



BEDSIDE AIR CHAIR [®]

Pressure Relieving System

Operating Instructions

Revision 101204-UL2601

SenTech Medical Systems, Inc.



WARNING

Before operating this medical equipment, it is important to read this manual and to understand the operating instructions and safety precautions. Failure to do this could result in patient injury and/ or damage to the product. If you have any questions, please contact SenTech Medical Customer Service at **800-474-4225** or **954-739-4972**.

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1.0 SAFETY PRECAUTIONS –

CAUTION! The BEDSIDE AIR CHAIR system is *contraindicated* for use with certain medical conditions and treatments. **Always consult with the patient’s physician before placing a patient on an alternating pressure system.**

CAUTION! Chair frames used with the BEDSIDE AIR CHAIR system can vary greatly depending on the specific health care setting, e.g., hospitals, nursing homes, home care, etc. Therefore, it is the responsibility of the caregiver to take the necessary precautions to ensure the safety of the patient and to prevent falls and/or patient entrapment.

Electronic Controller:

DANGER!

- Do not use in the presence of flammable anesthetics. **Risk of explosion can result.**
- Exposure of the electronic controller to any liquid while it is plugged in could result in a severe electrical hazard.
- Only use fuses that have the same specified rating (**See Section 7.0 Product Specifications**). Using fuses with higher ratings could result in damage and/or injury.

CAUTION!

- **Risk of Electric Shock.** Do not open or attempt to repair or service the electronic controller. Repairs and service should only be done by SenTech Medical Systems. If the controller is not functioning properly, or has been damaged, unplug the unit and take it out of service immediately. Contact Customer Service at **800-474-4225** or **954-739-4972** for repair and service information.
- The electronic controller is a precision electronic product. Use care when handling or transporting. Dropping, or other sudden impacts, may result in damage to the controller.

IMPORTANT!

- Do not return a product for any reason without first contacting Customer Service to obtain authorization (**See Section 9.0**).
- Do not place any objects/items, such as blankets, on, or over, the electronic controller. Excessive weight on the BEDSIDE AIR CHAIR controller could result in damage.
- After exposure to extreme high or low temperatures, allow electronic controller to equilibrate to room temperature before operating.

1.0 SAFETY PRECAUTIONS (Continued) -

- The BEDSIDE AIR CHAIR system circulates room air during operation. Exposure to smoke may cause the system to fail. Therefore, smoking by patients, or visitors, while using the BEDSIDE AIR CHAIR system is strongly discouraged.
- The power cord to the electronic controller should be positioned to avoid a tripping hazard and/or damage to the cord. SenTech recommends placing the cord under the chair and attaching it to an electrical outlet behind the chair.

2.0 PRODUCT OVERVIEW -

The BEDSIDE AIR CHAIR is a patented Alternating Pressure Overlay that provides therapeutic pressure relief for patients sitting in a chair.

Alternating Pressure provides pressure relief by sequentially deflating and inflating alternate air cells on a timed interval. It is widely recognized that constant pressure to a bony prominence is the leading cause of skin breakdown. The continuous movement provided by the BEDSIDE AIR CHAIR system alleviates these areas of constant pressure and enhances circulation.

The deflated air cells provide pressure relief, while the inflated air cells support the patient's weight. The amount of pressure to support a patient can be adjusted, based on the patient's weight.

The chair overlay can also be used with the following SenTech controllers:

- Sentry 1200
- Stage IV 2000
- Stage IV 3000

3.0 INSTALLATION –

NOTE: It is recommended that all shipping and packing material be saved in the event that the product has to be sent back to SenTech Medical.

3.1 Unpacking and Inspection

Carefully remove the controller, overlay and all accessories from the shipping cartons. Inspect all items for any damage that may have occurred during shipping. Any damages, or missing components, should be reported to SenTech Customer Service as soon as possible.

Chair Overlay: The Chair Overlay consists of:

- Air Cell Assembly
- Top Coverlet
- Foam Wedge

Electronic Controller: The electronic controller is packaged in a separate box and contains:

- Electronic Controller
- Power Cord
- Operating Instructions
- Bio-Med Data Sheet (Electrical Safety Testing)

3.2 Installation Requirements

The BEDSIDE AIR CHAIR system is designed to operate in a controlled environment that is free from extreme temperatures, high humidity and/or excessive amounts of airborne particulates, such as dust and smoke. The controller can be hung on the side or back of the chair, or placed on any flat stable surface.

3.2.1 Chair Overlay:

1. Place the Chair Overlay on the chair so that the air hoses come out of the seat cushion.
2. Attach the two (2) straps on the back portion of the overlay as follows:
 - **Top Strap:** Fasten around the top portion of chair back. Pull tight to prevent the overlay from sliding forward.
 - **Bottom Strap:** Fasten the straps around the *bottom* portion of the chair back. This procedure can be changed to accommodate different chair styles.

IMPORTANT! Make sure the straps are securely buckled and that the attachment of the overlay does not interfere with chair movement/operation.

3.2.2 Electronic Controller

1. **Handles:** The handles on the BEDSIDE AIR CHAIR controller are designed with a spring action:

Attaching the Controller: Fully open both handles simultaneously and hang the controller over the armrest of the chair. When released, the handles will spring back, providing tension to hold the controller securely on the armrest.

Removing the Controller: Fully open both handles simultaneously to release the tension and lift the controller off of the armrest.

CAUTION! Do not try to remove the controller without first relieving the spring tension on the handles. Failure to do this may damage the handle system.

2. **Air Hoses:** Connect the hoses from the Chair Overlay to the connectors on the left side of the electronic controller. Order of connection is not important.

NOTE: Each connector should tightly “click” into place.

3. Plug into an electrical outlet that is compatible with the electrical rating for your particular controller (See **Section 7.0, Specifications**) and turn on the controller.

4.0 OPERATION –

4.1 Setting the Electronic Controller:

1. Turn the power on by pressing the power switch located on the left side panel of the controller.
2. Select patient's weight using slide control on top of the electronic controller (See **Figure 1** below). If more pressure is desired, move the slide control to the higher weight setting. If less pressure is desired, move the slide control to the lower weight setting.

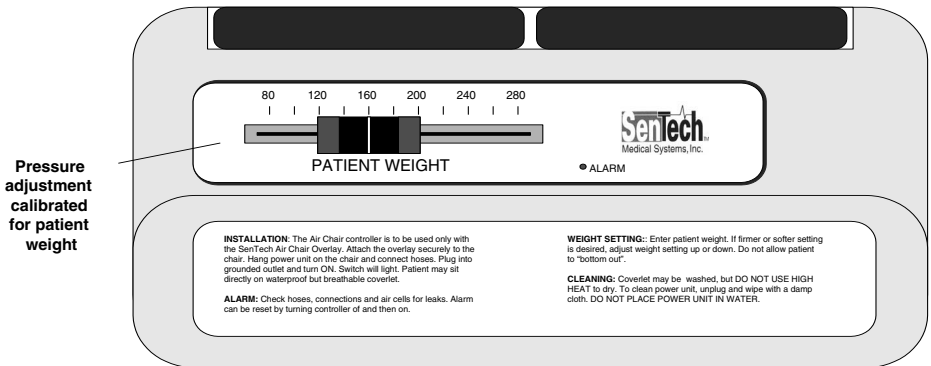


Figure 1

5.0 MAINTENANCE AND CLEANING –

IMPORTANT! Use a "hospital-grade" disinfectant that is registered with the Environmental Protection Agency (EPA) or chlorine bleach to disinfect your system. Use according to the manufacturer's instructions, including specified *dilutions* and *contact times*.

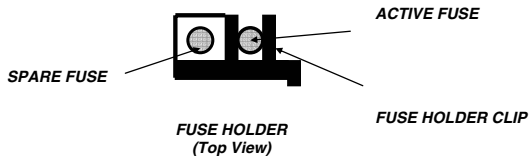
5.1 Electronic Controller

5.1.1 Fuse Replacement:

CAUTION! Only use *UL-Approved* fuses that have the same specified rating (See **Section 7.0**). Using fuses with different ratings could result in damage and/or injury.

One (1) replacement fuse is provided with your controller and is located in the compartment on the electrical cord socket. To replace a fuse:

1. Ensure the power switch is in the OFF position.
2. Remove the power cord from the electrical socket on the side of the controller.
3. Using a small sized flat-head screwdriver, pry the fuse holder away from the socket and slide it out of the socket.
4. Remove the "blown" fuse from the fuse holder clip and discard.
5. Remove the spare fuse from the storage compartment and install it into the fuse holder clip (See Diagram Below):



6. Push the fuse holder completely back into the electrical socket until it "snaps" into place.

NOTE: The fuse holder must be properly oriented to slide in correctly. Do not force.

7. Replace power cord and turn on the controller.

5.1.2 Filter Maintenance

The filter should be checked every 30 days. If dirty, the filter should be dusted or vacuumed.

CAUTION! DO NOT attempt to remove filter or filter cover assembly.

IMPORTANT! Good filter maintenance is critical in keeping your PRIMARY CARE controller in optimal operating condition. Failure to keep the filters clean will result in system downtime and increased repair costs.

- 5.1.3 The exterior of the controller should be periodically wiped using a cloth dampened with disinfectant.

CAUTION! DO NOT spray disinfectant directly on the electrical controller, or immerse the controller in any type of liquid. This could result in a severe electrical hazard.

- 5.1.4 Before plugging in the controller, check the power cord for electrical hazards, e.g., cuts, exposed wires, worn insulation, etc. If hazards are present, take the controller out of operation immediately and contact SenTech Customer Service.

- 5.1.5 To ensure optimal performance of your BEDSIDE AIR CHAIR, calibration should be verified every 12 months. Contact SenTech Customer Service for calibration information.

5.2 Coverlet

5.2.1 Washing and Disinfecting

If there are visible signs of body fluids and/or substances present, coverlets should be washed between patients. Coverlets can be machine-washed using chlorine bleach (50-150ppm) or an *intermediate level* disinfectant, such as ProTech¹. Bleach and disinfectant should be used according to the manufacturer's instructions. To determine the amount of bleach or disinfectant to use, determine the amount of water in the washer and then follow the *manufacturer's dilution instructions*. Soak the coverlet in the disinfectant or bleach during the wash cycle. Rinse thoroughly in clean water and dry before use.

1. ProTech[®] is a tuberculocidal disinfectant cleaner and a registered trademark of Central Solutions, Inc.

5.2.1 Washing and Disinfecting (Continued)

NOTE! 2.5 ounces of bleach per 10 gallons of water is approximately 100ppm of available chlorine.

CAUTION! DO NOT dry the coverlet using the “*heat*” cycle. Air-dry, or select a low or “*non-heat*” dry cycle, e.g., air fluff.

5.1.2 Washing Alternative

If there are no visible signs of body fluids and/or substances present, the coverlet can be sanitized between patients. To sanitize the coverlet:

1. Apply chlorine bleach, or an intermediate level disinfectant at the appropriate dilution (See **Section 5.2.1**) to the upper surface of the coverlet. Bleach/disinfectant may be applied either by spraying or by hand application.
2. Ensure surface is completely covered with the bleach/disinfectant.
3. Allow bleach/disinfectant to remain in contact with the surface according to the manufacturer’s instructions.
4. Remove bleach/disinfectant and rinse.
5. Allow to air dry before use.

5.3 Outside Shell

Wipe down with disinfectant, ensuring that all surfaces come in contact with the disinfectant. Rinse off with a clean damp cloth and allow to air dry.

5.3 Air Cell Assembly

CAUTION! DO NOT machine wash or dry the air cells.

If the air cell assembly is *visibly* soiled, or if there is an odor, clean by wiping with a disinfectant, prior to use.

6.0 TROUBLESHOOTING GUIDE -

Problem	Cause	Solution
1. Low Pressure Alarm is on.	The alarm is triggered when a cell(s) fails to reach its programmed pressure after an extended period of time (~20min.) This is usually an indication of an air leak somewhere in the system.	a) Be sure all hoses are properly connected to the controller. b) Check all hoses along the inside of the cushion. Each hose should be tightly connected. c) Check each air cell to ensure there are no leaks. d) After the leak has been eliminated, reset the system by turning the controller off and then on.
2. Patient is sinking or bottoming out and the alarm light is not on.	Although some sinking is normal for an air cushion, the pressure may be set too low for the patient's weight distribution.	Increase weight setting using the slide bar on the control panel until patient is no longer bottoming out. Wait at least one full cycle before determining if the pressure increase is adequate.
3. Controller does not work.	a) May be caused by a power surge substantial enough to overload the internal circuitry. b) May be caused by internal damage.	Call SenTech Medical Systems, Inc. at 800-474-4225 or 954-739-4972 .

7.0 PRODUCT SPECIFICATIONS –

Product Specifications for your BEDSIDE AIR CHAIR system are presented below:


Physical Dimensions:


Height (Inches)	8
Width (Inches)	8 (9, including air ports)
Depth (Inches)	4
Weight (Pounds)	6

Electrical Specifications:

US and Canada:

UL2601 Classification

Class II 

Type B 

Power Requirements

120VAC, 60Hz

External Fuse

2A 250V, Fast Acting (*UL-Approved*)

Maximum Current

< 0.5A

Ground

Earth 

Operating Parameters:

Weight Range (Pounds) 80-280.

Environmental Conditions:

Operating Conditions:

Ambient Temperature (°C)	+10 to +40
Relative Humidity (%)	30 to 75
Atmospheric Pressure (hPa)	700 to 1060

Storage/Shipping Conditions:

Ambient Temperature (°C)	-20 to +70
Relative Humidity (%)	10 to 100
Atmospheric Pressure (hPa)	500 to 1060

Overlay (Fully-Inflated) –

Height (Inches)	2 to 5 (@ top of foam wedge)
Width (Inches)	18
Length (Inches)	38
Weight (Pounds)	3.1

8.0 WARRANTY INFORMATION –

LIMITED WARRANTY

SenTech Medical Systems, Inc. (“SenTech”) warrants each of its products to perform in accordance with established specifications for the following time periods, starting from date the product was shipped from the SenTech facility.

Stage IV & Millennium Systems

Compressor Pump: 3 Years

Electronic Controller: 2 Years

Soft Goods: 1 Year

Primary Care, Sentry, Express & Air Chair Systems

Compressor Pump: 2 Years

Electronic Controller: 1 Year

Soft Goods: 1 Year

Battery: 6 Months

Recliner Chair: 2 Years

During the warranty period, SenTech will repair or replace at no charge any products that are not performing in accordance with established specifications, unless the problem/failure is due to (1) customer damage, negligence and/or misuse or (2) unauthorized repairs. Items not covered under warranty include, but are not limited to: stains, punctures, cuts, damages to electrical cords, rips or tears, dents and/or lost/missing parts.

All products returned for warranty repairs must be assigned a return authorization number, prior to return. Returns should include information describing the problem and/or requested repair and be sent to SenTech by prepaid transportation. SenTech will return the repaired/replaced product at no charge. Warranty repairs do not extend the length of the warranty period. During the warranty period, SenTech will provide one Bio-Med test at no charge, excluding shipping/handling.

Neither SenTech, its officers, directors, employees or agents shall be liable for consequential or other damages, including but not 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 SenTech products.

All product specifications are subject to change without notice.

9.0 PRODUCT RETURN –

The BEDSIDE AIR CHAIR system has been designed to provide you with years of trouble-free service. However, in the event that the product needs to be returned for any reason, such as calibration, upgrades, testing or repair, the following return procedure must be followed. Failure to follow this procedure may result in unnecessary delays.

Return Procedure -

Before returning a product to SenTech:

1. Contact Customer Service at **800-474-4225** or **954-739-4972** and obtain a **Return Material Authorization (RMA)** number.
2. Package the product in its *approved* packaging.

IMPORTANT! Failure to use the *approved* packaging when returning a product may result in shipping damage and could void the warranty.

3. Reference the assigned RMA number on the shipping documents and send to the following address:

SenTech Medical Systems, Inc.

5353 NW 35 Avenue
Ft. Lauderdale, FL 33309

Attention: Customer Service / RMA <Number>

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SenTech Medical Systems, Inc.
5353 NW 35 Avenue
Ft. Lauderdale, FL 33309

Phone: 954-739-4972
FAX: 954-739-2779
Web Site: sentechmedical.com

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Ft. Lauderdale, FL*