

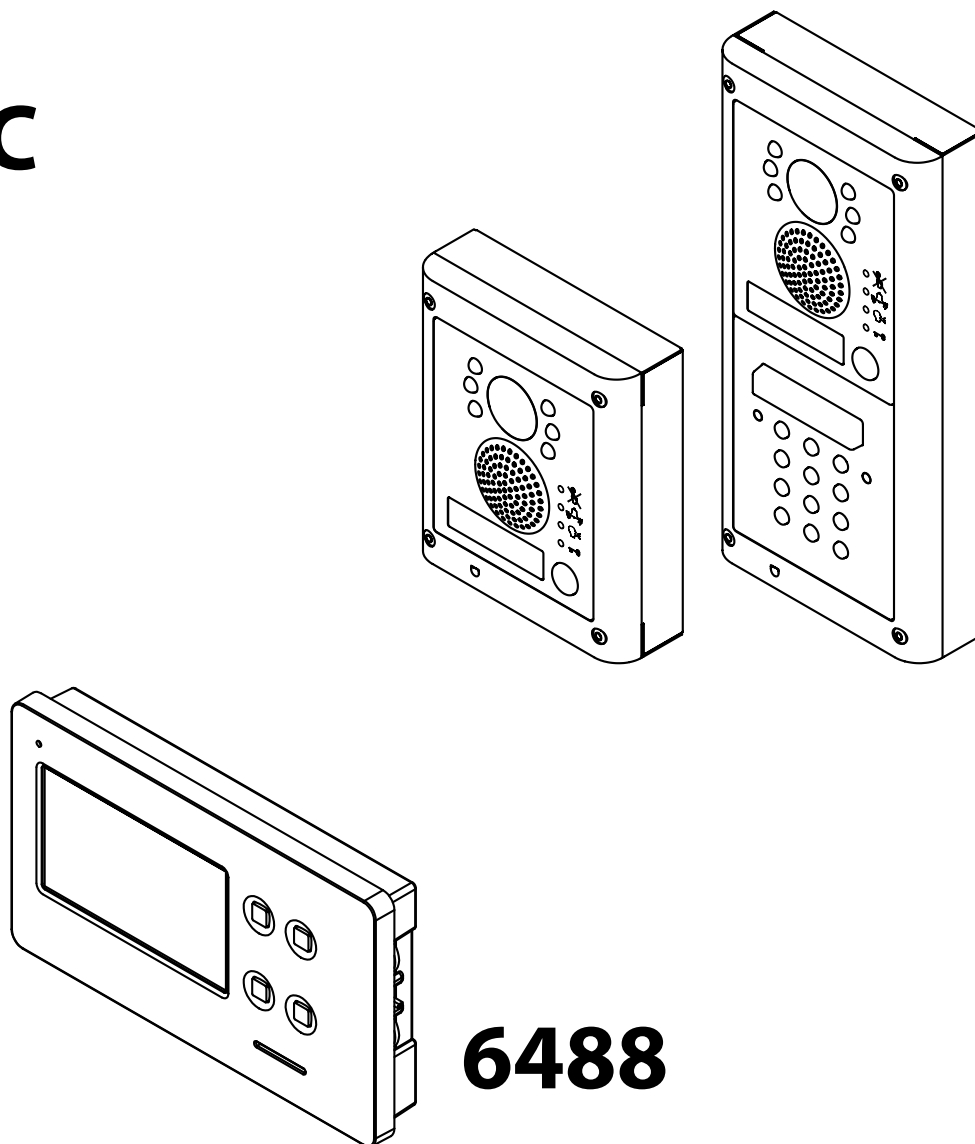
VIDEOKIT

ESVK/6488 SERIES

"2 Wire" bus one way, two way videokit

ESVK

ESVKC



Installation handbook



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System components and available versions

ESVK/6488 Colour videokit.

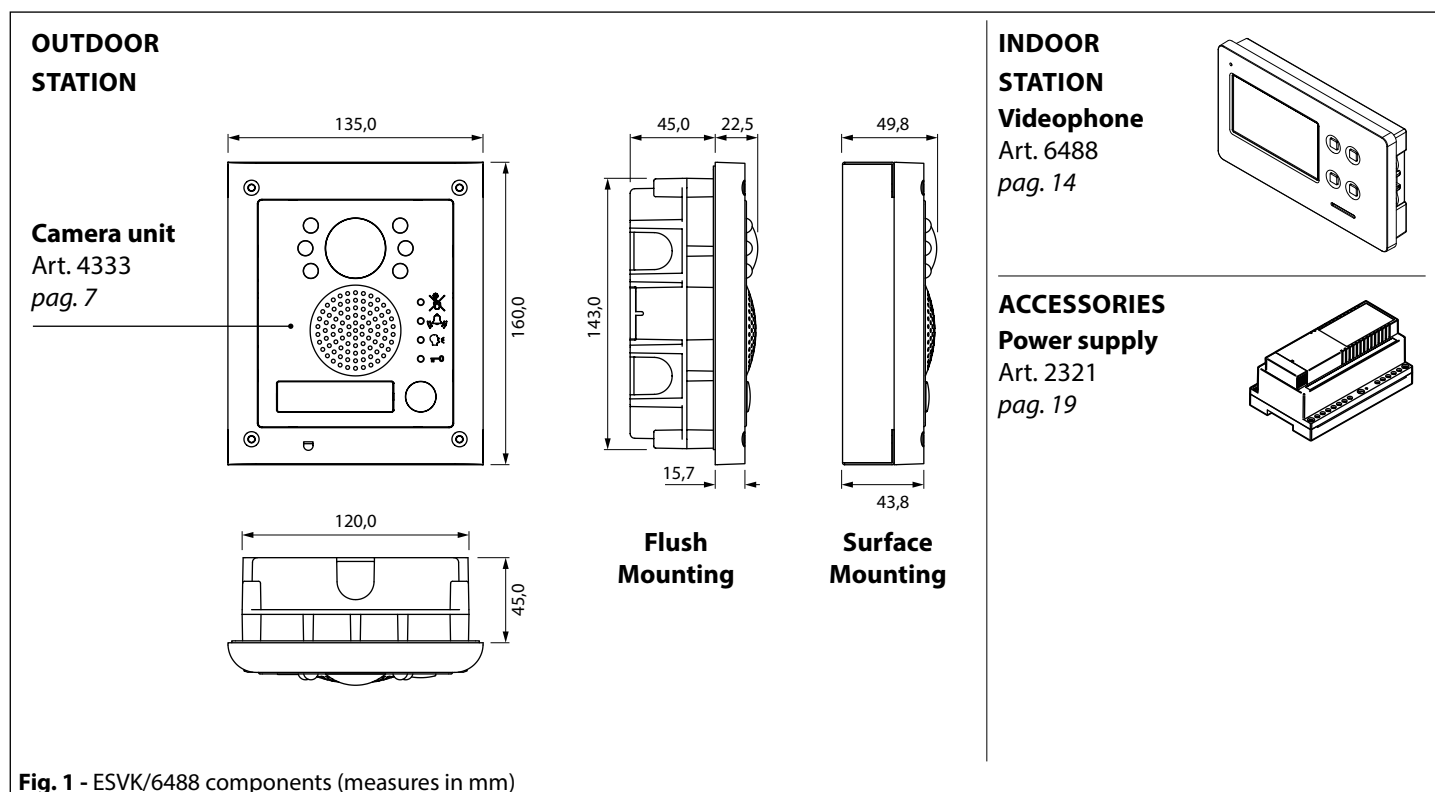


Fig. 1 - ESVK/6488 components (measures in mm)

ONE WAY VERSIONS	ESVK-1/6488 - flush mounting 1 Outdoor station composed of: 1 Art. 4333-1: 1 button camera unit 1 Art. 4851: Flush mounting box	1 Colour videophone Art. 6488	1 Power supply Art. 2321
	ESVK-1S/6488 - surface mounting 1 Outdoor station composed of: 1 Art. 4333-1: 1 button camera unit 1 Art. 4881: Surface mounting box	1 Colour videophone Art. 6488	1 Power supply Art. 2321
TWO WAY VERSIONS	ESVK-2/6488 - flush mounting 1 Outdoor station composed of: 1 Art. 4333-1D: 2 buttons camera unit 1 Art. 4851: Flush mounting box	2 Colour videophones Art. 6488	1 Power supply Art. 2321
	ESVK-2S/6488 - surface mounting 1 Outdoor station composed of: 1 Art. 4333-1D: 2 buttons camera unit 1 Art. 4881: Surface mounting box	2 Colour videophones Art. 6488	1 Power supply Art. 2321

ESVKC/6488 Colour videokit plus a codelock module.

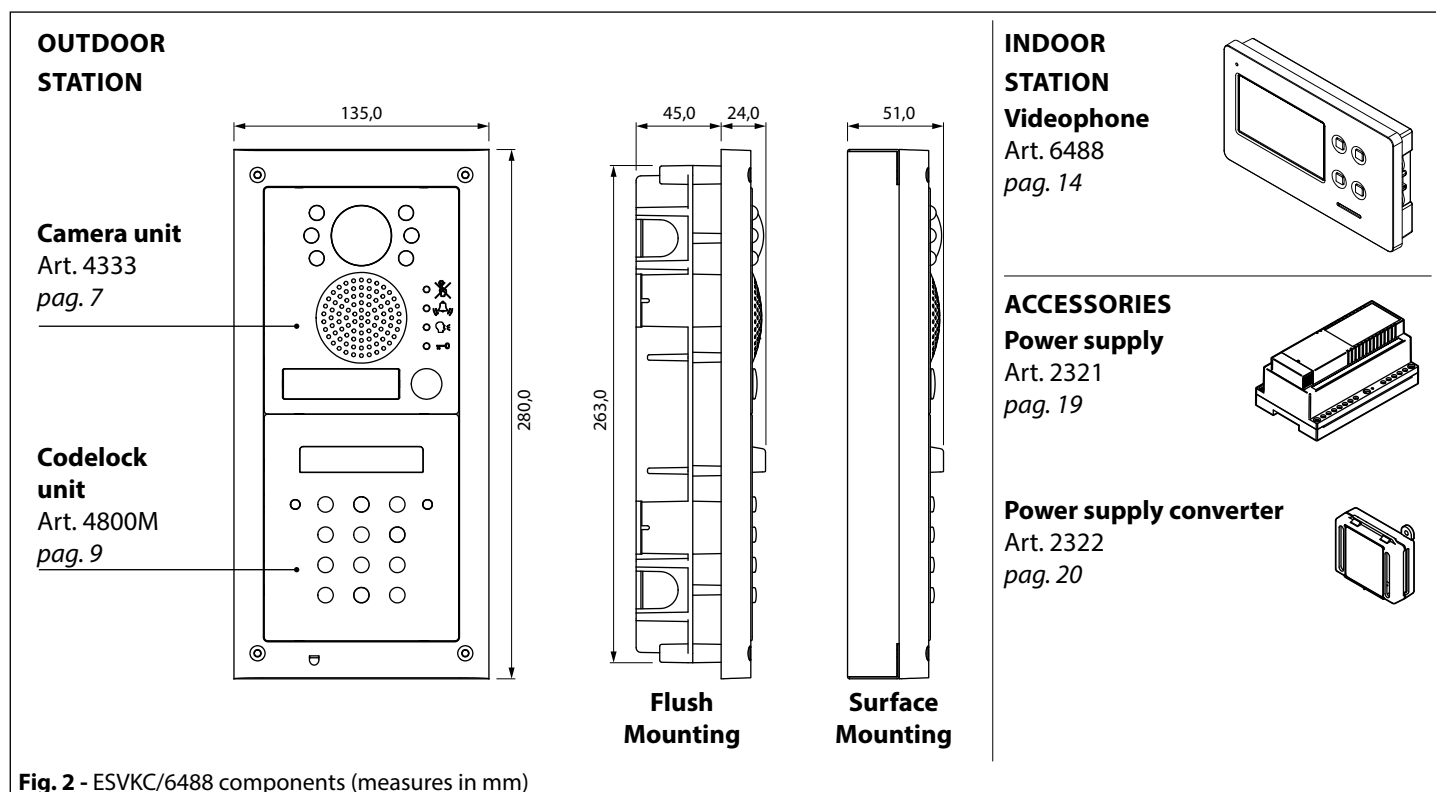
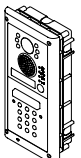
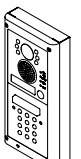
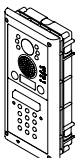
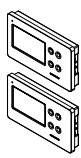
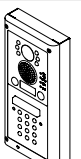
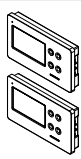


Fig. 2 - ESVKC/6488 components (measures in mm)

ONE WAY VERSIONS	ESVKC-1/6488 - flush mounting  1 Outdoor station composed of: 1 Art. 4333-1: 1 button camera unit 1 Art. 4800M: Codelock module 1 Art. 4852: Flush mounting box	 1 Colour videophone Art. 6488	 1 Power supply Art. 2321
	ESVKC-1S/6488 - surface mounting  1 Outdoor station composed of: 1 Art. 4333-1: 1 button camera unit 1 Art. 4800M: Codelock module 1 Art. 4882: Surface mounting box	 1 Colour videophone Art. 6488	 1 Power supply Art. 2321
TWO WAY VERSIONS	ESVKC-2/6488 - flush mounting  1 Outdoor station composed of: 1 Art. 4333-1D: 2 buttons camera unit 1 Art. 4800M: Codelock module 1 Art. 4852: Flush mounting box	 2 Colour videophones Art. 6488	 1 Power supply Art. 2321
	ESVKC-2S/6488 - surface mounting  1 Outdoor station composed of: 1 Art. 4333-1D: 2 buttons camera unit 1 Art. 4800M: Codelock module 1 Art. 4882: Surface mounting box	 2 Colour videophones Art. 6488	 1 Power supply Art. 2321

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 to 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 cables. Noise from such cables (electromagnetic interference) may cause noises on audio/video and lost 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 furthest door station and the furthest 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).

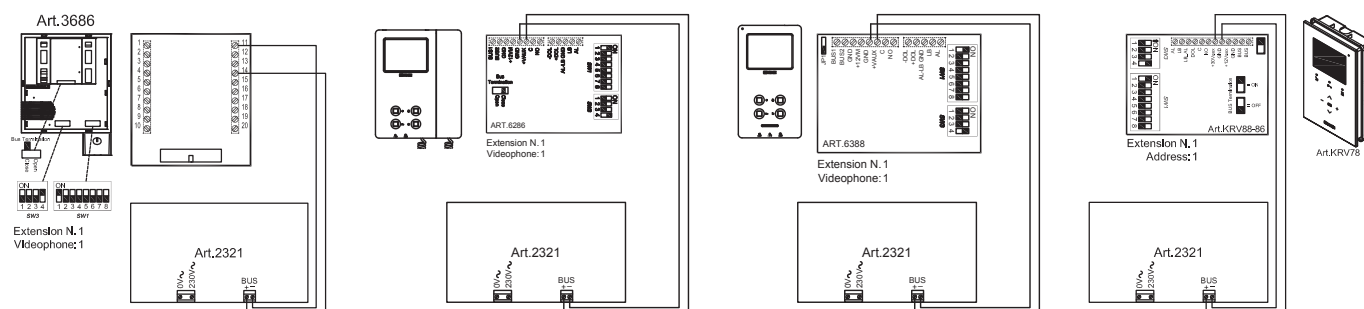
BUS DEVICE SETUP AND VIDEO DISTRIBUTION

- 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. 317N): 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.

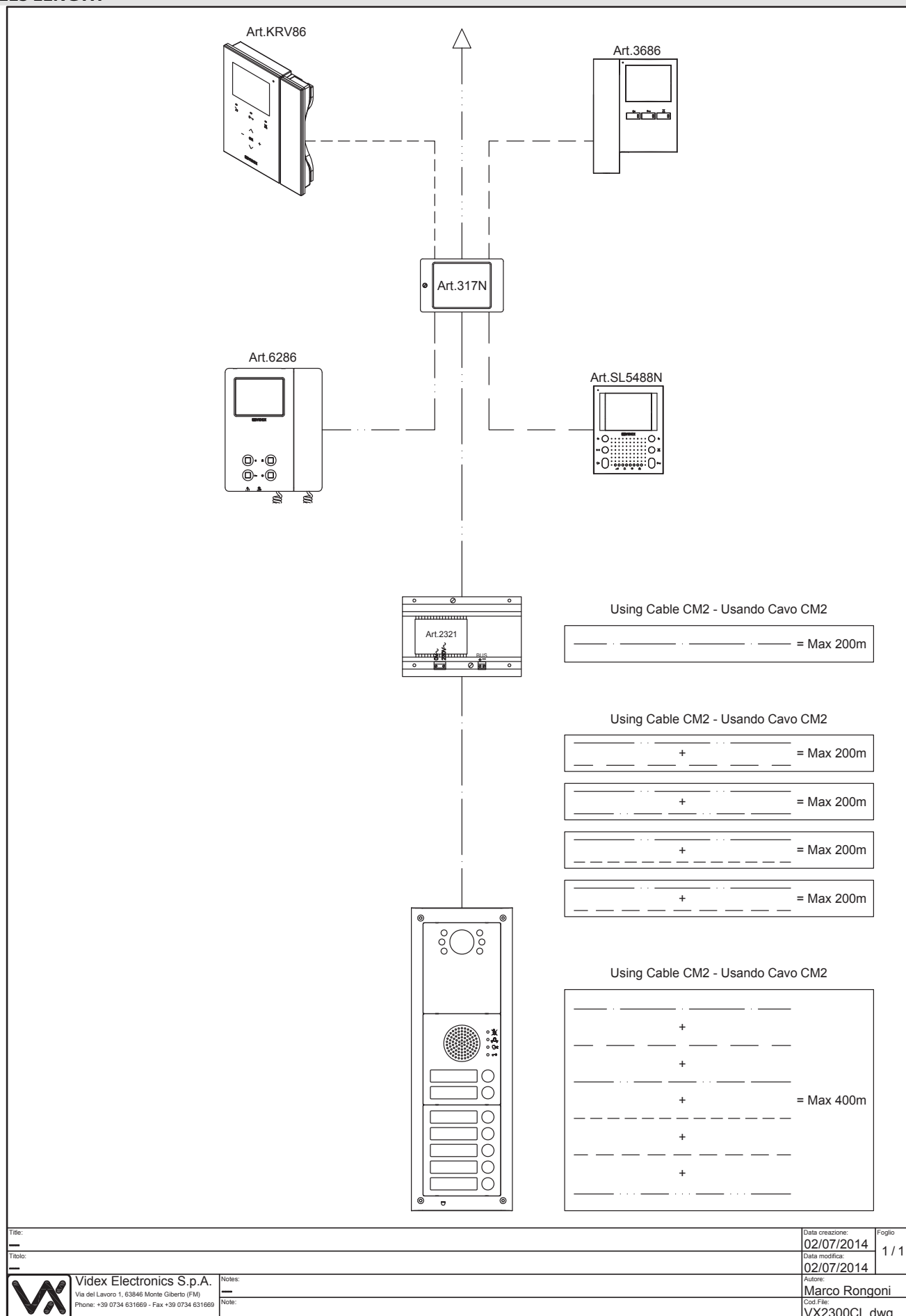
HOW TO CONNECT A LOCAL POWER SUPPLY

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.



CABLES LENGTH



Art. 4333 Speaker unit module with built-in functional to digital interface

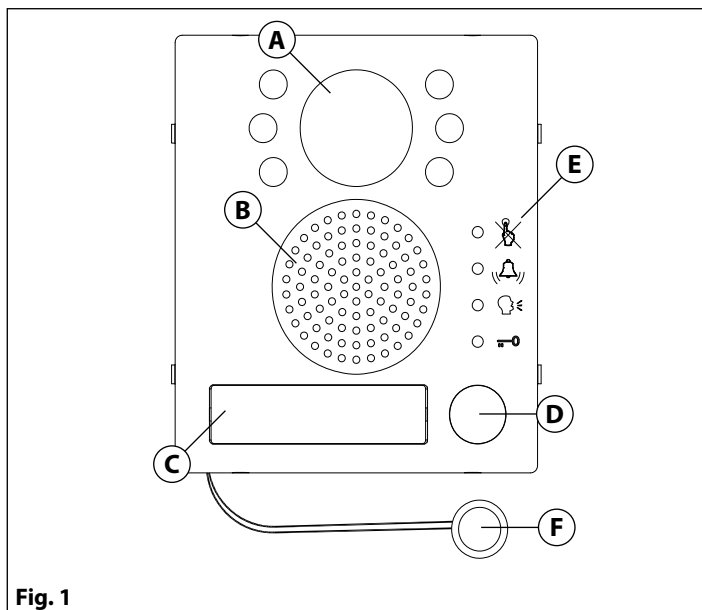


Fig. 1

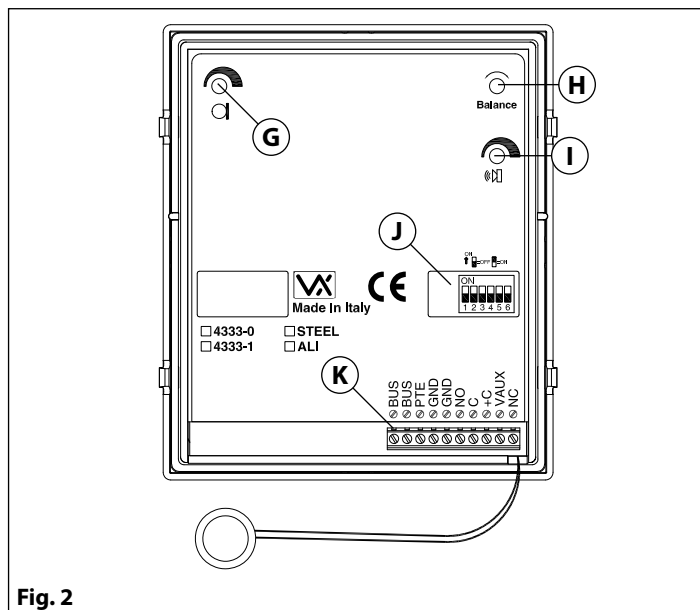


Fig. 2

DESCRIPTION

Speaker unit module with built-in colour day/night camera with autoiris lens comprised of IR illumination LEDs. According to the speaker unit version it includes one or two call push buttons.

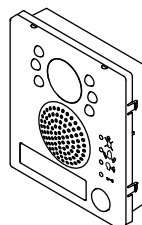
The unit circuitry incorporates:

- 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.

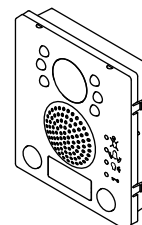
MODULE DETAILS:

- (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

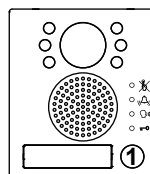


Art. 4333-1
Art. 4333-1/color

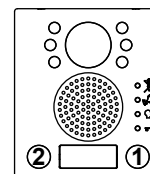


Art. 4333-1D
Art. 4333-1D/color

BUTTONS LAYOUT



Art. 4333-1
Art. 4333-1/color



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

FRONT LEDS SIGNALLING 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 ① on

Fig. 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	Switch	Seconds	Switch	Minutes	Switch	Sort
1	2	3	ID	4		5		6	
OFF	OFF	OFF	1	OFF	3	OFF	1	OFF	see
ON	OFF	OFF	2	ON	6	ON	2	ON	Art. 125
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

CONNECTED ON TOTAL CONNECTION TERMINALS		
BUS	BUS Connection terminals	
BUS		
PTE	"Push to exit" active low input	
GND	Ground	
GND		
NO	Door open relay normally open contact	Max 12-24 Vac/dc 3A
C	Door open relay common contact	
+C	Electric lock capacitor discharge output	
VAUX	35Vdc power supply input (if used, the module is powered locally and not from the BUS)	
NC	Door open relay normally closed contact	Max 12-24 Vac/dc 3A

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), Anodized Aluminium (add /a after the product code) or High Brass (add /HB)
Power Supply:	Supplied by the BUS line
Power consumption:	Stand-by: 35mA Operating: 165mA
Working Temperature:	-10 +50 °C

Art. 4800M Digital codelock module

CODELOCK UNIT MODULES ART. 4800M

The module features 12 stainless steel buttons (Keys **0 - 9**, **ENTER** and **CLEAR**), 2 LED's for progress information during use and programming and a mirror finish stainless steel front plate (Standard version). With three integral relays each with common, normally open and normally closed connections and two inputs to enable the external triggering of relays one and two (For example, push to exit button). Key presses are signalled both acoustically and visually while each button press has a tactile feel. Entering the correct code followed by ENTER will activate the relevant relay. Programming is carried out through the same keypad following a simple programming menu. The module can be combined with other 4000 Series modules in an audio or video intercom system.

MAIN FEATURES

- 3 C, NC, NO relay outputs (24Vac/dc – 5A max);
- 3 Programmable secret codes (one for each relay);
- Each relay can be set to be activated for a specific time (01 to 99 seconds) or to work as latch;
- Two active low inputs to command directly the relay 1 and 2;
- Programming menu guarded by a 4-8 digit programmable engineer's code;
- Visual and Acoustic signal during operating and programming;
- Keypad illumination LEDs;

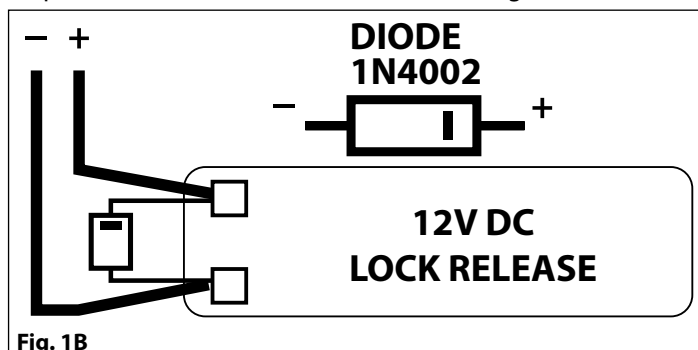
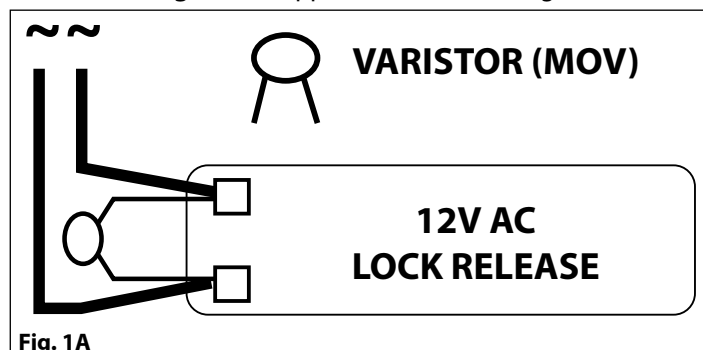
GENERAL DIRECTIONS FOR INSTALLATION

In order to achieve the best results from the schematics described it is necessary to install only original VIDEX equipment, strictly keeping to the items indicated on each schematic and follow these General Directions for Installation:

- The system must be installed according to national rules in force, in any case the running of cables of any intercom unit must be carried out separately from the mains;
- All multipair cables should be compliant to CW1308 specification (0.5mm twisted pair telephone cable).
- Cables for speech line and service should have a max resistance of 10 Ohm
- Lock release wires should be doubled up (Lock release wires and power supply wires should have a max resistance of 3 Ohm);
- The cable sizes above can be used for distances up to 50m. On distances above 50m the cable sizes should be increased to keep the overall resistance of the cable below the RESISTANCES indicated above;
- Double check the connections before power up;
- Power up the system then check all functions.

LOCK RELEASE BACK EMF PROTECTION

A varistor must be fitted across the terminals on AC lock release (**Fig.1A**) and a diode must be fitted across the terminals on a DC lock release (**Fig.1B**) to suppress back EMF voltages. Connect the components to the lock releases as shown in figures.



BUZZER BACK EMF

When using intercoms with buzzer call (Art.924/926, SMART1/2, 3101/2, 3001/2 and 3021/2) add one 0.1uF (100nF) capacitor between terminals 3 and 6 on the telephone.

BUILT-IN RELAYS – BACK EMF PROTECTION

The Art. 4800M includes selectable back EMF protection on the relays. The jumpers marked MOV (One jumper for each relay) are used to select the protection type. When using a fail secure lock with connections C & NO the jumper should be in the NO position. When using a fail open lock with connections C & NC the jumper should be in the NC position and when using the codelock to trigger a gate controller or another third party controller the jumper should be removed completely (This disables the protection on the relay).

PROGRAMMING (SEE ALSO THE RELEVANT FLOW CHART)

- Enter the "ENGINEER'S CODE": first time type six times "1" (111111 factory preset) and press **"ENTER"** (The red LED will illuminate);
- Confirm "ENGINEER'S CODE" (typing again the same) or type the new code (4 to 8 digits) then press **"ENTER"** (Melody). Pressing twice the **"ENTER"** button without changing the "ENGINEER'S CODE", will exit from the programming;
- Enter the code (4 to 8 digits) to enable "RELAY 1" or re-enter the existing code then press **"ENTER"** (Melody);
- Enter the "RELAY 1" operation time (2 digits 01 to 99 I.E. 05=5 seconds, 00= remain open time) or re-enter the existing time then press **"ENTER"** (Melody);
- Enter the code (4 to 8 digits) to enable "RELAY 2" or re-enter the existing code then press **"ENTER"** (Melody);
- Enter the "RELAY 2" operation time (2 digits 01 to 99 I.E. 05=5 seconds, 00= remain open time) or re-enter the existing time then press **"ENTER"** (Melody);
- Enter the code (4 to 8 digits) to enable "RELAY 3" or re-enter the existing code then press **"ENTER"** (Melody);
- Enter the "RELAY 3" operation time (2 digits 01 to 99 I.E. 05=5 seconds, 00= remain open time) or re-enter the existing time then press **"ENTER"** (Melody);
- The system is ready to use (the red LED will be off).

PROGRAMMING NOTES

- After pressing enter following a command, press **"ENTER"** a further twice to exit the programming menu.

RETURN SYSTEM TO PRESET ENGINEER'S FACTORY CODE

- Turn off power to code lock;
- Keep **"ENTER"** button pressed while turning the power back on;
- Release **"ENTER"** button;
- The engineer's code is now set to **"111111"** (six times one).

OPERATION

- Type in the programmed code and press **"ENTER"**;
- If the code is correct, the green LED will illuminate for approx. 2 seconds and the relay relevant to the code will operate for the programmed time;
- If a wrong code is entered, a continuous melody will sound for 4 or more seconds, according to the number of mistakes;
- To switch off any relay while operating, type in the relevant code then press the **"CLEAR"** button;

OPERATION NOTES

- To operate relays together, set the same code for each relay;
- If a wrong code is entered, the system will lock out for 5 seconds which will increase each time a wrong code is entered. The system will operate only when the correct code is entered.

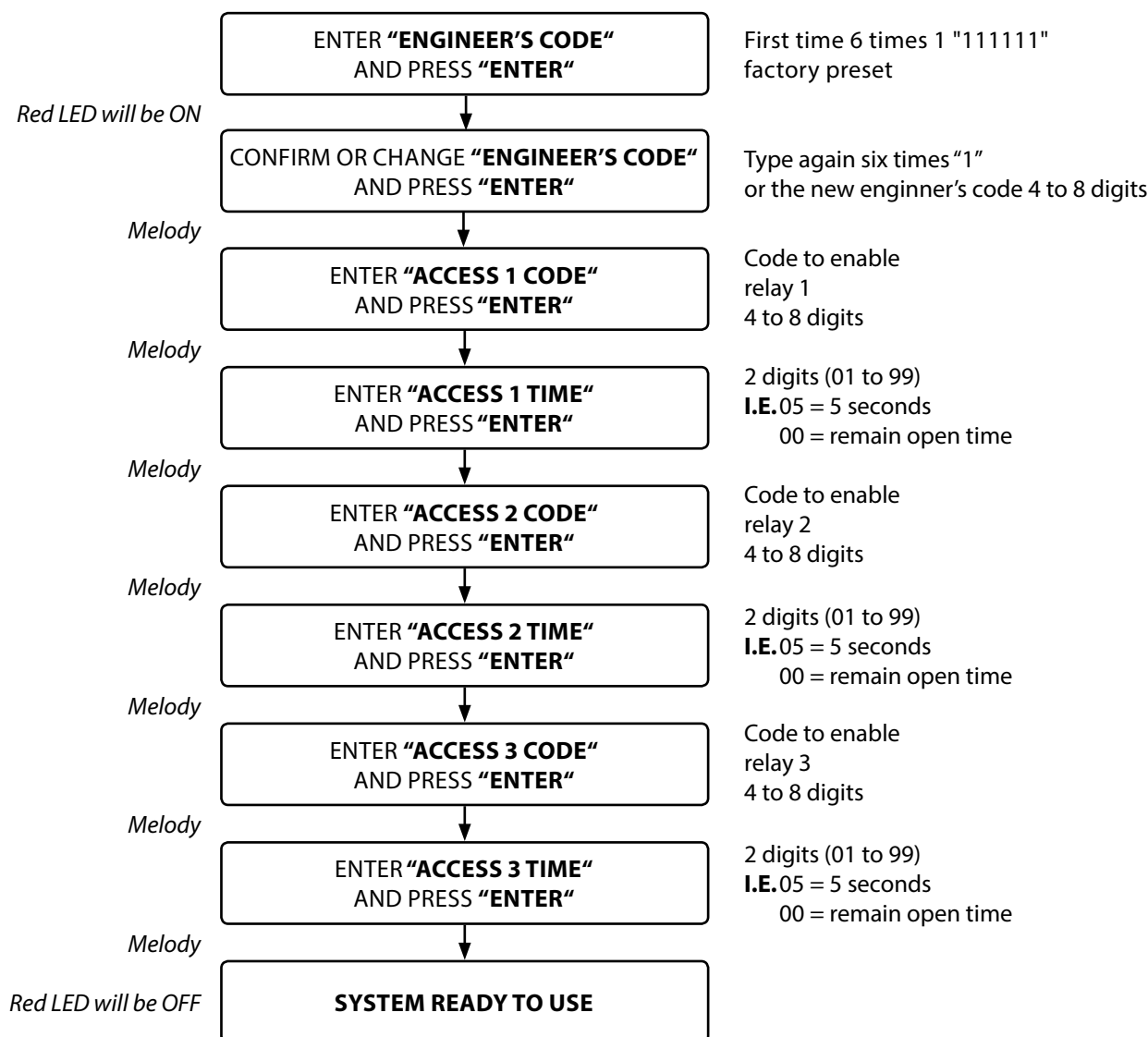
TERMINALS:	
SW2	Relay 2 command signal (active low)
SW1	Relay 1 command signal (active low)
NC3	Relay 3 normally closed contact
NO3	Relay 3 normally open contact
C3	Relay 3 common contact
NC2	Relay 2 normally closed contact
NO2	Relay 2 normally open contact
C2	Relay 2 common contact
NC1	Relay 1 normally closed contact
NO1	Relay 1 normally open contact
C1	Relay 1 common contact
-	12/24Vac/dc power input
+	

**Max
24Vac/dc
3A**

TECHNICAL SPECIFICATION

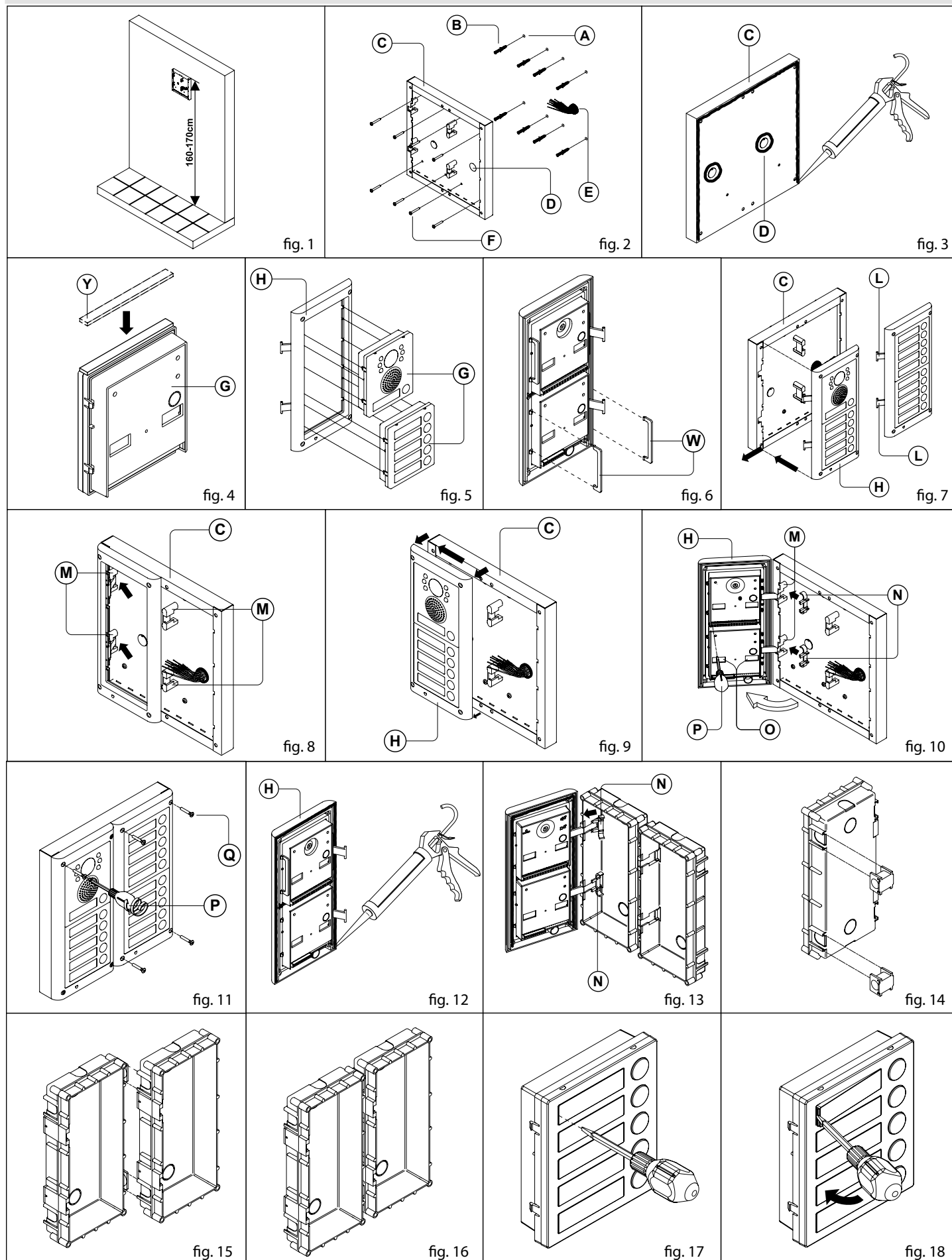
Power Supply: 12/24 Vac/dc – 2VA
Power Consumption: Stand-by: 20mA
Operating: 70mA
Working Temperature: -10 +50° C

PROGRAMMING FLOW-CHART



4000 Series Surface and flush mounting door station installation

EXAMPLE: INSTALLING A FOUR MODULE OUTDOOR STATION



INSTALLING A SURFACE MOUNT DOOR STATION

1. Place the surface box against the wall (165-170cm between the top of the box and the floor level as shown in **Fig. 1**) and mark the fixing holes for the wall plugs and the hole for the cables **E** (**fig. 2**). Observe the orientation of the box with the hinge on the left;

 **In order to prevent water ingress we highly recommend using a silicon sealant between the wall and the back box C (Fig.3) and around all holes D (Fig.3);**

2. As shown on **Fig. 2**, drill the fixing holes **A**, insert the wall plugs **B** and feed the cables **E** through the surface box opening **D**, fix surface box **C** to the wall using the screws **F**;
3. Apply the **Y** silicon sealant on top of each module as shown in **Fig. 4**;
4. Before installation of the module support frame, hook the modules **G** to the support frame **H** as shown in **Fig. 5** then, as shown in **Fig. 6**, fit the two anti-tampering locks **W** for each module (do the same for the second module support frame);
5. When you have more than one support frame, hook the support frame to the surface box starting from the left. For convenience we will described how to attach the left frame but the same must be carried out for the right frame. As shown in **Fig. 7**, hook the module support frame **H** (complete with modules) to the surface box **C** moving the frame as suggested from pointers. Ensure that the pivots **L** (**Fig. 7**) go inside the relevant housing **M** as shown in **Fig. 8**;
6. As shown on **Fig. 9**, pull back the module support frame **H** while moving it slightly to the left as suggested by the pointers;
7. As shown in **Fig. 10**, open the module support frame **H** as suggested by the pointer, hook the hinge locks **N** to the hinges **M**, make the required connections using the screwdriver provided **P** (flat blade end) and make the required adjustment by adjusting the settings (through openings **O**) and adjust trimmers;
8. Repeat the same operations described above for the second module support frame (or for the third if available);
9. When the system has been tested and is working correctly, move back the module support frames carefully, fix them to the surface box using the screwdriver provided **P** (torx end) and the pin machine torx screws **Q** (**Fig. 11**). **Note: do not over tighten the screws more than is necessary.**

INSTALLING A FLUSH MOUNTING DOOR STATION

When flush mounting and the number of modules is greater than 3, the required back boxes need to be linked together (before embedding them in the wall) as shown on **Fig. 14, 15 and 16**:

- Arrange the back boxes and remove knockouts to allow cables to be fed from one back box to the other;
 - Hook the spacers to first back box then hook the second back box to obtain the result shown on **Fig. 16**;
1. Protect the module support frame fixing holes from dust then embed the back box into the wall (165-170cm between the top of the box and the floor level as shown on the **Fig. 1**) feeding the cables **E** (**Fig. 2**) through a previously opened hole in the box. Observe the direction of the box ensuring the hinge is on the left and take care that the box profile is in line with the finished wall profile;

 **In order to prevent water ingress we highly recommend using a silicon sealant between the wall and the back box H (Fig.12);**

2. Continue from step 4 of surface mounting instructions , but at step 7 hook the hinge locks **N** as shown on **Fig. 13**.

 **Note: if additional holes are made in the surface box, oxidation problems may appear unless the unprotected metal is coated with a protective paint.**

NOTES

- The screwdriver's blade has two sides, one flat and one torx, to select one of them unplug the blade from the screwdriver body and plug it into the required side.
- The example shows the use of only one back box bottom hole for wires, this is done to keep file drawings clear. Naturally the installer can use the left hole or the right or both if required.

HOW TO REMOVE THE CARD NAME HOLDER

- To avoid damage to the module front plate, tape the side that will be in contact with the screwdriver blade;
- Insert the screwdriver (flat side) into the card-holder hole as shown in **Fig. 17**;
- Move the screwdriver to the left as shown in **Fig. 18** to extract the card name holder;
- Edit the card name then replace it inside the holder and refit: insert the holder inside its housing from the left or right side then push the other side until it clips into place.

Art. 6488 4.3" hands free colour display digital videophone

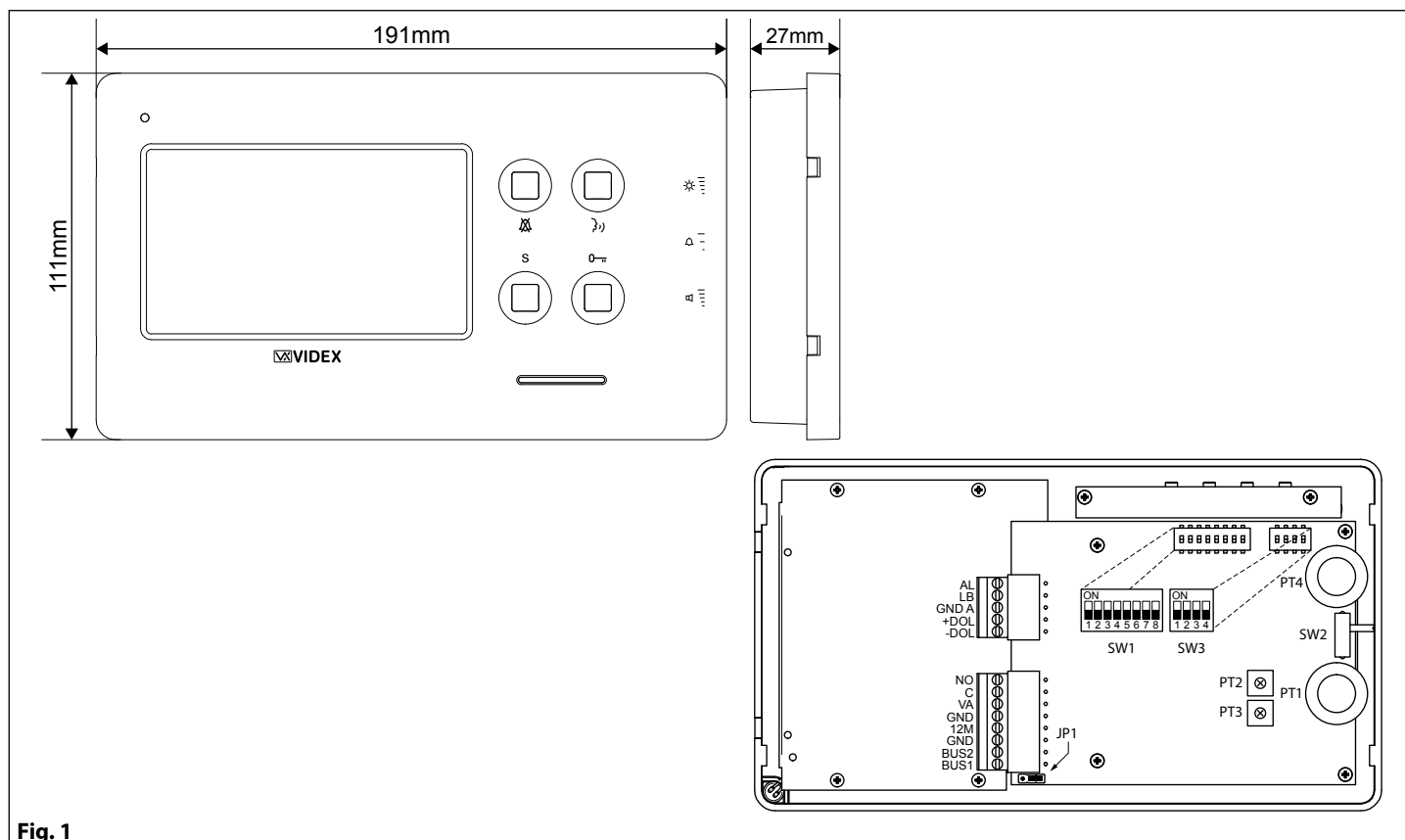


Fig. 1

DESCRIPTION

An intelligent hands free videophone using 4.3" full colour active matrix LCD monitor for VX2300.

Including 4 buttons "service", "privacy/bus relay activation", "door-open/intercommunicating call" and "answer/camera recall" 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. 6488 is surface mount.

PUSH BUTTONS (FIG. 1)

S	Service push button. When pressed it links internally the terminals "C" and "NO" on the connection terminals.
	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. Activate bus relay board Art. 2305 push button. To activate a bus relay, during a conversation, press this button quickly as many times as the address value of the relay. Camera switch push button. 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 to the video signal coming from the camera module input for external camera. During the conversation, press and keep pressed the button until the camera switches. Repeat the operation to switch back to main camera. Call Reject Button. During an incoming call, press this button to reject the call. The visitor doesn't receive any warning of the call rejected.
0	Door open push button. Press this button to open the door when you are in conversation or you are receiving a call. Intercommunication push button. For an intercommunicating call, press as many times as the extension or address value to call (see SW3 Intercommunication Settings).

PUSH BUTTONS (FIG. 1)

	Answer push button. On an incoming call, operation of this button allows the user to answer and converse with the visitor. The relevant LED will illuminate.
	Switch off button. With the system switched on (monitor on), momentary operation of the button will switch the video monitor off. The videomonitor will also automatically switch off after a time delay if the button is not pressed. The relevant LED will switch off.
	Camera Recall push button. Press as many times as the DEVICE N. of the door station to switch on.
	Simplex button. Pressing and holding the button for more than 3 seconds will switch the videomonitor into SIMPLEX speech mode. Press and hold the button to speak to the caller ( LED will flash rapidly), release the button to listen ( LED will flash slowly). If the button is not pressed for 10 seconds the videomonitor will switch off. The videomonitor will revert to duplex speech when another call is made.

LEDs (FIG. 1)

LED 	Privacy on LED It illuminates when the privacy service is enabled.
LED 	Generic use LED It is controlled from the terminals "+DOL" and "-DOL". Normally used to signal the door status (open or closed).
LED 	ON LED It illuminates when the videophone is switched ON.

CONTROLS (FIG. 1 AND FIG. 2)

 PT4	Speech volume control (sliding wheel).
 SW2	Call tone volume control (3 levels).
 PT1	Brightness control (sliding wheel).
PT2	Colour intensity control trimmer (rotate left to increase or right to decrease).
PT3	Contrast control trimmer* (rotate left to increase or right to decrease). *Not available in some LCD versions.
JP1	Bus termination switch (lower position = BUS termination active, upper 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, jumper JP1);
- 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

All programming options are available only 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



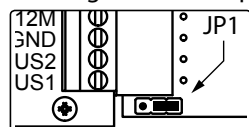
The table below shows how to set the address of the videophone. Considering that ON = 1 and OFF = 0, multiply each digit for the relevant decimal weight then sum values obtained to get the address: E.g. as highlighted in the table OFF,ON,OFF,OFF,ON, OFF,ON in binary is equal to 0100101 then multiplying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

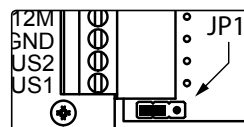
Note: The maximum number of units allowed is 100 but the address of each unit can be a value between 1 and 127.

VIDEOPHONE END OF LINE TERMINATION – JP1

Looking at the videophone from the rear:



Move the jumper **JP1** to the right position to enable the bus termination.



Move the jumper **JP1** to the left 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



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).

SW3.1

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

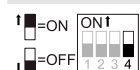


If the intercommunication between apartments is enabled (switch 1 of SW3 = ON) leave these two switches in default position (both to OFF). Otherwise, if the intercommunication is between the same apartment (switch 1 of SW3 = OFF), set the extension addresses starting always from 1. During the external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

SW3.2..3

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 +VAUX and BUS- to terminal GND on the connection terminals (the local power supply is required for each black & white slave videophone or starting from the third slave).

SW3.4

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.

SIGNALS ON CONNECTION TERMINALS		
Signal	Description	
BUS1	Bus input	
BUS2	Bus input	
GND	Ground	
12M	+12Vdc power supply input for version with Memory Board option	
GND	Ground	
VA	Auxiliary power supply input (to be used when the switch 4 of SW3 is set to ON)	
C	Dry contact. Internally linked to NO when the S button is pressed.	Max 35Vdc, 10mA
NO	Dry contact. Internally linked to C when the S button is pressed.	
–DOL	Auxiliary LED power supply input (ground)	
+DOL	Auxiliary LED power supply input (+12Vdc)	
GND A	Ground output for use in combination with “AL” & “LB” active low inputs	
LB	Local bell input (active low)	
AL	Alarm input (not implemented yet)	

MEMORY BOARD

This device is also available in the version with memory board (Art. 6488/VM).

If you have that version, please refer to the **"6200, 6300, 6400 and 6700 Series Memory Board"** user manual for installation and use. The manual is available for download at the following link:

<https://www.dropbox.com/s/492p16btyqhxmmpu/66250782-EN.pdf?dl=0>



TECHNICAL SPECIFICATION

Housing/Mounting:	6400 Series Videophones / surface mount
Push buttons:	Yes, 4
Programming:	Yes, carried out by the buttons and the dip-switches located on the rear of the videophone
Controls:	Call tone volume, picture hue, brightness and contrast
Power Supply:	Supplied by the BUS line
Power consumption:	Stand-by: 0.2mA Operating: 115mA
Working Temperature:	-10 +50 °C

6400 Series Wall mounting instructions

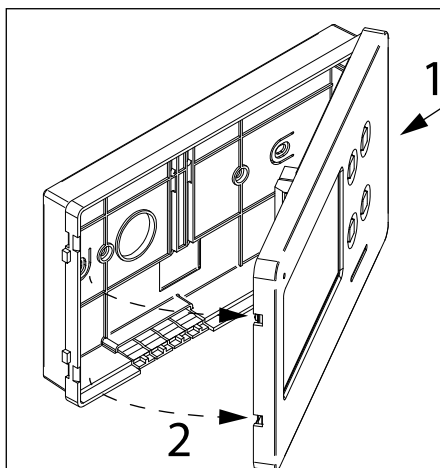


Fig. 1

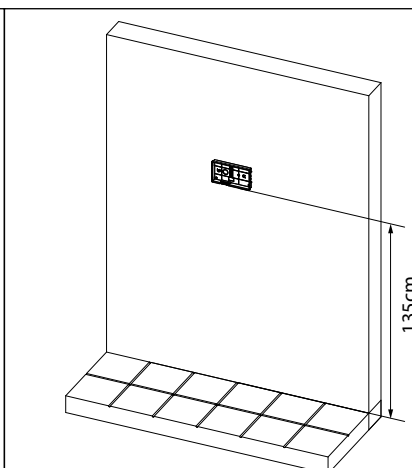


Fig. 2

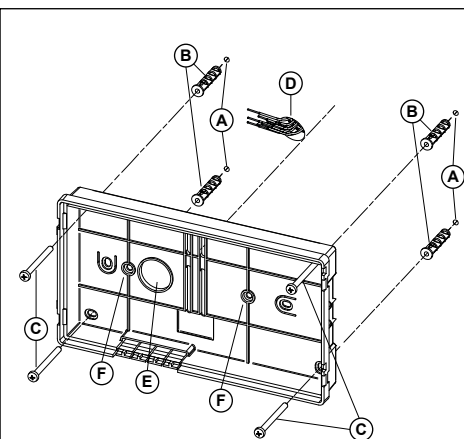


Fig. 3

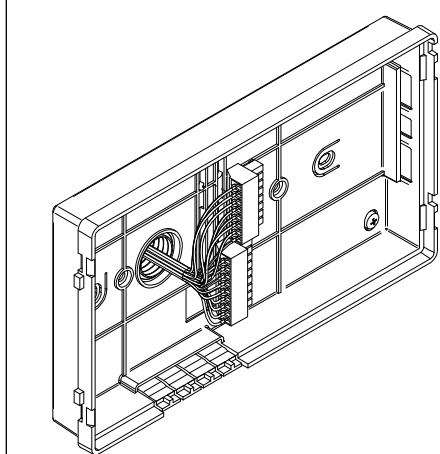


Fig. 4

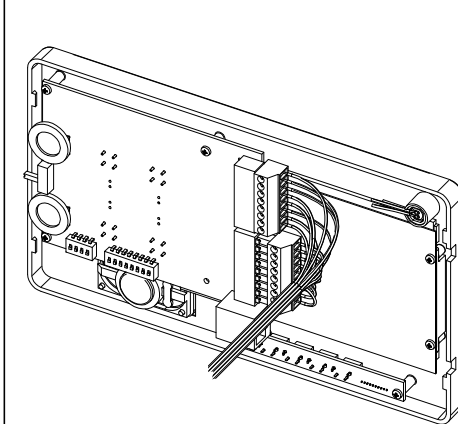


Fig. 5

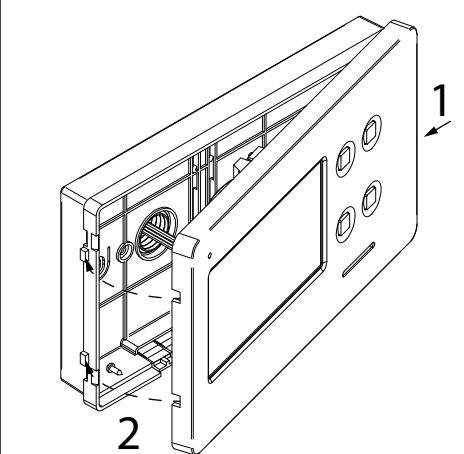


Fig. 6

1. In order to install the videophone, it is necessary to remove the cover, which contains all the electronics, from the base: press lightly on the right part of the videophone and simultaneously pulling outwards the left part as shown in **Fig. 1**.
2. Put the base of the unit on the wall at approx 135cm from the finished floor to match the points for the fixing holes "A" (**Fig. 2**) remembering that the wires "D" (**Fig. 3**) must be fed through the large hole "E" (**Fig. 3**). If you use the flush mounting box 503, embed it into the wall vertically at approx. 140cm from the finished floor and the base.
3. Following **Fig. 3**, make the holes "A", insert the wall plugs "B" and fix the base with the screws "C" feeding the wires "D" through the hole "E". If you have used the box 503, fix the base to the wall through the holes "F" using the screws "C".
4. As shown in **Fig. 4**, connect the wires to the removable terminals following the provided installation diagram. Connect the terminal blocks to the electronics contained in the cover as shown in **Fig. 5**. Test system before closing.
Contrast and hue trimmers can be adjusted only if the videophone is open. To activate the display and see changes use the "Camera Recall" function by pressing  button.
Note: while testing the system, it is advisable to hold the cover with your hand.
5. Once testing is complete and all the necessary adjustments are made, close the unit as shown in **Fig. 6**: first hook in the right part and then the left part until you hear a click.

Art. 2321-2321/P Power supplies for VX2300

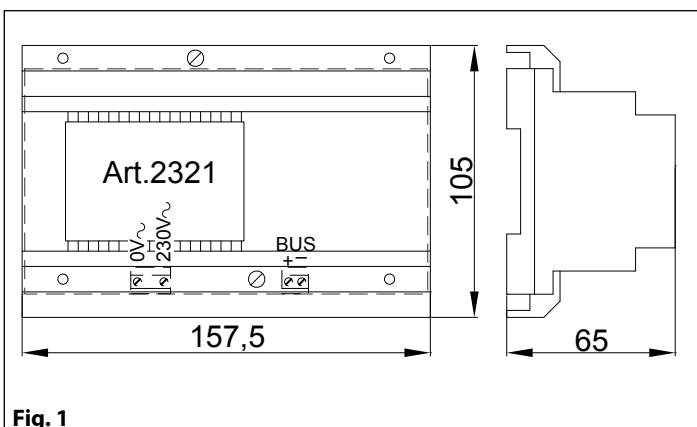


Fig. 1

DESCRIPTION

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

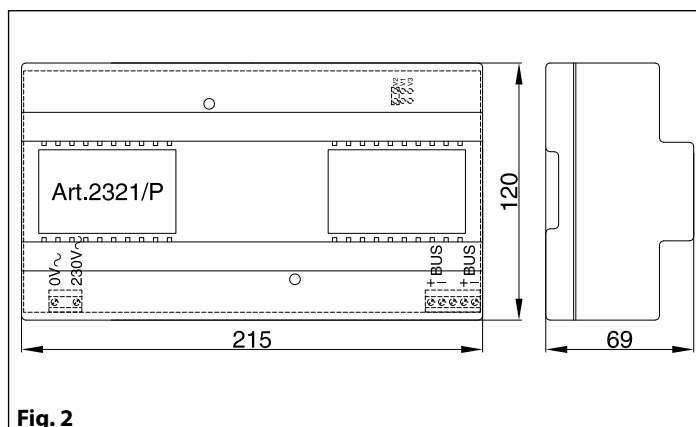


Fig. 2

CONNECTION TERMINALS AND JUMPERS

0	Mains input
~230V	
BUS + BUS -	BUS terminals
BUS + BUS -	BUS terminals (only Art. 2321/P)
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 Art. 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) – 12 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

ART. 2321 - ELECTRICAL DATA

Mains voltage:	230Vac ~ 50/60Hz
Output voltage:	32Vdc 0.8A

ART. 2321/P - ELECTRICAL DATA

Mains voltage:	230Vac ~ 50/60Hz
Output voltage:	35Vdc 1.5A

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

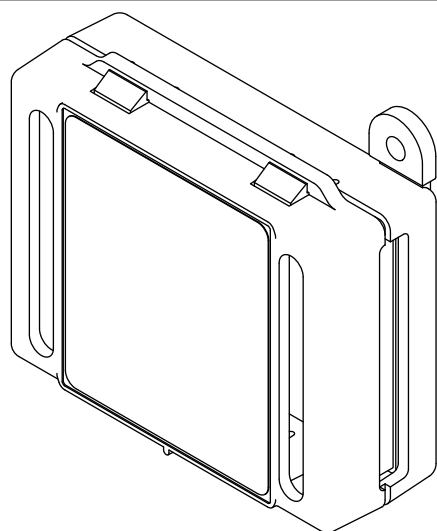


Fig. 1

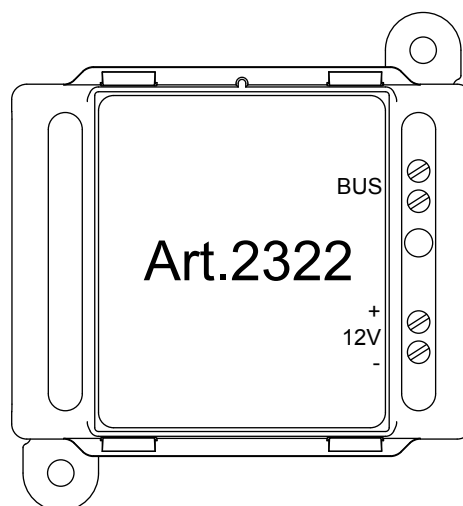


Fig. 2

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 or Art. 4800M without the need for an additional power supply.

Please note: The peripherals must not require more than 100mA.

CONNECTION TERMINALS

BUS	BUS line inputs
BUS	
12V+	12Vdc – 100mA output
12V– (0V)	

TECHNICAL 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

Installation diagrams

NOTES AND SUGGESTIONS

- All diagrams refer to all kits versions: flush or surface, colour or black & white.
- Dashed connections refer to optional connections ("Local bell", "Push to exit" & "Door monitor").
- Some diagrams show how to connect a 12Vdc electric lock: these directions are suitable for all diagrams in this manual.
- Each time a setting is changed on a videophone (address, extension, number of rings etc.), the videophone must be disconnected from the relevant connection board then after a few seconds reconnected again to allow the recognizing of the new setting.
- All diagrams shown are valid for B&W or colour systems with surface or flush mount door station.

DECLARATION OF RESPONSIBILITY

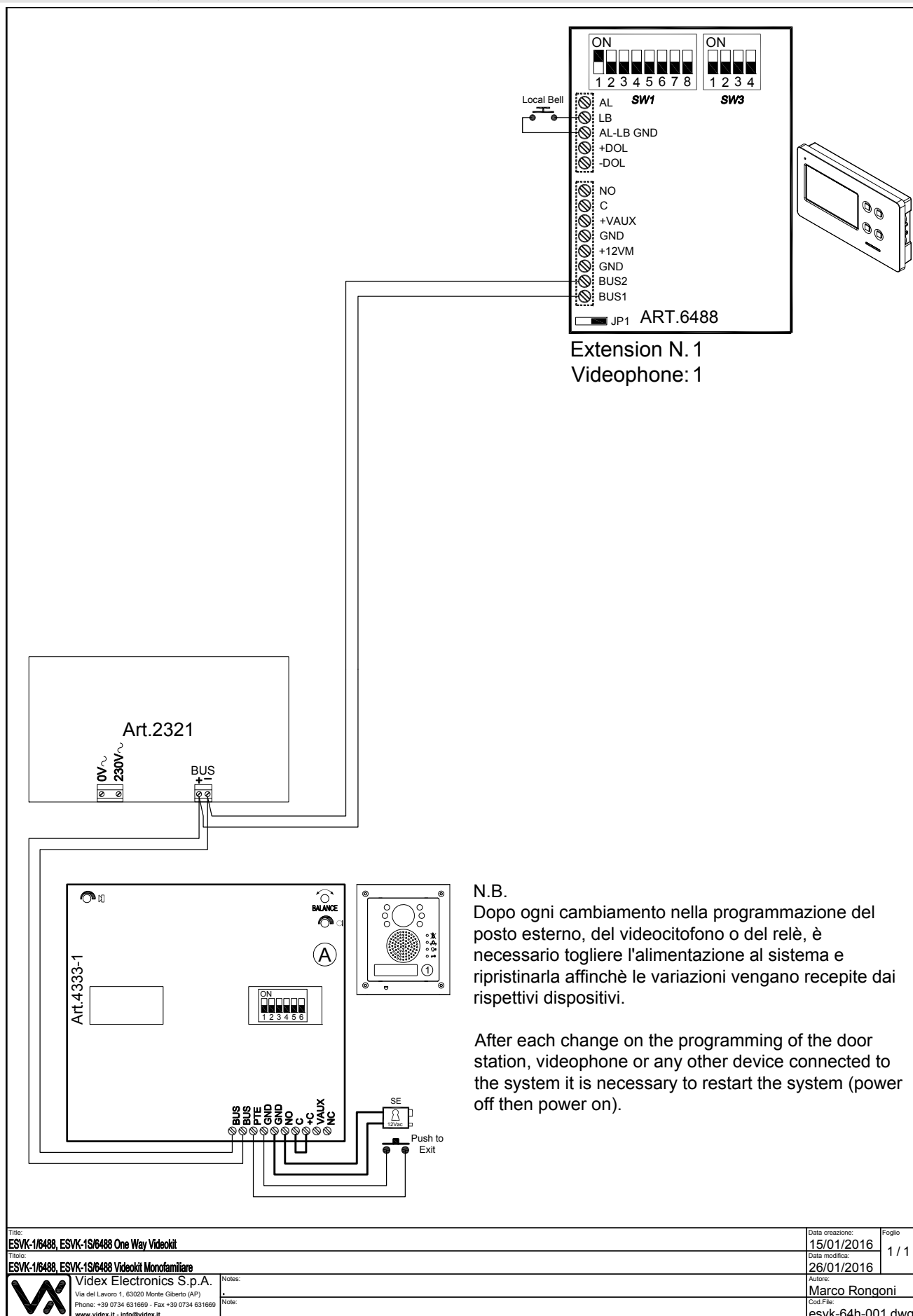
This manual has been written and revised carefully. The instructions and the descriptions which are included in it are referred to VIDEX parts and are correct at the time of print. However, subsequent VIDEX parts and manuals, can be subject to changes without notice. VIDEX Electronics S.p.A. cannot be held responsible for damages caused directly or indirectly by errors, omissions or discrepancies between the VIDEX parts and the Manual.



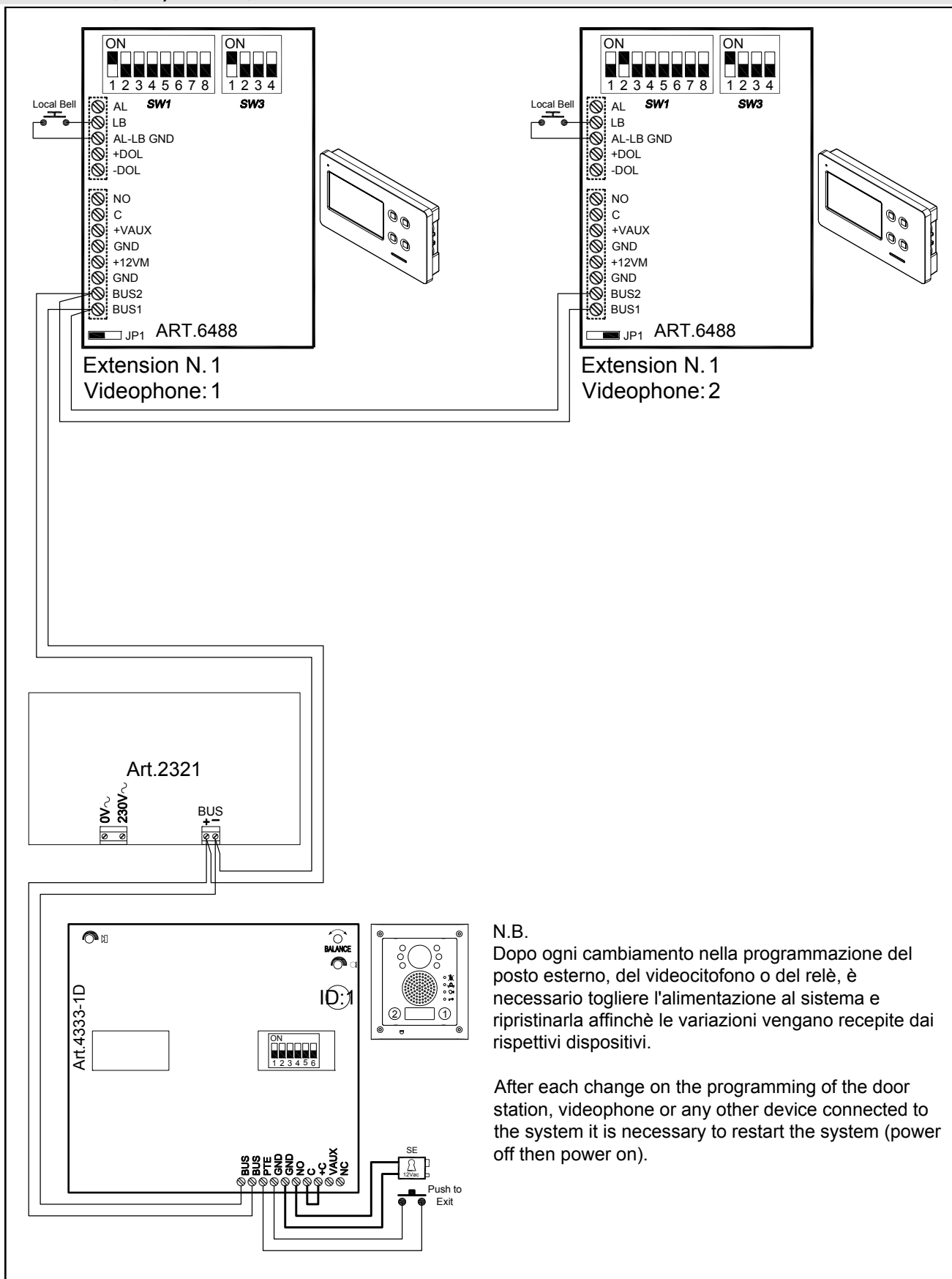
WE RECOMMEND

This equipment is installed by a Competent Electrician, Security or Communications Engineer

VIDEOKIT ESVK-1/6488, ESVK-1S/6488



VIDEOKIT ESVK-2/6488, ESVK-2S/6488



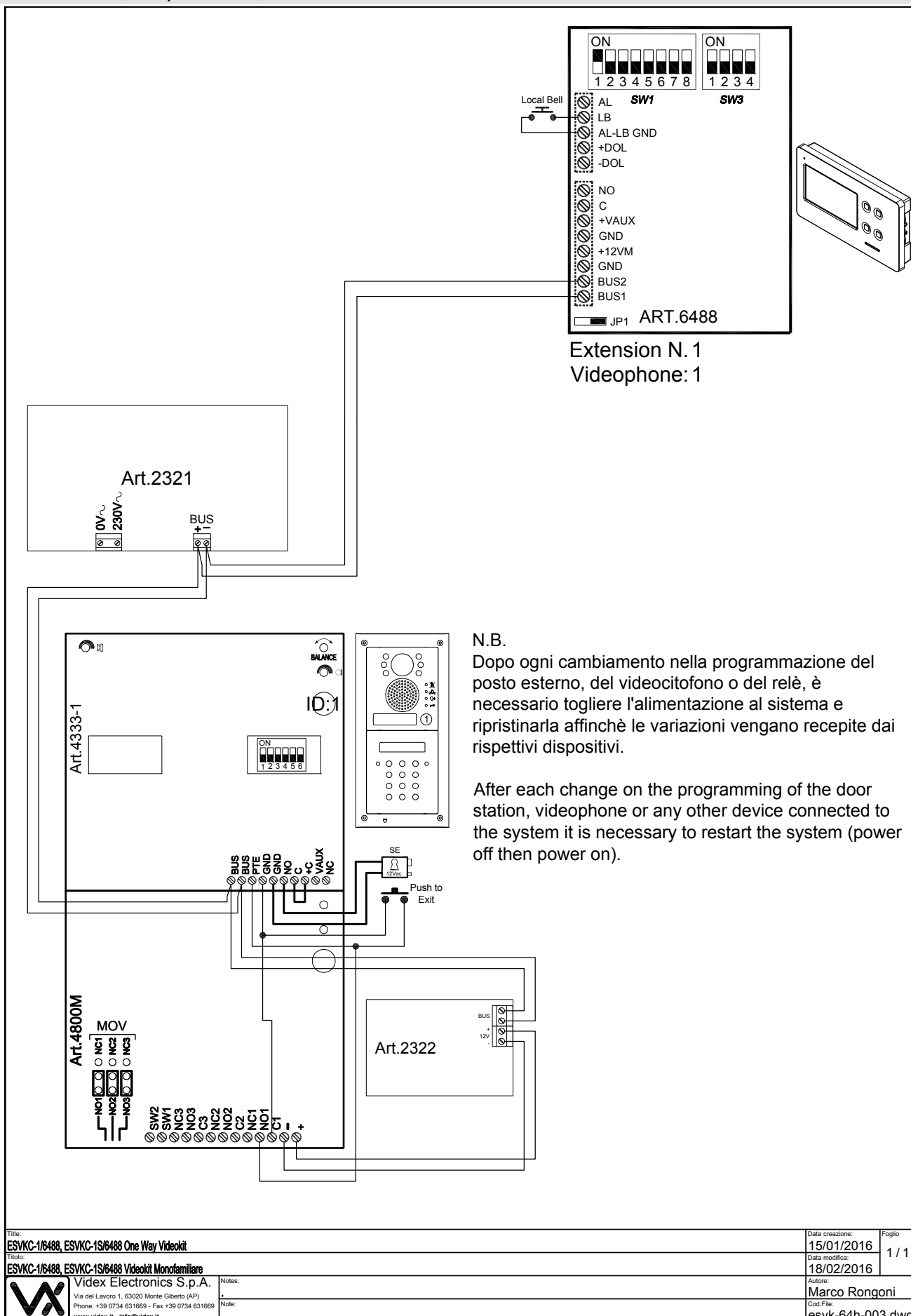
N.B.

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).

Title: ESVK-2/6488, ESVK-2S/6488 Two way Easy Videokit		Date creazione: 15/01/2016	Foglio 1 / 1
Titolo: ESVK-2/6488, ESVK-2S/6488 Easy Videokit bifamiliare		Data modifica: 26/01/2016	
Videx Electronics S.p.A. Via del Lavoro 1, 63020 Monte Giberto (AP) Phone: +39 0734 631669 - Fax: +39 0734 631669 www.videx.it - info@videx.it		Autore: Marco Rongoni Cod. File: esvk-64h-002.dwg	

VIDEOKIT ESVKC-1/6488, ESVKC-1S/6488



ESVKC-1/6488, ESVKC-1S/6488 One Way Videokit

ESVKC-1/6488, ESVKC-1S/6488 Videokit Monofamiliare

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Notes:

Note:

Data creazione:

15/01/2016

Data modifica:

18/02/2016

Autore:

Marco Rongoni

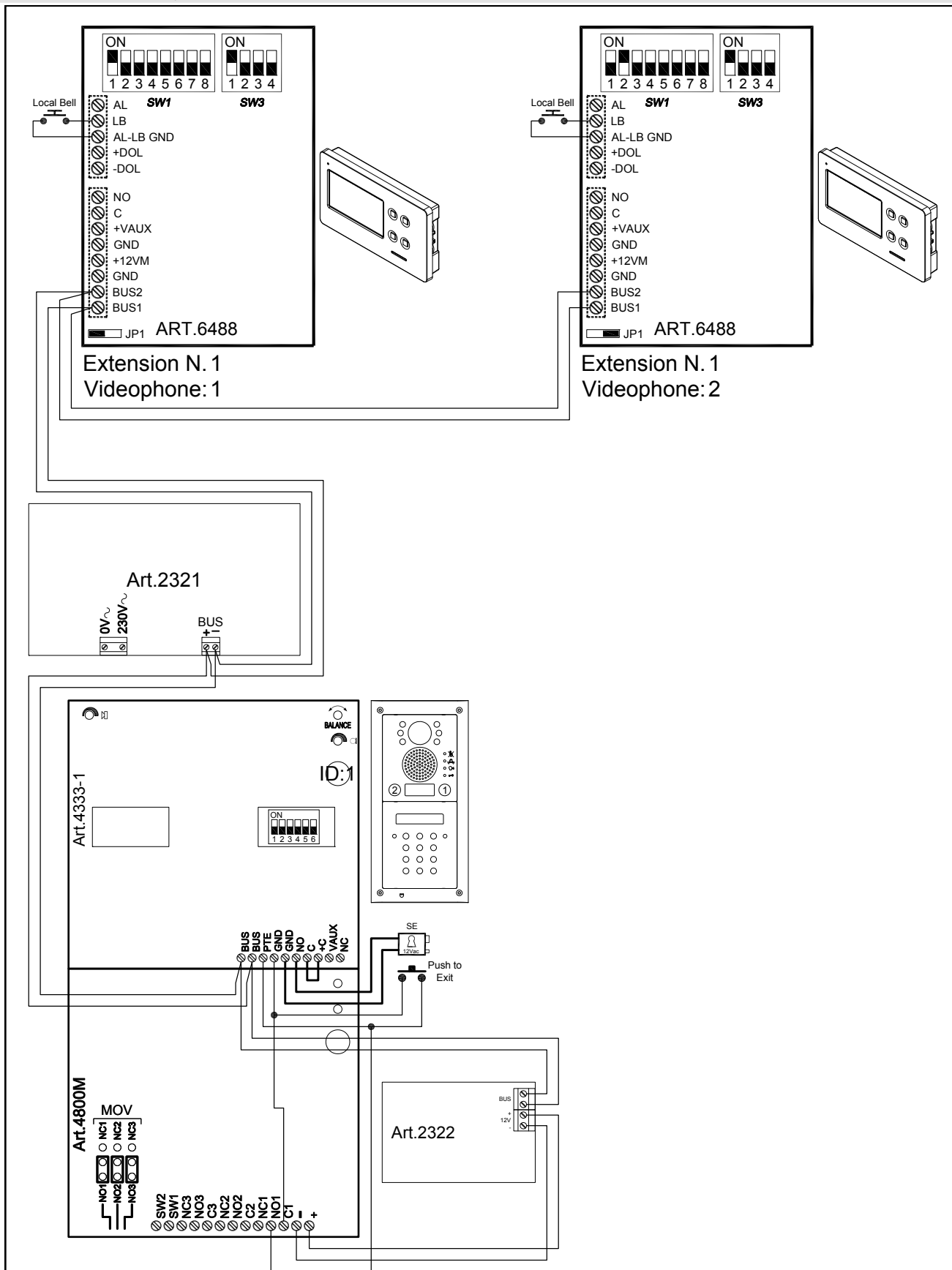
Cod.Filer:

esvk-64h-003.dwg

Foglio

1 / 1

VIDEOKIT ESVKC-2/6488, ESVKC-2S/6488

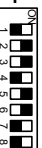
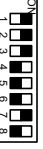
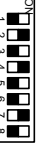
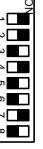
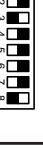
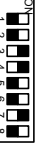
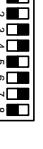
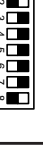


Titolo: ESVKC-2/6488, ESVKC-2S/6488 Two way Easy Videokit		Data creazione: 22/01/2016	Foglio 1 / 1
Autore: ESVKC-2/6488, ESVKC-2S/6488 Easy Videokit bifamiliare		Data modifica: 26/01/2016	
Videx Electronics S.p.A. Via del Lavoro 1, 63020 Monte Giberto (AP) Phone: +39 0734 631669 - Fax: +39 0734 631669 www.videx.it - info@videx.it		Autore: Marco Rongoni Cod. File: esvk-64h-004.dwg	

Addresses 1..127 Table for dip-switch banks with ON position up

1/2

 = OFF
 = ON

1		16		32		48		64		80		96		112	
2		17		33		49		65		81		97		113	
3		18		34		50		66		82		98		114	
4		19		35		51		67		83		99		115	
5		20		36		52		68		84		100		116	
6		21		37		53		69		85		101		117	
7		22		38		54		70		86		102		118	
8		23		39		55		71		87		103		119	
9		24		40		56		72		88		104		120	
10		25		41		57		73		89		105		121	
11		26		42		58		74		90		106		122	
12		27		43		59		75		91		107		123	
13		28		44		60		76		92		108		124	
14		29		45		61		77		93		109		125	
15		30		46		62		78		94		110		126	
		31		47		63		79		95		111		127	

[illegible]



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