P162B Radio PIR Motion Detector

User/Installer Handbook

Models covered by this handbook	
P162B	Radio Motion Sensor

One of a range of Alert-it Care Alarms available from:

UH1118B

Alert-it Care Alarms, Atherstone House, Merry Lees Industrial Estate, LE9 9FE
0845 2179951, www.alert-it.co.uk, sales@alert-it.co.uk

Made in the UK

This handbook is intended to assist carers install, configure and use the monitors. The carere therefore needs to understand the needs of the user and asses that the monitor meets those needs and if any supplementary monitoring is needed taking into account any health risks.

The P162 is based on the familiar infra-red intruder alarm, modified to assist in the care of those who would be at risk if mobile and unsupervised.
The P162 is perfect for discrete monitoring of clients at night as it is totally portable and can be placed in the room at any stage and connected to the infrastructure Nurse Call system.

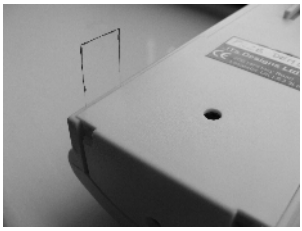
Pager Operation

The alarm is passed by the Alert-iT high integrity radio link to the carers pager. The link can operate in Safelink mode which constantly checks the link is working and raises the alarm if it fails

Activation

The system is armed by the carer using a small key fob, who then has 30 seconds to leave the area.
If there is subsequent movement in the room, then after 4 seconds the output alarm is activated if not disarmed with the key fob

Power connection



First time activation:
On arrival, remove the battery isolating tab shown by pulling out.

The pager will indicate if the batteries need chaning

For stand alone systems the P162B features a radio link to the P137/P138 pagers.

Installation

Location:

- The unit has a horizontal window covering approximately 1.5 meters (the length of a bed) from a distance of 1.5 meters. It also has a narrow vertical window (±20 cm from the base) at this point. Hence if positioned on the floor pointing at a bedside, at a distance of 1.5-2.5m, it will detect feet descending to the floor, while being immune to body movement in bed. This makes it ideal for monitoring bed vacation,
- If positioned on furniture or wall mounted using the bracket supplied, at a height of approx. 50 cm above the bed height with a clear view of the bed, it will detect someone sitting up while being immune to normal movement around the bed.
- If positioned viewing a door or on a corridor wall at body height it will operate when someone comes into view, but can be immune to pets etc at floor height. The range is up to 5 metres.
- It can also be mounted centrally above a door, pointing down. It will then alarm if someone passes through the doorway., but not if they are further away than a typical door mat.

To ensure reliable operation it is essential to ensure that there are no sources of rapid heat change within the viewed area. Such sources could be radiators, windows, dangling decorations, bathroom doors

Securing

The bracket supplied should be used to secure the main unit to a wall or other fixture. Screws and wall plugs are supplied

Pairing the Keyfob

After first enabling the battery power, or following battery replacement, the supplied keyfob has to be paired with the main unit by pressing ARM while pointed at the front. The red led should flash and pairing is complete.

Range Test

It is most important to check that the alarm signal will reach all the places where the pager will be used. This is easiest achieved by temporarily setting the unit into Securelink mode (see p 7) and taking the pager to the extremities of the building. The message NEW! 0189 (or similar) should appear every 10 seconds to show that the radio link is functioning

Securelink Mode

In health critical applications it is advisable to use the radio in secure mode (see p 7). This will shorten the battery life but ensure that any failure of equipment or radio path is reported

Typical System Configurations

The P162 PIR uses radio to transmit an alarm when motion is detected, using Safelink

Optionally the P162 can be set for Securelink mode and make a regular transmission which is used by the P137/8 pagers to prove the integrity of the radio network The regular transmissions will reduce battery life

The P137/8 pagers will give full details of battery and alarm status. It can also use the regular Securelink transmission to warn of wandering or radio failure

The P162B can connect to a Nurse Call system using the P155 RadioInterface or to a P117 autodialler (as shown).
The receiver shows successful radio reception by the flash of a green light. It will warn of radio failure when the Securelink protocol is enabled by a red light and audible alert

Operation

Arming the unit:

Point the key-fob at the unit and press ARM. The red led will flash. You now have 30 seconds to leave the area without triggering the alarm

Disarming:

Point the key-fob at the unit and press DISARM within 4 seconds of entering the room. The red led will flash.

Detection

Once movement is detected and the 4 second wait is past, then the P162 will send the alarm, leaving the front red led illuminated. The pager will show URGENT 01 or the autodialler will start the dialling sequence.. After 30 seconds the unit will reset for a brief period to reassess if movement is continuing. A short delay in sending the RESET condition to the pager is used to mask this period, but occasionally there may be a brief cancellation of the alarm before movement is detected again. It may be possible for a carer to judge if the user is continuing to move and hence to be at risk, or if they have returned to bed.

Cancelling the alarm:

Point the key-fob at the unit and press DISARM, then reset any remote alarm equipment (eg the Nurse Call Wall unit)

Battery Low

As the battery approached discharge the pager will indicate FAULT 30. If the battery is unable to support continued use then the alarm will become FAULT 31. At the end point the red led on the front will remain on without their being an alarm and will not cancel by pressing DISARM.
Failure of the red keyfob light to flash will indicate the batteries will need replacing in the keyfob

Alarm indication at the pager/receiver				
Alarm	Detect Delay	P162	Pager	P155 /P117C
Motion	4 sec	Red LED	URGENT 01	Intermittent tune + alarm
ARM	30 sec	Flash		
DISARM	4 sec	Flash	Clears	Clears
TEST	Less than 1 sec	No	Node Name	Green light flash
Battery Low	-		Fault 30	Intermittent tune, + alarm
Battery Fail	-		Fault 31	Intermittent tune, + alarm
Battery Dead	The P162 LED on permanently and no transmission			

Maintenance

Cleaning

Use Alert-iT procedure

Technique B

Wiping with cotton wool pads moistened (compressed until dripping stops) with a mild detergent (0.5% washing up liquid) solution.

Battery

Remove the bottom screw from the rear panel and gently lever up and slide out to reveal the battery compartment. Ensure the Nurse Call cable slides through the hole to allow the back panel to be moved clear.

After replacement replace the rear panel, ensuring the cable lies flat so not to bow the rear panel

The key-fob batteries are replaced by sliding open the cover.

Battery Life	3 months
Main Unit	4* AA Alkal;ine Cells
Keyfob	3* LR44

Test button: Short press will stimu-late a transmission and battery status check

Battery Holder

Configuration

Configuration Changes

The P162 uses the standard Alert-iT Programming Data Protocol and all the main features can be changed using the P152 USB Interface and Data Editor Programme.

Communication Address Changes

Each badge in a care home MUST have a different communication address. To facilitate easy installation the Communication Address can also be changed directly from the pager using the P173A programming cable

Safelink Radio

The Securelink failsafe feature is enabled by fitting the link shown

Safety Instructions and Warnings

This symbol indicates there are warnings and precautions associated with the use of this equipment that should be carefully read and understood before using the equipment

1. Clean and disinfect each item regularly in accordance with information herein
2. Regularly test monitor as described herein
3. Ensure, by testing, that the alarm is annunciated at the carer's location(s)
4. Charge pager away from direct heat and uncovered.
5. As with all medical electronic equipment there is potential for the equipment to interfere with or be effected by interference from other electrical or electronic devices. For this reason avoid placing the monitor, sensor or connecting cable in close proximity to sensitive electronic devices or devices which produce strong electromagnetic fields such as radio transmitters, mobile phones or power cables.
6. Only use the monitor with accessories approved for use with this product and only in accordance with instructions.
7. If the equipment is modified in any way, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment.
8. The carer must conduct a risk assessment to determine if the level of reliability offered by the monitor is sufficient or if additional monitoring is needed. Contact the manufacture for assistance with Risk Evaluation Tools.
9. Additional levels of mechanical protection may be needed for some patient disorders. Contact the manufacturers for advice
10. Some accessories are fitted with small screws and have plastic bags. Ensure these do not come into the possession of vulnerable patients who might choke on them
11. The monitor and all accessories are designed to operate indoors in a residential environment of 10ºC to 30ºC and 90%RH max.

This system is certified to the following European Standards	
73/23/EEC	Low Voltage Safety Directive
89/336/EEC	Radio Interference Immunity
EN 300 220-1 V2.1.1 (2006-04)	Permitted radio transmission
EN 50081-1:1992	Domestic Radio Emissions
EN 50082-1:1995	Industrial Radio Immunity
EN12182	Assistive Technology
Also complies with 2002/95/ECRoHS	Permitted Materials

Additional Documents	
Quick Start Radio P162 Systems	
P137 Configuration Handbook	UH1068C
You tube Instruction Videos Index	UV1198

None of the components, including batteries should be disposed of as Domestic Waste. For information on disposal contact iTs Designs Ltd.

Support

For technical support please fax or EMail:
HELP: 0845 2179951
FAX : 0845 2179953
Support@itsdesigns.co.uk

Designed by:
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...using technology to care for carers

The Alert-it system has been designed with due regard to reliability and integrity. While it offers a highly vigilant monitoring method,it is always possible that a distress condition can go undetected for a variety of reasons (including malfunction) and in life threatening situations it is advisable to use the Alert-it system in conjunction with additional monitoring techniques (e.g. video). Neither the manufacturer nor its agent can accept legal responsibility to provide a system that is infallible. The carer is responsible for assessing the risks of using this equipment and any settings pertaining to it.