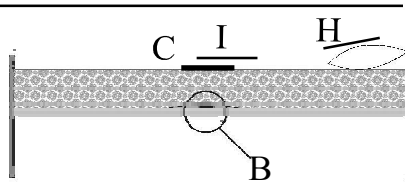


## Quick-start guide for Guardian Wire linked Bedside Monitor systems (S1020B, S1017)

The P139B is a flexible monitor capable of using a range of sensing elements and passing an alarm to a portable Nurse Call Pager. We have provided your system with a selection of our sensors to best suit your needs and set any operating parameters as best we can within our experience and information you provided. This leaflet is a quick-start guide to installing, testing and using your system. After installation we are pleased to offer you a full system check via our telephone helpline, and would urge you to use this service. Should you wish to change any of the operating parameters or modify your system in any way, then detailed handbooks are available on request or on-line at [www.alert-it.co.uk/handbooks/](http://www.alert-it.co.uk/handbooks/)

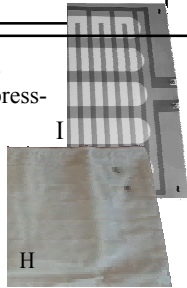
### Install the sensing components

Install the **Bed Movement & Breathing Sensor (B)** underneath the mattress on a firm bed base, in a position below the rib cage. Its task is to monitor the smallest bed movements transmitted through the mattress.

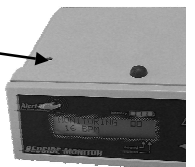


For S1016 install the **Bed Occupancy Mat (C)** on top of the mattress under a suitable cover sheet, in a position that ensures the maximum body weight is lying on the mat, typically below the upper torso. Under the shoulder area is a good place if an alarm is required before the users feet touch the floor.

The optional **Moisture Sensing** mat is connected to its connecting lead using press-studs and then placed either over the pillow for vomit detection (H) or on top of the mattress (over the Bed Occupancy mat if fitted) in the region of the groin for urination monitoring (I).



The sound sensor is built into the case, which should therefore be as close as possible to the client if sound sensing is required



Please refer to the Supervisor Handbook for details on how to tune each sensor for a specific client

### Connect to P139 and test

The system components and connection details are shown overleaf. The actual range of sensors provided will depend on your order requirements

Connect the Guardian monitor to the Nurse Call system with the lead supplied.  
Using one of the sensors, trigger an alarm to ensure the Nurse Call system is triggered.  
The most convenient way is to enable RESPIRATION monitoring for 10 seconds, with no sensor pad connected. The alarm will then trigger 10 seconds after returning to the monitor screen

*These tests must be repeated regularly to check the sensors*

Follow the test sequence as appropriate: for sensor provided  
**Breathing:** Lie on the bed and note that the breathing symbol (b) appears on the display as you exhale (the breathing tick can also be heard if enabled). The sensitivity can be adjusted  
**Bed Movement.:** Tap the mattress and note at each tap that the # symbol appears. The amount of force needed to make the light flicker can be adjusted  
**Sound:** Make a sharp click near the sensor and note that an “ear” symbol appears on the display. The sensitivity can be adjusted  
**Bed Occupancy:** With the mat plugged in and no-one in the bed the word VACANT should appear. Lie on the bed and this should change to OCCUPIED  
**Moisture.:** If enabled the sensor MUST be connected or a fault alarm will occur. Connect the two press-studs on the sensor mat with a metal object and the Urination or Vomit alarm will occur (as appropriate).

### Normal Operation

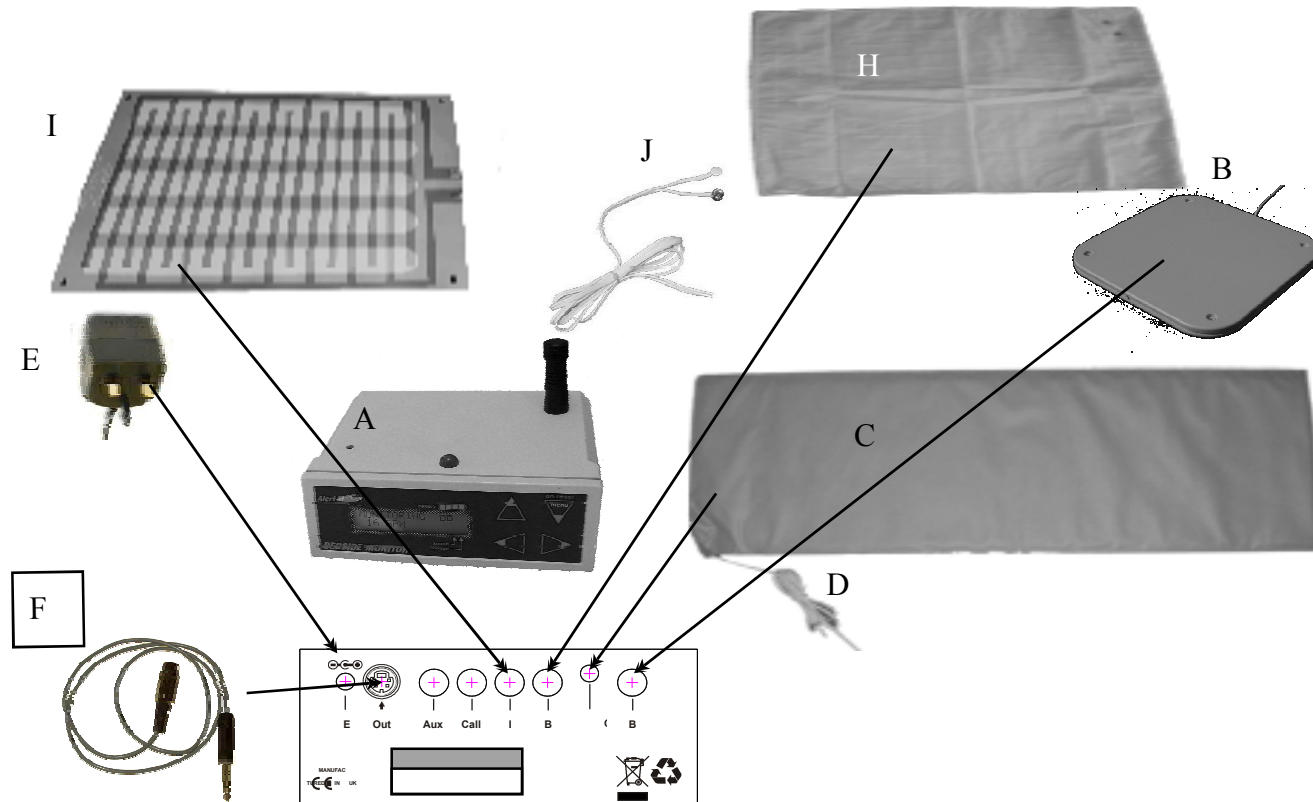
Remember that most sensors operate with a time delay to reduce false alarms. When a sensor is stimulated the corresponding time delay starts. If the sensor activity stops then the time delay is reset without sending an alarm. If the sensor remains activated the alarm will be transmitted after the delay, and the ALARM light will illuminate (unless disabled)  
Before the Nurse Call room unit can be reset, the Guardian monitor needs to be reset. Depending on the sensor and its setting this may simply require the sensor to be replaced (see below) or by pressing the button marked **MENU** on the P139 front panel.  
If this action is taken while the sensor is still detecting an alarm condition (eg while the occupant is out of bed), then the alarm will show “**SUSPENDED**” and will no longer send alarms until the safe condition is restored (eg occupant back in bed)

A **Breathing Alarm** will always occur when there is no-one in bed, UNLESS the Bed Occupancy sensor is used and set to disable the alarms when VACANT. For this reason it is recommended to disable the Breathing Alarms while experimenting with the setting of the other features, if possible.

In order to reset a **moisture alarm**, then the cotton vomit sheet must be removed and replaced or the plastic urination sheet can be wiped clean with disinfectant and dried. The cotton sheet can then be laundered.

**System components and connection**  
*(actual components supplied may vary to order)*

	<b>Part Description</b>	<b>Part No</b>
A	Bedside Monitor	P139B
B	Bed Movement Sensor	P140A
C	Bed Occupancy Mat (S1017 only)	P143C
D	Extension lead for C (S1017 only)	P157D
E	Power Supply for A (UK)	
F	Nurse Call lead (supplied to order)	P145
H	Vomit Sheet (optional purchase)	P142A
I	Urination Sheet (optional purchase)	P142B
J	Connecting Lead for H/I (optional)	P141A



Full adjustment details are found in handbooks available on:  
**[www.alert-it.co.uk/handbooks/](http://www.alert-it.co.uk/handbooks/)**  
 Or by phoning Alert-iT 08452179951

Unless otherwise agreed, the P139 will be shipped only to create alarms in response to Bed Movement, to prevent the confusion of many alarms activating as soon as the unit is turned on. Any unused sensors will have their menu hidden (see handbook to change this) . The other alarm functions can then be enabled one at a time as confidence is gained at each level. The table below shows the recommended default start setting for alarms and the pager indication that will occur. It can be used to record the actual settings used

Function	Leftmost	Adjustment Range		Comment	Default	Client
ID Number/Site No				Appears on screen at power up		
Power	off		menu	Press to scroll menu. also press also resets alarms		
Tick Volume	off	1	8	Volume of click on each breath	8	
Respiration	off	10	60	Time for no breathing detected	OFF	
Breathing Threshold		1	8	Set for optimum breath detection using tick or # symbol	4	
Slow Respiration	off	5	20	BPM below which is alarm	OFF	
Fast Respiration	off	30	60	BPM above which is alarm	OFF	
Seizure Min Time	off	5	60	Time for spasm to set alarm	15	
Spasm Threshold		1	8	Set for optimum detection of spasm using # symbol	4	
Spasm Rate		12	120	Movements per minute above which a spasm is assumed	24	
Sound monitor	off	5	30	Time for sound level to set alarm	OFF	
Sound Threshold		1	8	Sensitivity of microphone	5	
Transient Sounds		1	20	Number of sound peaks in time to trigger alarm	4	
Body Moisture	off	1	5	Fault alarm if sensor open circuit Covers perspiration to urine	OFF	
Pillow Moisture	off	1	5	Fault alarm if sensor open circuit Covers Saliva to Vomit	OFF	
Bed Occupancy	Stop Alarms	10 sec	20min	Minimum will disable breathing alarm. Time allowed for vacancy alarm.	Stop	
Restore Default				Snapshot saved in "hidden menu"		

**Other alarms without set-up parameters**

Function	Comment
Body Moisture Sensor fault	Open circuit wires
Pillow Moisture Sensor Fault	Open circuit wires
Battery Low	Connect charger
Distress Call (or internal radio call)	External push button or internal radio receiver (option)
Aux Input	External push button