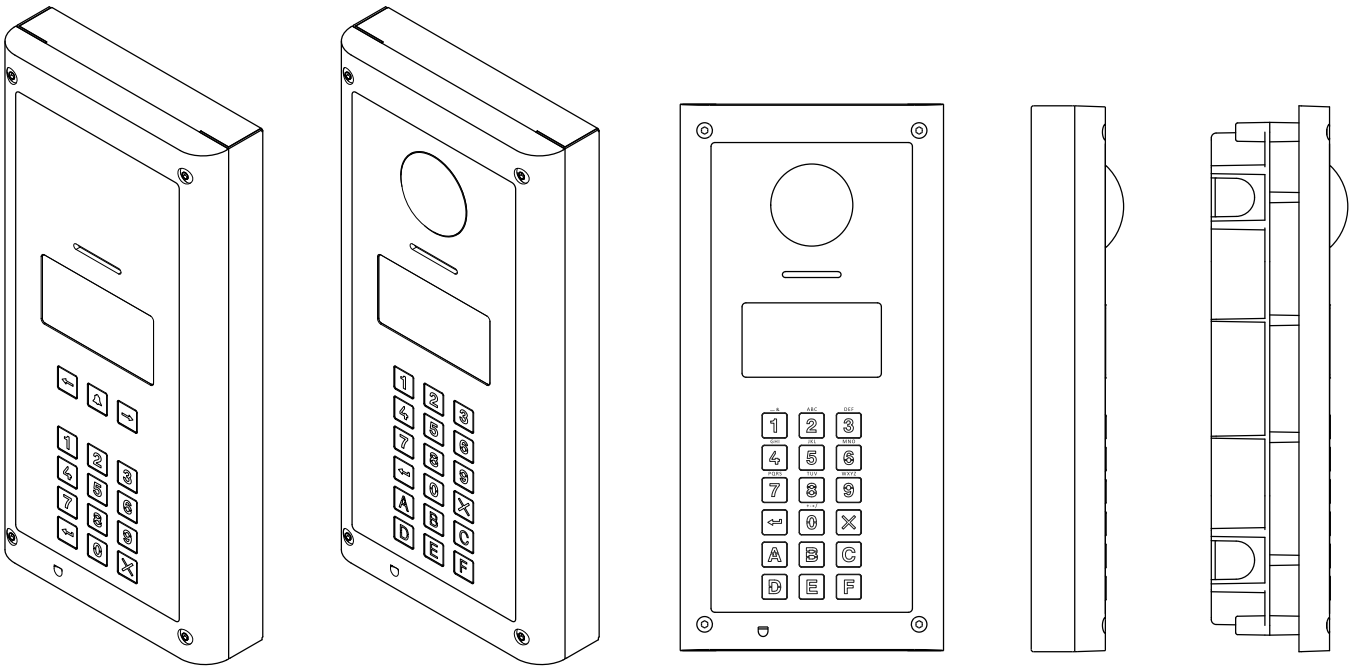

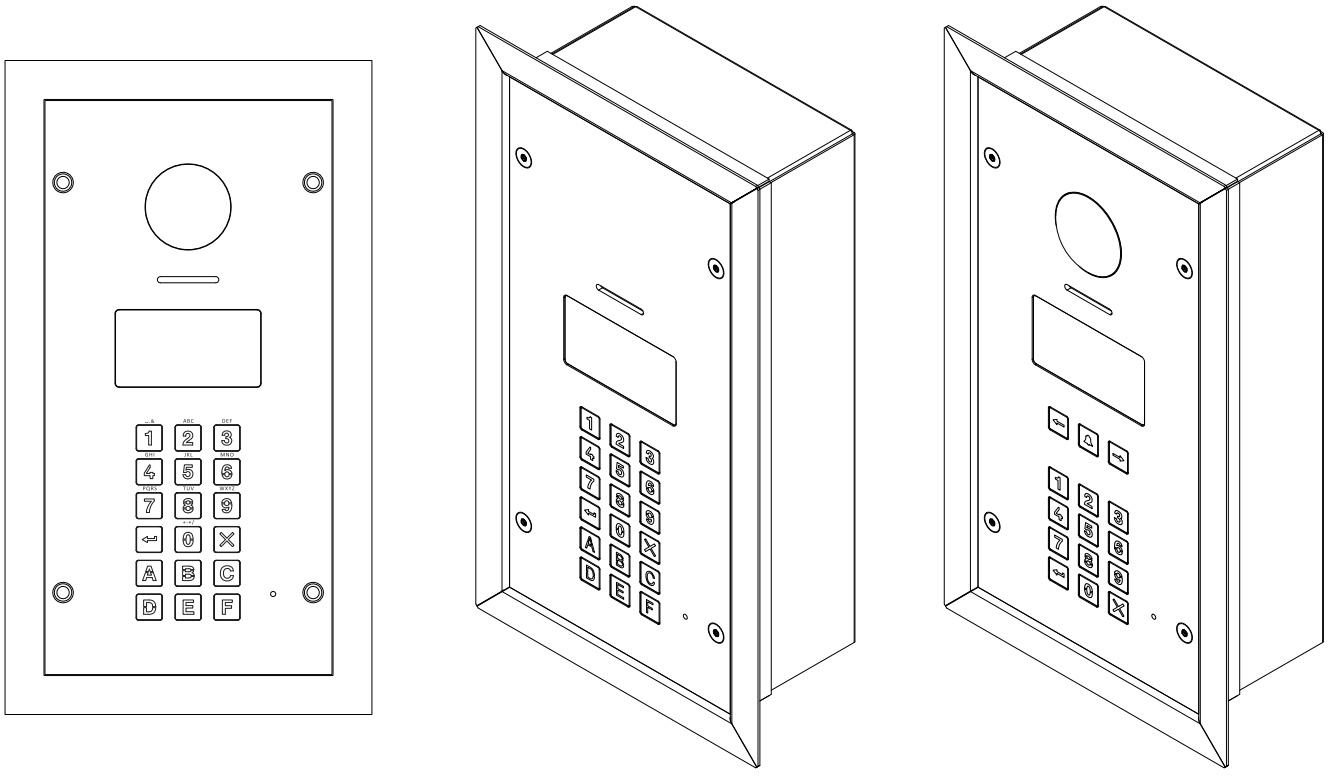

4212 PC SOFTWARE PROGRAMMING GUIDE

4212 PC SOFTWARE PROGRAMMING GUIDE EN-UK
V.1.0
17/09/15

WE RECOMMEND
This equipment be installed by a Competent Electrician, Security Installation or Communications Engineer.

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INTRODUCTION

This programming guide is intended to give an introduction on the additional programming features found in the 2X00PC software *(version 7.0.0.14 or later)* for programming the 4212 series digital door panel.

The connection to the device is via a micro USB cable between the PC and the 4212 panel. The software can also be used to program both 2200 and 2300 digital panels as well as the UIM-138 display and voice annunciation module. For technical support using this program please call 0191 224 3174.

SOFTWARE INSTALLATION

First of all install the USB driver which can be found on the installation CD supplied.

USB Driver Installation

1. Insert the 2X00PC installation CD into the CD rom drive of the PC.
2. Select 'RUN' from the start menu.
3. Type in 'D:\CDM20824_setup.exe' then press the 'OK' button.
4. The relevant drivers for the USB cable will be installed.

2X00PC Software Installation

1. Insert the 2X00PC installation CD into the CD rom drive of the PC.
2. Wait for the autorun to begin.
3. After a short while the following start up menu screen will appear.

From the start up menu screen the following options will be available:

INSTALL	: Installs the 2X00PC programming software on the PC.
MANUAL	: View the pdf version of this PC Programming Guide.
BROWSE CD	: Browse the installation CD for other files and programs.
EXIT	: Exit out of the start up program.
EMAIL TECHNICAL	: This will open your default email program so that you can send an email to the Videx Technical Support.
EMAIL SALES	: This will open your default email program so that you can send an email to the Videx Sales Department.
ADOBE READER	: If you do not already have a pdf reader to view the pdf version of the manual, click this option to install a free pdf reader.

If the the autorun does not begin automatically, explore the CD and run the 'autorun.exe' program.

Install the program to your PC by clicking on the INSTALL button from the start up screen or alternatively browse the CD and select 'setup.exe' from the route of the CD.

2X00PC

The 2X00PC program will appear in your start menu and as a short cut to the desktop.

HARDWARE INSTALLATION

After the software is installed connect the 4212 digital panel to the PC using the USB cable as shown in Fig.1A.

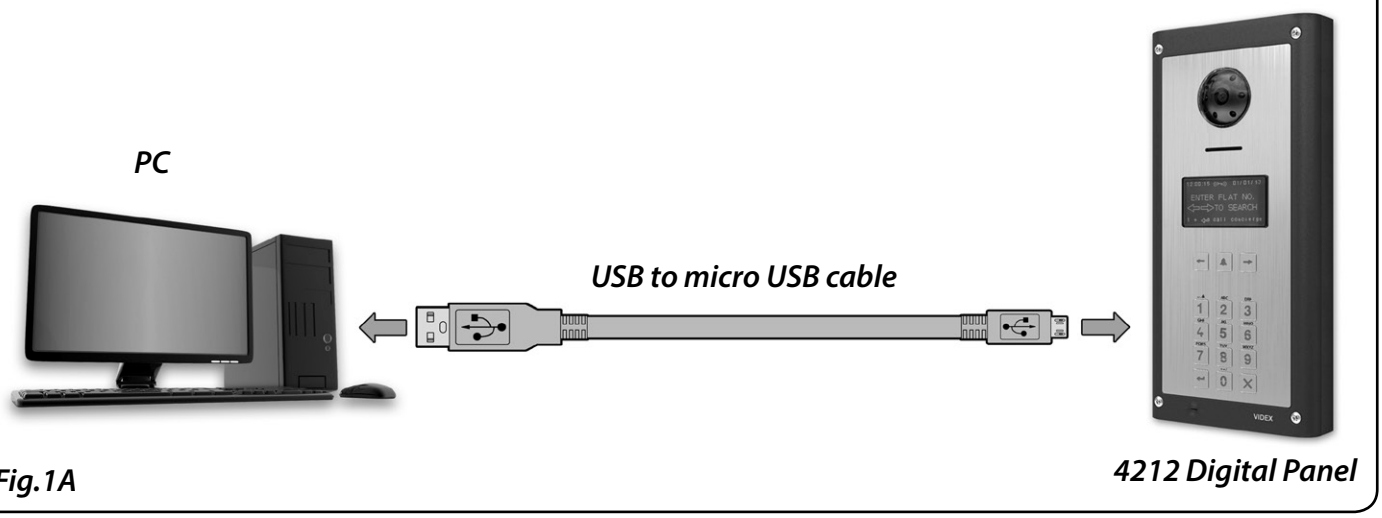


Fig.1A

The USB cable should be connected into the 4212 digital panel and 12Vdc power connected as shown in Fig.1B.

TERMINALS, JUMPERS AND SWITCHES

CONNECTION TERMINALS	
12T	+12Vdc camera power supply input.
GNDV	0V camera power supply input and video ground on coax video system.
V2/V	Balanced video signal sync- *(V2)* or coax video signal *(V)*. Also see switches.
V1	Balanced video signal sync+ *(V1)*.
PTE	Push to exit input *(switched 0V)*.
TRD	Trade signal *(from Art.701T)*.
NO	Relay output - normally open contact.
C	Relay output - common contact.
NC	Relay output - normally closed contact.
SL	Accessory control signal *(switched 0V output)*.
BS	Busy signal.
L	Bus connection *(positive)*.
-	Bus connection *(negative)*.
+12	+12Vdc power supply input.
OC OUTPUT	Open collector output.
RS485 CONNECTION TERMINALS	
A	RS485 serial bus interface.
B	
GND	Ground.
WIEGAND CONNECTION TERMINALS	
D0	Data 0.
D1	Data 1.
LR	Red 'denied' LED status output.
LG	Green 'granted' LED status ouput.

JUMPERS	
Dry contact output.	
Capacitor discharge.	

SWITCHES	
Balanced V1, V2	
Coax V2 = V, V1 not used.	

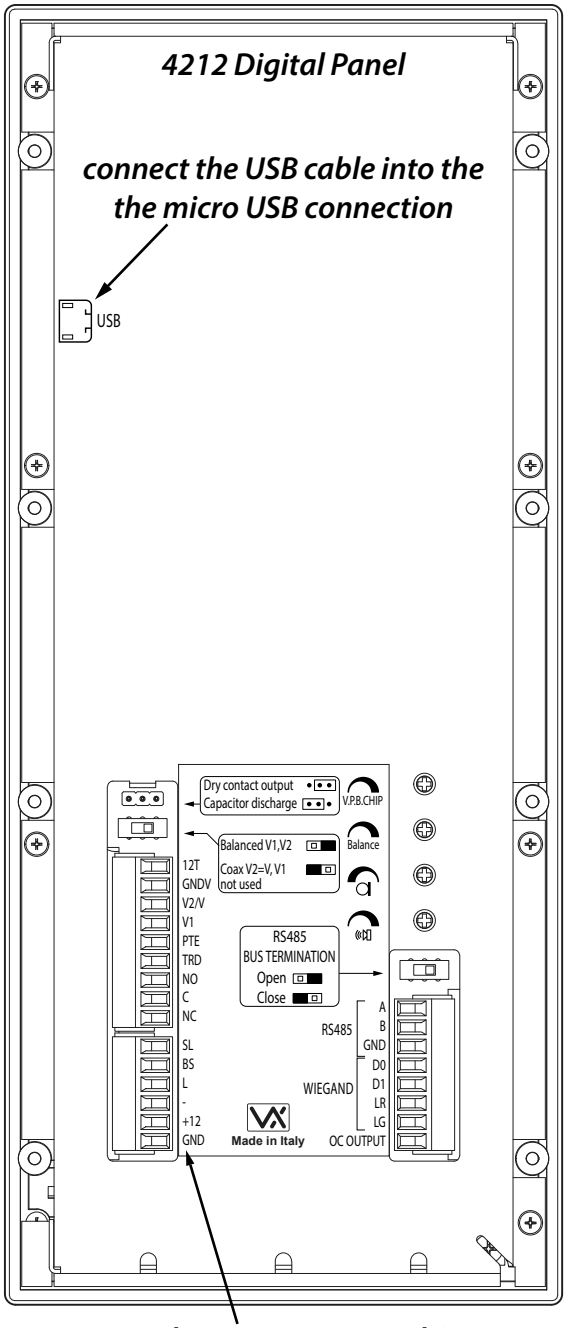


Fig.1B

RS485 BUS TERMINATION	
OPEN.	
CLOSED.	

TECHNICAL SPECIFICATION

Memory capacity: 998 users; 2800 key fobs; 2800 access codes
Working voltage: 12Vdc +/- 10%
Current Rating: approx. 350mA *(max.)*
Working Temperature: -10 to +50°

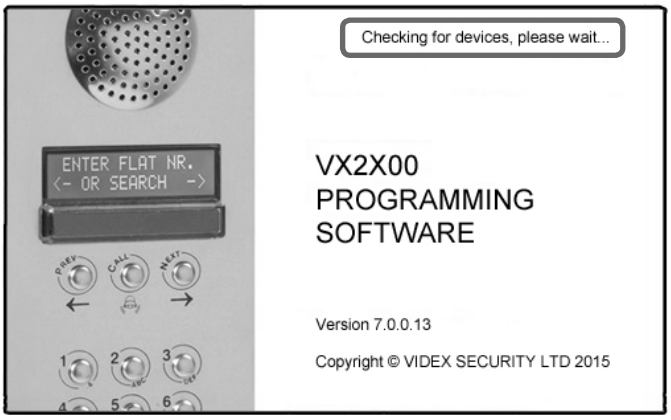
USING THE SOFTWARE

Launching the Software

Launch the 2X00PC software by double clicking on the desktop icon.

2X00PC

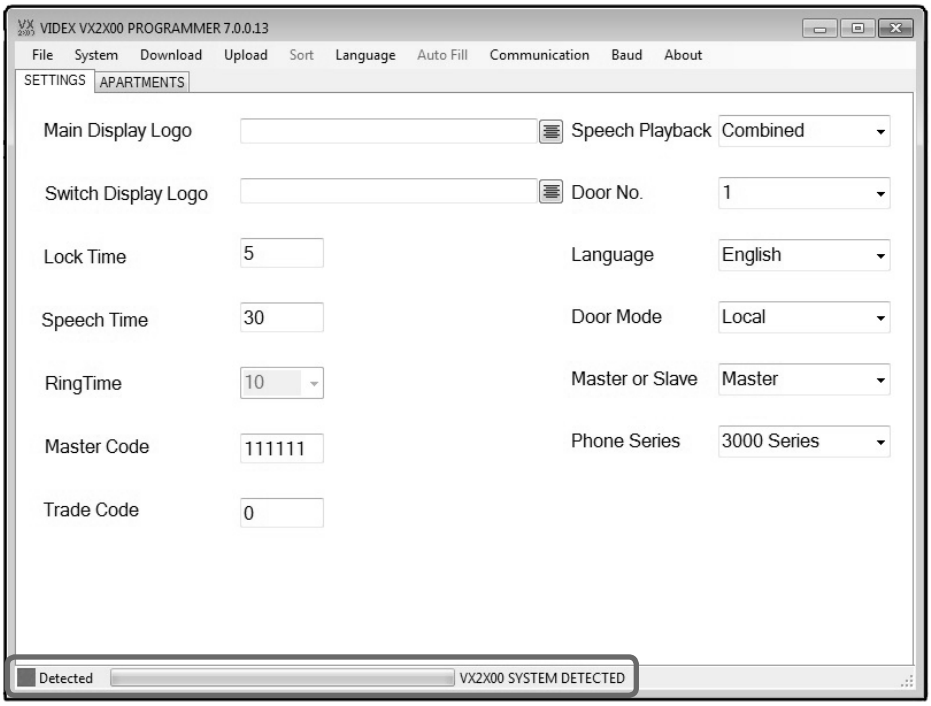
The initial launch window will appear *(as shown on the right)*. At the top of the window the software will show that it is checking for any devices connected to the PC or laptop.



After a brief period the main programmer screen will appear.

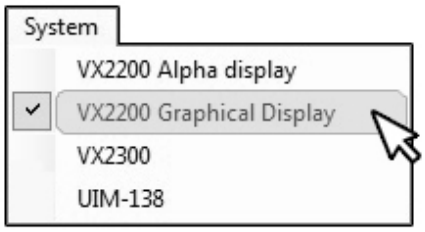
THE MAIN PROGRAMMER SCREEN

If a device has been detected this will be shown at the bottom of the main programmer screen with a green square *(see below)*. On this screen several programming options can be selected.

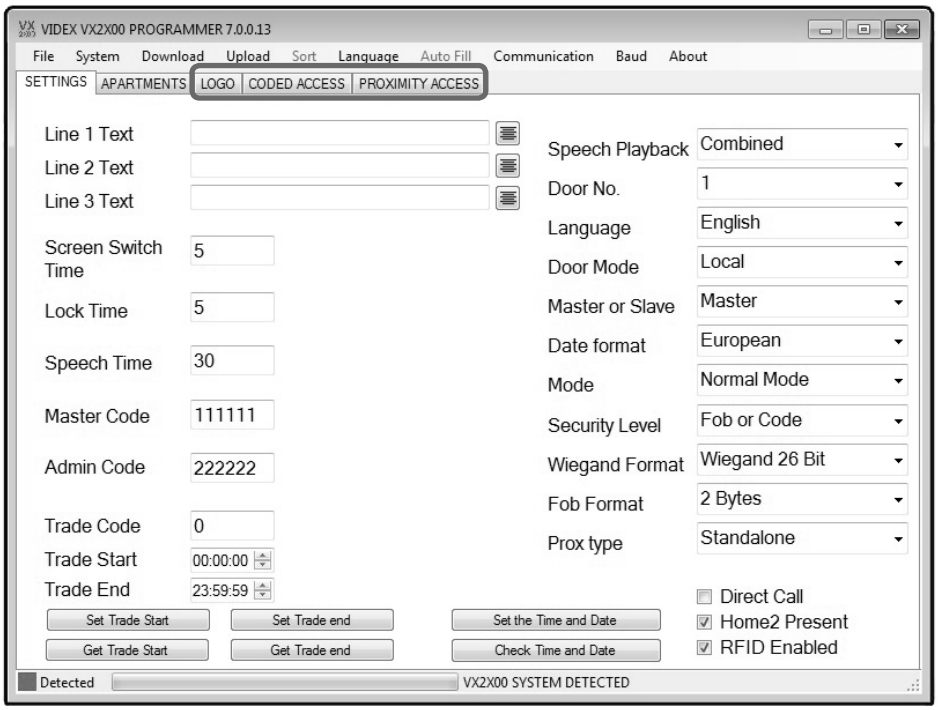


The main programmer screen shows several menu options at the top and two selectable windows on the main screen; 'settings' and 'apartments'. The default window is the 'settings' tab.

Before programming the 4212 digital panel the correct system type must be selected from the top menu. To do this select 'System' from the top menu bar and then from the drop down menu highlight and select 'VX2200 Graphical Display', *(as shown to the right)*.



Once the correct system type has been selected the 'settings' tab on the main programmer screen will change appearance and include additional programming options. Three additional selectable tabs will also appear; 'logo', 'coded access' and 'proximity access', as shown below.



SETTINGS WINDOW

Line 1, 2 and 3 Text Fields

In the top left corner of the 'settings' window there are three editable text line fields. Line 1 Text field will have 'ENTER FLAT' set as the default text that will first appear on the 4212 digital panel when powered up. The other two text fields will be blank. All three text lines can be edited if required and the text can be centred in the middle of the 4212 display by clicking on the justify button to the right of the text field *(as shown below)*.

Screen Switch Time

Just below the three text line fields is the screen switch time field, as shown on the right. This is the time *(in seconds)* that the main display will switch between the three lines of text *(entered in the text fields)* and a display logo. The default time is set for 5 seconds *(setting range from 1 - 255 seconds max.)*.

Lock Time

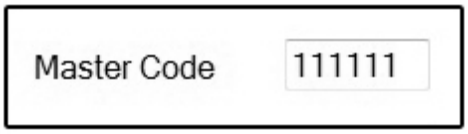
Below the screen switch time is the lock time field, as shown on the right. This is the time *(in seconds)* that the relay on the 4212 digital panel will operate for. The default time is set for 5 seconds *(setting range from 1 - 255 seconds max.)*.

Speech Time

Below the lock time is the speech time field, as shown on the right. This is the time *(in seconds)* that the speech conversation time between the 4212 digital panel and intercom phone will last for before automatically clearing down and ending the call. The default time is set for 30 seconds *(setting range from 30 - 255 seconds max.)*

Master Code

Below the speech time is the master code field, as shown on the right. This is the code used to access the programming features when entering into the programming mode using the keypad on the front of the 4212 digital panel when progamming the panel manually. It is also the code used when uploading or downloading data from the panel when using the PC programming software. The default master code is set to '111111' *(6x1)*.

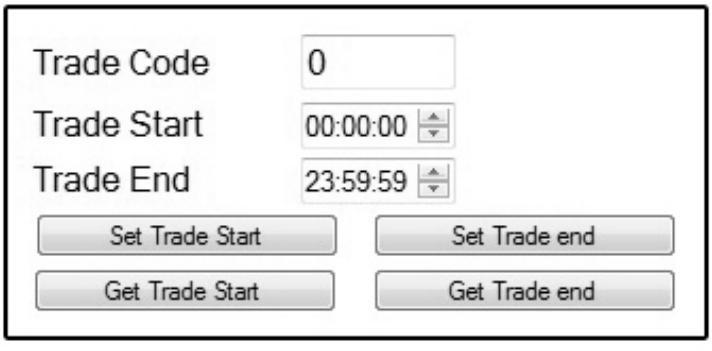


Admin Code

Below the master code is the admin code field, as shown on the right. This code is used to allow users limited access to certain programming features when programming the 4212 digital panel manually *(please also refer to technical programming document '66250203-EN' for more information)*. The default admin code is set to '222222' *(6x2)*.

Trade Code and Setup

Below the admin code is the trade code field and the trade setup options, as shown to the right. This allows the user to setup a trade code *(min 3 digits, max 6 digits)* with start and end times for the trade facility to work without the need for a separate timeclock. The trade setup functions are linked directly to the 4212 digital panel's relay. The start and end times can be set

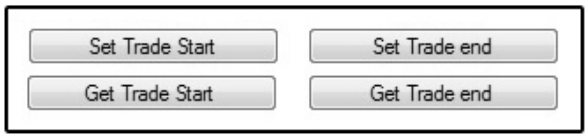


with the 'trade start' and 'trade end' fields using the up/down *(▲▼)* scroll buttons to the right hand side of the respective fields, as shown on the right, *(the time format is hours: minutes: seconds)*. When the trade times are set the trade code will **only** operate the panel's relay within these times and will operate the relay for the lock time duration, *(e.g. if the 'trade start' is set to 08:30:00 and the 'trade end' is set to 09:30:00 with a lock time set for 10, then the trade code will be 'active' for one hour between 8:30am - 9:30am and operate the panel's relay for 10 seconds)*.

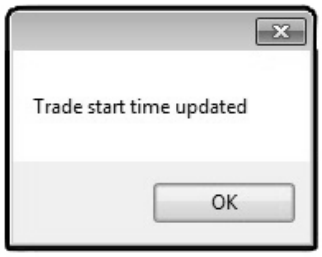
▲▼ *up/down scroll buttons*

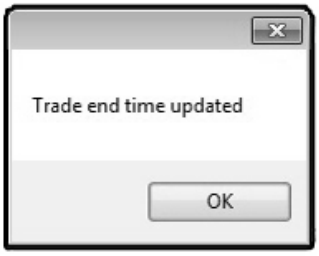
Trade Features

Below the trade time fields are four trade setup buttons; set trade start, set trade end, get trade start and get trade end, as shown on the right.

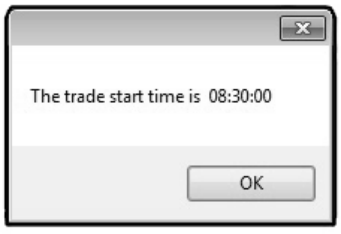


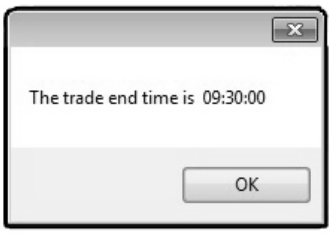
The set trade start and end buttons allow the engineer to set and update the trade start and end times that have been entered in the trade time fields *(refer to example above)*. Pressing the set trade start button and pressing the set trade end button a confirmation window will appear *(shown below)*.





The get trade start and get trade end buttons allow the engineer to obtain the most recent trade times that were set when the set trade start and set trade end buttons were last used *(again refer to example above)*. Pressing either of these buttons, the following confirmation windows will appear *(shown below)* showing what start and end times were set.

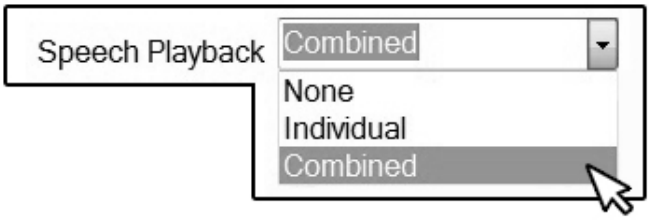




Setting Up a Trade button

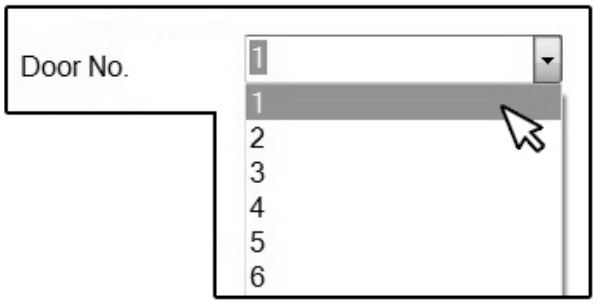
The 4212 panel can also be programmed to allow the 'X' button to function as a trade button if a trade code is not required. To enable this feature through the software the trade code field should be left blank. The trade start and end times will still need to be entered and the correct time and date *(refer to page 13)* set on the 4212 panel *(it should be noted that the 4212 panel can only operate with a trade code or trade button not both)*.

Speech Playback



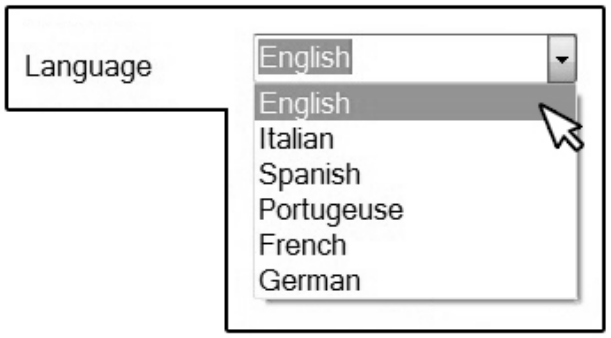
In the top right corner of the 'settings' window is the speech playback drop down menu with three available options; None, Individual and Combined. This setting is used to set the onboard speech board in the 4212 digital panel. The default setting is combined speech playback. By clicking on the drop down menu button (▼) on the right of the field this setting can be changed *(if 'none' is selected then there will be no speech playback when a call is made to the flat. If 'individual' is selected then the speech annunciation will playback the individual numbers that make up the flat number e.g. if calling flat 25 the speech will playback "calling two five". If 'combined' is selected then the speech annunciation will playback the combined flat number e.g. if calling flat number 15 the speech will playback "calling fifteen").*

Door No.



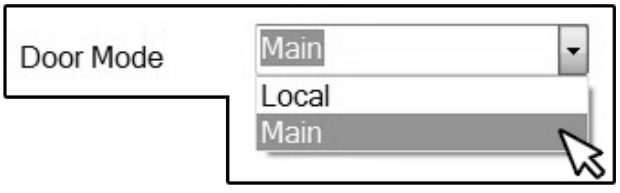
Below the speech playback is the door number drop down menu with up to 15 available door selections. Use this menu to select and set the door number of the 4212 digital panel *(this feature is used on video systems where the camera recall function is required or on systems including a 2210 concierge and a panel recall is required).*

Language



Below the door number setting is the language selection with 6 languages available; English *(default)*, Italian, Spanish, Portugeuse, French and German. Use this menu to set the display language on the 4212 digital panel *(please note that this option sets the display language on the 4212 digital panel only and* ***not*** *the language of the PC programming software).*

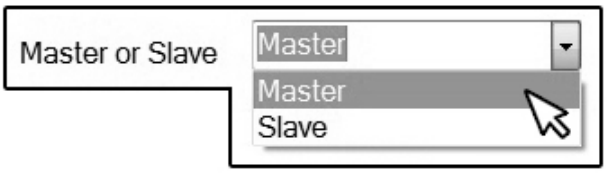
Door Mode



Below the language setting is the door mode selection. There are 2 door modes; LOCAL and MAIN. *(MAIN mode should only be used for 4212 panels that call all users and on systems that include 2206N bus exchange devices, LOCAL mode can be used for all other applications. When using the 4212 panel in MAIN mode, the programming of each user will require the address of the 2206N [block ID] for which that user is connected. When this option is selected the block ID column on the 'apartments' tab will become available to set the block ID. When in LOCAL mode the block ID column will not be available and will be 'grayed out'. Also refer to block ID programming on page X).*

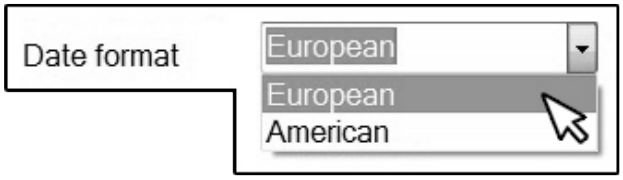
Master or Slave

Below the door mode selection is the master or slave drop down menu. Use this menu to set the 4212 panel as a master or slave panel.



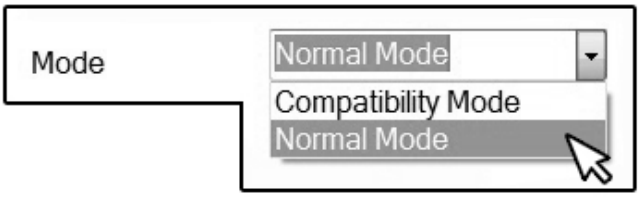
Date Format

Below the master or slave setting is the date format selection. Use this option to set the date format shown in the top right corner of the display on the 4212 panel. The two options available are european or american *(when set to european the date format will show the day: month: year and when set to american will show month: day: year).*



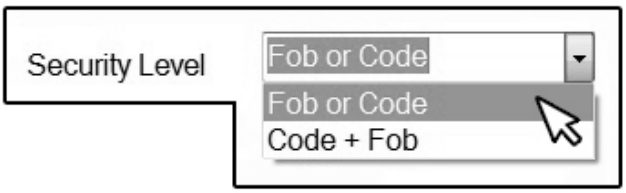
Mode

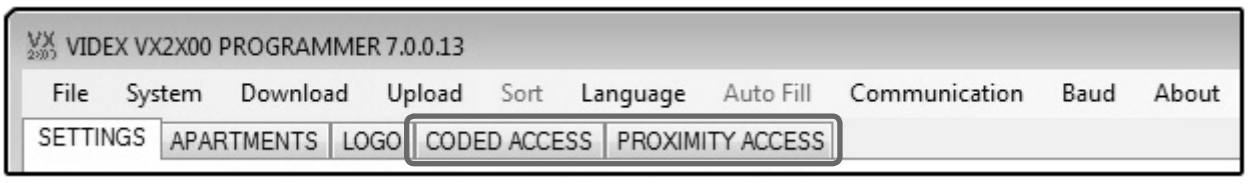
Below the date format setting is the mode selection. The two options available are normal mode or compatibility mode. Normal mode enables all the advanced features of the 4212 digital panel while compatibility mode restricts features to those found on older panels such as the 4202, SP30X and 8202 series.

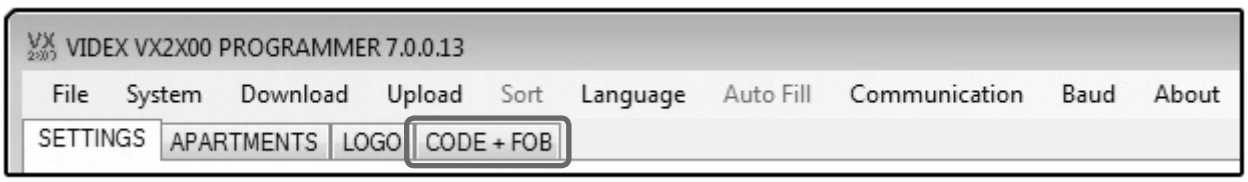


Security Level

Below the mode setting is the security level drop down menu. This setting allows the onboard relay in the 4212 panel to be activated by using a door access code or a proximity key fob or both *(where entering an access code as well as presenting a proximity fob to the onboard reader is required to activate the relay)*. The options available are fob or code or fob + code. If the fob or code option is selected then a 'coded access' tab and a 'proximity access' tab will be shown at the top of the main programmer screen if, however, the fob + code option is selected then the main programmer screen will change appearance and show a combined 'code + fob' tab at the top of the screen *(shown below).*

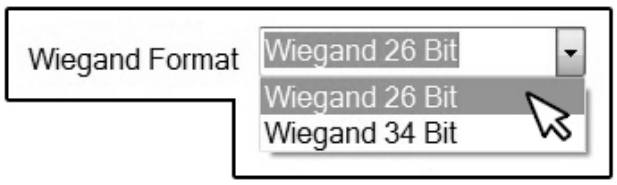






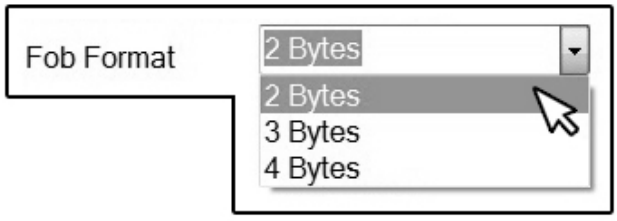
Wiegand Format

Next is the Wiegand format, as shown on the right. From the drop down menu two Wiegand formats are available; Wiegand 26 bit or Wiegand 34 bit. The Wiegand format selection will depend on the requirements of the external access control CPU and is only relevant if an external controller is used.



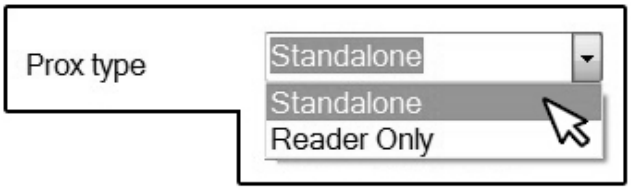
Fob Format

Below the Wiegand format is the fob format, as shown on the right. From the drop down menu 3 fob formats are available; 2 bytes, 3 bytes and 4 bytes. The fob format can only be set using the PC programming software and sets the reading format of the fob.



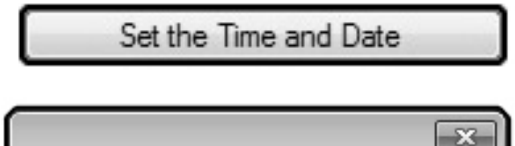
Prox Type

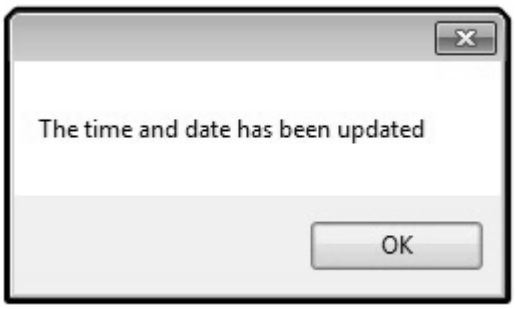
Next is the prox type. From the drop down menu there are two selections; standalone and reader only. These options set up the mode of the onboard proximity reader. When in standalone mode the programming of the key fobs is done using either the PC programming software or via the 4212 panel itself going through the onboard menu selections. All the fob information is stored in the 4212 panel and there are no additional reader wiring connections to be made to an external controller. When in reader only mode any key fob programming is done via an external proximity controller that supports the Wiegand format *(for example the Portal Plus proximity system or any other 3rd party proximity control)*. If this option is selected all key fob data is held within the external controller and not the 4212 panel, the reader in this instance is being used purely as a reader. Four additional wiring connections will be required; D0, D1, LR, LG and a common 0V.



Set the Time and Date

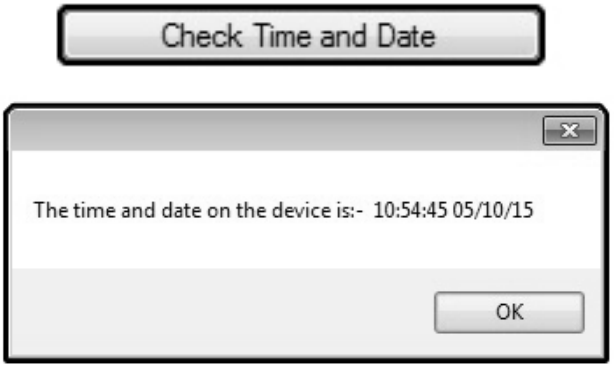
Below the prox type is the 'set the time and date' button, as shown on the right. Pressing this button will set the time and date of the 4212 panel to the current time and date of the PC. After the button is pressed a confirmation window will appear, as shown below right. The format of the date will be displayed in the date format *(european or american)* that has been selected from the date format drop down menu *(refer to the date format on page 11)*.





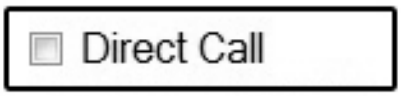
Check Time and Date

Below the set time and date button is the check time and date button, as shown on the right. Pressing this button will confirm the current time and date setup on the 4212 panel. After pressing this button a confirmation window will appear showing the current time and date, as shown on the right.



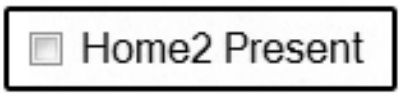
Direct Call

In the bottom right corner of the settings tab is the direct call check box, shown below. If this box is ticked it will allow the numbered buttons *(1-9)* on the front of the 4212 panel to act like functional call buttons *(e.g. pressing button 1 will call phone ID.1, pressing button 2 will call phone ID.2 etc.)*. This check box will be unticked as default and can only be set using the PC programming software.



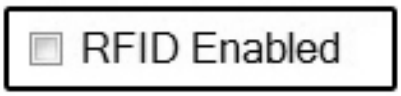
Home2 Present

Below the direct call check box is the home2 present check box, shown below. If this box is ticked it will allow the 4212 panel to switch between the lines of text *(entered in Line 1, Line 2 and Line 3 text fields)* and logo screen *(refer to pages 8 and 18 - 20)*. The timing of the transition between the display text and logo will be based on the time set in the screen switch time field *(refer to page 9)*.



RFID Enabled

Below the home2 present check box is the RFID enabled check box, shown below. This check box enables or disables the onboard proximity access reader within the 4212 panel. If this box is ticked it will enable the onboard reader, this can be confirmed on the front display of the 4212 panel with a key symbol at the top centre of the display, as shown in Fig.2.



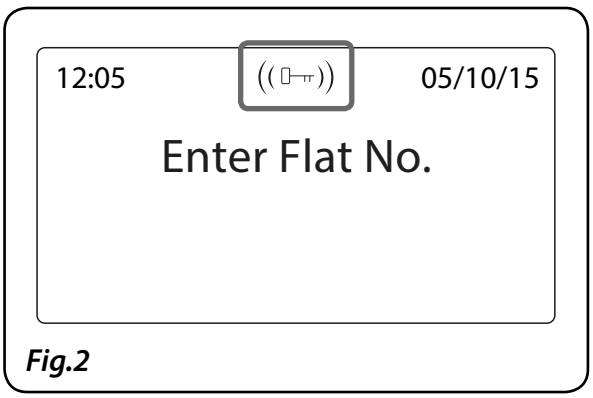
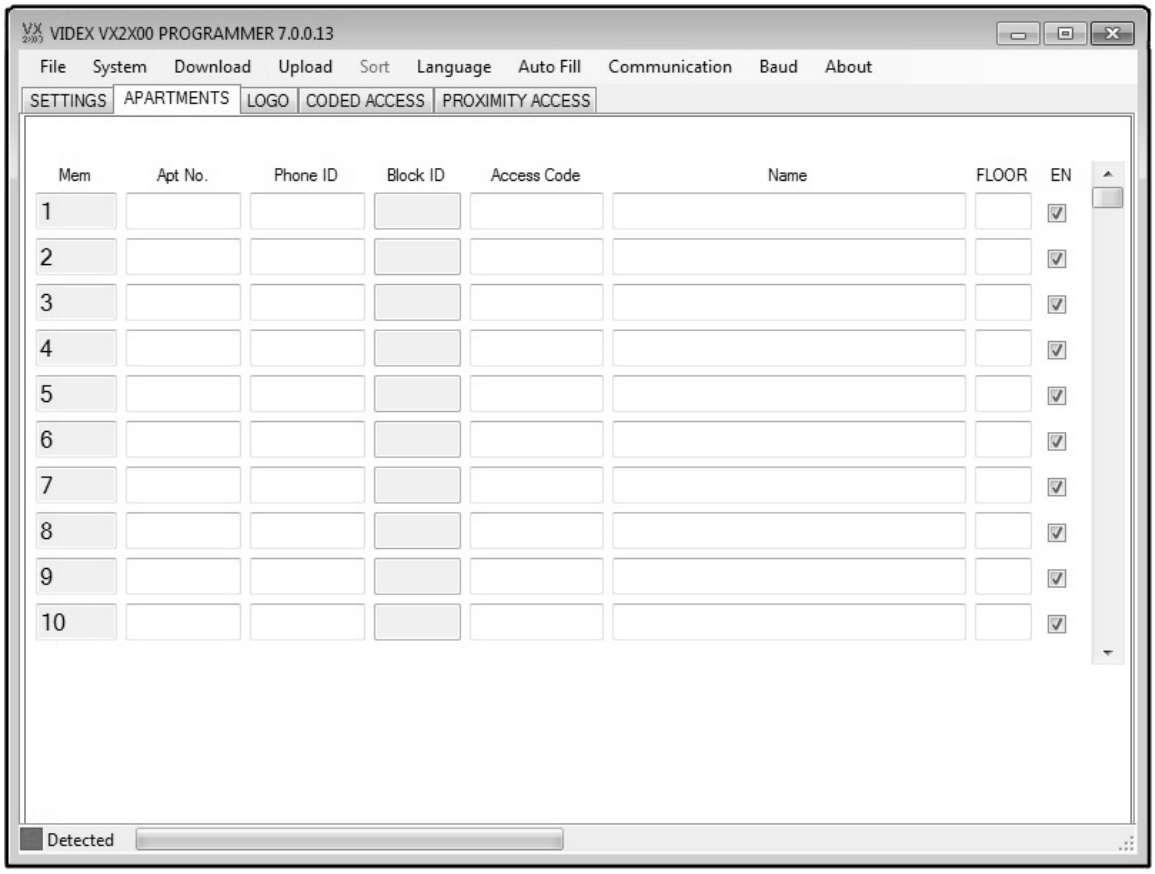


Fig.2

APARTMENTS WINDOW

The next tab on the main programmer screen is for the apartments window, as shown below.



Mem

This column is the memory location where the user's data is stored in the 4212 digital panel. It is already completed and 'grayed' out.

Apt No.

The user's apartment number or flat number can be entered into this field. The apartment number entered into this field will be shown at the bottom of the display *(flashing between 'calling' and the user's apartment number)* when a call is made to that apartment, as shown in Fig.3, and is the number used to make a call.

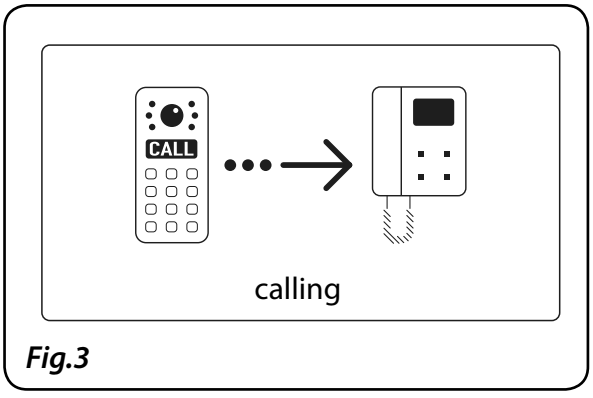


Fig.3

Phone ID

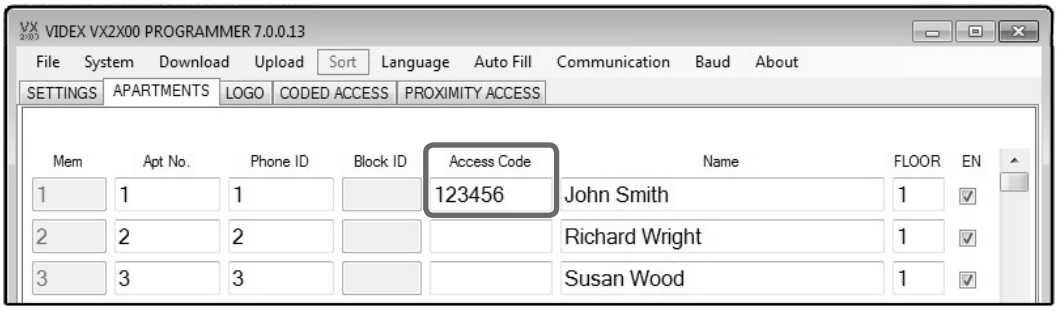
The address of the intercom phone in the user's apartment can be entered into this field.

Block ID

By default this column will be 'grayed' out if the initial Door Mode setting in the settings window is set to Local mode and therefore cannot be altered. If an Art.2206N bus exchange device is being used, however, then the block ID can be entered into this field. *(Information completed in this field will only be applicable on multiple entrance systems where an Art.2206N bus exchange device has been used and the Door Mode field in the settings window has been set to Main mode, also refer to page 10 regarding Door Mode setting)*.

Access Code

If a door access code is required it can be entered into this field. Each user can therefore have their own access code, however if a single communal access code that all resisdents can share is required then it can be entered into the first access code field only *(in mem location 1 row, shown below)*.



Name

The name of the user, the apartment or the office name can be entered into this field. The name entered into this field will be displayed on the 4212 display once the call from the intercom panel has been answered, just below the speak icon, as shown in Fig.4, and is also the name displayed when using the scroll facility.

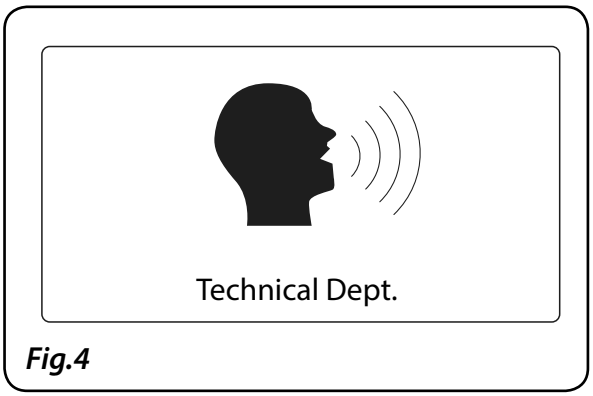


Fig.4

Floor

The floor number for the apartment or the office can be entered into this field. The floor number entered into this field will be displayed on the 4212 display after a call from the intercom panel has been answered and the lock release button has been pressed on the intercom phone. The floor number is shown just to the right hand side of the door open icon on the display, as shown in Fig.5.

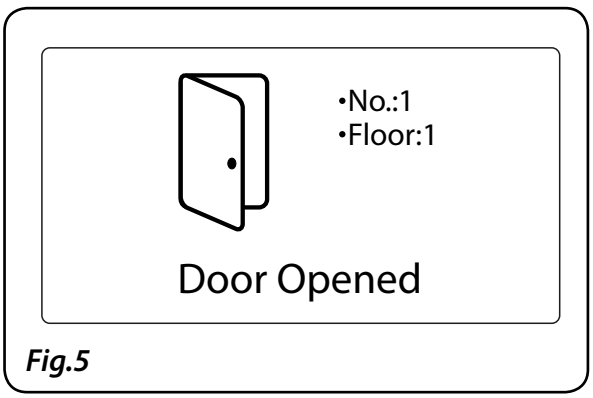


Fig.5

EN (enable/disable)

Just to the right of the floor column is the EN check box column. This check box can enable *(ticked)* or disable *(unticked)* each individual line of programming. When first opening the apartments window this column will have all the check boxes ticked as default. If a line of programming has this box unticked and an attempt is made to call the flat or apartment from the intercom panel the 4212 display will show 'NOT FOUND' as shown in Fig.6. *(Although the panel will show this message the line of programming data is still held in the panel's memory and can be enabled again by either ticking the EN check box in the PC software or entering the programming manually using the panel's keypad and following the on screen menu options).*

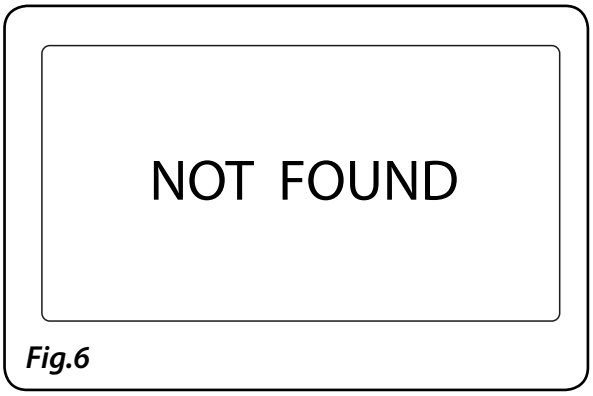
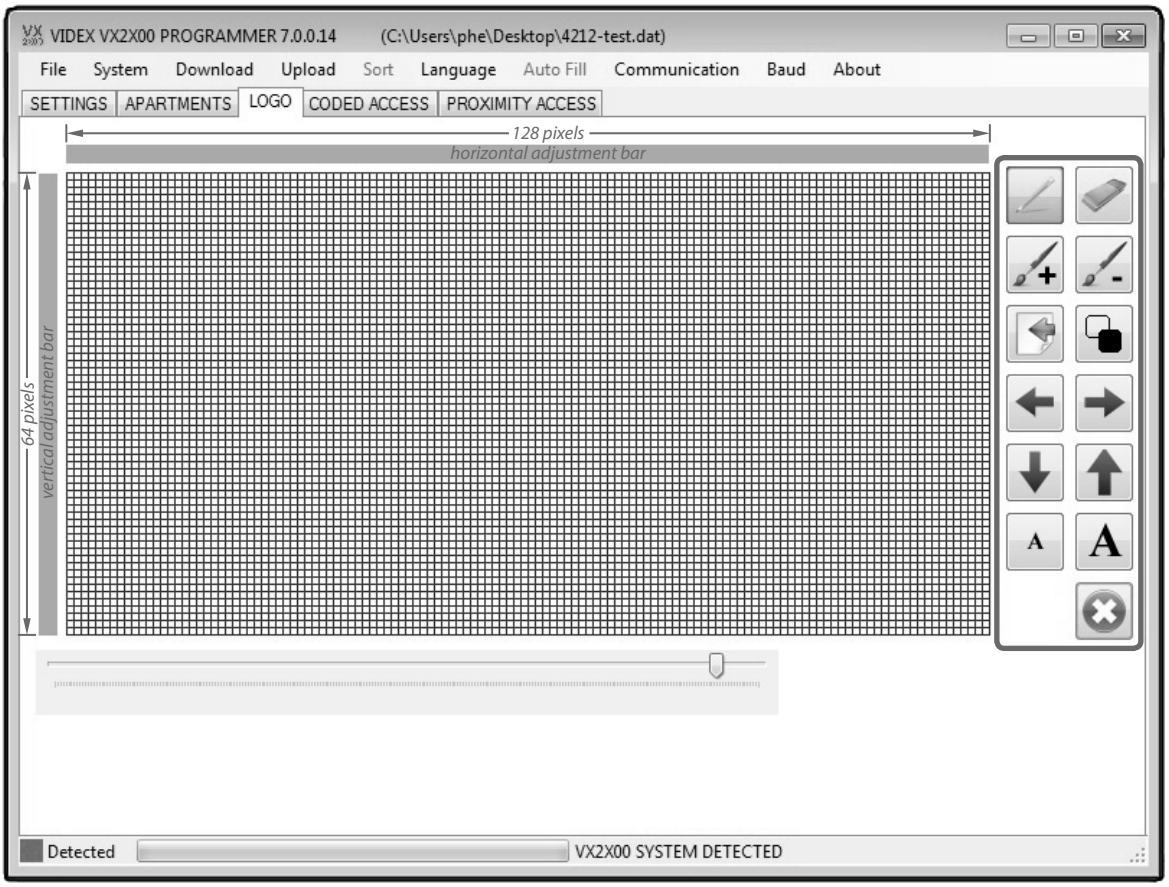


Fig.6

LOGO WINDOW

The next tab on the main programmer screen is for the logo window, as shown below, this can be selected by clicking on the logo tab at the top of the screen. The main logo window consists of the main editable 128x64 pixel area *(the size of the main 4212 graphical display)*, vertical and horizontal image adjustment bars and 13 edit icons down the right hand side, as shown below.



Draw Icon

Selecting the draw icon on the right will allow the user to draw an image, logo or shape by individual pixel.

Erase Icon

Selecting the erase icon on the right will allow the user to erase individual pixels one at a time.

Draw Box Icon

Selecting the draw box icon on the right will allow the user to draw an entire box larger than an individual pixel *(with no size contraints other than the size of the main 128x64 editing window itself).*

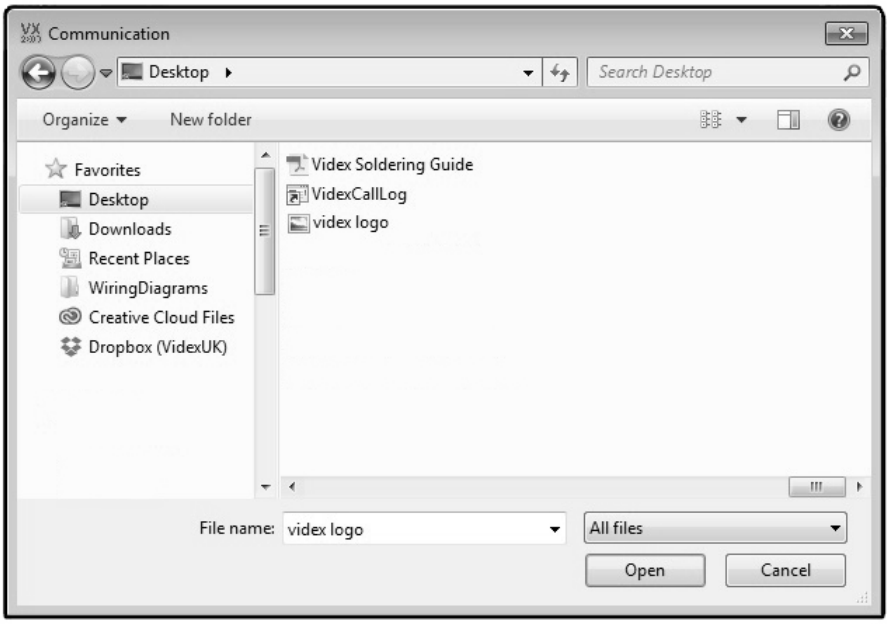
Erase Box Icon

Selecting the erase box icon on the right will allow the user to delete an entire box area larger than an individual pixel *(with no size contraints other than the size of the main 128x64 editing window itself).*

Import Image Icon

Selecting the import icon on the right will allow the engineer to import an image or logo to use. Image file types that can be imported are: jpeg, png, bmp, gif and tiff.

Once the import icon has been selected the following communcation window will appear to find the required image or logo file. Once the file has been located and selected click on the open button to import the file.



Important Note: It may be necessary to scale down the image size to 128x64 pixels before importing it into the logo editing window especially if it is a high resolution image. The reason for this is that the detail in higher resolution images may be lost when importing. Any third party image software (*e.g. microsoft paint, adobe illustrator, coral draw or paintshop pro)* can be used to do this. The 4212 graphical display and logo editing window is only designed to show and edit basic images and company logos.

Reverse Icon

Clicking on the reverse icon will change the appearance of the image or logo in the editing area, any dark areas will become light and any light areas will become dark.

The image will appear like a photo negative in the editing area and on the main 4212 display. The original image will appear as shown in Fig.7A with a dark background and light logo and text and if the reverse icon is pressed it will appear as shown in Fig.7B with a light background and dark logo and text.

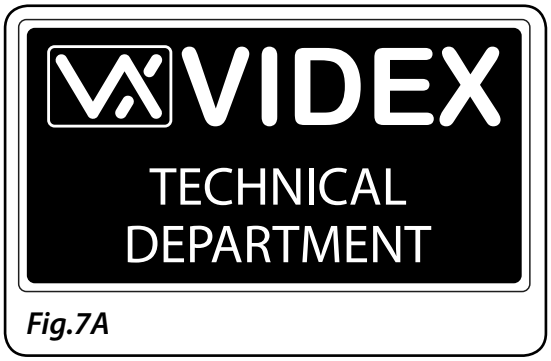
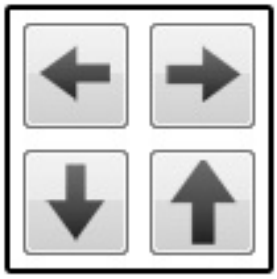


Fig.7A

Fig.7B

Justify Image Icons



Selecting and pressing on any of the justify image icons on the right will allow the user to move the image or logo in the editing area left *(⬅)*, right *(➡)*, down *(⬇)* and up *(⬆)*.

Text Icons

There are two text icons. Selecting the text icon on the left will allow the user to type in small text *(upper or lowercase)*, selecting the text icon on the right will allow the user to type in large text *(upper or lowercase)* to be shown on the 4212 display.

Once a text icon has been selected move the cursor over to the left hand side of the editing area *(128x64 pixel area)* and click. The following text window will appear, as shown on page 19.

Simply enter the required text in the text field and then click on the OK button. The text will appear in the editing area. It should also be noted that the text font displayed is just a basic font. If a particular font is required then it may be necessary to import this using the import icon (*as mentioned on page 18),* however, consideration should be taken into account when doing this because if the font is quite intricate it may not display properly in the editing area and therefore will not show up properly on the 4212 main display.

Clear Icon

Clicking on the clear icon will delete everything in the image editing area.

Vertical and Horizontal Adjustment Bars

The vertical and horizontal adjustment bars allow the user to select a specific region on the main 128x64 pixel editing area and move a specific image, part of an image or text within that specified region by creating 'pixel zones'. This is done by selecting individual pixels up and down the vertical adjustment bar and/or selecting pixels along the horizontal adjustment bar.

To create a 'pixel zone' along the horizontal adjustment bar place the cursor on the top bar in the area you wish to select. Click and hold down the left mouse button whilst moving the cursor left and the individual pixels will highlight *(in white)* along the bar, as shown in Fig.8A. To de-select a 'pixel zone' click and hold down the left mouse button whilst moving the cursor right and the individual pixels will 'gray out' as the cursor is moved back along the bar, as shown in Fig.8B.

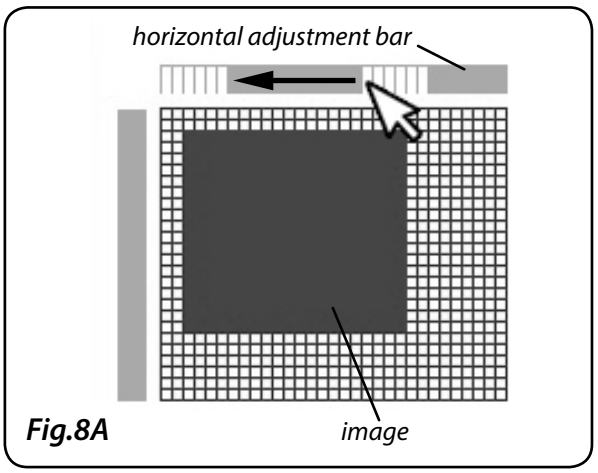


Fig.8A

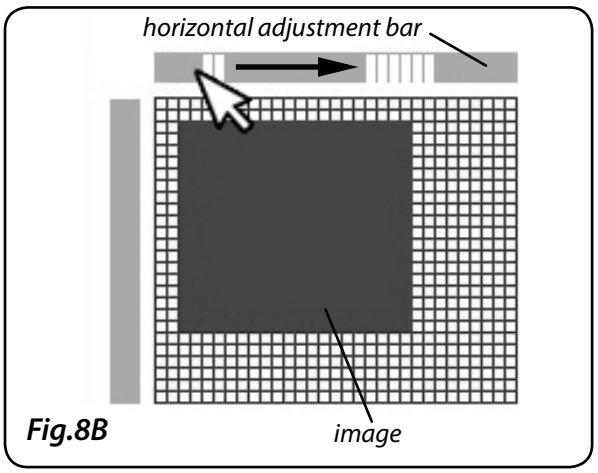


Fig.8B

Creating 'pixel zones' along the vertical adjustment bar is done in a similar way. Click and hold down the left mouse button whilst moving the cursor up the bar to highlight the pixels, as shown in Fig.9A. To de-select a 'pixel zone' click and hold down the left mouse button but this time moving the cursor down. The individual pixels will 'gray out' as the cursor is moved down the bar, as shown in Fig.9B.

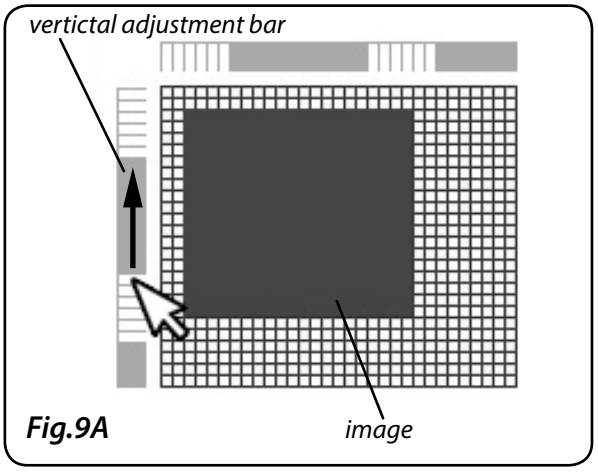


Fig.9A

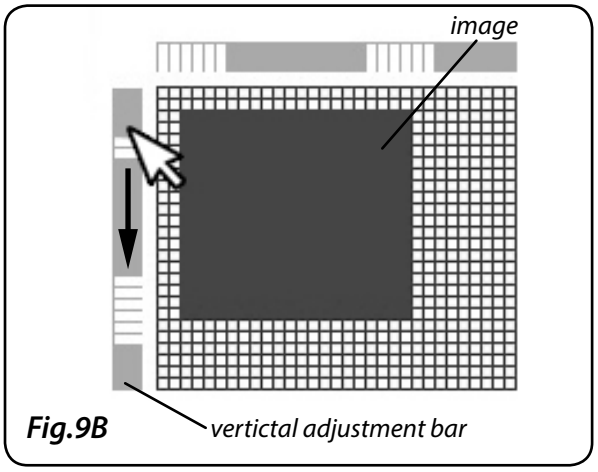


Fig.9B

After a 'pixel zone' has been created along each adjustment bar *(areas highlighted in white)* any image, part of an image or text that is within this region will be fixed in position. Any image, part of an image or text that is not within this region *(areas 'grayed out')* can be moved using the four justify image icons *(as described on page 19)*. An example of this is shown in Fig.10A, the dashed lines indicate the 'pixel zone' boundry where the image is fixed. Pressing the right justify icon will move part of the image that is not within these boundaries across to the right of the editing area, as shown in Fig.10B.

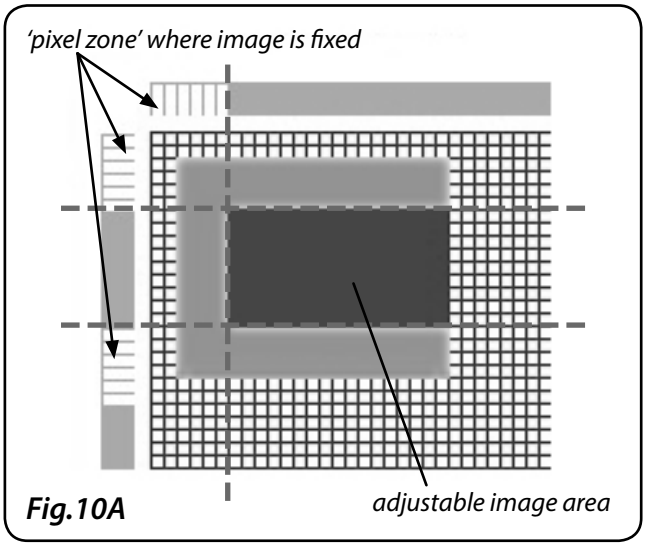


Fig.10A

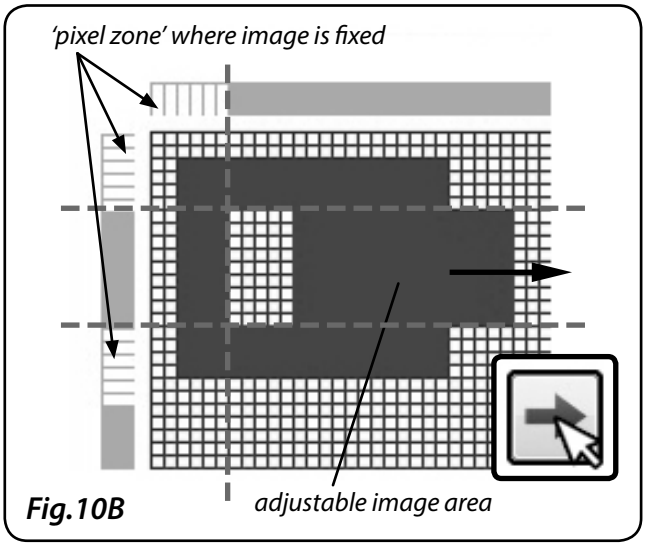
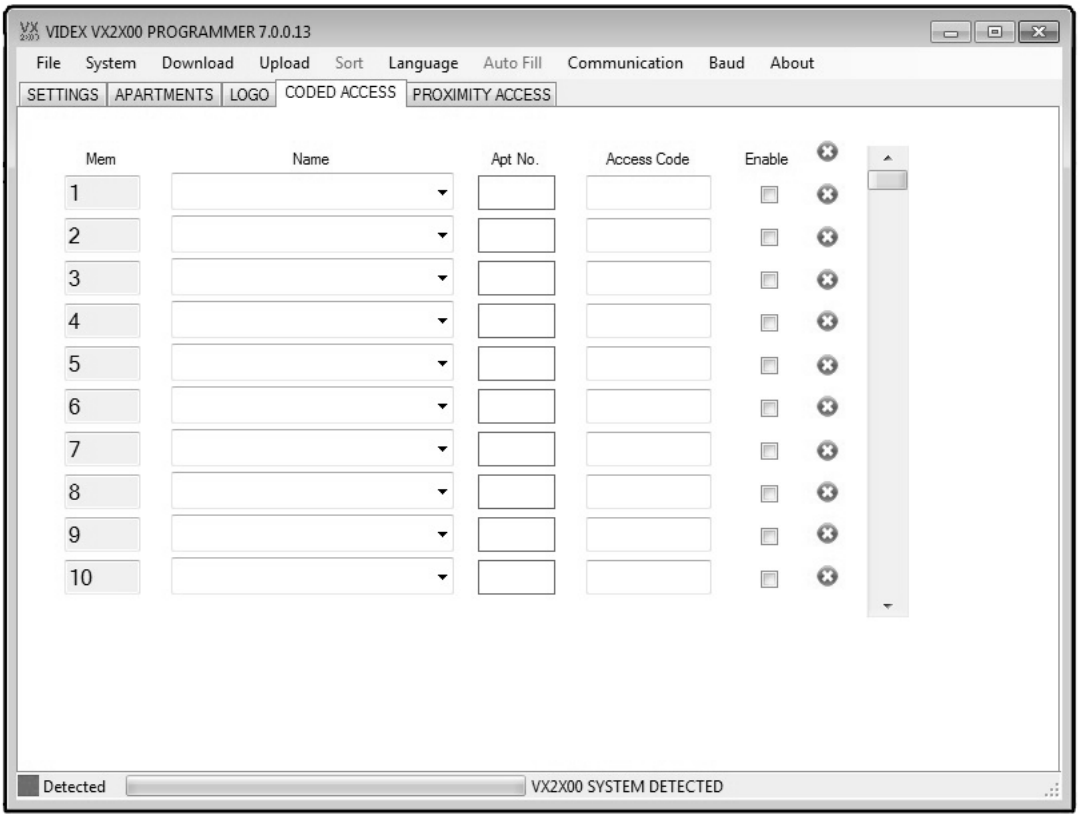


Fig.10B

CODED ACCESS WINDOW

The next tab on the main programmer screen is for the coded access window, as shown below. The coded access tab will only be available if the security level on the settings window was set to fob or code from the drop down menu *(refer to page 12)*.

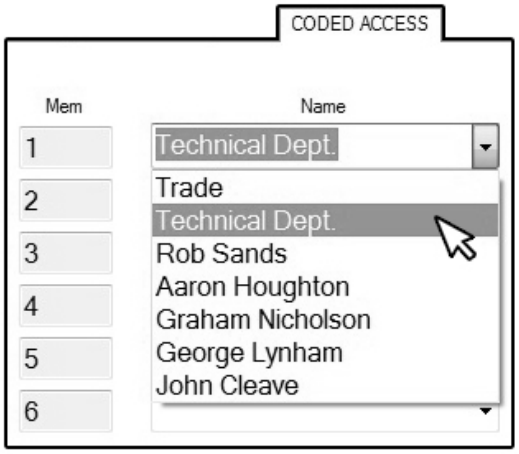


Mem

Like on the apartments window this column is the memory location where the user's data is stored in the 4212 digital panel. It is already completed and 'grayed' out.

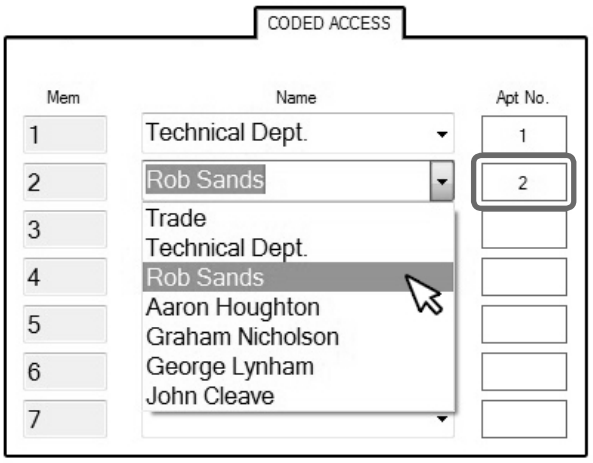
Name

The name column for each memory location row has a drop down menu where an optional trade code or user's name can be selected, as shown on the right. The list of names shown in this drop down menu is taken directly from the name column shown in the apartments window *(refer to pages 15 and 16)*. If Trade codes or access codes are required that are only to operate within the timeband *(trade start and trade end times)* set in the trade code setup (refer to pages 9 and 10) then 'Trade' can be selected from the drop down list. An access code can then be entered in the 'Access Code' field and then enabled by checking the 'EN' enable check box *(refer to page 23)*.



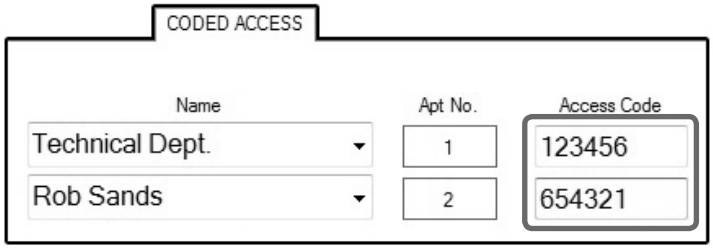
Apt No.

Next is the Apt No. column and the apartment information in this field will appear once a name has been selected from the drop down menu in the name column, as shown on the right. The apartment information is taken from apartment number that was entered in the Apt No. column in the apartments window *(refer to pages 15 and 16)*.



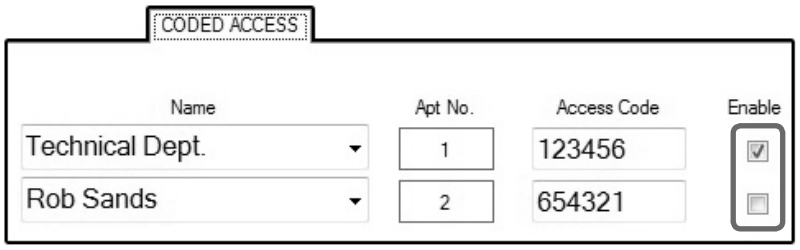
Access Code

Next is the Access Code column and this is where the access code can be entered, as shown on the right. If each user requires their own access code it can be entered into this field, however, if a single communal access code is required that is shared by all users then it only needs to be entered into the first access code field in mem location 1.



Enable

The enable check box column is next. The enable check box on each row of data will enable or disable the individual user's access code, as shown below. If the check box is ticked it will enable the user's access code, and if left unticked will disable the user's access code. If the check box is unticked, but the user has an access code in the access code column the code itself will still be stored in the memory of the 4212 panel after an upload. If an attempt is made to use the access code via the keypad on the 4212 panel then the display will show 'NOT ALLOWED', as shown in Fig.11. The access code can be enabled again manually through the 4212 keypad following the onboard programming menu *(please also refer to technical programming document '66250203-EN' for more information)*.



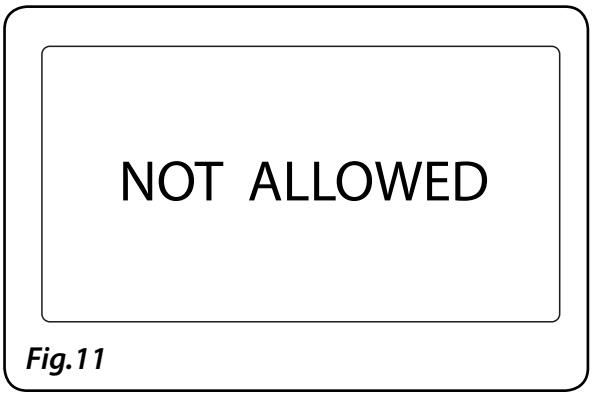
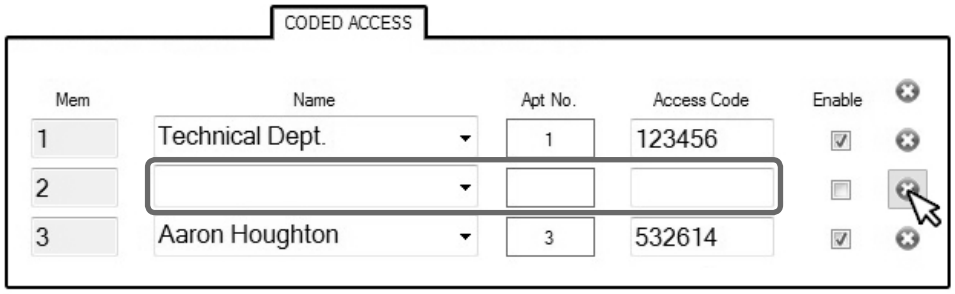


Fig.11

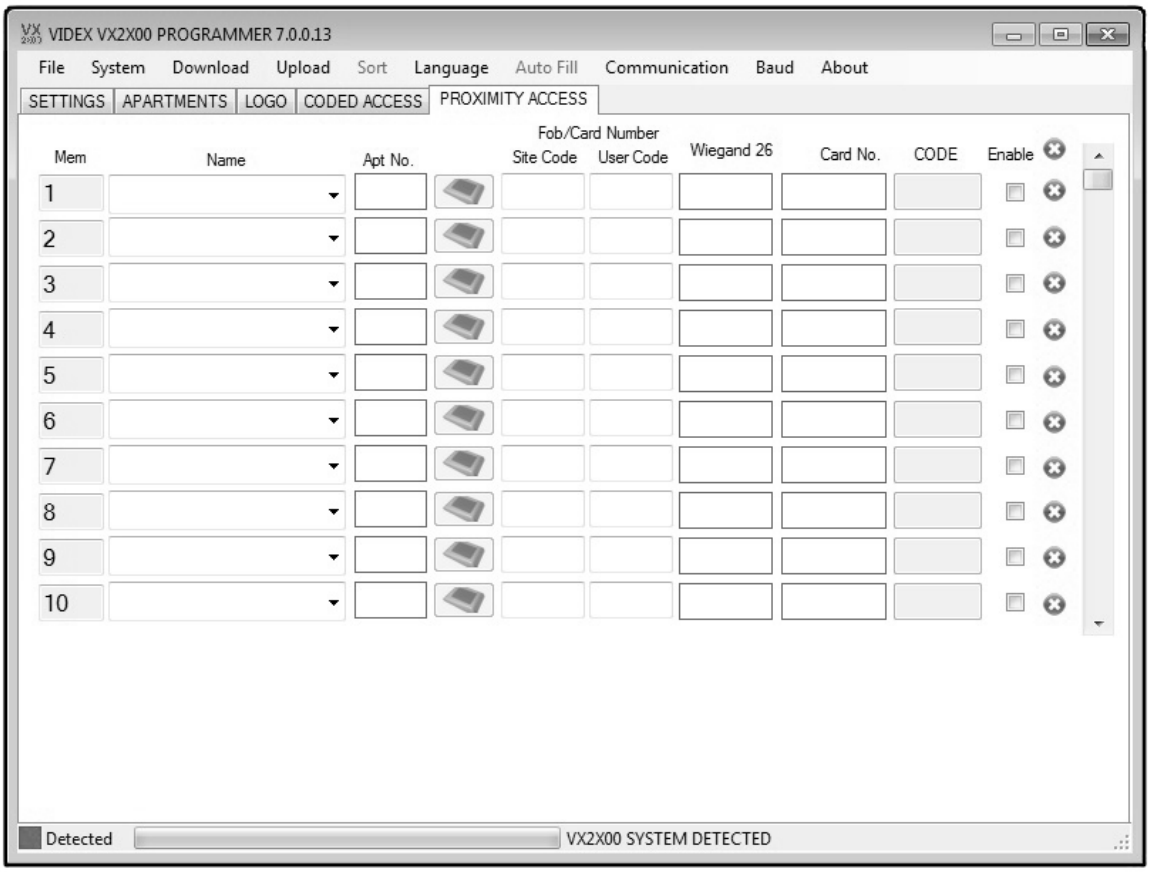
Clear

The last column on the coded access window is the clear symbol column. If the clear symbol in the top right corner is pressed then a delete window will appear. Clicking on the YES button, as shown below left, will then clear all data *(up to 10 rows that are displayed)* on the coded access window. If the clear symbol on an individual row is pressed then it will only clear the data for that row, as shown below right.



PROXIMITY ACCESS WINDOW

The next tab on the main programmer screen is the proximity access window, as shown below. The proximity access tab will only be available if the security level on the settings window was set to 'fob or code' from the drop down menu *(refer to page 12)*.

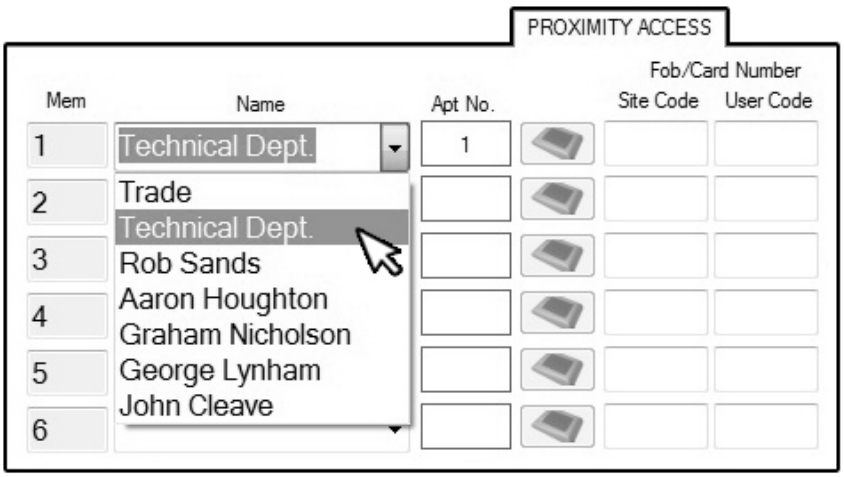


Mem

Like on the apartments window and coded access window this column is the memory location where the user's data is stored in the 4212 digital panel. It is already completed and 'grayed' out.

Name

The name column for each memory location row has a drop down menu where an optional trade key fob or user's name can be selected, as shown on the right. The list of names shown in this drop down menu is taken directly from the name column shown in the apartments window *(refer to pages 15 and 16)*.

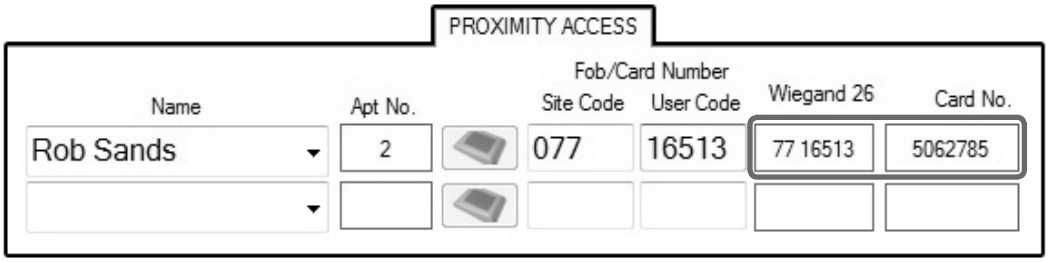


Apt No.

Next is the Apt No. column and like on the coded access window the apartment information in this field will appear once a name has been selected from the drop down menu in the name column. Again the apartment information is taken from apartment number that was entered in the Apt No. column in the apartments window *(refer to pages 15 and 16)*.

Fob/Card Number (Site Code, User Code, Wiegand 26 and Card No.)

The next four columns are site code, user code, Wiegand 26 and card no. which make up the Fob/Card Number details. The fob number on a proximity key fob *(PBX1E)* or card *(PBX2)* can be broken down into two parts. The first 3 digit number on the fob/card is the site code and can be entered into the site code field and the 5 digit number on the fob/card is the user code and can be entered into the user code. When these details are entered into these fields the Wiegand 26 and card no. fields will automatically be updated with the card's Wiegand number and card number respectively, as shown below.



Understanding the Fob Format and Card Number

It is important to understand the relationship between the fob format and the card number when entering the card's site code and user code into the appropriate fields.

- ***Fobs/Cards with 5 digit number (user code)***

  If a proximity fob/card has no site code but a 5 digit user code *(955/T or 955/C)* then the fob format should be set to 2 bytes in the fob format field in the settings tab.

- ***Fobs/Cards with 3 digit site code and 5 digit user code***

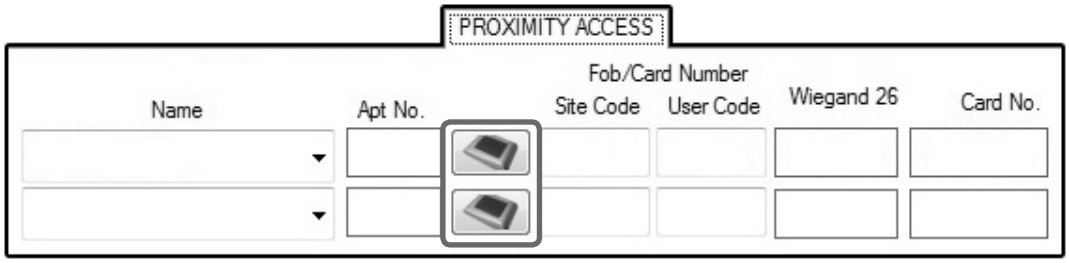
  If using a fob/card with a 3 digit site code and 5 digit user code *(see above ref: PBX1E or PBX2)* then the fob format should be set to 3 bytes.

- ***Fobs/Cards with longer site and user codes and the PROXE***

  If the fob/card has a longer site code and user code then the fob format should be set to 4 bytes. If using the PROXE deskmount reader for programming fobs and/or cards *(refer to page 25 for PROXE programming)* then the fob format should be set to 4 bytes.

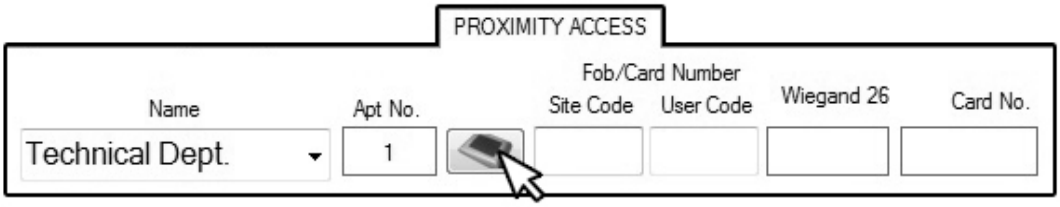
Using the PROXE Deskmount Reader for Programming Fobs/Cards

When programming with a PROXE deskmount reader the PROXE icon column in the proximity access tab will be highlighted, as shown below.



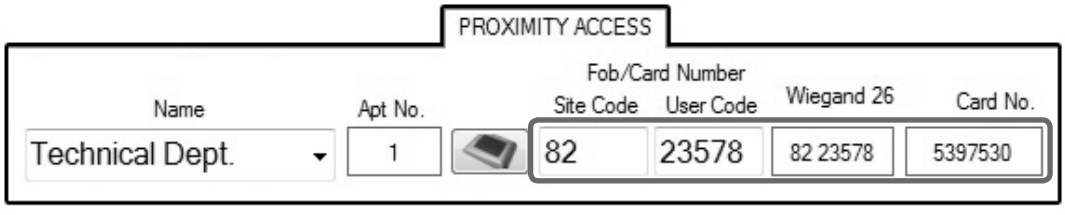
Before using the PROXE deskmount reader to program fobs/cards ensure that it has been setup correctly *(refer to page 39 for PROXE setup)*. Also make sure that the fob format *(refer to pages 13 and 24)* has been set to 4 bytes *(regardless of which type of fobs/cards are being used)*. Follow the steps below to program a fob/card:

1. First select the user name from the 'Name' drop down list.
2. Click on the deskmount reader icon next to the Apt No. field as shown below.



At the bottom of the proximity access screen the following message will appear 'PRESENT THE CARD OR FOB', as shown below. Also the green LED on the PROXE reader will come ON.

3. Present the fob/card to the reader. The reader will emit a beep and the green LED will go OFF.
4. The fob /card number fields *(site code, user code, Wiegand 26 and Card No.)* will automatically update, as shown below. Simply repeat these steps for adding more fobs/cards.

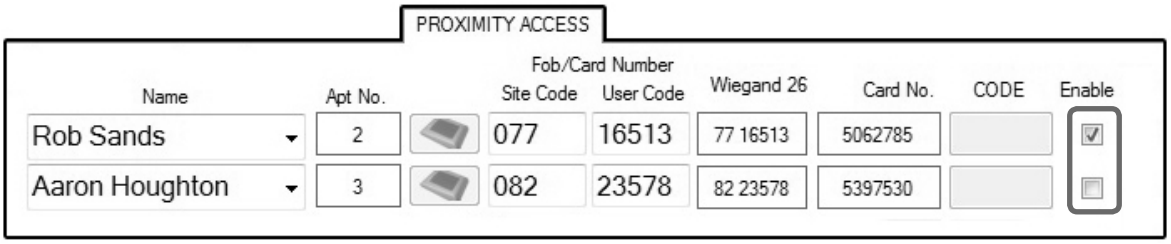


Code

The Code column is next and will be 'grayed' out and is not applicable if only proximity fobs/cards are being programmed.

Enable

The enable check box column is next. The enable check box on each row of data will enable or disable the individual user's key fob or card, as shown below. If the check box is ticked it will enable the user's key fob or card, and if left unticked will disable the user's key fob or card. If the check box is unticked, but the user has a key/card number data in the relevant columns then this data will still be stored in the memory of the 4212 panel after an upload. If a fob or card is presented to the onboard reader on the 4212 panel then the display will show 'NOT ALLOWED', as shown in Fig.12. The fob or card can be enabled again manually through the 4212 keypad following the onboard programming menu *(please also refer to technical programming document '66250203-EN' for more information)*.



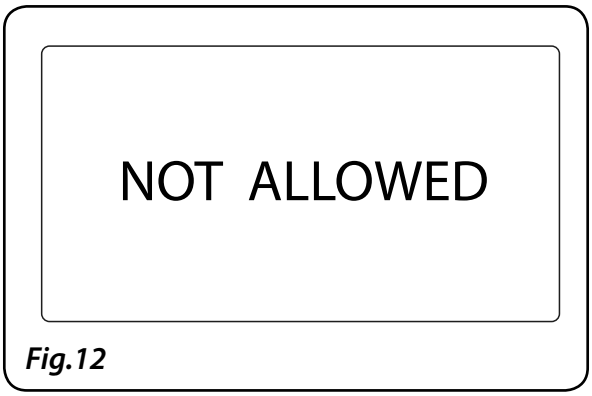
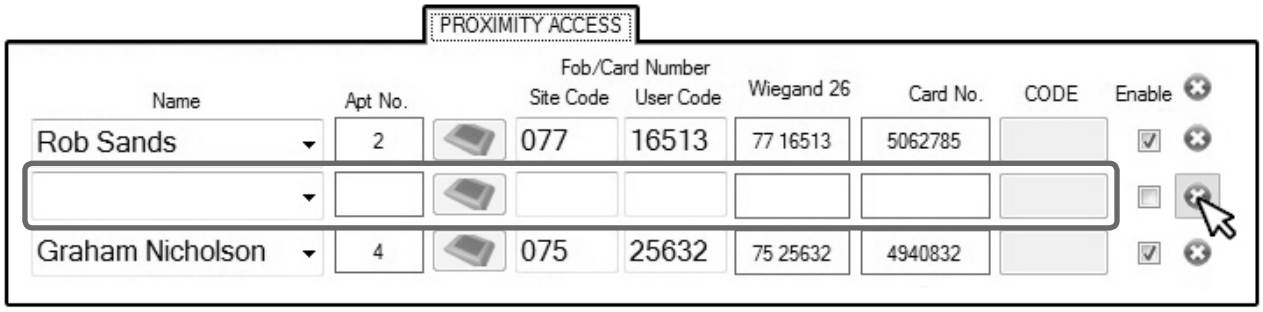


Fig.12

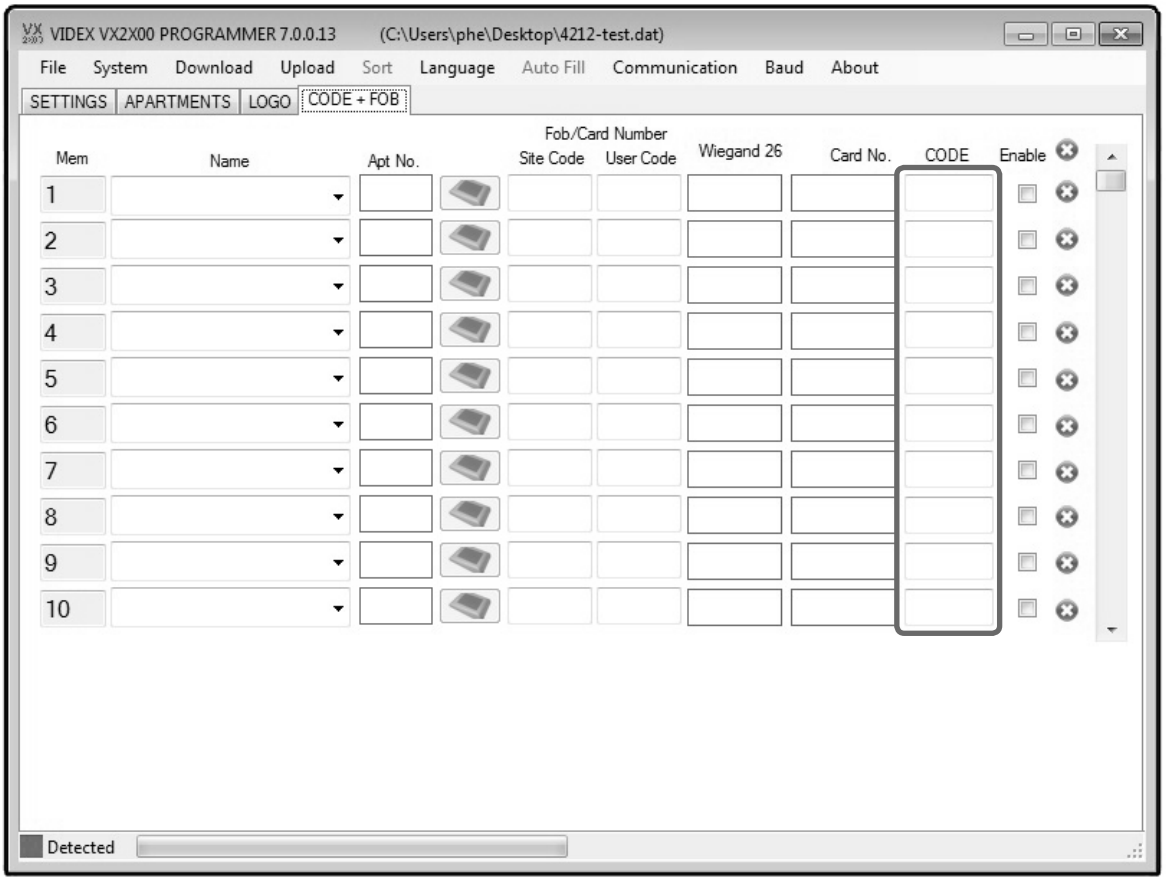
Clear

The last column on the proximity access window is the clear symbol column. If the clear symbol in the top right corner is pressed then a delete window will appear. Clicking on the YES button, as shown on the right, will then clear all data *(up to 10 rows that are displayed)* on the proximity access window. If the clear symbol on an individual row is pressed then it will only clear the data for that row, as shown below.



CODE + FOB WINDOW

The code + fob tab will only appear at the top of the main programmer screen if the code + fob option was selected from the security level drop down menu on the settings window *(refer to security level selection on page 12)*.



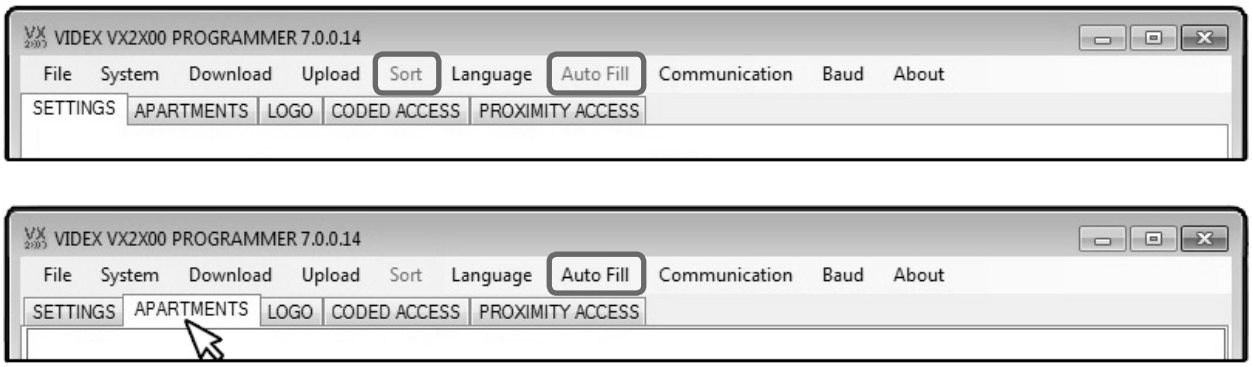
Code and Fob setup on the Code + Fob Window

The memory location column is already completed and 'grayed' out like on previous programming windows. All other programming fields are setup in the same way as if you were programming an access code and programming a proximity fob/card *(refer to pages 21 - 23 for programming an access code and pages 24 - 27 for programming a fob/card)*.

Important Note: It is important that when programming an access code to work in combination with a fob/card that the access code entered in the code column in apartments window matches the same access code entered in the code column in the code + fob window. If they do not match then the 4212 panel will display 'NOT ALLOWED' when the code is entered. Also it is advised when uploading the data back into the panel that the upload all option is selected from the upload drop down menu.

PROGRAMMER SCREEN TOP MENU

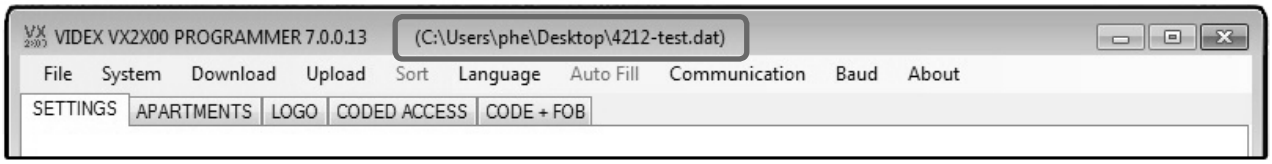
At the top of the main programmer screen there are 10 menu options: File, System, Download, Upload, Sort, Language, Auto Fill, Communication, Baud and About. The Sort and Auto Fill options are initially 'grayed' out for the 4212 panel, as shown at the top of page 29. Once the apartments tab is selected the Auto Fill menu option becomes available, as shown at the top of page 29.



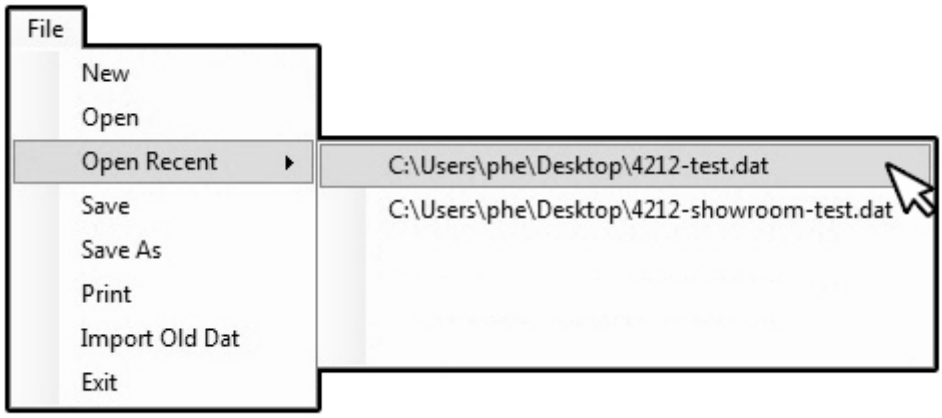
FILE

From the top menu on the main programmer screen when File is selected the following drop down menu will appear, as shown to the right, and the following options are available; New, Open, Open Recent, Save, Save As, Print, Import Old Dat and Exit. The Open Recent option expands to show a drop down list of the most recent files that have been opened.

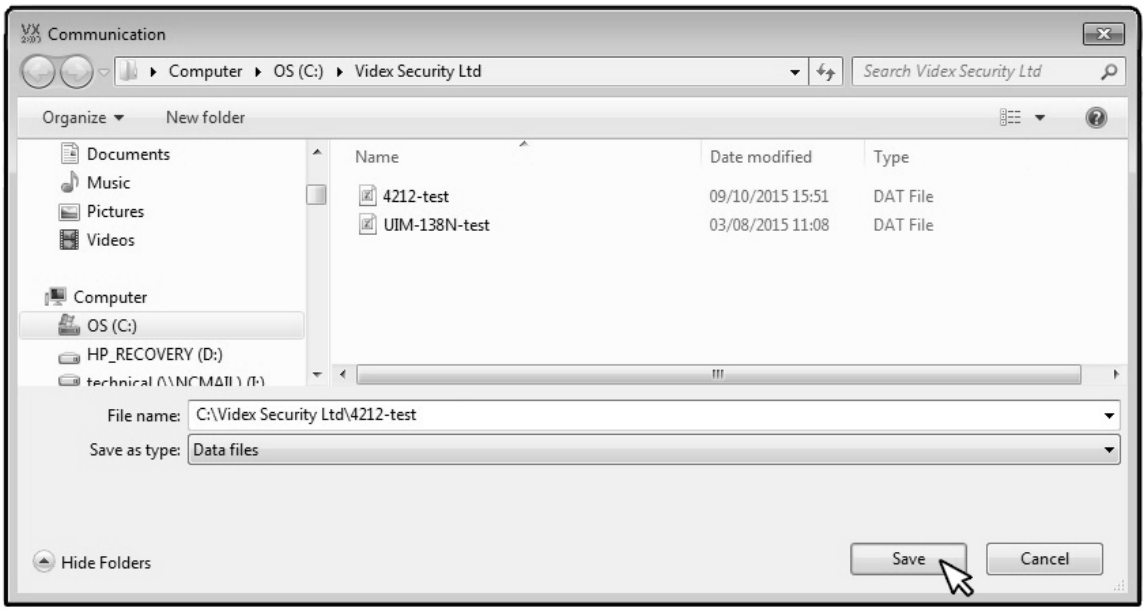
- **New** - selecting this option from the drop down menu will allow a new database file to be created and saved.
- **Open** - selecting this option from the drop down menu will open an existing database file that has previously been saved. *(The file path location and file name will be shown at the top of the programmer screen, see below)*.



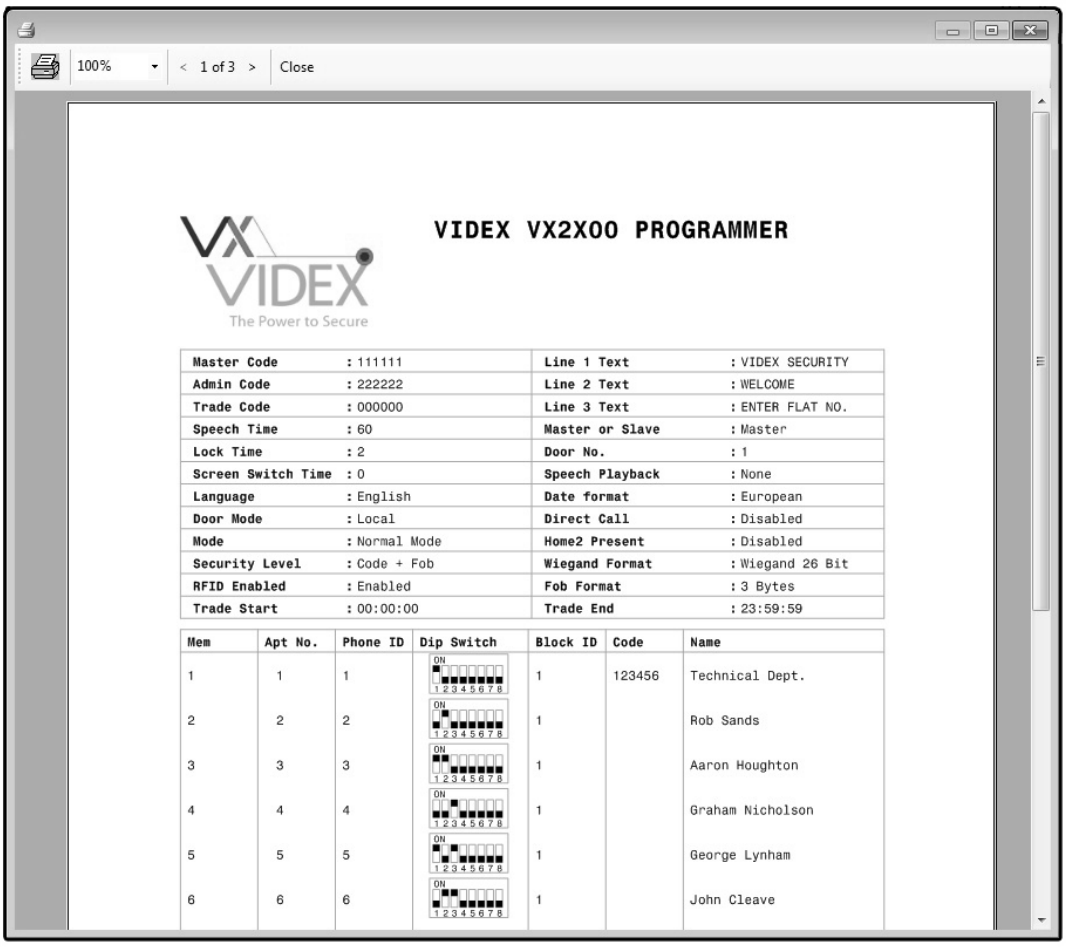
- **Open Recent ▶** - Select this option from the drop down menu, as shown below, and a list of the most recent database files that were previously accessed will be shown. To open select and click on the file required and the programming tabs will update with all file information.



- **Save** - select this option from the drop down menu to save the database file that is open.
- **Save As** - select this option from the drop down menu to save the database file in a specific file location *(a specified file path and location can be selected as shown below).*



- **Print** - select this option from the drop down menu to print out the settings and the database file, as shown below.



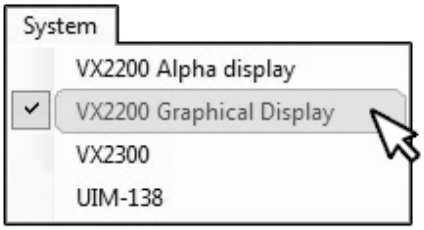
Master Code	: 111111	Line 1 Text	: VIDEX SECURITY
Admin Code	: 222222	Line 2 Text	: WELCOME
Trade Code	: 000000	Line 3 Text	: ENTER FLAT NO.
Speech Time	: 60	Master or Slave	: Master
Lock Time	: 2	Door No.	: 1
Screen Switch Time	: 0	Speech Playback	: None
Language	: English	Date format	: European
Door Mode	: Local	Direct Call	: Disabled
Mode	: Normal Mode	Home2 Present	: Disabled
Security Level	: Code + Fob	Wiegand Format	: Wiegand 26 Bit
RFID Enabled	: Enabled	Fob Format	: 3 Bytes
Trade Start	: 00:00:00	Trade End	: 23:59:59

Mem	Apt No.	Phone ID	Dip Switch	Block ID	Code	Name
1	1	1		1	123456	Technical Dept.
2	2	2		1		Rob Sands
3	3	3		1		Aaron Houghton
4	4	4		1		Graham Nicholson
5	5	5		1		George Lynham
6	6	6		1		John Cleave

- **Exit** - select this option when all programming is finished and exiting out of the programmer software. *(please note that when exiting out of the programmer software a prompt window will appear asking if you want to save the current file before exiting, click on the required button. If saving the file again it will be saved in the same file location as described under the Save As function).*

SYSTEM

From the top menu on the main programmer screen when system is selected the following drop down menu will appear as shown on the right. Although there are four options shown in the drop down list, the VX2200 Graphical Display should be selected as a 4212 digital panel is being used. The other three options will not be applicable.



DOWNLOAD

From the top menu on the main programmer screen when download is selected then one of two drop down menus will appear. In the settings window if the 'Code or Fob' option was set in the security level menu then the download drop down menu, as shown below left, will appear. If the 'Code + Fob' option was set instead then the download drop down menu, as shown below right, will appear.

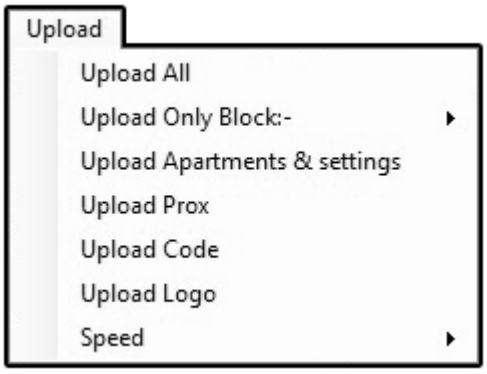
The menu options available; Download All, Download Apartments & Settings, Download Codes and Download Prox or Download Codes+Prox and Download Logo.

- **Download All** - select this option from the drop down menu to download all settings, codes, proximity fobs and any logo stored on the 4212 digital panel.
- **Download Apartments & Settings** - select this option from the drop down menu to download the apartment programming stored on the 4212 digital panel; Apt No., Phone ID, Block ID *(if applicable)*, Access Code, Name and Floor number.
- **Download Codes** - *(if the security level has been set to Fob or Code)* select this option to download all coded access programming stored on the 4212 digital panel.
- **Download Prox** - *(if the security level has been set to Fob or Code)* select this option to download all proximity fob/card programming stored on the 4212 digital panel.
- **Download Codes + Prox** - *(if the security level has been set to Code + Fob)* select this option to download all coded access and fob/card proximity programming stored on the 4212 digital panel.

- **Download Logo** - select this option to download any logo stored on the 4212 digital panel.

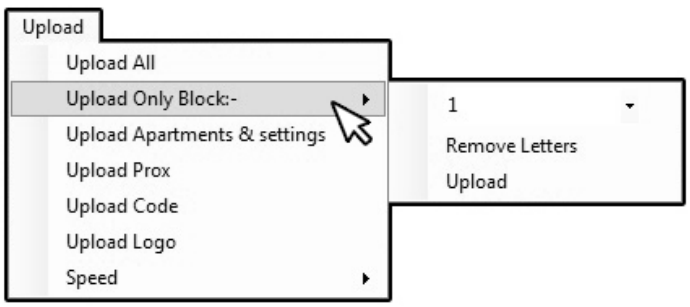
UPLOAD

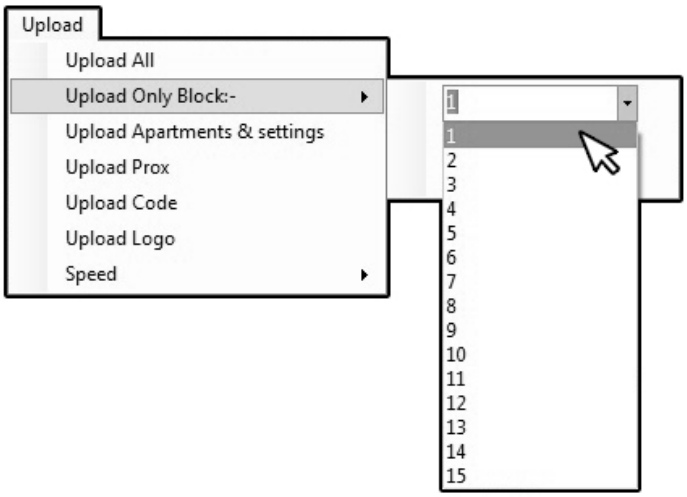
From the top menu on the main programmer screen when upload is selected the following drop down menu will appear, as shown on the right. The following menu options are available; Upload All, Upload Only Block, Upload Apartment & Settings, Upload Prox, Upload Code, *(if the security level has been set to Code + Fob)* Upload Code + Prox, Upload Logo and Speed.



- **Upload All** - select this option to upload all programming including all settings, apartment information, logo, coded access and proximity access to the 4212 digital panel.

- **Upload Only Block** - select this option to upload all programming for a specific block including any coded access and proximity access *(this option is only applicable if the 4212 digital panel is set in main mode and 2206N bus exchange devices are being used, also refer to Door Mode setting on page 11 and Block ID setting on page 16)*. Once selected an additional drop down menu will appear as shown below left with 3 options. The first option is a further drop down list from 1 - 15 representing the Block ID's, as shown below right. Next is the Remove Letters option, this will remove any letters that may make up an apartment number when uploaded to the panel *(e.g. Apt No. 100A will become Apt No. 100 where the suffix A has been removed after an upload)*. Last on the list is the Upload option to upload the information for the particular block to the panel.



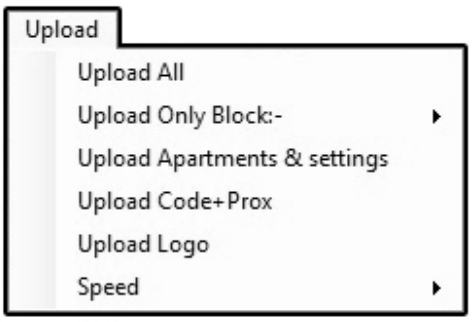


- **Upload Apartments & Settings** - select this option to upload the apartment and settings information only to the 4212 digital panel.

- **Upload Prox** - select this option to upload any proximity access information only to the 4212 digital panel.

- **Upload Code** - select this option to upload any coded access information only to the 4212 digital panel.

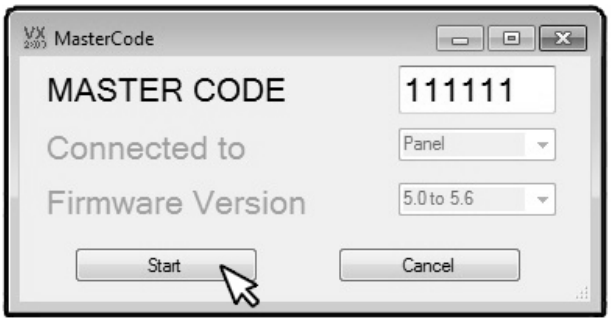
- **Upload Code + Prox** - if the security level has been set to Code + Fob then the Upload Code + Fob option will appear on the drop down menu as shown on the right *(refer to page 12 for security level setup)*. Select this option to upload the coded access and proximity access information only to the 4212 digital panel.



- **Upload Logo** - select this option to upload a company logo or image *(refer to pages 17 - 21 for logo setup)* to the 4212 digital panel.
- **Speed** - last on the Upload drop down menu is the upload speed, when selected from the list a further drop down list is available to set the speed *(from 1 - 9, with 1 being the max. speed setting)* of the upload to the 4212 digital panel.

DOWNLOADING AND UPLOADING

Whenever a download or an upload is performed the master code window will appear, as shown below. To download or upload enter the master code into the master code field and click on the start button, otherwise click on the cancel button to cancel the download or upload.

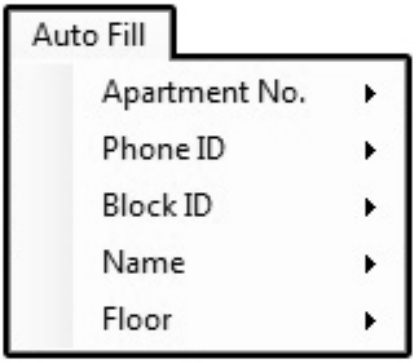


LANGUAGE

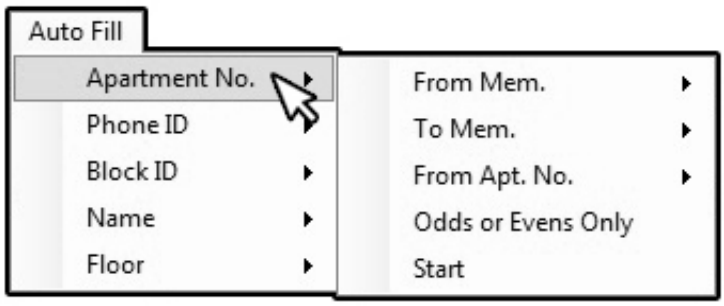
Next from the top menu on the main programmer screen is the Language, this is the language used for the PC programming software and is already default as english.

AUTO FILL

The Auto Fill menu option only becomes available when the apartments tab has been selected *(previously mentioned on page 28)*. Selecting this drop down menu will show four additional options; Apartment No., Phone ID, Block ID and Name *(four of the programming columns in the apartments window)*, as shown on the right. Each option has a further drop down list. Specific parameters can be set that will allow the software to automatically input the programming information required for the 4212 panel into the relevant column.

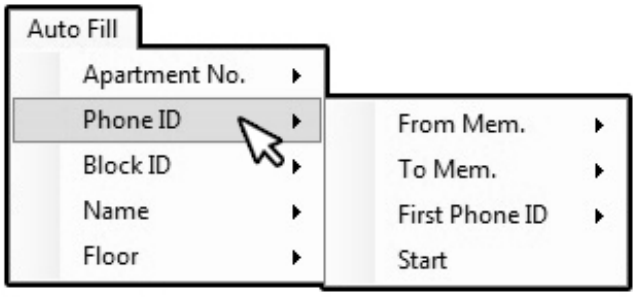


- **Apartment No.** - select this option from the drop down menu, as shown to the right, to set the auto fill parameters *(From Mem; To Mem; From Apt No.; Odds or Evens Only and Start)* to input the apartment number programming in the Apt No. column.



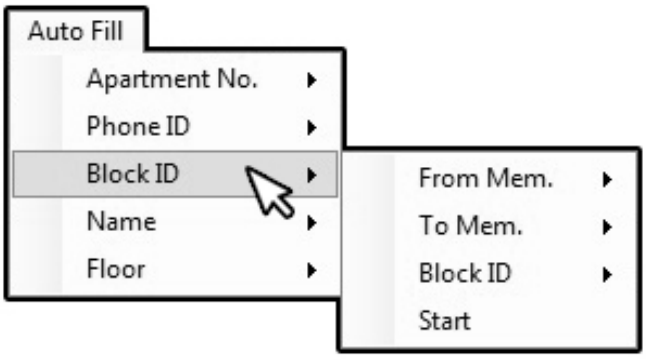
  - **From Mem** - is the first memory location where the apartment information will be stored.
  - **To Mem** - is the last memory location where the apartment information will be stored.
  - **From Apt. No.** - is the first apartment number the auto fill feature will start from.
  - **Odds or Evens Only** - if this option is 'ticked' the auto fill feature will only input the odd numbers into the Apt No. column if the first Apt. No. starts with an odd number. Similarly if the first Apt. No. starts with an even number then the auto fill feature will only input even numbers into the Apt No. column.
  - **Start** - when the parameters above have been set select this option to start the auto fill feature.

- **Phone ID** - select this option from the drop down menu, as shown to the right, to set the auto fill parameters *(From Mem; To Mem; First Phone ID and Start)* to input the phone ID programming in the Phone ID column.



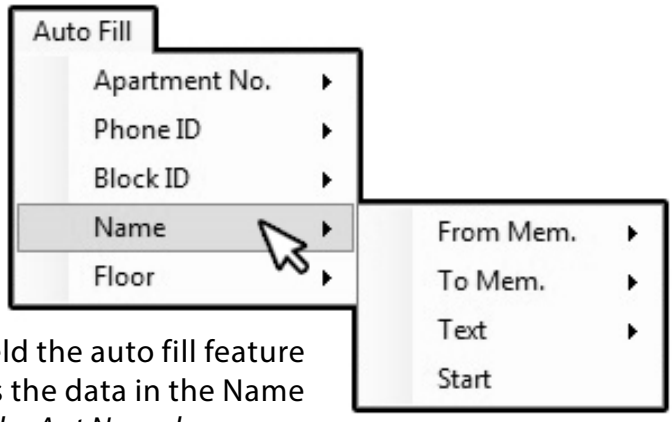
  - **From Mem** - is the first memory location where the phone ID information will be stored.
  - **To Mem** - is the last memory location where the phone ID information will be stored.
  - **First Phone ID** - is the first phone ID the auto fill feature will start from.
  - **Start** - when the parameters above have been set select this option to start the auto fill feature.

- **Block ID** - select this option from the drop down menu, as shown to the right, to set the auto fill parameters *(From Mem; To Mem; Block ID and Start)* to input the block ID programming in the block ID column. The block ID *(from 1 to 15)* is only relevant if the door mode of the 4212 panel has been set to main mode in the settings window and is connected to a 2206N bus exchange device.



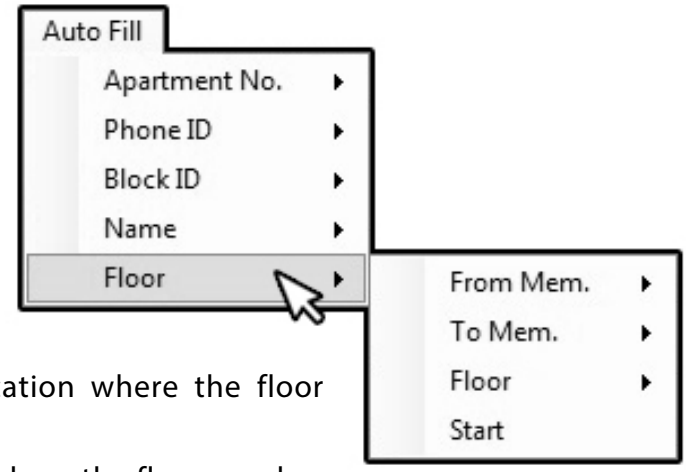
- **From Mem** - is the first memory location where the block ID information will be stored.
- **To Mem** - is the last memory location where the block ID information will be stored.
- **Block ID** - is the block ID *(from 1 to 15)* and is only required if the 4212 panel is connected to a 2206N bus exchange device.
- **Start** - when the parameters above have been set select this option to start the auto fill feature.

- **Name** - select this option from the drop down menu, as shown to the right, to set the auto fill parameters *(From Mem; To Mem; Text and Start)* to input the name programming in the name column. It should be noted that this auto fill feature is only really useful if each flat or apartment has the same designation *(e.g. flat 1, flat 2, flat 3 etc.)*. If the '#' symbol is input before or after any text within the text field the auto fill feature will include the flat number when in completes the data in the Name column *(it will take the information provided in the Apt No. column, e.g. Apt No. 125A with 'Flat #' input in the text field will display as Flat 125A)*. If individual users names are required then they will need to be input manually in each name field down the name column.



  - **From Mem** - is the first memory location where the name information will be stored.
  - **To Mem** - is the last memory location where the name information will be stored.
  - **Text** - is the 'common' text that will be input into the name column.
  - **Start** - when the parameters above have been set select this option to start the auto fill feature.

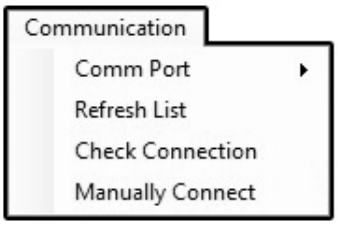
- **Floor** - select this option from the drop down menu, as shown to the right, to set the auto fill parameters *(From Mem; To Mem; Floor and Start)* to input the floor number programming in the floor column *(1 - 250 max.)*.



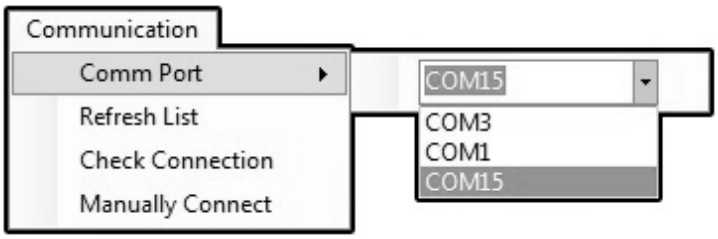
  - **From Mem** - is the first memory location where the floor number information will be stored.
  - **To Mem** - is the last memory location where the floor number information will be stored.
  - **Floor** - is the floor number of where the flat or apartment is located.
  - **Start** - when the parameters above have been set select this option to start the auto fill feature.

COMMUNICATION

Next from the top menu on the main programmer screen is the Communication drop down menu, as shown on the right, from which the following options are available; Comm Port, Refresh List, Check Connection and Manually Connect.



- **Comm Port** - selecting this option from the drop down menu will allow an available COM port that the 4212 digital panel is connected to on the PC to be selected.



- **Refresh List** - selecting this option from the drop down menu will refresh the COM port drop down list *(please note that the COM port that the 4212 panel is connected to should be included in the COM port drop down list).*
- **Check Connection** - selecting this option from the drop down menu will check and refresh the COM port connection between the PC programmer software and the 4212 digital panel.
- **Manually Connect** - although shown in the drop down list this option is not applicable.

BAUD

The baud rate 19200 will already be selected and all other options greyed out *(when the PC programmer software first loads up it will automatically check through the COM ports, searching under different baud rates to see if the 4212 digital panel is connected).*

ABOUT

This option confirms the current version of programming software being used.

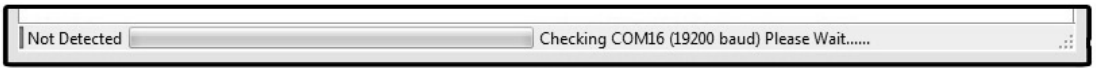
PROGRAMMER SCREEN STATUS AND PROGRESS BAR

The bottom of the main programmer screen indicates the current status of the PC programmer software and its connection to the 4212 digital panel. The following notes describe the different statuses the PC programmer software will show.

- **Not Detected** - this status is shown when the programmer software hasn't detected a device (4212 digital panel) attached to the PC, as shown below.

The Refresh List option can be selected from the Communication drop down list *(from the top menu)* and the status bar will confirm that the ports list has been updated, this can be seen to the right of the progress bar as shown below.

If the Check Connection option is then selected from the Communication drop down list the programmer software will then search for the COM port that the 4212 panel is connected to and re-establish a link. This can be seen to the right to the progress bar as shown below.

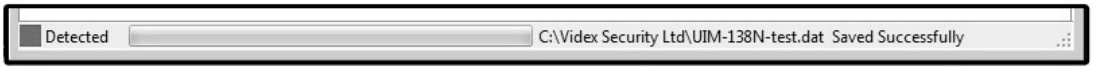


Once the COM port has been found by the programmer software the status bar will update. This can be seen to the left of the progress bar. Confirmation of which COM port the 4212 panel is connected to can be seen to the right of the progress bar as shown below.

- **Detected** - this status is shown when the programmer software has found a device (4212 digital panel) attached to the PC, as shown below.

- **Opened File** - this status is shown when the programmer software has successfully opened a saved file using the Open or Open Recent option from the File drop down list. The status will update to the right of the progress bar as shown below.

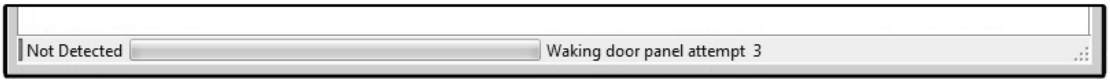
- **Saved File** - this status is shown when the programmer software has successfully saved an open file using the Save or Save As option from the File drop down list. The status will update to the right of the progress bar as shown below.

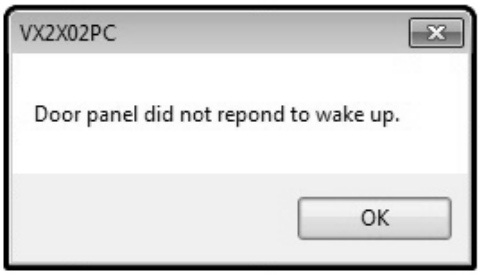


- **Downloading Settings** - this status is shown when the programmer software downloads any of the existing programming information *(apartments, settings, logo, coded access and proximity access)* currently saved on the 4212 panel. This is done by selecting one of the Download options from the Download drop down list from the top menu *(refer to pages 31 - 32)*. The status and download progress can be seen to the right of the progress bar as shown below.

- **Uploading Settings** - this status is shown when the programmer software uploads any of the current setting, apartments, logo, coded access and/or proximity access from an open file into the 4212 panel. This is done by selecting one of the Upload options from the Upload drop down list from the top menu *(refer to pages 32 - 33)*. The status and upload progress can be seen to the right of the progress bar as shown below.

- **No Response** - this status is shown when the programmer software has tried to make 3 attempts to upload or download any information from the 4212 panel. The status and progress bar at the bottom of the programmer screen will change and the 'no response' window will appear, as shown below.





POWERING UP THE 4212 DIGITAL PANEL

After all connections have been made to the 4212 digital panel power up the system. When the display initializes it will show the part number of the unit in the middle of the display, as shown in Fig.13A. After a few seconds it will then display the firmware version of the unit in the middle of the display, as shown in Fig.13B then after a few more seconds the default panel display will be shown as shown in Fig.13C. The 4212 digital panel will be ready to connect to the PC.

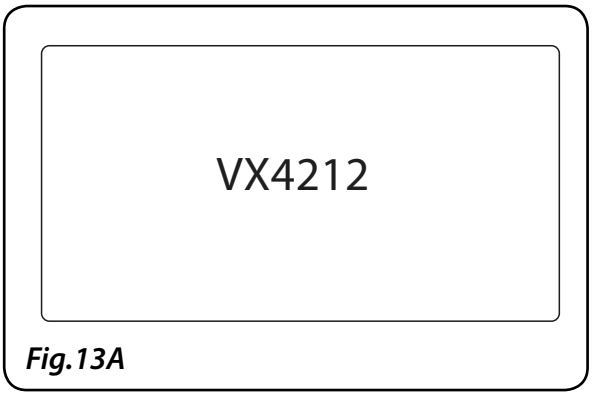


Fig.13A

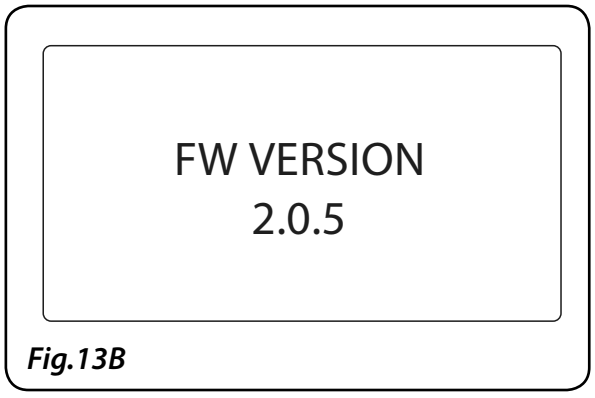


Fig.13B

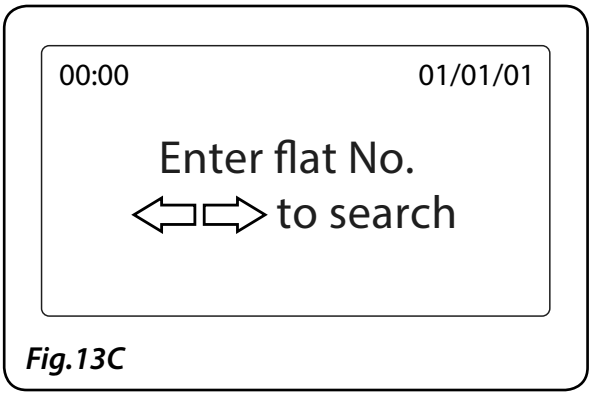
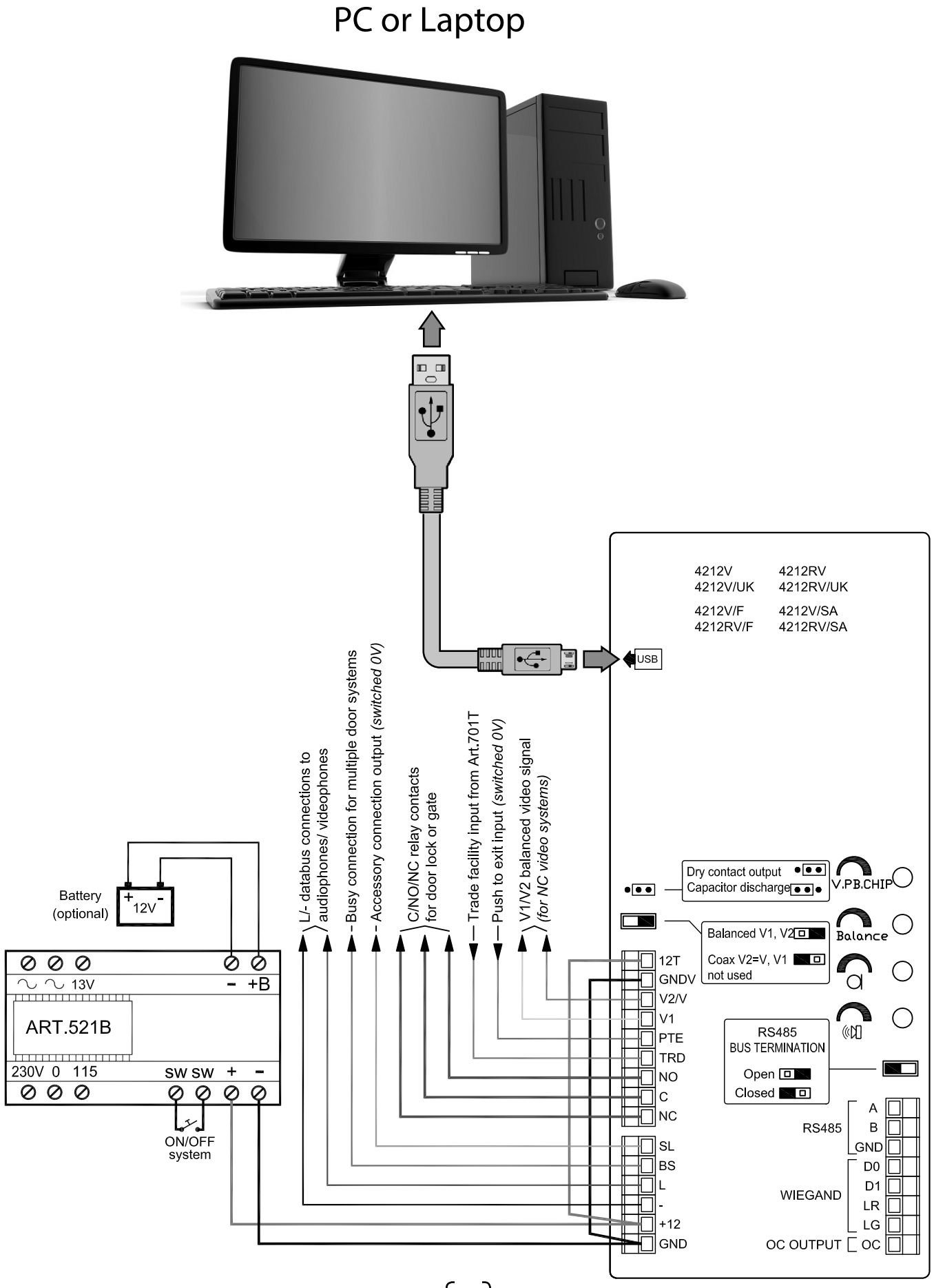


Fig.13C

CONNECTION DIAGRAM



QUICK SOFTWARE SETUP GUIDE

1. Insert the 2X00PC software CD into the PCs CD/DVD rom drive.
2. Select 'RUN' from the start menu.
3. Type in 'D:\setup' then press the 'OK' button.
4. Follow the on screen instructions to complete the setup.
5. Connect the USB cable between the PC and the 4212 digital panel.
6. Once the PC programmer software setup is complete 'double click' on the 2X00PC desktop icon to launch the software.

PROXE SETUP GUIDE

1. Before launching the 2X00PC software plug the USB cable of the PROXE deskmount reader into a spare USB port on the PC.
2. The drivers will automatically be installed by the PROXE reader.
3. The PROXE will emit a single short beep followed by a double beep and the red LED will switch ON.
4. 'Double click' on the 2X00PC desktop icon to launch the software.

NOTES

SOFTWARE UPDATES

Date	Software Version	Revision
25/07/2015	*7.0.0.13*	*Update of PC software to include VX2200 Graphical Display (4212) programming*
12/10/2015	*7.0.0.14*	*Update PC software to include additional Logo editing features*
19/10/2015	*7.0.0.15*	*Update PC software to include 'floor' auto fill feature*

FIRMWARE UPDATES

Date	Software Version	Revision
25/07/2015	*2.0.5*	*Update of Coded Access and Proximity protocols*
16/10/2015	*2.0.6*	*Update of Code+Fob reading, Trade button feature*

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