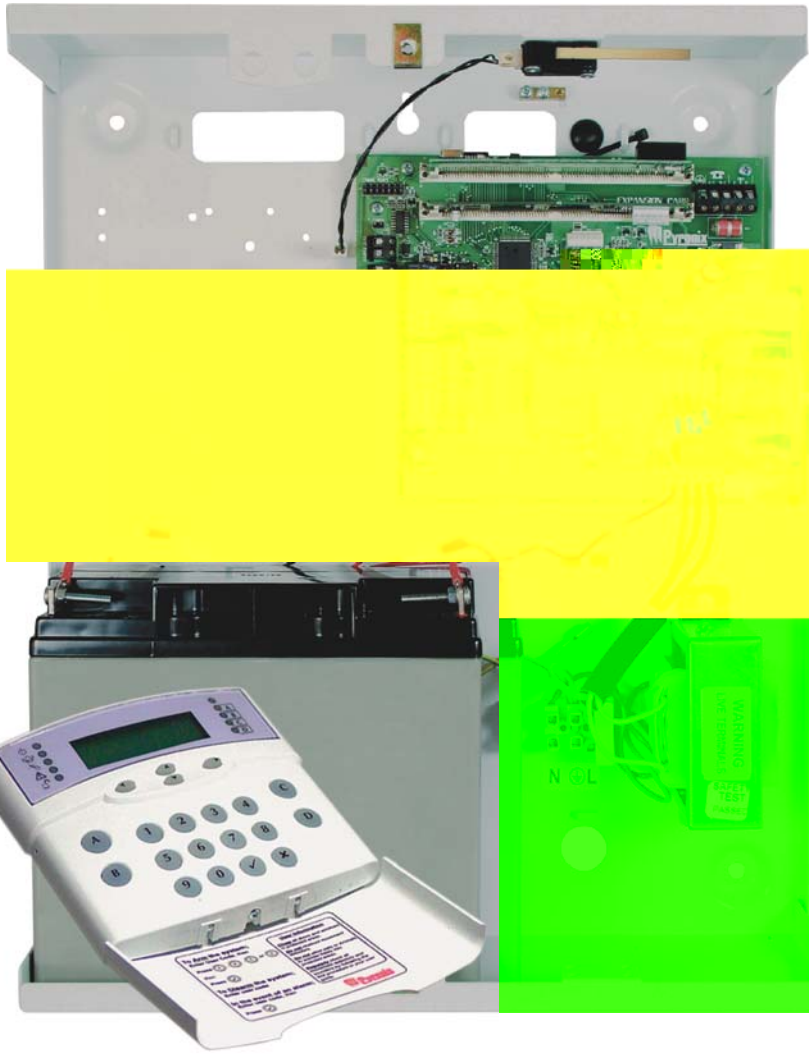
PCX®256
Grade 3

User Manual



TS50131-3:2003
EN50131-1
PD6662
Security Grade 3
Environmental Class 2

www.pyronix.com

RINS867-3

CONTENTS

CHAPTER 1: INTRODUCTION

Congratulations on your purchase of a Pyronix PCX alarm system. The PCX is designed and manufactured to our ISO9001 approved quality system to offer options to suit your needs.

1.1 The Keypad and Proximity Readers

The PCX panel is active for 24 hours a day and the two basic operation modes are DISARMED mode and ARMED mode.

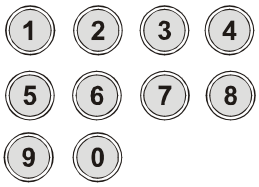
DISARMED: In this mode all inputs are disarmed, apart from Fire, Hold Up, 24 Hour, Gas, Tamper and Fault, which are active 24 hours a day. The Tamper state of all End of Line inputs is always active irrespective of the input type.

ARMED: In this mode all enabled inputs are armed, and if triggered will generate an alarm condition. If an alarm is triggered, internal and external sounders will operate for a programmed period or time. Upon expiry of this time period, the system will automatically rearm.

There are 3 types of operating devices for the PCX: The LCD keypad, the internal proximity reader and the external proximity reader. Also note that the PCX LCD keypad also has an inbuilt prox reader.

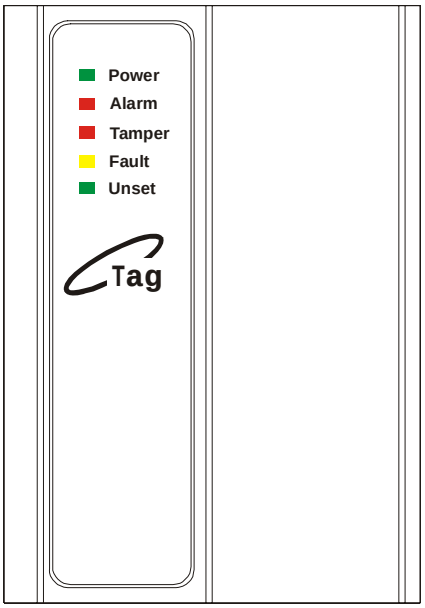
1.1.1 The PCX LCD Keypad (PCX-LCD/UK)

POWER LED This indicates that the reader has power. The power LED will extinguish after a couple of seconds.	
ALARM LED This indicates that an alarm activation has occurred.	
TAMPER LED This indicates that a tamper has occurred	
FAULT LED This indicates that a fault has occurred, i.e. device fail etc.	

DISARMED LED This will illuminate for a couple of seconds after the system has been disarmed.	
NUMERICAL BUTTONS Used to enter user codes and program input names	
DIRECTION BUTTONS Used to select options and scroll display.	
OPERATIONAL BUTTON 1 Selects items and enters sub menu indicated in master manager menu. Used to arm the panel if flexi-arm is enabled.	
OPERATIONAL BUTTON 2 Moves forward to the next main menu item, also clears faults.	
THE A KEY Exit Manager Mode (from a main menu item)	
THE B KEY Moves backwards to the previous menu item	
THE C KEY Chime Button and displays additional information in the log and the diagnostic functions.	
THE D KEY Moves forward to the next option, or toggles between 'YES/NO' choices. Enters the manager mode.	

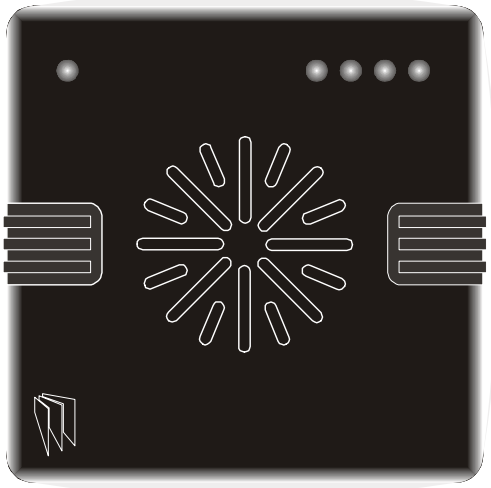
The emergency buttons for the PCX system consist of 2 buttons being pressed to activate a Hold Up. These are the keys ① and ⑦. On default these are disabled to comply to PD6662. If you wish for these to be enabled please contact your engineer.

1.2 The Internal Reader (PCX-PROX/INT)



POWER LED This indicates that the reader has power present.	Power
ALARM LED This indicates when an alarm activation as occurred.	Alarm
TAMPER LED This indicates when a tamper has occurred.	Tamper
FAULT LED This indicates when a fault has occurred, i.e. device fail etc.	Fault
DISARMED LED This will illuminate for a couple of seconds after the system has been disarmed.	Unset

1.3 The External Reader (PCX-PROX/EXT)



POWER LED This indicates that the reader has been found on the data bus, and power is present. This will extinguish after a couple of seconds.	
RED LED This can be programmed to follow an output (For example you may want the output to illuminate when a partition is armed). Contact your engineer for more information	

The prox tags that are used with the PCX-PROX/INT and PCX-PROX/EXT are shown below:

These can be ordered as a pack of 5 (PCX-PTAG)

CHAPTER 2: ARMING AND DISARMING THE SYSTEM

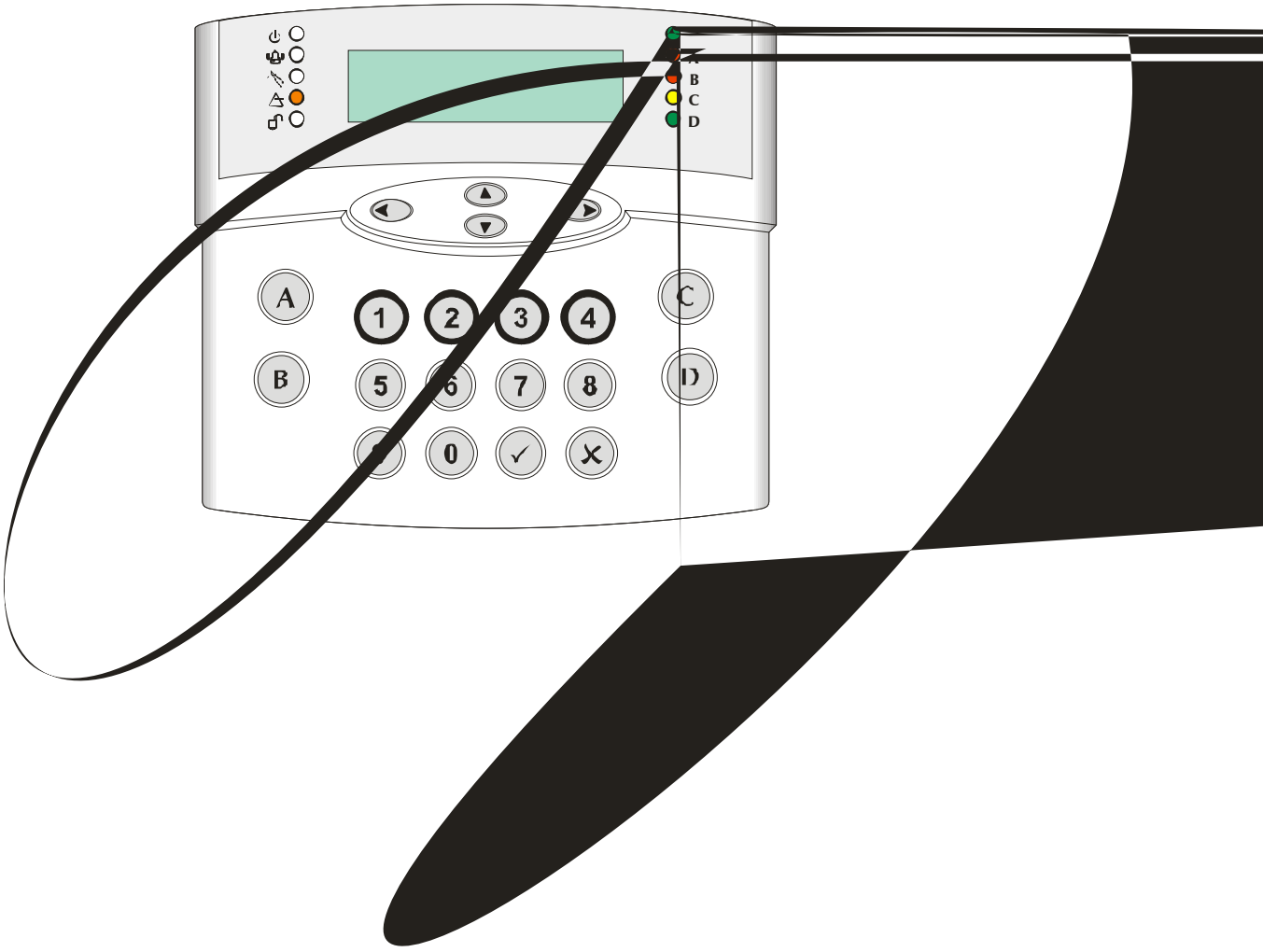
2.1 Arming / Disarming Via The Keypad

There are a number of ways to arm the PCX 256; either via the keypad, via the keypad proximity reader, the internal tag reader or the external prox reader. Each involves either entering a valid user code or presenting a valid tag/card.

2.1.1 Arming Arm Modes Via The Keypad

If the engineer has selected that the system is to be used as a Level arm system rather than a Partition system, then you will arm the system as follows:

1. Enter your user code (default 1234) or present your card



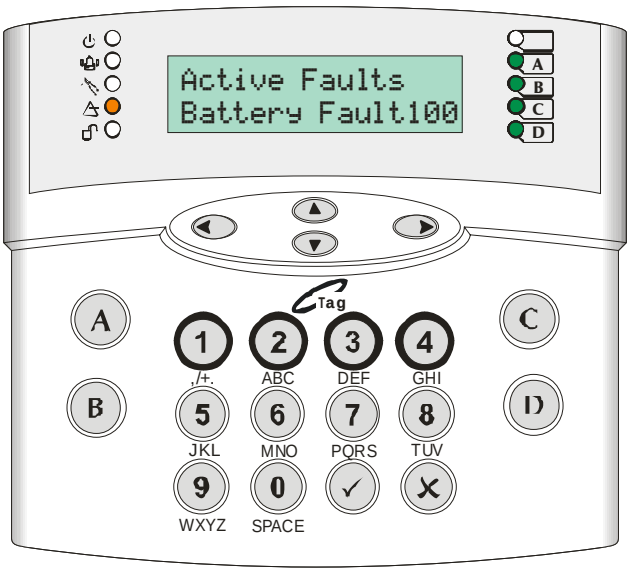
2.362 Disarming Arm M

1.

2.1.3 Arming Partitions Via The Keypad

If the system is set up as a partition system, the master manager can assign different codes to individual partitions. Please see Change Codes on page: 22.

1. Enter your user code (default 1234) or present your card



2. Before you can arm the system, any active faults will be displayed (see above), press the ✖ key.

3. The system will allow you to arm the required arm mode.

4. Use the numeric and the Ⓐ,Ⓑ,Ⓒ,Ⓓ keys to select the partition(s) you wish to arm and press the ✓ key. The system will start to arm. Once the system has armed, a beep will be heard and the system is armed.

NOTE: The system will only arm depending on what 'Exit Mode' is programmed. This would have been selected by your engineer. For example:

If *Timed* is selected the system will arm after the exit time has expired.

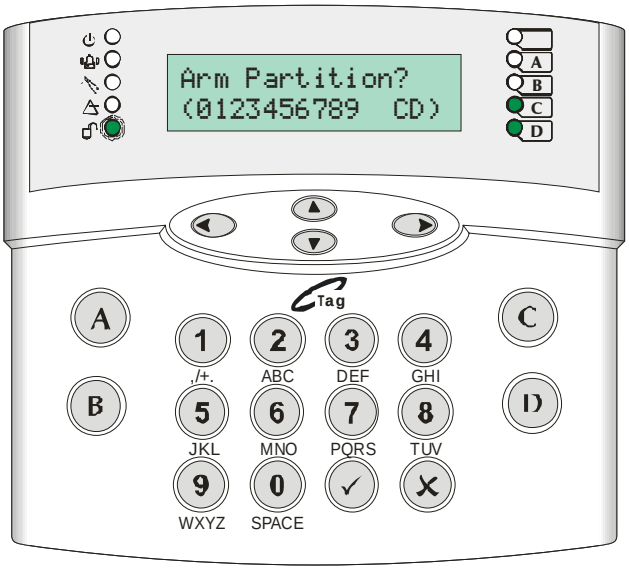
If *Final Door* is selected, the system will only arm after the entry/exit door has been opened/closed.

If *PTS* (Push To Set) is selected, the system will only arm after the Push To Set button has been pushed.

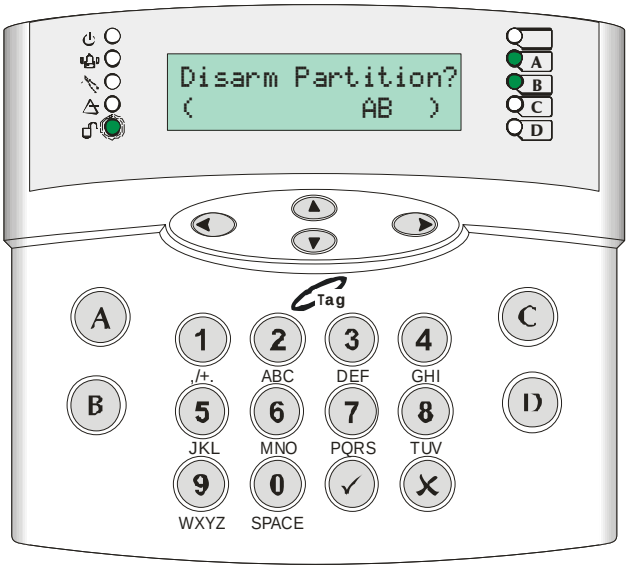
2.1.4 Disarming Partitions Via The Keypad

To disarm any partition on the system:

1. If you have only one partition assigned to the card/code, then the partition will be disarmed automatically (this coincides with the 'Flexi-Arm' option – please see page 24). If you have multiple partitions assigned to a user, then the following will be displayed when you enter your code or present your card (In this example partitions A and B were armed initially)



2. Press the ✖ key. The system will ask which of the armed partitions you wish to disarm:

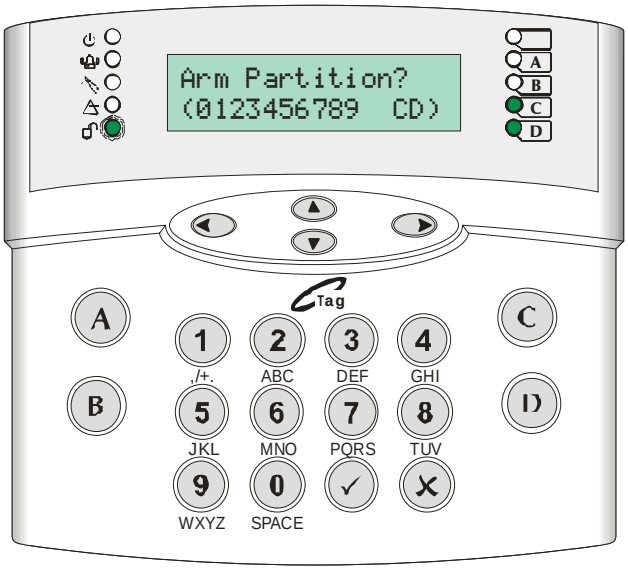


3. Use the numeric and the Ⓐ,Ⓑ,Ⓒ,Ⓓ keys to select the partition(s) you wish to disarm and press the ✓ key. The system will disarm those partitions.

2.1.5 Arming Partitions with Partitions Already Armed

If for example partitions A and B are already armed, and you would like to arm partitions C and D, you will do the following:

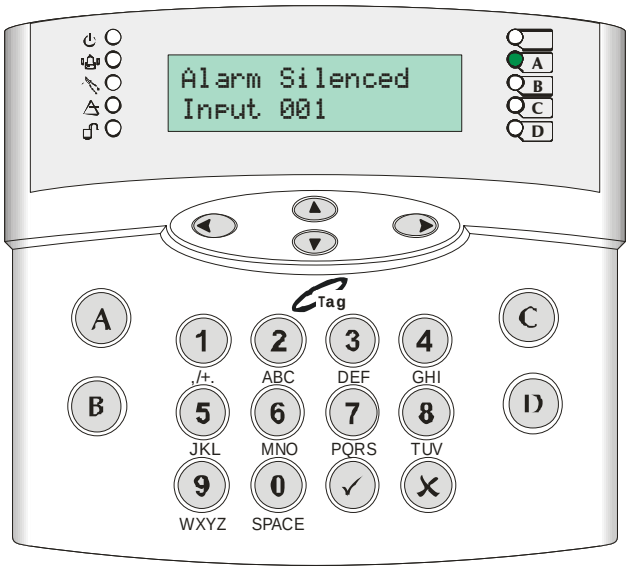
1. Enter your user code or present your card, the display will show which partitions are available to arm (partitions A and B are already armed):



2. Press Ⓒ and Ⓓ, and press the ✓ key. The system will arm partitions C and D.

2.1.6 Disarming After an Alarm via the Keypad

After an alarm, enter your user code (default 1234). The activated input will be displayed:



Press the ✗ key to reset the system.

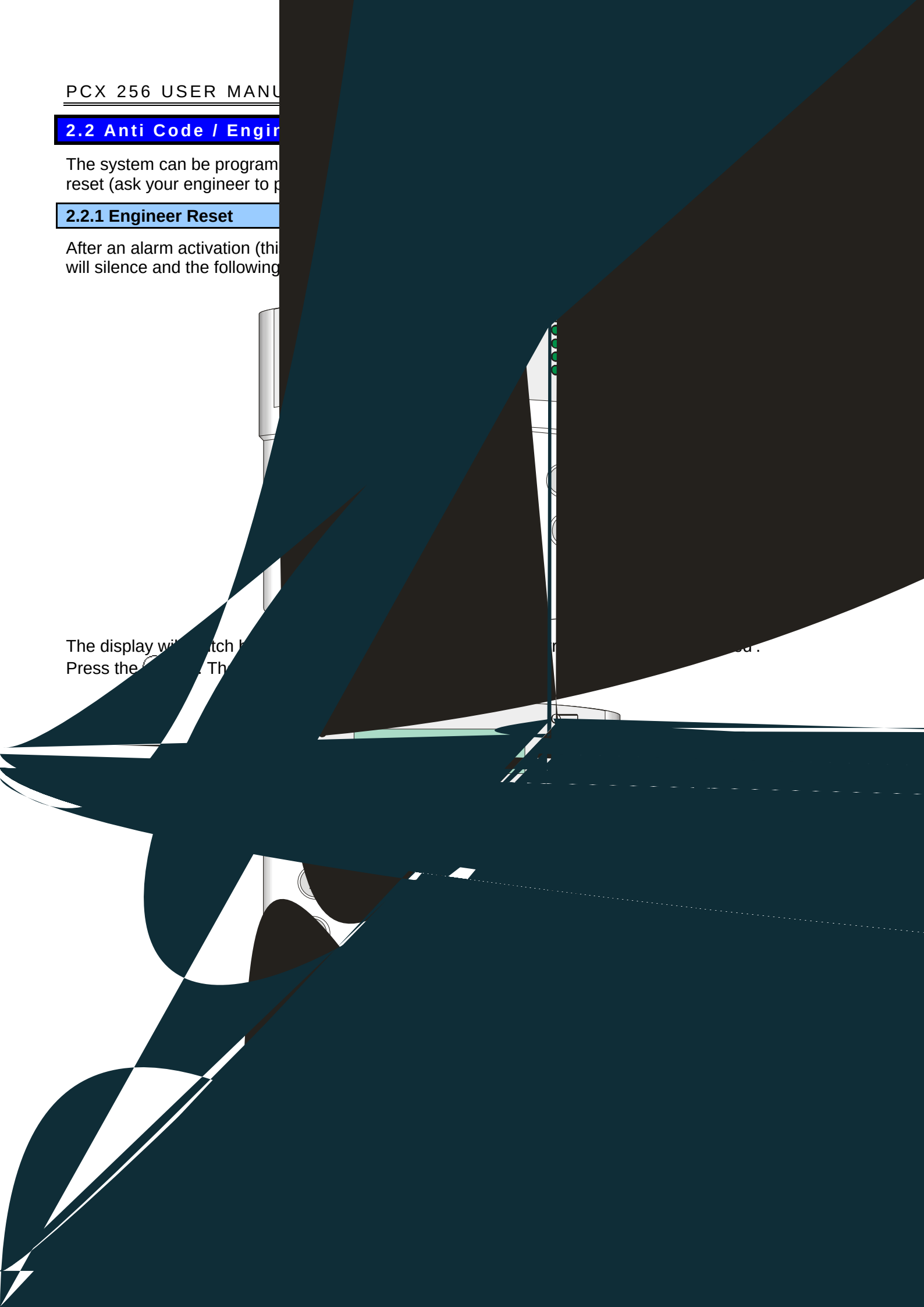
PLEASE NOTE: If engineer restores or anti code restores are enabled you will not be able to reset the system until a valid engineer code or anti-code has been entered.

2.2 Anti Code / Engir

The system can be program
reset (ask your engineer to p

2.2.1 Engineer Reset

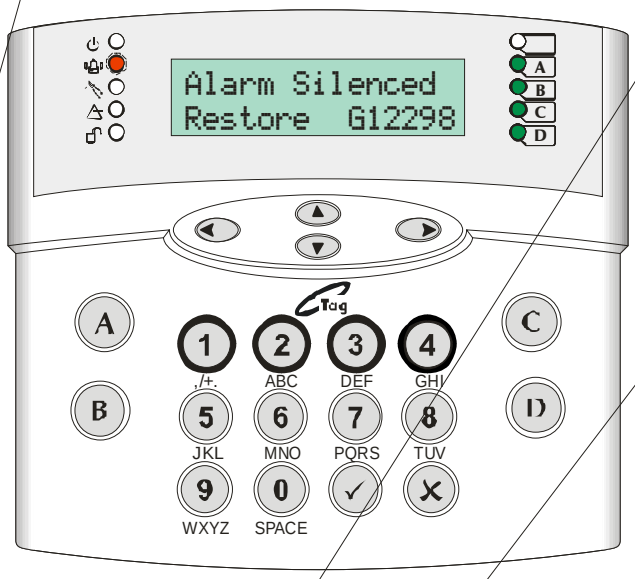
After an alarm activation (thi
will silence and the following



The display wi tch
Press the . Th

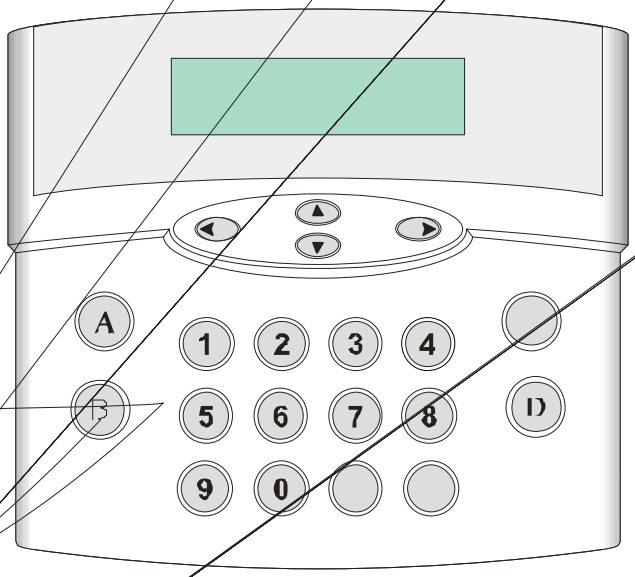
2.2.2 Anti Code

After an alarm activation (this example shows a personal attack), enter your user code, the alarm will silence and the following will be displayed:



The restore number that is shown (for example G12298), will need to be given to your alarm receiving station, in return they will supply you with a reset code.

- Press the ✓ key.
- Enter the code the ARC have given you. The following will be displayed:



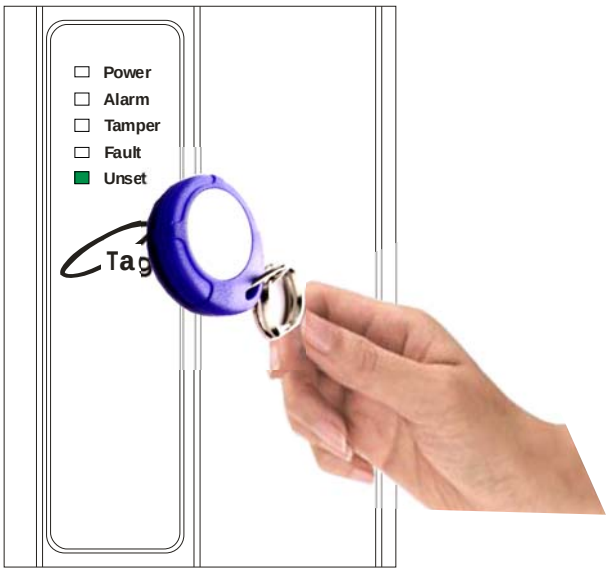
2.3 Arming / Disarming Via The Internal Tag Reader

Once the relevant cards/tags have been programmed into the system (see page 'Change Codes' page 22), you may arm and disarm via the internal tag reader.

Please note that 'Flexi-Arm' may need to be disabled so that the card will arm the assigned partitions automatically. This is described on page: 24.

2.3.1 Arming Partitions / Arm Modes via the Internal Tag Reader

1. To arm the system, hold up a valid card/tag until the left **UNSET** LED illuminates, and remove the card/tag. The system will begin to arm.



NOTE: The system will only arm depending on what 'Exit Mode' is programmed. This would have been selected by your engineer. For example:

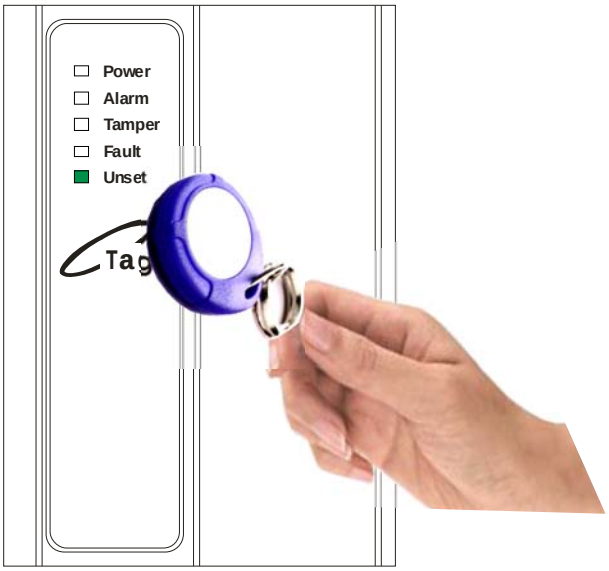
If *Timed* is selected the system will arm after the exit time has expired.

If *Final Door* is selected, the system will only arm after the entry/exit door has been opened/closed.

If *PTS* (Push To Set) is selected, the system will only arm after the Push To Set button has been pushed.

2.3.2 Disarming Partitions / Arm Modes via the Internal Tag Reader

1. To disarm the system, hold up a valid card/tag until the **UNSET** LED is illuminates, and remove the card/tag. The system will be disarmed.



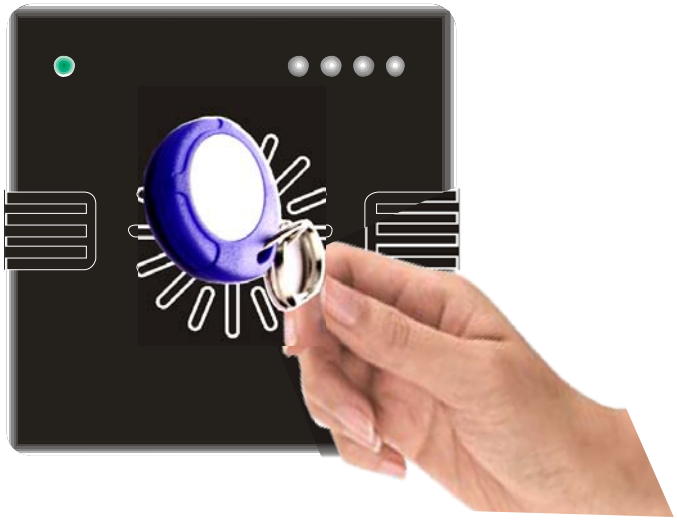
2.4 Arming / Disarming Via The External Tag Reader

Once the relevant cards/tags have been programmed into the system (see page 'Change Codes' page 22), you may arm and disarm via the external tag reader.

Please note that 'Flexi-Arm' may need to be disabled so that the card will arm the assigned partitions automatically. This is described on page: 24.

2.4.1 Arming Partitions / Arm Modes via the External Tag Reader

1. To arm the system, hold up a valid card/tag until the left **GREEN** LED comes on, and remove the card/tag.



2. Hold up the card/tag again, the system will start to arm the assigned Partition(s) / Arm Mode. Remove the card/tag.
3. Once the assigned Partition(s) / Arm Mode have been armed, the **GREEN** LED will extinguish.

NOTE: The system will only arm depending on what 'Exit Mode' is programmed. This would have been selected by your engineer. For example:

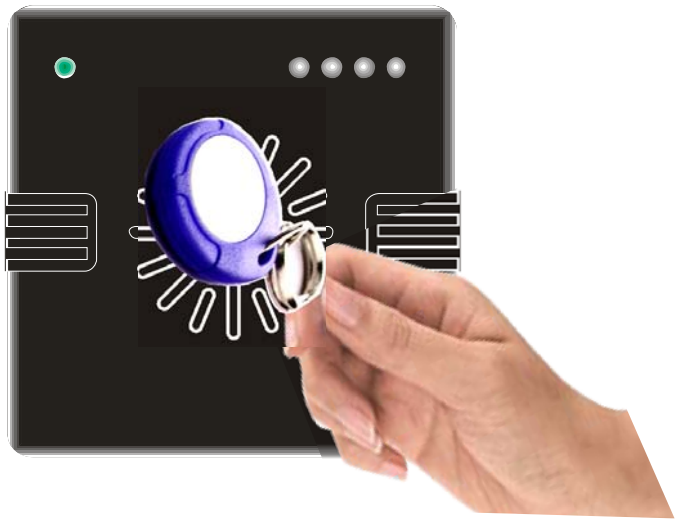
If *Timed* is selected the system will arm after the exit time has expired.

If *Final Door* is selected, the system will only arm after the entry/exit door has been opened/closed.

If *PTS* (Push To Set) is selected, the system will only arm after the Push To Set button has been pushed.

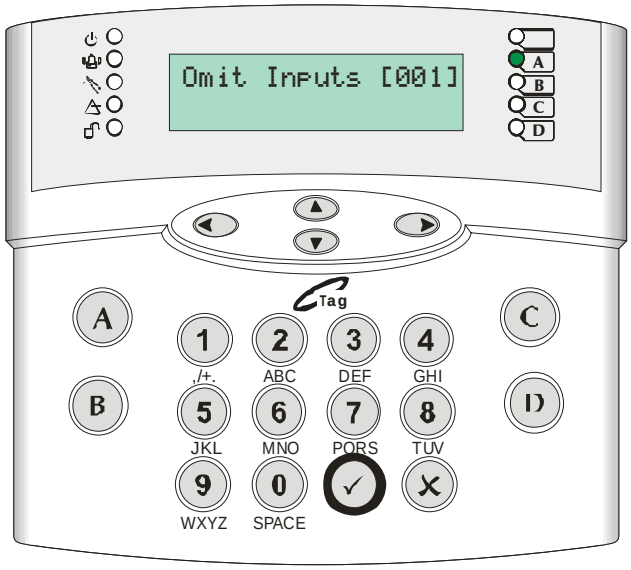
2.4.2 Disarming Partitions / Arm Modes via the External Tag Reader

1. To disarm the system, hold up a valid card/tag until the left **GREEN** LED comes on, and remove the card/tag.

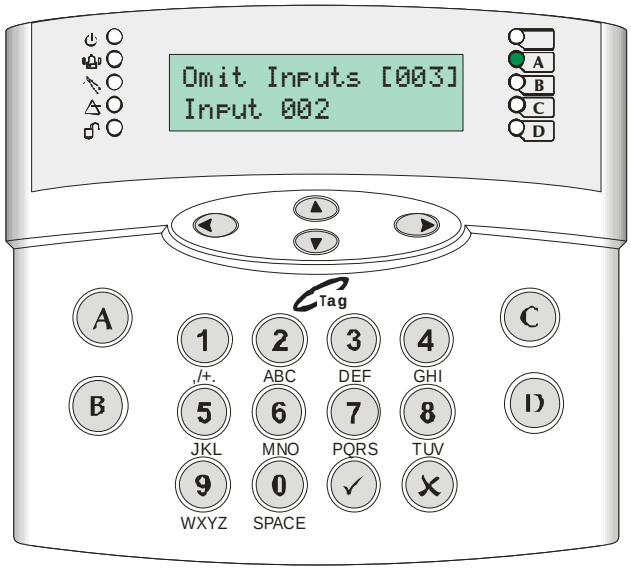


2. Hold up the card/tag again, the system will disarm the assigned Partition(s) / Arm Mode. Remove the card/tag.
3. Once the assigned Partition(s) / Arm Mode have been disarmed, the **GREEN** LED will extinguish after 15 seconds.

3. Select the partition(s) / Arm Mode you would like to arm using the numeric and the Ⓐ,Ⓑ,Ⓒ,Ⓓ keys. Press the ✓ key.
4. Once the exit timer has started, Press the ✓ key, the following will be displayed:



5. Enter the inputs you wish to omit, for example, to omit inputs 2 and 3, enter '002' and press the ✓ key, then enter '003' and press the ✓ key. These inputs will be displayed on the bottom line of the keypad.

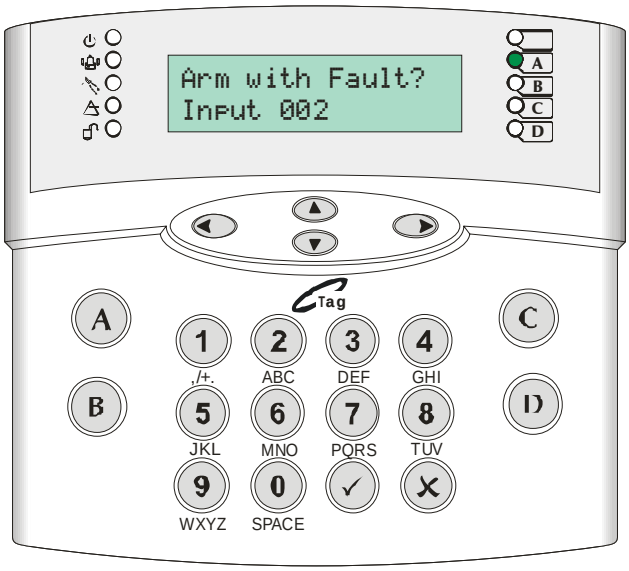


6. Wait 10 seconds, the display will then revert back to the exit time and once the system is armed the selected inputs will be omitted for the system.
7. When you disarm the system, the display will show the inputs that have just been omitted. Press the ✓ key.

Note when you disarm the system the inputs will become active again.

3.2.1 Omitting Open Inputs

If any inputs are open during the arming procedure, the following be displayed:

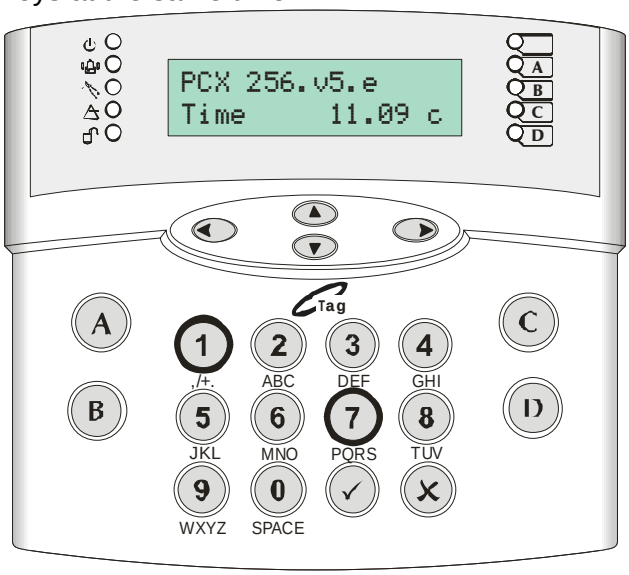


1. Press the ✓ key, the system will then arm with the shown input(s) omitted.

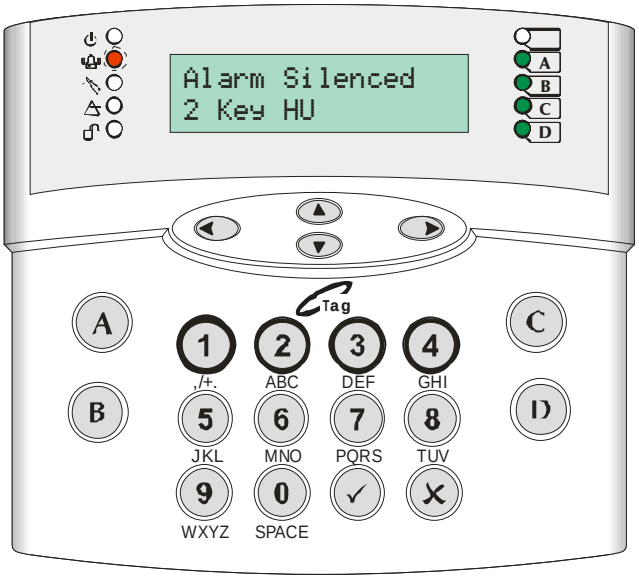
3.3 Hold Up Alarm via The Keypad

The PCX LCD keypad can be used to produce a Hold Up alarm if enabled by the engineer. If this is enabled, you can produce a Hold Up Alarm as follows:

1. Press the 1 and 7 keys at the same time:



2. An alarm will be activated. To disarm the Hold Up alarm, enter your user code (default: 1234) or present a card/tag. The following will be displayed:



3. Press the ⊗ key to reset the display.

PLEASE NOTE: If engineer restores or anti code restores are enabled you will not be able to reset the system until a valid engineer code or anti-code has been entered.

CHAPTER 4: THE MANAGER MENU

NOTE: You can only enter the Manager Mode when the system is disarmed

4.1 Entering The Manager Menu

The PCX system has a user menu that is accessible via a master manager code. To enter the manager menu:

1. Press the Ⓓ key once. 'Enter Your Code' will be displayed
2. Enter the master manager code (default 5678).
3. Use the Ⓑ and ✖ keys to scroll through the different options:

Functions	Description
SET DATE & TIME	Set / Adjust time and date for display and system logs.
OMIT INPUTS?	Temporary omission of 24-hour inputs whilst system is disarmed
CHANGE CODES?	Program and change User and Manager codes or tags. Also authorisation of tags for sub-partition / access control purposes.
REVIEW LOGS?	*Panel Log:* Review entries in panel log – arm/disarm events, alarm events, etc. *Access Log*:* Review entries in access log (if facility used)
PHONEBOOK?	Lets you change the SMS numbers programmed for text messaging service.
WALK TEST?	Enable detector operation to be tested
BELL TEST?	Enable system siren and strobe to be tested
TEST PHC COMMUNICATIONS?	Initiate a test call to the Pyronix Host Computer (PHC) if SMS messaging in use
DIAL OUT MENU?*	Allows the PCX system to connect to a PC and allows the user to choose which option they would like to perform
ALLOW ENGR MENU?	User has the facility to disable access to the engineer menu
BLOCK REMOTE ARM?	Blocks anyone trying to remotely arm and disarm the system
BLOCK UDL?	Downloading is only allowed in Engineers Mode
ENTER ANTI-CODE?	Anti-Code features
EXIT MANAGER MODE?	Returns you to day mode. Can also be performed by pressing the Ⓐ key.

Press the ✓ key to enter the required function.

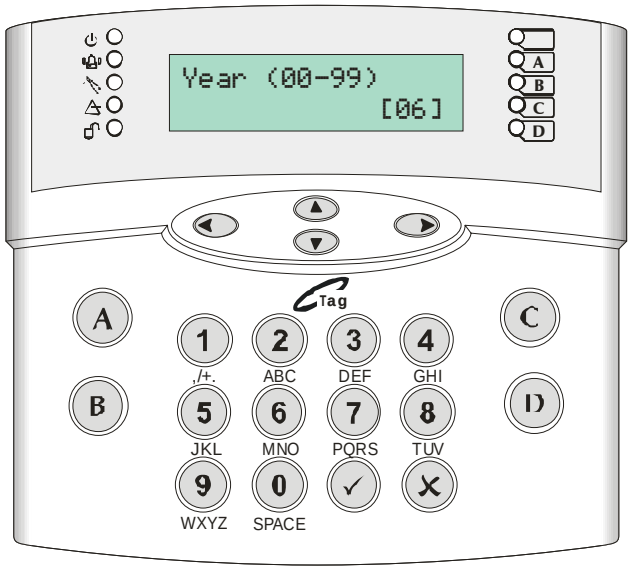
4.2 Exiting The Manager Menu

1. To exit the Manager Menu, make sure that you are not in a function, i.e. that you are back in the main menu (all menu items are capitals), and press the Ⓐ key.

4.3 Set Date & Time

Setting the date and time of the PCX system is vitally important as then any false alarms or unknown activations etc can be easily recognised in the event log, which records the date and time of each event.

1. Use the Ⓑ and ✖ keys to scroll to **'SET DATE & TIME'**. Press the ✓ key. The following will be displayed:



2. ***Year:*** Enter the year, for example, for the year 2006, enter '06' on the keypad and press the ✓ key.
3. ***Month:*** Enter the month, for example, for June enter '06' and press the ✓ key.
4. ***Day:*** Enter the date, for example, for the 2nd, enter '02' and press the ✓ key.
5. ***Hours:*** Enter the hour, for example, for 8pm enter '20' (24 hour clock) and press the ✓ key.
6. ***Minutes:*** Enter the minutes, for example, for 8.30pm, enter '30' and press the ✓ key.

You will be returned to the Manager Menu.

4.4 Omit Inputs

Omitting inputs can be performed in the user menu, and works in a similar way as shown on page: 17

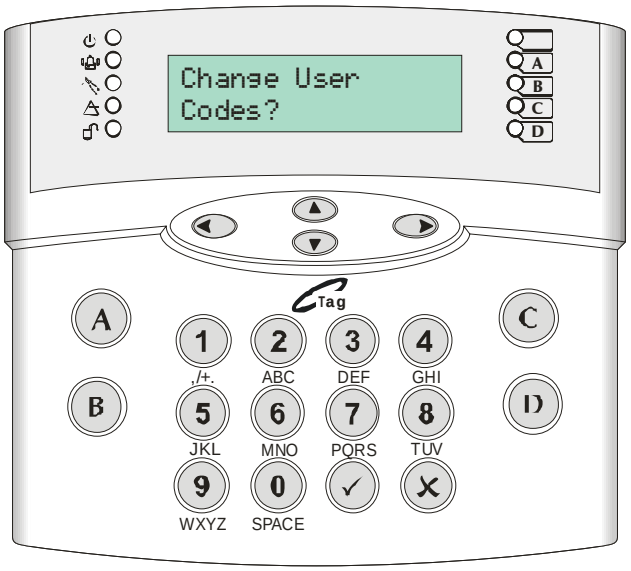
4.5 Change Codes

There are a total 500 user codes on the PCX256 system.

4.5.1 Changing User Codes and Manager Codes

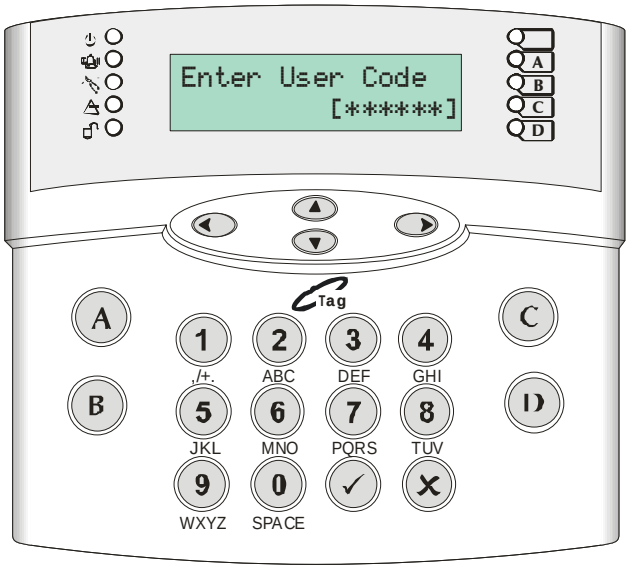
The Change Codes function allows you to assign or change codes or cards/tags for different users, as well as altering their options. The default code for user 1 is 1234.

1. Use the Ⓑ and ✖ keys to scroll to **'CHANGE CODES**. Press the ✓ key. The following will be displayed:



2. To Change any of the user codes press the ✓ key.
3. Enter the user number you would like to change/add and press the ✓ key.
4. If there are asterisks in the brackets on the keypad, then a user code already exists. To delete this code press the Ⓒ key, or to select another user press the ✗ key.

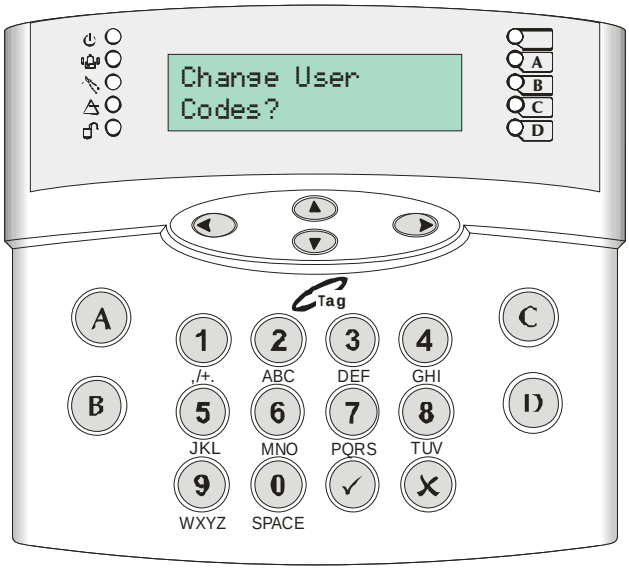
   Enter the new user code or present the card/tag up to the keypad (shown below)



5. Asterisks will appear in the brackets, indicating the code or card/tag has been accepted. Press the ✓ key.
6. ***User Type***: Select the user type for this user code or card/tag:
   - Enter '0' = User Code (can access limited function in the manager menu)
   - Enter '1' = Manager Code (can access all functions in the manager menu)
   - Press the ✓ key.
7. ***User Partitions:*** Select the partitions that this user code or card/tag will be assigned for.
8. ***User Arm Options:*** Select the Arm option that this user code or card/tag will be used for.
   - Enter '0' = Disarm/Arm

4.6 Deleting a User Code

1. Use the Ⓑ and ✖ keys to scroll to **'CHANGE CODES**. Press the ✓ key. The following will be displayed:



2. To delete any of the user codes press the ✓ key.
3. Enter the user number you would like to delete and press the ✓ key.
4. If the user you have selected has asterisks in the bracket, press the Ⓒ key. The asterisks should no longer be there or to select another user, press the ✖ key.

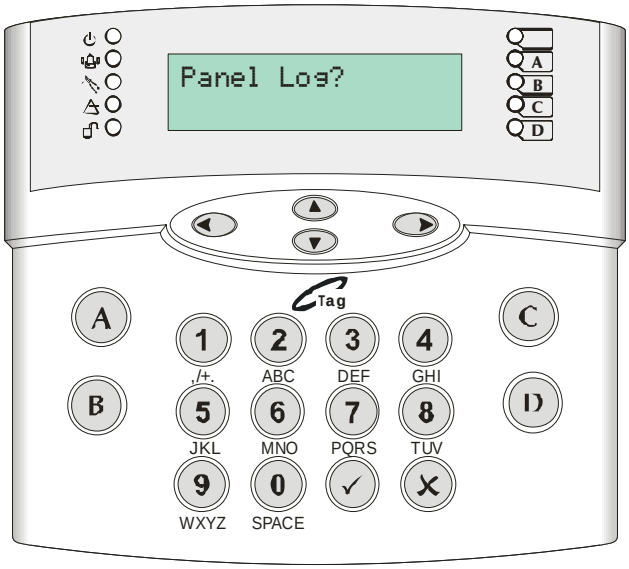
4.7 Review Logs

The event log allows for up to 3000 events to be stored.

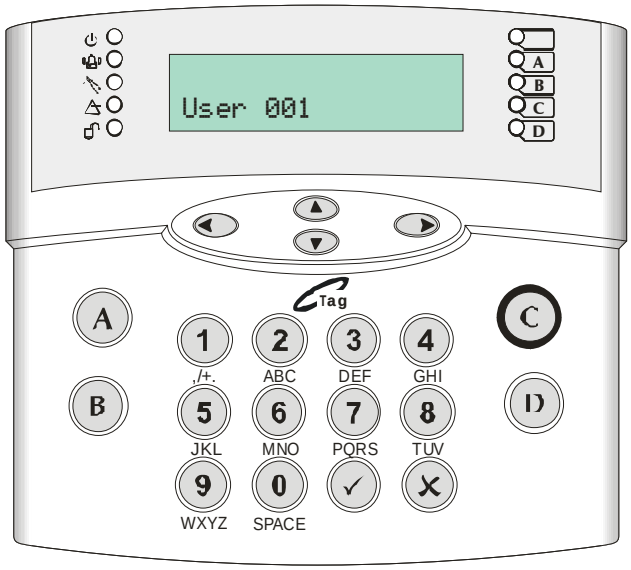
4.7.1 The Panel Log

The panel log includes all armed events, disarmed events, alarm events and system faults. It also includes Engineer Access details.

1. Use the Ⓑ and ✖ keys to scroll to **'REVIEW LOGS'**. Press the ✓ key. The following will be displayed:



2. Press the ✓ key. The latest event will be displayed; more information can be attained by pressing the Ⓒ key. For example, if the log says 'Alarm Silenced' then press the Ⓒ key to see which user silenced the alarm as shown below:

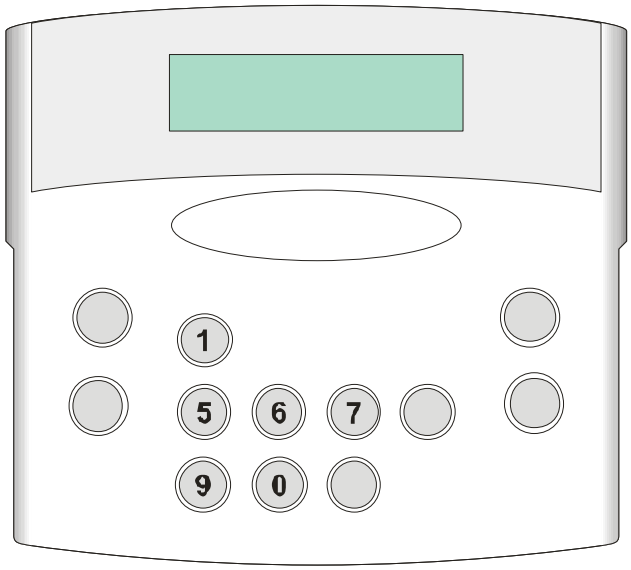


3. Press the Ⓐ key to return back to the main screen of the log. Use the ▲ and ▼ keys to scroll through the log. Once completed, press the ✗ key, 'Panel Log' will be displayed, press the ✗ key twice to exit the manager menu.

4.7.2 The Access Log

The Access log contains all Access Control and Guard Tour events.

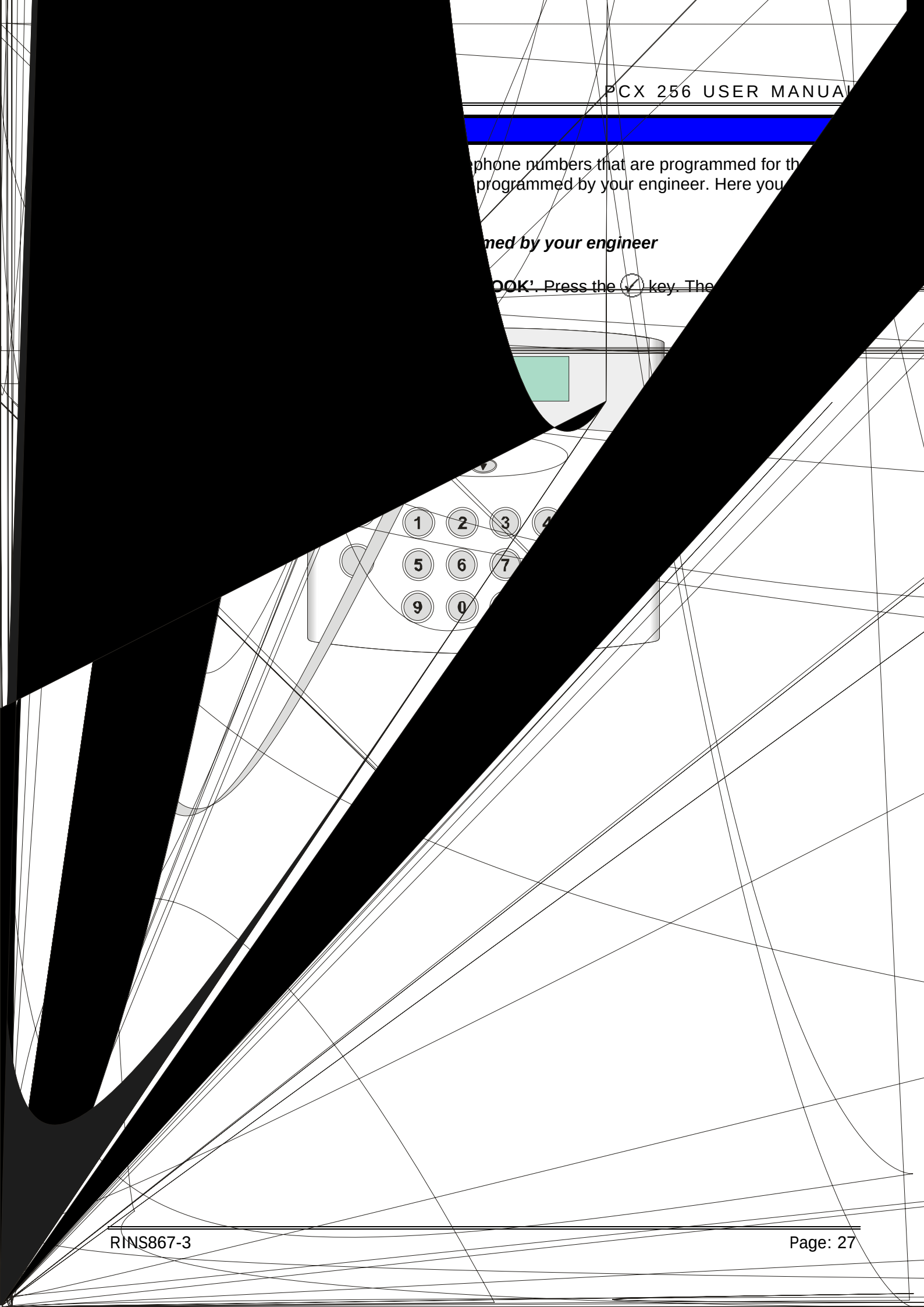
1. Use the Ⓑ and ✗ keys to scroll to **'REVIEW LOGS'**. Press the ✓ key. The following will be displayed:

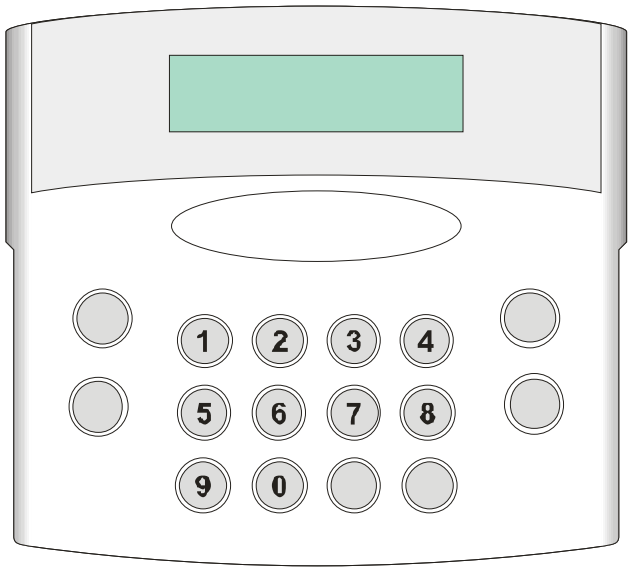


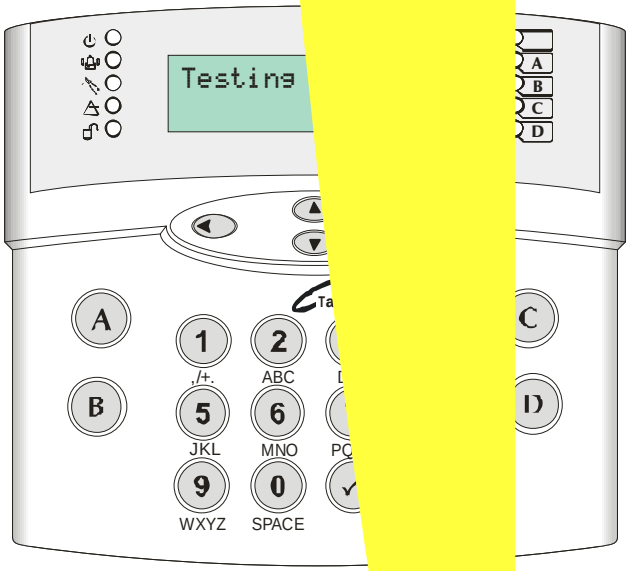
phone numbers that are programmed for th
programmed by your engineer. Here you

med by your engineer

OOK'. Press the ✓ key. The




1
2
3
4
5
6
7
8
9
0



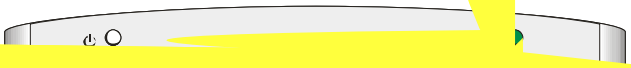
2. The bell and strobe will activate if the bell is installe ✓. Press the ✖ key to return to the manager menu.

4.11 Test PHC Communications

If the engineer has set up SMS text messaging then this needs to be used.

The system will automatically carry out a test call to the P ronix Host Computer) every two weeks. The call is made via a premium rate number and t ayer should be informed of the charges. Customers who have “BT Answer 1571” enabled ave difficulty in connecting to the PHC.

1. Use the Ⓑ and ✖ keys to scroll to **‘TEST PHC COMM CATIONS’**. Press the ✓ key. The following will be displayed:



4. 'Calling Remote PC' will then be displayed. If the call fails, then please check your telephone connections and modem numbers.
5. Press the ✖ key to return back to the Manager Menu.

4.13 Allow Engineer Menu

If this function is enabled, the engineer will require authorisation from the user to access the Engineers menu.

1. Use the B and ✖ keys to scroll to **'ALLOW ENGR MENU'**. Press the ✓ key.
2. Select the following:
   - Enter '0' = No – To disallow engineer access (only accessible from the manager mode)
   - Enter '1' = Yes – To allow engineer access
3. Press the ✓ key, you will be returned to the engineer menu.

4.14 Block Remote Arm

Your alarm may be configured so that your alarm installation company or company manager can arm or disarm the system remotely via the PC. Should you wish to block this access, select 'Yes' for this function.

1. Use the B and ✖ keys to scroll to **'BLOCK REMOTE ARM'**. Press the ✓ key.
2. Select the following:
   - Enter '0' = No – To block remote arming
   - Enter '1' = Yes – To allow remote arming
3. Press the ✓ key, you will be returned to the engineer menu.

4.15 Block UDL

If this function is enabled, connecting to the PCX system via the PC software (upload/download software) will be only allowed in the Engineers Mode.

1. Use the B and ✖ keys to scroll to **'BLOCK UDL'**. Press the ✓ key.
2. Select the following:
   - Enter '0' = No – To allow upload/download access
   - Enter '1' = Yes – To block upload/download access
3. Press the ✓ key, you will be returned to the engineer menu.

4.16 Enter Anti-Code

This function will tell you if there are any engineer / anti-code features turned on.

You must enter your anti-code / engineer code to fully reset the system.

4.17 Exit Manager Mode

Select this option to save any changes you have made, and return to disarmed mode.

APPENDIX A: FAULTS

Device Codes

If a device on the PCX system is not installed correctly or has lost its communication with the panel, “DEVICE FAIL” will be shown on the LCD keypad followed by a 3-figure device code. The first digit identifies each type of device:

1 = End Station
2 = Keypad
3 = Tag Reader / Door Station / RIX2
4 = Remote Input Expander
5 = Remote Output Expander

The digits after refer to that devices address, for example:
DEVICE FAIL 401 = means that the Remote Input Expander addressed as “01” has a problem.

Fault Indications

COMMUNICATION FAULTS		
Fault	**Description**	**Solution**
MODEM FAULT	End Station unable to communicate with Digi Modem	Call Engineer
DIGI FAIL COMM	Call to ARC from Digi Modem DigiModem has failed. ***Note:*** *This is a communication problem, which is rarely caused by an equipment fault.*	Call Engineer
PHC TEST FAIL	Unable to communicate with Pyronix Host Computer. ***Note:*** *This would also result if the telephone line had premium rate calls blocked.*	Call Engineer
LINE FAULT 100	PSTN Line Fault signalled by Digi Modem.	Call Engineer
ATE LINE FAULT	PSTN Line Fault signalled by device using STU/ATE pins on End Station.	Call Engineer
ATE FAIL COMM	Call to ARC from device using End Station STU/ATE pins has failed. ***Note: This is a communication problem, which is rarely caused by an equipment fault.***	Call Engineer
ATSF 1 Path/Both 100	Signalling equipment has failed to signal on one of its paths or both of its path.	The control panel will automatically signal a test on ATE output 10 – if the signalling equipment has still failed the error message will be displayed again. If not everything will return to normal.

RS-485 BUS PROBLEMS		
Fault	**Description**	**Solution**
DEVICE FAIL xxx	Device on RS-485 communications bus failing to communicate	Call Engineer
485/COMMS LOST	Displayed on keypad that has not yet established communications with End Station	Call Engineer
Keypad display is BLANK	Keypad address does not match any keypad enabled	Call Engineer
Keypad display normal, but KEYS LOCKED OUT	More than one device connected at the same address	Call Engineer

DETECTION FAULTS		
Fault	**Description**	**Solution**
SAB TAMPER	Tamper fault detected on connection from SAB	Call Engineer
CASE TAMPER	Case tamper switch open	Call Engineer
SIREN x TAMPER	Monitors for German specification fault conditions on relay plug-on	Call Engineer
STROBE TAMPER		

POWER SUPPLY PROBLEMS		
Fault	**Description**	**Solution**
BATTERY FAULT xxx	Battery Fuse (F4) failed, OR Battery not present, OR Battery volts low	Call Engineer
BAT LOAD FAIL	Battery Load Test has failed	Call Engineer
BATTERY CRITICAL	Battery being disconnected	Call Engineer
MAINS FAIL xxx	Mains supply failed	Call Engineer
FUSE x FAULT	Fuse identified failed, OR Output protected by fuse drawing excessive current	Call Engineer
LOW VOLTS xxx	Power supply volts low	Call Engineer

CHAPTER 5: SERVICE INFORMATION

We are sure you will be delighted with your PCX 256 Grade 3 System. For your personal reference here is a record of the relevant service information.

Service Company……

Date of Installation……Day……Month……Year……

Site Reference……

24 Hour Service Number……

Keyholders……Name……Tel……..

Name……Tel……..

Entry Time…….....

Exit Time……

Manager Code……..……

CHAPTER 6: CONTACT INFORMATION

Address

QUICK FIND GUIDE

OPERATING DEVICES

ARMING / DISARMING

ADVANCED FUNCTIONS

MANAGER MODE