

Folknoll



Prestige Warden Call

PS 7600-000 SM1

System Manual

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Prestige Warden Call



System Manual

Issue Control

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1 INTRODUCTION

This document is the System Manual for the Folknoll Prestige Warden Call System.

This document covers: Power Supply Unit P/N 7600-7708, Speech Unit P/N 7600-7601, External Pull Switches P/N 7600-7604, Paging Interface and Transmitter P/N 7600-7803, Dialer P/N 7600-7703, Neck Pendant Radio Receiver P/N 7600-7801, Neck Pendant, 7600-7810, Door Entry Control Panel, 7600-7903, Door Entry Panel P/N 7600-7901, Lock Release Board P/N 7600-7907.

1.1 OVERVIEW

The Prestige Warden Call System is an alarm, intercom and door entry system for use sheltered housing schemes and other similar applications. Speech Units are installed in each residential unit and other strategic locations. The Warden is supplied with a Hand Unit which clips on to any Speech Unit. Should any tenant be in difficulty he or she can summon help by pressing the alarm button on the Speech Unit or by pulling its pull cords. The Warden's Hand Units displays information about the alarm (residence number, tenant's name, type of alarm and personal information) and emits an audible alarm. The Warden can accept the alarm, talk to the tenant and take any necessary action.

1.2 OPTIONS

1.2.1 Additional Pull Cords

Additional pull cords may be fitted to the Speech Units e.g. in the bathroom, over the bed, increasing the practicality and convenience of the system.

1.2.2 External Sensors

Alarm calls can also be activated automatically by external sensors such as

- Smoke detectors
- Gas detectors
- Hypothermia detectors
- Inactivity sensors

1.2.3 Radio Neck Pendant

The Warden Call System can be upgraded so that tenants can carry a Radio Neck Pedant which can be used to call for help.

1.2.4 Radio Paging

The Warden Call system can be upgraded so that Wardens Hand Unit will receive alarms by radio anywhere on site. Once alerted the Warden can either take immediate action or clip the Hand Unit on to the nearest Speech Unit and talk to the tenant.

1.2.5 Door Entry Panels

The Warden Call System can be fitted with door entry panels allowing visitors to talk to the Warden and the Warden to open the door remotely (If appropriate).

1.2.6 Dialer

To provide cover when the warden is off duty, or away from the site, systems are usually equipped with a dialer which transfer calls to a central monitoring station or another Warden Call system via a telephone line.

When the Warden goes off duty or leaves the site the hand Unit is used to switch the system to OFF SITE mode. If an alarm call is activated while the system is off site the dialer will automatically dial the control centre. The necessary data is passed to the central computer to enable the computer to extract information about the tenant from its data base. The tenant information is displayed on the computer screen. The call would be accepted by the computer operator and a speech path would be opened. The operator can try to talk to the tenant and summon any help that may be needed.

1.2.7 DECT Phone Interface

The Wardens Mobile Telephone Exchange can be used to interface the Warden Call System to a DECT phone system. Using this interface Wardens can receive and respond to alarms anywhere in range of the DECT system.

1.2.8 Remote Input Controller

Allows the connection of additional alarms outputs e.g. fire exits, to the Warden Call system.

For a full list of Prestige Warden Call parts please refer to 8 APPENDIX A Prestige Warden Call EQUIPMENT.

2 PRESTIGE WARDEN CALL INSTALLATION

The Warden Call System fixed installation comprises a PSU and a network of Speech Units. There may also be some additional options e.g. radio paging etc. wired directly to the PSU.

All Speech units are linked to the PSU by 4-off twisted pairs, (power, coms, warden call audio and door entry audio).

Speech Units can be wired as a multi-drop or radial circuit or a combination of both. Typically spurs with a number of Speech Units looped together are wired to the PSU.

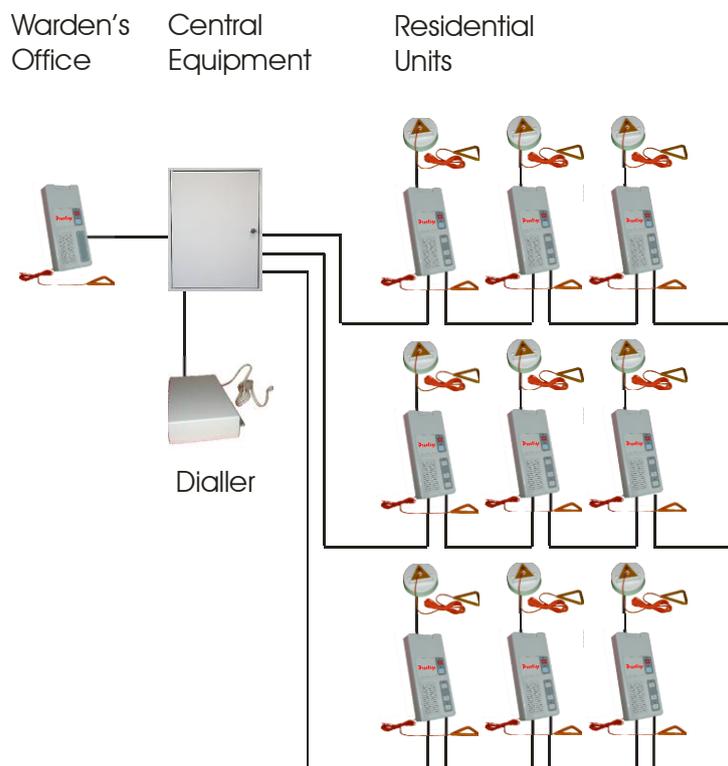


Figure 2:1 Typical Warden Call Cabling

2.1 CABLING

All data cabling should be of type CW1308 twisted pair and be suitable for the installation site e.g. LSZH etc. All cables can be terminated directly into the system equipment termination blocks. Back boxes, loft joints etc. are not usually required.

IMPORTANT: Great care must be taken in planning cable runs. The number of Speech Units that can be connected to a spur depends on the length and specification of cable used. Each unit on the system draws between 30 and 50mA in standby mode, and 200mA when audio channels are open. For correct operation voltage drop across the Speech Unit should be minimized. The voltage should not fall below 16V. Additional power pairs may be required for larger installations. On sites with a door entry system, door entry panels are wired back to the door entry controller and then on to the main network, as are the lock releases. Lock releases should be wired with larger cable, 1mm flex etc, as they can draw 500mA or more.

Please refer to section 9 APPENDIX B Prestige Warden Call Cabling Guides for more information.

2.2 EQUIPMENT POSITIONING

In general any piece of system equipment may be positioned at any point on the network, however, dialers and door entry control units are normally pre-mounted inside the power supply cabinet, and this is usually mounted in a central position on the site so as to keep cable runs as short as possible. The pendant decoder module should be mounted close to the aerial to keep the co-axial type cable short and the aerial should be mounted in a central position fairly high up and away from site metal work to give good reception. If a paging hand unit transmission system is to be installed, it should be mounted with receiver a close to the areal as possible in a similar a position to give good reception throughout the site.

A 13A fused spur unit should be provided to supply power to the main power supply and 13A sockets should be provided adjacent to paging transmitters.

3 PRESTIGE WARDEN CALL EQUIPMENT INSTALLATION

3.1 POWER SUPPLY UNIT (P/N 7600-7708)

3.1.1 Purpose

The Power Supply provides power for the Warden Call system. Battery backup is provided by the Battery Kit P/N 7710.

3.1.2 Connection

The PSU should be connected to an un-switched fused spur fitted with a 3 or 5 amp fuse.

The PSU should be fitted and tested before any other devices are connected to the system.

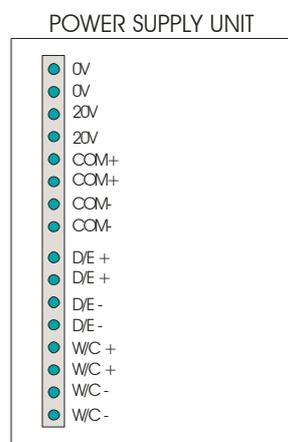


Figure 3:1 Typical PSU Connections

3.1.3 Testing

To test the PSU without any outgoing cables connected. Power up the PSU and ensure that the LED and the mains neon are all illuminated. Use a multi-meter to measure the 0V-20V connections this should read approximately 21.5V. The **com+** connection should read the same with respect to ground and the **com-** should read -21.5V with respect to 20V. The two wires for the battery should deliver approximately 27V. Do not connect the battery at this stage as they will run down overnight if the power is switched off during the installation process.

3.2 SPEECH UNIT NO1 (P/N 7600-7601 NO1)

3.2.1 Purpose

This is the master Speech Unit setting addresses for other Speech Units etc. This unit is normally supplied fitted inside of the PSU cabinet.

3.2.2 Connection

This unit is normally supplied connected to the system within the PSU cabinet.

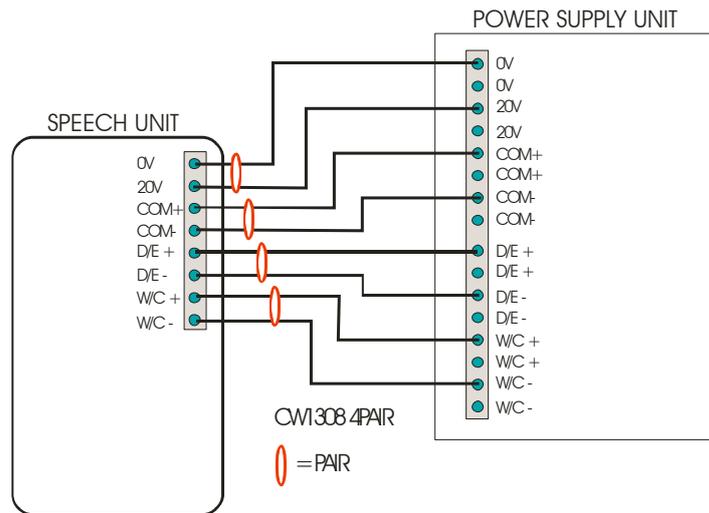


Figure 3:2 Typical Speech Unit No1 Connections

The Speech Unit No1 is ready configured no initialisation is required.

3.3 SPEECH UNITS (P/N 7600-7601)

3.3.1 Purpose

Speech Units are used by the tenant to initiate alarms and by the Warden to house the Hand Unit.

3.3.2 Connection

Speech units should be connected to the Warden Call network after the PSU tested and before any other equipment. Please refer to the drawing below.

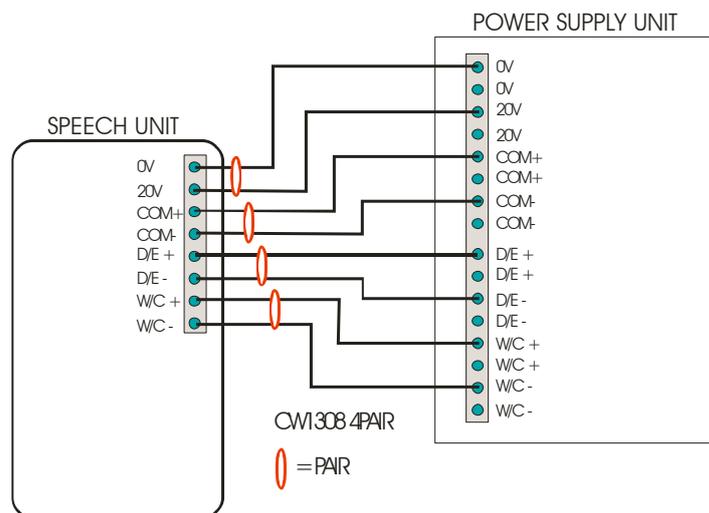


Figure 3:3 Typical Speech Unit Connections

Each Speech Unit should be initialised and programmed before moving on to the next.

IMPORTANT: Do not disconnect initialised Speech Units whilst initialising the system. The Speech Unit No1 automatically allocates unused addresses to new Speech Units. If an existing Speech Unit is disconnected from the system its address may be allocated to another unit.

3.3.3 Testing

To initialise the Speech Unit, clip the Hand Unit onto another Speech Unit or Speech Unit No1 and initiate a call to the Hand Unit by pressing CALL or pulling the cord.

The Speech Unit is ready for Editing please refer to section 4.1 Speech Unit Editing.

3.3.4 Possible Faults

If the display shows **RESET** for 10-12 seconds then changes to **ERROR LOGGING ON** the Hand Unit has not been able to communicate with any of the system equipment. Check for swapped, shorted or missing communication cables, or possibly dusty hand unit contact pins, low speech unit power, and faulty speech units. The fault must be rectified before the next Speech Unit can be installed.

3.4 EXTERNAL PULL SWITCHES (P/N 7600-7604)

3.4.1 Purpose

Pull switches provide additional alarm activation points. These can be installed in bathrooms, by beds communal rooms etc. to make the system more convenient for tenants.

3.4.2 Connection

External pull switches are cabled into the local Speech Unit. Additional external pull switches can be wired to the preceding switch.

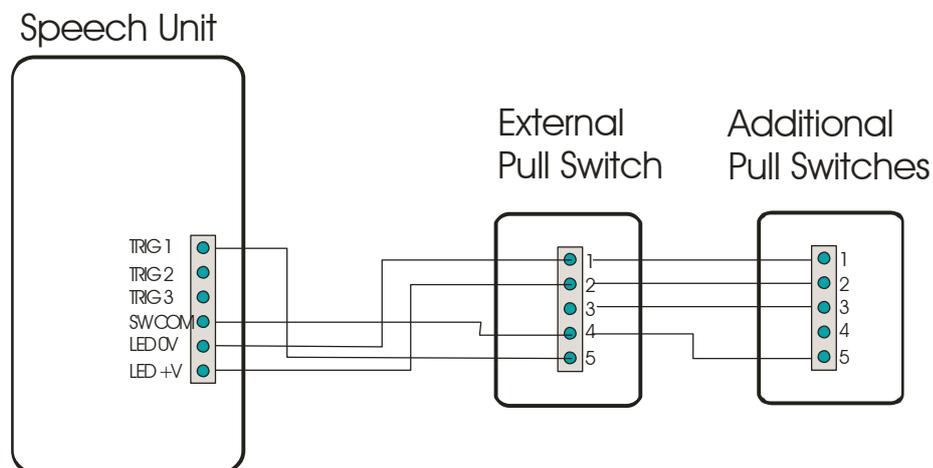


Figure 3:4 Typical External Pull Switch Connections

After cabling the pull switches to the local Speech Unit use the Hands Unit to configure the pull switch alarm.

3.4.3 Test

To test the pull switch pull the cord and check the system responds as correctly.

3.4.4 Possible Faults

If the system does not respond correctly then check the alarm configuration, and test the cabling. If this is correct the switch or the Speech Unit could be faulty.

3.5 PAGING INTERFACE AND TRANSMITTER (P/N 7600-7803)

3.5.1 Purpose

The paging interface and transmitter sends alarm calls and alarm information to a Paging Hand Unit. The Warden receives alarms on the Hand Unit even when it is not clipped on to a Speech Unit.

3.5.2 Installation

Mount the 7803 paging interface high up in a central location away from large metal objects that may affect radio transmission such as building structure and metal cabinets.

Warden Call Network cable should be run to the receiver.

NOTE: It is advisable to test the system before finally fixing the aerial in case there are any local RF anomalies.

3.5.3 Connection

The power and coms from the Warden Call network is connected to CON1. Audio connections are not required).

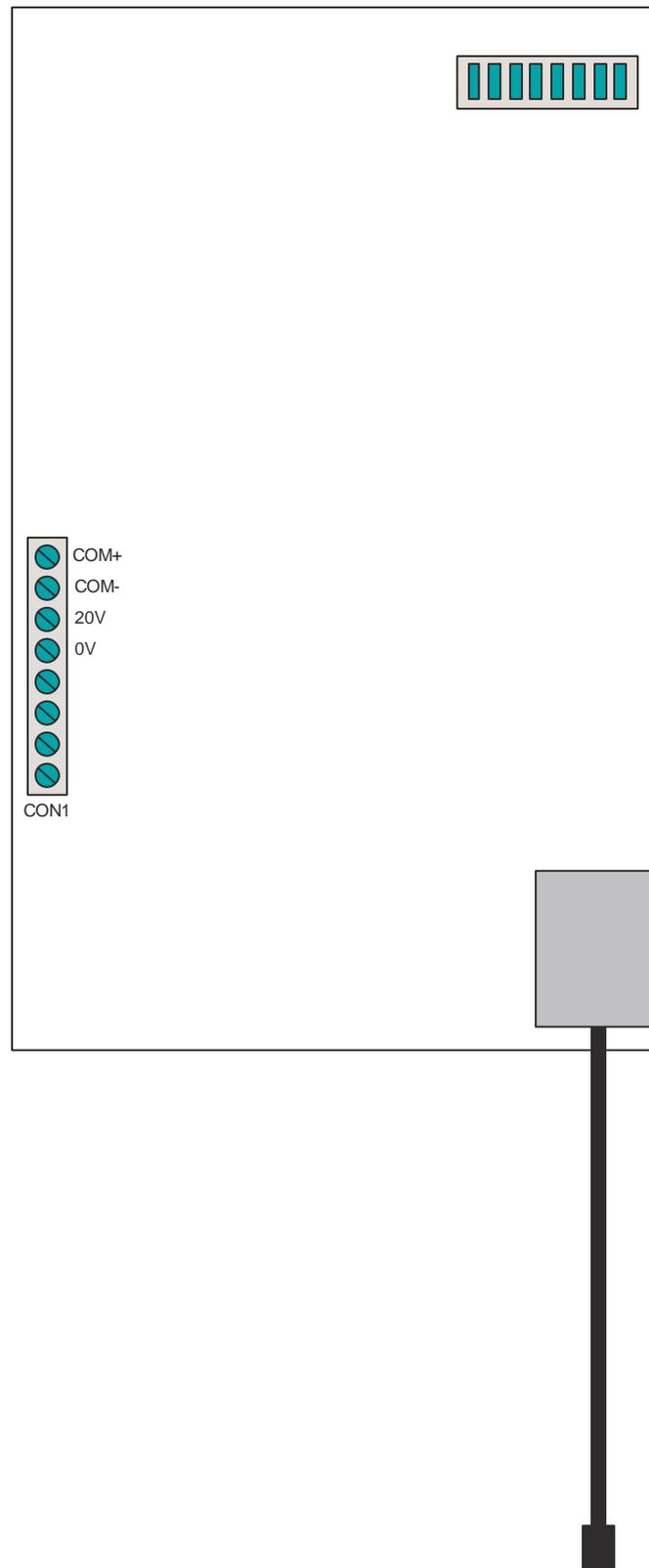


Figure 3:5 Typical Paging Interface Connections

Range Check

Once the Paging Interface has been made operational a range check may be made using a Paging Hand Unit. Switch the Hand Unit to **ENG** mode, un-clip the Hand Unit from the Speech Unit. Switch

off the Hand Unit hold down the **TEST** button and switch in the Hand Unit. The Hand Unit should now display **RADIO TEST**. If the Hand Unit is not receiving a signal it will display **NO RADIO**. Walking round the site with the Hand Unit in this mode should show up any blind spots.

3.6 DIALER (P/N 7600-7703)

3.6.1 Purpose

The dialer is used to connect the Warden Call system to a central control station or another scheme via PSTN.

3.6.2 Connection

Connect the Dialer to the Warden Call network using the power and coms pairs no audio is required.

Connect the RJ11 socket to the PSTN socket using the cable provided.

NOTE: If the dialer was purchased at the same time as the power supply cabinet the Dialer is usually supplied mounted inside the power supply cabinet and connected to the Warden Call network.

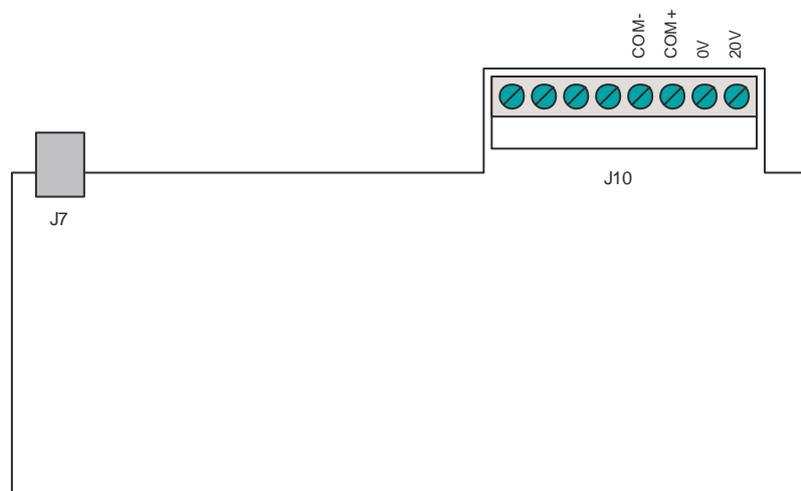


Figure 3:6 Typical Dialer Connections

3.6.3 Configuration

No hardware configuration is required. After connection onto the Warden Call System the dialer is configured during system editing, please refer to section 4.2 System Editing below.

3.7 NECK PENDANT RADIO RECEIVER (P/N 7600-7801)

3.7.1 Purpose

A Neck Radio Pendant Radio Receiver is used to receive alarms calls from Neck Pendants.

3.7.2 Installation

The 7801 receiver unit comprises a receiver circuit mounted in an enclosure and an end fed dipole aerial. Mount the aerial high up in a central location away from large metal objects that may affect radio transmission such as building structure and metal cabinets.

Mount the receiver in its enclosure at a convenient location.

A 50 Ohm coaxial cable should be run between the aerial to the receiver. A Warden Call Network cable should be run to the receiver.

NOTE: It is advisable to test the system before finally fixing the aerial in case there are any local RF anomalies.

3.7.3 Connection

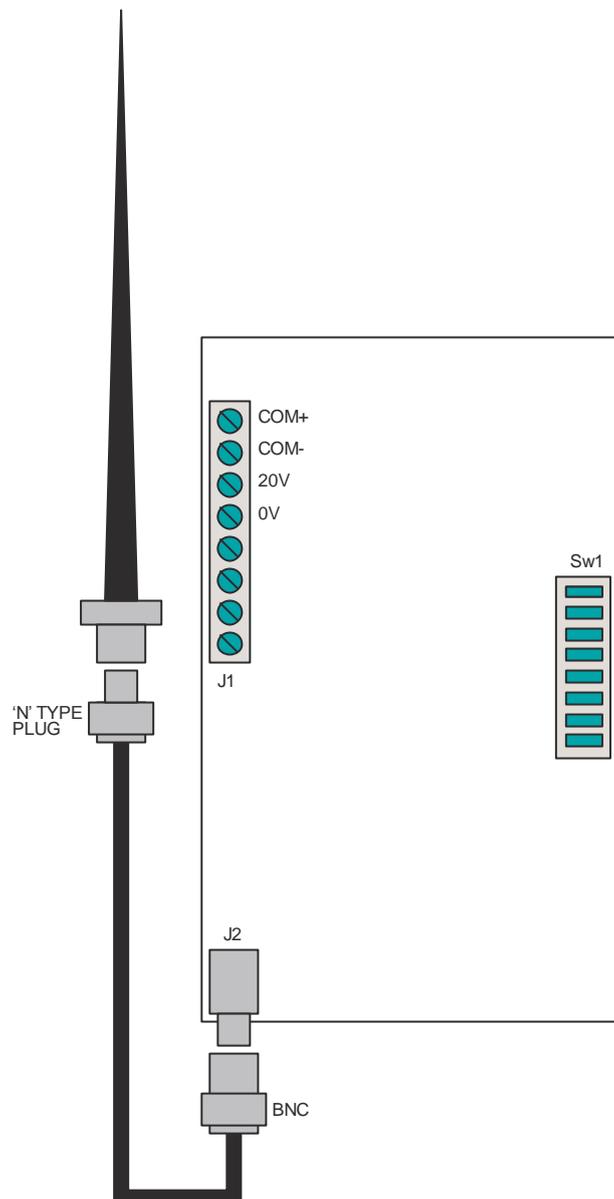


Figure 3:7 Typical Radio Pendant Connections

Open the receiver enclosure and connect the Warden Network power and coms to terminal J1. Audio connections are not required.

Connect the aerial coaxial cable to connector J7 on the receiver board. A 50hm BNC plug will be required.

Connect the coaxial cable to the socket on the aerial. An 'N' type plug will be required.

3.7.4 Configuration

Set the ID switches to ON, OFF, OFF, OFF or if there is another site nearby to ON, OFF, OFF, and ON.

3.7.5 Testing

Press the button on a Pendant, check that the Warden Call System responds as required.

3.7.6 Possible Faults

If the Warden Call system fails to respond to a call from a Neck Pendant, the pendant may be out of range or there is a problem with the aerial or its cable, check the Warden Call network connections to receiver board.

NOTE: Neck Pendants must be set to the same the ID as the receiver board.

3.8 NECK PENDANT (P/N 7600-7810)

3.8.1 Purpose

The Neck Pendant is worn by a tenant and is used to activate an alarm.

3.8.2 Configuration

Set the ID switches to ON, OFF, OFF, OFF or ON, OFF, OFF, and ON.

NOTE: These switches should match the ID switches in the Neck Pendant Radio Receiver, please refer to section 3.7 Neck Pendant Radio Receiver (P/N 7600-7801 above.

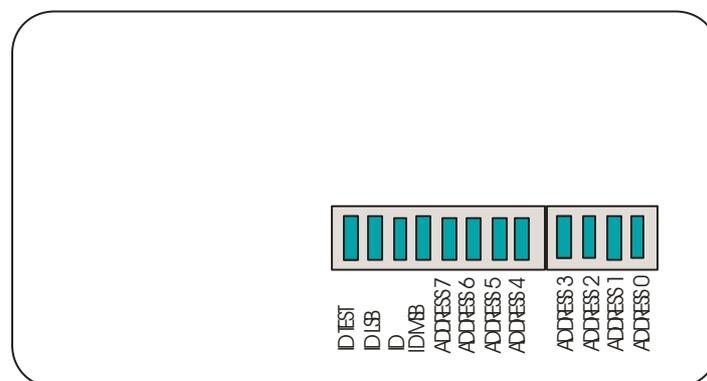


Figure 3:8 Neck Pendant Switches

Switch the Hand Unit into Engineer mode and clip on to the Tenant's Speech Unit. Press **CMD** followed by **TEST**. The Hand Unit will display the dip switch settings required to associate the Neck Pendant with the Speech Unit. If required more than one Neck Pendant can be configured with the same switch settings to trigger the same alarm for example in the case of a couple in the same residential unit.

3.8.3 Testing

Press the button on the Pendant, check that the system responds as required.

3.9 DOOR ENTRY CONTROL PANEL (P/N 7600-7903)

3.9.1 Purpose

The door entry control panel controls a door entry panel.

3.9.2 Connections

The door entry control panel is simple to install and usually come pr-mounted on the door of the power supply cabinet. Connections onto the main network are marked SKT2 on the top left of the panel. The connections are in the same order as the Speech Unit. The audio connections are not required. Outgoing connections to the door panels are on the bottom left and are in the same order as a Speech Unit. These have to be wired as a totally separate ring/spur system from the main system to protect the system if the door entry panel is vandalised. Lock release connections are on SKT4 on the bottom right. These connections are in pairs for each lock, the top connection of each pair is 12V and the other is taken to ground to a lock is opened. These circuits are protected from shorts and lock release back EMF.

To connect the control panel to the system wire the system connection black and check its polarity. Plus the block onto the control panel the display should show **RESET** followed by **D/E COMS ERROR D** on the top line and **TRADE CLOSE** or **TRADE OPEN** on the bottom line.

Connect the door entry panels and lock releases the Door Entry Control Panel is now ready for programming please refer to 4.5Door Entry Editing for further details.

3.9.3 Possible Faults

If "D/E COMS ERROR D" is displayed continuously check for faulty communications cables, check door panel coding, check software parameters.

If calls on the door entry system are being lost when a Speech Unit call is initiated check that the system is not running on the three pair system, as this system will give priority to top the Warden Call system as only audio pair is available.

3.10 DOOR ENTRY PANEL (P/N 7600-7901)

3.10.1 Purpose

The Dorr Entry Panel is normally mounted outside of a residence entrance and allows visitors to call the Warden, and the Warden to unlock the door.

3.10.2 Connection

The door entry panel requires a three pair connection from the door panel to SKT 3 on the door entry control panel.

3.10.3 Testing

When correctly connected "." should be displayed for a short period. Any of the number buttons pressed should be displayed. To test connect to a residence press C for clear, dial the residence number followed by **R** for ring. The Speech Unit in the residence should beep. Press the **SPEAK** and check that the audio is working, use the two controls at the bottom of the circuit board to adjust the speaker and microphone amplifiers

3.10.4 Coding the Door Entry Panel

As you look at the Door Entry Panel from the front, the control on the left adjusts the loudspeaker amplifier and the control on the right adjusts the microphone amplifier.

A row of switches on the rear of the panel are used to select test modes and set the panel (all door entry panels must have a unique ID)

SWITCH	NORMAL MODE	TEST MODE
8	TEST	TEST
7	FUNCTIONAL PANEL	DISPLAY SWITCHES
6	ID BIT 5	DISPLAY FRONT PANEL BUTTONS
5	ID BIT 4	OPEN AUDIO/SPEEK
4	ID BIT 3	REASSURANCE TONE/LISTEN
3	ID BIT 2	RELAY TEST
2	ID BIT 1	CHECK COMMUNICATION CIRCUIT
1	ID BIT 0	NOT USED

Figure 3:9 Door Entry Panel Switch Settings

BIT	ID 1	ID 2	ID 3	...	ID 63
ID BIT 5	0	0	0		1
ID BIT 4	0	0	0		1
ID BIT 3	0	0	0		1
ID BIT 2	0	0	0		1
ID BIT 1	0	1	1		1
ID BIT 0	1	0	1		1

Figure 3:10 Door Entry Panel ID Switch Settings

3.10.5 Possible Faults

If the dots fail to disappear after power up it is likely that the panels ID is incorrectly set or there is a cable fault. Under these conditions the control panel will display **D/E COMS ERROR**.

Most of the test functions are only for use by the test engineer; however switch 6 can be used to check the correct operation of the panel switches.

3.11 LOCK RELEASE BOARD (P/N 7600-7907)

3.11.1 Purpose

The lock release board has been provided to give sites without Door Entry facilities access control. The board is used in conjunction with a stainless steel Speech Unit. When call is from this unit is accepted by the Warden or control centre the front door lock can be released by cancelling down the Door Entry Panel call and calling out to the lock release unit. A normally open relay is used to drive the door release mechanism.

3.11.2 Connection

Connect the Warden Network power and coms to the connection terminal.

Door release is connected to bottom terminals (W/C + and W/C) please refer to the drawing below:-

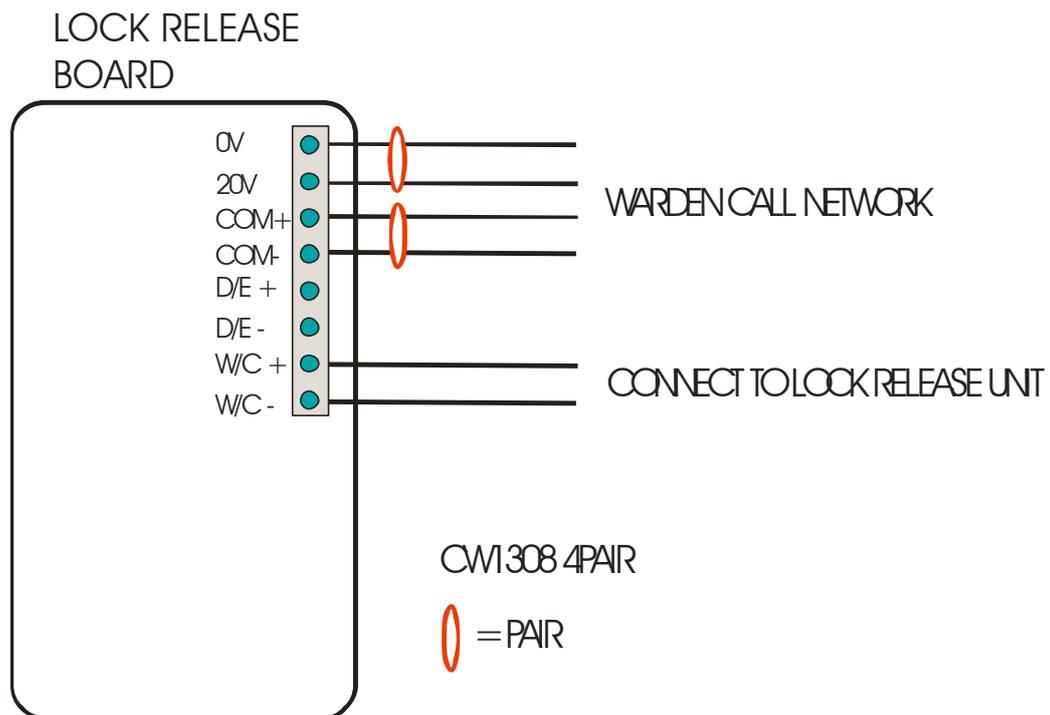


Figure 3.11 Typical Lock Release Board Connections

3.11.3 Testing

The Lock Release board is programmed as speech unit except no audio inputs and outputs are required so volume, reassurance and input parameters can be ignored.

Call to the Lock Release Unit and Press the **Open** button. Check that door can be opened.

4 PRESTIGE WARDEN CALL SYSTEM EDITING

All the programmable features on the prestige system can be edited from the Wardens Hand Unit, provided the access rights are switched on (see Hand Unit Features). The editing of these features is split into four groups.

- Speech Unit features
- Systems features
- Hand unit features
- Inactivity

4.1 SPEECH UNIT EDITING

4.1.1 To Initialise a Speech Unit

Clip a Hand Unit onto another system Speech Unit or Speech Unit No1 and initiate a call by pressing **CALL** or pulling the cord.

4.1.2 To Disable A Speech Unit

Remove the Speech Unit from the wall leaving the unit connected to the network. Turn the unit over to expose the PCB, locate the reset button on the PCB near the speaker. Press the **RESET** and **PRIVACY** buttons on the front panel.

4.1.3 Summary of Speech Unit Programmable Features

PRIMARY TENANT INFORMATION	The line of information that is displayed on the top line of the hand unit display when a call is pending.
SECONDARY TENANT INFORMATION	The line of information that is displayed on the second line of the hand units display when a call is accepted.
TENANT CODE	The code that identifies the Speech Unit.
SPEECH UNIT VOLUME	The default volume level of the Speech Unit.
TO NE VOLUME	The reassurance tone volume.
TO NE DURATION	The time the Speech Unit reassurance tone is generated for.
INPUT CODES AND CONTACT TYPES	The type of call that each input on the Speech Unit generates, and the type of contact required (normally open or normally closed).

Figure 4:1 Summary of Speech Unit Programmable Features

4.1.4 Speech Unit Editing Procedure

Press the **EDIT** key.

- Enter the **tenant code** of the Speech Unit to be edited.
- Press the **SET** key.
- Press **INDEX** key until the programmable feature you wish change is displayed.

- Follow the instruction listed below to edit the particular feature. Press the **CANCEL** key when all the necessary changes have been made.
- If no key is pressed within 30 seconds then the hand unit will time out and return to normal operation.

4.1.5 Editing the Primary information

- Use the **VOL +** and **-VOL** keys to move the cursor to the character you wish to change. Press the appropriate **ALPHANUMERIC** key for the character required. The first time a key is pressed the number of that key will appear at the cursor position, the second to fourth time the key is pressed the appropriate letter will appear.
- The **TALK** key will clear the line of information from, one character before the cursor, to the end of the line.
- The **CMD** key will change the letters being entered between upper and lower case.
- When the line of information is correct, press the **SET** key and the information will be saved in the Speech Unit and the next programmable feature will be displayed.
- Pressing the **CANCEL** key at any time during the editing procedure will abort the process and the information will remain unchanged.

4.1.6 Editing the Secondary information

The secondary information is edited in the same way as the primary information.

4.1.7 Editing the Tenant code

Enter the new code has required followed by the **SET** key.

The **VOL +**, **-VOL**, **TALK**, and **CANCEL** keys operate in the same manner as described above.

As a Speech Units tenant code must be unique "EXISTS" will be displayed, and the process aborted if another Speech Unit already has that code.

IMPORTANT: If the tenant code is included in secondary information (as per default), that information must be edited if the tenant code is changed.

4.1.8 Editing Speech Unit volume

Enter any value between **0** and **7** followed by the **SET** key.

0 = Min. volume, **7** = Max. volume.

4.1.9 Editing tone volume

Enter any value between 0 and 7 followed by the **SET** key.

4.1.10 Editing tone duration

Enter the reassurance tone duration (in minutes). Any value between 0 and 98 minutes may be entered. If **zero** is entered **no** reassurance tone will be generated by that Speech Unit. **99** may be entered in which case the reassurance tone will be **continuous**.

4.1.11 Editing input codes and contact types

- Press the appropriate **ALPHANUMERIC** key until the required call type is displayed.
- Press the **INDEX** key to skip to the next input. Although 8 inputs can be programmed, only the first 4 inputs are implemented on current Speech Units.
- Input 0 is the Call button / Speech Unit pull cord.
- Inputs 1 to 3 are the external inputs (ceiling pull cords etc.).
- Press **EDIT** key to change the input to and from normally open and normally closed contacts. *Input 0* should always be set to *N/O*.
- Press **SET** key to save setting and to move onto the next input.

4.1.12 Call Types

<i>CALL TYPES</i>	<i>MEANING</i>	<i>CALL TYPES</i>	<i>MEANING</i>
A	ATTACK	N	NO ACTIVITY
B	BOILER	O	
C	CALL ON SPEECH UNIT	P	REMOTE PULL CORD
D		Q	QUIT (on nurse call units)
E	ENTRY	R	RADIO
F	FIRE	S	SMOKE
G	GAS	T	TEMP ALARM
H	HYPOTHERMIA	U	UNDEFINED
I	INTRUDER	V	
J		W	Programmable
K		X	Programmable
L	LOW BAT	Y	Programmable
M	MAINS FAIL	Z	DISABLED

Figure 4:2 Table of Call Types

4.2 SYSTEM EDITING

4.2.1 Summary of System Programmable Features

All of these features are only available when the system is fitted with a dialer and an Alarm board.

<i>1ST TELEPHONE NUMBER</i>	The first number that is dialed by the dialer when a call is placed on the system in the OFF SITE mode.
<i>2ND TELEPHONE NUMBER</i>	The second number that is dialed if contact with the control centre is not achieved on the first number.
<i>SYSTEM TELEPHONE NUMBERS</i>	Telephone numbers of other schemes that can be contacted by the warden using the hand unit.
<i>SCHEME NUMBER</i>	The number that is passed to the control centre to identify the scheme.
<i>AUTO OFF SITE TIME</i>	The time delay between, a call being placed on the system, and the dialer automatically dialing the control centre when the system is ON SITE.
<i>ALARM PARAMETERS</i>	The delay before 'S' type call, initiate the fire alarm, and the number speech that sound the alarm at any one time.

Figure 4:3 Summary of System Programmable Features

4.2.2 System Editing Procedure

- Press the **EDIT** key.
- Press the **EDIT** key.
- Press the **SET** key.
- Press the **INDEX** key until the programmable feature you wish change is displayed.
 - Follow the instruction listed below to edit the particular feature. Press the **CANCEL** key when all the necessary changes have been made.
 - If no key is pressed within 30 seconds then the hand unit will time out and return to normal operation.

4.2.3 Editing the 1st Telephone Number

Enter the required telephone number, followed by the **SET** key. The **VOL +**, **-VOL**, **TALK**, and **CANCEL** keys have the same functions as described in Editing Tenant Information.

4.2.4 Editing the 2nd Telephone Number

The second telephone number is entered in the same way as the first.

4.2.5 Editing System Telephone Numbers

Press the **SET** key. Press the **INDEX** key until the telephone number you wish to change is displayed. Edit the number as described above and press **CANCEL** key when all the numbers are as required.

NOTE: There are 20 numbers that can be programmed (1A to 10B), but only the A numbers are used at present.

4.2.6 Editing Scheme Number

The scheme number is edited as per the 1st and 2nd telephone numbers.

4.2.7 Editing Auto Off Site Time

Enter the auto off site time (in minutes), followed by the **SET** key. The **VOL +**, **-VOL**, **TALK** and **CANCEL** keys have the same functions as described in Editing Tenant Information.

Any value between 0 and 99 minutes can be programmed in. If zero is programmed in, then the dialer will dial the centre as soon as a call is placed on the system.

4.2.8 Editing Dialer Options

Enter the dialer option code, followed by the **SET** key. The **VOL+**, **-VOL**, **TALK** and **CANCEL** keys have the same functions as described in Editing Tenant Information. Please refer to section 4.1.5 Editing the Primary information above.

<i>Dialer Option Code</i>	<i>Pulse Dialing</i>	<i>Delay after 1st Digit</i>	<i>Patron Acceptor</i>
00			
01	√		
02		√	
03	√	√	
04			√
05	√		√
06		√	√
07	√	√	√

Figure 4:4 Table of Dialer Options

4.2.9 Editing Alarm Parameters

There are two parameters to be set up in the alarm board (if fitted).

The DLY parameter is the delay (in seconds) between an 'S' type call being placed on the system, and the alarm sounding.

The CYL parameter sets how many Speech Units will sound the alarm at any one time. This parameter can only be edited if the Hand unit is in ENG mode.

4.3 HAND UNIT EDITING

4.3.1 Summary of Hand Unit Programmable Features

ID	The hand unit identity number.
ACCESS	Various editing features can be enabled or disabled.
PASS NUMBER	A pass number can be set up to bar access to the hand unit's programmable features.
DISABLE /ENABLE CANCEL	The hand unit's ability to cancel calls can be disabled for nurse call systems.
tone DELAY	The time delay between the hand unit receiving a call, and the hand unit's Speech Unit starting to beep.
CALL TYPES	Hand units can be programmed to display a pre-programmable call type name for 'W', 'X', and 'Y' call types.
ZONES	The Hand unit can be zoned, this means that the hand unit will only respond to certain tenant codes. Only tenant codes 0001 to 1599 can be zoned. A zoned Hand unit will always respond to calls outside this range.

Figure 4:5 Summary of Hand Unit Programmable Features

4.3.2 Hand Unit Editing Procedures

- Press the **EDIT** key.
- Press the **EDIT** key.
- Press the **EDIT** key.
- Press the **SET** key.
 - You will then be prompted for the "PASS NUMBER". Enter the pass number followed by the **SET** key (the pass number is 123 when new hand units leave the factory).
 - A menu will now be displayed. Press the **INDEX** key to see more of the menu. Press the appropriate **NUMERICAL** key and follow the instructions given below.

- Press **CANCEL** key to return to normal operation.

4.3.3 Key 1 - ID

Enter any number between 1 and 63 followed by the **CLOCK SET** key. Each hand unit on the system must have a unique ID number.

NOTE: If the site has any Speech Units with 'SUB' software fitted then hand unit I.D.s are limited to 1 - 7.

4.3.4 Key 2 - ACCESS

- Press the **INDEX** key until the access rights you want to change are displayed.
 - Press the **EDIT** key to change the access rights
 - Press the **SET** key to save your changes,
 - Press the **CANCEL** key to cancel changes.

TIME	Allow the clock to be set on the hand unit
INFO	Allows primary and secondary information, Speech Unit volume, and tone volume and tone duration to be edited.
TENANT	Allows the tenant code to be edited.
SCHEME	Allows all the system parameters to be edited.
INACT	Allows the inactivity parameters to be edited.
RESET	Enables COMMAND 9 (see Hand Unit Commands).
ENG	Overrides all access rights and enables all features to be edited. Also various test routines become available.

Figure 4:6 Table of Access Rights

4.3.5 Key 3 - PASS NUMBER

Enter up to a 6 digit number followed by **SET** key. The **VOL +, - VOL, TALK**, and **CANCEL** keys have the same functions as described in Editing Tenant Information.

4.3.6 Key 4 - DI / EN CANCEL

This parameter is normally set to ON, it should only be turned OFF on Nurse Call sites. When set to OFF the Hand Unit will not be able to cancel calls.

- Press **EDIT** key toggle the feature.
- Press **SET** key to save the setting.
- Press **CANCEL** key to abort operation.

4.3.7 Key 7 - TONE DELAY

Enter a value between 0 and 99 seconds followed by the **SET** key. The **VOL +, - VOL, TALK**, and **CANCEL** keys have the same functions as described in Editing Tenant Information.

4.3.8 Key 8 - CALL TYPES

Use the **INDEX** key to display the call type you wish to edit. Edit the call type and press the **SET** key. The **VOL +, - VOL, TALK**, and **CANCEL** keys have the same functions as described in Editing Tenant Information.

4.3.9 Key 0 - EDIT ZONES

Use the **-VOL** and **VOL +** keys to display the zone you wish to enable or disable. Press the **EDIT** key to enable or disable this zone. Repeat this operation until all zones are has required. Press the **SET** key to save the settings. Press the **CANCEL** key at any time to abort the editing procedure.

4.4 INACTIVITY EDITING

4.4.1 Summary of Inactivity Programmable Features

Inactivity monitoring is only available on sites fitted with INACT Speech Units. Inactivity can be checked manually from the Hand Unit (see Hand Unit commands), or the Hand Unit can be programmed to automatically check for inactivity and raise an alarm call on the system. It should be noted that *the hand unit must be left on the system at all times* if automatic inactivity checking is to be used.

RESET TIME	The time of day that inactivity monitoring begins.
TEST TIME	The time of day that the hand checks to see if there has been any activity since the last RESET TIME.

Figure 4:7 Summary of Inactivity Programmable Features

Up to 4 RESET and TEST times can be programmed into the hand unit.

4.4.2 Inactivity Editing Procedure

- Press the **EDIT** key.
- Press the **SET** key.

The display will show:-

DISABLED
RESET TIME 1

or

HH:MM
RESET TIME 1

Enter the time you wish the reset to be done followed by the **SET** key. The display will now show:-

DISABLED
TEST TIME 1

or

HH:MM
TEST TIME 1

Enter the time you wish the test to be done followed by the **SET** key. The second reset time will now be displayed. The second, third, and fourth reset and test times are edited in the same manor. To skip to the next time without entering a time, press the **INDEX** key. To disable a time press the **TALK** key when the appropriate time is displayed.

4.5 DOOR ENTRY EDITING

4.5.1 Summary of Door Entry Programmable Features

TIME	Sets time and date
TRADE TIMES	Sets the times the door locks can be operated by the TRADE buttons on the door entry panels.
SUB UNIT BLEEP	Sets the length of time the speech unit will bleep when a tenant code is entered at the door entry panel.
SUB ANSWER TIME	Set the time the tenant has to answer a call from the door entry panel after the speech unit has stopped beeping, before the call is automatically cancelled.
LOCK OPEN TIME	Sets the time the door lock is unlocked when the DOOR OPEN button is pressed on the speech unit.
SUB TIME OUT	Sets the time between the last speak or listen action and before the call is automatically cancelled
BLOCK NUMBERS	Sets the fourth digit added to the three digits entered at the door entry panel (to make a four digit tenant code) for each door entry panel. Alternatively if the door panel is functional type, the tenant code for each button can be edited.
WARDEN CODE	Sets the tenant code that will be called when the WARDEN KEY pressed on the door entry panel.
ACCESS	All the above editing features can be individually enabled or disabled. Also the following Engineer Editing Features can be enabled and disabled on block.

Figure 4:8 Summary of Door Entry Programmable Features

4.5.2 Door Entry Editing Procedure

To enter Edit Select Mode press **EDIT** key. When in Edit Select Mode use **<** or **>** keys until the feature you wish to edit is displayed. Note that only enabled edit features will be displayed. When the required feature is on the display press **ENTER** key and follow the appropriate instructions listed below. When in Edit Mode if no keys are pressed for 30 seconds Edit Mode will be aborted and the controller will return to Standby Mode with the time and trade state displayed. Pressing the **CANCEL** key while in Edit Select Mode will return the controller to Standby Mode.

4.5.3 Editing the Time

The display will have the time and date on it, with the first hour digit flashing. Press the digit required on the key pad or use **>** key to move on to the next digit. When the time and date is correct press **ENTER** key to return to Edit Select Mode. If the **CANCEL** key is pressed at any time when editing the time, the time and date will remain unchanged and you will be returned to Edit Select Mode.

4.5.4 Editing Trade Times and Override Code

Four trade times can be set up. Use the **EDIT** key to move to the trade time you wish to change. Enter the new time from the key pad, press **ENTER** key to save the new time and move to the next time. To disable a trade time enter 00 00 in both OPEN and CLOSE times. Press **CANCEL** key to exit to Edit Select Mode. Provision for an OVERRIDE CODE can be made to allow key personnel to enter the building at any time. This can be done through the ACCESS option, see 4.5.11 Editing Access below.

4.5.5 Editing the Sub Unit Beep

The number of seconds the speech unit will beep is displayed. Enter the new time from the key pad. Press **ENTER** key to save and return to Edit Select Mode. Pressing the **CANCEL** key will return you to Edit Select Mode without saving the new time.

4.5.6 Editing the Sub Answer Time

The Sub Answer Time is set in the same way as the Sub Unit Beep.

4.5.7 Editing the Lock Open Time

The Lock Open Time is set in the same way as the Sub Unit Beep.

4.5.8 Editing the Sub Timeout

Sets the time between the last speak or listen action and before the call is automatically cancelled.

4.5.9 Editing the Block Numbers

Key in the Door Panel number you wish to edit followed by **ENTER** key. The existing Block Number will be displayed or an **F** will be displayed if the door panel is a functional type.

If the door panel is a digital type key in the new Block Number followed by the **ENTER** key, pressing the **CANCEL** key will return you to the Edit Select Mode without changing the Block Number.

If the door panel is a functional type press **CANCEL** key to return to Edit Select Mode, or **EDIT** key to edit the Tenant Codes for that Door Panel. The Door Panel button number (01 being the top button) and its Tenant code will be displayed. Press the **EDIT** key until the Button you wish to edit is displayed. Now key in the new tenant's code. Press **ENTER** key to save, and move on to the next button. Press **CANCEL** key to return to Edit Select Mode.

4.5.10 Editing the Warden Code

Edit the Warden Code from the key pad and press **ENTER** key to save, and return to Edit Select mode. Pressing the **CANCEL** key will return you to Edit Select Mode without changing the Warden Code.

4.5.11 Editing Access

Enter the pass number (123 when controllers are supplied from the factory) followed by **ENTER** key. Press **1** to enable/disable editing features, press **2** to change the pass number and press **3** to enter an OVERRIDE CODE.

If **1** has been pressed the ACCESS option will be opened and the editing feature will be displayed followed by ON for enabled and OFF for disabled. Press **<** or **>** keys until the feature you want is

displayed. Press the **EDIT** key to toggle enable/disable. When all the enables and disables are as required press **ENTER** key to save, and return to the Edit Select Mode. Pressing the **CANCEL** key will return you to the **EDIT** select Mode without any changes being saved. Note that enabling the Engineer Mode overrides all the disables, and enables the Engineer Edit features.

If **2** has been pressed the PASS NUMBER option will be entered, you can now key in a new PASS NUMBER. Press **ENTER** key to save.

If **3** has been pressed, the OVERRIDE option will be entered. You can now enter an 8 digit number e.g. 40254317. Press **ENTER** to save.

To use the OVERRIDE code at the front door press the following sequence:-

4,0,2,TRADE,5,4,3,TRADE,1,7,TRADE

The door will open and the door open tone will come from the loudspeaker.

4.6 ENGINEER EDITING

4.6.1 Summary of Programmable Engineering Features

TEST	Keyboard test, initialise E2PROM, Relay test.
I.D.	Sets the identity of the Door Entry Controller board, and whether a 3 pair or 4 pair system, (3 pair is used only on systems that do not have the correct number of cables installed).
PANELS ON SYSTEM	Sets the number of Door Entry Panels on the system

Figure 4:9 Summary of Engineering Programmable Features

4.6.2 Engineering Editing Procedure

These features are only available if Engineer Mode has been enabled.

Do not press ENTER key to enter test procedures just select the test required.

4.6.3 The KB Test

Select KB. The display will now show which keys are pressed. Press **CANCEL** key to exit.

4.6.4 The Init Test

Select INIT. All information stored in the E2PROM will be cleared and default values inserted.

4.6.5 The RLY Test

Select RLY. Press the key corresponding to the lock relay you wish to switch on. When a relay is on it can be turned off by pressing any numerical key. Press **CANCEL** key to exit.

4.6.6 Editing the ID

The identity of the Door Entry Controller board is displayed. You can now key in the new I.D. number followed by **ENTER** key to save. The I.D. should be 1 unless more than one door entry controller boards are on the system. Pressing the **EDIT** key in this mode will enable the door entry system to work in 3 pair mode (no separate audio pair for door entry). If 3 pair mode is already enabled pressing **EDIT** key will return the controls to 4 pair mode.

4.6.7 Editing the Number of Panels on the System

The total number of Door Panels the controller will communicate with is displayed on the left, and the number that can be Functional Door panels is displayed on the right. Key in the number of door panels and press **ENTER** key. Key in the number of functional panels and press **ENTER** key.

The maximum number of Door panels on a standard system is 8. The maximum number of door panels on an expanded system is 64. If the controller is told it has more panels than it has, System errors will occur.

The maximum number of functional door panels is on a standard system is

4 x 7 Button panels or
2 x 14 Button panels or
1 x 28 Button panel.

To determine which Door panels are functional enter BLOCK NUMBERS with Engineer Mode on press **EDIT** key when the appropriate block number is displayed. If you try to assign more Functional Panels than the system has been set up for the message OUT OF MEMORY will be displayed. If it is required to change a Functional Panel to a Digital Panel enter BLOCK NUMBERS with Engineer Mode on, edit the appropriate Panel and enter the required Block Number.

IMPORTANT Do not leave the door entry controller operating in engineering mode.

5 PRESTIGE WARDEN CALL TESTING

5.1 HAND UNIT TEST ROUTINES

When the hand unit *is not in ENGINEER* mode only test 0 is available (see below). To initiate the test press the **TEST** key.

When the hand unit *is in ENGINEER* mode several test routines are available. Press the **TEST** key followed by the number of the test required. Press the **CANCEL** key to return to normal operation.

5.1.1 Test 0 - System test

Each Speech Unit on the system is checked. All Speech Units found on the system have their logical I.D. number displayed on the left of the display. Missing logical I.D. numbers are displayed on the right hand side of the display. The test pauses when a gap in logical I.D.'s is detected.

Press the **CANCEL** key at any time to abort the test.

5.1.2 Test 1 - Keyboard test

Each key pressed is displayed on the hand unit. Press the **CANCEL** to exit from this test.

5.1.3 Test 2 - Speech Unit I.D. test

The Speech Units logical I.D., Tenant code, and software version are displayed. Press the **INDEX** key to view the next Speech Unit on the system. Press the **CANCEL** key to exit the test.

5.1.4 Test 3 - Monitor

This test turns the hand unit in to a Comms monitor. Press the **CANCEL** key to exit the test, press **any other key** to freeze and unfreeze the display.

NOTE: The hand unit must be removed from the Speech Unit, switched off, and clipped back on to the Speech Unit again, after this test.

5.1.5 Test 4 - Software Version

Displays the Hand Unit software version.

5.1.6 Test 5 - Site Information

Displays site software information (only dialer and door entry at present).

5.2 RADIO PAGER TEST ROUTINE

This test is only available on Paging Hand Units. To enter the test press the **TEST** key has the hand unit *is switched on*. The display will show 'RADIO TEST' on the top line and 'NO TEST SIGNAL' or 'Receiving Test' on the bottom line. This test is used in conjunction with the Pager Transmitter Board test mode. To exit this test switch, off the Hand unit.

5.3 MK4 WARDEN CALL HAND UNIT TEST PROCEDURE

5.3.1 Equipment Required

- Oscilloscope and x10 probe
- Frequency counter 1 MHz
- Variable power supply 0 - 21V Min, 1A
- Digital Multimeter DC mA, DC V
- (Pager Only) Transmitter

5.3.2 Before Starting

- Real time clock battery should not be fitted at the start of the tests.
- In tests where the hand unit is 'on' a sub unit, it is assumed that the sub unit is properly connected up.
- Connect the sub to 21V and the comms connections should be pulled up and down with 220R resistors. Program the sub unit to be sub 1.
- The current drawn by the hand unit can be measured by 'breaking' the +21V supply and subtracting the current drawn by sub 1 from that of sub 1 plus the hand unit.

5.3.3 Power Supply

- Set the variable power supply to 21V and plug the hand unit onto sub 1. The hand unit will now log on.
- If the display is dim or no message appears then adjust VR102.
- The current at this point should measure 35 mA.
- Using the multimeter the current available across the real time clock battery connections should measure 0.9 - 1.0 mA.
- Using the 'scope the voltage at pins 44 and 15 of the processor should be 5V.
- (Pager Only) Using the 'scope measure the VCC pin of the receiver module (this pin leads from Q113).

5.3.4 Reset

- Whilst using the 'scope to measure pin 10 of the processor slowly decrease the supply voltage until the pin goes high (4.5 - 5V).
- Using the 'scope measure pin 44 of the processor. It should measure approximately 4.5V. Return the supply voltage to 21V.

5.3.5 Low Battery Detection

- (Standard Only) Using the 'scope set pin 3 of U102 to 5V by adjusting VR101.
- (Pager Only) Remove the hand unit from sub 1.

- Disconnect the power supply from the sub rig, and set it to 7.5V. Connect it to the main battery connector (PP3).
- Using the 'scope measure pin 1 of U102.
- Adjust VR101 until pin 1 of U102 is at 0V, the display should show 'LOW BATTERY'.
- Adjust VR101 until pin 1 of U102 is at 5V, the display should show ' 0'.
- Leave VR101 at the point where pin 1 of U102 just crosses over and remove the 'scope probe.
- Adjust the variable power supply to 7.4V. The display should show 'LOW BATTERY'.
- Adjust the variable power supply to 7.6V. The display should show ' 0'.
- Because the 'scope loads the low battery circuit, manual adjustments may be necessary.
- Remove the power supply from the battery connector and reconnect it to the sub rig at 21V.
- Log the hand unit onto sub 1.

5.3.6 Keypad and EEPROM

- Turn on the hand unit's engineering mode by pressing :
 - [EDIT] [EDIT] [EDIT] [SET] [1] [2] [3] [SET] [2] [INDEX] (until the ENG function comes round) [EDIT] [SET] [CANCEL].
- Check that the keypad functions correctly by pressing :
 - [TEST] [1] then every key. (Each key will show it's unique number on the display)
 - Press [CANCEL] to finish.
- Change the hand unit's ID number to '05' by pressing :
 - [EDIT] [EDIT] [EDIT] [SET] [1] [2] [3] [SET] [1] [0] [5] [SET].
- Change the hand unit's tone delay to '00' by pressing :
 - [7] [0] [0] [SET].
- Press [CANCEL] and remove the hand unit from sub 1, wait 5 seconds and then replace hand unit.
- Check that the hand unit has retained it's ID by pressing :
 - [EDIT] [EDIT] [EDIT] [SET] [1] [2] [3] [SET] [1].
- Return the hand unit's ID number to '01' by pressing :
 - [1] [0] [1] [SET] [CANCEL].
- The display should show the time, date and 'NO CALLS'.

5.3.7 Real Time Clock

- Using the 'scope to measure pin 14 of U105, adjust C104 to give a frequency of 32.768 KHz +/- 6 Hz.
- For best results set the frequency counter to 10 second gate and attach the 'scope probe ground to pin 8 of U105.
- Set the time and date by pressing [CMD] [SET] (enter time and date) [SET].

5.3.8 Communications

- Check for correct log-on, i.e. that the time and date are shown on the displays top row and 'PLEASE WAIT' followed by 'NO CALLS 0' is shown on the bottom row.
- Check that during logging-on and when a call is pending the hand unit bleeps.

- Check that calls can be accepted and cancelled (if there is only sub 1 on the test rig then when a call is put on from sub 1 and it is accepted the hand unit will show 'ERROR SELF CALL' and will automatically be cancelled.
- (Pager Only) Remove the hand unit from sub 1 and turn it on.
- Check that the hand unit shows 'OUT OF RANGE' after a short delay.
- Connect the transmitter to the sub rig. The hand unit display should change to 'NO CALLS'.
- Initiate a call from sub 1. Check that the hand unit picks up the call and shows the correct information.
- Accept and cancel the call.
- Switch the Transmitter to test mode and switch on the hand unit holding in the test key.
- Check that the display shows 'RECEIVING TEST'.
- Range check the hand unit to a reasonable distance, when the hand unit can no longer pick up the transmission the display will show 'NO RADIO'.

5.3.9 Pager Battery Current

- Log the hand unit onto sub 1.
- The current available across the pager battery connector should be 21mA approximately. The current measured through the PP3 pager battery should be 10mA approximately.
- Connect the pager battery and remove the hand unit from sub 1. To measure current lift one battery connector off the pager battery.
- Connect up the transmitter and set it to 'run' mode. The current drawn when the hand unit is switched on initially should be 32mA approximately.
- When there is a transmission the current will drop to 13mA approximately.
- The hand unit's UHF receiver module will now turn on and off when the transmitter transmits.

5.3.10 Miscellaneous

- Check that the backlight on the display automatically switches off after a delay when a key has not been pressed.

6 PRESTIGE WARDEN CALL SYSTEM ERROR CODES

If an error occurs when the hand unit is trying to communicate with another unit on the system a 'COMS ERROR' code will be displayed. The following table contains the meaning of these codes and possible causes.

<i>COMS ERROR</i>	<i>MEANING</i>	<i>POSSIBLE CAUSE</i>
0	No gap in data for 2.5 sec's	Another hand unit is performing a TEST 0. Faulty unit on system continuously transmitting data.
1	Check sum error	Two Speech Units with the same logical I.D. Two hand units with the same I.D.
2	No reply to data	Faulty unit unable to receive data.
3	No reply from hand unit's Speech Unit when audio channel is open	Faulty Speech Unit
4	Incorrect data	Two hand units with the same I.D.
5	Missing data	Two Speech Units with the same tenant code. Two hand units with the same I.D. number.
6	No Poll	Faulty or missing Speech Unit with Logical I.D 1.
7	Call aborted	Speech Unit detecting an error code.

7 PRESTIGE WARDEN CALL SYSTEM OPERATION

7.1 HAND UNIT OPERATION

7.1.1 Accepting a Call

When a call has been placed on the system the hand unit will bleep and display details of the call. On the top line of the display will be the primary information and this will usually be the name of the tenant who lives in the flat. On the second line of the display the tenant code will be displayed, , (all Speech Units have a different number to distinguish them from each other), and then the type of call e.g. PULL CORD, RADIO, SMOKE, SUB UNIT etc. At the end of the second line there will be a flashing number; this number represents how many calls are awaiting attention. If there is more than one call pending on the display, pressing the **INDEX** key will allow a choice to be made of which call should be accepted first. When the choice has been made pressing the **ACCEPT** key will open the speech channel allowing communication to commence, and the bottom line of the display will change from the identification number and the type of call, to show the secondary information, which will usually be the flat or house number. Also at the end of the secondary information line next to the calls pending, will be a character, this character represents the type of call accepted e.g. G for gas, P for pull cord etc. The calls pending will be reduced by 1 and again flash indicating the number of calls still on the system. To speak to a tenant, press the **TALK** key, and release the **TALK** key to listen to the tenant.

7.1.2 Volume Control

If the volume is too high or too low, pressing the **-VOL** or **VOL +** key will alter the volume at the hand unit end only. If the tenant says that the volume is too low or too high then a press the **CMD** key followed by the **VOL +** or **-VOL** key, the outgoing volume will increase or decrease by one step at the tenants end. There are eight levels of volume and when the speech channel is first opened it is opened at its pre-programmed level, which is normally level 3 or half volume.

7.1.3 Call Tone

When connection is first made it may be necessary to attract the attention of the tenant. For this purpose a double bleep will be made at the tenants Speech Unit, every time the **ACCEPT** key is pressed, after connection has been made. This facility is primarily for use when calling out to tenants.

7.1.4 Cancelling the Call

To finish a call simply press the **CANCEL** key.

7.1.5 Calling out to a Flat

Each Speech Unit on the system will be programmed with a four digit Tenant code during installation. Each Tenant code will be different from the rest, in order to distinguish each individually. To call out to any tenant on the system it is a simple matter of typing in the Tenant Code (leading zeros being unnecessary), and then pressing the **ACCEPT** key. The speech channel will then open. All functions will be the same as described above in the Accepting a Call section. With a Speech Unit in privacy however, the tenant's microphone will not be connected and "IN PRIVACY"

will be displayed on the secondary information line. A call out tone should be then sent using the **ACCEPT** button again. The tenant should be asked to take their Speech Unit out of privacy by pressing the privacy button on the Speech Unit. This will connect the tenant's microphone, and the secondary information line will be displayed.

7.1.6 Setting the System Clock

To set the clock to the correct time and date press the **CMD** key followed by the **SET** key. The first digit of the display will flash. Type in the new time and date and press one of the number keys until the required month is displayed, then press the **SET** key on a time signal and the new time and date will be displayed.

NOTE: Hand units can be programmed to prevent the user from being able to alter the time (see Hand Unit Editing Procedures).

7.1.7 Connecting Calls to the Centre

To divert calls through to a control centre or to another scheme simply press **CMD 0** the display will now display "OFF-SITE" if there are no problems. Any calls now activated on the system will dial through the telephone network to a control centre. If however, the display does not display the "OFF SITE" message another message will appear instead e.g., "No B.T. Line", this is an indication that the B.T. line has become disconnected or a possible fault exists on the line. This obviously needs looking into.

7.1.8 Connecting Calls to the Hand Unit

When the hand unit is displaying "OFF-SITE", calls are currently being diverted through to another centre/scheme. To turn this mode of operation off simply press **any key** on the keyboard. The display will now return to normal.

NOTE : If a call is currently connected through the telephone network to a remote centre/scheme the system will not return to ON SITE. You have to wait until this call has been cancelled before you can take control of the system again.

7.2 HAND UNIT COMMANDS

Press the **CMD** key - The Command menu will be displayed.

Press the **INDEX** key - To display more of the menu.

Select the required option see below.

7.2.1 Off Site Mode

Press **0** to put the system into **Off Site Mode**. All calls will be directed to the Central Control Station. Only available for sites with a PSTN connection and a dialer fitted.

7.2.2 Inactivity Test

Press **1** to interrogate any inactivity Speech Units to determine whether or not movement has been detected by that unit since inactivity inputs were last reset.

7.2.3 Inactivity Reset

Press **2** to resets inactivity inputs on **INACT** Speech Units.

7.2.4 Alarm On

Press **4** to switch on the Speech Unit's fire alarm beeps. This feature is only available if the system is equipped with an alarm board.

7.2.5 Alarm Off

Press **5** to switch off the Speech Unit's fire alarm beeps.

7.2.6 Open Door

Press **6** to open the door after an 'E' type call has been accepted.

7.2.7 Standby

Press **7** to enter standby mode. The Hand Unit is disabled and will not receive any call. This mode allows the Hand unit to be left on a Speech Unit to charge the battery when not in use. The display will show:-

STANDBY 1-EXIT 7-PAGER

Press key **1** to return to normal operation

Press key **7** to put the Hand unit in to 'Pager standby mode'. In this mode the Hand unit will not receive any calls from the system, but will receive calls from the Pager transmitter. Press **any** key to return to normal operation.

7.2.8 Reset

Press **8** to reset the system. Any accepted calls on the system are cleared. This command can be disabled see 'Hand Unit Editing Procedures'.

NOTE: This command should not normally be used unless a fault condition arises.

7.2.9 Set Time

Press **SET** to set the system clock. Please refer to 7.1.6 Setting the System Clock.

7.2.10 Display Trigger Codes

Press **TEST** to display the required trigger bit pattern for this Speech Unit.

7.2.11 Exit

Press **CANCEL** to return to normal operation.

7.3 PAGING HAND UNIT OPERATION

When the Hand Unit is fitted with this option, calls can be received while the hand unit is not clipped on to a Speech Unit. The Hand Unit must be switched on, and have a charged battery, in order to receive calls. The battery is charged by clipping the Hand Unit on to a Speech Unit, this is normally done over night. Calls can only be accepted by a Hand Unit clipped on to a Speech Unit.

7.4 SPEECH UNIT OPERATION

There are five types of Speech Unit available.

- Standard Speech Units.
- Combined Door Entry Speech Units.
- Nurse Call Speech Units
- Inactivity Speech Units
- Stainless Steel Speech Units

7.4.1 Placing a Call

Calls can be initiated in one of several ways.

- Press the red CALL button on the Speech Unit.
- Pull down the cord at the bottom of the Speech Unit.
- Pull a remote pull cord (if fitted).
- Press the button on the radio trigger (if supplied).

Each action will initiate a call and flash the red Call Light situated just above the red CALL button. The Speech Unit will also emit a bleeping sound (optional). If a Hand Unit is placed somewhere on the system, it will bleep warning the warden that a call has been placed on the system.

If the scheme is in Off Site mode (no warden is on duty at the scheme) the system dialer will dial the Control Centre and the call will be handled by the Control Centre staff.

There are several devices which can be connected to a Speech Unit which will initiate a call but not cause the unit to bleep (intruder detectors, hypothermia detectors etc.).

7.4.2 Privacy Button

To give the tenant of a flat complete privacy a PRIVACY button is provided on the front of the Speech Unit. When the PRIVACY button is pressed the light situated just above the button will come on, and the Speech Unit is placed in privacy mode.

In privacy mode the tenant cannot be heard when a Speech Unit is called. While in privacy the tenant can hear the warden. The wardens hand unit will display IN PRIVACY. The warden should ask the tenant to switch the privacy mode off by pressing the PRIVACY button.

Privacy mode has **no effect** on calls initiated by the Speech Unit.

7.4.3 Door Entry Schemes

On door entry Speech Units the **CALL** and **PRIVACY** buttons are positioned higher up on the Speech Unit. The **CALL** and **PRIVACY** buttons have the same functions as the standard Speech Units.

The on / off light above the **ON/OFF** button will be lit if the door entry feature is enabled. If the door entry feature is disabled no calls will be received from the door entry panel. To enable or disable the door entry feature press the **ON/OFF** button.

When the Speech Unit is called from the door entry panel it will bleep (if enabled). The tenant should then speak to the caller by holding in the **SPEAK** button. To Listen to the caller the **SPEAK** button must be released.

If the tenant wishes to give access to the caller they should press the **DOOR OPEN** button. If the tenant does not want to give access to the caller then the **ON/OFF** button should be pressed to cancel the call.

If the tenant fails to, open the door, or cancel the call, the call will be cancelled automatically.

7.5 NURSE CALL SPEECH UNITS

These Speech Units have **CANCEL**, **NURSE PRESENCE** and **EMERGENCY CALL** buttons. On schemes where Nurse Call Speech Units are used, the Hand Unit, are programmed not to cancel calls. The purpose of nurse call schemes is to ensure that a warden attends every call placed on the scheme.

7.6 INACTIVITY SPEECH UNITS

These Speech Units are fitted with special INACT software. They are used in conjunction with the warden's hand unit to monitor the tenant's mobility. For full details of this feature see the **Patron Prestige Mk4 Hand Unit Manual**.

8 APPENDIX A PRESTIGE WARDEN CALL EQUIPMENT

	7501	Standard Hand Unit MK3
	7502	Standard Paging Hand Unit MK3 (UHF)
	7601	Standard Speech Unit
	7601No1	Speech Unit No1 Monitoring
	7602	Door Entry Speech Unit
	7608	Stainless Steel Speech Unit
	7604	Ceiling Pull Switch
	7708	Power Supply Kit
	7710	PSU Battery Kit
	7703	Warden Dialer
	7803	UHF Radio Paging Transmitter
	7847	Paging / Beacon Interface
	7851	Serial Printer Interface

	7801	Central Radio Receiver
	7804	Aerial for Central Receiver
	7810	Neck Pendant Radio Trigger
	7815	Neck Pendant Radio Trigger Replacement Battery
	7901	Stainless Steel Door Entry Panel
	7903	Door Entry Exchange Control Panel
	7907	Lock Release Speech System
	7702	Remote Input Controller
	7970	All Call Broadcast Unit
	9750	Wardens Mobile Telephone exchange (Excluding DECT telephones)

Figure 8:1 Prestige Warden Call System Parts Numbers

9 APPENDIX B PRESTIGE WARDEN CALL CABLING GUIDES

9.1 SCHEME SIZES

Maximum number of Speech Units	254 (Standard scheme) 510 (Extended scheme)
Maximum cable length	1000 metres min (without repeaters) 6000 metres (with repeaters)
Power Supplies Required	8A PSU per 175 Units

Figure 9:1 Scheme Sizes

9.2 SYSTEM CABLE GUIDE

Cable Type	CW1308
Number of pairs	4 (Standard System) 6 (System with Door Entry)

Figure 9:2 Number of Cable Pairs

NOTE: Two pair used for power supply to Speech Units where cable runs do not exceed the requirements set out in the cable length guide tables below.

9.3 SYSTEM CABLE LENGTH GUIDE

<i>Length of System ring using CW1308</i>	<i>Max Number of Speech Units on ring</i>	<i>Length of Spur using CW1308</i>	<i>Max number of Speech Units on spur</i>
400 metres	6	200 metres	1
200 metres	16	100 metres	6
100 metres	36	50 metres	10
50 metres	76	25 metres	36

Figure 9:3 System Cable Length Guide

NOTE: Where ring or spur lengths exceed the lengths shown above, 1.0mm twin cable should be used for the power pair. The audio pair is unaffected until lengths exceed 6000 metres, and the communications pair is unaffected until lengths exceed 1000 metres.

<i>Length of Power Ring Using 1mm Cable</i>	<i>Maximum Number of Speech Units on Ring</i>	<i>Length of Power Spur Using 1mm Cable</i>	<i>Maximum Number of Speech Units on Spur</i>
2000 metres	2	1000 metres	1
1000 metres	6	500 metres	6
500 metres	16	250 metres	16
250 metres	36	100 metres	46

Figure 9:4 Maximum Number of Speech Units per Cable

9.4 SPEECH UNIT SPECIFICATION

Voltage	20V nominal
Current consumption	15 mA Max (In standby) 100 mA Max (Audio Channel Open)
Audio output	1.8 W Max (R,M,S,)
Frequency Response	500 Hz to 5kHz (3dB)
Automatic Volume Control	0dB to -20 dB
Manual Volume Control	-14 dB to +6 dB
Dimensions	230 x 120 x 35mm
Identify Range	0001 to 9999
Tenant Information Storage	26 Characters

Figure 9:5 Speech Unit Specification

9.5 HAND UNIT SPECIFICATION

Voltage	6V to 25V
Current Consumption	28mA (Standard Hand Unit) 42.5mA (Paging Hand Unit)
Battery	(Paging Hand Unit) 8.4V Ni-Cad
Battery Discharge Time	8 Hours (Paging Hand Unit)
Display	30 Characters
Dimensions	145 x 92 x 45mm
Key Pad	20 Key Membrane

Figure 9:6 Hand Unit Specification

9.6 DIALER SPECIFICATION

Voltage	20v
Current Consumption:-	50mA (Standby) 150mA (Max)
Method of dialing	DTMF)
Method of Communication	DTMF
B.T. Approval No	S/3376/3/K/453448
Dimensions	37 x 160 x 250mm

Figure 9:7 Dialer Specification

9.7 CENTRAL RECEIVER SPECIFICATION

Voltage	20v nominal
Current Consumption	50mA
Aerial Impedance	50R
Receiving Frequency	173.225 Mhz

Figure 9:8 Central Receiver Specification

9.8 PAGING HAND UNIT TRANSMITTER INTERFACE SPECIFICATION

Voltage	20V nominal
Current Consumption	25mA
Output to transmitter	1V r.m.s.
Output impedance	600R

Figure 9:9 Paging Hand Unit Specification

9.9 POWER SUPPLY UNIT SPECIFICATION

Input	240V a.c.
Current Consumption	600mA (Fully loaded)
Outputs	21V at 8A (8A PSU) 24V at 1.5A
Batteries	2 x 12V 18VA
Battery backup time	8 Hours (with 75 Speech Units in standby on system using 8A PSU)
Battery charging time	12 hours

Figure 9:10 Power Supply Unit Specification

9.10 DOOR ENTRY CONTROLLER SPECIFICATION

Voltage	20V (Nominal)
Current Consumption	200 mA
Maximum Number of Door Entry Panels	8 (Standard) 64 (Expanded system)
Maximum Number of Trade Times	4
Lock Releases	12v d.c. 700MA Maximum

Figure 9:11 Door Entry Controller Specification

9.11 DOOR ENTRY PANEL SPECIFICATION

Voltage	20V (Nominal)
Current consumption	70mA (Standby)
Display	3 x 7 Segment L.E.D.
Audio Output	1.8W (r.m.s.)
Volume Control	14dB to +6dB
Frequency Response	500 Hz to 5kHz (3dB)

Figure 9:12 Door Entry Panel Specification

10 USER NOTES

This Section left blank for user notes.

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