



galaxy

16 and 16 *plus*

User Guide

Table of Contents

| | |
|---|------------|
| INTRODUCTION | v |
| QUICK OPERATION GUIDE | vii |
| GLOSSARY OF TERMS | ix |
| KEYPAD INFORMATION | 1 |
| Star (★) Key Features | 2 |
| SETTING AND UNSETTING THE SYSTEM | 3 |
| Setting the System | 3 |
| Before Setting the System | 3 |
| Full Setting the System | 3 |
| Part Setting the System | 3 |
| Unsetting the System | 4 |
| Normal Entry | 4 |
| Slow Entry | 4 |
| Straying From The Entry Route | 4 |
| Alarm Abort | 5 |
| Cancelling Alarms | 5 |
| Engineer Reset | 5 |
| USER MENU | 7 |
| Option 1 – Omit | 7 |
| Selecting the Omit Option | 7 |
| Omitting Zones | 8 |
| Setting with Omitted Zones | 8 |
| Option 2 – Chime | 8 |
| Selecting the Chime Option | 8 |
| Option 3 – Walk | 8 |
| Selecting the Walk Option | 8 |
| Option 4 – Codes | 9 |
| Selecting the Codes option | 9 |
| Assigning Modifying and Deleting User Codes | 9 |
| Assigning User Attributes | 10 |
| Keyswitch Zones and User Codes | 10 |
| Option 5 – Test | 11 |
| Selecting the Test Option | 11 |
| Operation of the Test Option | 11 |

| | |
|--|-----------|
| Option 9 – Log | 11 |
| Selecting the Log Option | 11 |
| The Event Log | 11 |
| Option 10 – Time | 12 |
| Selecting the Time Option | 12 |
| Operation of the Time Option | 12 |
| APPENDIX A — ALARM AND HELP MESSAGES | 13 |
| APPENDIX B — AVOIDING FALSE ALARMS | 15 |
| APPENDIX C — CONFORMITY AND STANDARDS | 17 |
| Compliance | 17 |
| Telecoms | 17 |

INTRODUCTION

The Galaxy 16 and 16 *plus* control panels are designed to the highest specifications and requirements using the most advanced software and hardware technology.

The Galaxy 16 and 16 *plus* are designed to satisfy the requirements of domestic and smaller commercial installations, yet are flexible enough to provide ease of use and operational versatility.

This User's Guide contains the information required to operate the system. The installation engineer will program and commission the system to meet your requirements. The system is simple to operate but users are advised to read this guide carefully before using the system and retain it in a safe place for future reference.

QUICK OPERATION GUIDE

| | | |
|----------------------------------|--------------|---|
| | A | SET (an Unset system) |
| | B | PART SET (Defaults to Parts 1 and 2) 1 key • toggles the Set (ON)/Unset (OFF) status of Part 1 2 key • toggles the Set (ON)/Unset (OFF) status of Part 2 3 key • toggles the Set (ON)/Unset (OFF) status of Part 3 |
| | ent | UNSET (a Set system) |
| | 1 | OMIT ZONES A or B key to view zones # to change omit status of zone (must be an omissible zone) ent key to accept programming and start setting esc key to accept programming without setting |
| | 2 | CHIME ZONES A or B key to view zones # key to enable/disable chime function on zone ent key to accept esc key to cancel |
| | 3 | WALK TEST A or B key to view zones # key to enable/disable Walk Test function on zone ent key to start Walk Test # key to toggle display between open and tested zones esc key to end Walk Test Note: Zones number 10 to 16 will be displayed as A to G |
| Enter your user code then select | 4 | (ASSIGNING) USER CODES A or B key to select user (1 – 14) ent key to program code number keys to enter digits, ★ key to delete digits ent key to accept programming, esc to cancel |
| | 5 | TEST OUTPUTS A or B key to select output for test # key to enable/disable test function on zone esc key to end test |
| | 9 | LOG A key to step forwards through events B key to step backwards through events # key to display event date esc key to exit Log |
| | ent+B | TIME To access the Time option, enter your user code, press the ent key, the B key and then the ent key. Then press the: <ul style="list-style-type: none">• 1 key to select Time (hh/mm)• 2 key to select Date (dd/mm/yy)• 3 key to select Start Summer (dd/mm)• 4 key to select End Summer (dd/mm). Press the ent key to accept the programming for each option, or the esc key to cancel. |

GLOSSARY OF TERMS

| | |
|--------------------------|---|
| Chime: | Zone attribute which gives an audible indication of the activation of a detector or contact. |
| Duress: | Applicable when a remote signalling device is fitted. A Duress code entered at the keypad will unset the system but transmit a Duress code to the Alarm Receiving Centre. |
| Entry Time: | The preset time allowed for users to reach the keypad and unset the system. |
| Exit Time: | The preset time allowed for users to leave the building after the setting routine has been initiated. |
| Exit Terminator: | A switch or push-button located outside the protected area and used to set the system. |
| Event Log: | The control panel memory which stores, in sequence, a record of the system events. |
| Final Exit: | The last door closed or detector operated by the user on exit. |
| LCD | Liquid Crystal Display. |
| Non-omit: | An alarm circuit which cannot be omitted (bypassed) by the user. |
| Numeric Keypad: | The unit comprising the LCD display and buttons that is the interface between users and the system. |
| Omit: | Setting the system with alarm zones excluded from the system. Only zones programmed as “omittable” by the engineer can be omitted. |
| PA | Panic Alarm: an emergency button or switch used to set off the alarm; results in instantaneous transmission of a silent alarm signal using the remote signalling device. |
| Part Set: | To set only a section of the full system. |
| Programme: | To alter the system functions or parameters. |
| Set: | To arm the system. |
| Unset: | To disarm the system. |
| User Code: | A four digit code that identifies users to the system. |
| Walk Test: | A routine test of the alarm detectors. |
| Security Circuit: | An alarm circuit which has been programmed to be armed continuously whether the system is set or not. |

KEYPAD INFORMATION

The Galaxy system is programmed and operated from the LCD keypads.

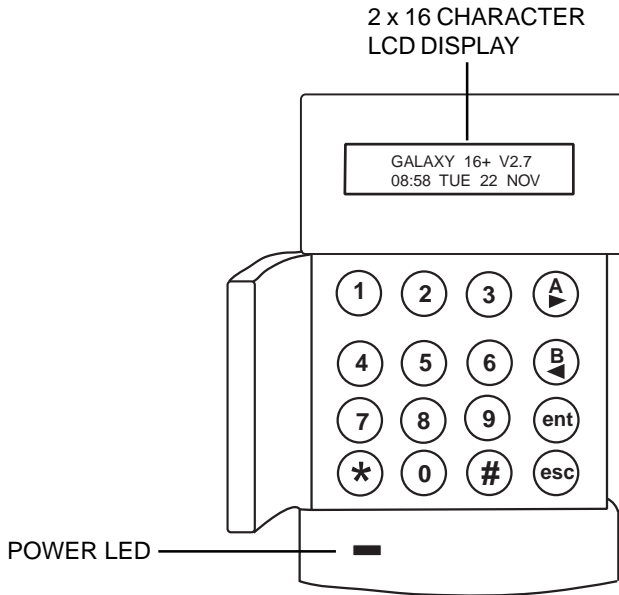


Figure 1: Galaxy Mk 7 LCD Keypad.

Number Keys (**0-9**): are used to enter your User Code and to select and modify options.

View (**A** and **B**) Keys: are used to set the system and to step through the menu options during programming.

Enter (**ent**) Key: The ent key allows you to unset the system, to access the menu options and to accept programming selections.

Escape (**esc**) Key: The esc key permits you to cancel any modifications made to a menu option and allows you to return to the previous menu option level. The esc key also aborts the setting routine if pressed during the Exit-time from the same keypad used to initiate the setting.

Hash (**#**) Key: The # key is used as a toggle key, which enables or disables the programming features of certain menu options. It is also used to select the user attributes feature in menu option 4 – Codes.

Star (**★**) Key: The ★ key, when combined with other keys, provides special functions. The engineer will advise of these where applicable, see also: Star (**★**) Key Features.

Power LED: The green power LED remains lit whenever the system is connected to the a.c. mains power supply and a charged stand-by battery. A mains power failure is indicated by the LED flashing slowly. A fuse or battery failure is indicated by the LED flashing quickly.

Your User Code: is a four digit personal identification number which identifies you to, and allows you to operate, the system.

Note: Entry of an invalid code will cause the keypad to display the message INVALID CODE. Entry of six consecutive invalid codes will cause a ten minute keypad lockout during which the keypad horns activate and the keypad displays the message ALARM IS ACTIVE. No further code entries will be recognised during the lockout period.

Star (★) Key Features

The star key is used as a shift key, when combined with other keys it provides additional system features. To toggle the enable status of the Star key features enter either the manager code (User 14) at the keypad and then hold down the Star (★) key and press the **esc** key; after a second the keypad displays ★ ENABLE ON, or, ★ ENABLE OFF; release both keys.

| Key Combination | Star Feature |
|--|---|
| ★1 | Changes keypad buzzer volume. |
| ★2 | Activates PA alarm. |
| Mgr. Code + ★3 [†] | Toggles On/Off to authorise Galaxy Gold connection. |
| ★4 | Toggles keypad backlighting On/Off. |
| ★5 | Activates Medical alarm. |
| Code + ★6 | Prints the entire system details. |
| Code + ★7 | Prints the entire event log. |
| ★8 | Activates the Fire alarm. |
| ★9 [†] | Initiates the Engineer's Test. |
| ★# | Indicates zone statuses. |
| Mgr. Code + ★ent [†] | Activates the Galaxy Gold Call Back. |
| Mgr. Code + ★esc | Toggles ★ key features On/Off. |
| [†] Galaxy 16 <i>plus</i> only. | |

Table 1: Star Key Features.

Note: The Star mode must be enabled for the Star features to operate.

SETTING AND UNSETTING THE SYSTEM

Setting the System

Before Setting the System

Before the system is Set ensure that:

- All doors and windows are secured.
- All areas protected by movement detectors are free from obstructions and any animals are excluded from the areas to be protected.

Full Setting the System

Enter your User Code and press the A key:

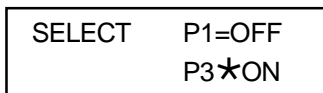
- If all the system zones are closed when the setting routine is initiated the keypad sounders will emit a continuous tone and the keypad displays the Exit Time countdown blocks.
- If any zones are open (for example: protected doors or windows; or if someone activates a movement detector when the setting process is started) then the keypad sounders pulse rapidly and the keypad displays which zones are open. Closing the open zones allows the setting routine to restart.

Leave the building using the agreed Exit Route. Close and lock the Final Exit Door and then, if fitted, operate the Exit Terminator; the horn outputs and the keypad buzzers become silent for four seconds, the countdown blocks all clear and the keypad buzzers emit two long tones to confirm that the system is Set. On the keypad the message SYSTEM IS SET appears before the display goes blank.

The setting routine can be aborted, before the system sets, by pressing the ESC key on the keypad used to initiate the setting routine.

Part Setting the System

Your alarm system can be Part Set using the B key. To Part Set the system enter your User Code then press the B key. The keypad then displays the Set/Unset status of those parts assigned to your code, see Figure 2 Part Setting Options.



Part Set options for user code with Parts 1 and 3 assigned. Part 1 is unset, Part 3 is set.

Figure 2: Part Setting Options.

The Parts marked 'ON' are Set, those marked 'OFF' are Unset. To alter the set/unset status of a Part press the number corresponding to that part, that is, pressing the 1 key toggles the set status of Part 1 between set/unset.

The equals sign denotes that what is displayed beside the Part number is the current status of the Part, that is, P1=ON denotes that Part 1 is currently set. Pressing the 1 key will cause the display to read P1*OFF, this means that Part 1 is now provisionally programmed as Unset.

The actual set status of the part will not be altered until the ent key is pressed to accept the programming.

Once the ent key has been pressed leave the building using the agreed exit route. Close and lock the final exit door and then operate the exit terminator; the horn outputs and the keypad buzzers become silent for four seconds, the countdown blocks on the keypad display all clear and the keypad buzzers emit two long tones to confirm that the system is set. On the keypad the message SYSTEM IS SET appears before the display goes blank.

The setting routine can be aborted, before the system sets, by pressing the ESC key on the keypad used to initiate the setting routine.

Note: If the Silent Part Set facility has been enabled only the keypad display indicates the setting status, that is, no audible tones are emitted.

Unsetting the System

Normal Entry

The system begins the unsetting routine whenever a Final door opens or an Exit/Entry zone is activated. The keypad buzzers pulse slowly indicating that the Entry Time countdown has started.

To unset the system, go directly to the keypad using the agreed entry route, enter your code and press the ent key.

Note: On some systems, unsetting may alternatively be achieved, by swiping a proximity card at the card reader.

Slow Entry

The keypad sounder begins to pulse rapidly after 75% of the entry time has expired to indicate that time is running short. If the entry time expires before a valid user code is entered, a full alarm occurs.

Straying From The Entry Route

If, during the entry routine, you stray from the agreed entry route and activate a zone in a protected area an audible alarm occurs.

Alarm Abort

Note: If the system is programmed for Alarm Abort a period of 90 seconds after expiry of the Entry Time is provided to enable the user to cancel an alarm caused by exceeding the Entry Time or deviating from the entry route.

If the 90 second Alarm Abort time is exceeded then a full alarm may result in the Police being called to the premises and the system requiring an Engineer Reset.

The installation engineer will explain the operation of the Alarm Abort function where necessary.

Cancelling Alarms

To cancel an alarm enter your user code. The keypad displays the zones that have been activated during the alarm. Press the **ESC** key to return to the normal display.

Certain types of alarms, once cancelled, require a code authorised with the appropriate reset authorisation to be entered. The system prompts for a valid reset code by displaying **INTRUDER RESET REQUIRED**, **PA RESET REQUIRED** or **ENGINEER RESET REQUIRED** on the keypad.

Engineer Reset

Certain types of alarm require an engineer to visit the site and, after investigation, reset the system.

USER MENU

For access to the menu options enter your user code then press the **ent** key. The keypad then displays the menu options available to the user.

| Menu Option | |
|-------------|--------|
| No | Option |
| 01 | Omit |
| 02 | Chime |
| 03 | Walk |
| 04 | Codes |
| 05 | Test |
| 09 | Log |
| 10 | Time |

Table 2: Menu Options.

The user menu offers a selection of up to seven options. All users have access to the Chime and Walk options. The Omit and Codes options are assigned to users, (if required) by the installer.

The system manager (User 14) can also:

- test outputs (Bells and Strobe only)
- view the Event Log
- modify the Time options.

Note: The keypad returns to the normal display if no key press occurs for two minutes while accessing the menu.

The menu options are described in the following pages.

Option 1 – Omit

This option allows authorised users to omit engineer enabled zones from the system. Once a zone has been omitted it is not able to generate an alarm condition. Omitted zones are reinstated automatically the next time the system is unset or manually when the Omit feature is disabled by the user.

Selecting the Omit Option

Enter your user code and press the **ent** key to select the menu options. Press the **ent** key again to select Omit.

Omitting Zones

When the Omit option is selected, zone 01 is displayed, along with its omit eligibility and status (NON OMITTABLE – the zone cannot be omitted; #,xx OMIT – the zone is omissible (where xx is the zone number); OMIT – the zone is currently omitted).

If the zone is currently omitted then the box on the top line of the display is filled; if zone is not currently omitted then the box is empty.

If the zone can be omitted and the omit status is to be changed, press the # key. The display indicates the new omit status of the zone. Use the A or B keys to view and select other zones.

Setting with Omitted Zones

Once the required zones have been selected for omission press the **ent** key. The system begins to set with the selected zones omitted, the keypad display indicates how many zones have been omitted. The zones remain omitted until the system is unset.

To save the omit status of the zones press the **esc** key. The selected zones remain omitted allowing the system to be set, with the zones omitted, at a later time. The zones remain omitted until the next time the system is unset or the zones are manually unomitted.

Option 2 – Chime

This option allows the user to assign the Chime function to the zones on the system. Any zone with the Chime function enabled momentarily activates the keypad buzzers each time the zone is opened.

Selecting the Chime Option

Enter your User Code and press the 2 key.

On selecting the Chime option the first zone is displayed along with its chime status (enabled or disabled). Pressing the # key changes the chime status of the zone.

Press the A or B keys to view and program the other zones on the system.

Press the **ent** key to accept the programming or **esc** to cancel.

Option 3 – Walk

The Walk option allows the user to Walk test the zones on the system ensuring that they are operating correctly.

Selecting the Walk Option

Enter your User Code and press the 3 key.

On selecting the Walk option zone 01 is displayed. If the zone is to be tested press the # key. Use the A or B keys to scroll through the zones on the system, each one may be selected for inclusion in the test. When all the required zones have been selected press the ent key to start the Walk Test.

The keypad displays the number of Walk Test zones currently open on the system. Pressing the A or B keys allows the currently open zones to be viewed.

Walk test the selected zones by activating the appropriate sensor (movement detector, door switch, etc). When the Walk Test is complete return to the keypad. The display shows the number of test zones that are currently open. Press the # key to toggle the keypad display between showing the number of test zones currently open and the number of zones registered as tested.

To terminate the Walk Test press the esc key.

Note: If the esc key is not pressed the Walk Test remains active for 20 minutes after the last key press.

Option 4 – Codes

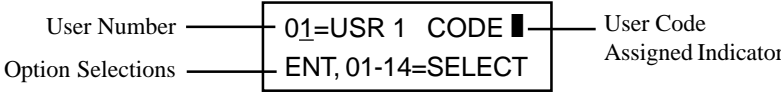
The Codes option enables authorised users to allocate, modify and delete the 14 user codes (PINs) on the system, as well as assign and modify user attributes. Only users with the Modify Codes attribute enabled can carry out these functions.

Selecting the Codes option

Enter your User Code and press the 4 key.

Assigning Modifying and Deleting User Codes

Once the Codes option is selected the user code assignment of User 1 is displayed. If the box next to CODE is filled then a PIN has been assigned, if it is blank then no PIN has been as-



signed.

Figure 3: Menu Option 4 – Codes.

Use the A or B keys to select a user number and press the ent key.

To assign or modify a user PIN enter a four digit number. Press the ★ key to erase any digits incorrectly entered. When the required four digit code is displayed press the ent key.

If a User Code is to be deleted press the ★ key four times followed by the ent key.

Note: User Code 13 may be assigned as a Duress Code. Entry of this code causes a Duress alarm which will activate the PA outputs and trigger the Remote signalling Device (if fitted); the Horn, Bells and Strobe outputs do **not** activate. The installation engineer will advise you on the operation of this function where applicable.

Assigning User Attributes

| No | Attribute | Description |
|----|---------------|---|
| 01 | Set Access | Enables the user to Set the system using the A key. |
| 02 | Unset Access | Enables the user to Unset the system using the ent key. |
| 03 | Part 1 Access | Gives the user access to Part 1. |
| 04 | Part 2 Access | Gives the user access to Part 2. |
| 05 | Part 3 Access | Gives the user access to Part 3. |
| 06 | Omitting | Enables user to omit omissible zones. |
| 07 | Modify codes | Enables user to program User Codes and attributes. |

Table 3: User Code Attributes.

When the Codes option is selected User 01 is displayed. Press the ent key to select this user or the A or B key to view the other users. To modify the attributes of the selected user press the # key.

The Set Access attribute is displayed along with its status. Press the # key to toggle the enable status of the attribute. An attribute is enabled when the square next to the attribute number is black and Enable appears on the bottom line of the display.

When the required attributes have been assigned to the user, press the ent key to save the selection or esc to cancel the programming. The display returns to the selected user number. Press the A or B key to view and select other users.

To exit from the codes option press the **ESC** key.

Keyswitch Zones and User Codes

Keyswitches are assigned the attributes of User Code 1, 2 or 3. A Keyswitch zone assigned to one of these codes can Set and Unset the parts assigned to the code and reset authorised alarms. The user code assigned to the Keyswitch must be assigned Set Access to allow the Keyswitch to set the allocated parts The Keyswitch assumes the assigned attributes even if the code has not been allocated a PIN.

The installation engineer will advise you of the use of keyswitch zones where necessary.

Option 5 – Test

The Test option allows the Manager Code (User 14) to test the Bell and Strobe outputs on the system.

Selecting the Test Option

Enter the Manager Code and press the 5 key.

Operation of the Test Option

On selecting the Test option 5 BELLS is displayed. If the bells are to be tested press the # key. Any output programmed as Bells will activate. To end the test repress the # key.

Pressing the A key will display 6 STROBE. If the strobes are to be tested press the # key. To end the test repress the # key.

To exit from the Test option press the `esc` key.

Option 9 – Log

The Log option permits the system manager (User 14) to view the events stored in the system log.

Selecting the Log Option

Enter the Manager Code and press the 9 key.

The Event Log

Once the Log option has been selected the current date is displayed. To view the Event Log press the A key to advance through the log or the B key to move backwards through the log. Figure 4 shows the Event Log display.

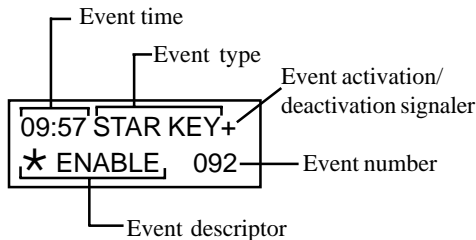


Figure 4: Viewing the Event Log.

The log event displays the event type, time, descriptor and number. Also displayed is the activation (+) and deactivation (-) signaller.

To display the date of the event currently being displayed press the # key. Pressing the # key again returns the display to the event details.

To quickly move through the log enter a three digit number between 001 and 250 followed by the # key. The system will jump to the event number entered.

To exit from the Log option press the **esc** key.

Option 10 – Time

The Time option allows the system manager (User 14) to modify the four time features of the system, these are:

- Time (hr:min)
- Date (dd/mm/yy)
- Start Summer (dd/mm) – the date that summer time begins (clocks go forwards).
- End Summer (dd/mm) – the date that summer time ends (clocks go backwards).

Selecting the Time Option

Enter your User Code and press the **ent** key. Press the **B** key until the Time option is displayed then press the **ent** key.

Operation of the Time Option

On selecting the Time option **1=TIME** is displayed. If the time requires to be modified press the **ent** key and enter the time (this is a four digit number and must be a valid time between 00:00 and 23:59). Press the **ent** key to accept the programming and **esc** to cancel.

To change one of the other time features use the **A** or **B** keys to select the required option and follow the same procedure as for modifying the Time option.

To exit from the Time option press the **esc** key.

APPENDIX A — ALARM AND HELP MESSAGES

ALARM IS ACTIVE: The system is currently in alarm and must be cancelled by a valid user code.

PA RESET REQUIRED: The user code that cancelled the PA alarm does not have the authorisation to reset the system. A user code with the PA Reset attribute enabled must be entered. The PA switch which created the alarm may also have to be reset.

ENGINEER RESET REQUIRED: This message is displayed when a tamper alarm occurs. Tamper alarms usually require an engineer to visit the site and check all modules on the system.

INTRUDER RESET REQUIRED: The user code that cancelled the alarm does not have the authorisation to reset the system. A user code with the PA Reset attribute enabled must be entered. The PA switch which created the alarm may also have to be reset.

CALL ALARM CO / QUOTE NUMBER XXXXX: This message is displayed on a system with the Technistore reset facility enabled after an alarm has been cancelled. The alarm company should be informed that Technistore reset is required (quoting the number on the keypad display).

INVALID CODE: The code that was entered is not registered in the system memory.

DUPLICATED CODE: When assigning new user codes, the code entered has already been assigned to a code.

TIMED TIMEOUT DISABLED: When setting the system, the exit time has been set to infinity and a Final zone or Push-to-Set zone is used to act as the exit terminator.

TELECOM FAILURE: A fault has occurred with the telephone line or remote signalling which will require engineer attention.

STU LINE FAIL: A fault has occurred with the telephone line or remote signalling which will require engineer attention.

APPENDIX B — AVOIDING FALSE ALARMS

False alarms are inconvenient and may give rise to Police response being withdrawn from your site which may affect your insurance cover.

Here are twelve points to help you avoid false alarms:

1. Ensure that you understand how to operate the alarm system. In your absence the system should be operated by someone thoroughly instructed in its use.
2. Ensure that:
 - you know your User Code
 - your Password is readily available if you need to quote it to the Alarm Receiving Centre.
3. Before leaving the premises ensure that all doors and windows are securely closed.
4. Ensure that detection devices such as Infra-red beams or movement detectors are not obstructed by stock or building partitions.
5. Where Passive Infra-red (PIR) or movement detectors are installed make sure that the area is kept free from animals and birds. Particular attention should be paid to swinging signs, fluorescent lights and Christmas decorations. Electric fans, heating or ventilation systems should, where possible, be switched off before the system is Set.
6. Always follow the setting and unsetting procedure and keep to the entry and exit routes agreed with the installation engineer.
7. Treat the alarm system with care and ensure that it is not accidentally damaged.
8. Consult your installer about alterations to your building and its contents if you think they may affect your system or its performance.
9. Always report any obvious reasons for unwanted or false alarms to your installer. If necessary an engineer will be sent to check the system where it is established that a technical fault exists.
10. If opening or closing times are monitored by the Alarm Receiving Centre be sure you notify them of any changes from the agreed times using your password where necessary.
11. While the system should be provided with a stand-by battery for use in the event of an a.c. mains failure every effort should be made to restore the a.c. mains supply as soon as possible.
12. Make sure that regular maintenance checks are carried on the system to minimise the risk of technically related false alarms.

APPENDIX C — CONFORMITY AND STANDARDS

Compliance

The Galaxy 16 and 16 *plus* is compatible with the relevant parts of the following standards:

- BS 4737
- EN 60950
- CTR 21
- CE Standards (EN 50130-4)
- EN41003

Telecoms

The equipment has been approved to { Council Decision 98/482/EC } for Pan -European single terminal connection to the Public Switched Telephone Network (PSTN). However due to differences between the individual PSTNs provided in different countries the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems contact the equipment supplier in the first instance.

The Galaxy 16 and 16 *plus* is designed to interwork with the following networks:

| | | | | |
|---------|---------|-----------------|----------|----------------|
| Austria | France | Italy | Norway | Switzerland |
| Belgium | Greece | Liechtenstein | Portugal | United Kingdom |
| Denmark | Iceland | Luxembourg | Spain | * Germany |
| Finland | Ireland | The Netherlands | Sweden | |

Note: Contact the equipment supplier before using the Galaxy 16 and 16 *plus* on any network not listed.

* *May have interworking difficulties*

| ZONE REFERENCE TABLE | | | | |
|----------------------|------|----------|-----------|------|
| No. | Type | Location | Omittable | Part |
| 01 | | | | |
| 02 | | | | |
| 03 | | | | |
| 04 | | | | |
| 05 | | | | |
| 06 | | | | |
| 07 | | | | |
| 08 | | | | |
| 09 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |

