

Auto Aire Select™

Dynamic Low-Air-Loss Therapy
with Alternating Pressure and Active Sensor Technology®



- REF C2500MS Control Unit
- REF M2500S Series Mattress
- REF Auto Aire Select Safety Mattress

Operator's Manual

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Before you begin...

 **Important**

Before using the Auto Aire Select System, please read and understand this manual and all safety precautions prior to each application.

Upon receipt, unpack the control unit and/or mattress and inspect for concealed damage. Save all packaging material. If any damage is found, notify the carrier at once and ask for a written inspection. Prepare a written description of any damage. Photograph any damage. Failure to take action within 15 days of receipt may result in loss of claim. Contact Gaymar's Technical Service Department for instructions

Only qualified medical service personnel should attempt to repair this device. A *Service Manual* is available for use by qualified personnel. For assistance contact your local dealer. If additional assistance is needed, contact Gaymar's technical service department.

Toll Free (800) 828-7341
International (716) 662-2551

1.0 Warranty

The Control Unit is warranted free of defects in material and workmanship for a period of two (2) years.






The Mattress is warranted free of defects in material and workmanship for a period of one (1) year.

The Control Unit, and Mattress are warranted under the terms and conditions of the Gaymar warranty in place at the time of purchase. A copy of the warranty is available upon request. Gaymar disclaims all implied warranties including, but not limited to, the implied warranties of merchantability and of fitness for a particular purpose.

Control Units may be returned to the factory for servicing. Contact Gaymar Customer Service for return authorization prior to return.

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2.0 Symbols

-  Attention, consult accompanying documents
-  Type BF equipment
-  Dangerous voltage
-  Protective earth
-  Latex Free

3.0 Indications for Use

This device is intended to assist in treating and preventing pressure ulcers.

4.0 Contraindications

Air support therapy is not recommended when spinal stability is a concern.

5.0 Safety Precautions

Review the following SAFETY PRECAUTIONS prior to using the Auto Aire Select System.

DANGER
<ul style="list-style-type: none">• Risk of electric shock. Refer servicing to qualified service personnel. <p>--EXPLOSION HAZARD--</p> <p>DO NOT USE IN THE PRESENCE OF FLAMMABLE ANESTHETICS</p>

WARNING
<ul style="list-style-type: none">• For grounding reliability, plug only into a properly grounded outlet. Failure to use a properly grounded outlet may result in risk of death or serious injury.• The RUN/STANDBY switch does not provide isolation from the mains. Isolation from the mains (IEC 601-1) can only be achieved by disconnecting the cord from the mains. Risk of death or serious injury.• Disinfect the Auto Aire Select system between patient installations. Failure to disinfect may risk cross-contamination and infection.• Check patient at least every 8 hours or, once per shift, to assure proper system inflation. Otherwise, desired therapy may not occur.• Deflate mattress before performing CPR or CPR may be ineffective.

CAUTION

- Some medical conditions may not respond to therapy of this type. Patient's skin condition should be inspected regularly. Consult physician if any redness or skin breakdown occurs.
- Make certain all mattress straps are secured to the bed frame to prevent mattress from sliding and causing patient injury.
- Plexus mattresses are **not** intended to be AND DO **NOT** FUNCTION AS a patient fall safety device. **SIDE RAILS MUST BE USED WITH THE PLEXUS MATTRESS TO PREVENT FALLS**, unless determined unnecessary based on the facility protocol or the patient's medical needs as determined by the facility, **IN THESE CASES, THE USE OF OTHER SUITABLE PATIENT SAFETY MEASURES ARE RECOMMENDED.**
- Use single layer of sheeting and incontinence pads. More than one layers of sheeting and incontinence pads between the patient's skin and the support surface will reduce the effectiveness of the system.
- Do not secure linens tightly over mattress. Maintain loose fit of linens over mattress. Tight sheets can cause "hammocking" and reduce effectiveness of treatment.
- Do not block the pump intake on the enclosure. Any obstruction to airflow, particularly a dirty filter, will cause excessive heat and greatly shorten the life of the blower. Keep unit away from radiators or other heat sources.
- Do not use in the presence of smoking materials or open flame. Air flowing through the air mattress will support combustion.
- Portable and RF communication equipment can affect medical electrical equipment.

6.0

6.0 Description

The Auto Aire Select System is a portable, low-air-loss system with on-demand alternating low pressure therapy, designed to provide therapeutic benefit to patients suffering from, or at risk of pressure ulcers. The system, consisting of a Control Unit and an Air Flotation Mattress with therapeutic top sheet, is designed to provide pressure management therapy and patient comfort.

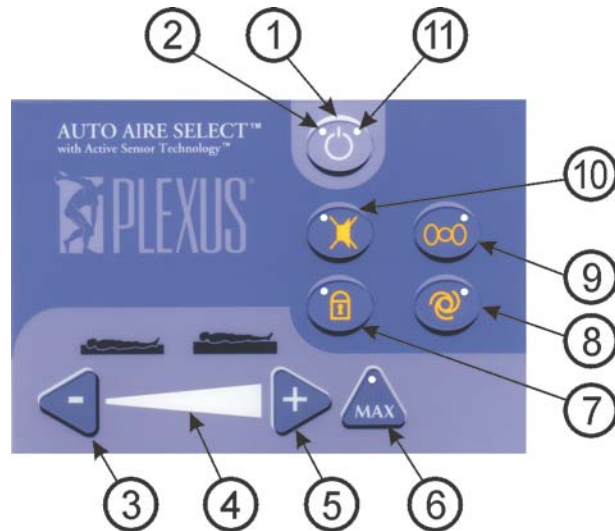
The Control Unit inflates and maintains the Mattress to user-selected settings, and can also provide on demand alternating low pressure therapy if desired. Used with the Auto Aire Select or Aire Select Safety Mattress with the Sensor Cell Option with their Active Sensor Technology, the system automatically adjusts the Mattress to the optimal fill level insuring complete flotation therapy.

The Aire Select base consists of twenty transverse air cells constructed of low shear nylon. Each of the individual cells is a minimum of eight inches tall (inflated height) and spatially oriented above a two inch convoluted foam base. The system provides continuous low-air-loss therapy through a series of calibrated orifices within the Mattress to assist in the prevention of skin maceration.

The Aire Select Safety Mattress features two side bolster options to allow the patient to safely immerse into the mattress; a straight bolster version which rises three inches above the surface of the mattress and an egress option. The Egress option also rises three inches above the mattress but features a three inch drop in the middle of the side bolster to aide with the egress and ingress of the patient from the mattress.

Covering the entire M2500 and Aire Select Safety Mattress assembly is a low-friction, low-shear producing, vapor permeable, nylon top sheet. The top sheet surface creates a membrane impermeable to liquids, air and bacteria though still permeable to water vapor. Quilted onto the base of the Mattress top sheet is a spun bonded polyester fiberfill that exhibits less frictional resistance to nylon than that of the patient's skin. When the patient moves, the top sheet tends to move relative to the air cells rather than relative to the patient, minimizing shearing effects. Additionally, the quilting acts to provide a diffusion layer by which the water vapor can be drawn away from the patient, resulting in more efficient evaporation and subsequent reduced skin maceration. A Dartex Silver3® cover option is also available for the Aire Select Mattress series.

7.0 Operator Control Panel



1. **ON/STANDBY** switches Control Unit between On and STANDBY modes.
2. **POWER INDICATOR LED** indicates AC power is present to the Control Unit.
3. **SOFT (-)** decreases the inflation level of the bed while Control Unit is in manual mode only. Pressing once will decrease the setting by one unit. Pressing and holding will rapidly change the setting.
4. **COMFORT CONTROL INDICATOR** displays the current inflation level.
5. **FIRM (+)** increases inflation level of the bed while in manual mode only. Pressing once will increase the setting by one unit. Pressing and holding will rapidly change the setting.

Button is inactive in Automatic mode.

6. **MAX INFLATE** selects/deselects the max inflate mode (maximum mattress firmness). The indicator within the button will flash while max inflate mode is active. After 30 minutes, max inflate mode will cancel.

At power-up, max inflate is active for 30 seconds.

7. **LOCKOUT** activates or cancels lockout mode. Press and hold for three seconds to activate or cancel mode. The indicator within the button will light while lockout is active. In lockout mode, only the MAX INFLATE button is operational. All other buttons are temporarily inactive.
8. **AUTO** selects/deselects the automatic mode of operation. The indicator within the button will light while automatic mode is active.

Automatic mode will not activate if the M2500S / Auto Aire Select (with sensor cell option) mattress sensor cord is not connected to the jack on the right side of the Control Unit.

Note: Connecting the mattress sensor cord while the unit is not in automatic mode will cause the Control Unit to enter automatic mode by itself.

The AUTO button can be used to exit automatic mode at any time.

9. **AP** selects the alternating low pressure mode of operation. The indicator within the button will light while AP mode is active. Note: AP mode is temporarily suspended in max inflate mode.
10. **ALARM SILENCE** temporarily silences the audible alarm for 15 minutes.
11. **POWER FAIL INDICATOR** flashes when power supplied from line cord is interrupted while the Control Unit is operating. To avoid an inadvertent power fail alarm, place the unit in STANDBY mode before disconnecting power from Control Unit.

8.0 Setting Up the System

Mattress

1. Place the mattress on the bed frame with the connecting hoses at the foot of the bed.
2. Before securing the mattress straps, raise the head and foot ends of the bed frame. Raise the side rails. Loosely, secure mattress to bed frame by looping the nylon straps on mattress through the bed frame and then back through the D-rings on mattress. Make sure the side rails can still move up and down without interference.
3. Lower frame to its horizontal position and tighten straps.
4. If you do not have an Aire Select Safety Mattress, skip to step 5. Otherwise lower the side rails down. Unzip the side bolster pockets. Locate the longer of the two bolster ends at the head section and slide bolster into the side bolster pocket. Zip the pocket closed. Repeat for the opposite side. Plexus mattresses are not intended to be AND DO NOT FUNCTION AS a patient fall safety device. SIDE RAILS MUST BE USED WITH THE PLEXUS MATTRESS TO HELP PREVENT FALLS, unless determined unnecessary based on the facility protocol or the patient's medical needs as determined by the facility, IN WHICH CASE THE USE OF OTHER SUITABLE PATIENT SAFETY MEASURES ARE RECOMMENDED.
5. Cover the mattress with the therapeutic, low-shear top sheet and attach to the mattress by looping the Velcro straps on the top sheet through the D-rings on the mattress. In the case of the Aire Select Safety Mattress, zippers located on all four sides attach the top sheet. Verify top sheet is loosely fit so as not to "hammock" patient above mattress.

Control Unit / Linens / Patient

1. Suspend control unit on footboard of bed using the mounting brackets on back of unit.
2. Connect the dual quick-connect couplings of the mattress hoses to the mating connectors located on the side of the control unit.
3. Check that the hoses are secure by gently pulling. Ensure the hoses are not kinked or tucked under the mattress.
4. If using an M2500S Mattress or an Aire Select Safety Mattress with the Sensor option, connect the plug end of the mattress sensor cord into the jack on the side of the control unit.
5. Plug the AC power cord into properly grounded outlet. The control unit will enter STANDBY mode.
6. Press the ON/STANDBY button on the top right of the control panel. Maximum air flow will be delivered to the mattress for approximately 30 seconds to quickly inflate.
7. Apply hospital linens and/or incontinence pad over the top of the Mattress. Linens should be loose to prevent "hammocking".
8. Place patient on Mattress and position along center of bed. Raise the bed side rails.

9.0 Instructions for Use

9.1 Use with M2500 Mattress and the Aire Select Safety Mattress

Manual Mode Adjust

1. Adjust the inflation level for patient comfort using the SOFT (-) and FIRM (+) buttons; start at the lowest inflation level. These buttons adjust the inflation pressures in the mattress from a minimum of 10 mmHg (one LED lighted on the COMFORT CONTROL INDICATOR) to a maximum up to 32 mmHg (all LED's lighted).
Manually ensure the patient is sufficiently supported. In the mattress, place your hand between two air cells and then under the patient's pelvic region.
2. To prevent accidental changes in settings, press the LOCKOUT button.

AP Mode

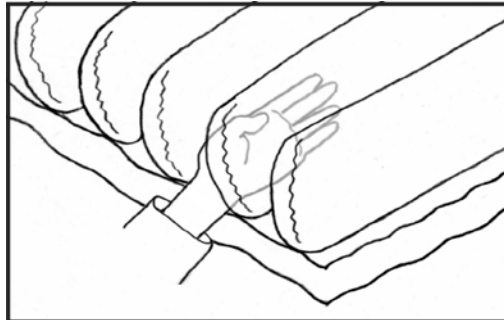
1. If alternating low pressure therapy is desired, press the AP button. Alternation will occur every 2 minutes and 30 seconds.
2. Pressing the AP button again causes the control unit to exit the AP mode.

WARNING

Check patient at least every 8 hours or once per shift, to assure proper system inflation. Otherwise, desired therapy may not occur.

Hand Check for Mattress

Perform a hand check to ensure that the mattress is properly inflated. Detach the center mattress cover strap and lift the mattress cover to access the air cells. Using a vertical hand, insert your hand between the air cells directly underneath the patient's pelvic region. Determine if four fingers worth of clearance is present between the mattress base and the patient. If clearance of four fingers exists, no adjustment is needed. If you can feel the patient's body resting on your hand, increase the inflation level to the next highest setting, wait 10 minutes and perform the hand check again.



9.2 Use with M2500S Mattress (Mattress with Active Sensor Technology) and the Aire Select Safety Mattress with the Sensor Option

Automatic Mode

1. Automatic mode of operation is engaged automatically at the press of the ON button (when the Mattress sensor cord is plugged into the control unit). The indicator within the AUTO button will light indicating the automatic mode is active.
2. The automatic mode requires **no** user input to determine the appropriate inflation level for the patient. The active sensors in the mattress located under the patient's pelvic region, in conjunction with the control unit, automatically determine the optimal inflation level for the patient in this mode to ensure complete flotation of the patient.
3. To prevent accidental changes in settings, press the LOCKOUT button.

Theory

While in automatic mode, the control unit continually repeats a deflation/inflation cycle.

The inflation level of the mattress is lowered until the lowest allowable flotation height is sensed (via feedback from the active sensors in the mattress). It is then slowly increased until the appropriate patient flotation height is sensed. This is approximately four fingers width under the patient's pelvic region but will vary with patient weight and build.

If the patient sinks into the mattress for any reason (such as elevation of the head section or other part of the bed) the control unit will automatically increase the inflation level until the appropriate flotation height is again realized.

- Pressing the SOFT (-) button will reset the deflation/inflation cycle. The FIRM (+) button is inactive while the system is in automatic mode.

- Disconnecting the mattress sensor cord from the control unit while in automatic mode will cause an audible alarm to sound and indicators in the ALARM SILENCE and AUTO buttons to flash. This alarm can be silenced temporarily for 15 minutes. Reconnect the mattress sensor cord to the jack on the right. Connecting the mattress sensor cord to the control unit while the system is not in automatic mode will engage the automatic mode automatically and light the indicator within the AUTO button.

Manual Mode Adjust

1. Pressing the AUTO button while in automatic mode of operation will turn off the automatic mode. The indicator in the AUTO button will go out. Manual adjustment of the inflation level can then be performed using the SOFT (-) and FIRM (+) buttons. These buttons adjust the inflation pressures in the mattress from a minimum of 10 mmHg (one LED lighted on the COMFORT CONTROL INDICATOR) up to a maximum up to 32 mmHg (all LED's lighted).
2. You must ensure the patient is sufficiently supported by placing your hand in the mattress between two air cells and then under the patient's pelvic region. There should be clearance for 4 fingers (stacked vertically) beneath the patient's pelvic region.

WARNING

Check patient at least every 8 hours or, once per shift, to assure proper system inflation. Otherwise, desired therapy may not occur

3. To prevent accidental changes in settings, press the LOCKOUT button.

AP Mode

1. If alternating low pressure therapy is also desired press the AP button. Alternation will occur every 2 minutes and 30 seconds.
2. Pressing the AP button again causes the control unit to exit the AP mode.

10.0 Transferring Patients In and Out of Bed

1. For patient transfer press the MAX INFLATE button. This will maximally inflate the mattress to provide a firm and stable support surface (and suspend AP and automatic modes). Pressing the MAX INFLATE button again will cancel this mode and return the mattress to previously chosen settings.
2. While in the max inflate mode, the indicator within the MAX INFLATE button will flash to remind the caregiver that the system is in this state. After approximately 30 minutes, the control unit will automatically cancel the max inflate mode and return to the previously chosen settings.

11.0 CPR (Cardio Pulmonary Resuscitation)

To deflate mattress for CPR:

1. Disconnect the dual quick-connect couplings of the mattress hose from the control unit. Mattress will deflate in approximately 20 seconds.
2. Proceed with CPR procedures.

12.0 System Cleaning, Care and Storage

12.1 Cleaning

WARNING

- Disconnect the AC power cord from the wall outlet before attempting to clean the control unit. Failure to disconnect the AC power may result in risk of death or serious injury.
- Do not heat or steam autoclave any component of the system. Damage may result.

1. To clean, use soap and a clean damp cloth to wipe down the control unit, power cord, hoses and mattress. Do not use abrasive cleaners on the mattress. Wipe dry with a clean, dry cloth. Note: Blood and other body fluids must be thoroughly cleaned from all surfaces before applying disinfectants.
2. Apply any approved disinfectant to the external surfaces of the control unit, hoses and mattress. Allow to completely dry. The solution contact time is what makes disinfection effective.
3. Wipe down the mattress with a clean, dry cloth to remove any excess disinfectant.
4. The top sheets of the Auto Aire Select series of mattresses may be laundered between patient uses or as required to maintain good patient hygiene. Fill the washing machine with warm water (70 -140 °F or 21 - 60 °C). Add one cup of laundry detergent. Place no more than four top sheets in a single extra large load capacity washing machine. When wash cycle is complete, remove promptly from machine and ensure all excess water is drained from load. Place dryer on LOWEST heat setting, or AIR FLUFF if available until dry. Verify top sheet is completely dry before placing under patient.
5. If individual air cells of mattress become soiled, clean and disinfect as described above or simply replace air cell with a clean replacement. Single air cell replacement can be successfully achieved with patient remaining on the mattress.

WARNING

Do not launder the red colored Active Sensor Technology air cells of the of the M2500S mattress or Aire Select Safety Mattress. Damage may result.

12.2 Filter Removal Instructions



Step 1: Using a finger or other suitable tool, such as a pen, pry up the end of the filter through the large vent opening.

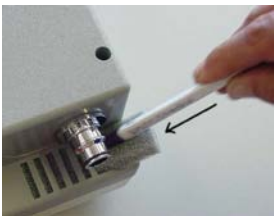


Step 2: Next, grasp the filter between the thumb and index finger and pull slowly from the housing.

14.2 Filter Installation Instructions



Step 1: Insert the first inch of the filter into the large vent opening in the rear housing.



Step 2: Next, using a series of short strokes with a pen or similar tool, move the filter completely up into the rear enclosure.

WARNING

Failure to clean the filter can result in damage to the control unit and/or inadequate patient support.

12.3 Storage

Control Unit

1. Check the AC power cord and plug for abrasions or excessive wear.
2. Coil power cord up and place both cord and control unit in plastic bag for storage.

Mattress


1. Check the air manifold of the mattress for kinks or breaks. Replace if necessary.
2. For the Aire Select Safety Mattress unzip pouches and remove side bolsters. Zip pouches up.
3. To deflate, disconnect hose assembly from control unit.

4. Coil the hose assembly loosely and roll the deflated air mattress starting at the head end. Use the straps for containment. Place in plastic bag for storage.

13.0 Troubleshooting

Symptom:	Corrective Action
Mattress does not inflate or is too soft.	Make certain the air hoses are not kinked, cracked, or split. Verify the POWER INDICATOR LED is illuminated. Verify the hose couplings are fully engaged to controller. Verify that all 20 air cells are connected to the air manifold in the mattress. Inspect and/or clean intake air filter of the control unit.
Loss of power	Make certain the power outlet at the wall has power and control unit is plugged in.
Control unit is whistling	Check to make sure that the filter on the back of the control unit is free of blockage or debris.
Audible alarm is sounding while in automatic mode.	Check the connection to the jack on the side of the unit to the M2500S mattress sensor cord or the Auto Aire Select safety mattress with sensor option. Reconnect.

14.0 Specifications, Control Unit

	C2500MS
Enclosure Dimensions	10" x 12" x 5"
Weight	12 pounds
Power Cord	Detachable 14' , #18 AWG minimum, with ground wire
Overcurrent Protection	<p>Primary</p> <p>Two 32mm x 6.3mm fuses</p> <p>5A, 250V, T, L</p>
	<p>Secondary</p> <p>Two 32mm x 6.3mm fuses</p> <p>1A, 250V, T, L</p>
Input	120 VAC, 60Hz, 5A
Classification	<p>Qualified with respect to electric shock, fire, and mechanical hazards only in accordance with UL60601-1, CAN/CSA C22.2 NO. 601.1-M90, EMC60601-1-2,</p>
	<p>Type BF, Class 1, grounded equipment suitable for continuous operation. Not classified for protection against harmful ingress of liquid.</p> <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 20px;">IPX0</div> </div>
Operating Ambient Temperature Range	60 to 90°F
Electromagnetic Compatibility	<ul style="list-style-type: none"> • (CISPR 11 Classified as Class B, Group 1 ISM equipment) • EN60601-1-2



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P/N 100561000 Rev B 09/10