



Yes, you can.

microAIR® MA900
Lateral Rotation Low Air Loss Mattress System

User Manual



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Yes, you can.

Making Life's Experiences Possible®

This manual **MUST** be given to the user of the product.
BEFORE using this product, this manual **MUST** be read and saved for
future reference.

LIMITATIONS AND EXCLUSIONS: THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE ENCLOSED INSTRUCTIONS. IN ADDITION, THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED; PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE; OR PRODUCTS MODIFIED WITHOUT INVACARE'S EXPRESS WRITTEN CONSENT INCLUDING, BUT NOT LIMITED TO: MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS; PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF INVACARE; PRODUCTS DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S CONTROL; PRODUCTS REPAIRED BY ANYONE OTHER THAN AN INVACARE DEALER, SUCH EVALUATION SHALL BE SOLELY DETERMINED BY INVACARE.

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THE APPLICATION OF ANY IMPLIED WARRANTY WHATSOEVER SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.

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14. Expected Service Life

- For maintain basic safety and essential performance in regards to EMC, the microAIR® MA900 has an expected service life of two years. To maintain the condition of the alternating mattress system, service the system regularly according to the schedule recommended by INVACARE.
- Medical electrical equipment needs special precautions regarding EMC. Shall the device be used within one mile distance from AM, FM, or TV broadcast antennas, it needs to be installed according to the EMC information provided.
- Do NOT use unapproved accessories or attempt to modify, disassemble or otherwise misuse the microAIR® MA900 Lateral Rotation Low Air Loss Mattress System or any of its components.

15. Limited Warranty

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser who purchases this product when new and unused from Invacare or a dealer. This warranty is not extended to any other person or entity and is not transferable or assignable to any subsequent purchaser or owner. Coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants the mattress and cover when purchased new and unused to be free from defects in materials and workmanship for a period of one year from the date of purchase from Invacare or a dealer, with a copy of the seller's invoice required for coverage under this warranty. Invacare warrants the electronics of the control unit when purchased new and unused to be free from defects in materials and workmanship for a period of one year from the date of purchase from Invacare or a dealer, with a copy of the seller's invoice required for coverage under this warranty. The internal pump, blower and compressor are warranted for a year from the date of purchase from Invacare or a dealer, with a copy of the seller's invoice required for coverage under this warranty. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at Invacare option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Invacare product. In the event you do not receive satisfactory warranty service, please write directly to Invacare at the address on the back cover. Provide dealer's name, address, model number, and the date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number.

Invacare will issue a return authorization. The defective unit or parts must be returned for warranty inspection using the serial number, when applicable, as identification within thirty days of return authorization date. DO NOT return products to our factory without our prior consent. C.O.D. shipments will be refused; please prepay shipping charges.

Manufacturer's declaration-electromagnetic immunity Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment							
The <u>microAIR® MA900</u> is intended for use in the electromagnetic environment (for home and professional healthcare) specified below. The customer or the user of the <u>microAIR® MA900</u> should assure that it is used in such an environment.							
Test frequency (MHz)	Band ^{a)} (MHz)	Service ^{a)}	Modulation ^{b)}	Maximum power (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)	Compliance LEVEL (V/m) (for home and professional healthcare)
385	380 - 390	TETRA 400	Pulse modulation b) 18 Hz	1,8	0,3	27	27
450	430 - 470	GMRS 460, FRS 460	FM c) ±5 kHz deviation 1 kHz sine	2	0,3	28	28
710	704 - 787	LTE Band 13, 17	Pulse modulation b) 217 Hz	0,2	0,3	9	9
745							
780							
810	800 - 960	GSM 800/900, TETRA 800, IDEN 820, CDMA 850, LTE Band 5	Pulse modulation b) 18 Hz	2	0,3	28	28
870							
930							
1 720	1 700 - 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation b) 217 Hz	2	0,3	28	28
1 845							
1 970							
2 450	2 400 - 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation b) 217 Hz	2	0,3	28	28
5 240	5 100 - 5 800	WLAN 802.11 a/n	Pulse modulation b) 217 Hz	0,2	0,3	9	9
5 500							
5 785							
NOTE If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.							
a) For some services, only the uplink frequencies are included. b) The carrier shall be modulated using a 50 % duty cycle square wave signal. c) As an alternative to FM modulation, 50 % pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.							

⚠ CAUTION: If abnormal behavior is observed due to EM disturbances, please relocate the device accordingly.

⚠ CAUTION: Please do not use any other cables or accessories not approved by the manufacturer in this manual to avoid negative influence on electromagnetic compatibility.

Contents

1.	Safety	4
2.	The Purpose of this Manual.....	4
3.	Intended Use.....	5
4.	Indications for Use	5
5.	Intended Users.....	5
6.	Contraindications for use.....	5
7.	Product Description	5
	Master Control Unit Features	5
	Mattress Features	6
8.	Technical Data.....	7
	Master Control Unit.....	7
	Mattress Replacement	7
	Symbols information essential for proper use	8
9.	Instructions for Proper Use.....	8
	Mattress Turning Illustration	11
	Comfort Level Setting.....	11
	CPR Deflation	12
10.	Cleaning	12
	The Mattress.....	12
	The Master Control Unit.....	13
	Replace Air Filter.....	13
	Waste Disposal	13
11.	Storage and Handling.....	14
	Master Control Unit.....	14
	Mattress:	14
12.	Maintenance & Troubleshooting	15
13.	EMC Related Notifications	16
14.	Expected Service Life	20
15.	Limited Warranty	20

1. Safety

The safety section contains important information for the safe operation and use of this product. Read this information and any other safety information included with the product.


⚠ Warning

- ❖ Connect the Master Control unit to a proper power source.
- ❖ Don't use the system in the presence of any flammable gases (such as Anesthetic Agents).
- ❖ Keep the pump and mattress away from open flame.
- ❖ Keep sharp objects away from the mattress.
- ❖ The device is not AP/APG protected.
- ❖ Do not place a heating device on or close to the mattress system.
- ❖ Use the product only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
- ❖ If pain, irritation, numbness, swelling, or redness occurs discontinue use and contact a healthcare professional.
- ❖ This device can be used in home healthcare and professional healthcare environment.
- ❖ This device should not be used adjacent to or stacked with other equipment.
- ❖ Medical electrical equipment needs special precautions regarding EMC and needs to be installed according to the EMC information provided.
- ❖ The product should never be left unattended when plugged in.
- ❖ Close supervision is necessary when the product is used by, on, near children or physically challenged individuals.
- ❖ Never block the air opening of this product or place it on a soft surface, such as a bed or couch, where the air openings may be blocked. Keep the air openings free of lint, hair, and other similar debris.
- ❖ Never drop or insert objects into any openings.
- ❖ DISCONNECT POWER SUPPLY BEFORE OPENING.
- ❖ Power cable & pump shall be placed at the foot-side of the patient to prevent any risk of strangulation due to cable.
- ❖ Please ensure the microAIR® MA900 Lateral Rotation Low Air Loss Mattress System is used with stable power or in connection with UPS.
- ❖ To reduce the risk of electrocution:
 - Always unplug product immediately after use.
 - Do not use while bathing.
 - Do not place or store product where it can fall or be pulled into a tub or sink.
 - Do not place in or drop into water or other liquids.
 - Do not reach for product that has fallen into water. Unplug immediately.

Manufacturer's declaration-electromagnetic immunity

The microAIR® MA900 is intended for use in the electromagnetic environment (for home and professional healthcare) specified below.

The customer or the user of the microAIR® MA900 should assure that it is used in such and environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance (for home and professional healthcare environment)
Conducted RF IEC 61000-4-6	3 Vrms: 0,15 MHz – 80 MHz 6 Vrms: in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	3 Vrms: 0,15 MHz – 80 MHz 6 Vrms: in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	Portable and mobile RF communications equipment should be used no closer to any part of the microAIR® MA900 including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: d = 1,2 √P d = 1,2 √P 80MHz to 800 MHz d = 2,3 √P 800MHz to 2,7 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 metres (m). Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated RF IEC 61000-4-3	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	
NOTE1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

Manufacturer's declaration-electromagnetic immunity

The microAIR® MA900 is intended for use in the electromagnetic environment (for home and professional healthcare) specified below.

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Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance (for home and professional healthcare environment)
Electrostatic discharge(ESD) IEC 61000-4-2	Contact:±8 kV Air±2 kV,±4 kV,±8 kV,±15 kV	Contact:±8 kV Air±2 kV,±4 kV,±8 kV,±15 kV	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%
Electrical fast transient/burst IEC 61000-4-4	± 2kV for power supply lines ± 1kV for input/output lines	± 2kV for power supply lines Not applicable	Mains power quality should be that of a typical home healthcare environment.
Surge IEC 61000-4-5	± 0.5kV, ±1kV line(s) to line(s) ± 0.5kV, ±1kV,± 2kV line(s) to earth	± 0.5kV, ±1kV line(s) to line(s) Not applicable	Mains power quality should be that of a typical home healthcare environment.
Voltage Dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	Voltage dips: 0 % Ut; 0,5 cycle 0 % Ut; 1 cycle 70 % Ut; 25/30 cycles Voltage interruptions: 0 % Ut; 250/300 cycle	Voltage dips: 0 % Ut; 0,5 cycle 0 % Ut; 1 cycle 70 % Ut; 30 cycles Voltage interruptions: 0 % Ut; 300 cycle	Mains power quality should be that of a typical home healthcare environment. If the user of the <u>microAIR® MA900</u> requires continued operation during power mains interruptions, it is recommended that the <u>microAIR® MA900</u> be powered from an uninterruptible power supply.
Power frequency(50, 60 Hz) magnetic field IEC 61000-4-8	30 A/m 50 Hz or 60 Hz	30 A/m 60 Hz	The <u>microAIR® MA900</u> power frequency magnetic fields should be at levels characteristic of a typical location in a typical home healthcare environment.

NOTE UT is the a.c. mains voltage prior to application of the test level.

* During DIP interference, the pump will outage these normal. The cells connected with pump still have air inside which won't affect the use and function of the system.

* During DIP, pump will show abnormal but won't affect essential performance and no need to worry the basic safety.

⚠ Caution

- ❖ The mattress system should always be used in accordance with your Institution's pressure care guidelines.
- ❖ Re-positioning of the patient is always recommended when using an alternating pressure air mattress (APAM).
- ❖ The Control unit can only be repaired by an authorized technician.
- ❖ Do not drop the control unit.
- ❖ Do not store the system in direct sunlight or extreme cold conditions.

2. The Purpose of this Manual

This operation manual is mainly focused on the set up, cleaning, and routine maintenance of the microAIR® MA900 Lateral Rotation Low Air Loss Mattress System. We recommend you keeping this manual handy to answer most of the question related to the system.

3. Intended Use

The microAIR® MA900 system is intended for patients who need continual lateral rotation therapy to help mobilize secretions and other bodily fluids during pulmonary treatment related to immobility. The system is also for patients who are at risk of developing pressure ulcers according to your sound clinical judgment. The device can also be used for patients who have an existing stage 1, 2, and 3 pressure ulcers, in conjunction with your policy on pressure area management.

4. Indications for Use

Indicated for patients who are at risk of developing pressure ulcers according to your sound clinical judgment. The system is also indicated for patients who need continual lateral rotation therapy to help mobilize secretions and other bodily fluids during pulmonary treatment related to immobility.

5. Intended Users

Healthcare professionals or caregivers who are at least fifteen years in age, with the ability to read and understand English and Westernized Arabic Numerals. This device should not be operated by patient.

6. Contraindications for use

Alternating pressure therapy should not be used for patients with unstable fractures, gross oedema, burns or an intolerance to motion.

7. Product Description

The microAIR® MA900 system operated blower unit is a very unique innovation of a specialized mattress replacement. The system is primarily designed for at risk patients or step-down intensive care units. It features continuous lateral rotation therapy in two different angles (20 degrees and 40 degrees), which gently turns the patient from side to side to significantly lower the risk of infection, pneumonia and other pulmonary complications – illnesses that significantly add to patient care costs and length of stay.

Master Control Unit Features

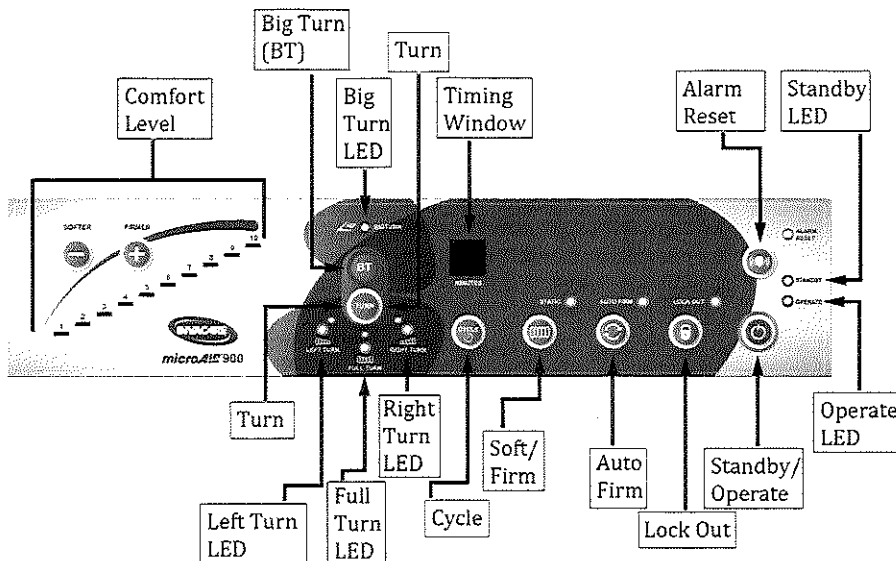
- The Master Control Unit is a user friendly design and most of the functions are self-explanatory.
- Rotation angle can be independently selected for 20 degrees or 40 degrees.
- Rotation time can be adjusted in 5 min increments to 95 min. The caregiver can even select the Static Function that will seize the Rotation Function and provide only the True Low Air Loss Therapy.
- Auto Firm Function provides a uniformly firmness for nursing procedures.
- Power failures produce an audio alarm for added safety.
- 10 digital scales of Soft/Firm Comfort Control.
- Double insulation to provide max silent operation.
- Foot board mounting rack provides the convenient placement.

Mattress Features

- Individual air cushion design for maximum pressure distribution.
- Each air cushion has orifices to provide true Low Air Loss therapy.
- Integrated glide sheet to base cover for easy transferring and reduced patient shearing.
- Lateral Rotation Low Air Loss Mattress System eliminates the compromising effects of an existing mattress.
- Permanent inflated bed bolsters for added safety.

⚠ Caution

Alternating pressure should not be applied to pain or pain-sensitive patients. In these cases, we recommend the application of static mode or other suitable foam overlays or other materials which can be found in the Invacare product range.



13. EMC Related Notifications

Manufacturer's declaration-electromagnetic emissions		
The <u>microAIR® MA900</u> is intended for use in the electromagnetic environment (for home and professional healthcare) specified below. The customer or the user of the <u>microAIR® MA900</u> should assure that it is used in such an environment.		
Emission test	Compliance	Electromagnetic environment-guidance (for home and professional healthcare environment)
RF emissions CISPR 11	Group 1	The <u>microAIR® MA900</u> 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 emissions CISPR 11	Class B	The <u>microAIR® MA900</u> 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	Not applicable	
Voltage fluctuations /flicker emissions IEC 61000-3-3	Not applicable	

Recommended separation distance between portable and mobile RF communications equipment and the microAIR® MA900

The microAIR® MA900 is intended for use in an electromagnetic environment (for home and professional healthcare) in which radiated RF disturbances are controlled. The customer or the user of the microAIR® MA900 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the microAIR® MA900 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 $d = 1,2\sqrt{P}$	80 MHz to 800 MHz $d = 1,2\sqrt{P}$	800 MHz to 2,7 GHz $d = 2,3\sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,38	0,38	0,73
1	1,2	1,2	2,3
10	3,8	3,8	7,3
100	12	12	23

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.

NOTE1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

11. Storage and Handling

Master Control Unit:

- Check the power cord and plug for abrasions or excessive wear.
- Plug in the unit and verify air flows from the units hose connection ports.
- Place in plastic bag for storage.

Mattress:

- Check the air manifold for kinks or breaks. Replace if necessary.
- Twist the CPR plug at the head of the mattress and disconnect the air feed tubes. All the air will now be expelled. Starting at the head end, the mattress can now be rolled. Use the base mounted straps for containment.
- Place in plastic bag of storage.

It is recommended the following guidelines are used whenever this system is being stored or transported another location:

Temperature limitations: 5°C ~ 60°C

Relative Humidity: 15% to 90% non-condensing


12. Maintenance & Troubleshooting

No daily maintenance is required. It is intended this equipment should only be serviced by properly qualified, authorized technical personnel. In case of minor trouble please refer to the Troubleshooting table in this section. Contact the provider or Invacare for questions and repair information.

Symptom	Inspection Procedure	Possible Solution
Air is pumping out from the control unit but mattress is not inflating.	1. Is the power source correct? Improper voltage may cause the pump to function abnormally and damage the control unit.	1. Use power regulator.
	2. Is there any kinking tube?	2. Adjust the air tubes to enable smooth air flow.
	3. Is there any air leakage from the air cells?	3. Replace with new air cells
	4. Is there any air leakage from air tube between mattress and control unit?	4. Replace with new air tubes
	5. Has the air tube connector been connected properly?	5. Re-connect the air tubes.
The Control Unit is not functioning.	1. Check the power cord and the power voltage. 2. Check the fuse	1. Use a power regulator 2. Replace with a new fuse
Some of the air cells are not properly inflated.	1. Is the connection between air cells and the manifold kinked? 2. Is there any air leakage from the air cells?	1. Check for any kinking between air cells and manifold. 2. Replace new air cell if faulty.

8. Technical Data







Master Control Unit

Model Name	microAIR® MA900
Model No.	MA900P
Size (inch)	17.7" (L) x 6.8" (W) x 10.8" (H)
Weight	13.2 lbs (6 kg)
Dwell Time	3~95 minutes
Max Operating Pressure	≥ 30 mmHg
Rated Voltage	AC 110-120V
Rated Frequency	60 Hz
Fuse Rating	T5AH/250V
Max Current	5A
Classification	Class II, Type BF Not AP or AGP type 
Ingress of Water Protection	IP21
Mode of Operation	Continuous
Max Flow Rate	1275 L/min
Power Cable	15ft, non-shielding, AC powered
Environment (Temperature)	Operation: 15°C to 35°C (59°F to 95°F)
	Storage: 5°C to 60°C (41°F to 140°F)
Environment (Humidity)	15% to 90% non-condensing
Operation Atmospheric Pressure Range	800 hPa to 1060 hPa
Standard	IEC 60601-1 CAN/CSA C22.2 No. 60601-1, IEC 60601-1-2 IEC 60601-1-11

Mattress Replacement

Model Name	microAIR® MA900 Air Mattress		
Model No.	MA900M	MA900M42	MA900M48
Size (W x L x H)	36" x 80" x 10"	42" x 80" x 10"	48" x 80" x 10"
Weight (Kg)	38 lbs. (17 kg)	41 lbs. (19 kg)	46 lbs. (21 kg)
Weight Capacity	600 lbs. (272 kg)	1000 lbs. (454 kg) (Static)	1000 lbs. (454 kg) (Static)
Cells Material	Nylon w/ PU backing		
Cover Material	Nylon woven fabric w/ PU coating finish		
Base Material	Woven Polyester fabric w/ PVC backing		

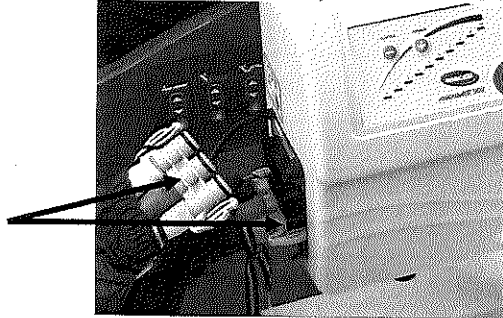
Symbols information essential for proper use

	Type BF Protection Against Electronic Shock		Class II Equipment
	Consult instructions for use		Waste Disposal
	Caution, Consult accompanying documents		SGS product certification mark

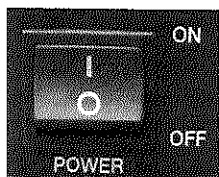
9. Instructions for Proper Use

1. Remove the existing mattress from the bed frame.
2. Replace the standard mattress with the Lateral Rotation Low Air Loss Mattress System and make sure orient mattress so that the air tube is placed at the foot of the bed.
3. Secure the straps beneath the mattress to the bed frame.
4. Hang the Master Control Unit on the foot-board of the bed frame.
5. Attach the air tubes connectors to socket on the left panel of the Master Control Unit. Be careful on the color matching between the connectors and socket. (black connectors to black socket, red connector to red socket).

Air Tube
Connectors



6. Ensure the air hoses are not kinked under the mattress. (Could be verified by simple visual check).
7. Zip the low shear top cover to the mattress. The top cover should be loosely fit to the mattress.
8. Carefully plug power cord into a properly grounded power source. Turn on the master mechanical power switch on the right side panel. The STANDBY LED should illuminate.



The Master Control Unit

⚠ CAUTION
SWITCH OFF THE ELECTRICAL SUPPLY TO THE PUMP AND DISCONNECT THE POWER CORD FROM THE MAIN SUPPLY BEFORE CLEANING AND INSPECTION

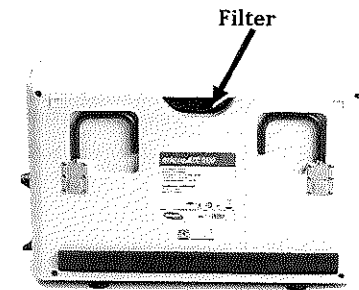
The pump unit should also be cleaned weekly using a damp soft cloth and mild detergent.

The pump casing is manufactured from ABS plastic and if the case is soiled the pump can be wiped down with a sodium hypochlorite solution to dilution of 1000ppm or any EPA- approved hospital grade disinfectant. **(Do not use phenol based cleaning solution).**

The air filter should also be cleaned and checked as often as possible at a minimum of every six months. Air Filter can be removed by pinching center of the filter and pulling outward from the back of the control unit.

Replace Air Filter

1. Remove air filter and replace with a new one.
2. Use a soft bristle to remove dust and difficult dried-on soil.



NOTE:

1. Do not use phenol based cleaning solutions.
2. Switch off the electrical supply to the pump and disconnect the power cord from the main supply before cleaning and inspection)

Waste Disposal

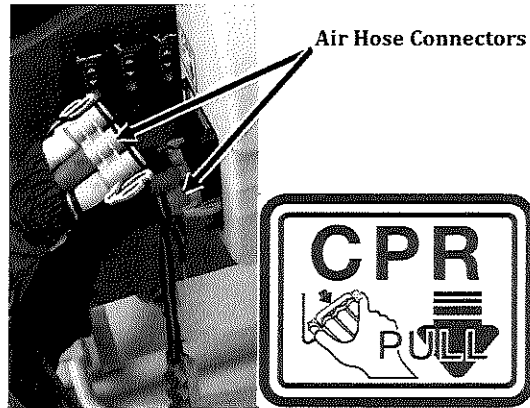


This Product has been supplied from an environmentally aware manufacturer that complies with the WEEE.

This product may contain substances that could be harmful to the environment if disposed of in places (landfills) that are not appropriate according the legislation. Please be environmentally responsible and recycle this product through your recycling facility at its end of life.

CPR Deflation

The air hose connectors can be disconnected from the controller to quick release the air when in an emergency situation where CPR is to be performed.



10 Cleaning

The Mattress

The mattress should be cleaned on the bed weekly using a damp soft cloth and mild detergent.

If top cover or base cover becomes grossly soiled, put on clean gloves, plastic gown and eye protection before removing top and base covers and disposing according to standard hospital procedures for contaminated waste and replace with clean covers.

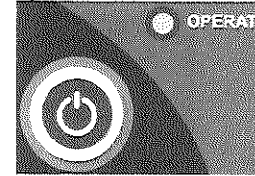
Covers can be washed and thermally disinfected in a washing machine by following below procedure: **(Never use phenol based cleaning solutions).**

Industrial	Break washes	Cold	10 minutes
	Main washes	60°C (140°F)	16 minutes
	Extraction		2 minutes
	Cold Rinses		
	Extraction		5 minutes
Domestic	Pre-wash	Cold	
	Main Wash	60°C (140°F)	10 minutes
	Extraction		2 minutes
	Cold Rinses		
	Extraction		5 minutes

Tumble Drying or Tunnel Drying is not recommended.

Mattress Cells can be wiped over with a solution of sodium hypochlorite 1000ppm or any other non-phenolic germicidal solution.

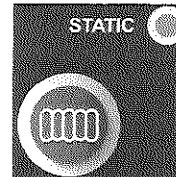
9. Push the STANDBY/OPERATE button of the front panel. The OPERATE LED should now be lighted up and the Master Control Unit should now start to spin.



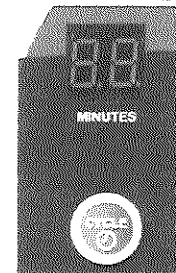
10. Push the AUTO FIRM button for fast inflation. Allow 4 - 7 minutes for full inflation. After the mattress is fully inflated, the caregiver can now transfer the patient on to the mattress. Push the AUTO FIRM again to release the fast inflation mode. (Note: The mattress can be inflated with patient lying on top).



11. Static Function: Push the static button and adjust the Confort Control by pressing the SOFT/FIRM button to achieve the maximum patient comfort. On this mode the system provides True Low Air Loss therapy. Perform a hand check by placing hand under the patient buttocks between cells and foam. The patient should have at least 4 cm of clearance between the buttocks and the bottom of the mattress.



12. Turning time can be adjusted by the CYCLE button. The time can be adjusted from 3 minutes to 95 minutes. (When Static Function is selected, the timing window would not show any digits).



13. The Master Control Unit is equipped with power failure alarm. With this function enabled, the Control unit generates a horn sound to signal to caregiver that main power failure. The alarm can be disabled by pushing the ALARM RESET Button on the front panel.

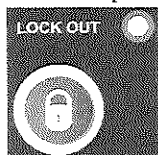


⚠ Caution: Immediate response by the operator is required with power failure alarm.

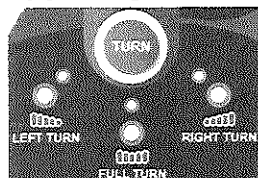
14. **LOCK OUT:** The Master Control Unit is also equipped with a manual lock out function. All function keys will be automatically disabled if the LOCK OUT button has not been activated. When lock-out has been engaged, the LOCK OUT LED will illuminate.

UNLOCKING

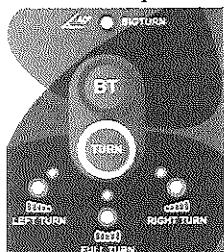
Unlocking the control panel is easy. Simply press the LOCK OUT button on the control panel for 3-5 seconds or recycle the power by turning off and on the main power switch.



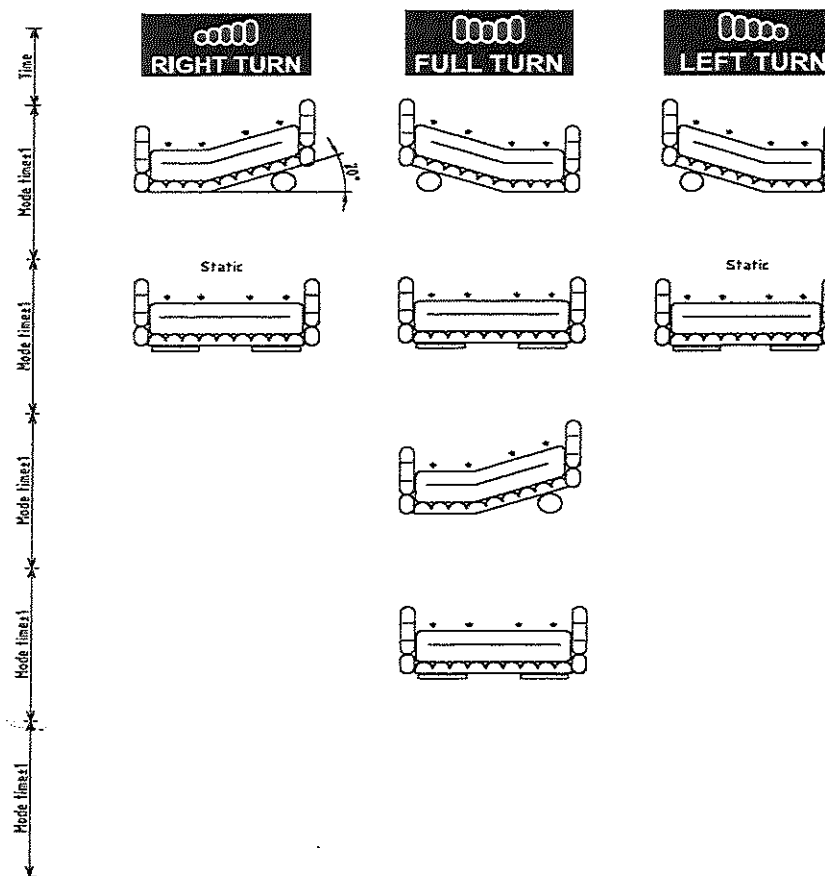
15. The 20° turning function can be activated by pressing the TURN button and selecting the desired turning therapy. LEFT TURN allows the mattress to turn to left and back to horizontal. RIGHT TURN would have the same effect but turning to the right. The FULL TURN allows for full function of turning to left and right and should always activate with timer setting. The timer can be set by pressing the CYCLE button.



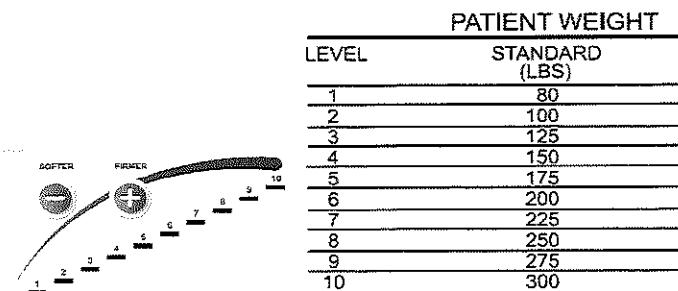
16. The 40° turning function can be activated by pressing the BT button and follow the operation instruction in the previous step.



Mattress Turning Illustration



Comfort Level Setting



Note: The pressure level settings on the weight chart are only a guideline. The proper adjustment of the pressure level must be applied according to individual patient.