

INSTALLATION INSTRUCTIONS

Maximum distances guaranteed by cable art.2302

* (A)	Art.2220	←	→	TD2100MA CD2132-34
	art.2221	←	50m. →	art.2222
	PRS210	←	→	art.2273
(B)	TD2100MA CD2132-34	←	200m. →	DV2420
(C)	TD2100MA CD2132-34	←	200m. →	PT5262-PT562 KM8262-KM862
				farthest internal station
(D)	art.2222	←	50m. →	DV2420
(E)	DV2421P	←	30m.** →	PT5262-PT562 KM8262-KM862
(F)	DV2420	←	200m. →	PT5262-PT562 KM8262-KM862 farthest internal station

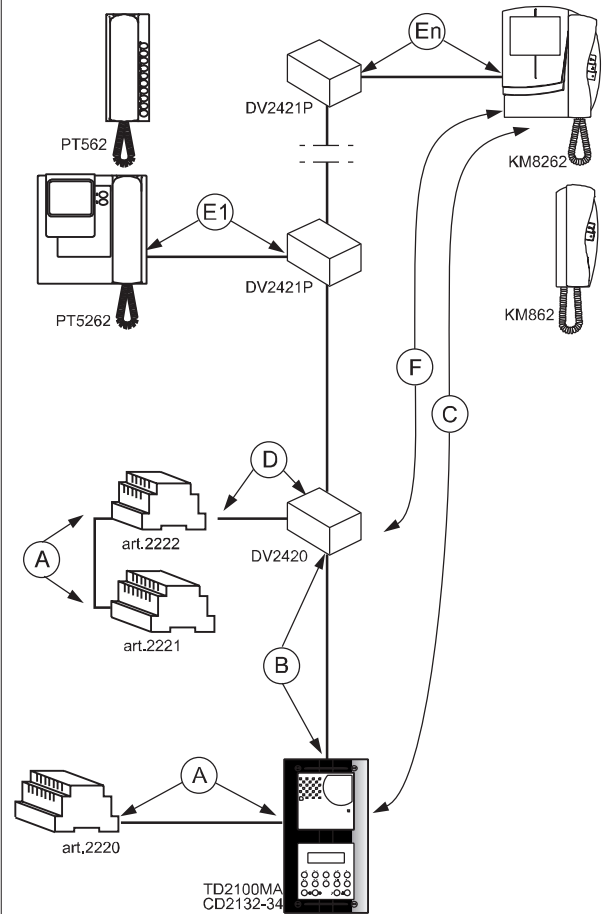
Notes

* Letters for reference on the diagrams

** The total length of cables from line distributors to internal stations should not exceed 300 metres (adding all the "E" sections).

Schematic for distance calculation

Video intercom system to 1 external station and 1 riser



Maximum permitted distances

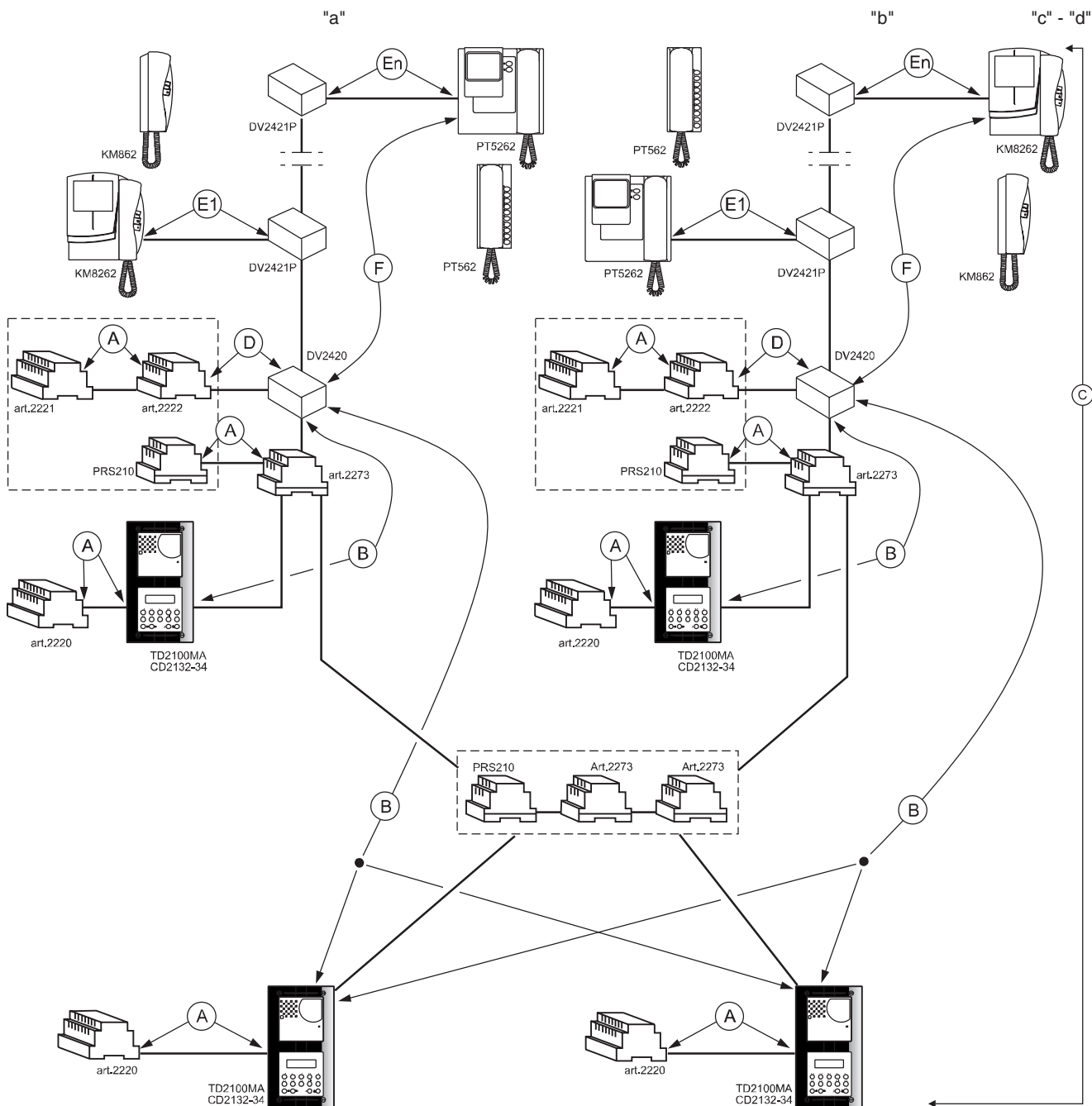
Section	Farfisa cable art.2302 (1mm ²)	NOT twisted cable AWG18 (0,75mm ²)	Twisted cable AWG22 (0,32mm ²)	CAT5 cable AWG24 (0,2mm ²)	Distance between:
A	50 m	35 m	10 m	5 m	art.2220 and external door station art.2221 and 2222 art.PRS210 and 2273
B (*)	200 m	100 m	200 m	200 m	external door station and art.DV2420
C (*)	200 m	150 m	200 m	200 m	farthest external door stations and internal stations
D	50 m	35 m	5 m	5 m	art.2222 and DV2420
E	30 m	20 m	20 m	20 m	art. DV2421P and internal station connected to it
E1+E2+..En	300 m	200 m	300 m	300 m	adding all the E sections
F (*)	200 m	130 m	50 m	35 m	art. DV2420 and farthest internal station

(*) These distances can be increased by applying one or more video amplifiers correctly (examples on pages 52 and 53).



INSTALLATION INSTRUCTIONS

Multi-way installation with 2 main common entrances and 2 risers, each riser with 1 secondary door station



Notes.

- The total length of (E1), (E2) .. (En) should not exceed 300 metres.
 - The section C is the maximum distance of the installation (distance between farthest internal station and external door station).
 - To calculate the distance, you must add the section F of a riser and the section B of the farthest external door station. Repeat the calculation with the other risers. Each measurement must not exceed 200 metres.
 - Sections B and F may vary according to the installation requirements, as long as the sum does not exceed 200 metres of distance C. For higher distances one or more line amplifiers art. 2223 must be used (see application diagrams on pages 52 and 53).
- Example of videointercom installation with 2 main common entrances and 3 risers ("a", "b", "c"), each riser with 1 secondary door station:*
- riser "a" - section F 100 m + section B (external secondary door station) 70 m = **total 170 m.**
- section F 100 m + section B (farthest external main door station) 100 m = **total 200 m.**
 - riser "b" - section F 50 m + section B (external secondary door station) 20 m = **total 70 m.**
- section F 50 m + section B (farthest main external door station) 80 m = **total 130 m.**
 - riser "c" - section F 110 m + section B (external secondary door station) 40 m = **total 150 m.**
- section F 110 m + section B (farthest external main door station) 200 m = **total 310 m** (add one amplifier art. 2223 and transformer PRS210 at the beginning of section F of riser "c")
- The line distributor DV2420 is NOT necessary if the length of section D is lower than 1 metre.



INSTALLATION INSTRUCTIONS

Connection of art. 2222 to the line

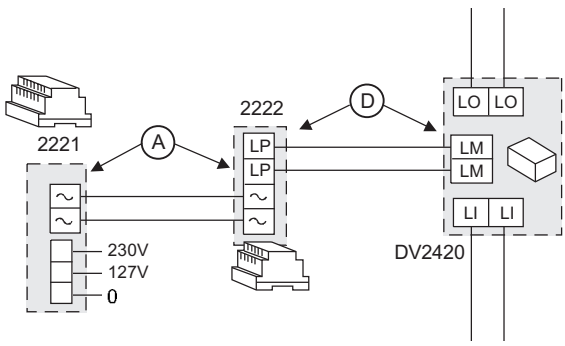
The DUO system needs a correct power supply and audio, video and data impedance over the riser line.

This function is provided by art. 2222 that must be installed between the first internal station and the external door station (or exchanger, in case of multiple risers). Each riser must have its own line power supply.

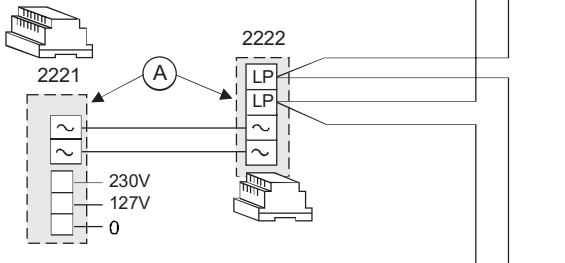
Art. 2222 can be connected to its line in three different modes:

- through line distributor DV2420;
- directly to the line with in-out connection of wires;
- through connector box with 1 metre maximum distance.

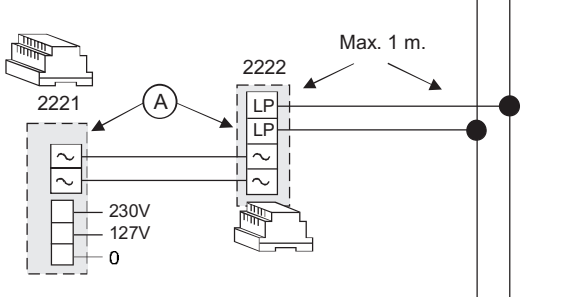
Connection with line distributor DV2420



Direct connection to line



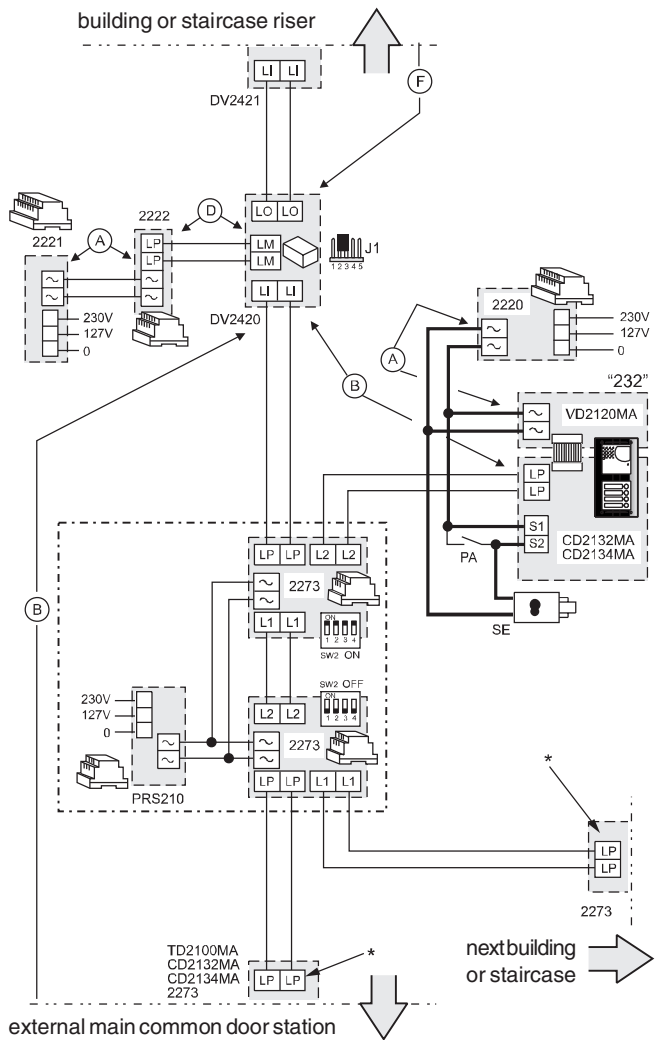
Connection to line with 1 metre maximum distance



Connection of power supplies and exchangers in installations with staircase secondary door stations

The installation diagrams with a secondary door station are illustrated with power supplies and exchangers NOT grouped in the same switchboard (*basic diagrams from page 69 to page 77*). This allows for a better distribution of articles according to the installation distances to be obtained. To calculate the maximum distances, compare the reference letters shown in a circle in the installation diagrams with the table on page 48. Three connection options of the different staircase devices are illustrated below according to different installation requirements.

a) Connection of line power supply, power supplies and staircase exchangers NOT GROUPED (connection of installation diagrams – see pages 69, 71, 73, 75 and 77)



* In the last building it is connected to terminals L1 of the staircase exchanger.

