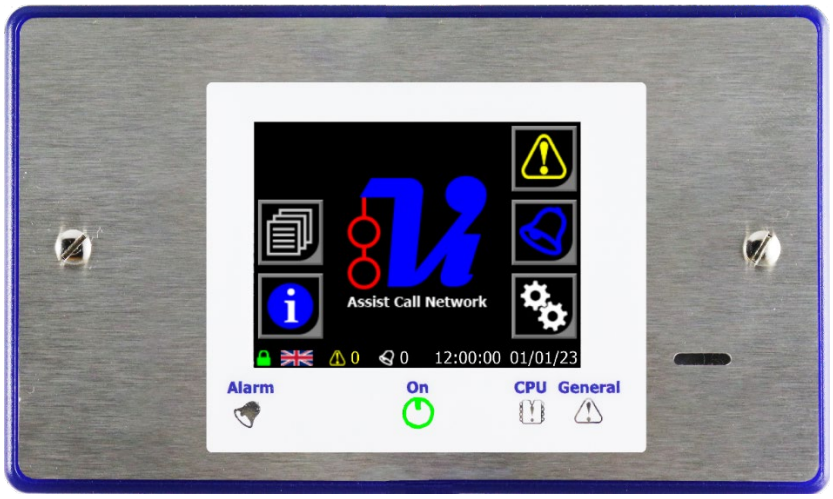
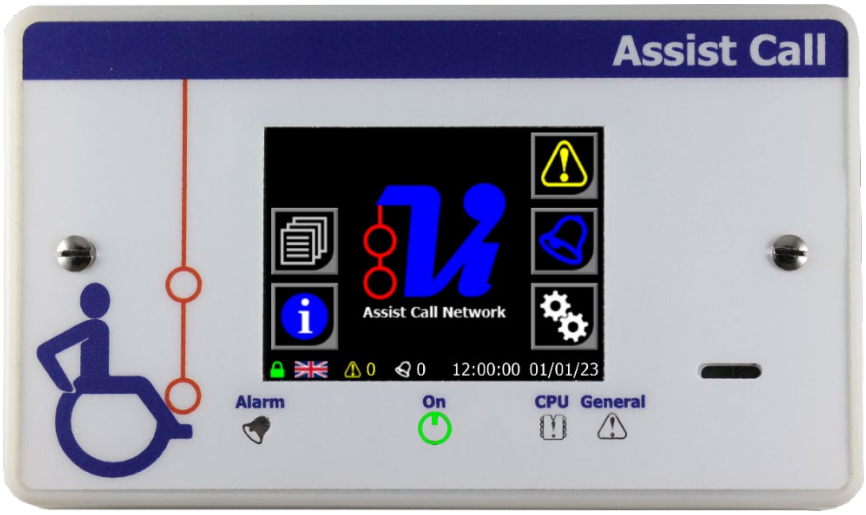
Vox Ignis AssistCallPro





Installation and Commissioning Manual Software V1 Onwards

Revision 2- January 2025

1 Document Control

Revision Number	Description of Change	Date of Change	Author of Change
0	Initial Draft		JS
1	Initial Release Version	07/08/24	JS
2	Updated layout	21.11.24	JS

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2 Product Overview

The Assist Call Network has been designed around a total network solution, so all modules have inbuilt networking capabilities. There are four modules available for use with the system; the ViAC-ACT touchscreen display module (hereafter referred to as ACT), the ViAC-4ZC 4-zone control module (hereafter referred to as 4ZC), the ViAC-PSU power supply module (hereafter referred to as PSU), the ViAC-BAT-2 battery module (hereafter referred to as BAT), and the ViAC-RLY relay module (hereafter referred to as RLY).

Any Assist Call Pro system must have at least one ACT on the network to allow for configuration of the system, and to act as a master display for the system. Additional ACT modules can be used wherever indication or control is required and can be filtered to only show certain alarms if necessary.

The network should be wired in a ring, but can work in a line if required., and the alarms are wired radially from the 4-zone control modules. Up to 56 modules can be present on the network, up to 16 each for 4ZCs, RLYs and PSUs, and up to 8 ACTs. Each 4ZC has inputs for 4 alarms, allowing a maximum of 64 alarms on the network.

2.1 Assist Call Pro Product Range

Part Code	Description
ASSIST CALL PRO MODULES	
ViAC-ACT-W	Touch screen display module with 2.8" colour screen. White polycarbonate finish.
ViAC-ACT-SS	Touch screen display module with 2.8" colour screen. Stainless steel finish.
ViAC-4ZC-W	4-zone control module. White polycarbonate finish.
ViAC-4ZC-SS	4-zone control module. Stainless steel finish.
ViAC-PSU-W	Power supply unit, 2×500mA fused outputs. White polycarbonate finish.
ViAC-PSU-SS	Power supply unit, 2×500mA fused outputs. Stainless steel finish.
ViAC-RLY-W	4-way relay interface, 4× Com, NO contacts. White polycarbonate finish.
ViAC-RLY-SS	4-way relay interface, 4× Com, NO contacts. Stainless steel finish.
ViAC-BAT-2-W	Battery backup module. White polycarbonate finish.
ViAC-BAT-2-SS	Battery backup module. Stainless steel finish.
WHITE PLASTIC ASSIST CALL ALARMS	
ViAC-ACA-W	Assist call WC alarm kit. White polycarbonate finish.
ViAC-ACB-W	Assist call accessible bedroom kit White polycarbonate finish.
ViAC-ODP-W	Assist call over-door plate White polycarbonate finish.
ViAC-CNP-W	Assist call cancel plate White polycarbonate finish.
ViAC-ACP-W	Assist call ancillary cancel plate White polycarbonate finish.
ViAC-CPP-W	Assist call ceiling pull cord White polycarbonate finish.
ViAC-CLP-W	Assist call call plate. White polycarbonate finish.
ViAC-SIP-W	Assist call switch interface plate White polycarbonate finish.
ViAC-CCP-W	Assist call call cancel plate. White polycarbonate finish.
STAINLESS STEEL ASSIST CALL ALARMS	
ViAC-ACA-SS	Assist call WC alarm kit. Stainless steel finish.
ViAC-ACB-SS	Assist call accessible bedroom kit Stainless steel finish.
ViAC-ODP-SS	Assist call over-door plate Stainless steel finish.
ViAC-CNP-SS	Assist call cancel plate Stainless steel finish.
ViAC-ACP-SS	Assist call ancillary cancel plate Stainless steel finish.
ViAC-CPP-SS	Assist call ceiling pull cord Stainless steel finish.
ViAC-CLP-SS	Assist call call plate. Stainless steel finish.
ViAC-SIP-SS	Assist call switch interface plate Stainless steel finish.
ViAC-CCP-SS	Assist call call cancel plate. Stainless steel finish.

Part Code	Description
ASSIST CALL WEATHERPROOF DEVICES	
ViAC-CNP-66	Assist Call cancel plate. IP66 weatherproof enclosure in brushed stainless steel.
ViAC-CLP-66	Assist Call call plate. IP66 weatherproof enclosure in brushed stainless steel.
ViAC-CLP-56	Assist Call mushroom call plate. IP56 weatherproof yellow polycarbonate enclosure.
ViAC-ODP-66	Assist Call over-door plate. IP66 weatherproof enclosure with indication and sounder.
ViAC-ACP-66	Assist Call ancillary cancel plate. IP66 weatherproof enclosure in brushed stainless steel.

2.2 ViAC-ACT – Touchscreen Display Module

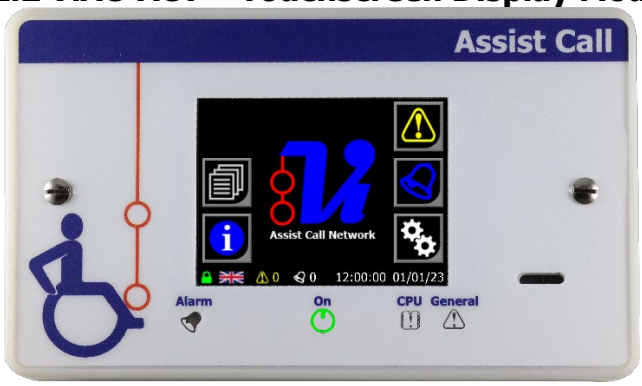


Figure 1 – ViAC-ACT Touchscreen Display Module

The touchscreen display module provides the central control and indication point for the system. Alarm indication can be tailored if multiple ACTs are present on the network, allowing only certain alarms to show on certain ACTs. Up to 8 ACTs can be present on an Assist Call Pro network.
Provides full fault monitoring for the network including line faults, network faults, and module faults.

Allows for full configuration of network from either the 2.8" touchscreen itself or via a configuration spreadsheet loaded from the onboard micro-SD card.

The ACT also has status LEDs for:

Alarm		Alarm activity status
On		ACT power status
CPU		Display system fault status
General		General fault status

2.3 ViAC-4ZC – 4-Zone Control Module



Figure 2 – ViAC-4CZ 4-Zone Control Module

The 4-zone control module allows for connection of up to 4 alarm lines into the network. These lines are monitored for both open and short circuits, which are displayed on both the front of the 4ZC itself and communicated over the network to the ACTs.
Up to 16 4ZCs can be present on an Assist Call Pro network, allowing for up to 64 alarm lines in total on a fully loaded system.
Each control module features four LED line indicator, one DC power LED and a blue indicator around the accept button

2.4 ViAC-PSU – Power Module

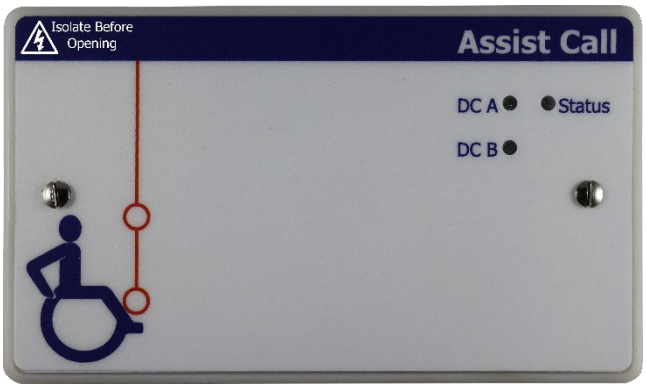


Figure 3 – ViAC-PSU Power Module

The power supply module is used to provide power to the other modules on the network. It has 2× 500mA fused outputs that can each power two modules. These outputs are monitored and indicated on both the DC status LEDs on the front of the panel, and as faults on the ACT.

A battery can be fitted to the PSU if required. This battery is monitored, and its status will be shown on the status LED on the front of the panel and on ACTs.

2.4.1 ViAC-BAT – Battery Module

The battery module is connected to a power module to provide a battery backup for the system if the power module loses its mains supply. When connected, the battery monitoring dipswitch on the rear of the PSU must be switched on (the up position, see Figure 8 for more information) otherwise the battery will not be fault monitored.

2.5 ViAC-RLY – Relay Interface Module

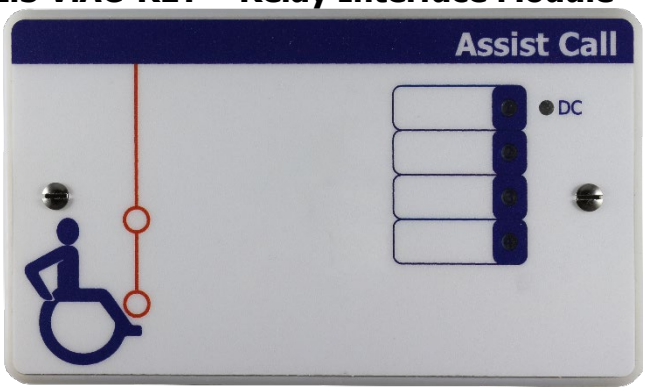


Figure 4 – ViAC-RLY Relay Interface Module

The relay interface module gives four programmable relays that can be used to either monitor lines, or monitor whether the system is healthy.

By default, the four relays will monitor for active alarms on the four lines on the 4ZC with the same address. For example if the RLY's address is 1, relay 2 will monitor for an active alarm on line 2 of 4ZC address 1.

Four indicator LEDs will show whether the relay is active, with an additional DC status LED to show whether the module has power.

2.5.1 ViAC-RLX – Relay Expander Module

There is an expander module to the relay interface that allows for another four relay outputs. By default these relays will monitor the same four lines as the ViAC-RLY, but will monitor for the lines going into fault rather than them activating.

3 Addressing and Cabling

3.1 Addressing Modules

On the Assist Call Pro network, modules are addressed per module type. This means that you can have control modules that are addressed 1, 2, 3, and 4, and then also have power modules addressed 1, 2, and 3. Two modules of the same type cannot have the same address. If there is any duplicate addresses, a fault will be displayed on the ACT after a network discovery have been performed.

On the ACT, the address is set via the touchscreen display (see 6.20 ACT Address Screen for information on how to do so), with addresses lying between 1 and 8 inclusive being valid. The other three modules have their addresses set by using the dipswitch on the rear of each module, the location of which is indicated on the diagrams below.

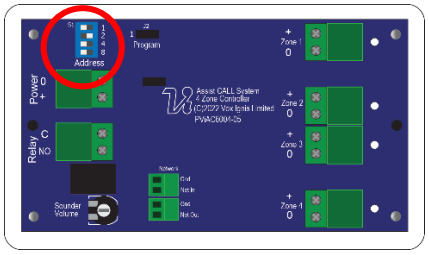


Figure 5 – 4ZC Dipswitch

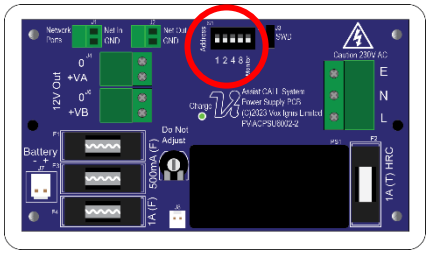


Figure 6 – PSU Dipswitch

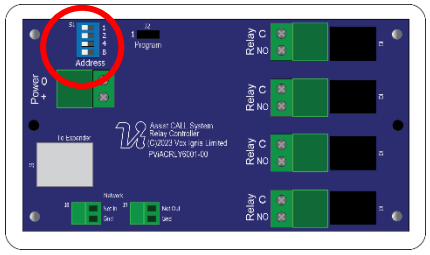


Figure 7 – RLY Dipswitch

The addresses for the 4ZC, PSU, and RLY modules is a binary number given by the positions of dipswitches labelled as 1, 2, 4, and 8 on the PCBs, with valid addresses lying between 1 and 16 inclusive.

Addr	1	2	4	8
1	1	0	0	0
2	0	1	0	0
3	1	1	0	0
4	0	0	1	0
5	1	0	1	0
6	0	1	1	0
7	1	1	1	0
8	0	0	0	1

Addr	1	2	4	8
9	1	0	0	1
10	0	1	0	1
11	1	1	0	1
12	0	0	1	1
13	1	0	1	1
14	0	1	1	1
15	1	1	1	1
16	0	0	0	0

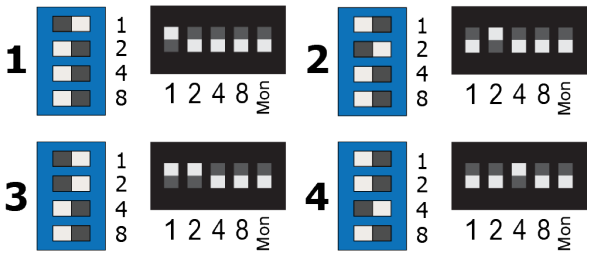


Figure 8 – Address Dipswitches

Where 1 = dipswitch on (up on PSU, right on 4ZC and RLY)
and 0 = dipswitch off (down on PSU, left on 4ZC and RLY)

3.2 Module Cabling

The cabling between modules on the Assist Call Pro network should be done using CAT5 or CAT6 cable. The data uses one pair and has a maximum distance of 250m between modules. Using multiple pairs for the data will not increase the distance. The power can be transmitted using either one or two pairs. If one pair is used the maximum distance is 50m, if two pairs are used 100m is the maximum. An example of how to terminate a CAT5/6 cable when using two pairs for power is see in Figure 9 – CAT5/6 Termination. This uses the brown and blue pairs for the power, and the orange for the data (with the white-orange wire used to the ground of the network).

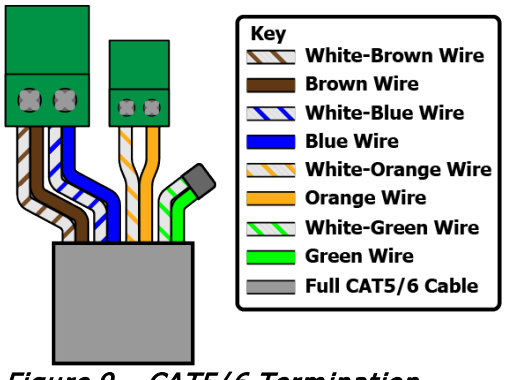


Figure 9 – CAT5/6 Termination

3.3 Network Terminals

There are two network ports on every module, marked "Gnd, Net In" and "Gnd, Net Out". The data ports must be connected from the **Net Out** port on one module to the **Net In** port on the next module as can be seen in Figure 10 – Network Terminal Connections below. It is recommended that that system is wired in a ring as this allows for redundancy, but the system can be wired just in a line if required.

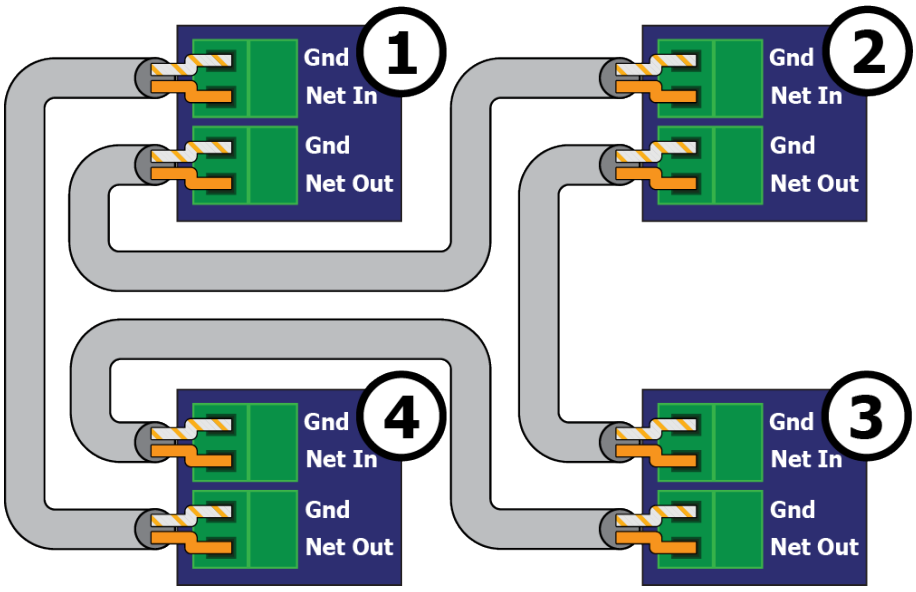


Figure 10 – Network Terminal Connections

3.4 Alarm Field Wiring

The Assist Call Pro network system is compatible with the full range of Vox Ignis Assist Alarms. These devices -including call buttons, pull cords, switches, cancel plates and over door plates – are connected to the 4 zone control modules using 2 core cables. A breakdown of the cabling that is available is seen in the Table 1.

Cable Type	Size	Distance from control module
LSF flex / T&E	1.00m	500m
1 pair Cat5/6 or security	0.22mm	50m
2 pair Cat5/6 or security	0.22mm	100m

Table 1 – Field Wiring Information

An example for connecting a ViAC-ACA kit is shown below in Figure 11. The plates can be connected in any order, with a 10kΩ end-of-line resistor placed in the last alarm in the chain. All installations must conform to Building Regulations Approved Document M and BS8300.

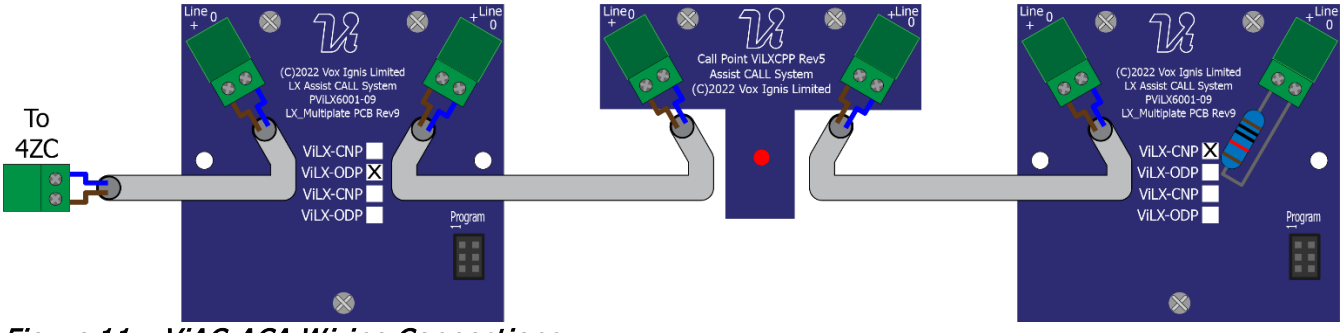


Figure 11 – ViAC-ACA Wiring Connections

4 Example Systems

4.1 Simple 8-Line Example

The simplest Assist Call Pro network setup can handle up to 8 alarms and requires four modules, 1 ACT, 1PSU and 2 4ZCs. In this case the PSU will be located next to one of the 4ZC modules, with the other 4ZC and the ACT located where they need to be. A schematic can be seen below in Figure 12.

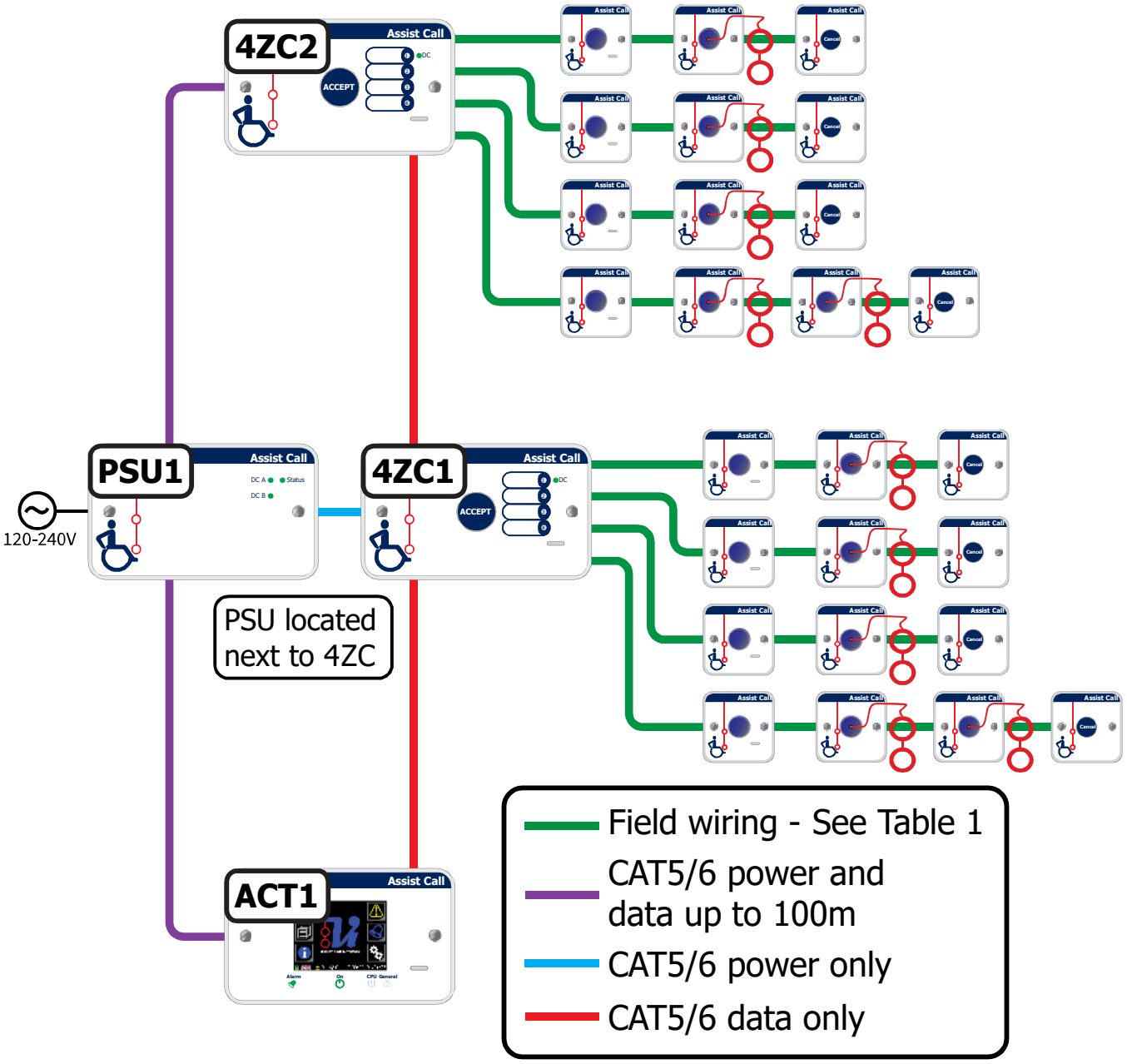


Figure 12 – 8-Line System Schematic

The setup will require 5 sections of CAT5/6 cable, with a full wiring diagram shown in the Figure 13. In the diagram the modules are in the same positions as in Figure 12 however they have been placed closer together for compactness. In reality, the ACT and 4ZC2 can be placed up to 100m away. The two 4ZCs should be powered off separate outputs on the PSU, with the ACT sharing the output used to power 4ZC1 (output B in Figure 13).

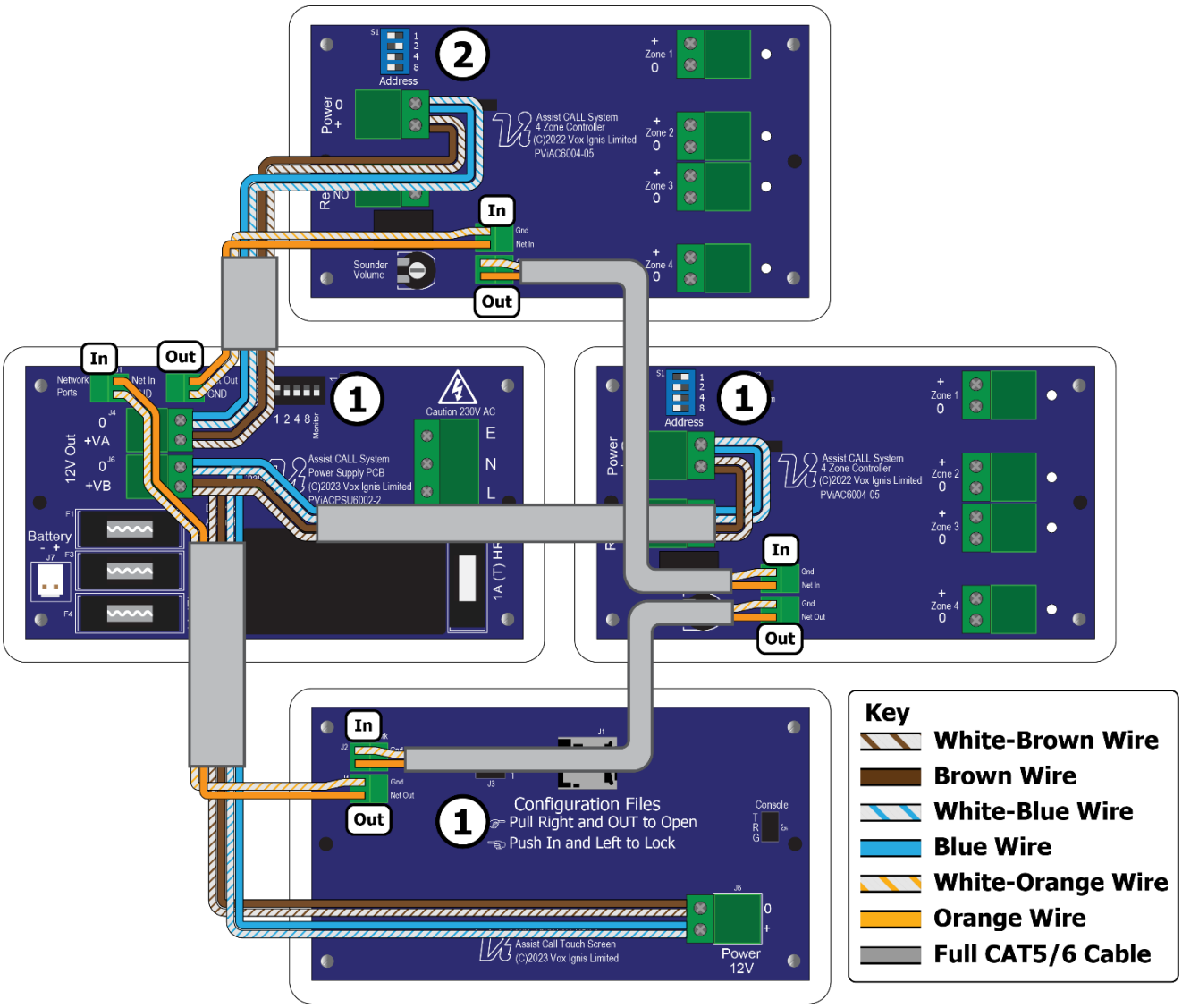


Figure 13 – 8-Line Wiring Diagram

4.2 Pool Alarm Example

The following example utilises the ViAC-CLP-56 Mushroom Call Buttons being used as alarms around the pool, and a ViAC-RLY module being used to control a set of beacons that are illuminated when the pool alarms are activated. Along with the pool alarms, there are a set of Assist Call alarms in the changing room area for accessible changing room and bathrooms. An ACT is placed in the reception to display both the alarms from the pool area, and the changing room area.

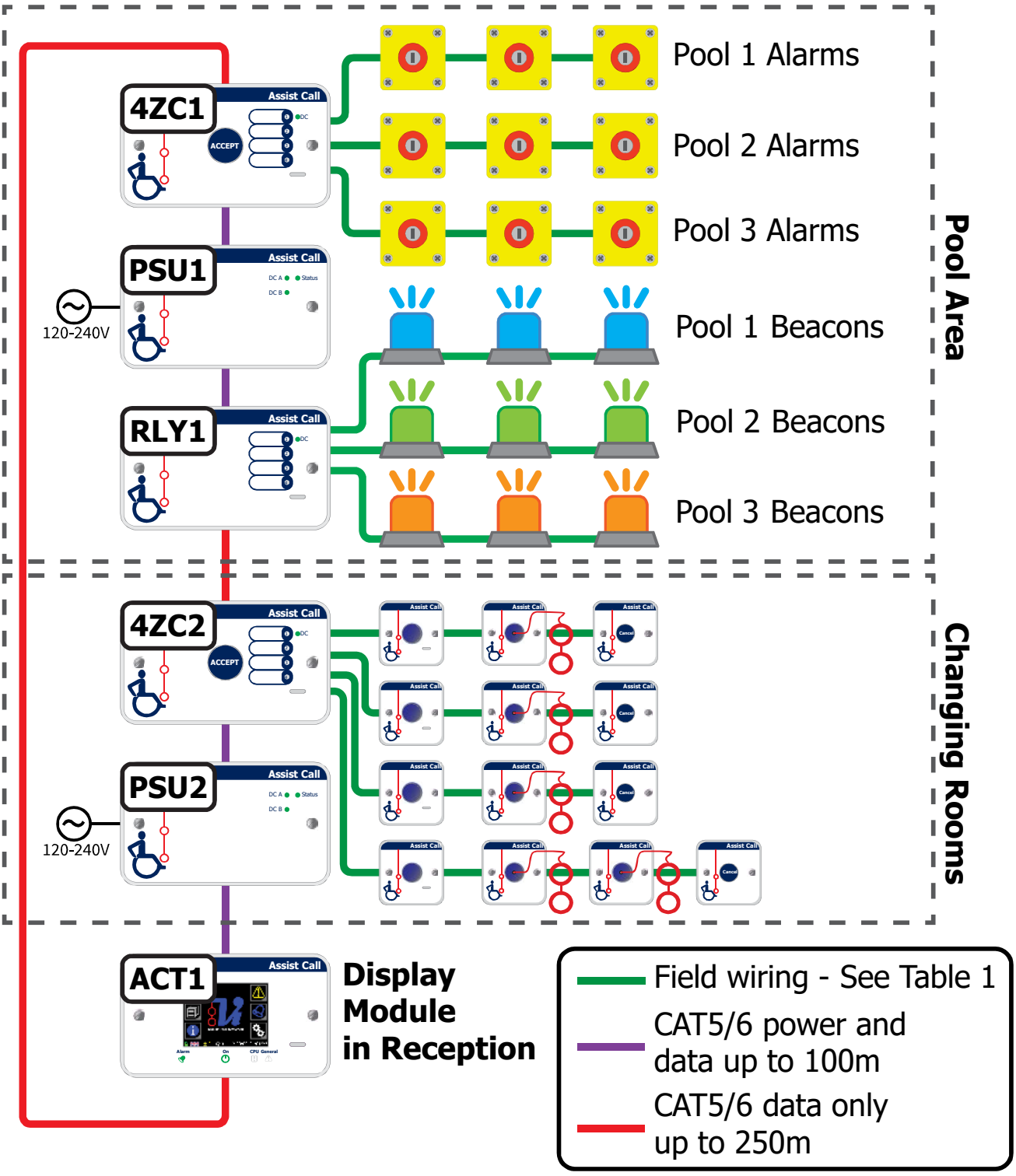


Figure 14 – Pool Example Schematic

The above system can be wired up as follows below. Modules are in the same layout as in Figure 14, although the pool area modules have been shown alongside for space reasons.

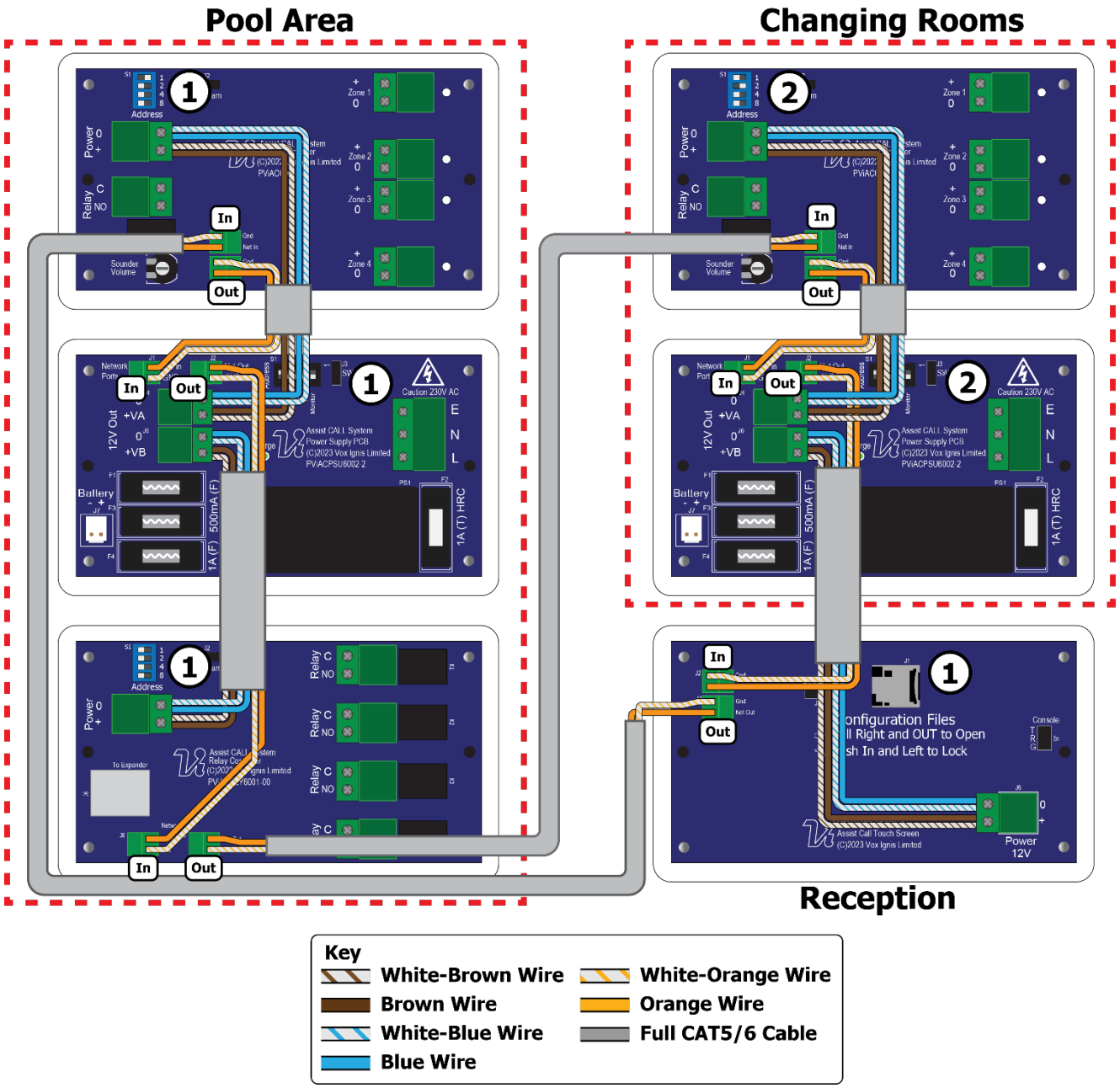


Figure 15 – Pool Example Wiring Diagram

4.3 Relay – BMS Example

The following example shows four relay modules that are connected to a BMS interface. These relay modules are monitoring alarms connected to the control modules around the building. With the Assist Call Pro network system the relay modules can be placed next to the BMS interface and monitor the alarms anywhere else on the network, meaning relay connections to the BMS don't need to be wired all around the building. In the example below, four control modules are used, allowing up to 16 lines but this can be expanded as required. Additional power modules will be needed if this is the case as one power module can only power four relay modules.

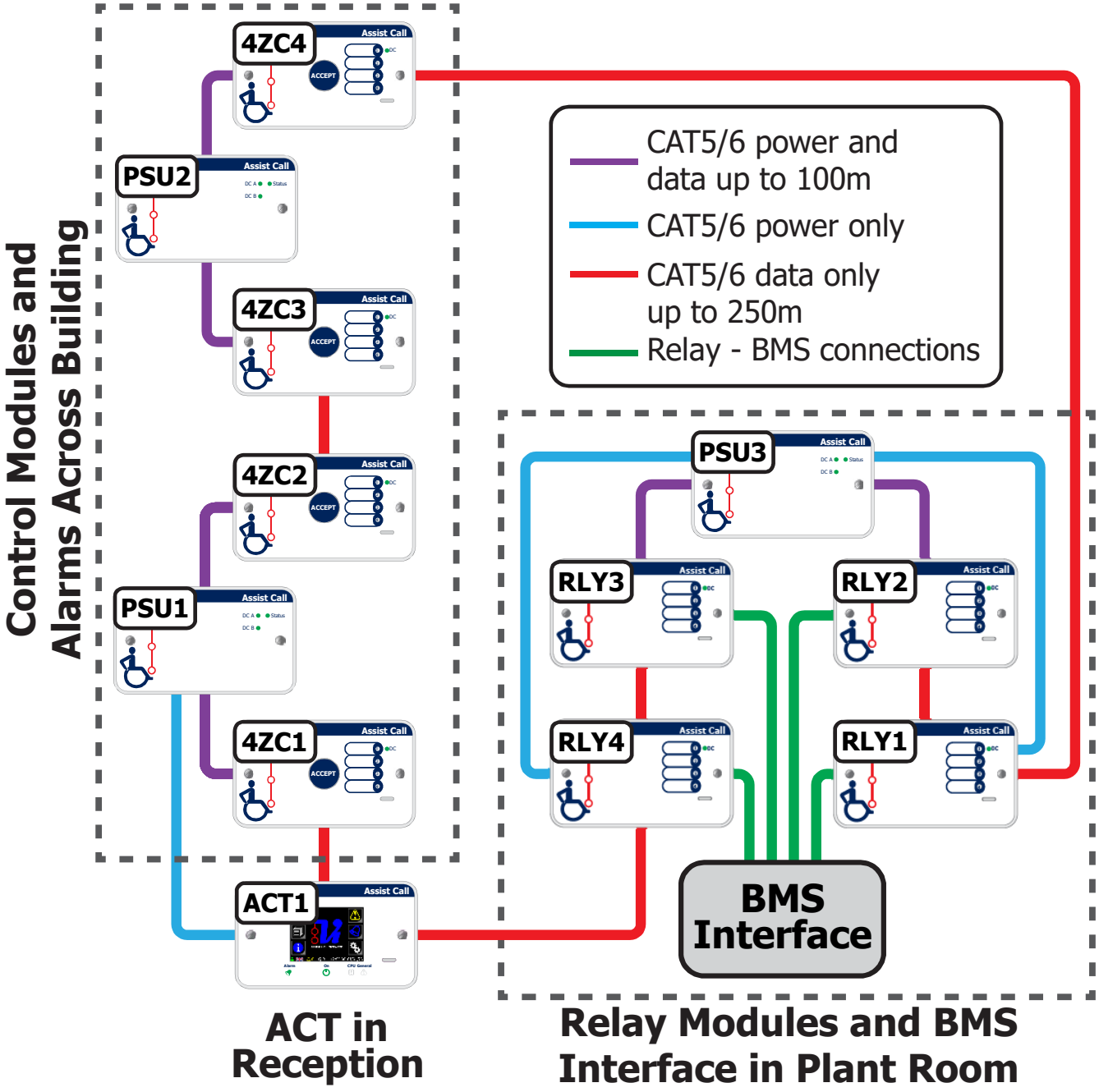


Figure 16 – Relay - BMS Network Example

4.4 Hotel Example with Multiple Display Modules

The following example shows a hotels with accessible bedrooms across multiple floors (which have been omitted from the diagram for simplicity), which may need to have a display module in multiple places (reception, management room, and security for example).

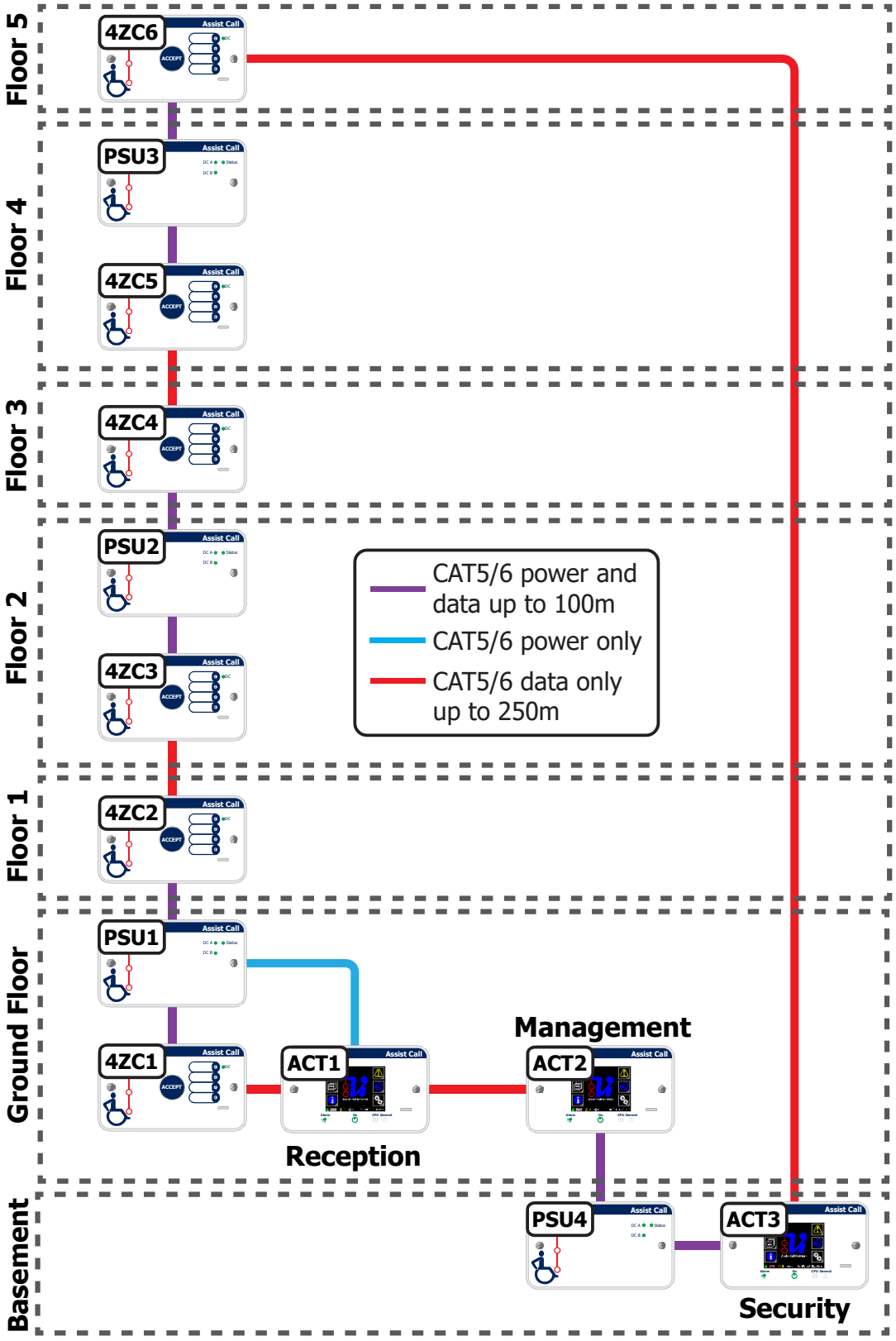


Figure 17 – Hotel Network Example

5 Configuration

5.1 Configuration Procedure

5.1.1 Accessing SD Card

1. Remove the Micro SD card from the MMC holder on the rear of the ACT PCB.
2. Use the supplied Micro SD card reader to open the configuration spreadsheet contained on the Micro SD card. These spreadsheets are available in both Apache Open Office Calc and Microsoft Excel formats.

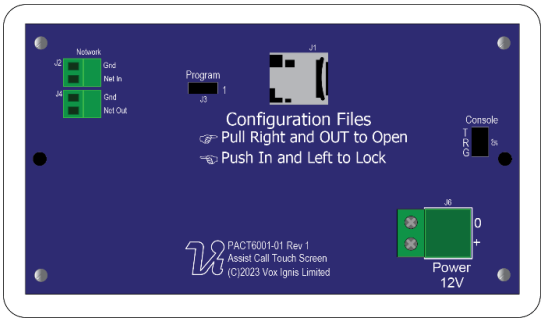


Figure 18 – ViAC-ACT Rear View

5.1.2 Updating Configuration File

1. Update the configuration spreadsheet as described below in section 5.2 AC Network Configuration File.
2. Save the updated configuration spreadsheet with a 15-character filename of your choice, this allows multiple versions of configuration, we suggest a copy is kept elsewhere as a backup.
3. **This spreadsheet MUST then be saved as a UTF-8 CSV file for use by the ACT.** In Excel, use the save as option and set the [Save as Type] to "CSV UTF-8 (Comma delimited)". In Open Office Calc, save as a text CSV, and change the character set to "Unicode (UTF-8)".
4. Make sure the USB card reader is properly ejected from the computer to avoid the possibility of files getting corrupted.
5. The Micro SD card can then be removed from the card reader and reinserted into the MMC card holder.
6. From the home screen, log in at access level 3 (see 6.8 Login Screen for information on this).
7. Access the load screen (Figure 81) by pressing the  icon on the settings screen.
8. Select the file you would like to load in using the  icon and the file select screen (See 6.28 File Select Screen).
9. Press the load configuration button to load the configuration from the SD card into the ACT and the network.
10. All other modules on the network will be sent the configuration which will be stored on the module's internal memory. **Note – the Micro SD card's on other ACTs on the network will not be updated. Either only use one ACT for configuration (preferred option) or store the updated configuration on all Micro SD cards to ensure discrepancies do not occur in future.**

5.1.3 Opening CSV Files

If the configuration has been edited on the ACT, and then backed up, the CSV file can be opened on the computer if required. When opening with Microsoft Excel, the file will be automatically select the correct settings, however OpenOffice Calc needs the settings manually set to the ones shown in Figure 19. Those settings being character set of Unicode (UTF-8), and a separator option of separated by comma.

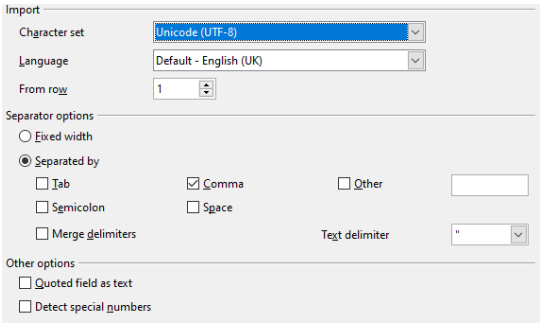


Figure 19 – OpenOffice Calc CSV Options

5.2 AC Network Configuration File

All modules on the network are configured from the configuration file located on the Micro SD card that is fitted to the ACT as standard.

The configuration file contains information on general site details, the modules names and network settings, and the settings for the lines containing the alarms.

The configuration file is generated from the supplied spreadsheet. This spreadsheet is available in both Apache Open Office Calc format, and Microsoft Excel format. All details are entered into the appropriate spreadsheet.

In Excel use the save as option and set the [Save as Type] to "CSV UTF-8(Comma delimited)". In Open Office Calc, save as a text CSV, and change the character set to "Unicode (UTF-8)".

When the configuration is loaded from the Micro SD card, the file can be selected based on its filename (see 6.28 File Select Screen).

In Microsoft Word, the spreadsheet will flag an error when the file is saved as a CSV (see Figure 20). This is due to the spreadsheet having a hidden sheet to control the dropdown boxes. All the user has to do is press the OK button and the spreadsheet will save as a CSV.

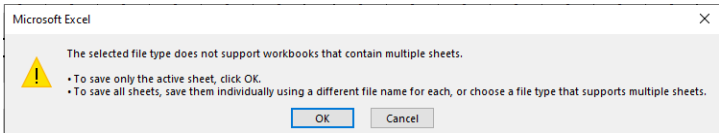


Figure 20 – Microsoft Excel CSV Popup

The configuration file is split into five main sections. One for the project details, and one each for the four module types (4ZCs, ACTs, RLYs, and PSUs).

5.2.1 Project Settings

This section contains the project details that are common to all modules for this project. These details are shown on the information screen on the ACT.

	v1.1 AC Network Config
Project	Project Name
Site Name	Site Name
Installer	Installer Name
Contact	Contact Name

Figure 21 – Spreadsheet Project Settings

5.2.1.1 **Project**

This row is used to store the project name, which is limited to 30 characters.

5.2.1.2 **Site Name**

This row is used to store the site name, which is limited to 30 characters.

5.2.1.3 **Installer**

This row is used to store the installer name, which is limited to 30 characters.

5.2.1.4 **Contact**

This row is used to store the contact details, which is limited to 30 characters.

5.2.2 4-Zone Control (4ZC) Settings

This sections is used to configure the 4-zone control modules, and the lines connected to them.

Device Settings		Line	Icon	Action	Row 1	Row 2	Match	Row 1	Row 2
4ZC 1									
Name Row 1	4ZC 1 Top	1	Assist	Ack	4ZC 1	Line 1	Yes	4ZC 1	Line 1
Name Row 2	4ZC 1 Bottom	2	Assist	Ack	4ZC 1	Line 2	Yes	4ZC 1	Line 2
Network	In & Out	3	Assist	Ack	4ZC 1	Line 3	Yes	4ZC 1	Line 3
Mute	No	4	Assist	Ack	4ZC 1	Line 4	Yes	4ZC 1	Line 4
4ZC 2									
Name Row 1	4ZC 2 Top	1	Assist	Ack	4ZC 2	Line 1	Yes	4ZC 2	Line 1
Name Row 2	4ZC 2 Bottom	2	Assist	Ack	4ZC 2	Line 2	Yes	4ZC 2	Line 2
Network	In & Out	3	Assist	Ack	4ZC 2	Line 3	Yes	4ZC 2	Line 3
Mute	No	4	Assist	Ack	4ZC 2	Line 4	Yes	4ZC 2	Line 4

Figure 22 – 4ZC Configuration Section

5.2.2.1 **4ZC Name**

The name of the 4ZC is used to identify the location when a fault or event has occurred and is split into two rows, each containing a maximum of 20 characters. Row 1 is the top row, row 2 is the bottom row.

5.2.2.2 **4ZC Network Monitoring**

The network monitoring sets whether the network in and out ports on the 4ZC are monitored or not. The four network options that are available in the dropdown box are:

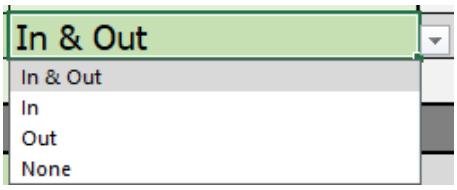


Figure 23 – 4ZC Network Monitoring Options

In & Out	Both net in and net out ports monitored
In	Only net in port monitored
Out	Only net out port monitored
None	Neither network port monitored

5.2.2.3 **4ZC Mute**

The mute settings allows the user to mute the fault and alarm buzzer on a 4ZC that might be out of sight, whilst it is networked with an ACT. The dropdown box has options for yes and no.



Figure 24 – 4ZC Mute Options

5.2.2.4 **4ZC Line Index**

This is the index number of the line on the 4ZC, numbered 1-4.

5.2.2.5 **Alarm Icon Configuration**

The alarm icons can be defined for different functions, the default is a pull cord symbol for Assist Call Emergency Assistance Alarm. Other icons can be chosen using the dropdown menu which has six options, those being:

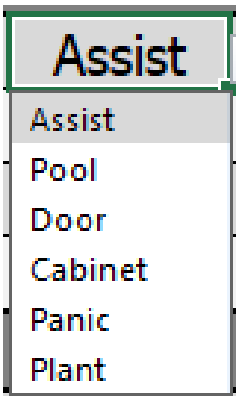
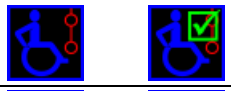
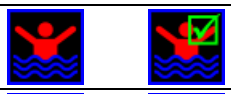
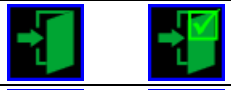
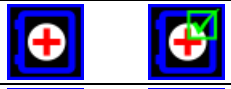
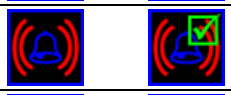
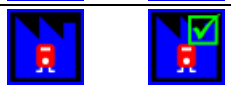


Figure 25 – Alarm Icon Options

Assist	Assist Call Alarm	
Pool	Swimming pool drown alarm	
Door	Door alarm	
Cabinet	Medicine cabinet alarm	
Panic	Panic alarm	
Plant	Plant boiler room alarm	

5.2.2.6 **Alarm Action Configuration**

The alarm action describes what happens when the alarm's icon is pressed on the ACT display. There are four options in the dropdown box which are:

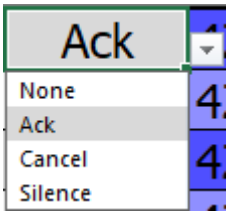


Figure 26 – Alarm Action Options

None	The alarm will continue to alert the user and the buzzer on the ACT will continue to sound.
Ack	The alarm will be acknowledged. *If the assist icon is selected, the action will be ack regardless of the selected configuration.*
Cancel	The alarm will be cancelled.
Silence	The alarm will remain in the alarm state, but the ACT's buzzer will play the acknowledge tone for 2 minutes.

5.2.2.7 **Alarm Name Text**

The Alarm text is used to identify an active, or acknowledged, emergency assistance alarm. The Alarms screen displays all active emergency assistance alarms, using the alarm text to identify the alarms.

The Alarm text is split into 2 rows, with each row having a maximum of 20 characters. Row 1 is the top row, and Row 2 is the bottom row

Alarm Name	
Row 1	**Row 2**
4ZC 1	
4ZC 1	Line 1
4ZC 1	Line 2
4ZC 1	Line 3
4ZC 1	Line 4

Figure 27 – Alarm Name Configuration

5.2.2.8 **Line Fault Text Match**

The fault text match option allows the user to specify whether the text that is shown when a line goes into fault is the alarm text, or the separate fault text. It is configured using the dropdown box with the following options:

Yes	The fault text will match the alarm text
No	The fault text will be different from the alarm text

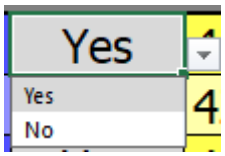


Figure 28 – Fault Text Match Configuration

5.2.2.9 **Line Fault Text**

The Fault text is used to identify any fault associated with that line. This text allows additional information i.e., where equipment is fed from or located in addition to line identity. The Faults screen displays all faults, including line faults, where the line faults use the fault text to identify the line in fault, if the line fault text match is configured as no.

The Fault text is split into 2 rows, with each row having a maximum of 20 characters. Row 1 is the top row, and Row 2 is the bottom row.

Fault Text	
Row 1	**Row 2**
4ZC 1	Line 1
4ZC 1	Line 2
4ZC 1	Line 3
4ZC 1	Line 4

Figure 29 – Spreadsheet Fault Text

5.2.3 Assist Call Touchscreen (ACT) Settings

This sections is used to configure the ACTs on the network, including names and network and line monitoring.

ACT 1	
Name Row 1	ACT 1 Top
Name Row 2	ACT 1 Bottom
Network	In & Out
Line Shown	
4ZC 1	
Yes	
Yes	
Yes	
Yes	
4ZC 2	

ACT 2	
Name Row 1	ACT 2 Top
Name Row 2	ACT 2 Bottom
Network	In & Out
Line Shown	
4ZC 1	
Yes	
Yes	
Yes	
Yes	
4ZC 2	

Figure 30 – ACT Configuration Section

5.2.3.1 **ACT Name**

The name of the ACT is used to identify the location when a fault or event has occurred and is split into two rows, each containing a maximum of 20 characters. Row 1 is the top row, row 2 is the bottom row.

5.2.3.2 **ACT Network Monitoring**

The network monitoring sets whether the network in and out ports on the ACT are monitored or not. The four network options that are available in the dropdown box are:

In & Out	Both net in and net out ports monitored
In	Only net in port monitored
Out	Only net out port monitored
None	Neither network port monitored

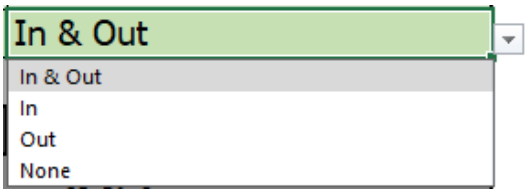


Figure 31 – ACT Network Monitoring Options

5.2.3.3 **ACT Line Monitoring**

Line monitoring sets whether a line will be shown on the given ACT when it is activated. This is used when there are multiple ACTs on the network that may only want to show certain lines on them. Line faults will always be shown on all ACTs on the network. Every line that is used must be shown on at least one ACT. The options in the dropdown are as follows:

Yes	The line will be shown on the given ACT when active.
No	The line will not be shown on the given ACT when active.

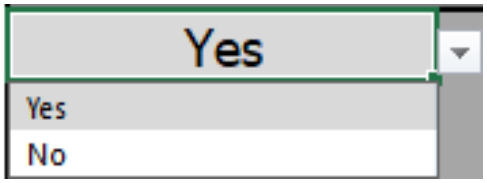


Figure 32 – ACT Line Monitoring Options

5.2.4 Relay Module (RLY) Settings

This section is used to configure the RLYs on the network, including names, network monitoring, and relay action and monitoring.

RLY 1							
Name Row 1	RLY 1 Top						
Name Row 2	RLY 1 Bottom						
Network	In & Out						
Relay 1	**Relay 2**	**Relay 3**	**Relay 4**	**Relay 5**	**Relay 6**	**Relay 7**	**Relay 8**
Lines	Lines	Lines	Lines	Lines	Lines	Lines	Lines
4ZC 1							
Alarm	-	-	-	Fault	-	-	-
-	Alarm	-	-	-	Fault	-	-
-	-	Alarm	-	-	-	Fault	-
-	-	-	Alarm	-	-	-	Fault
4ZC 2							
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Figure 33 – RLY Configuration Section

5.2.4.1 **RLY Name**

The name of the RLY is used to identify the location when a fault or event has occurred and is split into two rows, each containing a maximum of 20 characters. Row 1 is the top row, row 2 is the bottom row.

5.2.4.2 **RLY Network Monitoring**

The network monitoring sets whether the network in and out ports on the RLY are monitored or not. The four network options that are available in the dropdown box are:

In & Out	Both net in and net out ports monitored
In	Only net in port monitored
Out	Only net out port monitored
None	Neither network port monitored

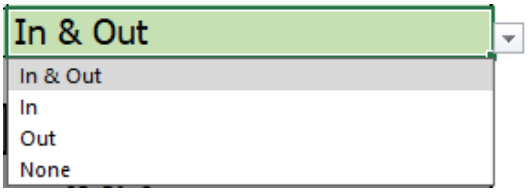


Figure 34 – RLY Network Monitoring Options

5.2.4.3 **RLY Relay Action**

The relay action sets what a given relay output on the RLY (1-4 on the main RLY board and 5-8 on the expander) is monitoring for. There are three options in the dropdown box, which are as follows:

None	The relay will not operate under any condition.
Lines	The relay will monitor the alarm lines on the network, and close depending on the configuration (see 5.2.4.4 RLY Line Monitoring).
Healthy	The relay will be closed when the system is healthy, and open if any fault occurs. The RLY panel losing power will also open the relay.

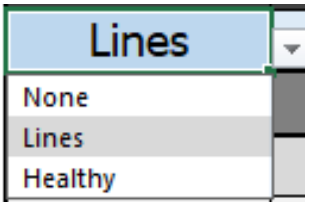


Figure 35 – RLY Relay Action

5.2.4.4 **RLY Line Monitoring**

The line monitoring configuration sets what a given relay monitors for on the alarm lines on the network. There are three options in the dropdown box, which are as follows:

-	Line is not monitored
Alarm	Line is monitored for active and acknowledged alarms
Fault	Line is monitored for open and short circuit faults

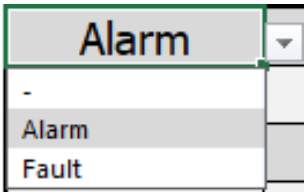


Figure 36 – RLY Line Monitoring

5.2.5 Power Supply Unit (PSU) Settings

This section is used to configure the names and network monitoring of the PSUs on the network.

PSU 1	
Name Row 1	PSU 1 Top
Name Row 2	PSU 1 Bottom
Network	In & Out

PSU 2	
Name Row 1	PSU 2 Top
Name Row 2	PSU 2 Bottom
Network	In & Out

PSU 9	
Name Row 1	PSU 9 Top
Name Row 2	PSU 9 Bottom
Network	In & Out

PSU 10	
Name Row 1	PSU 10 Top
Name Row 2	PSU 10 Bottom
Network	In & Out

Figure 37 – PSU Configuration Section

5.2.5.1 **PSU Name**

The name of the PSU is used to identify the location when a fault or event has occurred and is split into two rows, each containing a maximum of 20 characters. Row 1 is the top row, row 2 is the bottom row.

5.2.5.2 **PSU Network Monitoring**

The network monitoring sets whether the network in and out ports on the PSU are monitored or not. The four network options that are available in the dropdown box are:

In & Out	Both net in and net out ports monitored
In	Only net in port monitored
Out	Only net out port monitored
None	Neither network port monitored

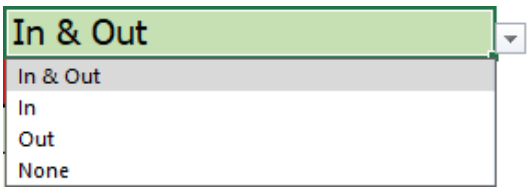


Figure 38 – RLY Network Monitoring Options

5.3 Custom Logo

A custom logo can be shown on the home screen instead of the default logo. To use a custom logo, a bitmap file must be saved to the root directory of the Micro SD card with the following properties:

- Name: logo must be saved as **Logo.BMP**.
- Location: the file must be stored in the root directory of the SD card (see Figure 39).
- Format: 16bit bitmap (BMP) or 24bit bitmap (BMP).
- Size: 200x200 pixels.

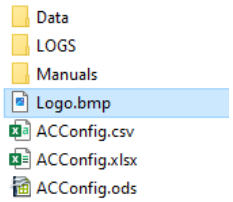


Figure 39 – Custom Logo SD Card Location

6 Operation

The ACT has a 2.8" touchscreen that is used for all the operation and configuration of the Assist Call Pro network.

6.1 Footer Bar



Figure 40 – Footer Bar

The footer bar is shown on most screens of the ACT, with the exception of a few configuration screens. It contains information about the user that is currently logged in and the language of the panel, as well as fault and alarm counts, and the current time and date.

The access level is shown as an icon:	The counts are indicated with the following icons:
Access level 1 No user is logged into the ACT	**Fault count** Number of active faults on the system
Access level 2 The manager is logged into the ACT	**Alarm count** Number of active alarms on the system
Access level 3 The engineer is logged into the ACT	**Disabled count** Number of modules that have been disabled for maintenance purposes

6.2 Home Screen

The home screen is the main idle screen of the ACT. It allows the user to access all the other screens of the ACT. In the middle of the screen is a logo that can be changed if the user requires (see 5.3 Custom Logo for information on how to do this)

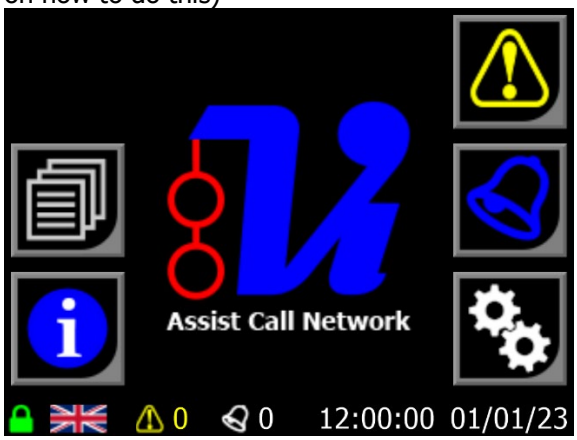


Figure 41 – Home Screen

The icons on the home screen have the following functions:

Faults – Allows the user to view all the current faults on the system.

Alarms – Allows the user to view all the active alarms on the system.

Settings – Allows the user to log in and update the configuration of the system.

Logs – If SD card installed, allows the user to view all the events that have occurred on the system.

Info – Allows the user to see the system and module information.

Fault Accept – If unaccepted faults on system, allows the user to accept them. Will be shown in top left corner, above the logs icon.

6.2.1 Home Screen – Active Faults

If there are active faults on the system, the fault icon on the home screen will flash, and the fault accept button will be shown, as shown in Figure 42



Figure 42 – Home Screen (Fault)

6.2.2 Home Screen – Active Alarms

If there are active alarms on the system, the alarm icon on the home screen will flash, as shown in Figure 43.



Figure 43 – Home Screen (Alarm)

6.3 Fault Screen

The fault screen is accessed by pressing the  icon on the home screen (Figure 41). Pressing this icon when there are no active faults will display the text "No active faults" then return the user to the home screen after 5 seconds.

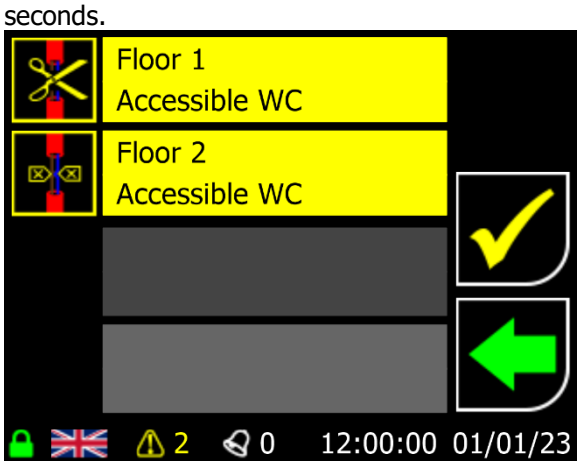


Figure 44 – Fault Screen

In the example in Figure 44 above, there is an open circuit fault on the line serving the accessible WC on floor 1, and a short circuit fault on the line serving the accessible WC on floor 2.

Displayed on this screen are the current fault on the entire system. An icon denotes the type of fault (see 8.2 ACT Fault Status Icons for a breakdown of what each icon means) and the two lines of user definable text describe the location. Pressing one of the icons will take the user to the fault information screen (see 6.3.1 Fault Information Screen).

Faults are shown with the most recent one appearing at the top of the list. All unaccepted faults are shown with a yellow background, which becomes grey once accepted.
If there are more than four faults on the system, the list can be scrolled using the scroll icon  that will be shown in the top right of the screen.

The other icons on the screen have the following functions:



Fault Accept – Accepts the faults on the system, silences the fault buzzer, and turns the general LED to solid yellow. Faults need to be reaccepted every 8 hours.



Back – Returns the user to the home screen

6.3.1 Fault Information Screen

The fault information screen is accessed by pressing on the fault icons on the fault screen (Figure 44). It allows the user to see more in-depth information about a specific fault.

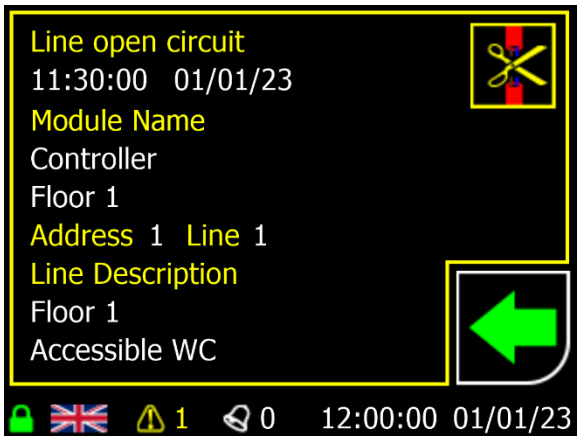


Figure 45 – Fault Information Screen

In addition to the description of the fault that has occurred, the faults icon, and its time and date. The other information is as follows:

Module Name	User definable name for the module on which the fault has occurred.
Type	Type of module where the fault has occurred (not shown for line faults)
Address	Address of the module on which the fault has occurred.
Line	Index of line in fault (only shown for line faults)
Line Description	User definable name for the line in fault (only shown for line faults)

Pressing the back button  will return the user to the fault screen (Figure 44).

6.4 Alarm Screen

The alarm screen is accessed by pressing the  icon on the home screen (Figure 41). One of three screens will be shown depending on the state of the system. If there is in an active alarm, the screen shown will be the popup shown in Figure 46. With multiple alarms on the system, or the only alarm is acknowledged or silenced, the list view seen in Fig8 will be shown. If the system is idle, and no alarms are active, the screen will be shown with the text "No active alarms" then return the user to the home screen after 5 seconds. This screen is automatically displayed when an alarm is triggered, and the ACT is idle.

6.4.1 Alarm Screen – Active Alarm Popup

This is the variant of the alarm screen that is shown when there is only the one active alarm on the system. The box will flash to attract the user attention.

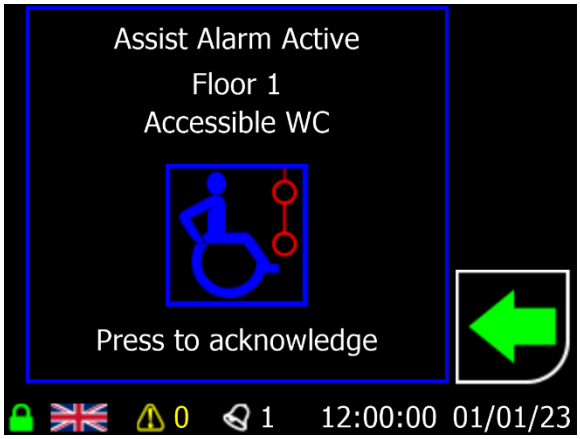


Figure 46 – Alarm Screen Popup View

At the top of the screen is the text showing which type of alarm is active. Underneath is the two line of user definable text describing the location of the alarm.

The bottom line of text gives instruction on what will happen when the icon above is pressed, with the options being: acknowledge, cancel, silence, or close. If the close text is shown, meaning the action is none, the alarm will remain active until cancelled at the plate.

Once the icon has been pressed the screen will revert to the list view (Figure 47). In the example in Figure 46, pressing the icon will acknowledge the alarm in the accessible WC on floor 1, then show that alarm as acknowledge in the list view (as in Figure 47).

Pressing the back button  will return the user to the home screen (Figure 44).

6.4.2 Alarm Screen – List View

This variant of the alarm screen is shown when there is only one alarm that has been acknowledged, or there are multiple alarms in any state, on the system.

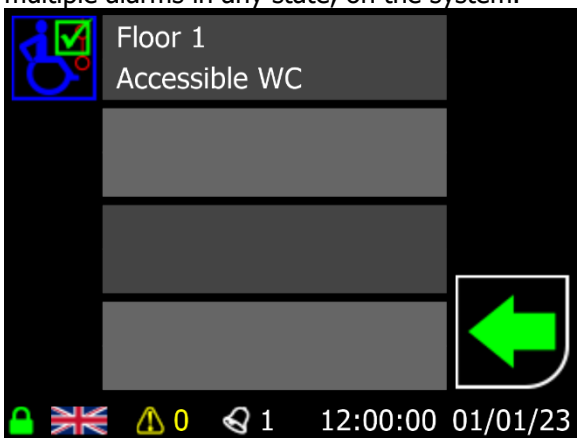


Figure 47 – Alarm Screen List View

Up to four alarms can be displayed on the screen at once, with each showing an icon denoting its state (See 8.1 ACT Alarm Status Icons for a full list of icons) and two line of user definable text to describe the location of the alarm. The oldest alarm on the system is shown at the top of the screen, with newer alarms added to the bottom of the list.

If the alarm is active, then the icon can be pressed to perform the action related to that line (either acknowledge, cancel, or silence). An alarm which has had its action set to none will not respond to the icon being pressed, the alarm will continue to sound until cancelled at the point of call.

When there are more than four alarms on the system, scroll icons will be shown in the top right of the screen. These can be used to scroll through the list of alarms.

6.5 Log Screen

The log screen is accessed by pressing the icon on the home screen (Figure 40), if there is a Micro SD card attached to the back of the ACT. It contains a list of all the events that have occurred on the system.

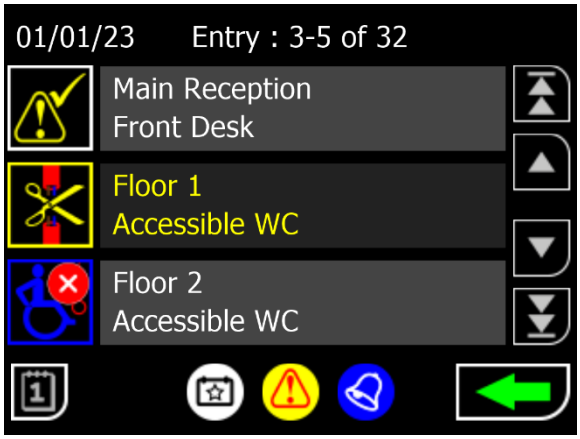


Figure 48 – Log Screen

When an event occurs on the system, that event is added to the log file for the day. Each log file can contain up to 65,535 events and are stored on the attached Micro SD card. These log files are stored in CSV format, and can be imported into a spreadsheet for analysis.

Each event is described using an icon to denote the type of event, as well as two lines of text. This text is either a module name, line name, or the event type text. The icon can be pressed to bring up further information about the event.

At the top of the screen is the date of the log file that is currently being viewed, as well as the range of entries being shown out of the total number of entries.

Pressing the icon will take the user to the calendar screen (Figure 51) where they can select a new day's log file to view. The icon will return the user to the home screen (Figure 41).

6.5.1 Log Screen Filter Options

The log events are split into three types, which can be filtered using the three round icons at the bottom of the screen. Those types are:

	Events	Operating system events
	Faults	Faults occurred and cleared
	Alarms	Assistance alarm events

6.5.2 Log Screen Navigation

The scroll buttons on the right-hand side of the screen are shown when there are more than three events. They can be pressed to navigate through the entries as follows:

	Shows the three most recent entries
	Moves the list up by three entries
	Moves the list down by three entries
	Shows the three oldest entries

6.5.3 Log Screen – Event Info

When an icon is pressed on the log screen (Figure 48) a new screen is shown which shows more information about the log event that was just pressed.

There are different variants for the screen, colour coded to denote the types of log event that is on show. Below are the variants for system events (Figure 49) and alarm events (Figure 50), with the fault variants looking the same as the fault information screen (Figure 45)

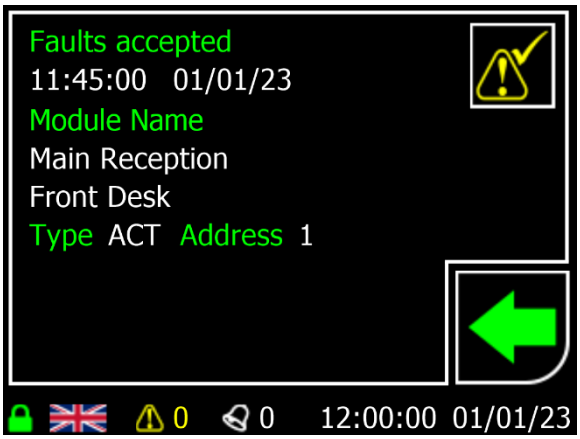


Figure 49 – Log Information (Event)

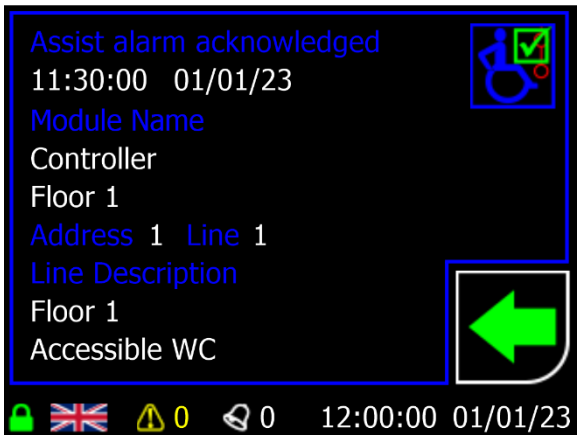


Figure 50 – Log Information (Alarm)

The information that is shown on screen includes the event type, icon, time, and date, along with the following information

Module Name	User definable name for the module on which the fault has occurred.
Type	Type of module where the fault has occurred (not shown for line faults)
Address	Address of the module on which the fault has occurred.
Line	Index of line in fault (only shown for line faults)
Line Description	User definable name for the line in fault (only shown for line faults)

Pressing the back button will return the user to the log screen (Figure 48).

6.6 Calendar Screen

The calendar screen is accessed by pressing the icon on the log screen (Figure 48). This allows the user to view a log file for a specific day.

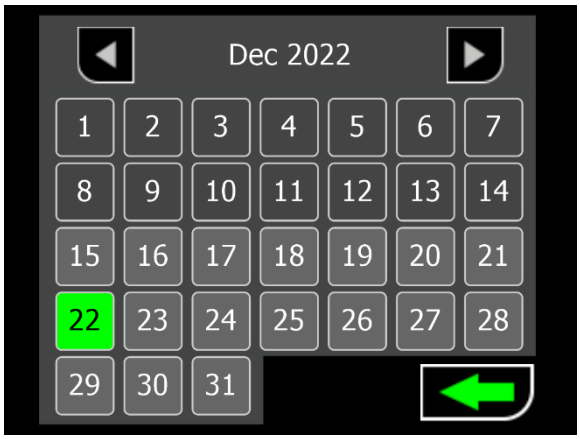


Figure 51 – Calendar Screen

The calendar shows all days for the month displayed. This month can be changed using the icons.

If a log file exists for a given day, that day will be shown in light grey. Those days shown in dark grey have no log file created. The file that is currently open is highlighted in green.

Pressing a valid day will return the user to the log screen (Figure 48) and show the entries for that day.

Note: when the log screen is first accessed from the home screen, the current day will be shown.

To return to the log screen (Figure 48) without choosing a day, press the icon.

6.7 Info Screen

The info screen is accessed by pressing the  icon on the home screen (Figure 41) and shows addition information about the ACT and wider project.

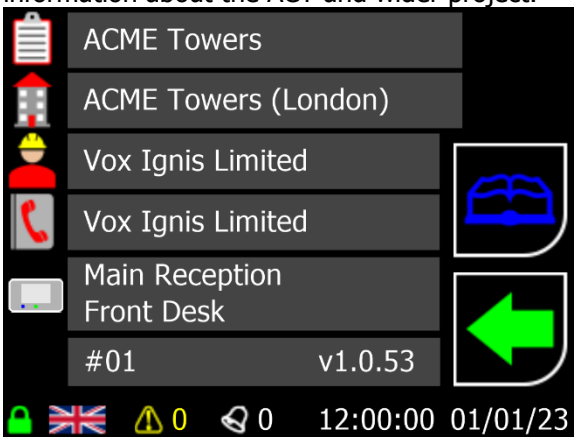


Figure 52 – Info Screen

The icons down the left-hand side of the screen denote the following:

	Project name
	Site name
	Installer name
	Contact details
	ACT module name

On the last row, the information shows the address of the ACT, and its current software version.
The buttons on the right-hand side of the screen have the following functions:

	**Manual** – Shows the screen containing the QR code that can be scanned to show the manual (See 6.7.1).
	**Back** – Returns the user to the home screen (Figure 41)

6.7.1 QR Code Screen

The QR code screen is shown when the  icon is pressed on the info screen (Figure 52).



Figure 53 – QR Code Screen

On the screen is QR code which, when scanned, shows the download page of the Vox Ignis website, where an online version of this manual is present.

Pressing the back button  will return the user to the info screen (Figure 52).

6.8 Login Screen

The login screen is shown when the  icon is pressed on the home screen. It allows the user to log in and access the settings and configuration of the ACT and the network.

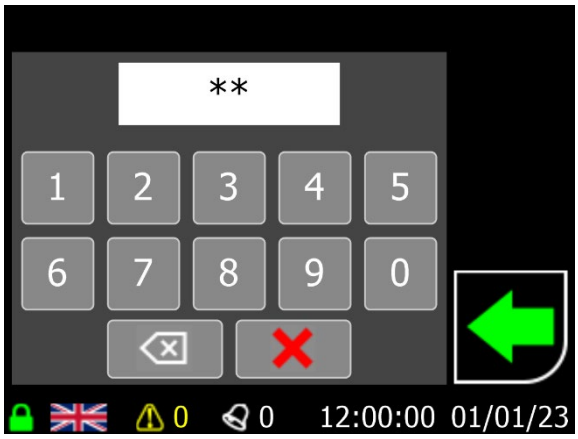


Figure 54 – Login Screen

The keypad allows the user to enter the four-digit PIN for either the level 2 or level 3 access. These PINs can be changed (see 6.13 PIN Change Screen) but by default they are set to:

	**Level 2**	1664
	**Level 3**	1812

At the bottom of the keypad are two buttons that have the following functions:

	Deletes the last digit that was entered.
	Clears all the digits that have been entered so far.

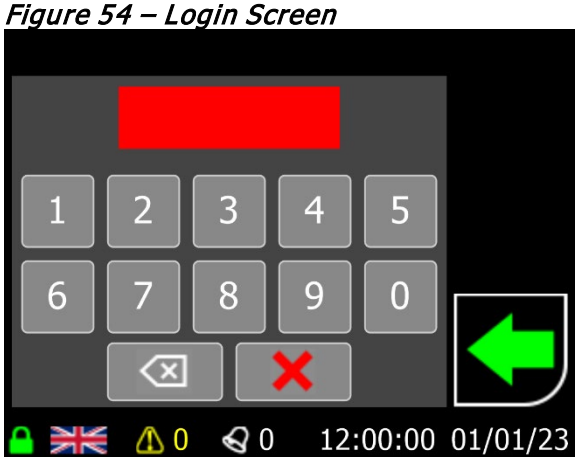


Figure 55 – Login Invalid

Once all four digits have been entered the user will either be taken to one of the settings screens (Figure 56 or Figure 58 depending on the level logged in) or they will be shown the screen in Figure 55 meaning they have entered an invalid passcode.

If the user wishes to retry the entry process, then press one of the number keys to clear the red and enter that digit. The other three digits can then be entered.

6.9 Settings Screen – Level 2



Figure 56 – Settings Screen (Level 2)

This screen is shown when the level 2 PIN (1664 by default) is entered on the login screen (Figure 54). The level 2 user only has access to basic options, further configuration requires the level 3 PIN.

The icons on the screen have the following functions:

	**Lamp Test** – Allows the user to test the display screen, status LEDs, and buzzer.
	**Clock** – Allows the user to set the time and date on the network
	**Back** – Logs the user out and returns to the home screen (Figure 41)

6.10 Lamp Test

The lamp test is initiated by pressing the  icon on the settings screen. It will test all colours of the screen, the status LEDs (alarm, CPU, and general), and play a test tone from the buzzer. To exit the lamp test simply press anywhere on the screen to return to the settings screen. The sequence of screen colours and LEDs is as follows:

Screen Colour	Alarm LED	CPU LED	General LED
Black			
Red			
Green			
Blue			
White			

6.11 Clock Screen

The clock screen is accessed by pressing the  icon on the settings screen. It allows the user to change the time and date on the system.



Figure 57 – Clock Screen

Press either the time or date box to select it. The selected value will have a red border. Any box that contains an asterisk (*) means the value is unsaved.

Use the number on the keypad to enter the time or date that is wanted. The  button allows the user to delete the last digit entered, whereas the  button allows the user to clear the whole edit box.

The DST toggle allows the user to set whether the time will change for daylight savings time, following the European rules.

If the toggle is green , DST is enabled

On the right-hand side of the screen, the buttons have the following functions:

 **Save** – *Shows once configuration has changed.* Stores the time, date, and DST to memory and transmits to the network.

 **Back** – Returns the user to the settings screen.

6.12 Settings Screen – Level 3

This screen is shown when the level 3 PIN (1812 by default) is entered on the login screen (Figure 54). The level 3 user has full configuration access.



Figure 58 – Settings Screen (Level 3)

The icons on this screen (in addition to those defined in 6.9 Settings Screen – Level 2) have the following functions:

	**PIN Change** – Allows the user to change the PINs for both access levels.
	**Network Settings** – Allows the user to view and configure the network and modules on it.
	**Project Settings** – Allows the user to change the project, site, installer and contact names.
	**Language** – Allows the user to change the language of the ACT.
	**Load** – Allows the user to load the configuration from the Micro SD card.
	**Backup** – Allows the user to back up the configuration to the Micro SD card.

Pressing the back button  will log the user out and return them to the home screen (Figure 41).

6.13 PIN Change Screen

The PIN change is accessed by pressing the  icon on the level 3 settings screen (Figure 58). It allows the user to change the PIN codes for both access levels.



Figure 59 – PIN Change Screen

Select the desired access level using the icons on the left-hand side of the screen, the selected one is highlighted in green. The icons correspond to the following access levels:

 	Level 2 (Manager)
 	Level 3 (Engineer)

Pressing one of these icons will clear both entry boxes and select the left hand one.
The number on the keypad can then be used to enter the PIN.
Pressing the  button allows the user to delete the last digit entered, whereas the  button allows the user to clear the whole edit box.

Once the first box has been filled with a PIN, the second box will automatically be selected, and the PIN must be entered again to verify it's correct. After the second box is filled, you will see one of the two screens below.

The back button  can be pressed to return the user to the settings screen (Figure 58)



Figure 60 – PIN Change Screen (Fault)

If the two PINs don't match, or a PIN that is already in use is entered, the boxes will show with a yellow background.

Either box can be selected and changed to make them match, or both can be changed to a valid PIN.



Figure 61 – PIN Change Screen (Save)

If a valid PIN is entered twice, the save button will be shown.

Pressing the save button  will update the PIN for the defined user.

6.14 Network Overview Screen

The network overview screen is shown when pressing the  icon on the level 3 settings screen (Figure 58). It gives a view of the modules that have been found by a network discovery (See 6.15.3 Network Discovery) and is the starting point for configuring the modules on the Assist Call Pro network.

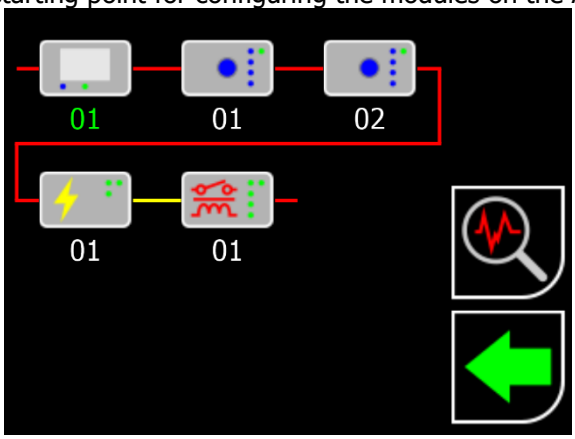


Figure 62 – Network Overview Screen (Ring)

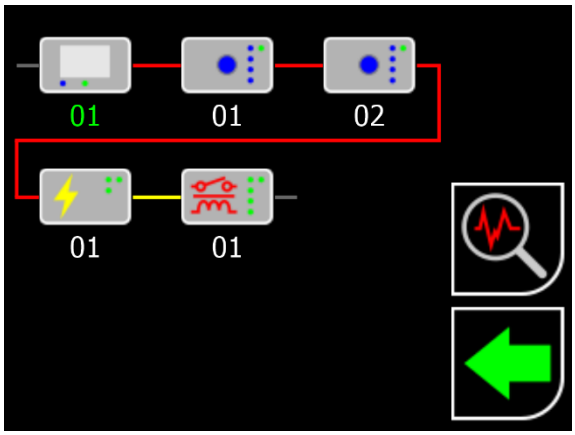


Figure 63 – Network Overview Screen (Line)

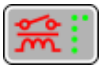
Each module is represented by a net in connection to the left, a net out connection to the right, a module icon, and a module address.

The module icons denote the following type of module:


ViAC-ACT


ViAC-4ZC


ViAC-PSU


ViAC-RLY

These icons can be pressed to bring up the settings for the given module (see 6.16 Module Settings Screen).

Underneath the icon is the address of the module. This is normally shown in white, with green denoting the local ACT, and yellow indicating that communication has been lost with that module (as it has with the RLY in Figure 63). If the module has been disabled, the address number will be shown in red.

Up to 9 modules can be shown on the screen at once. If there are more modules, scroll icons  will be shown in the top right of the screen. These can be pressed to move through the list of modules on the network.

The connections either side of the icon show the state of the net in and net out ports on the module, with net in to the left, and net out to the right. Each ports state is denoted by the following colours:

Red	Enabled and healthy
Yellow	Enabled and in fault
Grey	Disabled

In the example in Figure 63, the net in port of the ACT and the net out port of the RLY have both been disabled, and there is a data fault between the PSU and RLY.

It is recommended that the network is wired in a ring, to give the extra redundancy, but the network can work as a line. If this is the case, the modules at the end of the line should have their unused ports turned off (see 6.16 for information on how to do this).

The example in Figure 63 shows a line network, with the ACT's net in and the RLY's net out ports disabled.

Pressing the  icon will take the user to the discovery and diagnostics screen when there are network diagnostics options, and the option to run a network discovery (see 6.15.3). The back icon  will return the user to the setting screen (Figure 58)

6.15 Diagnostics and Discovery Screen

The diagnostics and discovery screen is shown when the  icon is pressed on the network overview screen (Figure 62). It gives the user options to show either the address, or network fault diagnostics on ViAC-4ZC and ViAC-RLY panels, and allows the user to run a network discovery.

At the top of the screen are two buttons labeled "Faults" and "Address", these can be pressed to switch the 4ZCs and RLYs displaying their addresses, or the network fault information. The button with the lime green background is the one currently selected.

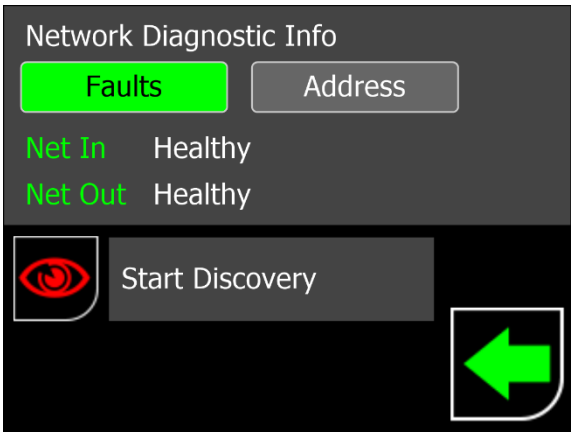


Figure 64 – Diagnostics and Discovery Screen (Faults)

If faults is selected the states of the net in and net out ports on the ACT will be shown. The states are either healthy, in fault, or disabled.

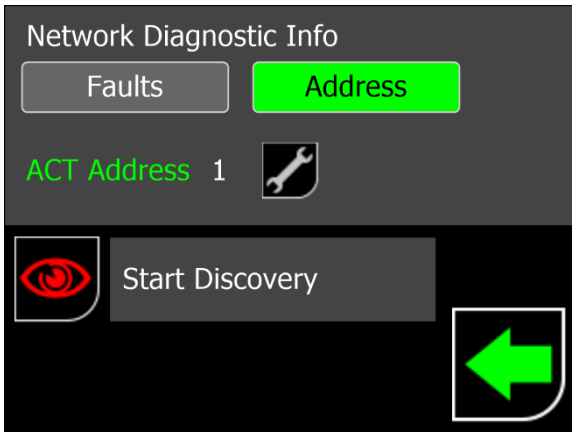


Figure 65 – Diagnostics and Discovery Screen (Address)

If address is selected, the ACT's address is shown, along with a  button that takes the user to the ACT address screen where the address can be changed

Underneath the diagnostics info box is the  button to begin a network discovery. This will build up a list of all the modules that are on the network, and how the system is connected (see 6.15.3 for more information)

The back button  can be pressed to return the user to the network overview screen (Figure 62)

6.15.1 Network Fault Diagnostics

When the "Network" button is selected, and the user is on the Diagnostics and Discovery Screen (as in Figure 64), the 4ZCs and RLYs on the network will show the network diagnostics information on their four status LEDs, with those LEDs showing the following information:

LED 1	LED 2	LED 3	LED 4
Net in healthy	Net out healthy	4ZC buzzer mute	Fault diagnostics mode active
Net in data fault	Net out data fault	4ZC buzzer not muted or RLY	

6.15.2 Module Address Diagnostics

When the "Address" button is selected, and the user is on the Diagnostics and Discovery Screen (as in Figure 64), the 4ZCs and RLYs on the network will show their address using the four status LEDs. This allows someone to easily see the address of the module, without having to remove it from the wall and look at the dipswitch. The LEDs mirror the dipswitch and show the address in binary, as shown below:

Addr	LEDs 1	2	3	4	Addr	LEDs 1	2	3	4
1	○	●	●	●	9	○	●	●	○
2	●	○	●	●	10	●	○	●	○
3	○	○	●	●	11	○	○	●	○
4	●	●	○	●	12	●	●	○	○
5	○	●	○	●	13	○	●	○	○
6	●	○	○	●	14	●	○	○	○
7	○	○	○	●	15	○	○	○	○
8	●	●	●	○	16	☼	☼	☼	☼

Where:

○	LED White
●	LED Off
☼	LED flashing white

6.15.3 Network Discovery

The network discovery is used to learn what modules are on the network. It is started when the  icon is pressed on the Diagnostics and Discovery screen of an ACT.

When the discovery is started, packets are first sent out from the net out port of the ACT. Once the other modules have responded, and if the network isn't wired as a ring, the packets are sent out the net in port. All the modules that have responded are then build into the network that is shown on the Network Overview screen (Figure 62). The screen will also show a count of the number of modules that have been found.

This list of modules is compiled by all ACTs on the network, regardless of which one of the started the discovery process, therefore the discovery only needs to be done once from a single ACT.

Once the discovery has been completed, the configuration of the modules on the network can be changed.

The net list can be cleared by pressing the  icon. This doesn't need to be pressed before starting a discovery, as the list is always cleared during discovery initialisation.

6.16 Module Settings Screen

The Module Settings screen is shown when one of the module icons is pressed on the Network Overview screen (Figure 62).

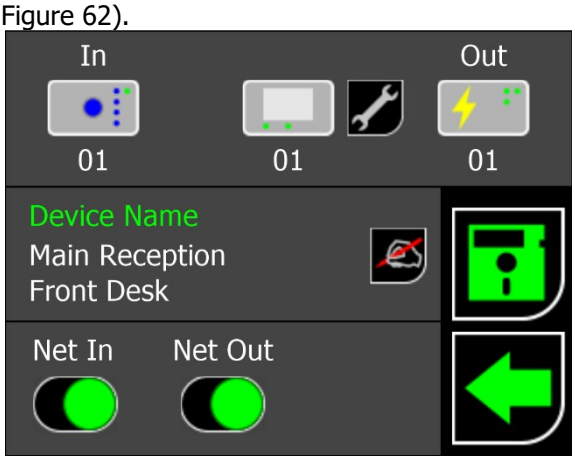


Figure 66 – Module Settings (ACT)

On the screen is the module that is currently being edited, and the modules connected to the net in and out ports of that module. All three showing their module icon and address.
The module icons for the in and out modules can be pressed to bring up their configuration, allowing the user to change the settings for all the modules on the network without having to return to the Network Overview screen.

Underneath the icons is the name of the module. This is two lines, containing 20 character each, of user definable text that describe the location of the module. The  icon to the right of the text can be used to bring up the Keyboard screen which allows that text to be changed (See 6.19 Keyboard Screen).
At the bottom of the screen are two toggles that say whether the net in and out ports are being monitored for faults, with the green toggle  denoting that they are.

In addition to the network toggles, 4ZCs have a third toggle labelled "Mute". If enabled, seen by the green toggle , the 4ZC will not sound when an alarm connected to it is triggered.

If any of the toggles are changed, the save icon  will be shown. Pressing the icon will save the configuration and transmit it to the network

4ZCs, RLYs, and the local ACT, have an edit icon  to the right of the module icon. This can be pressed to take the user to configuration specific to that panel type, for further information see:

	ACT	6.20 ACT Address Screen
	4ZC	6.21 Line Settings Screen
	RLY	6.23 Relay Settings Screen

The back button  can be pressed to return the user to the network overview screen (Figure 62).

Below are the three other variants of the module settings screen for 4ZCs, PSUs and RLYs.

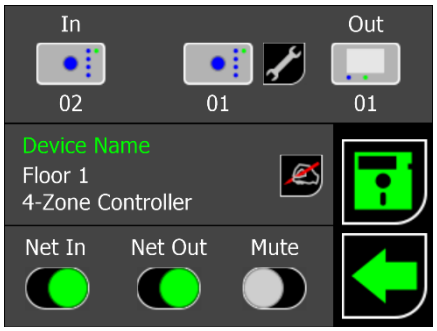


Figure 67 – Module Settings (4ZC)

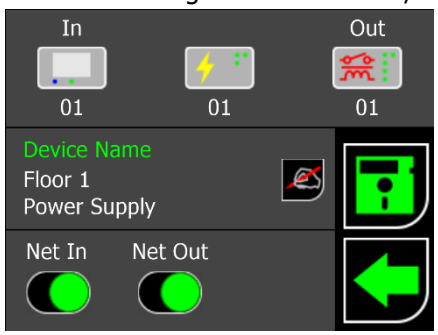


Figure 68 – Module Settings (PSU)

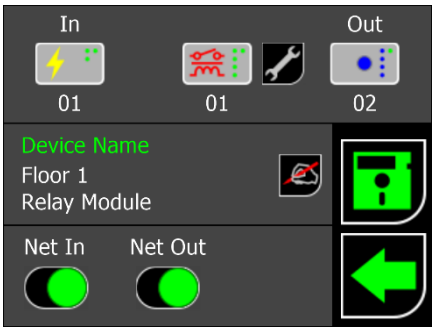


Figure 69 – Module Settings (RLY)

6.17 Module Disable Screen

The module disable screen (Figure 70) is shown when the central module icon is pressed and held for 5 seconds.

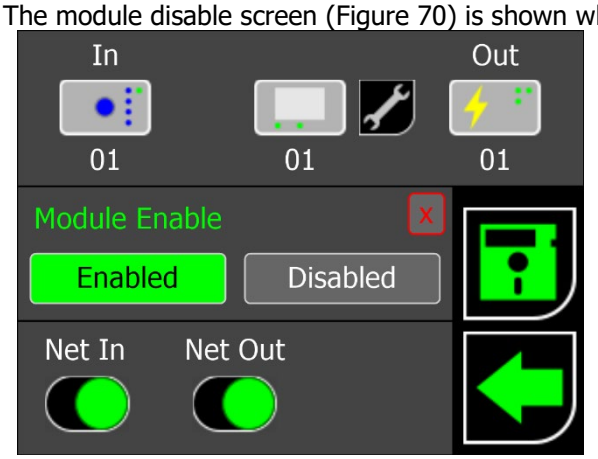


Figure 70 – Module Disable Screen

The screen allows the user to disable a module if it has been removed from the network in order to be replaced or repaired. This means that the module will not be monitored for, and won't appear as missing, but will remain in the network list and appear on the overview screen (Figure 62).

To disable a module, press the disabled button to select it then press the save icon to update the configuration. The configuration box can be closed by pressing the red close button in the top right of the box. This will return the user to the normal Module Settings Screen (Figure 66 in the case of the ACT).

Once the module has been replaced, it must be reenabled using the same method as it is disabled.

6.18 Disable Module List Screen

The disabled module list screen (Figure 71) can be accessed by pressing the icon on the level 3 settings screen (Figure 58). This icon is only shown if there are any disabled modules on the network.

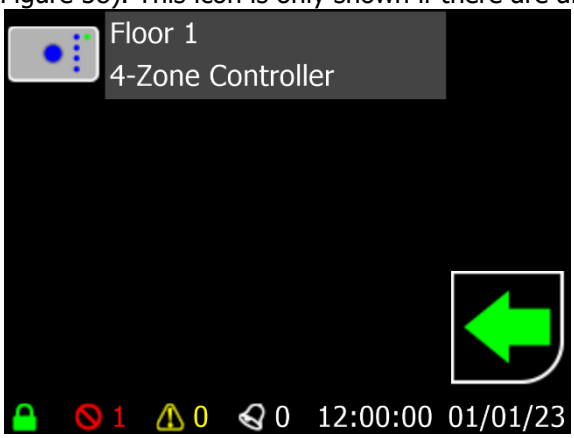


Figure 71 – Module Disable Screen

Once on the screen up to four modules are shown on the screen at any one time. If more are disabled, scroll icons will be shown in the top right corner of the screen. These can be used to scroll through the list of disabled modules.

Each module is denoted by an icon denoting the module type (see 6.14 Network Overview Screen for a list of the four icons that are used). To the right of the icon is the module's name

Pressing the back icon will return the user to the settings screen.

6.19 Keyboard Screen

The keyboard screen is accessed by pressing the icon next to various pieces of text on the setting screens.

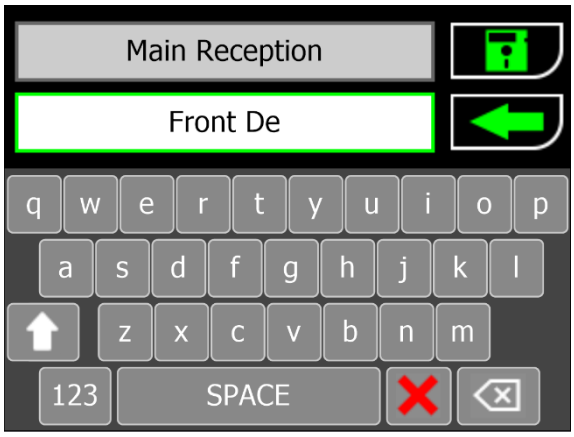


Figure 72 – Keyboard Screen

If there are two lines of text, the two boxes can be selected by pressing them, with the selected one shown in white with the green border.

Pressing a character will add it to the text string.

The shift icon can be pressed to capitalise the next character, turning the icon to . If pressed twice quick succession then the keyboard will enable caps lock, denoted by the icon showing .

Pressing the button allows the user to delete the last character entered, whereas the button allows the user to clear the whole edit box.

The "123" button will take the user to a different keyboard containing numbers and symbols.

Pressing the save icon will store the new names to the ACT's memory and transmit them across the network. The user will then be returned to the screen they last came from.

The back icon can be used to return to the previous screen without changing the names.

6.19.1 Alternative Keyboard Screen

If the ACT is set to a language that doesn't use the English QWERTY style keyboard, the screen will look slightly different. The main difference being the addition of the button on the bottom row, between the "123" and space bar. This allows the user to switch between the language's keyboard, and the English QWERTY keyboard.

The layout will automatically adjust depending on the number of keys in each row, and the shift key can be hidden for those languages that do not use upper case characters (such as Arabic and Hebrew).

The other difference is the addition of character keys that can be held down to access variants of that character. For example, in Figure 74 the **e** key has been held down to show the accented variants that are used in French. One of these variants can be pressed to add it to the string, and any of the blank keys can be pressed to return to the normal keyboard.

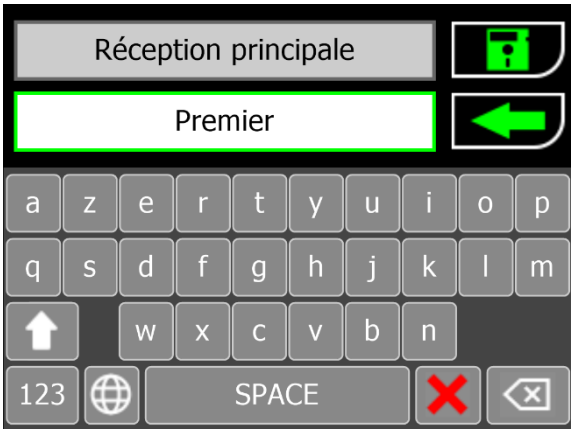


Figure 73 – Alternative Keyboard Screen (French AZERTY)

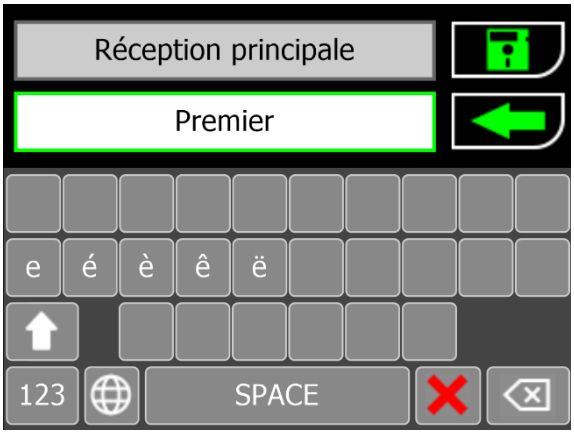


Figure 74 – Alternative Keyboard Screen (Extra Characters)

6.20 ACT Address Screen

This screen is accessed from either pressing the icon to the right of the local ACT on the module settings screen (Figure 66) or from pressing the icon that appears on the diagnostics and discovery screen when the address diagnostic button is selected (Figure 65).

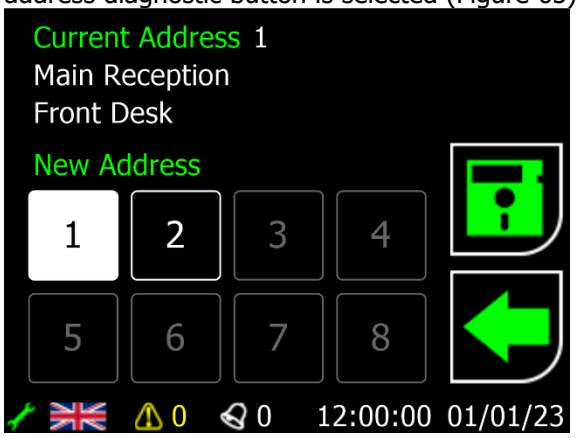


Figure 75 – ACT Address Screen

The screen shows the ACT's current address, along with its name.

Underneath are buttons 1-8 which allow the new address to be selected.

The selected button is shown with a fully coloured background, whilst the others only have the coloured border and number. The colours denote the following:

	Address in network list and visible on network
	Address not in network list and not visible on network
	Address not in network list but visible on network
	Address in network list but not visible on network

Pressing one of the number buttons will select it. Once an address that differs from the current one is selected, the save icon will be shown. Pressing the save icon will update the ACT's address.

The back button will return the user to the screen they came from.

6.21 Line Settings Screen

The line settings screen is accessed by pressing the icon to the right of a 4ZC on the module settings screen (Figure 67).

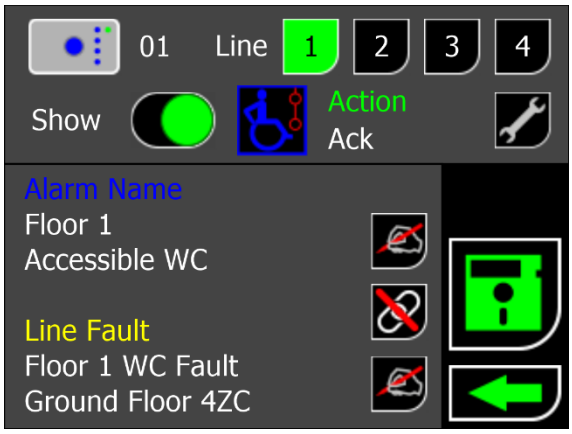


Figure 76 – Line Settings Screen

At the top of the screen is an indication which 4ZC houses the lines that are being edited. To the right is the line selection, with the selected line denoted by the green background 1. These line index buttons can be pressed to select a new line to edit.

Underneath is a toggle that says whether a given line is shown on the local ACT when activated, with the green toggle denoting it will be shown.

To the right is the icon denoting the type of alarm that is selected, along with the action, which determines what happens to that line when it's icon is pressed on the alarm screen. These can be edited using the icon which takes the user to the line type screen (see 6.22 Line Type Screen).

The alarm name and line fault text are shown on the screen and can be edited using the icon. Between the two edit buttons is the fault text match toggle. This allows the user to set the alarm name text to show if the line goes into fault rather than separate fault text. If the variant of the toggle is shown (and the line fault edit button gets hidden) then the alarm text will be used.

Once configuration has changed, the save button will be shown, pressing it will update the configuration on memory and on the network.

Pressing the back button will return the user to the module settings screen (Figure 67).

6.22 Line Type Screen

The line type screen is accessed by pressing the  icon on the line settings screen. It allows the user to select which type of alarm is on the line, as well as that alarm's action.

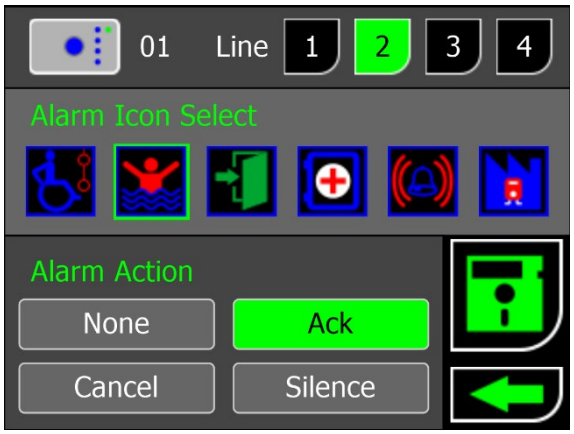


Figure 77 – Line Type Screen

At the top of the screen is an indication which 4ZC houses the lines that are being edited. To the right is the line selection, with the selected line denoted by the green background . These line index buttons can be pressed to select a new line to edit.

Pressing on the icon will set the alarms type, with the green border denoting the one that is currently selected.

If the selected alarm type is anything other than assist, then the alarm action buttons will be shown. This allows the user to select what occurs when the line's icon is pressed on the alarm screen. The actions are as follows:

None	The alarm can't be acknowledged and will remain active until cancelled at the point of call. Can be used for alarms such as the ViAC-CLP-56 mushroom call button that remains physically locked in alarm and can't be acknowledged.
Ack	The alarm will be acknowledged when the icon is pressed. If the alarm's kind is Assist, the action will always remain as Ack.
Cancel	The alarm will be cancelled when the icon is pressed.
Silence	*This affects the local ACT only.* Pressing the icon will silence the alarm buzzer on the ACT for 2 minutes.

Once configuration has changed, the save button  will be shown, pressing it will update the configuration on memory, then transmits that configuration around the network. Changing the alarm action to none, ack, or cancel will update all ACTs on the network. This means the silence action will have to be re-set on ACT's that use it, if the overall action has been changed.

Pressing the back button  will return the user to the line settings screen (Figure 76).

6.23 Relay Settings Screen

The relay settings screen is accessed by pressing the  icon to the right of an RLY on the module settings screen (Figure 69). It allows the user to configure the 4 relays on the main RLY board, and the 4 relays on the optional expander board.

Each relay has three options for operation, those being:

None	Relay doesn't operate under any circumstance, it remains open
Lines	Relay is normally open, but will close upon specified lines activating, or going into fault
Healthy	Relay is normally closed, but opens on any fault on the network, including loss of power to RLY

By default the relays are configured to monitor lines, with relays 1-4 (on the main RLY board) monitoring for lines 1-4 respectively going active, and relays 5-8 (on the RLX expander board) monitoring lines 1-4 respectively going into fault.

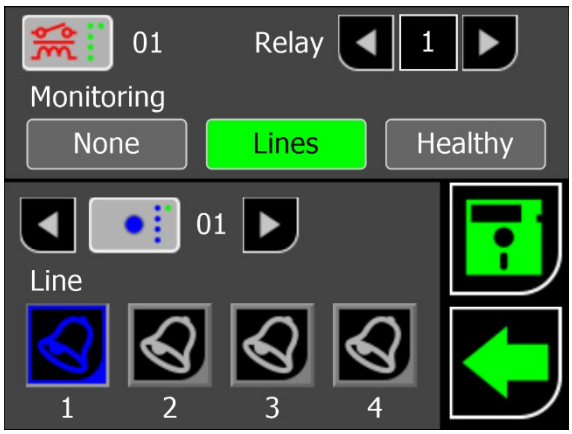


Figure 78 – Relay Settings Screen (Lines)

At the top of the screen is an indication showing the address of the RLY currently being edited. To the right is the relay selection, where the user can press the icon to select from relay 1-8 to edit.

Underneath are the buttons for selecting what the relay is monitoring for, from the three options described above. The button highlighted in green is the one currently selected.

If the **Lines** option is selected (as in Figure 78), a further box will be shown allowing the user to configure which lines are being monitored. This box isn't shown if **None** or **Healthy** is selected as the monitoring option.

The 4ZC can be selected using the icons, with the current 4ZC denoted by the icon and address.

Underneath are toggles, which can be pressed to select what state each line is being monitored for, those states being:

	None	Line not monitored
	Active	Line monitored for alarm going active
	Fault	Line monitored for faults

Once configuration has changed, the save button will be shown. Pressing will save the configuration to memory, and transmit across the network. The configuration **must** be saved before the relay index or 4ZC address is changed.

Pressing the back button will return the user to the module settings screen (Figure 69).

6.24 Project Settings Screen

The project settings screen is accessed by pressing the icon on the level 3 settings screen (Figure 58). It allows the user to configure the project name, site name, installer name, and the contact details.

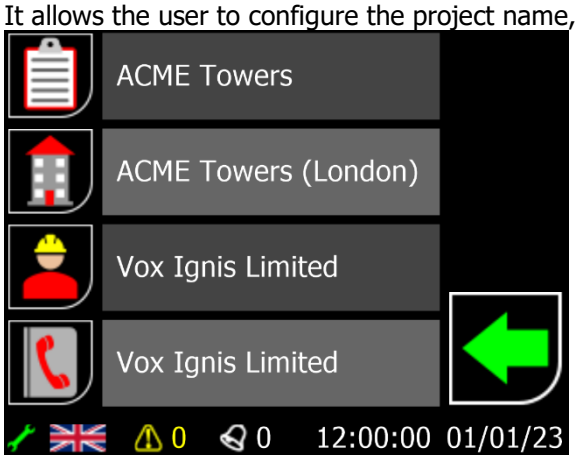


Figure 79 – Project Settings Screen

Pressing one of the icons on the left-hand side of the screen will bring up the keyboard screen (see 6.17) and allow the user to edit the text. The icons denote the following:

	Project name
	Site name
	Installer name
	Contact details

Pressing the back icon will return the user to the settings screen (Figure 58).

6.25 Language Screen

The language screen is accessed by pressing the icon on the level 3 settings screen (Figure 58). It allows the user to change the language of the ACT.

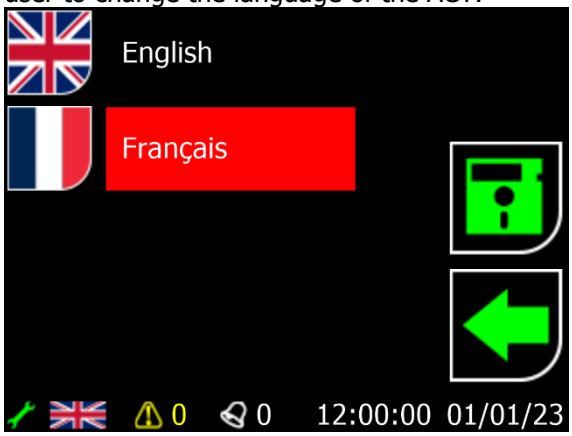


Figure 80 – Language Screen

Pressing one of the flag buttons on the left-hand side of the screen will select the language, highlighting the name with a red background.

The save button will be shown once a new language is highlighted. Pressing the button will set the ACT to the selected language, updating all text, and showing a new flag in the footer bar.

This language will now be used across the whole ACT, including loading from, and backing up to, the Micro SD card.

Pressing the back button will return the user to the level 3 settings screen (Figure 58).

6.26 Configuration Load Screen

The configuration load screen is accessed by pressing the icon on the level 3 settings screen (Figure 58). It allows the user to load the system's configuration from the Micro SD located on the rear of the ACT display.

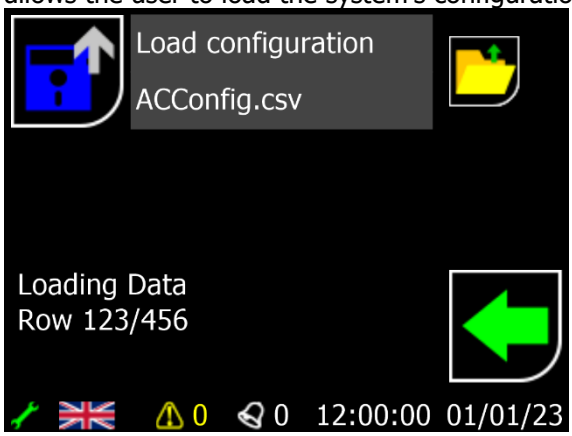


Figure 81 – Configuration Load Screen

By default the ACT will try and load from a file called ACConfig.csv but this can be changed by pressing the icon on the right-hand side of the screen to bring up the file select screen (see 6.28 File Select Screen)

Once the desired filename is on show, pressing the icon will begin the load procedure. ***During the loading procedure, the user is unable to leave this screen.*** Whilst loading, the progress of the load will be shown in the area underneath the grey box. This will also show any errors if any occur (see 6.26.1 for information about errors)
Once the load is complete and the finished message has shown, the user can then leave the screen. Pressing will return the user to the menu screen.

6.26.1 Load Screen Errors

If an error occurs whilst loading a file from the SD card, one of the following message will be shown on screen:

Error Text	Description
Read Error	Data in given cell of the csv file (as denoted by row and column) is invalid.
Invalid File	File does not contain the expected number of rows or columns.
File Missing	File is not present on the SD card.
Language Error	The language used in the csv file doesn't match the one the ACT is currently set to.

Upon receiving an error, the load process will end and the buttons on the screen will be active again. If the "Read" or "Invalid" message appears then the csv file must be resaved to the SD card from the computer.

6.27 Configuration Backup Screen

The configuration backup screen is accessed by pressing the icon on the level 3 settings screen (Figure 58). It allows the user to back up the system's configuration to the Micro SD located on the rear of the ACT display.

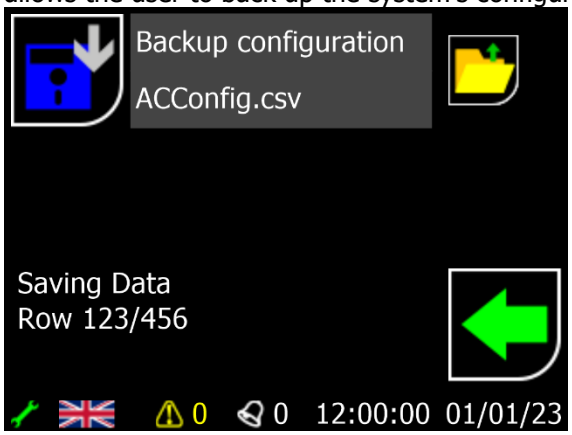


Figure 82 – Configuration Backup Screen

By default the ACT will try and back up to a file called ACConfig.csv but this can be changed by pressing the icon on the right-hand side of the screen to bring up the file select screen (see 6.28 File Select Screen)

Once the desired filename is on show, pressing the icon will begin the backup procedure. ***During the backup procedure, the user is unable to leave this screen.*** Whilst backing up, the progress of the backup will be shown in the area underneath the grey box. This will also show any errors if any occur (see 6.27.1 for information about errors) Once the backup is complete and the finished message has shown, the user can then leave the screen. Pressing will return the user to the menu screen.

6.27.1 Backup Screen Errors

If there is an error when writing the backup to the SD card, the display will try again, showing a "Backup Failed – Retrying" message. If after five attempts it remains unsuccessful, an error will appear saying "Backup Failed" and the backup process will end. If a written file fails the verification, the backup will be tried again.

6.28 File Select Screen

The file select screen is show by pressing the icon on either the load or backup screen and allows the user to select which file is being read from or written to.

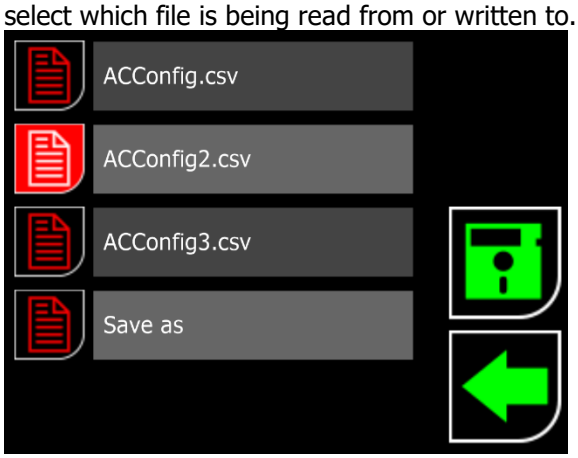


Figure 83 – File Select Screen

The screen will show up to four csv files at a time. If there are more than four files, the list can be scrolled through using the icon that will show in the top left of the screen.

Pressing one of the icons will highlight that file (denoted by the icon and the red background).

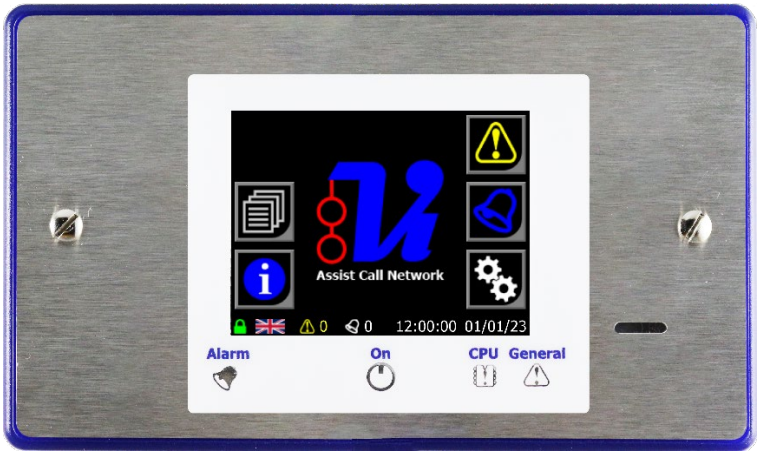
Pressing the save icon will select the highlighted file as the one to be read from or written to.

Pressing the back icon will return the user to the previous screen, without selecting a new file.

6.28.1 Backing up to a New File

If a new file is needed for a backup, rather than just an overwrite of a current file, the user can press the "Save as" file that will appear at the end of the file list. Once selected, pressing the save icon will take the user to the keyboard screen (see 6.19 Keyboard Screen) and allow them to enter their own 15-character file name ***(the .csv extension does not need to be entered)***. Pressing the save icon on that screen will return the user to the backup screen (see 6.27 Configuration Backup Screen) and **automatically** begins a backup of the configuration.

7 Indication and Controls



7.1 Indicator Icons Key

LED off	LED illuminated a single colour	LED flashing on and off
		

Table 2 – LED Indicator Icons Key

7.2 General Fault Indication Summary

General LED	Description
	No faults present.
	Unaccepted faults present.
	Faults present and accepted.

Table 3 – General Indicator Summary

7.3 CPU Fault Indication Summary

CPU LED	Description
	Display checksum or display CPU fault present on ACT
	No CPU faults present on ACT

Table 4 – CPU Indicator Summary

7.4 Alarm Indication Summary

Alarm LED	Description	Alarm LED	Description
	System idle		Acknowledged alarms on system
	Active alarms on system		System in fault

Table 5 – Alarm Indicator Summary

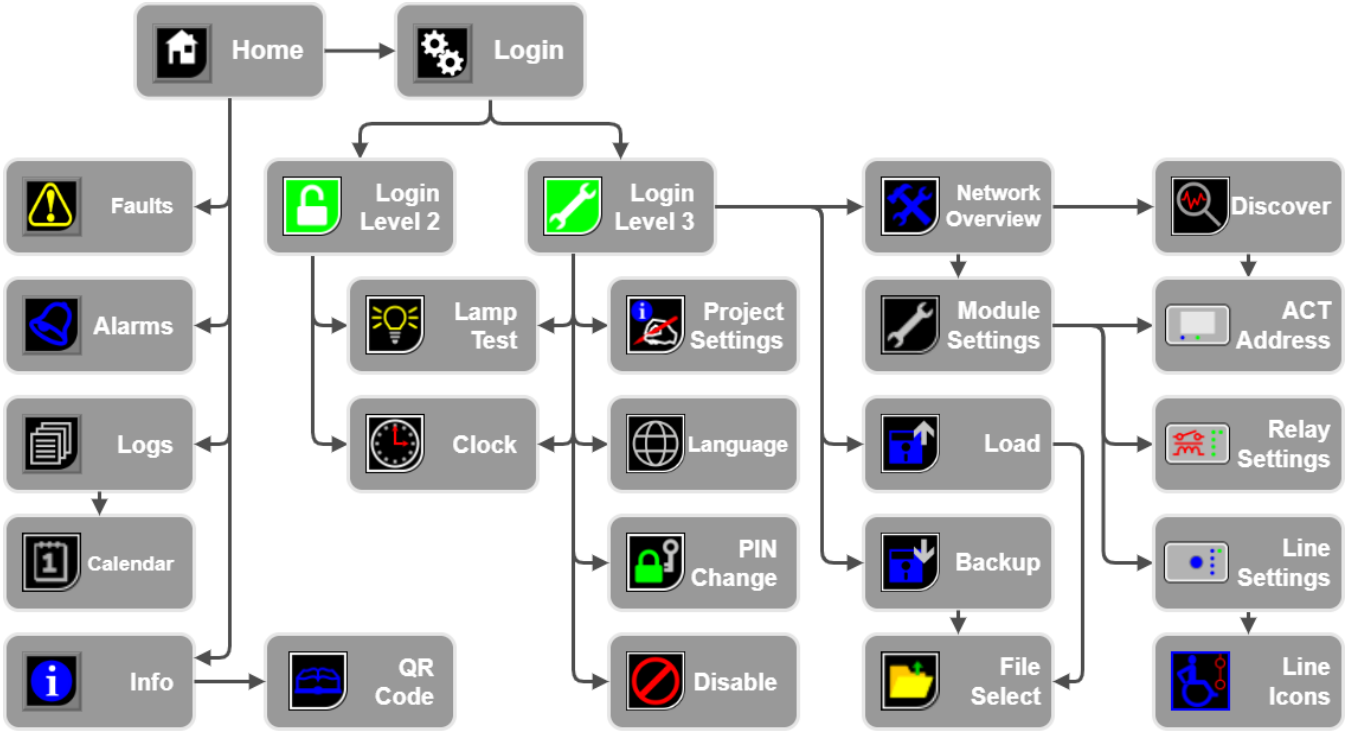
7.5 Power Indication Summary

On LED	Description
	ACT is receiving power
	ACT not receiving power

Table 6 – Power Indication Summary

8 Operational Flowchart

This flowchart shows how each of the screens on the ACT are connected to each other.



9 ACT Status Icons

9.1 ACT Alarm Status Icons

Icon	Description	Icon	Description
	Assist Call alarm activated.		Medicine cabinet alarm activated.
	Assist Call alarm acknowledged.		Medicine cabinet alarm acknowledged.
	Assist Call alarm cancelled.		Medicine cabinet alarm cancelled.
	Pool alarm activated.		Panic alarm activated.
	Pool alarm acknowledged.		Panic alarm acknowledged.
	Pool alarm cancelled.		Panic alarm cancelled.
	Door alarm activated.		Plant alarm activated.
	Door alarm acknowledged.		Plant alarm acknowledged.
	Door alarm cancelled.		Plant alarm cancelled.

9.2 ACT Fault Status Icons

Icon	Description
	**Line open circuit** There is an open circuit fault on the identified line.
	**Line short circuit** There is an short circuit fault on the identified line.
	**Net in data fault** The net in port on the identified module has stopped receiving data.
	**Net out data fault** The net out port on the identified module has stopped receiving data.
	**Module missing** The ACT has not received any communication from the identified module for at least 60 seconds.
	**Unknown module fault** The ACT has received data from a module that is not in its network list.
	**Duplicate module fault** After performing a network discovery, multiple modules of the same type with the same address have been found on the network
	**Module checksum fault** There is a checksum fault on the identified module.
	**Module system fault** The identified module has watchdogged.
	**Main failure** The identified PSU has lost its mains AC connection and is currently running on the battery backup.
	**Battery open circuit** The battery on the identified PSU is being reported as open circuit
	**Battery short circuit** The battery on the identified PSU is being reported as short circuit
	**Battery charger fault** The identified PSU is reporting a fault with the battery charger.
	**Output A fuse fault** There is a fault with the output A fuse on the identified PSU.
	**Output B fuse fault** There is a fault with the output B fuse on the identified PSU.
	**PSU powered down** The identified PSU has powered down.

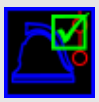
9.3 ACT Log Status Icons

9.3.1 ACT Log Event Status Icons

Icon	Description	Icon	Description
	New log file created.		Faults accepted.
	ACT powered and initialised.		User logged in.
	Watchdog reset occurred.		User logged out.
	Time and date changed.		Lamp test performed.
	Configuration loaded from SD card.		Module disabled.
	Configuration backup up to SD card.		Module re-enabled.

9.3.2 ACT Log Alarm Status Icons

In addition to the icons shown in 8.1 ACT Alarm Status Icons, the following icons are used.

Icon	Description	Icon	Description
	Alarm acknowledge by the indicated module		Alarm cancelled by the indicated module.

9.3.3 ACT Log Fault Status Icons

The log events for faults occurring use the icons from 8.2 ACT Fault Status Icons. When the fault clears, the following icons are used.

Icon	Description	Icon	Description
	Line open circuit cleared		Module system fault cleared.
	Line short circuit cleared		Mains failure cleared.
	Net in data fault cleared.		Battery open circuit cleared.
	Net out data fault cleared.		Battery short circuit cleared.
	Panel missing cleared.		Battery charger fault cleared.
	Unknown module fault cleared.		Output A fuse fault cleared.
	Duplicate module fault cleared.		Output B fuse fault cleared.
	Module checksum fault cleared.		PSU power restored

10 Technical Specifications

10.1 ViAC-ACT Technical Specification

POWER	
Remote Power	Powered from ViAC-PSU

CONTROLS AND INDICATIONS	
Touchscreen	2.8" RGB touchscreen
Statutory indicators	1× power status indicator
	1× CPU fault indicator
	1× general fault indicator
	1× RGB alarm indicator

CAT5 CABLING MAX DISTANCES	
Power single pair	50m
Power twin twisted pairs	100m
Data single pair	250m

STANDARDS COMPLIANCE	
EMC	EN 55035:2017+A11:2020 EN 55032:2015+A1:2020
LVD	EN IEC62368-1:2020+A11:2020
Product Family	BS 8300-2:2018

DIMENSIONS	
Height	86mm
Width	140mm
Depth	22mm
Weight	160g (-SS) 120g (-W)

10.2 ViAC-4ZC Technical Specification

POWER	
Remote Power	Powered from ViAC-PSU

INPUTS	
Lines	4
Voltage	12VDC Nominal
Monitoring	Open and Short Circuit
End of Line	10kΩ

ALARM FIELD CABLING		
Cable Type	**Size**	**Distance from 4ZC**
LSF flex/ T&E	1.00mm	500m
1 pair Cat5/6 or security	0.22mm	50m
2 pair Cat5/6 or security	0.22mm	100m

OUTPUTS	
Alarm Relay	1× Volt free NO, Com 24VDC 3A

CAT5/6 CABLING MAX DISTANCES	
Power single pair	50m
Power twin twisted pairs	100m
Data single pair	250m

CONTROLS AND INDICATIONS	
Accept Button	1× Push Button (with alarm indication)
Statutory indicators	1× DC power indicator
	1× general alarm indicator
	4× RGB line status indicators

STANDARDS COMPLIANCE	
EMC	EN 55035:2017+A11:2020 EN 55032:2015+A1:2020
LVD	EN IEC62368-1:2020+A11:2020
Product Family	BS 8300-2:2018

DIMENSIONS	
Height	86mm
Width	140mm
Depth	22mm
Weight	190g (-SS) 160g (-W)

10.3 ViAC-PSU Technical Specification

Power Supply & Charger		
Mains Supply	230VAC	
Outputs	2× 12VDC	
Standby Battery	1× 12V 0.8AH (optional)	
Standby Duration	1 module	2 modules
	10 Hrs	5 Hrs
Fuses	2× Outputs – 500mA	
	1× Battery – 1A	
	1× Mains – 1A (HRC)	

Cat5/6 Cabling Max Distances	
Power single pair	50m
Power twin twisted pairs	100m
Data single pair	250m

Controls and Indications	
Statutory indicators	1× AC/Battery status indicator
	1× Output A DC indicator
	1× Output B DC indicator

Standards Compliance	
EMC	EN 55035:2017+A11:2020 EN 55032:2015+A1:2020
LVD	EN IEC62368-1:2020+A11:2020
Product Family	BS 8300-2:2018

Dimensions	
Height	86mm
Width	140mm
Depth	22mm
Weight	230g (-SS) 200g (-W)

10.4 ViAC-RLY Technical Specification

Power	
Remote Power	Powered from ViAC-PSU

Outputs	
Multi-function Relays	4× Volt free NO, Com 24VDC 3A
RLX Connection	1× Cat5 connection for ViAC-RLX

Cat5/6 Cabling Max Distances	
Power single pair	50m
Power twin twisted pairs	100m
Data single pair	250m

Controls and Indications	
Statutory indicators	1× DC power
	4× Green relay active

Standards Compliance	
EMC	EN 55035:2017+A11:2020 EN 55032:2015+A1:2020
LVD	EN IEC62368-1:2020+A11:2020
Product Family	BS 8300-2:2018

Dimensions	
Height	86mm
Width	140mm
Depth	22mm
Weight	200g (-SS) 170g (-W)

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The AssistCallPro system is designed and manufactured in the UK by:

Vox Ignis Limited
Unit 27 NEBIC
Enterprise Park East,
Sunderland,
SR5 2TA.
Company Registration No: 8892407

www.vox-ignis.com

info@vox-ignis.com

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