



1142RX Series Radio Panic Alarm System Operation & Maintenance Manual

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MANU/A6551

System Overview

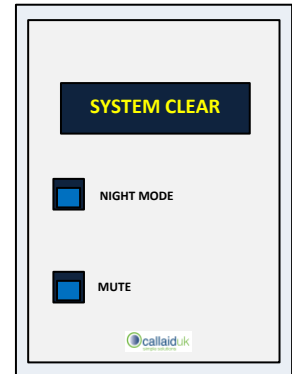
The 1142RX Radio Receiver

This system can be set to operate on either 'Cancel at Source' or 'Cancel at Panel', depending on your ordered preference.

The systems operating radio frequency is 868MHz.

The 1142 unit can be powered by a plug top or inline 12Vdc power supply, or by the recommended wall mounted 12Vdc power supply (A1871) with back up battery via a RJ45 socket.

It is advisable not to place the radio receiver close to metal filing cabinets or at a low level. The higher the 1142 receiver is above the floor level the better the reception. Do not place the receiver next to computers or similar equipment that emit spurious radio signals.



The range of the Call Aid UK radio transmitters is approximately 80 metres indoors, depending on building structure and up to 200 metres outdoors.

The range should be tested using the 1142's RSSI (Radio Signal Strength Indicator) function at the proposed 1142 position in order to check that the radio panic buttons can transmit to the 1142RX receiver.

1142RX Incoming Alerts

When a call button is pressed the 1142RX display panel will respond by showing the call unit identity in the OLED display. An audible alert will be activated, which will vary depending on the alert type i.e. Call Assist or Panic.

If there is more than one panic alert on the system, the 1142RX display will scroll through the incoming calls.

If "System Clear" is not displayed the power supply to the 1142 unit should be checked.

Low battery warning

When a panic button is pressed and the battery is low, a low battery signal will be sent to the 1142RX master panel and the display will show "Low Battery" along with the panic button ID. The "Low Battery" message can only be removed by changing the battery in the panic button with the low battery and then sending a panic/call signal to the 1142RX master.

To cancel/reset alerts

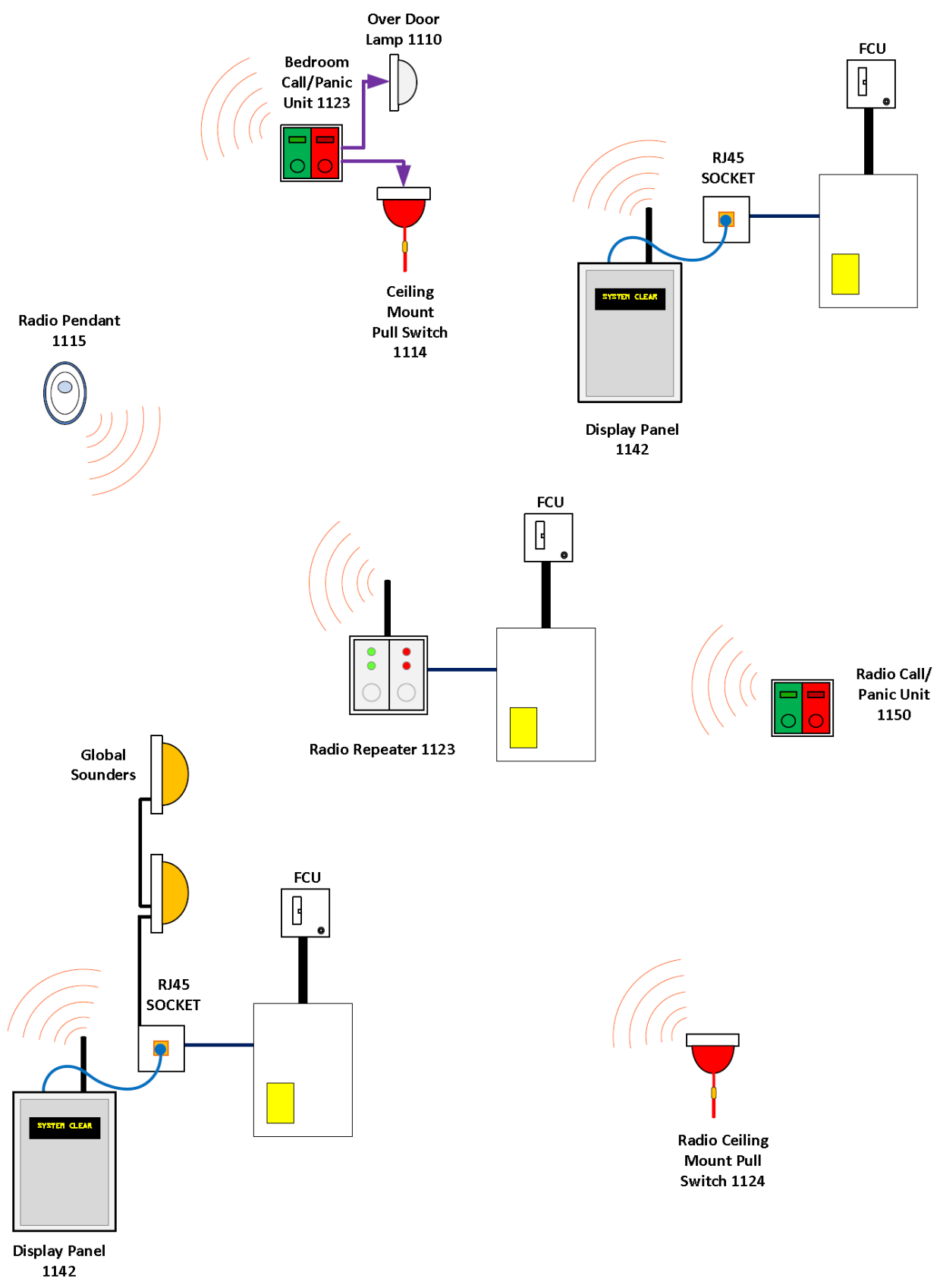
Cancel at Source:

Call and panic alerts can only be cancelled at the source of the call (i.e. at the radio call/panic unit that transmitted the call). Alerts are cancelled at the triggered panic button with a double button press & hold function for units with two buttons, or a single button press & hold function for units with one button.

Cancel at Panel:

Call and panic alerts can only be cancelled at the 1142RX master panel by pressing the 'cancel' button on the 1142RX.

1142RX Series – Example Radio System Schematic



Call & Panic Buttons for this System

1122 Portable panic button

The portable panic buttons are supplied with two buttons, pressing the 'Panic' button will trigger a 'PANIC' alert on the system. Pressing the 'Call' button will trigger a less urgent 'Call' alert on the system.



Canceling calls on portable panic buttons

To cancel calls, press both buttons together for 0.5 of a second.

Low battery warning

When any cancel signal is sent from a portable panic button the battery level is sent at the same time. After the call has been cancelled should the battery be running low, a "Low battery" message will be displayed at the receiver.

To check the state of the batteries in the portable panic buttons press any button, then cancel the call. If the battery is running low this will cause a low battery message to be displayed on the receiver. This function will not work while the system is in 'Silent Test' mode.

To clear the low battery warning on the receiver, please change the batteries in the unit as shown, then press any button. After the call is shown on the receiver, please cancel. If the batteries are in good condition the low battery message should have now cleared. If the message fails to clear, please ensure that the correct unit is being used and that the batteries are brand new.

The battery model is: **AAA**

DO NOT USE MIXED BATTERIES.

Changing the batteries

The batteries will last a long time as the portable unit only uses battery power for a short time when the button is pressed.

To access the batteries remove the small screw on the rear of the portable panic button.

The batteries are securely held under a black clamp.

Remove the clamp screw and replace the batteries observing the correct polarity, the left hand battery has the positive to the bottom of the case and the right hand battery has the positive facing to the top.

Replace the clamp but DO NOT over tighten the screw.

When closing the case ensure that the two lugs at the top of the front cover are engaged first into the back of the unit. Slowly close the case looking to see that link wires do not fold on top of the batteries.

Refit the screw in the back of the case, but DO NOT over tighten the screw.



Call & Panic Buttons for this System...continued

1115 Pendant & Wrist Strap panic button

The 1115 panic button is a battery powered unit that, as standard, will send a panic signal to the radio receiver. This unit can be programmed to send a less urgent 'Call' alert if required. Please contact Call Aid UK for more details.



Cancelling at source

To cancel a panic call, please press and hold until the green lamp starts blinking (For three seconds). The alert will now have been cleared from the receiver.

Low battery warning

When a panic button is pressed and the battery is low, a low battery signal will be sent to the master receiver. The message can only be removed by changing the battery in the 1115 panic button and then triggering & cancelling the alert. This function will not work while the system is in 'Silent Test' mode.

The battery type is: **CR2032**

Changing the battery

The **CR2032** button cell will power this call button for many months (depending on usage). To change the battery, remove the screw on the rear of the housing. Pull the rubber holder away from the housing to allow purchase on the edge of the housing to separate the two halves.

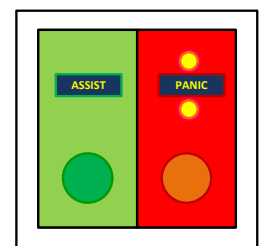
The battery can be lifted out of its holder. Replace with a new battery.

To reassemble, ensure that the rubber strap holder is correctly fitted to the back half of the housing before placing the other half in position. A gentle squeeze should bring the two halves together. Refit the screw (Do not over tighten as damage may result), refit the strap or lanyard.

Wall mounted assist/panic button

These wall units have two buttons. Pressing the GREEN button will send an assist call signal to the 1142 master which will display the identity of the call and a low level audio alert. Pressing the RED button on the wall unit will send a high level alert to the 1142 master.

The labels in the buttons will vary depending on the application or usage.



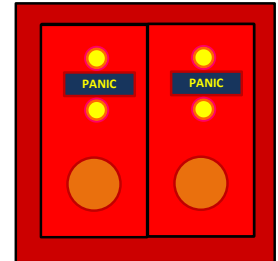
Cancelling at source

To cancel an alert at the call unit press and hold **both buttons**. The reassurance lights will stop flashing and the alert will have cleared from the 1142 master panel.

Call & Panic Buttons for this System...continued

Radio Under desk panic button

The under desk panic button has two red buttons; these buttons have a large dimple to assist the operator to find the correct part of the button to press. When either buttons is pressed a panic call is sent to the 1142RX master. There is a red lamp mounted on the side facing out as a reassurance lamp to be seen by the operator. When installing this unit ensure that the dimples are nearest to the operator.

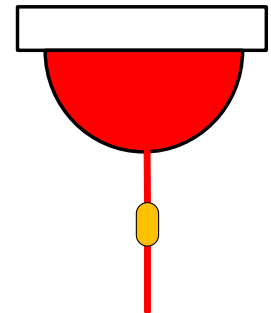


Cancelling at source

To cancel an alert at the call unit press and hold **both buttons**. The reassurance lights will stop flashing and the alert will have cleared from the 1142RX master panel.

Radio ceiling mounted pull switch

When the orange cord is pulled this unit will send a high level call alert to the 1142RXmaster. This unit complies with the relevant regulations for this application.

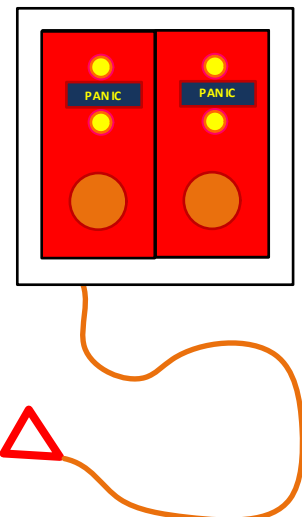


Cancelling at source

To cancel an alert at the ceiling mounted pull switch pull the cord four times in quick succession. The reassurance lights will stop flashing and the alert will have cleared from the 1142RX master panel.

Disabled toilet wall mounted panic button

These units operate along the same lines as the other wall call units. When either button is pressed a high level alert will be sent to the 1142RX master. For disabled toilet applications this unit is supplied with an orange pull cord and triangle.



Cancelling at source

To cancel an alert at the call unit press and hold **both buttons**. The reassurance lights will stop flashing and the alert will have cleared from the 1142RX master panel.

Installation & Maintenance of the System



Panic button names/IDs

Orders are despatched with the panic button names/IDs provided at the time of ordering. Alternative names should be sent to Call Aid UK with your order for programming into the system.

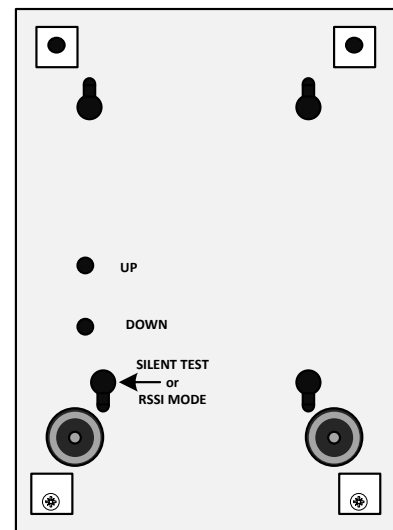
Silent Test & RSSI (radio signal strength indicator) Mode

To activate the RSSI test mode, press the RSSI switch at the reverse of the receiver. This mode can only be activated when there is no activity on the system.

To exit this mode, press the RSSI switch again. The RSSI test mode can be exited at any time.

Up to 50 signal strength reports can be shown at any one time.

Before the test for signal strength is carried out position the 1142RX master in the position on the wall where it is to be used. When in RSSI mode take the applicable panic button to the location where it is to be used. Press one of the buttons on the panic button. Check the value that is on the 1142RX display. A value ranging from 200 – 45 will be displayed on the 1142RX master. The higher the better but a minimum of 55 is recommended to give a reliable signal.



Repeat this process until all the units have been tested. There is no need to action anything at the 1142RX master as each time a panic button is tested it updates the RSSI value.

It is sensible to keep a record of this test so that should there be difficulties with receiving signals from all the units above the 55 RSSI value you will be able to "Map" how the signal is propagating through the building.

If you cannot setup the system due to low signals please contact Call Aid UK on 0115 940 0905 for technical assistance.

To exit the RSSI mode press the RSSI button once again.

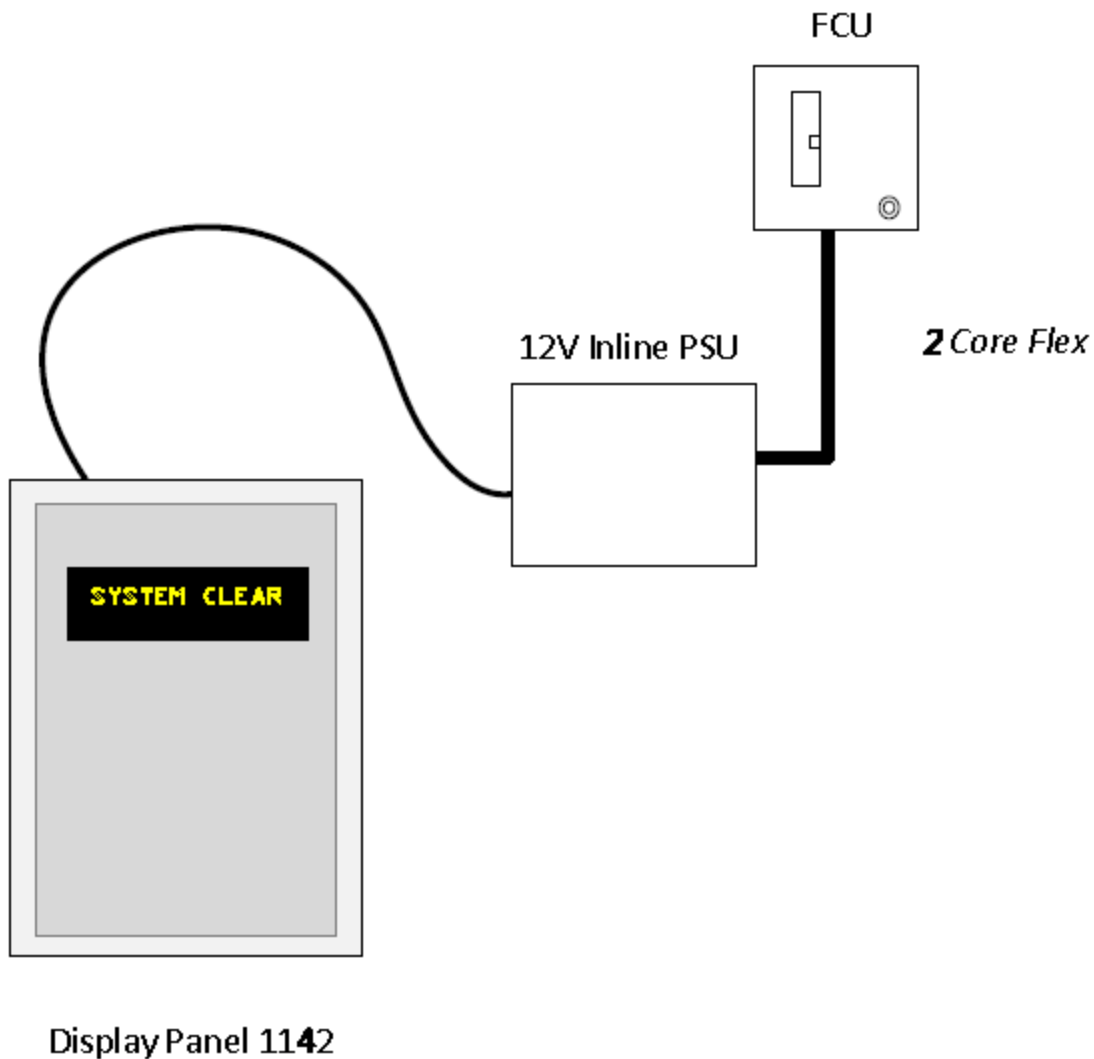
Installing the 1142RX master panel

On the reverse of the 1142RX there are two keyholes that will allow the master unit to be hooked onto the stainless steel wall bracket. Use a spirit level to ensure that the bracket is level as it is not adjustable.

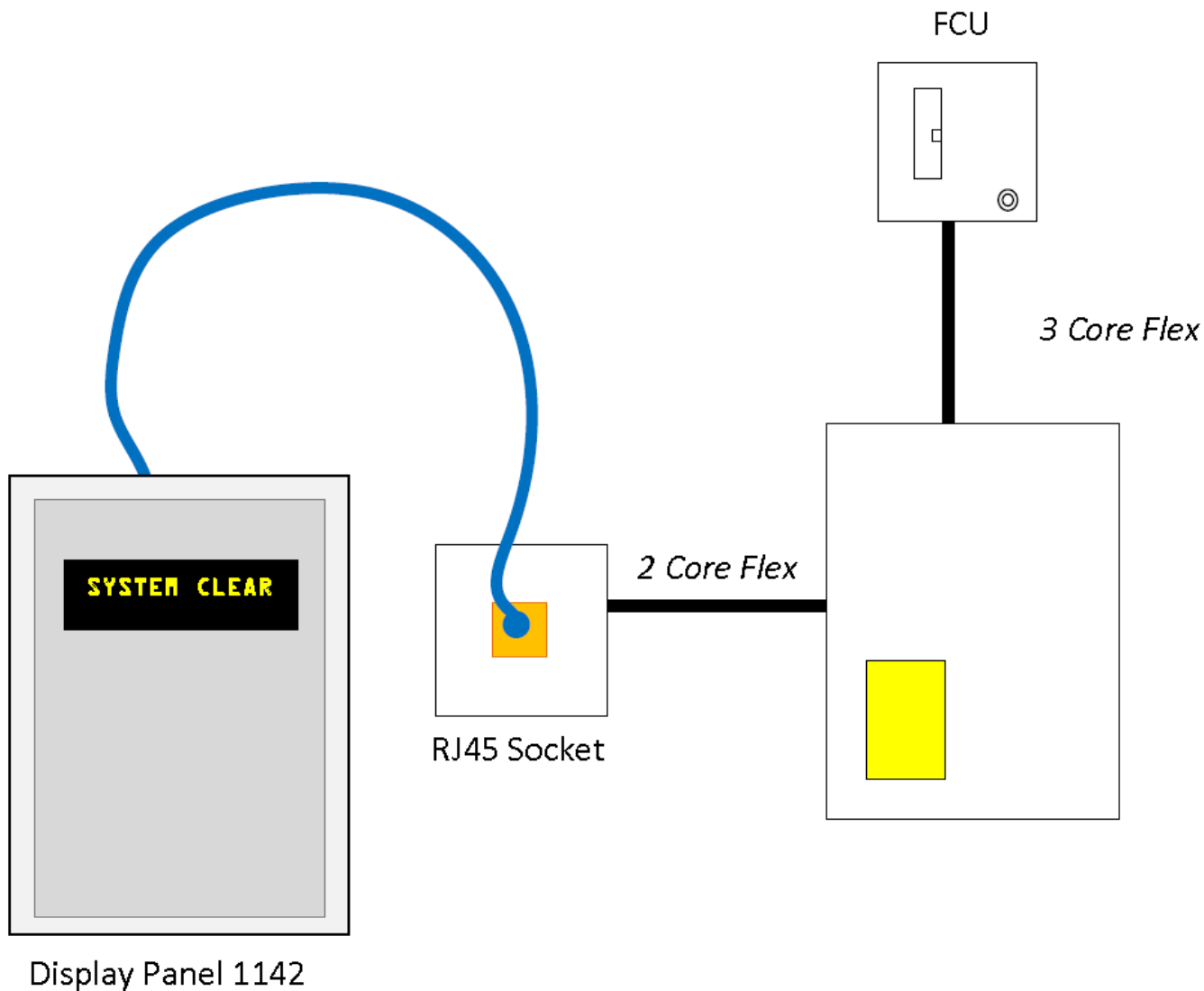
Before the master is screwed to the wall, test that ALL the panic button signals are reaching the 1142RX master in the position on the wall where it is to be used. It is better for the master to be at head height as the signal reception is better at this height.

If you cannot setup the system due to low signals please contact Call Aid UK on 0115 940 0905 for technical assistance.

1142 Panel with 12V inline power supply unit

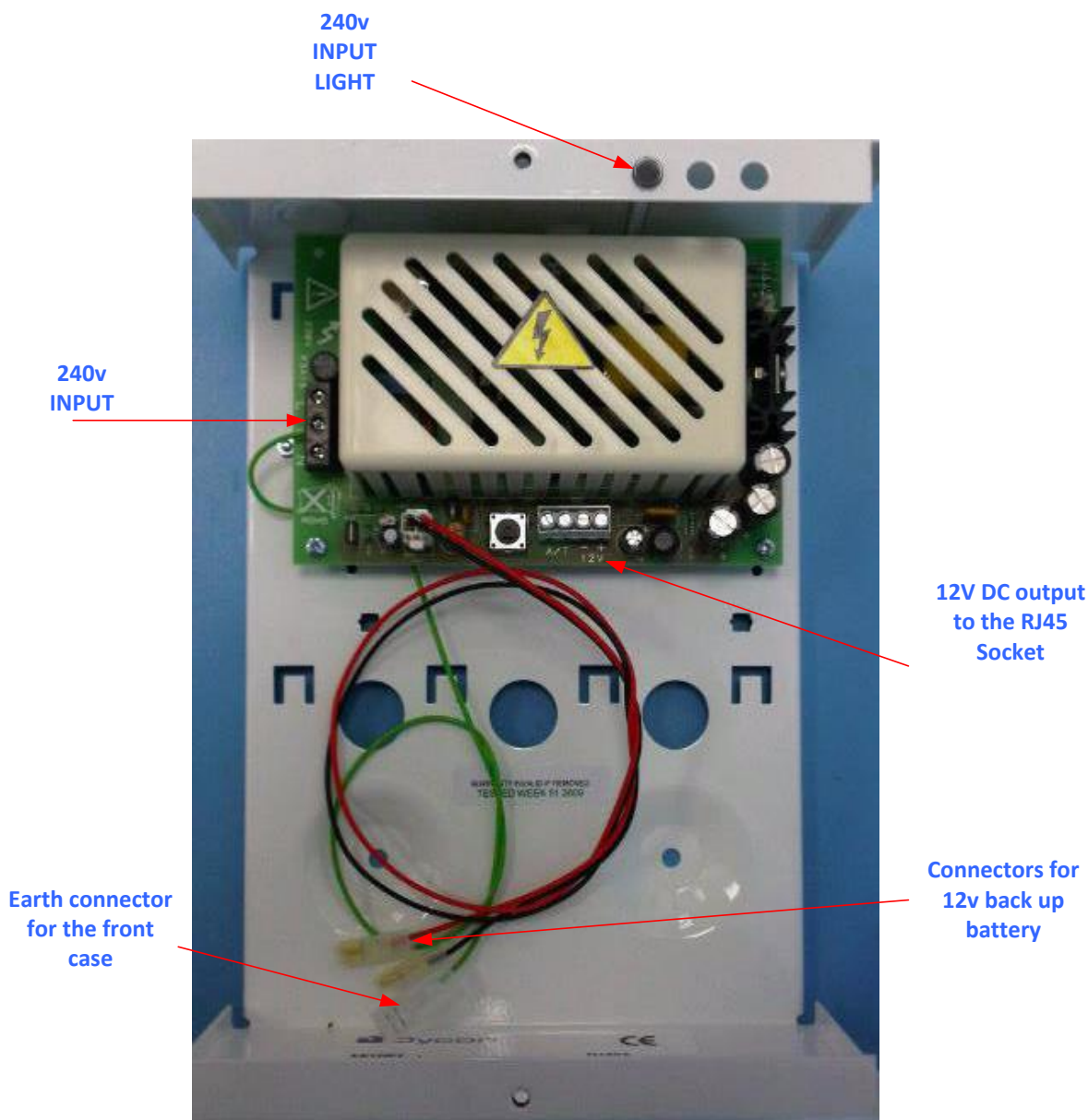


1142 Panel with 12V PSU with back up battery & RJ45

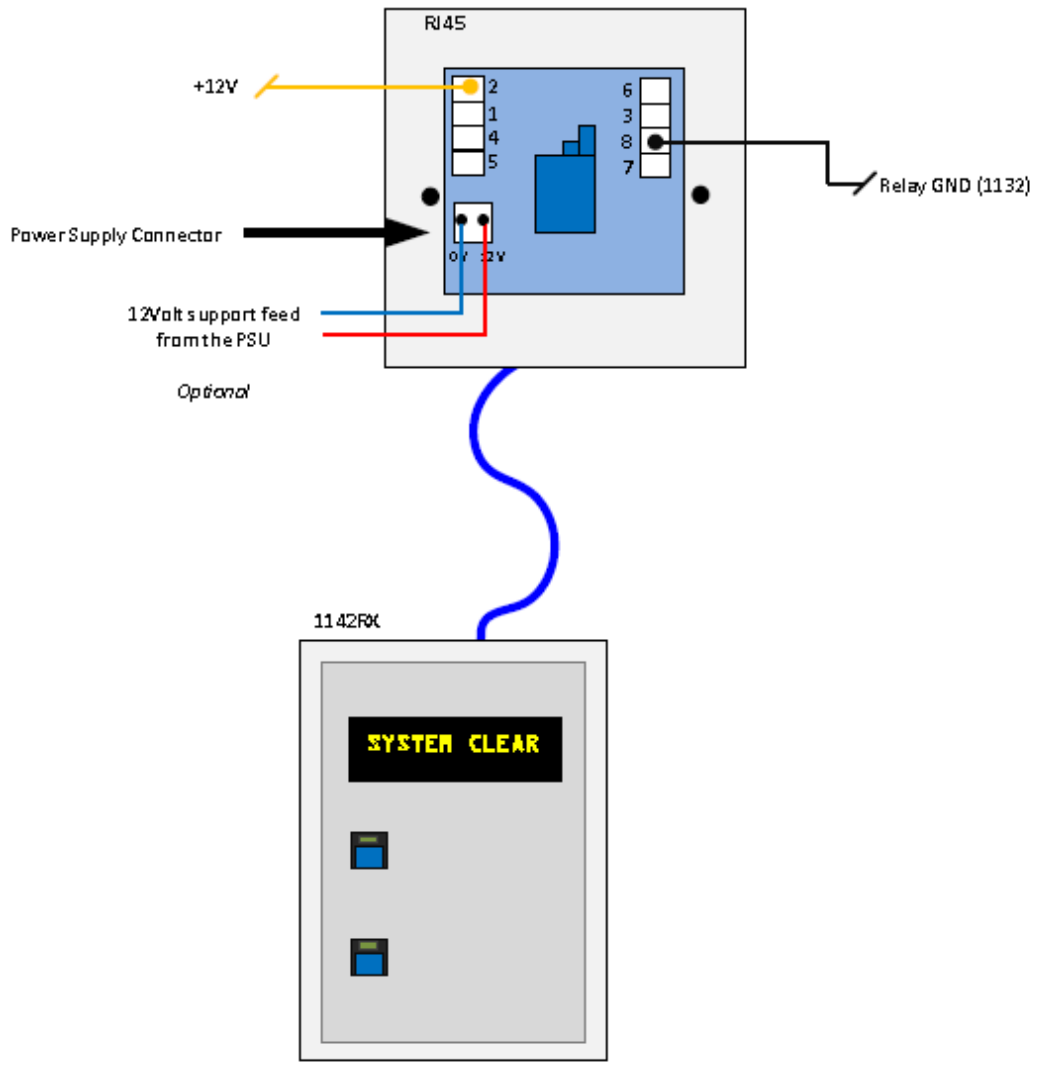
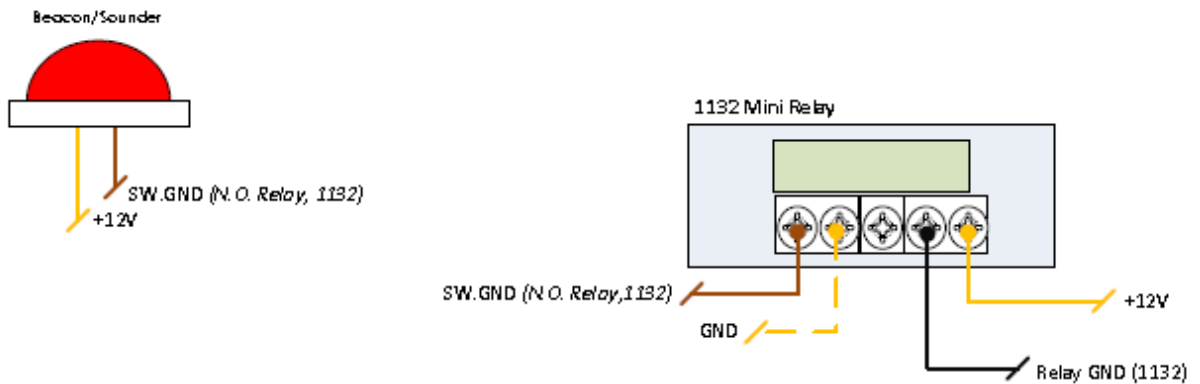


12V PSU with back up battery - Connections

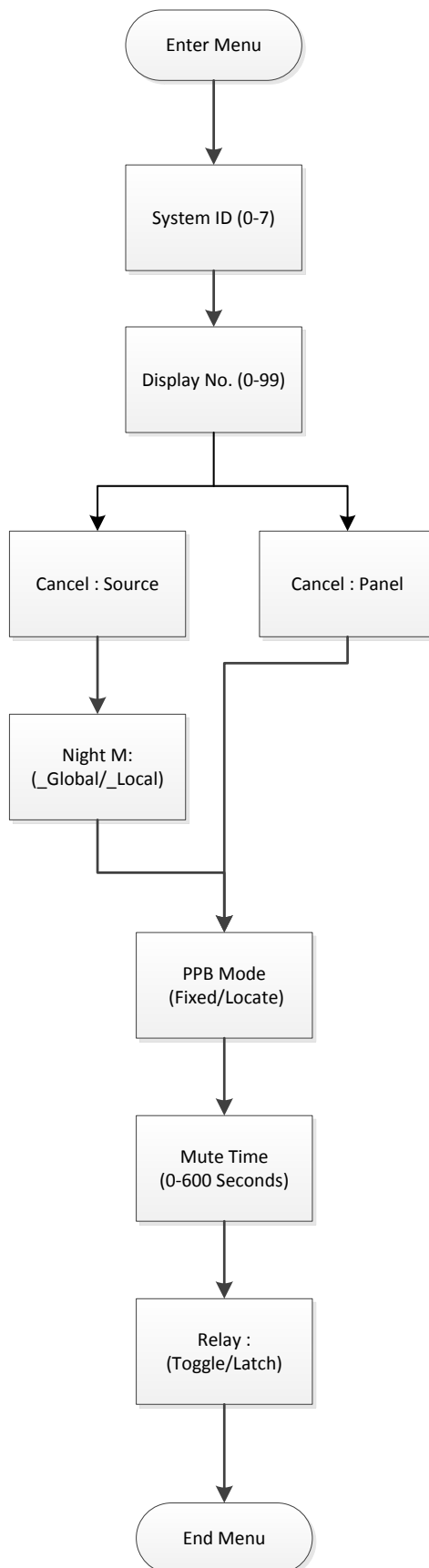
OPTIONAL - Standby power supply connections



1142 Master panel to RJ45, Relay & Beacon/Sounder



1142RX Engineer's Menu – Schematic



1142RX Engineer's Menu - Overview

Setup Overview

- To operate the setup menu, the switches at the rear of the unit are used. This mode cannot be accessed when any alarm calls are active.
- To gain access to the menu, press both the 'UP' and 'DOWN' switches at the same time.
- In this mode, features that dictate the operation of the system can be changed.
- To advance through the menu levels, press the 'MUTE' button on the front of the unit. The various modes will be listed on the display.
- To change values inside the level, press the 'UP' or 'DOWN' buttons.
- If no buttons are pressed within 10 seconds of the last button press, the program will revert to SYSTEM CLEAR.

System ID

- The system ID option is used to isolate systems that are within close proximity of other 1142RX units or when they share a common RS485 loop. At manufacturing, the default setting is '01' unless previously requested before dispatch.

Display No (Display ID)

- This ID is used to give the display panel a unique ID. This is set by Call Aid UK at manufacture and should not be changed.

Cancel via Source/Panel (Cancel Method)

- **Selecting Cancel:** Calls can be set to be cancelled at the unit from which the call/panic was sent (SOURCE). (Please refer to specific unit instruction)
- Calls can be set to be cancelled at the 1142RX (PANEL). This can be done by pressing the 'CANCEL' switch on the 1142RX.
- If Panel is selected, please skip the next step (Night Mode) as this does not apply to systems with cancel at the panel.

Night M Global/Local (Night Mode control)

- Night Mode is used to adjust the sound level of the 1142RX system. This mode cuts down the length of beep tone and changes the frequency of the beeps.
- To activate this mode, press the 'NIGHT MODE' switch.
- While Night Mode is active, the red lamp inside the 'NIGHT MODE' switch will be illuminated.
- To turn off Night Mode, press the 'NIGHT MODE' switch. The lamp should now be turned off.
- Global mode will allow other display panels on the same system to also control the night and mute modes on other panels.
- Local mode will restrict control such as mute and night functions to the individual display panels. (Not affecting other display panels)

PPB Mode (PPB Display Method)

- If PPB units are used with this system, the 1142RX can display the ID of the PPB or the closest location where the PPB was triggered.
- To have the 1142RX display the PPB ID, select the 'Fixed' option.
- To have the 1142RX display the PPB location, select 'Locate'.

1142RX Engineer's Menu – Overview...continued

Mute Time (Mute delay)

- To disable the 'MUTE' switch, select 0 seconds.
- This timer is adjustable from 0-600 seconds in 60 second increments (11 settings).
- If a new call/panic is placed on the system after the mute button is set, the MUTE will be overridden.

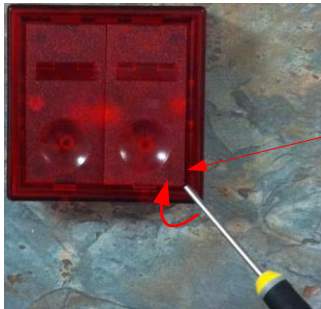
Relay (Output Type)

- The 1142RX has an output that can be used with the CAUK 1132 Relay PCB. This output can be used to control external sounders or interface with third party systems.
- The latch option should be used with Beacon Sounders and third party systems equipment. This will hold the output ON until the call or panic is cancelled.
- The toggle option is used when Call Aid UK over door lamps are connected to the relay. The over door lamps will follow the pulse rate of the 1142RX internal sounder. The ODLs are silenced by cancelling the call or by pressing the mute button.



1150 Radio Panic button

Opening the 1150 Case



To open the case please use a small screw driver inserted at the bottom of the buttons. Now apply a little pressure and ease the buttons out from the bottom.

When the two buttons are removed. Unscrew the two screws and the back box will be separated from the main front plate. The back box can now be screwed into position.

Please note when replacing the front case to the back case do not overtighten the screw as this will hinder the actions of the buttons.

Battery:CR123



When the low battery signal is received at the master the battery will have to be changed to stop the low battery beep.

Please ensure that the battery is installed correctly with the + to the + symbol on the PCB.

Setting room numbers



To change the room number that will be transmitted to the Radio Receiver the headers on J1 need to be fitted to the correct position.

The numbers on the right hand side of the headers are binary numbers. To set the correct room number the numbers on the PCB need to be added together. So by putting a jumper link on the numbered headers the appropriate transmit number is selected.

Please note: Unless by previous arrangement, units are shipped from our manufacturing dept. with the header links fitted to one half of a header so that the unit does not have a pre-set number.

Example For room number **6** = header **4 & 2** should have headers fitted.
For room number **7** = header **4 & 2 & 1** should have headers fitted.

Setting system ID

All the equipment fitted on any system must have the same system ID. All units are shipped from our manufacturing dept. with the same System ID. To change the System ID on a transmitter unit the headers on J2 need to be moved. The headers relating to the System ID are marked with S1, S2 and S4 on the right hand side. The numbers are binary numbers and so to get the correct System ID the numbers selected with the jumpers need adding together as described above.

Example: System ID **3** = header **S2** + header **S1**. **If there are no Jumpers on the System ID headers then the default setting is System ID 1**

Installation

Please note: This 1150 radio panic button should be located away from large metal objects as this will reduce the range of the transmitter. Test that the signal is being received before final fixing. Hold the unit in the proposed position and test by putting a call to the radio receiver. Try not to cover the 1150 with the hand as this will adversely affect the range

Low Battery

When the battery is getting low and the panic button is pressed a low battery signal will be sent to the receiver. Change the battery in the 1150 panic button and then send a panic to the receiver to cancel the low battery warning.



1124 Radio ceiling pull switch

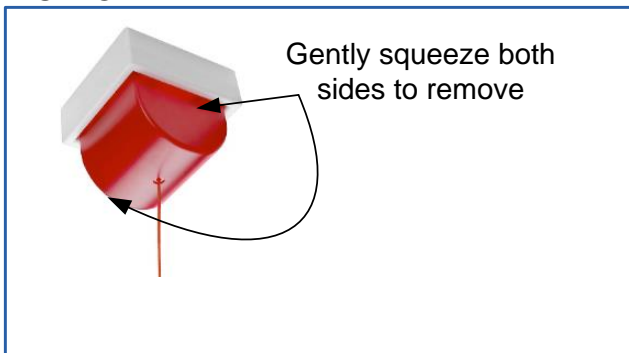
The Radio ceiling pull switch is a battery powered call unit that will transmit a signal to a receiver. The signal can be set either as a call (low level call) or a panic (high level call).

Installing the 1124

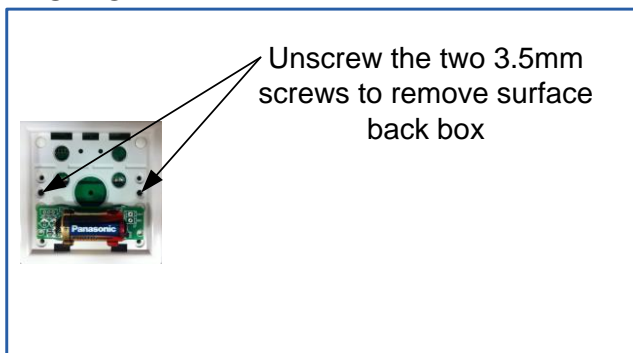
The 1124 are supplied with a standard single gang surface back box unless specified. To remove the back box, first gently squeeze the two flat sides of the oval cover and lift off (STAGE 1). It is now possible to see the battery PCB and the two 3.5mm screws. Remove the two screws and the back box will be free to be installed.

To fit the 1124 back to the surface box, fasten with the two 3.5mm screws supplied, these are the correct length. clip in the dome cover. When replacing the dome cover ensure that the side with the single lug is positioned first (to the side with 3 cut outs) and then click in the other side.

STAGE 1



STAGE 2



Setting the ID of the 1124

If the ID's of the 1124 are known in advance then the numbering of the ID's will be completed during manufacture. However these are easily changed by moving the headers on the PCB as shown below.

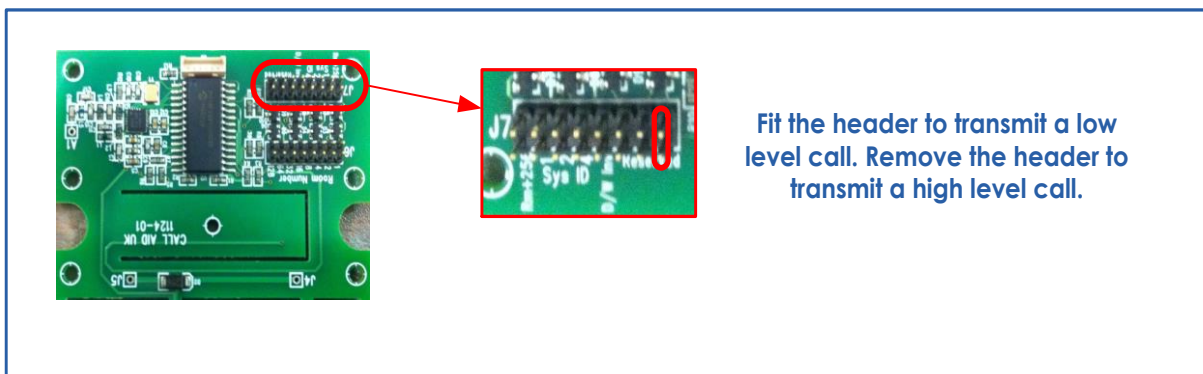


Each 1124 unit has a dedicated ID number. To change the ID number add or remove links to the required links. E.G. Headers fitted to 2 + 1 = ID 3

Setting the call level

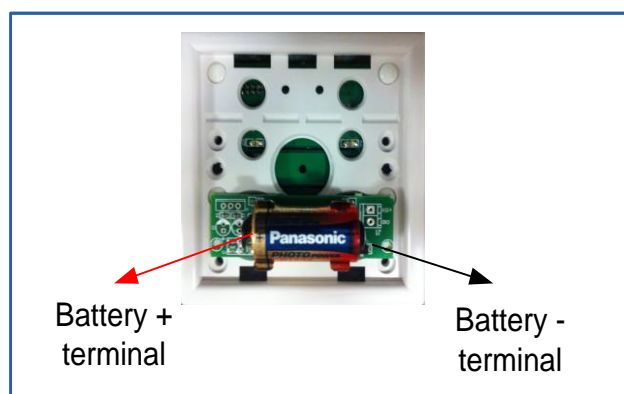
The 1124 can send two levels of call either Call (Low level assistance) or Panic (High level panic) these functions will be available depending on the type of the receiver fitted.

To change the call level a header needs to be added or removed, see picture below for the header to use. If the header is fitted a low level call is transmitted, if the header is not fitted a high level call is transmitted.



Changing the battery

The 1124 has a CR123A battery which should last years depending on the usage. When the battery needs to be changed remove the dome cover as previously described and lift the battery from the clips. Ensure that the battery is inserted with the correct polarity.



1123 Radio Signal Repeater

