P163BBA Radio Enuresis Alarm Monitor

Handbook

Models covered by this handbook	
P163BBA	Radio Comf-it Monitor

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

UH1249A

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

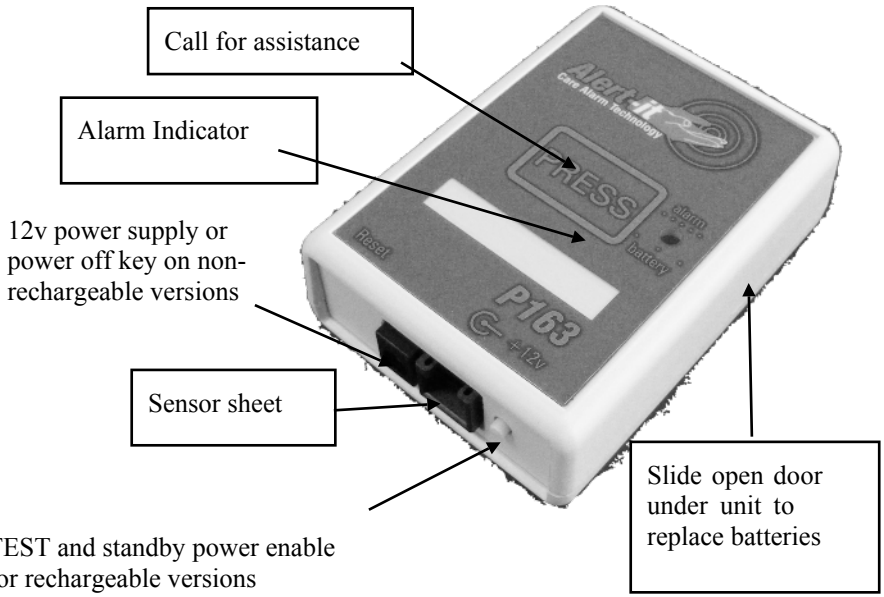
This handbook is intended to assist carers install, configure and use the monitors. The carere therefore needs to understand the needs of the user and asses that the monitor meets those needs and if any supplementary monitoring is needed taking into account any health risks.

The P163 is an incontinence monitor designed to operate with the Alert-it Pagers (P137 or P138). A moisture sensing sheet connects via a RJ12 (Telephone Style) connector. All units offer a front panel CALL button to allow the user to call for assistance. In health critical applications the monitor can use the failsafe features of Safelink (see Page 6)

Power for P163

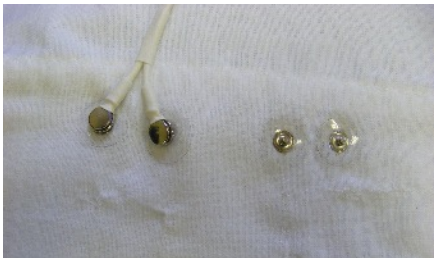
While usually powered from batteries, a mains adapter can be used and a rechargeable version can also be supplied. The rechargeable option has no power key and the RESET button must be pressed for 5 seconds on first installation to switch on the stand-by battery, after which the battery is always active if the mains power fails

The power supply **MUST** be that recommended by the manufacturer as this provides protection for the user, who is connected to the monitor by the sensing circuit.



Quick Reference Sheet: Installation

The ***Moisture Sensing*** sheet has 4 press-studs, 2 are used for connection to the monitor via ta special cable.and two for testing (see picture). Joining the two unused stud will cerate an alarm, provided no wires are broken in the sheet..



Connect the moisture sheet cable to the monitor before using the press-studs to connect to the sheet.

Range test.

The unit and pager should be tested in all the usual locations to prove signal reception. A short press (less than 1sec) of the RESET button will cause the P163 to transmit a signal. The pager should respond by showing NODE 00 (or the name allocated to the unit) on the display for 1 second. See page 6 for details of enabling failsafe operation

Accessories available		
Part Description	**Part No**	**Cleaning See p 5**
Cotton Sheet	P142A	D
Absorbent Cotton Sheet	P142E	D
Cotton Sheet Cable	P141E	B
Power supply (optional)	P113B	C
Mounting bracket	P159A	B
Pager	P138B	B
Power Supply for Pager	P153*	C

Sensor Testing

Connect the spare press-studs together with a metal object (eg paper clip or spoon). After 15 seconds an alarm should be raised

These tests should be performed regularly to confirm correct system operation
All parts of the system, apart from the pager charger, are suitable for use within the patient vicinity

The monitor is **turned o**n by

- Removing the power key for battery power
- Connecting a mains adapter if required
- Or its is always available if the rechargeable battery has been fitted and enabled

Operating the P163:

Call for Assistance

Activating the call button for longer than 1 second will result in an ASSIST alarm with audible warning on the pager, and a beep from the P163 monitor. Activating for longer than 5 seconds will result in a second beep and the alarm will be elevated to URGENT. The alarm has to be RESET by the carer as below

Enuresis Alarm

The sheet conductivity is measured every 15 seconds using a high quality ac measurement to ensure reliability. If this shows the sheet to be wet an alarm is raised.
The alarm is cancelled if the sheet is replaced.

P142A Instant Cotton Sheet

This sheet monitors the whole area under the body and will report an alarm at the slightest wetness. Not only will this warn of the start of an incontinence episode but it has been used to detect the excessive sweating cause by infection or hypoglycae-mia.

P142E Absorbent Cotton Sheet

This sheet follows the principle of the "Kylie" (™ Kylieheathcare) and absorbs up to 1.5 litres of urine. However after 500ml (about 1 bladder full) an alarm is raised which ensures the user is not left lying on an excessively wet sheet.

Reset the Alarm

To reset the CALL alarm it is necessary to press the RESET button for greater than 1 second (until a beep is heard).
The Enuresis alarms automatically resets when a dry sheet is connected

Turn off P163

The unit is supplied with a small RED tagged key. Insert this into the front power socket to turn the unit off and prevent alarms being detected. If a mains power adapter is used, then this can be disconnected to isolate the monitor.

Operation (cont)

The rechargeable version can only be turned off be removing the standby battery, which can then be replaced. The unit will then stay dormant until the RESET button is pressed (to cause a beep).

Alarm indication on monitor and at the pager/receiver

Alarm	Detect Delay	P163	Pager	
Call	Instant	Flash	Assist 02	Intermittent tune + alarm
Call	>5sec	Flash	Urgent 02	Continuous tune + alarm
Sheet Wet	15 sec	Flash	Assist 01	Continuous tune + alarm
TEST	Press HELP	Flash	Shows node name	
Battery Low	-	Flash every 8 sec	Fault 30	Intermittent tune,+ alarm
Battery Fail	-	Flash every 8 sec	Fault 31	Intermittent tune,+ alarm
Battery Dead	The P163 beeps every 0.5 sec with no LED and no transmission			

Maintenance

Expected Battery Life: Operating Mode	Battery capacity
No failsafe heartbeat, no alarms	1 year
Fail safe heartbeat, and alarms	6 months
Maximum alarm number (based on 2 min response)	2000 alarms

Battery Replacement

The battery needs replacing when FAULT 30 or 31 shows on the P137/8 pager (and the alarm led flashes intermittently every 8 seconds). The P163 will continue to function for some hours, allowing time for this replacement. If the battery is exhausted then the P163 will click continuously without the light flashing or transmitting.

The batteries are found inside the compartment via the sliding door on the base (see page 2)

Battery Type: 2 of AA Alkaline Batteries or equivalent

Cleaning:

The following is a general guide line based on the components listed on page 3. Where a different sensor has been supplied, then please refer to the cleaning instructions supplied with that sensor.

Technique A

Wetting with strong disinfectant. This can include immersion provided plugs and any obvious breathing holes are avoided.

Technique B

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

Technique C

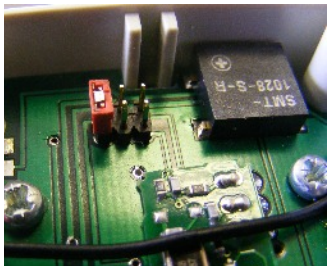
Wiping with disposable 70% isopropyl alcohol wipes. Ensure that any plugs are completely dry before reinserting into the sensor input socket on the monitor.

Technique D

Full immersion in detergent , water and optional disinfectant. See component washing instructions for details

Technical Information & Configuration

Safelink Mode



In Safelink the monitor will send a radio "heartbeat" signal every 10 seconds. If this signal disappears for more than 2 minutes, the pager will issue an "RF Fail" alarm. This mode will decrease battery life but is essential in any health critical application

The default setting is without Safelink (as shown). To enable the failesafe mode refit the link to the centre pins AND CYCLE POWER (which will require removing/replacing any rechargeable batteries)

Configuration Changes

The monitor 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

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.

This symbol indicates where a Patient Applied part is connected, for which it is important to follow these instructions carefully

1. Ensure that the senor cable is routed and secured to avoid the risk of entanglement or strangulation.
2. Only the recommended power supply shall be used as it is certified to provide two means of patient protection to EN60601-1in non-hospital environments
3. Consult the manufacturer for power supplies suitable for hospital use
4. Ensure any power cable is routed to avoid a trip hazard
5. Regularly check the power supplies for damage and potential shock risks
6. Clean and disinfect each item regularly in accordance with information herein
7. Regularly test all sensors as described herein
8. Ensure, by testing, that the alarm is annunciated at the carer's location(s)
9. Operate any power supply and charge pager away from direct heat and uncovered.
10. 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.
11. Only use the monitor with accessories approved for use with this product and only in accordance with instructions.
12. If the equipment is modified in any way, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment.
13. 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.
14. Additional levels of mechanical protection may be needed for some patient disorders. Contact the manufacturers for advice
15. 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
16. Any sensor over the mattress (Bed Vacation) has the potential to cause pressure sores . The carer must assess this risk and monitor the use of these products
17. Any sensor over the mattress could pose a fire hazard if in contact with a smouldering cigarette.
18. The monitor and all accessories are designed to operate indoors in a residential environment of 10ºC to 30ºC and 90%RH max.

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

Certified as Class 1 Medical,
Class II Electrical Safety

Certified as compliant to the following standards	
93/42/EEC as revise 2007/47/EC	Medical Devices Directive
EN 14971:2007	Risk Assessment
EN 61010-1:2005	Medical Device Safety Requirements
EN12182:1999	Technical Aids for Disabled Persons
EN 61010-1-2:2004	EMC
EN 300 220-1 V2.1.1 (2006-04)	Radio Transmissions: Short Range Devices
2002/95/ECRoHS	Permitted Materials

[1]Alert-it Care Alarms are social aids designed and manufactured in accordance with 93/42/EEC as Class 1 Medical Devices. They are intended to improve the vigilance of carers to distressing side-effects of various diseases, such as Epilepsy and Dementia. They do not monitor vital physiological processes and should not be expected to diagnose any disease or predict the onset of any symptoms.

Additional Documents	
Quick Start Radio Enuresis System	UQ1161
You tube Instruction Videos Index	UV1198

Support

For technical support please fax or EMail:
HELP: 0845 217 9951
FAX :0845 217 9953
Support@alert-it.co.uk

Designed by:
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LE9 9FE UK

...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.