

# INSTALLATION NOTES

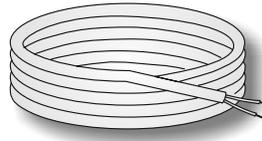
## Conductors

For connection of equipment throughout the Duo digital system a non-polarised two conductor cable is used preferably with twisted wires. The wires must be sized according to the distance to the various apparatus and the number of modules to be applied. It is also important to comply with the recommended maximum distances between the various apparatus as indicated in the table of wire sizes. The use of inadequate wire sizes and a lack of compliance with the distance between the various apparatus could compromise the performance and affect the proper operation of the system.

**2302.** Twisted pair cable specified for the digital installation with DUO systems.

### Technical characteristics of cable

Number of conductors: 2  
 Colour of conductors: red/black  
 Cross-section: 2x1mm<sup>2</sup>  
 Material: tinned copper  
 Twisting pitch: 40mm  
 Nominal impedance: 100Ω



**2302E.** Cable for outdoor use with the same characteristics as item 2302.

**Table 5.2.**  
**Maximum permitted distances of the intercom systems (measures in meters)**

Section	Type of cable			
	Farfisa art.2302 2x1mm <sup>2</sup>	NOT twisted AWG18 2x0.75mm <sup>2</sup>	Twisted AWG22 2x0.32mm <sup>2</sup>	CAT5 AWG24 2x0.2mm <sup>2</sup>
<b>A</b>	50 m.	50 m.	35 m.	10 m.
<b>C</b>	800 m.	650 m.	250 m.	150 m.

**A** = Distance between power supply 2220S and door station.  
**C** = Distance between farthest external door stations and internal stations.

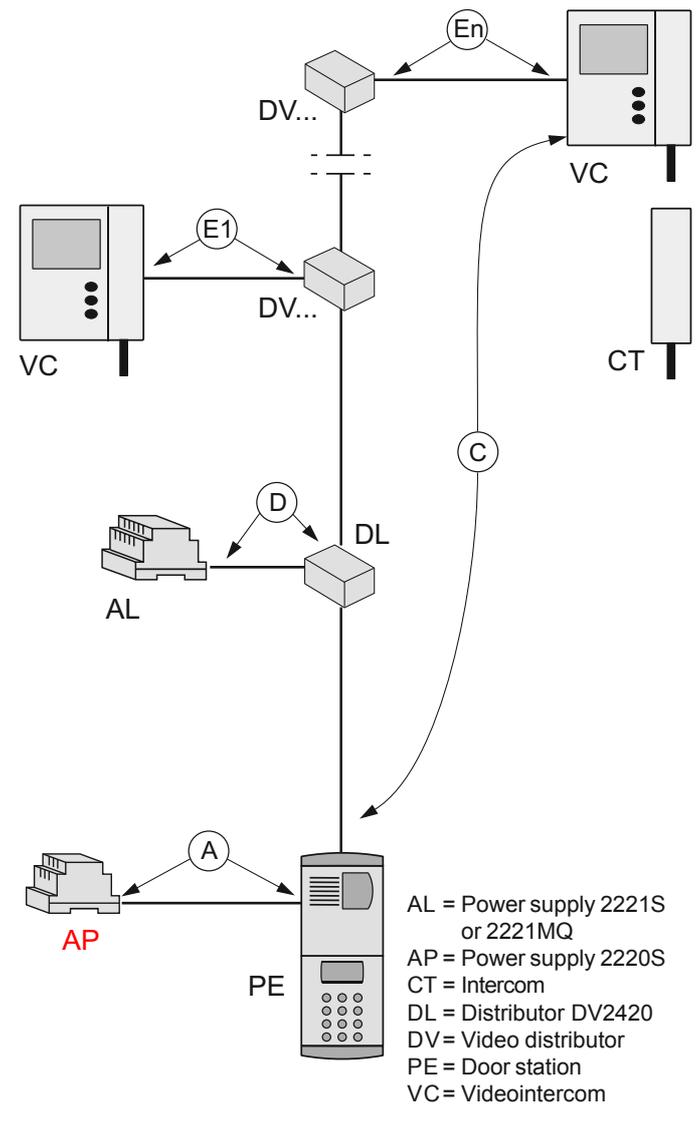
**Table 5.3.**  
**Maximum permitted distances of the videointercom systems (measures in meters)**

Section	Type of cable				Distance between:
	Farfisa art.2302 (2x1mm <sup>2</sup> )	NOT twisted AWG18 (2x0.75mm <sup>2</sup> )	Twisted AWG22 (2x0.32mm <sup>2</sup> )	CAT5 AWG24 (2x0.2mm <sup>2</sup> )	
<b>A</b>	50	35	10	5	art.2220S and external door station
<b>C (*)</b>	200	25	50	40	farthest powered from the bus door s. and internal stations
<b>C (*)</b>	200	30	150	150	farthest traditional door stations and internal stations
<b>D</b>	50	35	5	5	art.2221S-2221MQ and DV2420
<b>E</b>	30	20	20	20	art.DV2421-DV2424 and internal station connected to it
<b>E1+E2+..En</b>	300	200	300	300	adding all the <b>E</b> sections

(\*) These distances can be increased by applying one or more video amplifiers correctly.

## Schematic for distance calculation

### Video intercom system to 1 external station and 1 riser



**AP PSU NOT USED FOR ALBA or HERO**