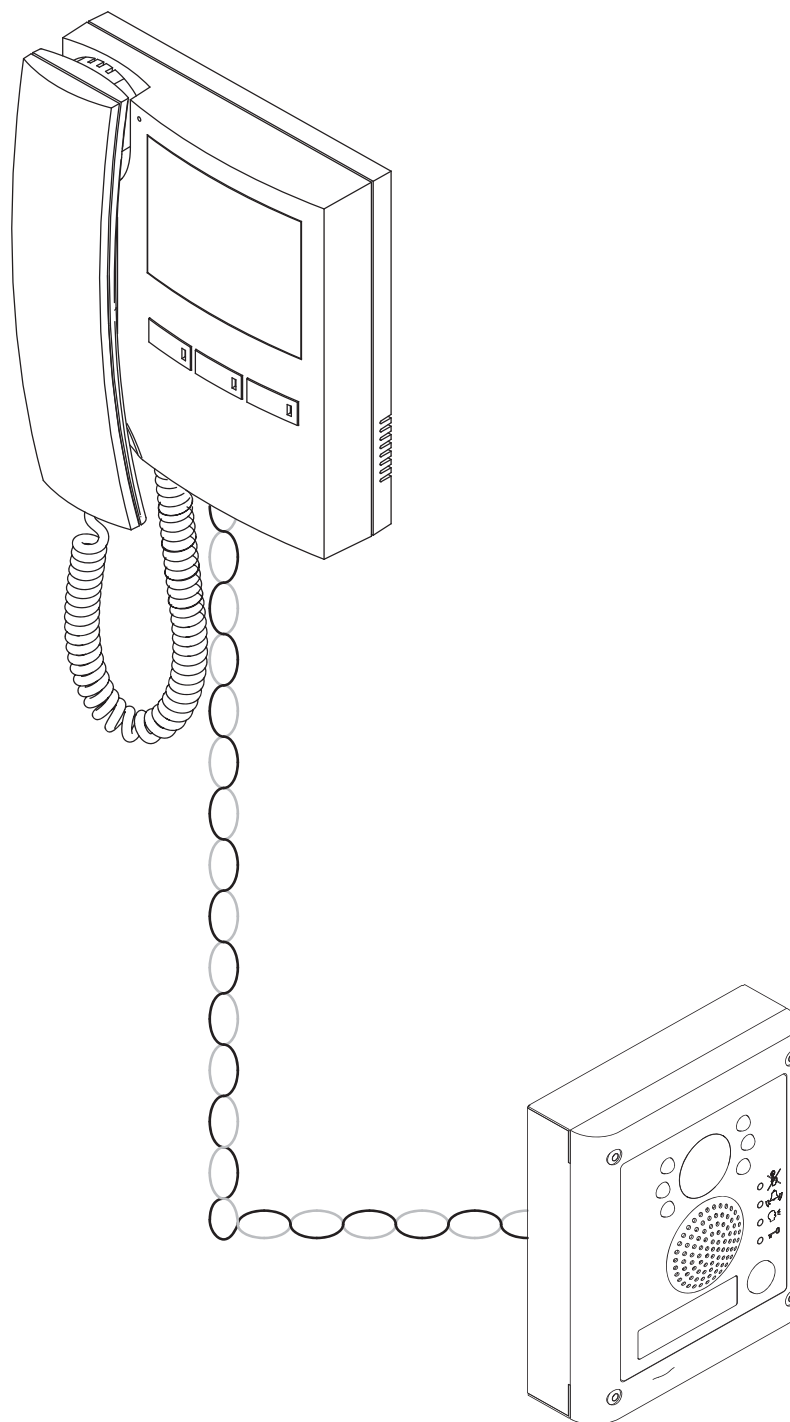


ENG

3600 Series

Easy Videokit "2 Wire"



Edition
2014
Rev. 1.1

 **VIDEX®**

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Art.4333



Speaker unit module with built-in B&W camera with autoiris lens comprised of IR illumination LEDs. According to the speaker unit version it includes one or two call push buttons. The module is available also in colour camera version where the illumination LEDs are white light.

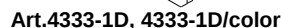
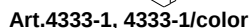
- The transmitting amplifier with condenser microphone and volume control;

- The receiving amplifier with volume control;
- The audio balance circuit with the "BALANCE" control;
- The enslavement relay to enable the electric lock (3 contacts: common, normally open and normally closed). It can work also as capacitor discharge to supply directly the electric lock;
- The call buttons from 1 to a maximum of 2 depending on the module version;
- The illumination LEDs for the card name holder;
- The camera comprised of illumination LEDs.

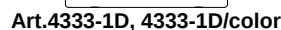
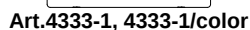
a. Camera with illumination LEDs:

- b. Loudspeaker;
- c. Card name holder;
- d. Call push button (1 or 2 according to the model);
- e. Operation LEDs
- f. Microphone;
- g. Microphone volume control;
- h. Balance Control;
- i. Loudspeaker volume control;
- j. Dip-switch to carry out the following programming:
 - Door station ID (switches from 1 to 3);
 - Door opening time (switch 4);
 - Conversation time (switch 5);
- k. System connection terminals;

AVAILABLE MODULE VERSIONS



BUTTONS LAYOUT



FRONT LEDS SIGNALLING DESCRIPTION

Sign	Description
	When illuminated, indicates that it is not possible to make a call because a call or a conversation is in progress (from the outdoor station from which you are calling or from another outdoor station on systems with multiple entrances). The LED will be off when the system is in stand-by
	If illuminated, indicates that the call from the outdoor station is in progress. The LED will switch OFF when the call is answered or after the programmed number of rings.
	If illuminated, indicates that it is possible to speak because the call has been answered. The LED will switch OFF at the end of a conversation (or at the end of the conversation time).
	If illuminated, indicates that the door lock has been operated. It will switch OFF at the end of the programmed "door opening" time.

PROGRAMMING

The programming consists of the following settings:

- Unit ID (1..8);
- Door Opening Time (3 or 6 seconds);
- Conversation Time (1 or 2 minutes);
- Addressing order of the buttons;

The settings are carried out through the 6 way dip-switch (reference j on figure 2) accessible from the rear side of the module.

Unit ID				Door Opening Time		Conversation Time		Addresses Order (Rev. 2.3 or later)	
Switches			ID	Switches	Seconds	Switches	Minutes	Switch	Sort
1	2	3		4		5		6	
OFF	OFF	OFF	1	OFF	3	OFF	1	OFF	see Art.125
ON	OFF	OFF	2	ON	6	ON	2	ON	
OFF	ON	OFF	3						
ON	ON	OFF	4						
OFF	OFF	ON	5						
ON	OFF	ON	6						
OFF	ON	ON	7						
ON	ON	ON	8						

SIGNALS ON SYSTEM CONNECTION TERMINALS			
Terminal	Description	Terminal	Description
BUS	Bus connection terminals	NO	Door open relay normally open contact
BUS		C	Door open relay normally closed contact
PTE	"Push to exit" active low input	+C	Electric lock capacitor discharge output
GND	Ground	VAUX	35Vdc power supply input (if used, the module is powered locally and not from the BUS)
GND	Ground	NC	Door open relay normally closed contact

To use the electric lock with capacitor discharge, make a short between "C" and "+C" then connect the electric lock between terminals "NO" and "GND".

UNIT SPECIFICATION

Housing/Mounting	One 4000 Series Module / 4000 Series Modular System
Push Buttons	Yes, from 0 to 2 call buttons according to the model
Programming	Yes, carried out by the 6 way dip-switch located on the rear of the module
Controls	Microphone and Loudspeaker volume trimmers plus balance trimmer
Front plate Finishes	Mirror stainless steel (standard) and Anodized aluminium (add /a after the product code)
Power Supply	Supplied by the BUS line
Working Temperature	-10 +50°C

CUSTOMER SUPPORT INFORMATION

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Art.125 Call expansion module

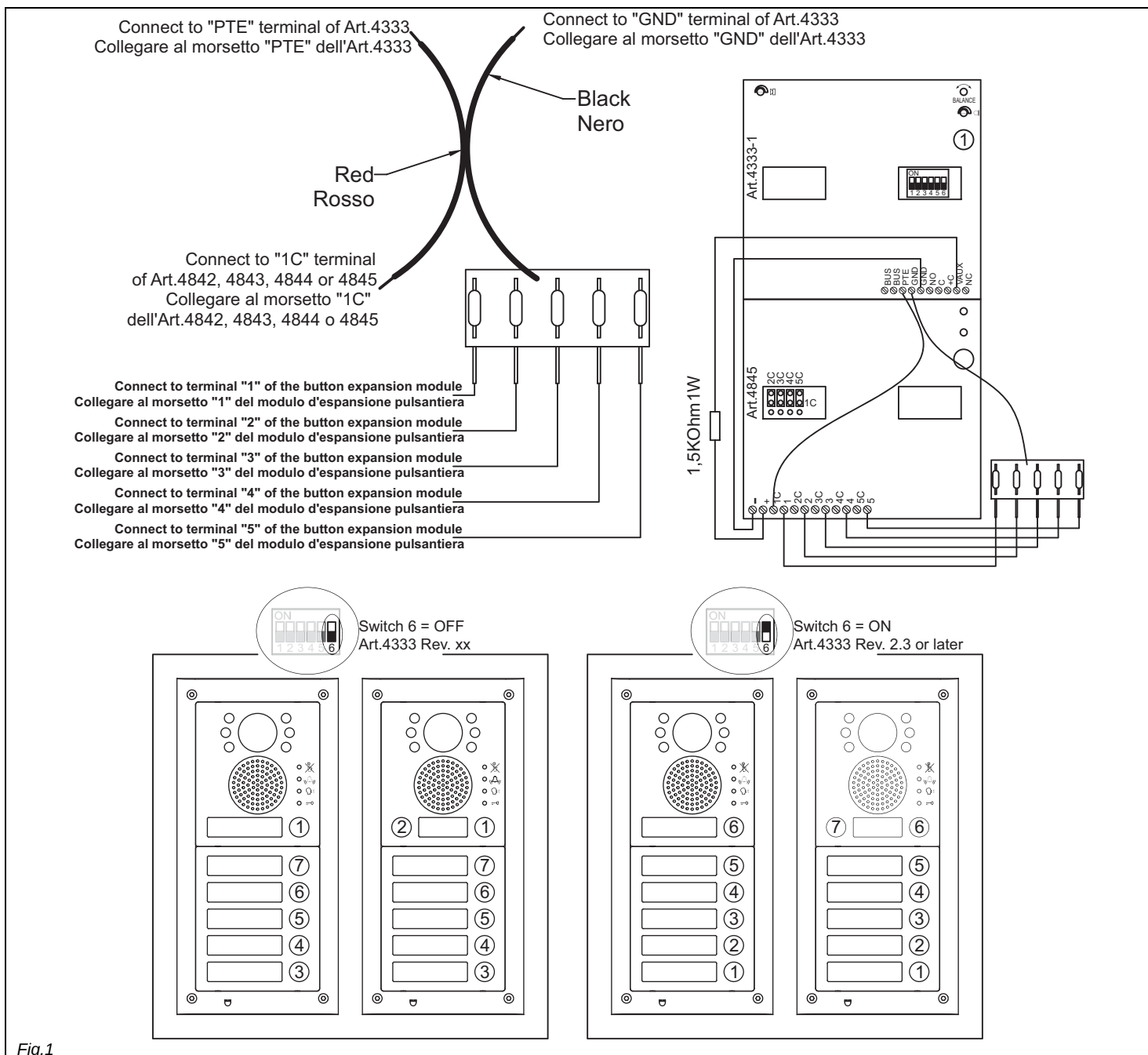


Fig.1

DESCRIPTION

This module must be used in combination with speaker units Art.4333 with firmware release 2.0 or higher. The module, in combination with standard 4000 series button expansion modules (Art.4842, 4843, 4844 and 4845), allows to add up to 5 call buttons to the call buttons built-in the speaker unit to reach a maximum of 7 call buttons. To supply the LED of the button expansion modules make the connection as shown in figure 1. From Art.4333 firmware version 2.3 or later, the switch n.6 sets the addressing order of the buttons so you can sort them as shown above.

UNIT SPECIFICATION

Housing/Mounting	5 resistors module / fix to button expansion module
Push Buttons	N/A
Programming	N/A
Controls	N/A
Power Supply	N/A
Working Temperature	-10 +50°C

CUSTOMER SUPPORT INFORMATION

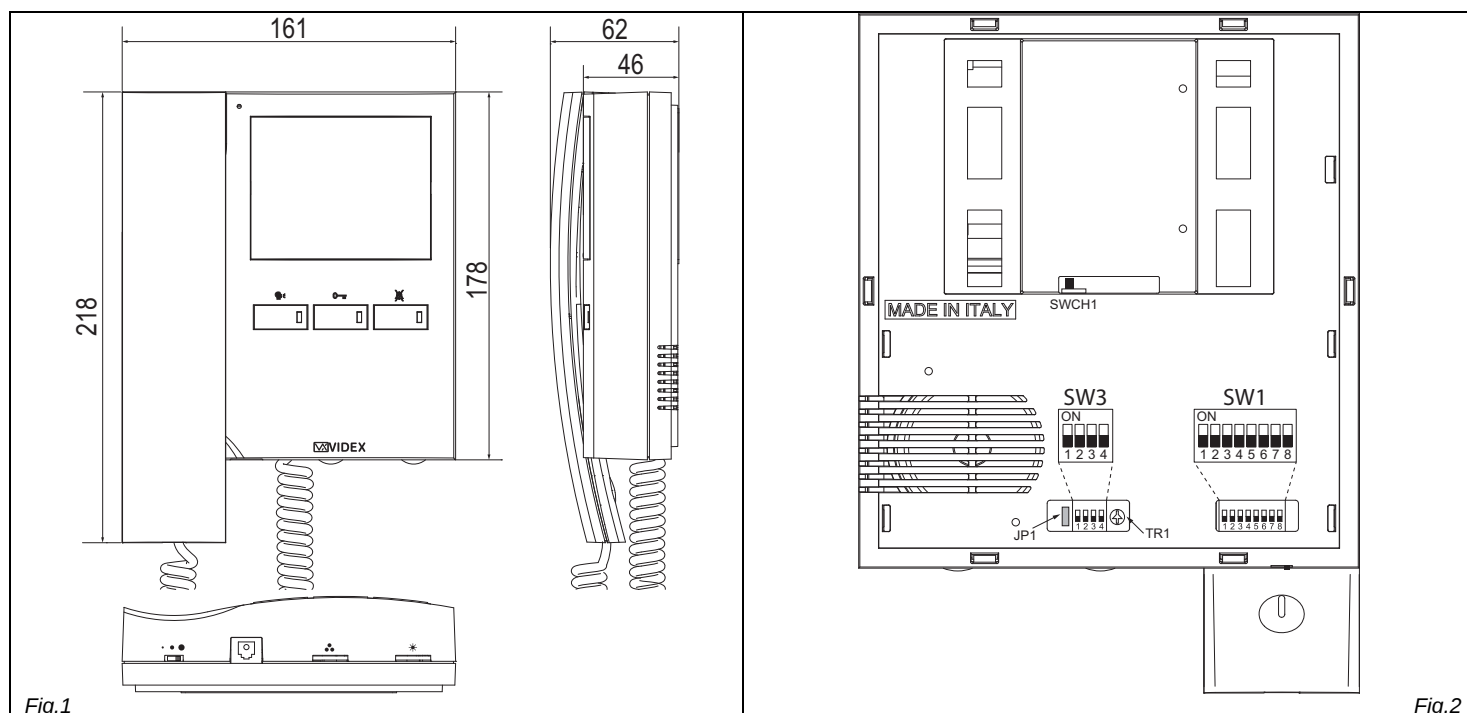
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Art.3686 Digital Videophone



DESCRIPTION

An intelligent Videophone using 3.5" full colour active matrix LCD monitor for VX2300. Including 3 buttons "camera recall", "door-open/intercommunicating call", "privacy/service" plus 3 LED's* for visual indication of all functions. Adjustments & programmable options: call tone volume on 3 levels (low, medium, high), picture hue, brightness and contrast, call tone melody, number of rings, privacy duration and address. Also includes a local bell function. The Art. 3686 is surface mount and requires the Art. 5980 connection board and wall mounting plate.

PUSH BUTTONS, LEDS AND CONTROLS (FIG.1)	
	Camera recall push button. Pick up the handset and press as many times as the DEVICE N. of the door station to switch on.
	Door open push button. Press this button to open the door when you are in conversation.
	Privacy ON-OFF push button. To enable the function press this button when the videophone is in stand-by. The service is automatically disabled when the programmed time expires (the privacy duration time can be programmed) or manually by pressing again the button.
	ON LED. It illuminates when the videophone is switched ON.
	Generic use LED. It is controlled from the terminals "6" and "7" of the PCB connection board Art.5980. Normally used to signal the door status (open or closed).
	PRIVACY ON LED. It illuminates when the privacy service is enabled.
	Call tone volume control (3 levels).
	Brightness control.
	Colour intensity control.
	Jumper for future expansion (must remain closed).
	Contrast control trimmer (rotate left to increase or right to decrease).
	Bus termination switch (Left position = BUS termination active, Right position = BUS termination disabled)

PROGRAMMING

The videophone setup consists of the following settings:

- Number of Rings;
- Melody selection;
- Privacy duration;
- Unit address (1..127, switches 1 to 7 of SW1);
- Bus Termination (open or close, switch SWCH1);
- Intercommunication mode (between apartments or within apartment, switch 1 of SW3);
- Extension address (1..4, switches 2,3 of SW3);
- Slave mode (switch 4 of SW3);

The programming of the number of rings, melody and privacy duration are carried out through the videophone push buttons, all other settings are carried out on the two dip-switch banks (SW1 and SW3) on the rear side of the video monitor (all the settings can be done without opening the videophone).

It is necessary to remove temporary the power supply after making any programming changes.

NUMBER OF RINGS, MELODY SELECTION AND PRIVACY DURATION

To make these changes, it is necessary to pick up the handset first when the system is in stand-by.

Number of rings

- Keep pressed the "☎" button until the two LEDs "☎" and "☎" switch on.
- Press the "☎" button for the number of times corresponding to the required number of rings to set. A beep confirms each time the button is pressed.
- Once the required number of rings is reached, wait approx 5 seconds for the two LED's to switch off.. The new value is stored.

Melody selection

- Keep pressed the "🔑" button until the two LEDs "☎" and "☎" switch on. The unit emits the current selected melody.
- Press the "🔑" button and keep it pressed to listen the next melody. Repeat the operation until the required melody is found.
- Once the required melody is found, wait approx 5 seconds for the two LED's to switch off. The new melody is set.

Privacy duration

- Keep pressed the "🔒" button until the two LEDs "☎" and "☎" are switched on.
- Press the "🔒" button for the number of times corresponding to the required privacy duration to set. Each time the button is pressed, the duration is increased by 15 minutes: i.e. to set 2 hours, press the button 8 times.
- Once the required privacy time is reached, wait approx 5 seconds for the two LED's to switch off. The new duration is set.

VIDEOPHONE ADDRESS – SW1.1..7



SW1.1..7

The table below shows how to set the address of the videophone. Considering that ON = 1 and OFF = 0, multiply each digit for the relevant decimal weight then sum values obtained to get the address: E.g. as highlighted in the table OFF,ON,OFF,OFF,ON, OFF,ON in binary is equal to 0100101 then multiplying each digit for the relevant decimal weight you obtain the address that is 37.

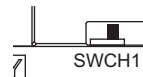
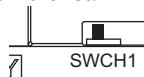
Switches Status							Binary Code – Decimal Weight							Address
7	6	5	4	3	2	1	64	32	16	8	4	2	1	
OFF	OFF	OFF	OFF	OFF	OFF	ON	0	0	0	0	0	0	1	1
OFF	OFF	OFF	OFF	OFF	ON	OFF	0	0	0	0	0	1	0	2
OFF	OFF	OFF	OFF	OFF	ON	ON	0	0	0	0	0	1	1	3
OFF	OFF	OFF	OFF	ON	OFF	OFF	0	0	0	0	1	0	0	4
OFF	ON	OFF	OFF	ON	OFF	ON	0	1	0	0	1	0	1	37
ON	ON	ON	ON	ON	ON	ON	1	1	1	1	1	1	1	127

Note

The maximum number of units allowed is 100 but the address of each unit can be a value between 1 and 127.

VIDEOPHONE END OF LINE TERMINATION – SWCH1

Looking at the videophone from the rear:



Move the switch to the left position to enable the bus termination

Move the switch to the right position to disable the bus termination

In case of more units (intercoms, videophones or video monitors) in a parallel connection (bus wires are connected to the terminals of the first unit then from this to the second and so on up to 4 units max) the BUS termination must be enabled only for the last unit in the chain while on all other units it must be set to disabled.

INTERCOMMUNICATION MODE – SW3.1



SW3.1

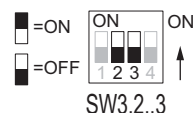
This switch establishes the intercommunication mode: in OFF position (default) intercommunication is between units in the same apartment (same addresses but different extension); in ON position the intercommunication is between units in different apartments (different addresses).

On installations where there are more than one intercom/videophone in the same apartment and intercommunication between different apartments is required, only one intercom/videophone may be set with this function (SW3.1=ON, SW3.2=OFF, SW3.3=OFF). The other intercom/videophones in the apartment must be set for local intercommunication with extension addresses "2-4" (slaves). From the intercom/videophone set for intercommunication with other apartments it will not be possible to intercommunicate within the apartment but slave extensions 2-4 will be able to intercommunicate with each other within the apartment.

EXTENSION NO – SW3.2..3

If the intercommunication between apartments is enabled (switch 1 of SW3 = ON) leave these two switches in default position (both to OFF). Otherwise, if the intercommunication is between the same apartment (switch 1 of SW3 = OFF), set the extension addresses starting always from 1. During the external call, all video monitors in the same flat will ring but the video will be shown only from the videophone with extension address 1.

2	3	Extension No.
OFF	OFF	1 (default, master)
ON	OFF	2 (slave)
OFF	ON	3 (slave)
ON	ON	4 (slave)



SLAVE MODE - SW3.4

This set up concerns the answering mode of the video monitor when there is more than one unit (max 4) in the same apartment. OFF (default) = during a call, only the video monitor with extension 1 (master) will show the video. ON = the video monitor will be switched on independently of the extension address: in this case the video monitor must be supplied locally using a power supply Art.2321 and connecting respectively BUS+ to terminal 14 and BUS- to terminal 11 on the Art.5980 pcb connection board (the local power supply is required for each black & white slave videophone or starting from the third slave videophone when they are all colour videophones). **If you set for one slave videophone, you must set ON the same switch also for the relevant master videophone.**

VIDEOPHONE CONNECTION BOARD ART.5980

SIGNAL ON CONNECTION TERMINALS

Terminal	Signal	Description
1	GND	Ground
2	BUS1	Bus input
3	C	Dry contacts relay common contact (during a conversation, keep pressed the button  for more than 3 seconds to enable the internal link between terminals "3" and "5" – the link remains until the button is released) Max 50Vdc @ 100mA
4	BUS2	Bus input
5	NO	Dry contacts relay normally open contact (during a conversation, keep pressed the button  for more than 3 seconds to enable the internal link between terminals "3" and "5" – the link remains until the button is released) Max 50Vdc @ 100mA
6	DOL	Auxiliary LED power supply input (+12Vdc)
7	DOL	Auxiliary LED power supply input (ground)
8	GND	Ground
9	GND	Ground
10	LB	Local bell input (active low)
11	GND	Ground
12		
13		
14	+VAUX	Auxiliary power supply input (to be used when the switch 4 of SW3 is set to ON)
15		
16		
17		
18	AL	Alarm input (not implemented yet)
19	AL-LB_GND	Ground output for use in combination with "AL" & "LB" active low inputs
20		

VIDEOMONITOR WALL MOUNTING INSTRUCTIONS



- Cables must be fed through the opening "e" (Fig. 2A) of the mounting plate "c", which should be fitted approximately 135cm from finished floor level as shown in Fig 1;
- Place the mounting plate "c" against the wall feeding the wire group "d" through opening "e" of the mounting plate and mark the fixing holes "a" (Fig. 2A)
- Drill the fixing holes "a", insert the wall plugs "b" then with the cables threaded through opening "e" fix the mounting plate "c" to the wall with the 4 screws provided "f" (Fig. 2A).
- Hook the pcb connection board "g" to the mounting plate "c" as shown in Fig2B and connect the wires (using the screwdriver provided) to the terminals as shown in the diagram provided;
- Once the wires are connected, hook the videophone "h" to the Mounting plate "c" as shown in Fig. 3.
 - o Connect the Plug "l" on the ribbon cable from the videophone to the plug "i" on the PCB connection board "g";
 - o Place the videophone "h" against the 4 hooks "m" on the mounting plate "c" (in line with the 4 openings "n" on the rear side of the videophone Fig. 4) and push down as suggested by the pointers in Fig. 3, the videophone will lock into place;
- To remove the videophone, hold it firmly and push the unit in an upward direction until the videophone "h" unlocks from the mounting plate "c"

SPECIFICATION

Housing/Mounting	3600 Series Videophones / mounting plate plus connection board
Push buttons	Yes, 3
Programming	Yes, carried out by the buttons and the dip-switches located on the rear of the videophone
Controls	Call tone volume, brightness and hue
Power Supply	Supplied by the BUS line
Working Temperature	-10 +50 °C

CUSTOMER SUPPORT INFORMATION

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Art.317N Active/passive four way distribution box

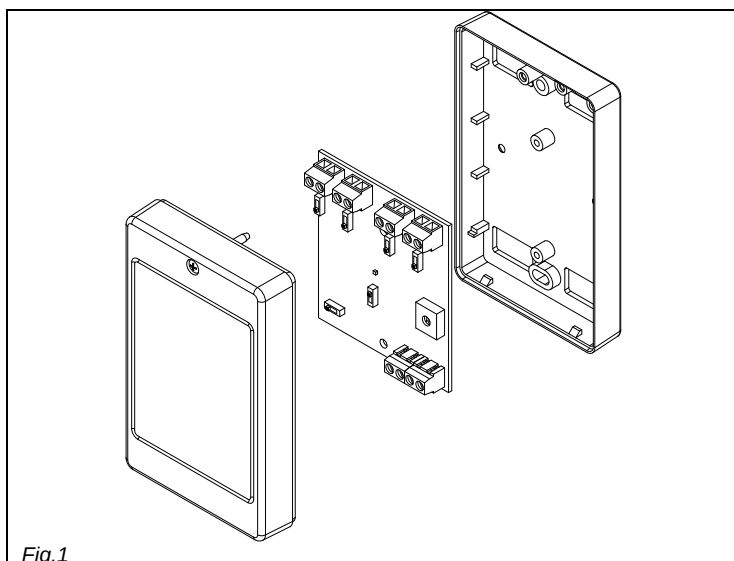


Fig.1

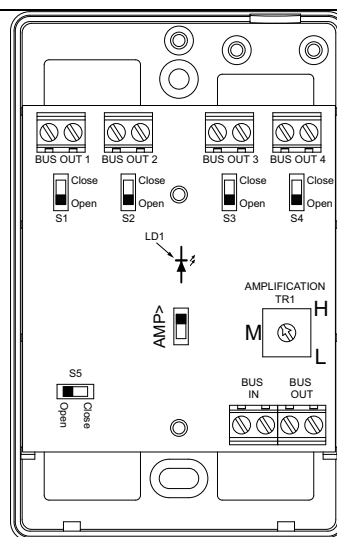


Fig.2

DESCRIPTION

The unit distributes the bus signal to 4 outputs linked to videophones or intercoms. A switch ("AMP>") allows to enable (active) or disable (passive) the amplification. If active, the amplification can be adjusted in a linear way by a built-in trimmer. To make the amplification adjustment easy, the related positions corresponding to a low level, a medium level and to a high level are marked. The amplification only effects the 4 outputs and not the loop through output. Art.317N also includes a bus isolation feature which isolates Art.317 from the rest of the bus in case a short on one of its outputs occurs. This prevents a short from happening in any apartment impairing the whole system. In case of short on any BUS output the LED LD1 switches ON.

CONNECTION TERMINALS AND JUMPERS	
Terminal/Jumper	Description
BUS IN	Bus input terminals
BUS OUT	Bus output terminals (loop through to next distributor)
BUS OUT 1	Videophone/Intercom bus output 1
BUS OUT 2	Videophone/Intercom bus output 2
BUS OUT 3	Videophone/Intercom bus output 3
BUS OUT 4	Videophone/Intercom bus output 4
S1	Close/Open bus output jumper for BUS OUT 1. Move to close when BUS OUT 1 is not used.
S2	Close/Open bus output jumper for BUS OUT 2. Move to close when BUS OUT 2 is not used.
S3	Close/Open bus output jumper for BUS OUT 3. Move to close when BUS OUT 3 is not used.
S4	Close/Open bus output jumper for BUS OUT 4. Move to close when BUS OUT 4 is not used.
S5	Close/Open bus through output. If the distributor is the last in line move to close otherwise leave open.
AMP>	Enable (upper position toward the BUS output terminals) or Disable (lower position) the amplification on the BUS OUTPUTS from 1 to 4.
AMPLIFICATION	Set the required level of amplification choosing between low, medium and high.

SPECIFICATION

Housing/Mounting	Plastic box 70x110x30mm / direct wall mounting
Push Buttons	N/A
Programming	N/A
Controls	Outputs amplification (3 levels)
Power Supply	Supplied by the BUS line
Working Temperature	-10 +50°C

CUSTOMER SUPPORT INFORMATION

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Art.318 Two way passive distribution box

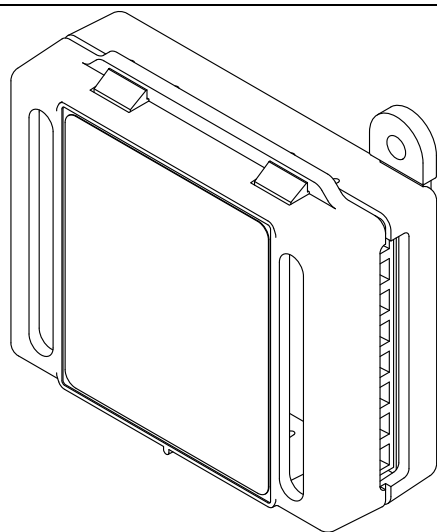


Fig.1

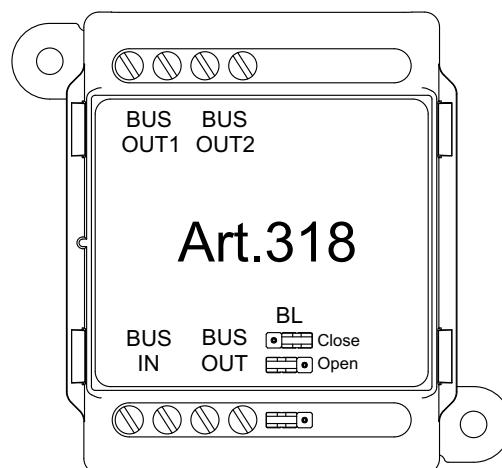


Fig.2

DESCRIPTION

The unit distributes the bus signal to 2 outputs linked to videophones or intercoms. It is a passive distributor, so there is no possibility to adjust the video amplification. The device is suitable for small systems with a maximum distance between door panel and the last monitor of 70 metres.

CONNECTION TERMINALS AND JUMPERS	
Terminal/Jumper	Description
BUS IN	Bus input terminals
BUS OUT	Bus output terminals (to next distributor)
BUS OUT 1	Videophone/Intercom bus output 1
BUS OUT 2	Videophone/Intercom bus output 2
BL	Close/Open bus output jumper. If the distributor is the last move to close otherwise leave open.

SPECIFICATION

Housing/Mounting	Plastic box 50x60x20mm / direct wall mounting
Push Buttons	N/A
Programming	N/A
Controls	N/A
Power Supply	Supplied by the BUS line
Working Temperature	-10 +50°C

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Art.2301N Entrances exchanger for VX2300 digital systems

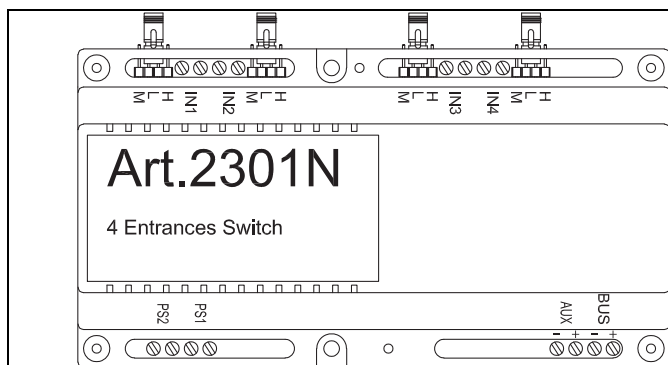


Fig.1

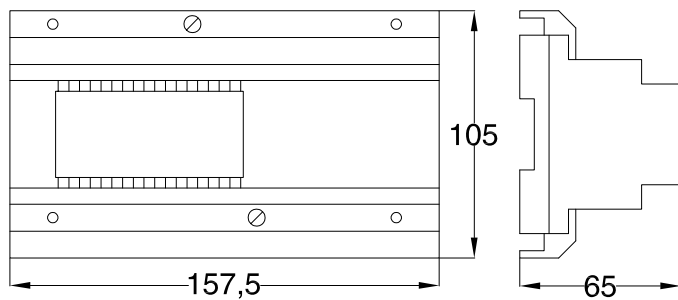


Fig.2

DESCRIPTION

This unit is required for systems with 2 or more entrances (4 maximum). The Art.2301N has 4 inputs (IN1..IN4) each with adjustable amplification ("L" = low, "M" = medium and "H" = high) to compensate for different door station distances. The AUX input enables a second 2301N device to be connected to expand the system up to 8 entrances. When connecting 2x2301N the polarity of the bus between the Art.2301N's must be observed. When connecting 2x2301N's the BUS output of the first exchanger must be linked to the AUX input of the second exchanger and then onto the apartments. The polarities are not relevant if there is only one 2301N.

The power supply inputs are PS1 and PS2. The Art.2321/P with its jumper set to V2 should be used. For systems with up to 4 entrances and 50 video-phones only one power supply is required connected to PS1. For larger systems connect a power supply to each of the two inputs (PS1 & PS2).

When 2x2301N, the 2x2321/P power supplies only connect to the 2301N at which the AUX connection is used. (The one supplying the apartments).

CONNECTION TERMINALS AND JUMPERS	
Terminal/Jumper	Description
BUS-	BUS Output (observe the polarities only when linked to the AUX input of a second 2301N)
BUS+	
AUX-	Auxiliary BUS input to carry out systems up to 8 entrances linking together two 2301N (observe the polarities when connecting the BUS output of the first exchanger to the AUX of the second BUS- with AUX- and BUS+ with AUX+)
AUX+	
IN1	Door station input 1 (the signal may be amplified by the relative jumper – L=Low, M=Medium and H=High)
IN2	Door station input 2 (the signal may be amplified by the relative jumper – L=Low, M=Medium and H=High)
IN3	Door station input 3 (the signal may be amplified by the relative jumper – L=Low, M=Medium and H=High)
IN4	Door station input 4 (the signal may be amplified by the relative jumper – L=Low, M=Medium and H=High)
PS1	Power Supply input 1 (use Art.2321/P set to V2 voltage level)
PS2	Power Supply input 2 (use Art.2321/P set to V2 voltage level)

SPECIFICATION

Housing/Mounting	9 Module A Type DIN box / DIN Bar or directly to the wall
Push Buttons	N/A
Programming	N/A
Controls	Signal amplification on 3 levels for each bus input
Power Supply	From specific power supply or from the bus
Working Temperature	-10 +50°C

CUSTOMER SUPPORT INFORMATION

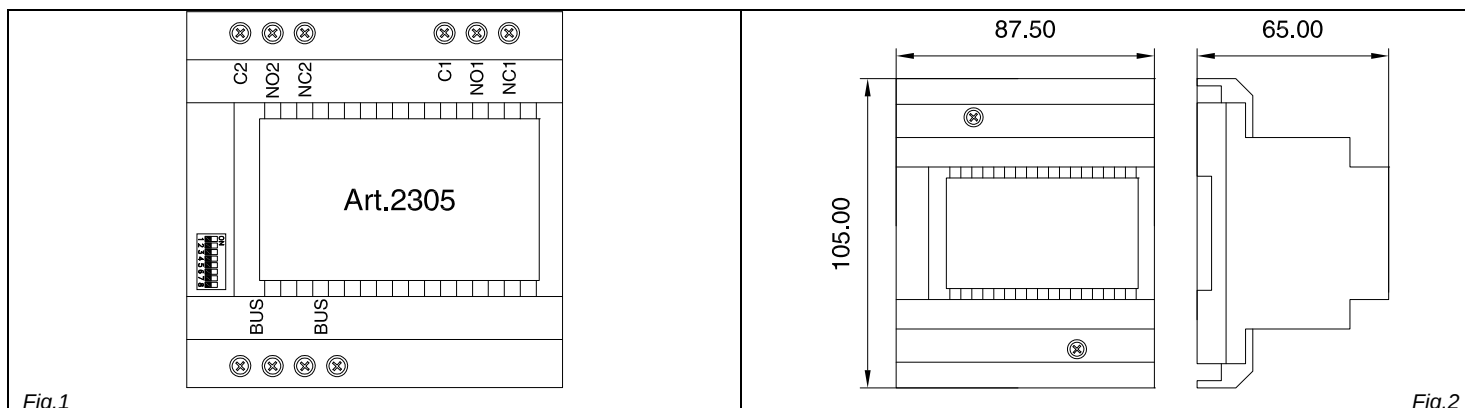
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Art.2305 Extension Relay for VX2300 digital systems



DESCRIPTION

This unit can be connected directly to the bus and has two operating modes: general purpose extension relay and apartment extension relay for additional sounders. As general purpose extension relay, the built-in relays are controlled by the relevant button of the intercom or videophone while as extension sounder relay, relay one will operate on each ring and relay two will operate for the duration of the call.

CONNECTION TERMINALS & DIP-SWITCHES

Terminal/Jumper	Description
BUS	Input/Output bus connection terminals
BUS	Input/Output bus connection terminals
C2	Relay 2 common contact
NO2	Relay 2 normally open contact
NC2	Relay 2 normally closed contact
C1	Relay 1 common contact
NO1	Relay 1 normally open contact
NC1	Relay 1 normally closed contact
DIP-SW	8 way dip-switch to set the relay operating mode

PROGRAMMING

The operating mode is set by switch 8 as shown below. Note: After making changes to the dip-switch settings it is necessary to disconnect it from the bus (or power the system down) and then reconnect before the changes will take affect.

GENERAL PURPOSE EXTENSION RELAY – SWITCH 8 = OFF

When the unit is set as general purpose extension relay, switches 1 to 6 are used to set the relays addresses and activation times.

Switches		Relay 1,2 Addresses	Switches		Relay 1 Time	Switches		Relay 2 Time
1	2		3	4		5	6	
OFF	OFF	1,2	OFF	OFF	2 seconds	OFF	OFF	2 seconds
ON	OFF	3,4	ON	OFF	4 seconds	ON	OFF	4 seconds
OFF	ON	5,6	OFF	ON	16 seconds	OFF	ON	16 seconds
ON	ON	7,8	ON	ON	32 seconds	ON	ON	32 seconds

Switch 7 is not used.

For example if switch 1 is set to ON and switch 2 is set to OFF (addresses 3 & 4), pressing the “dot” button on the intercom (or “double dot” on the videophone) 3 times will operate relay one while pressing 4 times will operate relay two.

EXTENSION SOUNDER RELAY – SWITCH 8 = ON

When the unit is set in this mode, switches from 1 to 7 (8 is not used but set to on) are used to set the address of the unit: the address of the unit is set to the same address as the videophone or intercom it that apartment (refer to intercom/videophone SW1 settings).

When the apartment is called, relay 1 will operate 4 times (once for each ring) while relay 2 will energise for the duration of the call (Approx. 60 seconds). The relays revert to the de-energised state if the call is cancelled or the user ends the call.

SPECIFICATION

Housing/Mounting	5 Module A Type DIN box / DIN bar or directly to the wall
Push Buttons	N/A
Programming	Yes, carried out by the 8 way dip-switch
Controls	N/A
Power Supply	from the bus
Working Temperature	-10 +50°C
Dry contacts relay	Max 24Vac/dc 5A

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Art.2380 Interface "2 Wire" to "4+1" audio system

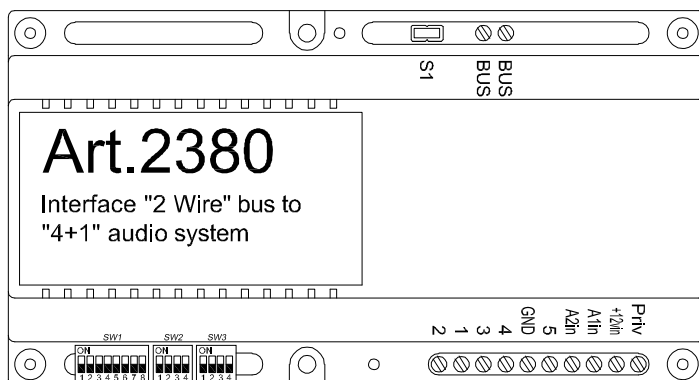


Fig.1

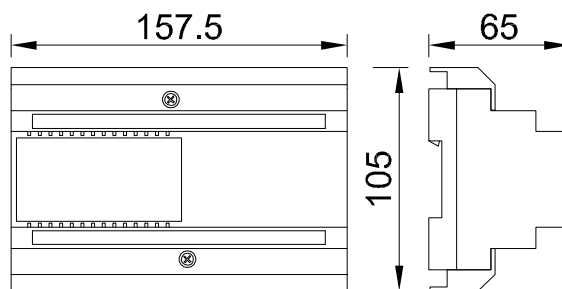


Fig.2

DESCRIPTION

Interface to connect 4+ 1 audio devices to the VX2300 "2 Wire" Bus (For example the Art.380 telephone interface or the Art.275/2W PABX interface) Using the items listed above (380, 275/2W) it is possible to use a conventional household telephone as a standard intercom.

The operating mode of the telephone depends on the connected device and on the connections made, refer to the instructions of the Art.380 or Art.275.

DIP-SWITCHES AND JUMPERS (FIG.1)

SW1	Switches from 1 to 7 are used for unit address (from 1 to 127 binary coded). Last switch (8) is not used
SW2	Switches 1,2 and 3 are used to set privacy duration time. Switch 4 is used to set the "Priv" signal operating mode
SW3	Switches 1,2 and 3 are used for intercommunication settings. Switch 4 is not used
S1	Impedance terminator. The jumper must be normally closed. When more videophones/intercoms are connected in parallel (from a peripheral to another and so on until the last) the jumper must be open for all the intercoms except for the last following the order of connection.

PROGRAMMING

After each programming operation carried out through dip-switches or jumpers it is necessary to temporary disconnect the device from the BUS or from the power supply if locally powered.

SW1 – DEVICE ADDRESS

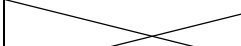
Switches Status							Binary Code – Decimal Value								Decimal Code
7	6	5	4	3	2	1	64	32	16	8	4	2	1		
OFF	OFF	OFF	OFF	OFF	OFF	ON	0	0	0	0	0	0	1	1	
OFF	OFF	OFF	OFF	OFF	ON	OFF	0	0	0	0	0	1	0	2	
OFF	OFF	OFF	OFF	OFF	ON	ON	0	0	0	0	0	1	1	3	
OFF	OFF	OFF	OFF	ON	OFF	OFF	0	0	0	0	1	0	0	4	
OFF	ON	OFF	OFF	ON	OFF	ON	0	1	0	0	1	0	1	37	
ON	ON	OFF	OFF	OFF	ON	ON	1	1	0	0	0	1	1	99	

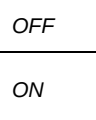
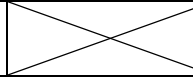
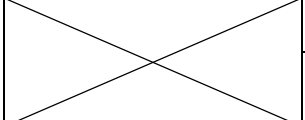
The table above shows how to set the address of the device. Considering that ON = 1 and OFF = 0, multiply each digit for the relevant decimal weight then sum the values obtained to get the address: E.g. as highlighted in the table OFF,ON,OFF,OFF,ON, OFF,ON in binary is equal to 0100101 then multiplying each digit for the relevant decimal weight you obtain the address that is 37.

Note

The maximum number of units allowed is 100 but the address of each unit can be a value between 1 and 127.

SW2 – PRIVACY DURATION TIME

Switches Status				Privacy Mode (switch 1)	Privacy Duration (switches 2,3)
1	2	3	4		
OFF	OFF	OFF		The privacy duration time is set by switches 2 and 3. When enabled the privacy service will be disabled when the set time expires or the switch is moved back to off.	15 minutes
	ON	OFF			1 hour
	OFF	ON			4 hours
	ON	ON			8 hours
ON				No privacy time expiration: the privacy service is enabled or disabled only by the slide switch.	
			ON	The "Priv" terminal works as an open collector output to signal the status of the privacy service. When the service is enabled the "Priv" output shorts to ground.	
			OFF	<u>This mode must be set when the Art.2380 is connected in parallel (with the same address) to one or more intercoms/videophones. Make a link between terminals "Priv" and "2"</u>	

SW3 – INTERCOMMUNICATION SETTINGS					
Switches Status				Intercommunication Mode (switch 1)	Unit Extension (switches 2,3)
1	2	3	4		
OFF	OFF	OFF		Intercommunication allowed between units (same unit address) inside the same flat. To call an extension pick up the handset then press the “door open” button as many times as the extension value (Eg. extension 2 two times, 3 three times etc). <u>Each intercom/videophone in the same apartment must have a different extension address, the master address must always be set except when one of the intercom/videophone is set for apartment intercommunication (i.e. in a 3 intercom/videophone installation, one of the intercom/videophone must have the extension address 1 while the others must have different addresses)</u>	1 (master)
	ON	OFF			2 (slave)
	OFF	ON			3 (slave)
	ON	ON			4 (slave)
ON	OFF	OFF		Intercommunication allowed between videophones (different apartment). To call an extension pick up the handset then press the “door open” button as many times as the address value (Eg. extension 10 ten times, 12 twelve times etc)	
				OFF	
			ON	The Art.2380 delays of 20 seconds the call toward the “4+1” interface to which is connected the Art.275/2W or Art.380. During a call, If the Art.2380 is in parallel connection with an intercom or a videophone, answering from the intercom/videophone stops the call toward the “4+1” interface.	

NOTE: Extension 1 is mandatory. On systems with more than one device in an apartment, each device must have a unique extension ID. On installations where there are more than one intercom/videophone in the same apartment and intercommunication between different apartments is required, only one intercom/videophone may be set with this function (SW3.1=ON, SW3.2=OFF, SW3.3=OFF). The other intercom/videophones in the apartment must be set for local intercommunication with extension addresses “2-4” (slaves). From the intercom/videophone set for intercommunication with other apartments it will be not possible to intercommunicate within the apartment but slave extensions 2-4 will be able to intercommunicate with each other.

SIGNALS ON CONNECTION TERMINALS	
Signal	Description
BUS	BUS connection terminals
BUS	
2	Speech line in
1	Speech line out
3	Speech ground
4	Call output
GND	Ground
5	Active low input “door open” command
A2in	Auxiliary active low input 2. When active (0V) switches the status of privacy service.
A1in	Auxiliary active low input 1. When active (0V) the relay with address 1 of the Art.2305 if installed in the system will activate.
+12Vout	+12Vdc Output
Priv	With SW2.4 = OFF, it works as an open collector output that signals the privacy service status. Internal link to ground when the privacy service is active. With SW2.5 = ON, required setting when the Art.2380 is in a parallel (same address) connection with other devices it must be linked to terminal two.

SPECIFICATION

Housing/Mounting	9 Module A Type DIN box
Push Buttons	N/A
Programming	Yes, carried out through dip-switches
Controls	N/A
Power Supply	Supplied from the BUS
Working Temperature	-10 +50°C

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Art.2321-2321/P Power supplies for VX2300

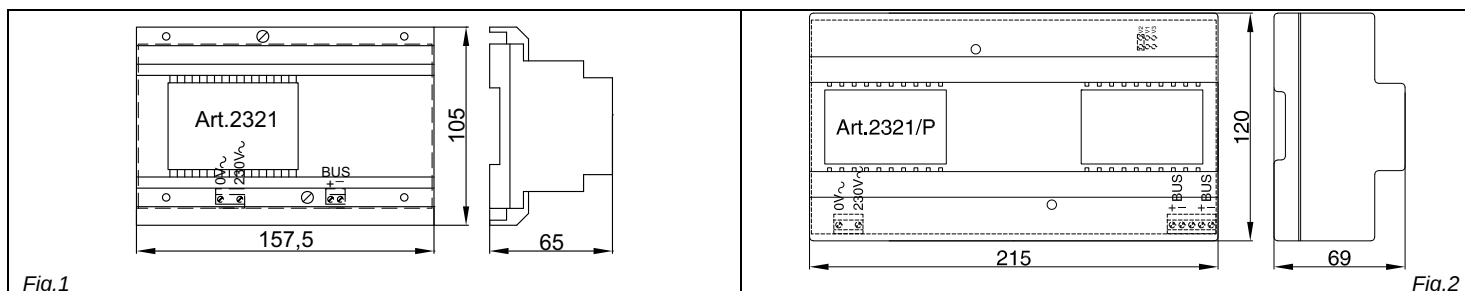


Fig.1

Fig.2

DESCRIPTION

These two units are specific power supplies for VX2300 digital system. The 2321 can be used for systems with 1 entrance up to 20 users while the 2321/P is for systems with more than 1 entrance and up to 100 users.

CONNECTION TERMINALS AND JUMPERS	
Terminal/Jumper	Description
0	Mains input
~230V	
BUS +	BUS terminals
BUS -	
BUS +	BUS terminals (only Art.2321/P)
BUS -	
V1	Jumper to adjust the output voltage (only Art.2321/P). V1=Low, V2=Medium, V3=Maximum. Set to maximum (V3) when the unit is used together with 2301N, otherwise leave in a low or medium position
V2	
V3	

CONNECTION TO MAINS AND POWER SUPPLY MOUNTING INSTRUCTIONS

The system must be installed according to national rules in force, in particular we recommend to:

- Connect the system to the mains through an all-pole circuit breaker which shall have contact separation of at least 3mm in each pole and shall disconnect all poles simultaneously;
- The all-pole circuit breaker shall be placed for easy access and the switch shall remain readily operable.

POWER SUPPLY INSTALLATION

- Remove the terminal side covers by unscrewing the retaining screws;
- Fix the power supply to a DIN bar or directly to the wall using two expansion type screws;
- Switch off the mains using the circuit breaker mentioned above and then make the connections as shown on the installation diagrams;
- Check the connections and secure the wires into the terminals;
- Replace the terminal covers and fix them using the relevant screws;
- When all connections are made, restore the mains.

SPECIFICATION

Housing/Mounting	9 Module A Type DIN box (Art.2321) – 15 Module A Type DIN box (Art.2321/P) / DIN Bar or directly to the wall
Push Buttons	N/A
Programming	N/A
Controls	Voltage amplification (3 levels)
Power Supply	230Vac
Working Temperature	-10 +50°C

CUSTOMER SUPPORT INFORMATION

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Art.2322 Power supply converter from BUS line to 12 Vdc

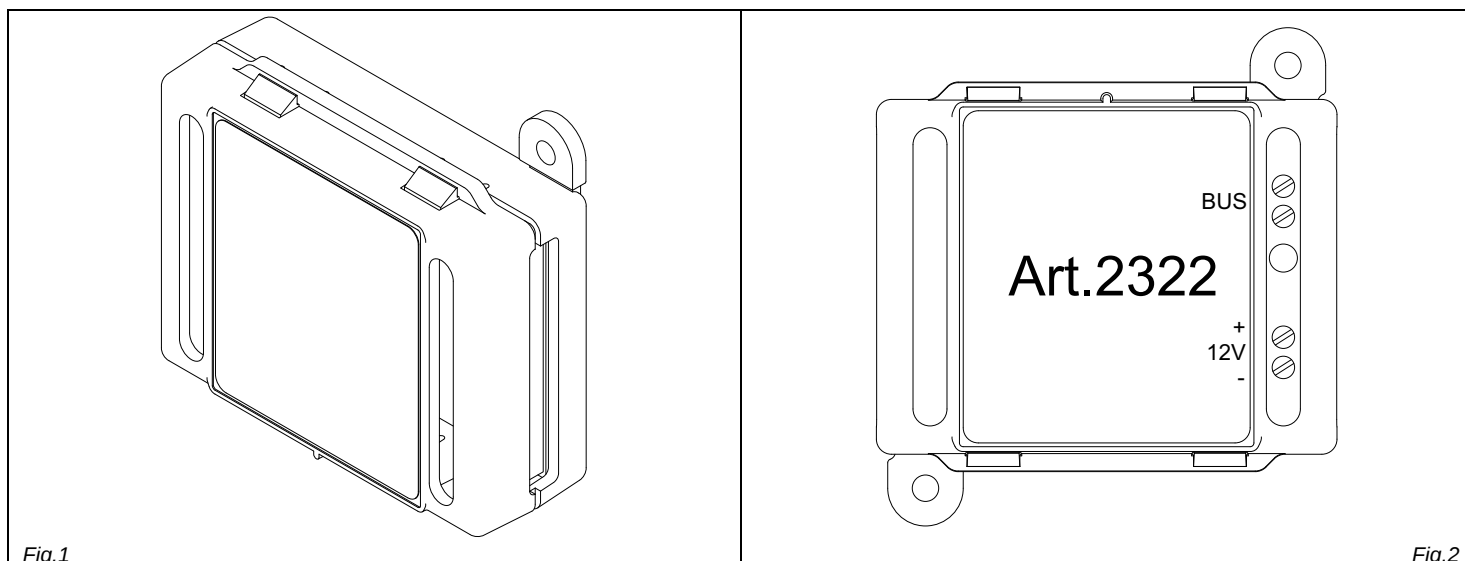


Fig.1

Fig.2

DESCRIPTION

When this unit is connected to the BUS line it generates a +12Vdc – 100mA power source. This unit can be used to supply peripherals such as the Art.4800 without the need for an additional power supply. Please note: The peripherals must not require more than 100mA.

CONNECTION TERMINALS	
Terminal/Jumper	Description
BUS	BUS line inputs
BUS	
12V+	12Vdc – 100mA output
12V- (0V)	

SPECIFICATION

Housing/Mounting	Plastic box 50x60x20mm / direct wall mounting
Push Buttons	N/A
Programming	N/A
Controls	N/A
Power Supply	Supplied by the BUS line
Working Temperature	-10 +50°C

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General Directions for Installation

CABLE TYPES AND CROSS SECTIONAL AREAS

The VX2300 digital system can use several types of cables but depending on their specification will allow different distances up 400 meters maximum. We do not recommend the use of shielded cables because of the high eddy capacitance. It is also not advised to double up on cables as this will also increase the capacitance. The following table specifies values of resistance, capacitance and maximum distances achievable for several types of cables (capacitance and resistance values are referring to 100 metres of cable).

Cable Type**	Wires Section (mm ²)	Resistance (Ohm) per 100 metres	Capacitance (nF) per 100 metres	*Maximum Distance (metres)
VIDEX CM2	0.50	3.2	8	200m
CAT5 UTP/CW1308	0.22	8	4.9	70m
Std Telephone Cable	0.28	6.5	5.5	100m
Two wire	0.8 / 1	2	6.5	70m

* The maximum distance represents the maximum distance from power supply. i.e. the cable length between the outdoor station and the power supply or between the power supply and the videophone.

There are two important characteristics to consider when calculating cable, the resistance and the capacitance. The resistance of the cable from power supply to end point must be less than 10 Ohms and can be calculated from point to point. The capacitance of the cable must not exceed 40nF and is an accumulation of all lengths and branches of the cable. For example: Videx CM2 cable can be used for a maximum distance of 200m from door station to power supply and another 200m from power supply to videophone (400 meters) but this distance may be reduced if the maximum capacitance is reached first.

When using the block exchanger art. 2306 it is possible to exceed the limit of 400m. The 2306 breaks the system into smaller systems or blocks, each block can then achieve the 400m.

For example: in a system with two block exchangers:

- Using 100m to reach the first block, you can then use up to 300m cable in the block;
- Assuming you are using another 50 meters cable to get from the first to the second block, in the second you can use (400-100-50) = 250m.

** It is important that the video intercom system cables do not run with mains or other high power supply cables. Noise from such cables (electromagnetic interference) may cause noises on audio/video and lost of functionality. In cases where this advice can not be followed or when existing cables are to be used it will be necessary to carry out tests to assess the quality and functionality of the installation.

In case of use of cables not in conformity with above specification it is possible to experience deterioration of digital and video signals. We suggest to use twisted cables with maximum resistance of 10 Ohm (between the farthest door station and the farthest videophone) and maximum capacitance of 40nF (this value must be calculated considering all the cables used in the system; the capacitance/metres value is normally specified on the cable package or directly on the cable).

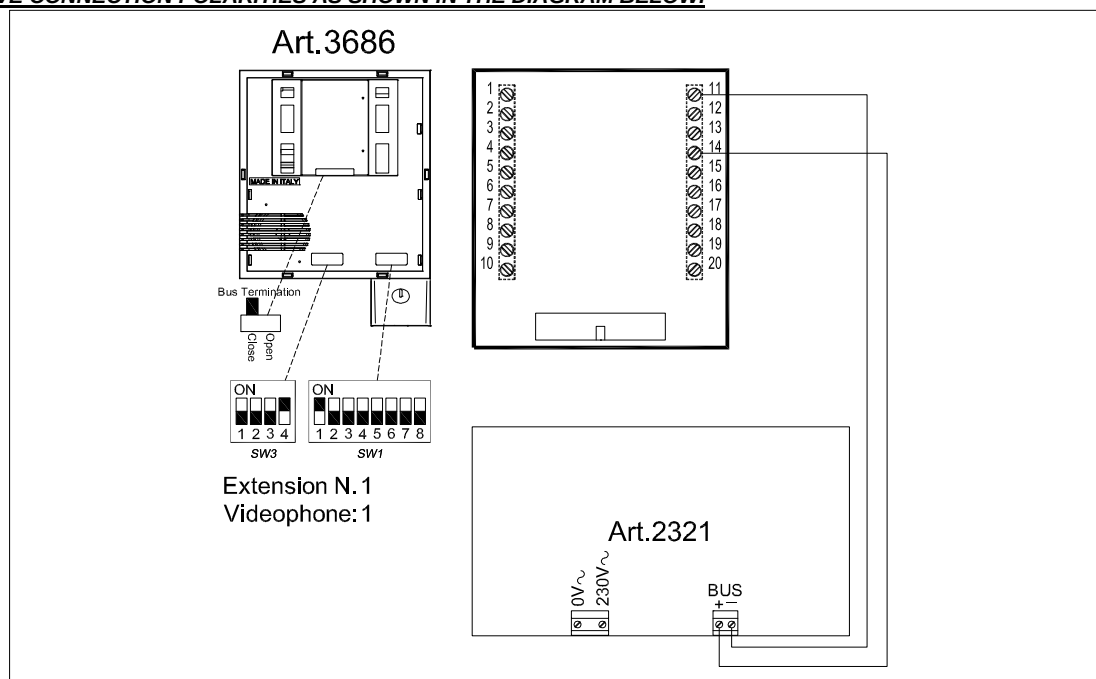
BUS DEVICES SETUP AND VIDEO DISTRIBUTION

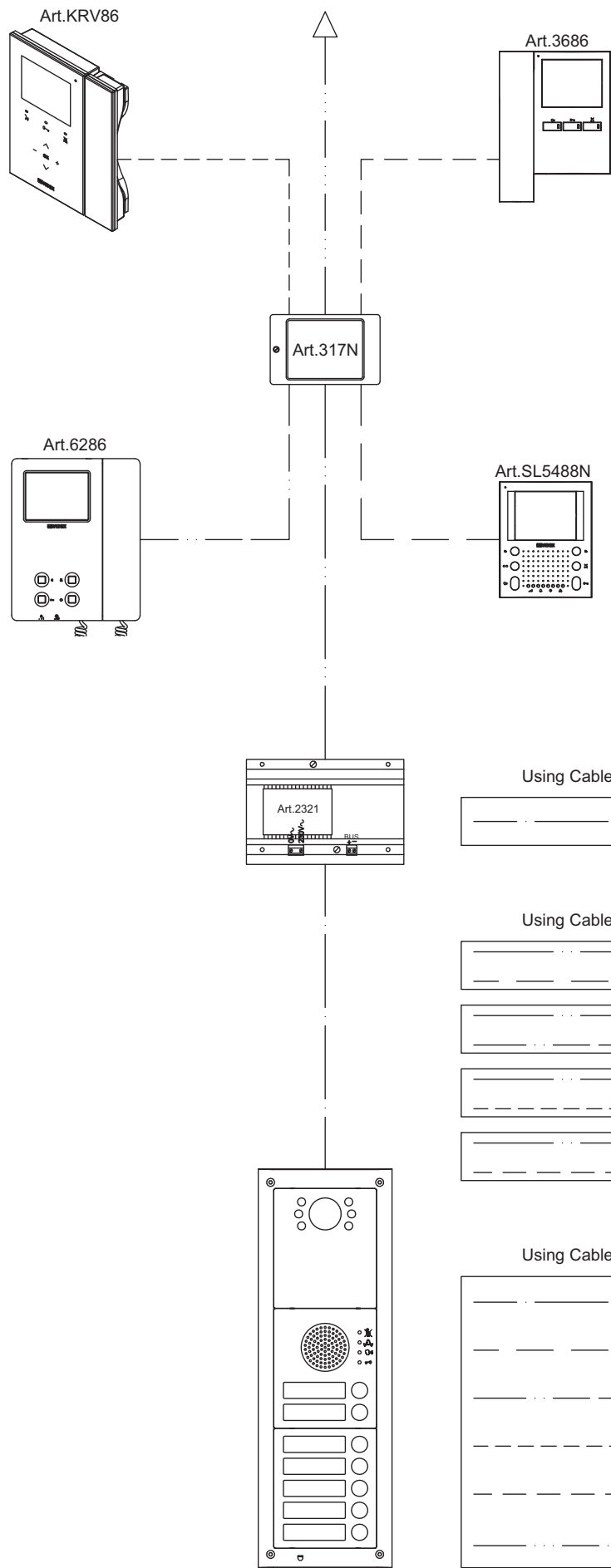
- When changing dip switch settings, disconnect the device from the bus for a minimum of 1 minute to allow the unit to fully discharge.
- When you have more than one device in the same apartment, all the devices must be connected to the same video distributor (Art.317): this means that you cannot use two video distributors Art.318 for one apartment where you have 4 videophones/intercoms.
- After completing the installation proceed to testing. The video level gain can be adjusted at several points including distributors, entrance exchanger and bus boosters.

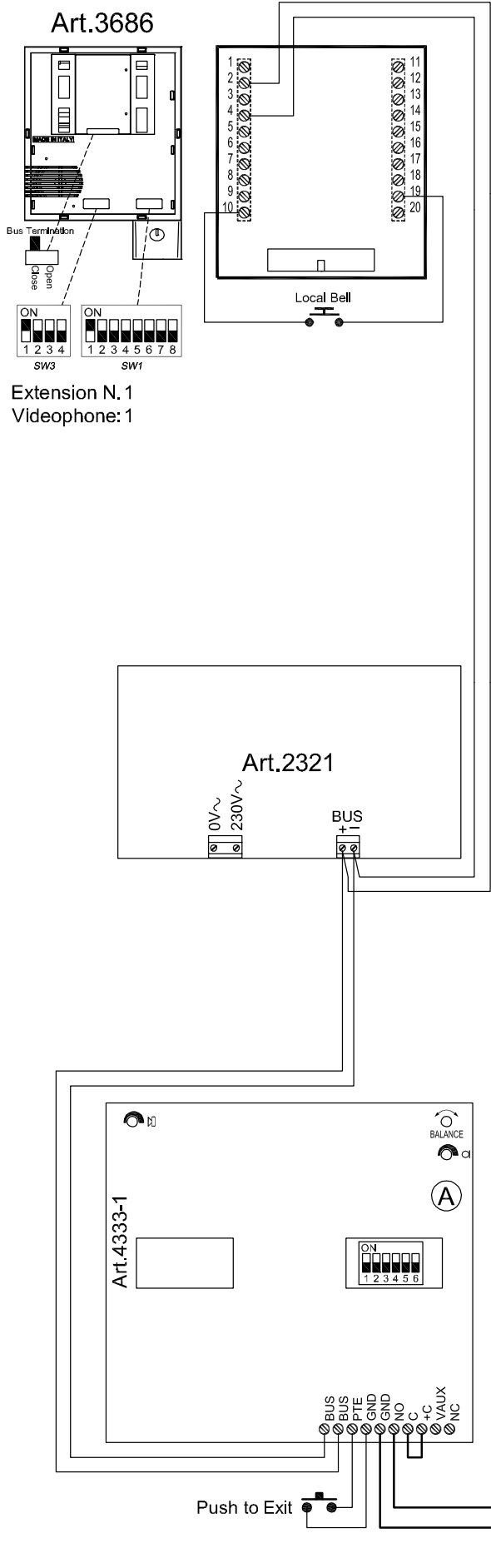
HOW TO CONNECT LOCAL POWER SUPPLY

The drawing below shows how to connect a local power supply when required (i.e. when you have 4 videophones with the same address that must be switched on at the same time). In both cases switch 4 of SW3 must be set to the ON position.

NOTE ! OBSERVE CONNECTION POLARITIES AS SHOWN IN THE DIAGRAM BELOW.

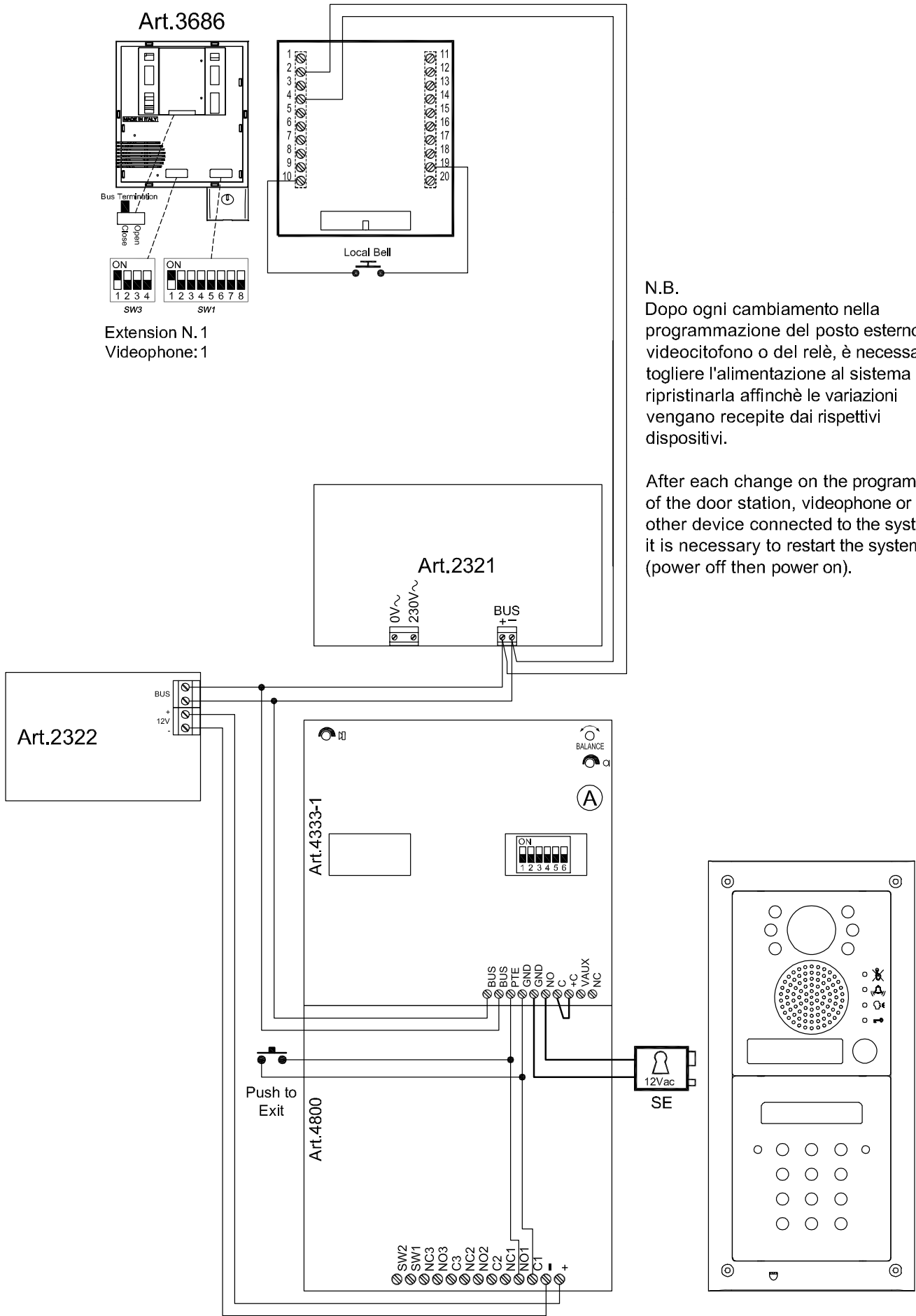






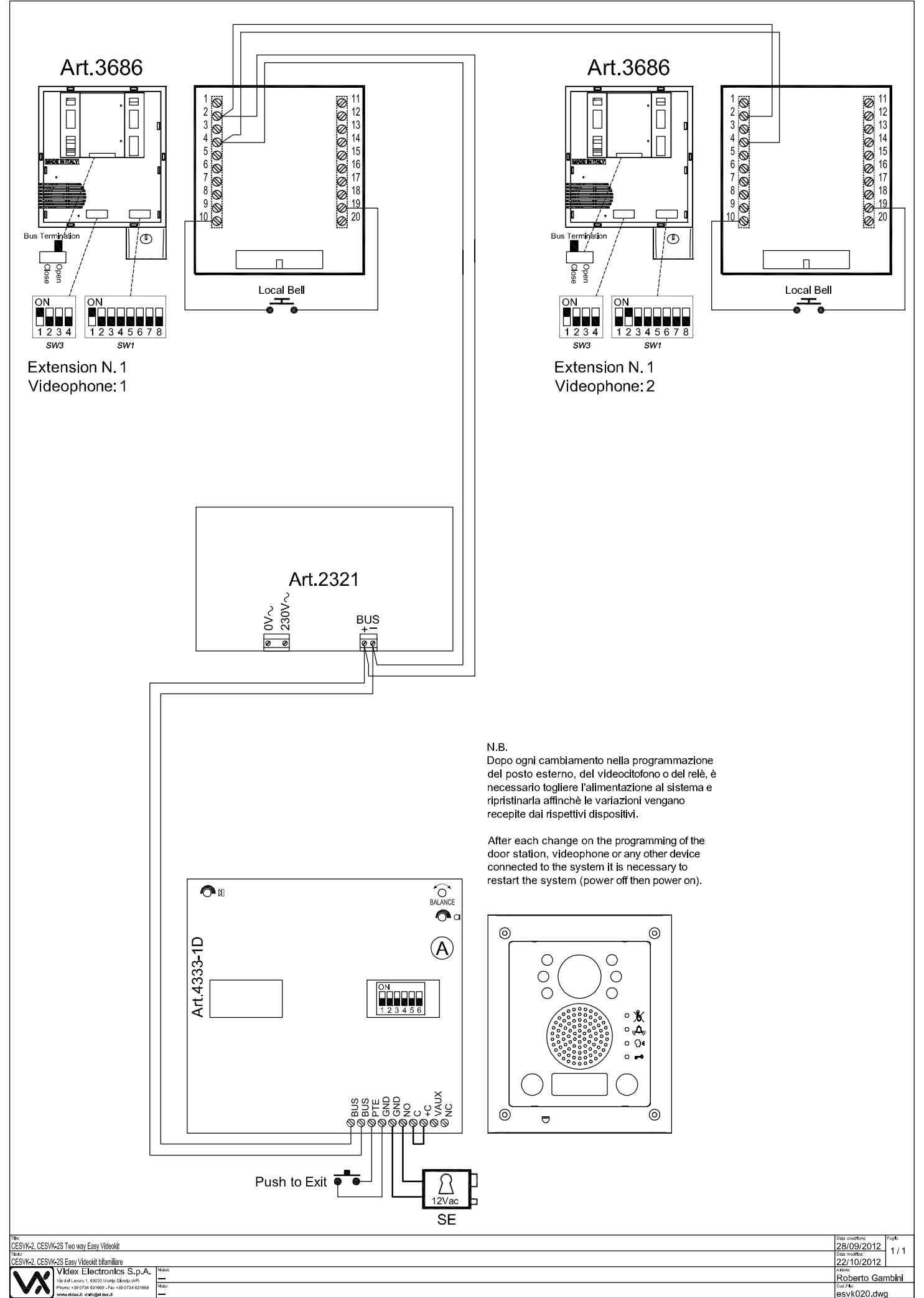
N.B.
Dopo ogni cambiamento nella programmazione del posto esterno, del videocitofono o del relè, è necessario togliere l'alimentazione al sistema e ripristinarla affinché le variazioni vengano recepite dai rispettivi dispositivi.

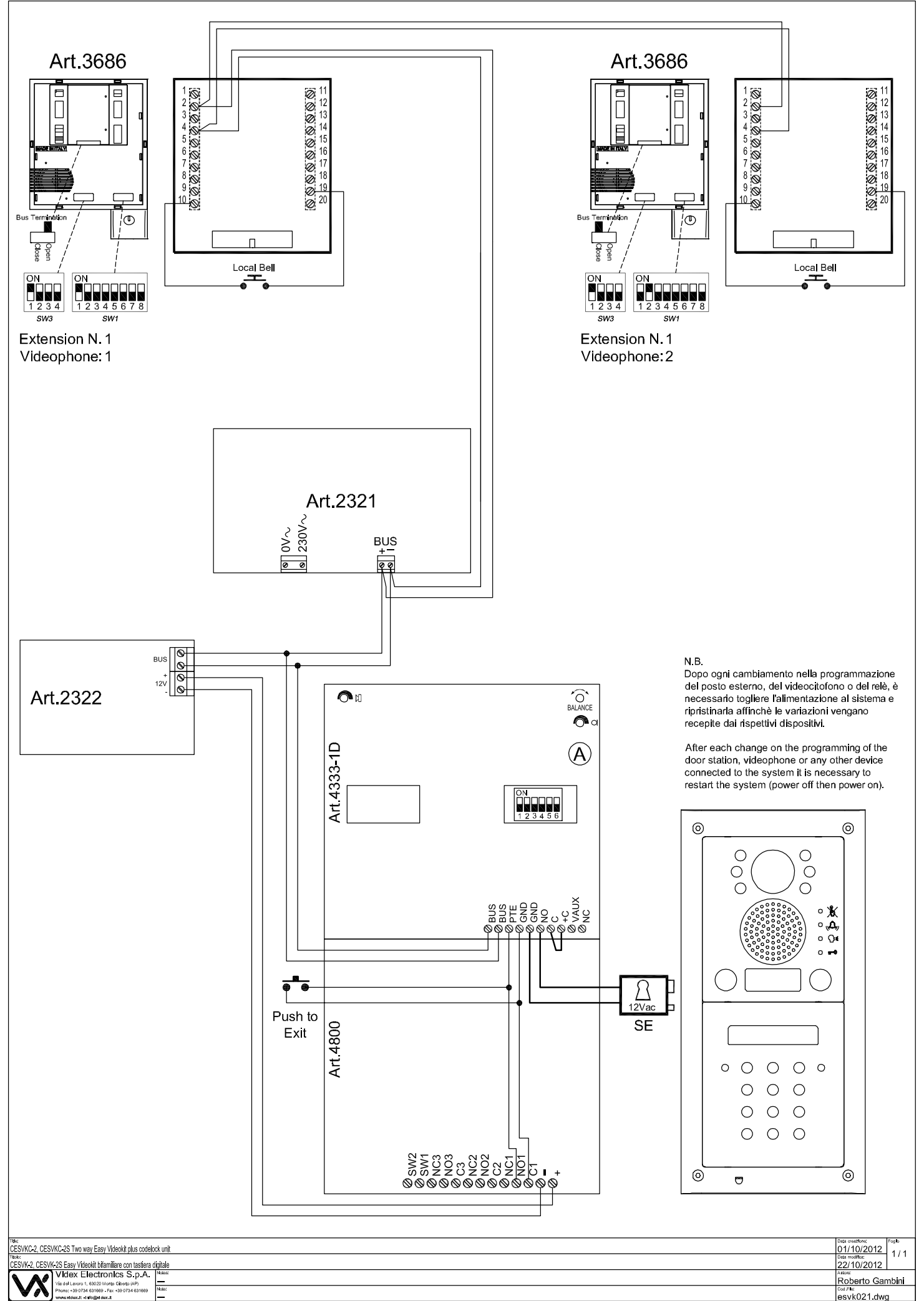
After each change on the programming of the door station, videophone or any other device connected to the system it is necessary to restart the system (power off then power on).



N.B.
Dopo ogni cambiamento nella programmazione del posto esterno, del videocitofono o del relè, è necessario togliere l'alimentazione al sistema e ripristinarla affinché le variazioni vengano recepite dai rispettivi dispositivi.

After each change on the programming of the door station, videophone or any other device connected to the system it is necessary to restart the system (power off then power on).







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