

9x5x

PROGRAMMING GUIDE

9853

9752

9751

**HARDWIRED
CONTROL UNITS**

9853, 9752, 9751 Hardwired Control Unit Programming Guide
This document applies to control panels using software version 4.2.x.

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1. INTRODUCTION

About this Manual

This manual is divided into five chapters:

1. **Introduction** provides an overview of how to program a 9x5x control unit.
2. **Programming Commands** lists and describes the commands available to program aspects of a 9x5x control unit's operation.
3. **Testing Commands** lists and describes the commands available to test a newly installed alarm system based on a 9x5x control unit.
4. **System Configurations** describes how to set up a 9x5x control unit in a partitioned system and so that it complies with industry standards.

The 9x5x series of control units is fully programmable to accommodate individual user and site requirements. Installers can program units either from a keypad or using a program called Downloader on a PC running Windows. When programming from a keypad, you enter instructions using the three-digit commands described in "2. Programming Commands". Before you start, familiarise yourself with the control unit's functions and the programmable options described in this manual.

For guidance on using 9x5x control units, refer to the *9x5x User Guide*. For guidance on installing an alarm system using 9x5x control units, refer to the *9x5x Installation Guide*.

Compliance with Standards

9751/2 control units are suitable for systems designed to comply with:

- ° PD 6662 / prEN 50131-1: 2004 at grade 2 and environmental class 2.
- ° DD243: 2004 – reflecting the ACPO (Association of Chief Police Officers) Security Policy 2000.

9853 control units are suitable for systems designed to comply with:

- ° PD 6662 / prEN 50131-1: 2004 at grade 3 and environmental class 2.
- ° DD243: 2004 – reflecting the ACPO (Association of Chief Police Officers) Security Policy 2000.

Operating Modes

The alarm system has three basic modes of operation that provide access to commands appropriate to different types of users:

1. **User mode** allows setting, unsetting and resetting of the system, along with some basic commands. There may be many user codes of this type.
2. **Master user mode** provides access to all user commands, including those available in user mode. The master user can configure other users. There is only one user code of this type.
3. **Installer mode** provides access to the installer menu, which contains the programming and testing commands described in this Guide. There is only one user code of this type.

To enter either of the user modes, enter a user code (which may be four or six digits) or present a proximity tag. To select a user command, enter the command number.

To enter installer mode, enter zero followed by the installer code (which may be four or six digits). To select an installer command, enter the command number.

In addition to the three standard operating modes, there two special modes:

1. **Guard mode** provides the same access as user mode but **only** if there is, or has been, an alarm. If there has been no alarm, the Guard code will not provide access to the system. There is only one user code of this type.
2. **Duress mode** provides the same access as user mode but also secretly communicates the duress status. There is only one user code of this type.

Entering Installer Mode

The *9x5x Installation Guide* describes how to enter installer mode for the first time in a new installation. You can use this mode at any time, provided that the system is unset and not in alarm. To enter installer mode:

1. Make sure the system is unset.

Note: If you have selected defaults for Finland, Norway, Sweden or Denmark (Command 0), or a user has selected user command 3, you must enter a valid user code at this point.

2. Press 0, then key in the Engineer Code (default 7890).

The display shows:

Installer Mode

You are now in installer mode.

While the system is in installer mode, all keypads except the one that you are using will be locked and will display "Busy".

Using Programming and Testing Commands

When delivered from the factory, the control unit already has default settings.
To change the default settings:

1. Enter installer mode.
2. Key in the appropriate command number and press ✓.
The display shows the current value of the command.
3. Key in digits to select the value you require.
The display shows the new value.
4. Press ✓ to store the new value of the command.

Note: If at any time you change your mind, repeat steps 1 to 3. The 9x5x Quick Reference Programming Guide shows the commands and their values. "Y" to the right of a value shows that it is the factory default.

Leaving Installer Mode

When you have finished programming the control unit:

1. Press 99✓ at the keypad
The display shows: 99:Exit Eng ?
2. Press ✓.
The display shows: 99:Checking Sys
followed by the time and date.

The system is now in user mode.

Note: If any 24-hour, Fire, PA or Technical zones are active when you enter Command 99, the keypad gives an error tone and displays the faults. Correct the problems identified. When the display shows "No Faults", press ✓ to enter user mode.

Restoring Default Access Codes (first stage reset)

The default (original) access codes are:

	4-digit	6-digit
Engineer Code	7890	567890
Access Code User 1	1234	123456
Access Code Users 2 to 50	✗002 ... ✗050	✗00002 ... ✗00050
Duress Code	✗017	✗00017

*Note: To activate the Access Codes (02 to 50) and Duress Code, which are initially inactive, User 1 must change the defaults to the correct codes.
The 9x5x User Guide explains how to do this.*

1. Introduction

To restore all access codes to their default settings:

1. Remove mains power.
2. Open the case and disconnect the battery.
3. Identify the NVM Reset pins and Kick Start pins on the main PCB (refer to the *9x5x Installation Guide*).
4. Short circuit the NVM Reset pins with a wire link.
5. Short circuit the Kick Start pins with a wire link.
6. Reconnect the battery.
7. Remove the wire links from the NVM Reset pins and Kick Start pins.
The control unit will load the factory default access codes listed above.
8. Close the control unit.
9. Apply mains power.
10. Carry out an engineer reset (see next section).

Performing an Engineer Reset

To perform an engineer reset:

1. Check that the display is showing the alarm condition.
2. Enter installer mode.
3. Enter 99 **✓✓**.

The display returns to the time and date.

Restoring Default Command Settings

To restore all command options to their default (original) settings:

1. Enter installer mode.
2. Press 98**✓** at the keypad.
The display shows: Load Default
3. Press 1**✓** at the keypad.
The display shows (for example): Mult Sys? OFF
4. Either:
Press 1 to create a partitioned system
Or press 0 to create a single system
See page 75 for information about single and partitioned systems.
The display shows (for example): Mult Sys? ON
5. Press **✓**.
The keypad gives a double "beep" confirmation tone and the control unit loads the default settings, erasing all previous selections.

Adding and Deleting Tags

You can use any industry-standard ISO tag or card with the 934 module. To purchase tags from Cooper Security, quote part number Proxtagpk5.

A tag acts as an alternative to a user access code. You can assign a user a tag, an access code, or both. You cannot assign a tag to the Master User (User 01), the Installer (User 00) or, if the Guard Code facility has been enabled using Command 181, the Guard (User 50). This means you can assign up to 48 (or 49) tags on a system, one each for Users 2 to 49 (or 50).

When presenting a proximity tag to a 9930 keypad, whether for programming or for normal use, make sure that the tag is touching the front of the keypad to the left of the display as shown in Figure 1. The 9940 keypad has a proximity coil that makes the whole case sensitive to tags.

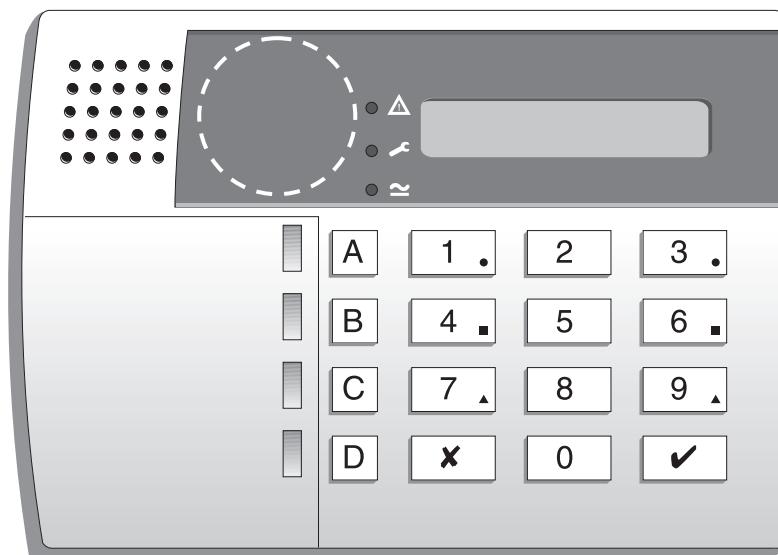


Figure 1. Sensitive Area on 9930 Keypad for Tag

1. Introduction

To Add a Tag

1. Key in User 01 access code while the system is unset.
The display shows: Select?
2. Press 4 to select the change codes option.
The display shows: Old Code= -
3. Enter the access code of the user for whom you want to program a tag and press ✓.
The display shows the user number and any text description you have programmed for that user.
4. Press ✓.
The display shows the user number and an underscore, for example: User 06 = - - -
5. Present the proximity tag to the front of the keypad (see Figure 1).
The system learns the identity of the tag and links it to that user number.
The keypad gives a double "beep" to confirm that the tag has been learned successfully.
The keypad displays the date and time.
6. Repeat steps 1 to 5 for other tags, as necessary.

To Delete a Tag

Note: If you delete a tag, you also delete that user's access code.

1. Key in User 01 access code while the system is unset.
The display shows: Select?
2. Press 4 to select the change codes option.
The display shows: Old Code= -
3. Enter the User 01 access code again and press ✓.
The display shows "User 01" and any text description for that user.
4. Press ✗ repeatedly until the display shows the user number of the tag you want to delete.
The display shows the user number and any text you have programmed for that user.
5. Press ✓.
6. Key in "0000" and press ✓.
The system deletes the tag and the user's access code. The keypad gives a double "beep".

2. PROGRAMMING COMMANDS

0: Country PTT Defaults

Use this command to select the country and PTT defaults; it also loads default access codes and programming options. Use Command 126 to select language without making other changes.

*Note: If you select options **X4**, **X5**, **X6** or **X7** (Finland, Norway, Sweden or Denmark), the control unit changes the method of entering installer mode (see "Entering Installer Mode" on page 1).*

Option	Option	Option	Option
0 UK (default)	6 Belgium	X3	OEM 2
1 Italy	7 Germany	X4	Finland
2 Spain	8 Switzerland	X5	Norway
3 Portugal	9 Austria	X6	Denmark
4 Netherlands	X1 Ireland	X7	Sweden
5 France	X2 OEM 1		

01 to 16, X17 to X40: Zone Programming

The number of zones available to program depends on the control unit model and the number of expanders in your system (for details, refer to the *9x5x Installation Guide*). The format of the zone programming command changes, depending whether a zone is connected to the control unit or to an expander. For the first 16 zones, which are connected to the control unit, key in "01" to "16" and press **✓**. For zones 17 upwards, which are connected to expanders, key in "**X17**" to "**X40**" (if that many zones are connected) and press **✓**.

The zone programming commands take at least three further digits: the first two specify the zone's type, while the others specify the zone's attributes.

When you key in the zone number and press **✓**, the display shows the zone number and any text associated with it. At this point, you can edit the zone text. When the text is as required, press **✓** to display the zone type and attributes. At this point, you can edit them. When they are as required, press **✓** once more to store the changes.

Zone Names

When you key in the zone number and press **✓**, the display shows the current zone name with a flashing cursor under the first letter. Zone names can contain up to 12 characters, including spaces and punctuation marks.

2. Programming Commands

Enter letters from the keypad one at a time by repeatedly pressing a number key until the display shows the letter you want. If you make a mistake, press C or D to move the cursor to the letter you want to change and key in the new letter. To delete a name completely, press D to move the cursor onto the first character of the name and then press D again to clear the old name.

When you have finished entering the name, press ✓.

The following table shows the letters generated by each key on the keypad.

1	7	P Q R S
2	8	T U V
3	9	W X Y Z
4	0	Space ' () : . - ! &
5	C	Move right
6	D	Move left

Zone Types

The following table shows the values available for zone type.

Value	Type	Description
00	Not Used (NU)	Identifies zones that are not used. The system ignores zones of this type. It is not necessary to link the circuit or anti-tamper connections.
01	Panic Alarm (PA)	Operating a device programmed as "Panic Alarm" will start either a silent alarm transmission to the Alarm Receiving Centre (ARC) or an audible alarm, depending on how you have programmed PA Response (see Command 30). PAs operate, whether the system is set or unset. PA zones can be allocated to one or more partitions in a partitioned system (A–D attributes on page 12) but these attributes are not available in a single system.
02	Fire (FR)	Smoke or heat detectors connected to FR type zones cause the speakers to give a distinctive fire signal (internal sounders pulsing "Dee Dah Dee Dah..."). Fire alarms always operate, whether the system is set or unset, and always trigger communications if fitted. Fire zones can be allocated to one or more partitions in a partitioned system (A–D attributes on page 12) but these attributes are not available in a single system.
03	Normal Alarm (NA)	A zone programmed as "Normal Alarm" will start an alarm if activated while the system is set.
04	24-hour (24)	This zone causes an internal alarm if violated when the system is unset, and a full alarm if the system is set. If the Installer programs 24-hour zones with "Omit Allow", the user can omit 24-hour zones in Day mode. The control unit reinstates all 24-hour zones if anyone sets the system.

Value	Type	Description
05	Final Exit (FE)	Zones of this type must be the first to be activated on entry. You can use them to set the system using the Final Door Set exit mode. Use Command 39 to set the exit mode for the zone (page 20). Use zone attribute X7 to select an entry timer for the zone (page 12) and Commands 201–4 (page 66) to set up the entry timers.
06	Entry Route (ER)	Use this zone type for detectors sited between the Final Exit door/detector and a keypad. If an "Entry Route" zone is violated when the system is set, an alarm will occur. If the Entry/Exit timer is running when an Entry Route zone is violated, no alarm occurs until the Entry/Exit timer expires. Use zone attribute X7 to select an entry timer for the zone (page 12) and Commands 201–4 (page 66) to set up the entry timers.
07	Shock Analyser (SA)	You can apply this zone type to zones 1 to 4. The system will not accept this type for zones 5 to 40. Use zone attribute X7 to set the sensitivity for the zone (page 12).
08	Technical Alarm (TC)	Use this zone type when you want to monitor equipment, for example a freezer, without raising a full alarm. If a Technical Alarm zone is activated while the system is set, the system makes no audible alarm. However, when a user unsets the system, the keypad indicates a fault. If a Technical Alarm zone is activated while the system is unset, the system starts a pulsed tone from the keypad. If programmed, the control unit also starts communication. When a user enters a valid code, the keypad stops the tone and displays the zone.
09	Keybox (KB)	This zone type is for use in Scandinavia only. When a zone of this type is required, the Installer connects the alarm wires of the zone to a special external key box and the tamper wires to the box enclosure switch. When someone opens the box, the control unit logs the event and communicates it to the Alarm Receiving Centre (ARC). The control unit also provides a Key Box output type, which you can program with Command 151 to trigger one of the plug-by communicator output pins.
10	Smoke Detector (SD)	In Scandinavia only, use this type for zones connected to 12V smoke detectors. This type is active whether the system is set or unset, and the control unit will transmit a specific alarm to the Alarm Receiving Centre (ARC) if triggered. The control unit also provides a Smoke Detector output type, which you can program with Command 151 to trigger one of the plug-by communicator outputs. If a zone of this type causes an alarm, the user will need to enter an access code to disarm and reset the system.

2. Programming Commands

Value	Type	Description
11/12	Keypad	<p>There are two Keypad zone types: Momentary and Fixed. Use these for zones that connect to an access control keypad, electronic key or other hardwired device used to set or unset the system:</p> <ul style="list-style-type: none"> 11 Momentary Keypad (KM) 12 Fixed (or latched) Keypad (KF) <p>The keypad or similar device can be used to set and unset the level or partition to which the zone is assigned. It cannot be used to reset the system.</p> <p>In a single system, do not assign a Keypad zone to levels B, C or D if you have assigned one to Level A (full system). In a partitioned system, do not assign more than one Fixed Keypad zone to a partition.</p> <p>Note: In a partitioned system with a keypad for each partition, operating a second keypad whilst the first partition is starting to set will prevent the second partition from setting.</p>
13	Anti-Mask Zone (AM)	<p>Use this zone type for the anti-mask outputs of detectors with this facility. Connect the detector's alarm and contact wiring to one zone (for example, Zone 07) and its anti-mask outputs to the zone above (for example, Zone 08). Assign the Anti-Mask type to the higher zone; that is, the one connected to the anti-mask outputs (Zone 08 in the example).</p> <p>If an Anti-Mask zone is violated, the control unit starts a Tamper Alarm and shows the message "AM Tamper" on the keypad display. It logs the event to the zone connected to the detector's alarm and contact wiring (Zone 07 in the example). Command 136 defines whether an Anti-Mask zone can be reset by a user or only by the installer.</p> <p>To use two-zone anti-masking, Command 88 must be set to 0 (Mask only).</p>
14	Forbikobler (FB)	<p>This zone type is a Scandinavian type of Entry/Exit zone (the word "forbikobler" means "bypass" in Danish). Use this type for zones connected to standalone external keypads or access controllers. If the zone is triggered by the external keypad during the exit time, the control unit stops the exit time and sets the system. If the zone is triggered while the system is set, the control unit starts the entry time. Use zone attribute X7 to select an entry timer for the zone (page 12) and Commands 201–4 (page 66) to set up the entry timers.</p>
15	AC Fail (AC)	<p>This zone type is triggered by a failure in the AC input to an external power supply. Command 134 defines whether a zone of this type can be reset by a user or only by the installer.</p> <p>Command 137 defines whether the user can override the fault to set the system. In a partitioned system, AC zones are always allocated to Partition A.</p>
16	Low Battery (LB)	<p>This zone type is triggered by a low voltage in the battery in the external power supply. In a partitioned system, LB zones are always allocated to Partition A.</p>

Value	Type	Description
17	Battery Fault (BF)	This zone type is triggered by a fault in the battery in the external power supply. In a partitioned system, BF zones are always allocated to Partition A.
18	Power Output Failure (PF)	This zone type is triggered by a failure in the DC output to the external power supply. In a partitioned system, PF zones are always allocated to Partition A.
19	Fault (FL)	This zone type triggers a fault condition, causing an alert and preventing the system from being set. The tamper connection operates in the same way as a normal alarm zone (type "NA"). Command 139 defines whether a zone of this type can be reset by a user or only by the installer. Command 140 defines whether the user can override the fault to set the system. In a partitioned system, FL zones are always allocated to Partition A.

Zone Attributes

The following table shows the values available for zone attribute, depending on the zone type. To set an attribute, key in the appropriate value. To unset the attribute, key in the value again.

Value	Attribute	Valid for	Description
x1	Chime (C)	Normal Alarm (NA) Final Exit (FE) Entry Route (ER) Shock Analyser (SA)	When enabled by the user, the system makes a doorbell-like sound when any zones programmed as "Chime" are opened. This facility operates only while the system is unset. To make the Chime available from keypad sounders but not internal sounders, use Command 22 with option 0.
x2	Soak Test (S)	Normal Alarm (NA) Entry Route (ER) 24-hour (24) Shock Analyser (SA)	Use this zone attribute if you want to place on long-term test a detector that you suspect is giving false alarms. Zones with this attribute are disabled for 14 days after you return the control unit to user mode. If the zone is opened while the system is set (or at any time for a 24-hour zone), the control unit logs the event as a "Soak Fail Znn" (nn = zone number) without sounding any bells or starting signalling. The control unit returns the zone to normal use after 14 days, even if the system is set at the time.

2. Programming Commands

Value	Attribute	Valid for	Description
x3	Double Knock (D)	Normal Alarm (NA) Entry Route (ER)	For zones with this attribute, no action is taken on first activation. To cause an alarm, the zone must be activated twice within a five-minute period or remain open for longer than 10 seconds. An alarm will also occur if another double-knock zone in any partition is activated within five minutes of the first. Programming a zone as "Double Knock" is a way of reducing false alarms caused by environmental changes but is not normally recommended. Do not apply "Double Knock" to radio zones with a PIR detector. The radio PIR detector uses a lockout timer and will not send a second activation within the Double Knock period.
x4	Omit Allowed (O)	All	When applied to a zone, this attribute allows the user to omit the zone when setting the alarm. Do not allow the user to omit PA zones. Do not apply this attribute to an FE zone if there is no ER zone present.
x7	The meaning of this attribute depends on the zone type:		
	Shock Analyser Sensitivity	Shock Analyser (SA)	You can set this attribute only for a zone of type SA, and only zones 1, 2, 3 and 4 support this type. To set the sensitivity of a shock sensor zone, enter a digit in the range 1 (least sensitive) to 6 (most sensitive). You must enter the whole sequence; for example, to set the sensitivity to 3, press x73
	Entry Timer Number	Final Exit (FE) Entry Route (ER) Forbikobler (FB)	To select which of the four entry timers (set up using Commands 201–4, as described on page 66) are used for the zone, enter a digit in the range 1 to 4. You must enter the whole sequence; for example, to select Entry Timer 3, press x73
A	Armed in Level or Partition A	All	When applied, the zone is armed when the user selects Level or Partition A.
B	Armed in Level or Partition B	All	When applied, the zone is armed when the user selects Level or Partition B.
C	Armed in Level or Partition C	All	When applied, the zone is armed when the user selects Level or Partition C.
D	Armed in Level or Partition D	All	When applied, the zone is armed when the user selects Level or Partition D.

For information on how zones behave in linked partitions, refer to "Common Areas" on page 78.

Zones and Partitions

In a partitioned system, you can assign some zone types to two or more partitions, and some zone types to one partition only.

One partition only

- Panic Alarm (PA)
- Fire (FR)
- 24-hour (24)
- Technical (TC)
- Smoke Detector (SD)
- Keyswitch – Momentary (KM)
- Keyswitch – Fixed (KF)

More than one partition

- Normal Alarm (NA)
- Final Exit (FE)
- Entry Route (ER)
- Shock Analyser (SA)
- Keybox (KB)
- Anti-Mask (AM)
- Forbikobler (FB)

Use those zone types that can be assigned to more than one partition to create a common area (see page 78).

Some zone types are not assigned to a partition: AC Fail (AC), Low Battery (LB), Battery Fault (BF) and Power Output Fault (PF). The Fault zone type (FL) is always assigned to Partition A.

20: Change Engineer Code

Note: 9x5x control units support six-digit access codes as well as the standard four-digit codes. Command 56 sets the code length.

To change the Engineer Code:

1. Make sure you are in installer mode.

2. Press 20✓

The display shows:

20:Code

3. Key in a new Engineer Code.

The display shows:

20:Code xxxx

4. Press ✓

If Guard Code is enabled (Command 181), the display shows: 20:Guard

3. Key in a new Guard Code.

The display shows:

20:Guard xxxx

4. Press ✓

21: Zone Configuration

This command enables you to select the wiring type of the zone connectors on the control unit PCB. The default is option 0 for all models.

Zones type on 9751/2 PCB

- 0 Up to 8 closed circuit loop zones (CC + Com A/T).
- 1 Up to 8 fully-supervised loop zones (FSL 2K2/4K7).

Zones type on 9853 PCB

- 0 Up to 8 closed circuit loop zones (CC 4 wire).
- 1 Up to 8 end-of-line zones (EOL 2K2).
- 2 Up to 16 fully-supervised loop zones (FSL 2K2/4K7). This setting enables up to 24 zones to be connected to expanders.
- 3 Up to 8 fully-supervised loop zones (FSL + EXP). This setting enables up to 32 zones to be connected to expanders.

Note:

1. *Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) at Grade 3 (9853 units only) requires that Command 21 is set to one of the Fully Supervised Loop options (2 or 3).*
2. *Using three-resistor anti-mask wiring (9853 units only) requires that Command 21 is set to one of the Fully Supervised Loop options (2 or 3).*

You can connect more zones using expanders. The maximum number of zones depends on the type of control unit. Refer to the *Installation Guide* for details.

22: Loudspeaker Chime

In a single system, a user may find that the Chime tone from the keypads is not loud enough. If so, use this command to make the internal sounder give the Chime tone as well. If you select option 0, the internal sounder emits no tone. Select a value from 1 (quietest) to 9 (loudest) to set the Chime volume (the default is 5). The internal sounder demonstrates the volume when you enter the digit.

Note: In a partitioned system, this command is available only for Partition A.

23: Remote Reset Enable

Option 1 enables Remote Reset, which is designed to operate with the plug-by communicator or remote PC reset. After an alarm, the user keys in an access code to silence the alarm but cannot reset the system. The first alarm message to display and the Service lamp remain visible. The user contacts the Alarm Receiving Centre (ARC), which verifies the user's identity and then sends a signal to the control unit. The Service lamp goes out and the user can then reset the system with any valid access code, provided that there are no faults.

Use option 0 (the default) to disable this function.

Notes:

1. *To ensure option 1 works correctly, you must set System Reset to Engineer (Command 33 option 1) and set a CSID code (Command 50).*
2. *To comply with PD 6662 / prEN 50131-1: 2004, the system must be set to hide status information after 30 seconds (Command 28), in which case the Service lamp will go out after the same period.*

24: Show Control Unit Account Name

An account name can be programmed into a control unit using Downloader. Use this command to display the account name.

25: Internal Sounder Delay and Duration

Option 0 (the default) makes the internal sounder use the external Bell Delay and Duration times. Option 1 makes the internal sounder continue after the external Bell Delay expires, stopping only when a user enters an access code.

26: Internal Sounder Delay on Entry

This command controls when internal sounders start to operate in response to an intruder straying from the Entry Route or the entry time expiring.

If you select option 0, the control unit starts the internal sounders immediately.

If you select option 1 (the default), the control unit starts the internal sounders at the same time as the external sounders (that is, after any Bell Delay). This delay allows silent communications when an entry alarm is triggered, which is required by some police forces. Option 1 is available only when:

- Alarm Abort is Off (Command 36, option 0)
- Bell Delay is not zero (Command 41, not option 0)
- Alarm Confirm is Off (Command 89, option 0)

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) at Grades 1, 2 and 3 requires that Command 26 is set to option 0.

27: Exit Fault External Sounder

This command controls what happens when an exit timer completes and a zone is still violated (for example, when a door is not shut).

Option

0 Internal (default). System operates the internal sounders only.

1 Local. System operates both internal and external sounders.

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) prohibits an alarm after a failure to set the system, which would require Command 27 to be set to option 0. However, if external sounders are preferred, 9x5x control units also provide "Set Fail" outputs that can be used to indicate that an alarm resulted from a set failure.

28: Status Display

If you select option 0 (the default), the keypad displays "Level Set" or "Partn. Set" continuously for the whole time that the alarm system is set. The keypad lamps are illuminated if a relevant condition exists. Select option 1 to clear the display and turn off the lamps 30 seconds after the user's last action.

The following table shows the effect of these settings in more detail.

		Text		Alert lamp		Service/Mains lamps	
Panel Set	0 continuous	1 timed	0 continuous	1 timed	0 continuous	1 timed	
No alerts	P/L set	P/L set 30s, then T&D	Off	Off	On	On* 30s	
Alerts	P/L set	P/L set 30s, then T&D	On	On 30s	On	On* 30s	
Panel Unset	0 continuous	1 timed	0 continuous	1 timed	0 continuous	1 timed	
No alerts	T&D	T&D	Off	Off	On	On* 30s	
Alerts	T&D	T&D	On	On	On	On* 30s	

P/L Partition or level T&D Time and date * If a relevant condition exists

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) at Grades 1, 2 and 3 requires that Command 28 is set to option 1.

29: Entry Alarm Delay Time

This command determines what the system does if a user strays from an Entry Route zone during entry.

If you select option 0 (the default), the system gives an immediate alarm when the user strays from an Entry Route zone during entry.

If you select option 1, the system gives an internal alarm when the user strays from an Entry Route zone during entry but waits for 30 seconds before raising a full alarm. The user can reset the system by entering an access code within that time.

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 29 is set to option 1.

30: PA Response

When a Panic Alarm (PA) occurs, the system sends a PA message to the Alarm Receiving Centre (ARC), if a communicator is enabled, and the keypad shows the PA zone when a user disarms the system. With this option, you can choose whether the system also operates the sounders.

Option

- 0 Sounders operate (default).
- 1 Sounders remain quiet.

31: Zone Tamper User/Engineer Reset

Use this command to ensure that the system complies with national requirements for resetting zone tamper indications while the system is unset.

If you select option 0 (the default), the user can reset the system after a zone tamper.

If you select option 1, the user can silence the alarm after a zone tamper but an engineer must reset the system by entering the Engineer Code, or by using a remote or anti-code reset (Commands 23 and 50).

Note: See Commands 37 and 38 for reporting and resetting system tampers (for example, attempts to open control unit or keypad cases).

32: Keypads and Partitions

If you created a partitioned system during initial power up, this command enables you to assign individual keypads to those partitions. By default, all keypads belong to all partitions.

Notes:

1. You cannot assign keyswitches connected to keypads to partitions.
2. PAs belong to the whole system.
3. Command 66 is used to assign Forbikobler keypads to partitions.

33: System User/Engineer Reset

To require an engineer reset, select option 1. To permit a user reset, select option 0 (the default). Certain types of events always need an engineer reset, irrespective of the option that you choose here:

- Auxiliary 12V supply fuse blown
- Keypad missing or failed
- Remote expander missing or failed
- A low battery at the control unit.

Note: Compliance with DD 243: 2004 (see page 83) requires that Command 33 is set to option 1. You can use various other forms of reset, such as remote (see Command 23) or anti-code (see Command 50).

34: PA User/Engineer Reset

To require an engineer to reset the system after a PA, select option 1. To permit a user to reset the system after a PA, select option 0 (the default).

35: First Circuit Lockout

If you select option 0 (Lockout), the first zone to activate during the set cycle is ignored until the system is unset. This is the default.

If you select option 1 (Rearm), all zones are included at the end of the programmed bell run time, provided that the first-to-alarm zone is closed and the number of rearms is not exceeded. While the zone is open, the system excludes it. If the zone closes after the system rearms, the system includes it again.

36: Alarm Abort

Users occasionally trigger false alarms by accident. Select option 1 to permit them to abort under these circumstances.

If a user accidentally triggers an alarm while the system is set, the control unit transmits an intruder alarm and starts the Bell Delay and Alarm Abort timers. To abort the alarm, the user must enter a valid access code during the abort period. If the user enters a valid code within this time, the system transmits a restore of the intruder alarm and simultaneously transmits an abort.

Select option 0 (the default) to prevent users from aborting alarms in this way.

Note: The Alarm Abort period is controlled by the Alarm Receiving Centre (ARC).

37: Daytime Tamper Communication

This command defines how the control unit reports tamper indications (for example, an attempt to open a control unit or keypad case) while the alarm system is unset.

Option

- 0 Internal sounder only (default).
- 1 Internal sounder and communication of tamper indication to the Alarm Receiving Centre (ARC).

Notes:

1. *Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) at Grade 3 requires that Command 37 is set to 1 (see notes for Command 132 on page 53).*
2. *Command 31 sets user/engineer reset for zone tampers.*
3. *Command 38 sets user/engineer reset for system tampers.*
4. *Command 58 sets user/engineer reset for system tampers.*

38: System Tamper User/Engineer Reset

This command defines how to reset the control unit after a tamper alarm (for example, an attempt to open a control unit or keypad case).

To require an engineer reset, select option 1 (the default). To permit a user reset (provided that no tamper circuit is open), select option 0.

Note: This facility is independent of the options selected in Commands 31 and 33.

39: Level/Partition A Exit Mode

Use this command to select the exit mode for Full Set or Partition A. The keypads give a double "beep" confirmation tone at the end of all setting modes, including Silent Set. The default is option 0, Timed.

In a single system, the options are:

Option

- 0 Timed. Use this option if the system sets after an exit time selected using Command 44. If an Exit Terminate button is fitted, the user may use it to shorten the exit time.
- 1 Terminated. Use this option if the user completes setting the system by pushing an Exit Terminate button connected to a keypad. The exit time is infinite in this option. The system sets 7–12 seconds after the completed action; the delay is set with Command 182 (see page 63).
- 2 Final Door Set. Use this option to complete setting of the system by closing a door fitted with a Final Exit zone detector. The exit time is infinite in this option. The system sets 7–12 seconds after the completed action; the delay is set with Command 182 (see page 63).
- 3 Lock Set. To use this option, you must install a lock switch and connect its contacts to the ET terminals of a keypad (refer to the *9x5x Installation Guide*). This facility is available on keypad software version 1.4.2 onwards. See the notes below for more information.

In a partitioned system, the options are:

Option

- 0 Timed. Use this option if the system sets after an exit time selected using Command 44. If an Exit Terminate button is fitted, the user may use it to shorten the exit time.
- 1 Terminated. Use this option if the user completes setting the system by pushing an Exit Terminate button connected to a keypad. The exit time is infinite in this option. The system sets 7–12 seconds after the completed action; the delay is set with Command 182.
- 2 Final Door Set. Use this option to complete setting of the system by closing a door fitted with a Final Exit zone detector. The exit time is infinite in this option. The system sets 7–12 seconds after the completed action; the delay is set with Command 182.
- 3 Instant Set (no exit tone). Use this option to make the system set without delay or exit tone.
- 4 Silent Set. Use this option to make the system set without an exit tone. Use Command 44 to program the exit time.
- 5 Lock Set. To use this option, you must install a lock switch and connect its contacts to the ET terminals of a keypad (refer to the *9x5x Installation Guide*). This facility is available on keypad software version 1.4.2 onwards. See the notes below for more information.

Notes on Lock Set:

1. *Do not assign the keypad to more than one partition. Do not connect more than one lock switch (or any other device) to the keypad ET terminals. In a single system, do not attempt to fit two lock switches.*
2. *To set the system, the user first enters their access code at a keypad or operates a keyswitch. The control unit starts to emit the exit tone. The exit time is infinite in this option. The user then operates the Final Exit zone and turns the key in the lock switch to "locked". The system sets 7–12 seconds after the lock switch contacts open; the delay is set with Command 182 (see page 63).*
3. *To unset the system, the user turns the lock switch to "unlocked" (which closes the contacts). The keypads start to emit a continuous tone; this is not affected by PD6662 / pr EN 50131-1: 2004, as the possession of a key indicates an authorised user. At this point, the user can lock the lock switch again without causing an alarm. When the user opens the Final Exit zone, the control unit starts the entry timer. The user completes entry by unsetting the system in the normal way.*
4. *When the user unlocks the lock switch, the control unit disables Alarm Confirmation. If the user locks the lock switch without starting the entry timer, the control unit enables Alarm Confirmation again.*
5. *If an intruder opens the Final Exit door without first unlocking the lock switch, the control unit immediately starts an unconfirmed alarm. If the intruder goes on to violate another zone and Alarm Confirmation is enabled, the control unit sends a confirmed alarm.*

40: System Auto Rearm

This command sets the number of times that the system will rearm all closed zones when the bell duration expires. If you select option 0, the system will not rearm (it will go into alarm only once). Select option 1 to rearm once, 2 to rearm twice, 3 to rearm three times or 4 to rearm every time the bell duration expires.

Use this command in conjunction with Command 35, First Circuit Lockout. If the system has rearmed, the control unit gives an audible internal alarm instead of the normal entry tone when a user enters the premises through the Entry Route.

41: Bell Delay

When an alarm occurs (for example, an intruder violates a zone), the system waits for the Bell Delay before operating the external sounder for the Bell Duration. This command sets the Bell Delay.

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that the Bell Delay does not exceed 10 minutes and that it is not used for entry alarms (see Command 26).

Option

- 0 No delay (default)
- 1 1.5 minutes
- 2 3 minutes
- 3 5 minutes
- 4 10 minutes
- 5 15 minutes
- 6 20 minutes

Note: Command 41 has no effect if Alarm Confirmation (Command 89) is enabled and any of the following applies:

External Sounder (Command 162) is set to option 0

Internal Sounder (Command 161) is set to option 0

Alarm Response Mode (Commands 47, 63, 73 and 77) does not require communications.

42: Bell Duration

When an alarm occurs (for example, an intruder violates a zone), the system waits for the Bell Delay before operating the external sounder for the Bell Duration. This command sets the Bell Duration.

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that the Bell Duration does not exceed 15 minutes.

Option

- 1 1.5 minutes
- 2 3 minutes
- 3 5 minutes
- 4 10 minutes
- 5 15 minutes (default)
- 6 20 minutes

43: Not used

Level A Entry Time has been replaced by Command 201–204.

44: Level/Partition A Exit Time

This command lets you set the Exit Time for Full Set or Partition A.

Option

- 1 10 seconds
- 2 20 seconds (default)
- 3 30 seconds
- 4 45 seconds
- 5 60 seconds
- 6 120 seconds

45: Entry/Exit Tone Volume

In a single system, this command sets the volume of the Entry/Exit tone from the internal sounder. If you select option 0, the internal sounder emits no tone. Select a value from 1 (quietest) to 9 (loudest) to set the volume (default 5). The internal sounder demonstrates the volume when you enter the digit.

Note: *In a partitioned system, this command is available only for Partition A.*

46: Tamper Alarm Response

In a single system, this command specifies which sounders the control unit will activate for a Tamper Alarm while the system is unset.

Option

- 0 Internal sounders only (default)
- 1 Keypad sounders only
- 2 Internal and keypad sounders

Note: *This command is not available in a partitioned system.*

47: Partition A Alarm Response

In a partitioned system, this command specifies which sounders the control unit will activate for an alarm.

Note: *Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires the full response, option 2 (default).*

Option

- 0 Keypad sounders only
- 1 Local alarm (internal and external sounders)
- 2 Full alarm (internal and external sounders, plus communication)

Note: *This command is not available in a single system.*

48: Lockout Keypads During Entry

This command enables you to lock keypads during entry when proximity tag readers or remote setting devices are being used to unset the system. When you lock keypads during entry, some functions are still available:

- ° Keypad PA, Fire and Medical alarms
- ° Duress Code operation
- ° User's ability to cancel false alarms or disarm the system during an alarm.

If you select option 0, the system permits all users to use all keypads during entry. If you select option 1, it locks all users out of all keypads during entry. The display shows 'abcd' for option 1 in a partitioned system to indicate that locking affects all partitions; you cannot change the partitions affected.

Note: Compliance with DD 243: 2004 (see page 83) requires that Command 48 is set to option 1 when using portable ancillary control equipment to unset the system with readers inside the premises (section 6.4.5). Otherwise (sections 6.4.2, 6.4.3, 6.4.4 and 6.4.6), set this command to Option 0.

49: Duress Code

This command selects whether the control unit supports a Duress Code (set by the master user as described in the 9x5x *User Guide*). Entering this code will cause a silent communication to be sent to the Alarm Receiving Centre (ARC) if a user is forced to unset the system by an intruder.

A duress restore is communicated on the first occasion that a normal user access code is entered after the duress code has been used.

Option

- 0 Off (default). No Duress Code.
- 1 On. Duress Code.

Note: If the duress code is disabled and then enabled again, the code previously assigned to it by the user will be lost. A new duress code must be assigned.

50: CSID Code

To enable the user to use the "Remote Reset" facility (enabled with Command 23), you must program the control unit as "Engineer Reset" (Command 33 option 1) and install a four-digit Central Station Identification (CSID) code:

1. Contact the Alarm Receiving Centre (ARC) and obtain the CSID code.
2. Ensure that the system is in installer mode.
3. Select Command 50 and enter the four-digit CSID code.

The control unit now contains the same CSID code as the ARC and can use this to generate a four-digit reset code that will be recognised by the ARC 7300 Remote Reset decode programmer.

After an alarm, the user keys in their access code to silence the alarm but cannot reset the system. The system generates the reset code and displays it on the keypad. The user calls the ARC and reports the reset code. The ARC verifies the user's identity and then enters the reset code into the 7300 programmer, which generates an anti-code. The ARC gives the anti-code to the user, who keys it into the keypad to reset the system.

Note: To delete a CSID code, key in "0000" over the existing code.

51: Set Time and Date

The system has an internal clock/calendar, which it uses to record the time and date of events in the log. This command sets the current time and date in the clock/calendar. The system displays the date first: enter the day, month and year in turn, each as two digits. The system then displays the time: enter the hours and minutes in turn, each as two digits (using the 24-hour clock).

52: Omit Alarm

This command specifies whether, when a user omits a zone, the control unit omits the tamper contacts as well as the alarm contacts.

Option

- 0 The control unit omits alarm contacts only.
- 1 The control unit omits both alarm and tamper contacts.

*Note: To permit the user to omit a zone, you must set attribute **X4** for the zone.*

53: Abort User/Engineer Reset

This command specifies how the system is reset after an aborted alarm.

Option

- 0 Use the reset option selected for the system with Command 33 (default).
- 1 Permit the user to reset after an abort.

54: Supervision Time

Radio zones are supervised. If they do not communicate for a certain time, the control unit reacts in the way selected with Command 55. The time is based on the supervision period of the radio detector used in the zone, which depends on the model as shown in the following table. The model number is usually shown on a label affixed to the PCB inside the detector.

Long period (29 minutes)	Short period (4 minutes)
1715REUR-00	1715REUR-02
715REUR-00	715RB-00
715RUK-00	715REUR-02
719REUR-00	715REUR-01
735REUR-00	719RB-00
	719REUR-02
	719REUR-01
	735RB-00
	735REUR-02
	735REUR-03
	735REUR-01
	RST15RDK-00
	RST19RDK-00
	RST35RDK-00
	all 734R models
	735REUR-50
	all 714R models
	all 738R models
	all 739R models
	all 7525R models

Command 54 specifies whether the control unit uses slow or fast supervision, which determines how quickly it reacts to losing contact with a radio zone. It will never take more than two hours to react to a supervision failure.

Option

- 0 Supervision time slow.
- 1 Supervision time fast (default).

If the system uses **any** radio detectors with long supervision periods, select option 0.

If the system uses **only** radio detectors with short supervision periods, you can select either option. However, selecting option 1 will cause the control unit to react to a loss of contact after only about 15 minutes.

Note:

1. *Compliance with PD 6662 / prEN 50131-1: 2004 Grades 1 and 2 (see page 85) requires option 1.*
2. *PD 6662 / prEN 50131-1: 2004 Grade 3 does not permit radio zones.*

55: Supervision Response

This command specifies how the control unit responds to a reported supervision failure (as described in Command 54).

Option

- 0 Supervision response: tamper (default)
- 1 Supervision response: alarm
- 2 Supervision response: fault
- 3 Supervision response: silent

Note: Compliance with PD 6662 / prEN 50131-1: 2004 Grades 1 and 2 (see page 85) requires option 0. Grade 3 does not permit radio zones.

The response depends on whether the system is set or unset, as well as on the option selected. The following table shows the possible variations.

Panel UNSET

Option	0	1	2	3
Lights Alert lamp	Yes	Yes	Yes	Yes
Emits fault tone	Yes	Yes	Yes	No
Starts internal sounder	Yes	No	No	No
Starts external sounder	No	No	No	No
Sends to ARC (EN 50131-1)	Tamper	None	None	None
Sends to ARC (other)	Supervision Fault	None	None	None
Records in event log	Supervision Fault + Tamper	Supervision Fault	Supervision Fault	Supervision Fault

Panel SET

Option	0	1	2	3
Lights Alert lamp	No	No	No	No
Emits fault tone	No	No	No	No
Starts internal sounder	Yes	Yes	No	No
Starts external sounder	Yes	Yes	No	No
Sends to ARC (EN 50131-1)	Tamper	Alarm	Supervision Fault	Supervision Fault
Sends to ARC (other)	Supervision Fault	Supervision Fault	None	None
Records in event log	Supervision Fault + Tamper	Supervision Fault + Alarm	Supervision Fault	Supervision Fault

56: Number of Digits in Access Codes

The control unit can use either four-digit or six-digit access codes. Select option 0 for four-digit access codes and option 1 for six-digit access codes.

Changing code length causes the system to revert to factory defaults for all access codes; four-digit defaults are 1234 (user) and 7890 (engineer), six-digit defaults are 123456 (user) and 567890 (engineer).

Note: Compliance with PD 6662 / prEN 50131-1: 2004 Grades 2 and 3 (see page 85) require option 1; this applies even if you are using proximity tags because the installer and master user will still use access codes. Grade 1 permits either option.

57: Battery Load Test (not 9751)

This command specifies whether the control unit should load test its backup battery. If the battery fails a test, the control unit reports the failure to the central station; it also emits a regular short tone through the keypad sounders and shows the message "Batt Load Fail" on the keypad display.

Option

- 0 Do not load test the battery (default).
- 1 Load test the battery when the system is unset or 23 hours after the last battery test (whichever comes first).

Note: Compliance with PD 6662 / prEN 50131-1: 2004 Grade 3 (see page 85) requires option 1. Grades 1 and 2 permit either option.

58: Day Tamper User/Engineer Reset (not 9751)

To require an engineer to reset a tamper indication while the system is unset, select option 1. To permit a user to reset a tamper indication in this situation, select option 0 (the default). Irrespective of this setting, the user can continue to set and unset the system while a tamper indication is being displayed.

Notes:

1. *Command 58 was originally used to achieve BVVO compliance.*
2. *Use Command 38 to allow a user reset after a system tamper alarm.*

59: External Sounder Tamper

This command specifies which one of two tamper arrangements is used to connect the control unit to the external sounders. Select the appropriate option for the sounder fitted to the system.

Option

- 0 Tamper return uses negative voltage (default).
- 1 Tamper return is terminated with a 2k2 resistance.

60: Level B Final Exit Operation

In a single system, this command specifies how the system treats Final Exit zones during part set B. If you select option 0 (the default), Final Exit zones included in Level B continue to act as Final Exit zones during part set B. If you select option 1, these zones act as Normal Alarm zones during part set B.

Note: This command is not available in a partitioned system.

61: Level B Entry Route Operation

In a single system, this command specifies how the system treats Entry Route zones during part set B. If you select option 0 (the default), Entry Route zones included in Level B continue to act as Entry Routes during part set B. If you select option 1, these zones act as Final Exit zones during part set B.

Note: This command is not available in a partitioned system.

62: Level/Partition B Exit Mode

This command sets the exit mode for Level or Partition B. The keypads give a double "beep" confirmation tone at the end of all setting modes, including Silent Set. The default is option 0, Timed.

In a single system, the options are:

Option

- 0 Timed. The keypad sounders and any internal sounders give a low tone during exit of Level B. Use Command 65 to select the exit time.
- 1 Instant Set (no exit tone). Use this option to make the system set without delay or exit tone.
- 2 Silent Set. Use this option to make the system set without an exit tone. Use Command 65 to program the exit time.
- 3 Makes the Level B exit mode the same as Level A.

2. Programming Commands

In a partitioned system, the options are:

Option

- 0 Timed. Use this option if Partition B sets after an exit time selected using Command 65. If an Exit Terminate button is fitted, the user may use it to shorten the exit time.
- 1 Terminate. Use this option if the user completes setting the partition by pushing an Exit Terminate button connected to a keypad. The exit time is infinite in this option.
- 2 Final Door Set. Use this option to complete setting the partition by closing a door fitted with a Final Exit zone detector. The exit time is infinite in this option.
- 3 Instant Set (no exit tone). Use this option to make the system set without delay or exit tone.
- 4 Silent Set. Use this option to make the system set without an exit tone. Use Command 65 to program the exit time.
- 5 Lock Set. See Command 39 on page 20 for an explanation.

63: Level/Partition B Alarm Response

This command sets the alarm response for Level or Partition B.

In a single system, the options are:

Option

- 0 Keypad sounders only.
- 1 Internal sounders and keypad sounders (default).
- 2 Local alarm (internal and external sounder only).
- 3 Full alarm (communication and internal/external sounders).

In a partitioned system, the options are:

Option

- 0 Keypad sounders only.
- 1 Local alarm (internal and external sounder only).
- 2 Full alarm (communication and internal/external sounders) (default).

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 63 is set to option 2 in a partitioned system.

64: Not used

Level B Entry Time has been replaced by Command 201–204.

65: Level/Partition B Exit Time

This command sets the Exit Time for Level or Partition B.

Option

- 1 10 seconds
- 2 20 seconds (default)
- 3 30 seconds
- 4 45 seconds
- 5 60 seconds
- 6 120 seconds

66: Forbikobler Keypads and Partitions

If you created a partitioned system during initial power up, this command enables you to assign individual Forbikobler keypads to those partitions. By default, all Forbikobler keypads belong to all partitions.

Note: Command 32 is used to assign ordinary keypads to partitions.

67: Forbikobler Approved

This command specifies whether the Forbikobler system should operate in an approved manner (user codes only) or a non-approved manner (proximity tags and user codes).

Option

- 0 Non-approved
- 1 Approved (default)

68: Forbikobler Door Timer

This command sets the time that the Forbikobler system allows for entry to the building (not the time needed to unset the system). During this period, an optional output is activated to operate an electromechanical lock on the door.

Option

- | | |
|----------------------------|--------------------|
| 0 2 seconds | 5 20 seconds |
| 1 3 seconds | 6 30 seconds |
| 2 4 seconds | 7 60 seconds |
| 3 5 seconds (default) | 8 120 seconds |
| 4 10 seconds | 9 255 seconds |

69: Forbikobler Door Locking

This command specifies whether the door controlled by the Forbikobler system is normally unlocked while the system is reset or opened only for a controlled time. Even if the door is normally unlocked, it can be locked with a user command if required.

Option

- 0 Lock Timed (default)
- 1 Lock Toggled

70: Level C Final Exit Operation

In a single system, this command specifies how the system treats Final Exit zones during part set C. If you select option 0 (the default), any Final Exit zones in Level C continue to act as Final Exit zones during part set C. If you select option 1, these zones act as Normal Alarm zones during part set C.

Note: This command is not available in a partitioned system.

71: Level C Entry Route Operation

In a single system, this command specifies how the system treats Entry Route zones during part set C. If you select option 0 (the default), any Entry Route zones in Level C continue to act as Entry Routes during part set C. If you select option 1, these zones act as Final Exit zones during part set C.

Note: This command is not available in a partitioned system.

72: Level/Partition C Exit Mode

This command sets the Exit Mode for Level or Partition C. The keypads give a double "beep" confirmation tone at the end of all setting modes, including Silent Set. The default is option 0, Timed.

In a single system, the options are:

Option

- 0 Timed. The keypad sounders and any internal sounders give a low tone during exit of Level C. Use Command 75 to select the exit time.
- 1 Instant Set (no exit tone). Use this option to make the system set without delay or exit tone.
- 2 Silent Set. Use this option to make the system set without an exit tone. Use Command 75 to program the exit time.
- 3 Makes the Level C exit mode the same as Level A.

In a partitioned system, the options are:

Option

- 0 Timed. Use this option if Partition C sets after an exit time selected using Command 75. If an Exit Terminate button is fitted, the user may use it to shorten the exit time.
- 1 Terminate. Use this option if the user completes setting the partition by pushing an Exit Terminate button connected to a keypad. The exit time is infinite in this option.
- 2 Final Door Set. Use this option to complete setting the partition by closing a door fitted with a Final Exit zone detector. The exit time is infinite in this option.
- 3 Instant Set (no exit tone). Use this option to make the system set without delay or exit tone.
- 4 Silent Set. Use this option to make the system set without an exit tone. Use Command 75 to program the exit time.
- 5 Lock Set. See Command 39 on page 20 for an explanation.

73: Level/Partition C Alarm Response

This command sets the Alarm Response for Level or Partition C.

In a single system, the options are:

Option

- 0 Keypad sounders only.
- 1 Internal sounders and keypad sounders (default).
- 2 Local alarm (internal and external sounder only).
- 3 Full alarm (communication and internal/external sounders).

In a partitioned system, the options are:

Option

- 0 Keypad sounders only.
- 1 Local alarm (internal and external sounder only).
- 2 Full alarm (communication and internal/external sounders) (default).

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 73 is set to option 2 in a partitioned system.

74: Not used

Level C Entry Time has been replaced by Command 201–204.

75: Level/Partition C Exit Time

This command sets the Exit Time for Level or Partition C.

Option

- 1 10 seconds
- 2 20 seconds (default)
- 3 30 seconds
- 4 45 seconds
- 5 60 seconds
- 6 120 seconds

76: Level/Partition D Exit Mode

This command sets the Exit Mode for Level or Partition D. The keypads give a double "beep" confirmation tone at the end of all setting modes, including Silent Set. The default is option 0, Timed.

In a single system, the options are:

Option

- 0 Timed. The keypad sounders and any internal sounders give a low tone during exit of Level D. Use Command 79 to select the exit time.
- 1 Instant Set (no exit tone). Use this option to make the system set without delay or exit tone.
- 2 Silent Set. Use this option to make the system set without an exit tone. Use Command 79 to program the exit time.
- 3 Makes the Level D exit mode the same as Level A.

In a partitioned system, the options are:

Option

- 0 Timed. Use this option if Partition D sets after an exit time selected using Command 79. If an Exit Terminate button is fitted, the user may use it to shorten the exit time.
- 1 Terminate. Use this option if the user completes setting the partition by pushing an Exit Terminate button connected to a keypad. The exit time is infinite in this option.
- 2 Final Door Set. Use this option to complete setting the partition by closing a door fitted with a Final Exit zone detector. The exit time is infinite in this option.
- 3 Instant Set (no exit tone). Use this option to make the system set without delay or exit tone.
- 4 Silent Set. Use this option to make the system set without an exit tone. Use Command 79 to program the exit time.
- 5 Lock Set. See Command 39 on page 20 for an explanation.

77: Level/Partition D Alarm Response

This command sets the Alarm Response for Level or Partition D.

In a single system, the options are:

Option

- 0 Keypad sounders only.
- 1 Internal sounders and keypad sounders (default).
- 2 Local alarm (internal and external sounder only).
- 3 Full alarm (communication and internal/external sounders).

In a partitioned system, the options are:

Option

- 0 Keypad sounders only.
- 1 Local alarm (internal and external sounder only).
- 2 Full alarm (communication and internal/external sounders) (default).

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 77 is set to option 2 in a partitioned system.

78: Not used

Level D Entry Time has been replaced by Command 201–204.

79: Level/Partition D Exit Time

This command sets the Exit Time for Level or Partition D.

Option

- 1 10 seconds
- 2 20 seconds (default)
- 3 30 seconds
- 4 45 seconds
- 5 60 seconds
- 6 120 seconds

Note: In a single system, you cannot change the operation of Final Exit and Entry Route zones assigned to Level D as you can with Levels B and C (see Commands 60, 61, 70 and 71). For this reason, Cooper Security recommends that you use Level D for simple applications only.

80: Forbikobler Chime

This command links the bell push on the Forbikobler keypad to the Chime on the system, so that pressing the bell operates the sounders.

Option

- 0 Off. Pressing the bell push does not operate the sounders (default).
- 1 On. Pressing the bell push operates the sounders.

81 to 84: Output n Type

These commands, along with Commands 215 to 218, select types for the control unit's panel outputs. They take two digits to select the type (see below) and have the following defaults:

Command	Output	Control unit	Default outputs
81	1	All	00 Bell
82	2	All	08 Strobe
83	3	All	03 Set Latch
84	4	9853	04 Shock Sensor Reset
215	5	9853	15 Set Complete
216	6	9853	16 Unset Complete
217	7	9853	38 All Fault
218	8	9853	01 EE Follow

Notes:

1. Commands 84 and 215-218 apply only to the 9853, as only it has more than three outputs.
2. The panel outputs can be tested using Command 91 (page 73).

Option

- 00 Bell: active during an alarm. Use Command 41 to set Bell Delay and 42 to set Bell Duration. In a partitioned system, this type is activated when any partition is in alarm. If Alarm Confirmation (Command 89) is enabled, use Command 162 to set whether the bell is sounded on the first or confirmed alarm.
- 01 EE Follow: active when Entry or Exit Time starts and inactive when the time expires or is terminated. The output can be used for a separate Entry/Exit buzzer. It will not give a tone during part set if the exit mode is silent set or instant set.
- 02 Armed Lamp: active continuously while the system is full or part set.
- 03 Set Latch: active when the system is set and inactive when the system is unset or an alarm condition occurs. It is active for one second when a reset is performed or the control unit leaves installer mode. It is also active during Walk Tests.
- 04 Shock Reset: used to reset shock sensors (for example, the "Viper"). The output is triggered by the control unit at the start of the Exit Time and remains active for five seconds.

- 05 Walk Test: active during both engineer and user Walk Tests and during the time between silencing and resetting the system. It is used on movement detectors that are able to switch off the Walk Test lamp in any state other than a Walk Test.
- 06 Ready Lamp: active when the system is unset and if there are no faults. It is inactive when the system is full or part set, during any alarm or if a circuit fault prevents setting. It is also active when the control unit is in installer mode.
- 07 24-hour Alarm: activated when a zone designated as 24-hour is violated and deactivated when the system is disarmed.
- 08 Strobe: activated during an alarm and deactivated when the system is disarmed.
- 09 Smoke Reset: designed to be connected to low-voltage smoke detector reset terminals. It is active for 3 seconds when the system is reset after an alarm.
- 10 Siren Test: activated when the user performs a sounder test.
- 11 Strobe Set A: active for 10 seconds after the system (or any partition) is set. It can be used to operate the Strobe output to give a visual indication that the system has completed setting.
- 12 Pulse Set 1: active for the time set by Command 170 when someone sets the system (same as type 26).
- 13 Pulse Unset 1: active for the time set by Command 172 when someone unsets the system and during a Fire alarm or PA (same as type 30).
- 14 Alarm Confirm: active during a confirmed alarm.
- 15 Set Complete: active for 10 seconds after someone sets the system.
- 16 Unset Complete: active for 10 seconds after someone unsets the system or disarms it after an alarm.
- 17 System Alarm: activated when the control unit raises a System Alarm.

In a partitioned system, the following options (18-25) are also available:

- 18 Bell Partition A: active when an alarm occurs in Partition A.
- 19 Bell Partition B: active when an alarm occurs in Partition B.
- 20 Bell Partition C: active when an alarm occurs in Partition C.
- 21 Bell Partition D: active when an alarm occurs in Partition D.
- 22 Strobe Set A: active for 10 seconds after Partition A is set.
- 23 Strobe Set B: active for 10 seconds after Partition B is set.
- 24 Strobe Set C: active for 10 seconds after Partition C is set.
- 25 Strobe Set D: active for 10 seconds after Partition D is set.

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- 26 Pulse Set 1: active for time set by Command 170.
- 27 Pulse Set 2: active for time set by Command 170.
- 28 Pulse Set 3: active for time set by Command 170.
- 29 Pulse Set 4: active for time set by Command 170.
- 30 Pulse Unset 1: active for time set by Command 172.
- 31 Pulse Unset 2: active for time set by Command 172.
- 32 Pulse Unset 3: active for time set by Command 172.
- 33 Pulse Unset 4: active for time set by Command 172.
- 34 Fire: active during a Fire alarm.
- 35 PA: active during a PA.
- 36 Set Fail: active for 60 seconds from when a set command fails.
- 37 General Fault: active for all faults except AC Fail, Anti-Mask, Battery Fault, Line Fault, Supervision Fail, Zone AC Fail, Zone Battery Fault and Zone Low Battery.
- 38 All Fault: active for all faults (including AC Fail, Anti-Mask, Aux DC, Battery Load Test Fail, Battery Missing, Comms Fail, Jamming, Keypad Ident Fail, Line Fail, Low Battery, Pluggy Fail, RF Low Battery, Supervision Fail, Telecommand Low Battery, uCom Fail, Zone AC Fail, Zone Battery Fault, Zone Fault, Zone Low Battery and Zone Pwr O/P).

85: Burglar Communication Rarm

This command determines what happens to the "burg" communications output (or channel) at the end of the bell run time.

Option

- 0 Latched (default). The output stays active until an engineer or user resets the system.
- 1 Rarm. The system turns off the "burg" channel when the bell run time has expired. Once the channel is inactive, the system is ready to report any new alarm.

Note: If Alarm Abort is enabled (Command 36, option 1), the "burg" channel restores if the user unsets the system.

86: Not used

This command has been replaced by the changed Command 29.

87: Keypad Dual Key Alarms

This command enables users to raise an alarm by pressing two keys on the keypad at the same time. Three types of alarms are available, each of which can be enabled or disabled independently. The default is disabled (option 0).

Alarm type	Key combination	Disable	Enable
PA	1 and 3	0	1
Medical	4 and 6	0	1
Fire	7 and 9	0	1

Press A and B to scroll up and down through the types (PA, FI and MD).

Notes:

1. Selecting option 1 also enables any PAs connected to 9928 keyswitch interfaces or to 9940 keypads.
2. Compliance with DD243: 2004, which relates to the ACPO Security Systems Policy 2004, requires that dual key PA is disabled (option 0).

88: Anti-Mask Mode (9853 only)

When using the three-resistor wiring method for anti-masking, the three possible signals from a detector are interpreted in combination:

Event	Signal		
	Alarm	Tamper	Fault
None	N	N	N
Intrusion	Y	N	N
Tamper	any	Y	any
Fault	N	N	Y
Masking	Y	N	Y

This command determines whether a resistance value of 4.4kΩ (resulting from a Fault signal alone) is reported as Mask or Fault. If the detectors with anti-masking outputs in the system can report faults, select option 1; if they cannot, select option 0. For information on three-resistor anti-mask wiring, refer to the *9x5x Installation Guide*.

All detectors with anti-masking outputs used in the system must work in the same way (either all report faults or none report faults). If no detectors with anti-masking outputs are fitted, this command has no effect.

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Option

- 0 Masking (default). Resistance values of both 4.4kΩ and 9.1kΩ are reported as Masking detected.
- 1 Masking and Fault. A resistance value of 4.4kΩ is reported as a Fault and 9.1kΩ is reported as Masking detected.

Note:

- 1. *Using three-resistor anti-mask wiring requires that Command 21 is set to one of the Fully Supervised Loop options (2 or 3).*
- 2. *Compliance with PD 6662 / prEN 50131-1: 2004 Grade 3 (see page 85) requires that detectors can report faults and that Command 88 is set to 1.*

89: Alarm Confirmation

Use this command to select if alarms are confirmed and, if so, how this is done. Your local Police Intruder Alarms Policy may require alarms to be confirmed.

Option

- 0 None: alarm is communicated when one zone is activated (default outside the UK).
- 1 UK (DD 243): alarm is not communicated until a second zone is activated within 30 minutes of the first (default in the UK).
- 2 2Zn: alarm is communicated when any two zones are activated at any time while the system is set.

Note:

- 1. *Compliance with DD 243: 2004 (see page 83) requires that Command 89 is set to option 1.*
- 2. *Activating entry zones during the entry time will not cause or confirm an alarm.*

90: Event Log

For information on this command, see page 69.

91 to 96: Testing Outputs

For information on these commands, see page 73.

97: Engineer Walk Test

For information on this command, see page 73.

98: Load Full Defaults

This command loads the original default values for all commands and selects single or partitioned operation (for more information, see page 4).

99: Leave Installer Mode

This command returns to user mode (for more information, see page 3).

100: Not used

This command is not used.

101: Call Mode

Use this command to select the call mode used by the communicator when contacting the Alarm Receiving Centre (ARC).

Option

- 0 Disabled (default). The control unit does not use any communications.
- 1 Single reporting. The control unit reports to one programmed telephone number (see Command 115) with one account number (see Command 117).

Operation: The communicator dials the number and tries to connect with the ARC. If it fails, it closes down and then tries again. It will try to connect up to 15 times.
- 2 Alternate reporting. The control unit reports to one of two programmed telephone numbers (see Commands 115 and 116), still using one account number (see Command 117).

Operation: The communicator dials the first telephone number and tries to connect to the ARC. If it fails, it closes down, dials the second telephone number and tries to connect to the ARC again. If this attempt is received and acknowledged, the system closes down and the alarm transmission is complete. If this attempt fails, the system closes down and tries again to connect to the first telephone number. The communicator tries the two numbers in turn for up to 15 times, until it has successfully called one of them.
- 3 Dual reporting. The control unit reports to two programmed telephone numbers, one each for two receivers (see Commands 115 and 116).

Operation: The communicator dials the first telephone number and tries to connect to the first ARC. If this attempt is received and acknowledged, the communicator dials the second number and tries to connect to the second ARC. If this attempt is received and acknowledged, the communicator closes down and the alarm transmission is complete. If the call to the first number fails, the communicator tries the second number. If the call to the second number fails, the communicator closes down and tries the first number again. The communicator tries the two numbers in turn for up to 15 times, until it has successfully called both of them.

Note: Dual reporting does not work with SIA or CID reporting formats.

102: Communication Fault Timeout

This command sets the period after which a communications fault times out. In earlier versions of the 9x5x series, timeouts occurred after a specified number of calls.

Option

- 0 60 seconds
- 1 120 seconds
- 2 240 seconds (default)
- 3 480 seconds

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 102 is set to option 2.

103: Reporting Type

The system supports several message formats for communications:

Option

- 0 Scancom Fast Format (FF) (default)
- 1 Contact ID (CID)
- 2 Scancom SIA Level I (SIAI)
- 3 Scancom SIA Level II (SIAII) – this does not send time and date
- 4 Scancom SIA Level 3 (SIA3)
- 5 Extended Scancom SIA Level 3 (XSIA3)
- 6 Home "beep" (Home)

Option 6, Home "beep", is not a particular message format. What it means is that the communicator dials a number and sends a "beep" down the line. This does not allow a complex message to be sent but means that the person answering the call needs no special equipment to decode the message. The number of times the communicator repeats the Home "beep" is set with Command 186. For the 9853 only, the receiver can press 5 on the telephone keypad to acknowledge the alarm and terminate the series of calls.

104: Not used

This command is not used.

105: Static Test Call

With static testing, the control unit makes test calls at fixed times or intervals; alternatively, you can use Command 108 (see page 44) to set up a dynamic test call for 24 hours after the last communication.

Note: Cooper Security recommends that you choose either Static Test Call (105) or Dynamic Test Call (108), but not both at the same time.

To disable static test calls, key in "00".

To make static test calls at a regular time, you have two options:

Ann To make a static test call at a set time every day, press A and then key in a number between 01 and 24 to select the time for the call. For example, key in "18" to program the control unit to make a call at 6.00pm every day.

Bnn To make a static test call on a set day of every month, press B and then key in a number between 01 and 28 to select the day for the call. For example, key in "22" to program the control unit to make a call on the 22nd day of every month. The call will be made at 1.00am.

To make static test call at regular intervals, you have two options:

Cnn To make a static test call every nn hours, press C and then key in a number between 01 and 24 to select the interval in hours. For example, key in "12" to program the control unit to make a call every 12 hours.

Dnn To make a static test call every nn days, press D and then key in a number between 01 and 28 to select the interval in days. For example, key in "07" to program the control unit to make a call every 7 days.

The control unit adjusts call timing by a random interval (up to 16 minutes) to ensure that the Alarm Receiving Centre (ARC) is not overwhelmed by a flood of test calls from systems that have all been set with the static test options.

Note: Compliance with PD 6662 / prEN 50131-1: 2004 Grades 1 and 2 (see page 85) requires that a test call is made within 25 hours of the last communication. Grade 3 requires the call to be within five hours. If you use static test calls, choose an appropriate interval.

106: Line Fault Response

This command sets how the control unit responds when it detects a fault on an attached telephone line. The response depends on whether the system is set or unset.

Option

- 0 Disabled. The control unit does not monitor the telephone line.
- 1 Audible (default).

If the system is unset, the control unit logs the event and the keypads emit a short audible tone every minute. Entering a valid access code silences the sounders and the keypad displays indicate a telephone line fault. The system can be set again with the line fault present.

If the system is set, the control unit logs the event but the keypads do not emit a tone or display a message. If the line is out of order when an alarm occurs, the control unit cancels any programmed Bell Delay.

Note: Compliance with the NSI recommendation requires option 1.

- 2 Silent.

If the system is unset, the control unit logs the event and the keypad displays indicate a telephone line fault (without giving any audible warning). The system may be set again with the line fault present.

If the system is set, the control unit logs the event but the keypads do not display a message. If the line is out of order when an alarm occurs, the control unit cancels any programmed Bell Delay.

107: Not used

This command is not used.

108: Dynamic Test Call

With dynamic testing, the control unit makes a test call 24 hours after the last communication, rather than at the fixed times or intervals specified for static calls with Command 105 (page 43). Select option 0 (the default) to disable dynamic test calls and option 1 to enable dynamic test calls.

Notes:

1. *Cooper Security recommends that you select either Static Test Call (105) or Dynamic Test Call (108), but not both at the same time.*
2. *Compliance with PD 6662 / prEN 50131-1: 2004 Grades 1 and 2 (see page 85) requires that a test call is made within 25 hours of the last communication, which is satisfied by Command 108. Grade 3 requires the call to be within five hours, which is not satisfied by Command 108.*

109: Three-way Calling (UK only)

To use three-way calling, you must make sure that the BT Network Services Option of "three-way calling" is available on the telephone line to which the communicator is connected.

Option

- 0 Three-way calling off (default).
- 1 Three-way calling on.

Operation: If the communicator, when triggered by the control unit, detects Off Hook or Incoming Ringing, it sends an 80ms trigger. This trigger represents the "R" or Recall button on a telephone and is interpreted by the exchange as a request for a new clean line. When the new line is available, the communicator tries to connect to the programmed receiver number.

110: Download Mode

You can program the control unit from a PC using Downloader software. The PC can be connected to the control unit using the telephone network or, for the 9752 or 9853 model, locally using a cable. This command enables you to select one of these options.

Option (not 9751)

- 0 Local (default for 9752 and 9853). Programs the control unit for a cable connection.
- 1 Remote. Programs the control unit for a telephone connection, in which case it will wait for and answer a call from the remote PC. You will need to use Commands 112 and 113 to configure the connection.

Notes:

1. *There is no option for this command on the 9751, which has no connector for a local PC: 110✓ selects Remote.*
2. *Secure Callback does not work with this command.*
3. *The control unit will exit from this command if Downloader does not call within 30 minutes. Press ✗ to exit before then.*

111: Modem Speed (9853 only)

Use this command to set the speed of the modem inside the 9853 (built-in communicator).

Option

- 0 Automatic baud selection: tries to connect at 1200 baud; if that fails, connects at 300 baud.
- 1 300 baud (default).

112: Rings to Answer

Use this command to set the number of rings for which the system waits before answering an incoming call from the remote PC.

Option

- 0 3 rings
- 1 5 rings (default)
- 2 7 rings
- 3 10 rings
- 4 15 rings
- 5 255 rings

113: Answer on One Ring

If the alarm system shares a telephone line with other equipment, use this command to instruct the control unit how to interpret one ring on the shared line.

Option

- 0 One Ring off (default). The control unit does not respond to one ring.
- 1 One Ring on. The control unit interprets one ring as a message from Downloader to expect a call within 10 to 90 seconds.
Operation: Downloader calls once, waits for one ring and then disconnects. It then waits for 10 to 90 seconds before calling again, at which time the control unit answers after the first ring.

Note: *When using One Ring mode, set the number of rings in "Rings to Answer" (Command 112) to a higher number than that used by the equipment with which the alarm system shares a line. If you do not, the other equipment will never answer any incoming calls because the control unit will answer them first.*

114: Access Mode

You may wish to impose extra security on communication between a remote PC and the control unit as, once the PC is connected, Downloader has access to all programming commands. Select option 0 (the default) to require the user to initiate communication with the remote PC. Select option 1 to accept remote calls but check the details sent by the Downloader software. Select option 2 if you do not require extra security.

Option

- 0 Callback off (Attended).

Operation: Someone must initiate a call to the remote PC manually using Command 0 in User Mode. This command calls the first Downloader Telephone Number (set with Command 118).

- 1 Callback on (Secure Callback).

Operation: When the remote PC calls, the control unit answers after a set number of rings (set with Command 112). The control unit hangs up and checks that the received control unit ID and software version are correct. If they are, it waits for a short delay and then calls the PC back using one of the Downloader Telephone Numbers programmed with Commands 118 and 119 (see page 48).

- 2 Callback any (Unattended).

Operation: When unset, the control unit answers after a set number of rings (set in Commands 112 or 113) and accepts programming instructions immediately.

Notes:

1. *Secure Callback must be disabled (default) until the first attended upload has been performed. This first upload can be carried out either using Command 110, option 1 or using Command 114, option 0.*
2. *The Downloader operator can choose to use Secure Callback, even if the control unit is programmed for Unattended.*

115 and 116: Communicator Telephone Numbers

Use these commands to enter the telephone numbers to which the communicator will report alarms. The numbers can contain up to 31 digits.

You can use the A key to insert a four-second pause, displayed as a comma (,). When a number is successfully stored, the keypad gives a double "beep".

Use of the numbers depends on the setting of Command 101 (Call Mode):

- ° Option 0 (Disabled – default): the numbers are not used.
- ° Option 1 (Single): only the first number is used (Command 115).
- ° Option 2 or 3 (Alternate or Dual): both numbers are used.

117: Account Number

With SIA formats, the control unit can report alarms using a six-digit account number. Use leading zeros to pad the account number to the correct length if necessary; for example; account 1234 would be 001234. Some European countries use letters in account numbers. The control unit accepts B, C, D, E and F ("Zone Names" on page 7 explains how to enter characters).

In a partitioned system, you can enter up to four account numbers, one for each partition. The display shows the partition to which each account number applies: PA, PB, PC and PD.

118 and 119: Downloader Telephone Numbers

Use these commands to enter the telephone numbers that the communicator will use to call the Downloader software on a remote PC (as described in the *9x5x User Guide*). The numbers can contain up to 31 digits. You can use the A key to insert a pause of four seconds, which is displayed as a comma (,). When a number is successfully stored, the keypad gives a double "beep".

Use of the numbers depends on the setting of Command 114 (Access Mode):

- ° Option 0 (Attended – default): only the first number is used (Command 118).
- ° Option 1 (Secure Callback): both numbers are used.
- ° Option 2 (Unattended): the numbers are not used.

120: Enable Third Downloader Telephone Number

Use this command to instruct the control unit to accept a callback telephone number from Downloader (independent of Commands 118 and 119). The remote PC operator keys in this number before a connection is established and then Downloader transmits it to the control unit. The control unit then uses the number to call the remote PC back.

Select option 0 (the default) to disable a third callback number. Select option 1 to enable it.

121: Not used

Fast Format Channels has been replaced by Commands 191 to 198.

122: Communication Acknowledge

This command is available only if Country is set to Ireland (Command 0, option **X1**). In addition, option 1 is effective only if Scancom Fast Format is selected (Command 103, option 0).

To enable Communication Acknowledge, select option 1. In this mode, when the communicator has called the Alarm Receiving Centre (ARC) and received an acknowledgement, the keypad displays the message "Call your CS" and emits a "beep" for 10 seconds when the system is unset or disarmed. To clear the display, the user must enter a valid access code.

If Fast Format communications are programmed with Channel 3 for burglary (using Command 193), the control unit adds a 20-second delay before making an alarm call.

To disable Communication Acknowledge, select option 0 (the default).

123: Report Restores

This command is effective only if Scancom Fast Format is selected (Command 103, option 0).

Option

- | | |
|---|--|
| 0 | Restore off (default). The system does not communicate restores. |
| 1 | Restore on. The system communicates restores. |

124: Reverse Open/Closed

Note: This command is normally set to option 1 in France.

Selecting option 1 reverses the sense of the Open/Close Fast Format channel. It is effective only if Scancom Fast Format is selected (Command 103, option 0) and does not affect the separate Open and Close channels.

	Option 0 (default)	Option 1
On setting system	code 4	code 2
On unsetting system	code 2	code 4

125: No Close Signal (not 9751)

Note: This command is required for Belgian approval.

This command is effective only if Scancom Fast Format is selected (Command 103, option 0). When option 1 is selected, the control unit does **not** transmit a Close signal if the user has omitted two or more zones. The default is option 0.

126: Select Language

The control unit can display messages on the keypads in several languages.
Select option for the language you wish to use:

- | | | | |
|---|-------------------|----|-------------------|
| 0 | English (default) | 6 | Deutsch (German) |
| 1 | Italian | 7 | Norsk (Norwegian) |
| 2 | Espanol (Spanish) | 8 | Svenska (Swedish) |
| 3 | Port (Portuguese) | 9 | Dansk (Danish) |
| 4 | Nederl (Dutch) | x1 | Suomi (Finnish) |
| 5 | Francai (French) | | |

Note: This overrides the default language loaded when the Country is selected with Command 0.

127: Not used

This command is not used.

128: Not used

This command has been replaced by Command 55.

129: Telecommand Requires Entry for Unset

If the system is fitted with a radio expander, the user can use a telecommand (remote setting device) to set and unset the system from outside the building. This command provides two options for unsetting with a telecommand:

Option

- 0 The user must first trigger the entry zone and start the entry timer before unsetting the system with a telecommand (default).
- 1 The user can unset the system using a telecommand without first starting the entry timer by triggering the entry zone.

Note: To conform to UK Class VI radio requirements, set Command 129 to option 0 and select Final Door Set with the appropriate command for the level or partition (Command 39, 62, 72 or 76). This prevents users from unsetting the system from outside the building.

130: Not used

This command is not used.

131: SIA Report Mode

SIA reports are called telegrams. Each telegram contains the site identification number (normally six digits) and relevant event information. The amount of information reported depends on the SIA mode that you select: Basic, Summary, Intermediate or Full. The following table shows the types of report for each mode; use this to decide which mode is appropriate for the installation. Each mode also contains all the reports in the mode above it.

Option

- 0 Basic (default)
- 1 Summary
- 2 Intermediate
- 3 Full

The system also provides a "custom" mode, which allows any combination of event information, but you have to use Downloader to create the required combination.

Note: The control unit delays reporting/logging either mains loss, or exiting engineering with mains loss, by 15-18 min (chosen at random). The control unit delays reporting/logging either mains restore, or exiting engineering with mains restored, by 60-90 sec (chosen at random). If you select a Scandinavian default in Command 0, the control unit waits at least 60 minutes before reporting.

BASIC

Event	SIA Code	CID Code
ALARM CONFIRM	BV	139
BURG	BA	130
BURG RESTORE	BR	130‡
DURESS	HA	121
DURESS RESTORE	HR	121‡
EXIT TIMEOUT	EA	-
EXPANDER TAMPER	TA	137
EXPANDER TAMPER RESTORE	TR	137‡
FIRE	FA	110
FIRE RESTORE	FR	110‡
FORBI INTERFACE TAMPER	TA	137
FORBI INTERFACE TAMPER RESTORE	TR	137‡
FORBI LOOP TAMPER	TA	137
FORBI LOOP TAMPER RESTORE	TR	137‡
FORBI TAMPER	TA	137
FORBI TAMPER RESTORE	TR	137‡
GLOBAL TAMPER	TA	137
GLOBAL TAMPER RESTORE	TR	137‡
KEYBOX OPEN	BA	150
KEYBOX CLOSED	BR	150‡

2. Programming Commands

KEYPAD MEDICAL	MA	100
KEYPAD FIRE	FC	110
KEYPAD PA	HA	120
LID TAMPER	TA	137
LID TAMPER RESTORE	TR	137‡
MAN TRIGGER TEST REPORT	RX	601
PANIC	PA	120
PANIC RESTORE	PR	120‡
PERIODIC TEST REPORT	RP	602
SENSOR TAMPER	TA	137
SENSOR TAMPER RESTORE	TR	137‡
SMOKE DETECTOR	FA	111
SMOKE DETECTOR RESTORE	FR	111‡
BELL TAMPER	TA	137
BELL TAMPER RESTORE	TR	137‡
SUPERVISION FAIL	BZ	381
TA (Technical alarm)	UA	150
TA RESTORE	UR	150‡
TAMPER KEYPAD	TA	137
TAMPER KEYPAD RESTORE	TR	-
TELCO1 FAULT	LT	351
TELCO1 FAULT RESTORE	LR	-
ZONE OMIT	BB	573

SUMMARY

Event	SIA Code	CID Code
AC LOST	AT	301
AC RESTORE	AR	301‡
ALARM ABORT	BC	406
ANTI MASK ZONE OPEN (see note below)	BT	380
ANTI MASK ZONE TAMPER (see note below)	BT	380
ANTI MASK ZONE RESTORED (see note below)	BJ	380
AUX TROUBLE	YP	-
AUX RESTORE	YQ	-
BATT MISSING	YM	311
BATT RESTORED	YR	311‡
LOW BATT	YT	311
LOW BATT RESTORE	YR	311‡
PARTITION RESET	OR	305
RESET	OR	305

INTERMEDIATE

Event	SIA Code	CID Code
ARM	CL	401
DISARM	OP	401

KEYSWITCH DISARM	OS	409
KEYSWITCH ARM	CS	409
FULL		
Event	SIA Code	CID Code
DOWNLOAD SUCCESS	RS	412
EXPANDER MISSING	TA	137
EXPANDER MISSING RESTORE	TR	137‡
FORBI MISSING	TA	137
FORBI MISSING RESTORE	TR	137‡
JAMMING	XQ	380
PASSWORD DEFAULTS LOADED	RH	-
PROG MODE START	LB	627
PROG MODE END	LS	628
TD (Time and day) RESET	JT	625
TX BATTERY TROUBLE	XT	384
USER CODE CHANGED	JV	-
USER CODE DELETED	JX	-

Notes:

1. *If Command 143, option 1 is selected, all messages with a CID Code are sent. If option 0 is selected, the restores marked with ‡ are not sent.*
2. *The control unit logs an Anti-Mask event to the zone number one below that assigned the Anti-Mask type. See page 8 for an explanation of the Anti-Mask zone type.*

132: Send Tampers as Burglary

Some Alarm Receiving Centres (ARCs) experience problems if a control unit sends "restore" messages using SIA, wrongly interpreting them as "user restores". When using SIA reporting, Command 132 enables you to program the control unit to send tampers as alarms.

Option

- 0 The control unit sends all SIA messages as specified in Command 131 (default).
- 1 For full alarm response, the control unit sends tampers as burglary (BA) and sends Contact ID 130 in place of Contact ID 137.

Notes:

1. *Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) at Grade 3 requires that Command 132 is set to 1.*
2. *If Command 132 is set to 0, Command 37 must also be set to 0.*
3. *Fast Format and plug-by outputs send tampers as alarms only if no tampers are allocated using Commands 151-158, 191-198, 211-218. As the default settings do not include tamper allocations, the normal operation of these outputs is to send tampers as alarms.*

133: Do not Send SIA Restores

Use this command to stop the system sending SIA restore messages.

Option

- 0 SIA Restores Off (default). System does not send SIA restore messages: FR (Fire Restore), PR (Panic Restore), UR (Technical Restore), BR (Burglary Restore) or TR (Tamper Restore).
- 1 SIA Restores On. System sends SIA restore messages.

134: AC Fail User/Installer Reset

Use this command to determine how AC Fail alerts are reset.

Option

- 0 No Reset Required (default). An alert is generated when the mains power supply fails and reset automatically when the supply is restored.
- 1 User Reset. An alert is generated when the mains power supply fails and can be reset by the user or installer when the supply is restored.
- 2 Installer Reset. An alert is generated when the mains power supply fails and can be cleared only by the installer when the supply is restored.

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 134 is set to 1 or 2 (Cooper Security recommends 1).

135: Line Fault User/Installer Reset

Use this command to determine how Line Fault alerts are reset.

Option

- 0 No Reset Required (default). An alert is generated when a line fault occurs and reset automatically when the fault is cleared.
- 1 User Reset. An alert is generated when a line fault occurs and can be reset by the user or installer when the fault is cleared.
- 2 Installer Reset. An alert is generated when a line fault occurs and can be cleared only by the installer when the fault is cleared.

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 135 is set to 1 or 2 (Cooper Security recommends 1).

136: Anti-Mask User/Installer Reset

Use this command to determine how Anti-Mask alerts are reset.

Option

- 0 User Reset (default). Anti-Mask alerts can be reset by the user or installer.
- 1 Installer Reset. Anti-Mask alerts can be cleared only by the installer.

137: AC Fail Override

Use this command to determine how AC Fail alerts can be overridden.

Option

- 0 Never. The user cannot override AC Fail alerts when setting the system and must first reset them. Command 134 determines how the alert can be reset.
- 1 Inactive. The user can override AC Fail alerts when setting the system, provided that the power supply has been restored.
- 2 Any (default). The user can override AC Fail alerts when setting the system.

Note: Insurance policies that are conditional on compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) may require that Command 137 is set to 1 or 2 to restrict the user's ability to override alerts.

138: Line Fault Override

Use this command to determine how Line Fault alerts can be overridden.

Option

- 0 Never. The user cannot override Line Fault alerts when setting the system and must first reset them. Command 135 determines how the alerts can be reset.
- 1 Single. The user can override a Line Fault alert when setting the system, provided that only one signalling path is faulty.
- 2 Any (default). The user can override any number of Line Fault alerts when setting the system.

Note: Insurance policies that are conditional on compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) may require that Command 138 is set to 1 or 2 to restrict the user's ability to override alerts.

139: Fault User/Installer Reset

Use this command to determine how alerts can be reset for all faults that do not have an individual reset command.

Option

- 0 User Reset (default). Fault alerts can be reset by the user or installer.
- 1 Installer Reset. Fault alerts can be cleared only by the installer.

Notes:

1. *Resets faults including AC Fail, Aux DC, Battery Load Test Fail, Battery Missing, Comms Fail, Jamming, Keypad Ident Fail, Line Fail, Low Battery, Plugby Fail, RF Low Battery, Supervision Fail, Telecommand Low Battery, uCom Fail, Zone AC Fail, Zone Battery Fault, Zone Fault, Zone Low Battery and Zone Pwr O/P.*
2. *Insurance policies that are conditional on compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) may require that Command 139 is set to 1 to restrict the user's ability to override alerts.*

140: Fault Override

Use this command to determine how alerts can be overridden for all faults that do not have an individual override command.

Option

- 0 Never (default). The user cannot override a Fault alert when setting the system.
- 1 Inactive. The user can override a Fault alert when setting the system, provided that the cause of the fault has been rectified.

Note: Overrides faults including AC Fail, Aux DC, Battery Load Test Fail, Battery Missing, Comms Fail, Jamming, Keypad Ident Fail, Line Fail, Low Battery, Plugby Fail, RF Low Battery, Supervision Fail, Telecommand Low Battery, uCom Fail, Zone AC Fail, Zone Battery Fault, Zone Fault, Zone Low Battery and Zone Pwr O/P.

141 to 142: Not used

These commands are not used.

143: Contact ID Report Restores

If the Reporting Type is set to Contact ID (Command 103, option 1), use this command to select the types of contact ID messages that will be sent.

Option

- 0 Basic: all the messages with numbers in the "CID Code" column of the table in "131: SIA Report Mode", except for those marked with an "#".
- 1 Basic + Restore (default): all the messages with numbers in the "CID Code" column of the table in "131: SIA Report Mode".

Note: If the keypad display shows "Custom" when you enter Command 143, Downloader has been used to program Contact ID Report Restores.

144 to 150: Not used

These commands are not used.

151 to 158: Plug-by Communicator Outputs

These commands select types for the control unit's programmable outputs, which can be used to control a plug-by communicator. All models provide eight programmable outputs on the main circuit board and there is an optional expansion for the 9853 that adds four more (see Commands 211 to 214 on page 68). The outputs can be connected to the communicator by a wiring harness provided with the control unit (refer to the 9x5x *Installation Guide* for details). The commands take two digits to select the type (23-26 apply to a partitioned system only) and have the following defaults:

Command	Output	Default type
151	1	01 Fire
152	2	02 PA
153	3	03 Burglar
154	4	04 Open/Close
155	5	15 Zone Omitted
156	6	05 Alarm Abort
157	7	07 Alarm Confirm
158	8	06 Technical Alarm
211	9	11 AC Fail
212	10	21 Battery Fault
213	11	40 All Fault
214	12	12 Tamper Alarm

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Option

00	Not Used	21	Battery Fault
01	Fire	22	System Alarm
02	PA	23	Alarm Partition A
03	Burglar	24	Alarm Partition B
04	Open/Close	25	Alarm Partition C
05	Alarm Abort	26	Alarm Partition D
06	Technical Alarm	27	Not used
07	Alarm Confirmation	28	Not used
08	RF Low Battery	29	Not used
09	Supervision Loss	30	Pulse Set OP 1
10	RF Jamming	31	Pulse Set OP 2
11	AC Fail	32	Pulse Set OP 3
12	Tamper Alarm (day tamper)	33	Pulse Set OP 4
13	Open	34	Pulse Unset OP 1
14	Close	35	Pulse Unset OP 2
15	Zone Omitted	36	Pulse Unset OP 3
16	Medical Assistance	37	Pulse Unset OP 4
17	Key Box	38	Set Fail
18	Anti-Mask	39	General Fault (Note 2)
19	Smoke Detector	40	All Fault (Note 3)
20	Comms Acknowledge (Note 1)	41	Duress

Notes:

1. *If the control unit is using Fast Format signalling, and has sent a Burg to the Alarm Receiving Centre (ARC), the control unit activates the output pin assigned to Comms Acknowledge when the ARC returns a Comms Acknowledge signal.*
2. *General Fault is active for all faults except AC Fail, Anti-Mask, Battery Fault, Line Fault, Supervision Fail, Zone AC Fail, Zone Battery Fault and Zone Low Battery.*
3. *All Fault is active for all faults (including AC Fail, Anti-Mask, Aux DC, Battery Load Test Fail, Battery Missing, Comms Fail, Jamming, Keypad Ident Fail, Line Fail, Low Battery, Plugby Fail, RF Low Battery, Supervision Fail, Telecommand Low Battery, uCom Fail, Zone AC Fail, Zone Battery Fault, Zone Fault, Zone Low Battery and Zone Pwr O/P).*
4. *The control unit delays reporting/logging either mains loss, or exiting engineering with mains loss, by 15-18 min (chosen at random). If you select a Scandinavian default in Command 0, the control unit waits at least 60 minutes before reporting.*
5. *The plug-by outputs can be tested using Command 92 (page 73).*

159: Invert Plug-by Outputs

By default, plug-by outputs have a positive voltage when inactive and this is removed when the output is active. This command inverts that logic so that a positive voltage is applied when the output is active.

Option

- 0 +ve removed to trigger (default): the output is positive when inactive and goes to zero when active.
- 1 +ve applied to trigger: the output floats when inactive and goes positive when active.

160: Confirmed Alarm Timer

Note: Set Alarm Confirmation (Command 89) to 1 to access this command.

This command controls a timer, which starts when an alarm is triggered for the first time. If a second alarm is triggered before the timer expires, the control unit transmits a confirmed alarm to the Alarm Receiving Centre (ARC). You can set the timer to any value between 001 and 999 minutes (default 30).

Note: Compliance with DD 243: 2004 (see page 83) requires that Command 160 is set to a value of 30 to 60 minutes.

161: Internal Sounder on Confirmed or Unconfirmed Alarm

Note: Set Alarm Confirmation (Command 89) to 1 or 2 to access this command.

This command selects whether the control unit will operate the internal sounder for a confirmed alarm or for an unconfirmed alarm. In a partitioned system, the internal sounder is available only for Partition A; other partitions use keypad sounders only.

Option

- 0 Control unit operates the internal sounder for a confirmed or unconfirmed alarm (default).
- 1 Control unit operates the internal sounder only for a confirmed alarm.

Note: Compliance with DD 243: 2004 (see page 83) requires that Command 161 is set to 0.

162: External Sounder on Confirmed or Unconfirmed Alarm

Note: Set Alarm Confirmation (Command 89) to 1 or 2 to access this command.

This command selects whether the control unit will operate the external sounder for a confirmed alarm or for an unconfirmed alarm.

Option

- 0 Control unit operates the external sounder for a confirmed or unconfirmed alarm (default).
- 1 Control unit operates the external sounder only for a confirmed alarm.

Note: Compliance with DD 243: 2004 (see page 83) requires that Command 162 is set to 0.

163: Confirmed Alarm during Entry

Note: Set Alarm Confirmation (Command 89) to 1 or 2 to access this command.

This command controls how the system treats alarms that arise during entry. The options select the number of non-Entry Route zones that must be triggered to provide a confirmed alarm after the entry time.

Option

- 0 Never (default). Alarm Confirmation is disabled after entry.
- 1 One zone.
- 2 Two zones.

Notes:

1. *Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 163 is set to 0.*
2. *Compliance with DD 243: 2004 (see page 83) requires that Command 163 is not set to 1 (setting to 0 to comply with Note 1 is acceptable).*

Option 0 ensures that you will never get a confirmed alarm after the start of the entry timer. Select this to comply with DD 243 sections 6.4.2, 6.4.3, 6.4.4 and 6.4.6, which cover entry methods where:

- Unlocking the final door unsets the system.
- Unlocking the final door disables confirmation.
- Opening the entry door disables confirmation.
- The user must call the Alarm Receiving Centre (ARC) to unset the system.

Select option 2 to comply with DD243: 2004 section 6.4.5, which covers unsetting the system with an item of portable alarm communication equipment (for example, a proximity reader or telecommand).

164: User/Engineer Reset after Confirmed Alarm

Note: Set Alarm Confirmation (Command 89) to 1 or 2 and Enable Engineer Reset (Command 33) to access this command.

Use this command to select who can reset the system after a confirmed alarm.

Option

- 0 User/Engineer (default). The user can reset the system after a first alarm but an engineer is required to reset after a confirmed alarm.
- 1 User/User. The user can reset the system after both types of alarm.
- 2 Engineer/Engineer. An engineer is required to reset the system after both types of alarm.

Note: Compliance with DD 243: 2004 (see page 83) requires that Command 164 is set to (a) option 0 or 2 for sections 6.4.4 and 6.4.5 or (b) option 1 for sections 6.4.2, 6.4.3 and 6.4.6. This means that a user cannot reset the system after a confirmed alarm unless the system is unset using a keyswitch, lockswitch or by calling an Alarm Receiving Centre (ARC).

165 to 169: Not used

These commands are not used.

170 to 175: Pulse Output Programming

You can program the panel outputs to generate a pulse of a defined length when triggered by a set or unset event. Pulses of different lengths can be set for each level or partition. Commands 170 to 175 enable you to configure these pulse outputs. Press **✓** to move between the outputs within each command.

Command	Value	Default	Description
170	00* to 12	01	Specifies the length in seconds of the pulse to be generated on setting. * A value of 00 latches the output.
171	A/B/C/D	abcd	Assigns each pulse set output to one or more levels or partitions.
172	00* to 12	01	Specifies the length in seconds of the pulse to be generated on unset setting. * A value of 00 latches the output.
173	A/B/C/D	abcd	Assigns each pulse unset output to one or more levels or partitions.
174	0 (Off) or 1 (On)	On	Specifies whether each pulse unset output is activated for a Fire alarm.
175	0 (Off) or 1 (On)	On	Specifies whether each pulse unset output is activated for a PA.

2. Programming Commands

Notes:

1. Generating a pulse on an output depends both on a set or unset pulse being defined for the output and on the output being associated with a partition that is being armed or disarmed.
2. Commands 174 (Fire) and 175 (PA) activate only the Pulse Unset outputs configured with Command 172.

Example 1

In a single system, panel output 3 is to be programmed as type 12 (Pulse Set 1). It will be used to operate a locking mechanism when the whole system is set. The locking mechanism requires a 6-second pulse. The table below shows how to program the system to generate the required pulse.

Command	Value	Description
83	12	Sets panel output 3 to type Pulse Set 1.
170	Set 1 = 06	Sets the duration of Pulse Set 1 to 6 seconds.
171	Set 1 = a	Allocates Pulse Set 1 to Level or Partition A (which is the whole system in a single system).

Example 2

In a partitioned system, panel output 3 is to be programmed as type 35 (Pulse Unset 2). It will be used to operate an unlocking mechanism when Partition B is unset. The unlocking mechanism requires an 8-second pulse. The output will also be activated if there is a Fire alarm or PA, enabling people to leave the building. The table below shows how to program the system to generate the required pulse.

Command	Value	Description
83	31	Sets panel output 3 to type Pulse Unset 2.
172	Unset 2 = 08	Sets the duration of Pulse Unset 2 to 8 seconds.
173	Unset 2 = b	Allocates Pulse Unset 2 to Level or Partition B.
174	Fire 2 = On	Activates the second pulse output in a Fire alarm.
175	PA 2 = On	Activates the second pulse output in a PA.

176 to 179: Not used

These commands are not used.

180: Print Log (9853 only)

This command instructs the control unit to print the event log through the serial port on the main PCB. Selecting option 1 causes events to be printed as they occur until the mode is cancelled by selecting option 0. To print the log during testing, use Command 90, options 0 and 7, as described on page 70.

Option

- 0 Off (default). Do not print the event log.
- 1 On. Print the event log.

Note: The log is protected and cannot be erased by the Installer or a user.

181: Enable Guard Code

This command selects whether the control unit supports a Guard Code (set with Engineer Code using Command 20). A user with Guard access can unset the system but only after an alarm, which will be recorded in the event log.

Option

- 0 Off (default). No Guard Code.
- 1 On. Guard Code.

182: Set Final Exit Settling Time

This command defines a time delay to allow detectors to settle before the system sets. This may be needed if detectors are being set off by air movements caused by the final door being closed. During this period, the sounders stop and the system sets but the control unit ignores any alarms generated by the detectors.

Enter two digits to specify a time in seconds, from 07 to 12 (default is 07).

183: Set Display Line 2

This command sets the message that the control unit shows on the second line of keypad displays in user mode. Key in a message of up to 16 characters ("Zone Names" on page 7 explains how to enter characters). The default text identifies the control unit model used in the system.

184: Pulsed External Sounder for Fire

This command instructs the control unit to send a pulse to bell-type panel outputs (configured with Commands 81–84, option 00) to signal a Fire alarm. This can be used to drive the external sounders, giving a different alarm sound from the normal continuous bell tone.

Option

- 0 Off (default). Use normal two-tone Fire alarm.
- 1 On. Send a pulse to bell-type outputs in the system.

185: Keyswitch Auto Reset

This command instructs the control unit to reset automatically if the user uses the keyswitch to set the system on leaving.

Option

- 0 Off (default). User must reset manually.
- 1 On. System resets automatically when the user sets it with a keyswitch (KM or KF).

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that Command 185 is set to option 0.

186: Set Number of Home Beep Calls

This command sets the number of times that the control unit will call if Reporting Type is set to Home "beep" (Command 103, option 6). The repeated message acts as a confirmation.

Enter two digits, from 01 to 15 (default 02). The default is usually sufficient, providing one call to alert the user and a second call to confirm the alert. For the 9853 only, the user can acknowledge the call by pressing 5 on the telephone handset; this terminates the series of home "beep" calls.

Note: This command sets the number of successful calls the system makes. It does not include retries after failed communication attempts, which are built into the general protocols used to control communications.

187 to 190: Not used

These commands are not used.

191 to 198: Fast Format Channels

If Fast Format reporting is selected (Command 103, option 0), Commands 191 to 198 enable you to assign types of events to outputs. The commands take two digits to select the type (23-26 apply to a partitioned system only) and have the following defaults:

Command	Output	Default type
191	1	01 Fire
192	2	02 PA
193	3	03 Burglar
194	4	04 Open/Close
195	5	15 Zone Omitted
196	6	05 Alarm Abort
197	7	07 Alarm Confirmation
198	8	06 Technical Alarm

Option

00	Not Used	21	Battery Fault
01	Fire	22	System Alarm
02	PA	23	Alarm Partition A
03	Burglar	24	Alarm Partition B
04	Open/Close (Note 1)	25	Alarm Partition C
05	Alarm Abort	26	Alarm Partition D
06	Technical Alarm	27	Not used
07	Alarm Confirmation	28	Not used
08	RF Low Battery (Note 2)	29	Not used
09	Supervision Loss	30	Pulse Set OP 1
10	RF Jamming	31	Pulse Set OP 2
11	AC Fail	32	Pulse Set OP 3
12	Tamper Alarm (day tamper)	33	Pulse Set OP 4
13	Open (Note 1)	34	Pulse Unset OP 1
14	Close (Note 1)	35	Pulse Unset OP 2
15	Zone Omitted (Note 3)	36	Pulse Unset OP 3
16	Medical Assistance	37	Pulse Unset OP 4
17	Key Box	38	Set Fail
18	Anti-Mask	39	General Fault (Note 4)
19	Smoke Detector	40	All Fault (Note 5)
20	Comms Acknowledge	41	Duress

Notes:

1. 13 Open and 14 Close provide the same functions as 4 Open/Close, but on two separate channels.
2. The control unit sends 08 RF Low Battery when the radio detector with a low battery causes an alarm or sends a supervision signal. To enable this facility in day mode set Menu 37 to option 1.
3. 15 Zone Omitted – the control unit sends this signal for five seconds when a user omits a zone.
4. General Fault is active for all faults except AC Fail, Anti-Mask, Battery Fault, Line Fault, Supervision Fail, Zone AC Fail, Zone Battery Fault and Zone Low Battery.
5. All Fault is active for all faults (including AC Fail, Anti-Mask, Aux DC, Battery Load Test Fail, Battery Missing, Comms Fail, Jamming, Keypad Ident Fail, Line Fail, Low Battery, Pluggy Fail, RF Low Battery, Supervision Fail, Telecommand Low Battery, uCom Fail, Zone AC Fail, Zone Battery Fault, Zone Fault, Zone Low Battery and Zone Pwr O/P).
6. The control unit delays reporting/logging either mains loss, or exiting engineering with mains loss, by 15-18 min (chosen at random). If you select a Scandinavian country in Command 0, the control unit waits at least 60 minutes before reporting.

199: Display Zone Circuit Resistance

For information on this command, see page 74.

200: Forbikobler Entry Timer

This command sets the interval between a user entering the premises through a Forbikobler entrance and an alarm going off, using one of the independent entry timers configured with Commands 201 to 204. Any of the entry timers can be assigned to any Forbikobler entrance. Entering the entry code into the Forbikobler unit starts the selected entry timer.

Option

- 1 Entry Timer 1 (default)
- 2 Entry Timer 2
- 3 Entry Timer 3
- 4 Entry Timer 4

201 to 204: Entry Timers 1 to 4

Entry timers set the interval between a user entering the premises and an alarm going off. There are four independent entry timers so that you can set different intervals for different entrances, reflecting the time required to complete each entry route.

Note: These replace the level-specific timers available on earlier control units (formerly set with Commands 43, 64, 74 and 78). They provide a more flexible approach to timed entry routes, enabling any timer to be selected for any entrance.

Each entry timer can be assigned to any zone of types FE (Final Exit), ER (Entry Route) and FB (Forbikobler), using the zone programming commands 01 to **X40** (see page 7). Set zone attribute **X7** to a value between one and four to select the required entry timer. Opening the zone starts the selected entry timer.

Note: Compliance with PD 6662 / prEN 50131-1: 2004 (see page 85) requires that the Entry Timer does not exceed 45 seconds.

Option

- 1 10 seconds
- 2 20 seconds (default)
- 3 30 seconds
- 4 45 seconds
- 5 60 seconds
- 6 120 seconds

Note: By default, Entry Timer 1 is assigned to all relevant zones.

Setting Different Entry Timers for Different Entrances

Suppose that you have installed a system on a site that can be entered through a front door or through an integral garage with an internal door:

- ° When a user opens the front door, it may take only 20 seconds to step inside and enter an access code at a keypad in the lobby.
- ° In contrast, when the user drives in through the garage door and uses a remote setting device to open the external door (starting the entry timer), it may then take 120 seconds to park the car, get out, lock the car, unlock the internal door, go inside and enter an access code at the keypad.

Irrespective of levels or partitions, you can set one entry timer to 20 seconds and assign it to the front door, and set another entry timer to 120 seconds and assign it to the garage door.

To set up such a system:

1. Set Entry Timer 1 to 20 seconds: Command 201, option 2 (default).
2. Set Entry Timer 2 to 120 seconds: Command 202, option 6.
3. Set up an FE zone for the front door and use **X7** to select Entry Timer 1: for example, zone 10 with type set to 05 (FE) and attribute **X7** set to 1 (Entry Timer 1).
4. Set up an FE zone for the garage door and use **X7** to select Entry Timer 2: for example, zone 11 with type set to 05 (FE) and attribute **X7** set to 2 (Entry Timer 2).

The same principle applies equally well in any other situation where there are multiple entrances with entry routes of different lengths. Managing entry timers in this way enables you to assign the most appropriate of four intervals to each entrance, without being restricted by the way in which you have set up your levels or partitions.

Setting Entry Timers for both FE and ER Zones

Suppose that you have installed a system that uses the Final Door exit mode. In this case, the entry timer will usually be started when a user opens the final door. It might seem unnecessary to assign an entry timer to an ER zone set up inside but there are two types of situations which make it useful to do so.

1. In a house where the keypad is near the final door (for example, in the hall), the entry time for a user coming through the door and unsetting the system might be short (for example, 20 seconds). However, if the stairs from the bedrooms descend into the living room (rather than the hall) and you set up a detector there as an ER zone, users coming downstairs in the morning may need longer to reach the keypad and unset the system. Assigning a longer timer to the ER zone allows for this requirement.
2. If a final door develops a fault and has to be omitted from the system, the control unit treats ER zones as FE zones and so they need entry timers.

211 to 214: Plug-by Communicator Outputs

These commands select types for the four additional programmable outputs on the optional expansion for the 9853. For details, see Commands 151 to 158 on page 57.

215 to 218: Output n Type

These commands select types for the control unit's panel outputs. They apply only to the 9853, as only it has eight outputs. For details, see Commands 81 to 84 on page 36.

3. TESTING COMMANDS

90: Reading the Event Log

The control unit keeps a log of recent events. The log can contain up to 700 events. Each event is described by a short text message. To review the event log, make sure the system is in installer mode and then:

1. Key in 90✓.
The display shows the most recent event in the log.
2. Key in 1 to show earlier events or 3 to show later events.
3. Key in 4 to show the first event or 6 to show the last event.
4. Press **X** to leave the log.

The table on the following pages shows the messages that can be recorded in the event log. Column 1 lists messages shown on the keypad displays and column 2 lists corresponding messages in the printed log (9853 only). Each event in the printed log is preceded by the date and time in numerical format.

To avoid multiple entries being made for the same fault condition, no more than three events of the same type will be recorded for the same zone in the same set period.

Note: The log is protected and cannot be erased by the Installer or a user.

In the log, users and devices are represented by numbers:

U00	Installer	U54	Telecommand
U01	User 01	U55	Keypad
U02 to U49/50	Users 02 to 49/50	U56	Remote reset
U50	Guard code (if set up)	U57	Download
U51	Duress code	U58	Virtual keypad (Downloader)
U52	Control unit		
U53	Idle	U59	Forbikobler

3. Testing Commands

Printing the Event Log (9853 only)

Note: 975x models do not have the connector required for event log printing.

To print the event log, make sure the system is in installer mode, and then press 90✓0. To stop printing, press X.

To toggle the logging printer on and off, press 90✓7. The keypad gives a Chime tone when the printer is turned on and a "beep beep" confirmation tone when the printer is turned off. This is a test mode and is cancelled if power is lost. Use Command 180 to turn printing on indefinitely.

Figure 2 shows a sample of a printed log.

```
- 9853 -
14/12/01 18:42:30 Sounder Tamper
<END OF LOG>
```

Figure 2. Sample Log Print

To print a listing of the control unit's configuration, press 908✓

Note: The log is protected and cannot be erased by the Installer or a user.

Event Log Messages

* Printed event messages start with a time and date stamp.

Keypad Display	Printed (9853 only)*	Meaning
AC Fail	AC Lost	Mains power supply failed
AC Restore	AC Restore	Mains power supply restored
AI Conf Dis K==	AI Conf Dis K==	Alarm confirmation disabled by lock switch
AI Confirm Z==	Confirmed Z==	Confirmed alarm on zone ==
Alarm Abort	U== Alarm Abort	User aborted alarm
AntiMask AI Z==	Anti Mask Alarm Z==	Anti-mask alarm on zone ==
AntiMask Rs Z==	Anti Mask Restore Z==	Anti-mask alarm on zone == reset
AntiMask Tp Z==	Anti Mask Tamp. Z==	Tamper on anti-mask zone ==
ATE L.F. All	ATE L.F. All	Alarm Transmission Equipment: fault on all lines
ATE L.F. Rstr	ATE L.F. Rstr	Alarm Transmission Equipment: line fault(s) restored
ATE L.F. Single	ATE L.F. Single	Alarm Transmission Equipment: fault on one line
AUX DC Fail	AUX Trouble	Auxiliary power failed
AUX DC Fail Rstr	AUX Restore	Auxiliary power restored
Bad Checksum	EEPROM Failure	Control unit memory corrupted
Batt Flt Rstr	Battery Restored	Battery reconnected
Batt Load Fail	Batt Load Test Fail	Battery failed load test
Batt Missing	Battery Missing	Battery disconnected
Bell Tamper	Bell Tamper	Sounder tampered with

Keypad Display	Printed (9853 only)*	Meaning
Bell Tamper Rst	Bell Tamper Restore	Sounder tamper reset
Burg Z== Alarm	Burg: Z==	Intruder alarm on zone ==
Burg Z== Rstr	Burg Restore Z==	Intruder alarm on zone == reset
Bypass Supr. Z==	U== Sup. Bypass Z==	Supervision on zone == bypassed
Codes Defaulted	Passwords Loaded	Access codes returned to default values
Comms Fail	Comms Fail	Communications failure (e.g. no response from ARC)
Config Changed	Config Changed	System configuration (site-specific data) has changed
Defaults Loaded	Defaults Loaded	Default values loaded for all commands
EEPROM Fail	EEPROM Bad Data	Control unit memory damaged
Exp == Tamp Rst	Exp. Tamper Restore	Expander tamper reset
Exp == Tamper	Exp. Tamper	Expander tampered with
Expander == Miss	Expander Missing	Expander disconnected
Expander == Rstr	Expander Restored	Expander reconnected
F== Missing	Forbi Missing F==	Forbikobler keypad disconnected
F== Restore	Forbi Miss Restore F==	Forbikobler keypad reconnected
F== Tamper	Forbi Tamper F==	Forbikobler keypad tampered with
Fire Reset	U== Fire Reset	Fire alarm reset
Fire Z== Alarm	Fire Z==	Fire alarm on zone ==
Fire Z== Rstr	Fire Restore Z==	Fire alarm on zone == restore
Forbi I/F Tamper	Forbi I/F Tamper	Forbikobler interface tampered with
Forbi Lp Tamper	Forbi Lp Tamper	Forbikobler loop tampered with
Fr K== Alarm	K/P Fire K==	Fire alarm started at keypad ==
Frb I/F Tamp Rst	Forbi I/F Tamp Restore	Forbikobler interface tamper reset
Frb Lp Tamp Rst	Forbi Lp Tamp Restore	Forbikobler loop tamper reset
Global T.Restore	Global T.Restore	Global zone tamper alarm reset
Global Tamper	Global Tamper	Global zone tamper alarm
K== Excess Keys	Tamper Usercode K==	Incorrect access code entered more than four times at keypad ==
K== Missing	K/P Missing K==	Keypad == disconnected
K== Restore	K/P Miss Restore K==	Keypad == reconnected
K== Tamper	Tamper K/P K==	Keypad == tampered with
Key Box Cls Z==	Keybox Close Z==	Keybox on zone == closed
Key Box Opn Z==	Keybox Open Z==	Keybox on zone == open
Key Sw Set #	Key Switch Set #	System set by keyswitch on level/partition #
KeySw Unset #	Key Switch Unset #	System unset by keyswitch on level/partition #
Lid Tamp Restore	Lid Tamp Restore	Control unit lid tamper reset
Lid Tamper	Lid Tamper	Control unit lid tampered with
Low Bat Z==	Tx Lo Batt Z==	Low battery detected on transmitter ==
Low Bat Z== Rstr	Tx Lo Batt Restore Z==	Low battery reset on transmitter ==
Low Batt Rstr	Low battery Restore	Low battery detected on control unit

3. Testing Commands

Keypad Display	Printed (9853 only)*	Meaning
Low Batt Rstr Z==	Low Batt Rstr Zone Z==	Low battery reset on control unit
Md K== Alarm	K/P Medi K==	Medical alarm started at keypad ==
Override #	Override #	Fault overridden in level/partition #
PA K== Alarm	K/P PA K==	Panic alarm started at keypad ==
PA Z== Alarm	Panic Alarm Z==	Panic alarm started in zone ==
PA Z== Rstr	Panic Restore Z==	Panic alarm reset in zone ==
RF Jamming	Jamming Start	Radio jamming detected
RF Jamming Rstr	Jamming End	Radio jamming reset
RF Sup Fail Z==	Supervision Fail Z==	Radio supervision failure detected in zone ==
RF Sup Rstr Z==	Super'ion Restore Z==	Radio supervision failure in zone == reset
Set Fail Z==	U== Exit Timeout Z==	System failed to set because of fault in zone ==
Smk Det Alm Z==	Smoke Det. Alarm Z==	Smoke detector alarm in zone ==
Smk Det Res Z==	Smoke Det. restore Z==	Smoke detector alarm reset zone ==
Soak Fail Z==	Test Zone Fail Z==	Soak test failed in zone ==
System Rearmed	Rearmed	System rearmed after an alarm
System Startup	Startup	Power applied to system
System Tamp Rst	System Tamp Restore	System tamper reset
System Tamper	System Tamp	System tamper
Tamper F== Rstr	Forbi Tamp Restore F==	Forbikobler keypad == tamper reset
Tamper K== Rstr	Tamper K/P Restore K==	Keypad == tamper reset
Tamper Z==	Tamper Z==	Zone == tampered with
Tamper Z==	Tamper In Day Z==	Tamper in zone == during the day
Tamper Z== Rstr	Tamp Restore Z==	Zone == tamper reset
Tech Z== Alarm	TA Z==	Technical alarm in zone ==
Tech Z== Rstr	TA Restore Z==	Technical alarm in zone == reset
Tel Line Fault	Tel Line Fault	Fault on telephone line (e.g. line cut)
Tel Line Rstr	Tel Line Restore	Line fault reset on telephone line
Telecmd Low Bat	Telecomm Low Battery	Low battery in 723r telecommand
Telecmmd PA	Telecmd Panic	Panic alarm from 723r telecommand
Test Call	Man Trig Test	Test call made
Test Call	Periodic Test	Test call at a specified interval
U== # Set	U== Armed L=	User == set level/partition #
U== # UnSet	U== Disarm L=	User == unset level/partition #
U== Change U==	U== Changed U==	User == changed access code for user ==
U== Delete U==	U== Deleted U==	User == deleted access code for user ==
U== Dload Fail	U== Download FAIL	Download by user == failed
U== Duress	U== Duress	Duress code entered by user ==
U== Off-Site	U== Prog. Mode End	Installer exited from programming mode
U== On-Site	U== Prog. Mode	Installer entered from programming mode
U== Ptn # Reset	U== Reset #	User – reset partition #
U== Remote Dload	U== Download OK	Download by user == successful

Keypad Display	Printed (9853 only)*	Meaning
U== System Reset	U== Reset	User – reset system
U== Time/Date	U== Reset Time/Date	Time and date user reset the system
U== Z== Omit	U== Omitted Z==	User omitted zone ==
U== Z== Unomit	Zone Unomit Z==	User unomitted zone ==
UserCode req off	UserCode req off K==	No user code before installer code
UserCode req on	UserCode req on K==	User code before installer code
XT ACFI Rst Z==	AC Fail Rstr Zone Z==	Mains power supply restored in zone ==
XT ACFI Z==	AC Fail Zone Z==	Mains power supply failed in zone ==
XT BatFl Rst Z==	Batt Fault Rstr Zone Z==	Battery reconnected in zone ==
XT BatFl Z==	Batt Fault Zone Z==	Battery fault in zone ==
XT Fault Z== Rst	Fault Rstr Zone Z==	Zone of type ‘Fault’ reset
XT Fault Zone ==	Fault Zone Z==	Zone of type ‘Fault’ active
XT LoBat Rst Z==	Low Battery	Low battery reset on radio zone ==
XT LoBat Z==	Low Batt Zone Z==	Low battery detected on radio zone ==
XT PwrFl Rst Z==	Power O/P Fault Rstr Zone Z==	Power output fault reset in zone ==
XT PwrFl Z==	Power O/P Fault Zone Z==	Power output fault in zone ==

Note: The log is protected and cannot be erased by the Installer or a user.

91 to 96: Testing Outputs

You may test parts of the system by entering commands at the keypad. To carry out a test make sure the system is in installer mode and then key in one of the following commands:

- 91✓ Test normal outputs:
On 975x units, press keys 1 to 3 to toggle outputs 1 to 3 on and off.
On 9853 units, press keys 1 to 8 to toggle outputs 1 to 8 on and off.
- 92✓ Test plug-by and plug-on outputs:
Press key 0 to test the Alarm Transmission System.
On 975x units, press keys 1 to 8 to toggle outputs 1 to 8 on and off.
On 9853 units, press keys 1 to C to toggle outputs 1 to 12 on and off (A=10, B=11 and C=12).
- 93✓ Not used.
- 94✓ Test the internal sounder output.
- 95✓ Test the keypad sounder.
- 96✓ Not used.

Press ✓ to end each test. All outputs revert to their former settings.

Note: An Alarm Transmission System (ATS) test includes the whole communication system, from the Alarm Transmission Equipment (ATE) attached to the control unit to the communication equipment in use at the Alarm Receiving Centre (ARC).

97: Engineer Walk Test

This function enables the engineer to test all devices on the system.

1. Enter installer mode.
2. Press 97✓

The display shows:

97: Walk Test

3. Open and close each alarm and tamper contact in turn.

The system gives a Chime tone each time you open and close a detector contact. The display shows: "A: Zone" and the zone number of every detector you have tested, in sequence and for one second each. If you also test the tampers on each zone, the display shows the letter "T" against each zone number.

4. Press X to stop the Walk Test.

*Note: The engineer Walk Test enables you to test **all** zones, including PA zones, zone tampers, and control unit and bell tampers. The user Walk Test does not enable you to test tampers or PA, Fire, 24-hour and Technical zones.*

199: Display Zone Circuit Resistance

This command lets you step through the zones connected to the control unit, viewing the resistance of the circuit connected to each. Press 1 (down) and 3 (up) keys to step through the list of zones. The display shows the resistance of the circuit in ohms, or O/C for open circuit.

4. SYSTEM CONFIGURATIONS

Using a Partitioned System

Introduction

When programming a control unit, there are two ways of changing from a single system to a partitioned system:

- a) during initial power up
- b) using Command 98.

To create a partitioned system during initial power up, refer to the *9x5x Installation Guide*.

If you have an existing control unit that has already been programmed as a single system and wish to convert it to a partitioned system, then:

1. Enter installer mode.
2. Press 98✓ at the keypad.
The display shows: Load Default
3. Press 1✓ at the keypad.
The display shows (for example): Mult Sys? OFF
4. Either:
Press 1 to create a partitioned system
Or press 0 to create a single system
The display shows (for example): Mult Sys? ON
5. Press ✓.
The keypad gives a double "beep" confirmation tone and the control unit loads the default settings, erasing all previous selections.

Programming Partitions

Once you have selected a partitioned system, you can use the following commands to program each partition:

1. Use Commands 01 to 16 and **X17** to **X40** to assign each zone to a partition.
Each zone defaults to Partition A.
Press A to assign zones to Partition A.
Press B to assign zones to Partition B.
Press C to assign zones to Partition C.
Press D to assign zones to Partition D.
(See also "Setting Up A Common Area" on page 78.)
2. Use Command 32 to assign each keypad to a partition as required. By default all keypads belong to all partitions.
3. Program Exit Mode, Alarm Response and Exit Time for each partition:

Partition	A	B	C	D
Exit Mode	C39	C62	C72	C76
Alarm Response	C47	C63	C73	C77
Exit Time	C44	C65	C75	C79
4. Use Commands 81 to 84 to assign bell outputs to each partition as required.
Option 18 assigns an output to Partition A
Option 19 assigns an output to Partition B
Option 20 assigns an output to Partition C
Option 21 assigns an output to Partition D
5. Make sure that the master user understands how to assign individual user codes to each partition.

Differences in Commands for Partitioned Systems

When you are using a partitioned system, some commands offer new options and others can no longer be used. The table below summarises the programming differences between partitioned and single systems.

Command	Partitioned system	Single system
01-40 Zone Programming	A to D = Partitions	A to D = Part Sets
28 Hide Status Display	"Partn. Set"	"Level Set"
32 Keypads and Partitions	Link keypad to partition	Not available
39 Level/Partition A Exit Mode	Opts 3 and 4 available	Opt 3 becomes Lockset Opt 4 not available
47 Partition A Alarm Response	Available	Not Available
60 Level B Final Exit	Not available	Available
61 Level B Entry Route	Not available	Available
62 Level/Partition B Exit Mode		Options change
63 Level/Partition B Alarm Response		Options change
70 Level C Final Exit	Not available	Available
71 Level C Entry Route	Not available	Available
72 Level/Partition C Exit Mode		Options change
73 Level/Partition C Alarm Response		Options change
76 Level/Partition D Exit Mode		Options change
77 Level/Partition D Alarm Response		Options change
81, 82, 83, 84 Outputs	18-21=Partition bells 22-25=Strobe sets	Not available Not available

Common Areas

Setting up a Common Area

You can create a common area linked to two or more partitions. The system sets the common area when the users have set all the linked partitions. When users enter the common area using the appropriate access code, the system unsets it and any partition selected by the user. The remaining partitions stay set.

The following sections show examples of how to use common areas.

Example 1. Four Offices and a Lobby

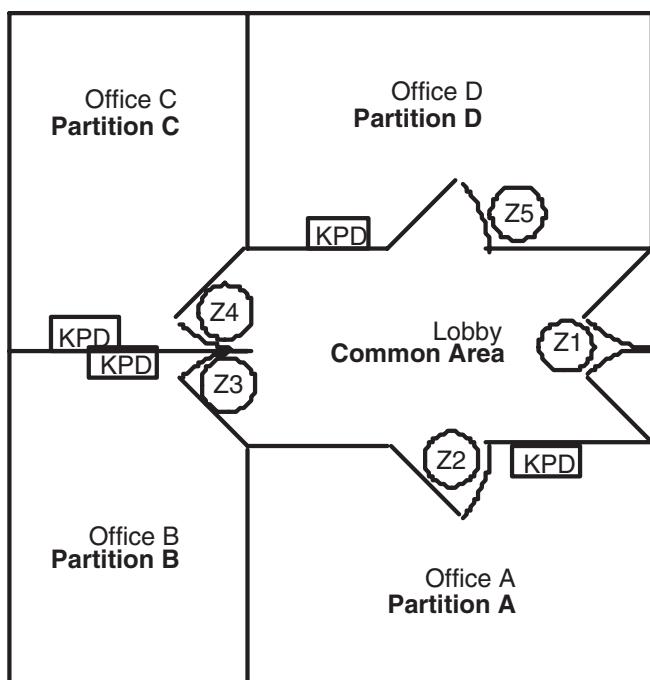


Figure 3. Using a Common Area

Figure 3 shows four offices share a building, all using the same entrance lobby. The building owner wants to protect the lobby when the building is empty but cannot rely on the last office user to remember to set the alarm for the lobby on leaving.

The Installer fits keypads in each office and door contacts to the doors leading from the offices to the lobby (zones 2 to 5). The Installer also fits a door contact to the door leading from the lobby to the street (zone 1).

During programming, the Installer assigns each keypad and office door to one of Partitions A to D, and makes each office door a Final Exit zone. The Installer then makes zone 1 a Final Exit zone and assigns it to all the partitions.

To see how this works, start with what happens at the end of a working day when all the users leave the building. User A happens to leave first, and sets Partition A from the keypad in Office A. The control unit completes setting Partition A when the user closes zone 2. A few moments later, users B and C set their partitions. The control unit completes setting Partitions B and C when the users close zones 3 and 4 respectively. Finally, user D sets Partition D from the keypad in Office D. When the user closes zone 5, the control unit completes setting Partition D. However, the control unit maintains the exit tone because no one has opened and closed zone 1. When the user leaves the building and finally closes zone 1, the control unit also sets the common area.

In the morning, the users return to their offices at different times. The first user to return is user B. As user B opens the door from the street into the lobby, the control unit starts the entry timer. User B then opens zone 3 and unsets Partition B. The control unit stops the entry tone, unsets Partition B and the common area, and leaves Partitions A, C and D set. User C is the next to arrive. When user C opens zone 1 the control unit does nothing since the common area is already unset. The control unit starts the entry timer when user C opens zone 4. User C unsets Partition C and the control unit stops the entry timer, but leaves Partitions A and D set. As the morning goes on, users A and D arrive and unset their partitions in the same way.

Exit Methods

Example 1 uses Final Exit zones on the doors to complete setting of the system. You can also use Timed Exit zones on zones 2, 3, 4 and 5, with zone 1 as a Normal Alarm zone. In this case, the system sets the common area after the Exit Time for the last user to leave expires. However, you must make the Exit Time long enough to let the last user to leave close the door to their office, cross the lobby and close the last door before the exit timer expires.

Using Exit Terminate buttons is not recommended with common areas. If there is a single terminate button, one user can press the button while another is still crossing the lobby. If, on the other hand, you give each user a separate button, there is always the problem of a user pressing the wrong button.

Things to Avoid

If you use Final Exit Zones to complete setting of the system when all the users have left, you must not give any user separate access to the outside world. To see why, look at Figure 4 which shows two partitions sharing a common area.

4. System Configurations

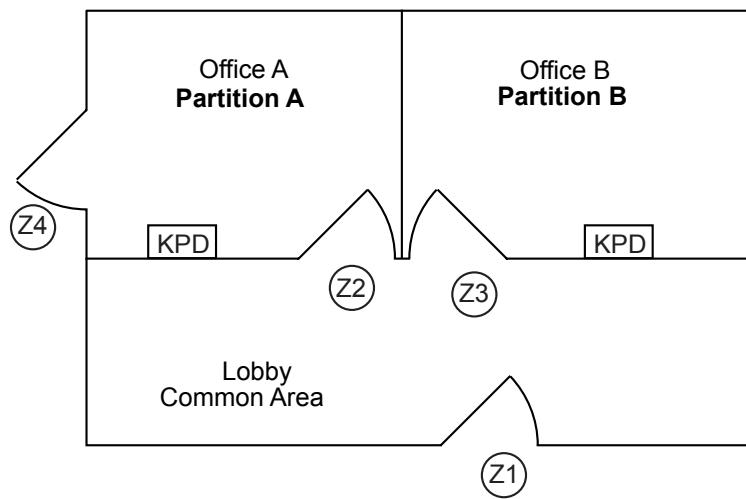


Figure 4. Using a Private Door

Partition A has a separate exit guarded by a Final Exit zone (zone 4). Partition B is set. User A starts setting at their keypad and then leaves by their private door on zone 4. The control unit is expecting to see zone 1 close in order to complete setting Partition A and the common area. However, since zone 1 has not opened and closed, the control unit does not set either Partition A or the common area.

In general, when using Final Exit, make sure that the exit route is always shared by increasing the number of partitions. Figure 5 shows an extreme example.

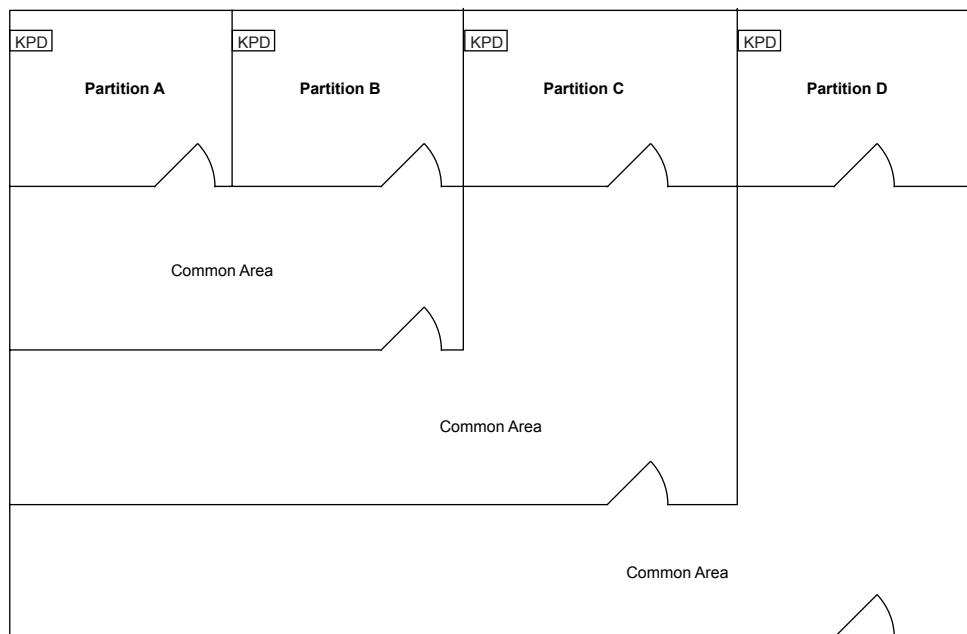


Figure 5. Arranging Shared Exit Routes

Example 2. Double Common Area

You are not limited to having one common area. Figure 6 shows three partitions sharing two common areas.

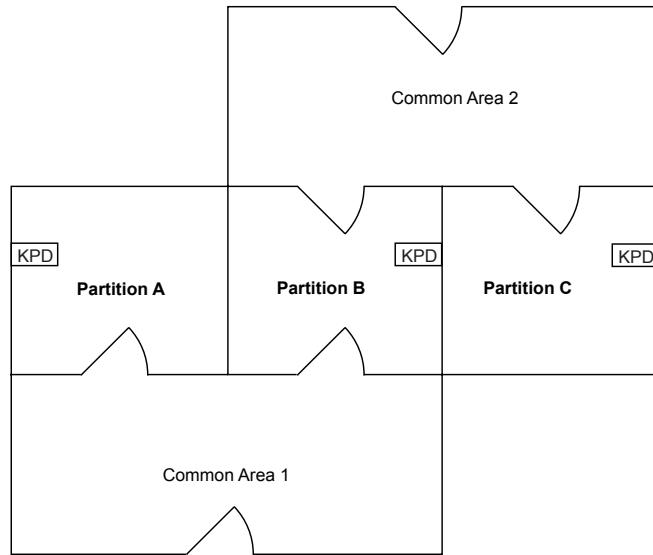


Figure 6. Using two Common Areas

The control unit sets Common Area 1 when users set Partitions A and B. The control unit sets Common Area 2 when users set Partitions B and C.

Example 3. Allowing Cleaners Access to the Common Area

In this example, three offices share a lobby but the building manager wants to allow cleaners into the lobby in the evening after all the users have left. To achieve this, the Installer uses Partition D to protect the lobby (see Figure 7).

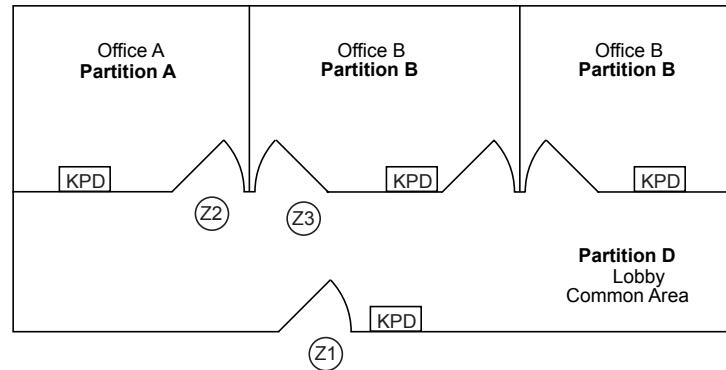


Figure 7. Allowing Cleaner Access to a Lobby

The Installer places one keypad in each office and one in the lobby. During programming, the Installer assigns each keypad to one partition, making the lobby Partition D, and assigns zone 1 to Partitions A, B, C and D, making it the common area. The Installer then assigns a user code for the cleaners to Partition D.

4. System Configurations

Partition D remains set during the day. Partitions A, B and C are unset, so the control unit leaves the common area unset. When users A, B and C leave at the end of the day the control unit sees that all partitions are set and sets the common area.

When the cleaners arrive in the evening, they open zone 1 and the control unit starts the entry timer. The cleaners unset Partition D and the control unit unsets the common area but leaves Partitions A, B and C set. When the cleaners have finished, they set Partition D again and the control unit sets the common area. In the morning, the first user to arrive unsets their partition, and the control unit unsets the common area, leaving the other partitions (including D) set.

If you do not use a common area and simply assign the lobby to Partition D, you still have the problem of ensuring that the last user to leave sets Partition D. If they forget, the lobby is unprotected in the time between the users leaving and the cleaners arriving.

Note: You cannot use plug-on or plug-by communications in this scenario. Partition D is set while Partitions A, B and C are unset. Partitions A, B and C are set while Partition D is unset. Therefore, the plug-on or plug-by communicator would indicate a closed system all the time.

DD243: 2004 Compliance

Applicability

Please study this section if **all** of the following apply:

1. You are installing an alarm system in England, Wales or Northern Ireland.
2. The system has remote signalling and requires the local Police Authority to issue a URN (Unique Reference Number).
3. You have chosen to use "Sequential Alarm Confirmation" to comply with DD243: 2004.

For Installers in Scotland, the ACPOS-IAS policy document states:

"Confirmation technology (BS DD243 applies) is desirable for newly installed systems but is not mandatory in terms of this policy."

Cooper Security therefore recommends that systems in Scotland are installed to comply with DD243: 2004, and Installers obtain copies of the ACPOS policy from their local Police Authority.

Note: The installed system will only fully comply with the requirements of DD243: 2004 if it has been designed in accordance with this section.

Programming for Compliance

Use the following settings to ensure compliance with DD243: 2004.

Command	Name	Value	Page	Notes
33	System Reset	1	18	Engineer Reset. In addition various other forms of reset can be used such as remote reset or anti-code (if the CSID code has been programmed into the control unit).
81-84	Output types		36	There are three new output types that you can use to indicate the status of the system: Alarm Confirm, Set Complete and Unset Complete.
89	Alarm Confirmation	1	39	Enabled

Note: The following commands are available only if Alarm Confirmation is enabled.

48	Lockout Keypads During Entry	1	24	Yes. Use this option to comply with section 6.4.5.
160	Confirm Time	30	59	Default.
161	Internal Sounder	0	59	Sounder on confirmed or unconfirmed alarm.
162	External Sounder	0	60	Sounder on confirmed or unconfirmed alarm.
163	Confirm After Entry	0	60	When a user starts the entry timer, the control unit disables Alarm Confirmation. Use this option to comply with sections 6.4.2, 6.4.3, 6.4.4 and 6.4.6.
		2	60	The control unit starts a confirmed alarm if an intruder activates two separate zones after the entry timer expires. Use this option to comply with section 6.4.5.
164	User Reset After Confirmed Alarm	1	61	Enabled to enable users to reset the system after a confirmed alarm.

4. System Configurations

The table below summarises which options to select on various commands in order to comply with paragraphs 6.4.2 to 6.4.6.

DD243: 2004 Para:	6.4.2	6.4.3	6.4.4	6.4.5	6.4.6
Possible Installation	Unset from outside the premises using a keyswitch zone input – entry must be prevented until system is unset	Exit Mode of "Lock Set"	Keypad and user access code	Portable ancillary control equipment – with the reader inside the premises	Requires ARC to unset
Command					
89	Alarm Confirmation		Enabled		
160	Confirmation Time		30 to 60 minutes		
48	Lockout Keypads During Entry	No (Option 0)	No (Option 0)	No (Option 0)	Yes (Option 1)
163	Confirmation on Entry	Never (Option 0)	Never (Option 0)	Never (Option 0)	Two zones (Option 2)
164	User Reset After Confirmation	Enabled (Option 1)	Enabled (Option 1)	Disabled (Option 0 or 2)	Enabled (Option 1)

Alarm Filtering

The alarm system should either:

- a) Have the means to indicate to the Alarm Receiving Centre (ARC) whether the alarm system is set or unset (open and close signals).
or
- b) Be capable of generating a secondary signal identifiable at the ARC as a mis-operation signal (see Command 36 Alarm Abort).

PD 6662 / prEN 50131-1: 2004 Compliance

EN 50131-1: 2004, *Alarm systems – Intrusions and Hold-up Systems – Part 1: System Requirements*, requires that an alarm system does not display any detailed information until a user enters a valid access code or presents a valid proximity tag. The system should display an alert to inform users that there is information to view. There are four grades of system:

- Grade 1** The 9651 control unit can be configured to comply with this grade.
- Grade 2** The 9751/2 control units can be configured to comply with this grade.
- Grade 3** The 9853 control unit can be configured to comply with this grade.
- Grade 4** 9x5x control units are not designed to comply with this grade.

Note: 9x5x control units do not reflect variations set out in EN 50131-1:1997. The 9651 unit is not covered by this Programming Guide.

4. System Configurations

Programming for Compliance

Use the following setting to ensure compliance with PD 6662 / prEN 50131-1: 2004.

N/A = Not applicable

Command	Grade 1/2	Grade 3	Page	Notes
21	any	N/A	14	9751/2
	any	2/3	14	9853
26	0	0	15	
27	0	0	16	
28	2	2	16	
29	1	1	17	
37	any	1	19	
41	≤ 10 min	≤ 10 min	22	
42	≤ 15 min	≤ 15 min	22	
47	2	2	23	
54	1	N/A	26	Grade 3 does not permit radio devices
55	0/2	N/A	27	Grade 3 does not permit radio devices
56	G1 – any G2 – 1	1	28	Applies when using proximity tags because the installer and master user still use access codes
57	any	1	28	9751 does not support option 1
63	2	2	30	
73	2	2	33	
77	2	2	35	
88	any	1	39	
102	2	2	42	
105	≤ 25 hours	≤ 5 hours	43	
108	≤ 25 hours	N/A	44	
132	any	1	53	If set to 0, set Command 37 to 0 too
134	1/2	1/2	54	Option 1 is recommended
135	1/2	1/2	54	Option 1 is recommended
136	1/2	1/2	54	Option 1 is recommended
137			55	Insurers may require a restriction
138			55	Insurers may require a restriction
139			56	Insurers may require a restriction
140			56	Insurers may require a restriction
201	≤ 45 secs	≤ 45 secs	66	
202	≤ 45 secs	≤ 45 secs	66	
203	≤ 45 secs	≤ 45 secs	66	
204	≤ 45 secs	≤ 45 secs	66	

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