

# Instructions Convulsion Monitor - (MM)

FREQUENCY PRECISION®

airlert®

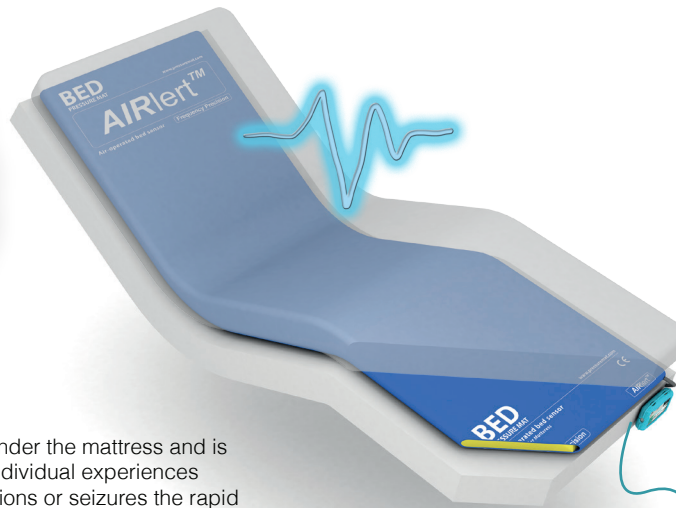
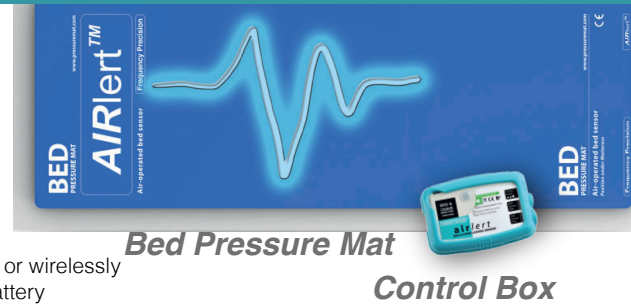
www.pressuremat.com

## A pressure-sensitive mat to alert to seizure

The movement monitor uses an Airlert™ Bed Pressure Mat to detect excessive movement of an individual whilst in bed. The mat is positioned under the mattress and is full length for increased comfort and reduced false alarms.

## What's Inside

Your movement monitor is supplied either to plug into your existing call system (Plug-Matched) or wirelessly linked to our pagers (Pager-Linked). Each consists of a rolled up full length foam mat and a battery powered control box. These plug together using the black airtube. The Plug-Matched package will also contain a matched lead to connect into your call system.



Control box  
Attaches to bed using  
velcro or protective  
rubber case

**Plug-Matched**  
If you have a  
Plugmatched  
system your  
control box plugs  
into your existing  
call system



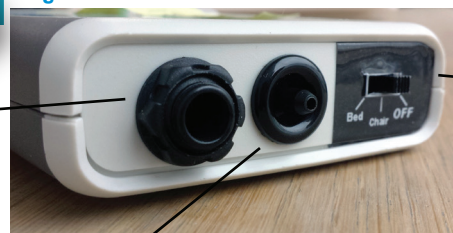
**Pager-Linked**  
If you have a  
Pager-linked  
system your  
Control box sends  
signal to pager



## How it works

The air-filled pressure mat is placed under the mattress and is connected to the control box. As an individual experiences excessive movement such as convulsions or seizures the rapid change in air pressure in the pressure mat is detected by the control box. The red light will flash on the control box and once a preset level is reached the alert is triggered.

## Installation Instructions



### Jack socket

**PLUG-MATCHED**  
For Plug-Matched sensors the control box is plugged into the call system using the supplied cable.

**PAGER-LINKED**  
For Pager-Linked systems, this socket provides an additional socket for an optional call bell or floor pressure mat.

### Socket to connect Air pipe from mat

Plug the airtube from the mat in by sliding the end firmly over the proud airpipe. Ensure it is not bent or crushed to allow clear airflow.

### Side Control Switch

This switch turns the control box on and sets the speed of the movement you want to detect. Is it a slow or rapid movement? It also switches between a bed or chair mat. Make sure it is switched to 'Bed'. Your control box can do both Bed and Chair sensing. Additional mats can be purchased from us.

3. The control box can be positioned on the bed or a wall using the optional rubber case. It can also be attached with the supplied velcro sticker.



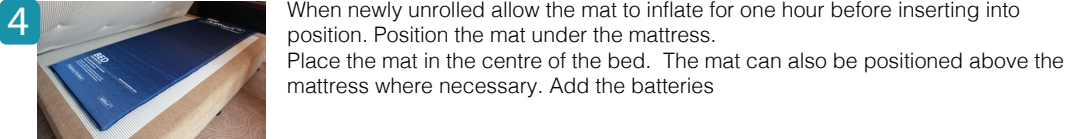
The rubber case is supplied with reusable rapstraps which can be attached by feeding them through part of the bed and pulling them until tight.



Alternatively the rubber case can be screwed onto a wall or bed using the supplied metal fixing plate.



Call 01837 810 590



4 When newly unrolled allow the mat to inflate for one hour before inserting into position. Position the mat under the mattress. Place the mat in the centre of the bed. The mat can also be positioned above the mattress where necessary. Add the batteries



5 Finally set the force control knob on the front of the control box. This dial fine tunes the sensitivity and sets the amount of force required in the movement to set off the sensor. A very violent seizure will exert a lot of force on the mat so the dial will be set over to heavy to avoid false alarms. A heavier person will naturally exert more force. Once everything is setup simulate the normal convulsion on the mat and adjust both the switch and force controller so that it only alerts when the required amount of movement is reached. We suggest turning the force knob fully clockwise and gradually turning down until no false alarms are detected.

## Problem Solving

**Connections** It sounds simple but it is important to check all the plugs and tubes are plugged in correctly. The jack plugs need to be plugged all the way in.

**Increase sensitivity** Try adjusting the sensitivity using the control knob. If the sensor is still too sensitive or not sensitive enough the control box can be returned to us for sensitivity adjustment.

**Mat inflation** When mats are new they can take a while to inflate fully. If your mat is not working correctly try letting it inflate whilst not under a mattress for a good few hours. Used mats not functioning correctly can also benefit from this treatment. It can also help to do the following:

1. allow the mat to inflate unplugged on the floor.
2. Plug the airtube into the control box,
3. Finally place it under the mattress (ensuring it remains plugged in to keep the air in).

**Mat position** Generally the mat is placed underneath the full length of a single mattress. For use with double beds the mat should be positioned under the side most commonly used by the individual.

### Low Battery

Check that the battery in the control box is not flat. Try replacing the battery with 2x new AA Alkaline batteries. We recommend Duracell Alkaline batteries. We can supply these at trade prices. Contact us for details.

### Control Box Switch

Check that the switch on the control box has not accidentally been set to Chair or Off.

## Other Information

### Control Box Coding (Pager-linked Only)

Check the ID sticker on the front of the control box. It should correspond to the pager that you have. If you are having problems and you have a large, complex system it is possible that the control box is linked to a different pager. This is indicated through a colour coding system. A yellow ID sticker means it is linked to a pager with a yellow sticker.

**Cleaning** The mat contains no batteries or electronics since it is air operated. It can therefore be cleaned with detergent or mild chlorine solution as required. We suggest wiping with a disposable cloth using alcohol solvent, disinfectant or with warm soapy water. The black air tube can be removed at both ends and wiped as above or as a low cost item these may be replaced easily. The control box and pager receiver incorporate electronic components and should not be submerged but may be wiped with an alcohol solvent, detergent or mild chlorine solution as required.

**Safety** Remember, daily system tests should be carried out to ensure correct function of the unit. Usage should be incorporated within safety manuals and procedures. Range tests should be carried out at least once a week, more often if critical criteria apply. This should involve testing the unit past its required range. If the unit has been dropped or it is worn by a person involved in an accident the unit should be tested again before re-use.

**Care** DO NOT subject this equipment to: Mechanical shock, Excessive humidity, Extremes of temperatures, Corrosive Liquids.

This equipment is designed primarily for indoor use and is not water resistant. It must not be used in classified hazardous areas including areas containing explosive or flammable vapours. Consult your local product dealer for further information.

## Specifications:

### Control box - pager-linked:

Power supply	2x AA Alkaline Battery (Removable, not rechargeable)
Frequency	433.92MHz
Bit Rate	1200 - 7uV/M
Code format	POCSAG
Dimensions (pager-linked):	147mm x 88mm 25mm

### Control box - plug-matched:

Power supply	2x AA Alkaline Battery (Removable, not rechargeable)
Dimensions (plug-matched):	117mm x 78mm 24mm
Weight with battery	140g

### Bed Mat:

Dimensions(mm)	1900mm(L)x 670mm(W) x
28mm(thickness)	
Weight	1Kg

### Compliance:

R&TTE Directive 1999/5/EC
EMC Directive(89/336/EEC) EN 301 489 -1 V 1. 4. 1
Low Voltage Directive (7323/EEC) EN60950 : 2000
ETSI EN 300 220-1 V2 (2006 - 04)
ROHS II compliant

**Liability** Frequency Precision does not accept any liability for any damage or injury, howsoever caused as a result of misuse of this equipment. It is the responsibility of the user to ensure that the equipment is operated in the manner for which it was intended and that it is the correct item of equipment for the required task.

All systems can fail and it is the responsibility of the user to carry out regular tests and to determine the suitability of this equipment for any application.

**Repair and replacement** Frequency Precision will refund payment for any unit returned within 30 days of purchase as unsuitable for the intended purpose. Un-damaged units will be repaired free of charge within the first 12 months.

**Literature** Frequency Precision Ltd operates a policy of continual improvement and therefore reserves the right to modify and change any specification without prior notice. While every possible care has been taken in the preparation of its manual, we do not accept any liability for the technical or typographical errors or omissions contained herein, nor for incidental or consequential damages arising from the use of the material.

**Disposal** At the end of the working life of the product it must not be disposed of with household waste but returned to Frequency Precision Ltd or disposed of at a collection point for the re-cycling of electrical and electronic equipment.