INSTRUCTIONS FOR USE

Easycare serial





Contents

| 1. | Packaging Contents | 1 |
|-----|--|----|
| 2. | Alternating Pressure Operation Principle | 1 |
| 3. | Guidelines | 1 |
| 4. | Specifications | 1 |
| 5. | General Precautions | 2 |
| 5 | .1 Mattress Precautions | 2 |
| 5 | .2 Control Unit Precautions | 3 |
| 6. | Storage | 3 |
| 7. | Warranty | 3 |
| 8. | Symbols | 4 |
| 9. | Easycare Front Panel | 5 |
| 10. | CPR Valve Operation (Mattresses only) | 5 |
| 11. | Installation | 6 |
| 1 | 1.1 Mattresses | 6 |
| 1 | 1.2 Cushions | 6 |
| 12. | Bottoming Out Test | 7 |
| 13. | Settings | 7 |
| 1 | 3.1 Factory Reset | 7 |
| 1 | 3.2 Setting the Cell Height | 7 |
| 14. | Alarms | 8 |
| 1 | 4.1 Low Pressure Alarm | 8 |
| 1 | 4.2 Power Failure Alarm | 8 |
| 15. | Replacing the Air Filter | 9 |
| 16. | Cleaning | 9 |
| 1 | 6.1 On-site cleaning | 9 |
| 1 | 6.2 Machine washing / drying | 9 |
| 1 | 6.3 Troubleshooting | 10 |
| Арр | endix A: EMC Information | |

1. Packaging Contents

- Control Unit x 1
- Power Cable x 1
- Mattress/Cushion (depending on system) x 1

2. Alternating Pressure Operation Principle

Patients who spend a lot of time in bed will often experience vascular compression on any part of their body where there is a bony protrusion, such as the shoulders and sacrum. This can easily cause decubitus pressure ulcers to form, leading to further complications such as infection.

The interleaved pressure relief areas on our alternating pressure support surfaces provide periodic relief from vascular compression to the whole body by dynamically redistributing your patient's weight, preventing and alleviating decubitus pressure ulcers. For your patient's comfort, the three-cell pillow zone at the head of the mattress is designed to provide static support for your patient's head.

3. Guidelines

Always use pressure care systems under the advice of a suitably qualified medical professional. The patient's pressure ulcer risk assessment scores, weight and the handling considerations for caregivers should be considered to ensure that the appropriate system is selected.

4. Specifications

| Technical Specifications | | | |
|---------------------------|--|--|--|
| Therapy modes | Dynamic & Static | | |
| Compressor air flow | Approx. 10lpm | | |
| Cycle time | 10 minutes | | |
| Anti-particle filter Yes | | | |
| Visual and audible alarms | Yes | | |
| Electrical power supply | 220 – 240V / 50Hz | | |
| Power consumption | 9W | | |
| Fuse rating | F2A 250VAC | | |
| Electrical isolation | Class I 2a | | |
| Ingress protection | IP21 | | |
| IEC conformity | 60601-1, 60601-1-2, 60601-11 | | |
| Warranty | 1 year against all manufacturing faults | | |

| Atmospheric Specifications | | |
|----------------------------|---------------|--|
| Storage temperature | -25 - 70°C | |
| Transport temperature | -25 - 70°C | |
| Operating temperature | 5 - 40°C | |
| Humidity | 10 - 90% | |
| Atmospheric pressure | 700 - 1060hPa | |

5. General Precautions

- ✓ Do not continue to use this equipment if there is a change in performance. You should unplug the device and contact your supplier for advice and or replacement
- Ensure this equipment is not setup or used near sources of high heat or excessive electromagnetic, electrostatic or radiation fields including UV radiation, such as direct sunlight.
- ✓ Do not use system in the presence of any flammable anaesthetic mixture with air, nitrous oxide or oxygen or in the presence of smoking materials or open flame - risk of explosion.
- ✓ Do not use this equipment for anything other than what it is specifically designed for. The use of accessories or parts not recommended or specifically designed for this equipment is prohibited and be voided the warranty.
- ✓ Do not modify or connect this equipment to other parts or equipment not specifically designed for use with this system.
- ✓ Do not allow young children to operate, play with or remove any part of this medical system.
- ✓ Do not use this equipment near sources of excessive moisture such as nebulizers or steam kettles.
- ✓ Do not use corrosive cleaning products such as industrial degreasers or acetone solvents.
- ✓ The product can only be operated by personnel who are qualified to perform general nursing procedures and has received adequate training in knowledge of prevention and treatment of pressure ulcer.
- Close supervision is necessary when this product is used on or near children. The device is mains powered and contains small parts so presents electrical and choking hazards.
- ✓ The mattress cover has passed skin sensitization and skin irritation test. If you suspect that you may have had or are having an allergic reaction to the mattress cover, consult a physician immediately.

5.1 Mattress Precautions

- ✓ Do not place any layers of material between the patient and top cover of the mattress; this will compromise the support system therapy. The following are included:
 - o Hospital sheets regular or fitted
 - Sheepskins or equivalent
 - o Incontinence sheets
 - $\circ \quad \text{Slide sheets} \quad$
 - o Electric heating blankets
- ✓ Ensure the patient's clothing does not cause skin damage due to ties, buttons, creases, seams, objects in pockets and jewellery.
- ✓ Do not place any sharp items on or near the mattress such as syringes or scalpels or any instrument that could hole the top cover.
- \checkmark Do not place any solid items on top of the system besides the patient.
- \checkmark No natural rubber latex is used in the construction of this system.

5.2 Control Unit Precautions

- ✓ Do not continue to use this equipment if there is a change in performance. You should unplug the device and contact your supplier for advice and or replacement
 - ✓ Do not open the control unit, as there is risk of electric shock and it will void your warranty.
 - ✓ Do not block the air inlet at the rear of the control unit.
 - ✓ Do not spill any liquids onto the control unit. If a spillage occurs:
 - Turn off power to the control unit at the wall and disconnect the power cable from the control unit.
 - Wipe dry any excess moisture on the external casing.
 - Check that the interior of the IEC socket, rocker switch and power plug are dry.
 - ✓ Ensure that the power lead is undamaged, safely run and properly connected so that it does not pose an electrocution or trip hazard.
 - ✓ Ensure that the power cable is positioned away from any moving bed part, which may kink or damage the power cord.
 - ✓ Ensure that the power cable does not interfere with cleaning around the bed or the use of cleaning liquids especially on the floor.

6. <u>Storage</u>

It is recommended that the control unit is stored in a sealed plastic bag in a cool, dry area. Ensure that no heavy items are placed on top of the system during storage as this may damage it.

7. Warranty

The control unit is guaranteed for 1 year from the date of purchase against all manufacturing faults, on the condition that it is stored and operated in the conditions recommended in this instruction document. Proof of purchase is required in order to claim the guarantee. The warranty will be void if the control unit is dismantled by the user as shown on the warning sticker on the side of the unit.

This guarantee is not a substitute for any legal guarantees. Contact your local sales agent for technical support.



Fig: 1

8. Symbols



Attention: See Instructions for use



UKCA Marking indicating conformance to UK MDR 2002 concerning medical devices



Type BF Applied Part (patient isolation from electrical shock)



Class II Product



Operation Instructions

Indicates separate collection for electrical and electronic equipment (WEEE)



Protection against finger and dripping water



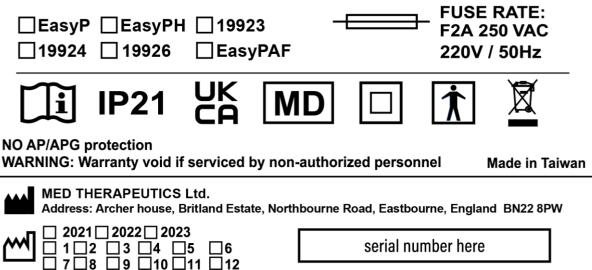
Manufacturer



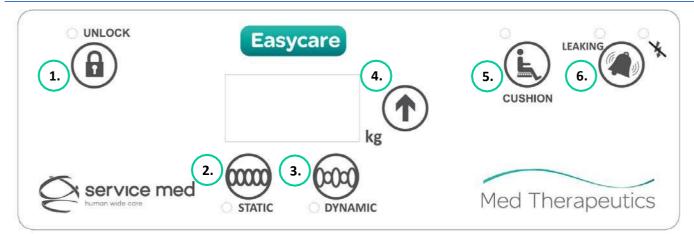
Date of manufacture

Note: Follow the requirements of your local authority regarding disposal of the unit.

ITEM NO. Easycare serial



9. Easycare Front Panel



- 1. Unlock
- **2.** Static CLP therapy
- **3.** Dynamic pressure therapy
- 4. Weight pressure setting
- 5. Cushion mode
- 6. Leakage alarm / power failure alarm mute

Fig: 2

10. CPR Valve Operation (Mattresses only)

The CPR valve allows the mattress to deflate quickly when CPR is to be performed on the patient. The CPR valve is located at the head end of the mattress. The system will operate normally when the CPR pull tag (Fig. 3) is securely located in the CPR air outlet and will deflate when the CPR pull tag is pulled from the CPR air outlet.



Fig: 3

11. Installation

11.1 Mattresses

- 1. Unroll the mattress on the bed with the connector hoses at the foot end.
- 2. Secure the mattress to the bed base with the attachment straps.
- 3. Hang the control unit at the foot of the bed using the hooks
- 4. Connect the mattress hoses (Fig: 4) and power cable (Fig: 5) to the control unit then guide it along the bed to the nearest plug socket and plug it in, taking care not to create a trip hazard.
- 5. Check that CPR tag is securely pressed down into CPR air outlet.
- 6. Switch on the rocker switch on the control unit. (Fig: 5)
- 7. The mattress will take 15 to 20 minutes to inflate.





Fig: 5



M WARNING:

The power cable must be installed to avoid interference with the articulated parts of the bed or the wheels and to prevent personnel from tripping up. Failure to install the power cable correctly may result in risk of bodily injury and/or material damage.

11.2 Cushions

- 1. Place the cushion on the seat with hoses protruding from the back corner.
- 2. Hang the control unit on the back of the seat.
- 3. Connect the cushion hoses and power cable to the control unit then guide it to the nearest plug socket and plug it in, taking care not to create a trip hazard.
- 4. Switch on the rocker switch on the control unit.
- 5. The cushion will take up to 5 minutes to inflate.

12. Bottoming Out Test

It is important to check that your patient has not bottomed out on the support system. This is where the patient's sacrum sinks too far into the mattress and contact pressure from the bed frame is exerted on the patient. To check for this, slide two fingers between the air cells underneath the patient's sacrum. The patient should be clear of your fingers. If the patient has bottomed out, increase the pressure setting on the control unit then wait for 10 minutes before repeating the bottoming out test. This test does not refer to cushion systems.

13. Settings

13.1 Factory Reset

The default setting for the Easycare control unit is dynamic mode. The control panel on your Easycare control unit will lock after 20 seconds of inactivity. To reset your control unit to factory settings, switch the control unit on whilst holding the leakage alarm / power failure alarm mute button (Fig: 2). The control unit will sound three short beeps and the display will flash continuously to indicate that it has been reset to factory settings.

13.2 Setting the Cell Height

The Easycare control unit is set to 5" cell height by default. To optimise it for 7" / 8" cell height, press and hold the leakage alarm / power failure alarm mute button. The control unit will sound four long beeps and display "78" (Fig. 7) to indicate that it is in 7" / 8" cell height mode; the control unit is now optimised for use with a 7" / 8" cell mattress. The control unit can be set to 5" cell height mode by repeating the process above; the control unit will sound two long beeps and display "5" (Fig. 6) to indicate that it is optimised for use with a 5" cell mattress.



Fig: 6



Fig: 7

14. Alarms

14.1 Low Pressure Alarm

When there is low pressure in the system the control unit will beep continuously and the corresponding red LED will flash.

Press and hold the unlock button for two seconds to unlock the control panel. (Fig: 2)

Press the low pressure alarm mute button (Fig: 2) to mute the alarm, and then check the following connections for leakage:

- The connection between the mattress and the control unit
- The connection of the CPR valve to the mattress
- The connection between the cells and the connecting hose

If the fault is not solved the check the following for leakage:

- The CPR valve
- The connecting hose
- The air cells

If the fault persists, contact your distributor for service repair.

14.2 Power Failure Alarm

When the power to the control unit fails, it will beep continuously and the corresponding red LED will flash.

Press and hold the unlock button for two seconds to unlock the control panel. (Fig: 2)

Press the power failure alarm mute button (Fig: 2) and check the following;

- That the power cable is connected to the power outlet and that the outlet is switched on
- That the power cable is connected to the control unit
- That the fuse in the power cable has not blown
- That the fuse in the IEC socket on the control unit has not blown

If one, or both, of the fuses has blown check the power cable for damage and replace it immediately if necessary.

If the fault persists, contact your distributor for service repair.

15. Replacing the Air Filter

The air filter must be replaced annually. To replace the air filter, remove the air filter cover (Fig: 8) from the back of the control unit and replace the cotton filter inside after cleaning any residual dust from the air filter cavity and cover.



Fig: 8

16. Cleaning

16.1 On-site cleaning

When necessary the top cover and base can be cleaned and disinfected on site once the patient has been removed from the mattress. The following on-site cleaning procedure is recommended for top cover and control unit. Note that a summary of the below is printed at the foot end flap of the top cover. Do not immerse the control unit in water.

- 1. Ensure gloves are worn and all disinfection and occupational health and safety protocols of the facility are adhered to.
- 2. Wipe down with a clean cloth using a disinfectant solution comprising of warm water and a neutral detergent or with a sodium hypochlorite solution (Chlorine 1000 ppm)
- 3. Proprietary disinfectants may be used provided manufacturer's instructions are followed.
- 4. All cleaning agents and disinfectants must be thoroughly rinsed off and the surface dried before storage or re-use. Failure to do this may result in the accumulation of reagent that could damage the polyurethane coating, react with the bed frame or negate the bio-compatibility results of the fabric.

16.2 Machine washing / drying

The mattress cover and base can be machine washed. To machine wash the base - all cells and hoses must be removed. Wash at a temperature **up to 71°C (160°F)**, using normal detergents.

Dry the cover by air drying, spinning or tumbling at temperatures **up to 130°C** (266°F); do not mangle.

In washing machines, it may be difficult to fully soak the mattress cover. Also, spinning and tumbling may not remove water trapped between layers. It may be helpful to interrupt the washing or drying cycles to alleviate this.

16.3 Troubleshooting

The instructions below are for end-user maintenance of the pressure care system. If these instructions do not resolve the fault, contact your distributor for service repair.

| Fault | Solution |
|-------------------------------|--|
| Control unit does not operate | 1. Check that the power cable is connected to the wall socket and |
| | the IEC socket on the control unit correctly. |
| | 2. Check the fuses in the power plug and in the IEC socket. Be sure |
| | to use the correct fuse specification. |
| Low pressure in mattress | 1. Check that the mattress is connected to the control unit and that |
| | the CPR tag is securely pressed into the CPR air outlet. |
| | 2. Check the air cells and connecting hose for punctures, tears or |
| | leaking connections. |
| Air cells at uneven heights | 1. Remove the top cover and check for air cell press studs that are |
| | disconnected. |

APPENDIX A: EMC INFORMATION

Guidance and Manufacture'rs Declaration- Electromagnetic Emissions:

This device is intended for use in the electromagnetienvironment specified below. The user of this deviceshould make sure it is used in such an environment.

| Emissions Test | Compliance | Electromagnetic Environment-Guidance |
|---|------------|--|
| RF emissions CISPR 11 | Group1 | Thedevice uses RF energy only for its internal function. Therefore, its RF emissions are very low and are no |
| RF emissions CISPR 11 | Class B | likely to cause any interference in nearby electroni equipment |
| Harmonic emissions IEC61000-3-2 | Class A | The device is suitable for use in all establishments, |
| Voltage fluctuations / Flicker emissions IEC61000-3-3 | Complies | including domestic establishments and those directly connected to the public low-voltage power supply network. |

Guidance and Manufacturer's Declaration- Electromagnetic Immunity:

This device is intended for use in the electromagnetienvironment specified below. The user of this device should make sure it is used in such an environment.

| Immunity Test | IEC6060 [^] test leve | Compliance | Electromagnetic Environment-Guidance | |
|--|---|--|---|--|
| Electrostatic Discharge (ESD IEC61000-4-2 | ±6kV contact ±8kV air | ±6 kV contact ±8kV air | Floors should be wood, concrete o ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%. | |
| Electrical fast transient/ burst IEC61000-4-4 | ±2kV for power supply line ±lkV for input/out line | ±2kV for power supply line ±lkV for input/out line | Mains power quality should be that of a typical commercial or hospita environment. | |
| Surge IEC61000-4-5 | ± 1 kV line(s) to line(s) ± 2 kV line(s) to earth | ± 1 kV line(s) to line(s) | Mains power quality should be that of a typical commercial or hospita environment. | |
| Voltage dips, short interruptionsand voltage variations on power supply input lines I EC61000-4-11 | 40 % Ur (60 % dip in Ur)for 5 cycles 70 % Ur (30 % dip in Ur)for 25 cycles | Ur) for 0,5 cycle 40 % Ur (60 % dip in Ur) for 5 cycles 70 % Ur (30 % dip in Ur) for 25 cycles | Mains power quality should be tha of a typical commercial or hospita environment. If the user of this device requires continued operatior during power mains interruptions, i is recommended that the device be powered from an uninterruptible power supply or a battery. | |
| Power frequency (50/60Hz) magnetic field IEC61000-4-8 | 3 A/m | 3A/m | Power frequency magnetic fields should be at levels characteristic o a typical location in a typica commercial or hospital environment | |
| NOTE: Ur is the a.c. mains voltage prior to the application of the test level | | | | |

Guidane and Manufacturer's Declaration - Electromagnetic Immunity:

Thisdevice is intended for use in the electromagnetic environment specified below. The user of this device should make sure it is used in such an environment.

| Immunity Tes | IEC60601test leve | Compliance | Electromagnetic Env1ronment-G1ud ance |
|--|---|-----------------|---|
| | | | Portable and mobile RF communications equipmentshould be used no closer to any part of this device, includingcables, than there commended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance d = 1.2? 150kHz to 80MHz |
| Conducted RF IEC 61000-4-6 Radiated RF IEC 610004-3 | 3Vrms150 kHz to 80 MHz outside ISM bandsa 3 V/m 80 MHz to 2.5 GHz | 3 Vrms 3 V/m | d = 1.2 ? 150kHz to 80MHz d = 2.3 ? 80 MHz to 2.5G MHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).b Fieldstrengths from fixed RF transmitters, as determined by an electromagnet site survey C, should be less than the compilancelevel in each frequency ranged. Interference may occur in the vicinity of equipmentmarked with the following symbol: |

NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a) The ISM (industrial, scientific and medical) bands between 150 kHz and 80 MHz are 6,765 MHz to 6,795 MHz;13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz.

b) The compliance levels in the ISM frequency bands between 150 kHz and 80 MHz and in the frequency range 80 MHz to 2.5 GHz are intended to decrease the likelihood that mobile/portable communications equipmentcould

cause interference if it is inadvertently brought into patient areas. For this reason, an additional factor of 10/3 is used in calculating the recommended separation distance for transmitters in these frequency ranges.

c) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with acruracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the device.

d) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RFcommunications equipment and this device:

This device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of this device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and this device as recommended below, according to the maximum output power of the communications equipment

| Rated maximum output power | Separation distance according to frequency of transmitter m | | | |
|-------------------------------|---|--------------------------------------|---------|----------|
| of transmitter | 150 kHz to 80 MHz | 80 MHz to 800 MHz 800 MHz to 2,5 GHz | | |
| W | <u>d=1.2√</u> | P | d=1.2√P | d=2.3fi, |
| 0.01 | 0.12 | 0.12 | 0.23 | |
| 0.1 | 0.38 | 0.38 | 0.73 | |
| 1 | 1.2 | 1.2 | 2.3 | |
| 10 | 3 | 3.8 | 7.3 | |
| 100 | 12 | 12 | 23 | |

or transmitters rated at a maximum output power not listed above, the recommended separation distance din meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where Pis the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

Note 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.



Manufacturer: Med Therapeutics Ltd

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