

Art. 4KC/3011-3012-3111-3112-3102G

Audiokit with digital codelock

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 (see the next paragraph for connection to mains and power supply installation);
- 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 10Ω;
- Lock release wires should be doubled up (Lock release wires and power supply wires should have a max resistance of 3Ω);
- The cables 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; 3 Power up the system then check all functions.

⚠ CONNECTION TO MAINS AND POWER SUPPLY MOUNTING INSTRUCTIONS

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

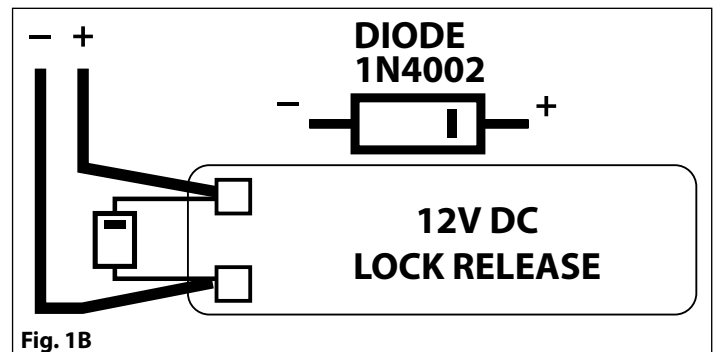
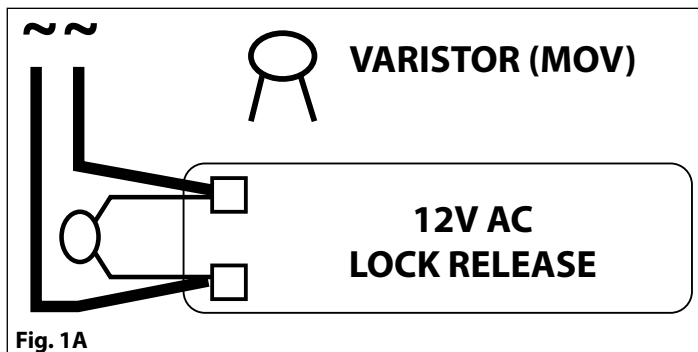
- Connect the system to the mains through an **all-pole circuit breaker** which shall have contact separation of at least 3mm in each pole and shall disconnect all poles simultaneously;
- **The all-pole circuit breaker** shall be placed for easy access and the switch shall remain readily operable.

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.

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.



**ART.4KC-1.. 1S../
3011-3012-3111-3112-3102G**

ART.3011-3012-3111-3112-3102G

- Citofono
- Intercom
- Innenstelle
- Poste d'appartement
- Teléfono
- Telefone

ART.321

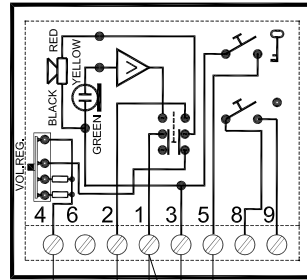
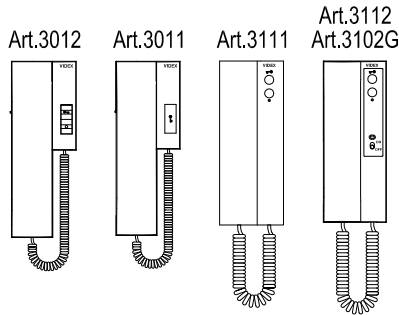
- Trasformatore
- Transformier
- Trafo
- Transformateur
- Transformador
- Transformador

ART.4836-1..

- Pulsantiera con portiere elettrico
- Front panel with built in audio amplifier
- Aussenstelle mit Sprecheinheit
- Platine de rue avec groupe phonie
- Unidad de habla/Botonera con parlante
- Botoneira com porteiro eléctrico

SE

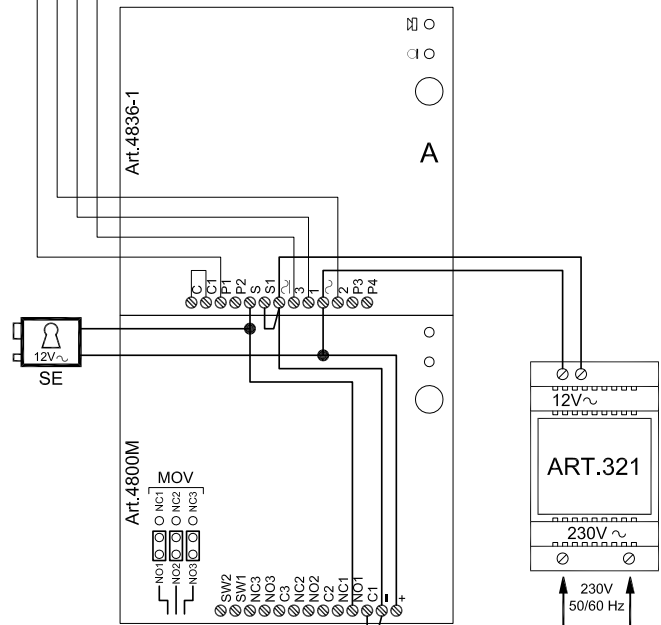
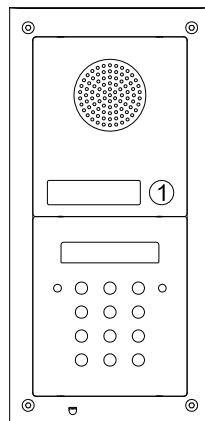
- Serratura elettrica (non inclusa)
- Electric lock (not included)
- Elektrisches Türschloß (nicht imbegriffen)
- Serrure électrique (non incluse)
- Cerradura eléctrica (no incluida)
- Testa eléctrica (não incluída)



1

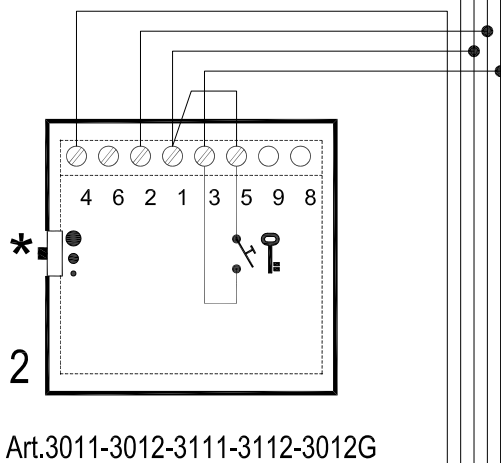
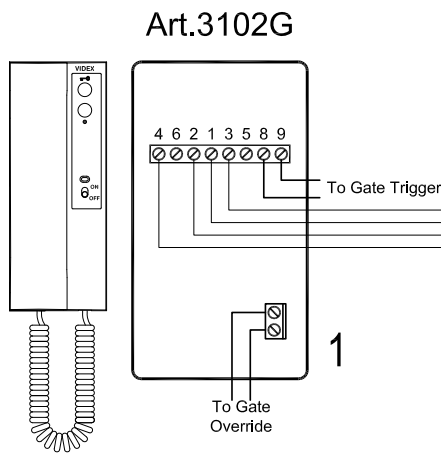
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- Regolazione volume della nota elettronica (3 livelli).
- Call tone volume control (3 Levels).
- Régulation du volume de l'appel électronique (sur 3 niveaux).
- Lautstärkeregelung des elektronischen Rufs (auf 3 Niveaus).
- Control de volumen del tono electrónico (3 niveles)
- Controle de volume (3 níveis) de chamada electrónica.



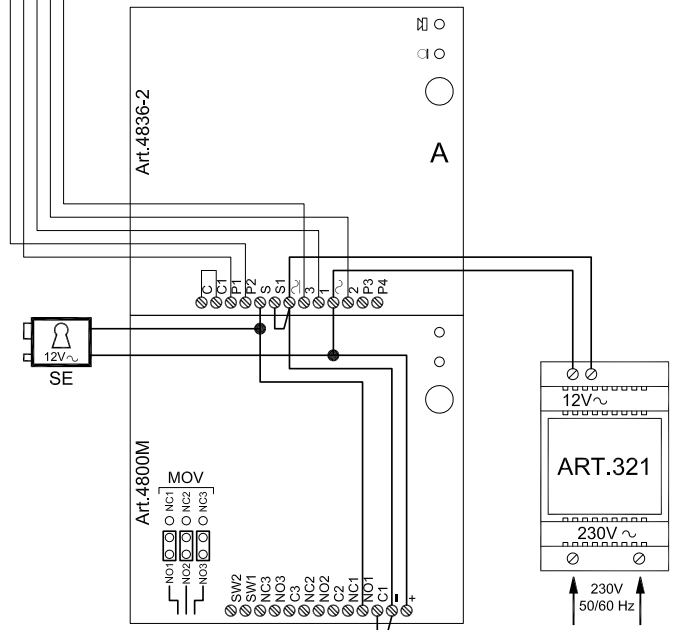
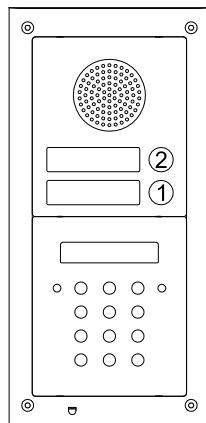
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Title: Digiphone kit 4KC-1, 4KC-1S		Date modifica: 10/05/2016	
Videx Electronics S.p.A. Via del Lavoro 1, 63846 Monte Giberto (FM) Phone: +39 0734 631669 - Fax +39 0734 631669 www.videx.it - info@videx.it		Autore: Marco Rongoni Cod. File: 4kcgeneral.dwg	

**ART.4KC-2.. 2S../
3011-3012-3111-3112-3102G**



*

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- Call tone volume control (3 Levels).
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- Lautstärkeregelung des elektronischen Rufs (auf 3 Niveaus).
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ART.4836-2..

- Pulsantiera con portiere elettrico
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- Cerradura eléctrica (no incluida)
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	Notes:	Cod. File: 4kcgeneral.dwg	

All intercoms wiring must run separately from the mains cable.
The cable type should be CW1308 or an equivalent cable. The cable size should comply with the table below.

DISTANCE METERS	CABLE SIZE (MM ²)
50	0.35
100	0.5
200	0.75
300	1.0
400	1.5

Max resistance of all lines: 8 Ohm

Before powering the system up, the wiring should be double checked to ensure it complies with the wiring diagram supplied.

TROUBLE SHOOTING GUIDE

In the event of the system not functioning correctly when you power up, the following points can be checked (a multimeter will be needed).

SYSTEM DEAD

- Check mains input to the transformer.
- Check the 12Vdc (+12 terminal) output from the power supply.
- Check fuses.
- Check for shorts on power supply wires.

SPEECH & LOCK WORKS BUT NO ELECTRONIC CALL TONE

- Check the link between "C" and "C1" terminals of the speaker unit.
- Call wire to terminal "4" of the handset broken or in short circuit; check the walk of the call wire.

NO SPEECH FROM THE DOOR PANEL

- Check and/or adjust the volume operating on trimmers controls on rear of speaker unit.
- Check the wire from terminal "2" of the speaker unit to terminal "2" of the handset.

NO SPEECH FROM THE HANDSET

- Check and/or adjust the volume operating on trimmers controls on rear of speaker unit.
- Check the wire from terminal "1" of the speaker unit to terminal "1" of the handset.

LOCK DOES NOT WORK

- Check on the handset the link between terminals "1" and "5".
- Check the 13Vac output on the transformer.
- Check the wires of the electric lock.
- Wires section not in conformity with the table above.

FEEDBACK PROBLEM (LARSEN EFFECT)

- Check that the handset microphone is firmly fitted inside its housing.
- Check that the speaker unit microphone is firmly fitted inside its housing and nothing is obstructing the microphone hole.
- Adjust the volume operating on trimmer controls on rear of the speaker unit.

HUM ON THE SPEECH LINES

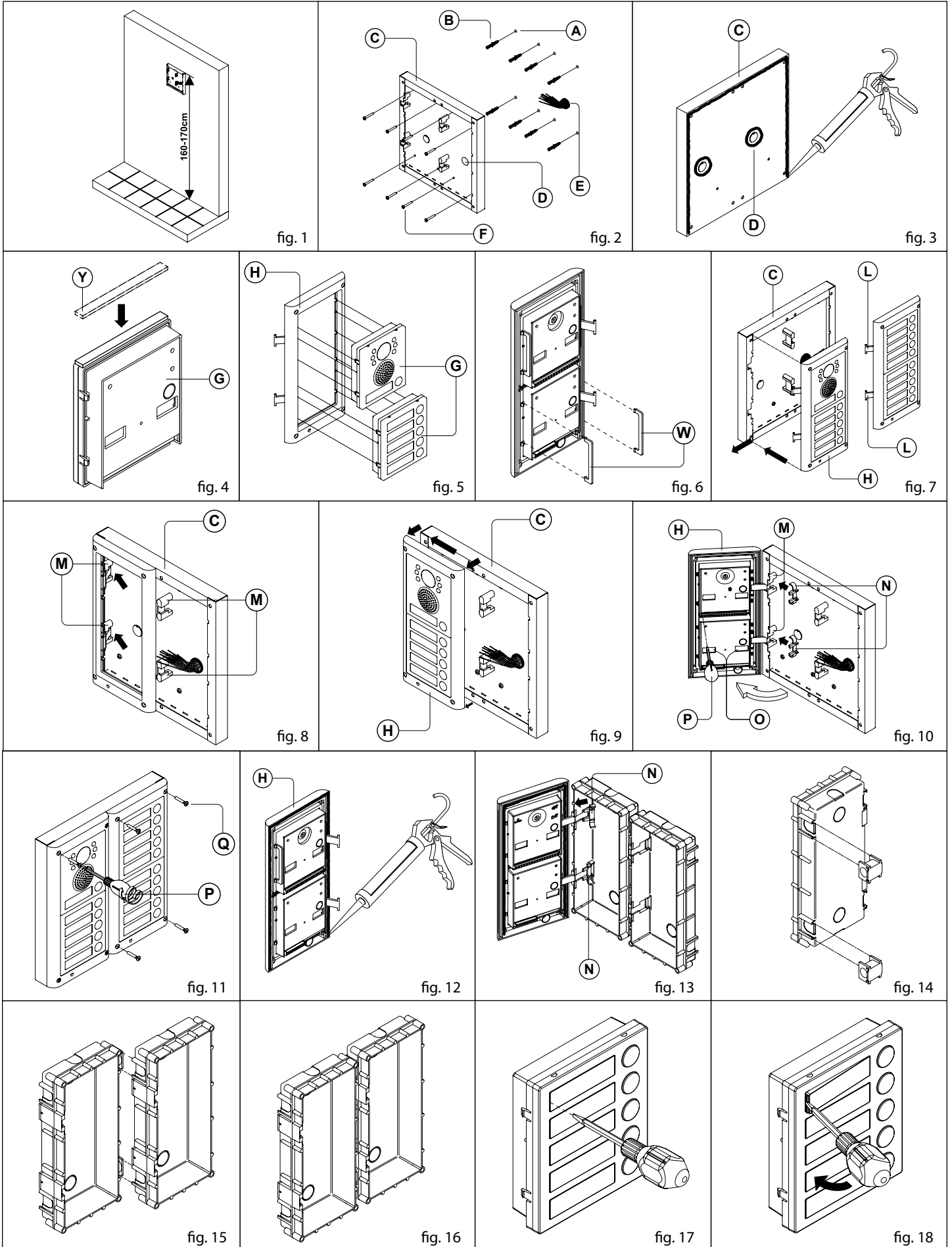
- Check that system cables are not running close to any high voltage or mains cables.
- Check that the system is wired exactly as shown on the wiring diagram.



WE RECOMMEND THIS EQUIPMENT IS INSTALLED BY A COMPETENT ELECTRICIAN, SECURITY OR COMMUNICATIONS ENGINEER.

If further assistance is required, call the technical help desk on 0191-2243174 for uk customers or +39 0734631669 for other countries.

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. 4800 - 4800M Digital codelock module

CODELOCK UNIT MODULES ART. 4800 - 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;

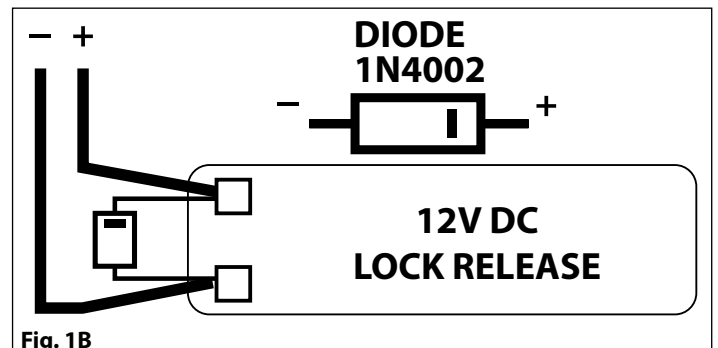
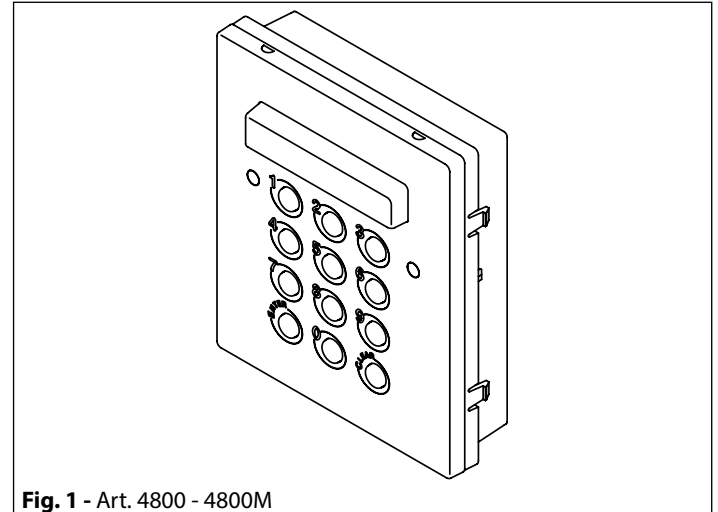
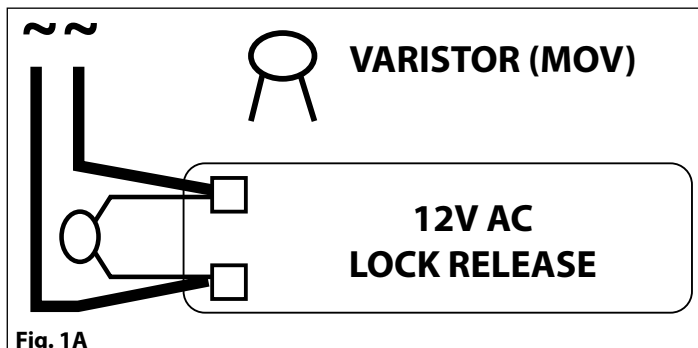
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- Double check the connections before power up;
- Power up the system then check all functions.

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 ART. 4800M

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;

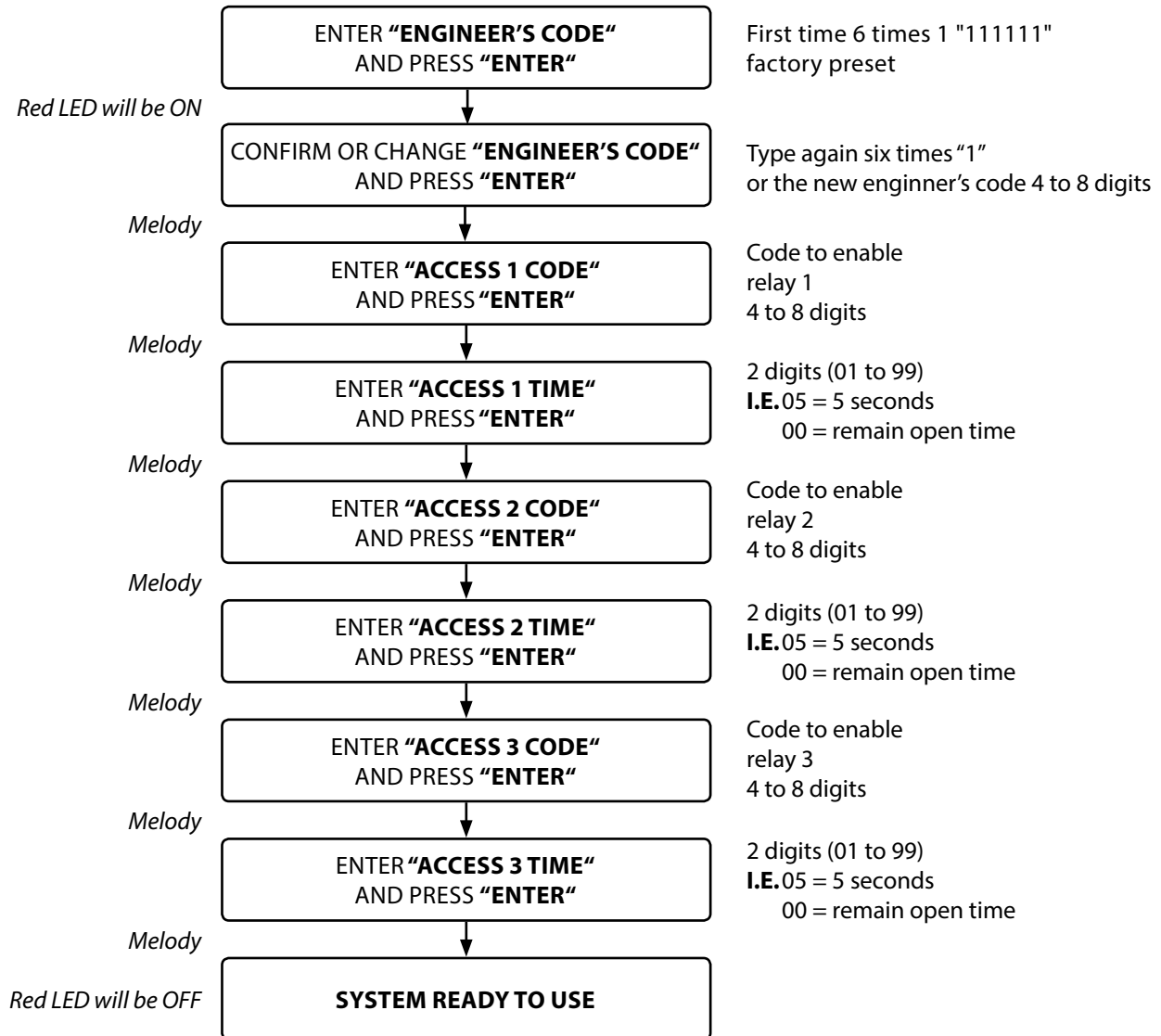
OPERATION NOTES

- 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:		Max 24Vac/dc 3A
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	
+		

TECHNICAL SPECIFICATION

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

PROGRAMMING FLOW-CHART


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