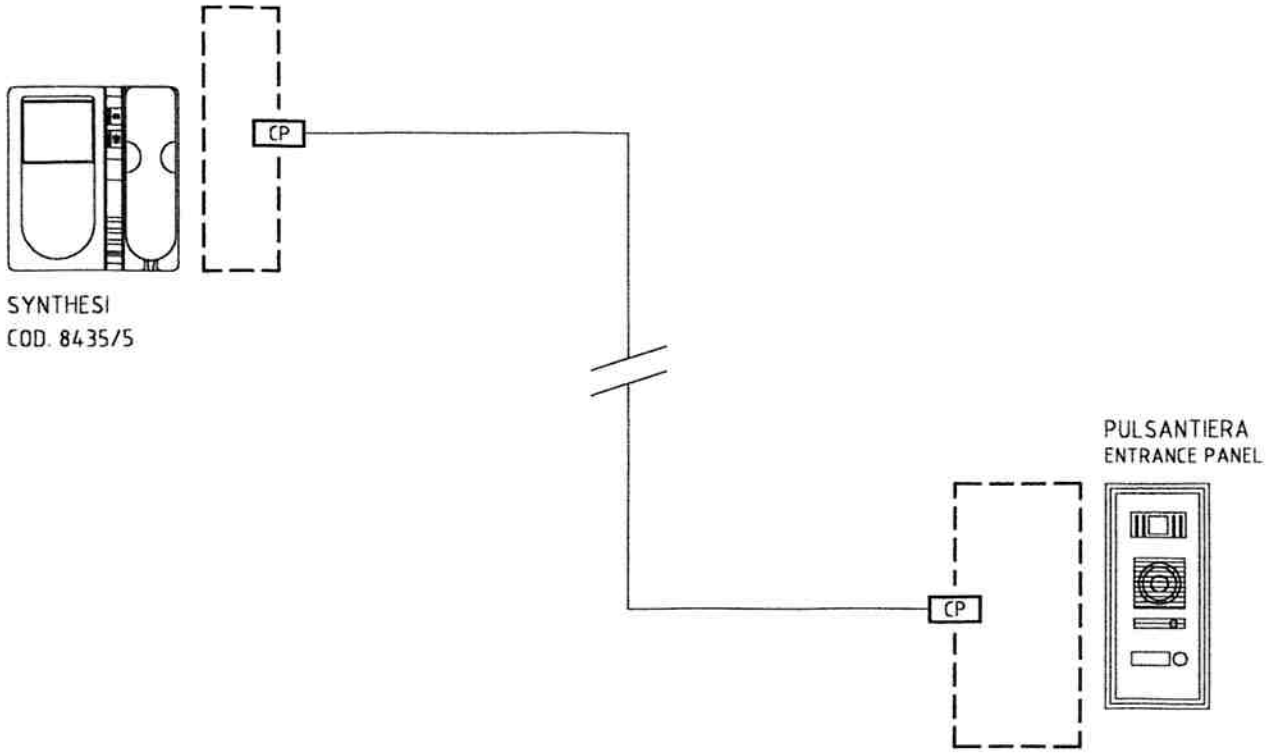
COLLEGARE MAX 2 CITOFONI IN PARALLELO

MAX 2 TELEPHONES IN PARALLEL

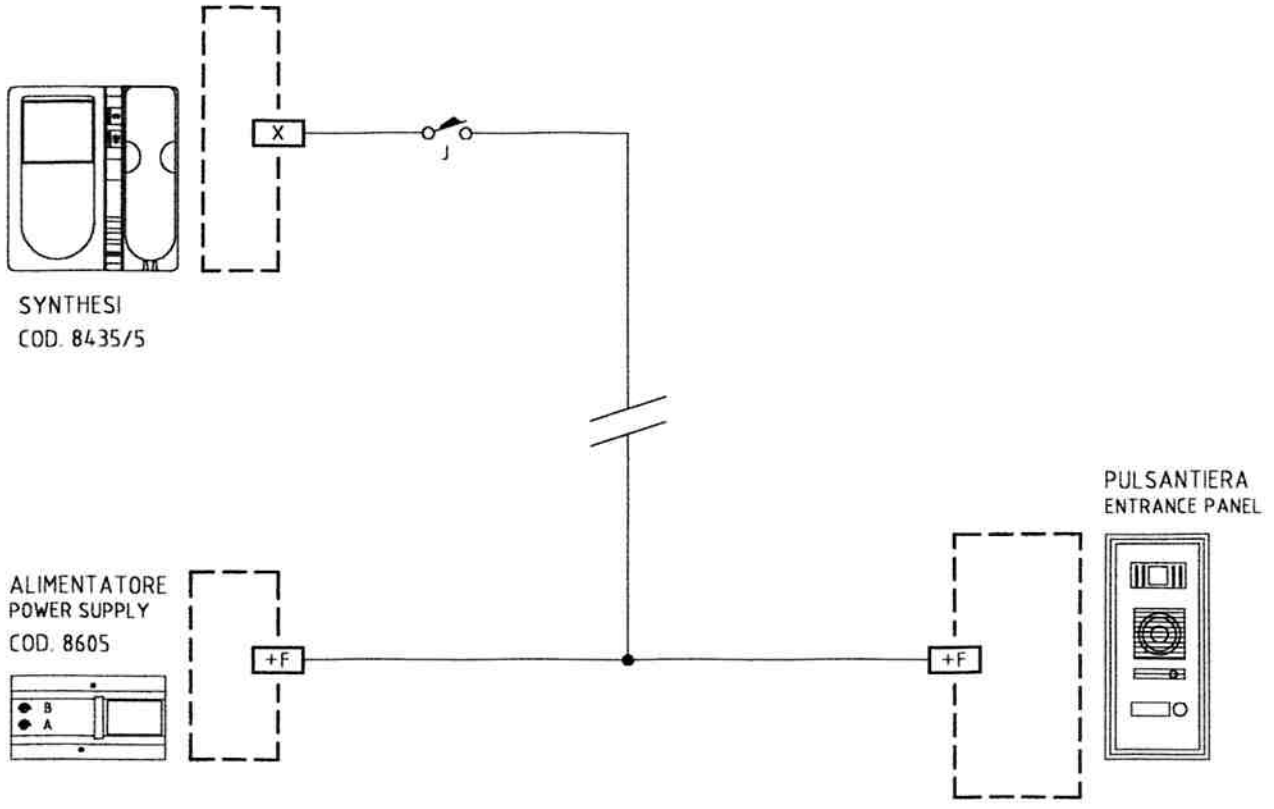
## Collegamento di un citofono in parallelo
Telephone in parallel



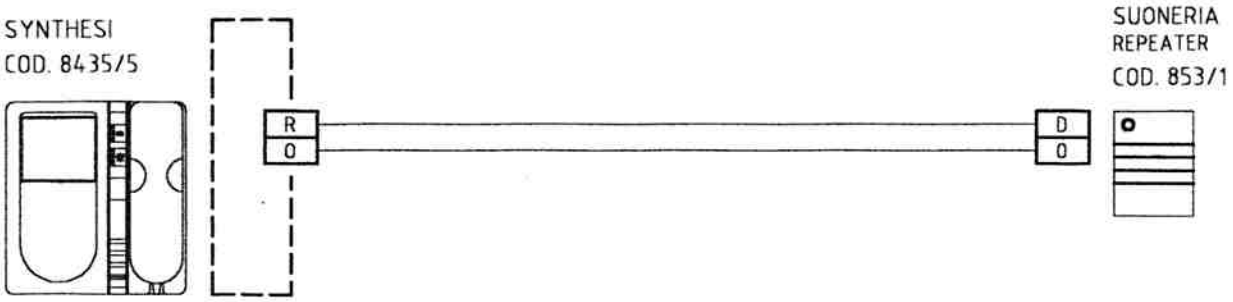

**Collegamento di tre monitori in parallelo senza derivatore**
Three monitors in parallel without video distributor



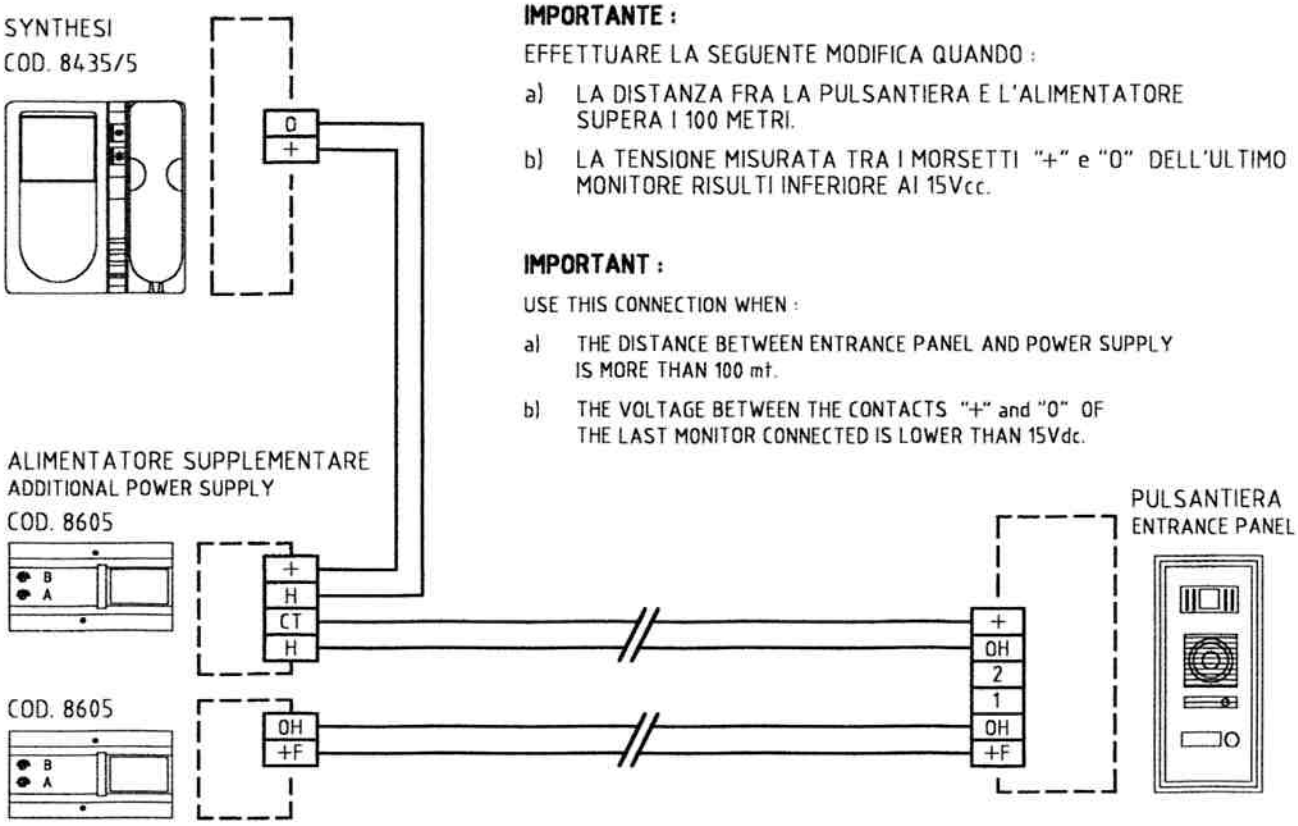

**Collegamento con richiamo video dal monitore**
Monitor with video recall




**Collegamento con chiamata di piano**
Apartment entrance door call




## Collegamento del ripetitore di chiamata — Cod. 853/1
Passive repeater for additional call




**IMPORTANTE :**

EFFETTUARE LA SEGUENTE MODIFICA QUANDO :

a) LA DISTANZA FRA LA PULSANTIERA E L'ALIMENTATORE SUPERA I 100 METRI.

b) LA TENSIONE MISURATA TRA I MORSETTI "+" e "0" DELL'ULTIMO MONITORE RISULTI INFERIORE AI 15Vcc.

**IMPORTANT :**

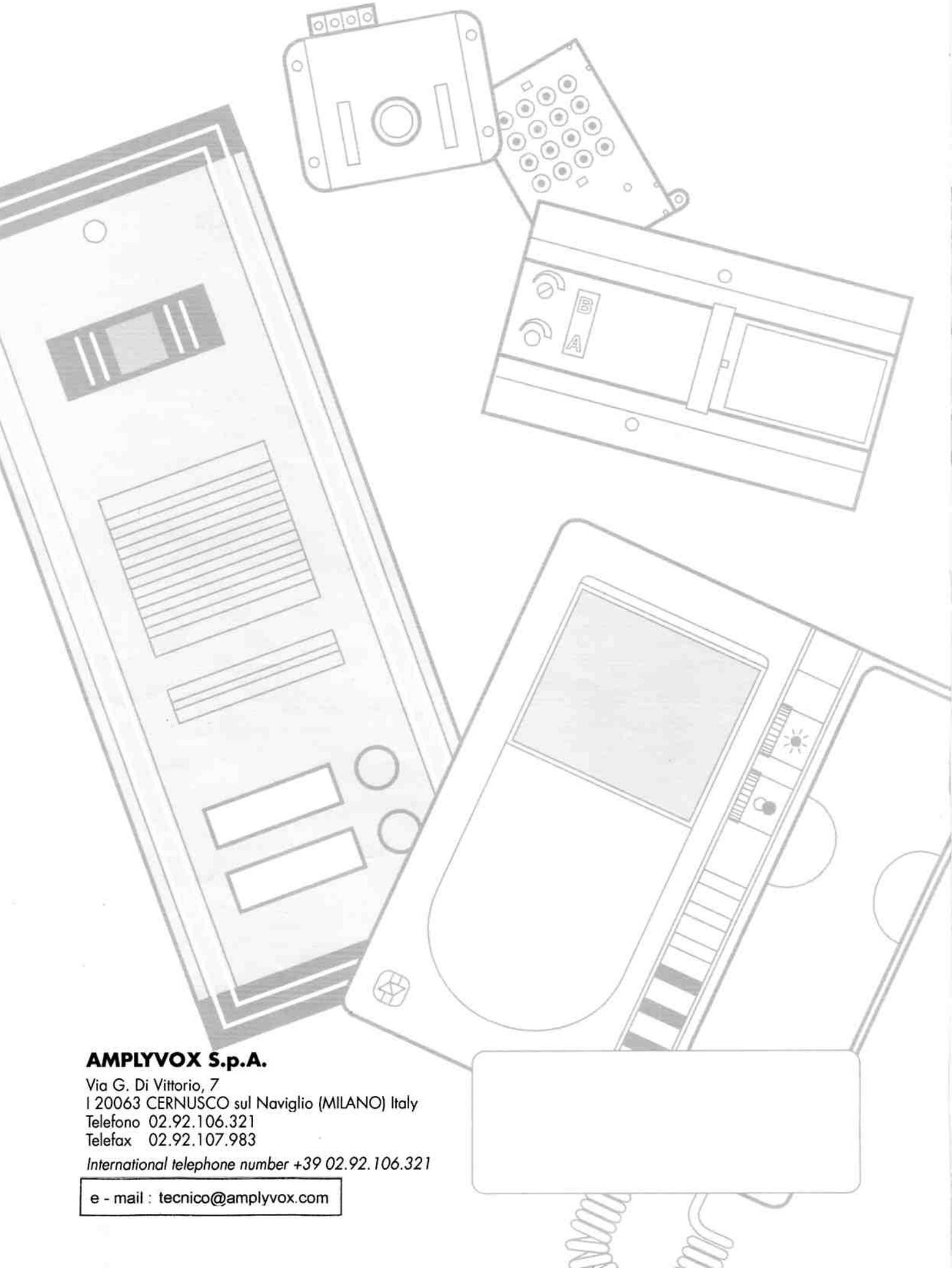
USE THIS CONNECTION WHEN :

a) THE DISTANCE BETWEEN ENTRANCE PANEL AND POWER SUPPLY IS MORE THAN 100 mt.

b) THE VOLTAGE BETWEEN THE CONTACTS "+" and "0" OF THE LAST MONITOR CONNECTED IS LOWER THAN 15Vdc.

## Collegamento in caso di lunghe distanze
Long distance connection

SCHEMI WIRING DIAGRAMS




**AMPLYVOX S.p.A.**

Via G. Di Vittorio, 7
I 20063 CERNUSCO sul Naviglio (MILANO) Italy
Telefono 02.92.106.321
Telefax 02.92.107.983

*International telephone number +39 02.92.106.321*

e - mail : tecnico@amplyvox.com