DIGITAL GSM DOOR INTERCOM SYSTEM
(Up to 1000 users)
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DIGITAL GSM INTERCOM MANUAL
VER2.1.1UK
MANUAL INTRODUCTION

The information in this manual is intended as an installation and commissioning guide for the digital GSM door intercom system. This manual should be read carefully before the installation commences. Any damage caused to the equipment due to faulty installations where the information in this manual has not been followed is not the responsibility of Videx Security Ltd.

VIDEX run free training courses for engineers who have not installed this system before. Technical help is also available on 0191 224 3174 during office hours or via e-mail tech@videxuk.com.

SYSTEM INTRODUCTION

The system is designed to work on the same technology as mobile phones. It enables a call to be made from an entry point (Door, gate etc), to any telephone number (mobile or land line). Up to 1000 apartments can be programmed into the door panel, each able to call two telephone numbers (If the first is busy or not answered, the call can be diverted to the second). 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 dial to open list (to allow them to dial into the panel and release the door/gate), a time band to restrict when this apartment can receive calls and on the scroll panels, a user name up to 16 characters. Features of the system include a dry contact relay output, an open collector auxiliary output, push to exit input and switched 0V auxiliary input. Programming of the telephone numbers and additional features can be carried out via the panel, PC using a specially designed Windows program or text message. An additional access control feature is included for all 2000 telephone numbers allowing a number of callers to open the gate/door simply by dialling the telephone number of the intercom panel (The intercom panel will not answer these calls but will activate the relay output).

A SIM card is required for this product but not supplied. 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 but if using a ‘Pay as you go’ we would recommend setting up an automatic top up to avoid running short on credit and loosing 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 contact the SIM card provider or visit their web sites. Remember to restrict the spend ion the SIM card to avoid unnecessarily large phone bills due to misuse or fault.

Network provider selection: It is imperative for the reliably 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. 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 broadband and mobile checker app). This tool will advise on the best coverage for the main network providers in the area. This will show all transmitters in the area. It is advised to choose the closest one or if there are many then choose a transmitter working on 900MHz as this frequency works best through obstacles such as walls, buildings etc. 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 serial number of the GSM intercom and can be found on the rear of the module just below the SIM holder on a white label. It’s the long number below the barcode.

TIME BAND NOTE: This feature relies on the network providers time zone setting and also if they support NITZ (Network Identity and Time zone). Check the time is correct when exiting programming mode. If the time/date returned is wrong, it maybe that they do not support it in which case this feature cannot be used.

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 mount the antenna vertically.
- Always ensure the power is off to the intercom panel before inserting or removing the SIM card.
- New SIM cards will need registering 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 web site or by calling their customer services. Please use one of the following SIM card providers (Vodafone, TMobile, O2 or Orange). **We do not recommend using 3 at this present time.**
- To be able to receive text messages from the intercom panel, the SIM card will require an SMS service centre number. This is normally preinstalled 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 telephone and using the telephones menu options to check it. If a number is not programmed then it should be programmed while in the telephone (The number can be obtained from the 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 Orange and T-Mobile the SIM card must be remove and put into a mobile phone.
- When storing the 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 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.

IMPORTANT NOTE ABOUT SIM CARD

When using a pay monthly SIM card you must ask the service provider to put a spend limit on the account (Vodafone call this service ‘spend checker’). This is to safeguard against possible problems which could result in a large phone bill at the end of the month. All providers offer this service. You will need to either ring them or e-mail them to set this up. Automatic top ups should also have a monthly limit.
SYSTEM COMPONENTS

A system comprises of an intercom panel, power supply, SIM card and antenna. The intercom panel is of modular design allowing it to be customised to the installation requirements by including proximity access control, coded access or bioaccess.

DIGITAL MODULE

The digital panel is available for the 4000 Series modular design or flush vandal resistant. There are two versions in the 4000 series design, name scroll facility which includes a numeric keypad and 3 buttons to navigate tenants/company names on the display and a alpha numeric version which includes a numeric keypad and letters A-F. The vandal resistant panel is also available with letters A-I.

DIP SWITCH SETTINGS

There are 2 dip-switches located on the back of the module. They can be used to alter the volume from the Door Intercom speaker. Additionally, the volume can also be adjusted during a call via the telephone keypad.

SPEAKER VOLUME

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>GAIN (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>ON</td>
<td>6</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>12</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>18</td>
</tr>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>23.5</td>
</tr>
</tbody>
</table>

LCD DISPLAY CONTRAST

Adjust the LCD contrast by turning the pot on the rear of the panel next to the terminal connector.

CONNECTION

<table>
<thead>
<tr>
<th>CONNECTION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>+12V</td>
<td>12Vdc – 14Vdc input</td>
</tr>
<tr>
<td>0V</td>
<td>Ground connection</td>
</tr>
<tr>
<td>C</td>
<td>Common connection of dry contact relay</td>
</tr>
<tr>
<td>NO</td>
<td>Normally open connection of dry contact relay</td>
</tr>
<tr>
<td>NC</td>
<td>Normally closed connection of dry contact relay</td>
</tr>
<tr>
<td>AO</td>
<td>Auxiliary output switched 0V (Open collector output)</td>
</tr>
<tr>
<td>PTE</td>
<td>Exit button input switched 0V (0V to trigger)</td>
</tr>
<tr>
<td>AI</td>
<td>Auxiliary input switched 0V (0V to trigger, triggers AO)</td>
</tr>
</tbody>
</table>

ANTENNA

The GSM antenna connects to the SMA female bulkhead on the rear of the module. A GSM antenna with a SMA male connector should be used.

Note: An antenna must always be connected and positioned vertically.

Note: Always route the GSM cable away from the microphone wires and the power supply wires to avoid interference on the speech channels.
DOOR PANEL MOUNTING FRAMES

Both surface and flush mounting frames are available. The size of the frame will depend on the number of modules that make up the door panel. The last digit of the frame code indicates the number of modules it will take. Frames are available in gun metal gray finish, chrome finish (Suffix \C to the frame code) or gold finish (Suffix \G to the frame code).

Flush frames:

Surface frames:

POWER SUPPLY

The GSM intercom panel is designed to work with power supplies in the range or 12-14Vdc. The power supply should be capable of supplying a constant current of no less than 1 amp (If the system is to work with failsafe lock releases or magnetic locks we would recommend a minimum of 2 amps). The following Videx power supplies can be used:-

AMR2-12  12-14Vdc 2A switched mode PSU
Art.521B  13.5Vdc 1A DIN box PSU
SP29      13.8Vdc 2A boxed PSU with battery backup facility
SP28      13.8Vdc 3A boxed PSU with battery backup facility
**WIRING DIAGRAMS**

**PUSH TO EXIT BUTTON AND AUXILIARY INPUTS/OUTPUTS**

Connections for push to exit button

Connections for auxiliary input (Switched 0V) and auxiliary output (Connected to 506N relay)

Auxiliary output is also triggered by pressing 6 on the handset during a call.
GUIDE

Connections for power supply output to intercom panel and lock release connections.

<table>
<thead>
<tr>
<th>Connections</th>
<th>20m</th>
<th>50m</th>
<th>100m</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5mm²</td>
<td>0.5</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>1.0mm²</td>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>1.5mm²</td>
<td>1.5</td>
<td>3.0</td>
<td>4.5</td>
</tr>
</tbody>
</table>

The power supply should be located as close to the intercom panel as possible for best performance. Maximum acceptable resistance for above cables = 3Ω

INSTALLATION

- 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.

- 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 (IEE Wiring regulations)

- 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.

**Lock release back EMF protection**: A capacitor must be fitted across the terminals on an AC lock release and a diode must be fitted across the terminals on a DC lock release as shown in the diagrams below to suppress back EMF voltages.

![Diagram 1](image1)

![Diagram 2](image2)

PANEL CARE

The door panel’s facia is either mirror finish stainless steel, brushed stainless steel or matt finish aluminium. It is important that the facia is cleaned on regular occasions to prevent dirt build up and tarnishing of the metal. A general household metal polish can be used but care should be taken to follow the grain of the metal when polishing and also avoid any polish build up around the call buttons which may prevent the buttons from operating correctly.
TESTING, POWER UP AND RESET

After connecting the power supply, antenna, lock output and auxiliary devices as shown in this manual and before powering up a SIM card must be installed. The SIM holder can be found on the back of the module under the label ‘SIM’. A SIM card from any supplier can be used. Simply push the SIM card in (It will only fit one way). IMPORTANT: Replace the label over the SIM hole.

- Check all the connections have been made correctly and then power up the system.
- The GSM intercom requires approximately 30 seconds too initialise properly. We recommend not sending SMS messages or pressing buttons during this time.
- From power up; the panel display will first show the software version number for a few seconds and then ‘WAIT’. After a delay the display will show the standby message.
- Once initialised, you can begin programming.

RESET TO FACTORY DEFAULTS

There are two reset modes available. The first will reset the master code only and the second will reset everything and clear all stored telephone numbers.

RESET THE MASTER CODE TO 1111

1. Power down the intercom panel
2. Hold down the ‘Enter’ button (on VR4802 or 4802) or the ‘4’ button (on 4802R)
3. Power up continuing to hold the button
4. Wait for the display to revert to the standby message
5. The master code is now reset to 1111

FULL RESET (WARNING: THIS WILL COMPLETELY FORMAT THE MEMORY)

1. Power down the intercom panel
2. Hold down the ‘9’ button (on VR4802 or 4802) or the ‘3’ button (on 4802R)
3. Power up continuing to hold the button
4. When the display shows ‘WAIT’ release the button
5. After a delay, all settings are returned to factory defaults

The panel software is the same for both Alpha (VR4802, 4802) and scroll (4802R) style panels. To initially set the panel, power up with the ‘7’ (on VR4802 or 4802) or power up with the ‘2’ pressed (on 4802R). Keep the button pressed until the display reverts to the standby message.

PROGRAMMING

Programming can be carried out either by the panel keypad & display or by PC. Additionally, programming can be carried out via SMS text messages.

PROGRAMMING BY THE KEYPAD AND DISPLAY

The programming menu is protected by a 4 digit engineer’s code. The factory default is 1111. To enter programming mode, press ‘0’ followed by the 4 digit code and then press enter. The programming flow chart is on the following page. An explanation of each programming option can be found on the pages that follow.
1 - ADD/EDIT or DELETE an Apartment

From the main menu page, press ‘1’ for APT then press either ‘1’ to add or edit an apartment, ‘2’ to delete an apartment or ‘5’ to return to the main menu page.

**ADD/EDIT**

**MEMORY LOCATION;** Memory locations are between 0 & 999. The memory location is simply a position in memory to store a single apartments/persons details.

**TELEPHONE NUMBER;** This is the first telephone number to be called when a user enters the apartment number for this user. The telephone number can be up to 16 digits.

**DIVERT NUMBER;** If the first number is not answered or busy then this number will automatically be called. The number can be up to 16 digits. Leave this blank if there is no number to divert to.

**APARTMENT NUMBER;** The apartment number is the number entered by the caller. The number can be up to 6 digits/characters.

**ACCESS CODE;** Each user can have their own personal access code to gain enter to the premises. The access code can be up to 6 digits. When entered by a user it will activate the lock relay for the programmed time period. Leave blank if not required.

**DTO;** It is possible to allow users to dial the telephone number of the panel to activate the lock relay. To activate this feature enter ‘1’. To disable this feature enter ‘2’. When this feature is active, a user calling from either the telephone number or divert number will activate the relay for the programmed time. The call will then be dropped automatically. If this option is set to ‘2’, the call will be dropped automatically.

**TIMEBAND;** A time band is used to set when a user can receive calls. For example a user may only want to receive calls during certain hours of the day. There are 10 time bands available (0-9). Time band 0 is set to all day (00:00 – 23:59) and cannot be changed whereas all the other time bands can be programmed.

**APARTMENT NAME;** The apartment name feature is only used on the scroll style panels. On this type of panel it is possible for callers to scroll through these names on the panel. The names can be up to 16 characters long. Entering these names is similar to sending a text on a mobile phone. You use the numeric keypad as shown in the table below.

| 1 = <SPACE>.,& | 2 = ABC | 3 = DEF |
| 4 = GHI | 5 = JKL | 6 = MNO |
| 7 = PQRS | 8 = TUV | 9 = WXYZ |
| ENTER = FINISHED | 0 = +,-* | CLEAR = DELETE |

**DELETE**

**MEMORY LOCATION;** Memory locations are between 0 & 999. The memory location is simply a position in memory to store a single apartments/persons details. Enter the memory location to delete and press enter. All information in that memory location will be deleted.

2 - ADJUSTING SYSTEM TIMES

From the main menu page, press ‘2’ for TIMES then press either ‘1’ for call time, ‘2’ for divert time, ‘3’ for relay time, ‘4’ for aux out time or ‘5’ to return to the main menu page.

**CALL TIME;** The call time can be between 1 - 255 seconds. The call time starts from when the enter button is pressed and is the time before the call automatically clears down.

**DIVERT TIME;** The divert time can be between 1 – 255 seconds. The divert time is the wait time for a call to be answered before it attempts to divert the call to the stored divert number (if available). If no number is stored, the call will continue with the first number until answered or the call time expires.

**RELAY TIME;** The relay time can be between 1 – 255 seconds.

**AUX TIME;** The auxiliary output (AO) time can be between 1 – 255 seconds.
3 – ADDITIONAL SETTINGS

From the main menu press ‘3’ for display and language settings then choose 1 to adjust the main display text, 2 to adjust the second display text and 3 to change the display language.

LCD1; The display text is usually ‘ENTER NUMBER’. This can be changed to any message up to 16 characters in length. Entering these names is similar to sending a text on a mobile phone. You use the numeric keypad as shown in the table below.

LCD2; This display text will switch back and forth with the text from LCD1 on an 8 second cycle. This can be changed to any message up to 16 characters in length. Entering these names is similar to sending a text on a mobile phone. You use the numeric keypad as shown in the table below.

LANGUAGE; The messages displayed on the display during operation can be shown in a number of languages. Choose from the options available and press enter to select.

| 1=EN  | English  |
| 2=IT  | Italian  |
| 3=DU  | Dutch    |

4 - ADJUSTING SYSTEM SETTINGS

From the main menu page, press ‘4’ for SETTINGS then press either ‘1’ to set the auxiliary mode, ‘2’ to change the master code, ‘3’ for audio options, ‘4’ for timebands or ‘5’ to return to the main menu page.

AUX MODE; The auxiliary mode controls how the AO output terminal operates. When set to ‘1’ the output is manually triggered by the user by pressing 6 on the telephone during a call or by triggering the AI terminal (0V triggered). When set to ‘0’ the AO terminal will trigger automatically during a call for the full duration of the call and when set to ‘2’ the AO terminal will trigger automatically upon a call for the programmed AUX TIME.

MC; The master code must be 4 digits but can be any 4 digit number. The factory default is 1111.

AUD; Entering this mode will take you to another menu page with the following options:-

The speech board ‘SB’ is the voice annunciation you here during a call. Both the volume and the setting of this can be adjusted. The MIC VOL and SPK VOL are the speech volumes during a call. Press 1 for speech board volume, 2 for speech board mode, 3 for microphone volume, 4 for speaker volume or 5 to return to the main menu.

SBVOL; The volume can be from 0 – 7. 0 = lowest, 7 = highest.

SBMODE; Press ‘1’ to disable the voice annunciation, ‘2’ to set the voice annunciation to speak numbers individually (i.e. 100 would be spoken as One, Zero, Zero) or ‘3’ to set the voice annunciation to speak the numbers combined (i.e. 100 would be spoken as One Hundred).

MICVOL; The microphone volume can be between 0 – 9. 0 = lowest, 9 = highest.
SPKVOL; The speaker volume can be between 0 – 9. 0 = lowest, 9 = highest.

TIMEBAND; There are 10 time bands available (0-9). Each user can be attached to one time band. Time band ‘0’ is the default time band and is set to all day (00:00 – 23:59) and can’t be changed. On the time band page, press 1-9 and then ‘enter’ to edit one of the time bands. On the following page enter the ON time and the OFF time. The 24 hour clock must be used and the ON time must be lower than the OFF time. Any users attached to this time band will only be able to receive calls between this ON & OFF time. Remember to use the 24hr clock.

EXIT

To exit from the programming menu from the main menu press ‘5’. When exiting the programming the display will first show ‘END’ then show the signal strength received from the service provider and also the time & date sent by the service provider. The signal strength will be between 0 – 31 or 99. Ideally the signal strength should be as close to 31 as possible. 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 network loss. A signal strength of 99 indicates it couldn’t be detected. Exit from the programming will also happen automatically if no buttons are pressed for 30 seconds.

PROGRAMMING BY PC

USB DRIVER
IMPORTANT: Before connecting the GSM unit to the PC and before installing the GSM PC program, first install the driver for the USB adapter which can be found on the supplied CD in the following folder:-

D:\FT232Driver\CDM20814.exe Where D is the letter of your CD drive.

SOFTWARE SETUP
Run the setup program (setup.exe) from the CD. Follow the on screen instructions to complete the setup. Please note, the PC must be Window XP PRO or later and have the .NET 4 framework installed. (The .NET 4 framework can be found on the CD or will be downloaded from the internet during install).

After completing the setup, the program will be available from your start menu as Videx GSM. Before running the program, connect the supplied USB cable between a USB port on your PC and the GSM unit. Run the program and the following screen should appear:-
When the program loads, it checks all available ports for the GSM unit. If found, the GSM unit goes online with the PC. From the main screen it is possible to:

**Check signal strength:**
Click on update to retrieve the signal strength from the unit. The signal strength will be between 1 & 31 whereby 31 is excellent and 1 is poor. A signal strength of at least 10 is required for the system to work satisfactorily.

**Check balance on pay as you go SIM’s:**
For this to work you must first store the check string required by the service provider on the settings page. For example, the string *#1345# is used by Vodafone to retrieve your current balance. Once this has been stored and uploaded to the unit, clicking the Check Balance button will retrieve it.

**Check firmware version:**
Click the Check Firmware button to retrieve the firmware version of the GSM unit. This will be useful to technical support should you need to call and can also give you an indication of functions available as identified in the back of this manual.

**Communication port setup:**
Although the communication should setup automatically when the program is started it is also possible to manual setup the communication port.

To setup manually, first press the Refresh List button which will find all available communication ports, Then either select from the drop down list, the port which is connected to the GSM unit and press the Auto Detect button to check for the device or just simply click on the Auto Detect button to check all available ports. If the device is found, the status will change to online.

**Mobile phone:**
The mobile phone can be used like a normal mobile phone to make calls. This can be useful when setting up the GSM unit’s SIM card with functions such as switching off voice mail and text alert or listening to the SIM cards balance through the intercom’s speaker. Simply type the number to call on the keypad and click the send button. To end the call press the button and to clear the display press the C button.

Please note: After making any changes to the settings and stored telephone numbers on the PC, they must then be uploaded to the unit before they will take effect.
GENERAL SETTINGS:

The general settings page has the following programmable options:

Call Time: Maximum length of a call before it automatically clears down (1-255 Seconds)
Relay Time: Relay activation time (1 – 255 Seconds, 0 = latching)
Aux Out Time: Auxiliary output AO terminal, switched 0V time ((1 – 255 Seconds, 0 = latching)
Divert Time: The time a phone is allowed to ring before the unit cancels the call and diverts to the second number, of programmed. (1 – 255 seconds)
Aux Mode: The AO terminal is a switch 0V output. It can be programmed to trigger by the end user pressing 6 on their telephone during a call or can be setup to switch on when a call is made and stay on for the length of the call. The two options are available in the drop down box.
Master Code: The master code must be 4 digits (Factory default 1111) and is required when using the SMS facilities on the GSM unit, entering the programming menu and also when dialling in to the unit from a number which is not stored.
Balance Check String: The balance check string allows the balance on certain pay as you go SIM cards to be checked. This must be stored to allow the balance to be checked.
Speech board Volume: The volume of the voice annunciation messages. The higher the number the higher the volume.
Speech board Mode: The voice annunciation can be set to speak the number being called as a whole number (i.e. 100 would be spoken as ‘One hundred’) or can be set to speak the numbers individually (i.e. 100 would be spoken as ‘One’ ‘Zero’ ‘Zero’). Alternatively the speech board can be disabled from the drop down menu.
Speaker volume: The speaker volume can be between 0 & 9. The higher the number the higher the volume.
Speaker volume: The microphone volume can be between 0 & 9. The higher the number the higher the volume.
Time bands: There are 10 time bands. The first is fixed to all day and cannot be changed, the other 9 can be set to any times (Ensure the ON time is lower than the OFF time).
Language: The language of the messages show on the LCD display
Display Line 1: The standby message on the LCD display
Switched display: A second message which switches with the one above every 8 seconds.
CALL SETUP:

From the call setup page it is possible to assign up to 2 telephone numbers to each of the 1000 available locations. The divert telephone number will be used if the call is busy or not answered and will divert to this number after the divert time has elapsed. If no divert number is stored, the first number will continue to ring until the call times out.

**Apartment No.** can be up to 6 digits and is the number entered by a caller to initiate a call.

**Apartment Name** is only used on panels with the scroll facility. It is used to store names which can be scrolled through on the panel. The names can be up to 16 characters long.

**Access Code** is a unique to each user code that can be used to release the door/gate via the door panel keypad. The code can be up to 6 digits.

**DTO** when set means that the telephone number and the divert number for that user can dial into the panel and release the door/gate.

**TB** Select a time band for the user. This user will only be able to receive calls within this timeband.

FILE MENU:

From the file menu it is possible to create a new data file, open an existing data file, save the current data file and print. These options are available online or offline allowing the data file to be created on or off site for convenience.
The exit option will close the program.

**DATA MENU:**
The data menu is only available when online. From here it is possible to upload the information from the PC to the GSM unit and download information from the GSM unit to the PC. Both upload and download have several options which include the facility to Download all data or upload/download only a section of data which is required and has been changed. When uploading it is recommended to only upload the range of locations in use as the upload for the complete memory will take a long time.

**SORT MENU:**
From the sort menu it is possible to put all the users data in order of apartment name or apartment number. On panels using the scroll facility we would recommend sorting into apartment name order.

**PC Requirements:-**

Windows XP Service Pack 3 or Later
.Net framework 4 or later
CD Drive
USB port
### PROGRAMMING BY TEXT MESSAGE

Programming by text message is a simple way to change the apartment programming remotely. This can include changing an apartments telephone numbers, access code, name or settings. If you have a large number of changes you may find programming easier with the PC software or through the keypad and display.

#### APARTMENT SETTINGS PROGRAMMING COMMANDS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CODE</th>
<th>EXAMPLE</th>
<th>SETTINGS</th>
<th>DEFAULT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apt primary telephone no.</td>
<td>STN</td>
<td>1111STNn:&quot;019112243174&quot;</td>
<td>n = apt number</td>
<td>N/A</td>
<td>20</td>
</tr>
<tr>
<td>Apt divert telephone no.</td>
<td>STD</td>
<td>1111STDn:&quot;019112241559&quot;</td>
<td>n = apt number</td>
<td>N/A</td>
<td>20</td>
</tr>
<tr>
<td>Apartment access code.</td>
<td>STC</td>
<td>1111STCn:&quot;123456&quot;</td>
<td>n = apt number</td>
<td>N/A</td>
<td>20</td>
</tr>
<tr>
<td>Apartments dial to open setting</td>
<td>STO</td>
<td>1111STOn:z</td>
<td>n = apt number z = 1 or 2</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Apartments time band</td>
<td>STB</td>
<td>1111STBn:z</td>
<td>n = apt number z = 0 - 9</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Apartments name</td>
<td>STT</td>
<td>1111STTn:&quot;Mr Smith&quot;</td>
<td>n = apt number</td>
<td>N/A</td>
<td>21</td>
</tr>
<tr>
<td>Add or query a memory location</td>
<td>MEM</td>
<td>1111MEMnnn?</td>
<td>nnn = 000 - 999</td>
<td>N/A</td>
<td>21</td>
</tr>
</tbody>
</table>

#### GENERAL SETTINGS PROGRAMMING COMMANDS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CODE</th>
<th>EXAMPLE</th>
<th>SETTINGS</th>
<th>DEFAULT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech time</td>
<td>SPT</td>
<td>1111SPTnnn</td>
<td>nnn = 001 - 255</td>
<td>040</td>
<td>22</td>
</tr>
<tr>
<td>Relay time</td>
<td>RLT</td>
<td>1111RLTnnn</td>
<td>nnn = 000 - 255</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Aux Out time</td>
<td>AOT</td>
<td>1111AOTnnn</td>
<td>nnn = 000 - 255</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Divert time</td>
<td>DIT</td>
<td>1111DITnnn</td>
<td>nnn = 001 – 255</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>Aux Out mode</td>
<td>AOM</td>
<td>1111AOMn</td>
<td>n = 0, 1 or 2</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>Speech board volume</td>
<td>SBV</td>
<td>1111SBVn</td>
<td>n = 0 - 7</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Speech board mode</td>
<td>SBM</td>
<td>1111SBMn</td>
<td>n = 1 - 3</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>Mic volume</td>
<td>MIC</td>
<td>1111MICn</td>
<td>n = 0 – 9</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Speaker volume</td>
<td>SPK</td>
<td>1111SPKn</td>
<td>n = 0 – 9</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Master code change</td>
<td>CDE</td>
<td>1111CDEnnnn</td>
<td>nnnn = newcode</td>
<td>1111</td>
<td>24</td>
</tr>
<tr>
<td>Time bands</td>
<td>TBA</td>
<td>1111TBA&quot;hhmmHHMM&quot;</td>
<td>n = 1-9</td>
<td>00:00 – 23:59</td>
<td>25</td>
</tr>
</tbody>
</table>

| Store balance check dial string          | SDL       | 1111SDL"**#1345#"            | N/A                        | N/A     | 24   |

#### USER COMMANDS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CODE</th>
<th>EXAMPLE</th>
<th>SETTINGS</th>
<th>DEFAULT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check GSM signal strength</td>
<td>SIG</td>
<td>1111SIG?</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>Check software version</td>
<td>VER</td>
<td>1111VER?</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>Dial a number</td>
<td>DLE</td>
<td>1111DLE&quot;123&quot;</td>
<td>N/A</td>
<td>N/A</td>
<td>24</td>
</tr>
<tr>
<td>Trigger the relay</td>
<td>RLY</td>
<td>1111RLY</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>Trigger the auxiliary output</td>
<td>AUX</td>
<td>1111AUX</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>Check credit balance</td>
<td>BAL</td>
<td>1111BAL?</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>Latch the relay</td>
<td>RLA</td>
<td>1111RLA</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>Unlatch the relay</td>
<td>RUL</td>
<td>1111RUL</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>Latch the auxiliary output</td>
<td>ALA</td>
<td>1111ALA</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>Unlatch the auxiliary output</td>
<td>AUL</td>
<td>1111AUL</td>
<td>N/A</td>
<td>N/A</td>
<td>27</td>
</tr>
</tbody>
</table>

When sending text messages there may be a delay from when you send the message to when it is received by the intercom panel depending on how congested the network is.
CHANGING AN APARTMENTS TELEPHONE NUMBERS (STN) (STD)

Each apartment can have up to 2 telephone numbers, a primary number and a divert number should the first not answer or is busy. The STN code stores the primary number and the STD code stores the diverted telephone number. The messages to change numbers are as follows (Replace STN with STD when changing the divert numbers).

1111STNn:”yyyyyyyyyy”  
Change the primary telephone number to yyyyyyyyyyy for apartment n. n can be 1-6 digits.

1111STNn:”yyyyyyyyyy”?  
Change the telephone number to yyyyyyyyyyy in apartment n and send a confirmation text message to confirm the storage of the new number.

1111STNn:?  
Query the telephone number stored for apartment n. A text message will be sent to the sender with the stored number for that apartment.

1111STNn:””  
Delete the telephone number stored for apartment n.

1111STNn””?  
Delete the telephone number stored for apartment n. A text message will be sent to the sender with the delete confirmation for that location.

Example: To change the primary number to 01912243174 and the divert number to 01912241558 for apartment 100 would be the following two SMS messages:-

1111STN100:”01912243174”?  
1111STD100:”01912241558”?  

The ? is optional

CHANGING AN APARTMENTS ACCESS CODE (STC)

Each apartment can have a unique access code from 1-6 digits. To change or query this code send the following commands:-

1111STCn:”yyyyyy”  
Change the code to yyyyyyyy for apartment n. n can be 1-6 digits.

1111STCn:”yyyyyy”?  
Change the code to yyyyyyyy in apartment n and send a confirmation text message to confirm the storage of the new code.

1111STCn:?  
Query the code stored for apartment n. A text message will be sent to the sender with the stored code for that apartment.

1111STCn:””  
Delete the code stored for apartment n.

1111STCn””?  
Delete the code stored for apartment n. A text message will be sent to the sender with the delete confirmation for that location.
Example: To change the code to 123456 in apartment 20 would be the following SMS message:-

1111STC20:"123456"?

The ? is optional

**CHANGING AN APARTMENTS DIAL TO OPEN SETTING (STO)**

Each apartments telephone numbers can be used as dial to open numbers. When this setting is set to 1, dial to open is enabled and when set to 2, dial to open is disabled. When enabled, calling the digital panel’s telephone number from that apartments telephone numbers will release the door and end the call automatically without any charge. When this feature is disabled, dialling the digital panel’s telephone number from that apartments telephone numbers will open the speech to the panel and allow all functions available during a call.

1111STOn:y Change the dial to open setting to y for apartment n. n can be 1-6 digits. y can be 1 to enable to 2 to disable.

1111STOn: y? Change the dial to open setting to y for apartment n. n can be 1-6 digits. y can be 1 to enable to 2 to disable. A confirmation text message is returned to confirm the storage of the new setting.

1111STOn:? Query the dial to open setting for apartment n. A text message will be sent to the sender with the stored setting for that apartment.

**CHANGING AN APARTMENTS TIME BAND SETTING (STB)**

Each apartment’s calls from the panel can be restricted to a certain time band. There are 10 time bands to choose from 0-9. 0 is a 24-7 time band with no restriction of calls while 1-9 can be programmed to any required times. To change the time band associated with a certain apartment:

1111STBn:y Change the time band setting to y for apartment n. n can be 1-6 digits. y can be 0-9.

1111STBn: y? Change the time band setting to y for apartment n. n can be 1-6 digits. y can be 0-9. A confirmation text message is returned to confirm the storage of the new setting.

1111STBn:? Query the time band setting for apartment n. A text message will be sent to the sender with the stored setting for that apartment.

**CHANGING AN APARTMENTS NAME (STT)**

Each apartment can have a unique name from 1-16 characters in length. To change or query this name send the following commands:-

1111STTn:"yyyyyyyyyy" Change the name to yyyyyyyyy for apartment n. n can be 1-6 digits.
1111STTn:"yyyyyyyyyy"?
Change the code yyyyyyyyy in apartment n and send a confirmation text message to confirm the storage of the new name.

1111STTn:?  
Query the name stored for apartment n. A text message will be sent to the sender with the stored code for that apartment.

1111STTn:""  
Delete the name stored for apartment n.

1111STTn""?  
Delete the name stored for apartment n. A text message will be sent to the sender with the delete confirmation for that location.

NOTE: IF A SPACE IS REQUIRED ON THE DISPLAY SUBSTITUTE IT WITH THE CHARACTER ‘>’ IN THE SMS MESSAGE. THIS IS BECAUSE SPACES IN THE SMS MESSAGE ARE DISCARDED.

ADD A NEW APARTMENT OR QUERY A MEMORY LOCATION (MEM)

There are 1000 memory locations available in the Digital panel (000-999). Each of these memory locations stores apartment’s settings. It is possible to query change or add an apartment using the following command: -

1111MEMnnn?  
Query a memory location. A text message will be returned with all the settings for that apartment. nnn = memory location 000-999

1111MEMnnn"yyyyyyyyyy","zzzzzzzzzz","aaaaaa","cccccc",d,b,"tttttttttt"?

nnn = Memory location 000-999  
yyyyyyyyyy = Primary telephone number  
zzzzzzzzzz = Divert telephone number  
aaaaaa = Apartment number from 1-6 digits  
cccccc = Access code from 1-6 digits  
d = Dial to open setting, 1 = enabled, 2 = disabled  
b = Time band, 0-9  
ttttttttt = Apartment name, 1 to 16 characters.  
The ? is optional

NOTE: Using this command it is possible to change all or only some of the apartments settings. To leave a setting unchanged simply don’t enter anything in that section of that setting but remember to add the comma.

For example to change everything except the apartment number send:-

1111MEMnnn"yyyyyyyyyy","zzzzzzzzzz","cccccc",d,b,"tttttttttt"?

To change only the primary and divert number send:-

1111MEMnnn"yyyyyyyyyy","zzzzzzzzzz",,,,,?

SET CALL TIME (SPT)

The call time is the maximum time in seconds that a call can last before the intercom panel automatically clears the call down. The time can be from 1 seconds up to 255 seconds and begins from when the call/enter button is pressed. The default time is 40 seconds. The following messages are used to set/check the maximum call time.
**SET RELAY TIME (RLT)**

The relay time can be from 001 – 255 seconds or latching (Set the relay time to 000 for latched mode. In latch mode, the relay will stay energised until the command is send again).

- **1111RLTnnn**: Store the time, nnn = time in seconds.
- **1111RLTnnn?**: Store the time nnn = time in seconds. Also send a confirmation text back to the sender.
- **1111RLT?**: Query the current stored time. A text message will be sent to the sender showing the stored time.

**SET AO (AUXILIARY OUTPUT) TIME (FOR AOM = 1 ONLY) (AOT)**

The AO time can be from 001 – 255 seconds or latching (Set the AO time to 000 for latched mode). This option is only relevant for aux mode 1.

- **1111AOTnnn**: Store the time nnn = time in seconds.
- **1111AOTnnn?**: Store the time nnn = time in seconds. Also send a confirmation text back to the sender.
- **1111AOT?**: Query the current stored time. A text message will be sent to the sender showing the stored time.

**SET AO (AUXILIARY OUTPUT) MODE (AOM)**

There are three modes of operation for the AO terminal:

- User activated: n= 1; To activate the AO terminal either short g to 5 (Auxiliary 1 input) or press 6 on the telephone during a call.
- Call activated: n= 0; AO will activate when a call begins and deactivate when the call ends.
- Call activated (Timed): n = 2; AO will activate when a call begins and deactivate when the AUX TIME expires.

- **1111AOMn**: Store the mode n = 0 - 2.
- **1111AOMn?**: Store the mode n = 0 - 2. Also send a confirmation text back to the sender.
- **1111AOM?**: Query the current stored mode. A text message will be sent to the sender showing the stored mode.

**DIVERT TIME (DIT)**
The divert time is the number of seconds to wait for a call to be answered before diverting to the second number. The default time is 15 seconds (The count down begins from when the call/enter button is pressed, but is refreshed when the telephone begins to ring) and can be set to 001 – 255 seconds).

1111DITn
nn Store the time nnn = time in seconds.

1111DITn
nn? Store the time nnn = time in seconds. Also send a confirmation text back to the sender.

1111DIT? Query the current stored time. A text message will be sent to the sender showing the stored time.

CHANGING THE FOUR DIGIT CODE (CDE)

The four digit code can be any combination of numbers 0-9 but must be 4 digits long. The code allows access to the programming menu in programming mode and must be used when sending text messages to the intercom panel. The following message changes the code:-

1111CDEnnnn nnnn = new 4 digit code

FORCED DIAL (DLE)

A useful feature of the Intercom 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 messages or missed calls. Any number up to 15 digits 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 (See important note on page 19).

1111DLE"1210" Dial 1210 for the intercom panel

Other useful numbers which can be used with this feature are as follows. Please also check the service provider’s web sites for other useful codes.

<table>
<thead>
<tr>
<th></th>
<th>Vodafone</th>
<th>O2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable voicemail</td>
<td>1210</td>
<td>1760</td>
</tr>
<tr>
<td>Disable text alerts</td>
<td>#148#</td>
<td>1760</td>
</tr>
</tbody>
</table>

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

STORE CREDIT BALANCE CHECK 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. Because the 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.
STORE THE TIME BAND (TBA)

NOTE: This feature relies on the network providers time zone setting and also if they support NITZ (Network Identity and Time zone). Check the time is correct by entering programming mode through the keypad and display and then exiting. The correct time/date should be displayed. If the time/date returned is wrong, it maybe that they do not support it in which case this feature cannot be used.

The time band feature allows calls to be disabled to individual apartments at certain times of the day. i.e. a 'do not disturb' feature. For example, if the tenant only wants to receive calls between the hours of 6:00 in the morning until 23:30 at night. Remember to always use the 24hr clock and also ensure the start time is earlier than the stop time.

There are 10 time bands available 0-9. 0 can't be changed and is all day 00:00 – 23:59. 1 – 9 can be added as shown below. n in the string below represents the 1 – 9 time band selection.

1111TBA\text{n"HHMMHHMM"} Store the time using this format. The first HHMM is the start time to receive calls (i.e. 0600 for 6am) and the second HHMM is the time to stop receiving calls (i.e. 2330 for 11:30 at night).

1111TBA\text{n"HHMMHHMM"}\text{?} As above but also reply with a SMS text back to the sender with the stored setting.

1111TBA\text{n?} Query setting, A text message will be sent to the sender with the stored time window.

1111TBA\text{n""} Delete the time band and allow calls to be received at any time.

1111TBA\text{n""}\text{?} Delete and confirm deletion of the time band.

MICROPHONE VOLUME (MIC)

The microphone volume can be set from 0 (Low) to 9 (High) as follows:-

1111MIC\text{n} Store the mode n = 0 - 9.

1111MIC\text{n}? Store the mode n = 0 - 9. Also send a confirmation text back to the sender.

1111MIC? Query the current stored mode. A text message will be sent to the sender showing the stored mode.

SPEAKER VOLUME (SPK)

The speaker volume can be set from 0 (Low) to 9 (High) as follows:-

NOTE: SPEAKER VOLUME CAN ALSO BE ADJUSTED BY THE 2 WAY DIP SWITCH ON THE REAR OF THE PANEL

1111SPK\text{n} Store the mode n = 0 - 9.

1111SPK\text{n}? Store the mode n = 0 - 9. Also send a confirmation text back to the sender.

1111SPK? Query the current stored mode. A text message will be sent to the sender showing the stored mode.
**SPEECH BOARD VOLUME (SBV)**

The speech board volume can be set from 0 (Low) to 7 (High) as follows:-

- **1111SBVn**
  Store the mode n = 0 - 7.

- **1111SBVn?**
  Store the mode n = 0 - 7. Also send a confirmation text back to the sender.

- **1111SBV?**
  Query the current stored mode. A text message will be sent to the sender showing the stored mode.

**SPEECH BOARD MODE (SBM)**

The speech board mode can be set from 1 - 3 as follows:-

- n=1 Speech board switched off
- n=2 Speak numbers individually (i.e. 100 spoken as One Zero Zero)
- n=3 Combine numbers when spoken (i.e. 100 spoken as one hundred)

- **1111SBMn**
  Store the mode n = 1 - 3.

- **1111SBMn?**
  Store the mode n = 1 - 3. Also send a confirmation text back to the sender.

- **1111SBM?**
  Query the current stored mode. A text message will be sent to the sender showing the stored mode.
SYSTEM OPERATION

TO MAKE A CALL FROM THE INTERCOM PANEL
Enter the required apartment number and press ‘Enter’ or scroll to the required name and press ‘Call’ (Scroll panels only). If the apartment exists the panel will announce and display the calling progress. If the apartment does not exist, the display will show error and the panel will announce that an incorrect number has been entered. When the call is answered the display will show ‘speak’ and a conversation can take place. If the call is not answered and a divert number for that apartment is available, the call will be diverted to that number. If no divert number is available or the diverted number is not answered the calling will continue until the call time expires at which point the panel will show ‘End’ and revert to the standby state. If the panel shows ‘Phone Off’ and announces that the phone is off please try later, then this means that user does not want to receive calls at this time (This option is set through the time bands options). To end a call at any time press ‘Clear’. During a call, from the telephone press ‘3’ to release the door/gate, press ‘6’ to activate the AO or press ‘8’ or hang up to end the call. During the call, the visitor can press the numbers on the keypad to send DTMF tones to the line. This can be useful for automated answering systems.

RELEASING THE GATE/DOOR BY DIALLING THE INTERCOM PANEL NUMBER
This feature only works if that users DTO setting is set to 1 (Ticked on the PC software). Simply dial the number of the intercom panel. The intercom panel will drop the call and then open the gate/door for the programmed time. If someone calls the panel from a number without this setting then the call will simply be dropped.

RELEASING THE GATE/DOOR USING THE CODED ACCESS FACILITY
Press ‘0’ or ‘Code’ followed by the code and then press ‘Enter’. If the code is correct then the display will show open and the relay will energise for the programmed time. If the code is incorrect then the display will show ‘Error’. Note: The code stored in memory location 0 will activate the AO output as oppose to the relay output.

USER COMMANDS
The following commands can be carried out during a call: (Note: Successful commands are signalled by two beeps from the telephone, errors are signalled by four beeps).

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>1st KEY TO PRESS</th>
<th>2nd KEY TO PRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELEASE THE DOOR OR GATE</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>ACTIVATE THE AUXILIARY OUTPUT</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>END A CALL</td>
<td>8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The following text messages can be sent while in standby (Examples show code as 1111):

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>MESSAGE TO SEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHECK THE SIGNAL STRENGTH</td>
<td>1111SIG?</td>
</tr>
<tr>
<td>CHECK THE AVAILABLE BALANCE*</td>
<td>1111BAL?</td>
</tr>
<tr>
<td>CHECK THE SOFTWARE VERSION</td>
<td>1111VER?</td>
</tr>
<tr>
<td>RELEASE THE DOOR/GATE</td>
<td>1111RLY? (? Optional, send if a confirmation is required)</td>
</tr>
<tr>
<td>ACTIVATE THE AUXILIARY OUTPUT</td>
<td>1111AUX? (? Optional, send if a confirmation is required)</td>
</tr>
<tr>
<td>LATCH THE RELAY</td>
<td>1111RLA? (? Optional, send if a confirmation is required)</td>
</tr>
<tr>
<td>UNLATCH THE RELAY</td>
<td>1111RUL? (? Optional, send if a confirmation is required)</td>
</tr>
<tr>
<td>LATCH THE AUXILIARY OUTPUT</td>
<td>1111ALA? (? Optional, send if a confirmation is required)</td>
</tr>
<tr>
<td>UNLATCH THE AUXILIARY OUTPUT</td>
<td>1111AUL? (? Optional, send if a confirmation is required)</td>
</tr>
</tbody>
</table>
CHECKING THE BALANCE (BAL)

*Note: The balance can only be checked if the correct balance check string has previously been stored using the SDL code explained earlier in the manual.

The intercom also has the facility to monitor the available credit and then text you to inform you when it has fell below £5.00, €5.00 or $5.00. It will then remind you with another text after every 20 calls until the credit is either increased or it runs out. To use this feature, the following settings must first be made:-
- You must be using a Pay AS You GO SIM card from a provider that offers this service (Vodafone, O2)
- The correct balance check string must be stored using the SDL code.
- A mobile phone number in which to receive the balance low text must be stored in the telephone number field of memory location 999.

UNDERSTANDING THE SIGNAL STRENGTH (SIG)

When a request for signal strength message is sent to the intercom panel it will reply with a two digit signal strength code. The code will be between 0 – 31 or 99. Ideally the signal strength should be as close to 31 as possible. 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 network loss. A signal strength of 99 indicates it could not be detected.

DIALLING INTO THE INTERCOM FROM ANOTHER TELEPHONE

There are three possible outcomes to dialling into the 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 table below and are shown in order of priority (For example, if the number is programmed to automatically activate the relay, 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.

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>REQUIREMENT</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dial in to open the door. After dialling the number, the relay will activate and the call will be dropped.</td>
<td>The telephone number of the telephone dialling in must be stored in memory and the DTO flag set to 1.</td>
<td>1st</td>
</tr>
<tr>
<td>Dial in to activate a call (Live speech, activate relay/AUXO) After dialling the number, the call will be answered and two beeps will be heard. The speech will then be live.</td>
<td>The telephone number of the telephone dialling in must be stored in memory.</td>
<td>2nd</td>
</tr>
<tr>
<td>Dial in from a number not stored in the panel. The call will be dropped.</td>
<td>If neither of the two requirements above are met.</td>
<td>3rd</td>
</tr>
</tbody>
</table>

RECORD SHEET

<table>
<thead>
<tr>
<th>INTERCOM PANEL TELEPHONE No.</th>
<th>IMEI NUMBER</th>
<th>MASTER CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interference on the speech</td>
<td>Check the signal strength ‘1111Sig?’. If the signal strength is too low the GSM module will increase its power to compensate causing interference with the speech circuits. Try relocating the antenna or using a more powerful or directional 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 service provider as they may have better coverage in that area.</td>
</tr>
<tr>
<td>The intercom panel shows SIGNAL ERROR’</td>
<td>Check the power supply is of adequate voltage. 13.8Vdc. Try a full reset as shown earlier in the manual. Try a different SIM card and or antenna. Check the antenna is tight and in a good location. Intercom module may have a fault. SIM card has PIN setup. This must be disabled.</td>
</tr>
<tr>
<td>Error is displayed when I try to call an apartment</td>
<td>No telephone number setup for that number. Check the programming. Check the SIM card is fitted correctly.</td>
</tr>
<tr>
<td>The intercom panel does not respond to SMS messages</td>
<td>Check the SIM card has a 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 intercom panel) Try resetting the 4 digit code to 1111 as shown earlier in this manual.</td>
</tr>
<tr>
<td>The call keeps dropping out</td>
<td>Increase the call time in programming. Check the signal strength and if necessary, move or change the antenna or try a different SIM card provider.</td>
</tr>
<tr>
<td>Speech echoes and feeds back</td>
<td>Try lowering the speaker volume using the dip-switches Try adjusting the volume using the programmable settings Check the microphone is fitted correctly in the intercom panel and that the mic hole is not blocked in any way.</td>
</tr>
<tr>
<td>Display is blank</td>
<td>Ensure the contrast adjustment is set correctly</td>
</tr>
</tbody>
</table>
Enfora certifies that the Enfora Enabler IIG TM MHz GSM Radio Module
FCC ID: MIVMLG0208) complies with the RF hazard requirements
applicable to broadband PCS equipment operating under the authority
of 47 CFR Part 22 or Part 24, Subpart E of the FCC Rules and
Regulations.

This certificate is contingent upon installation, operation and use of the
Enabler IIG module and its host product in accordance with all
instructions provided to both EOM and end used. When installed and
operated in a manner consistent with the instructions provided, the
Enfora Enabler IIG module meets maximum permissible exposure (MPE)
limits for general population/uncontrolled exposure at defined in
section 1.1310 of the FCC Rules and Regulations.

WARNING
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
<table>
<thead>
<tr>
<th>Date</th>
<th>Software Version</th>
<th>Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/05/2011</td>
<td>GSM1.0.2</td>
<td>Launch of 4802</td>
</tr>
<tr>
<td>19/10/2011</td>
<td>GSM1.0.3</td>
<td>Minor adjustments to the software</td>
</tr>
<tr>
<td>14/02/2012</td>
<td>GSM1.0.4</td>
<td>Removed time/date from alpha standby (Some networks don’t support NITZ)</td>
</tr>
<tr>
<td>14/03/2012</td>
<td>GSM1.0.5</td>
<td>Dial to open now works with numbers as short as 4 digit</td>
</tr>
<tr>
<td>09/05/2012</td>
<td>GSM2.0.0</td>
<td>Added SMS programming functions</td>
</tr>
<tr>
<td>29/08/2012</td>
<td>GSM2.0.1</td>
<td>Voice annunciation of 14 fixed</td>
</tr>
<tr>
<td>03/04/2013</td>
<td>GSM2.0.3</td>
<td>Added support for 1.1.6 GSM module firmware</td>
</tr>
<tr>
<td>26/09/2013</td>
<td>GSM2.0.4</td>
<td>Added facility to edit the display</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Added second switchable display message</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Added facility to change the LCD language</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Added facility to use the keypad during a call for automated answering systems.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change memory location 0’s code to operate the AO output instead of the relay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Added additional AO mode to allow the AO output to activate upon a call for the auxiliary output time.</td>
</tr>
</tbody>
</table>