urmet
DOMUS

NOTES LIST

FOR READING URMET DOMUS S.p.A. SYSTEM DIAGRAMS

Installation notes on specific system solutions, special system arrangements details, use of different devices or implementation of indications not included in the instructions provided with the product are added to URMET DOMUS system diagrams.

The notes are provided with an alphanumeric code indicating the system typology and application following by three digits.

Example: VX.001 – Video door phone system coax note 1.

SYSTEM TYPOLOGY		NOTE code
ELECTRONIC DOOR PHONE SYSTEM	4+n	C4
	1+1	C1
ELECTRONIC VIDEO DOOR PHONE SYSTEM	Coax	VX
	5 wires	V5
826	door phone system	C6
	video door phone system	V6
BIBUS 1st EDITION	door phone system	CB
	video door phone system	VB
BIBUS 2nd EDITION	door phone system	CU
	video door phone system	VU
DIGIVOICE	door phone system	CD
	video door phone system	VD
EASIVOICE		CY
SCAITEL		VL
2GO!		V2
TELEPHONY		TF
ACCESS CONTROL		CE

This classification was created by URMET DOMUS to create a glossary (translated into several languages) for the note so that a diagram can be read by installers in different countries.

C4.001 - MINIMUM WIRE CROSS-SECTION AREAS

Distance	m	50	100	200	300
Voice and call circuit	sq.mm	0,5	0,5	0,8	1
Door opening circuit	sq.mm	0,5	0,8	1	1,6

- The indicated distance is between door unit and most distant door phone.
- Lay the wires at a suitable distance from power lines (as far away as possible).

If not present in diagram, plan 2 conductors for entrance panel name tag lighting. Use a suitable power transformer.
Up to 6W it is sufficient to use installation power supply unit.
Up to 15W it is suggested to use Sch.9000/230 transformer.

C4.002- SWITCH ARRANGEMENT ON SWITCHBOARD

N (BLACK) - Press to switch the door units to night service

TC (RED) - Calls to users

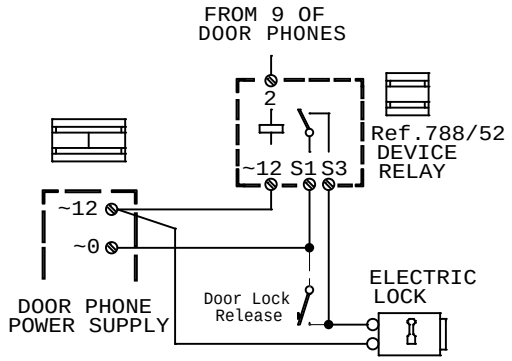
Important: Switch system setup E/T to position: .

C4.003

Doorphone	Terminal equivalence			
Ref.1132/1	T1	T2	T3	T4
Ref.1133/1	T1	T2	T3	X
Ref.1131/1	A	B	C	D

C4.004 - Use auxiliary relay ref.788/52 or ref.788/21 for operating the lock in systems with long lines (>30 m) to avoid buzzing.

The connection variant is:



C4.005 - A door phone cannot receive a floor call during conversation with the door unit (with handset consequently off-hook) when a speaker is used for both voice service and calls.

C4.006 - Sinthesi models only:
- Connected jumper ... to ...

C4.007 - Sinthesi models only:
See instruction booklet provided with product for connecting terminals G/T, ~0 and ~12 between modules.

C4.008 - K-Steel models only:
all connections are made with terminal boards.

C4.009 - IMPORTANT:
Use cord pairs.

C4.010 - Move the following jumpers
from: to: .
from: to: .

C4.011 - Exchange the blue and red wires of the handset on the terminal board (blue on 1, red on double terminal).
Move the double terminal from terminal 6 to terminal 7.

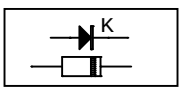
C4.012 - MINIMUM WIRE CROSS-SECTION AREAS

Distance	m	120	200	300	480
Diameter	mm	0,5	0,65	0,8	1
Cross-section area	sq.mm	0,20	0,8	1	1,6

C4.013 - Fit a 9V (MN1604/6LR61) battery in the ringer.
The ringer is equipped with two jumpers indicated by W1 and W2.
Remove one of the two jumpers for two-tone or one-tone operation as shown in the following table:

SOUND TYPE	JUMPERS W1	JUMPERS W2	
THREE-TONE	×	×	Both jumpers inserted
TWO-TONE	×		Jumper W1 only; remove W2
ONE-TONE		×	Jumper W2 only; remove W1

C4.014 - Check that the diode respects the polarisation shown in the diagram.



C4.015 - Repeater door phone call input connections

Call repeater ref.1332/84	**Mod.1131 Mod.1132 Mod.1133**		**Mod.1130**	
	4+n wire	1+1 wire	4+n wire	1+1 wire
CA	CA	2	7	
6	6	1	6	

C4.016 - Sinthesi models only:
The call forwarded LEDs on all panels light up when a call is in progress from any station.

C4.017 - Sinthesi models only:
The call forwarded LED of the secondary station in the column to which the call is directed lights up when a call from the main panel is in progress.

C4.018 - K-Steel model door units only:
- connect terminals ~0 and ~12 for name tag lighting.

C4.019 - Only for Sinthesi Model:
See the instruction book provided with the product for separing common signal in the device.

C4.020 - Ref. 786/11 only: Use the specific fastening kit ref. 786/50 for installing the power supply unit to the wall.

C4.021

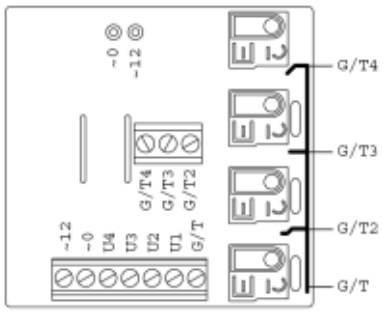
Maximum distance and wire cross-section area from transformer to panel.

~12, ~0, 1, 2	60 m	0,5 mm^2
	90 m	0,75 mm^2
	110 m	1 mm^2

C4.022 - Sinthesi models only:
For modules arrangement on push button panel frames, strictly follow the instructions provided with product.

C4.023 - Put trimmer (TIME) on device on min. time indication.

C4.024 - For splitting common buttons signal break the printed circuit board where indicated.

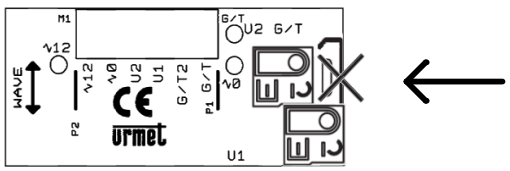


C4.025 - FREE

C4.026

	Length	Section
Maximum total length and wire section from trasformer to push button panel.	60 m	0,5 mm²
	90 m	0,75 mm²
	110 m	1 mm²
Maximum length and section wire from door phone to ringer (if present).	60 m	0,5 mm²
	90 m	0,75 mm²
	110 m	1 mm²
Maximum length and section wire from electric lock to push button panel.	60 m	0,5 mm²
	90 m	0,75 mm²
	110 m	1 mm²
Maximum length and section wire from door opener button to push button panel.	60 m	0,5 mm²
	90 m	0,75 mm²
	110 m	1 mm²

C4.027 - For splitting common buttons signal break the printed circuit board where indicated.



C1.001 - MINIMUM WIRE CROSS-SECTION AREAS

(System with ref.1137/1)

Maximum distance between transformer and push-button panel	m	60	90	110
~12,~0,1,2	sq.mm	0,5	0,75	1

C1.002 - MINIMUM WIRE CROSS-SECTION AREAS

Distance m	50	100	200
Cross-section area sq.mm	0,35	0,75	1

If not present in diagram, plan 2 conductors for entrance panel name tag lighting. Use a suitable power transformer.
Up to 15W it is suggested to use Sch.9000/230 transformer.
Up to 6W it is sufficient to use installation power supply unit.

C1.003 - MINIMUM WIRE CROSS-SECTION AREAS

FROM INTERFACE TO PABX SWITCHBOARD

Maximum distance	m	10	50	100	200
Section	Sq.mm	0,5	--	--	--

FROM INTERFACE TO DOOR UNIT

Maximum distance	m	10	50	100	200
Section	Sq.mm	0,75	0,75	0,75	0,75

C1.004 - Only for K-Steel Model:
remove connection(s):
a) ....and ....

VX.001 - To use video distributor output U5, cut the 75 Ohm resistor installed raised on printed circuit board or remove thhe jumper (if present).

VX.002 - The power unit can power up to 10 distributors. Use one local power unit ref. 789/2 for each group of distributors (max. 20) after exceeding this limit.

VX.003 - MINIMUM WIRE CROSS-SECTION AREAS

Distance	m	50	100	200	300
Normal Wires	Sq.mm	0,5	0,8	1	1,6
Wires R1,R2,+TC	Sq.mm	0,8	1	1,6	2,5
COAXIAL CABLE 75 Ohm	Use a normal coaxial wire for distances up to 300 m Add a video amplifier for longer distances.Sq.mm				

If not present in diagram, plan 2 conductors for entrance panel name tag lighting. Use a suitable power transformer.
Up to 15W it is suggested to use Sch.9000/230 transformer.
Up to 6W it is sufficient to use installation power supply unit.

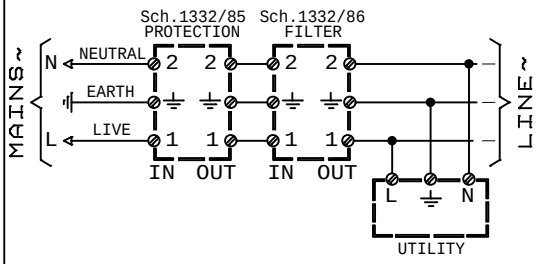
VX.004 - Various examples of coaxial cable connection: see diagram SV102-1613.

VX.005 - See diagram … for connecting Scaitel video door phones to replace Artico or Atlantico models.

VX.006 - See the instruction book provided with the product for fitting the accessory in the device.

VX.007 - The cross-section area of the wires indicated with ▬ must be double.

VX.008 - Connect the devices to a filter and power line protection device.



VX.009 - The local power unit ref. 789/2 can power up to 20 video distributors.
Use a power unit ref. 789/2 for each group (max. 20) after exceeding this limit.

VX.010 - No more than 20 monitors should be connected to each column; add video distributors to the camera output or other device if there are more devices.

VX.011 - Close the coaxial wire on the last monitor in the riser with a 75 Ohm resistance between terminals V4 and V5.

VX.012 - Relay ref. 788/5 is needed to prevent that a video door phone can be switched on while another device is working and interrupt vision.
Connect the ... wire directly to the monitor ... terminals if the relay is not fitted.

VX.013 - Connect the switch-off circuit ref. 5330/60 in the push-button panel and connect wire SN (brown) to the button common. Cut and isolate wire 1 (red).

VX.014 - Dusk switch or similar device for switching lights on, where relevant.

VX.015 - The power unit ref. 8500 can power up to 20 devices.
Use another power unit for each group of 20 devices if the system exceed this capacity.

VX.016 - MINIMUM WIRE CROSS-SECTION AREAS

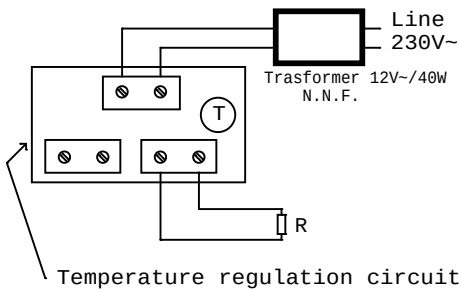
Distance	m	300	400	700	1000
Voice and call wires	Sq.mm	1,6	1,75	2,5	4
COAXIAL CABLE 75 Ohm	Use a normal coaxial wire for distances up to 300 m Add a video amplifier for longer distances.				

The video amplifier must be installed near the monitor.
Two BNC connectors are required for connecting the coaxial wire. Use a RG59 (75 Ohm) coax for a maximum distance of 300 m.
Use video amplifier ref. 1090/729 with RG11 wire for higher distances.

VX.017 - Separate the panel button common.
Push-button panel Mod.725 and / or Domus Aura is recommended.

VX.018 - Connect the following jumpers on the device:
a) ..... with .....
b) ..... with .....
c) ..... with .....

VX.019 - Connect the power unit to the external container



R = Heater resistor
T = Thermostat switch
Outdoor casing and lenses (see product catalogue).
Use the BNC connector provided with the product to connect the coaxial wire to the camera.

VX.020 - Adapt the device by cutting off the button common in point X as shown in the diagram; solder a wire on the button common without terminal and connect as shown in the diagram.

VX.021 - Cut or remove the jumpers on the device(s):
- ...-...
- ...-...
-...-...

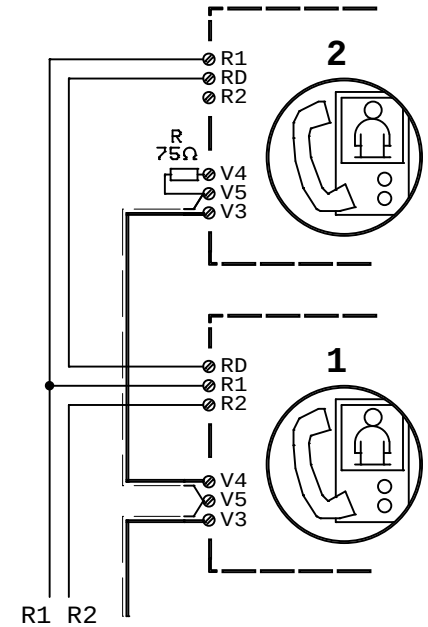
VX.022 - Move the specific switch to position 75 Ohm on the back of the monitor.
Use the BNC connector provided with the product to connect the coaxial wire to the monitor.

VX.023 - Terminal equivalence:
- RT (Artico) = RD (Atlantico).

VX.024 - Wire R2 is required in the column if a secondary door unit is fitted.

VX.025

EXAMPLE OF POWER CONNECTION WITH ATLANTICO VIDEO DOOR PHONES



VX.026 - Install the indicated wires __._._. and dedicated power unit for floor call service.

VX.027

Distance Power Supply/ Camera	Minimum wire cross-section areas
0 - 60 m	0,5 mmq
60 - 100 m	1 mmq

VX.028 - Only for Ref.5330/60: cut and insulate wire 1 (red).

VX.029

CROSS-SECTION AREAS		
DISTANCE	50 m	100 m
POWER SUPPLY/ MONITOR	0,75 mm^2	
MONITOR/ CAMERA	0,50 mm^2	0,75 mm^2

VX.030
Max. distance between main video door phone and secondary video door phone (V3 and V5 terminals)
- with normal wires: max 20 m;
- with coax cable: max 50 m.

VX.031 - On device cut P1 jumper, that short circuits the diode 1N4007 type.
So in intercom installation it is not necessary to insert the external diode.

VX.032 - Minimum wire cross-section areas

Power supply cords and length (12Vcc) have to be configured according to cameras consumption.
See following table:

Camera Consumption	Wire Section (Sq.mm)	Wire lenght (m)
max 300mA	0,75	50
	1,5	100
	2,5	150
	4	240

VX.033 - Minimum wire cross-section areas

Power supply cords and length (12Vcc) have to be configured according to cameras consumption.
See following table:

Camera Consumption	Wire Section (Sq.mm)	Wire lenght (m)
max 500mA	1	50
	2,5	125
	4	200

VX.034 - MINIMUM WIRE CROSS-SECTION AREAS

Distance	m	50	100	200	300
Normal wires	Sq.mm	0,5	0,8	1	1,6
Voice and call wires	Sq.mm	0,5	0,5	0,8	1
Wires R1,R2,+TC	Sq.mm	0,8	1	1,6	2,5
COAXIAL CABLE 75 Ohm	Use a normal coaxial wire for distances up to 300 m Add a video amplifier for longer distances.				

If not present in diagram, plan 2 conductors for entrance panel name tag lighting. Use a suitable power transformer.
Up to 15W it is suggested to use Sch.9000/230 transformer.
Up to 6W it is sufficient to use installation power supply unit.

VX.035 - Trimmer must be adjusted for a time of:..... seconds

VX.036 - Remove jumper on device.

VX.037 - On device setting the jumper/dip-switch ... in position ...

VX.038 - On the last riser video distributor, don't cut the 75 Ohm resistor fitted on the printed circuit.

VX.039 - Relay ref. 788/52 is needed to prevent that a video door phone can be switched on while another device is working and interrupt vision.
Connect the PS wire directly to the monitor ... terminals if the relay is not fitted.

V5.001 - WIRE CROSS-SECTION AREA

Maximum distance		m	50	100	200
Wires	R1	Sq.mm	0,75	1,5	2,5
	R2	Sq.mm	0,5	1,0	2,0
	CA	Sq.mm	0,35	0,50	0,75
	A,B	Sq.mm	0,35	0,35	0,35 Double wires

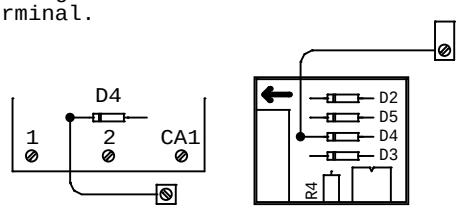
The diagrams indicate the distance between the camera and most distant video door phone unit.
Normal wires can be used for distances up to 100 metres. For higher distances (up to 200 metres) the wires A and B must be doubled.

V5.002 - If not present in diagram, plan 2 conductors for entrance panel name tag lighting. Use a suitable power transformer.
Up to 15W it is suggested to use Sch.9000/230 transformer.
Up to 6W it is sufficient to use installation power supply unit.

V5.003 - On the device, cut the wire connecting the G/T terminal to the printed circuit.

V5.004 - On the last distributor, insert two 82 Ohm resistors (provided) between terminals R1-A and R1-B.

V5.005 - Solder the wire to the diode terminal as shown in the following drawing and take it out with a terminal.



Ref.1132/35 Ref.1133/35A

V5.006 - The maximum distance between devices is … metres.

V5.007 - Wire cross-section area (Mod. 956)

From camera to video door phones

Function	Wires	m	50	100	200
Video power unit	R1	Sq.mm	0,5	0,75	1,5
Video power unit	R2	Sq.mm	0,5	0,75	1,5
Video signal	A	Sq.mm	0,35	0,35	0,35 Double wires
Video signal	B	Sq.mm	0,35	0,35	0,35
Call	C1-C2	Sq.mm	0,35	0,35	0,75
Self-insertion	AI	Sq.mm	0,35	0,35	0,35

From power unit to camera

Function	Wires	m	50	100	-
Power unit 12V~	~12	Sq.mm	0,75	1,50	-
Power unit 12V~	~0	Sq.mm	0,75	1,50	-
Power unit 18V=	+18	Sq.mm	1,50	2,50	-
Power unit 18V=	R1	Sq.mm	1,50	2,50	-

The diagrams indicate the distance between the camera and video door phone unit. Normal wires can be used for up to 100 m.

For higher distances (up to 200 metres) the wires A and B must be doubled.

The maximum distance from power unit to camera is 100 m.

V5.008 - Connect the wire for switch-on function.
Connect a jumper between the terminals X2 and G.

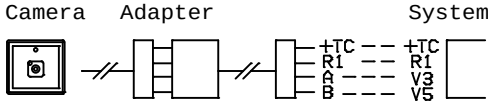
V5.009 - Wire cross-section area (Mod.952)

Maximum distance		m	50	100
Wires	A, A (R1, +26)	Sq.mm	0,75	- -
	L, L	Sq.mm	0,5	0,75

V5.010 - Cut the wires (projecting from the adapter) to use the connector again.
Then insert the connected in the adapter socket. Follow the tables below for connecting:

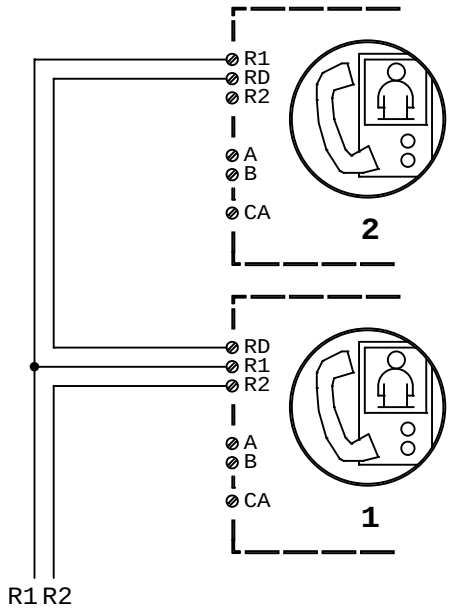
to Camera	Adapter (wires)	- -
R1	Bl (Blue)	- -
+TC	Gi (Yellow)	- -
V5	Sheath } Coaxial	
V3	Central }	

- -	Adapter (connector)	to System
Coaxial {	Central	A
	Sheath	B
--	Bl (Blue)	R1
--	Gi (Yellow)	+TC



V5.011 - Connect wire for autoinsertion function. In this case install a jumper between X2 and G terminals.

V5.012 - CONNECTION EXAMPLE OF POWER SUPPLY TO 2 WINFLAT+ OR ATLANTICO OR ONDA VIDEO DOOR PHONES IN PARALLEL



V5.013 - On device cut the wire connecting G/T terminal pin to printed circuit board.

V5.014 - On video door phones bracket terminating resistors must not be present.

V5.015 - If installation doesn't require monitors in parallel, Sch.789/5B video power supply unit can power max. 8 Sch.955/40 video distributors.

C6.001 - MINIMUM WIRE CROSS-SECTION AREAS

Distance	m	100	200	400	800	1200
Wires +24,-24 1, 2, D	Sq.mm	0,5	0,75	1,5	2,5	4

The indicated distance is between calling door unit and most distant apartment station.

- Lay the wires at a suitable distance from power lines (further than 30cm where possible).
- The wire length between decoder and apartment stations must be shorter than 20 m.

C6.002 - The calling module must be configured according to METHOD ...

C6.003 - The calling module must be programmed with:
PRIVATE DOOR OPENER (see programming chapter).

C6.004 - The digitiser must be configured according to METHOD ...

C6.005 - The digitiser must be programmed with:
PRIVATE DOOR OPENER (see programming chapter).

C6.006 - Each digitiser can manage 16 users and can be encoded as follows:
101-116/201-216 / / /901-916, etc.
1001-1016/2001-2016 / /9001-9016.

C6.007 - The telephone switchboard must be configured according to METHOD ...

C6.008 -

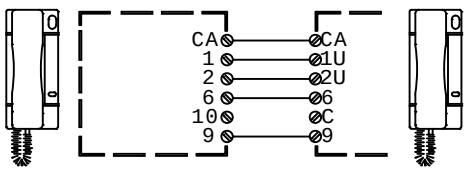
C6.009 - The sum in terms of unitary loads (UL) of the devices (quadruple/single decoders, digitisers, etc.) connected to the column power unit must be less than the maximum UL which can be output by the power unit.
Refer to the integrated system technical manual for the consumption of each device expressed in terms of UL.
N.B.: Relay boxes must be included in the unitary load count.
In all cases, the +24 wires of the various power units must NEVER be connected to each other.

C6.010 - Arrange the following jumpers on the special service decoder:

KEY:
☒ JUMPER ON
☐ JUMPER OFF

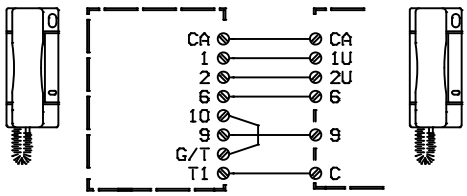
Follow the indications described in the chapter: "PROGRAMMING - CONTROL MODE"
○ DIRECT
○ INDIRECT
in the instruction booklet provided with the product.

C6.011 - EXAMPLE OF CONNECTION OF A DOOR PHONE IN PARALLEL



Door phone Ref.1132 Ref.826/31

C6.012 - EXAMPLE OF CONNECTION OF A DOOR PHONE IN PARALLEL



Door phone Ref.1132/1 Ref.826/31

C6.013 - Connect the electronic repertory to the calling module using the wire provided with the product.

C6.014 - Program special service decoder with switchboard in night mode.
- Proceed as follows on switchboard A:
  The two codes must be different.
  Example code 1: 0902.
  Example code 2: 0901.

Pay attention when entering the numbers because they will not appear on the display.

C6.015 -
BUTTON A - SWITCHBOARD B PROGRAMMING
 Set parameter 1 in programming step 7.
 Enter code 2 in programming step 7a.
BUTTON B - SWITCHBOARD A PROGRAMMING
 Set parameter 1 in programming step 8.
 Enter code 1 in programming step 8a.
Pay attention because they will not appear on the display.

C6.016 - SWITCHBOARD ACTIVATION
The two switchboards cannot both work at the same time.
One must be set up to work and the other must be bypassed.
-Set up switchboard B from switchboard A as follows: press button B and the bell button.
-Set up switchboard A from switchboard B as follows: press button A and the bell button.
The enabled switchboard will perform the normal day and night service.

C6.017 - Key buttons.
These buttons allow the user to reset the special decoder

C6.018
PROGRAMMING OF DOOR ENTRYPHONE SWITCHBOARD "A" BUTTON
At step 7 of programming procedure set parameter 1
At step 7a of programming procedure enter the 2nd code
PROGRAMMING OF DOOR ENTRYPHONE SWITCHBOARD "B" BUTTON
At step 8 of programming procedure set parameter 1
At step 8a of programming procedure enter the 1st code
Take care because the entered digits are not shown by display

C6.019 - Key buttons or relay contacts activated by an access control system: UrmetDomus.
These buttons (relay contacts) placed near door entryphone switchboards allow the operator to enable ONLY one of the door entryphone switchboards (with display message: SYSTEM OK).

C6.020 - Sch.826/54 decoder terminal pins indication for special services.

Normally open	S3
Common	S1
Normally close	S2

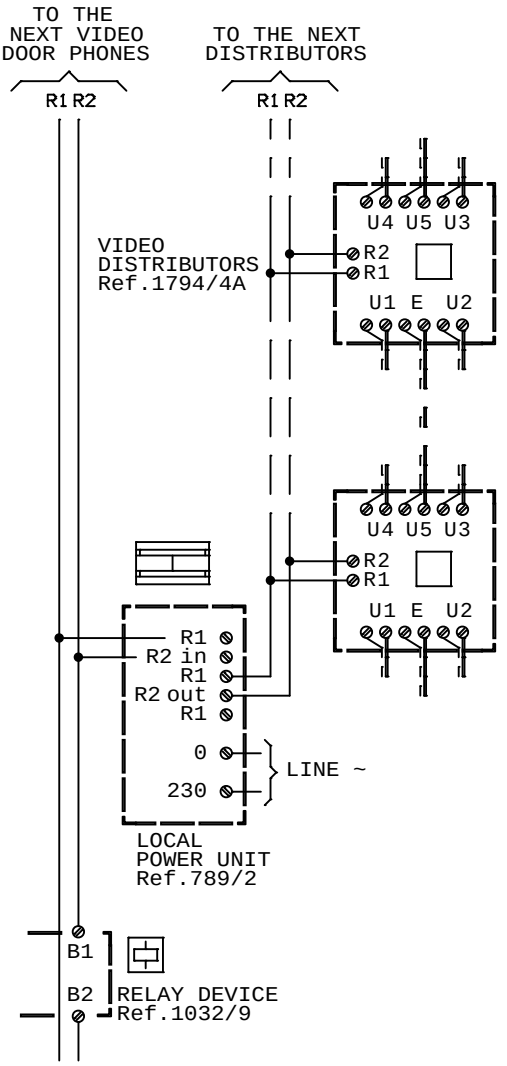
V6.001 - MINIMUM WIRE CROSS-SECTION AREAS

Distance	m	50	100	200	300
Wires R1, R2,+TC	Sq.mm	0,75	1	1,5	2,5
Wires +24,-24 1, 2, D	Sq.mm	0,5	0,5	0,75	1,5
COAX WIRE 75 Ohm	Use a normal coaxial wire for distances up to 300 m. Use video amplification devices for longer distances.				

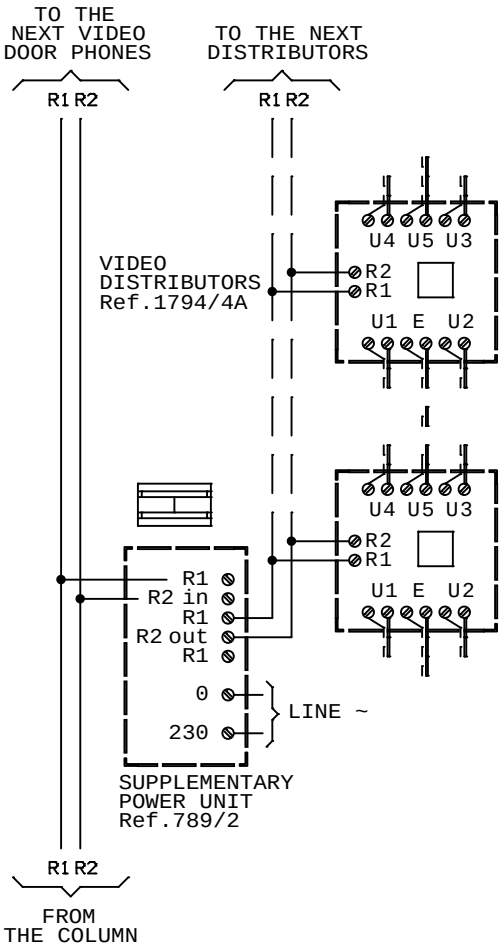
The indicated distance is between calling door unit and most distant apartment station.

- Lay the wires at a suitable distance from power lines (further than 30cm where possible).
- The wire length between decoder and apartment stations must be shorter than 20 m.

V6.002 - EXAMPLE OF LOCAL CONNECTION WITH SEVERAL VIDEO DISTRIBUTORS.

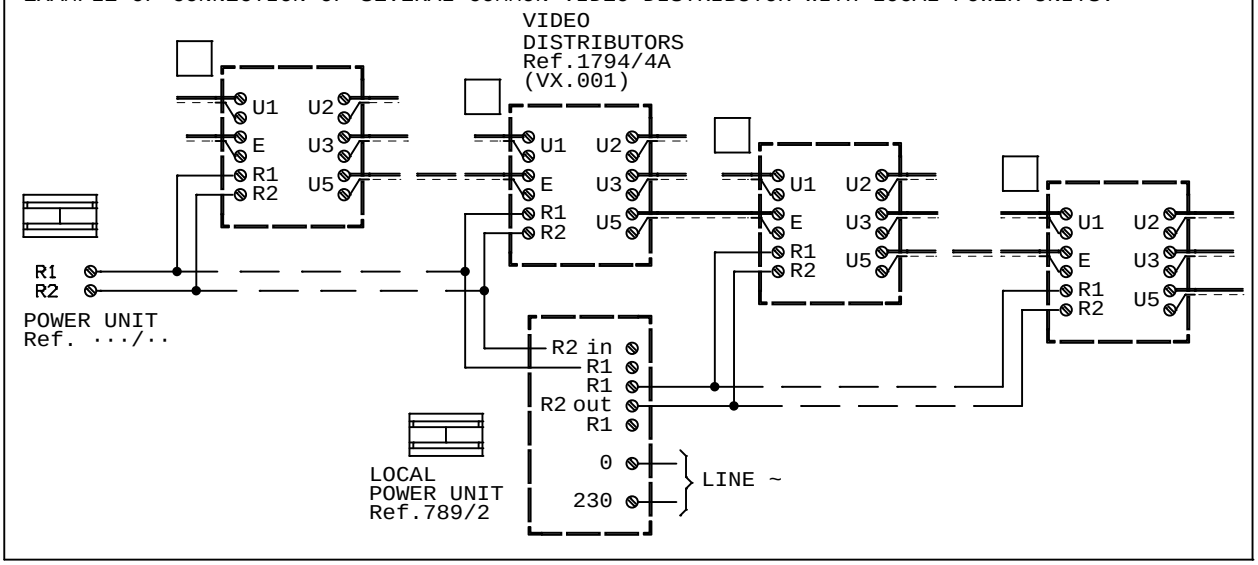


V6.003 - EXAMPLE OF SUPPLEMENTARY CONNECTION WITH SEVERAL VIDEO DISTRIBUTORS.



V6.004 - The power unit ref. /.. can power up to video distributors.
Use one local power unit ref. 789/2 for each group of distributors (max.12) after exceeding this limit.

EXAMPLE OF CONNECTION OF SEVERAL COMMON VIDEO DISTRIBUTOR WITH LOCAL POWER UNITS.



CB.001- MINIMUM WIRE CROSS-SECTION AREAS

FROM DOOR UNIT TO COUPLER

Distance	m	50	100	200	- -
Wires L1, L2	Sq.mm	0,75	0,75	1,5	- -

FROM COUPLER TO LAST APARTMENT STATION

Distance	m	50	100	200	400
Wires L1, L2	Sq.mm	0,75	0,75	0,75	1,5

FROM COUPLER TO TRANSFORMER

Distance	m	50	- -	- -	- -
Wires ~0, ~24	mmq	1,5	- -	- -	- -

ELECTRICAL DOOR LOCK CIRCUIT

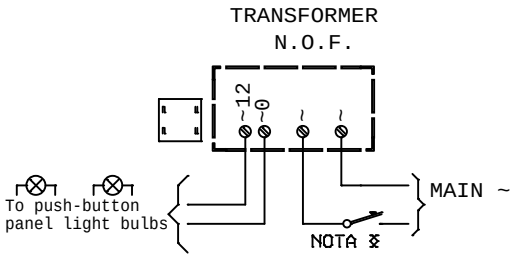
Distance	m	50	- -	- -	- -
Wires ~0, ~12	mmq	1,5	- -	- -	- -

NOTE: Lay the bus wires (L1 - L2) at a suitable distance from the power lines (more than 10cm, where possible). This precaution will prevent interference.
Refer to telephone installation regulations if the use of common conduits cannot be avoided (with a metallic partition).

WARNING: Avoid laying door unit bus wires in the same conduits with apartment station bus wires.

CB.002 - Insert the connector (provided with product) to M/S socket in only one of the bus couplers in the system. This will be the master unit. Each coupler can manage up to 50 users split on four outputs.

CB.003 - Set up wires for switching on push-button panel lights using a power transformer suited to the number of the bulbs.
Use 12Vac voltage for 14/15V bulbs.



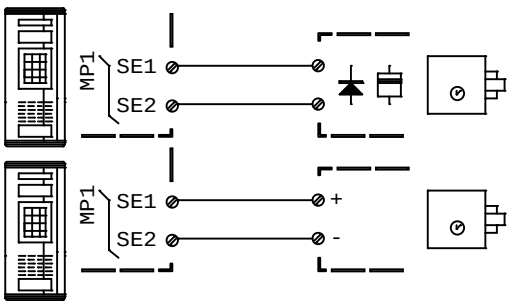
CB.004 - Set up the two wires for switching on push-button panel lights using a power transformer suited to the number of the bulbs.
Use 12V~ voltage for 14/15V bulbs (up to four bulbs can be directly powered via terminals ~0 and ~12 of the video power unit).

CB.005 - Connect a jumper SP and GND to the door unit/integrated digitiser.

CB.006 - Two accessible potentiometers are provided on the calling module to adjust internal (INT) and external (EXT) volume.

CB.007 - Connect jumper between terminal SP and terminal GND on the call module.

CB.008 - Two accessible potentiometers are provided on the calling module to adjust internal (INT) and external (EXT) volume.



IMPORTANT: Always connect SE1 to the positive pole of the electrical lock (if polarised).
If a polarisation diode is used, connect the SE1 terminal to the cathode of this diode.

VB.001- MINIMUM WIRE CROSS-SECTION AREAS

FROM DOOR UNIT TO POWER UNIT

Distance	m	50	100	200	- -
Wires GND, R, SN	Sq.mm	0,5	- -	- -	- -
Wires R1, +TC	Sq.mm	0,75	- -	- -	- -

FROM POWER UNIT TO LAST APARTMENT STATION

Distance	m	50	100	200	- -
Wires R1, R2	Sq.mm	0,75	1,5	2,5	- -
Wires A, B (*)	Sq.mm	0,25	0,25	0,25 binati	- -

(*) Mandatory cross-sections.
The diagrams indicate the distance between the camera and most distant video door phone unit.
Normal wires can be used for distances up to 100 metres. For higher distances (up to 200 metres) the wires A and B must be doubled.

BETWEEN VIDEO POWER UNITS

Distance	m	50	100	200	- -
Wires SNR, RR	Sq.mm	0,5	0,5	0,75	- -

VB.002- MINIMUM WIRE CROSS-SECTION AREAS

FROM COLUMN TO APARTMENT STATION

Distance	m	1	- -	- -	- -
Wires R1, R2	Sq.mm	0,75	- -	- -	- -
Wires A, B	Sq.mm	0,25	- -	- -	- -
Wires L1, L2	Sq.mm	0,75	- -	- -	- -

Wires A and B must be connected directly to terminals A1 and B1.
The terminals must be connected to the video door phone as shown.

BETWEEN VIDEO POWER UNITS

Distance	m	50	100	200	- -
Wires SNR, RR	Sq.mm	0,5	0,5	0,75	- -

VB.003 - Turn the TIMER trimmer on the video power unit to the maximum value (clockwise).

VB.004 - Connect two 82 Ohm-1/4 W resistors to the last video door phone in the column to terminals R1-A1 and R1-B1.

CU.001 - MINIMUM WIRE CROSS-SECTION AREAS

FROM DOOR UNIT TO TRANSFORMER

Distance	m	50	- -	- -	- -
Wires ~0, ~24	Sq.mm	1,5	- -	- -	- -

FROM TRANSFORMER TO ELECTRICAL LOCK

Distance	m	50	- -	- -	- -
Wires ~0, ~24	Sq.mm	1,5	- -	- -	- -

FROM MAIN STATION TO COUPLER

Distance	m	50	100	200	400
Wires L1, L2	Sq.mm	0,75	0,75	1,5	2,5

FROM COUPLER TO LAST APARTMENT STATION OR SECONDARY STATION

Distance	m	50	100	200	- -
Wires L1, L2	Sq.mm	0,75	0,75	0,75	- -

FROM COUPLER TO TRANSFORMER

Distance	m	50	- -	- -	- -
Wires ~0, ~24	Sq.mm	1,5	- -	- -	- -

FROM COUPLER TO SWITCHBOARD

Distance	m	50	100	200	400
Wires L1, L2	Sq.mm	0,75	0,75	1,5	2,5

FROM SWITCHBOARD TO TRANSFORMER

Distance	m	50	- -	- -	- -
Wires ~0, ~12	Sq.mm	1,5	- -	- -	- -

NOTE: Lay the bus wires (L1 - L2) at a suitable distance from the power lines (more than 10cm, where possible). This precaution will prevent interference.
Refer to telephone installation regulations if the use of common conduits cannot be avoided (with a metallic partition).

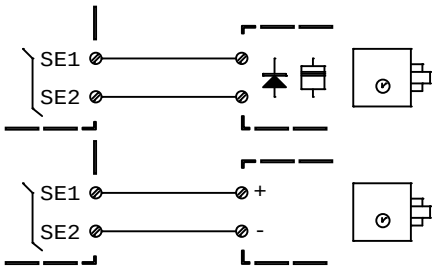
WARNING: Avoid laying door unit bus wires in the same conduits with apartment station bus wires.

Avoid arranging door unit bus wires leading to different couplers in the same conduit.

CU.002 - Insert the connector (provided with product) to M/S socket in only one of the bus couplers in the system. This will be the master unit. Each coupler can manage up to 50 users split on outputs.

CU.003 - The door unit must be installed in a suitable set-up 2-row push-button panel (e.g. Mod. Aura or Mod. 725).

CU.004 - Always connect SE1 to the positive pole of the electrical lock (if polarised).
If a polarisation diode is used, connect the SE1 terminal to the cathode of this diode.



CU.005 - Cut and isolate the speaker red wire.

CU.006 - Insert the connector (provided with product) to M/S socket in only one of the bus couplers in the system. This will be the master unit. Each coupler can manage up to 50 door phones/video door phones split on the outputs.

CU.007 - Maximum number of stations in system.

Number of main stations	Number of columns with secondary	Maximum number of columns without secondary	Maximum number of couplers
1	10	0	10
2	10	0	10
3	9	3	12
4	8	4	12
5	7	5	12
6	6	6	12
7	5	7	12
8	4	8	12
9	3	9	12
10	2	10	12
11	1	11	12
12	0	12	12

CU.008 - MINIMUM WIRE CROSS-SECTION AREAS

FROM MASTER COUPLER TO ANY DEVICE CONNECTED ON MAIN SIDE

Distance	m	50	100	200	400
Wires L1, L2 ~0*, ~12*	mmq	0,75	0,75	1,5	2,5

FROM COUPLER TO MOST DISTANCE APARTMENT STATION OR SPECIAL DECODER

Distance	m	50	100	200	- -
Wires L1, L2	mmq	0,75	0,75	0,75	- -

FROM COUPLER TO SECONDARY STATION

Distance	m	50	100	200	- -
Wires L1, L2 ~0*, ~12*	mmq	0,75	0,75	1,5	- -

FROM COUPLER TO DOOR LOCK CONNECTED TO DOOR UNIT WITH DIGITISER

Distance	m	50	100	200	400
Wires ~0*, ~12*	mmq	0,75	0,75	1,5	2,5

FROM CALL MODULE TO LOCK

Distance	m	50	- -	- -	- -
Wires SE1, SE2	mmq	1,5	- -	- -	- -

NOTE: * Sections shown in table refer also to use of transformer ref. 9000/230 (for wires ~0 and ~12).

CAUTIONS

Lay the bus wires (L1 - L2) at a suitable distance from the power lines (more than 10 cm).

Refer to telephone installation regulations if the use of common conduits cannot be avoided (with a metallic partition).

Avoid laying door unit bus wires in the same conduits with apartment station bus wires.

Avoid arranging apartment station bus wires leading to different couplers in the same conduit.

Extension limit of the system.

The sum of all bus sections on main station side must be less than 800 m. The sum of all bus sections on door phone side of a coupler must be less than 800 m.

CU.009 - Provide two wires for switching on the push-button panel light bulbs.
Use a power transformer suitable to the number of light bulbs.
Use of transformer ref. 9000/230 is recommended for up to five bulbs (max 15 W).

CU.010 - The following are present on K-Steel door unit only:
a) Terminals 0~ and 12~ (light).
b) Terminals C, 1 and 2 (user buttons)

CU.011 - Special service decoder must be configured as follows:

Operating mode ☐ **M0** ↵ (monostable)
☐ **M1** ↵ (bi-stable)

Relay activation time: **D5** ↵

Activation mode ☐ **O2** ↵ (any)
☐ **O1** ↵ (column)
☐ **O0** ↵ (specific)

user codes / calling stations

Switchboard function buttons ☐ **Enabled** ☐ **Disabled**

Follow the indications provided in instructions booklet in the "PROGRAMMING - CONFIGURATION" chapter.

CU.012

CU.013

CU.014 - MINIMUM WIRE CROSS-SECTION AREAS

BETWEEN DECODER AND BUS COUPLER ON DOOR PHONE SIDE

Distance	m	50	100	200	
Wires L1,L2	Sq.mm	0,75			X

BETWEEN DECODER AND BUS COUPLER MAIN STATION ON SIDE

Distance	m	50	100	200	400
Wires L1,L2	Sq.mm	0,75		1,5	2,5

VU.001 - WIRE CROSS-SECTION AREA

CONTROL SYSTEM AND RELAY CONTROL

Distance	m	50	100	- -	- -
Wires SN,+R	Sq.mm	0,5	1	- -	- -

FROM POWER UNIT TO VIDEO DEVICES

Distance	m	50	100	200	- -
Wires R1, R2, +TC	Sq.mm	0,75	1,5	2,5	- -
Wires A, B A1, B1	Sq.mm	0,25	0,25	0,25 Double Wires	- -

The diagrams indicate the distance between the camera and most distant video door phone unit.
Normal wires can be used for distances up to 100 metres. For higher distances (up to 200 metres) the wires A and B (A1 and B1) must be doubled.

VU.002 - Follow the instructions provided with the product for fitting the camera.

VU.003 - Use the wire (provided) to connect the switchboard to the video module. Connect the long terminal to terminal CV and the short terminal to GND.

VU.004 - The common section (wire A1 and B1 in, wire A1 and B1 out) runs in the same connection tube from monitors 1 and 2 must be max. 1 metre in length.

VU.005 - WIRE CROSS-SECTION AREA

FROM BUS COUPLER/VOP POWER UNIT TO DOOR PHONES

Distance	m	50	100	200	- -
Wires VPI,VPU, L1, L2	**Important! Use ref. 1074/90 wire only.**				

FROM VOP POWER UNIT TO MAIN STATION STREET SIDE

Distance	m	50	100	200	400
Wires R1, R2	sq.mm	0,75	0,75	1,5	2,5
Wires A, B	**Important! Use AWG22 double telephone wire only.**				

FROM VOP POWER UNIT TO SECONDARY STATIONS STREET SIDE

Distance	m	50	100	200	- -
Wires R1, R2	sq.mm	0,75	0,75	1,5	- -
Wires R	sq.mm	0,5	1	1,5	- -
Wires A, B	**Important! Use AWG22 double telephone wire only.**				

PILOT SIGNAL

Distance	m	10	- -	- -	- -
Wires CM, GND	sq.mm	0,5	- -	- -	- -

VU.006 - WIRE CROSS-SECTION AREA

FROM BUS MASTER COUPLER TO ANY DEVICE CONNECTED ON MAIN STATION SIDE

Distance	m	50	100	200	400
Wires L1, L2 ~0*, ~12*	sq.mm	0,75	0,75	1,5	2,5

FROM BUS COUPLER TO SECONDARY STATION

Distance	m	50	100	200	- -
Wires L1, L2 ~0*, ~12*	sq.mm	0,75	0,75	1,5	- -

FROM CALL MODULE TO LOCK

Distance	m	50	- -	- -	- -
Wires SE1, SE2	sq.mm	1,5	- -	- -	- -

FROM COUPLER TO DOOR LOCK CONNECTED TO DOOR UNIT WITH DIGITISER

Distance	m	50	100	200	400
Wires ~0*, ~12*	sq.mm	0,75	0,75	1,5	2,5

NOTE: * Sections shown in table refer also to use of transformer ref. 9000/230 (for wires ~0 and ~12).

CAUTIONS

Lay the bus wires (L1 - L2) at a suitable distance from the power lines (more than 10 cm).

Refer to telephone installation regulations if the use of common conduits cannot be avoided (with a metallic partition).

Avoid laying door unit bus wires in the same conduits with apartment station bus wires.

Avoid arranging door unit bus wires leading to different couplers in the same conduit.

Extension limits of the system.

The sum of all bus sections on main station side must be less than 800 m. The sum of all bus sections on door phone side of a coupler must be less than 800 m.

VU.007 - Warning! In Enter/Exit configuration and with Mod.Sentry+ monitors, there are limits on maximum distance in column and monitors maximum number, also with Ref.1074/90 vop cable. See system technical manual.

CD.001 - MINIMUM WIRE CROSS-SECTION AREAS

BETWEEN POWER UNIT AND LAST DECODER OR SPECIAL DOOR PHONE

Distance	m	230	460	760	1200
Wires 0V, +V	Sq.mm	0,75	1,5	2,5	4

BETWEEN POWER UNIT AND LAST SPECIAL DOOR PHONE

Distance	m	100	200	350	550
Wires 0F, +F	Sq.mm	0,75	1,5	2,5	4

BETWEEN POWER UNIT AND CALLING MODULE

Distance	m	20	40	70	110
Wires 0V, +V	Sq.mm	0,75	1,5	2,5	4

BETWEEN POWER UNIT AND DIGITISER

Distance	m	60	120	210	330
Wires 0V, +V	Sq.mm	0,75	1,5	2,5	4

BETWEEN POWER UNIT AND CALLING MODULE OR DIGITISER

Distance	m	75	150	250	400
Wires 0F, +F	Sq.mm	0,75	1,5	2,5	4

BETWEEN CALLING STATION AND LAST DECODER

Distance	m	1100	2250	3450	- -
Wires FA-FB (1-2)	Sq.mm	0,75	1,5	2,5	- -

BETWEEN MASTER POWER UNIT AND LAST DEVICE

Distance	m	580	1160	1800	- -
Wires D (Data)	Sq.mm	0,75	1,5	2,5	- -

BETWEEN MASTER POWER UNIT AND LAST SLAVE

Distance	m	350	700	1180	1800
Wires OD	Sq.mm	0,75	1,5	2,5	4

↓ ↓ ↓ ↓ ↓

FOLLOWS ON SIDE

↓ ↓ ↓ ↓ ↓

BETWEEN DECODER AND APARTMENT STATION

Distance	m	20	50	- -	- -
Wires CA-FA-FB CV-0V	Sq.mm	0,25	0,5	- -	- -

Lay the wires at a suitable distance from power lines (further than 30 cm where possible).

The maximum extension of DIGIVOICE system is 3500 m.

The extension corresponds to the distance between the calling device and the most distance decoder. Include the sum of all sections (column lines + common lines) for complex systems with several columns. Do not include extension lines from decoders to apartment stations.

CD.002 - The master power unit must be arranged in the middle of the system.

CD.003 - The power unit for up to 8 digitisers/built-in door units must be arranged so that the wires to each calling station are shorter than 330 m.

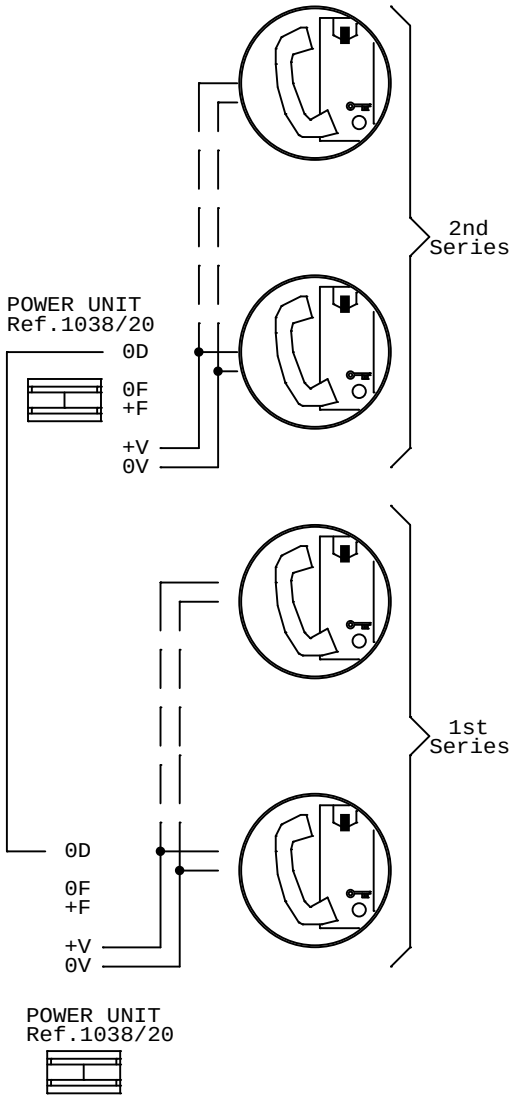
CD.004 - The calling module must be programmed with:
FREE DOOR OPENER [Lib.] or:
PRIVATE DOOR OPENER [Segr.]
(see programming chapter).

CD.005 - The calling module must be programmed with: PRIVATE DOOR OPENER [Segr.] (see programming chapter).

CD.006 - The digitiser/built-in door unit must be configured with:
PRIVATE DOOR OPENER [Segr.]
(see programming chapter).

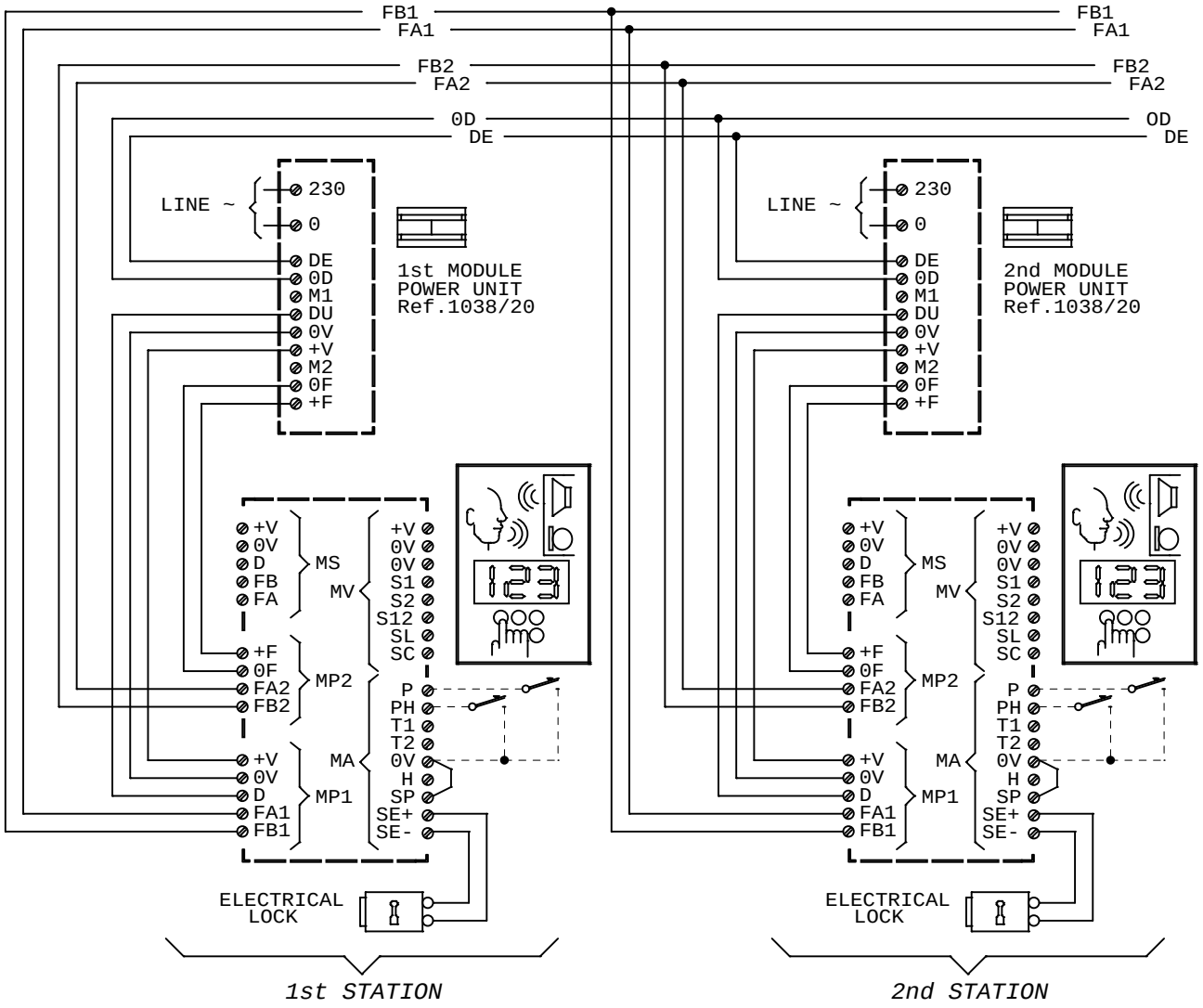
CD.007 - The sum in terms of unitary loads (UL) of the devices (quadruple/single decoders, digitisers, etc.) connected to the column power unit must be less than the maximum UL which can be output by the power unit.
Refer to the integrated system technical manual for the consumption of the devices expressed in terms of UL.
N.B.: Relay box intakes must be included in the UL count.
Join the terminals 0D of power units if several are used in the column.
In all cases, the +V wires of the various power units must NEVER be connected to each other.

EXAMPLE OF CONNECTION OF SEVERAL POWER UNITS TO SEVERAL DOOR PHONES

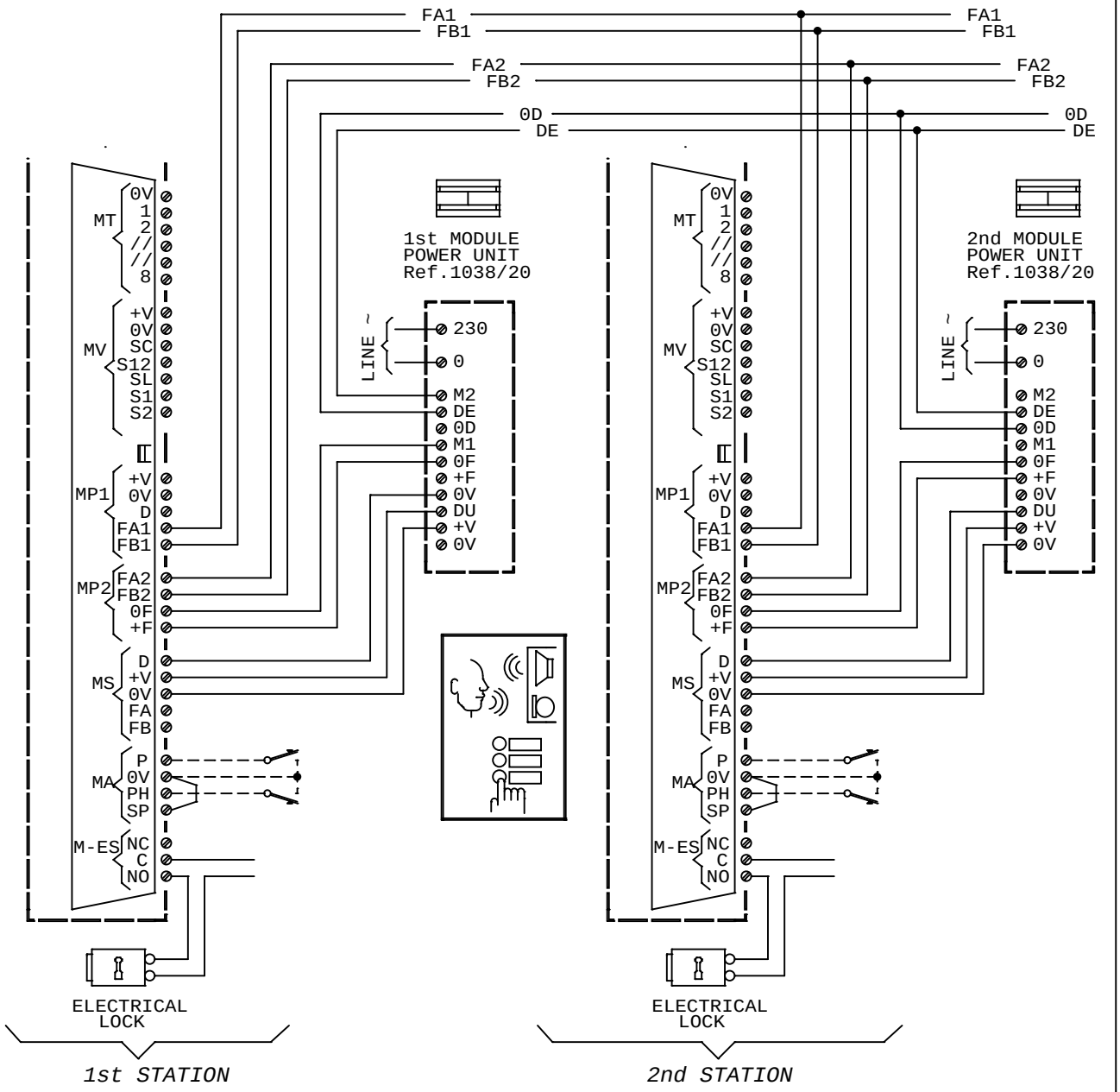


CD.008 - The power unit must be positioned so that the wires to each calling station are less than 110 m long.

CD.009 - Example of connection between two calling modules when the distance exceeds 110 metres.



CD.010 - Example of connection between two calling stations when the distance exceeds 330 metres.



CD.011 - Special service decoder must be configured as follows:

Relay mode: ☐ Bistable ☐ Toggle

Toggle time: 00:00

Enable reading: ☐ Yes ☐ No

Source:
- ☐ Specific
- ☐ Column
- ☐ Any

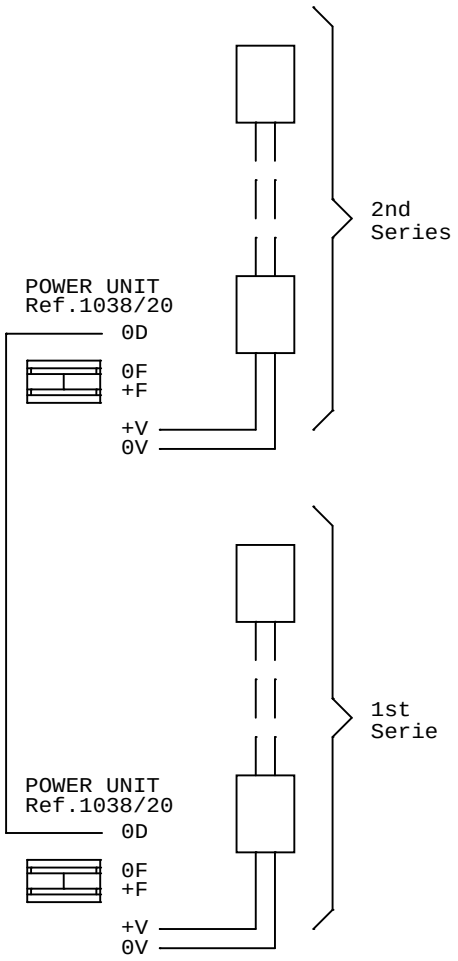
Destination:
- ☐ Specific
- ☐ Column
- ☐ Any

Following the indications provided in the instruction booklet in the "PROGRAMMING - CONFIGURATION" chapter.

CD.012 - Key buttons.
Other buttons can be used to silence calls and reset the switchboard memory.

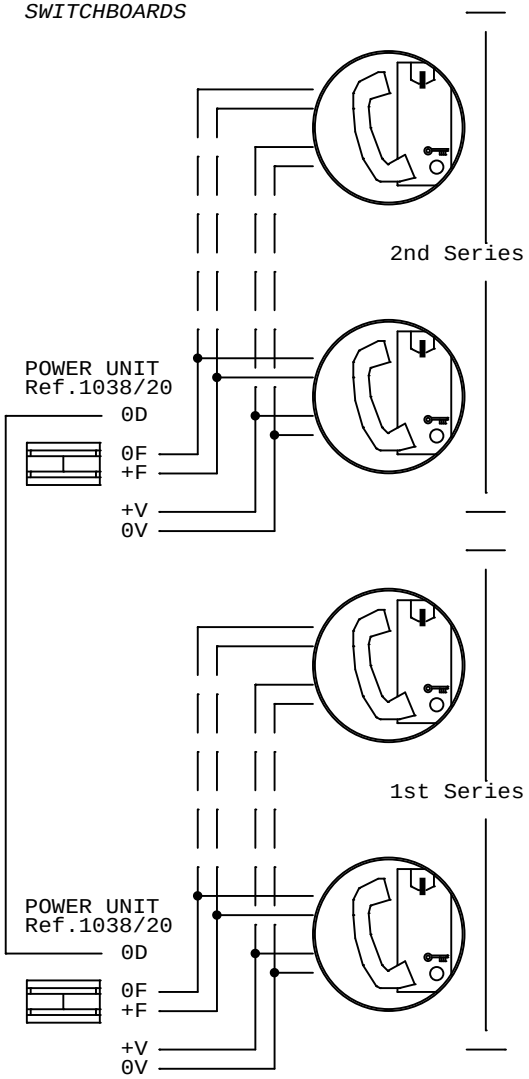
CD.013 - The sum in terms of unitary loads (UL) of the devices (quadruple/single decoders, digitisers, etc.) connected to the column power unit must be less than the maximum UL which can be output by the power unit.
Refer to the integrated system technical manual for the consumption of each device expressed in terms of UL.
N.B.: Relay box intakes must be included in the UL count.
Join the terminals 0D of power units if several are used in the column.
In all cases, the +V wires of the various power units must NEVER be connected to each other.

EXAMPLE OF CONNECTION OF SEVERAL POWER UNITS TO SEVERAL DECODERS



CD.014 - The sum in terms of unitary loads (UL) of the devices (quadruple/single decoders, digitisers, etc.) connected to the column power unit must be less than the maximum UL which can be output by the power unit.
Refer to the integrated system technical manual for the consumption of each device expressed in terms of UL.
N.B.: Relay box intakes must be included in the UL count.
Join the terminals 0D of power units if several are used in the column.
In all cases, the +V wires of the various power units must NEVER be connected to each other.

EXAMPLE OF CONNECTION OF SEVERAL POWER UNITS TO SEVERAL CONCIERGE SWITCHBOARDS



CD.015 - The code to be associated to button T2 must be different for each column.

CD.016 - Maximum length of battery wiring: 2 metres of wire with minimum cross-section area of 2.5 mm².

CD.017 - In door phones where the terminal AP is not fitted, connect the terminal CA of ringer Ref. 9854/42 to the red wire on the speaker after cutting it.

CD.018 - DISTANCES AND WIRE CROSS-SECTION AREAS IN A SINGLE COLUMN SYSTEM WITH CALLING MODULE

Maximum distance metres	*Wire cros-section area sq.mm*	*Wire function*
A = 1200	4	0V, +V
	1,5	D
B = 1800	4	0D
	2,5	D
C = 110	4	0V, +V
	1,5	0F, +F
D = 1800	2,5	D
E = 3500	2,5	FA, FB
F = 50	0,5	FA, FB CA, 0V

- Lay the wires at a suitable distance from power lines (further than 30 cm where possible).

The maximum extension of DIGIVOICE system is 3500 m.

Include the sum of all sections (column lines + common lines) for complex systems with several columns. Do not include extension lines from decoders to apartment stations. Refer to the DIGIVOICE system technical manual for the various distances.

CD.019 - DISTANCES AND WIRE CROSS-SECTION AREAS IN A SINGLE COLUMN SYSTEM WITH DIGITISER CALLING STATION

Maximum distance metres		*Wire cros-section area sq.mm*	*Wire function*
A =	1200	4	0V, +V
		1,5	D
B =	1800	4	0D
		2,5	D
C =	330	4	0V, +V 0F, +F
D =	1800	2,5	D
E =	3500	2,5	FA, FB
F =	50	0,5	FA, FB CA, 0V

- Lay the wires at a suitable distance from power lines (further than 30 cm where possible).

The maximum extension of DIGIVOICE system is 3500 m.

Include the sum of all sections (column lines + common lines) for complex systems with several columns. Do not include extension lines from decoders to apartment stations. Refer to the DIGIVOICE system technical manual for the various distances.

CD.020 - Connect ringer terminal Z to the red speaker wire (AP) in door phones.

CD.021 - Connect ringer ref. 9854/42 terminal CA to the red speaker wire (AP) in door phones.

CD.022 - Connect terminal C to the red speaker wire (AP) in door phones.

CD.023 - To connect in systems with door phone switchboard only.

CD.024 - On Mod. K-Steel door speaker unit only there are:
a) 0~ and 12~ terminals (lighting).
b) 0V, 1 and 2 terminals (users buttons).

CD.025 - MINIMUM WIRE CROSS-SECTION AREAS

BETWEEN DECODER AND PHONIC ADAPTOR

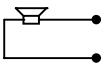
Distance	m	20	50	- -	- -
Wires CA-FA-FB CV-0V-+V	mmq	0,25	0,5	- -	- -

CD.026 - Sch.1038/62 digitiser only: use 725 Mod. or Domus-Aura mod. push button panel on two rows.

CD.027 - In door phone you must connect terminal pins K and Z to following loudspeaker wires:

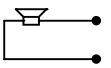
1138 1138/2	1138/3	1138/4	RINGER 9854/41
G/T	TP 6	TP 2	K
AP	TP 5	TP 1	Z

CD.028 - In door phone you must connect terminal pins C and 6 to following loudspeaker wires:



1138 1138/2	1138/3	1138/4	RELAY 788/52
G/T	TP 6	TP 2	6
AP	TP 5	TP 1	C

CD.029 - In door phone you must connect terminal pins C and 6 to following loudspeaker wires:



1138 1138/2	1138/3	1138/4	RINGER 9854/42
G/T	TP 6	TP 2	6
AP	TP 5	TP 1	CA

VD.001 - MINIMUM WIRE CROSS-SECTION AREAS

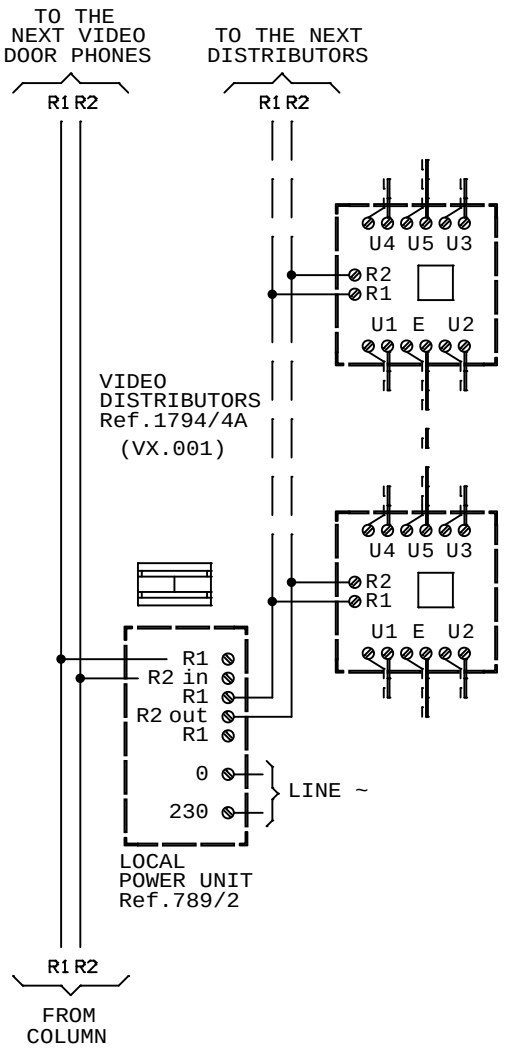
BETWEEN POWER UNIT AND VIDEO DEVICES

Distance	m	50	100	200	400
Wires R1,R2,+TC	Sq.mm	0,75	1	1,5	2,5
COAXIAL CABLE 75 Ohm	Use a RG 59 coaxial wire for up to 300 m. Use a RG 11 coaxial wire for up to 600 m. Use video amplification devices for longer distances.				

VD.002 - See the chapter "Demister power" in the chosen product manual for K-Steel camera modules only.

VD.003 - The column power unit Ref. .. /.. can power up to .. video distributors.
Use one local power unit ref. 789/2 for each group of distributors (max. 12) after exceeding this limit.

EXAMPLE OF LOCAL CONNECTION WITH SEVERAL VIDEO DISTRIBUTORS.



VD.004 -

VD.005 - Power unit ref. ... can power up to ... video distributors.

VD.006 - The video distributors must be powered by their own power unit to prevent putting earth in common.

VD.007 = Floor call button.

VD.008 - Relay terminal indicator Ref.1032/9

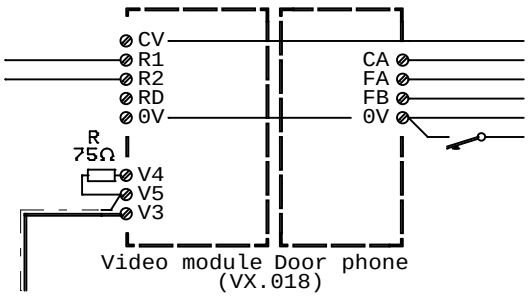
Normally open	*A3*	*B3*	*C3*	*V3*
Common	*A1*	*B1*	*C1*	*V1*
Normally closed	*A2*	*B2*	*C2*	*V2*

VD.009 - The power unit Ref. /.. can power up to max. -- video distributors.

VD.010 - CABLE COAXIAL

CAVO COAX 75 Ohm	Use a RG 59 coaxial wire for up to 300 m. Use a RG 11 coaxial wire for up to 600 m. Use video amplification devices for longer distances.

VD.011 - Connection example for mod. Scaitel video door phone system in place of mod.Artico and/or Atlantico video door phone system.



VD.012 - On switching device set the jumper as written in the table according to the number of used cameras.

JUMPER SETTING

Number of Cameras	JP1	JP2	JP3	FUNCTION
2	ON	--	--	Video Signal I1÷I2
3	--	ON	--	Video Signal I1÷I2÷I3
4			ON (*)	Video Signal I1÷I2÷I3÷I4

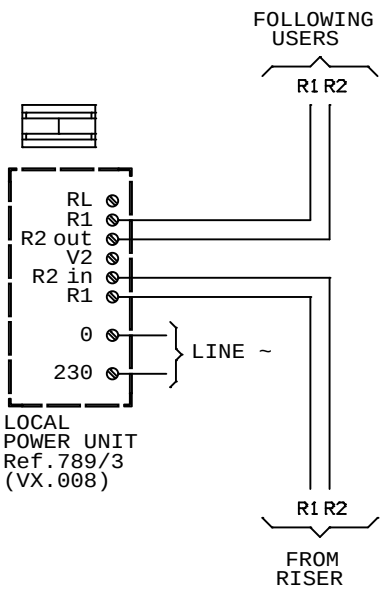
(*) Default setting

VD.013

VD.014

VD.015 - The column power unit Ref.789/3 can power up to 12 video distributors.
Use one local power unit Ref.789/3 for each group of distributors (max. 12) after exceeding this limit.

EXAMPLE OF LOCAL POWER UNIT WITH SEVERAL VIDEO DISTRIBUTORS.



CY.001 - MINIMUM WIRE CROSS-SECTION AREAS AND DIAMETERS

Distance	m	50	100	200
Voice and call circuit	∅ mm	8/10	10/10	12/10
	Sq.mm	0,5	0,8	1

CY.002 - The power unit is dimensioned for an average system with 25 devices. With a higher number of devices, connect several power units in parallel (maximum 4) each of which will power its own group of 25 devices.
You are recommended to arrange the power unit in the middle of each group of devices to minimise diaphony.

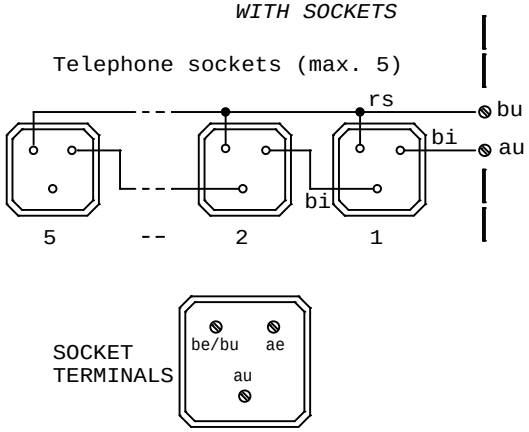
CY.003 - The calling devices must be programmed with two digits (any number from 01 to 97).

CY.004 - Add an amplifier with the following characteristics to set up the GENERAL CALLING service:
- Input sensitivity: 775 mV
- Power: According to the number of power of the speakers to be installed.

You are recommended to arrange the amplifier as close as possible to the power unit and connect it to the shielded wire.

VL.001 - Connect telephone lines to the switchboard via telephone line protection devices.

VL.002 - SERIES SYSTEM CONSTRUCTION WITH SOCKETS



VL.003 - Connect phone lines with phone line surge protection devices.

V2.001 - WIRE CROSS-SECTION AREAS

BETWEEN POWER SUPPLY UNIT AND DOOR SPEAKER UNIT

Distance	m	75	- -	- -	- -
Wires LINE	**Used only cable Ref.1082/90**				

FROM POWER SUPPLY TO APARTMENT STATION

Distance m	120 (Max.75 m with Artico)
Wires LINE	**Used only cable Ref.1082/90**

IMPORTANT NOTES

In all cases, avoid laying system wires near electrical power lines to improve interference immunity. Keep a distance of at least 30 cm.

The distance between the calling device and the most distant apartment station must be less than 150 m. The maximum distance between the most distant apartment stations of various columns must be less than 150 m

Extension limits of the system.

The maximum extension of the 2GO! system is 375 m.
Consider the sum of all lines (sections on door unit side + sections on video door phone/door phone side) in complex systems. Extension lines from the distributor to the apartment stations are included.

AUXILIAR SIGNAL FROM OUTDOOR STATION TO:

• ELECTRIC LOCK.

Distance	m	30	50	100
Wires SE-, SE+	sq.mm	0,28	0,5	1

• DOOR OPENER BUTTON.

Distance	m	25	- -	- -
Wires PA, GND	sq.mm	0,28	- -	- -

• DOOR SENSOR CONTACT.

Distance	m	25	- -	- -
Wires SP, GND	sq.mm	0,28	- -	- -

• DEVICE FOR CAMERA TVCC.

Distance	m	75	- -	- -
Wires T, GND	sq.mm	0,28	- -	- -

V2.002 - UNITARY LOAD SUM.

IMPORTANT. The sum of unitary loads (UL) of electrical devices in the system must be less than the maximum unitary load that can be output by the power unit ref. 1082/20.
Refer to the system technical manual for the draw expressed in terms of UL.
Add a transformer for lighting the name tags with the following sections and maximum distances if the total name tag capacity is not sufficient.
Switchboard B as follows: press button A and the bell button.
The enabled switchboard will perform the normal day and night service.

Distance	m	75	75	75	- -
Wires ~0, ~12	mmq	0,28	0,5	1	- -

V2.003

Switch the line termination "Z" to the off position (see instruction booklet provided with the product).

V2.004

Important! The dip switches on the power unit corresponding to not connected lines must be switched to the ON position (see instruction booklet provided with the product).

V2.005 - Special service decoder must be configured as follows:

switch mode ☐ Toggle ☐ Monost.

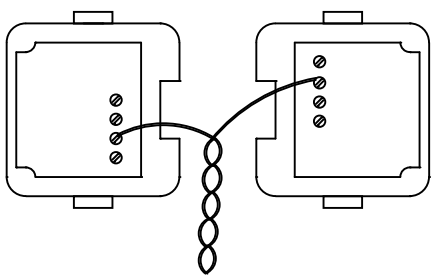
Monost. time ☐ not import. ☐ 00:00

Activation after: Call ☐

other events ☐

Follow the indications provided in instructions booklet in the "PROGRAMMING - CONFIGURATION" chapter.

V2.006 - The wire must remain twisted as near as possible to Ref.1038/69 relay boxes for AWG22 cables connection (A and B signals).
(Put devices as shown)



V2.007 - DIGIVOICE VIDEO INSTALLATION WIRE CROSS-SECTION AREAS

Distance	m	50	100	200	400
Wires R2, R1	sq.mm	0,75	1,5	2,5	4,0
Wires +TC, R1	sq.mm	0,75	0,75	1,5	2,5
Wires A, B	Important! Use AWG22 phone twisted pair only (max. distance 850 m)				

V2.008 - SUITABLE CABLES TYPES

BETWEEN POWER SUPPLY UNIT AND DOOR SPEAKER UNIT (LINE)

Cable type	*Distance*
Urmet Domus cable Ref.1082/90	75m
Ø0.6mmq phone twisted pair, not 5 category	75m
Other cables: min. cross-section: 0.3mmq, max cross section: 1.5mmq	75m

BETWEEN POWER SUPPLY UNIT AND APARTMENT STATION (LINE)

Cable type	*Distance*
Urmet Domus cable Ref.1082/90	75m
Ø0.6mmq phone twisted pair, not 5 category	75m
Other cables: min. cross-section: 0.3mmq, max cross section: 1.5mmq	75m

BETWEEN DOOR SPEAKER UNIT AND APARTMENT STATION

Cable type	*Distance*
Urmet Domus cable Ref.1082/90	150m
Ø0.6mmq phone twisted pair, not 5 category	75m
Other cables: min. cross-section: 0.3mmq, max cross section: 1.5mmq	75m

BETWEEN APARTMENT STATIONS

Cable type	*Distance*
Urmet Domus cable Ref.1082/90	150m
Ø0.6mmq phone twisted pair, not 5 category	75m
Other cables: min. cross-section: 0.3mmq, max cross section: 1.5mmq	75m

INSTALLATION MAXIMUM EXTENSION

Cable type	*Distance*
Urmet Domus cable Ref.1082/90	375m
Ø0.6mmq phone twisted pair, not 5 category	75m
Other cables: min. cross-section: 0.3mmq, max cross section: 1.5mmq	75m

Follow

↓ ↓ ↓ ↓ ↓ ↓

For complex systems include the sum of all the lines (door speaker unit sections + video door phone/door phone sections).

WARNING

However, to improve noise immunity do not lay system wires near power lines; so distance must be greater than 30 cm.

AUXILIARY SIGNALS BETWEEN DOOR SPEAKER UNIT AND:

o ELECTRIC LOCK.

Distance	m	30	50	100
Wires SE-, SE+	sq.mm	0,28	0,5	1

o ELECTRIC LOCK BUTTON.

Distance	m	25	- -	- -
Wires PA, GND	sq.mm	0,28	- -	- -

o CCTV CAMERAS DEVICE.

Distance	m	75	- -	- -
Wires T, GND	sq.mm	0,28	- -	- -

V2.009 - Set dip-switch INT on device to ...

V2.012 - WIRE CROSS-SECTION AREAS

BETWEEN POWER SUPPLY UNIT AND DOOR SPEAKER UNIT

Distance	m	75	- -	- -	- -
Wires LINE	**Used only cable Ref.1082/90**				

FROM POWER SUPPLY TO APARTMENT STATION

Distance m	120 (Max.75 m with Artico)
Wires LINE	**Used only cable Ref.1082/90**

IMPORTANT NOTES

In all cases, avoid laying system wires near electrical power lines to improve interference immunity. Keep a distance of at least 30 cm.

The distance between the calling device and the most distant apartment station must be less than 150 m. The maximum distance between the most distant apartment stations of various columns must be less than 150 m

Extension limits of the system.

The maximum extension of the 2GO! system is 375 m.
Consider the sum of all lines (sections on door unit side + sections on video door phone/door phone side) in complex systems. Extension lines from the distributor to the apartment stations are included.

AUXILIAR SIGNAL FROM OUTDOOR STATION TO:

• ELECTRIC LOCK.

Distance	m	30	50	100
Wires SE-, SE+	sq.mm	0,28	0,5	1

• DOOR OPENER BUTTON.

Distance	m	25	- -	- -
Wires PA, GND	sq.mm	0,28	- -	- -

• DOOR SENSOR CONTACT.

Distance	m	25	- -	- -
Wires SP, GND	sq.mm	0,28	- -	- -

• DEVICE FOR CAMERA TVCC.

Distance	m	75	- -	- -
Wires T, GND	sq.mm	0,28	- -	- -

V2.013 - For Genya mod. only: connection between modules must be done only with provided flat cable.

TF.001 - Extension output 28 cannot be used if a door phone interface ref.1342/56 is fitted.

TF.002 - Remember that for correct T0 bus operation, the 100 ohm (0.25 W) mains terminals must be connected only to the last bus socket. Consequently, check that all terminals except for the last one have been removed.
Refer to the respective instruction manual for removing mains terminals from an IStante switchboard.

TF.003 - For distances between internal terminals see diagram SC104-0025.

TF.004 - The number of telephones with LED panel shown in the table below can be connected to the SEGN terminals of the PABX telephone switchboard:

Switchboard	*Telephones with LED panel*
Ref.1332/515	Max. 2
" " 1332/528	Max. 2
" " 1332/512	Max. 3

TF.005 - 3 = Reception wire +
4 = Transmission wire +
5 = Transmission wire -
6 = Reception wire -

TF.006 - The distances shown in the figure refer to low capacity Bus S/T wires (C=30 nF/Km; R=130 Ohm/Km; Z=150 Ohm @ 96 kHz); the distances are halved for high capacity wires (C=120 nF/Km; R=130 Ohm/Km; Z=75 Ohm @ 96 kHz).

TF.007 - Domus Cell must not be installed by the side of or in close contact with the PABX switchboard because this could cause GSM radio-magnetic interference.

domus Cell

TF.008 - The maximum length of the telephone line (distance between switchboard and telephone socket) must not exceed 500 metres.

domus Cell

TF.009 ONLY PSTN LINES

LINES NUMBER	LINES NAME	REF. 2 LU 1362/2
2	LT1,LT2	1
4	LT1,LT2 LT3,LT4	2
6	LT1,LT2 LT3,LT4 LT5,LT6	3

1362/624

TF.010 ONLY ISDN LINES

LINES NUMBER (T0)	LINES NAME	REF. BASE 1362/52	REF. ADDITIONAL 1362/53
1,S0	T1,S0	1	
2	T1,T2	1	
2,S0	T1,T3,S0	1	1
3	T1,T2,T3	1	1
3,S0	T1,T3,T4 S0	1	2

1362/624

TF.011 LINE PSTN + LINE ISDN

LINES NUMBER PSTN	LINES NUMBER (T0) ISDN	LINES NAME PSTN	LINES NAME ISDN	REF. 2 LU PSTN 1362/2	REF. BASE ISDN 1362/52	REF. ADDITION. ISDN 1362/53
2	1,S0	LT1,LT2	T1,S0	1	1	
2	2	LT1,LT2	T1,T2	1	1	
2	2,S0	LT1,LT2	T1,T3, S0	1	1	1
4	1,S0	LT1,LT2 LT5,LT6	T1,S0	2	1	

TF.012 - DISTANCES AND WIRE CROSS-SECTION AREAS

BETWEEN Ref. 1090/722 TRANSMITTER AND Ref. 1090/723 RECEIVER (with B/W cameras)

Distance max.	m	2000	- -	- -
Wires	Use 2x0.5mmq twisted, type 24AWG 1KV insulation cable only.			

CE.001 - MINIMUM CROSS-SECTION AREAS

MAX DISTANCE	m	10	25	50
from Door Opener Module to Power Supply	mmq	1	1,5	2,5
from Door Opener Module to Electric Lock	mmq	1	1,5	2,5
from Door Opener Module to Lobby Key from Door Opener Module to Postman Key from Door Opener Module al Clock Contact	mmq	0,5		

Ref.1105/2

DOOR OPENER MODULE WITH CODE KEYPAD

CE.002 - MINIMUM CROSS-SECTION AREAS

MAX DISTANCE	m	25	50
MAINS	mm^2	0,75	1,5
ELECTRIC LOCK	mm^2	0,75	1,5
BUTTON PS	mm^2	0,5	--

Ref.1103/2

DOOR OPENER MODULE EMBEDDED WITH SINTHESI PROXIMITY KEY READER

CE.003 - MINIMUM CROSS-SECTION AREAS

MAX DISTANCE	m	25	50	100
MAINS	mm^2	0,75	1,5	--
ELECTRIC LOCK	mm^2	0,75	1,5	--
DOOR OPENER BUTTONS	mm^2	0,5	0,5	--
DOOR OPENER MODULES	mm^2	0,5	0,5	0,5

Ref.1104/12

DOUBLE TECHNOLOGY PROXIMITY KEY READER MODULE

CE.004 - Follow the programming instructions in the instruction booklet provided with the product.

Mod.1104

CE.005 -
Power supply output current must be:
-ACTIVE lock current
+
-door opener module current (200mA)

for
1103/2
and
1103/3