



# 1142RX Portable Radio Duress Alarm System

## Operation & Maintenance Manual

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MANU/A6993

## System Overview

### The 1142RX Radio Receiver

This system is be set to operate on 'Cancel at Source'.

The systems operating radio frequency is 868MHz.

The 1142 unit is 240 Volt mains powered with an internal stand by battery.

It is advisable not to place the radio receiver close to metal filing cabinets or at a low level. The higher the 1142RX portable receiver is above the floor level the better the radio 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 the 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 1142RX portable position in order to check that the radio Call alert 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 & Panic or Call & Assist.

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

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

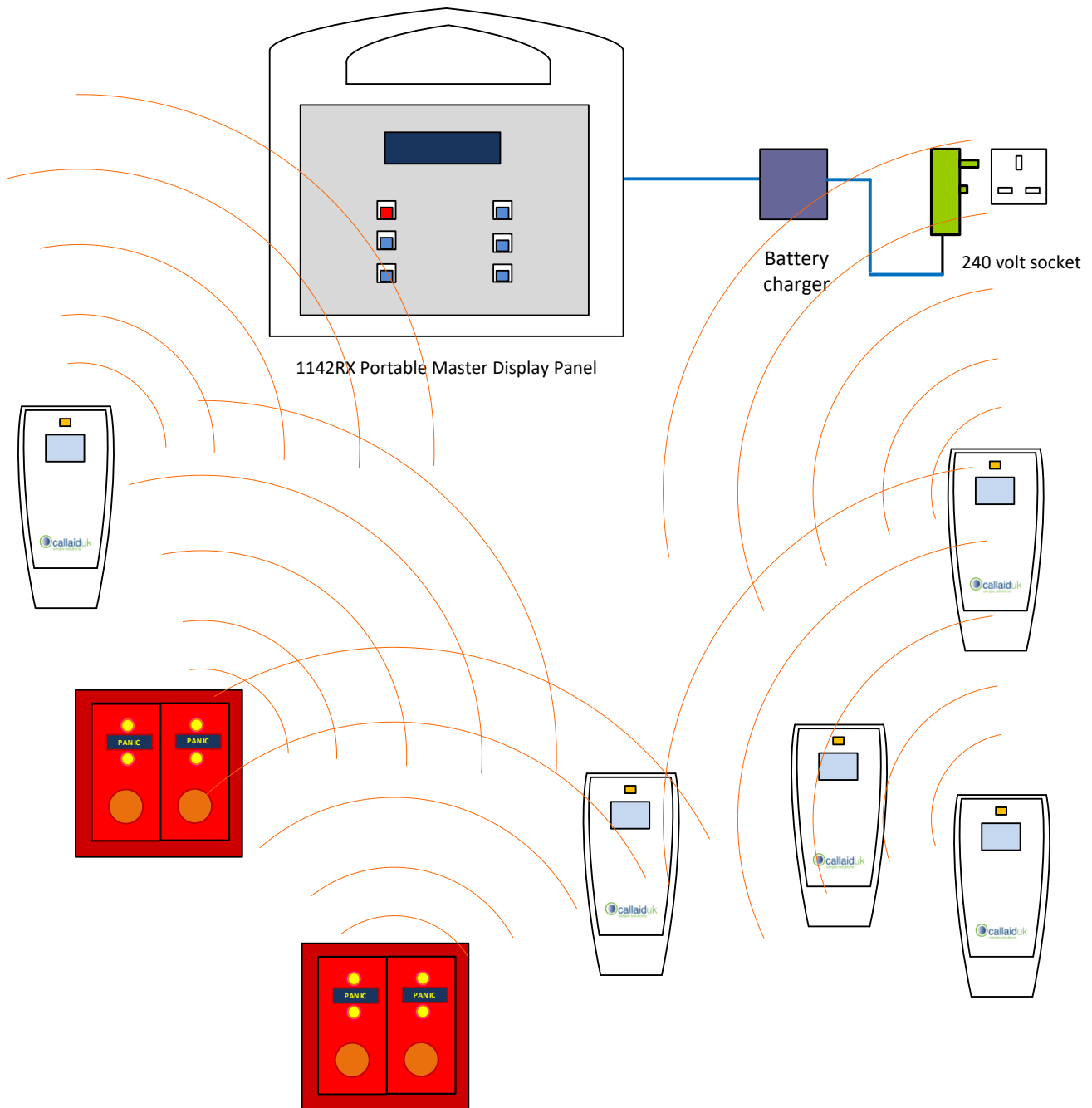
### Low Battery Warning

When a Call alert 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 Call alert button ID. The "Low Battery" message can only be removed by changing the battery in the Call alert button with the low battery and then sending a Call alert signal to the 1142RX master.

### To Cancel/Reset Alerts

Call alerts can only be cancelled at the source of the call (i.e. at the radio Call alert unit that transmitted the call). Alerts are cancelled at the triggered Call alert button with a double button press function for units with two buttons.

### Call Aid UK - 1142 radio Basic 1122 Alarm System



## Call & Panic Buttons for this System

### 1122 Portable Call alert button

The portable Call alert 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 Call alert buttons

If the system is 'Cancel @ source' calls and panics cancelled from the unit. To cancel call or panic press both buttons together for 1 second. Both LEDs will flash and a beep will sound from the unit showing that a 'Cancel' signal has been sent



### Low battery warning

When any cancel signal is sent from a portable Call alert 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 Call alert 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 will 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: **CR123A – Call Aid Part No A3425**

### 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 Call alert button and replace the old battery with the new one. Please ensure that the correct type of battery is used and that battery polarity is correct.

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.

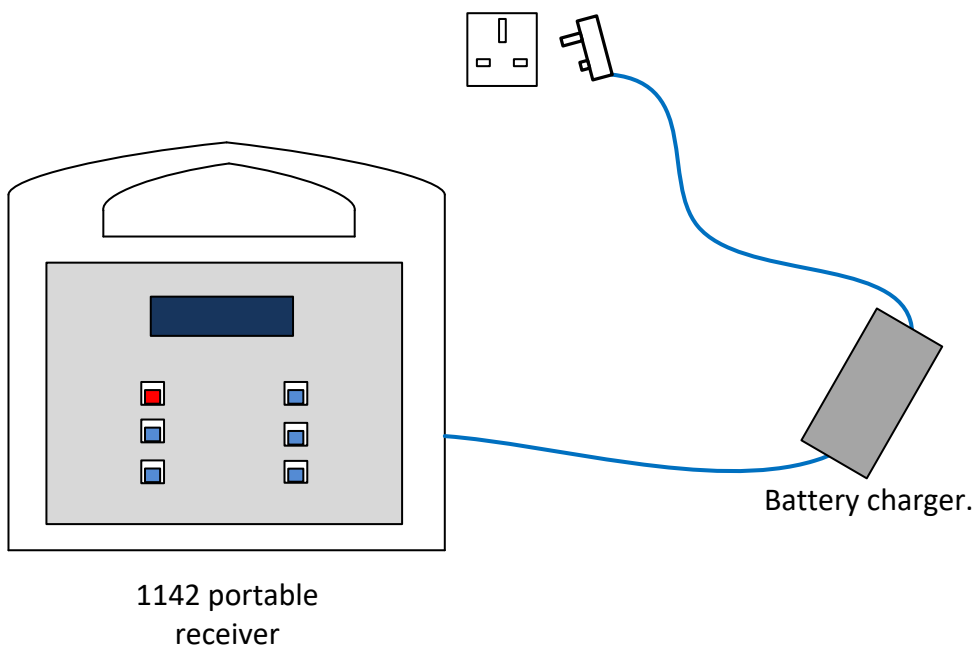
Please test the 1122 after replacing the battery.



## 1142 Portable charging instructions

1142 portable receiver should be plugged into the 240 Volt mains supply at all times. The internal battery is to keep the system running should the power fail. It will keep the system live when moving the receiver to another location.

When not in use the receiver should be plugged into the mains to maintain the life of the battery. **It should not be allowed to run flat.**



### 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 Call alert, 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 Call alert 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 Call

alert 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

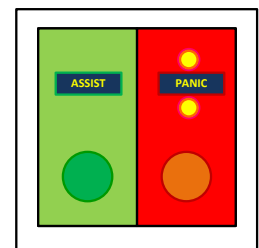
The **CR2032** button cell will power this call button for many months (depending on usage). To change the battery, remove the screw on the rear of the housing. Pull the rubber holder away from the housing to allow purchase on the edge of the housing to separate the two halves.

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 Call alert 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 alert button 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

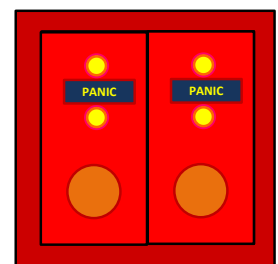
To cancel an alert at the call unit press and hold **both buttons**. The reassurance lights will stop flashing and the alert will have cleared from the 1142 master panel.



## Call & Panic Buttons for this System...continued

### Radio Under desk Call alert button

The under desk Call alert 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 Call alert 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

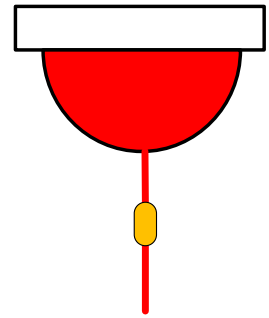
To cancel an alert at the call unit press and hold **both buttons**. The reassurance lights will stop flashing and the alert will have cleared from the 1142RX master panel.

### 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.

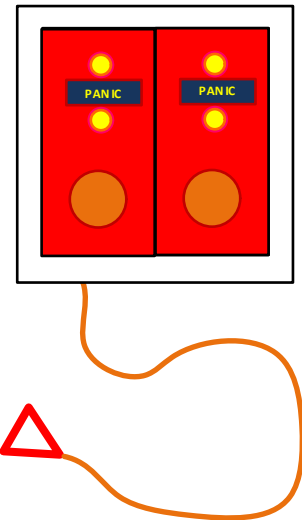


### Disabled toilet wall mounted Call alert button

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

### Silent Test & RSSI (radio signal strength indicator) Mode

To activate the RSSI test mode, press the RSSI/Test mode switch at the bottom right 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 RSSI test for signal strength can be carried out the 1142RX Portable master should be placed in the position where it is to be used. When in RSSI mode take the applicable Call alert button to the location where it is to be used. Press one of the buttons on the Call alert button. Check the value that is on the 1142RX display. A value ranging from 200 – 45 will be displayed



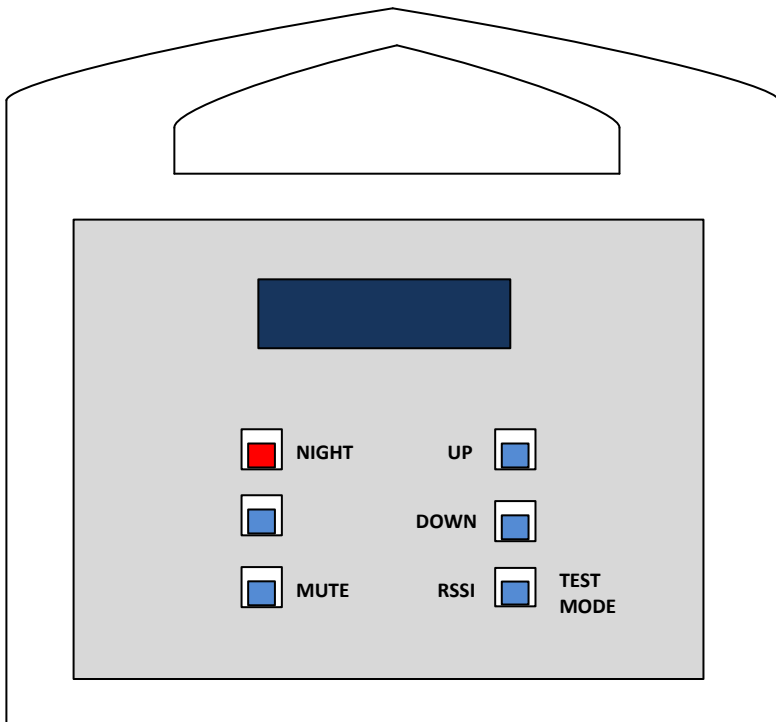
on the 1142RX master. The higher the better but a minimum of 55 is recommended to give a reliable signal. To cancel each call press both buttons at the same time on the transmitter unit.

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 Call alert button is tested it updates the RSSI value.

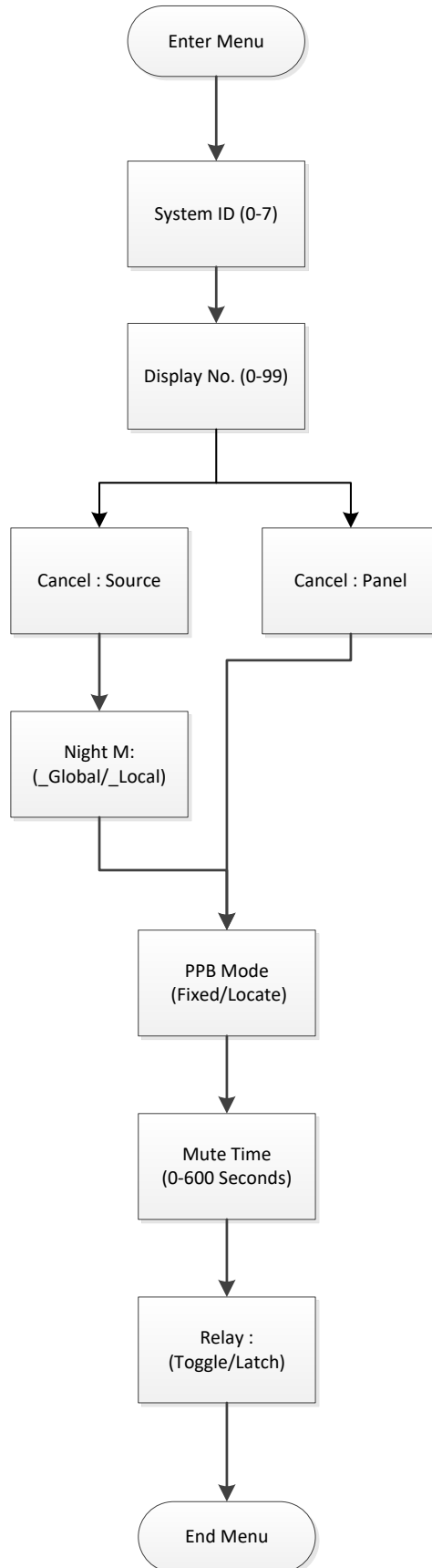
It is sensible to keep a record of this test so that should there be difficulties with receiving signals from all the units above the 55 RSSI value you will be able to "Map" how the signal is propagating through the building.

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.



## 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 alert 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 alert is placed on the system after the mute button is set, the MUTE will be overridden.

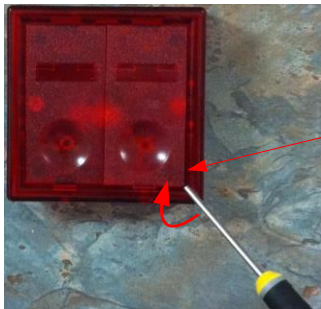
### **Relay (Output Type)**

- 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 alert 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

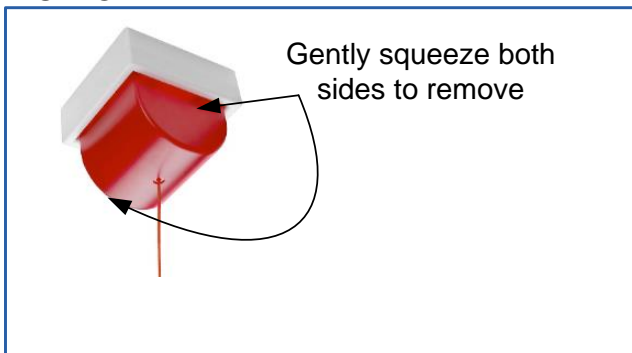
The Radio ceiling pull switch is a battery powered call unit that will transmit a signal to a receiver. The signal can be set either as a call (low level call) or a panic (high level call).

### Installing the 1124

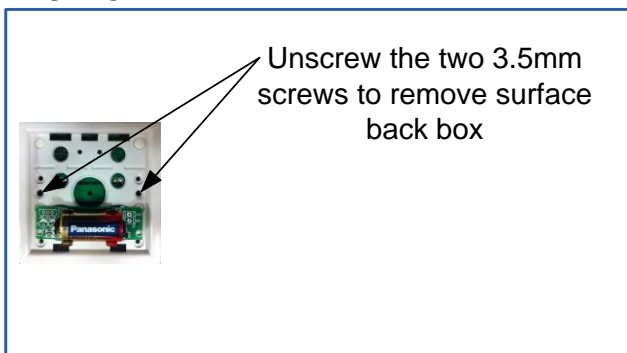
The 1124 are supplied with a standard single gang surface back box unless specified. To remove the back box, first gently squeeze the two flat sides of the oval cover and lift off (STAGE 1). It is now possible to see the battery PCB and the two 3.5mm screws. Remove the two screws and the back box will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

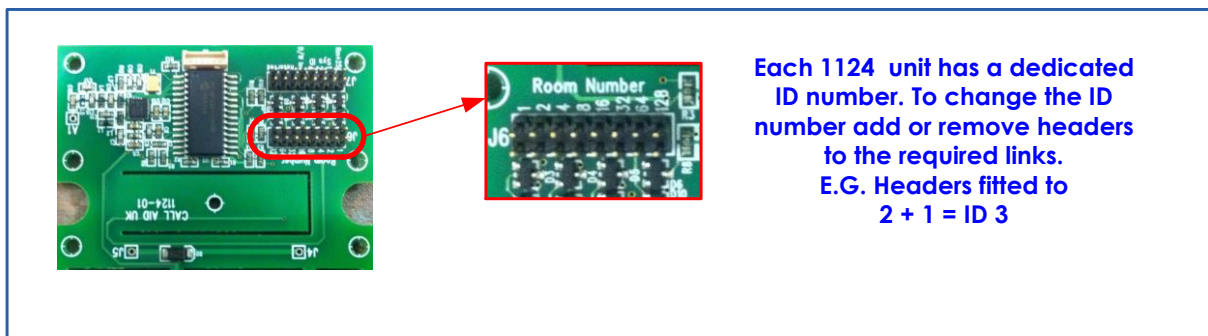


STAGE 2



### Setting the ID of the 1124

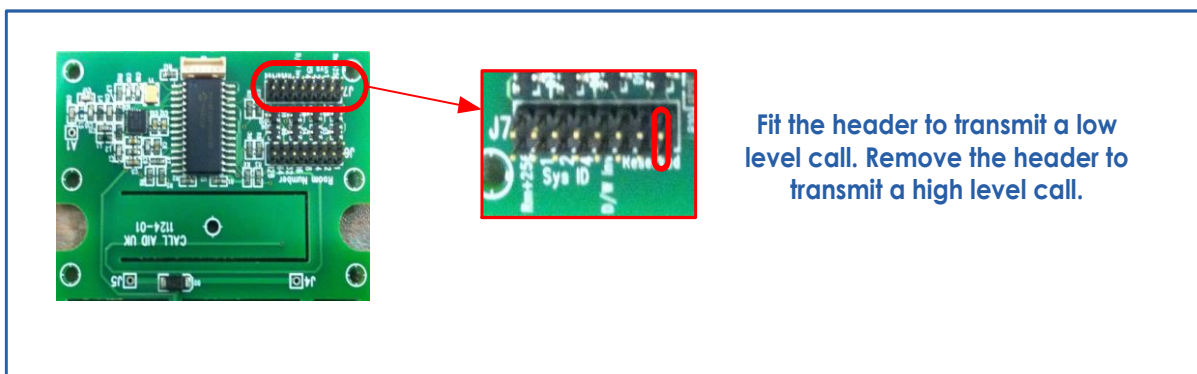
If the ID's of the 1124 are known in advance then the numbering of the ID's will be completed during manufacture. However these are easily changed by moving the headers on the PCB as shown below.



### Setting the call level

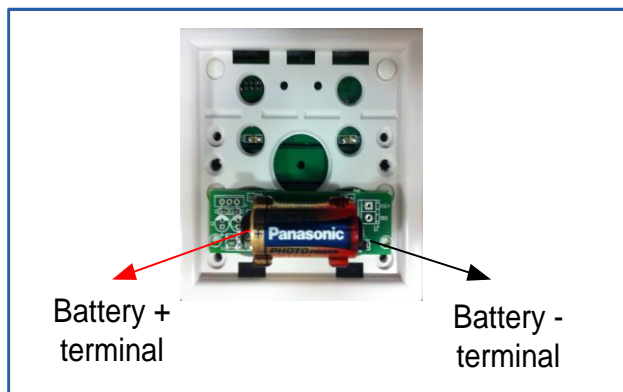
The 1124 can send two levels of call either Call (Low level assistance) or Panic (High level panic) these functions will be available depending on the type of the receiver fitted.

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.

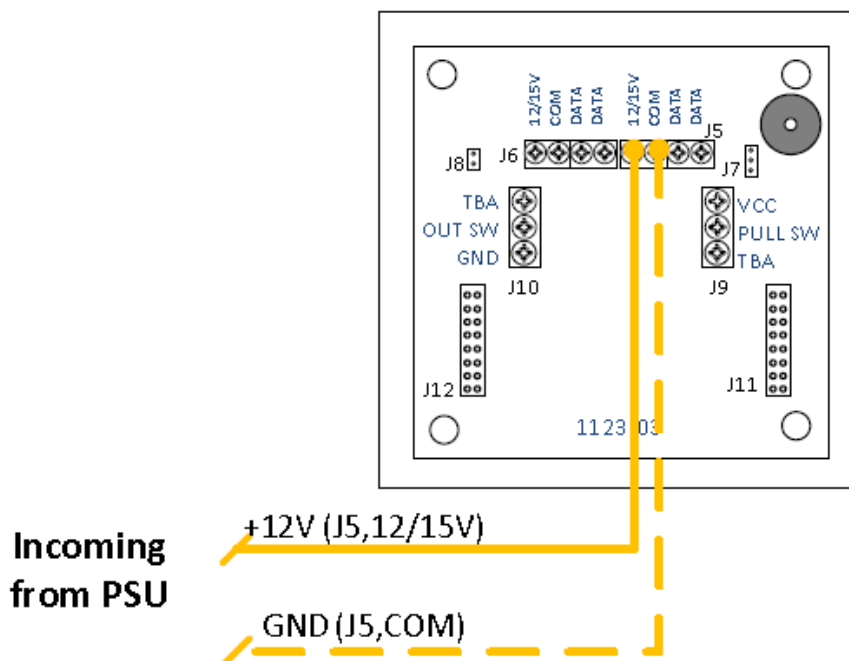
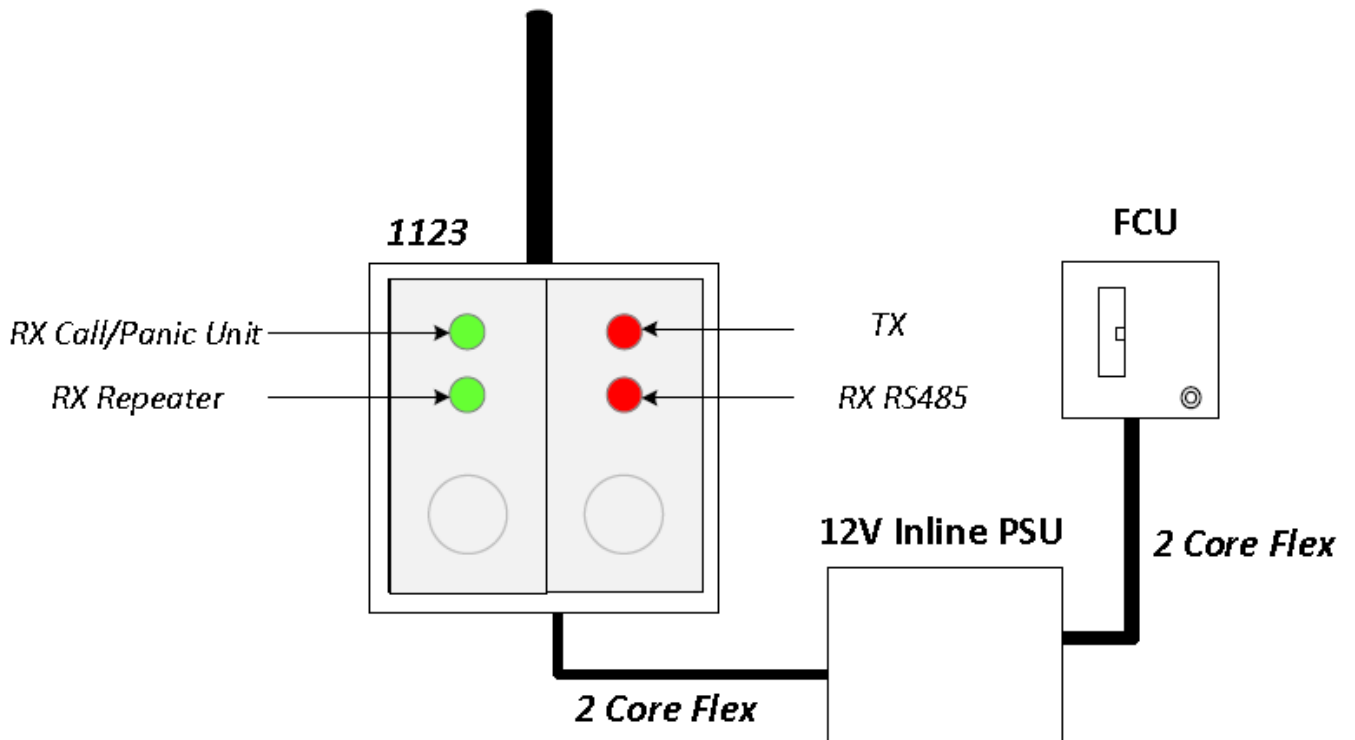


### Changing the battery

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





## 1123-IP65 Radio Stand Alone Repeater



On the reverse of the 1123-IP65 Repeater there are few place for making holes that will allow the repeater unit to be screwed onto the wall.

Before the repeater is screwed to the wall, test that all the Call alert button signals are reaching the 1123 Repeater in the position on the wall where it is to be used. It is better for the repeater to be as high as possible as the signal reception is better at this height.

## The 1123 Pairing over door lamp panic alarm system

The 1123 Radio Over Door Lamp is used to alert staff to any panic buttons that have been activated in the vicinity.

All Call Aid panic buttons that are to be used with this Over Door Lamp will need to be paired. Please refer to the pairing instructions. When supplied as a kit the equipment is paired at manufacture.

A maximum of five units can be paired to the 1123 Over Door Lamp.

When any panic buttons are pressed, the 1123 unit will begin to flash and a low volume tone will sound (the low volume is for the personnel nearby to hear but not the person in the room who is causing the incident).

To silence the 1123 unit, a cancel signal must be sent from any paired panic button.

The 1123 unit is powered via a 12V PSU. The PSU is powered from any mains 240V source. The PSU can be connected to the mains via the supplied plug or a suitable 3amp rated fused spur (if applicable).



### Low Battery Alerts

When the 1123 over door lamp detects a low battery when any paired unit is triggered, a low battery warning is stored.

When the system is idle, the over door lamp will flash and beep every 5 minutes to warn the users. The low battery alert can be removed by replacing the battery in the paired unit.

## Pairing remote radio products to the 1123 over door lamp

When the panic buttons are dispatched with the 1123 Over Door Lamp system they are already “paired” to that Over Door Lamp.

The 1123 can store in its memory up to five remote units such as radio pendants, portable panic button, ceiling mounted pull switches and radio wall units.

### Pairing

Before adding additional units, ensure that you have all the devices that are to be paired within reach.

Remove the red lens on 1123 Over Door Lamp by holding the lens top & bottom and squeezing and lifting it out. This exposes two mini buttons in the round apertures near the top. To enter **setup mode** press both buttons at the same time, the bottom right hand lamp will be lit. Please note: The pairing mode times out after five minutes.

To add a device, press and hold the right hand button, at the same time press any button on the pendant or activate any other device that needs to be paired to this unit; the bottom left hand red lamp will flash twice to confirm the pairing and a beep will sound if a buzzer is fitted. If the device is already stored in the memory the top two red lamps will flash alternatively. No further action is required, unless more panic buttons need to be stored, then exit the setup or allow it to time out.

If there are five panic buttons already stored then the two left hand lamps will be lit until exiting the setup.

### To clear stored devices

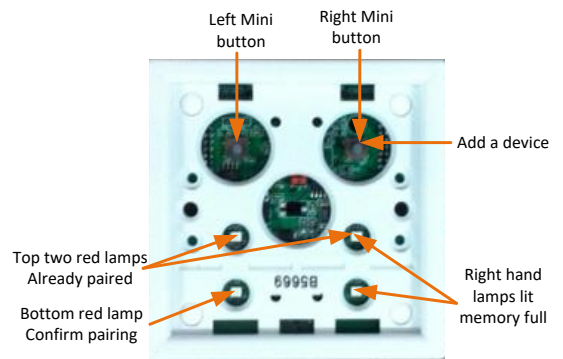
If the 1123 memory is full (there are already five paired units in the memory) the two right hand red lamps will be permanently lit when in setup mode. When more units need to be paired to replace some of those already paired, the memory needs to be cleared. ALL the units to be paired to this unit will need to be installed/reinstalled. When entering more devices and the memory becomes full the two right hand red lamps will again be permanently lit.

To clear the stored devices press the left hand button for 1 second until the bottom left hand red lamp flashes fast to confirm clearance, the memory full left hand red lamps switch off.

### Exiting the setup mode

Exiting the setup mode is done by pressing and holding the two buttons until all four lamps circle to end this function.

Please note: The pairing mode times out after five minutes.



## The 1123 Global over door lamp panic alarm system

The 1123 Radio over door lamp is used to alert staff to any panic buttons that have been activated in the vicinity. The 1123 also acts as a repeater sending messages on to the master panel.

When any panic buttons are pressed, the 1123 unit will begin to flash and a tone will sound.

To silence the 1123 unit, a cancel signal must be sent from an 1142 master panel or from the unit that triggered the panic (Cancel @ source).

The 1123 unit is powered via a 12V PSU. The PSU is powered from any mains 240V source. The PSU can be connected to the mains via the supplied plug or a suitable 3amp rated fused spur (if applicable).



### Low Battery Alerts

When the Global over door lamp detects a low battery when any call/panic unit is triggered, a low battery warning is stored.

When the system is idle, the Global over door lamp will flash and beep every 5 minutes to warn the users. The low battery alert can be removed by replacing the battery in the call/panic unit.



### 1123 Beacon and sounder with external relay wiring connections

