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## Art.4333

### Speaker unit with built-in camera



#### DESCRIPTION

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 unit circuitry incorporates :

- 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.

#### Module Details:

- 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
  - 000

#### Art.4333-1D, 4333-1D/color



Art.4333-1D, 4333-1D/color

Art.4333-1, 4333-1/color BUTTONS LAYOUT



, .....



#### FRONT LEDS SIGNALLING DESCRIPTION

Sign	Description
X	When illuminated, indicates that it is not possible to make a call because a call or a conversation is in progress (from the out- door 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 an- swered 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).
<del></del> 0	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);

The settings are carried out trough the 6 way dip-switch (reference j on figure 2) accessible from the rear side of the module. The switch 6 is not used.

Unit ID									
Switches ID									
1	1 2 3								
OFF	1								
ON	2								
OFF	3								
ON	ON ON OFF								
OFF	OFF	ON	5						
ON	OFF	ON	6						
OFF	7								
ON	ON	ON	8						

Door Opening Time					
Switches Seconds					
OFF	3				
ON	6				

Conversation Time									
Switches	Switches								
5	Minutes								
OFF	1								
ON	2								

SIGNALS ON SYSTEM CONNECTION TERMINALS							
Terminal	Description	Terminal	Description				
BUS	Bus connection terminals		Door open relay normally open contact				
BUS	Bus connection terminals	С	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 Mo	dular System						
Push Buttons	Yes, from 0 to 2 call buttons according to the	ne model						
Programming	Yes, carried out by the 6 way dip-switch loo	ated on the rear of the module						
Controls	Microphone and Loudspeaker volume trim							
Front plate Finishes	Mirror stainless steel (standard) and Anodi:	zed aluminium (add /a after the product code)						
Power Supply	Supplied by the BUS line							
Working Temperature	-10 +50°C							
CUSTOMER SUPPORT	INFORMATION							
All Countries Customers UK Customers								
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73/23/EEC (LVD) and 93/68/EEC (CE marking).	73/23/EEC (LVD) e 93/68/EEC (Marcatura CE).



## Art.125 Call expansion module



#### 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.

#### **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

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#### DESCRIPTION

Intelligent videophone with 4" flat screen B&W monitor with "door open" and "camera recall" push buttons, bus relay enable button, service button, "privacy ON-OFF" button plus "privacy on" and "door open" LEDs. Controls: 3 levels of call tone volume (both main and local) plus contrast and brightness. The videophone is available also in colour version Art.3481 which uses a 3,5" active matrix LCD monitor. To reduce bus current all apartment devices are in a sleep mode when not used. In case a user forgot to replace the handset, each operation must be executed within 10 seconds of lifting the handset otherwise the handset returns to its sleep state. To then perform an operation it would be necessary to hang up the handset and pick it upagain.

PUSH	BUTTONS, LEDS AND CONTROLS (FIG.1)
а	Door open push button – Intercommunicating call. For an intercommunicating call, pick up the handset and press as many times as the extension or address value to call (see SW3 Intercommunication Settings).
b	Camera recall push button. Pick up the handset and press as many times as the DEVICE N. of the door station to switch on.
	If the door station uses the Art.4303N plus the Art.4330N, pressing this button during a conversation switches the video signal coming from the camera module input for external camera.
С	Activate bus relay board Art.2305 push button. To activate a bus relay pick up the handset and press as many times as the address val- ue of the relay.
d	Service push button.
е	Privacy ON-OFF push button. The privacy duration time can be programmed.
f	Privacy ON LED. Switched ON when the privacy service is active.
g	Door Open LED. Switched ON if the door is open. Its correct operation depend from correct connection (terminals 1 and 18)
h	Call tone volume control (3 levels)
i	Contrast control (left decrease, right increase)
1	Brightness control (left decrease, right increase)

DIP-SWI	TCHES AND SWITCHES (FIG.2)
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 not used.
SW3	Switches 1,2 and 3 are used for intercommunication settings. Switch 4 is used to set the slave mode.
SW	Impedance terminator. The standard position is "close". When more videophones are connected in parallel (from a videophone to another and so on until the last) it must be set to "open" for all the videophones except for the last following the connection order.

#### PROGRAMMING

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

#### NUMBER OF RINGS

The number of rings can be set to 3 (factory preset) or 6.

To change the number of rings proceed as follow:

- Unplug the flat cable from the pcb connection board;

- Put in short the terminals 13 and 14;

- Plug-in the flat cable checking the privacy on LED and remove the short between terminals 13 and 14;

- The number of LED flashes will be 1 for 3 rings or 2 for 6 rings.

Each time this operation is carried out the number of rings is switched between the values 3 and 6.

SW1 -	SW1 – VIDEOPHONE ADDRESS													
		Sw	vitches St	atus			Binary Code – Decimal Weight					Address		
7	6	5	4	3	2	1	64	32	16	8	4	2	1	Address
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
	;	:	:	:	:	:	:			1				
OFF	ON	OFF	OFF	ON	OFF	ON	0	1	0	0	1	0	1	37
			1	1	1	1	1							
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 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. **Note** 

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

SW2 – F	SW2 – PRIVACY DURATION TIME						
Switches Status				Privacy Mode	Privacy Duration		
1	2	3	4	(switch 1)	(switches 2,3)		
OFF	OFF	OFF	$\setminus$ /	The privacy duration time is set by switches 2 and 3. When enabled the privacy ser- vice will be disabled when the set time expires or the switch is moved back to off.	15 minutes		
	ON	OFF	$\setminus$		1 hour		
	OFF	ON	Χ		4 hours		
	ON	ON			8 hours		
ON	$\geq$	$\ge$	$/ \setminus$	No privacy time expiration: the privacy service is enabled or disabled only by the slide switch.			

00	INTERCON Switche	es Status			Videophone		
1	2 3 4			Intercommunication Mode (switch 1)	Extension (switches 2,3)		
OFF	OFF	OFF	$\setminus$	Intercommunication allowed between videophones (same unit address) inside the same flat. To call an extension pick up the handset then press the "door open" button	1 (master)		
	ON	OFF		as many times as the extension value (Eg. extension 2 two times, 3 three times etc). Each intercom/videophone in the same apartment must have a different exten-	2 (slave)		
	OFF	ON		$\mathbf{Y}$	sion address, the master address must always be set except when one of intercom/videophone is set for apartment intercommunication (i.e. in a 3 in com/videophone installation, one of the intercom/videophone must have	3 (slave)	
	ON	ON		extension address 1 while the others must have different addresses)	4 (slave)		
ON			$/ \setminus$	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)			
		•		Slave Mode (switch 4) for Extensions 2, 3 and 4			
OFF	Factory preset, during a call the slave videophones will only ring while the master will also show the video picture). The picture will only appear on the slave when answered.						
ON	During a call, the videophone will ring and show the video picture: in this case the videophone must be powered locally using an Art.2321 and connecting BUS+ to "Vin" (9) and BUS- to "-" (10) (the local power supply is required for each black & white slave videophone or starting from the third videophone when are used all colour videophones). If you set ON this switch for one slave videophone, you must set ON the same switch also for the relevant master videophone.						

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.

### Two Wire Videokit ESVK Series

#### **VIDEOPHONE CONNECTION BOARD ART.3980**

As 3000 serie	es videophone	es also this version uses the Art.3980 connection board.							
Fig.3		Remove R1 resistor							
	N TERMINALS	S OF ART.3980 CONNECTION BOARD							
Terminal	Signal	Description							
1	-LD	Door open LED ground signal input							
2	AL	Alarm input (not implemented)							
3	S								
4	S	Contacts for "S" service push button. Linked together when the button is pressed							
5	GND	Ground signal							
6									
7									
8									
9	Vin	Auxiliary power supply input (for local power supply)							
10	-								
11	BUS	- Bus contacts							
12	BUS								
13	-	– Local bell contacts							
14	LB								
15									
16									
17									
18	+LD	Door open LED power supply (12Vdc)							



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### Two Wire Videokit ESVK Series

## Art.317

### Four way distribution box



#### DESCRIPTION

The unit distributes the bus signal to 4 outputs linked to videophones or intercoms. The distributor has 3 amplification levels (low, medium and high), the amplification only effects the 4 outputs and not the loop through output. The Art.317 also includes a bus isolation feature which isolates the Art.317 from the rest of the bus if there is a short on one of its outputs. This prevents a short in any one apartment compromising the whole system.

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				
B1	Close/Open bus output jumper for BUS OUT 1. Move to close when BUS OUT 1 is not used.				
B2	Close/Open bus output jumper for BUS OUT 2. Move to close when BUS OUT 2 is not used.				
B3	Close/Open bus output jumper for BUS OUT 3. Move to close when BUS OUT 3 is not used.				
B4	Close/Open bus output jumper for BUS OUT 4. Move to close when BUS OUT 4 is not used.				
BL	Close/Open bus through output jumper. If the distributor is the last in line move to close otherwise leave open.				
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



#### 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 distrbutor)					
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.2315

### BUS booster and video signal amplifier



#### DESCRIPTION

The Art.2315 restores the voltage levels of the BUS line and amplifies the video signal (3 levels: H=high, M=medium and L=low). The BUS line must be interrupted and connected to the BUS-IN input, then the signal from the **BUS-OUT** will be amplified. Connect to the PS input a power supply Art.2321. We suggest the use of the BUS booster in installations which are not using the VIDEX CM2 cable and it is necessary to reach large cables distances. (i.e. Using CAT5, distances greater than 70m).

CONNECTION TERMINALS AND JUMPERS						
Terminal/Jumper	Description					
BUS IN	BUS line input					
BUS OUT	BUS line output					
PS	Power supply input (use Art.2321)					
AMPLIFICATION	N Video signal amplification, 3 levels = high, medium and low					

Housing/Mounting	Plastic box 50x60x20mm / direct wall mounting
Push Buttons	N/A
Programming	N/A
Controls	Video signal amplification (3 levels)
Power Supply	Requires local 2321 PSU.
Working Temperature	-10 +50°C

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## Art.2301N Entrances exchanger for VX2300 digital systems



#### 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 is 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 PS1and PS2. The Art.2321/P with its jumper set to V2 should be used. For systems with up to 4 entrances and 50 videophones 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-	PLIS Output (observe the polyrities only when linked to the ALIX input of a second 2201N)					
BUS+	BUS Output (observe the polarities only when linked to the AUX input of a second 2301N)					
AUX-	Auxiliary BUS input to carry out systems up to 8 entrances linking together two 2301N (observe the polarities when connect-					
AUX+	ing the BUS output of the first exchanger to the AUX of the second BUS- with AUX- and BUS+ with 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 Suppy 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

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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 TERM	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	Switches		Relay 1	Switches		Relay 2
1	2	Addresses	3	4	Time	5	6	Time
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

OI LOII IOATION		
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	
<b>CUSTOMER SUPPORT</b>	TINFORMATION	
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## Art.2380 Interface "2 Wire" to "4+1" audio system



#### 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 Art275.

The operation	ng mode of the telephone depends on the connected device and on the connections made, refer to the instructions of the An.380 of An275.
<b>DIP-SWIT</b>	CHES 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.

	Switches Status							Binary Code – Decimal Value				Decimal		
7	6	5	4	3	2	1	64	32	16	8	4	2	1	Code
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.

3112 - 1	PRIVACY D	s Status		Privacy Mode	Privacy Duration
1	2	3	4	(switch 1)	(switches 2,3)
	OFF	OFF	$\setminus$	The privacy duration time is set by switches 2 and 3. When enabled the privacy ser- vice will be disabled when the set time expires or the switch is moved back to off.	15 minutes
OFF	ON	OFF	$\backslash$		1 hour
011	OFF	ON	X		4 hours
	ON	ON			8 hours
ON	$\ge$	$\ge$	/	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 pri- vacy service. When the service is enabled the "Priv" output shorts to ground.	
	>		OFF	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".	

#### SW3 – INTERCOMMUNICATION SETTINGS

	Switche	s Status	1	Intercommunication Mode	Unit
1	2	3	4	(switch 1)	Extension (switches 2,3)
	OFF	OFF	$\land$	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	1 (master)
OFF	ON	OFF		times as the extension value (Eg. extension 2 two times, 3 three times etc). <u>Each</u> <u>intercom/videophone in the same apartment must have a different extension</u>	2 (slave)
OFF	OFF	ON		address, the master address must always be set except when one of the inter- com/videophone is set for apartment intercommunication (i.e. in a 3 inter- com/videophone installation, one of the intercom/videophone must have the	3 (slave)
	ON	ON		extension address 1 while the others must have different addresses)	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	The operation is not altered.	
ON		ON	The Art.2380 delays of 20 seconds the call toward the "4+1" interface to whic Art.275/2W or Art.380. During a call, If the Art.2380 is in parallel connection with an phone, answering from the intercom/videophone stops the call toward the "4+1" interfa	intercom or a video-	

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	Bos connection terminais
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
	With SW2.4 = OFF, it works as an open collector output that signals the privacy service status. Internal link to ground when the privacy
Priv	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

#### **CUSTOMER SUPPORT INFORMATION**

All Countries Customers VIDEX Electronics S.p.A. www.videx.it – technical@videx.it Tel.+39 0734 631669 Fax +39 0734 632475 UK Customers VIDEX Security LTD www.videx-security.com Tech Line 0191 224 3174 Fax 0191 224 1559

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### Two Wire Videokit ESVK Series

## Art.2321-2321/P Power supplies for VX2300





#### Fig.1 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 TERM	CONNECTION TERMINALS AND JUMPERS				
Terminal/Jumper	Description				
0	Mains input				
~230V	Mains input				
BUS +	BUS terminals				
BUS -					
BUS +	BUS terminals (only Art.2321/P)				
BUS -	bus terminais (unity Art.2.32 I/P)				
V1	lumber to adjust the autout voltage (only Art 2221/D) V(1-Low V2-Medium V2-Medium Set to maximum (V2) when the				
V2	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				
V3					

#### CONNECTION TO MAINS AND POWER SUPPLY MOUNTING INSTRACTIONS

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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12/11/2012

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



#### 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.

<b>CONNECTION TERM</b>	CONNECTION TERMINALS					
Terminal/Jumper	Description					
BUS	PLIS line inpute					
BUS	BUS line inputs					
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

#### **CUSTOMER SUPPORT INFORMATION**

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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	Section (mm <sup>2</sup> )	Resistance (Ohm)	Capacity (nF)	*Maximum Distance (meters)
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

\* Between the power supply and the furthest door station or between the power supply and the furthest videophone.

\*\* In case of projects where it is necessary to reuse existing cables that could be cabled together with mains or other power cables, check in advance the practicability of the system: if the system cables are cabled together with mains or other power cables, the system is directly exposed to electromagnetic interference that may cause noises on audio/video and lost of functionality over digital communications.

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/100m for each wire (between the farthest door station and the farthest videophone) and maximum capacitance of 40nF (this value must be computed 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**

- Any device on the system (door station, intercom, videophone, relay etc.) for which the programming is carried out through one or more dip-switches, to store the new setup, must be disconnected from the power supply for 1 minute at least.
- 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.
- Once the system is wired, proceed to test the system. If it is required to adjust the level of the video signal, you can operate the devices on the system where it is possible to make this adjustment like entrances exchanger, block exchanger, bus booster and video distributors.
   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.









#### CESVK/ESVK-2 WITH ADDITIONAL DOOR STATION AND ENTRANCES EXCHANGER (TWO ENTRANCES SYSTEM)



#### ESVK-1 WITH 3 ADDITIONAL VIDEOPHONES AND RELATIVE POWER SUPPLIES (ALL MONITORS SWITCHED ON DURING THE CALL)














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