

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.

What's Inside

Your convulsion monitor consists of a rolled up full length foam mat and a battery powered control box. These plug together using the black air tube. The control box is connected to your nurse call system using the supplied cable.



How it works

The air filled foam mat is placed underneath the mattress and connects to the control box. When excessive movements are detected (such as those typical of the type of seizures that cause the whole body to shake), the rapid change in air pressure in the foam mat is detected by the control box. The red light will flash on the control box to indicate that the sensor has been triggered and a signal will be sent to your nurse call system.

Installation Instructions

1. Unroll the bed mat

Unroll the bed mat. When newly unrolled allow the mat to self inflate by leaving it on the floor for at least 20 minutes. It can then be inserted into position underneath the bed mattress. It will work underneath almost any mattress, including pressure relieving mattresses.

2. Unroll the bed mat

Remove the control box from the rubber case. The battery compartment is located on the back of the unit. Open the battery compartment by sliding the cover and insert 2 x Alkaline AA batteries if not already fitted.



3. Connect the bed mat

Connect the air tube to the mat and to the control box by twisting the end firmly over the proud airpipe. Take care to ensure the tube is not bent or crushed.

4. Connect to nurse call system

Connect one end of the cable to the call system socket and the other end to your nurse call system.

5. Set the sensitivity using the side control switch

The sensor is triggered by repetitive movements. Slow is the most sensitive setting. It means that the sensor will pick up slower shaking movements. Rapid is less sensitive, because the sensor will only pick up faster shaking movements.



6. Fine tune the sensitivity

Adjust the dial to fine tune the sensitivity. For most people, this will be somewhere between the 3 o'clock and 9 o'clock positions. When setting the sensitivity, the aim is to allow the person to move normally while they are in bed without triggering the sensor, while also ensuring that excessive movements typical of a seizure are detected. It is useful to fine tune the sensitivity with a person in the bed.

Ask them to roll over or reposition themselves and ensure that this doesn't trigger the sensor. Then ask them to simulate the movements associated with a seizure and check that the sensor triggers.

The nurse call system can be reset in the usual way, typically by pressing the reset button on the nurse call point.

7. Position the control box

The control box is supplied with a blue protective rubber case and straps. The straps are threaded through the back of the rubber case and can be attached to any part of the bed by feeding them through and pulling them until tight.

Alternatively, the control box can be placed on the floor underneath the bed.

We can supply alternative mounting solutions including:

- Self adhesive velcro pads which can be used to attach the control box to any flat surface.
- A wall mounting plate which can be used to attach the rubber case to a wall.

Please contact us for more information.



call 01837 810 590

How to reset the sensitivity

Move the control switch to the off position, then begin by moving it to slow. With a person on the bed, fine tune the sensitivity by gradually turning down the dial from a fully clockwise position. The sensor may trigger multiple times while you do this. Ask the person to move around on the bed and gradually turn down the dial until the sensor stops triggering. It is likely that the dial will end up somewhere between the 3 o'clock and the 9 o'clock positions. Finally, ask the person to make movements typical of a seizure and check that the sensor triggers. If you find that the sensor is still too sensitive, repeat this process with the switch in the rapid position.

Troubleshooting

Check the connections

It sounds simple but it is important to check that the black air tube is connected to the mat at one end and the control box at the other end. The black air tube can be cut to any required length. Also check that the cable is connected to the nurse call system.

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 that are 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 black air tube into the mat and control box,
3. Finally, place the mat 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 2 x new AA Alkaline batteries. We recommend using high quality Duracell batteries. The red light on the control box will become less bright when the battery needs changing.

Side switch

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

Other Information

Check the connections

The mat contains no batteries or electronics since it is air operated. It can therefore be cleaned with standard cleaning products or alcohol. 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 incorporates electronic components and should not be submerged but may be wiped with an alcohol solvent, detergent or mild chlorine solution as required.

Safety

This product is not a medical device and is intended to be used as an assistive care product.

Daily checks:

1. Visually inspect the black air tube to ensure that it is connected securely to the bed mat and to the control box. Check that the tube is not externally compressed anywhere along its length.
2. Check that the cable is connected to the nurse call system.
3. Check that the switch is not been moved to the 'off' position.
4. Check that the sensor activates the nurse call system by simulating a repetitive movement on the bed.

If the unit has been dropped or moved, it should be tested again.

Care

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

This equipment is designed 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

Power supply	2 x AA Alkaline batteries (removable, not rechargeable)
Dimensions	117mm x 78mm x 24mm
Weight	140g

Bed mat

Dimensions	1980mm x 670mm x 33mm
Weight	1.2kg

Compliance

This product is CE marked.

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. Undamaged 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. for disposal at a collection point for the recycling of electrical equipment.