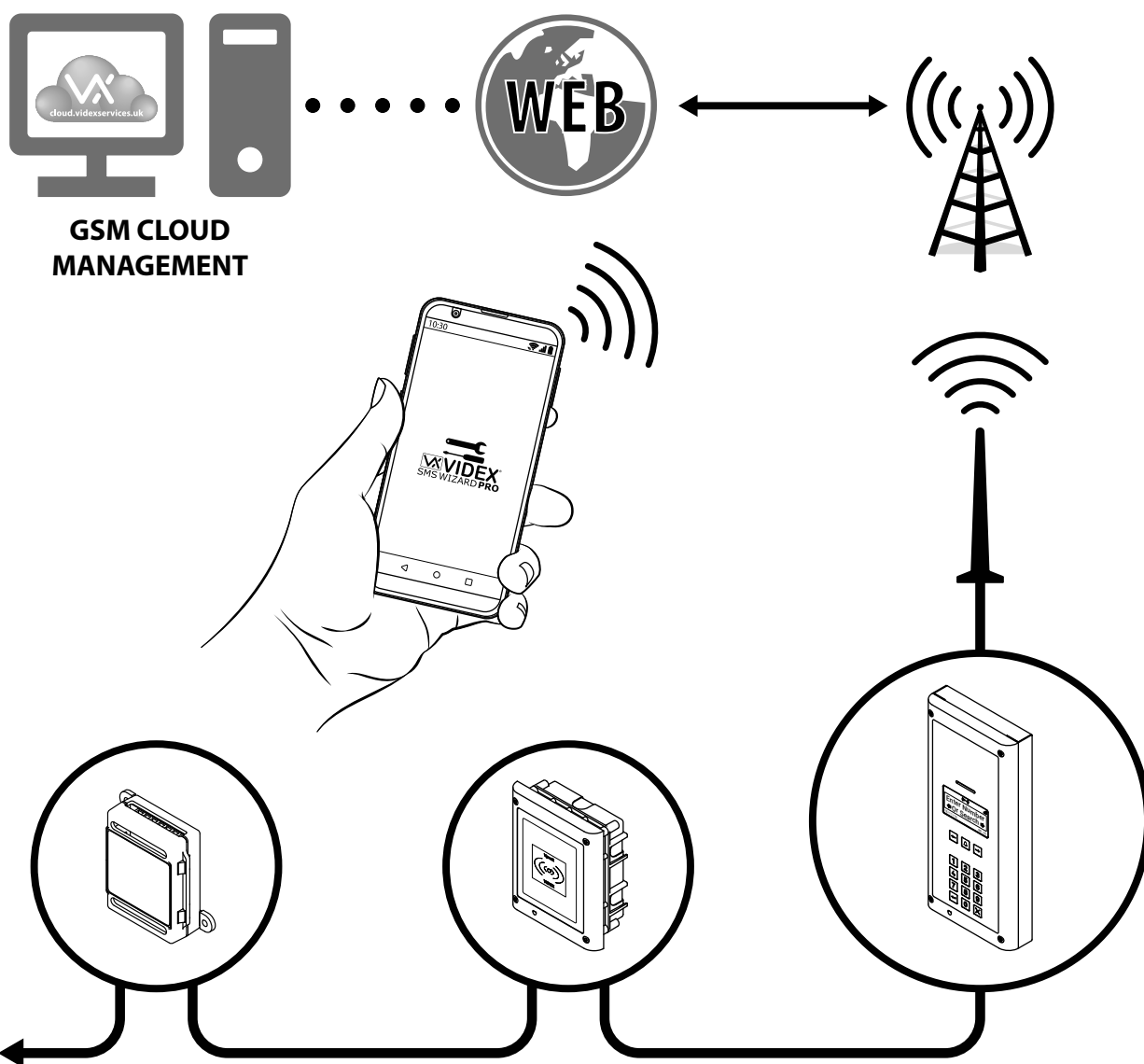


4G DIGITAL GSM

4000 Series Vandal Resistant Digital GSM Audio Intercom with Proximity

4812/4G and 4812R/4G

VR4812/4G and VR4812R/4G



Technical Manual



Declaration of Conformity

EU RoHS DECLARATION OF CONFORMITY

4G version

SIMCom certifies that the LTE/HSPA/GSM/GNSS module (model no. SIM7600G-H, SIM7600G-H miniPCIE) is in conformity with the essential requirements of **RE Directive 2014/53/EU** of the European Parliament and the Council of 16th April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing **Directive 1999/5/EC**.

RE Directive 2014/53/EU:

Applied / Complied Harmonized Standards		Complied
Article 3(1)(a) ■ Safety	EN 62368-1:2014 + A11:2017	Y
Article 3(1)(a) ■ Health	EN 62311:2008	Y
Article 3(1)(b) ■ EMC	EN 301 489-1 V2.2.3 EN 301 489-19 V2.1.1, EN 301 489-52 V1.1.0 EN 55032:2015, EN55035:2017	Y
Article 3(2) ■ Radio	EN 301 511 V12.5.1, EN 303 413 V1.1.1 EN 301 908-1 V11.1.1, EN 301 908-2 V11.1.2 EN 301 908-1 V11.1.2*, EN 301 908-13 V11.1.2	Y

*Note: This is a non-harmonized radio standard accepted by the RED (Radio Equipment Directive)

WARNING! IN ORDER TO COMPLY WITH FCC RF EXPOSURE REQUIREMENTS, A SEPARATION DISTANCE OF 20CM (7.87") OR MORE MUST BE MAINTAINED BETWEEN THE ANTENNA OF THIS PRODUCT AND ALL PERSONS.
SEPARATE FCC APPROVAL FOR THIS PRODUCT IS NOT REQUIRED AS IT WILL BE CLASSED AS A FIXED INSTALLATION.
THIS PRODUCT IS NOT DESIGNED TO BE USED AS AN EMERGENCY CALL POINT.

DECLARATION OF RESPONSIBILITY

This technical manual has been written and revised carefully. The guidance and the descriptions which are included in it are in reference to VIDEX parts and are correct at the time of print. However, subsequent VIDEX parts and technical manuals, can be subject to changes without prior notice. **VIDEX Electronics S.P.A.** and **VIDEX Security Ltd (UK)**. cannot be held responsible for damages caused directly or indirectly by errors, omissions or discrepancies between the VIDEX parts and the technical manual.

VULNERABILITY POLICY

VIDEX have an ongoing policy to improve its software and firmware while keeping backward compatibility a high priority, this includes adding new features, correcting software/firmware issues and adapting to platform and operating system changes. These updates will be available for the full life of the product.

MANUFACTURER



VIDEX ELECTRONICS S.P.A.

Via del Lavoro, 1 - 63846 Monte Gilberto (FM) Italy
 Tel: (+39) 0734-631699 - Fax: (+39) 0734-632475
 www.videx.it - info@videx.it

CUSTOMER SUPPORT

All Countries:
VIDEX ELECTRONICS S.P.A.
 www.videx.it - technical@videx.it
 Tel: (+39) 0734-631699 - Fax: (+39) 0734-632475

UK Customers:
VIDEX SECURITY LTD.
 www.videxuk.com - tech@videxuk.com
 Tel: (+44) 0370 300 1240 - Tech Line: (+44) 0191 224 3174



The product is CE marked demonstrating its conformity and is for distribution within all member states of the EU with no restrictions. This product follows the provisions of the European Directives 2014/30/EU (EMC); 2014/53/EU (LVD); 2011/65/EU (RoHS): CE marking 93/68/EEC.



The product is UKCA marked demonstrating its conformity and is for distribution within the UK. This product follows the provisions of the following UK legislation: Electromagnetic Compatibility Regulations 2016; Electrical Equipment (Safety) Regulations 2016; Radio Equipment Regulations 2017 and The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS).

Contents

Introduction	4
System Components and Available Versions	6
Digital 4G GSM Technical Information.....	10
Wiring Diagrams	12
Auxiliary Input & Output	14
USB & RS485 Connection to a PC.....	16
RS485 Network Connection	17
General Directions for Installation.....	19
Fitting the SIM & Connecting Power	21
Reset Procedure.....	22
4000 Series Back Box Installation	23
Programming via Alpha-Numeric Keypad.....	27
Programming Flowcharts	28
Programming Screens.....	37
Programming via Text Message	44
The GSM Mobile Apps	71
System Operation	72
User Commands.....	75
Additional User Information.....	77
User Management	79
Troubleshooting	80
General Information	82

Introduction

MANUAL INTRODUCTION

The information in this manual is intended as an installation and commissioning guide for the 4G digital GSM audio intercom system. **This manual should be read carefully before the installation commences.** Any damage caused to the equipment due to faulty installation where the information in this manual has not been followed is not the responsibility of **VIDEX Electronics S.P.A.** and **VIDEX Security Ltd (UK).**

It is recommended that the digital GSM intercom is installed by a competent electrician, security or communications engineer.

For UK customers Videx run free training courses for engineers who are unfamiliar or who have not installed this system before. Technical help is also available for UK customers on tel: (+44) 0191 224 3174 during office hours (8:30am - 5:00pm MON to FRI) or via e-mail: tech@videxuk.com and for all overseas customers on tel: (+39) 0734 631669 or via e-mail: technical@videx.it.

A copy of this Technical Manual can also be downloaded from the Videx websites: For UK customers www.videxuk.com and for overseas customers www.videx.it.

SYSTEM INTRODUCTION

The 4G digital GSM intercom (**Art.4812/4G** or **Art.4812R/4G**) is designed to work on the same technology as mobile phones, specifically a 4G network, however it is compatible with both 2G and 3G networks. As the 4G digital GSM is a global module it can be used around the world. It enables a call to be made from an entry point (door, gate etc), to any telephone number (mobile or land line). Up to 750 users can be programmed into the door panel, each able to call up to four telephone numbers (if the first is busy or not answered, the call can be diverted to up to three different numbers). 1000 user option also available, see below*. Features of the system include:

- Vandal resistant brushed stainless steel (2.5mm thick) front panel.
- Blue back-lit alpha-numeric keypad (for system operation and programming).
- Blue back-lit 128x64 pixel graphical LCD display and speech annunciation.
- A dry contact relay (CO, NO and NC), a switched 0V auxiliary input (AI), an open collector auxiliary output (AO) and a switched 0V push to exit input (push-to-make) and trade input.
- Proximity fobs/cards for up to 2000 users.
- Dial to Open (DTO) facility, this feature enables the stored DTO numbers and 32 temporary DTO numbers to dial the GSM intercom, the intercom will not answer these calls, but will activate the door/gate relay without being charged for the call. 3000 DTO numbers for the 750 user or 2000 DTO numbers for the 1000 user.
- An additional 200 DTO numbers with the option to include an access level.
- 750 users (each with 4 numbers, 1 primary and 3 divers) or *1000 users (each with 2 numbers, 1 primary and 1 divert).
- 750 programmable door codes (for 750 user) or 1000 programmable door codes (for 1000 user) - 1 code per user.
- 10 apartment call timebands (9 of which are programmable) and also up to 10 programmable free access timebands.
- 10 programmable access control timebands (for proximity fobs/cards, the additional 200 DTO no's and temporary DTO's) also 10 programmable access levels (0 - 9), including feature for access level 9 being used with the trade code instead of having an external TRD connection via an **Art.701T** timeclock.
- Automatic time correction features and daylight saving time adjustment.
- Micro USB connection for ease of programming using the **GSMSK** PC software (**version 4.1.0.44** or later).
- RS485 bus for connecting additional **Art.4903** keypads and/or **Art.4850R** proximity readers (up to a maximum of 8 devices), also for connecting **Art.2813** RS485 remote relays (up to a maximum of 64 remote relay units). The RS485 bus can also be used for ease of programming using the **GSMSK** PC software.
- Includes a facility to remotely program the digital GSM 'over the air' using the **GSMSK** PC software without the need to actually connect a PC or laptop directly to the intercom via the USB or RS485 connections.
- The digital GSM can also be linked to the **GSM cloud** management platform, a web browser based application to remotely manage any number of Videx 4G GSM products (via cloud.videxservices.uk) from anywhere with an internet connection.
- Event logging system that can record up to 8000 events which can be downloaded via the **GSMSK** PC software.
- Remote event logging (unlimited events) which can be monitored in real time (also see **user management** notes).
- Integrated bootloader function for updating digital GSM panel's firmware via the **GSMSK** PC software.

Programming of the telephone numbers (primary, divers and DTO numbers) and other features including proximity fobs/cards, access codes and timebands etc. can be carried out via the alpha-numeric keypad (refer to notes **programming via alpha-numeric keypad**, **programming flowcharts** and **programming screens**) or by text messages (refer to notes **programming via text message**).

The digital GSM can also be programmed using the **GSMSK** PC software (refer to the manual **GSMSK_66251720-EN_V2-3** or later) by direct USB or RS485 connection to a PC or remotely via the 'over the air' feature (the PC software can still be used to program the digital GSM, but is not directly connected to it via the USB or RS485 connection, further details can be found further on in this manual).

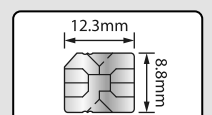
Alternatively a limited number of programming features can be carried out using the **Videx SMS Wizard** (for administrators) or for more in depth programming using the **Videx SMS Wizard PRO** (for installers), see notes on the **GSM mobile Apps** further on in this manual.

SIM CARD SELECTION



IMPORTANT: A SIM IS REQUIRED FOR THIS PRODUCT BUT NOT SUPPLIED BY VIDEX.

THE 4G GSM INTERCOM CAN ONLY ACCEPT A NANO SIZE SIM CARD, BOTH A STANDARD SIZE SIM AND MICRO SIM ARE NOT SUITABLE.



Introduction

It is recommended to choose the SIM card which has the best coverage for the area in which the intercom panel will be installed. Both contract and 'Pay as you go' SIM cards can be used, however if using a 'Pay as you go' we would recommend setting up an automatic top up to avoid running short on credit and losing the use of the intercom panel. Alternatively if you already have a contract mobile phone it should be possible to get a second SIM card and telephone number on the existing account. For more information regarding this contact the SIM card provider or visit their website, as this is a service is not provided by Videx.

NETWORK PROVIDER SELECTION

It is imperative that for the reliable operation of the system that the best network provider for the area is selected. Problems such as network disconnection can occur if the provider has signal or interference problems for that area. We would recommend using a GSM signal strength meter to survey the intended antenna location. Contact Videx for more information on where to purchase a tester.

For UK customers, as an initial check we also recommend visiting the ofcom website www.ofcom.org.uk and follow the onsite links to their online mobile coverage tool (*ofcom mobile and broadband checker app*). This tool will advise on the best coverage for the main network providers and other general queries that you may have about the service provider. For all overseas customers we suggest consulting the website of the network provider that will be used to check the coverage in your area.

The antenna should always be mounted vertically at the highest point possible. Metal structures and sources of interference such as power cables, control panels etc. can affect signals and so the antenna should be mounted away from these.

When registering a new SIM you may be asked for the IMEI number. This is the unique 15 digit serial number of the 4G digital GSM. This number is located internally on the main hardware chip inside the GSM module. To obtain the IMEI number from the GSM module refer to the programming notes **obtain the GSM's IMEI number** further on in this manual.

PRECAUTIONARY ADVICE

- When mounting the GSM antenna, choose a location which is away from human interaction and away from the intercom panel. Route the GSM antenna cable from the intercom panel so that it is separate from the power supply cables and microphone wire.
- Always ensure the power is switched **OFF** to the intercom panel before inserting or removing the SIM card.
- New SIM cards will need registering with the network service provider before they can be used. Full details of how this is done can normally be found in the SIM card pack. It will normally require that the SIM card is inserted into a mobile phone, a number dialled and instructions followed. While the SIM is in the mobile phone it would be a good time to disable any PIN codes, call diverts, ring back and disable features such as voicemail and text alerts. Details of how to do this can be found on the SIM card provider's website or by calling their customer services. Recommended SIM card providers are: **Vodafone, Three, O₂ or EE.**
- To be able to receive text messages from the intercom panel, the SIM card will require an SMS service centre number. This is normally pre-installed on new SIM cards but if you are having trouble receiving SMS messages you will need to confirm this by inserting the SIM card into a mobile phone and using the phones menu options to check it. If a number is not programmed then it should be programmed while in the phone (the number can be obtained from the network service provider).
- Voicemail and text alerts must be switched **OFF** on the SIM card when using the dial in to release the door/gate feature. For **Vodafone** and **O₂** this can be done while the SIM card is in the intercom panel. For other network providers the SIM card must be removed from the intercom panel, inserted into a mobile phone and the mobile phone menu instructions followed. This procedure may vary between network providers of different countries, therefore we suggest contacting your provider for more information regarding this.
- When storing the GSM intercom panel's telephone number in your own mobile phone avoid using an obvious name such as 'Front Door', or 'My Gate' as this would make it easy to decipher if your phone was lost or stolen.
- The PIN request feature must be disabled on the SIM card before using it in the GSM intercom panel. It is likely on a new SIM card that it will not be enabled, but if it is it will prevent the system from working at all.
- This product may not be suitable for installation in hospitals, health care facilities or in the presence of flammable gases or liquids. Seek advice and authorisation before installing this product in these locations. **This product is not designed to be used as an emergency call point.**

 **IMPORTANT: ALL NETWORK PROVIDER AND SERVICES CONFIGURATION CODES MENTIONED IN THIS MANUAL ARE SPECIFIC FOR THE UK ONLY. FOR OVERSEAS CUSTOMERS PLEASE CONTACT THE NETWORK PROVIDER OF YOUR COUNTRY FOR THE CORRESPONDING CODES, HOWEVER VIDEX OFFERS NO GUARANTEE THAT ANY ADDITIONAL CODES WILL WORK.**

IMPORTANT NOTE ABOUT THE SIM

When selecting the SIM with the chosen network provider it is recommended that it is setup with a suitable call allowance and text messages (most UK network providers for example offer unlimited calls and texts) and also with a sufficient data plan. **You will need to contact the network provider directly or visit their website for more details on how to set this up.**

 **IMPORTANT NOTE: THE NETWORK PROVIDER SERVICES WHICH ARE MENTIONED ABOVE ARE NOT PROVIDED BY VIDEX ELECTRONICS S.P.A. OR VIDEX SECURITY LTD.**

System Components and Available Versions

DESCRIPTION

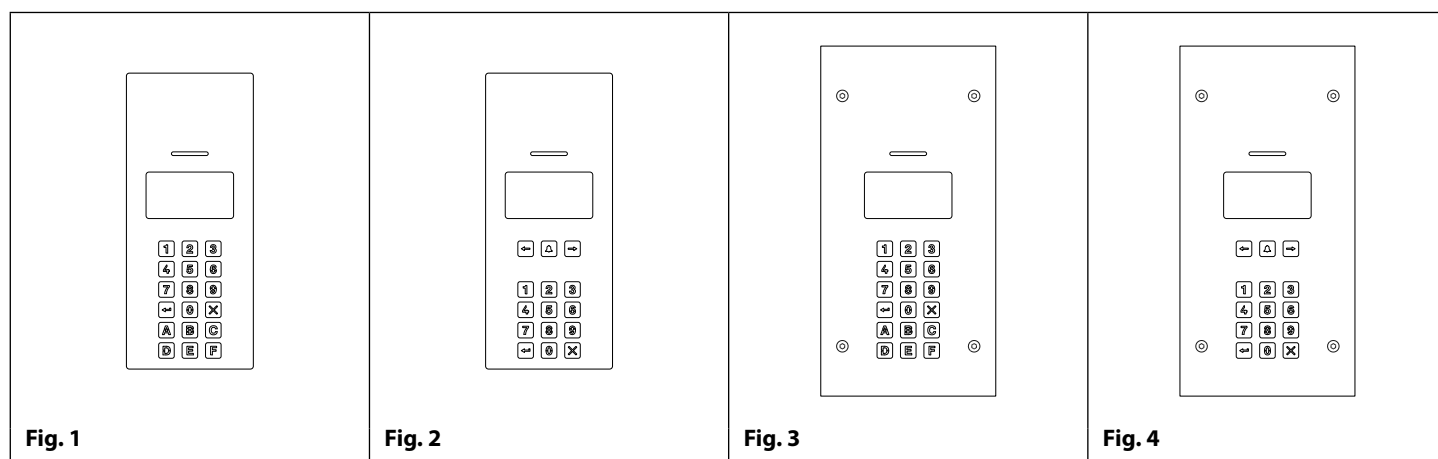
The 4000 series vandal resistant (front plate in brushed stainless steel with 2.5mm thickness) 4G digital GSM is designed to work on the same technology as mobile phones. The panel is compatible with the vandal resistant 4000 series modular range and is the size of two 4000 series modules. It enables a call to be made from an entry point (door, gate etc), to any telephone number (mobile or land line). Up to 750 users can be programmed into the door panel, each able to call up to four telephone numbers (if the primary number is busy or not answered, the call can be diverted through to up to three different divert numbers).

Additionally, each user can have a unique access code up to 6 digits, an apartment number up to 6 digits, their numbers added to the 'DTO' dial to open list (to allow them to dial into the panel and release the door/gate), a timeband facility to restrict when an apartment can receive calls (up to 10 timebands are available 9 of which can be programmed). On the scroll panel version a user name option is available with up to 16 characters.

Also, integrated into the panel is a proximity reader enabling up to 2000 user fobs/cards to be stored and used individually or in combination with the access code. In addition the panel includes a 128x64 pixel graphical LCD display with blue back light that provides both text and graphical messages guiding a user through the panel programming and operation. The LCD graphical display can also be used to display a company logo or name which can switch between the panel's standard (or customised) welcome message and the logo.

AVAILABLE VERSIONS

Two panels are available in the vandal resistant 4000 series range, the **Art.4812/4G (Fig.1)** and the **Art.4812R/4G (Fig.2)**, and two panels are available in the vandal resistant digital series range, the **Art.VR4812/4G (Fig.3)** and the **Art.VR4812R/4G (Fig.4)**, each with an integrated programmable keypad.



The **Art.4812/4G** and **Art.VR4812/4G** has 18 back lit buttons, 6 of which are alpha buttons (A - F), 10 of which are numeric buttons (0 - 9), plus an "ENTER"  and a "CLEAR"  button. The **Art.4812R/4G** and **Art.VR4812R/4G** has 15 back lit buttons, 10 of which are numeric buttons (0 - 9), plus an "ENTER" and "CLEAR" button with a "CALL"  and two "SEARCH" buttons , .

To compliment the visual messages provided by the display, the panel has a voice annunciation facility to supply audio messages concerning the system operation.

The onboard programming menu and setup menu are protected by two access codes with different login levels:

The master code: this code grants full access to all the programming functions (default '1111'):

1. **Apartment menu** - allows the programming of the apartment details, e.g. apartment name/number, telephone no's etc.
2. **Proximity menu** - allows the programming of proximity fobs/cards.
3. **General settings menu** - allows the general setup of the 4G digital GSM, e.g. panel's volume controls, enable proximity etc.
4. **Code settings menu** - allows the programming of the master code, admin code and trade code.
5. **Time settings menu** - allows the setup and programming of the 4G digital GSM's time settings, e.g. call time, divert time, relay time and timebands etc.

The admin code: this code is limited to only specific programming functions (default '0000'):

1. **Apartment menu** - allows the programming of the apartment details, e.g. apartment name/numbers, telephone no's etc.
2. **Proximity menu** - allows the programming of proximity fobs/cards.

The panel's programming can be carried out via the alpha-numeric keypad (refer to notes **programming via alpha-numeric keypad**, **programming flowcharts** and **programming screens** on the following pages) or by text messages (refer to notes **programming via text message** on the following pages).

System Components and Available Versions

The panel can also be programmed using the **GSMSK** PC software (refer to the manual **GSMSK_66251720-EN_V2-3** or later) by direct USB or RS485 connection to a PC or remotely via the 'over the air' feature (the PC software can still be used to program the digital GSM, but is not directly connected to it via the USB or RS485 connection, further details can be found on pages 63 - 65).

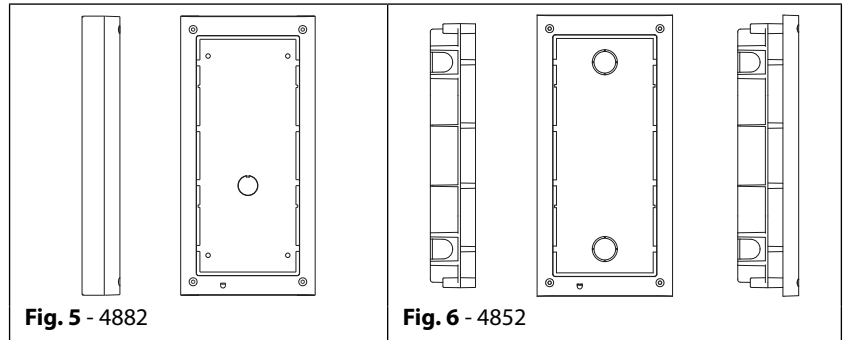
Alternatively a limited number of programming features can be carried out using the **Videx SMS Wizard** (for administrators) or for more in depth programming using the **Videx SMS Wizard PRO** (for installers), refer to notes **the GSM mobile Apps** on page 68.

Apart from the requirement of a nano SIM card additional parts will be required for the successful installation of the 4G digital GSM. The following components will also be required:

4000 SERIES BACK BOXES AND MOUNTING FRAMES

The **Art.4812/4G** and **Art.4812R/4G** panel versions are designed to fit into a 2 module 4000 series front frame with surface or flush back box. The front support frame is available in a gun metal grey finish.

The 4000 series mounting frames and back boxes are shown in **Fig.5** (surface) and **Fig.6** (flush) and their dimensions shown in the following table including the part numbers and dimensions for optional surface and flush 4000 series rainshields.



Surface Back Box Dimensions (inc. optional surface rainshield)			Flush Back Box Dimensions (inc. optional flush rainshield)		
Part No.	Module Size	(W x H x D) mm	Part No.	Module Size	(W x H x D) mm
Art.4882	2	back box: 135 x 280.2 x 43	Art.4852	2	front frame: 135 x 280.2 x 15.7 back box: 120 x 263.2 x 46
Art.4892		rainshield: 140 x 283 x 62	Art.4872		rainshield: 140 x 283 x 35

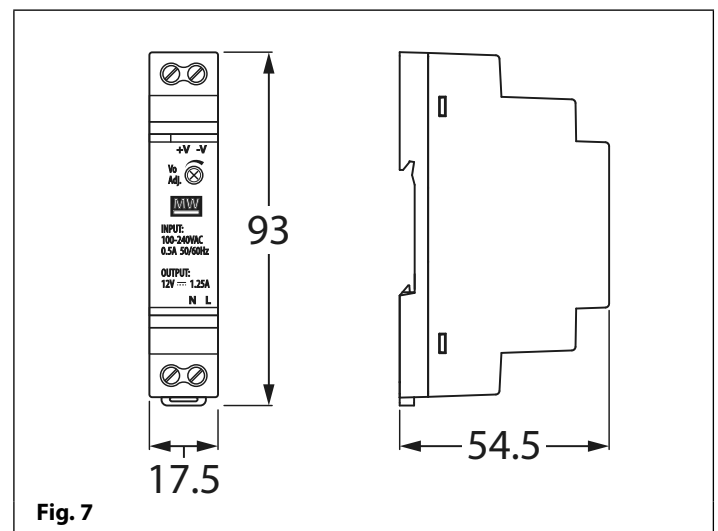
IMPORTANT NOTE: Both the **Art.VR4812/4G** and **Art.VR4812R/4G** panel versions are supplied with a **VRDBB140x280** flush bezel back box, dimensions (mm): bezel = 179 [W] x 319 [H], flush box = 143 [W] x 283 [H] x 80 [D].

12VDC 2A POWER SUPPLY (HDR-15-12)

The 4G digital GSM is designed to work with power supplies in the range of 12Vdc and should be capable of supplying a constant current of no less than 1A.

The **Art.HDR15-12**, **Fig.7**, is a DIN rail mount slim line power supply that has a mains voltage input of 230-240Vac, 50/60Hz and an adjustable 12Vdc output.

TERMINALS & ADJUSTMENT POTS	
L	Mains input 230-240Vac, 50/60Hz (live)
N	Mains input 230-240Vac, 50/60Hz (neutral)
+V	+12Vdc output
-V	0V (ground) output
Vo Adj.	Voltage adjustment POT (10.8V - 13.8Vdc range)



SPECIFICATION

Housing:	1.5 modules A Type DIN box
Mounting:	DIN rail only
Dimensions (mm):	17.5 (W) x 93 (L) x 54.5 (H)
Working temperature:	-10° to +50°C

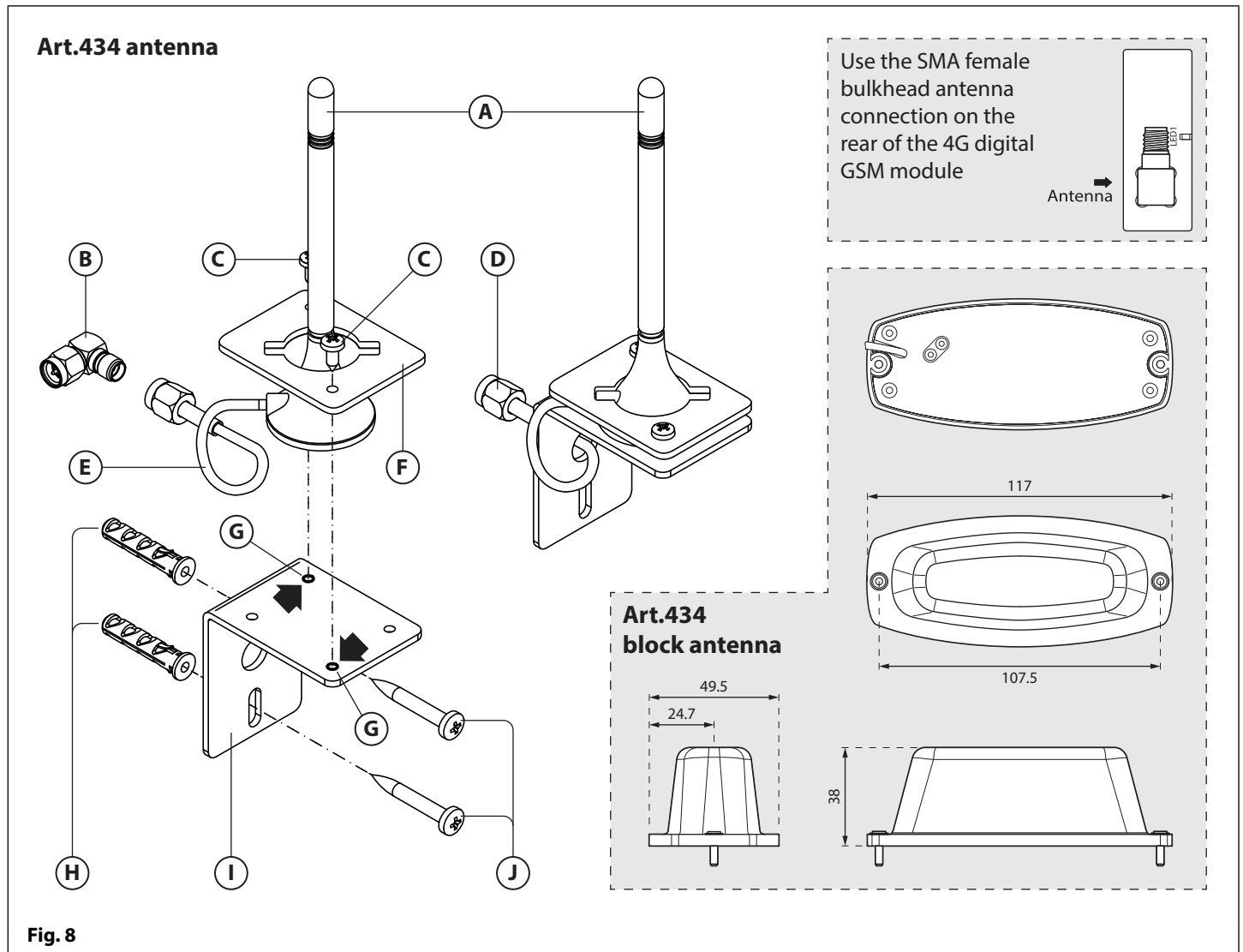
ELECTRICAL DATA

Mains voltage:	230-240Vac, 50/60Hz
Output voltage:	12Vdc
Adjustable voltage range:	10.8Vdc - 13.8Vdc (max.)
Current rating:	1.25A
Power rating:	15W

System Components and Available Versions

ART. 434 GSM ANTENNA & ART. 434 BLOCK ANTENNA

The **Art.434 GSM antenna**, **Fig.8**, connects to the SMA female bulkhead connection on the rear of the 4G digital GSM panel. A GSM antenna with an SMA male connector should be used (see **Fig.8** inset). Also available to use is the **Art.434 block antenna**, **Fig.8** inset.



ANTENNA PARTS

- | | |
|---|--|
| Ⓐ "B" type GSM antenna. | Ⓕ Antenna mounting clamp for L bracket. |
| Ⓑ Right angled SMA adapter. | Ⓖ Fixing support holes for "B" type antenna. |
| Ⓒ Self-threading screw (Ø2.9x6.5mm) for "B" type antenna. | Ⓗ Expansion type wall plugs (Ø6mm). |
| Ⓓ SMA male antenna connector. | Ⓘ Aluminium L bracket for wall mounting. |
| Ⓔ 3m antenna cable. | ⓵ Self-threading screw (Ø4x30mm). |

⚠ IMPORTANT NOTE: AN ANTENNA MUST ALWAYS BE FITTED FOR THE GSM MODULE TO WORK. ALWAYS ROUTE THE GSM ANTENNA CABLE AWAY FROM THE MICROPHONE WIRES AND THE POWER SUPPLY WIRES TO AVOID INTERFERENCE ON THE SPEECH CHANNELS.

IN INSTANCES WHERE THERE IS A TIGHT FITTING SPACE FOR THE SMA MALE CONNECTOR ON THE ANTENNA CABLE, THE RIGHT ANGLED SMA ADAPTER, **FIG.8 Ⓑ**, CAN BE USED TO HELP REROUTE THE CABLE DOWN THE BACK SIDE OF THE GSM MODULE.

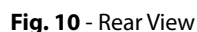
System Components and Available Versions

ANTENNA CHARACTERISTICS		Art. 434 GSM ANTENNA	Art. 434 BLOCK ANTENNA
RF & ELECTRICAL SPECIFICATION	Network coverage:	2G, 3G and 4G networks	
	Working frequency:	GSM (900MHz), DCS (1800MHz)	AMPS (824-894MHz), GSM (900MHz), DCS (1800MHz), PCS(1900MHz), 3G (2100MHz), WiFi (2400MHz), 4G/LTE (791-862/2500-2690MHz)
	Gain:	3 ± 0.5dBi (avg.)	2 dBi (max.)
	Voltage Standing Wave Ratio (V.S.W.R.)	< 2.0	< 2.5:1
	Polarization:	Linear	
	Impedance:	50 Ohms	
DATA, MATERIALS & DIMENSIONS	Cable:	RG174 coax cable	
	Cable length:	3m	
	Connector:	SMA male	
	Materials:	Antenna hat: ABS Antenna body: ABS and PVC	Antenna Lid: ABS Antenna Base: metal
	Colour:	Black	
	Mounting:	external use, surface mount	internal or external use, surface mount
	Dimensions (mm):	120 (H) x 30 (base diameter)	38 (H) x 117 (L) x 49.5 (W)



IMPORTANT NOTE: ALTHOUGH ALL THE FEATURES AND GENERAL INSTALLATION INSTRUCTIONS MENTIONED IN THIS TECHNICAL MANUAL MAKE REFERENCE TO THE ART.4812/4G AND ART.4812R/4G DIGITAL GSM INTERCOMS THE SAME FEATURES AND INSTRUCTIONS CAN ALSO BE APPLIED WHEN INSTALLING THE VR4812/4G AND VR4812R/4G DIGITAL GSM INTERCOMS RESPECTIVELY.

ART. 4812/4G & 4812R/4G DIGITAL GSM PANEL



Digital 4G GSM Technical Information

DESCRIPTION

There are two vandal resistant 4000 series digital 4G GSM panels available, see **Fig.9 - Art.4812/4G** with standard input keypad (1-9, ENTER, 0 and CLEAR) and alpha-numeric (A-F) buttons and also the **Art.4812R/4G** with standard input keypad (1-9, ENTER, 0 and CLEAR) and name search and scroll facility buttons. Also available are the vandal resistant versions with flush bezel back box - **Art. VR4812/4G** and **Art.VR4812R/4G**, see **Fig.9** inset. The rear of the digital 4G GSM panels, **Fig.10**, includes the antenna, 12Vdc power input, micro USB, RS485 bus and terminal connections (also refer to table below).

LEGEND

- | | |
|---|---|
| (A) Intercom speaker | (H) Nano SIM card holder |
| (B) Built-in proximity access reader | (I) Micro USB connection |
| (C) 128x64 pixel graphical display | (J) RS485 bus terminals |
| (D) Input keypad | (K) 12Vdc power input |
| (E) Power & network (2G, 3G or 4G) status indication LED | (L) Push to exit, auxiliary (AI and AO) and trade input terminals |
| (F) Main SMA antenna connection | (M) NC, CO and NO relay contacts |
| (G) Current firmware version: DG XXXrX (refer to firmware revision table on page 82 for current firmware) | |

TERMINAL CONNECTIONS

Terminal	Description
A	RS485 A connection.
B	RS485 B connection.
GND	RS485 ground connection.
12V	+12Vdc power (500mA max.).
0V	0V ground power.
PTE	Push to exit input (switched 0V).
AI	Auxiliary input.
TRD	Trade input.
AO	Auxiliary output.
NC	Normally closed relay connection.
CO	Common relay connection.
NO	Normally open relay connection.

Relay contacts:
 3A@24Vdc
 3A@120Vac

TECHNICAL SPECIFICATION

Working Voltage:	12Vdc (+/- 10%)
Current Consumption:	60mA (standby), 500mA (max.)
Number of Users:	750 user <u>or</u> 1000 user
Telephone Numbers (per apartment):	4 tel no. (1 primary, 3 diverts for 750 user) <u>or</u> 2 tel no. (1 primary, 1 divert for 1000 user)
Dial to Open Numbers (DTO):	3000 DTO (for 750 user) <u>or</u> 2000 DTO (for 1000 user), up to 32 temporary DTO's and up to 200 additional DTO with option to include access levels (for both 750 and 1000 user)
Proximity Access (fobs/cards):	up to 2000 (max.)
Door/Gate Access codes:	750 code (for 750 user) <u>or</u> 1000 codes (for 1000 user) - 1 code per user
Call Button (phone ID) Timebands:	10 (1 preset, 9 programmable)
Free access Timebands:	10 (programmable)
Programming Methods:	SMS text messaging, GSMSK PC software including the 'over the air' feature, the GSM mobile apps - the Videx SMS Wizard (for administrators) or the Videx SMS Wizard PRO (for installers/engineers), via the panel's onboard alpha-numeric keypad or the GSM cloud management platform (register for an account via cloud.videxservices.uk).
Push to Exit:	1 (switched 0V input, across terminals PTE/0V)
Auxiliary Input:	1 (switched 0V input, across terminals AI/0V)
Auxiliary Output:	1 (AO, open collector output, switched 0V, 150mA max.)
Trade Input:	1 (switched 0V input), for connecting Art.701T timeclock
Dry Contact Relay:	1 (CO, NO and NC, 3A @ 24Vdc, 3A @ 120Vac)
Event Log:	8000 stored events (unlimited via remote event logging facility)
USB Port:	micro USB
RS485 Bus Connection:	1 (A, B and GND), for connecting an Art.4850R expansion proximity reader, an Art.4903 keypad or Art.2813 remote relay modules
Panel Dimensions (mm):	103 (W) x 240 (L) x 32 (D)
Working Temperature:	-20 +60°C

Wiring Diagrams

LOCK RELEASE AND VOLT FREE CONNECTIONS

Fig.11 below shows connections for a fail secure and a fail safe lock release and also volt free contacts.

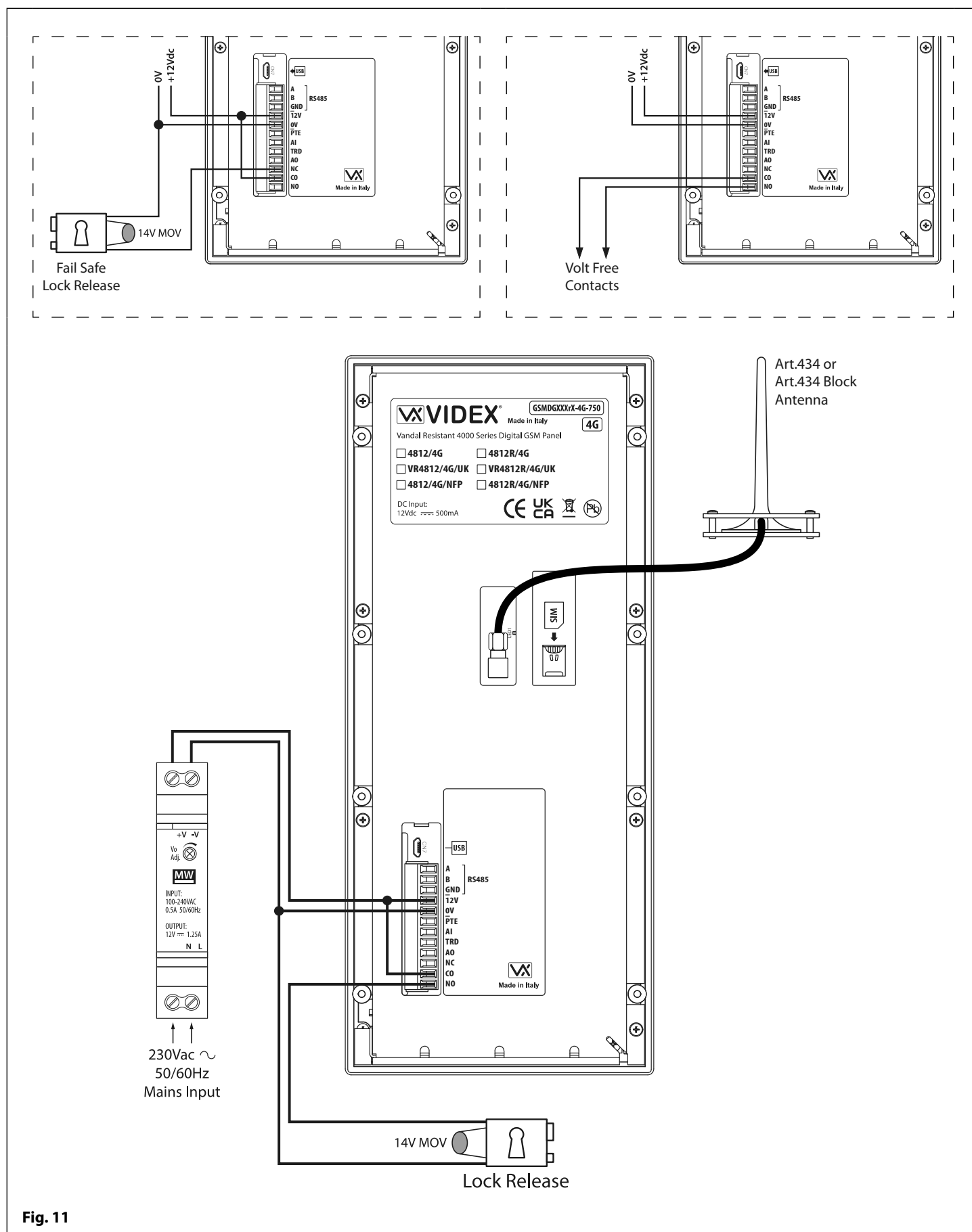


Fig. 11

Wiring Diagrams

TRADE INPUT AND PUSH TO EXIT INPUT CONNECTIONS

Fig.12 below shows connections for the trade input TRD using an Art.701T timeclock (in timeclock mode) and Fig.13 shows connections for the push to exit input using a push-to-make (normally open going closed) switch/button.

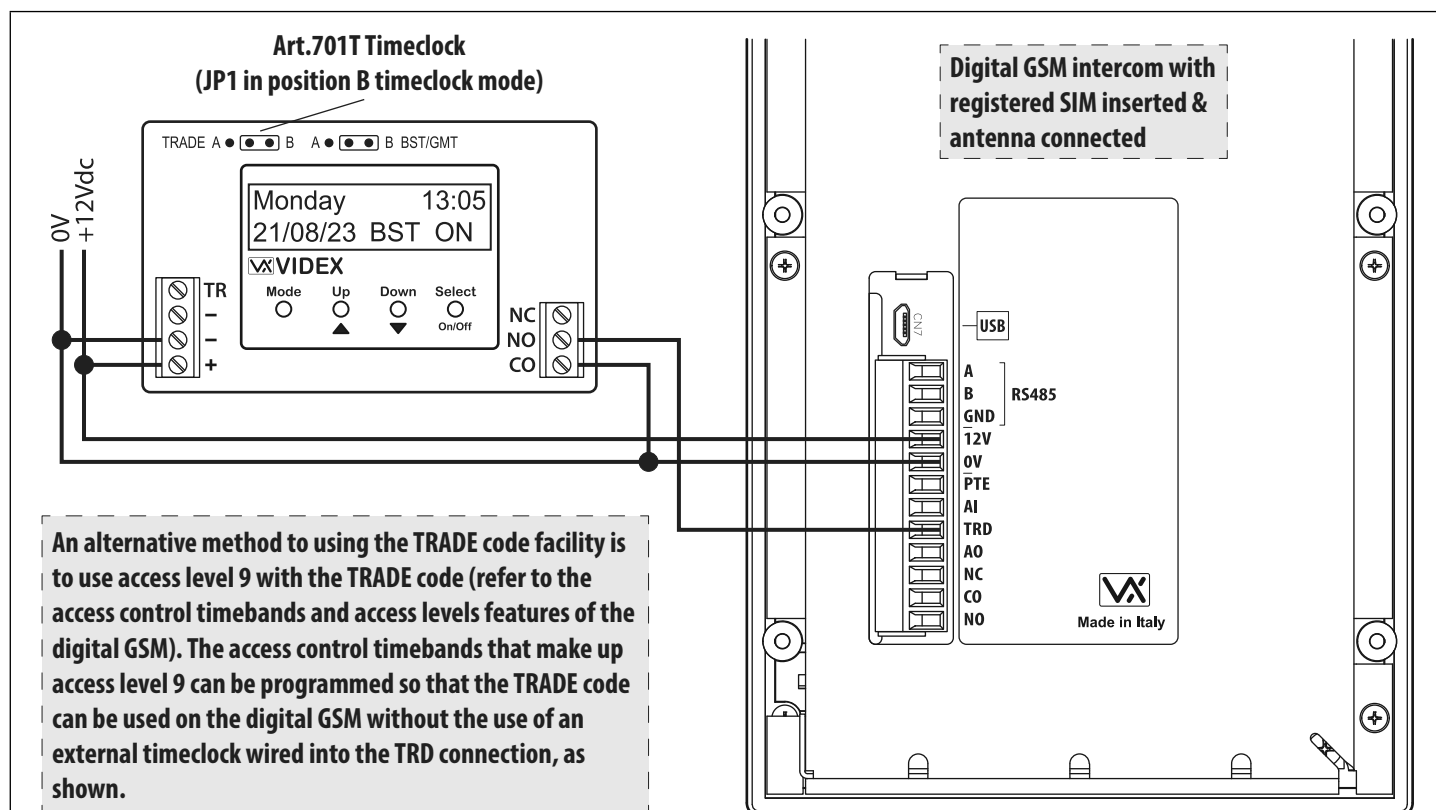


Fig. 12

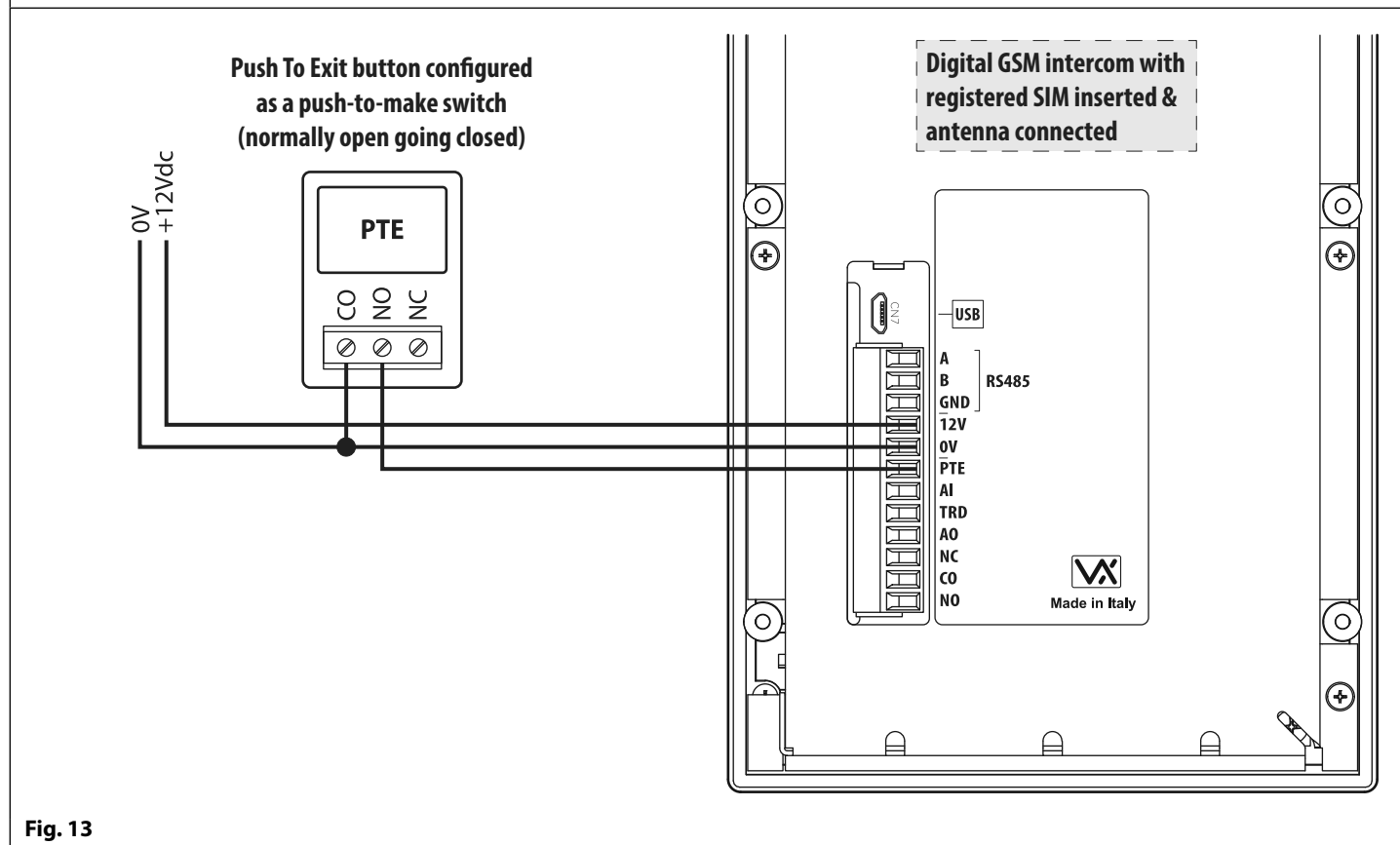
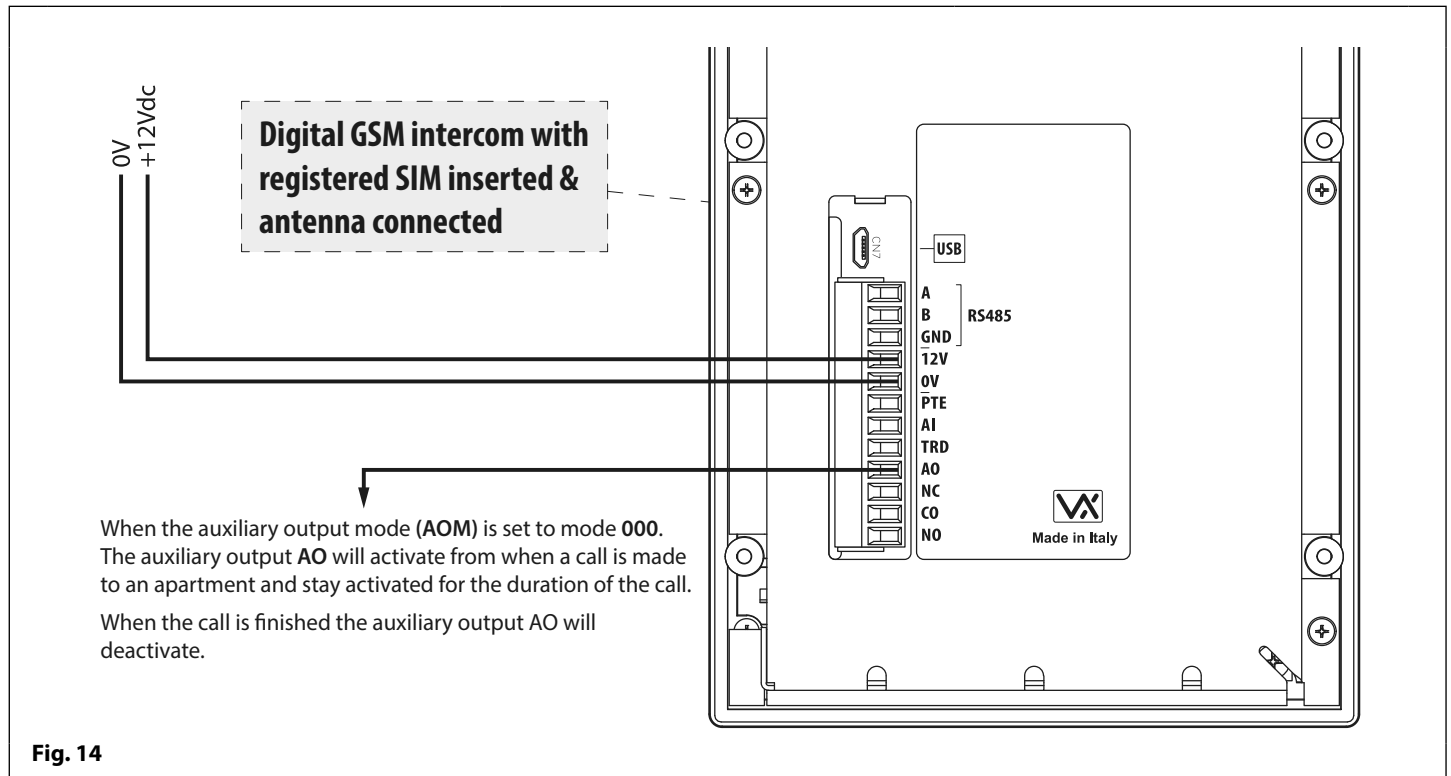


Fig. 13

Auxiliary Input & Output

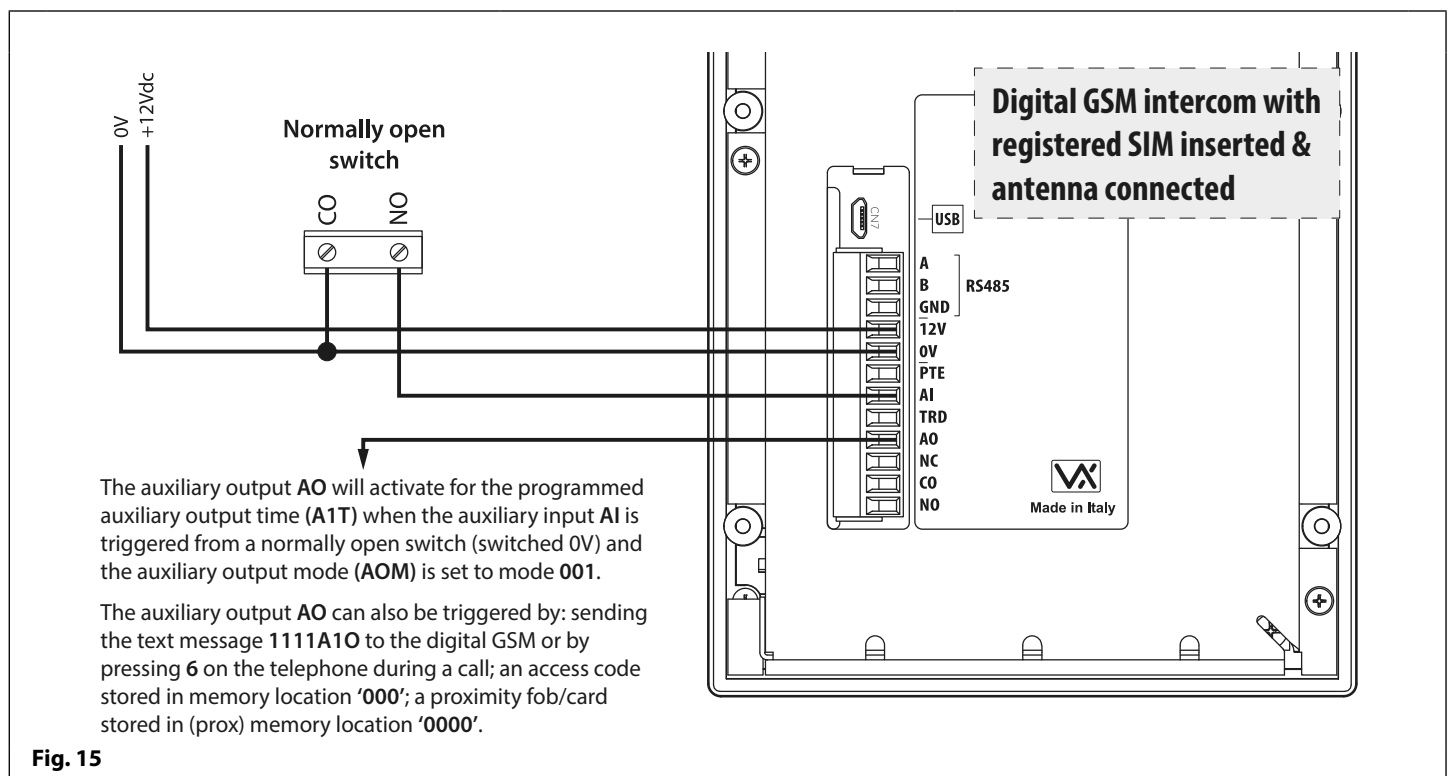
AUXILIARY OUTPUT (AO) WHEN SET TO MODE 000 (ON DURING A CALL)

Fig.14 below shows the connection for auxiliary output **AO** when the **AOM** mode is set to **000**. The auxiliary output **AO** will activate once a call to an apartment has been made and will stay activated for the duration of the call.



AUXILIARY INPUT (AI) AND AUXILIARY OUTPUT (AO) WHEN SET TO MODE 001 (ON WHEN TRIGGERED)

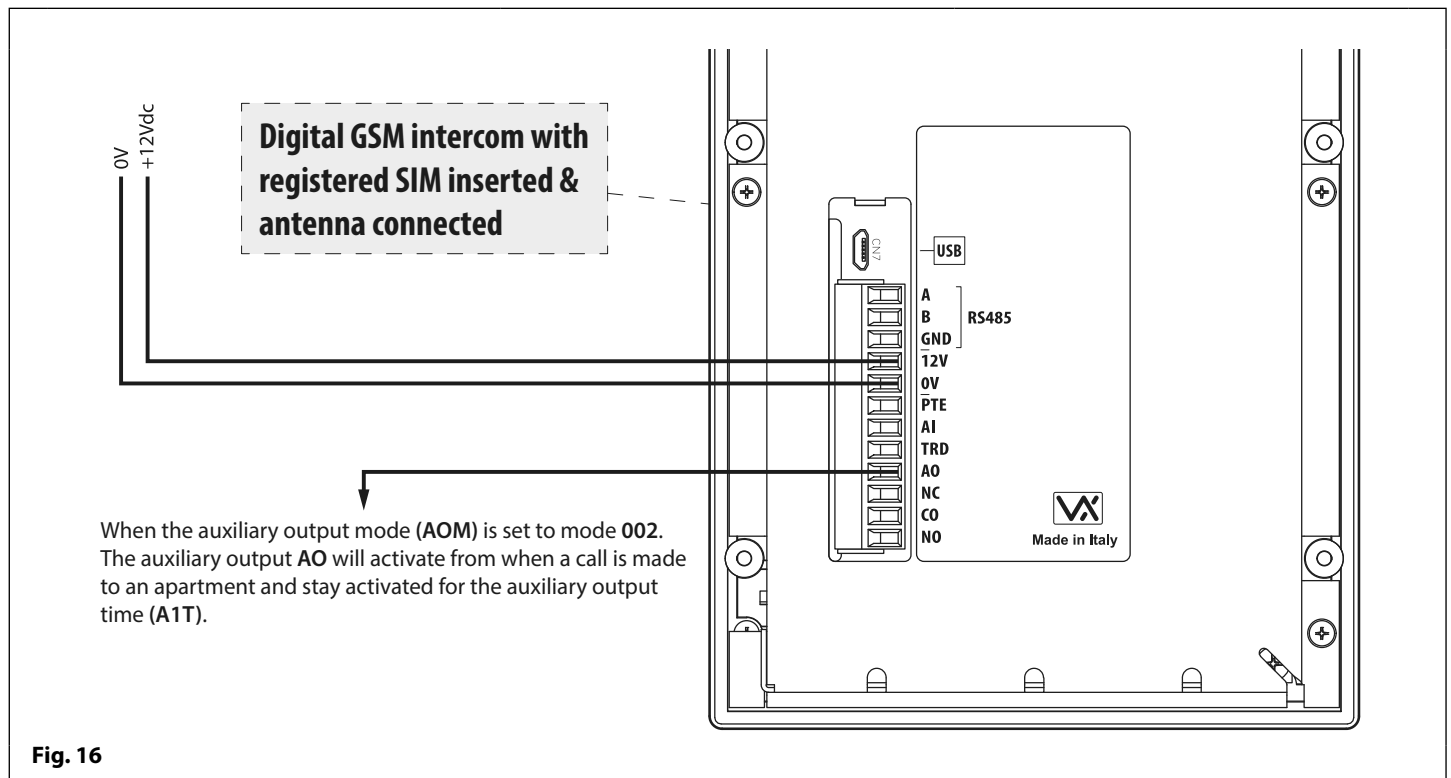
Fig.15 below shows the connection for auxiliary output **AO** when the **AOM** mode is set to **001**. The auxiliary output **AO** can be activated remotely by the user sending the text message **1111 A10** to the digital GSM intercom or by pressing **6** on the telephone during a call and will stay activated for the programmed auxiliary output time **A1T**. The auxiliary output can also be triggered by a normally open switch (switched 0V) connected into the auxiliary input **AI**.



Auxiliary Input & Output

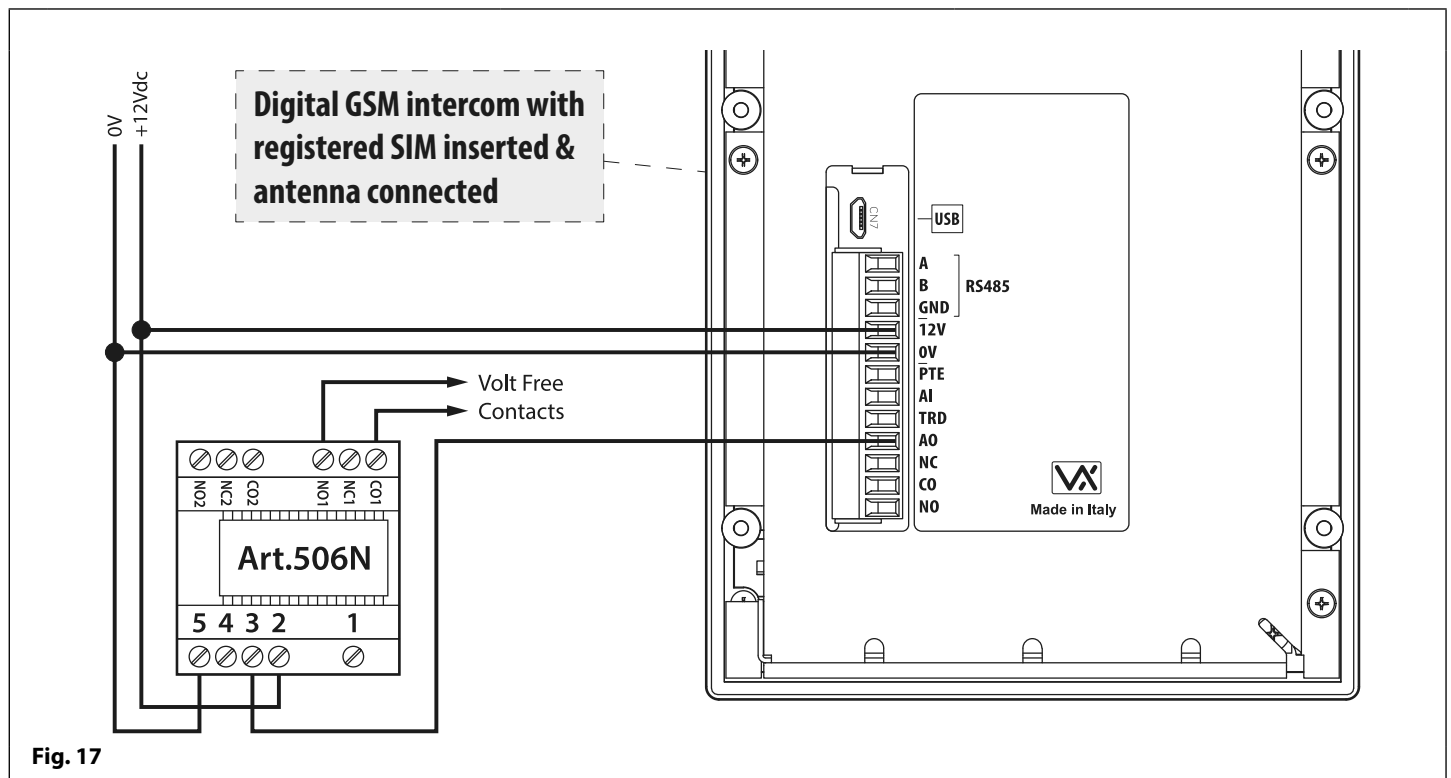
AUXILIARY OUTPUT (AO) WHEN SET TO MODE 002 (CALL ACTIVATED)

Fig.16 below shows the connection for auxiliary output **AO** when the **AOM** mode is set to **002**. The auxiliary output **AO** will activate once a call to an apartment has been made and will stay activated for the programmed auxiliary output time **A1T**.



CONNECTING A SECONDARY DEVICE TO THE AUXILIARY OUTPUT (AO)

Since the auxiliary output **AO** is a transistor switched output (switched low output) it can be connected to a relay (e.g. an Art.506N). This is particularly useful if a secondary device requires triggering. **Fig.17** shows how to connect an Art.506N relay.



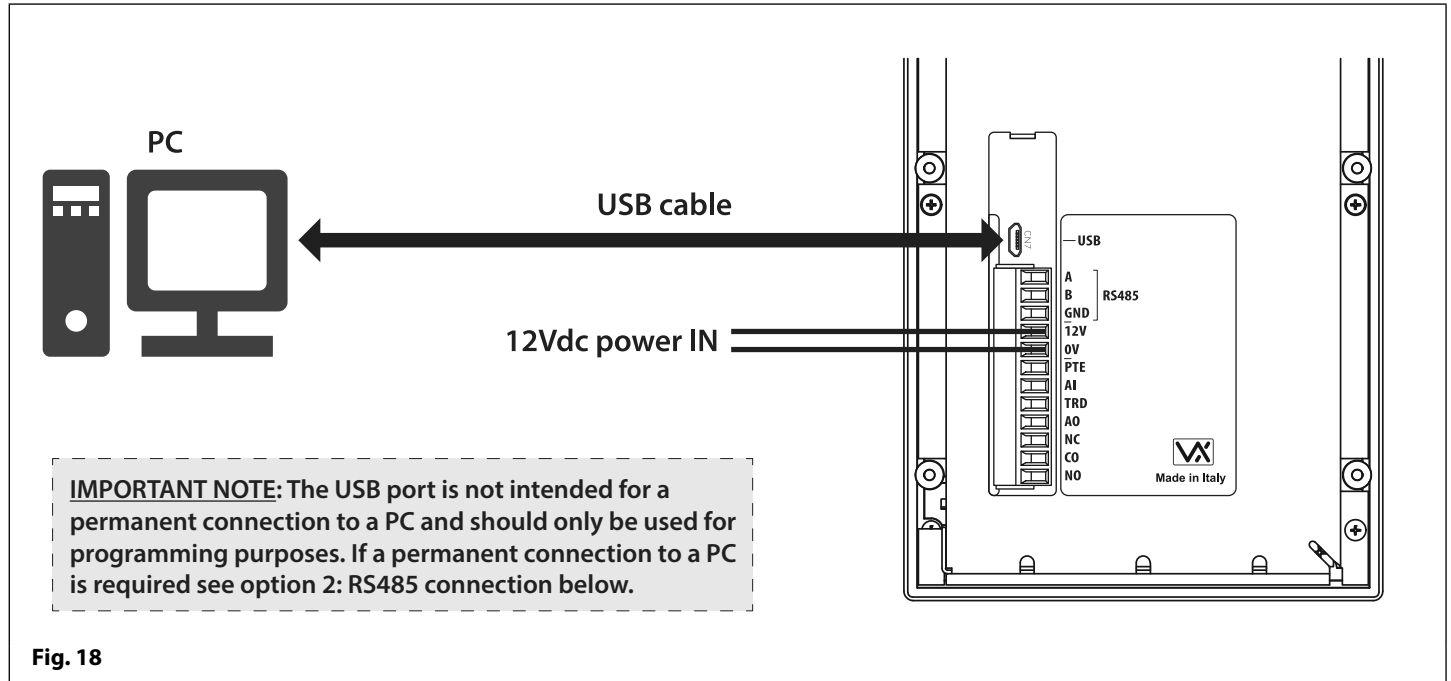
USB & RS485 Connection to a PC

CONNECTIONS TO A PC

The digital GSM intercom also includes two options for connecting to a PC: via a USB connection or via an RS485 connection. Both methods of connection are to allow for ease of programming and monitoring using the GSM SK PC software. All programming features described in this manual are also accessible using the software. Further information on using the GSM SK PC software can be found in the technical manual *GSM SK_66251720-EN_V2-3* (or later).

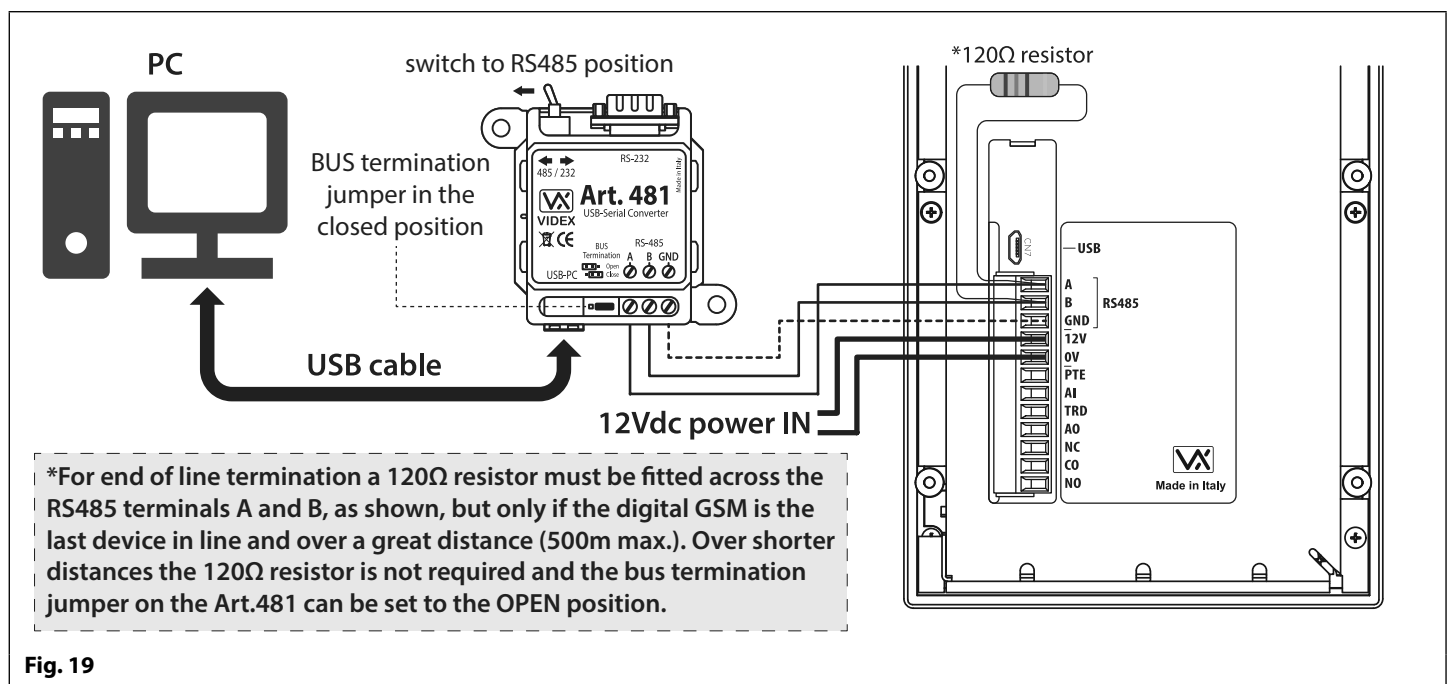
OPTION 1: USB CONNECTION

The digital GSM can be connected using a standard micro-USB to USB cable as shown in **Fig.18**. This method of connection is primarily used for programming and setup of the digital GSM panel.



OPTION 2: RS485 CONNECTION

The digital GSM intercom can also be connected using an RS485 bus connection via an RS485 to USB converter (**Art.481**) as shown in **Fig.19**. This method of connection, like option 1, can be used for programming and setup of the digital GSM, but can also be used in instances where a permanent connection to a PC is required for monitoring purposes and downloading event logs. When connected in this way the digital GSM can only be connected as a 'one-to-one' bus connection to the PC, another GSM module **cannot** be connected on the same RS485 bus to the PC.



RS485 Network Connection

RS485 BUS NETWORK CONNECTIONS TO AN ART. 4850R EXPANSION READER AND AN ART. 4903 KEYPAD

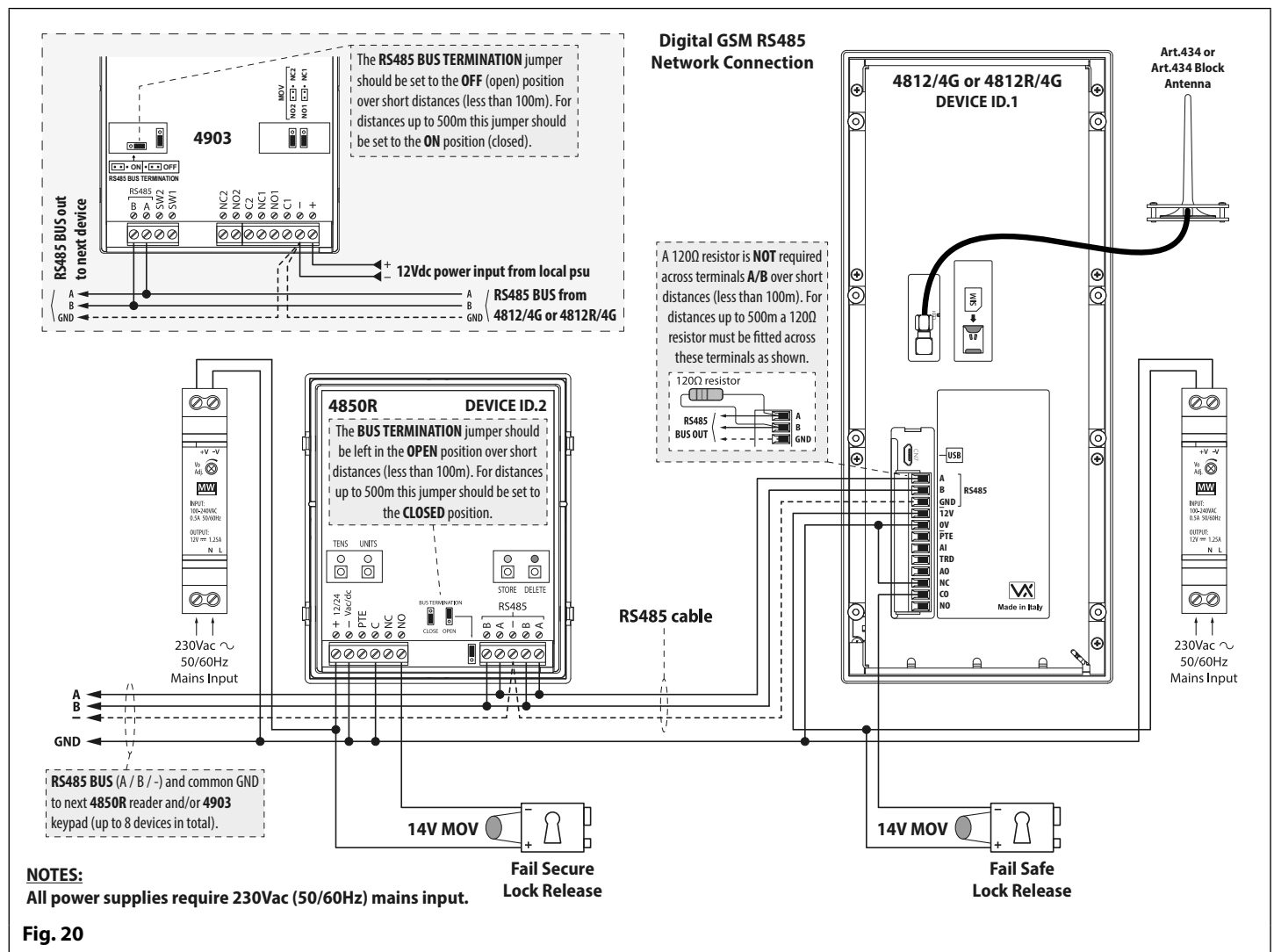
The RS485 bus terminals on the 4G digital GSM can also be used to network with an **Art.4850R** expansion reader and/or an **Art.4903** keypad (up to 8 devices in total including the digital GSM), see **Fig.20**. When user fobs/cards are programmed into the digital GSM they can be used on both the built-in reader and on the **Art.4850R** expansion reader and when an access code is programmed into the digital GSM the codes can be used on both the onboard keypad and on the **Art.4903** keypad.

The digital GSM is already setup as device **ID.1** so if either the **Art.4850R** or the **Art.4903** is setup as **ID.1** and networked together with the digital GSM they will operate as a parallel device with the built-in proximity reader or the onboard keypad on the digital GSM.

For programming fobs/cards or access codes via the digital GSM's keypad, follow the **proximity menu** flowchart for fobs/cards and follow the **apartment menu** flowchart for access codes shown further on in this manual. Programming fobs/cards and access codes can also be found in the **programming via text message** section of this manual. If using the **GSM SK** PC software programming can be found in the technical manual: **GSM SK_66251720-EN_V2-3** (or later) or if using the **GSM mobile apps**: the **Videx SMS Wizard** (for administrators) or for more in depth programming using the **Videx SMS Wizard PRO** (for installers). Alternatively programming fobs/cards and access codes can be carried out via the **GSM cloud** management platform (refer to **user management** notes further on for more details).

ART. 4850R READER AND ART. 4903 KEYPAD OPERATION WHEN NETWORKED

If a programmed fob/card is presented to the **Art.4850R** reader it will **only** operate it's own relay (for the expansion reader's programmed relay time) and **not** the relay on the digital GSM, similarly if a programmed user fob/card is presented to the digital GSM's built-in reader it will **only** operate it's own relay (for the programmed relay time) and **not** the expansion reader's relay. Likewise for the **Art.4903** keypad when an access code is entered on the keypad it will operate it's own relay for the programmed relay time and **not** the the relay on the digital GSM and vice versa.



IMPORTANT NOTE: For the RS485 bus cable over a short distance (less than 100m) the bus termination on the **Art.4850R** or **Art.4903** should be set to the **OPEN/OFF** position and a 120Ω resistor is **NOT** required across terminals A/B on the digital GSM intercom, as shown in Fig.20 above. The RS485 bus termination jumper should only be set to the **CLOSED/ON** position and a 120Ω resistor fitted across terminals A/B on the digital GSM over longer distances (up to 500m).

Connection to a Reader, Keypad or Relay

ART. 2813 NETWORK CONNECTION USING RS485

Like both the **Art.4850R** reader and the **Art.4903** keypad the **Art.2813** remote relay, **Fig.21** can also be connected to the digital 4G GSM module via the RS485 bus terminals, **Fig.22**.

It has a single onboard relay with **NO**, **NC** and **CO** connections with a switched 0V PTE input to activate the relay and also includes two switched 0V auxiliary outputs **A1** and **A2**.

The onboard relay and both auxiliary outputs operating times can be programmed from 1 - 63 seconds or 0 for latch mode. Up to 64 device ID's (from **ID.00** to **ID.63**) can be set and where relay operating times and auxiliary output times (for **A1** and **A2**) can be set.

Programming the remote relay is carried out directly using its internal 8 way dip switch, further instructions on how to configure and setup the remote relay can be found in the installation instructions: **2813_66251545_V1-0** (or later).

The remote relay and the auxiliary outputs can be activated remotely by sending SMS text messages to the digital GSM, refer to **programming via text message** notes further on, or if using the **GSM mobile apps** refer to the in app help guides.

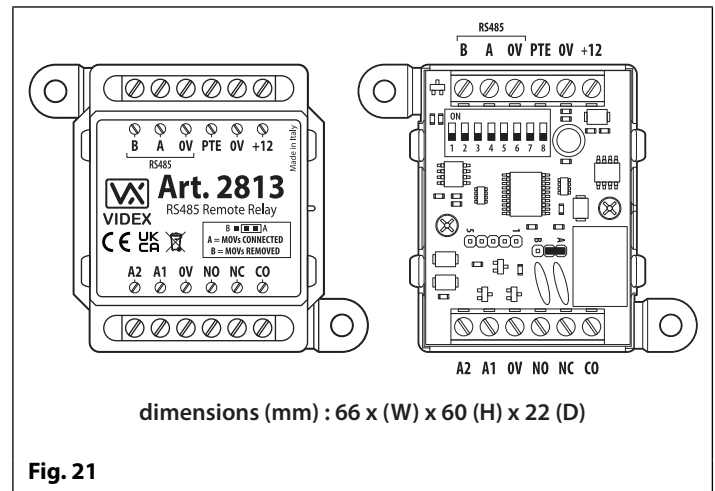


Fig. 21

NOTES:

All power supplies require
230Vac (50/60Hz) mains input.

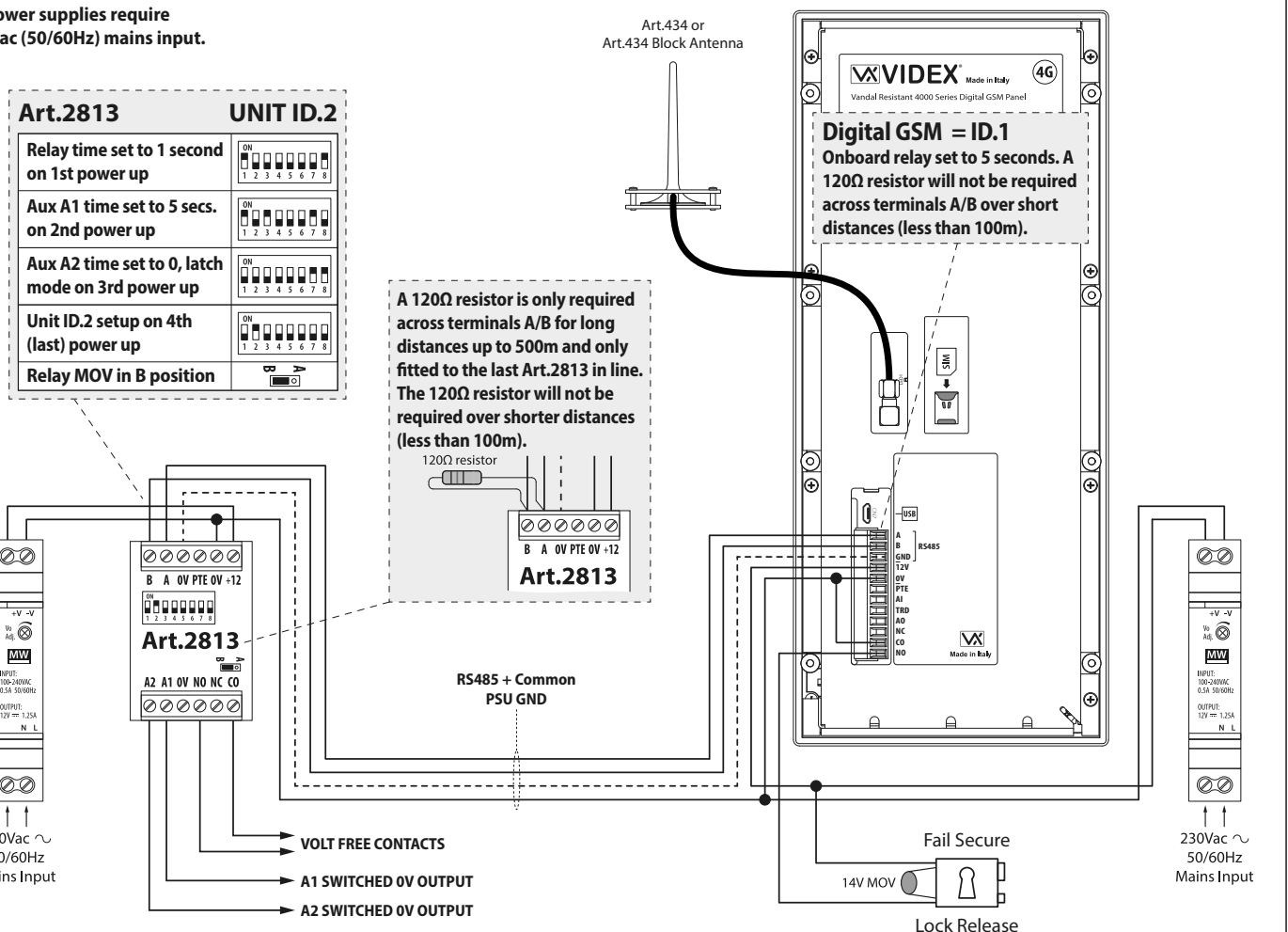


Fig. 22

SECURED BY DESIGN CONFIGURATION

If the remote relay is setup with the same device ID as the digital GSM, i.e. **ID.1** or setup with the same device ID as an **Art.4903** keypad or an **Art.4850R** proximity reader, it will then mirror their respective outputs (in the case of the digital GSM it will mirror the onboard relay and auxiliary output and for the keypad and proximity reader it will mirror the relay outputs) allowing for a **Secured by Design** configuration.

General Directions for Installation

CABLE SIZE GUIDE

POWER SUPPLY AND LOCK RELEASE CONNECTIONS

For PSU and lock connections refer to the table.

Distance	20m	50m	100m
Cross Sectional Area (CSA)	0.5mm ²	1.0mm ²	1.5mm ²

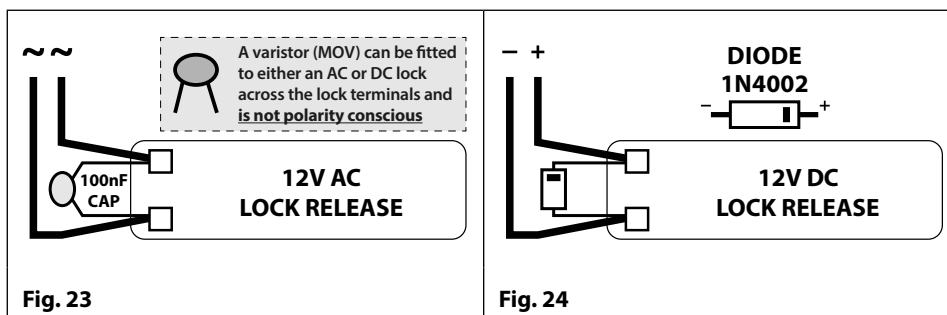
Ideally the PSU should be located as close to the GSM intercom panel as possible for best performance. The maximum acceptable resistance for the above cables = 3Ω or less for best possible performance.

IMPORTANT NOTE: ONLY BARE COPPER (BC) CABLE SHOULD BE USED, SOLID OR STRANDED IS ACCEPTABLE. PLEASE BE AWARE THAT WHEN SELECTING CABLE THE FOLLOWING TYPES ARE NOT RECOMMENDED BY VIDEX: COPPER COATED STEEL (CCS) AND COPPER CLAD ALUMINIUM (CCA).

GENERAL INSTALLATION NOTES

- Check that all components are free from damage before installing (**do not proceed with installation in the event of damage**).
- Keep all packaging away from children (**please dispose of any excess waste and packaging responsibly**).
- **Do not obstruct** the ventilation openings or slots on any of the devices.
- All connections to mains voltages must be made to the current national standards (**I.E.T. wiring regulations for the UK** or the appropriate standards of your country if installing overseas).
- Install an appropriate fused spur or isolation switch to isolate the mains.
- Isolate the mains before carrying out any maintenance work on the system.
- Avoid water ingress into the rear of the module, always seal the module frame after installation using a suitable silicon based sealant.
- All intercom and access control cables must be routed separately from the mains (ideally in a separate cable tray or duct).

LOCK RELEASE WIRING AND BACK EMF PROTECTION



For back EMF protection for AC locks fit a 100nF ceramic disc capacitor across the lock terminals as shown in **Fig.23**. For DC locks (fail secure or fail safe) fit a 1N4002 diode across the lock terminals as shown in **Fig.24**. If either of these are not available a 14 - 20V MOV (metal oxide varistor) can be fitted instead (**Fig.23**) on both an AC and DC lock. Examples can also be seen in the wiring diagrams on pages 12 - 13.

CONNECTION TO MAINS, SAFETY AND GUIDANCE NOTES

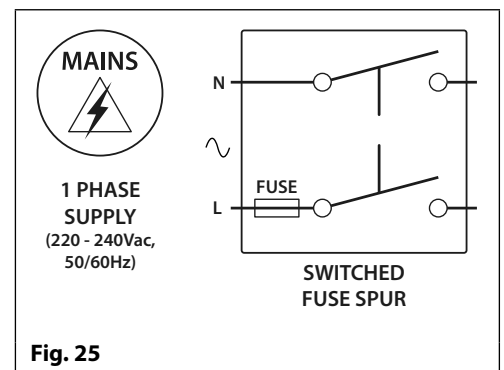
IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE COMMENCING WITH THE INSTALLATION. IT IS RECOMMENDED THAT ANY CABLING AND VIDEX PRODUCTS BE INSTALLED BY A COMPETENT AND QUALIFIED ELECTRICIAN, SECURITY INSTALLATION SPECIALIST OR COMMUNICATIONS ENGINEER.

- **DO NOT** install any Videx product in areas where the following may be present or occur:
- Excessive oil or a grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Possible obstructions which would prevent or hinder the access and/or removal of the Videx product.

MAINS CONNECTION

The system **MUST** be installed in accordance with the current I.E.T. regulations (in particular **I.E.T. Wiring Regulations, Eighteenth Edition BS7671:2018** for the UK), or the appropriate standards of your country if installing overseas, in particular Videx recommends:

- Connecting the system to the mains through an all-pole circuit breaker (refer to **Fig.25**) which shall have contact separation of at least 3mm in each pole and shall disconnect all poles simultaneously.
- That the all-pole circuit breaker shall be placed in such a way to allow for easy access and the switch shall remain readily operable.
- Ensuring that the mains supply (Voltage, Frequency and Phase) complies with the product rating label (this is usually located on the topside of the power supply).
- Isolating the mains before carrying out any maintenance work on the system.



General Directions for Installation

RS485 CONNECTIONS

A CAT-5 cable is acceptable where 1 pair is used for the **0V/GND** connection and a second pair is split between the **A** and **B** connections (i.e. 1 core of the pair is used for the **A** terminal, 1 core of the pair is used for the **B** terminal, see **Fig.26**).

The total overall distance between the first RS485 device in line, the **Art.481** or digital GSM, and the last RS485 device in line (**Art.4850R**, **Art.4903** or **Art.2813**) **should be no more than 500m max.** for the best possible performance, see **Fig.27** and **Fig.28**.

It is also important that the end of line RS485 bus termination of the respective device (**Art.4850R**, **Art.4903** or **Art.2813**) is in the **CLOSED/ON** position, in the case of the digital 4G GSM or **Art.2813** a 120Ω resistor should be fitted across the **A** and **B** bus terminal connections (unless it's connected with an **Art.481**, in which case the bus termination jumper on the **Art.481** should be in the **CLOSED** position as this would be the last RS485 device in line).

If the overall RS485 bus distance is less than 100m or so then a 120Ω resistor is not required (also refer back to **Fig.22**, page 18).

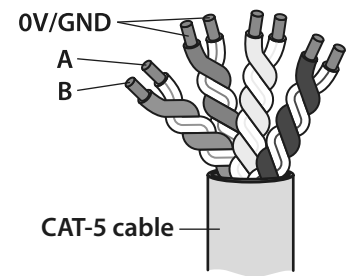


Fig. 26

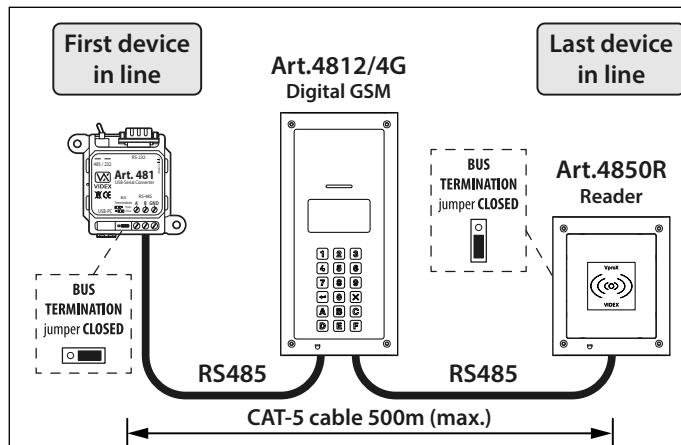


Fig. 27

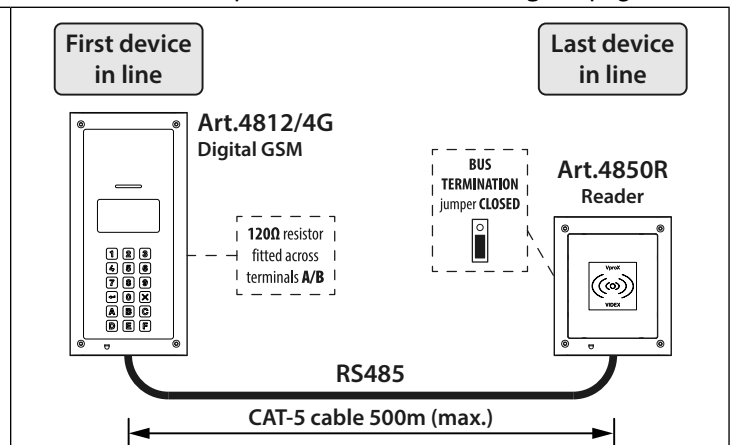


Fig. 28

POWER SUPPLY INSTALLATION

Follow the steps below to fit the **HDR-15-12** power supply.

- Fix the power supply to a DIN rail following **Fig.29**, **Fig.30** and **Fig.31**.
- Switch **OFF** the mains using the circuit breaker (mentioned previously) and then make the connections as required shown on the various wiring diagrams throughout this manual.
- Check the connections and secure the wires into the terminals ensuring that the low voltage (signal) cables are routed separately from the high voltage (mains) cables.
- If applicable replace the terminal covers and fix them back into place using the relevant screws.
- When all connections are made restore the mains supply.

PANEL CARE

It is important that the door panel's fascia is cleaned on regular occasions to prevent dirt build up and tarnishing of the metal.

A clean and soft cloth can be used with moderate warm water or non-aggressive cleansers. Additional care should be taken to follow the grain of the metalwork when polishing panels with a matte finish and always only polish in one direction to avoid light scratching of the plate, see **Fig.32**.

Also try to avoid any polish build up around the panel's buttons which may prevent the buttons from operating correctly.

DO NOT USE ANY OF THE FOLLOWING: Abrasive liquids, chlorine-based liquids, metal cleaning products (including sidol stainless steel cleaner as this can affect the etching and/or engraving) and hydrochloride bleaches.

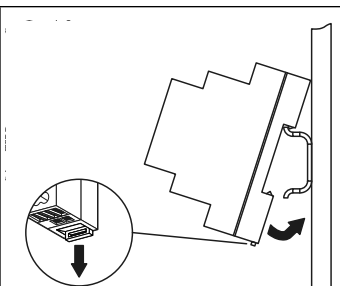


Fig. 29

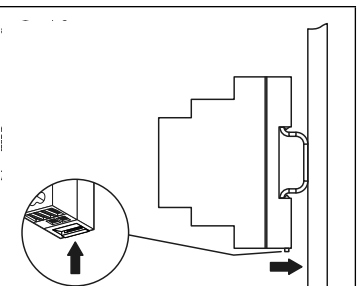


Fig. 30

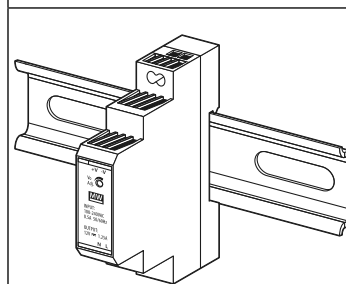


Fig. 31

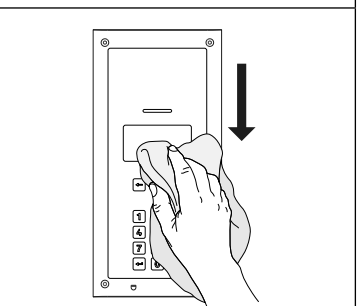


Fig. 32

IMPORTANT NOTE: IT IS IMPORTANT TO REGULARLY MAINTAIN THE "UP KEEP" OF THE GSM PANEL (CLEANING & GENERAL MAINTENANCE ETC.) ANY FAULT OR DAMAGE THAT MAY OCCUR TO THE GSM PANEL DUE TO THE LACK OF CLEANING & MAINTENANCE IS NOT THE RESPONSIBILITY OF VIDEX.

Fitting the SIM & Connecting Power

FITTING THE SIM CARD AND CONNECTING THE POWER TO THE GSM INTERCOM

After installing the power supply, antenna, lock output and any auxiliary devices as shown in this manual and before powering up, a SIM card must be installed (the SIM must already be registered with the network provider). The SIM holder can be found on the back of the module below the antenna connections. A nano SIM card from most network providers can be used, remember the 4G digital GSM will work with a 2G, 3G and a 4G SIM and will also work with the 3 network. Follow the steps below to insert the SIM card.

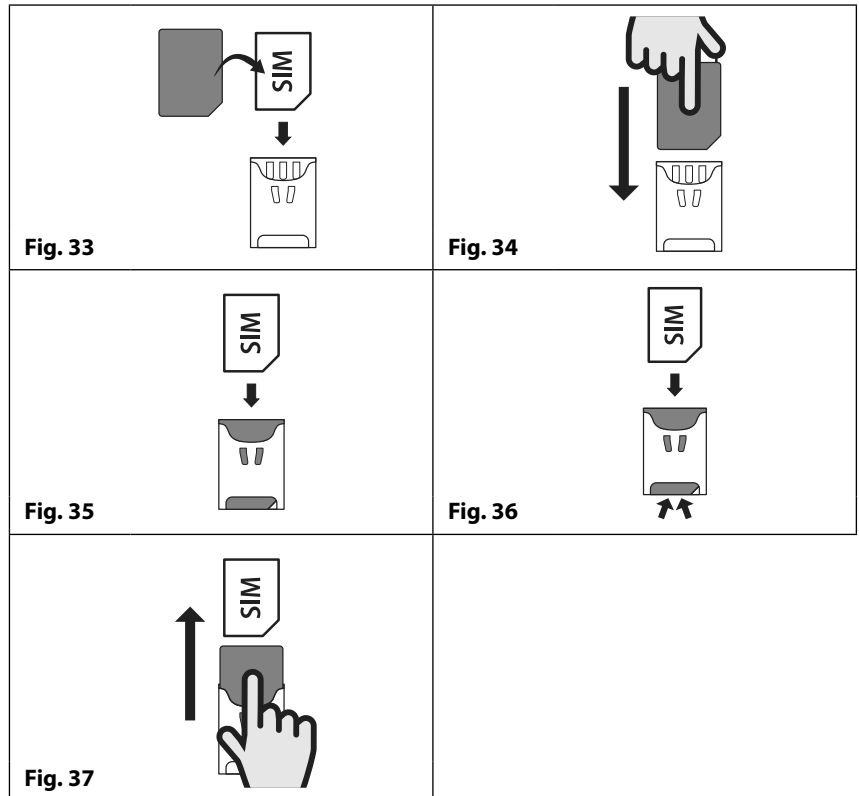
FITTING AND REMOVING THE SIM

Fitting the SIM:

1. Viewing the back of the digital GSM place the nano SIM on the SIM icon, with the SIM contacts facing down and following the SIM orientation, as shown in **Fig.33**.
2. Carefully, using your index finger, guide the nano SIM down, see **Fig.34**, into the SIM holder, see **Fig.35**.
3. Once the SIM is in place connect the GSM antenna and then connect the 12Vdc power supply wires but **DO NOT** power up the system yet.
4. Follow the **power up initialisation sequence** described below.

Removing the SIM:

1. Before removing the nano SIM disconnect the 12Vdc power to the GSM module.
2. To remove the SIM card carefully use the end of a small flat head terminal driver (indicated with the two arrows on the bottom side of the SIM holder where the edge of the SIM can be seen, **Fig.36**) and gently push the nano SIM up.
3. When the other side of the nano SIM sticks out of the SIM holder at the top edge carefully use your index finger to slide the nano SIM out of the holder, **Fig.37**.

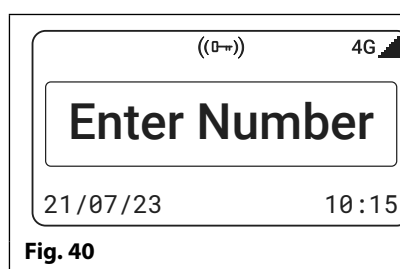
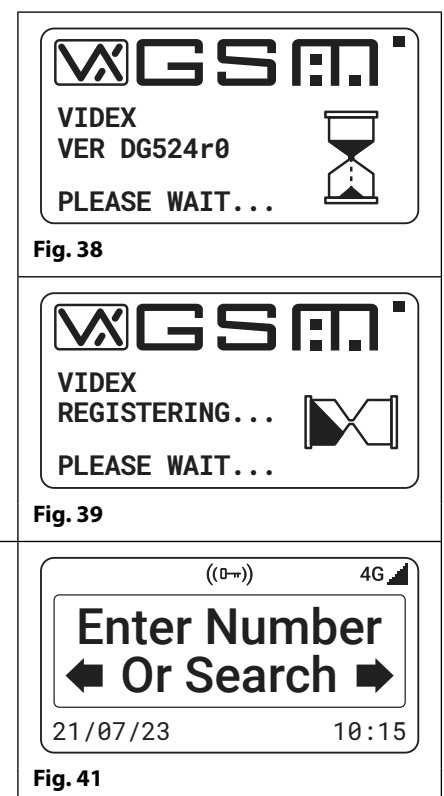


POWER UP INITIALISATION SEQUENCE

The 4G digital GSM intercom requires approximately 25 - 30 seconds too initialise properly. We recommend **NOT** sending any SMS messages or pressing buttons during this time.

1. First check all the connections have been made correctly and then power up the system.
2. The graphical display and the keypad buttons will illuminate.
3. After approximately 5 seconds the display will show the Videx GSM logo and current firmware version number, as shown in **Fig.38**.
4. After a further 10 seconds the GSM will emit a beep and below the Videx logo it will indicate the digital GSM is registering with the network, as shown in **Fig.39**.
5. After a further delay the display will then show the default welcome screen, refer to **Fig.40** for the **Art.4812** and **Fig.41** for the **Art.4812R** below. The digital GSM is ready to begin programming.

The date and time is shown along the bottom of the display and the signal is indicated at the top right corner of the display.



Reset Procedure

RESETTING THE DIGITAL GSM INTERCOM TO FACTORY DEFAULTS

There are two reset procedures for the 4G digital GSM panel. The first will reset the master code only and the second will reset everything and clear all stored telephone numbers, proximity cards and settings.

RESETTING THE MASTER CODE TO 1111 (4x1)

1. Ensure the power is switched off to the digital GSM panel.
2. Press and hold down the '0' button, , and keep it pressed down while the power is switched back ON.
3. The graphical display and the keypad buttons will illuminate.
4. After a brief delay the display will show the Videx GSM logo and current firmware version number, as shown in **Fig.42**.
5. After another delay the GSM will emit a beep and below the Videx logo it will indicate the digital GSM is registering with the network, as shown in **Fig.43**.
6. When the display shows that it is registering release the '0' button, .
7. After a further delay the display will then show the default welcome screen (refer to **Fig.40** for the Art.4812 and **Fig.41** for the Art.4812R on page 21).
8. The master code has been reset back to factory default 1111 (4x1).



Fig. 42



Fig. 43

FULL SYSTEM RESET

1. Ensure the power is switched off to the digital GSM panel.
2. On the rear of the GSM panel link out the GND and PTE terminals, as shown in **Fig.44**.
3. Press and hold down the 'ENTER' button, , and keep it pressed down while the power is switched back on.
4. The graphical display and the keypad buttons will illuminate.
5. After a brief delay the display will show the Videx GSM logo and current firmware version number, as shown in **Fig.45**.
6. After another delay the GSM will emit a beep and below the Videx logo it will indicate the digital GSM is resetting, as shown in **Fig.46**.
7. When the display shows that it is resetting release the 'ENTER' button, .
8. After a further delay the digital GSM will automatically follow the power up initialisation sequence as described on page 21.
9. The digital GSM panel has been fully reset.

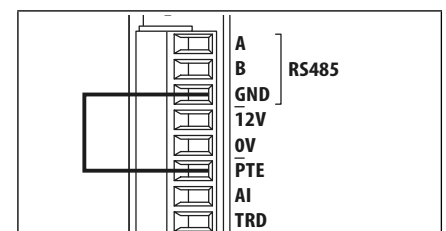


Fig. 44



Fig. 45



Fig. 46

IMPORTANT NOTE: WHEN PERFORMING A FULL SYSTEM RESET ALL THE DATA STORED IN THE DIGITAL GSM WILL BE DELETED FROM THE PANEL. IF ANY DATA IS STILL REQUIRED IT IS RECOMMENDED THAT THIS INFORMATION IS FIRST DOWNLOADED FROM THE DIGITAL GSM USING THE GSMSK PC SOFTWARE AND THEN SAVED. IT CAN THEN LATER BE UPLOADED BACK INTO THE DIGITAL GSM AFTER THE FULL RESET HAS BEEN COMPLETED.

4000 Series Back Box Installation

EXAMPLE: INSTALLING A 4000 SERIES TWO MODULE SURFACE BACK BOX (ART. 4882)

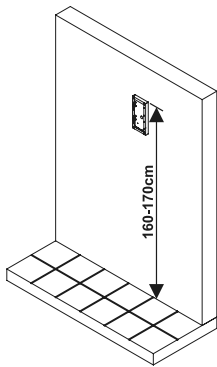


Fig. 47

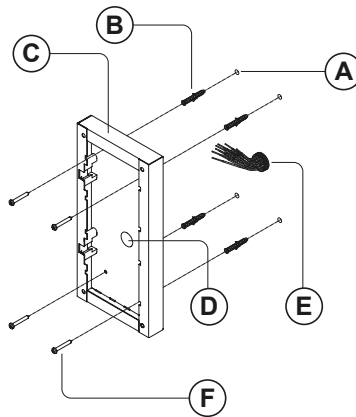


Fig. 48

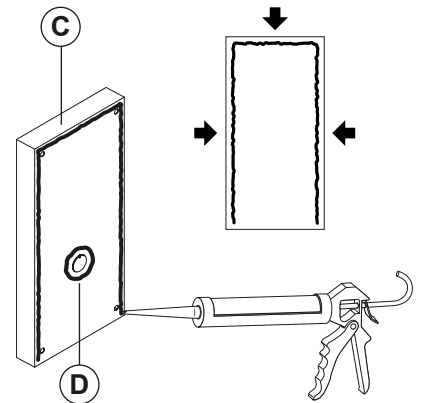


Fig. 49

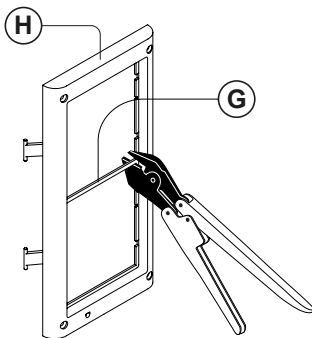


Fig. 50

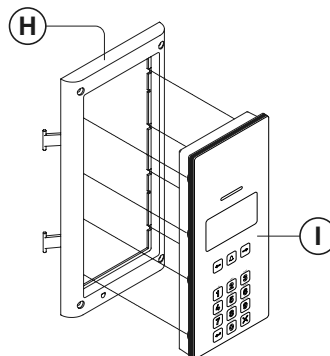


Fig. 51

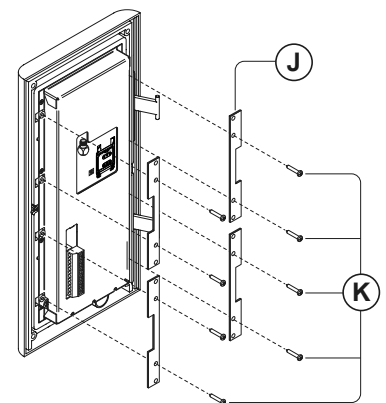


Fig. 52

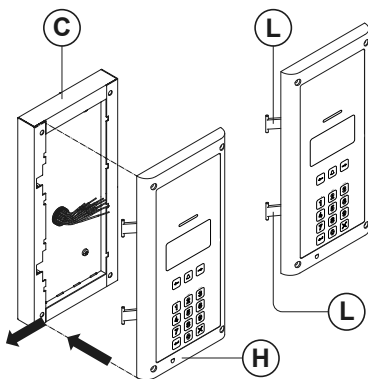


Fig. 53

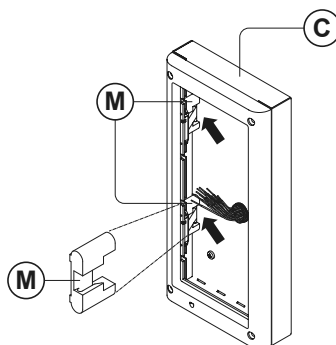


Fig. 54

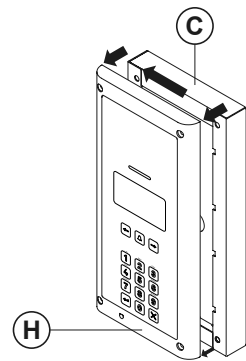


Fig. 55

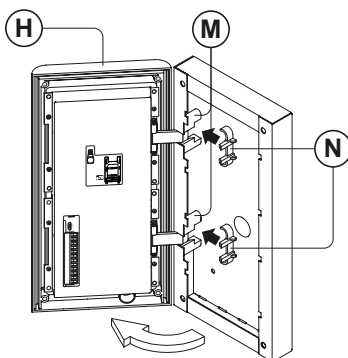


Fig. 56

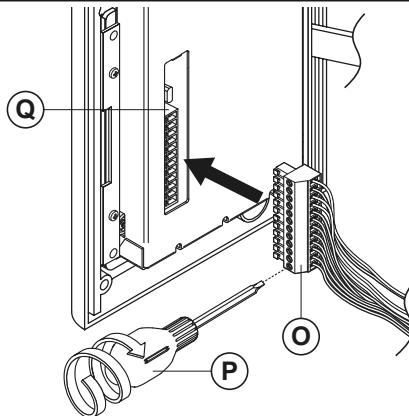


Fig. 57

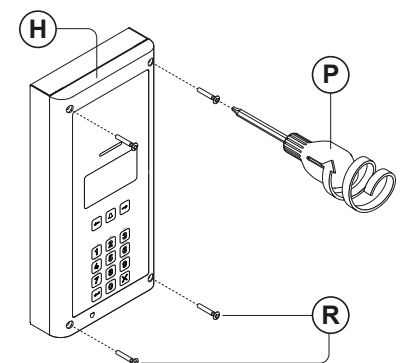


Fig. 58

4000 Series Back Box Installation

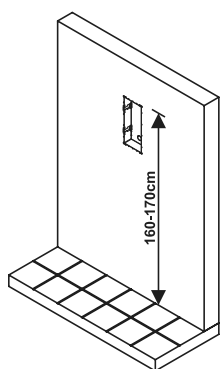
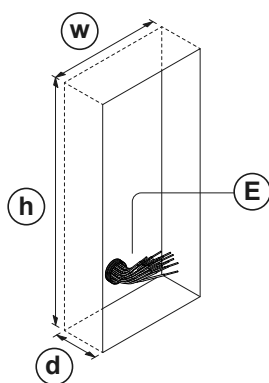
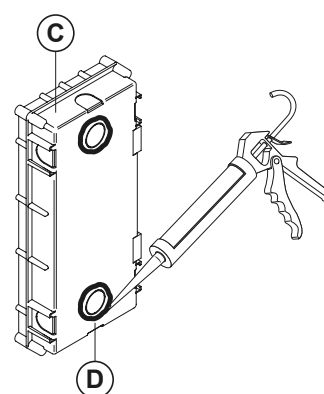
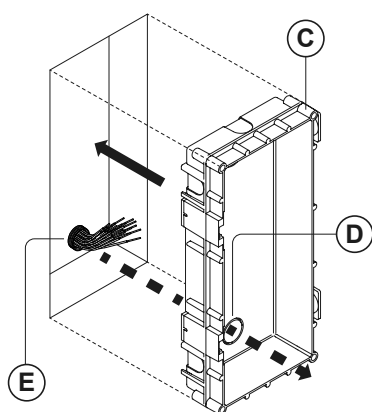
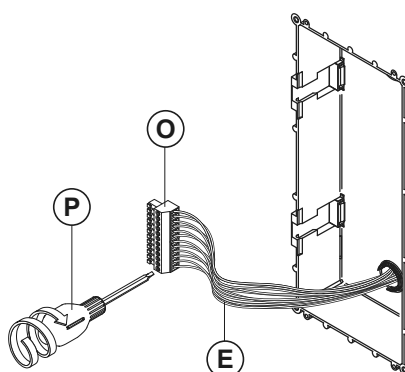
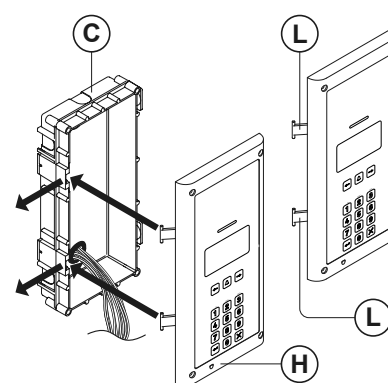
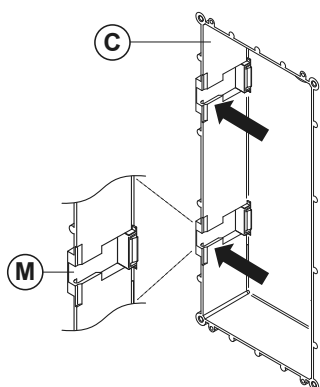
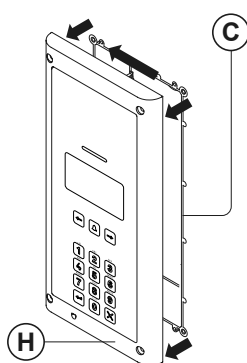
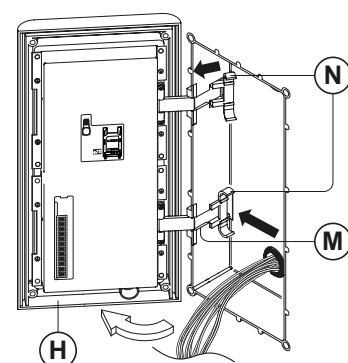
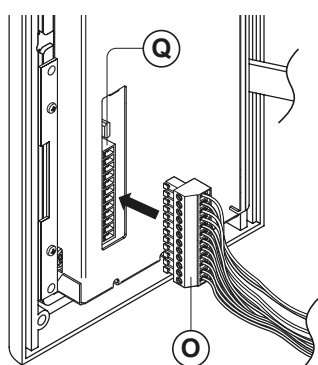
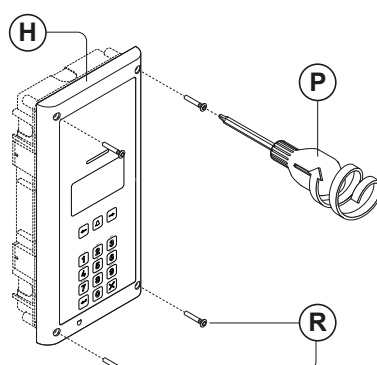
INSTALLING A SURFACE MOUNT DOOR STATION

1. Place the surface box against the wall (165-170cm between the top of the box and the floor level as shown in **Fig.47**) and mark the fixing holes **(A)** for the wall plugs **(B)** and the hole for the cables **(E)** (**Fig.48**). Observe the orientation of the box with the hinge mount **(M)** on the left;

 **IN ORDER TO PREVENT WATER INGRESS WE HIGHLY RECOMMEND USING A SILICONE SEALANT BETWEEN THE WALL AND THE BACK BOX **(C)**, ON THE LEFT, TOP AND RIGHT SIDES ONLY AND AROUND ALL THE HOLES **(D)** . DON'T USE SILICONE SEALANT ON THE BOTTOM SIDE OF THE BACK BOX (Fig.49);**

2. As shown in **Fig.48**, drill the fixing holes **(A)** , insert the wall plugs **(B)** and feed the cables **(E)** through the surface box opening **(D)** , fix the surface box **(C)** to the wall using the screws **(F)** ;
3. Remove the cross bar **(G)** from the module support frame **(H)** using the appropriate hand tool (where required it may be necessary to wear the appropriate clothing, e.g. protective gloves and eye protection, when doing this) as shown in **Fig.50**;
4. Before installation of the module support frame **(H)** to the surface box **(C)** , fit the module **(I)** to the support frame **(H)** as shown in **Fig. 51** then, as shown in **Fig.52**, fit the module fixing brackets **(J)** using the fixing screws **(K)** ;
5. Next take the frame's hinges **(L)** and hook the module support frame **(H)** to the surface box **(C)** , starting from the left following the guide arrows, as shown in **Fig.53**. Ensure that the frame's hinges **(L)** (**Fig.53**) fit inside the relevant hinge mounts **(M)** inside the surface box **(C)** , following the guide arrows, as shown in **Fig.54**;
6. Pull back the module support frame **(H)** from the surface box **(C)** while moving it slightly to the left, following the guide arrows, as shown in **Fig.55**;
7. Next open the module support frame **(H)** and clip the hinge locks **(N)** to the hinge mounts **(M)** , following the guide arrows, as shown in **Fig.56**;
8. Make the required wiring connections into the terminal block **(O)** using the screwdriver provided **(P)** (using the flat blade end) then plug the terminal block **(O)** into the module's terminal block connector **(Q)** , as shown in **Fig.57**. Make any other necessary panel adjustments required (connecting the antenna cable, fitting the SIM card and setting the dip-switches etc.);
9. After the system has been tested and is working correctly, move back the module support frame **(H)** carefully and then fix it to the surface box **(C)** using the screwdriver provided **(P)** (using the torx end) and the torx pin security screws provided **(R)** , as shown in **Fig.58**. **Note: do not over tighten the screws more than is necessary.**

 **NOTE: IF ADDITIONAL HOLES ARE MADE IN THE SURFACE BOX, OXIDATION PROBLEMS MAY APPEAR UNLESS THE UNPROTECTED METAL IS COATED WITH A PROTECTIVE PAINT.**

4000 Series Back Box Installation**EXAMPLE: INSTALLING A 4000 SERIES TWO MODULE FLUSH BACK BOX (ART. 4852)****Fig. 59****Fig. 60****Fig. 61****Fig. 62****Fig. 63****Fig. 64****Fig. 65****Fig. 66****Fig. 67****Fig. 68****Fig. 69**

4000 Series Back Box Installation

INSTALLING A FLUSH MOUNTING DOOR STATION

1. It is recommended that the flush box (C) is mounted into the wall approximately 165-170cm between the top of the box and the floor level as shown in **Fig.59**.
2. Using the flush box (C) and the hole dimensions (**w=120mm x h=263.2mm x d=46mm**), as shown in **Fig.60**, use appropriate tools to cut out the recommended hole size in the wall (where required it may be necessary to wear the appropriate clothing, e.g. protective gloves and eye protection, when doing this). Remember to allow room for the connecting cables (E) (**Fig.60**);



BEFORE FITTING THE FLUSH BOX (C) INTO THE WALL IT IS RECOMMENDED THAT IN ORDER TO PREVENT WATER INGRESS A SILICONE SEALANT IS USED BETWEEN THE WALL AND THE FLUSH BOX (C) (Fig.61) AND AROUND THE FLUSH BOX OPENINGS (D) (Fig.61);

3. Set the flush box (C) into the hole in the wall feeding the connecting cables (E) through the appropriate flush box opening (D), as shown in **Fig.62**;
4. Follow steps 3 and 4, from 'installing a surface mounting door station', to fit the module into the module support frame (H) as shown in **Fig.50, Fig.51** and **Fig.52** on page 24 and described on page 25;
5. Next take connecting cables (E) and make the required terminal connections into the terminal block (O) using the screwdriver provided (P) (using the flat blade end), as shown in **Fig.63**;
6. Take the frame's hinges (L) and hook the module support frame (H) to the flush box (C), starting from the left following the guide arrows, as shown in **Fig.64**. Ensure that the frame's hinges (L) (**Fig.64**) fit inside the relevant hinge mounts (M) inside the flush box (C), as shown in **Fig.65**;
7. Next close in the front support frame (H) and then pull it back from the flush box (C) while moving it slightly to the left, following the guide arrows, as shown in **Fig.66**;
8. Next open the module support frame (H) (to allow for easy access to the hinge mounts (M)) and clip the hinge locks (N) to the hinge mounts (M), following the guide arrows, as shown in **Fig.67**;
9. Plug the terminal block (O) (from step 5, **Fig.63**) into the module's terminal block connector (Q), as shown in **Fig.68**. Make any other necessary panel adjustments required (connecting the antenna cable, fitting the SIM card and setting the dip-switches etc.);
10. After the system has been tested and is working correctly, move back the module support frame (H) carefully and then fix it to the flush box (C) using the screwdriver provided (P) (using the torx end) and the torx pin security screws provided (R), as shown in **Fig.69**. **Note: do not over tighten the screws more than is necessary.**

NOTES

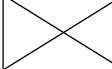
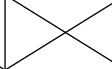
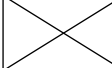
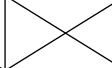
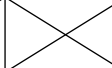
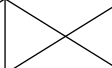
- The screwdriver's blade has two sides, one flat and one torx, to select one of them unplug the blade from the screwdriver body and plug it into the required side.

Programming via Alpha-Numeric Keypad

THE ALPHA-NUMERIC KEYPAD

Programming can be carried out using the onboard alpha-numeric keypad. When in programming mode the keypad can be used similar to mobile phone text typing. The following alpha-numeric table can be used when entering a username for example. The table shows the characters and symbols that can be entered into the panel by pressing a specific numeric button one or more times to select the character or symbol desired.

For the **Art.4812R** with the scroll buttons,  and  are not used. The call button  can also be used to confirm entry.
For the **Art.4812** the alpha buttons A-F are not used.

Number of Presses Button No.	1	2	3	4	5	6	7	8	9
1 	<space>	.	&	1					
2 	A	B	C	2	a	b	c		
3 	D	E	F	3	d	e	f		
4 	G	H	I	4	g	h	i		
5 	J	K	L	5	j	k	l		
6 	M	N	O	6	m	n	o		
7 	P	Q	R	S	7	p	q	r	s
8 	T	U	V	8	t	u	v		
9 	W	X	Y	Z	9	w	x	y	z
0 	+	-	*	/	0				
       	unused buttons								
 	confirm entry								
	delete previous character/symbol and cancel								

Example:

When entering an apartment name, to type the name “VIDEX” the following buttons can be pressed on the keypad:

Press button 8 ,  , 3 times = V.

Press button 4 ,  , 3 times = I.

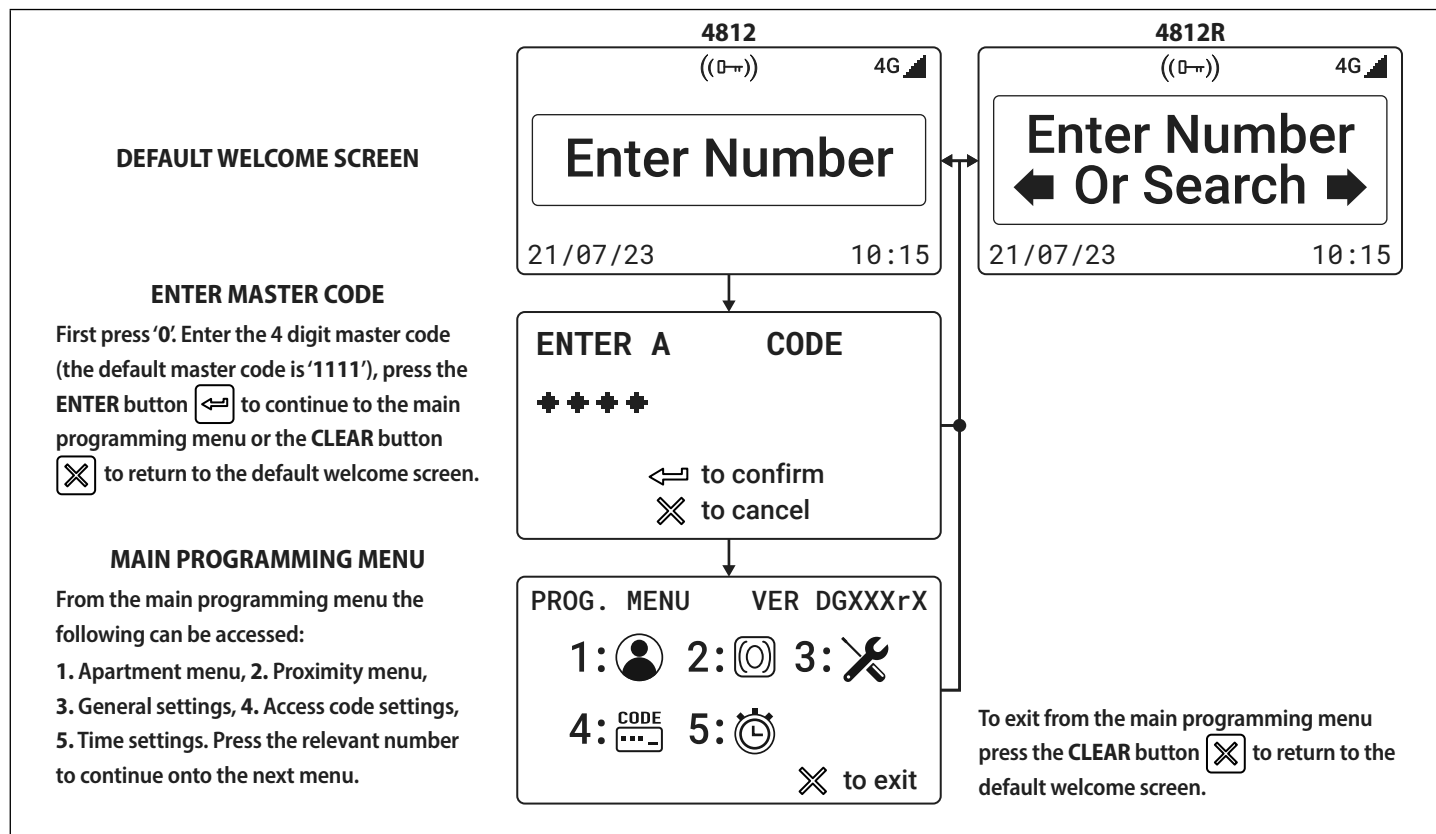
Press button 3 ,  , once = D.

Press button 3 ,  , twice = E.

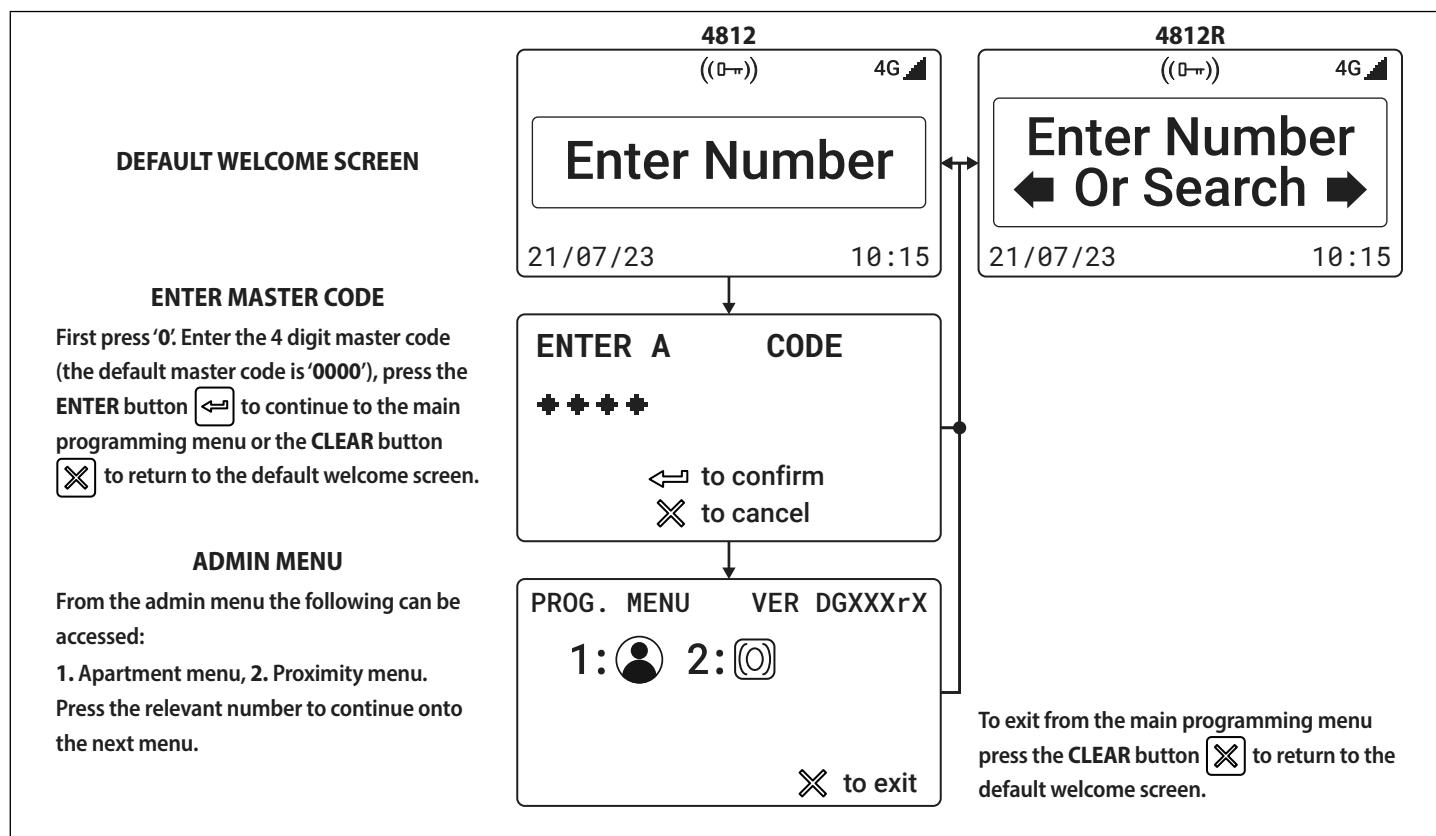
Press button 9 ,  , twice = X.

Programming Flowcharts

ACCESSING MAIN PROGRAMMING MENU

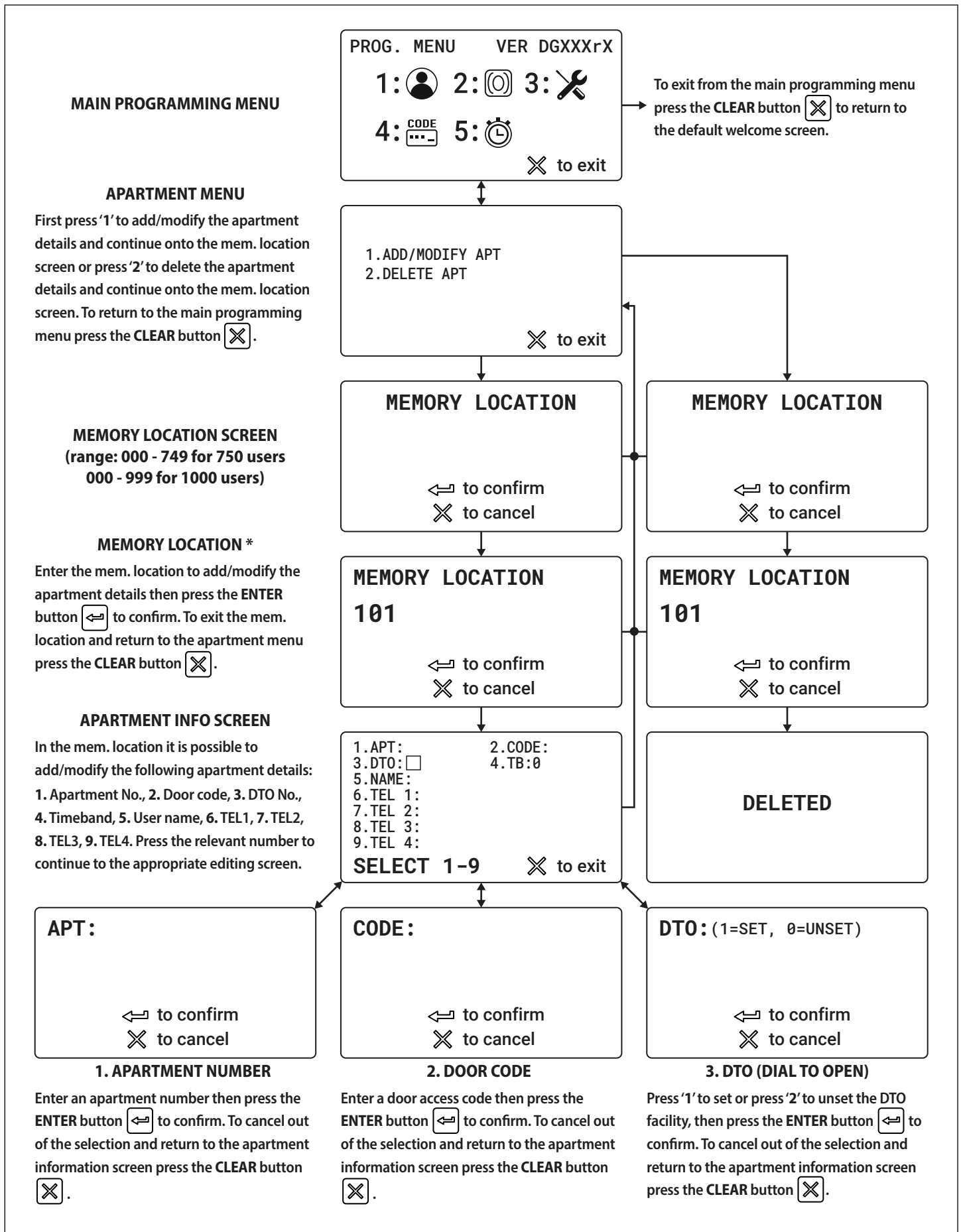


ACCESSING ADMIN MENU



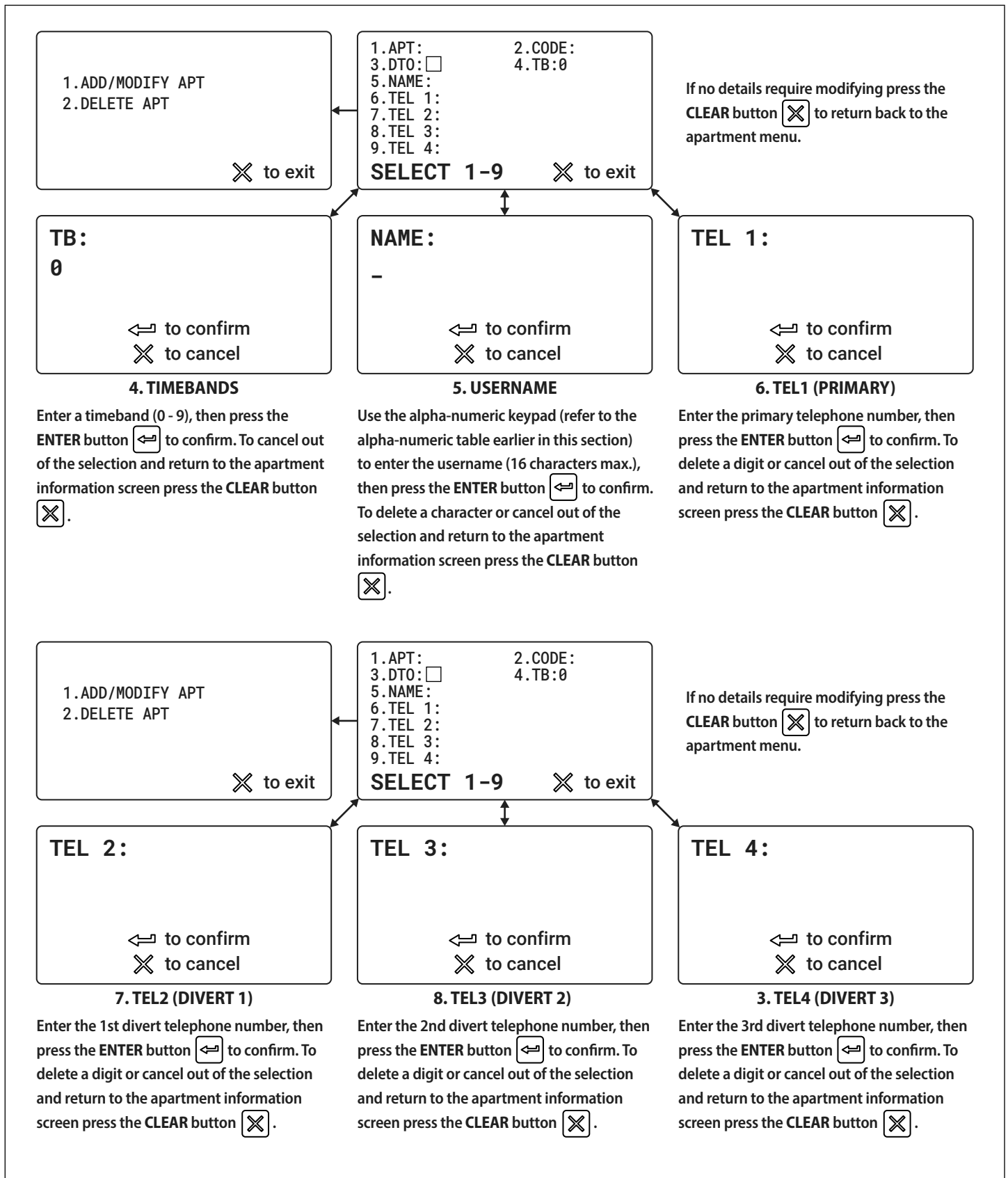
Programming Flowcharts

1. APARTMENT MENU



Programming Flowcharts

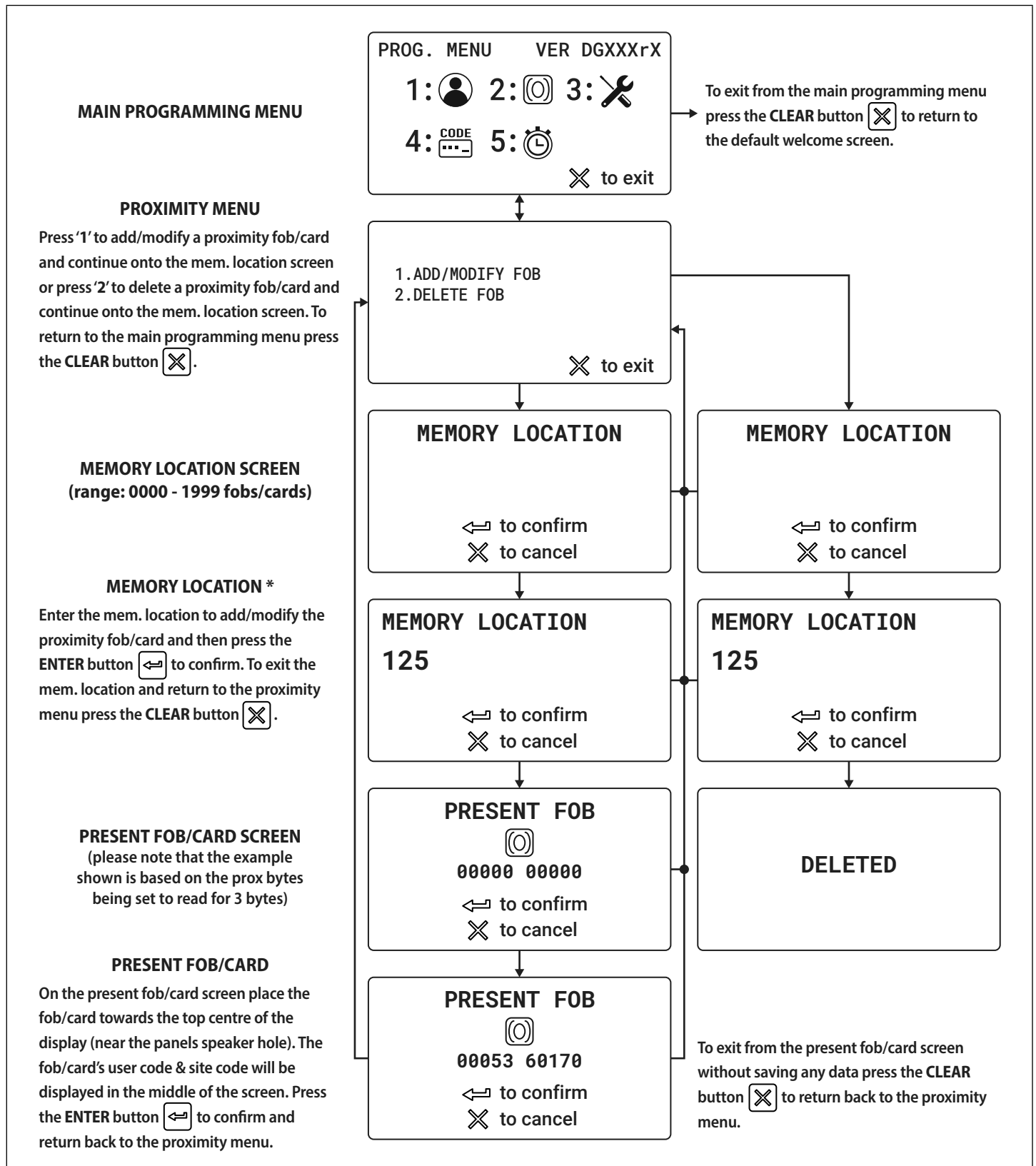
1. APARTMENT MENU (CONTINUED)



* **IMPORTANT NOTE:** Programming an access code into memory location '000' (via the Apartment Menu) will operate the auxiliary output AO for the programmed AO time (A1T). When a user enters this code via the keypad the digital GSM will show 'OK' on the display to confirm the auxiliary output AO has been activated. Please also note that activating the auxiliary output in this way is only possible when the auxiliary output mode A1M has been set to mode 001.

Programming Flowcharts

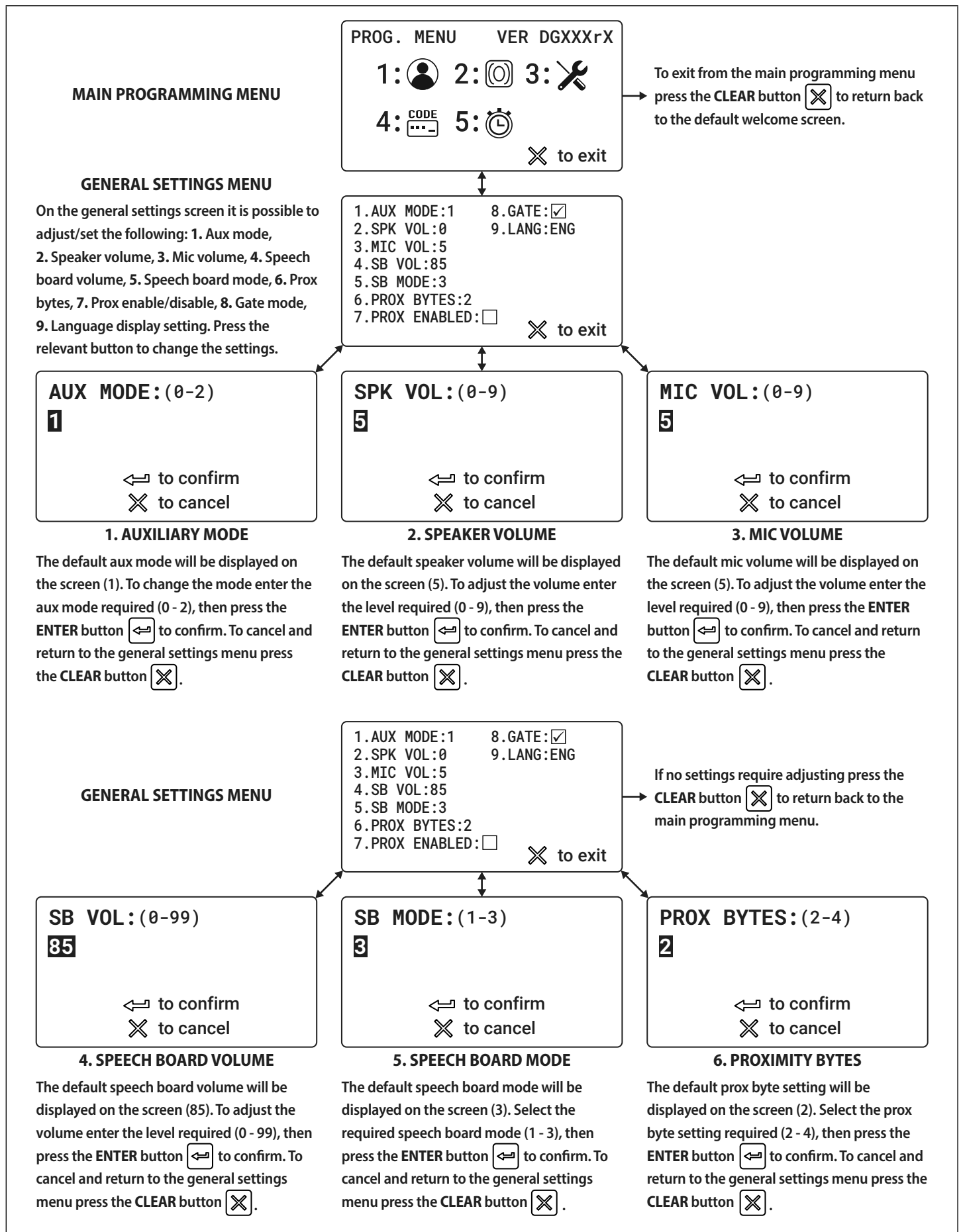
2. PROXIMITY MENU



* **IMPORTANT NOTE:** Programming a proximity fob/card into memory location '0000' (via the Proximity Menu) will operate the auxiliary output AO for the programmed AO time (A1T). When a user presents the programmed fob/card to the onboard reader the digital GSM will show 'OK' on the display to confirm the auxiliary output AO has been activated. Please also note that activating the auxiliary output in this way is only possible when the auxiliary output mode A1M has been set to mode 001.

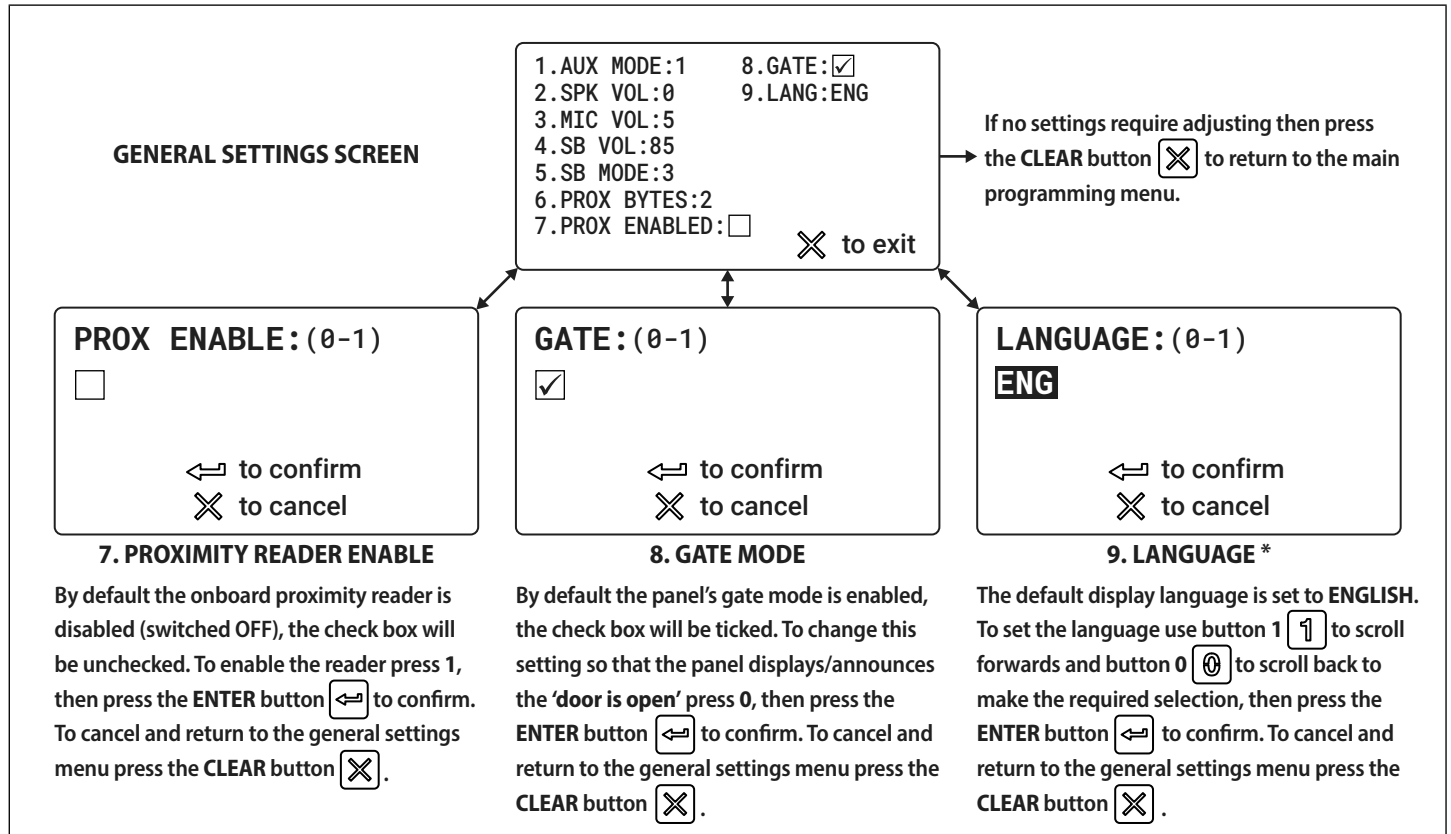
Programming Flowcharts

3. GENERAL SETTINGS



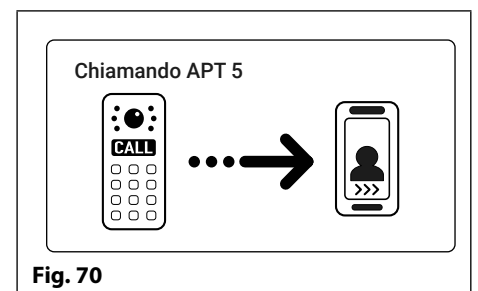
Programming Flowcharts

3. GENERAL SETTINGS ✕ (CONTINUED)



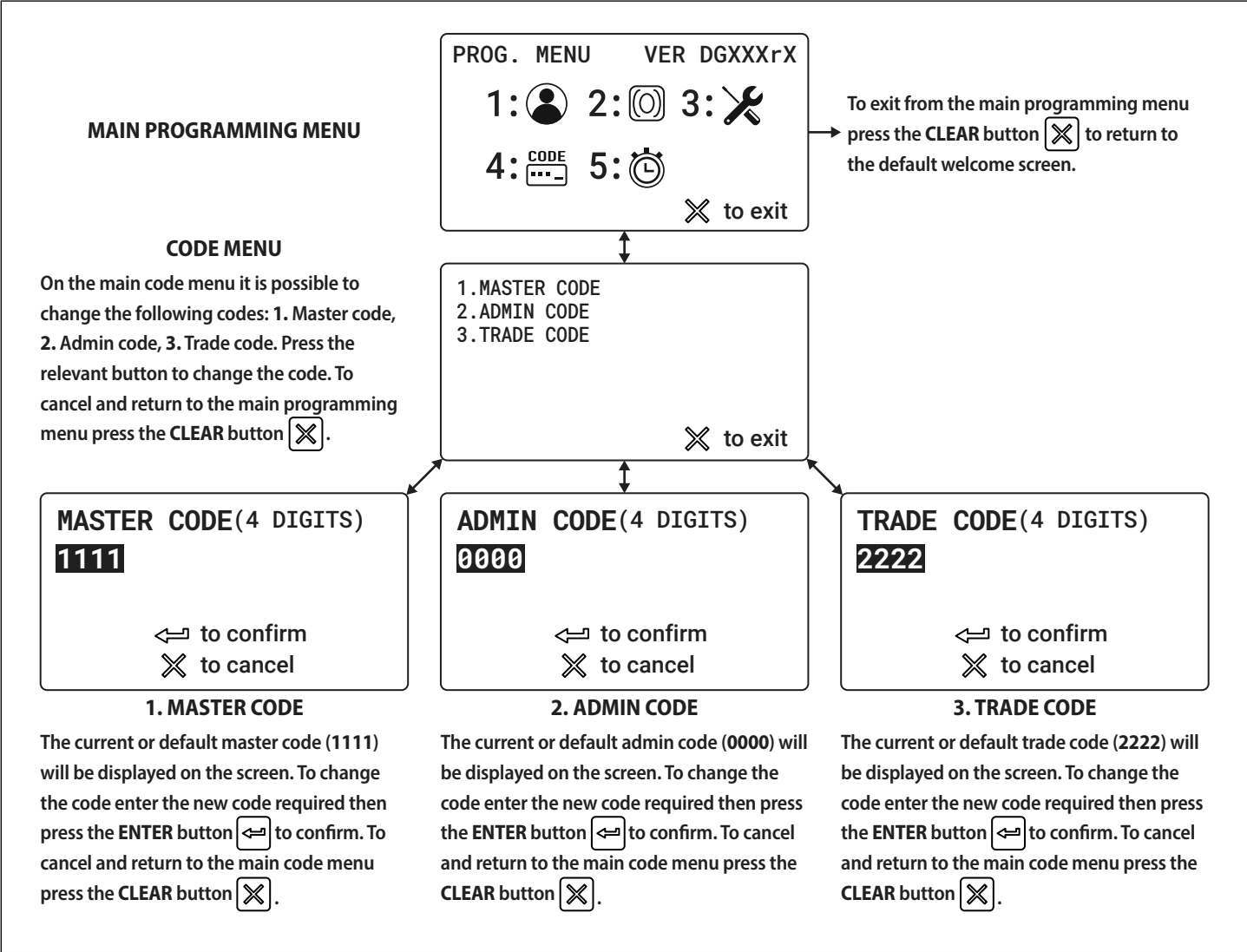
***IMPORTANT NOTE:** When setting the language only the panels on screen display messages (e.g. calling apartment 'nnn', enter number, door open etc.) will be shown in the chosen language. The digital GSM's on screen programming menus will still be displayed in English. **Fig.70** shows an example of what the panel would display when calling an apartment if the language has been set to **ITA** (italian).

The list of supported languages (in scrolling order) : **ENG** (English); **ITA** (Italian); **SPA** (Spanish); **POR** (Portuguese); **FRA** (French); **GER** (German); **CZE** (Czech); **CRO** (Croatian); **DAT** (Dutch); **POL** (Polish); **SLO** (Slovenian); **DAN** (Danish); **NOR** (Norwegian) and **HEB** (Hebrew).



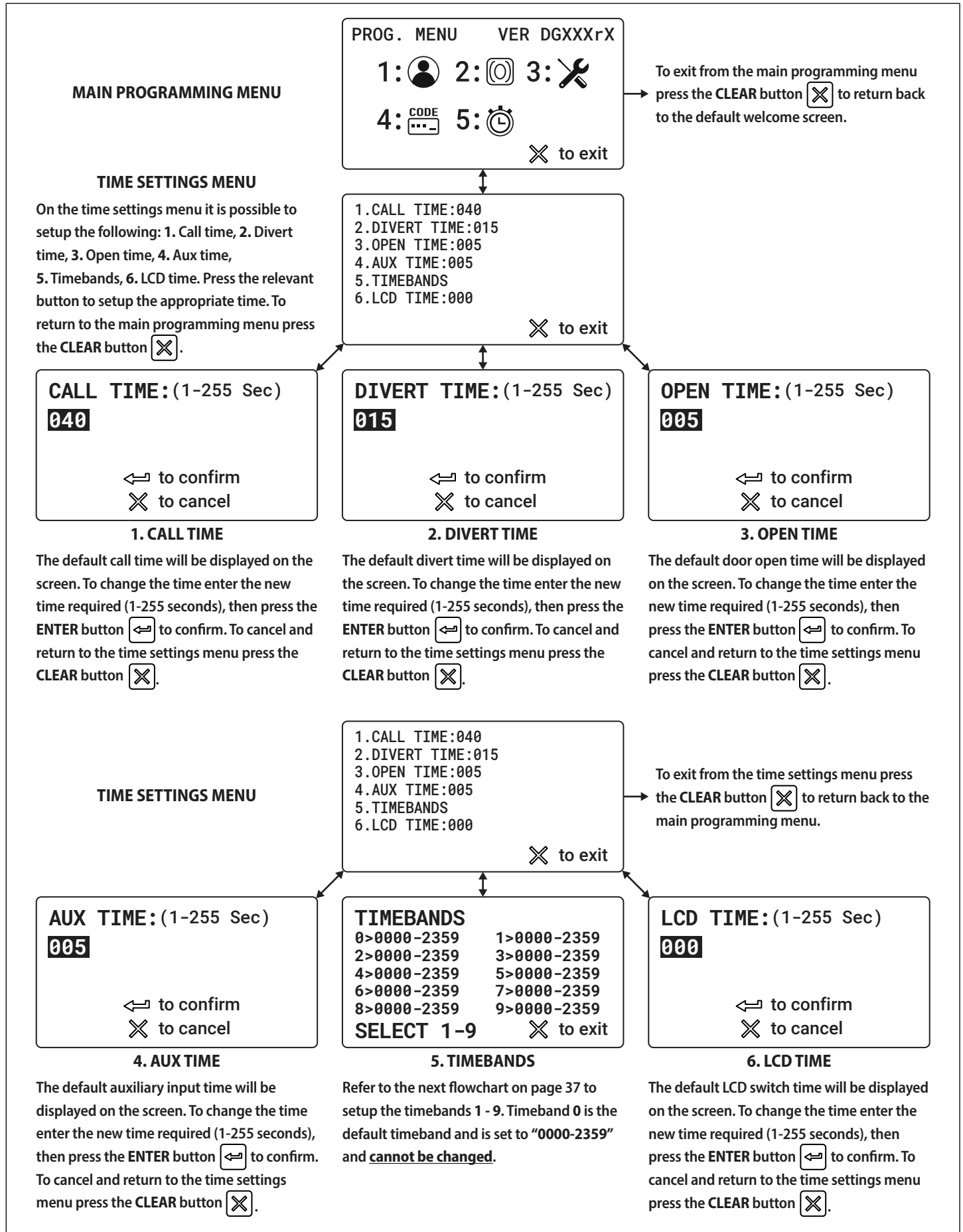
Programming Flowcharts

4. CODE MENU



Programming Flowcharts

5. TIME SETTINGS MENU



Programming Flowcharts

5. TIME SETTINGS MENU (CONTINUED)

TIME SETTINGS SCREEN

1.CALL TIME:040
2.DIVERT TIME:015
3.OPEN TIME:005
4.AUX TIME:005
5.TIMEBANDS
6.LCD TIME:000

 to exit

If no time settings require adjusting then press the **CLEAR** button  to return to the main programming menu.

TIMEBANDS SCREEN

The current time period will be displayed on the screen. To change the timeband use the alpha-numeric keypad to enter the new timeband* required then press the **ENTER** button  to confirm. To cancel and return to the timebands list press the **CLEAR** button .

TIMEBANDS

0>0000-2359 1>0000-2359
2>0000-2359 3>0000-2359
4>0000-2359 5>0000-2359
6>0000-2359 7>0000-2359
8>0000-2359 9>0000-2359

SELECT 1-9  to exit

TIMEBANDS LIST

From the timebands list it is possible to select a timeband that requires changing or setting up. Press the relevant button from 1 - 9 to change the timeband required. If no timeband requires amending, then to cancel and return to the time settings menu press the **CLEAR** button .

TIMEBANDS

1>09:30-16:35

 to confirm
 to cancel

*When entering a time period on the timebands screen the time **must be entered** using 24 hour clock notation, e.g. a timeband of 9:30am to 4:35pm would be entered as 09:30-16:35.

Programming Screens

MAIN PROGRAMMING MENU AND ADMIN MENU

From the main programming menu (refer to **Fig.71**) it is possible to access the following sub menus:

1. Apartment menu, 2. Proximity menu, 3. General settings menu, 4. Code menu, 5. Time settings menu.

From the admin menu (refer to **Fig.72**) it is possible to only access the following two sub menus:

1. Apartment menu, 2. Proximity menu

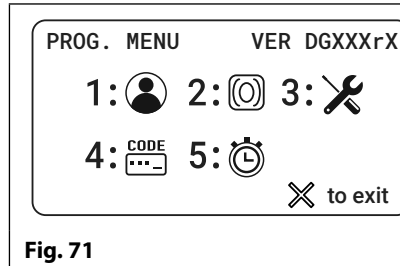


Fig. 71

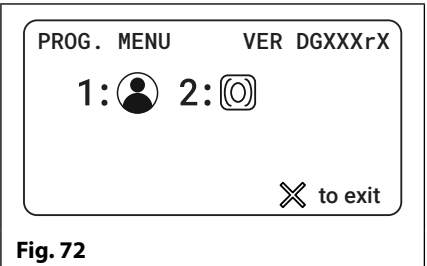


Fig. 72

Please note that the current firmware version of the digital GSM is shown in the top right corner of both the main programming and admin menus.

1.1 APARTMENT MENU (ADD/MODIFY APT)

From the apartment menu (**Fig.73**) it is possible to edit the following details:

1. Add or modify apartment details.
2. Delete apartment details.

Selecting option 1 (add/modify apartment details) from the apartment menu will first access the memory location screen and then from there the apartment information screen (refer to **Fig.74**).

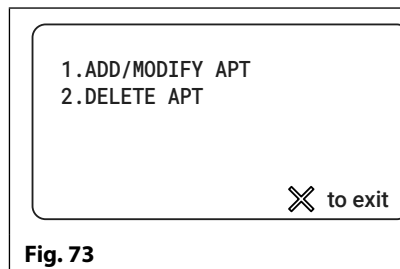


Fig. 73

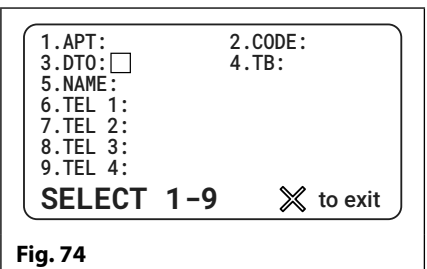


Fig. 74

The apartment information screen has 9 available options that allows the following information to be entered, enabled and/or assigned:

- | | | |
|--------------------------------------|-------------------------------------|---------------------------------|
| 1. Apartment number (APT). | 4. Timeband assignment (TB). | 7. First divert number (TEL2). |
| 2. Door/gate access code (CODE). | 5. Username (NAME). | 8. Second divert number (TEL3). |
| 3. Dial to open number enable (DTO). | 6. Primary telephone number (TEL1). | 9. Third divert number (TEL4). |

1.1.1 APARTMENT NUMBER (APT)

The apartment number can be entered on the apartment screen (refer to **Fig.75**) and can be made up of a maximum of 6 digits or letters (A - F only) or a combination of both e.g. apartment 100A, 100B etc.

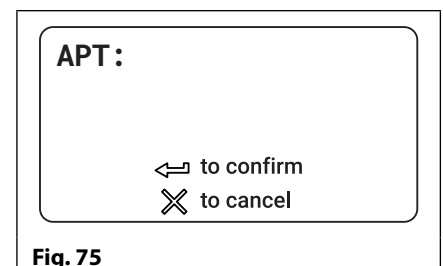


Fig. 75

1.1.2 DOOR/GATE ACCESS CODE

The door/gate access code can be entered on the code screen (refer to **Fig.76**) and can be made up of a maximum of 6 digits (no letters).

IMPORTANT NOTE: Remember if programming an access code into memory location '000' it will only operate the auxiliary output AO for the programmed AO time (A1T) and not the onboard relay. Please also note that activating the auxiliary output in this way is only possible when the auxiliary output mode A1M has been set to mode 001.

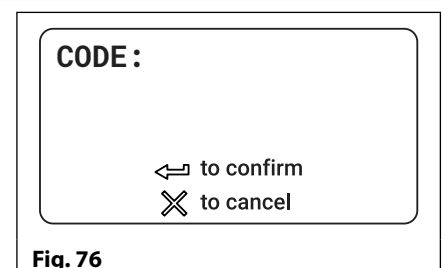


Fig. 76

1.1.3 DIAL TO OPEN NUMBER (DTO)

The dial to open (DTO) number can be enabled on the DTO screen. Press 1 on the keypad to enable (set) the dial to open number (refer to **Fig.77**) or press 0 on the keypad to disable (unset) the dial to open number (refer to **Fig.78**).

When set the primary and 3 divert numbers are automatically set as dial to open numbers.

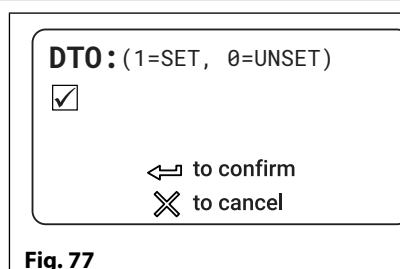


Fig. 77

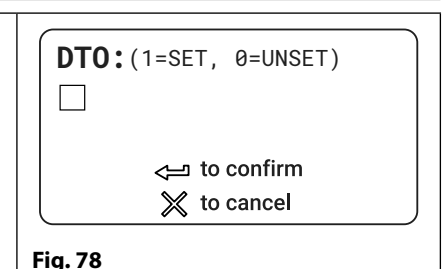


Fig. 78

Programming Screens

1.1.4 TIMEBAND (TB)

A timeband can be assigned to an apartment or apartments for when they can be called and for when apartment dial to open (DTO) numbers can be active for, on the timeband assignment screen (refer to **Fig.79**). The default timeband setting is **0 (0000 - 2359)**, calls to the apartments are enabled all the time. Timeband **0** cannot be changed, timebands **1 - 9** are programmable and can be set on the timeband set up screen, refer to **Fig.111** and **Fig.112** further on in this section.

TB:

↵ to confirm
X to cancel

Fig. 79

1.1.4 USERNAME (NAME)

A username can be entered for an apartment on the username screen (refer to **Fig.80**). A maximum of 16 characters can be entered via the alpha-numeric keypad following the keypad programming table on page 27.

NAME:

↵ to confirm
X to cancel

Fig. 80

1.1.5 TELEPHONE NUMBERS (PRIMARY NUMBER AND 3 DIVERT NUMBERS)

Options 6 (TEL1), 7 (TEL2), 8 (TEL3) and 9 (TEL4) on the apartment information screen is where the primary telephone number and the 3 divert numbers can be programmed respectively (refer to **Fig.81, Fig.82, Fig.83** and **Fig.84**).

When programmed each number can be a maximum of 30 digits. If a landline number is being programmed then the full regional dialing code must be included as part of the telephone number.

TEL 1:

↵ to confirm
X to cancel

Fig. 81

TEL 2:

↵ to confirm
X to cancel

Fig. 82

TEL 3:

↵ to confirm
X to cancel

Fig. 83

TEL 4:

↵ to confirm
X to cancel

Fig. 84

1.2 APARTMENT MENU (DELETE APT)

Selecting option 2 (**delete apartment details**) from the apartment menu will access the memory location screen (refer to **Fig.85**). Enter the memory location of the apartment to delete and press the **ENTER** button. The deleted screen will appear (refer to **Fig.86**) to confirm the apartment details have been deleted and then return back to the apartment menu.

MEMORY LOCATION

↵ to confirm
X to cancel

Fig. 85

DELETED

Fig. 86

IMPORTANT NOTE: When deleting a memory location all the user's information is deleted from the digital GSM intercom (telephone numbers, username, apartment number etc.).

2.1 PROXIMITY MENU (ADD/MODIFY FOB)

From the proximity menu, **Fig.87**, it is possible to edit the following details:

1. Add or modify fob details.

2. Delete fob details.

Selecting option 1 (**add or modify fob details**) from the proximity menu will first access the memory location screen (refer back to **Fig.85**), i.e. the memory location of where the fob/ card will be stored (0000 - 1999) and then from there the default present fob screen.

1.ADD/MODIFY FOB
2.DELETE FOB

X to exit

Fig. 87

Programming Screens

The default present fob screen the panel shows will depend on which prox byte setting the panel has been set to. When set to 2 bytes refer to **Fig.88** and when set to either 3 or 4 bytes refer to **Fig.89**. The prox byte setting can be selected on the general settings screen, option 6, refer to **Fig.95** further on. When the present fob screen appears place the proximity fob towards the display, in front of the fob symbol, as shown in **Fig.90**.

The display will show the fob number just below the fob symbol once it has read the fob, see **Fig.91**. The top line is the site code (sc) and user code (uc), the bottom line is the fob/card ID (cid).

To confirm and save the fob or card details press the **ENTER** button and the screen will revert back to the proximity menu (see **Fig.87**).

IMPORTANT NOTE: Remember when programming a proximity fob/card into memory location '0000' it will only operate the auxiliary output AO for the programmed AO time (A1T) and not the onboard relay. Please also note that activating the auxiliary output in this way is only possible when the auxiliary output mode A1M has been set to mode 001.

2.2 PROXIMITY MENU (DELETE/FOB)

Selecting option 2 (delete fob details) from the proximity menu will access the memory location screen (refer to **Fig.85**). Enter the memory location of the fob to delete and press the **ENTER** button. The deleted screen will appear (refer to **Fig.86**) to confirm the apartment details have been deleted and then revert back to the proximity menu.

3 GENERAL SETTINGS MENU ✕

From the general settings menu (refer to **Fig.92**) it is possible to adjust or set the following panel settings:

- | | | |
|-----------------------|------------------------|----------------------|
| 1. Auxiliary mode. | 4. Speechboard volume. | 7. Proximity enable. |
| 2. Speaker volume | 5. Speechboard mode. | 8. Gate/door mode. |
| 3. Microphone volume. | 6. Proximity bytes. | 9. Display language. |

After each menu option the current mode or setting for the panel is shown (on initial install the default modes and settings will be displayed as shown in **Fig.92**). Press the relevant button on the panel to select the menu option that requires adjustment.

3.1 AUXILIARY MODE (AUX MODE)

Selecting option 1 (auxiliary mode) from the general settings menu will access the auxiliary mode screen, see **Fig.93**. From this screen the mode of the auxiliary output AO can be set. The current setting will be highlighted on the second line of the screen, see **Fig.93**. By default this is set to **mode 1**. To set the AO mode select one of the following:

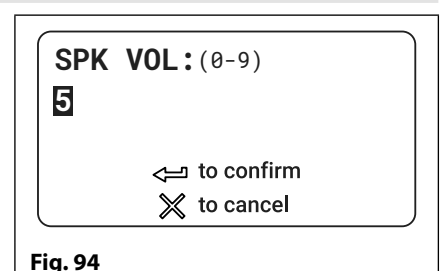
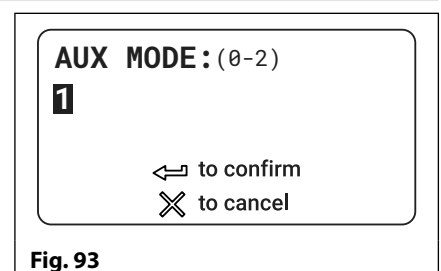
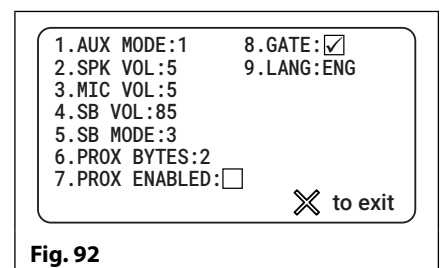
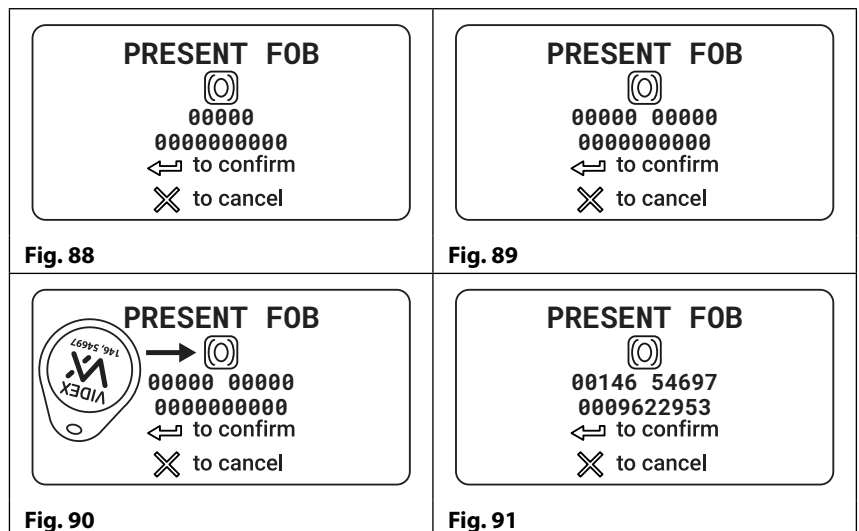
0. On during a call - the AI output will activate when a call begins and deactivate when the call ends.
1. On when triggered (default mode) - the auxiliary output AO will only activate when button 6 on the telephone is pressed during a call and/or when a fob/card is presented to the onboard reader, but only if the fob/card is stored in memory location '0000'.
2. Call activated (timed) - the auxiliary output AO will activate when a call begins and deactivate when the auxiliary output time ends.

To confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, refer to **Fig.92**.

3.2 SPEAKER VOLUME (SPK VOL)

Selecting option 2 (speaker volume) from the general settings menu will access the speaker volume control screen, refer to **Fig.94**. On this screen the speaker volume of the GSM panel can be adjusted.

The current setting will be highlighted on the second line of the screen, see **Fig.94**. The default speaker volume level is set to 5 and can be adjusted between 0 (low) up to 9 (high). Enter the volume level required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, **Fig.92**.

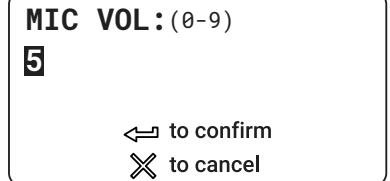


Programming Screens

3.3 MICROPHONE VOLUME (MIC VOL)

Selecting option 3 (**microphone volume**) from the general settings menu will access the microphone volume control screen, refer to **Fig.95**. On this screen the microphone volume of the GSM panel can be adjusted.

The current setting will be highlighted on the second line of the screen, see **Fig.95**. The default microphone volume level is set to 5 and can be adjusted between 0 (low) up to 9 (high). Enter the volume level required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu (**Fig.92**).



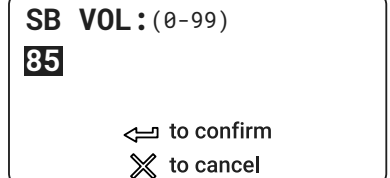
MIC VOL : (0-9)
5
← to confirm
X to cancel

Fig. 95

3.4 SPEECHBOARD VOLUME (SB VOL)

Selecting option 4 (**speechboard volume**) from the general settings menu will access the speechboard volume control screen, refer to **Fig.96**. On this screen the speechboard volume of the GSM panel can be adjusted.

The current setting will be highlighted on the second line of the screen, see **Fig.96**. The default speechboard volume level is set to 85 and can be adjusted between 0 (low) up to 99 (high). Enter the volume level required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu (**Fig.92**).



SB VOL : (0-99)
85
← to confirm
X to cancel

Fig. 96

3.5 SPEECHBOARD MODE (SB MODE)

Selecting option 5 (**speechboard mode**) from the general settings menu will access the speechboard mode screen, refer to **Fig.97**. From this screen the speechboard mode can be set. The current setting will be highlighted on the second line of the screen, see **Fig.97**. Three modes are available: **MODE 1, 2 or 3** (see mode options below). By default the mode is set to **MODE 3**.

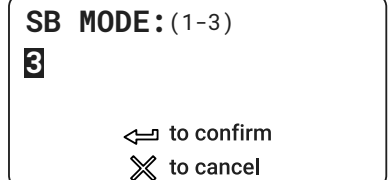
To set the speechboard mode select one of the following:

MODE 1 = Speechboard disabled - the speechboard will be switched **OFF** (no speech announcement will be heard through the panel's speaker).

MODE 2 = Individual speech playback - the speechboard will be switched **ON**. When an apartment is called the panel's speechboard will playback the individual numbers that make up an apartment number e.g. if calling apartment 25 the speech will playback "calling two five".

MODE 3 = Combined speech playback (default mode) - the speechboard will be switched **ON**. When an apartment is called the panel's speechboard will playback the combined numbers that make up an apartment number e.g. if calling apartment 36 the speech will playback "calling thirty six".

To confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, refer to **Fig.92**.



SB MODE : (1-3)
3
← to confirm
X to cancel

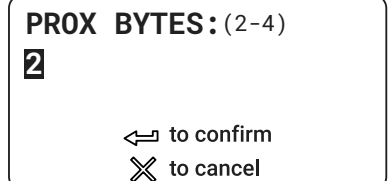
Fig. 97

3.6 PROX BYTE SETTING (PROX BYTES)

Selecting option 6 (**proximity bytes**) from the general settings menu will access the proximity byte setting screen, refer to **Fig.98**. From this screen the number of proximity bytes that the onboard reader checks can be set.

The current setting will be highlighted on the second line of the screen, see **Fig.98**. There are three byte settings that the panel's reader can be set to check for: **2, 3 or 4** bytes (see byte settings below).

The default setting is set to check for 2 bytes. To set the number of bytes select one of the following:



PROX BYTES : (2-4)
2
← to confirm
X to cancel

Fig. 98

- 2 Bytes (default setting)** - set the panel to check for 2 bytes if the proximity fob/card has no site code and only a 5 digit user code (955/T fobs or 955/C cards).
- 3 Bytes** - set the panel to check for 3 bytes if the proximity fob/card has a 3 digit site code and a 5 digit user code (PBX1E fobs or PBX2 cards).
- 4 Bytes** - set the panel to check for 4 bytes for proximity fobs/cards that have a longer site code and a 5 digit user code.

To confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, refer to **Fig.92**.

Programming Screens

3.7 PROXIMITY READER ENABLE/DISABLE (PROX ENABLE)

Selecting option 7 (**proximity enable**) from the general settings menu will access the proximity reader enable screen, refer to **Fig.99**. On this screen the proximity reader on the GSM panel can be switched **ON** and **OFF**. The current setting will be indicated on the second line of the screen with or without a tick in the check box, see **Fig.99**. By default the onboard reader will be switched **OFF**. Enter a **0** (reader switched **OFF**) to disable the reader or a **1** (reader switched **ON**) to enable the reader.

To confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, refer to **Fig.92**.

PROX ENABLE : (0-1)



↵ to confirm

✕ to cancel

Fig. 99

3.8 GATE MODE (GATE)

Selecting option 8 (**gate/door mode**) from the general settings menu will access the gate mode screen, refer to **Fig.100**. On this screen the gate mode of the panel can be set.

The current setting will be indicated on the second line of the screen with or without a tick in the check box, see **Fig.100**.

By default the gate mode is set with the check box ticked. To set the gate mode enter one of the following:

GATE : (0-1)



↵ to confirm

✕ to cancel

Fig. 100

0 - ☐ When set in this mode and the panel's onboard relay is activated the display will show that the door is open (refer to **Fig.125** further on). The speech annunciation (if the speechboard is switched **ON**) will announce "**the door is open**".

1 - ☒ When set in this mode and the panel's onboard relay is activated the display will show that the gate is open (refer to **Fig.126** further on). The speech annunciation (if the speechboard is switched **ON**) will announce "**the gate is open**".

To confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, refer to **Fig.92**.

3.9 LANGUAGE (LANG)

Selecting option 9 (**display language**) from the general settings menu will access the language selection screen, refer to **Fig.101**. On this screen the desired language can be selected.

The current language setting will be highlighted on the second line of the screen, see **Fig.101**. By default English is already set.

It should be noted that only the panels on screen display messages (e.g. calling apartment 'nnn', enter number, door open etc.) will be shown in the chosen language. The digital GSM's on screen programming menus will still be displayed in English.

To set the language use button **1**  to scroll forwards and button **0**  to scroll back to make the required selection, then press the **ENTER** button  to confirm and the screen will revert back to the general settings menu (refer to **Fig.92**).

The list of supported languages (in scrolling order) : **ENG** (English); **ITA** (Italian); **SPA** (Spanish); **POR** (Portuguese); **FRA** (French); **GER** (German); **CZE** (Czech); **CRO** (Croatian); **DAT** (Dutch); **POL** (Polish); **SLO** (Slovenian); **DAN** (Danish); **NOR** (Norwegian) and **HEB** (Hebrew).

LANGUAGE : (0-1)

ENG

↵ to confirm

✕ to cancel

Fig. 101

4 CODE MENU

From the code menu, refer to **Fig.102**, it is possible to edit the following access codes:

1. Master code (by default is set to "1111").
2. Admin code (by default is set to "0000").
3. Trade code (by default is set to "2222").

Press the relevant button **1**, **2** or **3** to change the required access code.

1.MASTER CODE
2.ADMIN CODE
3.TRADE CODE

✕ to exit

Fig. 102

4.1 MASTER CODE

Selecting option 1 (**master code**) from the code menu will access the master code screen, refer to **Fig.103**. On this screen the master code of the GSM panel can be changed. The current setting will be highlighted on the second line of the screen, see **Fig.103**.

By default the master code is set to "1111" and can be changed to any 4 digit number, but must be kept as a 4 digit number.

Enter the new code required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, **Fig.92**.

MASTER CODE(4 DIGITS)

1111

↵ to confirm

✕ to cancel

Fig. 103

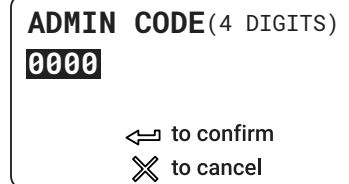
Programming Screens

4.2 ADMIN CODE

Selecting option 2 (**admin code**) from the code menu will access the admin code screen, see **Fig.104**. On this screen the admin code of the GSM panel can be changed. The current setting will be highlighted on the second line of the screen, see **Fig.104**.

By default the admin code is set to "0000" and can be changed to any 4 digit number, but must be kept as a 4 digit number.

Enter the new code required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, refer to **Fig.92**.



ADMIN CODE (4 DIGITS)
0000
↵ to confirm
✕ to cancel

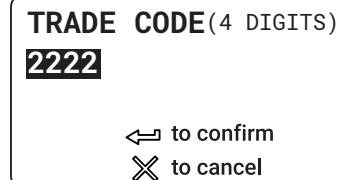
Fig. 104

4.3 TRADE CODE

Selecting option 3 (**trade code**) from the code menu will access the trade code screen, see **Fig.105**. On this screen the trade code of the GSM panel can be changed. The current setting will be highlighted on the second line of the screen, see **Fig.105**.

By default the trade code is set to "2222" and can be changed to any 4 digit number, but must be kept as a 4 digit number.

Enter the new code required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the general settings menu, refer to **Fig.92**.



TRADE CODE (4 DIGITS)
2222
↵ to confirm
✕ to cancel

Fig. 105

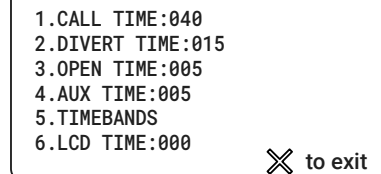
IMPORTANT NOTE: The trade code can operate in two ways i) when the TRD input is shorted to 0V (GND) via a timeclock, for example 0V (GND) is wired through the CO/NO relay terminals on an Art.701T timeclock and into the TRD connection on the digital GSM (as shown in **Fig.12** on page 13), ii) setting up the access control timebands for access level 9 so that the trade code can be used without having to connect the relay of a timeclock into the TRD input (for trade code setup for this method refer to the access control timebands and access levels features of the digital GSM further on in this manual).

5 TIME SETTINGS MENU ⌚

From the time settings menu, refer to **Fig.106**, it is possible to adjust the following panel settings:

- | | |
|-----------------|--------------------|
| 1. Call time. | 4. Auxiliary time. |
| 2. Divert time. | 5. Timebands. |
| 3. Open time. | 6. LCD time. |

After each menu option the current mode or setting for the panel is shown (on initial install the default modes and settings will be displayed as shown in **Fig.106**. Press the relevant button on the panel to select the menu option that requires adjustment.



1.CALL TIME:040
2.DIVERT TIME:015
3.OPEN TIME:005
4.AUX TIME:005
5.TIMEBANDS
6.LCD TIME:000
✕ to exit

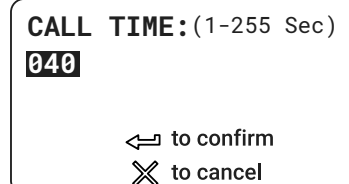
Fig. 106

5.1 CALL TIME

Selecting option 1 (**call time**) from the time settings menu will access the call time screen, see **Fig.107**. On this screen the call time of the GSM panel can be adjusted. The current setting will be highlighted on the second line of the screen, see **Fig.107**.

The default call time is set to 40 seconds and can be adjusted from 1 second up to 255 seconds.

Enter the call time required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the time settings menu, refer to **Fig.106**.



CALL TIME: (1-255 Sec)
040
↵ to confirm
✕ to cancel

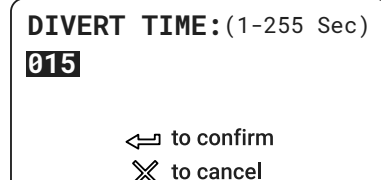
Fig. 107

5.2 DIVERT TIME

Selecting option 2 (**divert time**) from the time settings menu will access the divert time screen, see **Fig.108**. On this screen the divert time of the GSM panel can be adjusted. The current setting will be highlighted on the second line of the screen, refer to **Fig.108**.

The default divert time is set to 15 seconds and can be adjusted from 1 second up to 255 seconds.

Enter the divert time required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the time settings menu, refer to **Fig.106**.



DIVERT TIME: (1-255 Sec)
015
↵ to confirm
✕ to cancel

Fig. 108

Programming Screens

5.3 OPEN TIME

Selecting option 3 (**open time**) from the time settings menu will access the open time screen, see **Fig.109**. On this screen the door/gate open time of the GSM panel can be adjusted. The current setting will be highlighted on the second line of the screen, see **Fig.109**.

By default the open time is set to 5 seconds and can be adjusted from 1 second up to 255 seconds. For latching mode set the relay time to 000 seconds.

Enter the door/gate open time required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the time settings menu, refer to **Fig.106**.

OPEN TIME: (1-255 Sec)
005
 ⇐ to confirm
 ✕ to cancel

Fig. 109

5.4 AUX TIME

Selecting option 4 (**auxiliary time**) from the time settings menu will access the aux time screen, refer to **Fig.110**. On this screen the time that the auxiliary output stays active for can be adjusted. The current setting will be highlighted on the second line of the screen, see **Fig.110**.

The default auxiliary time is set to 5 seconds and can be adjusted from 1 second up to 255 seconds. For latching mode set the relay time to 000 seconds.

Enter the aux time required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the time settings menu (refer to **Fig.106**).

AUX TIME: (1-255 Sec)
005
 ⇐ to confirm
 ✕ to cancel

Fig. 110

5.5 TIMEBANDS

Selecting option 5 (**timebands**) from the time settings menu will access the 1st timeband screen, **Fig.111**. On this screen the timebands can be selected and then programmed on the next timeband screen. The GSM intercom has 9 programmable timebands (1 - 9). Timeband 0 is the default timeband and is permanently set from 0000 - 2359 and cannot be adjusted.

To enter a time period for one of the programmable timebands press the relevant button to make the selection. The display will access the 2nd timeband screen and the current time period will be highlighted on the second line of the display, refer to **Fig.112**.

Enter the time period required (using 24 hour clock notation, e.g. 4:35pm would be entered as 16:35). To confirm and save the setting press the **ENTER** button and the screen will revert back to the timebands list, refer to **Fig.111**.

It should be noted that the timebands set up on these screens can be assigned to a specific apartment or apartments, refer to **Fig.79** and notes earlier on in this section.

The time settings entered within a timeband is the period of time that an apartment is available for a call. For any period of time outside of the programmed timeband and any call from the GSM intercom to the apartment is disabled, e.g. if timeband 1 is set between 10:00 to 14:35 and has been assigned to apartment 1, a call from the GSM intercom to apartment 1 during this time period will call through ok. Any attempt to call apartment 1 outside of these times then the GSM intercom will not call the apartment. During such an event the GSM intercom's speechboard (if switched **ON**) will announce "the phone is switched off, please try later". The display will indicate this as shown in **Fig.113**.

IMPORTANT NOTE: This timebands feature does not affect the use of an apartment's access code, it will only affect when an apartment can be called and when an apartment dial to open (DTO) number can be active for.

TIMEBANDS
 0>0000-2359 1>0000-2359
 2>0000-2359 3>0000-2359
 4>0000-2359 5>0000-2359
 6>0000-2359 7>0000-2359
 8>0000-2359 9>0000-2359
 SELECT 1-9 ✕ to exit

Fig. 111

TIMEBANDS
1>00:00-23:59
 ⇐ to confirm
 ✕ to cancel

Fig. 112

PHONE OFF

Fig. 113

5.6 LCD TIME

Selecting option 6 (**LCD time**) from the time settings menu will access the LCD time screen, see **Fig.114**. On this screen the switching time of the GSM's LCD display can be adjusted.

The LCD time of the GSM is the time delay of when the GSM display switches between the default welcome screen (see **Fig.40** for Art.4812 and **Fig.41** for Art.4812R earlier on in this manual) and a custom welcome screen or logo which has been uploaded to the panel using the **GSMSK PC software**.

The current setting will be highlighted on the second line of the screen, see **Fig.114**.

The default LCD time is set to 000 (0 seconds = LCD switch time disabled) and can be adjusted from 0 seconds up to 255 seconds. Enter the LCD switch time required then to confirm and save the setting press the **ENTER** button and the screen will revert back to the time settings menu, refer back to **Fig.106**.

LCD TIME: (1-255 Sec)
000
 ⇐ to confirm
 ✕ to cancel

Fig. 114

Programming via Text Message

PROGRAMMING THE DIGITAL GSM INTERCOM

Apart from programming the 4G digital GSM via the onboard keypad it can also be carried out by one of the following methods: i) sending text (SMS) messages, ii) by using the **GSM SK** PC software (ver **4.1.0.44** or later), also refer to the latest programming manual **GSM SK_66251720-EN_V2-3** (or later), iii) by using the GSM mobile apps: **Videx SMS Wizard** (for administrators) and the **Videx SMS Wizard PRO** (for installers and engineers), or iv) by using the **GSM cloud** management platform (via **cloud.videxservices.uk**).

IMPORTANT NOTE: When you are required to use " in a text message it is important to use the correct symbol and not for example ' (or two ' single apostrophes side by side which may look the same but will be interpreted differently by the digital GSM).

PROGRAMMING BY TEXT MESSAGE

Programming by text message is a simple way to customise the settings of the digital GSM panel and to add or delete apartment programming remotely. This can include changing apartments telephone numbers, access codes, names or other settings. If a large number of telephone numbers need to be programmed it may be easier with the **GSM SK** PC software or via the **GSM cloud** management platform (if a **GSM cloud** account has been registered). Simply send texts in the following format shown below to the telephone number of the SIM within the digital GSM panel:

<4 DIGIT MASTER CODE> <3 DIGIT FUNCTION CODE> <OPTIONAL DATA> <OPTIONAL ?>

4 DIGIT MASTER CODE

This code prevents unauthorised access to the programmable features of the system. The code must be four digits long but can be any combination using digits 0 – 9. The default master code is 1111 and will be used for all examples in this manual.

3 DIGIT FUNCTION CODE

The 3 digit function code identifies the programmable feature to be changed. The code must be in capital letters. The following table lists the available codes.

DESCRIPTION	CODE	EXAMPLE	SETTINGS	DEFAULT	PAGE
Programming and storing user information in a new memory location	MEM	1111MEMnnn"pn","d1","d2","d3","apt no.,"code","DTO,TB,"name"	See notes and example on pages further on	n/a	47 - 48
Store or change an apartment door/gate access code	STC	1111STCn:"code"	n = <apt no.> code = door code	n/a	48
Enable/disable an apartment dial to open (DTO) setting	STO	1111STOn:O	n = <apt no.> O = 0 or 1	O = 0 (DTO disabled)	49
Store a temporary dial to open no. (DTO), store up to 32 temp no's max.	TDR	1111TDR"tele" T? (note: if T is omitted default time T = 8 hours)	tele = tel no. to store T = 1 - 255 hrs	n/a	49
Store additional dial to open (DTO) numbers (up to 200 max.), including storing up to 5 DTO's in a single text message to the next free location and assigning an access level (An)	STR	1111STRnnn"tele"? <u>or</u> 1111STRnnn"n1"An,"n2"An,"n3"An,"n4"An,"n5"An? <u>or</u> 1111STR"n1"An,"n2"An,"n3"An,"n4"An,"n5"An?	nnn = 000 - 199, tele = DTO tel no. n1 = 1st DTO n2 = 2nd DTO n3 = 3rd DTO n4 = 4th DTO n5 = 5th DTO An = A0 - A9. nnn - optional, if omitted will find next free location.	n/a	49
Find if a telephone number is stored	FDT	1111FDT"tele"?	tele = telephone no. 30 digits max.	n/a	50
Assign a timeband TB to an apartment	STB	1111STBn:B?	n = <apt no.> B = timeband 1 - 9	B = timeband 0	50
Store or change an apartment name	STT	1111STTn:"apt name"?	n = <apt no.> apt name = name, Use a > to represent a space	n/a	50 - 51
Store a primary telephone no.	STN	1111STNn:"pn"?	n = <apt no.> pn = primary no.	n/a	51
Store divert 1 telephone no.	STD	1111STDn:"d1"?	d1 = divert 1 no.	n/a	51
Store divert 2 telephone no.	STE	1111STEn:"d2"?	d2 = divert 2 no.	n/a	51
Store divert 3 telephone no.	STF	1111STFn:"d3"?	d3 = divert 3 no. (all telephone no's. 30 digits max.)	n/a	51

Programming via Text Message

Store a primary telephone no. and divert no's in a single text message	STN	1111STN:"pn","d1","d2","d3"? 1111STN:"01912243174", "01912241559","01912243678", "01912245326"	n = <apt no.> pn = primary no. d1 = divert 1 no. d2 = divert 2 no. d3 = divert 3 no.	n/a	51 - 52
Delete a telephone no. stored in additional 200 DTO numbers or temporary DTO numbers only	DET	1111DET"tele"?	tele = telephone no.	n/a	52
Set call time	SPT	1111SPTnnn?	nnn = 001 - 255	040 (40s)	52
Set relay time	RLT	1111RLTnnn?	nnn = 001 - 255	005 (5s)	52
Set auxiliary output AO time	A1T	1111A1Tnnn?	nnn = 001 - 255	005 (5s)	52 - 53
Set auxiliary output AO mode	A1M	1111A1Mnnn?	nnn = 000 - 002	001	53
Keep connection facility	NOD	1111NODnnn?	nnn = 001 - 099	000 (disabled)	53
Divert time	DIT	1111DITnnn?	nnn = 001 - 099	015 (15s)	53
Check GSM signal strength	SIG	1111SIG?	n/a	n/a	53
Confirm the network service provider's name	SPN	1111SPN?	n/a	n/a	54
Check firmware version	VER	1111VER?	n/a	n/a	54
Forced dial/dial a number	DLE	1111DLE"123"	n/a	n/a	54
Change 4 digit master code	CDE	1111CDEnnnn?	nnnn = any 4 digits	1111	54
Change 4 digit admin code	CDA	1111CDAnnnn?	nnnn = any 4 digits	0000	54
Change 4 digit trade code	CDT	1111CDTnnnn?	nnnn = any 4 digits	2222	54
Trigger the relay	RLY	1111RLY?	n/a	n/a	55
Trigger auxiliary output AO	A1O	1111A1O?	n/a	n/a	55
Store balance check dial string	SDL	1111SDL"*#1345#"	n/a	n/a	55
Check credit balance	BAL	1111BAL?	n/a	n/a	55
Store a master telephone no.	STM	1111STM"master no"?	n/a	n/a	55
Forward SMS messages to the master telephone number	FSM	1111FSMnnn?	nnn = 000 or 001	000 (disabled)	56
Latch the relay	RLA	1111RLA?	n/a	n/a	56
Unlatch the relay	RUL	1111RUL?	n/a	n/a	56
Disable latch facility (during call)	DLA	1111DLA?	nnn = 000 or 001	000 (disabled)	56
Check state of relay output	RLS	1111RLS?	n/a	n/a	56
Latch auxiliary output AO	A1L	1111A1L?	n/a	n/a	56
Unlatch the auxiliary output AO	A1U	1111A1U?	n/a	n/a	56
Check state of aux. output AO	A1S	1111A1S?	n/a	n/a	56
Store & query a timeband (for apartment calls and DTO no's.)	TBA	1111TBAn"HHMMHHMM",days?	n = timeband 0 - 9, HHMMHHMM = hours & mins for start & end time. days = Mo, Tu, We, Th, Fr, Sa, Su, AD, WD, WE and Ho.	timeband 0 - 9 = 00002359 (default)	57
Store & query timeband(s) for access control: proximity access fobs/cards and additional 200 dial to open (DTO) numbers only	ATB	1111ATBn"HHMMHHMM",days?	n = timeband 0 - 9, HHMMHHMM = hours & mins for start & end time. days = Mo, Tu, We, Th, Fr, Sa, Su, AD, WD, WE and Ho.	timeband 0 - 9 = 00002359 (default)	58
Store & query access levels for access control: proximity access fobs/cards and additional 200 dial to open (DTO) numbers only	ACC	1111ACCn"ttttttttt","rrrrrrr"?	n = 0 - 9, each t = 1 or 0, each r = 1 or 0	n/a	58 - 59

Programming via Text Message

Check/set date & time	CLK	1111CLK"yy/mm/dd,hh:mm"?	yy/mm/dd,hh:mm	n/a	60
Silent dialling mode	AUE	1111AUEnnn?	nnn = 000 or 001	001	60
Enable dial 0 on answer function	EDZ	1111EDZnnn?	nnn = 000 or 001	000	60
Enable the # (hash) function	ED#	1111ED#nnn?	nnn = 000 or 001	000	60
Enable proximity reader	EPR	1111EPRnnn?	nnn = 000 or 001	000	61
Proximity number of bytes to check	PBY	1111PBYnnn?	nnn = 002, 003 or 004	002	61
Store a fob/card in a known location <u>or</u> the next available location (using site code, user code <u>or</u> fob/card ID) also option to assign an access level (An)	FOB	1111FOBnnnn"sc","uc" <u>or</u> 1111FOBnnnn"0","uc" <u>or</u> 1111FOBnnnn"cid" <u>or</u> 1111FOBnnnn"sc","uc"An <u>or</u> 1111FOBnnnn"0","uc"An <u>or</u> 1111FOBnnnn"cid"An	nnnn = 0000-1999, sc = site code, uc = user code, cid = fob/card ID. nnnn - optional, if omitted will find next free location. An = A0 - A9.	An default = all access unless specified.	61 - 62
Find a fob or card using the user code <u>or</u> fob/card ID	FDF	1111FDF"uc"? <u>or</u> 1111FDF"cid"?	sc = site code, cid = fob/card ID.	n/a	62 - 63
Delete a fob or card without knowing its location using the user code <u>or</u> fob/card ID	DEF	1111DEF"uc"? <u>or</u> 1111DEF"cid"?	sc = site code, cid = fob/card ID.	n/a	63
Free access timebands including output setup with latch or momentary trigger	FRE	1111FREn"HHMMHHMM",days:m:o	n = timeband 0 - 9 HHMMHHMM days = Mo, Tu, We, Th, Fr, Sa, Su, AD, WD, WE and Ho m = L or M o = RL, A1	n/a	63 - 64
Clear all free access timebands	FRD	1111FRD?	n/a	n/a	64
Lock speech volume levels	LSP	1111LSPnnn?	nnn = 000 or 001	000 (disabled)	64
Disable (001), enable individual (002) or enable combined (003) speech board	SBM	1111SBMnnn?	nnn = 001, 002 or 003	003	64
Set speech board volume	SBV	1111SBVnnn?	nnn = 000 - 099	85	64 - 65
End on Last Divert	EOD	1111EODnnn?	nnn = 000 or 001	000	65
Door or Gate	GAT	1111GATnnn?	nnn = 000 or 001	001	65
Shutdown and Restart	RBT	1111RBT	n/a	n/a	65
Obtain the GSM's IMEI number	IME	1111IME?	n/a	n/a	65
Unlatch prevention feature	LLA	1111LLAnnn?	nnn = 000 or 001	000	66
Network connection indication	CON	1111CON?	n/a	n/a	66
Setup the digital GSM for data communication	APN	1111APN"apn","username", "password"?	n/a	n/a	66 - 67
Store a username & password for each GSM for online events	PAS	1111PAS"username","password"?	n/a	n/a	67
Enable online events for the digital GSM module	ENE	1111ENEnnn?	nnn = 000 or 001	000	67
Setup port forwarding for connection to a Server	SER	1111SER"IP",PORT?	n/a	n/a	67
Source of time/date updates	NTZ	1111NTZnnn?	nnn = 000, 001 or 002	001	68
UTC Time Zone for countries ahead of UTC	TZ+	1111TZ+nnn?	nnn = 000 - 048	000	68
UTC Time Zone for countries behind UTC	TZ-	1111TZ-nnn?	nnn = 000 - 048	000	68 - 69
Daylight savings time adjustment	DST	1111DSTnnn?	nnn = 000 or 001	001	69

Programming via Text Message

Send global announcement feature	SGA	1111SGA"text"	text = up to 150 characters max.	n/a	69
Activate remote relay output (relay, aux A1 or aux A2)	RLN	1111RLNnn? or 1111RLNna?	nnn = 00 - 63 (ID) a = 1 (relay), 2 (A1) or 3 (A2)	n/a	69
Store up to 100 dates for holidays (overrides apartment call timebands, free access timebands, access control timebands and access levels for DTO's and prox.)	HOL	1111HOLnnn"dd/mm/yy"?	nnn = 000 - 099 dd/mm/yy = date	n/a	70

OPTIONAL DATA

The optional data will vary depending on the command used. It may be a telephone number, a time setting or may not be used at all. For more information refer to the following command settings.

OPTIONAL ?

Most of the commands support the ? feature. When this is added to the end of the text message, a confirmation text message will be sent back to the sender indicating the new data has been received and stored.

When sending text messages there may be a delay from when you send the message to when it is received by the digital GSM intercom depending on how congested the network is. If you are at the door panel when sending the message you will here a single beep from the digital GSM intercom to indicate it has received the message.

PROGRAMMING AND STORING USER INFORMATION IN A NEW MEMORY LOCATION (MEM)

The memory location in the digital GSM is simply a position within the GSM's internal memory where the user's apartment information is stored. Up to 750 user's can be stored in the digital GSM (memory locations **000 - 749**).

There are 9 parts of user information that is stored in a memory location:

1. Apartment number (**APT/apt no.**);
2. Door/gate access code (**CODE/code/STC**);
3. Dial to open number/setting (**DTO/STO**);
4. Timeband assignment (**TB**);
5. Username (**NAME/apt name/STT**);
6. Primary telephone number (**TEL1/pn/STN**);
7. First divert number (**TEL2/d1/STD**);
8. Second divert number (**TEL3/d2/STE**);
9. Third divert number (**TEL4/d3/STF**).

IMPORTANT NOTE: Remember if programming an access code into memory location '000' it will only operate the auxiliary output AO for the programmed AO time (A1T) and not the onboard relay. Also note that activating the auxiliary output in this way is only possible when the auxiliary output mode A1M has been set to mode 001.

Please also note that for the 1000 user version (000 - 999) TEL3 second divert and TEL4 third divert is not applicable.

IMPORTANT NOTE: It is important to remember that before any specific user information can be changed, e.g. apartment number, telephone numbers etc., these details must first be stored in a memory location in the digital GSM. Without this initial information no changes can be made as there would be no user information stored in the GSM's memory to change or edit.

To store a user's information in a memory location the SMS message must be sent in the following format:

1111MEMnnn"pn","d1","d2","d3","apt no.,"code",DTO,TB,"name"?

where:

- **1111** = 4 digit code.
- **MEM** = 3 digit function/programming code.
- **nnn** = memory location (from 000 - 749).
- **pn** = primary telephone number (30 digits maximum).
- **d1** = first divert number Div1 (30 digits maximum).
- **d2** = second divert number Div2 (30 digits maximum).
- **d3** = third divert number Div3 (30 digits maximum).
- **apt no.** = apartment number (maximum of 6 digits including letters A - F).
- **code** = door/gate access code (maximum of 6 digits).
- **DTO** = dial to open enable (enter 1 to enable, leave blank or enter 0 to disable).
- **TB** = timeband assignment (from 1 - 9, leave blank or enter 0 for default timeband).
- **name** = username (maximum of 16 characters where the > character can be used to insert a space between characters or words).

Where shown, (in the example above) the quotation marks " and commas , must be included as part of the line of programming text with no spaces. The ? at the end of the message is optional if a confirmation text is required. The following text messages that can be sent to the digital GSM to program/store are as follows:

Programming via Text Message

1111MEMnnn"pn","d1","d2","d3","apt no.,"code",DTO,TB,"name"?	Store the primary telephone number pn , first divert d1 , second divert d2 , third divert d3 , apartment number apt no. , door/gate access code , dial to open enable DTO (1 or 0) , timeband assignment TB (0, 1 - 9) and username name in memory location nnn . A text message will be sent to the sender with the stored information for that memory location. Where nnn = memory location 000 - 749 .
1111MEMnnn?	Query the apartment details stored in memory location nnn , where nnn = memory location 000 - 749 .

The following example shows how to program a user's details:

Example 1: To program the following user's information: primary telephone number **01912243174**, first divert **07791123456**, second divert **07897654321**, third divert **07999532641**, apartment no. **123**, door/gate access code **654321**, dial to open enabled (1), timeband **3**, username **Videx Tech** in memory location **150** and receive a confirmation text, the following SMS message can be sent.

1111MEM150"01912243174","07791123456","07897654321","07999532641","123","654321",1,3,"Videx>Tech"?

Note that quotation marks " and commas , are used where appropriate and the > character is used to insert a space between the words Videx and Tech for the username. The optional ? is included at the end so a confirmation text is sent back to the sender.

The digital GSM will store the above information in memory location **150** and send the following confirmation text back to the sender:

MEM 150 APT = 123 CODE = 654321
DTO = 1 TB = 3 NAME = Videx Tech
TEL MEM = 01912243174 TEL 2 MEM = 07791123456
TEL 3 MEM = 07897654321 TEL 4 MEM = 07999532641
VIDEX 4G

Using the same **MEM** programming command it is also possible to change all or only part of the user's details as well as delete part of a user's details that may no longer be required. To leave a particular user detail or setting unchanged simply don't enter anything in that section of the command but remember to add a comma ,. To delete part of the user's details simply use two quotation marks "" next to each other in that section of the **MEM** programming command.

Using the same user details from the previous example the next example shows how to change and delete only part of the user's details in memory location **150**.

Example 2: If the user only needs to delete the door/gate access code, delete the third divert number and no longer requires the dial to open feature enabled and receive a confirmation text, the following SMS message can be sent.

1111MEM150,,,,,"0,,?

Note that two quotation marks "" are used next to each other to delete a particular detail and commas , are used where details remain unchanged. The optional ? is included at the end so a confirmation text is sent back to the sender.

The digital GSM will amend the above information in memory location **150** and send the following confirmation text back to the sender:

MEM 150 APT = 123 CODE =
DTO = 0 TB = 3 NAME = Videx Tech
TEL MEM = 01912243174 TEL 2 MEM = 07791123456
TEL 3 MEM = 07897654321 TEL 4 MEM =
VIDEX 4G

STORE OR CHANGE AN APARTMENT DOOR/GATE ACCESS CODE (STC)

Each apartment can have a unique door/gate access code programmed which can be a maximum of up to 6 digits (also refer to the notes **1.1.2 door/gate access code** in the programming screens section). The following text messages can be used to store/change, delete and query the access code stored for an apartment.

1111STCn:"code"	Store a door/gate access code for apartment n , where code = access code (up to 6 digits max.) and n = apartment number.
1111STCn:"code"?	Store a door/gate access code for apartment n , where code = access code (up to 6 digits max.) and n = apartment number. Also send a confirmation text back to the sender.
1111STCn:""	Delete the door/gate access code for apartment n , where n = apartment number.
1111STCn:""?	Delete the door/gate access code for apartment n , where n = apartment number. Also send a confirmation text back to the sender.
1111STCn:?	Query the door/gate access code stored for apartment n , where n = apartment number. Also send a confirmation text back to the sender.

IMPORTANT NOTE: Remember that the apartment number **n** can be up to 6 digits in length including letters **A - F**.

Programming via Text Message

ENABLE/DISABLE AN APARTMENTS DIAL TO OPEN, DTO, SETTING (STO)

Each apartment can have their programmed telephone numbers set up as dial to open numbers. Once this feature is enabled for an apartment all the numbers stored for that apartment (i.e. primary **pn** and 3 divert numbers **d1**, **d2** and **d3**) will be set as dial to open numbers. If a user calls from any of the stored numbers the digital GSM will see that they are dial to open numbers and drop the call but activate the onboard relay to trigger the door/gate.

IMPORTANT NOTE: It is important to switch OFF voicemail and automatic SMS features on the SIM card in the digital GSM when using this feature (see the 'Forced Dial' DLE section for more details). Also note that it will not be possible to use the "dial in to speak" facility from a number stored to release the door/gate as a DTO number when dialling in (door release takes priority, refer to the priority function table towards the end of this manual).

Please also note it is important that the numbers stored, when dialling in to release the door/gate, must have any "caller ID" or "withheld number" function switched OFF on the telephone/mobile that is making the call to the digital GSM. If this feature is not switched OFF the GSM intercom will not recognise the caller's number and simply end the call with no action taken.

By default this feature is disabled (switched OFF, i.e. set to 0). The following text messages can be used to enable or disable the dial to open feature.

1111STOn:O	Set the dial to open (DTO) feature O for apartment n , where n = apartment no., O = 0 disabled (switched OFF) or O = 1 enabled (switched ON).
1111STOn:O?	Set the dial to open (DTO) feature O for apartment n , where n = apartment no., O = 0 disabled (switched OFF) or O = 1 enabled (switched ON). Also send a confirmation text back to the sender.
1111STOn:?	Query the stored dial to open (DTO) setting for apartment n , where n = apartment no., O = 0 disabled (switched OFF) or O = 1 enabled (switched ON). Also send a confirmation text back to the sender.

STORE A TEMPORARY DIAL TO OPEN NUMBER (TDR)

Using the following programming command 1111TDR"tele"T? it is also possible to store a temporary dial to open (DTO) number in the digital GSM. The time period **T** for the temporary code is in hours and can be from 1 up to 255 hours. The time will only begin counting down from when the temporary dial to open (DTO) number is first used. Once the time period has elapsed the temporary DTO will be deleted from the digital GSM. Up to 32 temporary dial to numbers can be store in the GSM module.

1111TDR"tele"T?	Store a temporary dial to open number tele for the time period T (where tele is the DTO number and T is the time period in hours from 1 - 255hours), also send a confirmation text back to the sender. Note that if T is omitted default time T = 8 hours.
-----------------	--

STORE ADDITIONAL DIAL TO OPEN NUMBERS, UP TO 200, INCLUDING STORING UP TO 5 DTO'S IN ONE TEXT (STR)

Other than the dial to open (DTO) numbers stored for an apartment and temporary DTO numbers it is also possible to program up to an additional 200 dial to open (DTO) numbers in the digital GSM. What's more it is possible to program up to 5 of these DTO numbers in a single text message and assign an access level to each DTO number. Also these DTO numbers can either be stored in a specific memory location or in the next available memory location. The following programming commands can be used to store and query the additional dial to open (DTO) numbers.

1111STRnnn"tele"	Store an additional DTO number tele in memory location nnn , where nnn = memory location 000 - 199 and tele = dial to open number (used for storing just a single DTO number, no access level).
1111STRnnn"tele"?	As above and also send a confirmation text back to the sender.
1111STRnnn"n1"An? 1111STRnnn"n1"An,"n2"An? 1111STRnnn"n1"An,"n2"An,"n3"An? 1111STRnnn"n1"An,"n2"An,"n3"An,"n4"An? 1111STRnnn"n1"An,"n2"An,"n3"An,"n4"An,"n5"An?	Store the dial to open (DTO) number(s) starting from memory location nnn and assign an access level An to each DTO, where nnn = 000 - 199 memory location, n1 = 1st DTO number, n2 = 2nd DTO number, n3 = 3rd DTO number, n4 = 4th DTO number, n5 = 5th DTO number and An = access level A0 - A9. (used for storing up to 5 DTO numbers in a single text message). Including the ? at the end of the text message will also send a confirmation text back to the sender.
1111STR"n1"An? 1111STR"n1"An,"n2"An? 1111STR"n1"An,"n2"An,"n3"An? 1111STR"n1"An,"n2"An,"n3"An,"n4"An? 1111STR"n1"An,"n2"An,"n3"An,"n4"An,"n5"An?	Store the dial to open (DTO) number(s) from the next available memory location and assign an access level An to each DTO, where n1 = 1st DTO number, n2 = 2nd DTO number, n3 = 3rd DTO number, n4 = 4th DTO number, n5 = 5th DTO number and An = access level A0 - A9. (used for storing up to 5 DTO numbers in a single text message). Including the ? at the end of the text message will also send a confirmation text back to the sender.
1111STRnnn?	Query the dial to open number stored in location nnn , where nnn = memory location 000 - 199 and send a confirmation text back to the sender.

Programming via Text Message

FIND IF A TELEPHONE NUMBER IS STORED (FDT)

The find a telephone number feature allows the user to locate where a telephone number is stored in the digital GSM, whether it's an apartment call number (primary number **pn** and the 3 divert numbers **d1**, **d2** and **d3**), one of the additional 200 dial to open numbers or a temporary dial to open number. The following text message can be used to find where a telephone number is stored.

1111FDT"tele"?	Locate where a telephone number tele is stored in the digital GSM, where tele = telephone number searching for (up to a max. of 30 digits), and send a confirmation text back to the sender.
-----------------------	--

After the text message has been sent to the digital GSM it will reply with either **i**) just the memory location - indicating it is one of the apartment call numbers, **ii**) a memory location followed by **(D)** - indicating it is one of the additional 200 dial to open (DTO) numbers, or **iii**) a memory location followed by **(T)** - indicating it is one of the temporary dial to open (DTO) numbers, see the following examples below.

Example 1: To search for the telephone number **01912243174** and receive a confirmation text, the following SMS message can be sent to the digital GSM.

1111FDT"01912243174"?

Note that quotation marks " and the ? are used where appropriate. The following confirmation text will be sent back to the sender.

STORED IN 0235
VIDEX 4G

The reply from the digital GSM shows the telephone number above is stored in memory location **235** and indicates that it is an apartment call number.

Example 2: To search for the telephone number **07771234567** and receive a confirmation text, the following SMS message can be sent to the digital GSM.

1111FDT"07771234567"?

Note that quotation marks " and the ? are used where appropriate. The following confirmation text will be sent back to the sender.

STORED IN (D) 0194
VIDEX 4G

The reply from the digital GSM shows the telephone number above is stored in memory location **194** and with the **(D)** included in the reply indicates that it is one of the additional 200 dial to open (DTO) numbers.

Example 3: To search for the telephone number **07897654321** and receive a confirmation text, the following SMS message can be sent to the digital GSM.

1111FDT"07897654321"?

Note that quotation marks " and the ? are used where appropriate. The following confirmation text will be sent back to the sender.

STORED IN (T) 0024
VIDEX 4G

The reply from the digital GSM shows the telephone number above is stored in memory location **24** and with the **(T)** included in the reply indicates that it is a temporary dial to open (DTO) number.

ASSIGN A TIMEBAND (TB) TO AN APARTMENT (STB)

Each apartment can have a timeband TB assigned to it (also refer to the notes **1.1.4 timeband** in the programming screens section). By default timeband **0** is already assigned to the apartment (timeband **0** is set to **00:00 - 23:59**). There are 9 other programmable timebands (**1 - 9**) available for an apartment to be assigned to and each apartment can only be set to one timeband at any one time. The following text messages can be used to assign (set) a timeband to an apartment.

1111STBn:B	Set the timeband B to an apartment n , where n = apartment number, B = timeband 1 - 9 .
1111STBn:B?	Set the timeband B to an apartment n , where n = apartment number, B = timeband 1 - 9 . Also send a confirmation text back to the sender.
1111STBn:?	Query the timeband set for an apartment, where n = apartment number. Also send a confirmation text back to the sender.

STORE OR CHANGE AN APARTMENT NAME (STT)

An apartment name (usually the user's name) can be programmed into the digital GSM. The following text messages can be used to store, change, delete or query an apartment name (also refer to the notes **1.1.5 username** in the programming screens section). The apartment name can be up to a maximum of 16 characters long.

1111STTn:"apt name"	Store an apartment name (username) apt name for apartment n , where n = apartment number and apt name = apartment name (16 characters max.).
----------------------------	--

Programming via Text Message

1111STN:"apt name"?	Store an apartment name (username) apt name for apartment n , where n = apartment number and apt name = apartment name (16 characters max.). Also send a confirmation text back to the sender.
1111STN:""	Delete the apartment name (username) for apartment n , where n = apartment number.
1111STN:""?	Delete the apartment name (username) for apartment n , where n = apartment number. Also send a confirmation text back to the sender.
1111STN:?	Query the apartment name (username) stored for apartment number n , where n = apartment number. Also send a confirmation text back to the sender.

Please note that the > symbol can be used to insert a space between characters or words, for example.

Example: To program the username **Mr Smith** for apartment **321** and receive a confirmation text, the following text message can be sent to the digital GSM.

1111STT321:"Mr>Smith"?

Note that quotation marks " and a colon : are used where appropriate and the > character is used to insert a space between the words Mr and Smith for the name. The optional ? is included at the end so that a confirmation text is sent back to the sender. The digital GSM will store the above username for apartment **321** and reply with the following confirmation text back to the sender.

APT = 321

NAME = Mr Smith

VIDEX 4G

STORE OR CHANGE THE APARTMENT TELEPHONE NUMBERS (STN, STD, STE AND STF)

Telephone numbers can be stored for the 750 available apartments (000 - 749) and up to 1000 apartments for the 1000 user version (000 - 999). Each apartment can have up to four telephone numbers (if the first is busy or not answered in a certain time it can call a 2nd, 3rd and 4th number). The **STN** code stores the first number (primary telephone number **pn**) when the apartment is called. The **STD (d1)**, **STE (d2)** and **STF (d3)** codes stores the diverted telephone numbers if the first is busy or not answered (the digital GSM will divert to the 2nd number then divert to the 3rd number and finally the 4th number).

The text messages to store, change or check numbers are as follows, replace **STN/pn** with **STD/d1**, **STE/d2** or **STF/d3** respectively when storing or changing divert numbers (i.e. 1111STNn:"pn" → 1111STDn:"d1" and so on).

1111STNn:"pn"	Store the primary telephone number pn for apartment number n .
1111STNn:"pn"?	Store the primary telephone number pn for apartment number n and send a confirmation text message back to the sender to confirm storage of the new primary number.
1111STNn:?	Query the telephone number stored for apartment number n . A text message will be sent back to the sender with the stored number for that apartment.
1111STNn:""	Delete the telephone number stored for apartment number n .
1111STNn:""?	Delete the telephone number stored for apartment number n . A text message will be sent back to the sender confirming the deletion of the telephone number for that apartment.

Please note that **n** is an apartment number which can be made from up to a maximum of 6 digits including letters A - F. The telephone number **pn**, **d1**, **d2** or **d3** can be a maximum of 30 digits. For example:

Example: To store a primary number **pn** of **01912243174** for apartment **123** and include three divert numbers (if the primary number **pn** is not answered or busy) of **d1**, **d2** and **d3** of **01912241558**, **07771234567** and **01912241559** respectively, the following text messages would be sent to the digital GSM:

1111STN123:"01912243174"? (using the text format 1111STNn:"pn"?)

1111STD123:"01912241558"? (using the text format 1111STDn:"d1"?)

1111STE123:"07771234567"? (using the text format 1111STEn:"d2"?)

1111STF123:"01912241559"? (using the text format 1111STFn:"d3"?)

Note that quotation marks " and a colon : are used where appropriate. The optional ? is included at the end so that a confirmation text is sent back to the sender. The digital GSM will store the above numbers for apartment **123** and reply with the corresponding confirmation text back to the sender.

(for the primary number pn)	(for the divert 1 number d1)	(for the divert 2 number d2)	(for the divert 3 number d3)
APT 123	APT 123	APT 123	APT 123
TEL STN = 01912243174	TEL 2 STD = 01912241558	TEL 3 STE = 07771234567	TEL 4 STF = 01912241559
VIDEX 4G	VIDEX 4G	VIDEX 4G	VIDEX 4G

STORE THE PRIMARY AND DIVERT NUMBERS FOR AN APARTMENT IN A SINGLE TEXT MESSAGE (USING STN)

It is also possible to program the primary number **pn** and three divert numbers **d1**, **d2** and **d3**, for a particular apartment, in a single text message instead of using the individual programming codes **STD** (1st divert **d1**), **STE** (2nd divert **d2**) and **STF** (3rd divert

Programming via Text Message

d3). Expanding on the STN programming command the text messages used to store or check the primary number **pn** and divert numbers **d1**, **d2** and **d3** are as follows.

1111STNn:"pn" 1111STNn:"pn","d1" 1111STNn:"pn","d1","d2" 1111STNn:"pn","d1","d2","d3"	Store the primary number and the respective divert numbers for apartment n , where n = apartment number and pn = primary number, d1 = 1st divert number, d2 = 2nd divert number and d3 = 3rd divert number.
1111STNn:"pn"? 1111STNn:"pn","d1"? 1111STNn:"pn","d1","d2"? 1111STNn:"pn","d1","d2","d3"?	Store the primary number and the respective divert numbers for apartment n , where n = apartment number and pn = primary number, d1 = 1st divert number, d2 = 2nd divert number and d3 = 3rd divert number. Also send confirmation text back to sender of the stored numbers.

Using the same telephone numbers from the previous example.

Example: To store the primary number **pn** of **01912243174** for apartment **252A** and the three divert numbers **d1**, **d2** and **d3** of **01912241558**, **07771234567** and **01912241559** respectively, the following single text message can be sent to the digital GSM instead of sending 4 individual text messages like in the previous example.

1111STN252A:"01912243174","01912241558","07771234567","01912241559"?

Note that quotation marks " a colon : and commas , are used where appropriate. The optional ? is included at the end so that a confirmation text is sent back to the sender. The digital GSM will store all the above numbers for apartment **252A** and reply with the following confirmation text back to the sender.

APT = 252A

TEL STN = 01912243174

TEL 2 STN = 01912241558

TEL 3 STN = 07771234567

TEL 4 STN = 01912241559

VIDEX 4G

DELETE A NUMBER STORED IN THE ADDITIONAL 200 DTO NUMBERS OR TEMPORARY DTO NUMBERS (DET)

It is also possible to delete any of the additional 200 dial to open (DTO) numbers or any temporary dial to open (DTO) number stored in the digital GSM. Dial to open (DTO) numbers stored in the apartments section (000 - 749) of the digital GSM **will not be deleted**.

The following text message can be sent to the digital GSM to delete these dial to open (DTO) numbers.

1111DET"tele"?	Delete dial to open number tele , where tele is the DTO telephone number to be deleted. Also send confirmation back to the sender that the number has been deleted.
----------------	---

Please note that the confirmation reply from the digital GSM will simply indicate that the number was deleted as shown below.

DELETED

VIDEX 4G

SET CALL TIME (SPT)

The call time is the maximum time in seconds that a call can last before the GSM panel automatically clears the call down. The time can be from 1 second up to 255 seconds and begins from when the call is made from the panel. The default time is set to 40 seconds. The following messages are used to set and check the maximum call time (also refer to the notes **5.1 call time** in the programming screens section).

1111SPTnnn	Store the call time nnn seconds, where nnn is the time in seconds.
1111SPTnnn?	Store the call time nnn seconds, where nnn is the time in seconds. Also send a confirmation text back to the sender.
1111SPT?	Query the current stored call time. A text message will be sent back to the sender showing the stored time.

SET RELAY TIME (RLT)

The relay time can be set from 001 – 255 seconds or latching. To set the relay time for latched mode set the relay time to 000. In latch mode the relay will stay energised until the command is sent again (also refer to the notes **5.3 open time** in the programming screens section).

1111RLTnnn	Store the relay time nnn = time in seconds (e.g. nnn = 005, time = 5 seconds).
1111RLTnnn?	Store the relay time nnn = time in seconds. Also send a confirmation text back to the sender.
1111RLT?	Query the current stored relay time. A text message will be sent back to the sender showing the stored relay time.

SET AUXILIARY OUTPUT AO TIME (A1T, FOR A1M MODE = 001 OR 002 ONLY)

The auxiliary output AO time can be set from 001 - 255 seconds or latching. To set the AO output time for latched mode set the

Programming via Text Message

auxiliary time to 000. In latch mode the AO output will stay triggered until the relevant command is sent again to unlatch the output (e.g. sending text message 1111A1O to the digital GSM) or during a call by pressing **6** on the telephone to reset the AO output. The latching mode option is only available when the AO output mode, **A1M**, is set to mode 001. Please refer to the **A1M** modes below for more details (also refer to the notes **5.4 aux time** in the programming screens section).

1111A1Tnnn	Store the AO time nnn = time in seconds (e.g. nnn = 005, time = 5 seconds).
1111A1Tnnn?	Store the AO time nnn = time in seconds. Also send a confirmation text back to the sender.
1111A1T?	Query the current stored AO time. A text message will be sent back to the sender showing the stored AO time.

SET AUXILIARY OUTPUT AO MODE (A1M, MODES 000 - 002)

The auxiliary output AO has three modes that can be set (also refer to the notes **3.1 auxiliary mode** in the programming screens section).

Call Activated: nnn = 000

AO output will activate when a call begins and deactivate when a call ends. See example, **Fig.14** on page 14.

User Activated: nnn = 001 (default mode)

To activate the AO output press **6** on the telephone during a call or sending the text message 1111A1O to the digital GSM. The auxiliary output can also be activated by triggering the auxiliary input AI. See example, **Fig.15** on page 14.

Call Activated (Timed): nnn = 002

AO output will activate when a call begins and deactivate when the auxiliary output time (**A1T**) expires. See example, **Fig.16** on page 15.

1111A1Mnnn	Store the AO mode nnn = 000 - 002 (see modes above).
1111A1Mnnn?	Store the AO mode nnn = 000 - 002 (see modes above). Also send a confirmation text back to the sender.
1111A1M?	Query the current stored AO mode (see modes above). A text message will be sent back to the sender showing the stored AO mode.

KEEP CONNECTION FACILITY (NOD)

In the event the digital GSM is not used for long periods of time it could be possible that the network disconnects it. To prevent this from happening it is possible to program a time period, from 001 – 099 days or disabled 000 (default), to wait before the digital GSM makes a short call to refresh the connection to the network. This time period is reset after each call made on the system and will only happen if the full time period elapses without any incoming or outgoing calls.

1111NODnnn	Store the time nnn = time in days (e.g. nnn = 007, time = 7 days).
1111NODnnn?	Store the time nnn = time in days, as above, also send a confirmation text back to the sender.
1111NOD?	Query the stored time. A text message will be sent back to the sender showing the stored time.

DIVERT TIME (DIT)

The divert time is the number of seconds to wait for a call to be answered before diverting to the 2nd, 3rd and 4th number. The default time is 15 seconds (the count down begins from when an apartment is called, but is refreshed when the telephone begins to ring) and can be set from 001 – 255 seconds (also refer to the notes **5.2 divert time** in the programming screens section).

1111DITnnn	Store the divert time nnn = time in seconds (e.g. nnn = 015, time = 15 seconds).
1111DITnnn?	Store the divert time nnn = time in seconds. Also send a confirmation text back to the sender.
1111DIT?	Query the current stored divert time. A text message will be sent back to the sender showing the stored divert time.

IMPORTANT NOTE: Once the divert time is set on the digital GSM panel it is set for the same time for all divert numbers for all apartments stored in the digital GSM intercom. Each apartments divert numbers cannot have individual divert times set, e.g. if the divert time is set for 10 seconds then the divert time for apartment 1 will be the same as the divert time for apartment 321 and so on. Apartment 1 will not have a different divert time to apartment 321 it will be the same.

CHECK GSM SIGNAL STRENGTH (SIG)

At any time the signal strength of the digital GSM can be checked (also see notes on understanding the signal strength further on in this manual). It is advisable that when the digital GSM is first setup and before any other programming is carried out to check the signal strength of the GSM intercom. If the signal strength is too low the digital GSM may not operate properly and therefore the GSM antenna will need to be repositioned to increase the signal strength. Use the following command to check the signal strength.

1111SIG?	Check the signal strength of the digital GSM intercom and send a confirmation text back to the sender.
----------	--

Programming via Text Message

CONFIRM THE NETWORK SERVICE PROVIDER'S NAME (SPN)

In some instances it may be useful to know the current network service provider's name, for example when setting up the **APN** details of the digital GSM for data communication for the "over the air" feature (refer to **APN** notes further on in this manual). The following command can be used to confirm the name of the network service provider.

1111SPN?	Check the network service provider's name and send a confirmation text back to the sender.
-----------------	--

CHECK FIRMWARE VERSION (VER)

It is possible to check the current version of firmware in the digital GSM. This may be necessary to see if an update is required for any additional features or updates on the digital GSM which may be included on later versions. Use the following command to check the software version.

1111VER?	Check the software version of the digital GSM intercom and send a confirmation text back to the sender.
-----------------	---

FORCED DIAL/DIAL A NUMBER (DLE)

A useful feature of the digital GSM panel is its ability to call a number sent to it in a text message. This feature can be used when setting up the SIM card. For example, disabling the voicemail facility or disabling automatic SMS text messages or missed calls. Any number up to 15 digits in length can be called and the call will last for a maximum of 40 seconds. The example below would switch OFF voicemail on a Vodafone SIM card. Substitute the Vodafone number for other service providers.

1111DLE"1210"	Dial 1210 for the intercom panel.
----------------------	-----------------------------------

For UK customers other useful numbers which can be used with this feature are as follows. For other countries please check the service provider's web sites for other useful codes.

IMPORTANT NOTE: Although the following codes have been confirmed to work with the GSM intercom Videx offers no guarantee that other codes from other network providers will work.

	Vodafone	O ²
DISABLE VOICEMAIL	1210	1760
DISABLE TEXT ALERTS	#148#	1760

IMPORTANT NOTE: Disabling voicemail and text alerts is very important as there is no way to retrieve either of these services from the digital GSM panel. Disabling these features will also prevent the intercom panel switching to voicemail or sending a text when dialling in from another phone.

CHANGE THE 4 DIGIT MASTER CODE (CDE)

The four digit master code (by default = **1111**) can be any combination of numbers between 0 - 9, but must be 4 digits long. The code allows access to the full programming menu and must be used when sending text messages to the digital GSM. Use the following message to change the four digit master code (also refer to the notes **4.1 master code** in the programming screens section).

1111CDEnnnn	Change the 4 digit master code to nnnn (where nnnn = new 4 digit master code). Including an optional ? at the end of the text message will send a confirmation back to the sender.
--------------------	--

CHANGE THE 4 DIGIT ADMIN CODE (CDA)

The four digit admin code (by default = **0000**) can be any combination of numbers between 0 - 9, but must be 4 digits long. The code allows access to the admin menu and must be used when sending text messages to the digital GSM. Use the following message to change the four digit admin code (also refer to the notes **4.2 admin code** in the programming screens section).

1111CDAnnnn	Change the 4 digit admin code to nnnn (where nnnn = new 4 digit admin code). Including an optional ? at the end of the text message will send a confirmation back to the sender.
--------------------	--

CHANGE THE 4 DIGIT TRADE CODE (CDT)

The four digit trade code (by default = **2222**) can be any combination of numbers between 0 - 9, but must be 4 digits long. The trade code can only be used when a timeclock has been connected to the trade input (**TRD** terminal) on the digital GSM when a trade code facility is required. Use the following message to change the four digit trade code (also refer to the notes **4.3 trade code** in the programming screens section).

1111CDTnnnn	Change the 4 digit trade code to nnnn (where nnnn = new 4 digit trade code). Including an optional ? at the end of the text message will send a confirmation back to the sender.
--------------------	--

IMPORTANT NOTE: When a ? is used at the end of the change code text messages described above the confirmation reply from the digital GSM will simply indicate that the code was changed, but will not confirm what the code was actually changed to for security purposes, as shown below.

CODE CHANGED
VIDEX 4G

Programming via Text Message

TRIGGER THE RELAY (RLY)

There are several ways to trigger the digital GSM relay. The first is to press button **3** on the telephone during a call and the relay will operate for the programmed relay time. Another way is to send the following text message.

1111RLY	Operate the digital GSM relay (for the programmed relay time).
1111RLY?	Operate the digital GSM relay (for the programmed relay time) and send a confirmation text back to the sender.

TRIGGER AUXILIARY OUTPUT AO (A1O)

It is possible to trigger the auxiliary output AO for the programmed output time (**A1T**, also refer to the notes **5.4 aux time** in the programming screens section for setting **A1T** time). Please note that this method of triggering auxiliary output AO is only possible when the **A1M** mode has been set to mode **001**, also refer to the notes **set auxiliary output AO mode** on the previous pages and the example, **Fig.15** on page 14. Triggering the auxiliary output can be achieved by shorting terminals **AI** and **GND** on the digital GSM intercom, pressing button **6** on the telephone during a call or by sending the following text message to the digital GSM panel.

1111A1O	Trigger auxiliary output AO (for the programmed auxiliary output time).
1111A1O?	Trigger auxiliary output AO (for the programmed auxiliary output time) and also send a confirmation text back to the sender.

STORE BALANCE CHECK DIAL STRING (SDL)

Several network providers offer the facility to check available balance on their pay as you go tariffs. For example, on Vodafone the string is ***#1345#** and on **O₂** the string is ***#10#**. Other networks may also have this feature. Since the digital GSM intercom will not know the details of the network provider's SIM card which you have inserted it will be necessary to store the correct string in order to use the credit balance check features.

1111SDL"*#1345#"	Store the balance check string for a Vodafone pay as you go.
1111SDL"*#10#"	Store the balance check string for an O₂ pay as you go.

IMPORTANT NOTE: Videx are only aware of the balance check dial string codes for the network providers mentioned above. Check dial string codes for other networks are currently unavailable at this time. Please also note that this programming function is only applicable for pay as you go SIM cards. Also with network providers continually changing and updating their respective pay as you go methods and tariffs Videx offers no guarantee that these check dial string codes will work.

CHECK CREDIT BALANCE (BAL)

The balance can only be checked if the correct balance check dial string has previously been stored using the **SDL** code explained above. At any point the user will be able to send the following text message and the digital GSM intercom will reply with the current balance stored on the SIM card.

1111BAL?	Check current balance of the SIM in the digital GSM intercom and send a confirmation text back to the sender.
----------	---

In addition to this feature the digital GSM also has the facility to monitor the available credit and then text the user to inform them when the credit has fallen below £5.00, €5.00 or \$5.00. It will then remind the user with another text after every 5 calls until the credit has either increased or if it runs out.

To use this feature, the following settings must first be made:

A Pay As You Go SIM card from a provider that offers this service (**Vodafone, O₂**) must be used.

The correct balance check dial string must be stored using the **SDL** code (see **store balance check dial string** notes above).

A mobile phone number that is to receive the 'balance low' text must be stored in the master telephone number location using the **STM** code (refer to **store a master telephone number** feature below).

STORE A MASTER TELEPHONE NUMBER (STM)

The master telephone number is the number which will receive automatic balance updates when the balance gets low (if this feature is setup). The following programming text messages can be used to store, query and/or delete a master telephone number (up to 32 digits max.).

1111STM"master no"	Store a master number in the digital GSM, where master no = master telephone number.
1111STM"master no"?	Store a master number in the digital GSM, where master no = master telephone number and send a confirmation text back to the sender.
1111STM?	Query the master telephone number stored. A text message will be sent to the sender with the stored master telephone number.
1111STM""	Delete the master telephone number stored.
1111STM""?	Delete the master telephone number stored and send a confirmation text back to the sender.

Programming via Text Message

FORWARD SMS MESSAGE TO MASTER TELEPHONE NUMBER (FSM)

It is possible to forward SMS messages to the stored master telephone number. This feature is particularly useful if the SIM card used in the digital GSM receives network text updates or promotional text messages from the network service provider that the end user is required or wishes to see. The following command will either enable (**001**) or disable (**000**, default) this feature.

1111FSMnnn	Set forward SMS message to master telephone no., where nnn = 001 (enable) or nnn = 000 (disable).
1111FSMnnn?	As above and also send a confirmation text back to the sender.

LATCH THE RELAY (RLA)

It is possible to latch the digital GSM relay closed. This function is particularly useful if the GSM relay is connected to a gate controller and the user wishes to 'hold open' the gate. The following text message can be sent to the digital GSM intercom.

1111RLA	Latch the digital GSM relay to the C/NO position.
1111RLA?	Latch the digital GSM relay to the C/NO position and send a confirmation text back to the sender.

UNLATCH THE RELAY (RUL)

If the digital GSM intercom relay has been latched it is possible to unlatch the relay with the following text message.

1111RUL	Unlatch the digital GSM relay back to the C/NC position.
1111RUL?	Latch the digital GSM relay to the C/NC position and send a confirmation text back to the sender.

IMPORTANT NOTE: The digital GSM relay can also be unlatched by pressing **3** on the telephone during a call.

DISABLE THE LATCHING FACILITY VIA THE PHONE KEYPAD DURING A CALL (DLA)

Ordinarily it is possible to latch the GSM relay during a call by pressing **1** followed by **0** on the user's phone and also to unlatch the GSM relay during a call by pressing **3** on the user's phone (also refer to the user command tables). In order to prevent the user from latching or unlatching the GSM's relay during a call, the latching facility itself can be disabled using the **DLA** programming command.

By default the **DLA** feature is switched **OFF** (**nnn** = **000**), i.e. the latching facility is available. However when the **DLA** feature is switched **ON** the user cannot latch the relay (by pressing **1** then **0**). The following command can be sent to the GSM to enable or disable the **DLA** feature.

1111DLAnnn	Disable or enable the GSM relay's latching facility during a call, where nnn = 001 (DLA feature is switched ON i.e. latching/unlatching the GSM relay is not allowed) or where nnn = 000 (default, DLA feature is switched OFF i.e. latching/unlatching the GSM relay is allowed).
1111DLAnnn?	As above and also send a confirmation text back to the sender to confirm DLA feature is switched ON or switched OFF .

IMPORTANT NOTE: If the **DLA** feature described above is switched **ON** (thus disabling the latching facility of the GSM's relay during a call) it does not effect the use of the **RLA** or **RUL** text commands, i.e. the user will still be able to latch or unlatch the GSM's relay if required by sending the appropriate **RLA** or **RUL** text command to the GSM intercom.

CHECK STATE OF THE RELAY OUTPUT (RLS)

If necessary it is possible to check the state of the digital GSM's relay output, i.e. if the relay is open (**OFF**) or closed (**ON**). The following command can be sent to the digital GSM intercom to check the state of the relay output.

1111RLS?	Query the state of the GSM's relay output, where ON = relay open and OFF = relay closed, send confirmation text back to sender.
-----------------	---

LATCH AUXILIARY OUTPUT AO (A1L)

Auxiliary output AO, like the onboard relay, can be latched. To latch the auxiliary output AO the following text message can be sent to the digital GSM intercom.

1111A1L	Latch auxiliary output AO.
1111A1L?	Latch auxiliary output AO and send a confirmation text back to the sender.

UNLATCH AUXILIARY OUTPUT AO (A1U)

Auxiliary output AO can also be unlatched. To unlatch the auxiliary output AO the following text message can be sent to the digital GSM intercom.

1111A1U	Unlatch auxiliary output AO.
1111A1U?	Unlatch auxiliary output AO and send a confirmation text back to the sender.

CHECK STATE OF THE AUXILIARY OUTPUT AO (A1S)

If necessary it is possible to check the state of the digital GSM's auxiliary output, i.e. if the AO output is unlatched (**OFF**) or latched (**ON**). The following command can be sent to the digital GSM intercom to check the state of the AO output.

1111A1S?	Query the state of the GSM's auxiliary output AO, where ON = AO output latched and OFF = AO output unlatched (default), send confirmation text back to sender.
-----------------	--

Programming via Text Message

STORE A TIMEBAND FOR APARTMENT CALLS AND DIAL TO OPEN NUMBERS (TBA)

IMPORTANT NOTE: This feature relies on the network providers time zone setting (also see [source of time/date updates NTZ](#) notes on page 68). First check the time/date is correct by sending the SMS message 1111CLK? (also refer to check intercoms time & date feature below). If the time/date returned is incorrect, it maybe that they do not support it. The clock can be set manually but any power cut will result in the time and date being lost unless battery backup is included.

The timeband feature allows a call to an apartment and the dial to open (DTO) numbers for the apartment to be enabled for a specific time period, including what days of the week they can be enabled for. Any user door/gate codes will not be effected by the timebands (TBA) feature. Remember there are 9 programmable timebands (1 - 9) available (also refer to the notes 5.5 timebands in the programming screens section).

By default timeband 0 is set to 00:00 - 23:59 and cannot be re-programmed, any apartment assigned to timeband 0 will enable a call to go through to the apartment and allow the dial to open (DTO) numbers to be active. Once a timeband has been programmed it can then be assigned to an apartment (also refer to the notes 1.1.4 timeband in the programming screens section and programming notes on how to **assign a timeband to an apartment (STB)** further on in this manual.

Always use 24hr clock notation and also ensure the **start time** is earlier than the **stop (end) time**. The timeband can also be set for a specific day or days of the week to be active by adding the day or days to the end of the programming command. The timeband command also allows the holidays feature (HOL) to be enabled by including **Ho** to the end of the command (omitting **Ho** at the end of the timeband command disables the holidays feature). Refer to the **Days** table below for the codes used for the days required and to enable the holidays feature. For storing the dates for holidays refer to programming notes on how to **store up to 100 dates for holidays (HOL)** on page 70.

Days					
Mo = Monday	Tu = Tuesday	We = Wednesday	Th = Thursday	Fr = Friday	Sa = Saturday
Su = Sunday	AD = All days	WD = Week days only	WE = Weekends only	Ho = enable holidays	

Use the following text messages to store, query and delete a timeband.

1111TBAn"HHMMHHMM",days	Store the time period HHMMHHMM for timeband n, where n = timeband 1 - 9, the first HHMM is the start time and the second HHMM is the stop (end) time and days = the days of the week i.e. Mo, Tu, We, Th, Fri, Sa, Su, AD, WD, WE, Ho (refer to the Days table above for options).
1111TBAn"HHMMHHMM",days?	As above but also send a confirmation text back to the sender with the stored setting.
1111TBAn?	Query the time period programmed for timeband n (where n = timeband 1 - 9). A text message will be sent to the sender with the stored HHMMHHMM time period for timeband n.
1111TBAn""	Delete the programmed time period for timeband n (where n = timeband 1 - 9).
1111TBAn""?	Delete the programmed time period for timeband n (where n = timeband 1 - 9) and confirm deletion of the timeband.

The following example shows how to program a timeband:

Example: Program a time period to start from 6:00am until 11:30pm for timeband 5 and to be active for Monday, Wednesday, Thursday and enable the holidays. Store the time using the format HHMMHHMM. The first HHMM is the **start time** (i.e. receive calls from 0600, 6am in the morning) and the second HHMM is the **stop (end) time** (i.e. calls will be received up until 2330, 11:30pm at night, as soon as the clock reaches 2331, 11:31pm calls to the apartment will stop).

1111TBA5"06002330",Mo,We,Th,Ho?

Note that quotation marks " are used where appropriate also 24hr clock notation is used. Note that the selected days of the week and enable holidays are separated by a comma , and the optional ? is included at the end so a confirmation text is sent back to the sender. The digital GSM will store the above time period for timeband 5 and enable the holidays feature. The following confirmation text will be sent back to the sender:

TB 5 = 06002330,Mo,We,Th,Ho
VIDEX 4G

Any apartment assigned to timeband 5 will only be able to receive calls from 06:00 in the morning until 23:30 at night. The DTO numbers for the apartment will only be active during this time if they have been enabled. From 23:31 onwards all apartment calls from the digital GSM will stop calling through to the apartment and the DTO numbers will also stop working.

As the holidays feature is enabled for timeband 5 any holiday dates that occur will override and disable the function of timeband 5. For example if the holiday date was set as 22/01/24 then timeband 5 would be enabled for dates before and after the 22/01/24, i.e. calls will go through to the apartments or stop calling the apartments as expected, based on the timeband period shown above. On the 22/01/24 the date of the holiday itself, then timeband 5 will be overridden and no calls will call through to the apartment all day and only start again the following day on the 23/01/24 and only resume calling the apartments from 06:00 in the morning (unless this was also set as a holiday date).

Programming via Text Message

STORE TIMEBAND FOR ACCESS CONTROL: PROXIMITY FOBS/CARDS & 200 DIAL TO OPEN NO'S ONLY (ATB)

This function together with the access levels feature (ACC) described further on, allows the additional access control features, i.e. proximity fobs/cards (000 - 999) of the digital GSM and also the additional 200 dial to open (DTO) numbers to be programmed with up to 10 access control timebands (0 - 9). Whether using the built-in proximity reader on its own or a combination of networked off board **Art.4850R** proximity readers the access control timebands can be used to manage access rights (i.e. when fobs/cards or access codes can be active for on the proximity readers or keypads) for the different devices at various times. In the case of the additional 200 dial to open (DTO) numbers the timebands feature enables and disables when the dial to open numbers can be used.

Like the **TBA** timeband feature the **start time** and **stop (end) time** for the timebands used in the programming command must use 24hr clock notation. For example, if timeband **0** is set from 8:45am to 7:30pm then the user(s) will only be able to use their fobs/cards and additional 200 dial to open (DTO) numbers between the hours of 08:45 in the morning until 19:30 in the evening.

The access control timeband (ATB) can also be set for a specific day or days of the week to be active for by adding the day or days to the end of the programming command. This command also allows the holidays feature (HOL) to be enabled by including **Ho** to the end of the command (omitting **Ho** at the end of the timeband command disables the holidays feature). Refer to the **Days** table on the previous page for the codes used for the days required and to enable the holidays feature. For storing the dates for holidays refer to programming notes on how to **store up to 100 dates for holidays (HOL)** on page 70.

When including the day or days in the command they must be separated using a comma , between the codes required, also refer to the previous **TBA** example and the following examples. Use the following text messages to store, query and delete the access control timebands.

1111ATBn"HHMMHHMM";days	Store the time period HHMMHHMM for timeband n, where n = timeband 0 - 9, the first HHMM is the start time for fobs/cards and DTO's to be active and the second HHMM is the stop (end) time when fobs/cards and DTO's are to stop being active and where days = the days of the week i.e. Mo for Monday etc. and Ho = enable holidays (refer to the Days table for options).
1111ATBn"HHMMHHMM";days?	As above but also send a confirmation text back to the sender with the stored setting.
1111ATBn?	Query timeband n setting, where n = timeband no. (0 - 9) A text message will be sent to the sender with the stored timeband no., time period and days to be active for.
1111ATBn""	Delete timeband n, where n = timeband no. (0 - 9).
1111ATBn""?	Delete and confirm deletion of the timeband.

Example: To set timeband **3** to allow for proximity fobs/cards and the 200 dial to open (DTO) numbers to be active between **8:00am** in the morning up until **2:00pm** for weekends only and enable the holidays, the following text can be sent to the digital GSM, remembering to use 24hr clock notation:

1111ATB3"08001400";WE,Ho?

Note that quotation marks " and commas , are used where appropriate, 24hr clock notation is used and the optional ? is included at the end so a confirmation text is sent back to the sender. The digital GSM will store the above time period for timeband **3** and enable the holidays feature. The following confirmation text will be sent back to the sender:

ATB3 = 08001400,Su,Sa,Ho

VIDEX 4G

Note that in the example shown the confirmation text message received from the digital GSM will show the individual day or days of the week shown after the timeband period and separated by commas. Again like in the previous example for apartment call timebands (**TBA**) the holidays feature is enabled for access control timeband **3** so any holiday dates that occur will override the function of the timeband. For example if the holiday dates were set as **25/12/23** and **26/12/23** respectively then timeband **3** would be enabled for dates before **25/12/23** and after **26/12/23** i.e. any user fobs/cards and any of the additional 200 DTO's will operate the GSM's relay as expected, based on the timeband period shown above. On the dates **25/12/23** and **26/12/23** timeband **3** will be overridden and no user fobs/cards and additional 200 DTO's will work. The normal timeband functions of timeband **3** will only resume again the following day on **27/12/23** and only allow the user fobs/cards and additional 200 DTO's to start working again from **08:00** in the morning (unless this was also set as a holiday date).

IMPORTANT NOTE: It should be noted that the ATB timebands feature cannot be used alone it must also be used in conjunction with the access levels feature ACC described next.

STORE ACCESS LEVELS FOR ACCESS CONTROL: PROXIMITY FOBS/CARDS & 200 DIAL TO OPEN NO'S ONLY (ACC)

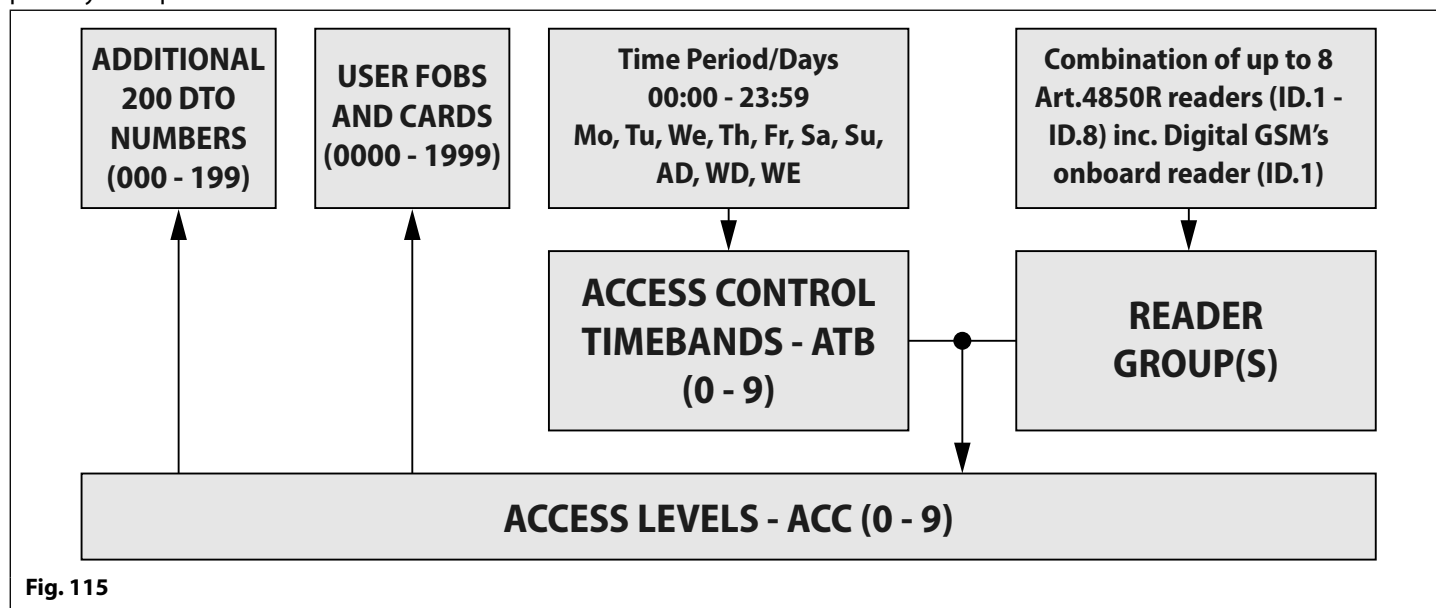
The digital GSM's access levels feature, **ACC** (from 0 - 9), can be made up of an access control timeband or group of access control timebands, **ATB** (from 0 - 9), where each timeband is made up from a time period (between **00:00 - 23:59**) and a day or days of the week. These access levels are also made up from a proximity reader or a group of proximity readers, either an **Art.4850R** reader or group of these readers and can include the digital GSM's onboard proximity reader (up to a total of 8 readers within a group using the readers unit **ID.1 - ID.8**). It should be noted that the digital GSM's onboard reader is automatically assigned reader **ID.1**.

Once an access level has been created it can then be assigned to a users proximity fob/card (only 1 access level can be assigned to a fob/card, but multiple fobs/cards can be assigned the same access level e.g. user fobs/cards from 1 to 10 can be assigned access level 3 and so

Programming via Text Message

on). The access levels can also be assigned to the 200 additional dial to open (DTO) numbers, see **Fig.115**.

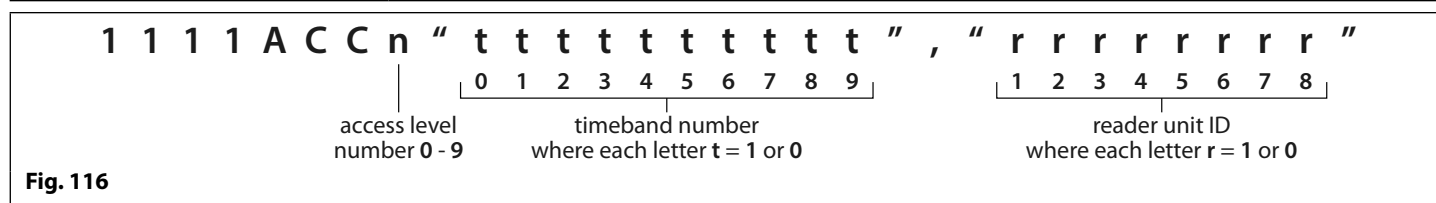
In addition access level 9 can also be used with the trade code without the need of having to traditionally wire the relay contacts (CO/NO) of a timeclock (**Art.701T**) to switch 0V (GND) onto the **TRD** input on the digital GSM (also refer to **Fig.12**, page 13). To use the trade code feature in this way simply program one of the access control timebands **ATB** (from **0 - 9**) that is used for access level 9 with the desired time period you require the trade code to be active for.



This feature of the digital GSM is particularly useful on systems where restricted access is required for certain users with fob/card access and users who have dial to open access. Before setting up any access levels it is recommended that any timebands that are required are setup first following the access control timeband (**ATB**) notes previously described.

The following text messages shown below can be used to store, query and delete an access level.

1111ACCn"tttttttt"rrrrrrr"	Assign the timebands tttttttt and the readers rrrrrrr to access level n , where n = access level no. 0 - 9 , each of the timebands tttttttt = 1 or 0 (where 1 = timeband assigned and 0 = timeband <u>not assigned</u>) and each of the readers rrrrrrr = 1 or 0 (where 1 = reader assigned and 0 = reader <u>not assigned</u>), also refer to the ACC command string shown in the example Fig.116 below.
1111ACCn"tttttttt"rrrrrrr"?	As above but also send a confirmation text back to the sender with the stored setting.
1111ACCn?	Query access level n , where n = access level no. 0 - 9 and send confirmation text back to sender with stored access level settings.
1111ACCn""	Delete access level n , where n = access level no. 0 - 9 .
1111ACCn""?	As above but also send a confirmation text back to the sender confirming access level deleted.



Example: Following the format of the **ACC** command string, shown in **Fig.116** above, the access level **n** represents the access level number from **0 - 9**, e.g. if access level **8** is being programmed then **n = 8** in the command string.

Each letter **t** in the command string represents which timeband(s) will be assigned to the access level and would be shown with the value of **1** (assigned) or **0** (not assigned), e.g. if the timebands **0, 2, 4, 6** and **8** were to be assigned to the access level then "**tttttttt**" would be shown as "**10101010**" in the command string.

Similarly each letter **r** in the command string represents which readers will be assigned to the access level and would be shown with the value of **1** (assigned) or **0** (not assigned), e.g. if the following readers **1, 2, 5** and **6** were to be assigned to the access level then "**rrrrrrr**" would be shown as "**11001100**" in the command string. The following text can then be sent to the digital GSM to program an access level:

1111ACC8"10101010"11001100"

Including a **?** at the end of the command the GSM intercom will reply with the following text:

AL8 = "10101010"11001100"

VIDEX 4G

Remember that each timeband would be programmed using the store timeband command **ATB**, see previous page.

Programming via Text Message

CHECK/SET DATE & TIME (CLK)

The check date and time feature relies on the network providers time zone setting (also refer to important note above). After a SIM has been placed into the digital GSM and powered up the SIM will attempt to register with the network and automatically synchronise with the network providers time zone setting. The following texts can be sent to the digital GSM to check and set the current time and date. The date and time format is as follows: **yy/mm/dd, hh:mm**, where **yy** = year, **mm** = month, **dd** = date and **hh** = hour, **mm** = minutes.

1111CLK?	Check current time & date and send a confirmation text back to the sender.
1111CLK"yy/mm/dd,hh:mm"	Set current time & date.
1111CLK"yy/mm/dd,hh:mm"?	Set current time & date and send a confirmation text back to the sender.

Example: Setting the current time & date to 11:22am, 18th June 2023, the following text can be sent to the digital GSM intercom:

1111CLK"23/06/18,11:22"?

Note that quotation marks " are used where appropriate. The optional ? is included at the end so a confirmation text is sent back to the sender. The digital GSM will reply with the following text:

CLK = 23/06/18, 11:22

VIDEX 4G

IMPORTANT NOTE: It should be noted that the user door/gate access codes (000 - 749) that are stored in the digital GSM are not affected by the TBA timebands feature in the way that apartment calls and dial to open (DTO) numbers are. Users will still be able to use their door/gate access code.

Similarly these access codes are not affected by the ATB access control timebands feature and/or the ACC access levels feature. In particular when additional Art.4903 keypads are networked together with the digital GSM and possibly other Art.4850R readers, while user fobs/cards may have restricted access if assigned to a specific access level, any user door/gate codes will still be able to work on the digital GSM's keypad and any Art.4903 keypads connected on the network.

SILENT DIALLING MODE (AUE)

When the digital GSM is calling the telephone number stored there is a choice of either hearing the standard ringing tone from the GSM's speaker or just hearing beeps to indicate a call is in progress. For the standard ringing tone during calling: **nnn = 001** (AUE is disabled, default) or for beeps heard during calling: **nnn = 000** (AUE is enabled). The following text messages can be sent to the digital GSM to enable/disable or query the setting of the silent dialling feature.

1111AUEnnn	Set the silent dialling mode nnn , where nnn = 000 (enabled) or 001 (disabled).
1111AUEnnn?	Set the silent dialling mode nnn , where nnn = 000 (enabled) or 001 (disabled) and send a confirmation text back to the sender.
1111AUE?	Query the current mode stored. A text message will be sent back to the sender confirming which silent dialling mode has been set.

ENABLE THE DIAL '0' ON ANSWER FUNCTION (EDZ)

When enabled this feature allows an incoming call to an apartment to be diverted to the programmed divert telephone number if the **0** button on the telephone has not been pressed after answering the call. This can be useful if the user's number has an answerphone service (or answer machine) and they do not want the call to be answered by this service or if the primary number (mobile no.) is switched **OFF**.

By default this function is disabled (set to **000**). The following texts can be used to enable or disable this function.

1111EDZnnn	Set the dial '0' function, where nnn = 001 (enabled) or 000 (disabled).
1111EDZnnn?	Set the dial '0' function, where nnn = 001 (enabled) or 000 (disabled) and also send a confirmation text back to the sender.
1111EDZ?	Query the dial '0' mode set.

When this feature is enabled (set to **001**) the user answering the call must press '0' on their phone to accept the call otherwise the call will be diverted to the next number.

ENABLE THE '#' (HASH) FUNCTION (ED#)

Once enabled the user must press the # button on their phone before pressing any other button (also refer to user the command table further on in this manual) with the exception of when the user needs to enter the 4 digit master code "1111".

The user will have up to 3 seconds to press the user command button required (e.g. button 3 to activate the panel's relay), if the user doesn't press the next button within the 3 second window they will have to press the # button again.

The default for this function is disabled (set to **000**). The following texts can be used to enable or disable this function.

1111ED#nnn	Set the # function nnn , where nnn = 001 (enabled) or 000 (disabled).
1111ED#nnn?	Set the # function nnn , where nnn = 001 (enabled) or 000 (disabled) and also send a confirmation text back to the sender.
1111ED#?	Query the dial # mode set.

Programming via Text Message

ENABLE PROXIMITY READER (EPR)

The digital GSM features a built-in proximity fob/card reader. The proximity reader can be enabled or disabled depending on whether this feature is required. By default the setting for this is disabled (proximity reader switched **OFF**). The following programming text messages are used to enable or disable the proximity reader (also refer to the notes **3.7 proximity reader enable/disable** in the programming screens section).

1111EPRnnn	Set proximity reader nnn, where nnn = 001 (enabled) or 000 (disabled).
1111EPRnnn?	Set proximity reader nnn, where nnn = 001 (enabled) or 000 (disabled) and also send a confirmation text back to the sender.
1111EPR?	Query proximity mode set. A text message will be sent back to the sender confirming if the proximity reader is enabled or disabled.

IMPORTANT NOTE: When an Art.4850R parallel reader is connected to the digital GSM (via the RS485 BUS terminals) and a programmed fob/card is presented to it then the fob/card will only operate the Art.4850R's relay even if the built-in reader on the digital GSM is disabled. The EPR function only enables and disables the digital GSM's built-in reader and not the Art.4850R expansion reader.

PROXIMITY NUMBER OF BYTES TO CHECK (PBY, 002, 003 & 004)

This function of the built-in proximity reader will only be applicable if the proximity reader has been enabled (see **EPR** function above). After the proximity reader is enabled the number of bytes that the reader checks is dependant on which type of proximity fob/card is used (also refer to the notes **3.6 prox byte setting** in the programming screens section).

Understanding the Fob Format and Card Number

It is important to understand the relationship between the fob format and the card number when setting up the proximity reader to check for the correct number of bytes.

- **Fobs/Cards with 5 digit number (user code):** If a proximity fob/card has no site code but a 5 digit user code (e.g. 955/T or 955/C) the PBY format should be set to check for 2 bytes (**002**).
- **Fobs/Cards with 3 digit site code and 5 digit user code:** If using a fob/card with a 3 digit site code and 5 digit user code (e.g. PBX1E or PBX2) the PBY format can be set to check for 2 bytes (**002**) or 3 bytes (**003**).
- **Fobs/Cards programmed using the PROXE or PROX-USB desktop reader:** If using the PROXE desktop reader the PBY format can be set to check for 2 bytes (**002**), 3 bytes (**003**) or 4 bytes (**004**).

By default the setting for this function is set to check for 2 bytes, **002**. The following texts can be used to change this setting.

1111PBYnnn	Set proximity reader to check for number of bytes nnn , where nnn = 002 , 003 or 004 (002 = check for 2 bytes, 003 = check for 3 bytes, 004 = check for 4 bytes).
1111PBYnnn?	As above and also send a confirmation text back to the sender.
1111PBY?	Query the number of bytes that the digital GSM has been set to check for.

PBY setting	Description
2 bytes	Will read all fobs/cards types programmed.
3 bytes	Will not read fobs/cards programmed with only 2 bytes (5 digit) information.
4 bytes	Will not read fobs/cards programmed with only 2 bytes (5 digit) or 3 bytes (8 digit) information.

IMPORTANT NOTE: It is recommended that only one fob/card type is used to allow for easier setup and programming of the digital GSM reader. Mifare cards cannot be used at this time.

STORE A PROXIMITY FOB/CARD IN A KNOWN LOCATION (0000 - 1999) OR THE NEXT AVAILABLE LOCATION (FOB)

When the built-in proximity reader has been enabled and the number of bytes to check for has been set (refer to the **EPR** and **PBY** setup) the proximity fobs/cards can be programmed into the digital GSM intercom. Fobs/cards that are programmed will also automatically work on an Art.4850R expansion reader when connected via the RS485 BUS terminals.

The digital GSM can store up to 2000 fobs/cards (**0000 - 1999**). The reader can be programmed with any one of the following fobs:

- **955/T or 955/C** = Videx fobs or cards. These fobs and cards may have no site code (**sc**) and have a 5 digit user code (**uc**), so the PBY function must be set to **002** (the default setting, checking for 2 bytes).
- **PBX1E or PBX2** = Portal Plus fobs or cards. These fobs and cards have a 3 digit site code (**sc**) and 5 digit user code (**uc**), so the PBY function can be set to **002** or **003**.

Please note in some cases the proximity cards may also have an 8 - 10 digit card ID (**cid**) printed on them. The following texts can be used to program fobs or cards.

1111FOBnnnn"sc","uc" or 1111FOBnnnn"0","uc" or 1111FOBnnnn"sc","uc"An or 1111FOBnnnn"0","uc"An	Store fob/card in location nnnn , where nnnn = memory location from 0000 - 1999 where the fob/card is stored, sc = site code and uc = user code printed on the fob/card. If no site code is shown then a 0 can be used as the site code. Also where An = an access level from A0 - A9 if an access level is required for the fob/card.
---	--

Programming via Text Message

1111FOBnnnn"sc","uc"? or 1111FOBnnnn"0","uc"? or 1111FOBnnnn"sc","uc"An? or 1111FOBnnnn"0","uc"An?	As above and also send a confirmation text back to the sender with the stored fob/card details.
1111FOBnnnn"cid" or 1111FOBnnnn"cid"An	Store fob/card in location nnnn , where nnnn = memory location from 0000 - 1999 where the fob/card is stored and cid = fob/card ID printed on the fob/card. Also where An = an access level from A0 - A9 if an access level is required for the fob/card.
1111FOBnnnn"cid"? or 1111FOBnnnn"cid"An?	As above and also send a confirmation text back to the sender with the stored fob/card details.
1111FOB"sc","uc" or 1111FOB"0","uc" or 1111FOB"cid" or 1111FOB"sc","uc"An or 1111FOB"0","uc"An or 1111FOB"cid"An	Store fob/card in the next available memory location, where sc = site code and uc = user code printed on the fob/card. As before if no site code is shown then a 0 can be used as the site code. Also where cid = fob/card ID printed on the fob/card and where An = an access level from A0 - A9 if an access level is required for the fob/card. An optional ? can be included at the end of the programming command where a confirmation text will be sent back to the sender with the stored fob/card details.
1111FOBnnnn?	Query the fob/card stored in memory location nnnn and send a confirmation text back to the sender with the stored fob/card details.

The following examples show how to program various fob/card types:

Example 1: Programming a **955/T** fob with no site code (**sc**), a 5 digit user code (**uc**) of **19852** and storing it in memory location **0001**, the following text can be sent to the digital GSM.

1111FOB0001"0","19852"?

Note that quotation marks " and commas , are used where appropriate. As there is no site code (**sc**) a **0** must be inserted for the site code. Including the optional **?** at the end will ensure a confirmation text is sent back to the sender. The digital GSM will store the above fob and reply with the following.

FOB 0001 = 00000 19852
ID = 0000019852
VIDEX 4G

Example 2: Programming a **PBX2** with a 3 digit site code (**sc**) of **105**, a 5 digit user code (**uc**) of **48599** and storing it in the next available memory location, the following text can be sent to the digital GSM.

1111FOB"105","48599"?

As before quotation marks " and commas , are used where appropriate. Including the optional **?** at the end will ensure a confirmation text is sent back to the sender. The digital GSM will store the above fob and reply with the following.

FOB 0002 = 00105 48599
ID = 0006929879
VIDEX 4G

Example 3: Programming a **955/C** card with a card ID (**cid**) of **0000549588** and storing it in memory location **0152** the following text can be sent to the digital GSM.

1111FOB0152"0000549588"?

As before quotation marks " and commas , are used where appropriate. Including the optional **?** at the end will ensure a confirmation text is sent back to the sender. The digital GSM will store the above fob and reply with the following.

FOB 0152 = 00008 25300
ID = 0000549588
VIDEX 4G

IMPORTANT NOTE: Remember when programming a proximity fob/card into memory location '0000' it will only operate the auxiliary output AO for the programmed AO time (A1T) and not the onboard relay. Please also note that activating the auxiliary output in this way is only possible when the auxiliary output mode A1M has been set to mode 001.

It should also be noted that if an Art.4850R parallel reader is connected to the digital GSM (via the RS485 BUS terminals) and a fob/ card that has been programmed to memory location '0000' (with A1M mode set to mode 001 on the digital GSM) when the fob/ card is presented to the Art.4850R reader it will activate the Art.4850R's relay and NOT the auxiliary output on the digital GSM.

FIND A FOB OR CARD (FDF)

The find a fob or card feature allows the user to search and find the memory location between **0000 - 1999** of where the proximity fob or card is stored in the digital GSM. It locates the fob/card by using the 5 digit user code (**uc**) or the fob/card ID (**cid**) printed on the fob/card. The following text message can be used.

1111FDF"uc"? or 1111 FDF"cid"?	Find the memory location where a fob/card is stored, where uc = user code printed on the fob/card or where cid = fob/card ID printed on the fob/card and reply with confirmation.
-----------------------------------	---

Programming via Text Message

Example 1: Find the memory location of a fob/card using the user code (**uc**) of **12345**, the following can be sent to the digital GSM.

1111FDF"12345"?

Note that quotation marks " are used where appropriate. The ? is included at the end so a confirmation text is sent back to the sender. The digital GSM intercom will reply with the following text.

STORED IN nnnn
VIDEX 4G

where **nnnn** = memory location (**0000 - 1999**) of where the fob/card is stored.

Example 2: Find the memory location of a fob/card using the fob/card ID (**cid**) of **0002567890**, using the following text message.

1111FDF"0002567890"?

As before the quotation marks " are used where appropriate. The ? is included at the end so a confirmation text is sent back to the sender. The digital GSM intercom will reply with the following text.

STORED IN nnnn
VIDEX 4G

where **nnnn** = memory location (**0000 - 1999**) of where the fob/card is stored.

DELETE A FOB OR CARD WITHOUT KNOWING ITS LOCATION (DEF)

This feature allows the user to delete a fob or card without knowing the memory location of where it is stored. The feature uses either the 5 digit user code (**uc**) or the fob/card ID (**cid**) printed on the fob/card to search through the memory locations where the fob/card data is stored and then deletes it from the digital GSM. The following text message can be used.

1111DEF"uc"? or 1111DEF"cid"?	Find the memory location of where the fob/card is stored by using the user code (uc) and delete or by using the fob/card ID (cid) and delete, where uc = user code and where cid = fob/card ID printed on fob/card, also send a confirmation text back to the sender.
--	--

Example 1: Delete fob/card whose user code (**uc**) is **54321**, the following text can be sent to the digital GSM.

1111DEF"54321"?

The digital GSM intercom will reply with the following text.

DELETED
VIDEX 4G

Example 2: Delete fob/card whose fob/card ID (**cid**) is **15739801**, the following text can be sent to the digital GSM.

1111DEF"15739801"?

The digital GSM intercom will reply with the same text message as shown in **Example 1** above.

FREE ACCESS TIMEBANDS (0 - 9) INC. OUTPUT SETUP WITH LATCH OR MOMENTARY TRIGGER (FRE)

The digital GSM has up to 10 programmable free access timebands (**0 - 9**) that can be setup to operate the onboard relay or the auxiliary output **AO**. Both the relay and the auxiliary output can be set to latch or momentarily trigger for the programmed relay time or programmed auxiliary output time respectively. The free access timebands are programmed in a similar way as the timebands (**TBA**) with a **start time** and an **stop (end) time** (using 24hr clock notation) which can be set for a specific day or days of the week to be active. If the selected output (relay or auxiliary) is setup to latch, the free access timeband will automatically activate the output when the **start time** is reached and will deactivate the output when it reaches the **stop (end) time** (i.e. the selected output will stay latched for the duration of the timeband). If the selected output (relay or auxiliary) is setup for momentary trigger, the free access timeband will automatically activate the output for the programmed output time when the **start time** of the timeband is reached. When the timeband reaches the **stop (end) time** the selected output will trigger again for the programmed output time, for example if the relay was setup to trigger for 5 seconds then the relay will activate for 5 seconds at the beginning of the timeband and then activate again for 5 seconds at the end of the timeband.

The free access timeband command also allows the holidays feature (**HOL**) to be enabled by including **Ho** after the days in the command string (omitting **Ho** disables the holidays feature). Refer to the **Days** table on page 57 for the codes used for the days required and to enable the holidays feature. For storing the dates for holidays refer to programming notes on how to **store up to 100 dates for holidays (HOL)** on page 70.

The following text messages can be used to setup the free access timebands to activate the digital GSM's relay or the auxiliary output and setup the selected output for latch or momentary trigger. When including the day, days or enabling the holidays in the command they must be separated using a comma , between the codes required, also refer to the following example. Use the following text messages to store, query and delete a free access timeband.

1111FREn"HHMMHHMM"days:m:o	Store the time period HHMMHHMM for free access timeband n , where n = timeband 0 - 9 , the first HHMM is the start time and the second HHMM is the stop (end) time and days = the days of the week i.e. Mo, Tu, We, Th, Fri, Sa, Su, AD, WD, WE and Ho = enable holidays (refer to the Days table, page 58, for options). Also where output trigger m = L for latch or M for momentary trigger and output selection o = RL for relay or AO for the auxiliary output.
-----------------------------------	--

Programming via Text Message

1111FREn"HHMMHHMM"days:m:o?	As above and also send a confirmation text back to the sender of programmed free access timeband period including day(s) active for, output trigger and output selection.
1111FREn?	Query the information stored for free access timeband n , where n = free access timeband number 0 - 9 , also send a confirmation text back to the sender.
1111FREn""	Delete the programmed time period for free access timeband n , where n = timeband 0 - 9 .
1111FREn""?	As above and send reply confirming deletion of free access timeband.

Example: To program free access timeband **4** to latch the digital GSM's relay between **9:45am** until **10:45am** for week days only (i.e. Monday to Friday) and enable the holidays, the following text can be sent to the digital GSM.

1111FRE4"09451045"WD,Ho:L:RL?

Note that quotation marks " and commas , are used where appropriate. A ? has been included to receive a confirmation text. The digital GSM will reply with the following text.

**FA4 = 09451045,Mo,Tu,We,Th,Fr,Ho,L,RL
VIDEX 4G**

In this example the reply from the digital GSM confirms the relay has been setup to latch for Monday, Tuesday and Friday only for free access timeband **4** between **9:45am** until **10:45am**.

As the holidays feature is also enabled any holiday dates that occur will override and disable the function of timeband **4**. For example if the holiday date was set as **16/01/24** then timeband **4** would be enabled for dates before and after the **16/01/24**, i.e. the GSM's relay will latch between **9:45am** until **10:45am** for week days only as expected. On the **16/01/24** the date of the holiday the functions of timeband **4** will be overridden and will only resume again the following day on the **17/01/24** and resume latching the GSM's relay from **09:45** in the morning (unless this was also set as a holiday date).

IMPORTANT NOTE: If the selected output (relay: RL or auxiliary: AO) is setup for a momentary trigger the output will trigger for the programmed output time. Remember to set the output time using the respective programming code, i.e. for the relay use 1111RLTnnn? and for the auxiliary output use 1111A1Tnnn?

It should also be noted that when any of the outputs have been setup with free access the free access feature takes priority over other programming or modes that may have been setup for the output unless the holidays feature has been enabled in which case this will take priority over the free access timeband.

CLEAR ALL FREE ACCESS TIMEBANDS (FRD)

It is also possible to clear and reset all the free access timebands. The following text can be used clear all the free access timebands.

1111FRD?	Delete all free access timebands, also send a confirmation text back to the sender.
----------	---

LOCK SPEECH VOLUME LEVELS (LSP)

It is possible to lock the digital GSM's speech volume levels (GSM's speaker and mic) once they have been set during a call (also refer to the **user command tables** further on in this manual advising how to adjust the speech volume levels). This feature is quite useful to avoid inadvertently adjusting the speech volume settings when using the telephone keypad for other user functions during a call. The following commands can be used to enable (**001**, lock) or disable (**000**, unlock default setting) this feature.

IMPORTANT NOTE: It should be noted that once this feature is enabled in order to re-adjust the speech volume levels during a call this feature must first be disabled so that the speech volume levels can be adjusted again.

1111LSPnn	Lock speech volume level, where nnn = 001 (lock, enable) or nnn = 000 (unlock, disable).
1111LSPnn?	As above and also send a confirmation text back to the sender.

DISABLE OR ENABLE SPEECH BOARD (SBM)

The digital GSM includes call progress speech annunciation which can be enabled or disabled. There are three options available:

- when set to **001** the speech board is disabled (switched **OFF**).
- when set to **002** the speech board is enabled with individual number speech playback.
- when set to **003** the speech board is enabled but with combined number speech playback.

By default this function is enabled with combined speech playback (**003**). The following text messages can be used to enable or disable this feature (also refer to the notes **3.5 speechboard mode** in the programming screens section).

1111SBMnnn	Disable or enable speech board, where nnn = 001 disabled, 002 enabled (with individual playback) or 003 enabled (with combined playback).
1111SBMnnn?	As above and also send a confirmation text back to the sender.
1111SBM?	Query the speech board status/setting.

SET SPEECH BOARD VOLUME (SBV)

The volume setting of the speech board in the digital GSM can be adjusted. The default volume level is set to **85**, but can be set anywhere between **000** (low) up to **099** (high). The following text messages can be used to increase or decrease the volume level and query the current speech board volume setting stored (also refer to the notes **3.4 speechboard volume** in the programming screens section).

Programming via Text Message

1111SBVnnn	Increase or decrease speech board volume nnn , where nnn = 000 (low) - 099 (high).
1111SBVnnn?	Increase or decrease speech board volume nnn , where nnn = 000 (low) - 099 (high), also send a confirmation text back to the sender.
1111SBV?	Query the speech board volume setting.

END ON LAST DIVERT (EOD)

The end on last divert feature allows the digital GSM to ring each programmed divert number as usual and if the divert number is not answered it will then proceed to ring the next programmed divert number, if however there is no divert number stored the digital GSM will simply end the call.

By default this feature is disabled (set to 000), but can be enabled (set to 001). The following programming commands can be used to set/check the end on divert function.

1111EODnnn	Set end on last divert to nnn , where nnn = 000 (disabled) or 001 (enabled).
1111EODnnn?	Set end on last divert to nnn , where nnn = 000 (disabled) or 001 (enabled). Also send a confirmation text back to the sender.
1111EOD?	Query the end on last divert status stored in the digital GSM module.

DOOR OR GATE (GAT)

This feature of the digital GSM allows the speech board to change the default speech annunciation that is heard from the intercom panel when the GSM relay is activated. For this feature to be heard the speech board must first be switched **ON** (refer to **SBM** notes).

By default the mode of this feature is set to 001, whereby the internal speech board will announce “the gate is open” when the onboard relay is activated. The alternative mode can be set to 000, whereby the internal speech board will announce “the door is open”. To set the required door/gate mode the following commands can be sent to the digital GSM intercom (also refer to the notes 3.8 gate mode in the programming screens section).

1111GATnnn	Set the speech board annunciation to mode nnn , where nnn = 001 : “the gate is open” or 000 : “the door is open”.
1111GATnnn?	Set the speech board annunciation to mode nnn , where nnn = 001 : “the gate is open” or 000 : “the door is open”, also send a confirmation text back to sender.
1111GAT?	Query the speech board annunciation mode set.

SHUTDOWN AND RESTART (RBT)

This command feature allows the digital GSM to be remotely shutdown and then rebooted again. The following command can be sent to the GSM intercom.

1111RBT	Shutdown and restart the digital GSM intercom.
---------	--

IMPORTANT NOTE: This feature should not be confused with the ‘hard-wired’ reset (described on page 23). The RBT function simply powers down the digital GSM panel and then powers it back up again.

OBTAIN THE GSM’S IMEI NUMBER (IME)

If the IMEI number (unique 15 digit number of the main internal hardware chip) of the digital GSM is required the following text message can be sent to obtain the number.

1111IME?	Query IMEI number of the GSM module, also send confirmation to the sender.
----------	--

Example: Obtain IMEI number of the GSM module, the following message can be sent to the digital GSM intercom:

1111IME?

The digital GSM will reply with the following text:

IMEI-357803045065535
OK VIDEX 4G

IMPORTANT NOTE: If installing the digital GSM for the first time, when registering the SIM card with the chosen network provider you may be asked for the IMEI number of the GSM module. As the programming command described above will only work with a SIM card that has already been registered with a network the command will not work.

Therefore in order to obtain the GSM’s IMEI number, which is located on the main hardware chip internally, use a SIM that is already registered with another network provider and fit it into the digital GSM module (following the procedure for initialisation described earlier in this manual), then use the programming command above 1111IME? to obtain the GSM’s IMEI number, so that when registering the actual SIM that will be used with the GSM module with the chosen network, you will have the appropriate IMEI number to hand.

Programming via Text Message

UNLATCH PREVENTION FEATURE (LLA)

The unlatch prevention command **LLA**, when enabled, will prevent a programmed latched output (the digital GSM's relay or the auxiliary output) from being inadvertently unlatched by a programmed fob/card, access code, DTO number or by pressing the relevant button (3) on the phone during a call. Even when this feature is enabled if the digital GSM's relay or the auxiliary output have been setup to latch they can still be unlatched using the relevant **1111RUL** or **1111A1U** programming command.

By default this feature is disabled (set to **000**), but can be enabled (set to **001**). The following programming commands can be used to enable/disable and check the unlatch prevention feature.

1111LLAnnn	Set the unlatch prevention feature to nnn , where nnn = 000 (disabled) or 001 (enabled).
1111LLAnnn?	Set the unlatch prevention feature to nnn , where nnn = 000 (disabled) or 001 (enabled). Also send a confirmation text back to the sender.
1111LLA?	Query the status of the unlatch prevention feature stored in the GSM module.

NETWORK CONNECTION INDICATION (CON)

As well as checking the power & network status indication LED on the back of the digital GSM intercom (**Fig.10**, **(E)** page 10) to check which network type (**2G**, **3G** or **4G**) the GSM intercom is connected to, the following command **1111CON?** can be sent to the digital GSM.

1111CON?	Check the network type (2G , 3G or 4G) the GSM module is connected to, also send confirmation to the sender.
-----------------	---

Example: To check which type of network the digital GSM is connected to, the following message can be sent to the digital GSM:

1111CON?

The digital GSM intercom will reply with the following text:

CON=nG
OK VIDEX 4G

(where **n** = 2, 3 or 4)

SETUP THE DIGITAL GSM INTERCOM FOR DATA COMMUNICATION (APN)

The digital GSM can be setup for data communication. In order for data communication the SIM card used in the GSM must also have a data allowance setup, this should be done by the user/installer when choosing a network provider (**O₂**, **EE**, **Vodafone** etc.) to use. There are two purposes for setting up the GSM for data communication:

- The first is to allow a user to be able to remotely monitor the GSM's events online using the web browser based events application or remotely monitor the GSM's events via one of the following GSM mobile apps - the **Videx SMS Wizard** (for users) and the **Videx SMS Wizard PRO** (for installers and engineers), also refer to the **GSM mobile apps** notes further on.
- The second purpose is to allow for the programming 'over the air' option so that a user/installer can remotely program the GSM intercom using the **GSM SK** PC software (the PC software can still be used to program the GSM intercom, but the PC or laptop is not directly linked to it via the USB or RS485 connections).

The following programming command can be used to store the network provider's **APN** details to the GSM intercom.

1111APN"apn","username","password"?	Store the APN details of the network provider to the GSM, also send confirmation to the sender, where the apn , username and password are the details provided by the SIM card network provider, these details can usually be found on the network providers website or doing an online search.
--	---

Example: Store the **APN** details for an **O₂** pay and go SIM to the GSM module, where the **apn** = **payandgo.o2.co.uk**, **username** = **payandgo** and **password** = **password**, the following message can be sent to the GSM intercom:

1111APN"payandgo.o2.co.uk","payandgo","password"?

With the inclusion of the **?** the GSM intercom will reply with the following text:

APN=payandgo.o2.co.uk
payandgo
password
OK VIDEX 4G

IMPORTANT NOTE: Remember that the **APN** details will vary from network to network and may also have different **APN** details for their contract SIM cards and their pay as/and you go SIM cards. The following table provides the **APN** details for the most common network providers in the UK that have been gathered by **VIDEX** and are correct at time of print. Please note that these details may also be subject to change without prior notice by the respective network provider, therefore **VIDEX** are not responsible for any errors, omissions or discrepancies that may effect the **APN** setup.

Programming via Text Message

Provider: Vodafone (contract) APN: wap.vodafone.co.uk Username: wap Password: wap	Provider: Vodafone (pay & go) APN: pp.vodafone.co.uk Username: wap Password: wap	Provider: EE or BT mobile APN: everywhere Username: eesecure Password: secure
Provider: O₂ (contract) APN: mobile.o2.co.uk Username: o2web Password: password	Provider: O₂ (pay & go) APN: payandgo.o2.co.uk Username: payandgo Password: password	Provider: Giffgaff APN: giffgaff.com Username: gg Password: p
Provider: Tesco Mobile APN: prepay.tesco-mobile.com Username: tescowap Password: password	Provider: ASDA Mobile APN: MY.INTERNET Username: wap Password: wap	Provider: Virgin Mobile APN: goto.virginmobile.uk Username: user Password:

It is recommended that after changing the **APN** details to reboot the digital GSM intercom using the **1111RBT** command (also refer to **RBT** notes on page 65).

STORE A USERNAME & PASSWORD FOR EACH GSM MODULE FOR ONLINE EVENTS (PAS)

When using the online events application each GSM module that is setup through the application requires it's own username and password. The username and password is created by the user, following the online setup steps (via the website www.videxevents.co.uk), when adding a new GSM to the list of GSM modules. Each GSM module on the list can have their events monitored remotely online or via one of the following GSM mobile apps - the **Videx SMS Wizard** (for users) and the **Videx SMS Wizard PRO** (for installers and engineers).

The following command is used to store the username and password for each of the GSM modules on the GSM module list.

1111PAS"username","password"?	Store the username & password for the GSM module, also send confirmation to the sender.
--------------------------------------	---

Example: To store the **username** "videx-tech-1" and the **password** "gsm-tech-1" for a 4G GSM on the GSM modules list, the following message can be sent to the GSM intercom:

1111PAS"videx-tech-1","gsm-tech-1"?

With the inclusion of the ? the GSM intercom will reply with the following text:

PAS=videx-tech-1
gsm-tech-1
OK VIDEX 4G

ENABLE ONLINE EVENTS FOR THE DIGITAL GSM MODULE (ENE)

After the user has registered an online events profile (via the website www.videxevents.co.uk), the GSM module has been configured for data communication (**APN**) and added to the list of GSM modules with a username and password setup (**PAS**) the GSM module itself requires the events to be enabled (i.e. the events from the GSM module will be sent to the web browser application to be displayed in the list of events).

By default this feature is disabled (set to **000**), but can be enabled (set to **001**). The following programming commands can be used to enable/disable and check the status.

1111ENEnnn	Enable the online events feature, where nnn = 000 (disabled) or 001 (enabled).
1111ENEnnn?	Enable the online events feature, where nnn = 000 (disabled) or 001 (enabled). Also send a confirmation text back to the sender.
1111ENE?	Query the status (enabled or disabled) of the events feature.

Further notes, **managing GSM events remotely**, can be found further on in this manual.

SETUP PORT FORWARDING FOR CONNECTION TO A SERVER (SER)

Before setting up a connection to a server the GSM module must first be setup for data communication using the **APN** programming command (see **APN** setup notes and example on the previous pages), this will allow the GSM to be able to be programmed remotely 'over the air' using the **GSM SK** PC software.

Also in order for the remote 'over the air' feature to work port forwarding needs to be setup on the router where the PC connects to so that the GSM module can forward and receive packets from it, to do this follow the setup and configuration instructions on Videx application note **AN0046_RemotelyProgramming4GIntercomsViaPCSoftware**.

To initiate communication the **SER** programming command can be used (see below), this will effectively let the GSM module know where the server is.

1111SER"IP",PORT?	Setup port forwarding for connection to a server, where IP is the public IP address where the PC is located and the PORT is any free port. Also send a confirmation text back to the sender.
--------------------------	--

Programming via Text Message

IMPORTANT NOTE: IT IS IMPORTANT TO MAKE SURE THAT THE SIM CARD INSTALLED HAS BEEN ENABLED FOR DATA AND HAS DATA ALLOWANCE AVAILABLE PRIOR TO USING THE APN, ENE, PAS AND SER PROGRAMMING COMMANDS OTHERWISE THE REMOTE ONLINE EVENTS FEATURE AND THE 'OVER THE AIR' FEATURE WILL NOT WORK!

SOURCE OF TIME/DATE UPDATES (NTZ)

The source of where the digital GSM synchronises its internal clock is particularly important when using any of the timeband features as these features rely on the GSM's clock to be accurate. As such the 4G digital GSM has 3 modes which it can be set to, for where it can obtain the current time and date updates to synchronise its internal clock with. The three modes are as follows:

- **mode 000:** no clock setting at all i.e. the GSM receives no automatic time updates.
- **mode 001:** the time is taken from the telephone network providers clock setting via **NITZ** (network identity & time zone), but only if the network supports **NITZ** (default).
- **mode 002:** the time is taken from an online clock using the **NTP** protocol where the Digital GSM is able to synchronise its clock with an online **NTP server**.

By default the 4G digital GSM is set to **mode 001**, whereby it will try to automatically synchronise with the network providers clock setting via **NITZ** (network identity & time zone) providing that the network supports **NITZ**, also refer to **important note** regarding **NITZ** on page 57. The following programming commands can be used to set and confirm the required mode.

1111NTZnnn	Set the mode of the GSM's internal clock to obtain the current time & date updates, where nnn = 000 (no automatic time updates), 001 (default, time taken from the phone network provider) or 002 (time taken from an NTP server , UTC time).
1111NTZnnn?	As above and also send a confirmation text back to the sender.
1111NTZ?	Query which mode the time & date updates is set to and send a confirmation text to the sender.

For the network providers that **do not** support the **NITZ** format, **mode 002** can be set. This mode utilises the **NTP server** protocol which is an internet protocol that is used to synchronise the clocks on computer networks to coordinated universal time (**UTC**). It enables the GSM to request and receive **UTC** data from an **NTP server** that, in turn, receives precise time from an atomic clock.

When **mode 002** is set the following 3 additional programming commands become available to the user: **TZ+**, **TZ-** and **DST**. These additional commands allow the user (depending on where/which country in the world they are installing the GSM intercom module) to manually setup the GSM in the correct **Time Zone** using the **TZ+** or **TZ-** commands and if the **Time Zone** they are in also requires a daylight savings time adjustment then they can use the **DST** command.

IMPORTANT NOTE: It should be noted that the coordinated universal time (**UTC**) is the basis for civil time today. This 24-hour time standard is kept using highly precise atomic clocks. Therefore when setting up the **TZ+**, **TZ-** and **DST** automatic time correction features the **Time Zone (UTC+0)** used is taken from the GMT UK based time of '0', i.e. **Time Zone (UTC+0) = UK standard time (GMT) = 0**.

UTC TIME ZONE FOR COUNTRIES AHEAD OF UTC (TZ+)

If the GSM module is being installed in a **Time Zone** ahead of **Time Zone (UTC+0)** then the command **1111TZ+nnn** can be used to set the correct time ahead. The time adjustments are made in increments of 15 minutes (e.g. 1 increment = 15 minutes), so an hour adjustment ahead of **Time Zone (UTC+0)** will be equal to **004** increments, an adjustment of 2 hours ahead of **Time Zone (UTC+0)** will be equal to **008** increments and so on.

By default the value **nnn** is set to **000** (i.e. **Time Zone (UTC+0) = UK standard time (GMT) = 0**). The following commands can be used to set the time ahead and confirm.

1111TZ+nnn	Adjust the GSM's time zone ahead of Time Zone (UTC+0) by nnn increments, where nnn = value between 000 (default) to 048 .
1111TZ+nnn?	As above and also send a confirmation text back to the sender.
1111TZ+?	Query the time zone adjustment setting and send a confirmation text to the sender.

Example - setting the Time Zone to Rome, Italy, Europe (1 hour ahead):

If the Digital GSM module is being installed in Rome, Italy and the network provider used does not support **NITZ**, the **NTZ** command would be set to **mode 002 = 1111NTZ002**. As the European time zone = 1 hour ahead of **Time Zone (UTC+0)** the adjustment will be 4 increments of 15 minutes = 1 hour. Therefore the following command can be sent to the 4G GSM module:

1111TZ+004?

The **?** is included in the example for a confirmation back from the GSM. The GSM intercom will reply with the following text:

TZ+004

OK VIDEX 4G

UTC TIME ZONE FOR COUNTRIES BEHIND UTC (TZ-)

If the GSM module is being installed in a **Time Zone** behind **Time Zone (UTC+0)** then the command **1111TZ-nnn** can be used to set the correct time behind. As with the **TZ+** command the time adjustments are made in increments of 15 minutes (e.g. 1 increment =

Programming via Text Message

15 minutes), so an hour adjustment behind **Time Zone (UTC+0)** will be equal to **004** increments, an adjustment of 2 hours behind **Time Zone (UTC+0)** will be equal to **008** increments and so on.

By default the value **nnn** is set to **000** (i.e. **Time Zone (UTC+0)** = UK standard time (GMT) = 0). The following commands can be used to set the time behind and confirm.

1111TZ-nnn	Adjust the GSM's time zone behind Time Zone (UTC+0) by nnn increments, where nnn = value between 000 (default) to 048 .
1111TZ-nnn?	As above and also send a confirmation text back to the sender.
1111TZ-?	Query the time zone adjustment setting and send a confirmation text to the sender.

Example - setting the Time Zone to New York, USA, North America (5 hours behind):

If the Digital GSM module is being installed in New York, USA and the network provider used does not support **NITZ**, as with the **TZ+** command in the previous example the **NTZ** command would be set to **mode 002 = 1111NTZ002**. Since New York is on the Eastern coast of the USA it falls into the Eastern Standard Time (**EST**) time zone = 5 hours behind **Time Zone (UTC+0)**. The adjustment will therefore be 20 increments of 15 minutes = 5 hours. The following command can be sent to the 4G GSM module:

1111TZ-020?

The **?** is included in the example for a confirmation back from the GSM. The GSM intercom will reply with the following text:

TZ-020
OK VIDEX 4G

DAYLIGHT SAVINGS TIME ADJUSTMENT (DST)

If the GSM module is being installed in a time zone that allows for daylight savings time then the automatic **DST** adjustment feature can be enabled or disabled. By default this feature is enabled, set to **001**. The following command can be used to enable (**001**) or disable (**000**) this feature.

1111DSTnnn	Enable/disable the daylight savings time feature, where nnn = 000 (disabled) or 001 (enabled).
1111DSTnnn?	As above and also send a confirmation text back to the sender.
1111DST?	Query the status of the daylight savings time feature stored in the GSM module.

 **IMPORTANT NOTE: IT WILL BE NECESSARY TO REBOOT THE POWER TO THE GSM MODULE USING THE PROGRAMMING COMMAND 1111RBT AFTER ANY TIME ZONE ADJUSTMENTS HAVE BEEN MADE. THIS IS SO THAT THE NEW CLOCK TIME AND DATE SETTINGS WILL BE RECOGNISED AND TAKE EFFECT.**

SEND GLOBAL ANNOUNCEMENT FEATURE (SGA)

It is possible to send out a global announcement text message to all the call numbers stored (primary and divert numbers) in the digital GSM module. The message can be up to 150 characters in length max. The feature is particularly useful if an urgent message needs to be sent out to all users that use the digital GSM in a single text.

The following text message can be used, remembering to include both the " before and after the message, also if the message requires spaces between words then replace the space with a **>**.

1111SGA"text"	Send global text message to stored call button numbers (inc. primary and divert numbers), where text = message up to 150 characters max.
----------------------	---

ACTIVATE REMOTE RELAY OUTPUT (RLN)

When the digital GSM networked with the **Art.2813** relay via the RS485 bus (see wiring diagram example on page 18, **Fig.22**) it is possible to activate the any of the three outputs (the onboard relay, **A1** and **A2**) remotely via text message.

It is important that the remote relay has already been setup with a unit ID (from **ID.00** to **ID.63**) and with the output activation times programmed, further details on this can be found in the installation instructions: **2813_66251545_V1-0** (or later).

To activate the desired output the following texts can be sent to the digital GSM.

1111RLNnn	Activate the remote relay, where nn = the unit ID of the remote relay from ID.00 to ID.63 . The onboard relay will activate for the programmed time.
1111RLNnn?	As above and also send a confirmation text back to the sender.
1111RLNnna?	Activate the specified output on the remote relay, where nn = the unit ID of the remote relay from ID.00 to ID.63 and where a = 1 (for the onboard relay), 2 (for auxiliary A1) or 3 (for auxiliary A2). The specified output will activate for the programmed time and the GSM will send a confirmation text back to the sender.

Programming via Text Message

STORE UP TO 100 DATES FOR HOLIDAYS (HOL)

It is possible to store up to 100 dates for holiday periods (**000 - 099**) that will override any apartment call timebands (**TBA**), any free access timebands (**FRE**) programmed and also override any access control timebands (**ATB**) and access levels (**ACC**) that have been assigned to any of the 200 additional DTO no's and any user's proximity fobs/cards.

It should be noted that this programming command only stores the actual holiday dates in the GSM, the holidays feature is enabled and disabled through the timeband programming commands, **TBA**, **FRE** and **ATB**. For examples please refer back to the previous pages regarding how these respective timeband features are setup and the holidays are enabled.

The following text message can be used to store the holiday dates and query the dates stored in the digital GSM.

1111HOLnnn"dd/mm/yy"	Store a holiday date in the digital GSM, where nnn = the location (number) where the holiday is stored (000 - 099) and where dd/mm/yy = the date of the holiday (format: dd = day of the month, mm = month and yy = year).
1111HOLnnn"dd/mm/yy"?	As above and also send a confirmation text back to the sender of where the date is stored and the date of the holiday.
1111HOLnnn?	Confirm the date of the holiday stored in location nnn .

The GSM Mobile Apps

VIDEX SMS ACCESS, SMS WIZARD & SMS WIZARD PRO

In addition to programming by direct text messages or using the **GSMSK** PC programming software it is also possible to program the GSM intercom using the GSM mobile apps: **Videx SMS Access** (for users), **Videx SMS Wizard** (for administrators) and **Videx SMS Wizard PRO** (for installers and engineers).



The mobile apps can be used to simplify the programming of the GSM intercom using SMS messages. The SMS wizards generate the text message required to communicate with the GSM intercom. Depending on the model of the GSM (GSM PRO, 4G GSM, Digital GSM, GSM Lite, GSMVRK and 2270 GSM module) text messages can be generated to program features such as access codes, proximity access fobs/cards, dial to open (DTO) telephone numbers, assign pre-existing access levels, free access periods and call button/apartment telephone numbers.

Other features are also included to simplify the programming setup process. Additionally it is also possible for users to control their gate or door via the dial to open (DTO) or text message features.

WHERE TO DOWNLOAD THE MOBILE APPS AND GETTING STARTED

The GSM mobile apps are available for both Android smart devices (mobile smartphones and tablets) and also Apple iOS (iPhones and iPads) and can be downloaded for free from the Google Play Store (for Android devices) and the App Store (for iOS devices).

Before using mobile apps, the following details will be required for initial setup:

- **Model of the GSM intercom module** - e.g. **Art.4812/4G** or **Art.4812R/4G** (digital GSM) etc.
- **Firmware level of the GSM intercom** - e.g. for the **Art.4812/4G** GSM the firmware might be **DG124r0** (the current firmware version of the GSM module can usually be found on the label on the back of the GSM intercom or by sending the text message **1111VER?** to obtain the firmware version, also refer to notes on page 54).
- **Telephone number of the GSM intercom** - i.e. the mobile number of the SIM card being used in the GSM module.
- **Master code of the GSM intercom** - i.e. the 4 digit code used for programming, by default this is set to '1111'. In the event that this code has been forgotten or lost please refer to **change the 4 digit master code (CDE)** notes on page 54 or **resetting the master code to 1111** notes on page 22 to reset the code back to factory default if required.

If the **SMS Access** or **SMS Wizard** app is downloaded and installed it is recommended that you first tap on the help icon (?) in the top right corner of the app's homescreen to navigate to the app's quick guide and then click on one of the guide's menu options: **overview**, **homepage** or **programming**.

If the **SMS Wizard PRO** app is downloaded and installed it is recommended that you first tap on the menu icon ☰ in the top right corner of the app's homescreen, then from the drop down menu click the quick guide icon (?). Once on the app's quick guide screen click on one of the guide's menu options: **overview**, **create a site**, **menu**, **homepage** or **programming**.

It should be noted when navigating between the apps different programming screens the hint/help icon (?) (either located in the top right corner of each screen or located in the drop down menu on each screen) can be used to offer additional guidance on how to use the current programming screen, **Fig.117**.

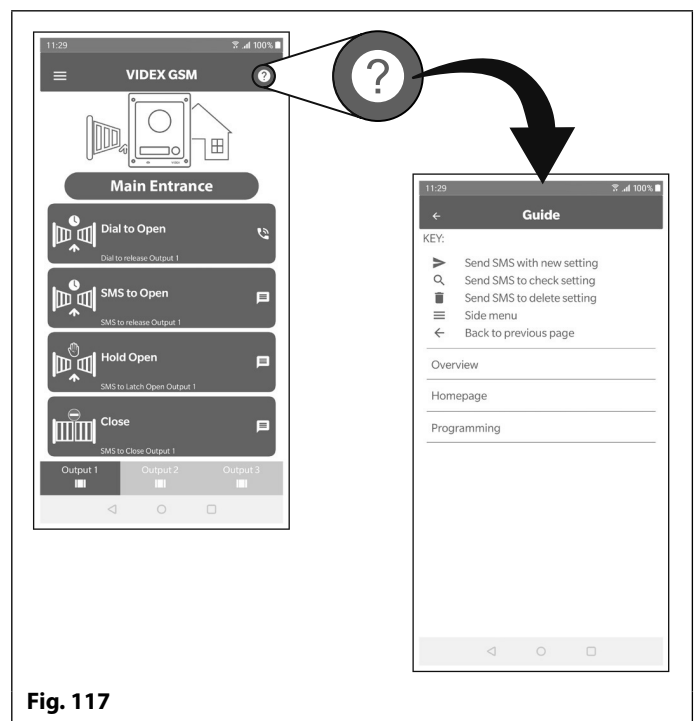


Fig. 117

SMS ACCESS, SMS WIZARD AND SMS WIZARD PRO APP COMPATIBILITY

The GSM mobile apps are all compatible with the latest GSM intercoms and modules available. They are also compatible with the older **Art.4810N** GSM PRO models from firmware version **1.0.4** onwards.

System Operation

STANDBY MODE

When the digital GSM intercom is in standby the display will show the standard welcome message, refer to **Fig.118** (Art.4812) and **Fig.119** (Art.4812R). The date and time is shown along the bottom of the display and the signal is indicated at the top right corner of the display.

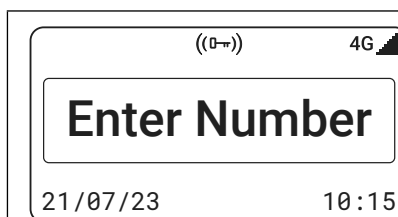


Fig. 118

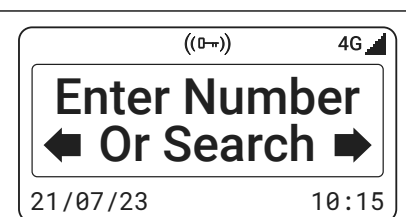


Fig. 119

MAKING A CALL

To make a call, from standby, simply enter the apartment number to be called (e.g. apartment 2) and then press the **ENTER** button , see **Fig.120**. On the panel with the scroll facility use the scroll buttons ,  to search for the required apartment number and then press the **CALL** button , see **Fig.121**.

The digital GSM will call the apartment (the primary number), see **Fig.122**. If an incorrect apartment number has been entered/selected simply press the **CLEAR** button  and start again. The panel will cancel the call to the apartment, see **Fig.123**.

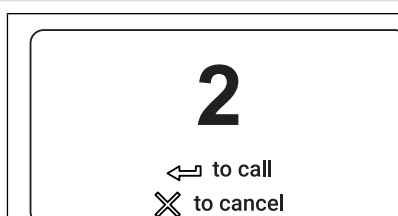


Fig. 120

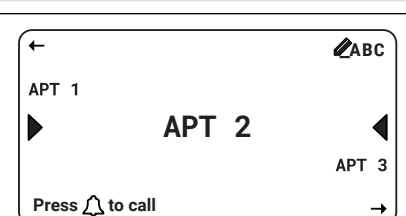


Fig. 121

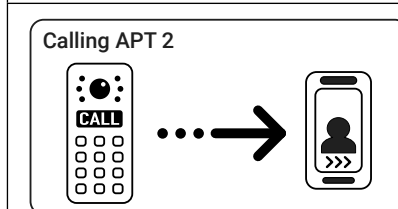


Fig. 122

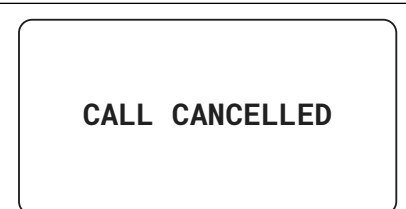


Fig. 123

If the speech board is switched **ON** the panel will announce the following: “calling two”, if apartment 2 was being called, (**Fig.122**) and “call cancelled”, if the call was cancelled, (**Fig.123**).

DIVERTED CALL

First make a call from the digital GSM intercom following the steps above **making a call**. If any divert numbers are programmed and the primary number is not answered the panel will then dial the divert number(s) after the programmed divert time has elapsed. The panel display will still show that a call is in progress (see **Fig.122**).

If the speech board is switched **ON** then the GSM intercom will announce “please wait”, this will indicate that the call has been diverted to the first divert number. This process will repeat again if a 2nd and 3rd divert number has been programmed into the panel.

ANSWERING A CALL AND OPERATING THE DOOR/GATE

After a call has been made and then answered both the caller and user can start a conversation.

The digital GSM intercom display will indicate this when the call has been answered and the line is open, see **Fig.124**.

During a conversation the user can operate the door (see **Fig.125**) or gate (see **Fig.126**) by pressing ‘3’ on their mobile/telephone.

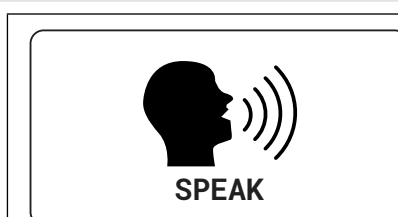


Fig. 124

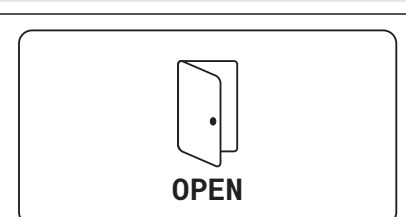


Fig. 125

The user also has some limited programming and operational functions available to them e.g. adjusting mic and speaker volumes, latching and unlatching the onboard relay and activating the auxiliary output (depending on the operating mode of the auxiliary output), for these user functions please refer to user command **table 1** further on in this manual.

If the speech board is switched **ON** the panel will announce one of the following:

“the door is open”, if the **GAT** feature is set to 000, **Fig.125** or

“the gate is open”, if the **GAT** feature is set to 001, **Fig.126**.

Also refer to the notes **3.8 gate mode** in the programming screens section on page 41 and the **GAT** programming notes on page 65.



Fig. 126

System Operation

ENTERING A DOOR/GATE AND TRADE ACCESS CODE

If an access code is programmed into the GSM intercom first press the '0' button, the 'ENTER A CODE' screen will appear on the display, see **Fig.127**. The access code can be entered using the alpha-numeric keypad.

If an incorrect digit has been entered press the **CLEAR** button  (to delete the most recent digit entered).

Re-enter the correct digit again and so on until the correct access code has been entered followed by the **ENTER** button , see **Fig.128**.

If an incorrect code or a code that is not stored in the digital GSM is entered, after the **ENTER** button has been pressed, the display will show **not found**, see **Fig.129**.

If the speech board is switched **ON** the panel will announce one of the following:

"the door is open", if the **GAT** feature is set to **000** and the correct code entered, **Fig.125** or

"the gate is open", if the **GAT** feature is set to **001** and the correct code entered, **Fig.126** or

"you have entered an incorrect number, please try again", if an incorrect code has been entered, **Fig.129**.

ENTERING A TRADE CODE

If a trade code is programmed into the panel follow the same steps as if entering a door/gate code. It is important to note that the trade code will only work if i) a switched 0V (GND) signal is wired through the **CO/NO** relay contacts of an **Art.701T** timeclock and into the **TRD** terminal on the digital GSM or ii) if an access control timeband (**ATB**) for access level 9 has been programmed into the digital GSM.

USING THE BUILT-IN PROXIMITY READER

If the proximity reader facility is being used this can be confirmed if the key symbol  is shown at the top of the LCD graphical display, see **Fig.130** and **Fig.131**. The user can present the programmed fob/card in front of this symbol to operate the door/gate, see **Fig.132** and **Fig.133**.

It should be noted that even if a proximity fob or card is programmed into the digital GSM intercom, if the proximity facility is not enabled then the fob/card will not operate the door/gate.

If the speech board is switched **ON** the panel will announce one of the following:

"the door is open", if the **GAT** feature is set to **000** and a programmed fob or card is presented, **Fig.125**.

"the gate is open", if the **GAT** feature is set to **001** and a programmed fob or card is presented, **Fig.126**.

"invalid code" and also emit a long beep, if a fob or card that is presented to the reader is **not** programmed into the digital GSM, **Fig.134**.

Additional user operations can be carried out via text messaging following user command table 2 on page 75.

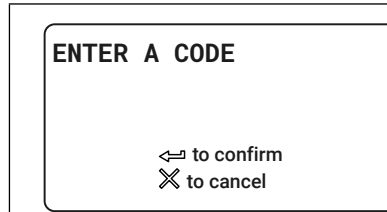


Fig. 127

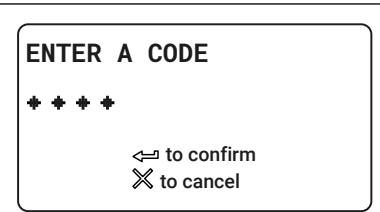


Fig. 128



Fig. 129

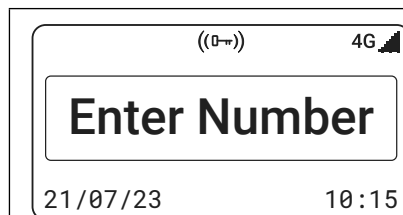


Fig. 130

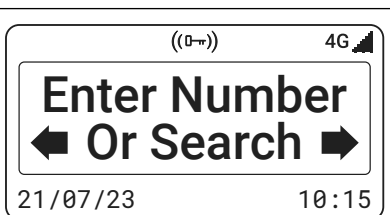


Fig. 131

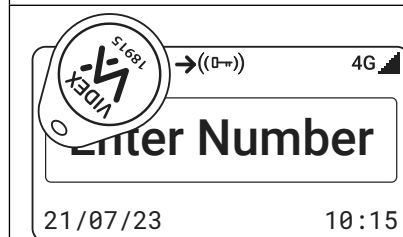


Fig. 132

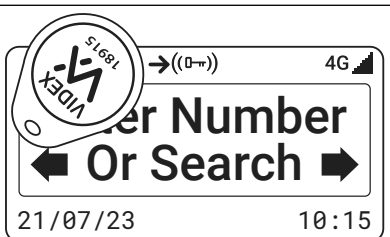


Fig. 133

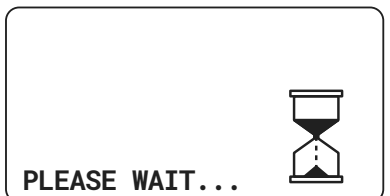


Fig. 134

RELEASING THE DOOR/GATE BY DIALLING THE DIGITAL GSM INTERCOM (DIAL TO OPEN DTO)

This feature is only possible if the dial to open, **DTO**, feature has been enabled on the digital GSM intercom (also refer to the notes **1.1.3 dial to open number** in the programming screens section on page 37 and refer to **Fig.77**). When this feature is enabled the primary number and the 3 divert numbers will be set as dial to open numbers. A call from any of these stored numbers to the digital GSM will result in the panel dropping the call and then opening the door/gate for the programmed relay time **RLT**.

System Operation

USING AN ART. 4850R EXPANSION READER, ART. 4903 OR ART. 2813 (IF CONNECTED VIA RS485 BUS)

If an **Art.4850R** expansion reader, an **Art.4903** keypad or an **Art.2813** remote relay is connected (refer to **Fig.20**, **Fig.21** and notes on pages 17 and 18) and if the speech board is switched ON the digital GSM panel will announce one of the following, but only if the respective module (i.e. **Art.4850R**, **Art.4903** or **Art.2813**) has been setup as device ID.1, if setup as any other ID then the digital GSM will **not speak**:

“the door is open”, if the **GAT** feature is set to **000** and a programmed fob/card is presented to it or a correct access code is entered. Also the LED on the **Art.4850R** will change from amber to green and emit a confirmation beep and operate its own relay (not the digital GSM's relay). In the case of the **Art.4903** the green access granted LED will flash and the keypad emit a series of beeps and operate its own relay and not the digital GSM's relay. In the case of the **Art.2813** remote relay this will operate for the remote relay's programmed time.

“the gate is open”, if the **GAT** feature is set to **001** and a programmed fob/card is presented to it or a correct access code is entered. Also the LED on the **Art.4850R** will change from amber to green and emit a confirmation beep and operate its own relay (not the digital GSM's relay). In the case of the **Art.4903** the green access granted LED will flash and the keypad emit a series of beeps and operate its own relay and not the digital GSM's relay. In the case of the **Art.2813** remote relay this will operate for the remote relay's programmed time.

“invalid code” or “you have entered an incorrect number, please try again”, the **Art.4850R** reader will emit a single beep, a brief pause followed by a short then long beep. Also the reader's LED will change from amber to red if a fob or card that is presented to the reader is **not** programmed into the digital GSM. The relay will **not** operate. In the case of the **Art.4903** keypad the red access denied LED will flash and the keypad will emit a beep and the relay will **not** operate. In the case of the **Art.2813** remote relay this will **not** operate.

IMPORTANT NOTE: Whenever a fob/card is presented to the **Art.4850R** expansion reader or an access code entered via the **Art.4903** keypad the display of the digital GSM will remain the same, i.e. it will continue to show the default welcome screen, refer to **Fig.118** and **Fig.119** on page 72, regardless of which one of the actions described above takes place.

ACTIVATING THE AUXILIARY OUTPUT AO USING AN ACCESS CODE OR BY USING A FOB/CARD

Using an Access code:

Activating the auxiliary output AO using an access code will only be possible if the access code has been stored in memory location **'000'**.

To activate the auxiliary output AO using a code simply enter the code following the same door/gate code steps described on the previous page.

The digital GSM will show **'OK'** on the display to confirm the auxiliary output AO has been activated, see **Fig.135**, and emit a series of beeps in line with the auxiliary output time **A1T**, e.g. if **A1T** is set to 5 seconds then 5 beeps will be heard.

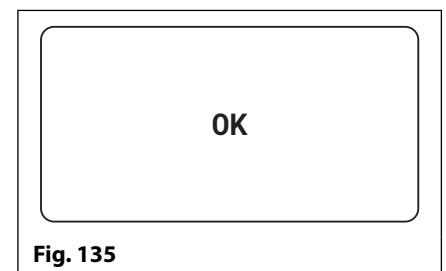


Fig. 135

Using a Proximity fob/card:

Activating the auxiliary output AO using a programmed fob or card will only be possible if the auxiliary output mode **A1M** has been set to mode **'001'** and a fob/card has been stored in memory location **'0000'**.

To activate the auxiliary output AO simply present the fob/card to the onboard reader on the digital GSM, the GSM's display will show **'OK'** to confirm the auxiliary output AO has been activated, see **Fig.135**, and emit a series of beeps in line with the auxiliary output time **A1T**, e.g. if **A1T** is set to 8 seconds then 8 beeps will be heard.

Also refer to the notes **3.1 auxiliary mode** in the programming screens section on page 39 for further details.

IMPORTANT NOTE: Even when the digital GSM's speech board is switched ON when activating the auxiliary output AO by code or proximity fob/card only the display will show **'OK'**, **Fig.135**, no speech annunciation will take place. The exception to this is when a programmed fob/card (stored in memory location **'0000'**) is presented to an **Art.4850R** expansion reader, the expansion reader will emit a single beep, the LED on the **Art.4850R** will change from red to green and operate its own relay and **not** the digital GSM's relay for the programmed relay time of the **Art.4850R**. In this instance with the digital GSM's speech board switched ON it will announce either **“the door is open”** or **“the gate is open”** depending on whether the **GAT** feature is set to **'000'** or **'001'** respectively.

User Commands

USER COMMAND TABLES

Table 1 shows the user commands that can be carried out during a call. Successful commands are signalled by two beeps from the telephone, errors are signalled by four beeps.

IMPORTANT NOTE: When the ED# function has been enabled the user must press the # button on their phone before pressing any of the following user commands (also refer to page 58 for further information).

Table 1

FUNCTION	1st KEY TO PRESS	2nd KEY TO PRESS
Latch the relay (unlatch by pressing 3)	1	0
Release the door or gate	3	n/a
Activate auxiliary output AO ¹	6	n/a
Adjust door speech volume (digital GSM speaker)	4	0 - 9 (0 = lowest, 9 = highest)
Adjust phone speech volume (digital GSM mic)	7	0 - 9 (0 = lowest, 9 = highest)

¹ Activating auxiliary output AO in this way is only possible when A1M mode has been set to mode 001 (also see Fig.15 and notes on page 14 and also notes on page 54, **set auxiliary output AO mode**) and will operate for the programmed A1T time. If the AO output time has been set to latch simply press 6 on the phone to unlatch the output again.

Table 2 shows the SMS text messages that can be sent to the 4G digital GSM intercom while in standby (the examples shown in the table use the default 4 digit master code 1111). Successful text commands are signalled by a single beep from the digital GSM and where the ? is used the appropriate confirmation text returned. Unsuccessful text commands are signalled by a long beep followed by a short beep from the digital GSM and where the ? is used the error message text returned, as shown in Fig.136.

ERROR VIDEX 4G

Fig. 136

Table 2

FUNCTION	MESSAGE TO SEND
Check the signal strength	1111SIG?
Confirm the network provider's name	1111SPN?
Check network type and connection	1111CON?
Check the available balance ²	1111BAL?
Check the software version	1111VER?
Release the door/gate	1111RLY? (? optional, send if confirmation is required)
Latch the relay	1111RLA? (? optional, send if confirmation is required)
Unlatch the relay	1111RUL? (? optional, send if confirmation is required)
Activate auxiliary output AO	1111A1O? (? optional, send if confirmation is required)
Latch auxiliary output AO	1111A1L? (? optional, send if confirmation is required)
Unlatch auxiliary output AO	1111A1U? (? optional, send if confirmation is required)
Check Timebands (0 - 9), for apartment calls and dial to open numbers DTO	1111TBAn? (where n = timeband 1 - 9, also refer to notes on page 57)
Query Access Control Timeband (0 - 9), for prox fobs/cards & additional 200 DTO no's	1111ATBn? (where n = access control timeband 1 - 9, also refer to notes on page 58)
Query Access Level (0 - 9)	1111ACCn? (where n = access level 1 - 9, also refer to notes on pages 58 - 59)
Query Free Access Timeband setting	1111FREN? (where n = free access timeband 0 - 9, also refer to notes on pages 63 - 64)
Check Intercom Time and Date	1111CLK?
Check GSM relay status	1111RLS?
Check auxiliary output AO status	1111A1S?
Find a Telephone Number - primary, diverts and DTO no's, inc. temporary DTO no's & additional 200 DTO no's	1111FDT"tele"? (where tele = telephone number, also refer to notes on page 50)
Delete temporary DTO no's & additional 200 DTO no's only	1111DET"tele"? (where tele = telephone number, also refer to notes on page 52)
Find a Fob or Card location (0000 - 1999)	1111FDF"uc"? or 1111FDF"cid"? (where uc = 5 digit user code and cid = 10 digit fob/card ID printed on fob/card, also refer to notes on pages 62 - 63)

User Commands

Delete a Fob or Card	1111DEF"uc"? or 1111DEF"cid"? (where uc = 5 digit user code and cid = 10 digit fob/card ID printed on fob/card, also refer to notes on page 63)
-----------------------------	--

The following command is only applicable when an **Art.2813** remote relay is connected via the RS485 bus

Activate remote relay output	1111RLNnna? (where nn = unit ID from 00 - 63 and where a = 1 (trigger relay), 2 (trigger A1 output) or 3 (trigger A3 output), also see notes on page 69.
-------------------------------------	--

² - The balance can only be checked if the correct balance check string has been stored (also see **SDL** notes on page 55). This feature is only applicable for pay-as-you-go SIM cards.

Additional User Information

UNDERSTANDING THE SIGNAL STRENGTH (SIG) AND BIT ERROR RATE (BER)

When a request for signal strength message is sent to the digital GSM intercom it will reply with a two part code.

The first part of the code is a signal strength code **SIG** which will be between 0 – 31 or 99. Ideally the signal strength should be as close to 31 as possible for the best possible performance. The lower the number, the weaker the signal. Signal strengths lower than 10 may cause operational problems such as loss of speech quality (and possibly missing DTMF tones) and/or network loss. A signal strength of 99 indicates it could not be detected.

The second part of the code is the bit error rate **BER**. The bit error rate is used in digital telecommunication as a figure of merit for how effectively the receiver (in this case the digital GSM intercom) is able to decode transmitted data (the data in this instance are the various text message commands used to program the digital GSM intercom, described on pages 44 - 70, speech and DTMF signals used by the digital GSM intercom for normal operation). It is the percentage of bits that have errors relative to the total number of bits received in a transmission. Ideally the **BER** code should be as close to 0 as possible, the lower the **BER** the better. High **BER** codes can be caused by noise, interference, distortion or bit synchronisation errors over the transmission of data to the digital GSM intercom and as a result the problems described above (loss of speech quality, possibly missing DTMF tones and/or network loss etc.) can occur.

The example below shows the ideal reply to expect when the signal strength query **1111SIG?** is sent to the digital GSM intercom:

SIGNAL = 31
BER = 0
OK VIDEX 4G

To achieve the best overall performance from the GSM intercom a high signal strength SIG and low bit error rate BER is required. In the event that a low signal strength and high bit error rate is received it is recommended that the **Art.434 GSM antenna** or if using the **Art.434 block antenna** is repositioned, where permissible, at the highest point to achieve the best signal. Where this is not possible an alternative high gain antenna can be used, in particular Videx recommends using the **Art.434/HG/5M** or **Art.434/HG/15M high** gain antennas or another suitable 4G GSM antenna with a standard SMA male connector.

DIALLING INTO THE DIGITAL GSM FROM ANOTHER TELEPHONE

There are three possible outcomes to dialling into the digital GSM intercom depending on the telephone number you are dialling in from and the features setup during programming. The three possible outcomes are shown in the priority function table below and are shown in order of priority. For example, if the number is programmed to automatically activate the relay (**DTO**), this will take priority over the following two options and if the telephone number is stored as a telephone number called from one of the push buttons, this will take priority over the last option.

Priority Function Table

FUNCTION	REQUIREMENT	PRIORITY
Dial in to open the Door (DTO). After dialling the GSM number, the relay will activate and the call will be dropped.	The telephone number of the telephone dialling in must be stored as a primary number or one of the divert numbers: STNn , STDn , STEn or STFn . The DTO feature <u>must</u> be enabled (switched ON) for the apartment, also see STOn:O notes on page 49 and also see STNn , STDn , STEn , STFn notes on pages 51 - 52. (750 user, where n = apt no. 000 - 749). (1000 user, where n = apt no. 000 - 999).	1st
Dial in to activate a call (live speech, activate relay/ auxiliary AO). After dialling the GSM number, the call will be answered and two beeps will be heard. The speech will then be live.	The telephone number of the telephone dialling in must be stored as a primary number or one of the divert numbers: STNn , STDn , STEn or STFn . The DTO feature <u>must</u> be disabled (switched OFF) for the apartment, also see STOn:O notes on page 49 and also see STNn , STDn , STEn , STFn notes on pages 51 - 52. (750 user, where n = apt no. 000 - 749). (1000 user, where n = apt no. 000 - 999).	2nd
Dial in to open the speech from a telephone number not stored in the digital GSM. After dialling the GSM number, the call will be answered and two beeps will be heard. You will then be required to enter the 4 digit code to open the speech.	If neither of the two requirements above are met.	3rd

Additional User Information

UNDERSTANDING THE BEEPS

Functions and errors are indicated by beeps from the digital GSM panel. The following will help you understand the different beeps heard and what, if anything, needs to be done in response to the beeps.

BEEP	REASON	SOLUTION
Short beeps at 1 second intervals.	Relay or auxiliary output activated.	None, this is normal.
Single short beep while the system is in standby and not being used.	A valid text message has been received and processed.	None, this is normal.
Two short beeps followed by a long beep. During this time the GSM display will indicate that it is attempting to call an apartment, see Fig.122 on page 72.	Call made to a stored apartment number but no actual telephone number stored.	Program a telephone number for the apartment.
Long beep, followed by a short beep while the system is in standby. During this time the GSM will send an error message to the sender, see Fig.136 on page 75.	Invalid text message received.	If this has happened when sending one of the programming text messages then check the message for errors. These beeps will also be heard if the 4 digit master code in the text message is incorrect. If you are unsure of the 4 digit code, try resetting it to '1111', also see notes on resetting the master code back to factory default on page 22.
Short beep while the system is in use.	Manually ending a call by pressing the CLEAR button  .	None, this confirms the call has been cancelled. Another call can be placed if required.
Single short beep approx. every 50 seconds after power up. During this time the GSM display will indicate that it is attempting to register with the network, see Fig.38 and Fig.39 on page 21.	Not registered with a network provider but still trying. Unable to see the SIM card or unable to see the antenna or other unknown registering problem.	Leave it a short while to see if it manages to find the network. If the beeps repeat every 50 seconds or so then try the following: check the SIM card is fitted correctly. Try removing the SIM card, cleaning and fitting again. Try moving the antenna to a better location. Try changing the SIM card to another network provider or try changing the antenna.

PROXIMITY READER (ONBOARD READER OR ART.4850R EXPANSION READER)

BEEP	REASON	SOLUTION
Successive short beeps lasting for the duration of the relay time ("the door is open" or "the gate is open").	Programmed fob/card presented to the onboard or expansion reader.	None, this is normal.
Single long beep ("invalid code").	Fob/card presented to the onboard or expansion reader that is not programmed.	The fob/card requires programming into the digital GSM (ensuring the onboard reader is enabled).
Single long beep ("invalid code").	Fob/card presented to the onboard or expansion reader is programmed in the digital GSM however the number of bytes to check for maybe incorrect.	Although the fob/card is programmed in the digital GSM try changing the number of bytes to check for to 2 bytes.
No beeps. The onboard reader is unresponsive.	The onboard reader has not been enabled (regardless of whether fobs have or have not been programmed).	Enable the onboard proximity reader. Also check that the proximity key symbol () at the top centre of the display is present, also see examples Fig.40 and Fig.41 on page 21.

User Management

RECORD SHEET

In order to manage the 4G digital GSM intercom more effectively it is recommended that an up to date record sheet is kept for all the programming particularly if there is a high volume of telephone numbers and fob/cards, access codes and system settings stored in the digital GSM. This will also be useful if any future changes need to be made.

USING THE GSM SK PC SOFTWARE TO MANAGE USER INFORMATION AND DOWNLOAD STORED EVENTS

Because of the high volume of user information that may need to be recorded it is possible to use the **GSM SK PC** software (version **4.1.0.44** or later) to record and save the user's information as an excel spreadsheet using the 'Export' feature. The **GSM SK** software can be used to record and save the call button setup (including divert numbers), the dial to open numbers, the proximity fob/card numbers and access codes. The software can also be used to download up to 4000 stored events from the GSM module.

Further information can be found in the following technical manual: **GSM SK_66251720-EN_V2-3** (or later version)

MANAGING GSM EVENTS REMOTELY

Users can also remotely monitor events in real-time from the digital GSM intercom using Videx's latest web browser based events application. These events can then be viewed on any device such as a tablet, smartphone, laptop and PC.

Details on how to register an online profile for the events application can be found on the website: www.videxevents.co.uk

IMPORTANT NOTE: The SIM card used in the digital GSM intercom requires a data package to be included in order to send the events to the server. Setup of the system only requires a few short steps (as shown below) and help on this can be found once registered and logged in. The steps below is a quick guide on how to setup a GSM to allow events communication between the GSM module and events webpage:

1. From the 'My Modules' page select 'Add new unit'.
2. Send the following SMS message to the GSM hardware to obtain it's unique 15 digit IMEI number: **1111IMEI?** (please note: **1111** is the default engineers code).
3. Complete the following fields:
 - **IMEI** - 15 digit number obtained from step 2.
 - **Description** - e.g. Videx Front Door.
 - **Model** - Select a GSM model from the available drop down list.
 - **Username** - Create a **username** for the GSM module - minimum 6 characters.
 - **Password** - Create a **password** for the GSM module - minimum 6 characters.
4. Press the 'Register' button and you will be returned back to the 'My modules' page where the GSM module will now be listed.
5. Next send the following SMS message to the GSM module replacing 'username' and 'password' with the credentials created in step 3: **1111PAS"username""password"?**
6. Determine the SIM card network providers **APN**, **username** and **password** details. This can usually be found on the network providers website (also refer to the table of **APN** details for the most common network providers in the UK on page 61).
7. Next send the following SMS message to the GSM module replacing the **APN**, **username** and **password** with the correct network providers information: **1111APN"APN""username""password"?**
e.g. the SMS message for an O₂ payandgo would be **1111APN"payandgo.o2.co.uk""payandgo""password"?**
8. Finally to enable sending of events, send the following command to the GSM module: **1111ENE01?**

GSM CLOUD (REMOTE MANAGEMENT AND PROGRAMMING)

It is also possible to remotely manage, program and monitor events of the GSM intercom through the **GSM cloud** management platform by registering for an account at cloud.videxservices.uk. The **GSM cloud** is a web browser based application which allows multiple Videx 4G GSM modules to be managed from anywhere with an internet connection.

⚠ IMPORTANT NOTE: THE GSM CLOUD IS A PAID SUBSCRIPTION BASED MANAGEMENT PLATFORM. ONCE SIGNED UP AND REGISTERED TO THE GSM CLOUD A SUBSCRIPTION KEY WILL BE REQUIRED FOR EACH GSM MODULE.

THERE ARE THREE AVAILABLE SUBSCRIPTION TIERS AS DESCRIBED BELOW.

TO APPLY FOR A SUBSCRIPTION KEY FOR UK & IRELAND CUSTOMERS PLEASE CONTACT :

VIDEX SECURITY LTD (UK) - TEL: (+44) 0370 300 1240, EMAIL: sales@videxuk.com

TO APPLY FOR A SUBSCRIPTION KEY FOR OVERSEAS CUSTOMERS PLEASE CONTACT :

VIDEX ELECTRONICS S.P.A. - TEL: (+39) 0374 631 699, EMAIL: info@videx.it

GSM CLOUD SUBSCRIPTION TIERS

1. **Occasional use tier** - for users or installers where changes to the GSM system are infrequent.
2. **Moderate use tier** - which could be used by local authorities, housing associations & users who need to make moderate changes to the GSM system.
3. **High volume tier** - for users who need to make regular changes to a GSM system e.g. for those managing air bnb properties, holiday parks etc. where a high volume of changes may be required to accommodate the ever changing visitors to the properties.

Troubleshooting

SYSTEM CHECKS AND TESTING

The following table can be used to help diagnose any potential issues that may occur during installation and the system checks that can be carried out to help resolve them.

SYMPTOM	TEST
Interference on the speech.	Check the signal strength 1111SIG? (if the signal strength is too low the GSM module increases it's power to compensate, causing interference with the speech circuits). Try relocating the antenna or using a more powerful or directional antenna (e.g. high gain antenna).
	Ensure the antenna cables are not running close to the power supply cables or the microphone wires inside the intercom panel.
	Try a different SIM card from a different network service provider as they may have better coverage in that area.
Nothing is shown on the graphical display and it is not illuminated.	Check the power supply has adequate voltage as described earlier in this manual (refer to page 7).
	Try a full reset (refer to page 22)
	The digital GSM module may have a fault.
The digital GSM intercom does not respond to SMS messages.	Check the SIM card has an SMS service centre number stored. This will require putting the SIM card into a mobile phone to check. Contact the SIM card provider if you are not sure.
	Check the number you are sending the message to is correct (the number of the SIM card in the digital GSM intercom panel).
	After sending an SMS message to the digital GSM listen for a single short beep from the intercom panel. This will indicate that the message was received and understood. If a long beep is heard it indicates the message was either not understood or the 4 digit master code was incorrect.
	Try resetting the 4 digit master code to 1111 (refer to page 22).
The digital GSM intercom does not respond to SMS messages, but all other functions appear to operate ok, e.g. DTO feature, adjusting speech volumes, releasing the door/gate when button 3 pressed on the phone etc.	This issue can occur on smartphones where the SMS messaging input method is set to UNICODE. Smartphones generally have 3 input methods: GSM alphabet, Automatic and UNICODE. The UNICODE setting is typically used when emoticons/emojis are used in the message so the digital GSM will not recognise text messages that are set to this mode.
	Check that the SMS messaging input method setting on the smartphone is not set up as UNICODE and is set to either GSM alphabet or Automatic. This can usually be done via the settings icon on the smartphone. If you are unsure of how to do this Videx recommend consulting with the user's manual that came with the smartphone or consulting directly with the manufacturer of the smartphone.
The call keeps dropping out.	Increase the call time (SPT) of the digital GSM intercom, refer to the 5. time settings menu programming flowchart (option 1. call time) on page 35 to program via the keypad and set call time notes on page 52 to program by SMS message.
	Check the signal strength and if necessary, move or change the antenna or try a different SIM card provider.
Speech echoes and feedback issues.	Try adjusting the mic and speaker volume via the digital GSM's keypad, refer to the 3. general settings menu programming flowchart (options 2. spk vol and 3. mic vol) on page 32.
	Try adjusting the mic and speaker volume using the programmable settings during a call (refer to user command table 1 on page 75).
	Check the microphone is fitted correctly in the intercom panel and the mic is sat correctly in the rubber boot and the mic hole is not blocked in any way.
ERROR message returned in SMS when programming or no SMS returned at all even though a ? was included at the end of the message sent.	Check over the message sent again and compare it with the examples in this manual. Common errors include: 1. Using two single apostrophe ' marks side by side instead of open and closed speech " marks. Note that these may look the same in the message. An easy way to see if this is the problem is to move the cursor along in the message and if the cursor can get between the two " marks then it is not the correct character used. 2. Lower case letters instead of upper case. For example using stn when STN should be used.

Troubleshooting

Unable to open the gate/door from the telephone during a call (DTMF tones not being recognised) continued.	If the DTMF tone to release the gate/door (or other DTMF tones shown in the user command table 1 on page 75) does not work then check to see if the ED# function has been enabled: 1. Send the following SMS command 1111ED#? to the digital GSM and wait for a reply confirming the status of this function. 2. Note: If the 1111EDZ function is set to 001 (enabled) then when answering the call it will be necessary to first press 0 to accept the call before 3 can then be used to operate the gate/door. Further details on how to setup and how to effectively use these functions can be found on page 61 following the notes enable the dial '0' on answer function and enable the '#' hash function. Check if the digital GSM's display shows the door/gate symbol (refer to Fig.125 and Fig.126 on page 72) when the door release button 3 is pressed on the phone and, if the speechboard is enabled, also confirm if the voice annunciation "the door is open" or "the gate is open" is heard through the digital GSM's speaker. Check if the GSM's relay has been setup with any free access timebands, as the free access feature takes priority over other programming or modes that may have been setup for the relay output, also refer to the free access timebands notes on pages 63 - 64 for more details. Check if the signal strength of the GSM intercom is good (as close to 31 as possible) and the bit error rate (BER) is low (as close to 0 as possible) for the best possible performance. If the signal strength is low and the BER is high it can effect the DTMF tones of the GSM. Try moving the antenna to a different location to try an improve the signal or if necessary swap out the antenna for a high gain antenna.
---	---

If any of the suggestions in the table does not resolve the problem then please contact Videx technical on tel: (+44) 0191 224 3174 for further assistance. For overseas customers contact Videx customer support on tel: (+39) 0734 631 699 for further assistance.

Further guidance can also be found in the **additional user information** section of this manual on pages 77 - 78 in the 'understanding the beeps' table.

General Information

FIRMWARE REVISION

DATE	FIRMWARE VERSION	REVISION
07/03/22	DG5.2.3 (alpha, 750 user), DG1.2.3 (scroll, 750 user), DG7.2.3 (alpha, 1000 user), DG3.2.3 (scroll, 1000 user)	Updated and added: new events, additional "no service" recovery, support for Art.2813 remote relay inc. RLN user command. Added SMS messaging service, user code limited SMS functions for users. Send global announcement SGA feature also added. Removed NOD command (No. of days before auto call). Fixed bug with STE and STF on 750 user version. Other minor bug fixes.
08/01/24	DG524r0 (alpha, 750 user), DG124r0 (scroll, 750 user), DG724r0 (alpha, 1000 user), DG324r0 (scroll, 1000 user)	New GSM 4G firmware format. New SMS commands included: • 1111SPN? - Obtain network service provider name. • 1111FSMnnn? - Forward SMS messages to the master number, where nnn = 000 to disable (default) or nnn = 001 to enable. • 1111LSPnn? - Set locking of speech volume levels during a call, where nnn = 000 to disable (default) or nnn = 001 to enable. • Reinstated 1111NODnnn? - Set the number of days to wait before the GSM makes a short call to refresh the connection to the network, where nnn = 001 – 099 days or 000 to disable (default). • 1111RLS? - Check the relay state i.e. ON (relay closed) or OFF (relay open). • 1111A1S? - Check auxiliary AO state i.e. ON (AO closed, latched) or OFF (AO open, unlatched). • 1111DLAnnn? - Disable/enable latching facility via the phone keypad during a call (DLA switched ON i.e. latching/unlatching not allowed, DLA switched OFF i.e. latching/unlatching allowed). • 1111FOB, 1111FDF and 1111DEF programming commands all updated to include storing fobs/cards, finding memory location of stored fobs/cards and deleting fobs/cards using the fob/card ID. • 1111ATBn"HHMMHHMM",days? - Access control timebands feature added that can be assigned to prox fobs/cards and the 200 additional DTO numbers. • 1111ACCn"ttttttttt",rrrrrrr" - Access control access levels feature added that can be assigned to prox fobs/cards and the 200 additional DTO numbers. • 1111STRnnn"tele"? - Store up to an additional 200 DTO numbers, including storing up to 5 DTO numbers in a single text and assigning access levels to them. • 1111FDT"tele"? - Find if a telephone number is stored. Text reply will indicate if an apartment tel no. or if a temp DTO [suffix (T) in the reply] or if one of the 200 additional DTO's [suffix (D) in the reply]. • 1111DET"tele"? - Delete a telephone number stored, but only if a temp DTO or one of the 200 additional DTO's. Stored apartment tel no's not affected. • 1111HOLnnn"dd/mm/yy"? - Store up to 100 dates for holiday periods (000 - 099) that will override the timebands features TBA, FRE and ATB (including access levels ACC). • Trade code update - Access level 9 can now be used with a trade code instead of having an external timeclock (Art.701T) connected to the TRD input. • Events update - Events can be uploaded by https.

FURTHER READING

Additional programming information using the **GSMSK** PC software can be found in the following technical manual:

- **GSMSK_66251720-EN_V2-3** (or later)

Additional setup information for the **Art.4850R** expansion proximity reader module, the **Art.4903** keypad module and the **Art.2813** remote relay can be found in the following installation instructions:

- **ART.4850R_66250407-EN_V1-2** (or later)
- **ART.4903_66251800-EN_V1-2 - Rev.0.1** (or later)
- **ART.2813_66251545_V1-1** (or later)

Additional port forwarding, server setup and configuration information can be found in Videx application note:

- **AN0046_RemotelyProgramming4GIntercomsViaPCSoftware.**

Additional information regarding connection to mains supply voltage can be found in the following regulations (for the UK only):

- **I.E.T. Wiring Regulations, Eighteenth Edition BS7671:2018** (or later).

For overseas customers it is recommended that you consult with the relevant governing body for the appropriate regulations and standards of your country.

ENG DISPOSAL

In accordance with the Legislative Decree no. 49 of 14 March 2014 "Implementation of the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)".

The crossed-out bin symbol on the equipment or on the packaging indicates that when the product reaches the end of its lifetime, it must be collected separately from mixed municipal waste. The user must, therefore, dispose of the equipment at the end of its lifetime in the suitable waste collection centres or bring it to the retailer during the purchase of a new equipment of equivalent type at the ratio of one-to-one. Furthermore, the user is allowed to dispose of the WEEEs of very small size (domestic appliances without any external dimension exceeding 25 cm (9.84 inches) for free to the retailers, without any purchase obligation. The correct waste disposal of the WEEEs contributes to their reuse, recycling and recovery and avoids potential negative effects on the environment and human health due to the possible presence of dangerous substances within them.

**ITA SMALTIMENTO**

Ai sensi del Decreto Legislativo 14 marzo 2014, n° 49 "Attuazione della direttiva 2012/19/UE sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE)".

Il simbolo del cassonetto barrato riportato sull'apparecchiatura o sulla sua confezione indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti urbani misti. L'utente dovrà, pertanto, conferire l'apparecchiatura giunta a fine vita presso gli idonei centri di raccolta differenziata oppure riconsegnarla al rivenditore al momento dell'acquisto di una nuova apparecchiatura di tipo equivalente, in ragione di uno a uno. L'utente ha, inoltre, la possibilità di conferire gratuitamente presso i distributori, senza alcun obbligo di acquisto, per i RAEE di piccolissime dimensioni (per le apparecchiature di tipo domestico con nessuna dimensione esterna superiore a 25 cm).

L'adeguata raccolta differenziata dei RAEE contribuisce al loro riutilizzo, riciclaggio e recupero ed evita potenziali effetti negativi sull'ambiente e sulla salute umana dovuti alla eventuale presenza di sostanze pericolose al loro interno.

FRA ÉLIMINATION

Conformément au décret législatif n° 49 du 14 mars 2014 relatif à l'« Application de la directive 2012/19 / UE relative aux déchets d'équipements électriques et électroniques (DEEE) ».

Le symbole de la poubelle barrée sur l'équipement ou sur son emballage indique que le produit en fin de vie utile doit être collecté séparément des autres déchets municipaux en mélange. L'utilisateur doit donc remettre l'équipement en fin de vie aux centres de collecte appropriés ou le restituer au revendeur lors de l'achat d'un nouveau type d'équipement équivalent, dans le rapport de un à un. De plus, l'utilisateur a la possibilité de conférer gratuitement aux distributeurs, sans aucune obligation d'achat, de très petits DEEE (pour les appareils ménagers sans dimensions extérieures supérieures à 25 cm). La collecte séparée adéquate des DEEE contribue à leur réutilisation, leur recyclage et leur valorisation et évite les éventuels effets négatifs sur l'environnement et la santé humaine en raison de la présence possible de substances dangereuses dans ceux-ci.

SPA ELIMINACIÓN

De conformidad con el Decreto legislativo n. 49 de 14 de marzo 2014 "Aplicación de la Directiva 2012/19/UE relativa a residuos de aparatos eléctricos y electrónicos (RAEE)".

El símbolo del contenedor tachado indicado sobre los aparatos o sobre los embalajes señala que el producto al final de su vida útil debe ser recogido separadamente de otros residuos municipales mezclados. Por tanto, el usuario deberá conferir los aparatos al final de su vida útil en los apropiados centros de recogida selectiva o devolverlos al revendedor al momento de la compra de nuevos aparatos equivalentes, en una relación de uno a uno. Además, el usuario tiene la posibilidad de entregar sin cargo a los distribuidores, sin ninguna obligación de compra, los RAEEs muy pequeños (para electrodomésticos sin dimensiones externas superiores a 25 cm).

La recogida selectiva apropiada de los RAEEs contribuye a su reutilización, reciclaje y valorización y evita potenciales impactos negativos sobre el medio ambiente y la salud humana debidos a la posible presencia de sustancias peligrosas dentro de ellos.

NLD VERWIJDERING

In overeenstemming met het Wetsbesluit nr. 49 van 14 maart 2015 "Implementatie van de Richtlijn 2012/19/EU inzake afgedankte elektrische en elektronische apparaten (AEEA)".

Het doorgeslechte vuilnisbaksymbool op het apparaat of de verpakking geeft aan dat het product aan het einde van zijn levensduur niet samen met het gewone huisvuil weggegooid mag worden. De gebruiker moet het apparaat aan het einde van zijn levensduur inleveren bij een gepast inzamelpunt of de winkel waar hij een nieuw apparaat van een gelijksoortig type zal kopen. De gebruiker kan tevens AEEA's van een zeer klein formaat (huishoudapparaten met een buitenafmeting kleiner dan 25 cm (9,84 inch) gratis en zonder enige aankoopverplichting bij handelaars inleveren. Een juiste verwijdering van AEEA's draagt bij tot hergebruik, recycling en terugwinning, en voorkomt potentiële negatieve effecten op het milieu en de menselijke gezondheid door de mogelijke aanwezigheid van gevaarlijke stoffen.

POR ELIMINAÇÃO

De acordo com o Decreto Legislativo n.º 49 de 14 de março de 2014 "Implementação da Diretiva 2012/19/UE relativa aos resíduos de equipamentos elétricos e eletrónicos (REEE)".

O símbolo do caixote do lixo riscado no equipamento ou na embalagem indica que quando o produto atinge o fim da sua vida útil, deve ser recolhido separadamente dos resíduos urbanos mistos. O utilizador deve, portanto, eliminar o equipamento no final da sua vida útil nos centros de recolha de resíduos adequados ou levá-lo ao vendedor durante a compra de um novo equipamento de tipo equivalente, na proporção de um para um. Além disso, o utilizador pode eliminar gratuitamente os REEE de dimensões muito reduzidas aos vendedores, sem qualquer obrigação de compra. (só aparelhos domésticos sem qualquer dimensão externa que exceda 25 cm, ou seja 9,84 polegadas). A correta eliminação dos REEE contribui para a sua reutilização, reciclagem e recuperação e evita potenciais efeitos negativos sobre o ambiente e a saúde humana devido à possível presença de substâncias perigosas no seu interior.

MANUFACTURER FABBRICANTE FABRICANT FABRICANTE FABRIKANT FABRICANTE الشركة المصنعة	VIDEX ELECTRONICS S.P.A. Via del Lavoro, 1 63846 Monte Giberto (FM) Italy Tel (+39) 0734 631669 Fax (+39) 0734 632475 www.videx.it - info@videx.it	
CUSTOMER SUPPORT SUPPORTO CLIENTI SUPPORTS CLIENTS ATENCIÓN AL CLIENTE KLANTENDIENST APOIO AO CLIENTE خدمة العملاء	VIDEX ELECTRONICS S.P.A. www.videx.it technical@videx.it Tel: +39 0734-631669 Fax: +39 0734-632475	UK Customers only: VIDEX SECURITY LTD www.videxuk.com Tech Line: 0191 224 3174 tech@videxuk.com

Portugal office:
VX IBÉRIA, UNIPESSOAL LDA
 Rua Tenente Mário Grilo, 26 D, E, F
 4200-397 Porto
 Phone: (+351) 221 124 531
 www.videx.it
 comercial@videx.it

Singapore office:
VIDEX ASIA PACIFIC PTE LTD
 31 Woodlands Close
 #06-37 Woodlands Horizon
 Singapore 737855
 Phone: (+65) 81898912
 commercial@videx.it

Main UK office:
VIDEX SECURITY LTD
 1 Osprey Trinity Park
 Trinity Way
 LONDON E4 8TD
 Phone: (+44) 0370 300 1240
 www.videxuk.com
 marketing@videxuk.com

Northern UK office:
VIDEX SECURITY LTD
 Unit 4-7
 Chillingham Industrial Estate
 Chapman Street
 NEWCASTLE UPON TYNE - NE6 2XX
 Tech Line: (+44) 0191 224 3174
 Phone: (+44) 0370 300 1240

Greece office:
VIDEX HELLAS Electronics
 48 Filolaou Str.
 11633 ATHENS
 Phone: (+30) 210 7521028
 (+30) 210 7521998
 Fax: (+30) 210 7560712
 www.videx.gr
 videx@videx.gr

Danish office:
VIDEX DANMARK
 Hammershusgade 15
 DK-2100 COPENHAGEN
 Phone: (+45) 39 29 80 00
 Fax: (+45) 39 27 77 75
 www.videx.dk
 videx@videx.dk

Benelux office:
NESTOR COMPANY NV
 E3 laan, 93
 B-9800 Deinze
 Phone: (+32) 9 380 40 20
 Fax: (+32) 9 380 40 25
 www.nestorcompany.be
 info@nestorcompany.be

Dutch office:
NESTOR COMPANY BV
 Business Center Twente (BCT)
 Grotestraat, 64
 NL-7622 GM Borne
 www.nestorcompany.be
 info@nestorcompany.be



The product is CE marked demonstrating its conformity and is for distribution within all member states of the EU with no restrictions. This product follows the provisions of the European Directives 2014/30/EU (EMC); 2014/35/EU (LVD); 2011/65/EU (RoHS); CE marking 93/68/EEC.

Le produit est marqué CE à preuve de sa conformité et peut être distribué librement à l'intérieur des pays membres de l'union européenne UE.
 Ce produit est conforme aux directives européennes 2014/30/EU (EMC) ; 2014/35/EU (LVD) ; 2011/65/EU (RoHS); marquage CE 93/68/EEC.

Het product heeft de CE-markering om de conformiteit ervan aan te tonen en is bestemd voor distributie binnen de lidstaten van de EU zonder beperkingen. Dit product volgt de bepalingen van de Europese Richtlijnen 2014/30/EU (EMC); 2014/35/EU (LVD); 2011/65/EU (RoHS); CE-markering 93/68/EEG.

يحمل المنتج علامة التوافق الأوروبي CE لإظهار توافقه مع المواصفات ذات الصلة وإمكانية توزيعه في كافة دول الاتحاد الأوروبي بدون أية قيود. يلبي هذا المنتج جميع متطلبات التوجيهات الأوروبية 2014/30/UE (EMC); 2014/35/UE (LVD); 2011/65/UE (RoHS); علامة المطابقة للمواصفات الأوروبية 93/68/CEE.

Il prodotto è marchiato CE a dimostrazione della sua conformità e può essere distribuito liberamente all'interno dei paesi membri dell'Unione Europea UE.
 Questo prodotto è conforme alle direttive Europee: 2014/30/UE (EMC); 2014/35/UE (LVD); 2011/65/UE (RoHS); marcatura CE 93/68/EEC.

El producto lleva la marca CE que demuestra su conformidad y puede ser distribuido en todos los estados miembros de la unión europea UE.
 Este producto cumple con las Directivas Europeas 2014/30/UE (EMC); 2014/35/UE (LVD); 2011/65/UE (RoHS); marca CE 93/68/EEC.

O produto tem a marca CE que demonstra a sua conformidade e destina-se a distribuição em todos os estados membros da UE, sem restrições. Este produto segue as disposições das Diretivas Europeas 2014/30/UE (EMC); 2014/35/UE (LVD); 2011/65/UE (RoHS); marcação CE 93/68/CEE.



66251 750-4G-EN