Disabled Refuge

Safe-Point

Commissioning and User Manual

K41202* Safe-Point 2-Way Disabled Refuge Control Panel (Loop connectivity)
K41102* Safe-Point 2-Way Disabled Refuge Control Panel (Radial connectivity)
K41208* Safe-Point 8-Way Disabled Refuge Control Panel (Loop connectivity)
K41108* Safe-Point 8-Way Disabled Refuge Control Panel (Radial connectivity)
K41216* Safe-Point 16-Way Disabled Refuge Control Panel (Loop connectivity)
K41216* Safe-Point 16-Way Disabled Refuge Control Panel (Radial connectivity)
K41232* Safe-Point 32-Way Disabled Refuge Control Panel (Loop connectivity)
K41132* Safe-Point 32-Way Disabled Refuge Control Panel (Radial connectivity)

***FST/SST - Flush mount enclosure/Surface mount enclosure**

Model shown: K4132SST

Kentec Electronics Ltd

Man-1484 Rev.01

Safety

Suppliers of articles for use at work are required under section 6 of the Health and Safety at Work act 1974 to ensure as reasonably as is practical that the article will be safe and without risk to health when properly used.
An article is not regarded as properly used if it is used ‘without regard to any relevant information or advice’ relating to its use made available by the supplier.

This product should be installed, commissioned and maintained by trained service personnel in accordance with the following:

(i) Regulations for electrical equipment in buildings specific to the country of use.

(ii) Codes of practice

(iii) Statutory requirements

(iv) Any instructions advised by the manufacturer.

According to the provisions of the Act you are therefore requested to take such steps as are necessary to ensure that you make any appropriate information about this product available to anyone concerned with its use.

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(i) IEE regulations for electrical equipment in buildings
(ii) Codes of practice
(iii) Statutory requirements
(iv) Any instructions specifically advised by the manufacturer

According to the provisions of the Act you are therefore requested to take such steps as are necessary to ensure that you make any appropriate information about this product available to anyone concerned with its use.

This equipment is designed to operate from 115V AC to 230V AC 50/60Hz mains supplies and is of class 1 construction. As such it must be connected to a protective earthing conductor in the fixed wiring of the installation and a readily accessible double pole disconnect device meeting the requirements of EN60950/IEC950 which disconnects live and neutral simultaneously shall be incorporated in the fixed wiring.

Switch disconnect devices such as MK Sentry 63A or similar are suitable for this.
Failure to ensure that all conductive accessible parts of this equipment are adequately bonded to the protective earth will render the equipment unsafe.

This control panel is environmental class A and is designed for indoor use only at temperatures between -10°C and +45°C with a maximum relative humidity of 95%.
The IP rating for the enclosure is IP30.

Operation outside of these limits may render the equipment unsafe.

Disclaimer

In no event shall The Manufacturer be liable for any damages or injury of any nature or kind, no matter how caused, that arise from the use of the equipment referred to in this manual.
Strict compliance with the safety procedures set out and referred to in this manual, and extreme care in the handling or use of the equipment, are essential to avoid or minimise the chance of personal injury or damage to the equipment.

The information, figures, illustrations, tables, specifications, and schematics contained in this manual are believed to be correct and accurate as at the date of publication or revision. However, no representation or warranty with respect to such correctness or accuracy is given or implied and The Manufacturer will not, under any circumstances, be liable to any person or corporation for any loss or damages incurred in connection with the use of this manual. The information, figures, illustrations, tables, specifications, and schematics contained in this manual are subject to change without notice.

Unauthorised modifications to the fire detection system or its installation are not permitted, as these may give rise to unacceptable health and safety hazards.

By installing this equipment on a computer network, the owner accepts full and unequivocal responsibility for ensuring that it is protected against all cyber threats and illegal tampering during the lifetime of the equipment.Any software forming part of this equipment should be used only for the purposes for which The Company supplied it. The user shall undertake no changes, modifications, conversions, translations into another computer language, or copies (except for a necessary backup copy).In no event shall The Manufacturer be liable for any equipment malfunction or damages whatsoever, including (without limitation) incidental, direct, indirect, special, and consequential damages, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss, resulting from any violation of the above prohibitions.

Safety Information

Observe all safety information on the product labels.

ESD Precautions

This product contains static-sensitive devices. Observe ESD precautions when working on the equipment with the cover / door removed.

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Contents

1. Introduction

This commissioning manual provides general guidance for the operation, configuration, commissioning, maintenance, and fault finding. The disabled refuge system has been manufactured to comply with BS5839 Pt9. Disabled Toilet Alarm has been manufactured to comply with the Equality Act 2010.

Emergency voice communication (EVC) systems allow fire fighters and others to communicate with one another during emergency situations in and around buildings. Emergency voice communication systems are used in connection with life safety and need, therefore, to be subject to high standards of design, manufacture, installation and servicing, similar to those covering fire detection and alarm systems and voice alarm systems.

1.1 Terms and definitions :

Competent person

Authorised person with the necessary training and experience, and with access to the requisite tools, equipment and information, and capable of carrying out a defined task.

Disabled refuge system

A disabled refuge system enables communication between strategic points throughout the building or site and the central control point(s). EVC systems are generally needed for disabled people who may have difficulty negotiating the evacuation route. The need for EVC in any specific building or complex will normally be determined by the appropriate regulation and/or a fire risk assessment carried out by the owner, landlord, occupier(s), employer(s) or other competent person, as appropriate.

Fire telephone system

Commonly-used with fire fighters to form an emergency voice communication system that includes telephone handsets (Type A) at outstations and wired in enhanced fire rated cable.

Refuge area

Area that is enclosed with fire-resisting construction (other than any part that is an external wall of a building) and served directly by a safe route to an exit, evacuation lift or final exit, thus constituting a temporarily safe space for disabled people to await assistance for their evacuation

2. Installation : (refer to drawing on page 23)

Install central enclosure, **with cable entry gland at top**, at a height of approx. 1.5 metres above floor height. Ensure fixings can support a load of 20 Kg.

The field cabling described below **must** be installed via top entry to the enclosure.

The system batteries will sit on the lower edge of the enclosure, and the entire space below the main PCB assembly must be kept clear to accommodate these items.

2.1 Connect Field Cabling

A - Connect 5A (lighting rated) A.C. Mains supply (220 - 240V) to appropriate (L)ive, (N)eutral and (E) earth terminals on the modular PSU unit DSP60, located on DIN Rail fixings at the right of the main enclosure (Max system load is 40 Watts).

N.B. Earth terminal must be connected to building earth.

B1 – Connect 4 core (+screen) enhanced fire rated cable **out** to first remote loop location.

Observe colour coding on PCB ident for cable cores:

GY (Grey)	: COM (0V common reference)
BN (Brown)	: PWR (+ 24VDC)
BK (Black)	: LIN (loop cable audio line)
BU (Blue)	: DAT (loop cable data line)
SCN	: Cable screen (connected to system earth and COM internally)

This cable is then connected, in a ‘daisy chain’ configuration, sequentially to all remote node locations, and terminate to the appropriately identified terminals on the PCB subassembly CS961 located in the back box at each remote location. Continue to observe colour coding as listed above.

B2 - Connect loop cable returns from the last remote node location to these terminals. Observe the same polarities as the B1 terminations listed above.

The following connections are optional, and are fitted only when the system specification requires these functions

C – Volt free ‘Fault Out’ changeover contacts, for remote fault reporting. (Fault relay is normally energised).

D – Volt free changeover contact – changes state with any call on the system. Use if remote call indication is required.

2. Installation Cont…

E – Short these terminals with a volt free closing contact (rated 50mA or higher) to enable the system ‘Anti Tamper’ feature.

(The ‘Anti Tamper’ feature enables the system to automatically disable incoming calls, whilst retaining system monitoring of the remote cabling and outstations. The system is returned to full operation with this contact opened).

2.2 Switch F

The setup switch is used for commissioning the system.

2.3 Connector J

The Cat5 (RJ45) socket is only used for the master control panel. These are intended to be connected via standard (non fire rated) UTP Cat 5 cable, to the main control panel.

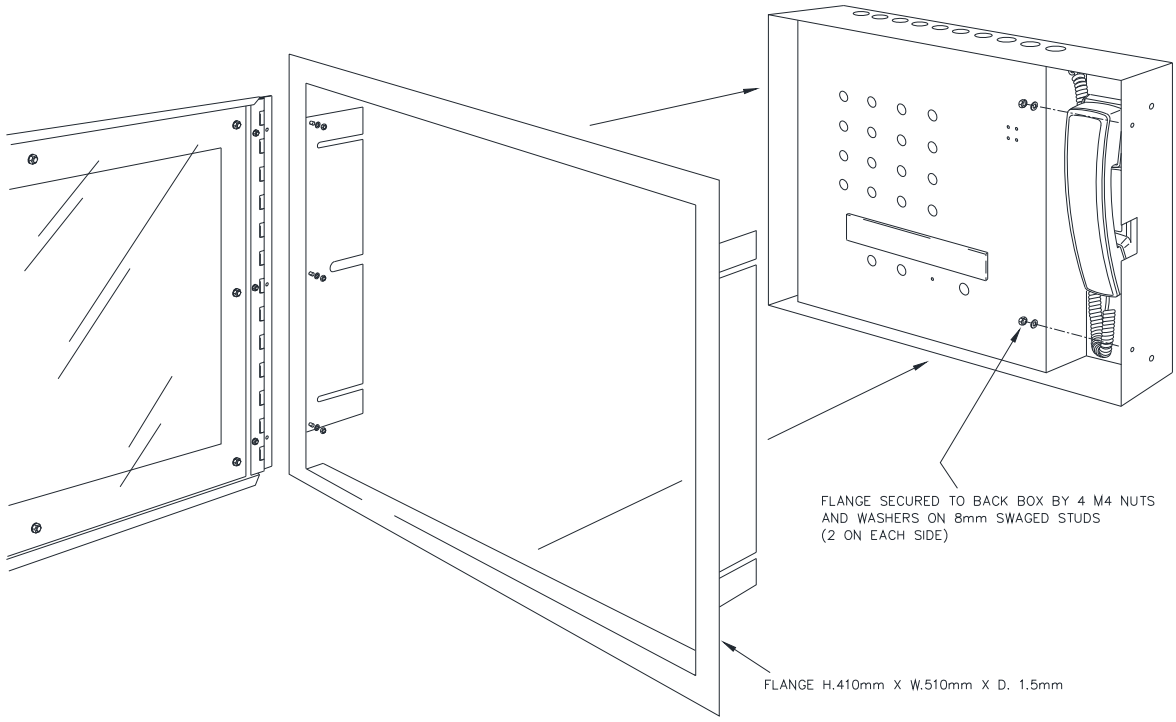
2.4 Connector K

The Cat5 (RJ45) socket is only used where a remote control panel (repeater) is fitted. These are intended to be connected via standard (non fire rated) UTP Cat 5 cable, to a cable junction box adjacent (within the same fire zone) to the main control panel.

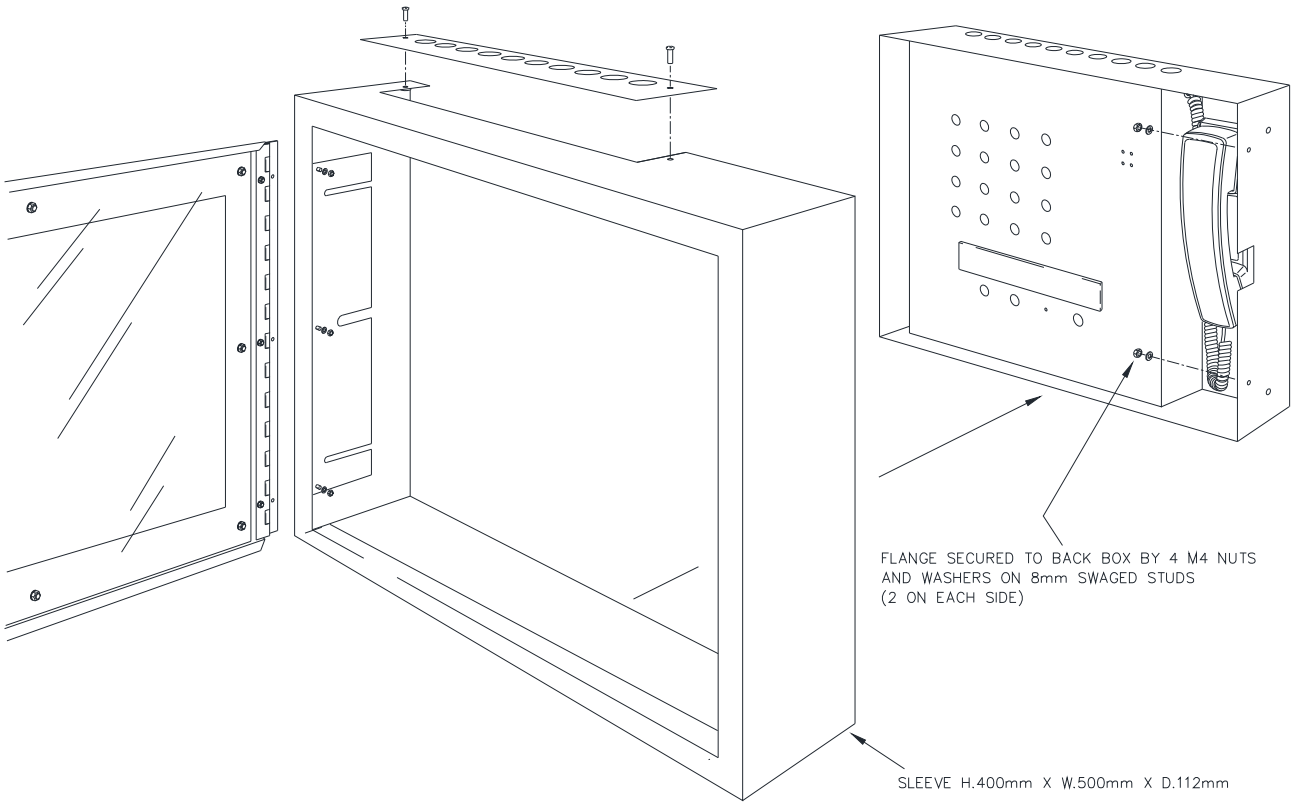
From that location, the control functions are serialised, and forwarded to the remote control panel location via a four pair (+screen) enhanced fire rated cable.

2 Installation Cont...

2.5 Flush mounting bezel assembly



2.6 Surface mounting sleeve assembly

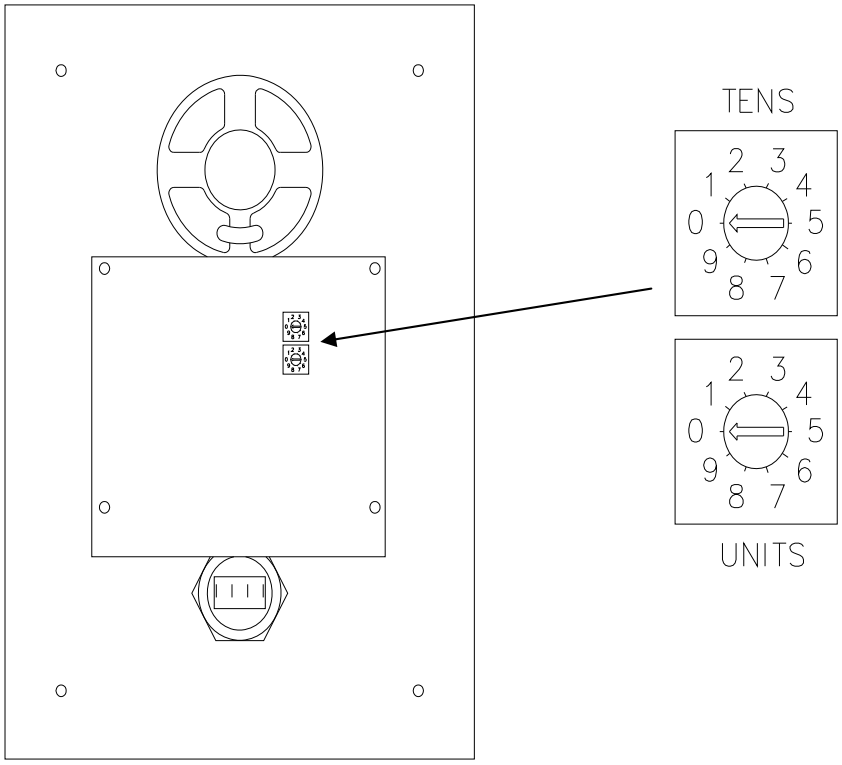


3. Commissioning procedure (refer to Drawing on page 23

3.1 Remote Outstation Addressing

Remote outstation addressing: CS965. Each outstation requires an address which relates to the switch position on the master control panel.

SW1 & SW2 are located on CS965 as below.



The remote outstation address is SW1 Tens and SW2 Units

Examples

Switch No.	Switch Set	Address
SW2 (Tens)	0	
SW1 (Units)	1	(Unit 1)
SW2 (Tens)	0	
SW1 (Units)	7	(Unit 7)
SW2 (Tens)	1	
SW1 (Units)	5	(Unit 15)

3. Commissioning procedure (refer to Drawing on page 23)

3.2 Advised Standby Batteries. Not supplied.

2-Way Panel: 2x Yuasa (NP3.2-12) 12V 3.2Ah Sealed Lead Acid

8-Way Panel: 2x Yuasa (NP7-12) 12V 7Ah Sealed Lead Acid

16-Way Panel: 2x Yuasa (NP7-12) 12V 7Ah Sealed Lead Acid

32-Way Panel: 2x Yuasa (NP17-12) 12V 17Ah Sealed Lead Acid

CHECK RED LEAD IS CONNECTED TO THE RED (+) BATTERY TERMINAL. CONNECTING THE BATTERY LEAD WITH REVERSE POLARITY WILL DAMAGE THE EQUIPMENT.

3. Commissioning procedure (refer to Drawing on page 23)

3.3 Loop Cable Testing

Remote outstation loop wiring tests:

The following measurements are required before applying A.C power to the system:

Ensure that B1 and B2 are disconnected from the CS911 PCB. With a DC meter on ‘200’ ohms range, the following measurements are required to be ‘6’ ohms or less <.

COM (0V common reference) : *Loop out (B1) to Loop Return (B2). < 6 Ohms*

Cable screen *Loop out (B1) to Loop Return (B2). < 6 Ohms*

3.4 Apply A.C. Power to the system

Check before power up that the master control panel RJ45 connector is plugged into connector J.

Disconnect the return of the loop. (B2)

Plug the two way cable loom terminal to the ‘Batt. +/-‘ terminals, located at the lower right edge of the main control PCB type CS911. (N.B. note that the system will not power up, until A.C. power is applied).

On power up the system will display all faults. Pressing the Lamp Test / Silence Fault button will mute the fault sounder. All control panel zone switches will illuminate in time with the fault indicators.

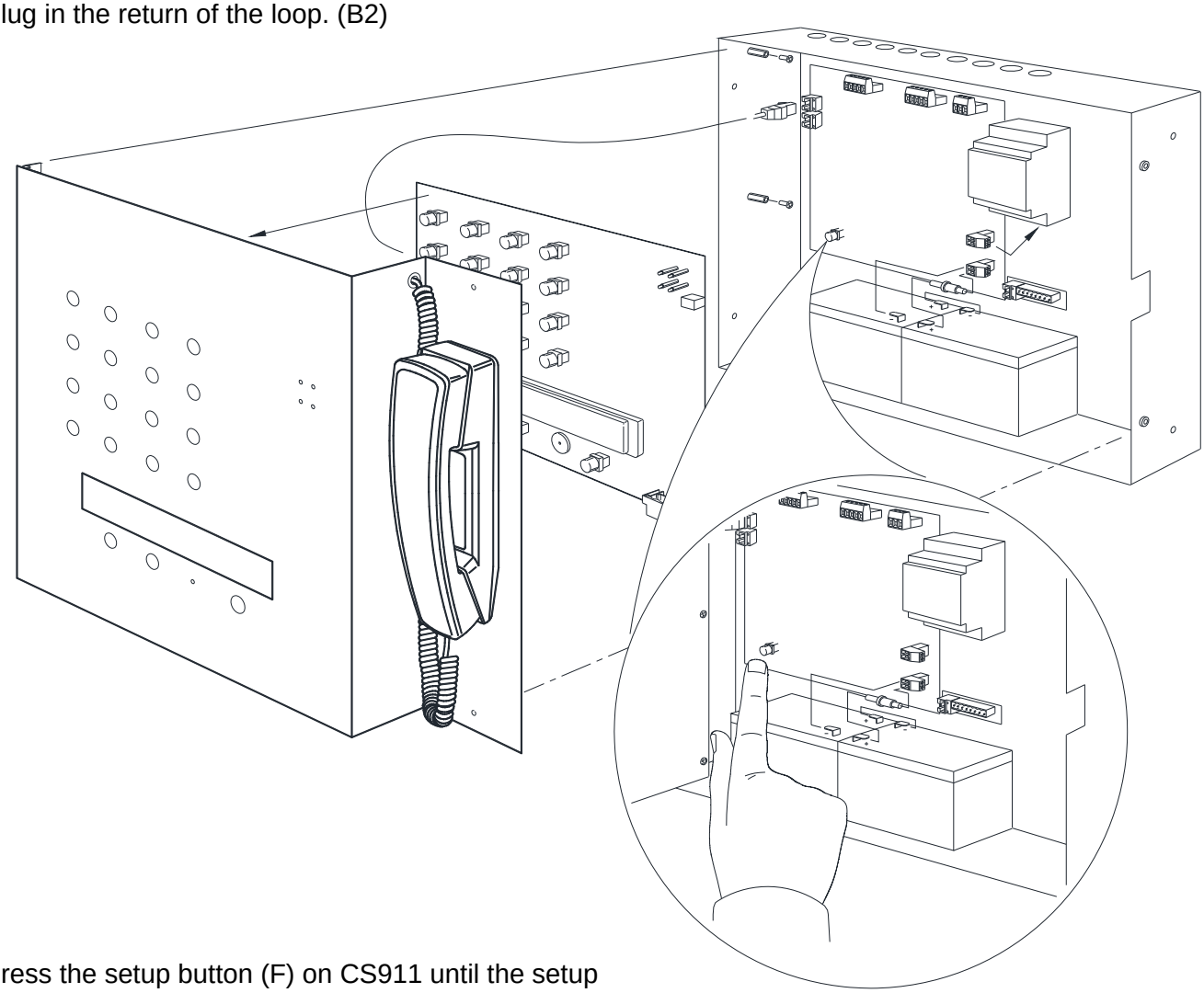
3. Commissioning procedure (refer to Drawing on page 23)

3.5 Setup

Press and hold the setup button (F) on CS911 until the setup switch illuminates. This can take up to ’10’ seconds. The front control panel will sound three times to signify that the system is in a setup mode.

In this mode the system will send out addresses for all sixteen outstations. With a response from an outstation a solid illumination will appear on the front control panel. Once all outstations are correctly displaying on the control panel front the system unit set is ready.

Plug in the return of the loop. (B2)



Press the setup button (F) on CS911 until the setup switch illumination goes out.

The front control panel will sound twice to signify that the system has come out of the setup mode.

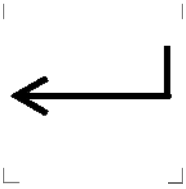
3. Commissioning procedure (refer to Drawing on page 23)

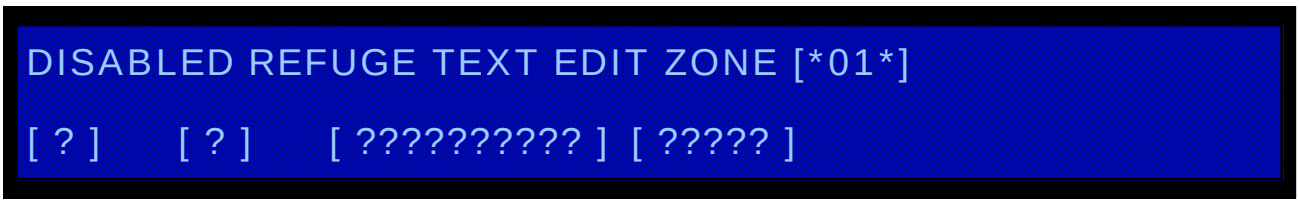
3.6 Setup LCD

Press and hold the setup button (F) on CS911 until the setup switch illuminates. This can take up to ’10’ seconds. The front control panel will sound three times to signify that the system is in a setup mode.

The LCD screen will change to SETUP ACTIVE TEXT EDIT as below. The high-lighting * stars * indicate the menu selection. With the right and Left buttons a selection can be made for zone text edit for Disabled Refuge or Toilet Alarm. Pressing the enter button selects the desired option.

DISABLED REFUGE selected





Pressing the right or left buttons allows the disabled refuge zone number to change to the desired text location to edit. As the system is in setup the responding or active remote outstations will be displaying on the 1-16 zone buttons above the LCD screen. These same zone numbers refer to the text locations required for each zone.

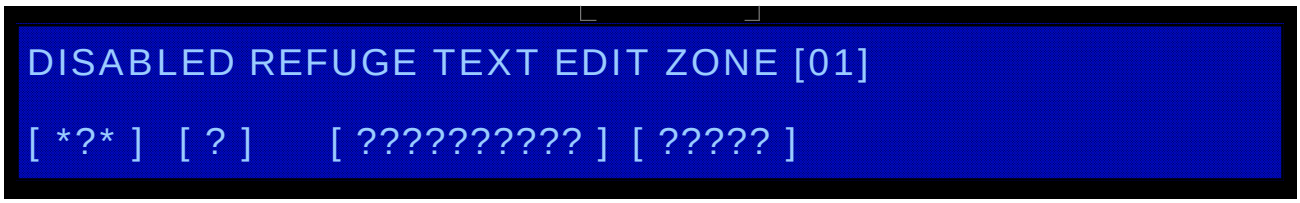
Pressing the enter button allows text editing of disabled refuge zone 01.

For this example we will want to enter ‘15TH FLOOR SOUTH’ as the zone description.

3. Commissioning procedure (refer to Drawing on page 23)

3.6 Setup LCD

DISABLED REFUGE ZONE [01] selected



The first zone text is selected [* ? *] and indicated by the highlighting stars.

Pressing the left or right button allows the first TEXT to be changed. This will be displayed as the first part of the description location. So in our example ‘1’ is required ‘**1**5 TH FLOOR SOUTH’

First TEXT selections with right button are as below :

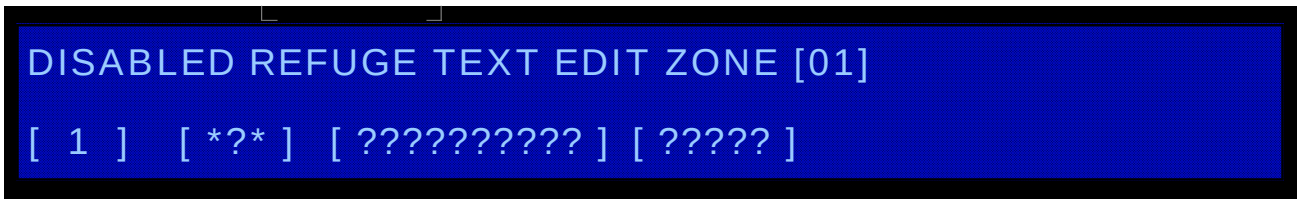
0
1
2
3
4
5
6
7
8
9
BLANK
BLANK
BLANK
BLANK
BLANK
BLANK

Press enter button once selection is correct. BLANK will leave the field empty.

3. Commissioning procedure (refer to Drawing on page 23)

3.6 Setup LCD

[1] selected





The second zone text is selected [* ? *] and indicated by the highlighting stars.

Pressing the left or right button allows the second TEXT to be changed. This will be displayed as the second part of the description location. So in our example ‘5’ is required ‘1**5** TH FLOOR SOUTH’

Second TEXT selections with right button are as below :

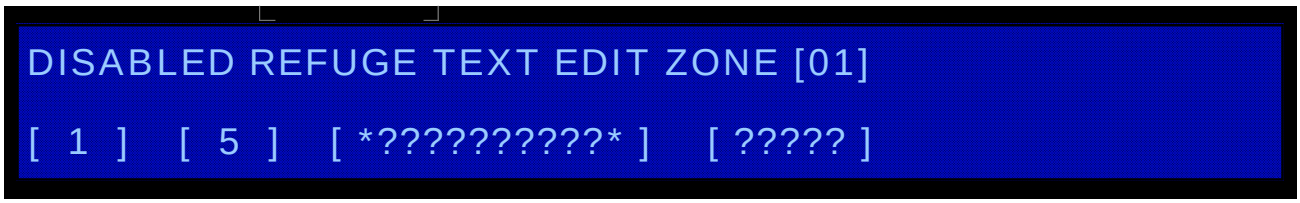
0
1
2
3
4
5
6
7
8
9
BLANK
BLANK
BLANK
BLANK
BLANK
BLANK

Press enter button once selection is correct. BLANK will leave the field empty.

3. Commissioning procedure (refer to Drawing on page 23)

3.6 Setup LCD

[5] selected



The third zone text is selected [* ?????????? *] and indicated by the highlighting stars.

Pressing the left or right button allows the third TEXT to be changed. This will be displayed as the third part of the description location. So in our example ‘TH FLOOR’ is required ‘15 **TH FLOOR** SOUTH’

Third TEXT selections with right button are as below :

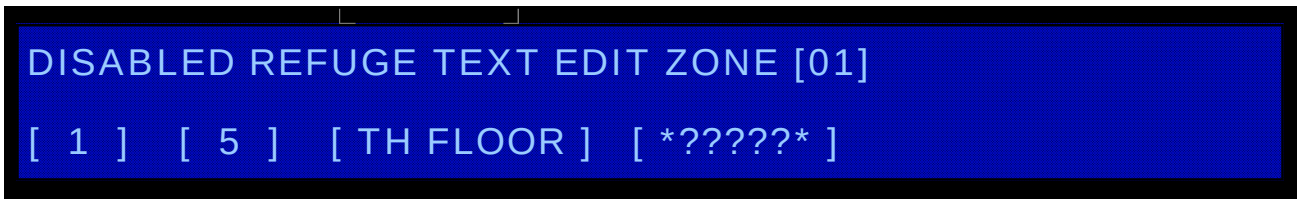
LOBBY
ST FLOOR
ND FLOOR
RD FLOOR
TH FLOOR
LWR GND
GROUND
BASEMENT
ROOF
LEVEL
CORE
EXT STAIR
LEVEL CORE
FLR CORE
STAIR
BLANK

Press enter button once selection is correct. BLANK will leave the field empty.

3. Commissioning procedure (refer to Drawing on page 23)

3.6 Setup LCD

[TH FLOOR] selected



The forth zone text is selected [* ????? *] and indicated by the highlighting stars.

Pressing the left or right button allows the forth TEXT to be changed. This will be displayed as the forth part of the description location. So in our example ‘SOUTH’ is required ‘15 TH FLOOR **SOUTH**’

Forth TEXT selections with right button are as below :

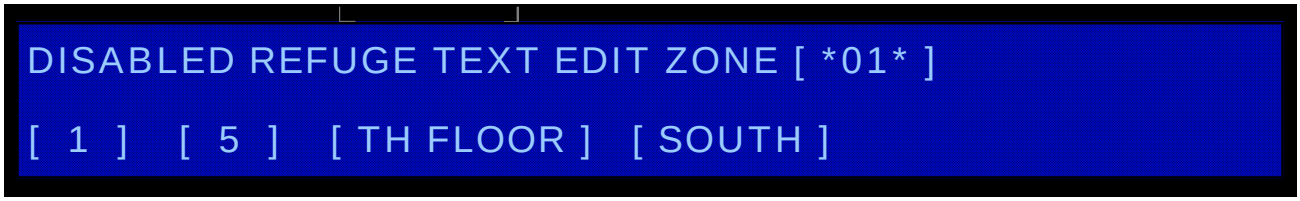
LOBBY
NORTH
EAST
SOUTH
WEST
1
2
3
4
5
6
7
8
9
BLANK
BLANK

Press enter button once selection is correct. BLANK will leave the field empty.

3. Commissioning procedure (refer to Drawing on page 23)

3.6 Setup LCD

[SOUTH] selected



The four text selections have created DISABLED REFUGE ZONE 01 : 15TH FLOOR SOUTH as a location description.

The highlighting stars return to the zone number selection [* 01 *]

To edit the next disabled refuge zones text use the left and right buttons to scroll to the next desired number.

To exit the text edit mode exit setup by ;

Press the setup button (F) on CS911 until the setup switch illumination goes out. The front control panel will sound twice to signify that the system has come out of the setup mode.

Please note the text edit will not exit until the current zone has been completed and has returned to the zone number selection.

3. Commissioning procedure (refer to Drawing on page 23)

3.7 Setup Toilet Alarm TAB and TAi units.

The TAB4 or TAB8 Toilet alarm input card provides radial spur connections for the Hark toilet alarm kits. In most cases the toilet alarm kit is wired to a local refuge point. However there are times where the toilet alarm '2' core spur from the Overdoor/PSU unit is wired directly back to the master control panel. The TAi-4 or TAi-8 can be positioned on the disabled refuge loop or radial cable positions.

In the central instance you would fit either a TAB4 (4 way) or a TAB8 (8 way) radial input card. This card fits directly onto the main control board in the rear of the control panel. This will fit onto either a CS1007 or CS911 card. Pillars are already fitted to these boards ready to accept the TAB card.

Before fitting the card remove ALL power to the system. Please take static precautions when handling any of the cards to avoid giving static damage to cards.

The TAB card is supplied with a RJ45 connection lead. This plugs directly into the rear main control board. CS1007 (J11) or CS911 (J9). Once the lead is connected between the two cards secure the TAB card to the pillars with the 4 off M3 x 6mm screws.

Now that the card is fitted you will need to change L2 on the main control rear board to the B position. As default the link is fitted in the A position.

The TAB cards are supplied already programmed and the BCD switch is already set to address 1 to activate the outputs correctly for toilet zones 1-8.

Different addresses can be selected depending on what zone number the toilet alarm in required to illuminate on alarm.

TAI-8 Address	Toilet Alarm zones
1	1-8
2	Not Used
3	9-16
4	Not Used

The cabling from the toilet alarm kits can be wired into the appropriate input terminals marked 1 to 4 (TAB4) or into 1 to 8 (TAB8). These connections are not polarity conscious.

Once all of the above is carried out the power can be re-instated and the batteries.

The system will have to be run through the standard set up procedure.

Press and hold the setup button (F) on CS911 until the setup switch illuminates. This can take up to '10' seconds. The front control panel will sound three times to signify that the system is in a setup mode.

In this mode the system will send out addresses for the TAi units. Each TAi unit has two RED led's that will flash from data IN to data OUT approximately every 6 seconds. This signifies that the TAi unit is logged onto the system. Whilst in setup mode check that all disabled refuge units are still responding on the front panel with solid zone indications.

Once all TAi units and outstations are correctly displaying exit setup. By pressing button (F) on CS911

3. Commissioning procedure (refer to Drawing on page 23)

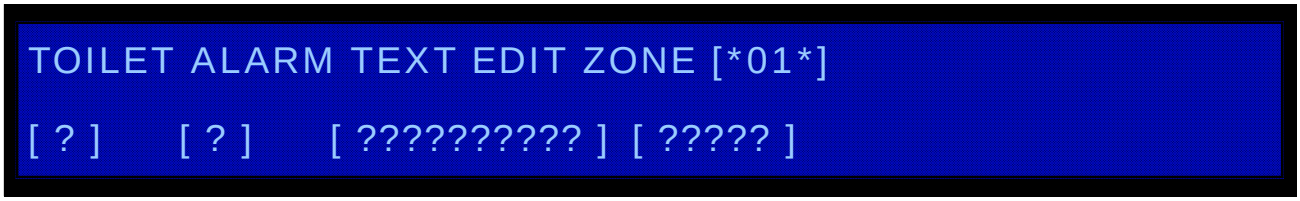
3.8 Setup LCD Toilet Alarm

To text edit the toilet alarm zone text the same process is required as the disabled refuge before.

Press and hold the setup button (F) on CS911 until the setup switch illuminates. This can take up to ’10’ seconds. The front control panel will sound three times to signify that the system is in a setup mode.

The LCD screen will change to SETUP ACTIVE TEXT EDIT as below. The high-lighting * stars * indicate the menu selection. With the right and Left buttons a selection can be made for zone text edit for Disabled Refuge or Toilet Alarm. Pressing the enter button selects the desired option.

TOILET ALARM selected



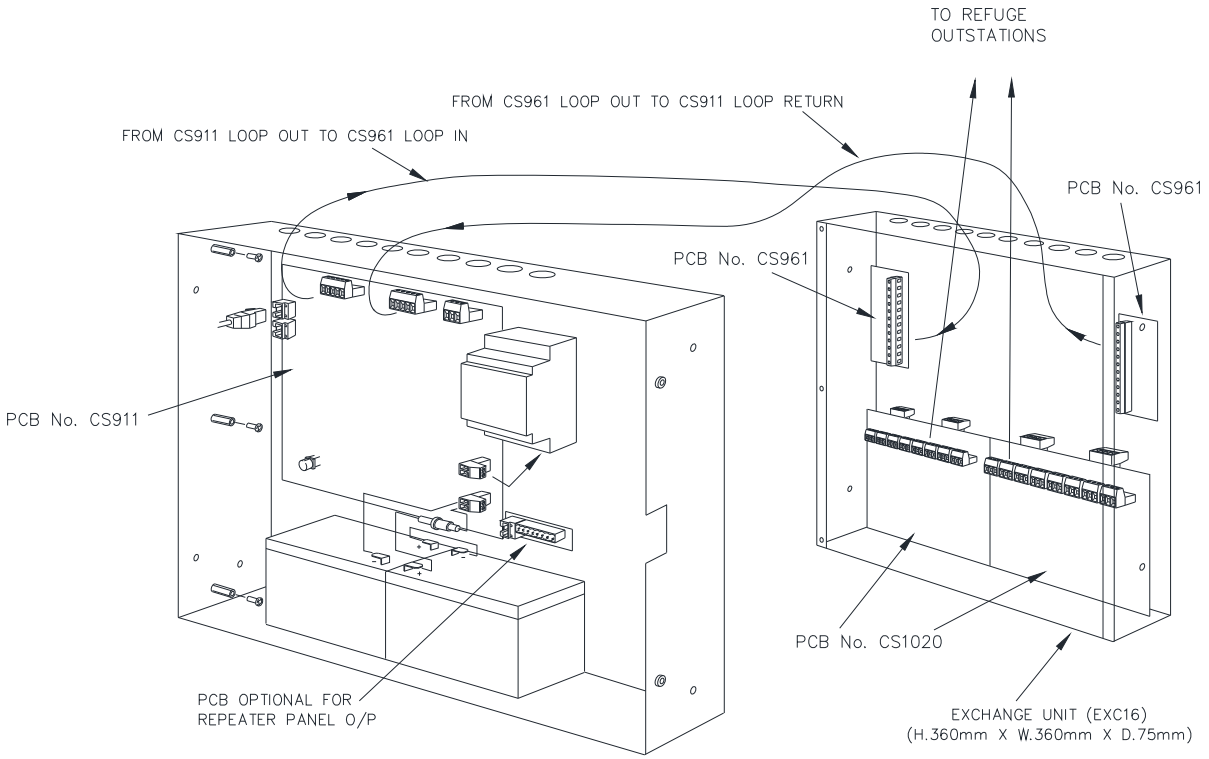
Pressing the right or left buttons allows the toilet alarm zone number to change to the desired text location to edit. As the system is in setup the responding or active remote outstations will be displaying on the 1-16 zone buttons above the LCD screen. These same zone numbers refer to the text locations required for each zone for each toilet that is wired to its local refuge point.

The same process as the disabled refuge will allow different zone location text to be entered for the toilet alarm zone.

3. Commissioning procedure (refer to Drawing on page 23)

3.9 Radial Exchange Setup

The Radial Exchange (EX8 or EX16) is a loop to radial cable convertor. This EXC8 device is powered from the loop and allows ‘8’ x ‘2’ core + screen enhanced fire rated cable outputs for eight remote outstations.



The EXC8 exchange PCB CS1020 has a set address on the loop. The output numbers will depend upon the address SW1 switch as below :

EXC8 Address (SW1)	Disabled Refuge Outstation Address
ADD 1	1-8
2	5-12
3	9-16
4	13-20

The disabled refuge outstation address must match the EXC8 output number. i.e. EXC8 (ADD 1) - output 1 to remote outstation set to address 01.

Ensure the +, - and SCN connection are observed at both ends of the cable. The red led’s (Data In / Data Out) on the CS1020 cards will flash momentarily when the unit has been logged.

If units are wired into incorrect outputs then they will appear logged onto the system. However when operated they will not connect and intercom will not be established. A high level data noise will be heard from the outstation.

If the main panel is in setup (3.5 Setup) any unused outputs will automatically go into fault after five scans. Once in fault the CS1020 SW2 switch must be pressed to reset the latched outputs. If an output is in fault the address data is isolated from the corresponding radial output and will not function.

3. Commissioning procedure (refer to Drawing on page 23)

3.10 System Test (refer to Drawing on page 23)

Once the installation and commissioning procedures are complete, test for correct system operation, and fault reporting functions. Test all locations for correct call in / call out functions, by following the user manual instructions listed on page 24 Section 4.

Remove primary power, to check correct operation of battery support supply. Central control will report a fault condition. The fault sounder will be activated on the main control panel, and the fault LED's will be illuminated with a slow flash pattern.

The fault out relay will be de-energised.

Press the 'silence fault / lamp test' switch on the control panel momentarily, to silence the fault sounder to an intermittent state. Open the main enclosure to confirm display of the 'mains fail' and 'charge fail' fault LED's located near the bottom edge of the main PCB ref. CS911. Reconnect primary power. To reset the fault press and hold setup button (F) until the fault clears from CS911.

Where utilised, check the function of the anti-tamper feature by applying a volt free closed contact (or temporary wire link) across the Anti-tamper terminals. Under this condition, any call made from a remote hands free outstation will be automatically cancelled by the central controller. The system will remain inactive from remote calling for c.10 seconds, to minimise nuisance recalling.

An open circuit at the anti-tamper terminals will allow normal system operation.

Note that making a call out from the master is not effected by the anti-tamper status.

Note that use of the anti-tamper facility is not recommended where telephone type remote outstations are used.

If a remote telephone is maliciously left off hook, the anti tamper circuitry will continue to attempt to clear the call until the handset is replaced. This will disable the remote fault monitoring system, until such time as the system is activated.

3. Commissioning procedure (refer to Drawing on page 23)

3.11 Fault Indications (refer to Drawing on page 23)

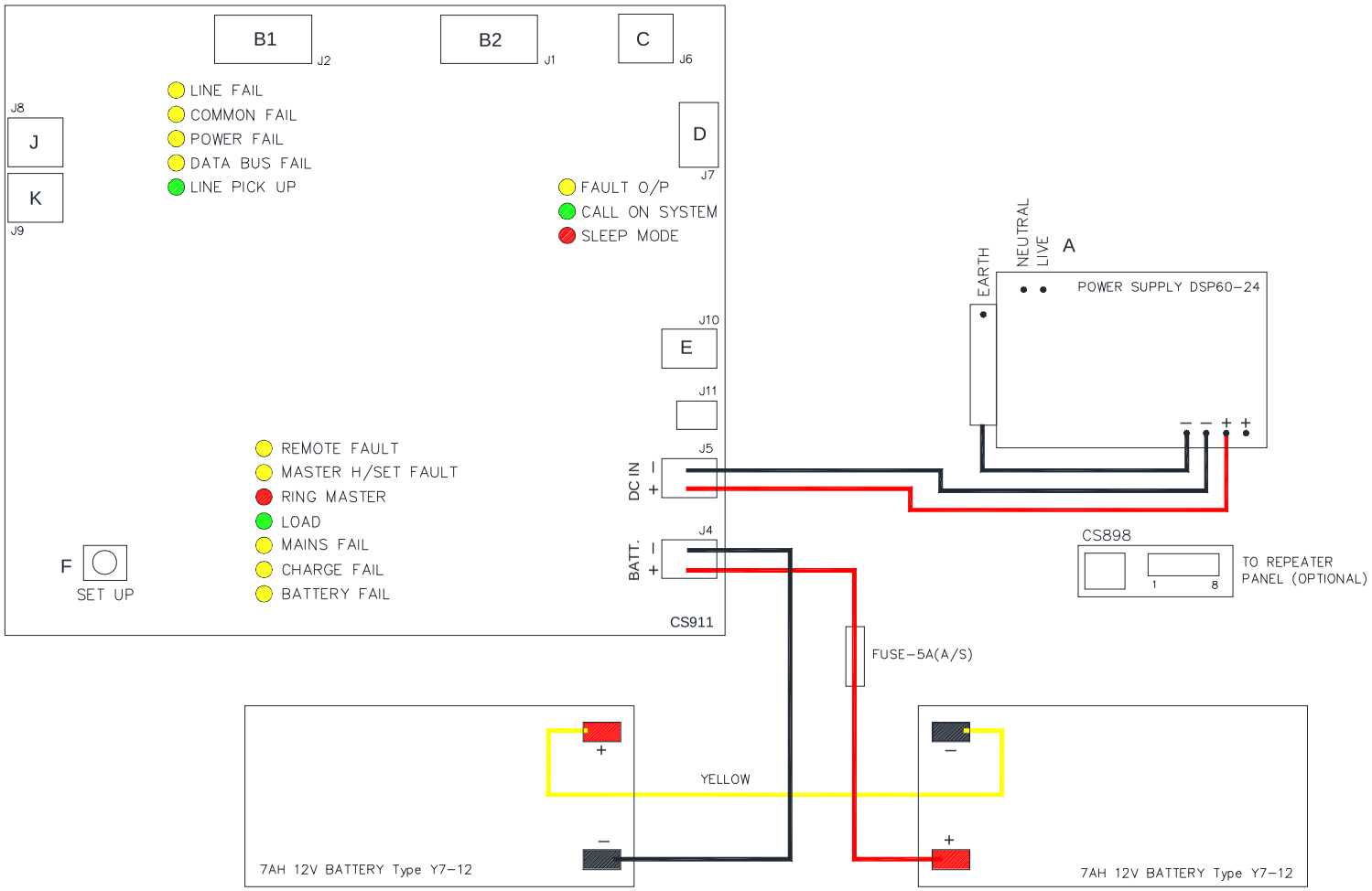
The LED function references Drawing found on page 23 and on PCB CS911, identify the function of all fault indications within the central enclosure. Note that any fault condition will cause the front panel fault Light Emitting Diodes (LED's) to indicate with a slow flashing pattern, and will activate the audible fault sounder as a continuous tone.

Pressing the 'Lamp Test / Silence Fault' switch will change the sounder function to intermittent. (A short 'reminder' bleep approx every 90 seconds). Generation of a second fault condition will reactivate the fault sounder to a continuous tone.

The following table lists the various fault LED's, and describes the action to be taken to help identify specific faults.

Fault LED Description	**Nature of Fault**	**Action required to assist fault location**	**Action required to clear fault state, after correction**
1 – 'Common Fail'	Loop common cable open circuit	Test loop wiring as per 3.3	Press and hold 'Setup Switch' switch **F**, to reset loop monitors.
2 – 'Power Fail'	Loop Power cable open circuit		
3 – 'Line Fail'	Loop Lin(e) cable open circuit	Test loop wiring as per 3.3	Press and hold 'Setup Switch' switch **F**, to reset loop monitors.
4 – 'Master H.SET Fault'	Master Handset short circuit or disconnected	Check master handset connections. Check CAT 5 connection to front panel	-
5 – Remote Fault	Failure of one (or more) remote units to respond	Check for missing responses on 'UNIT' LEDS in setup mode	-
6 – 'Data bus Fail'	Data loop cable open circuit	Test loop wiring as per 3.3 Ensure all outstations are responding in set up mode.	Press and hold 'Setup Switch' switch **F**, to reset loop monitors.
7 –'Load'	Indication of periodic battery load test	No Fault	-
8 – 'Mains Fail'	Failure of primary supply	Check for primary power to enclosure – check for + 28V DC out from DSP60 Din Rail PSU	Replace faulty DSP60 power supply if necessary.
9 – 'Batt Fail'	Failure of support battery(s) under load condition	Move L6 to position 'B' to reduce load interval to approx. 1 minute. Momentarily press setup switch to start new test sequence, and allow 2 minutes for repeat test. If 'Batt Fail' indicator illuminates again, replace batteries	Momentarily press setup switch after replacement batteries are fitted. Return L6 to position A
10 – 'Charge fail'	Failure of battery connection, or failure of primary supply	Check battery connection loom, including the inline protection fuse Replace if necessary (5A anti-surge)	-

DRG.No. C51297/D	TITLE LOOP WIRED SCHEMATIC	REF.



ISSUE	DATE	MODIFICATION	DRN.	CHD.
B	28.08.12	CALL ON SYSTEM WAS SPARE O/P LED	K.C.B.	
C	01.08.13	OPCB CS898 ADDED	K.C.B.	
D	05.09.18	DWG WAS CORALDRAW NOW AUTOCAD	K.C.B.	

DRAWN	DATE	SCALE	CHECKED	APRD.
K.C.BAILEY	05.09.18	---		

DRAWING NO.	ISSUE
C51297	D

4. User Manual

4.1 User Master Handset to Make a Call

The Central Control Panel consists of a single master telephone handset, and an array of momentary illuminated switches, one of which is assigned to each remote outstation during system commissioning.

Where these are identified on the Control Panel with simple numeric indications, a LCD screen provides zone text descriptions for each disabled refuge location.

Lifting the master handset will clear any faults present on the system. The LCD screen will change to either [NO ZONE TEXT] which indicates that the system has no zone location text entered. The set-up procedure 3.5 is required before zone information can be displayed.

Once Setup 3.5 procedure has been completed, lifting the master handset will display the edited zone descriptions for each zone. Each zone location can be scrolled by pressing the left and right buttons.

The zones descriptions will only display the edited zones.

Once the disabled refuge zone has been selected, press the corresponding zone button number will connect the outstation to the master handset.

4. User Manual

4.2 User Master Handset to Receive a Call

The Central Control Panel consists of a single master telephone handset, and an array of momentary illuminated switches, one of which is assigned to each remote outstation during system commissioning.

Where these are identified on the Control Panel with simple numeric indications, a LCD screen provides zone text descriptions for each disabled refuge location.

When a call is present on the system from an outstation pressing its call button, the master handset will ring with a conventional ‘double pulse’ ring tone.

The panel switch associated with the particular outstation zone will start to flash, in time with the ring tone. The LCD screen will display the zone number and location text for the calling in outstation.

The call is answered by lifting up the master handset, and momentarily pressing the flashing zone switch. The switch illumination will change to a solid state and you will hear a re-assurance ‘beep’, the ringer will cease, and the call will be routed through to the remote outstation.

Once the routing is complete, an audio path is established, and a two way full duplex conversation may take place, between the master handset operator, and the remote outstation. The call is cleared by replacing the master handset onto its cradle switch. This action will also clear the call status of the remote outstation automatically.

4. User Manual

4.3 User Master Handset to Receive Multiple Calls

In the event that the system is already in use, and a second remote outstation calls in, then the calling remote outstation will continue to hear the double pulse call tone. The associated call switch on the central control panel will begin to flash with a ‘busy’ pattern (c. 0.5 seconds on/off). There is no audible indicator of the additional call(s) at the central panel.

The LCD screen will change to show the number of calls on the system [3] CALLS WAITING. Pressing the left or right buttons will scroll through the active call zone descriptions.

The central control operator may either press this ‘busy’ indicating switch, whilst maintaining the current call status, so that the switch illumination goes solid, and the newly selected remote outstation is added to the audio buss, permitting a three way conversation to take place.

Alternatively, the central control operator may prefer to clear the first call, by replacing the master hand set onto its cradle, and then ‘pick up’ the second call by lifting the master handset again, and pressing the flashing ‘busy’ switch.

Note that a maximum of up to 4 outstations should be connected at any one time. This can cause confusion as to who is being spoken to. In practice it is usually found that two is a more suitable operational limit.

Once the routing is complete, an audio path is established, and a two way full duplex conversation may take place, between the master handset operator, and the remote outstation. The selected calls are cleared by replacing the master handset onto its cradle switch. This action will only clear answered calls. Unanswered calls will automatically call back in.

4. User Manual

4.4 User Remote Outstation Call - To Make a Call to Central Control

Press the CALL button on the front of remote outstation.

The 'CALL REGISTERED' LED will light, and a standard 'double pulse' call tone will be heard from the panel loudspeaker.

(N.B. If the system is already in use, a call tone will be heard as above until the Operator connects the call. The master control panel will register that a second call has been made. The main operator can then decide on whether to answer the second call together with the call already in use or to hang up and have private conversation with the new call.

Once the call is picked up at the central control station, it is then possible to hold a two way conversation with the controller. Speak slowly and clearly, at a distance of no more than 1 metre from the outstation, for best results.

At the conclusion of the call, the remote outstation call status will be reset automatically by the central control panel.

4.5 Fault Conditions

There are a number of fault states to which the central control equipment responds. At the outset of a fault condition, the internal control panel fault sounder will sound, and the two front panel 'fault' LEDs will flash with a slow (c. 2 seconds on / 2 seconds off) pattern. The LCD screen will change to *** SYSTEM FAULT ***

In the event that the fault is with a specific outstation, the appropriate call switch on the main control panel will also flash with the same pattern.

In the event that the fault condition is no location specific, then examination of the fault LED status internally within the control panel is required. This task should be carried out by suitably qualified service personnel. There are no user serviceable parts inside the central control enclosure.

To silence the fault sounder, momentarily press the 'LAMP TEST/ SILENCE FAULT' switch on the control panel.

Note that this action will only silence the fault sounder, and not clear the fault condition.

The occurrence of a further fault condition will restart the fault sounder.

All fault conditions should be reported to the service agent as soon as possible.

4. User Manual

4.6 User Master Handset to Receive a Toilet Alarm

When a toilet alarm is present on the system from a pull cord being pulled. The sounder will sound to draw attention to the master panel. The lamp test button can be pressed to mute the sounder whilst investigating the alarm. The sounder will resound every 2-3 minutes until the alarm has been reset at the toilet locations.

The LCD screen will indicate the zone and text location.

Multiple toilet alarms will show as the number of active toilets. [2] ACTIVE TOILETS

Pressing the left or right buttons will scroll through all active toilet alarms.

If a disabled refuge call is made or the master handset is lifted, the system will automatically prioritise the disabled refuge functions over the toilet alarm. The toilet alarm will reinstate once the disabled refuge call has cleared or the master handset s replaced.

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