Aeria 8pro

MATTRESS REPLACEMENT

USER GUIDE

Key

Definition of symbols used

User guide


Important information


Caution symbol


Electrical hazard


Aeda – a brand actively supporting your health

Aeria A fresh approach to proven pressure care solutions


The Aeda mattress and seating category

Mattress overlay


Wash instruction here


Zip located here


Do not immerse control unit


Infection control


Do not ...


Iron - low
- medium
- high


Do not iron


Bleach - chlorine


Do not bleach


Tumble dry - low
- medium
- high


Do not tumble dry


If dry cleaning - do not use a solution stronger than perchloroethane


Maximum water temperature (in this example - 160°F 70°C)

Control unit


Medical equipment mattress system with respect to electrical shock, fire and mechanical hazards only; in accordance with UL60601-1 and CANCSA N22.2 NO. 601.1


CE Marking (European Union-New Approach Directives)


Class II Equipment


Type B Applied Part


Manufacturer details


Alternating mode


Static mode


Power


Audio alarm


Audio alarm - off

SN Serial number


Operating instructions


Disposal: Do not dispose of this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

EC REP

Symbol for "Authorised Representative in the European Community"

Contents

System overview 2

System features 3

Intended use 4

Safety 5

Protection against hazards 5

System set up 6

Dismantling the system 7

Operation 8

Control unit layout 8

Establishing pressure 9

Alarm 11

Care and cleaning 12

Troubleshooting 13

Specifications 15

Warranty 20

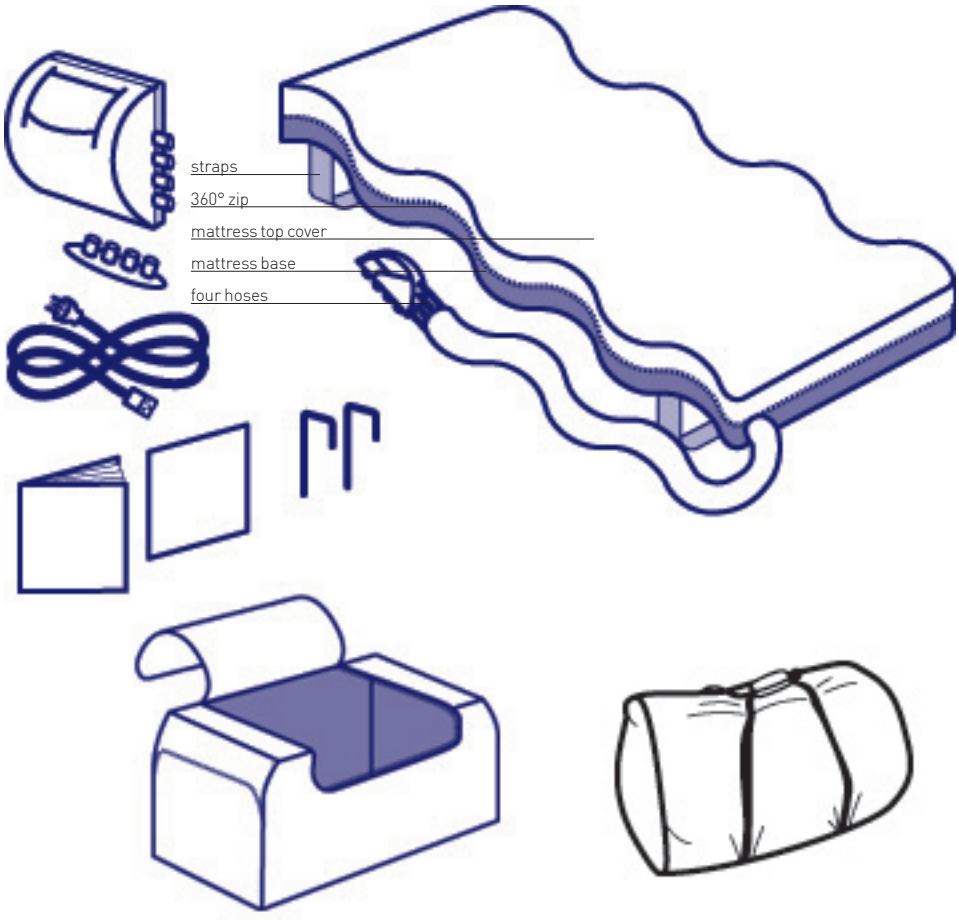
System overview

Introducing the Aeria 8 Pro Mattress Replacement System – this chapter provides a basic system overview, intended use guidelines and a summary of system features and box contents.

- dynamic mattress replacement with four air hoses and CPR release handle
- digital control unit with transport cap
- power cord
- Aeria 8 Pro Pro User Guide
- Aeria 8 Pro Pro Quick Set Up Guide
- square hanging hooks (optional spare part)
- carry bag

Applied part.

The mattress is treated as an applied part.



premium bag (in the EU)

basic bag (in the US)

- the Aeria 8 Pro is indicated for the prevention and treatment of skin breakdown and pressure ulcers in patients at high risk
- constructed from 21 transverse cells – 8 inch 215 mm high – that cyclically inflate and deflate in an alternating pattern, providing gentle and dynamic support
- cyclic alternation of pressure prevents arterial and venous capillary occlusion in the patient's surface tissue – maintaining and stimulating the flow of blood and lymphatic fluids through these tissues to provide essential oxygen and remove metabolic waste
- suitable for use at home or in long term or extended care environments
- the system is designed to replace your existing single bed mattress, for use on top of a standard single bed frame
- the three-cell cycle provides increased patient support, allowing more body surface to be supported at any one time for optimum healing
- an inner static cell (cell in cell design) remains fully inflated at all times to prevent patients 'bottoming out' and provide added safety when mattress is inclined or in the event of a power interruption
- connected to the control unit via four air hoses, mattress cells are inflated by an electronic control unit, which includes a pressure sensor for monitoring mattress pressure and adjustable pressure settings to match patient weight and comfort needs
- air pressure in the mattress replacement is continually monitored and a visual and audible alarm activates in the event mattress pressure becomes too low or high
- operator controls are kept to a minimum for simplicity and ease of use

System features

Support

- 21 x 8" 215 mm high density alternating cells
- vapor permeable, waterproof top cover prevents moisture transfer, while multi-stretch fabric minimizes friction and reduces shear
- adjustable pressure level to match users weight and comfort needs
- static pillow for stable head support and optimal comfort
- supporting users to a maximum weight of 400 pounds 180 kilograms

Safety

- 1 in 3 cell alternation sequence for 'zero' pressure benefits
- cell in cell design (internal static cell that remains fully inflated at all times) to prevent 'bottoming out' and provide added safety when mattress is inclined or in event of power interruption
- fully adjustable support straps and non slip mat securely fastens system to any standard single bed frame
- quick release CPR tag conveniently built into the digital control unit
- tape sealed seams for maximum antibacterial protection
- reinforced air hoses prevent unwanted kinks or interference to air flow
- timed transport and static function for stable patient handling, transfer and nursing care (20 minute automatic cutout)
- visible and audible alarm (plus alarm mute) to warn of a pressure failure

Simplicity

- easy to operate digital touch panel with bright LED indicators
- quick connector air hose attachments with interconnecting transport cap
- 360 degree quick release zipper to assist in cleaning (remove the cover from a stationery position)
- control unit includes inbuilt rear hanging hooks on for easy mounting and system portability; two size options to match different size bed ends

Intended use

Indications

The Aeria 8 Pro Mattress Replacement System is indicated for:

- the prevention and treatment of skin breakdown and pressure ulcers in patients of high risk

Contraindications

Patient conditions for which the application of pressure relief therapy on the Aeria 8 Pro Mattress Replacement System is contraindicated include:

- instable spinal cord injury
- cervical traction

Intended care setting

Intended care settings for the Aeria 8 Pro Mattress Replacement System are:

- long term or extended care
- home care

Working conditions

- Temp: 50°F - 105°F 10°C – 40°C
- Humidity: 30% ~ 75%

Shipping / Storage conditions

- Temperature: 15°F - 140°F -10°C –60°C
- Humidity: 10% ~ 80%

Connecting the system to other devices

There are other devices necessary for normal operation.

The Aeria 8 Pro mattress replacement can be fitted to most standard hospital or single bed bases.

The Aeria 8 Pro digital control unit can be fitted to the foot or head board of most hospital or home care beds.

Alternatively, the control unit can be placed on the floor, underneath the bed or on any other stable surface.

The Aeria 8 Pro Mattress Replacement System is an aid to the prevention and management of pressure ulcers. If there is no improvement in the patient's condition, clinical advice should be sought.

Therapeutic devices should only be used in accordance with manufacturer's instructions and under the consent, supervision and management of a suitably qualified health professional.

Aeda Healthcare accepts no liability for any use, change or assembly of the product other than that stated in this User Guide.

General safety precautions

For your own safety and the safety of equipment, always take the following precautions:

- Before commencing set up or installation, ensure the power is switched off and disconnect the power cord from the control unit.
- Unplug the system from the supply mains to disconnect its circuits.
- Placing layers between patient and seat cushion should be avoided or kept to a minimum. As part of sensible pressure care, avoid wearing clothing that may cause areas of localized damage due to creases, seams, objects in pockets, etc.
- Never use sharp objects or electrically heated blankets on or under the system.
- Product top cover is not completely air permeable and may present a suffocation risk. It is the responsibility of the caregiver to ensure that the patient can use this product safely.
- Avoid blocking the air intakes of the control unit, located at the rear of the unit.
- Only the control unit and mattress combination as indicated by Aeda Healthcare should be used, otherwise the correct function of the product cannot be guaranteed.

Maximum patient weight

The maximum recommended patient weight for this system is 400 pounds 180 kilograms.

Protection against hazards

Fluids

Avoid spilling fluids on any part of the control unit. If spills do occur:

- Turn off control unit power and disconnect the unit from the main electricity supply.
- Immediately clean fluids from the casing by wiping with a soft cloth.

Ensure there is no moisture in or near the power inlet, power switch and power cord before reconnecting the power supply.

Do not position the system so that it is difficult to operate the disconnection device.

Check the operation of controls and other components around the spill area.

Fluid or liquid remaining on the electronic controls can cause corrosion that may cause the electronic components to fail. Component failures may cause the unit to operate erratically, possibly producing potential hazards to patient and carers.

Explosion hazard

Equipment is not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

- Do not use in the presence of smoking materials or open flame – air flowing through the mattress will support combustion.
- Do not open the control unit – risk of electrical shock. Refer servicing to qualified service personnel.
- Do not modify this system without the authorization of the manufacturer.

Disposal

At the end of useful life, dispose of all components (air filter, air cells, mattress cover and base) according to local procedures and regulations or contact your local Aeda Healthcare authorized dealer for advice.

Power cord

The system should never be operated with a worn or damaged power cord. Should the power cord be found to be worn or damaged, contact your local Aeda Healthcare authorized dealer for a replacement.

Interference

Significant risks of reciprocal interference may be posed by the presence of the system during specific investigations or treatments.

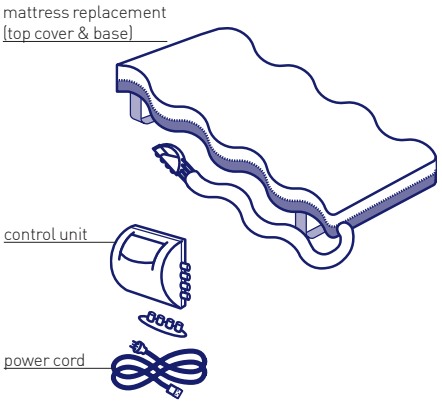
Potential electromagnetic or other interference between the system and other devices may occur. If interference is suspected, move equipment from sensitive devices of contact the manufacturer.

System set up

Preparing the system for use

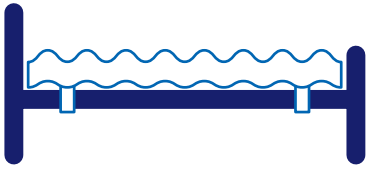
Carefully unpack the system and locate all items shown in the picture below.

Inspect each item for any damage that may have occurred during shipping. Any damage or missing components should be reported to your local Aeda Healthcare authorized dealer as soon as possible.



1. Remove your existing mattress and place the mattress replacement on top of your bed – printed top cover facing upwards and air hoses towards the base of the bed.

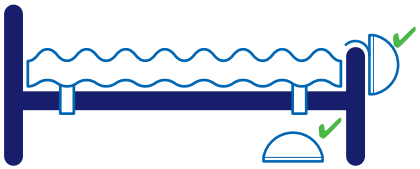
Attach to the bed by securing the adjustable straps, located on the underside of the mattress base under each bed end. Ensure the strap buckles are securely fastened together and the straps are pulled tight.



⚠ **Do not secure mattress straps to bed side rails – straps will tear.**

⚠ **Ensure that straps do not interfere with the operation of the bed, and that the mattress is properly secured. Failure to do so could result in patient injury or equipment damage.**

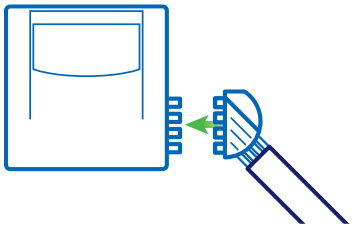
2. Hang the control over the foot end of your bed, using the inbuilt hanging hooks. The control unit can also be placed on a flat surface (ie on the floor or underneath the bed).



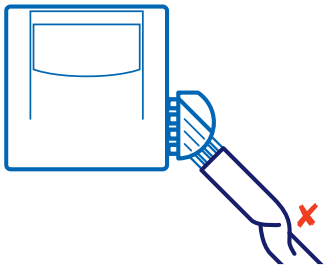
⚠ **Ensure the control unit is firmly secured to the bed. Failure to do so could result in equipment damage.**

Before attaching the control unit to the floor or the foot board of the bed, ensure they are sufficiently robust and free of damage.

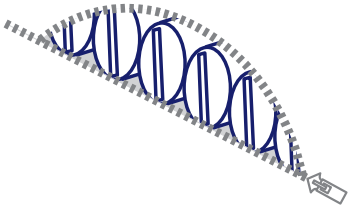
3. Attach all four air hoses to the control unit with the handle – the four connectors simply press into place. Ensure the handle is firmly pressed on before switching on the power.



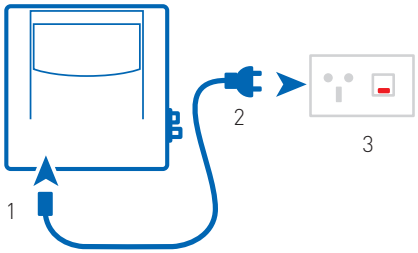
⚠ **Straighten any twists in the air hoses to ensure uninterrupted air flow between the control unit and mattress. Also ensure the hoses are not trapped between the mattress and bed. Failure to do so could result in an under inflated mattress leading to patient injury.**



4. Before inflating, unzip the top cover to ensure the cells are straight and the cell straps are not twisted. Rezip the top cover.



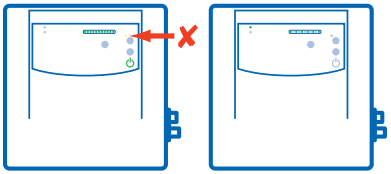
5. Insert the power cord into the base of the control unit, then plug into an appropriate electrical outlet and switch on mains power.



6. On the control unit, press the Power button to switch on.

   The Pressure Setting indicators (Soft to Hard) flash to indicate the system is operational and inflating. Allow up to 50 minutes for complete inflation.

   When initial inflation is complete, the first two Pressure Setting indicators will illuminate, together with the Alternating Mode indicator, to indicate the system is ready for use (the system automatically defaults to Alternating Mode on startup).



7. Once the mattress is fully inflated, bedding can be replaced. Secure sheets loosely enough to ensure they do not interfere with cell alternation.

Dismantling the system

1. Switch off the control unit.
2. Press the Alarm Mute button to silence the audible alarm.
3. Switch off mains power and unplug the power cord from the mains outlet.
4. Remove the handle from the control unit. This will deflate all cells, including the three static head cells and side bolsters.
5. Once air has been released from the system, detach the mattress from your bed by unfastening the straps, then fold and roll the mattress for storage.
6. Return all items to the custom carry bag for safe keeping.

⚠ **Do not store the system in direct sunlight.**

Operation

Control unit layout

Power button

Turns system power on and off.

Alarm indicator

This red light flashes, and an audible alarm signal sounds, to alert when control unit or mattress replacement pressure fails.

The alarm has five different signals, identified by five different flash sequences, to indicate the cause of the failure.

See page 11 **Alarm function** for details of each alarm signal and an illustration of each flash sequence.

The audible alarm also sounds when the power to the control unit is switched off – press the Mute button to silence.

Alarm mute

Silences the audible alarm (on / off).

Mode button
Alternating / Static indicators

MODE

Switches between Static and Alternating operational modes.

The red Static Mode indicator illuminates when mattress is operating in static mode (all cells fully inflated with no dynamic alternation).

The red Alternating Mode indicator illuminates when the mattress is operating in dynamic alternating mode (alternative cells cyclically inflating and deflating).

Pressure button
Pressure Setting indicators

PRESSURE

Cycles mattress pressure from Soft through to Hard (low to high), in line with patient weight and comfort requirements. The Pressure Setting indicators illuminate to indicate which of the four settings is operational.

The system automatically reverts to the maximum setting (Hard) when Static Mode is selected.

Note:

No special skills, training or knowledge are required to operate the control unit.

Establishing pressure (lying)

1. Prepare the system for use as described in **System Set Up**. When initial inflation is complete, the first two Pressure Setting indicators illuminate, together with the Alternating Mode indicator, to indicate the system is ready for use (with Alternating Mode as default setting).
2. Cover loosely with a sheet before placing patient on the mattress.

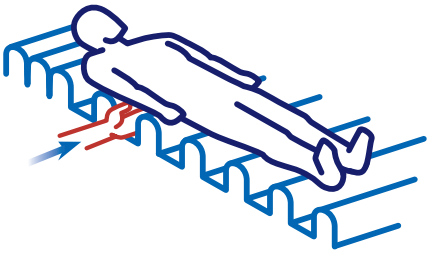
⚠ **The patient may lie on the Aeria 8 Pro system during inflation however the mattress will fill faster if allowed to inflate first.**

3. When the patient is lying comfortably, press the Pressure button to cycle through the four available pressure settings (Soft through Hard), to test the desired setting for effective patient comfort and support. Before lowering the pressure, ensure the Aeria 8 Pro system is working effectively by performing a **'bottoming out' test** (a test to ensure the patient is adequately suspended away from the base).

'Bottoming out' test

a. With the patient lying in the supine position (lying on back, face upwards), unzip one side of the top cover, just past the sacral region (lower spine).

b. Slide your hand underneath the patient and feel for a deflated cell under the patient's lower spine. Remember that the inner static cell will remain inflated however your hand should easily slide between patient and base.



c. If the patient is adequately suspended, the pressure setting can be lowered. After approximately 12 minutes, reassess system function and patient comfort.

If pressure fails for whatever reason the red Alarm indicator will display and audible alert will sound – immediately increase pressure to the maximum pressure setting (Hard).

⚠ **After lowering the pressure setting, always check the Aeria 8 Pro system is working effectively. Failure to do so could cause patient injury.**

⚠ **Wait at least 12 minutes between any pressure adjustment or patient assessment as the Aeria 8 Pro system may take a full cycle to adjust to the new pressure setting.**

Establishing pressure (inclined)

When moving the patient to a sitting or more upright position, pressure should be increased to provide added support and to avoid 'bottoming out'. It is recommended the maximum pressure setting (Hard) be selected while the patient is semi-recumbent (sitting or inclined).

⚠ **Always return to the original pressure setting when patient returns to a lying position.**

ⓘ **A "control setting guide" is included on the side of the control unit, to provide a quick reference for recommended weight setting. These settings are a guide only. Always verify pressure settings with a 'bottoming out' test.**

⚠ **If parts need to be repaired, circuit diagrams and a list of component parts can be provided by the manufacturer.**

Operation

Mode

In Static Mode, all mattress cells remain fully inflated to maximum pressure setting, thereby terminating the alternation cycle and any therapeutic patient benefits. This mode should be used to create a firm base for stable patient handling and transport or other special circumstances.

In Alternating Mode, alternate mattress cells inflate and deflate following a fixed cycle time of 10 to 12 minutes, with the exception of three static head cells. Alternating mode is used for normal therapeutic function.

The system will automatically start in Static Mode, and revert to Alternating Mode once operational pressure is reached.

The system will operate in Static Mode for a maximum of 20 minutes, after which it will automatically revert to Alternating Mode for patient safety.

The Aeria 8 Pro system provides no therapeutic benefits when operating in Static Mode.

Transport function

1. Before patient transport, press the Static Mode button and wait at least 12 minutes for cells to inflate to maximum pressure.
2. Once mattress pressure has reached maximum inflation, press the Power button to switch off the control unit. Switch off mains supply and unplug the power cord.
3. Remove the rapid release handle from the control unit and allow air to escape for a few seconds before inserting the transport cap into the handle air outlets to seal the system. This release softens the mattress surface for pressure relief and comfort. Ensure the cap is firmly secured across all four air hose outlets.

The length of time the system remains inflated during transport will depend on the weight and height of the patient, and will vary on a case by case basis.

During transport, regularly perform a 'bottoming out' test (see page 9) to ensure the patient is adequately suspended on the mattress. Failure to do so could cause patient injury.

Once the handle has been removed, the control unit must be switched off before the handle is replaced and the system restarted.

To attach the handle to the control unit:

1. Depress the lever on top of the handle.
2. Aligning the ports on the handle with those on the control unit, firmly push the handle into position.
3.. Release the lever, ensuring this has engaged onto the catch connected to the control unit.

To detach the handle from the control unit:

1. Depress the lever on top of the handle.
2. Pull the handle away from the control unit.

CPR / Re-inflation

Rapid deflation of the mattress replacement may be necessary for emergency treatment (or to decommission the unit).

If emergency treatment is required, firmly pull the rapid release CPR tag. Removing the tag will rapidly deflate the entire system, including side bolsters in less than 10 seconds.

Once the CPR tag has been removed, the control unit must be switched off before the CPR tag is replaced and the system restarted.

To reinflate the system after the rapid release CPR tag has been removed, turn off power to the control unit and replace the CPR tag.

Once firmly connected, switch on power and wait for the system to gain optimal pressure.

Alarm function

The red Alarm indicator flashes, and an audible alert sounds, to indicate control unit or mattress pressure has failed. The indicator will remain illuminated until appropriate pressure is restored. The audible alarm can be silenced by pressing the Alarm Mute button.

The system has five different alarm signals, identified by five different Pressure Setting illumination sequences. The signals and corresponding Pressure Setting indicators displays are illustrated below.

Pressure setting display	Alarm signal
	**Initial failure** Mattress has failed to reached minimum operational pressure within 50 minutes of switching on the power
	**Pressure too low** Pressure has fallen 10 mmHg or more below the minimum operational requirements for the selected setting
	**Pressure too high** Pressure has exceeded the maximum setting for therapeutic benefit
	**Alternating mode failure** The mattress has failed to commence alternation
	AC power failure No pressure output due to mains power failure

To guard against the control unit being accidentally shut off, the audible alarm will sound whenever power to the unit is switched off. Press the Alarm Mute button to silence.

If the Alarm activates and the system fails to inflate or loses pressure, refer to page 13 **Troubleshooting** for further support.

⚠ **If the problem persists, contact your local Aeda Healthcare authorized dealer for further advice about repair. Do not try to open the control unit. Opening the unit could cause personal injury or equipment damage.**

ⓘ **These alarm signals also appear on the side of the control unit for quick reference.**

Care & cleaning

This chapter describes general care and cleaning for the Aeria 8 Pro system, including basic maintenance procedures.

⚠ To prevent cross contamination, the mattress should be examined and disinfected between patient use.

⚠ Clean the mattress in accordance with local infection control policy and government regulations for blood borne pathogens. Failure to do so could cause patient or personal injury.

⚠ The mattress is not protected against excessive amounts of water. Disconnect power supply before cleaning. Failure to do so could result in equipment damage or electric shock.

⚠ Do not use high temperature autoclave steam cleaning devices or phenolic-based products for cleaning. This could result in damage to the equipment and loss of waterproof qualities of the top cover.

Switch off and disconnect the control unit from mains power supply before cleaning. Do not immerse the control unit in water.

Cleaning & infection control

⚠ It is recommended that the system be cleaned regularly if in constant use.

Base cleaning

Should the base require cleaning deflate the mattress, disconnect air cells from the base by unfastening the press studs at each end. Remove double tubing from main base air tubes and slide the cell out from the cell straps. Swab the cell with a solution of sodium hypoclorite or similar (up to 10,000 ppm available chlorine). Dry thoroughly before refastening. Do not machine wash the overlay base.

Top cover cleaning

Unzip the top cover from the base before washing. For basic care and cleaning, wipe down with warm water containing detergent. The top cover can also be machine washed at 160°F 70°C.

For infection control, swab with a solution of sodium hypoclorite or similar (up to 10,000 ppm available chlorine). Dry thoroughly before use.

Refer to the top cover wash tag for cleaning instructions.

⚠ Do not use system without top cover.

Control unit external cleaning

Disconnect control unit from mains power before cleaning. Gently wipe down the external case, including CPR handle, with a soft cloth.

Soak the cloth in warm water containing detergent, and twist dry any excess water before use. Repeat the process with a dry cloth to remove excess moisture.

Ensure the control unit is disconnected from mains electricity before cleaning.

Disinfection

The mattress, top cover and control unit may be decontaminated by using ETO (Ethylene Oxide).

Periodic maintenance

Care should be taken to avoid the risk of electric shock when changing the air filter and fuse.

Air filter replacement

1. Switch off power supply to the control unit and disconnect the air hoses and power cord.
2. Place the control unit face down on a soft, flat surface with back panel uppermost (use a soft cloth to prevent scratches).
3. Use a small screwdriver to carefully remove the air filter cover. Clean the dust from the filter or discard and replace with a new filter.
4. Refit the air filter cover to the control unit before use.

⚠ It is recommended that the air filter be replaced each year. Replacement air filters are available from your local Aeda Healthcare authorized dealer.

Fuse replacement

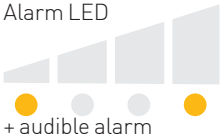
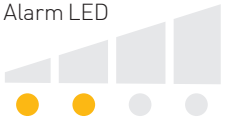
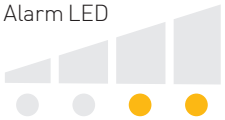
1. Switch off power supply to the control unit and remove the power cord from the socket in the base of the unit.
2. Insert a small screwdriver into the groove and turn anti-clockwise (quarter turn).
3. Remove the 'blown' fuse from the fuse holder clip and discard.
4. Insert a new fuse into the plug. Push against the force of the spring and turn clockwise with the screwdriver (quarter turn).

When changing the replaceable fuse, use same rating fuse only (T1AL/250V).

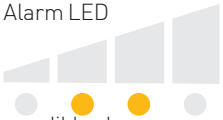
Preventive inspections and calibration are not required.

This chapter provides basic troubleshooting support for the Aeria 8 Pro system.

Troubleshooting

Problem	Cause	Solution
Control unit does not operate; no display lights are illuminated.	The control unit may not be attached to a power source or a fuse may need replacing.	1. Check the control unit is connected to mains power outlet with the correct voltage. 2. Check the control unit is switched on. Switch off and unplug the unit before restarting. 3. Check the mains plug fuse first (3 AMP) then check both control unit fuses (1 AMP) – fuses can be released using a screwdriver. ⚠ **Do not try to open the control unit. Opening the unit could cause personal injury or equipment damage.**
Alarm LED  + audible alarm	Initial failure	1. Reset the alarm – turn off Power and press the Alarm Mute button. 2. Check all hoses along the inside of the mattress – each should be firmly connected. Check each air cell is securely attached to the connecting air pipe. 3. Check all cells, pipes and hoses for any air leakage. 4. Switch on Power (system automatically starts in Static Mode and will switch to Alternating Mode when operational pressure is reached).
Alarm LED  + audible alarm	Pressure too low	1. Reset the alarm – turn off Power and press the Alarm Mute button. 2. Check the CPR handle is intact, ensuring all four sealing connectors are fully fitted to the control unit. 3. Check all hoses along the inside of the mattress – each should be firmly connected. Check each air cell is securely attached to the connecting air pipe. 4. Check all cells, pipes and hoses for any air leakage. 5. Check that the air filter cover is secured correctly and the air filter is clean. 6. Switch on Power (system automatically starts in Static Mode and will switch to Alternating Mode when operational pressure is reached).
Alarm LED  + audible alarm	Pressure too high	1. Reset the alarm – turn off Power and press the Alarm Mute button. 2. Remove the rapid release CPR handle to reduce system pressure – reconnect when pressure has decreased. 3. Check for twists in the air hoses between mattress and control unit. 4. Switch on Power (system automatically starts in Static Mode and will switch to Alternating Mode when operational pressure is reached).

Troubleshooting

Problem	Cause	Solution
Alarm LED  + audible alarm	Alternating Mode failure (no alternation)	1. Reset the alarm – turn off Power and press the Alarm Mute button. 2. Remove the rapid release CPR handle to reduce system pressure – reconnect when pressure has decreased. 3. Switch on Power (system automatically starts in Static Mode and will switch to Alternating Mode when operational pressure is reached).
Alarm LED  + audible alarm	AC power failure	1. Press the Alarm Mute button to silence audible alert. 2. Check the power cord is firmly plugged into the mains power outlet and the control unit plug; and check that mains power is switched on. **If power is restored within 20 minutes of failure, the system will run initial start up phase before returning to the last setting.**
Patient is sinking or 'bottoming out' while lying flat on the mattress	The pressure may be set too low for the patient's weight	1. Increase pressure to maximum setting (Hard) 2. Check effective system performance by conducting a 'bottoming out' test as described on page 9.

If the problem cannot be resolved, please contact your local Aeda Healthcare authorized dealer for further support.

This chapter provides the various physical and technical specifications of the Aeria 8 Pro system, including details of replacement parts.

Specifications

Technical specifications

Classification

Equipment not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

Non-continuous operation	**Type B Equipment**
	Class II Equipment
	Ordinary Equipment
Maximum recommended patient weight	**400 lb** 180 kg
Risk category	**High**

Mattress replacement

Dimensions (inflated):	
US, EU wide	**80" x 35" x 8"** 2000 x 880 x 230 mm
EU narrow	**80" x 32" x 8"** 2000 x 830 x 230 mm
Weight	**20 lb** 9.2 kg
Number of cells	**21**
Cell height	**8"** 215 mm
Alternation type	**1 in 3**
Cell material	**TPU coated nylon**
Base material	**TPU coated nylon**
Top cover material	**PU coated multi-stretch polyester**
Cover attachment	**Quick release zipper**
Skirt seams	**RF welded**

Control unit

Type	**Digital**
Dimensions	**11.5" x 5.5" x 10.5"** 290 x 140 x 270 mm
Weight	**7.7 lb** 3.5 kg
Rated voltage:	
US	**110-120VAC 50/60Hz 0.2A**
EU	**220 - 240VAC 50/60Hz 0.2A**
Rated input power	**20 va**
Protection class	**Class 2**
Power cord length	**16 ft** 5 m
Air output (Lpm)	**8**
Cycle time (mins)	**10 -12**

System part numbers

Aeria 8 Pro Mattress Replacement System:	
US:	**MT-A3-020**
EU wide:	**MT-A3-120**
EU narrow:	**MT-A3-220**
Aeria 8 Pro Control Unit:	
US:	**MT-S4-025**
EU:	**MT-S4-020**
Aeria 8 Pro Mattress:	
US:	**MT-S4-120**
EU wide:	**MT-S4-120**
EU narrow:	**MT-S4-155**

Electromagnetic emissions for all Aeria EQUIPMENT and SYSTEMS

Guidance and manufacturer's declaration – electromagnetic emission The Aeria 8 Pro is intended for use in the electromagnetic environment specified below. The customer or the user of the Aeria 8 Pro should ensure that it is used in such an environment.		
Emission test	**Compliance**	**Electromagnetic environment – guidance**
RF emissions CISPR 11	Group 1	The Aeria 8 Pro uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emission CISPR 11	Class B	The Aeria 8 Pro is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Declaration – electromagnetic immunity

Guidance and manufacturer's declaration – electromagnetic immunity The Aeria 8 Pro is intended for use in the electromagnetic environment specified below. The customer or the user of the Aeria 8 Pro should ensure that it is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment – guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floor are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines	±2kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s)	±1 kV differential mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines EC 61000-4-11	<5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in UT) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	<5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Aeria 8 Pro requires continued operation during power mains interruptions, it is recommended that the Aeria 8 Pro be powered from an uninterruptible power supply or a battery.
Power frequency (50Hz) magnetic field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE: U_T is the a.c. mains voltage prior to application of the test level.			

Specifications

This chapter provides the various physical and technical specifications of the Aeria 8 Pro system, including details of replacement parts.

Declaration – electromagnetic immunity – for Aeria EQUIPMENT and SYSTEMS that are not LIFE-SUPPORTING

Guidance and manufacturer's declaration – electromagnetic immunity

The Aeria 8 Pro is intended for use in the electromagnetic environment specified below. The customer or the user of the Aeria 8 Pro should ensure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3 V_{rms} 150 kHz to 80 MHz	3 V_{rms}	Portable and mobile RF communications equipment should be used no closer to any part of the CT515, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter Recommended separation distance $d = 1.167\sqrt{P}$ $d = 1.167\sqrt{P}$ 80 MHz to 800 MHz $d = 2.333\sqrt{P}$ 800 MHz to 2.5 GHz 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). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	

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. 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 accuracy. 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 Aeria 8 Pro is used exceeds the applicable RF compliance level above, the Aeria 8 Pro should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the Aeria 8 Pro.

b. 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 RF communications equipment and the EQUIPMENT or SYSTEM – for Aeria EQUIPMENT and SYSTEMS that are not LIFE-SUPPORTING

Recommended separation distances between portable and mobile RF communications equipment and the Aeria 8 Pro Alternating Control Unit

The Aeria 8 Pro is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Aeria 8 Pro can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Aeria 8 Pro as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)		
	150 KHz to 80 MHz $d = 1.167\sqrt{P}$	80 MHz to 800 MHz $d = 1.167\sqrt{P}$	800 MHz to 2.5 GHz $d = 2.333\sqrt{P}$
0.01	0.117	0.117	0.233
0.1	0.369	0.369	0.738
1	1.167	1.167	2.333
10	3.689	3.689	7.379
100	11.667	11.667	23.333

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is 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.

Warranty

Aeda Healthcare Ltd warrants each of its products to perform in accordance with established specifications for specified time periods, starting from the date the product is shipped from Aeda Healthcare Ltd.

During this warranty period, in the unlikely event of a defect in materials or workmanship, a local Aeda Healthcare authorized dealer will repair, replace or supply replacement parts under standard warranty terms and conditions in effect at time of purchase, unless the problem and/or failure is due to customer damage, negligence and/or misuse; or unauthorized repairs.

In the event of a defect, repair work should be completed by returning the faulty system to a local Aeda Healthcare authorized dealer.

Items not covered under warranty include, but are not limited to; stains, punctures, cuts, damage to power cords, rips or tears, dents, electrical overload, surge, spikes and lost or missing parts.

Warranty repairs do not extend the length of the warranty period. Warranty terms and conditions are subject to change at any time without notice.

Neither Aeda Healthcare, its distributors, officers, directors, employees or agents shall be liable for consequential or other damages, including but no limited to personal injury, loss, or any other expense, directly or indirectly arising from the use of its products. The sole remedy for breach of the limited warranty granted herein shall be repair or replacement of the Aeda Healthcare products.

Visit **www.aeda.com** to view a copy of the manufacturer's Warranty Statement.

Notes

AEDA™
HEALTHCARE

Aeda Healthcare is all about helping people enjoy a freedom of life, throughout every stage of life. About improving mobility, independence, dignity and offering choice. About making products that are practical, reliable, affordable – and stylish.

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